Radiation Report

TPS7H4011-SP Neutron Displacement Damage (NDD) Characterization Report

ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the Texas Instruments TPS7H4011-SP. The TPS7H4011-SP showed a strong degree of hardness to neutron irradiation up to fluence level 1 × 10^{13} n/cm^2.

The neutron irradiation test is a destructive test. Test procedure follows MIL-STD-883 method 1017 as guidance. The purpose of this test is to determine the device susceptibility to non-ionizing energy loss (NIEL) degradation. Objectives of the test are, to detect and measure the degradation of critical device parameters as a function of neutron fluence and to determine if these parameters are within specified limits after exposure to a specified level of neutron fluence.

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1 Device Information

1.1 Product Description

The TPS7H4011 is a 14V, 12A synchronous buck converter optimized for use in a space environment. High efficiency and reduced component count are achieved through peak current mode control.

The wide voltage range of the TPS7H4011 enables the device to be used as a point of load regulator to convert directly from a 12V or 5V rail. The output voltage start-up ramp is controlled by the SS_TR pin. Power sequencing is possible with the EN and PWRGD pins. The device can be configured with up-to four devices in parallel without an external clock for increased current capabilities. Additionally, various features are included such as differential remote sensing, selectable current limit, a flexible fault input pin, and configurable compensation.

1.2 Device Details

Table 1-1 lists the device information used in the initial NDD characterization.

Table 1-1. Device and Exposure Details

NDD Exposure Details	
TI Device	TPS7H4011-SP
TI Part Name	5962R2122101VXC
Package	30-pin CFP (HLB)
Technology	Linear BiCMOS (LBC7)
Lot Number / Date Code	4002624 / 2408A
Sample Quantity	9 +1 control unit
Exposure Facility	Fast Neutron Irradiation (FNI) Facility of University of Massachusetts Lowell Research Reactor (UMLRR)
Neutron Fluence (1-MeV equivalent) Level	1×10^{12}, 5×10^{12}, 1×10^{13} n/cm^2
Irradiation Temperature	Ambient room temperature (25ºC)

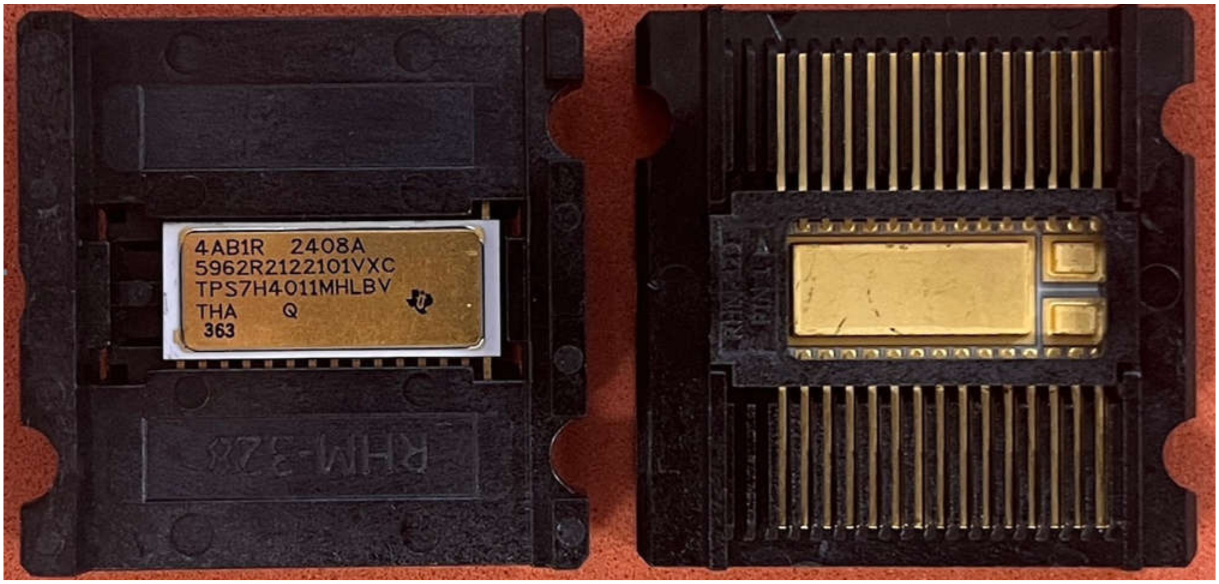


Figure 1-1. TPS7H4011-SP Device

2 Total Dose Test Setup

2.1 Test Overview

General test procedures adhere to MIL-STD-883, Method 1017 as a guide for neutron irradiation. The TPS7H4011-SP was electrically tested using the production automated test equipment (ATE) program at an ambient room temperature of 25°C before and after neutron irradiation.

2.2 Test Facility

The utilized test facility is the Fast Neutron Irradiation (FNI) Facility of University of Massachusetts Lowell Research Reactor. The neutron fluence for this irradiation was measured utilizing ASTM E-265 “Measuring Reaction Rates and Fast Neutron Fluence by Radioactivation of Sulfur-32” and correlated to the measured reactor power level. All irradiation conditions required under ASTM 722 were met, this includes: neutron fluence, distribution and uncertainty. The Average Integrated Neutron Fluence, 1-MeV(Si) equivalent, reflects these factors. Detailed information of the radiation facility is available at the following link:

UNIVERSITY OF MASSACHUSETTS LOWELL RESEARCH REACTOR

2.3 Test Setup Details

Devices were irradiated at three fluence levels in unbiased conditions: 1.0×10^{12} n/cm^2, 5.0×10^{12} n/cm^2 and 1.0×10^{13} n/cm^2. See the details in the following table.

2.4 Test Configuration and Condition

Table 2-1. Neutron Irradiation Conditions

GROUP	SAMPLE QTY	NEUTRON FLUENCE (n/cm^2)	BIAS
A	3	$1.0 \text{ x } 10^{12}$	Unbias
B	3	5.0×10^{12}	Unbias
C	3	1.0×10^{13}	Unbias
Control Units	1	N/A	N/A

3 NDD Characterization Test Results

3.1 NDD Characterization Summary

The results show that all devices were fully functional and within specification limits. A sample size of nine units was exposed for neutron irradiation and an additional unirradiated control unit was used as correlation. Overall, the TPS7H4011-SP showed a strong degree of hardness to Neutron irradiation up to fluence level 1 × 10^{13}n/cm^2. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each fluence level.

The parameters that did show a greater degree of change between pre- and post-irradiation were still within the electrical performance characteristics specified in the data sheet electrical parameters. See Table 3-1 for electrical parameters and associated tests. Electrical testing is done for pre- and post- neutron irradiation by ATE. ATE electrical test is done at an ambient room temperature of 25°C.

See Appendix A for NDD report up to 1 × 10^{13} n/cm^2.

3.2 Data Sheet Electrical Parameter Characteristics

Over 4.5V ≤ VIN ≤ 14V, PVIN = VIN, VSNS- = 0V, open loop configuration, IOUT = 0A, TA = 25°C, unless otherwise noted

Table 3-1. Data Sheet Electrical Parameter Characteristics

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
POWER SUPPLIES AND CURRENTS									
V_{UVLOR_PVIN}	PVIN internal UVLO rising threshold			1, 2, 3	3.2	3.4	3.6	V	14.1,14.7, 14.13, 14.19
$V_{UVLOHYST\_PVIN}$	PVIN internal UVLO hysteresis			1, 2, 3	425	450	500	mV	14.3, 14.9, 14.15, 14.21
V_{UVLOR_VIN}	VIN internal UVLO rising threshold			1, 2, 3	3.4	3.6	3.8	V	14.4, 14.10, 14.16, 14.22
$V_{UVLOHYST\_VIN}$	VIN internal UVLO hysteresis			1, 2, 3	140	155	170	mV	14.6, 14.12, 14.18, 14.24
I_{SHDN_VIN}	VIN shutdown supply current	V_{EN} = 0V	VIN = 4.5V	1, 2, 3		2	2.9	mA	12.1
			VIN = 14V	1, 2, 3		2	3		12.16
I_{SHDN_PVIN}	PVIN shutdown supply current	V_{EN} = 0V	PVIN = 4.5V	1, 2, 3		2.6	3.5	mA	12.2
			PVIN = 14V	1, 2, 3		3.5	4.7		12.17
I_{Q_VIN}	VIN operating quiescent current (non switching)	V_{EN} = 7V, VSENSE = 1V		1, 2, 3		2.6	5	mA	12.3, 12.8, 12.13, 12.18
ENABLE AND FAULT									
$V_{EN(rising)}$	Enable rising threshold (turn-on)			1, 2, 3	0.555	0.61	0.655	V	15.3, 15.6, 15.9, 15.12
$V_{EN(falling)}$	Enable falling threshold (turn-off)			1, 2, 3	0.455	0.51	0.554		15.4, 15.7, 15.10, 15.13
$t_{EN(delay)}$	Enable propogation delay	EN high to SW high, SS pin open		1, 2, 3		52	100	µs	24.32, 24.72, 24.112, 24.152
$I_{EN(LKG)}$	Enable input leakage current	V_{EN} = 7V		1, 2, 3		2	100	nA	15.1, 15.15
$V_{FAULT(rising)}$	FAULT threshold rising (turn-off)			1, 2, 3	0.555	0.6	0.635	V	16.1, 16.5, 16.9, 16.13
$V_{FAULT(falling)}$	FAULT threshold falling (turn-on)			1, 2, 3	0.455	0.5	0.535		16.2,16.6, 16.10, 16.14
$V_{FAULT(HYS)}$	FAULT hysteresis voltage			1, 2, 3	90	100	110	mV	16.3, 16.7, 16.11, 16.15
$I_{FAULT(LKG)}$	Fault input leakage current	V_{FAULT} = 7V		1, 2, 3		3	5	µA	16.4, 16.8, 16.12, 16.16
$t_{FAULT(min)}$	FAULT minimum puls width			9, 10, 11	0.4		1.4	µs	24.39, 24.79, 24.119, 24.159

Table 3-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
$t_{FAULT(delay)}$	FAULT delay duration			9, 10, 11	26	31	44	$(1/f_{sw})$ s	24.34, 24.36, 24.38, 24.74, 24.76, 24.78, 24.114, 24.116, 24.118, 24.154, 24.156, 24.158
VOLTAGE REFERENCE AND REMOTE SENSE									
V_{REF}	Internal voltage reference (including error amplifier V_{IO})	See data sheet for more info	T_A = –55°C	3	0.595	0.598	0.603	V	
			T_A = 25°C	1	0.596	0.6	0.603		17.3,17.11, 17.19, 17.27
			T_A = 125°C	2	0.596	0.599	0.603		
$V_{REF(internal)}$	Internal voltage reference (without error amplifier included)	$V_{REF(internal)} = V_{SS\_TR}$ – VSNS-		1, 2, 3	0.593	0.6	0.606	V	17.1, 17.9, 17.17, 17.25
V_{BG}	Bandgap voltage (voltage at the REFCAP pin)	C_{REFCAP} = 470nF		1, 2, 3	1.184	1.2	1.222	V	12.5,12.10, 12.15, 12.20
$I_{VSNS+(LKG)}$	VSNS+ input leakage current	VSNS+ = 0.6V		1, 2, 3		10	30	nA	17.5, 17.13, 17.21, 17.29
I_{VSNS-}	VSNS- output current			1, 2, 3	8	10	12	µA	17.4, 17.12, 17.20, 17.28
ERROR AMPLIFIER									
V_{IO}	Error amplifier input offset voltage	VSENSE = 0.6V		1, 2, 3	–2.3		2.9	mV	17.2, 17.10, 17.18, 17.26
g_{mEA}	Error amplifier transconductance	–10µA < I_{COMP} < 10µA, V_{COMP} = 1V	T_A = –55°C	11	1400	2050	2700	µS	
			T_A = 25°C	9	1200	1650	2100		18.1,18.4, 18.7, 18.10
			T_A = 125°C	10	1000	1250	1500		
EA_{DC}	Error amplifier DC gain	VSENSE = 0.6V				11500		V/V	
EA_{ISRC}	Error amplifier source	V_{COMP} = 1V, 100mV input overdrive		1, 2, 3	90	125	200	µA	18.2,18.5, 18.8, 18.11
EA_{ISNK}	Error amplifier sink				90	125	200		18.3, 18.6, 18.9, 18.12
EA_{Ro}	Error amplifier output resistance					7		MΩ	
EA_{BW}	Error amplifier bandwidth					9		MHz	
g_{mps}	Power stage transconductance, 18.3A (typ) current limit	I_{OUT} = 12, ILM = AVDD	T_A = –55°C	3	14.4	19.4	24.8	S	
			T_A = 25°C	1	15.2	20.4	26.1		20.12, 20.46, 20.80, 20.114
			T_A = 125°C	2	16	21	27		
g_{mps}	Power stage transconductance, 13.4A (typ) current limit	I_{OUT} = 9A, R_{ILM_TOP} = 49.9kΩ, R_{ILIM_BOT} = 100kΩ	T_A = –55°C	3	9.3	13.3	17	S	
			T_A = 25°C	1	9.6	13.8	17.5		20.13, 20.47, 20.81, 20.115
			T_A = 125°C	2	9.7	14	18.1		
g_{mps}	Power stage transconductance, 18.3A (typ) current limit	V_{COMP} = 0.6V, ILIM = AVDD		1, 2, 3	17.8	22.4	28.3	S	20.18, 20.52, 20.86, 20.120
g_{mps}	Power stage transconductance, 13.4A (typ) current limit	V_{COMP} = 0.65V, R_{ILIM_TOP} =49.9kΩ, R_{ILIM_BOT} = 100kΩ		1, 2, 3	12.8	16.1	20.6	S	20.19, 20.53, 20.87, 20.121
g_{mps}	Power stage transconductance, 9A (typ) current limit	V_{COMP} = 0.65V, R_{ILIM_TOP} =100kΩ, R_{ILIM_BOT} = 49.9kΩ		1, 2, 3	8	11	15.5	S	20.20, 20.54, 20.88, 20.122
g_{mps}	Power stage transconductance, 5.6A (typ) current limit	V_{COMP} = 0.75V, ILIM = GND		1, 2, 3	4.6	7.2	9.2	S	20.21, 20.55, 20.89, 20.123

Table 3-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
OVERCURRENT PROTECTION									
I_{OC_HS1}	High-side switch current limit threshold 1	R_{SHORT} = 100mΩ	ILIM = GND	1, 2, 3		5.6	7.5	A	
			R_{ILIM_T} = 100kΩ, R_{ILIM_B} = 49.9kΩ	1, 2, 3		9	11.9		20.5, 20.39, 20.73, 20.107
			R_{ILIM_T} = 49.9kΩ, R_{ILIM_B} = 100kΩ	1, 2, 3		13.4	17.8		20.10, 20.44, 20.78, 20.112
			ILIM = AVDD	1, 2, 3		18.3	24.9		20.7, 20.41, 20.75, 20.109
I_{OC_HS2}	High-side switch current limit threshold 2	VIN = 12V, R_{SHORT} ≈ 4mΩ	ILIM = GND			6.6		A	20.8, 20.42, 20.76, 20.110
			R_{ILIM_T} = 100kΩ, R_{ILIM_B} = 49.9kΩ			11.1			20.9, 20.43, 20.77, 20.111
			R_{ILIM_T} = 49.9kΩ, R_{ILIM_B} = 100kΩ			17			20.10, 20.44, 20.78, 20.112
			ILIM = AVDD			23.9			20.11, 20.45, 20.79, 20.113
$I_{OC\_LS(sink)}$	Low-side switch sinking overcurrent threshold	T_A = –55°C		3	1.6	2.3	3.6	A	
		T_A = 25°C		1	1.5	2.2	3.3		19.2,19.5, 19.8, 19.11
		T_A = 125°C		2	1.4	2	2.8		
$I_{ILIM(lkg)}$	ILIM input leakage current	ILIM = 7V		1, 2, 3		2	100	nA	15.2,15.16
$COMP_{SHDN}$	COMP shutdown voltage			1, 2, 3	1.7	1.9	2.1	V	22.1,22.7, 22.13,22.19
$t_{COMP(delay)}$	COMP shutdown delay					30		µs	
SOFT START AND TRACKING									
t_{SS}	Soft start time	V_{SS_TR} from 10% to 90%, VSNS- = GND, $V_{OUT(set)}$ = 3.3V	C_{SS} = 5.6nF			1.5		ms	22.4,22.10, 22.16,22.22
			C_{SS} = 22nF	9, 10, 11	4.7	5.8	7.3		22.5,22.11, 22.17,22.23
			C_{SS} = 100nF			24.7			22.6,22.12, 22.18,22.24
$R_{SS(discharge)}$	Soft start discharge pull-down resistor			1, 2, 3	200	442	700	Ω	22.2,22.8, 22.14,22.20
$SS_{startup}$	Maximum voltage on SS before startup (5)					20		mV	22.3,22.9, 22.15,22.21

Table 3-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
SLOPE COMPENSATION									
SC	Slope compensation with 18.3A (typ) current limit	f_{SW} = 100kHz, ILIM = AVDD	R_{SC} = 1.1MΩ			–0.7		A/µs	
		f_{SW} = 500kHz, ILIM = AVDD	R_{SC} = 80.6kΩ			–8.8			
			R_{SC} = 196kΩ			–4.2			
			R_{SC} = 1.1MΩ			–1.2			
		f_{SW} = 1000kHz, ILIM = AVDD	R_{SC} = 80.6kΩ			–10.5			
			R_{SC} = 196kΩ			–5.1			
			R_{SC} = 1.1MΩ			–2.1			
	Slope compensation with 13.4A (typ) current limit	f_{SW} = 500kHz, R_{ILIM_TOP} = 49.9kΩ, R_{ILIM_BOT} = 100kΩ	R_{SC} = 196kΩ			–3.2		A/µs	
	Slope compensation with 9A (typ) current limit	f_{SW} = 500kHz, R_{ILIM_TOP} = 100kΩ, R_{ILIM_BOT} = 49.9kΩ	R_{SC} = 196kΩ			–2.4		A/µs	
	Slope compensation with 5.6A (typ) current limit	f_{SW} = 500kHz, ILIM = GND	R_{SC} = 196kΩ			–1.8		A/µs	
MINIMUM ON TIME AND DEAD TIME									
$t_{on(min)}$	Minimum on time	50% to 50% of VIN, I_{SW} = 2A	VIN = 4.5V	9, 10, 11		210	235	ns	24.31
			VIN = 5V	9, 10, 11		213	250		24.71
			VIN = 12V	9, 10, 11		199	250		24.111
			VIN = 14V	9, 10, 11		199	250		24.151
$t_{off(min)}$	Minimum off time	I_{SW} = 2A				306		ns	
t_{dead}	Dead time					70		ns	24.4, 24.8, 24.12, 24.16
SWITCHING FREQUENCY AND SYNCHRONIZATION									
f_{SW}	RT programmed switching frequency	R_{RT} = 511kΩ		4, 5, 6	90	100	120	kHz	24.14, 24.15, 24.54, 24.55, 24.94, 24.95, 24.134, 24.135
		R_{RT} = 90.9kΩ		4, 5, 6	450	500	550		24.26, 24.27, 24.66, 24.67, 24.106, 24.107, 24.146, 24.147
		R_{RT} = 40.2kΩ	VIN = 4.5V	4, 5, 6	850	1000	1150		24.28, 24.29
			5V ≤ VIN ≤ 14V	4, 5, 6	870	1000	1170		24.68, 24.69, 24.108, 24.109, 24.148, 24.149
t_{SYNC_R}	SYNC1 out low-to-high rise time (10% to 90%)	Cload = 25pF, see see SYNCx Rise and Fall Time		9, 10, 11		10	21	ns	24.18, 24.19, 24.58, 24.59, 24.98, 24.99, 24.138, 24.139
t_{SYNC_F}	SYNC1 out high-to-low fall time (90% to 10%)	Cload = 25pF, see SYNCx Rise and Fall Time		9, 10, 11		10	21	ns	24.20, 24.21, 24.60, 24.61, 24.100, 24.101, 24.140, 24.141
$SYNC_{PH\_2\_1}$	SYNC2 to SYNC1 rising edge phase shift	SYNCM = GND		9, 10, 11	82	90	98	°	24.17, 24.57, 24.97, 24.137

Table 3-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
t_{SYNC_D}	SYNC1 to SW delay	Non-inverted SYNC1 input (SYNC2 = AVDD, SYNCM = AVDD)	VIN = 4.5V	9, 10, 11	140	225	350	ns	24.2
			5V ≤ VIN ≤ 14V	9, 10, 11	120	210	270		24.42, 24.82,24.122
			VIN = 12V, IOUT = 12A			224			
		Inverted SYNC1 input (SYNC2 = GND, SYNCM = AVDD)	VIN = 4.5V	9, 10, 11	150	256	390	ns	24.3
			5V ≤ VIN ≤ 14V	9, 10, 11	140	240	300		24.43, 24.83,24.123
			VIN = 12V, IOUT = 12A			246			
		SYNC1 output (SYNCM = GND)	VIN = 4.5V	9, 10, 11	110	180	280	ns	24.16
			5V ≤ VIN ≤ 14V	9, 10, 11	90	175	250		24.56, 24.96,24.136
			VIN = 12V, IOUT = 12A			184			
$V_{SYNCx(OH)}$	SYNC1, SYNC2 output high	SNYCM = GND, I_{OH} = 2mA	4.5V ≤ VIN ≤ 5V	1, 2, 3	VIN–0.3			V	24.22, 24.23,24.62, 24.63
			VIN > 5V	1, 2, 3	4.5	5	5.2		24.102,24.103,24.142,24.143
$V_{SYNCx(OL)}$	SYNC1, SYNC2 output low	SYNCM = GND, I_{OL} = 2mA		1, 2, 3			0.4	V	24.24, 24.25,24.64, 24.65,24.104,24.105,24.144,24.145
$V_{SYNC1(IH)}$	SYNC1 input high threshold	SYNCM = AVDD		1, 2, 3			1.7	V	24.4,24.44, 24.84,24.124
$V_{SYNC1(IL)}$	SYNC1 input low threshold	SYNCM = AVDD		1, 2, 3	0.7				24.5,24.45, 24.85,24.125
f_{SYNC}	SYNC1 input frequency range	SYNCM = AVDD		4, 5, 6	100		1000	kHz	24.1,24.8, 24.9,24.41, 24.48,24.49, 24.81,24.88, 24.89,24.121,24.128,24.129
D_{SYNC}	SYNC1 input duty cycle range	SYNCM = AVDD, external clock duty cycle		4, 5, 6	40%		60%		24.10, 24.11,24.50, 24.51,24.90, 24.91,24.130,24.131
$t_{CLK\_E\_I}$	External clock to internal clock detection time	SYNCM = AVDD, RT populated		9, 10, 11		2	5	$(1/f_{sw})$ s	24.12, 24.52,24.92, 24.132
$t_{CLK\_I\_E}$	Internal clock to external clock detection time	SYNCM = AVDD, RT populated		9, 10, 11		1	2	$(1/f_{sw})$ s	24.13, 24.53,24.93, 24.133
POWER GOOD AND THERMAL SHUTDOWN									
$PWRGD_{LOW\_F\%}$	PWRGD falling threshold (fault), low	Threshold for PWRGD (VSENSE as percent of V_{REF}), VSNS- = 0V	VSENSE falling	1, 2, 3	90%	92%	95%		23.2,23.9, 23.16,23.23
$PWRGD_{LOW\_R\%}$	PWRGD rising threshold (good), low		VSENSE rising	1, 2, 3	93%	95%	98%		23.3,23.10, 23.17,23.24
$PWRGD_{HIGH\_R\%}$	PWRGD rising threshold (fault), high		VSENSE rising	1, 2, 3	106%	108%	112%		23.4,23.11, 23.18,23.25
$PWRGD_{HIGH\_F\%}$	PWRGD falling threshold (good), high		VSENSE falling	1, 2, 3	103%	105%	109%		23.5,23.12, 23.19,23.26
$I_{PWRGD(LKG)}$	Output high leakage	VSENSE = V_{REF}, V_{PWRGD} = 7V		1, 2, 3		50	500	nA	23.6,23.13, 23.20,23.27
$V_{PWRGD\ (OL)}$	Power good output low	$I_{PWRGD\ (SINK)}$ = 0mA to 2mA		1, 2, 3		250	300	mV	23.7,23.14, 23.21,23.28

Table 3-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
$\text{VIN}_{\text{MIN\_PWRGD}}$	Minimum VIN for valid PWRGD output	Measured when $V_{\text{PWRGD}} \le 0.5\text{V}$ at 100µA		1, 2, 3		1	2	V	23.1
$T_{\text{SD(enter)}}$	Thermal shutdown enter temperature					170		°C	
$T_{\text{SD(exit)}}$	Thermal shutdown exit temperature					135			
$T_{\text{SD(HYS)}}$	Thermal shutdown hysteresis					35			
MOSFET									
$R_{\text{DS\_ON\_HS}}$	High-side switch resistance at I_{HS} = 12A (lead length ≈ 3mm)	PVIN = VIN = 4.5V	T_A = –55°C	3		38	53	mΩ	
			T_A = 25°C	1		50	61		20.2,20.3
			T_A = 125°C	2		64	79		
		PVIN = VIN = 5V	T_A = –55°C	3		36	50		
			T_A = 25°C	1		48	60		20.36, 20.37
			T_A = 125°C	2		62	73		
		PVIN = VIN = 12V	T_A = –55°C	3		34	45		
			T_A = 25°C	1		45	53		20.70, 20.71
			T_A = 125°C	2		59	67		
		PVIN = VIN = 14V	T_A = –55°C	3		34	45		
			T_A = 25°C	1		45	53		20.104,20.105
			T_A = 125°C	2		59	67		
$R_{\text{DS\_ON\_LS}}$	Low-side switch resistance at I_{LS} = 12A (lead length ≈ 3mm)	PVIN = VIN = 4.5V	T_A = –55°C	3		25	40	mΩ	
			T_A = 25°C	1		35	51		21.2,21.3
			T_A = 125°C	2		51	61		
		PVIN = VIN = 5V	T_A = –55°C	3		23	35		
			T_A = 25°C	1		33	45		21.8,21.9
			T_A = 125°C	2		48	56		
		PVIN = VIN = 12V	T_A = –55°C	3		23	32		
			T_A = 25°C	1		33	42		21.14, 21.15
			T_A = 125°C	2		47	55		
		PVIN = VIN = 14V	T_A = –55°C	3		23	32		
			T_A = 25°C	1		33	42		21.20, 21.21
			T_A = 125°C	2		47	55		

4 Applicable and Reference Documents

4.1 Applicable Documents

- Texas Instruments, *TPS7H4011-SP 4.5V to 14V Input 12A Radiation Hardened Synchronous Buck Converter* , data sheet.
- Texas Instruments, *TPS7H4011-SP (TPS7H4011EVM-CVAL) Evaluation Module User's Guide* , user's guide.

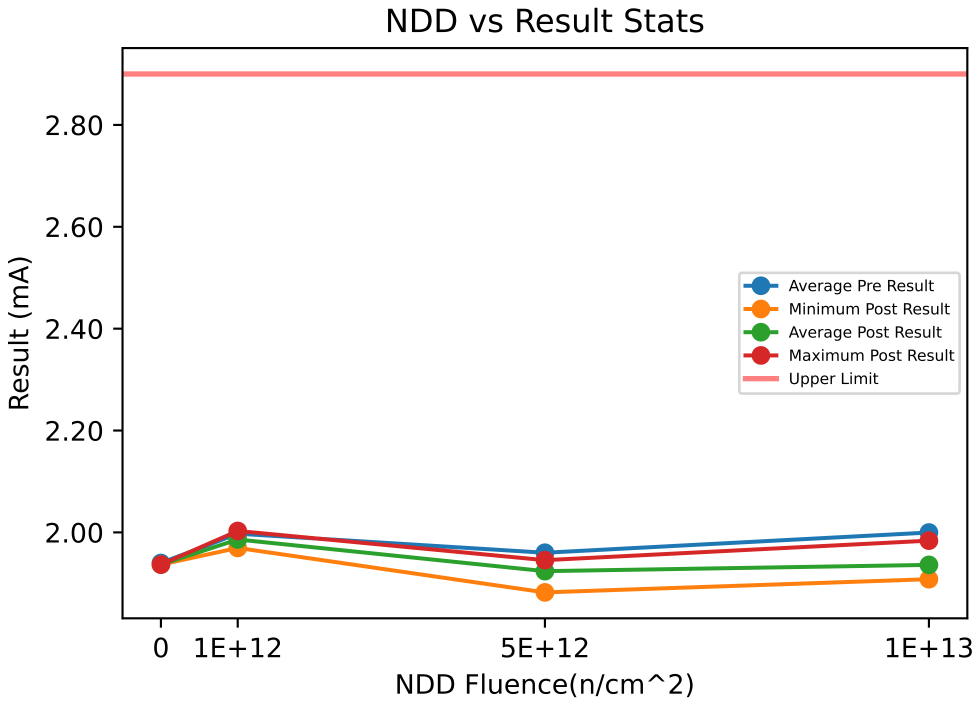
4.2 Reference Documents

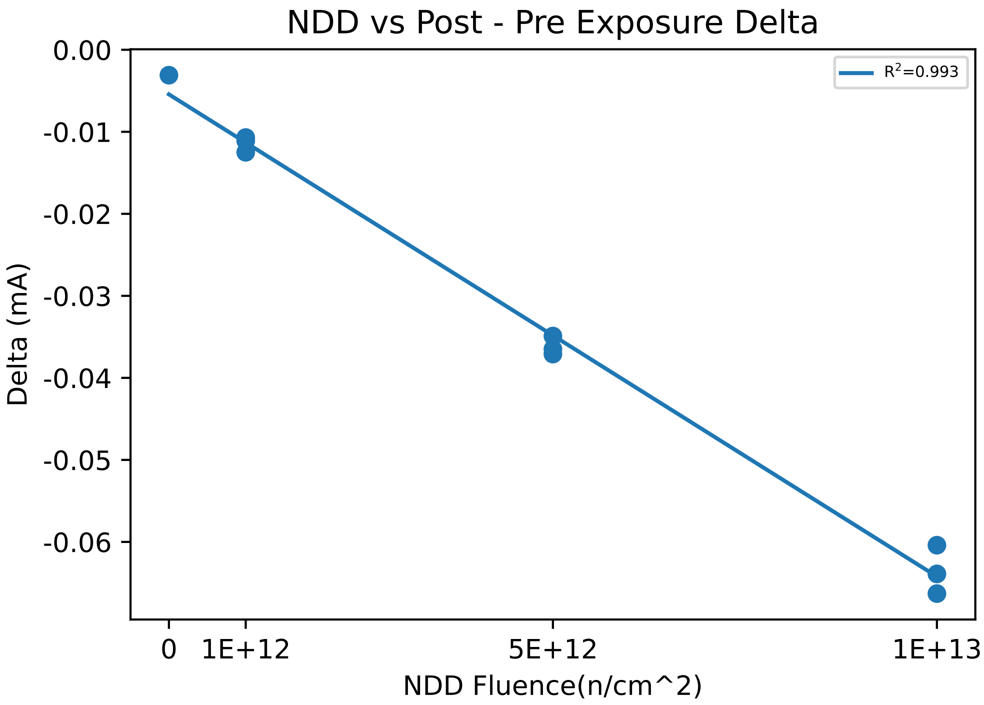
Texas Instruments neutron irradiation test follow the guideline from MIL-STD-883 TM 1017. The document is available in Defense Logistic Agency's website.

A Appendix: NDD Report Data

This appendix contains the NDD report data.

Device Test: 12.1 VIN_SHDN_CURR_4V(IDD|STATIC/VIN/4.5////@VIN_SHDN_CURR_4V)





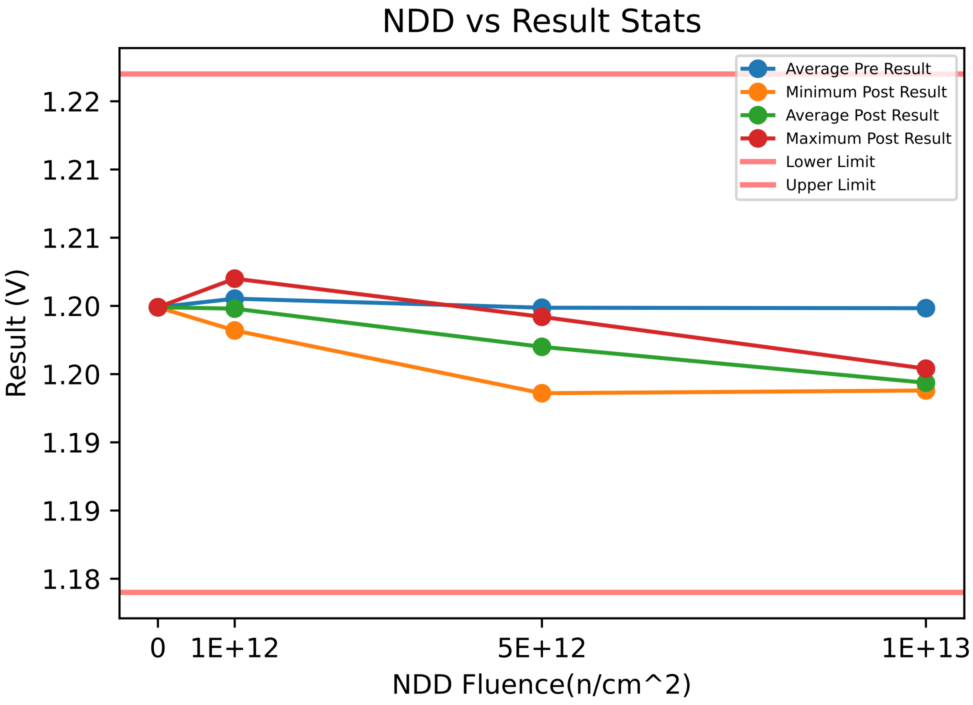
Test Results (Upper Limit = 2.9 (mA))

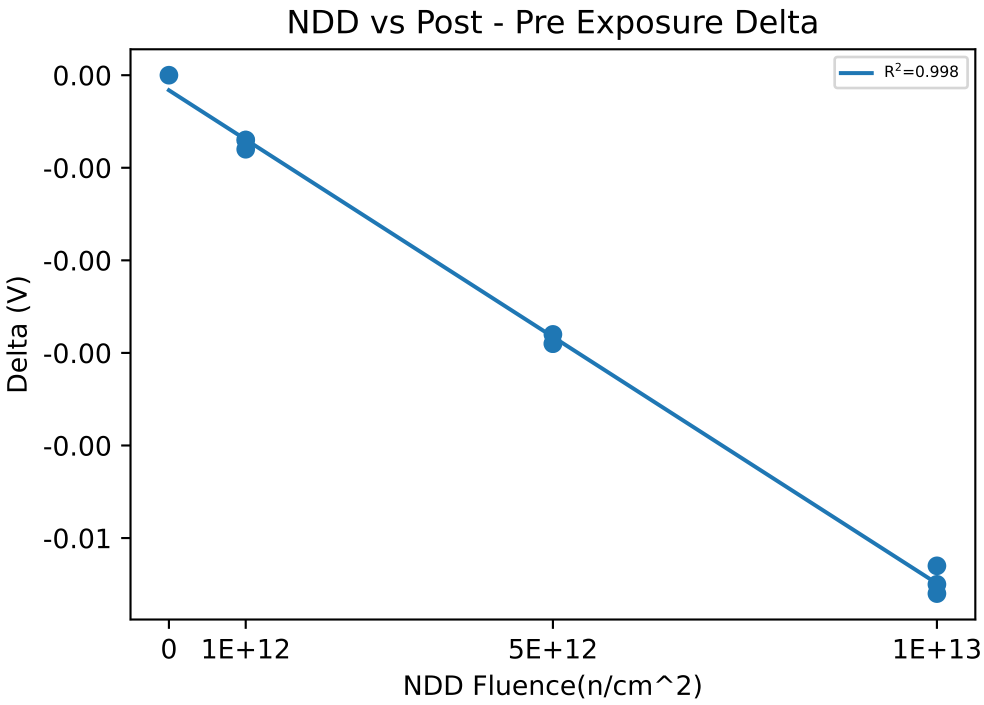
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.9802	1.9695	-0.0107
504	1e+12	NDD	2.0153	2.0028	-0.0125
505	1e+12	NDD	1.997	1.9859	-0.0111
506	5e+12	NDD	1.9805	1.944	-0.0365
507	5e+12	NDD	1.9171	1.8822	-0.0349
508	5e+12	NDD	1.9826	1.9455	-0.0371
509	1e+13	NDD	1.9685	1.9081	-0.0604
510	1e+13	NDD	2.0477	1.9838	-0.0639
511	1e+13	NDD	1.983	1.9167	-0.0663
512	0	Correlation	1.9399	1.9368	-0.0031

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.9399	1.9399	1.9399		1.9368	1.9368	1.9368		-0.0031	-0.0031	-0.0031	
1e+12	1.9802	1.9975	2.0153	0.017555	1.9695	1.9861	2.0028	0.016651	-0.0125	-0.011433	-0.0107	0.00094516
5e+12	1.9171	1.9601	1.9826	0.037225	1.8822	1.9239	1.9455	0.036121	-0.0371	-0.036167	-0.0349	0.0011372
1e+13	1.9685	1.9997	2.0477	0.042168	1.9081	1.9362	1.9838	0.041446	-0.0663	-0.063533	-0.0604	0.002967

Device Test: 12.10 VBANDGAP(LEVEL|STATIC/REFCAP/5////@VBANDGAP)





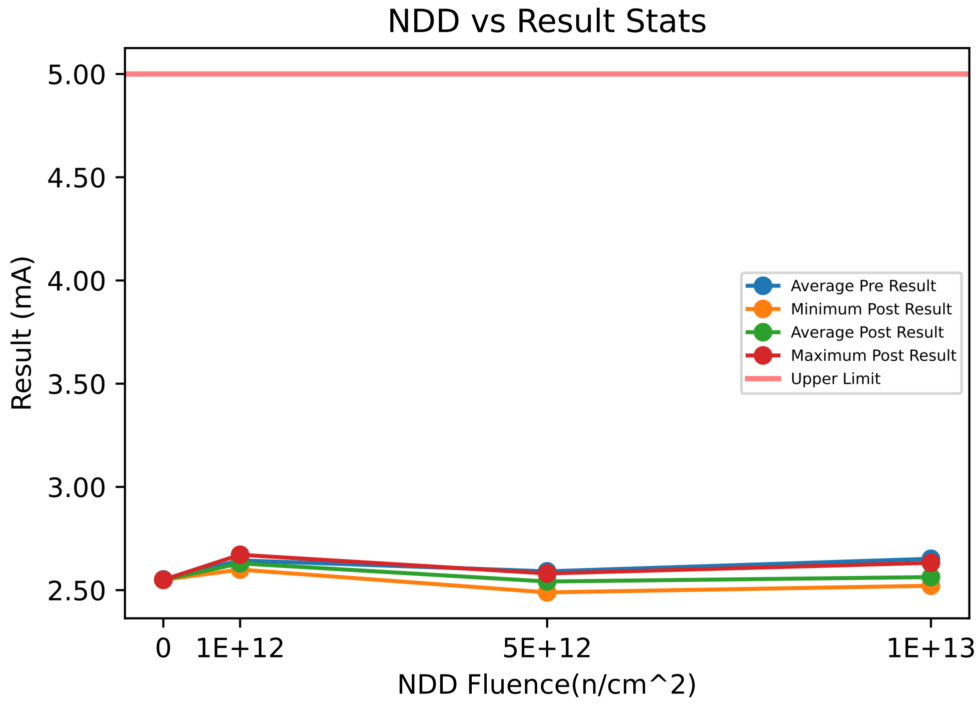
Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

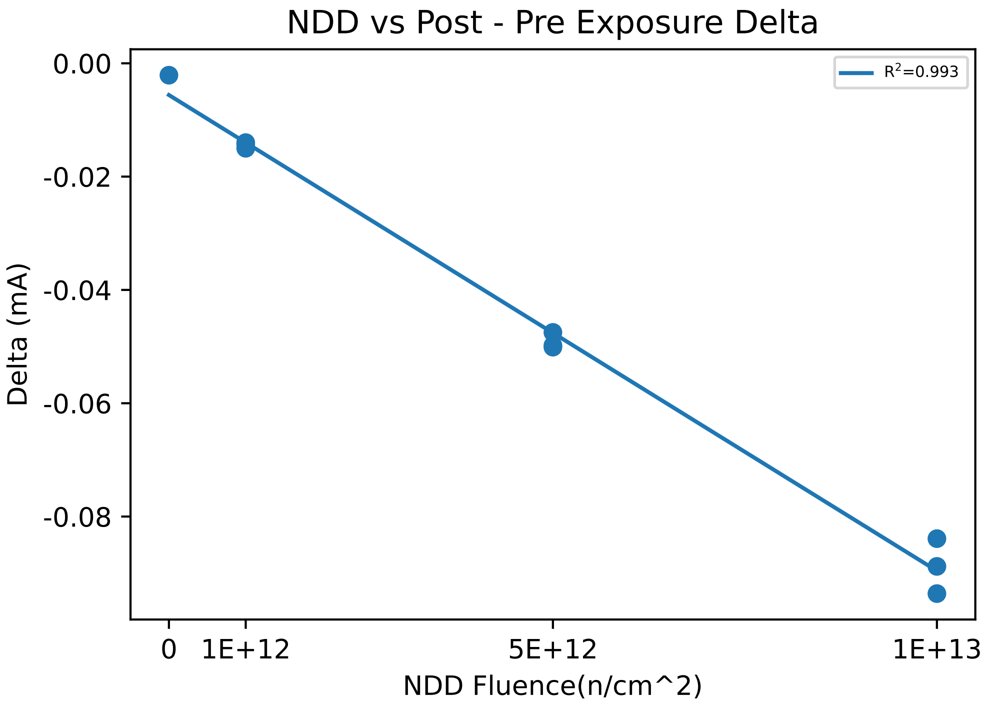
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.2049	1.2042	-0.0007
504	1e+12	NDD	1.204	1.2032	-0.0008
505	1e+12	NDD	1.2077	1.207	-0.0007
506	5e+12	NDD	1.207	1.2042	-0.0028
507	5e+12	NDD	1.2061	1.2032	-0.0029
508	5e+12	NDD	1.2015	1.1986	-0.0029
509	1e+13	NDD	1.2045	1.1989	-0.0056
510	1e+13	NDD	1.2043	1.1988	-0.0055
511	1e+13	NDD	1.2057	1.2004	-0.0053
512	0	Correlation	1.2049	1.2049	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.2049	1.2049	1.2049		1.2049	1.2049	1.2049		0	0	0	
1e+12	1.204	1.2055	1.2077	0.0019296	1.2032	1.2048	1.207	0.0019698	-0.0008	-0.00073333	-0.0007	5.7735e-05
5e+12	1.2015	1.2049	1.207	0.0029501	1.1986	1.202	1.2042	0.0029866	-0.0029	-0.0028667	-0.0028	5.7735e-05
1e+13	1.2043	1.2048	1.2057	0.00075719	1.1988	1.1994	1.2004	0.00089629	-0.0056	-0.0054667	-0.0053	0.00015275

Device Test: 12.13 IQ_VIN(IQ|STATIC/VIN/12////@IQ_VIN)





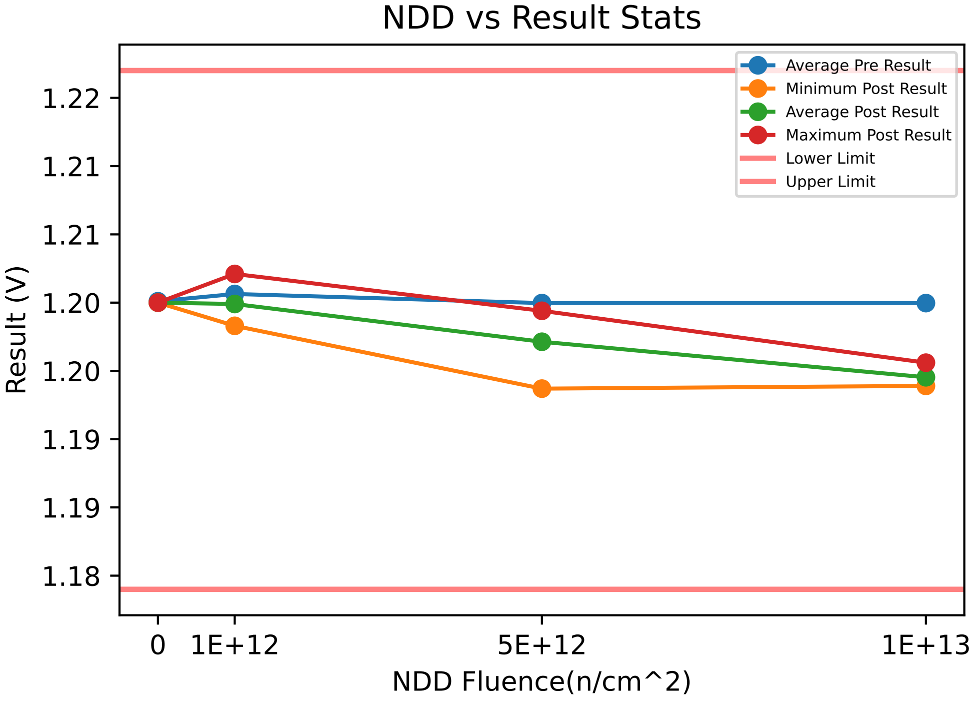
Test Results (Upper Limit = 5.0 (mA))

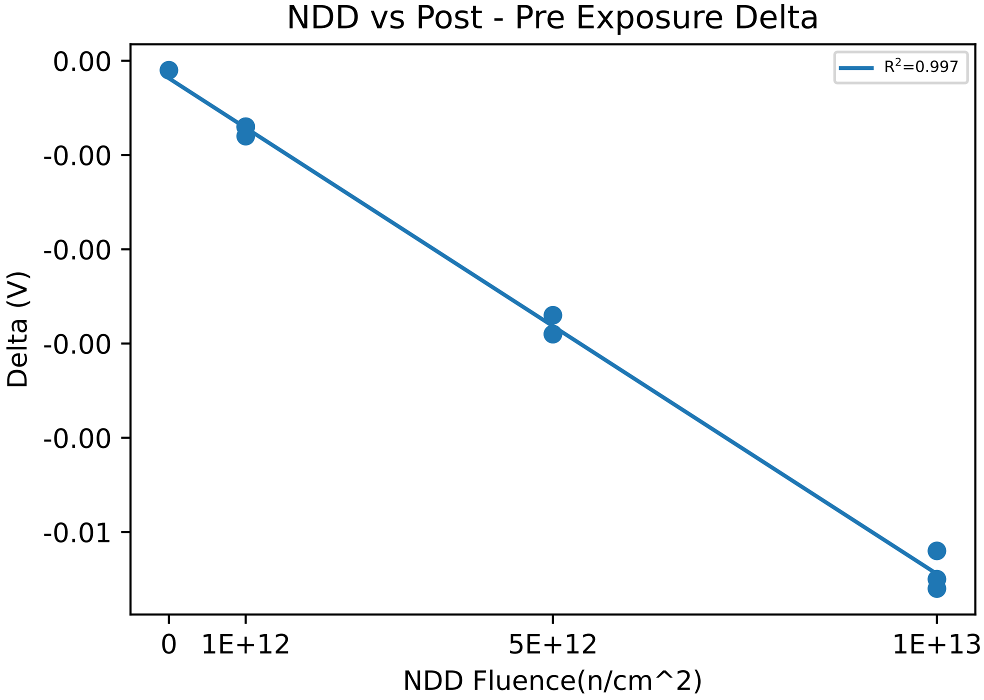
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.6138	2.5995	-0.0143
504	1e+12	NDD	2.6863	2.6713	-0.015
505	1e+12	NDD	2.6326	2.6186	-0.014
506	5e+12	NDD	2.6306	2.5808	-0.0498
507	5e+12	NDD	2.5366	2.4891	-0.0475
508	5e+12	NDD	2.6059	2.5558	-0.0501
509	1e+13	NDD	2.6052	2.5213	-0.0839
510	1e+13	NDD	2.7212	2.6324	-0.0888
511	1e+13	NDD	2.6295	2.5359	-0.0936
512	0	Correlation	2.5521	2.55	-0.0021

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5521	2.5521	2.5521		2.55	2.55	2.55		-0.0021	-0.0021	-0.0021	
1e+12	2.6138	2.6442	2.6863	0.037624	2.5995	2.6298	2.6713	0.037187	-0.015	-0.014433	-0.014	0.00051316
5e+12	2.5366	2.591	2.6306	0.048732	2.4891	2.5419	2.5808	0.047404	-0.0501	-0.049133	-0.0475	0.0014224
1e+13	2.6052	2.652	2.7212	0.061176	2.5213	2.5632	2.6324	0.060372	-0.0936	-0.088767	-0.0839	0.0048501

Device Test: 12.15 VBANDGAP(LEVEL|STATIC/REFCAP/12////@VBANDGAP)





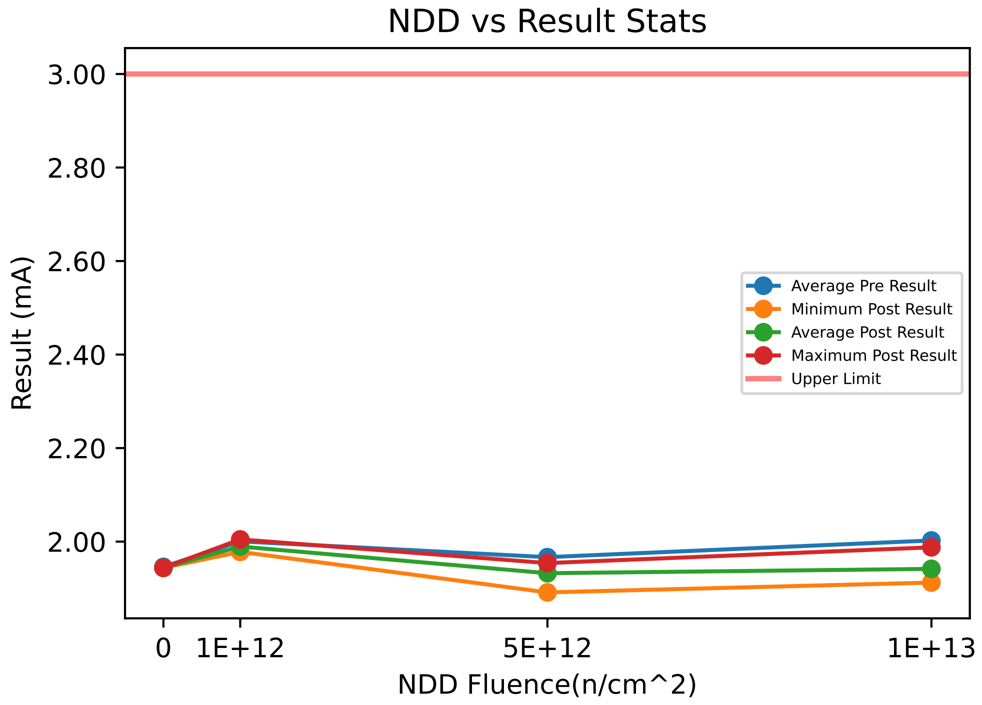
Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.205	1.2043	-0.0007
504	1e+12	NDD	1.2041	1.2033	-0.0008
505	1e+12	NDD	1.2078	1.2071	-0.0007
506	5e+12	NDD	1.2071	1.2044	-0.0027
507	5e+12	NDD	1.2062	1.2033	-0.0029
508	5e+12	NDD	1.2016	1.1987	-0.0029
509	1e+13	NDD	1.2046	1.1991	-0.0055
510	1e+13	NDD	1.2045	1.1989	-0.0056
511	1e+13	NDD	1.2058	1.2006	-0.0052
512	0	Correlation	1.2051	1.205	-0.0001

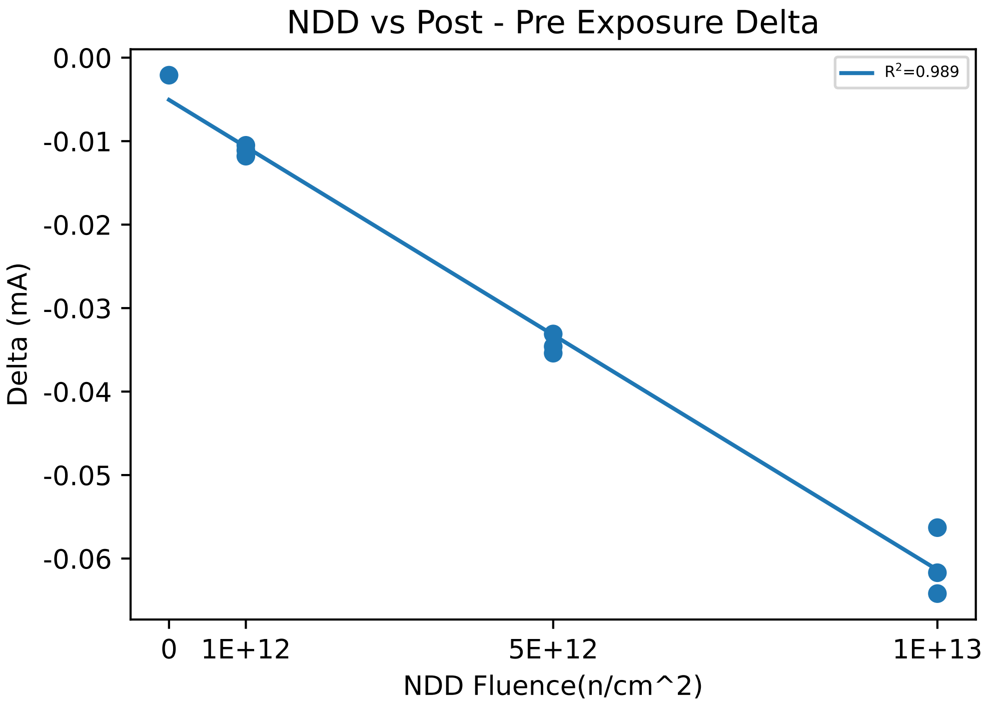
Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.2051	1.2051	1.2051		1.205	1.205	1.205		-0.0001	-0.0001	-0.0001	
1e+12	1.2041	1.2056	1.2078	0.0019296	1.2033	1.2049	1.2071	0.0019698	-0.0008	-0.00073333	-0.0007	5.7735e-05
5e+12	1.2016	1.205	1.2071	0.0029501	1.1987	1.2021	1.2044	0.0030238	-0.0029	-0.0028333	-0.0027	0.00011547
1e+13	1.2045	1.205	1.2058	0.00072342	1.1989	1.1995	1.2006	0.00092916	-0.0056	-0.0054333	-0.0052	0.00020817

Device Test: 12.16 VIN_SHDN_CURR_14V(IDD|STATIC/VIN/14////@VIN_SHDN_CURR_14V)



NDD vs Result Stats



NDD vs Post - Pre Exposure Delta

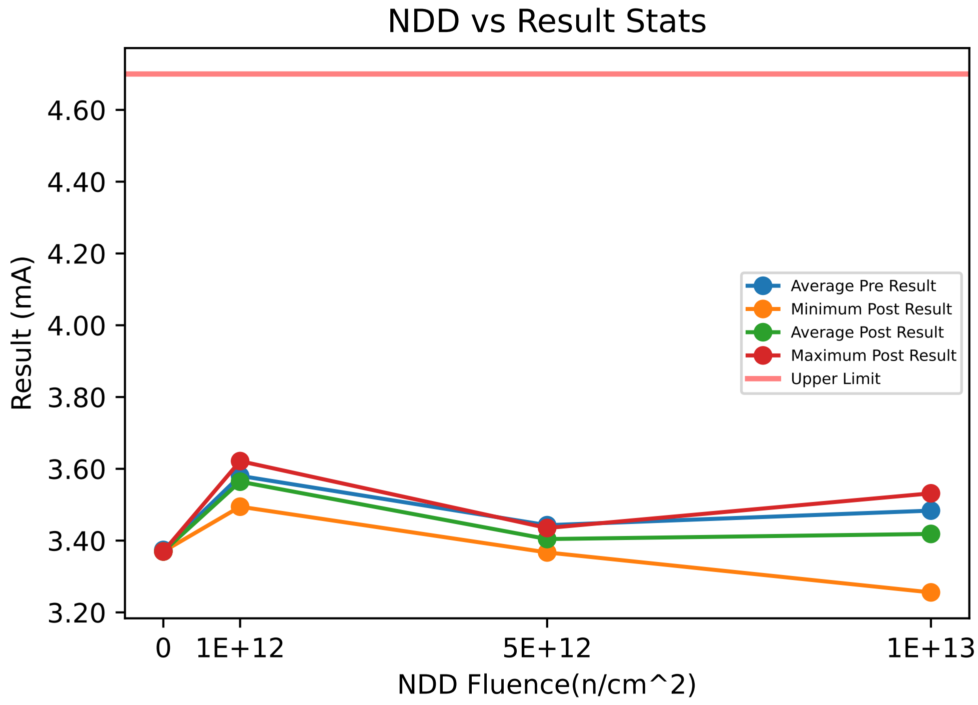
Test Results (Upper Limit = 3.0 (mA))

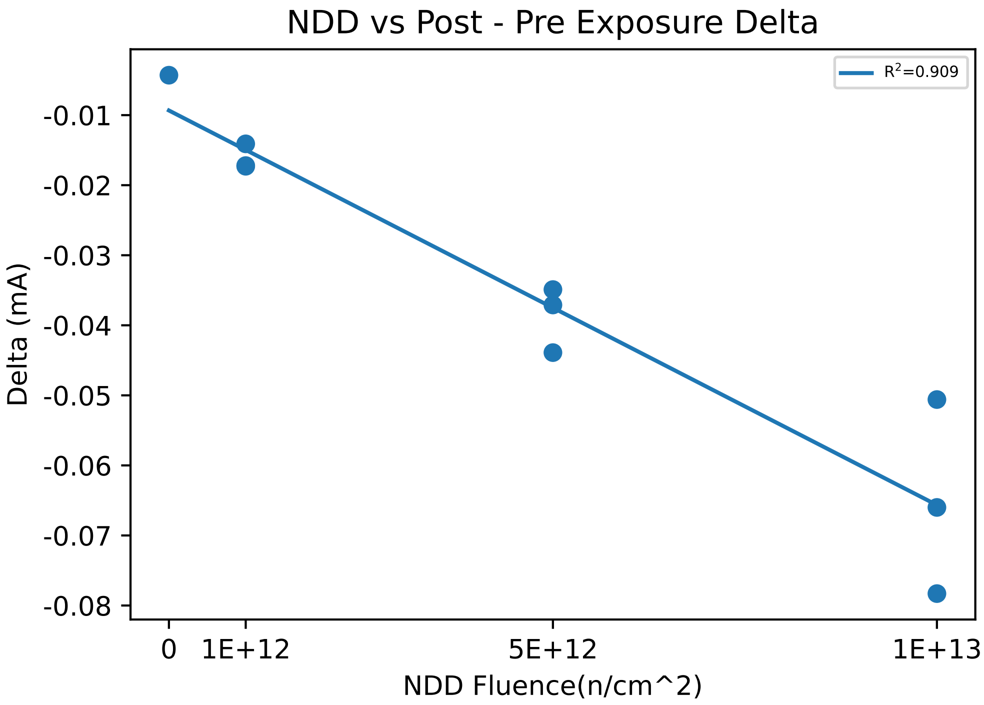
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.9886	1.9781	-0.0105
504	1e+12	NDD	2.0165	2.0047	-0.0118
505	1e+12	NDD	1.9966	1.9855	-0.0111
506	5e+12	NDD	1.9887	1.9541	-0.0346
507	5e+12	NDD	1.9245	1.8914	-0.0331
508	5e+12	NDD	1.9872	1.9518	-0.0354
509	1e+13	NDD	1.9687	1.9124	-0.0563
510	1e+13	NDD	2.0495	1.9878	-0.0617
511	1e+13	NDD	1.9891	1.9249	-0.0642
512	0	Correlation	1.946	1.9439	-0.0021

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.946	1.946	1.946		1.9439	1.9439	1.9439		-0.0021	-0.0021	-0.0021	
1e+12	1.9886	2.0006	2.0165	0.014367	1.9781	1.9894	2.0047	0.013729	-0.0118	-0.011133	-0.0105	0.00065064
5e+12	1.9245	1.9668	1.9887	0.036641	1.8914	1.9324	1.9541	0.035555	-0.0354	-0.034367	-0.0331	0.0011676
1e+13	1.9687	2.0024	2.0495	0.042018	1.9124	1.9417	1.9878	0.04041	-0.0642	-0.060733	-0.0563	0.0040377

Device Test: 12.17 PVIN_SHDN_CURR_14V(IDD|STATIC/PVIN/14////@PVIN_SHDN_CURR_14V)





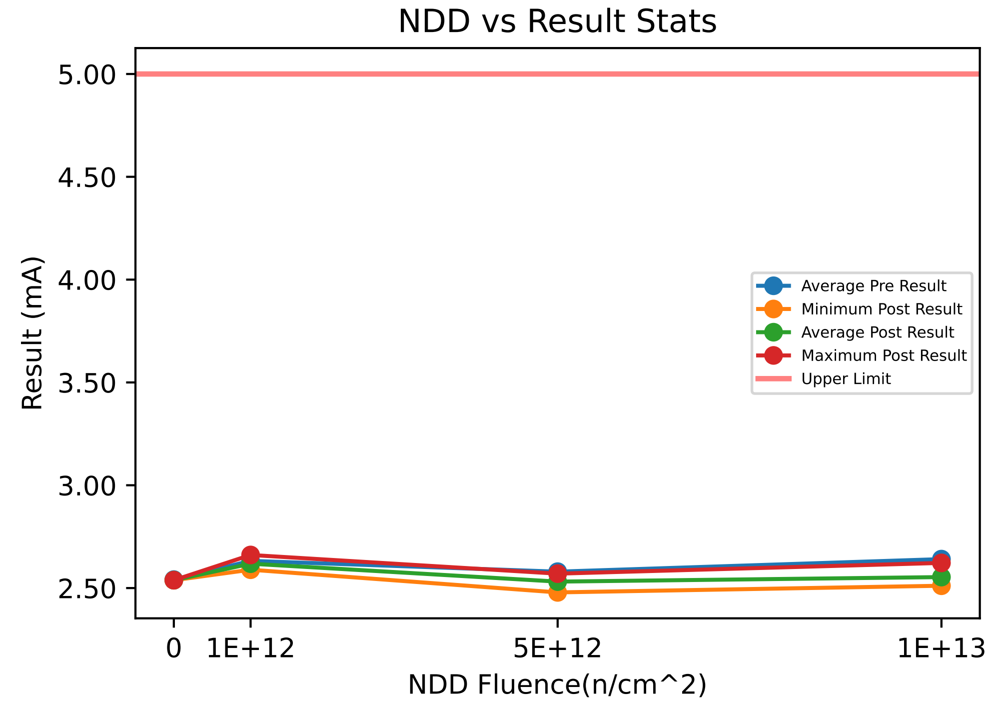
Test Results (Upper Limit = 4.7 (mA))

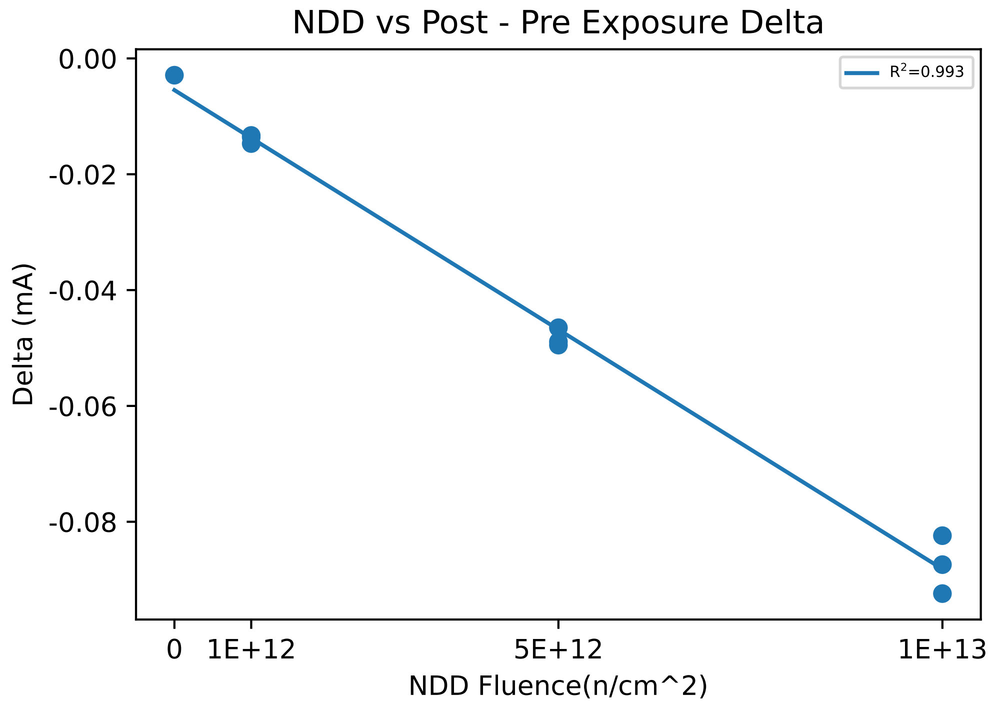
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.5086	3.4945	-0.0141
504	1e+12	NDD	3.5938	3.5766	-0.0172
505	1e+12	NDD	3.6388	3.6215	-0.0173
506	5e+12	NDD	3.4548	3.4109	-0.0439
507	5e+12	NDD	3.4041	3.367	-0.0371
508	5e+12	NDD	3.47	3.4351	-0.0349
509	1e+13	NDD	3.3063	3.2557	-0.0506
510	1e+13	NDD	3.5344	3.4684	-0.066
511	1e+13	NDD	3.61	3.5317	-0.0783
512	0	Correlation	3.374	3.3697	-0.0043

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.374	3.374	3.374		3.3697	3.3697	3.3697		-0.0043	-0.0043	-0.0043	
1e+12	3.5086	3.5804	3.6388	0.066126	3.4945	3.5642	3.6215	0.064402	-0.0173	-0.0162	-0.0141	0.0018193
5e+12	3.4041	3.443	3.47	0.034507	3.367	3.4043	3.4351	0.034522	-0.0439	-0.038633	-0.0349	0.0046918
1e+13	3.3063	3.4836	3.61	0.1581	3.2557	3.4186	3.5317	0.14458	-0.0783	-0.064967	-0.0506	0.013879

Device Test: 12.18 IQ_VIN(IQ|STATIC/VIN/14////@IQ_VIN)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

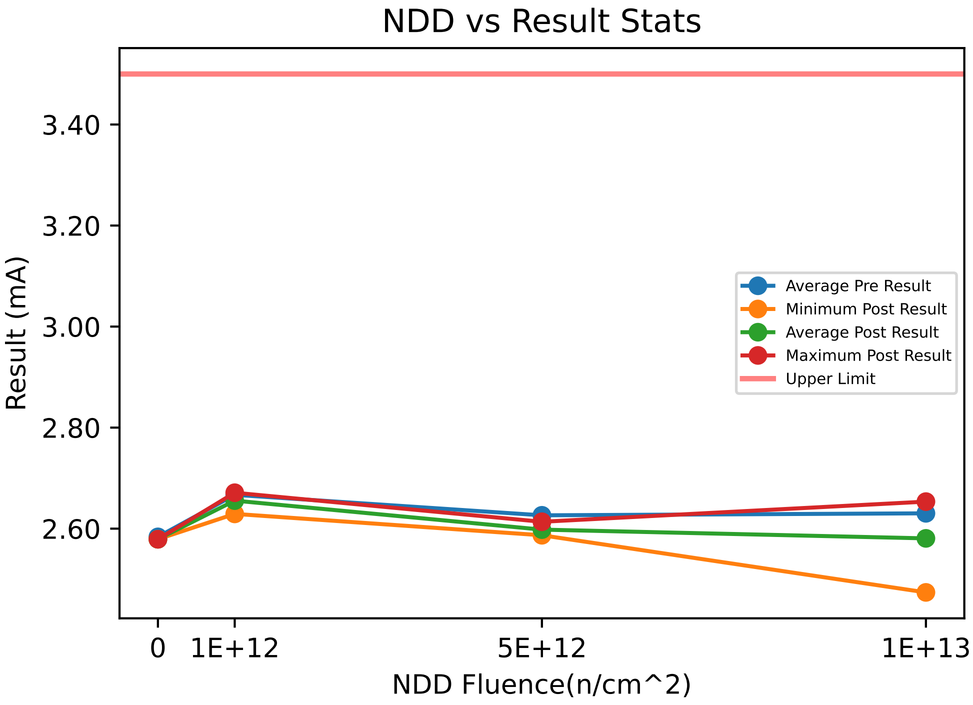
Test Results (Upper Limit = 5.0 (mA))

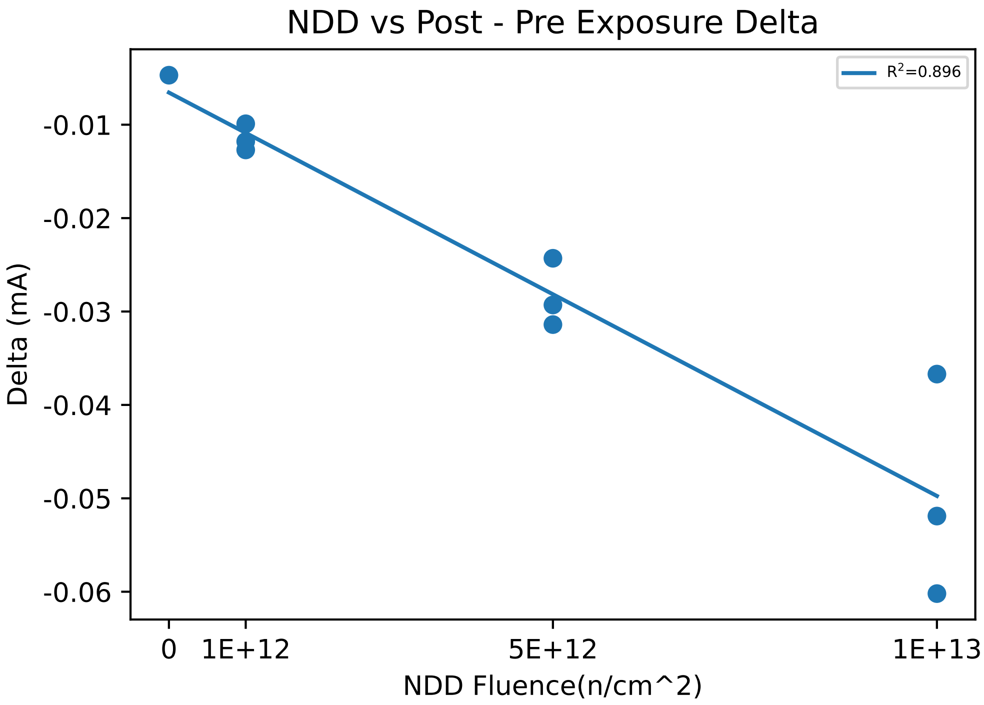
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.6025	2.5892	-0.0133
504	1e+12	NDD	2.6756	2.6609	-0.0147
505	1e+12	NDD	2.619	2.6054	-0.0136
506	5e+12	NDD	2.619	2.5701	-0.0489
507	5e+12	NDD	2.5254	2.4789	-0.0465
508	5e+12	NDD	2.5947	2.5452	-0.0495
509	1e+13	NDD	2.5937	2.5113	-0.0824
510	1e+13	NDD	2.7097	2.6223	-0.0874
511	1e+13	NDD	2.6189	2.5265	-0.0924
512	0	Correlation	2.5411	2.5382	-0.0029

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5411	2.5411	2.5411		2.5382	2.5382	2.5382		-0.0029	-0.0029	-0.0029	
1e+12	2.6025	2.6324	2.6756	0.038339	2.5892	2.6185	2.6609	0.037602	-0.0147	-0.013867	-0.0133	0.00073711
5e+12	2.5254	2.5797	2.619	0.048569	2.4789	2.5314	2.5701	0.04714	-0.0495	-0.0483	-0.0465	0.0015875
1e+13	2.5937	2.6408	2.7097	0.061013	2.5113	2.5534	2.6223	0.06018	-0.0924	-0.0874	-0.0824	0.005

Device Test: 12.2 PVIN_SHDN_CURR_4V(IDD|STATIC/PVIN/4.5////@PVIN_SHDN_CURR_4V)





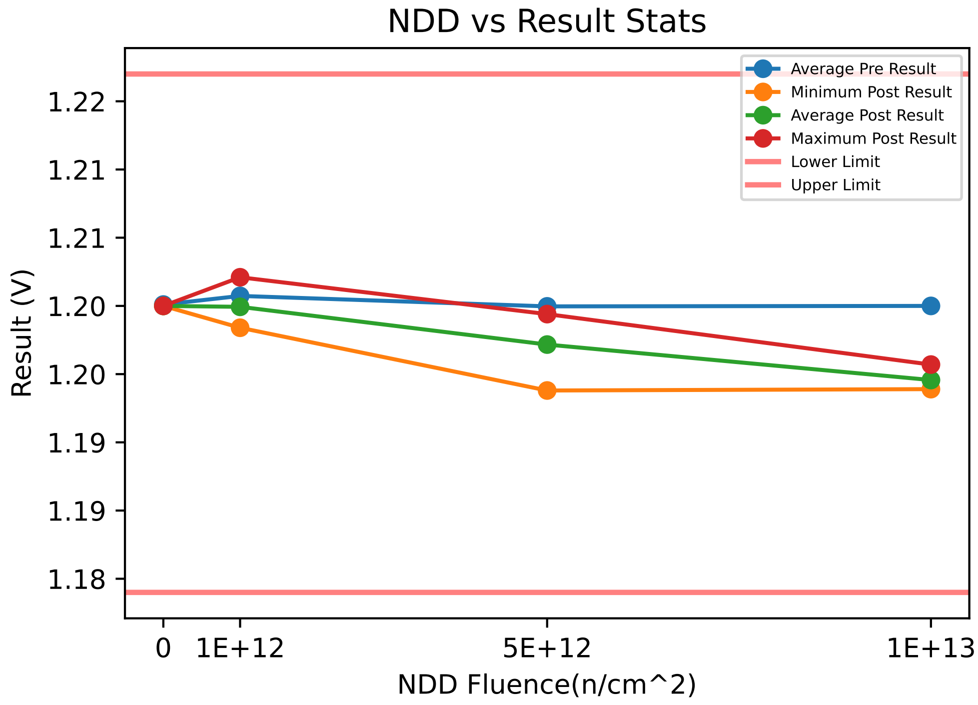
Test Results (Upper Limit = 3.5 (mA))

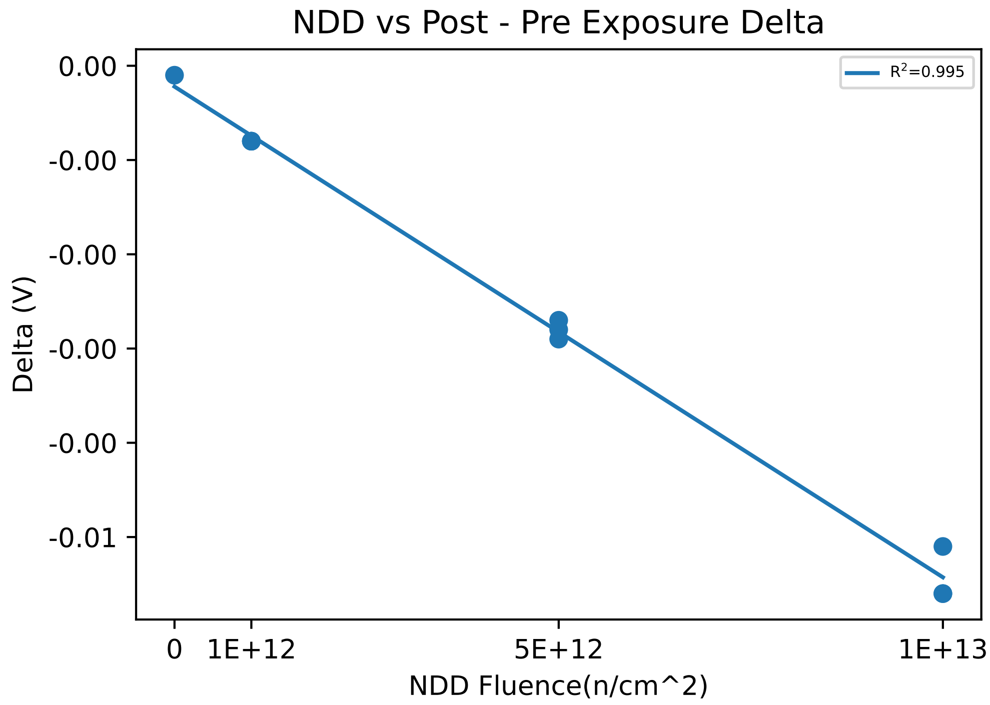
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.6391	2.6292	-0.0099
504	1e+12	NDD	2.6788	2.6661	-0.0127
505	1e+12	NDD	2.6829	2.6711	-0.0118
506	5e+12	NDD	2.6429	2.6136	-0.0293
507	5e+12	NDD	2.6183	2.5869	-0.0314
508	5e+12	NDD	2.618	2.5937	-0.0243
509	1e+13	NDD	2.5105	2.4738	-0.0367
510	1e+13	NDD	2.7054	2.6535	-0.0519
511	1e+13	NDD	2.6751	2.6149	-0.0602
512	0	Correlation	2.5837	2.579	-0.0047

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5837	2.5837	2.5837		2.579	2.579	2.579		-0.0047	-0.0047	-0.0047	
1e+12	2.6391	2.6669	2.6829	0.024191	2.6292	2.6555	2.6711	0.022885	-0.0127	-0.011467	-0.0099	0.0014295
5e+12	2.618	2.6264	2.6429	0.01429	2.5869	2.5981	2.6136	0.013875	-0.0314	-0.028333	-0.0243	0.0036474
1e+13	2.5105	2.6303	2.7054	0.10488	2.4738	2.5807	2.6535	0.094597	-0.0602	-0.0496	-0.0367	0.011918

Device Test: 12.20 VBANDGAP(LEVEL|STATIC/REFCAP/14////@VBANDGAP)





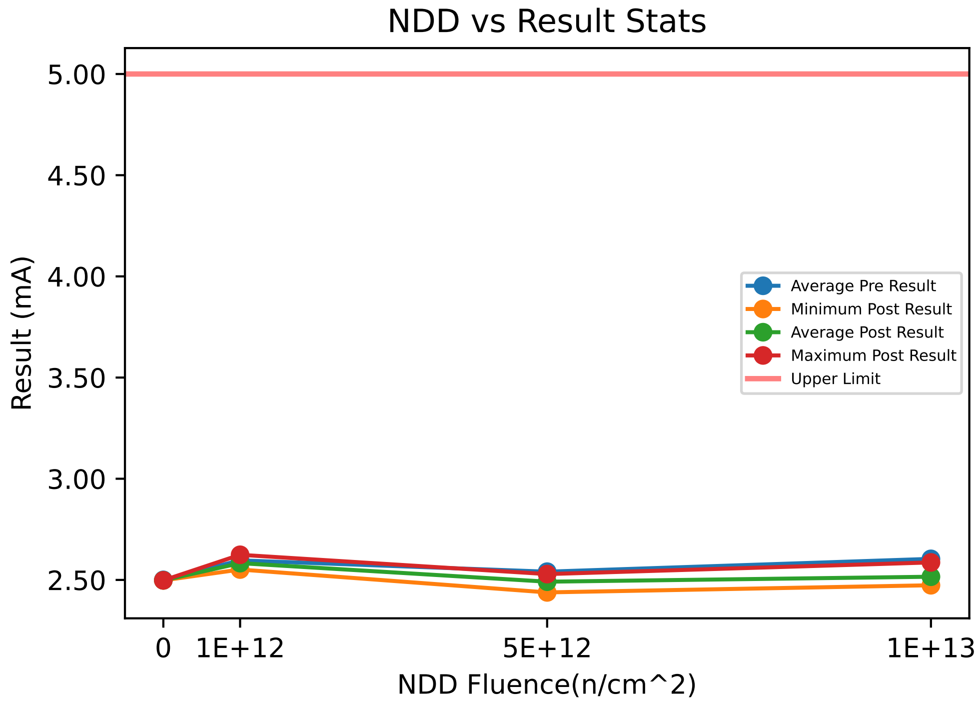
Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

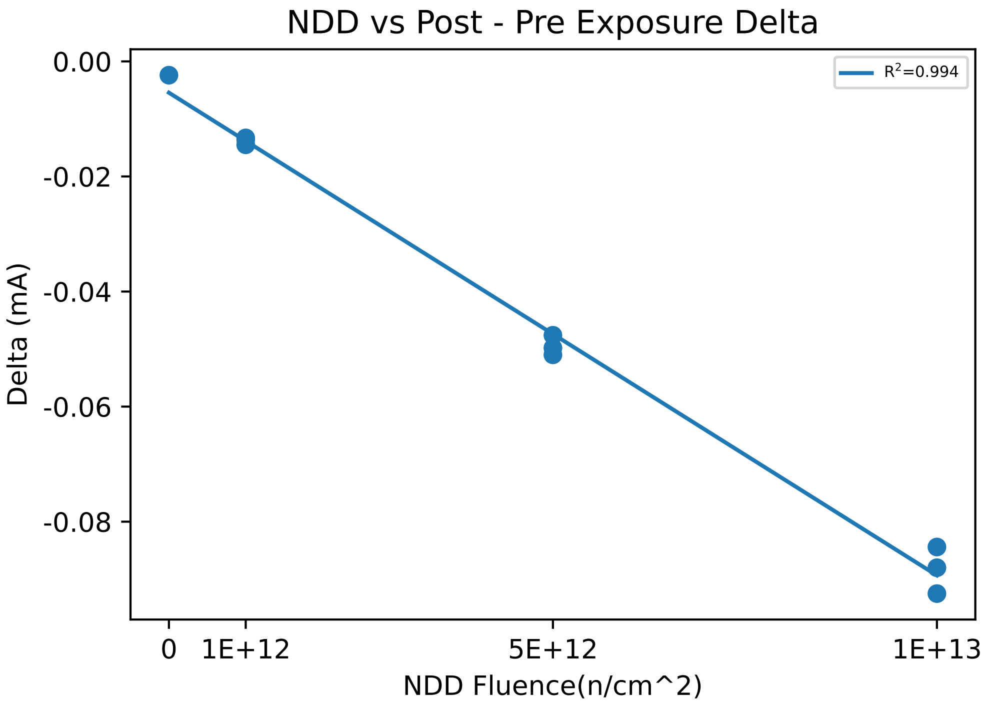
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.2051	1.2043	-0.0008
504	1e+12	NDD	1.2042	1.2034	-0.0008
505	1e+12	NDD	1.2079	1.2071	-0.0008
506	5e+12	NDD	1.2071	1.2044	-0.0027
507	5e+12	NDD	1.2062	1.2033	-0.0029
508	5e+12	NDD	1.2016	1.1988	-0.0028
509	1e+13	NDD	1.2047	1.1991	-0.0056
510	1e+13	NDD	1.2045	1.1989	-0.0056
511	1e+13	NDD	1.2058	1.2007	-0.0051
512	0	Correlation	1.2051	1.205	-0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.2051	1.2051	1.2051		1.205	1.205	1.205		-0.0001	-0.0001	-0.0001	
1e+12	1.2042	1.2057	1.2079	0.0019296	1.2034	1.2049	1.2071	0.0019296	-0.0008	-0.0008	-0.0008	1.2821e-16
5e+12	1.2016	1.205	1.2071	0.0029501	1.1988	1.2022	1.2044	0.002967	-0.0029	-0.0028	-0.0027	0.0001
1e+13	1.2045	1.205	1.2058	0.0007	1.1989	1.1996	1.2007	0.00098658	-0.0056	-0.0054333	-0.0051	0.00028868

Device Test: 12.3 IQ_VIN(IQ|STATIC/VIN/4.5////@IQ_VIN)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

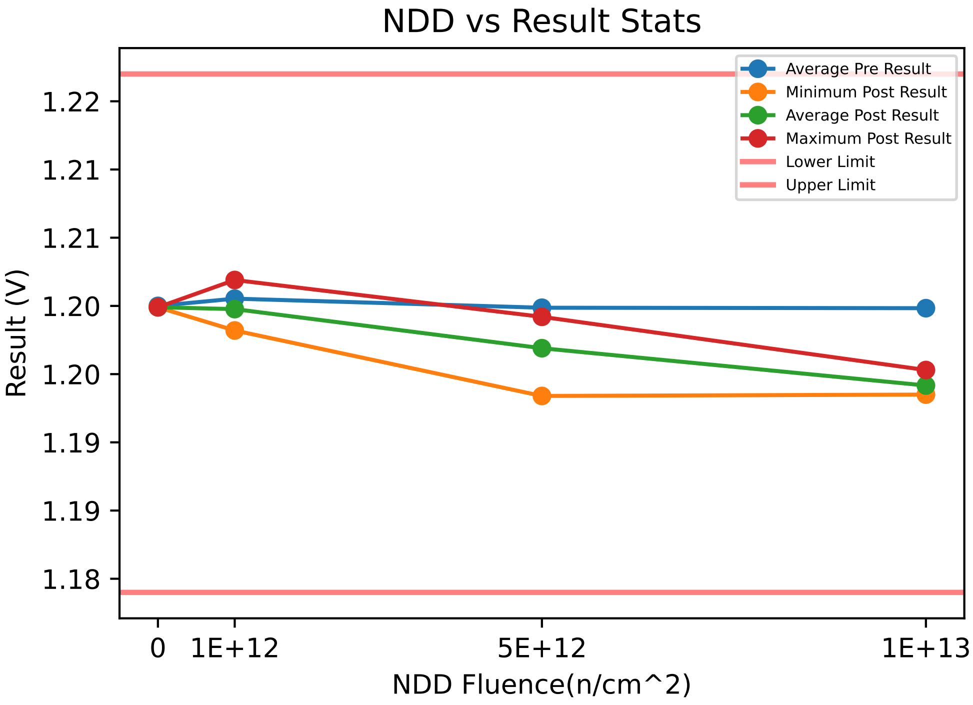
Test Results (Upper Limit = 5.0 (mA))

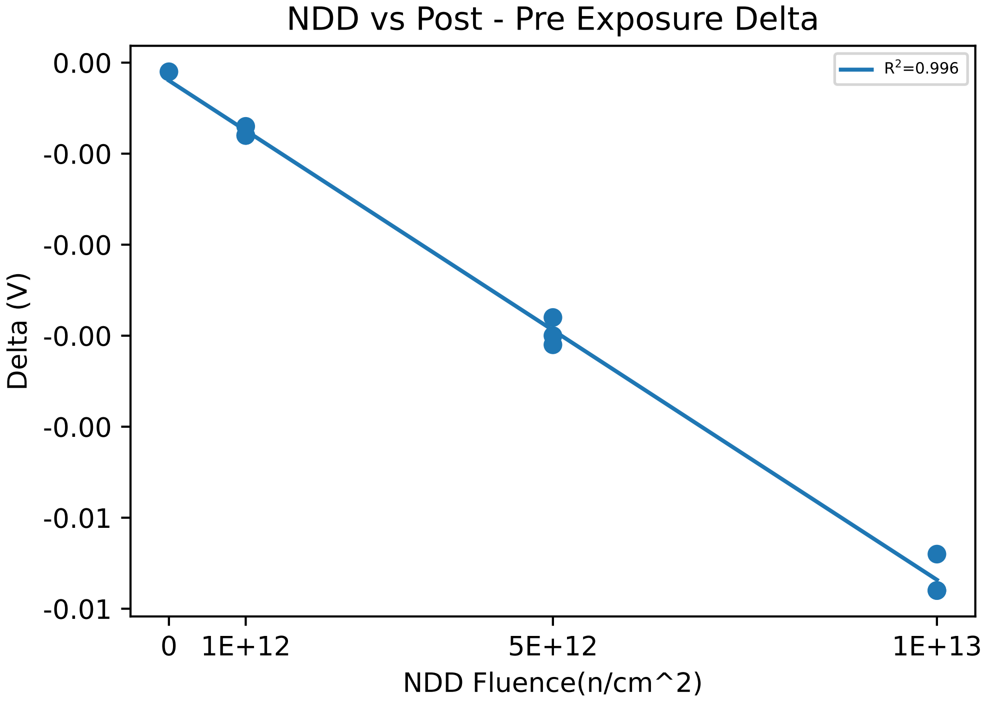
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.5647	2.5514	-0.0133
504	1e+12	NDD	2.6387	2.6242	-0.0145
505	1e+12	NDD	2.5868	2.5732	-0.0136
506	5e+12	NDD	2.5799	2.5289	-0.051
507	5e+12	NDD	2.486	2.4384	-0.0476
508	5e+12	NDD	2.5564	2.5066	-0.0498
509	1e+13	NDD	2.5581	2.4737	-0.0844
510	1e+13	NDD	2.6745	2.5865	-0.088
511	1e+13	NDD	2.5798	2.4873	-0.0925
512	0	Correlation	2.5003	2.4979	-0.0024

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5003	2.5003	2.5003		2.4979	2.4979	2.4979		-0.0024	-0.0024	-0.0024	
1e+12	2.5647	2.5967	2.6387	0.037987	2.5514	2.5829	2.6242	0.037363	-0.0145	-0.0138	-0.0133	0.0006245
5e+12	2.486	2.5408	2.5799	0.048863	2.4384	2.4913	2.5289	0.04715	-0.051	-0.049467	-0.0476	0.0017243
1e+13	2.5581	2.6041	2.6745	0.061898	2.4737	2.5158	2.5865	0.061576	-0.0925	-0.0883	-0.0844	0.0040583

Device Test: 12.5 VBANDGAP(LEVEL|STATIC/REFCAP/4.5////@VBANDGAP)





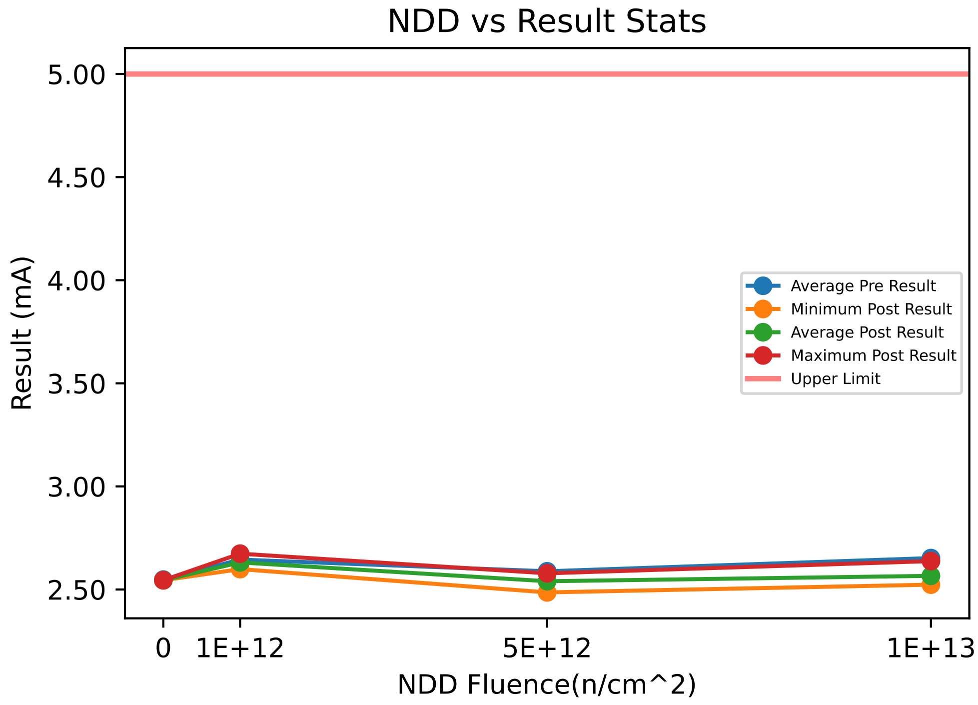
Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

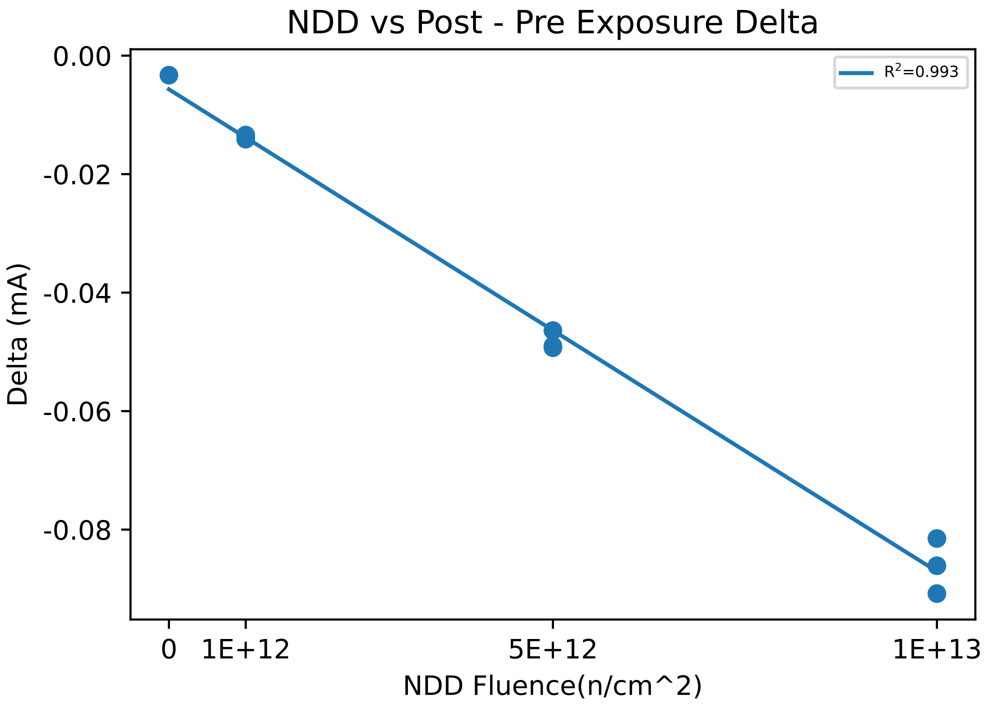
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.2049	1.2042	-0.0007
504	1e+12	NDD	1.204	1.2032	-0.0008
505	1e+12	NDD	1.2077	1.2069	-0.0008
506	5e+12	NDD	1.207	1.2042	-0.0028
507	5e+12	NDD	1.2061	1.2031	-0.003
508	5e+12	NDD	1.2015	1.1984	-0.0031
509	1e+13	NDD	1.2045	1.1987	-0.0058
510	1e+13	NDD	1.2043	1.1985	-0.0058
511	1e+13	NDD	1.2057	1.2003	-0.0054
512	0	Correlation	1.205	1.2049	-0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.205	1.205	1.205		1.2049	1.2049	1.2049		-0.0001	-0.0001	-0.0001	
1e+12	1.204	1.2055	1.2077	0.0019296	1.2032	1.2048	1.2069	0.001914	-0.0008	-0.00076667	-0.0007	5.7735e-05
5e+12	1.2015	1.2049	1.207	0.0029501	1.1984	1.2019	1.2042	0.0030806	-0.0031	-0.0029667	-0.0028	0.00015275
1e+13	1.2043	1.2048	1.2057	0.00075719	1.1985	1.1992	1.2003	0.00098658	-0.0058	-0.0056667	-0.0054	0.00023094

Device Test: 12.8 IQ_VIN(IQ|STATIC/VIN/5////@IQ_VIN)





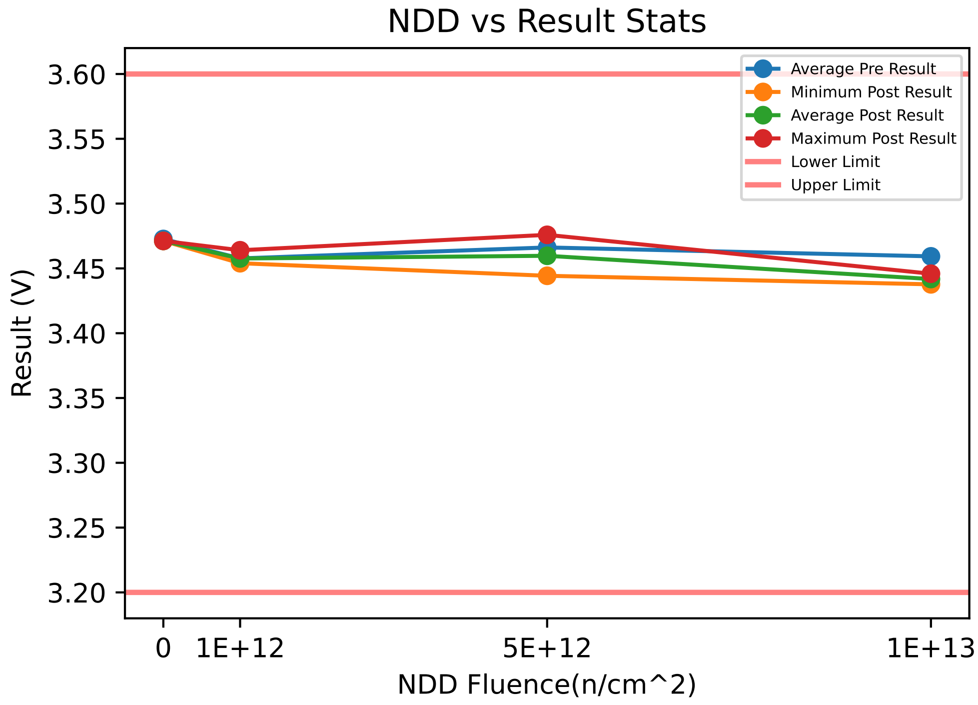
Test Results (Upper Limit = 5.0 (mA))

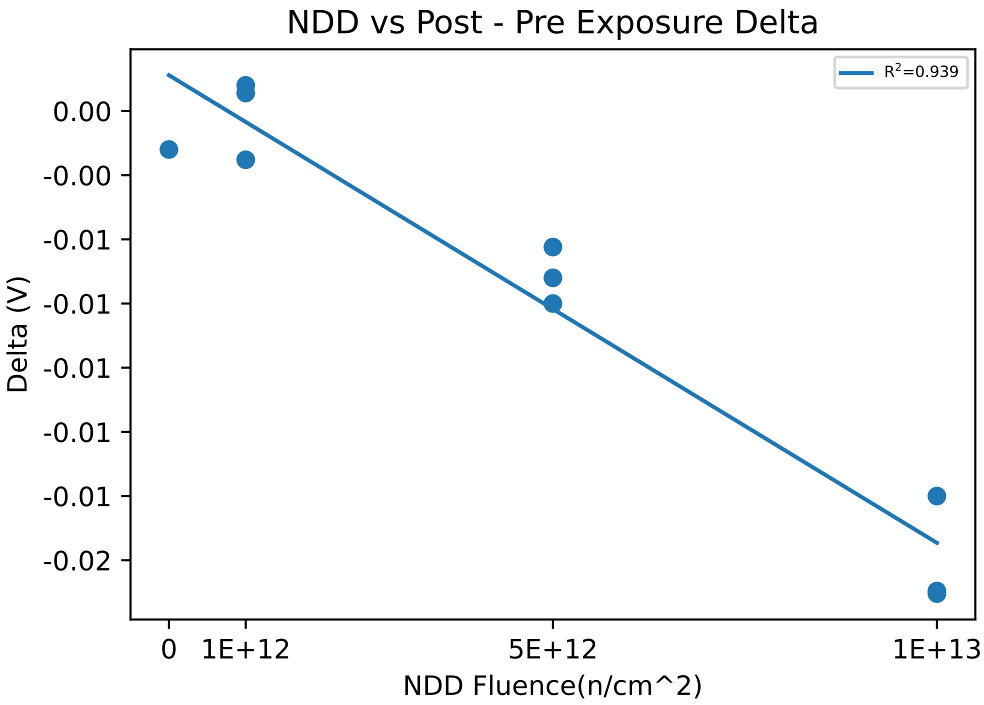
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.6122	2.5988	-0.0134
504	1e+12	NDD	2.6878	2.6737	-0.0141
505	1e+12	NDD	2.6348	2.6213	-0.0135
506	5e+12	NDD	2.6278	2.5785	-0.0493
507	5e+12	NDD	2.5323	2.4859	-0.0464
508	5e+12	NDD	2.6047	2.5557	-0.049
509	1e+13	NDD	2.6049	2.5234	-0.0815
510	1e+13	NDD	2.7237	2.6376	-0.0861
511	1e+13	NDD	2.6283	2.5375	-0.0908
512	0	Correlation	2.5481	2.5448	-0.0033

Test Statistics (mA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5481	2.5481	2.5481		2.5448	2.5448	2.5448		-0.0033	-0.0033	-0.0033	
1e+12	2.6122	2.6449	2.6878	0.038805	2.5988	2.6313	2.6737	0.038432	-0.0141	-0.013667	-0.0134	0.00037859
5e+12	2.5323	2.5883	2.6278	0.049826	2.4859	2.54	2.5785	0.048247	-0.0493	-0.048233	-0.0464	0.0015948
1e+13	2.6049	2.6523	2.7237	0.062931	2.5234	2.5662	2.6376	0.062263	-0.0908	-0.086133	-0.0815	0.0046501

Device Test: 14.1 UVLO_RISE_PVIN(THRESHOLD|RISE/PVIN/4.5////@UVLO_RISE_PVIN)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

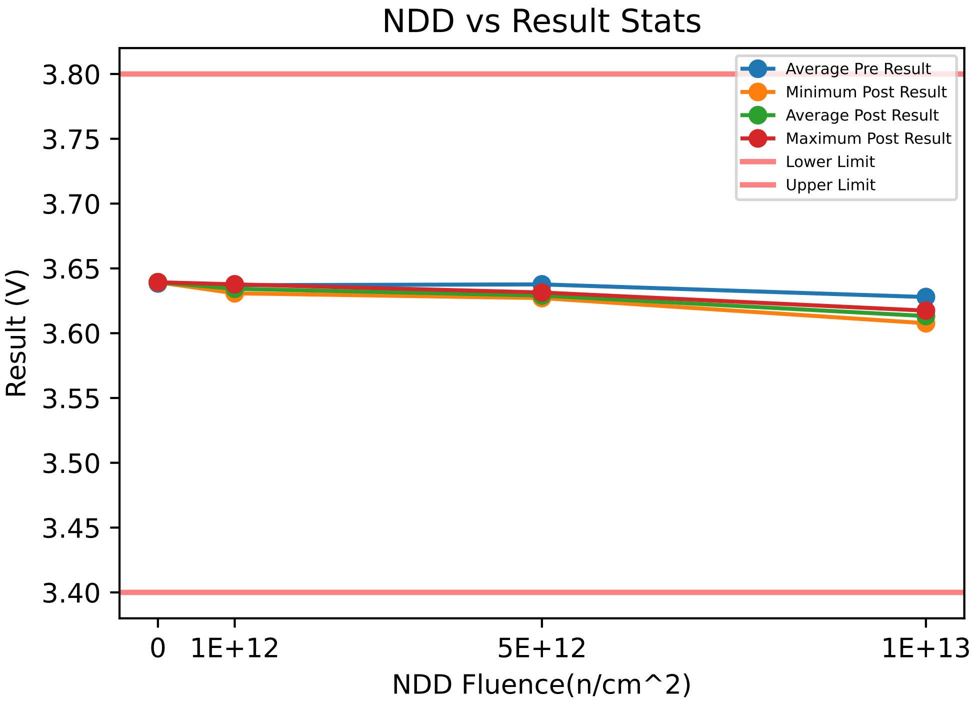
Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

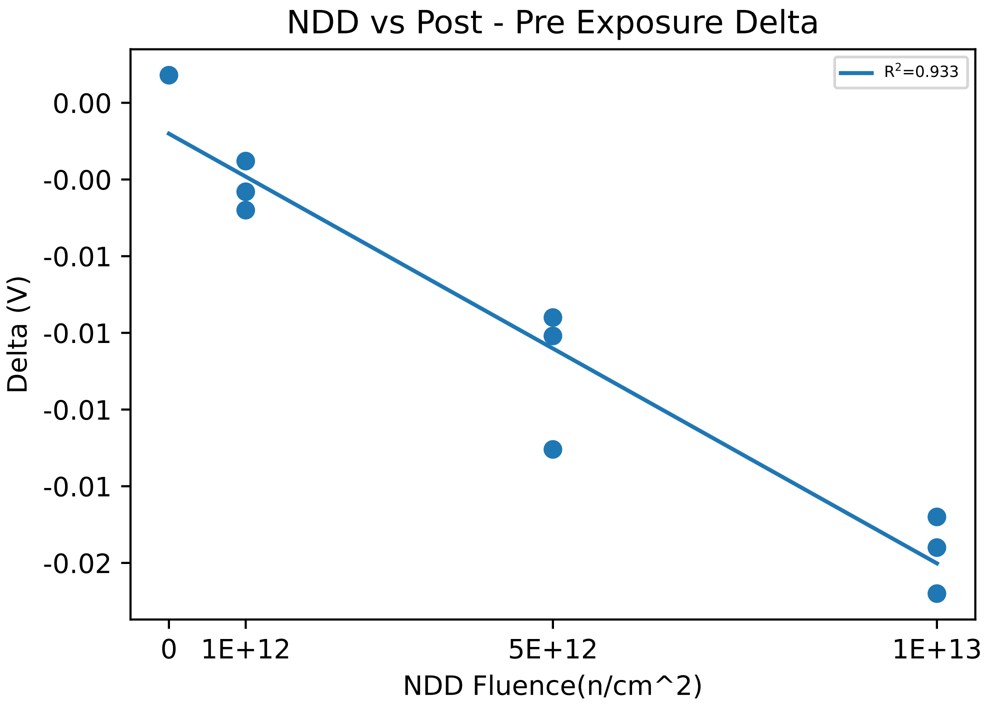
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.463	3.464	0.001
504	1e+12	NDD	3.4568	3.4549	-0.0019
505	1e+12	NDD	3.4533	3.454	0.0007
506	5e+12	NDD	3.4496	3.4443	-0.0053
507	5e+12	NDD	3.4824	3.4759	-0.0065
508	5e+12	NDD	3.4665	3.459	-0.0075
509	1e+13	NDD	3.4646	3.4459	-0.0187
510	1e+13	NDD	3.4565	3.4377	-0.0188
511	1e+13	NDD	3.4568	3.4418	-0.015
512	0	Correlation	3.4727	3.4712	-0.0015

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4727	3.4727	3.4727		3.4712	3.4712	3.4712		-0.0015	-0.0015	-0.0015	
1e+12	3.4533	3.4577	3.463	0.0049122	3.454	3.4576	3.464	0.005532	-0.0019	-6.6667e-05	0.001	0.0015948
5e+12	3.4496	3.4662	3.4824	0.016403	3.4443	3.4597	3.4759	0.015813	-0.0075	-0.0064333	-0.0053	0.0011015
1e+13	3.4565	3.4593	3.4646	0.0045924	3.4377	3.4418	3.4459	0.0041	-0.0188	-0.0175	-0.015	0.0021656

Device Test: 14.10 UVLO_RISE_VIN(THRESHOLD|RISE/VIN/5////@UVLO_RISE_VIN)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

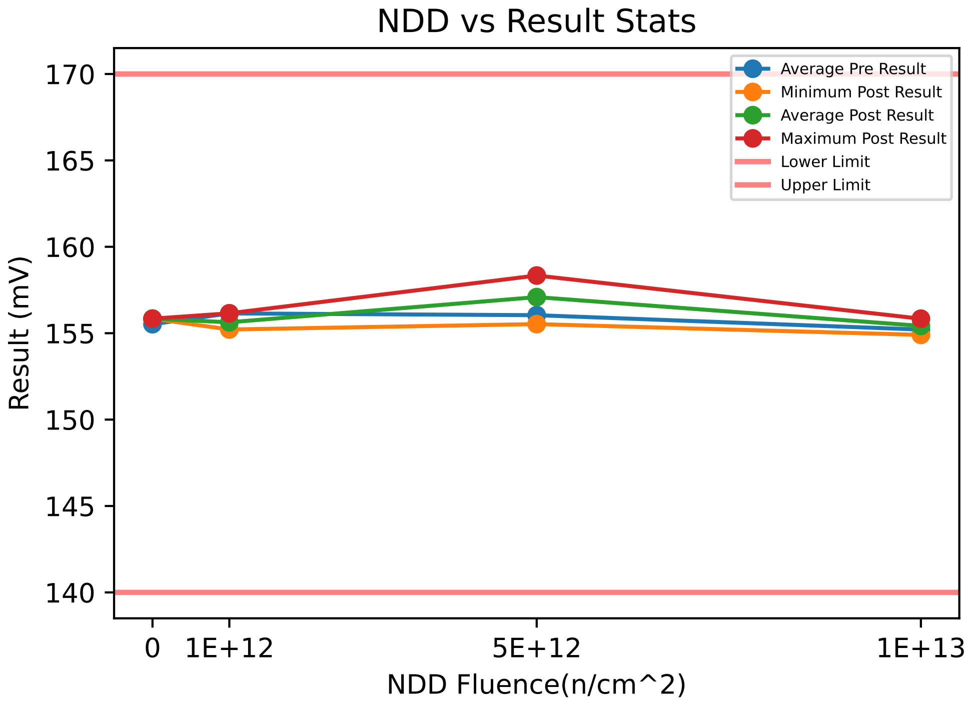
Test Results (Lower Limit = 3.4,
Upper Limit = 3.8 (V))

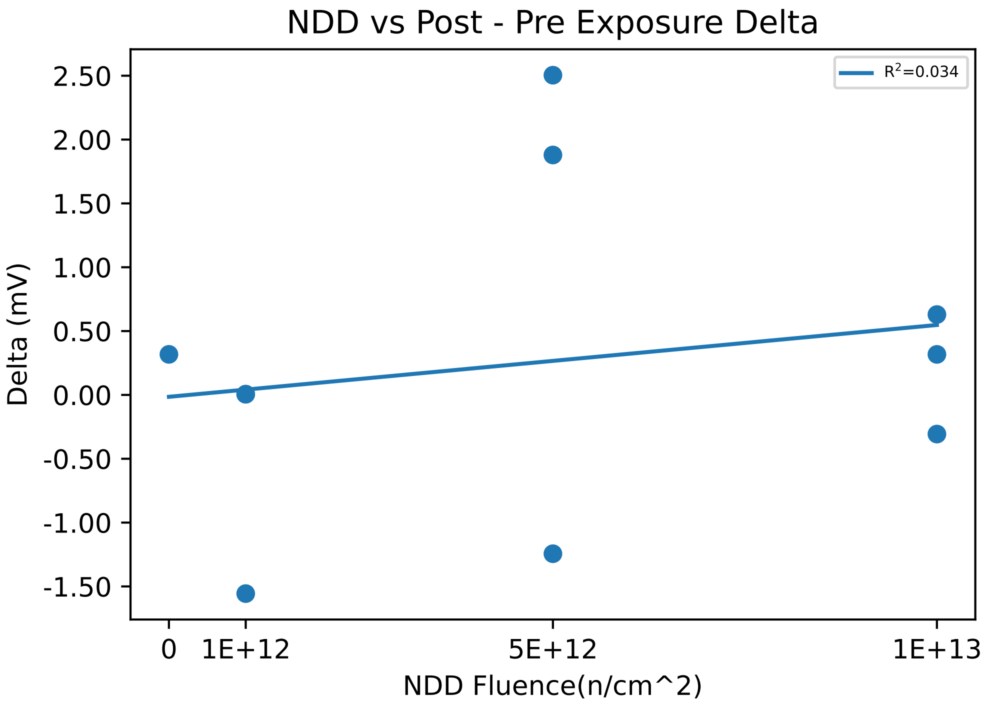
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.6362	3.6343	-0.0019
504	1e+12	NDD	3.6343	3.6308	-0.0035
505	1e+12	NDD	3.6406	3.6377	-0.0029
506	5e+12	NDD	3.6384	3.6271	-0.0113
507	5e+12	NDD	3.639	3.6314	-0.0076
508	5e+12	NDD	3.6356	3.6286	-0.007
509	1e+13	NDD	3.6309	3.6174	-0.0135
510	1e+13	NDD	3.6306	3.6146	-0.016
511	1e+13	NDD	3.6222	3.6077	-0.0145
512	0	Correlation	3.6384	3.6393	0.0009

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.6384	3.6384	3.6384		3.6393	3.6393	3.6393		0.0009	0.0009	0.0009	
1e+12	3.6343	3.637	3.6406	0.0032316	3.6308	3.6343	3.6377	0.0034501	-0.0035	-0.0027667	-0.0019	0.00080829
5e+12	3.6356	3.6377	3.639	0.0018148	3.6271	3.629	3.6314	0.0021825	-0.0113	-0.0086333	-0.007	0.0023288
1e+13	3.6222	3.6279	3.6309	0.0049386	3.6077	3.6132	3.6174	0.0049923	-0.016	-0.014667	-0.0135	0.0012583

Device Test: 14.12 UVLO_HYST_VIN(THRESHOLD|HYST/VIN/5////@UVLO_HYST_VIN)





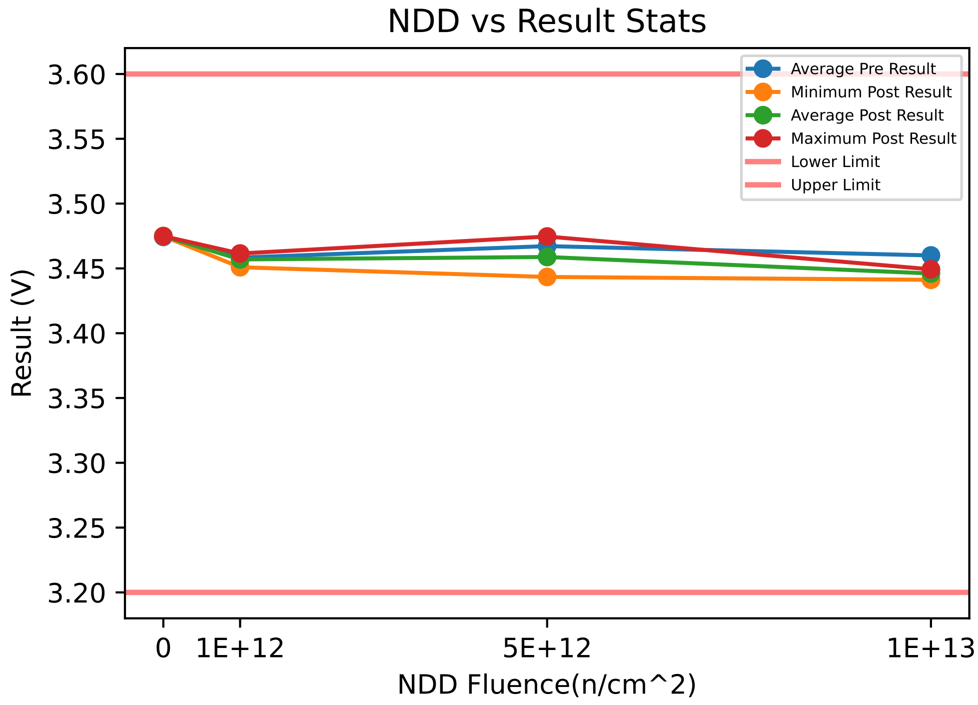
Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

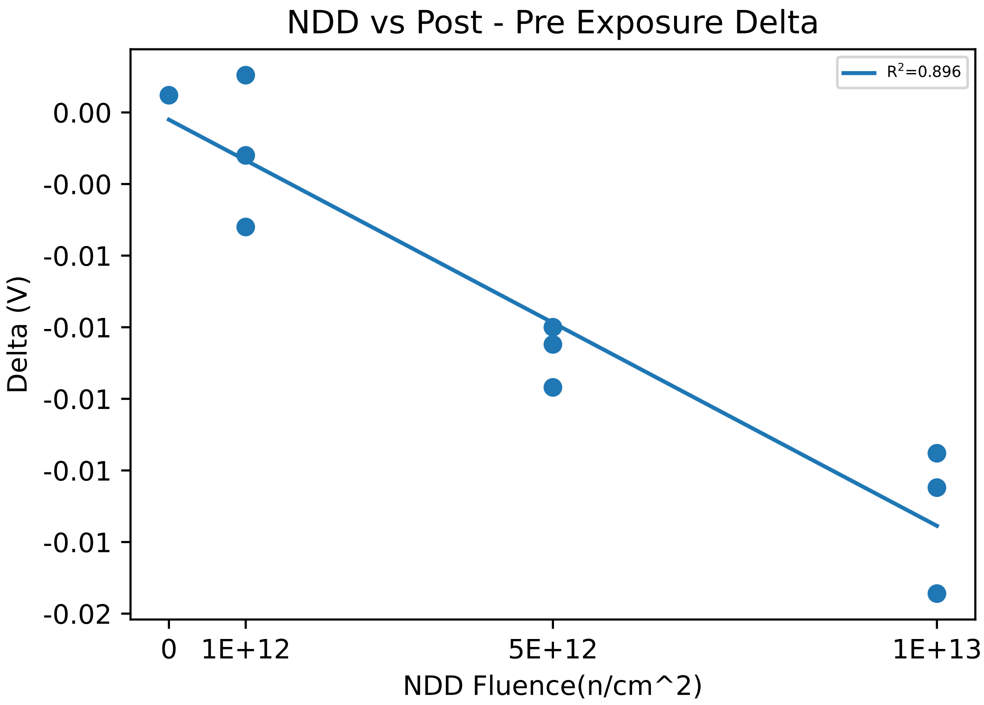
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	156.15	156.15	0.0055
504	1e+12	NDD	157.08	155.53	-1.5561
505	1e+12	NDD	155.21	155.21	0.0057
506	5e+12	NDD	156.77	155.53	-1.2438
507	5e+12	NDD	154.9	157.4	2.5041
508	5e+12	NDD	156.46	158.34	1.8792
509	1e+13	NDD	155.83	155.53	-0.3066
510	1e+13	NDD	155.52	155.84	0.3174
511	1e+13	NDD	154.27	154.9	0.6294
512	0	Correlation	155.52	155.84	0.3176

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	155.52	155.52	155.52		155.84	155.84	155.84		0.3176	0.3176	0.3176	
1e+12	155.21	156.15	157.08	0.93695	155.21	155.63	156.15	0.47696	-1.5561	-0.51497	0.0057	0.90165
5e+12	154.9	156.04	156.77	1.004	155.53	157.09	158.34	1.4311	-1.2438	1.0465	2.5041	2.0079
1e+13	154.27	155.21	155.83	0.82608	154.9	155.42	155.84	0.47714	-0.3066	0.2134	0.6294	0.47659

Device Test: 14.13 UVLO_RISE_PVIN(THRESHOLD|RISE/PVIN/12////@UVLO_RISE_PVIN)





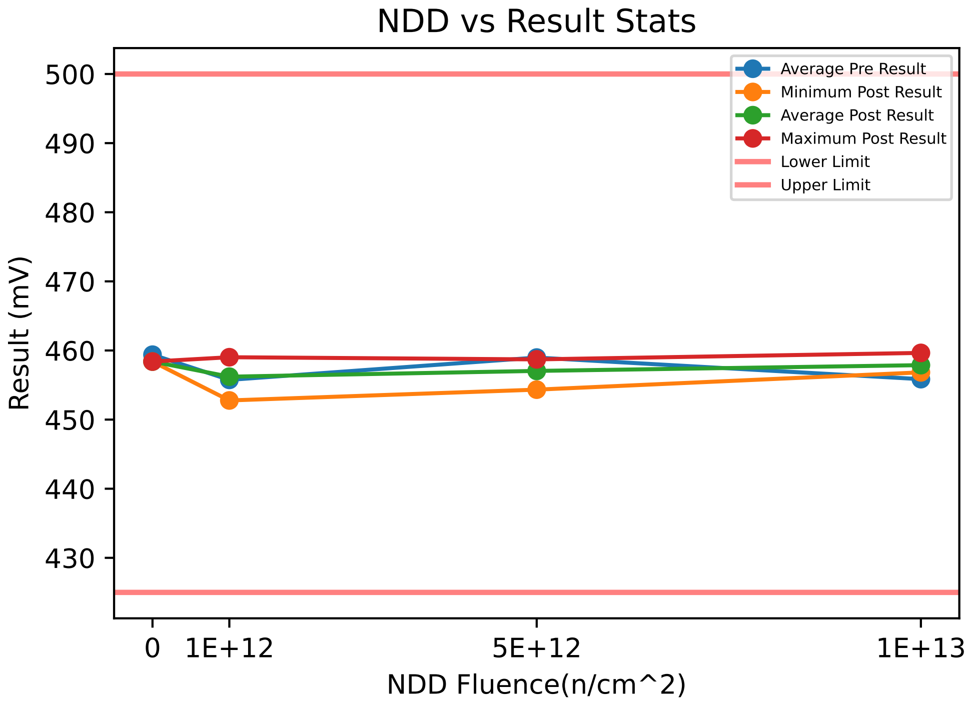
Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

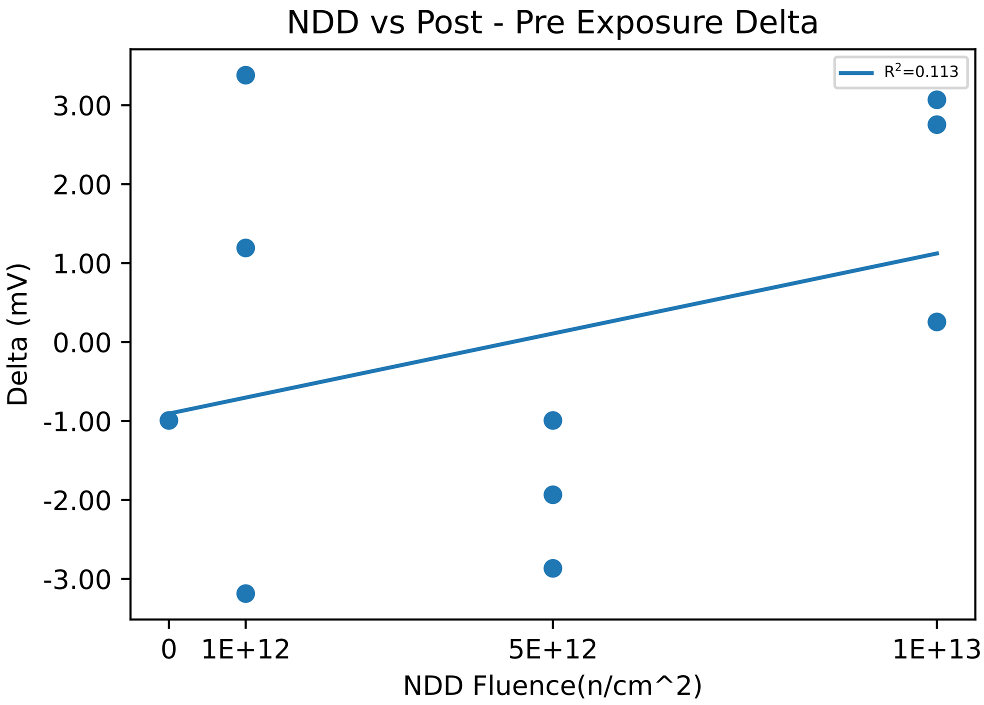
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.463	3.4615	-0.0015
504	1e+12	NDD	3.4571	3.4584	0.0013
505	1e+12	NDD	3.4549	3.4509	-0.004
506	5e+12	NDD	3.4509	3.4434	-0.0075
507	5e+12	NDD	3.4827	3.4746	-0.0081
508	5e+12	NDD	3.468	3.4584	-0.0096
509	1e+13	NDD	3.4624	3.4493	-0.0131
510	1e+13	NDD	3.458	3.4412	-0.0168
511	1e+13	NDD	3.4596	3.4477	-0.0119
512	0	Correlation	3.4743	3.4749	0.0006

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4743	3.4743	3.4743		3.4749	3.4749	3.4749		0.0006	0.0006	0.0006	
1e+12	3.4549	3.4583	3.463	0.0041885	3.4509	3.4569	3.4615	0.0054501	-0.004	-0.0014	0.0013	0.0026514
5e+12	3.4509	3.4672	3.4827	0.015915	3.4434	3.4588	3.4746	0.015604	-0.0096	-0.0084	-0.0075	0.0010817
1e+13	3.458	3.46	3.4624	0.0022271	3.4412	3.4461	3.4493	0.0042899	-0.0168	-0.013933	-0.0119	0.0025541

Device Test: 14.15 UVLO_HYST_PVIN(THRESHOLD|HYST/PVIN/12////@UVLO_HYST_PVIN)





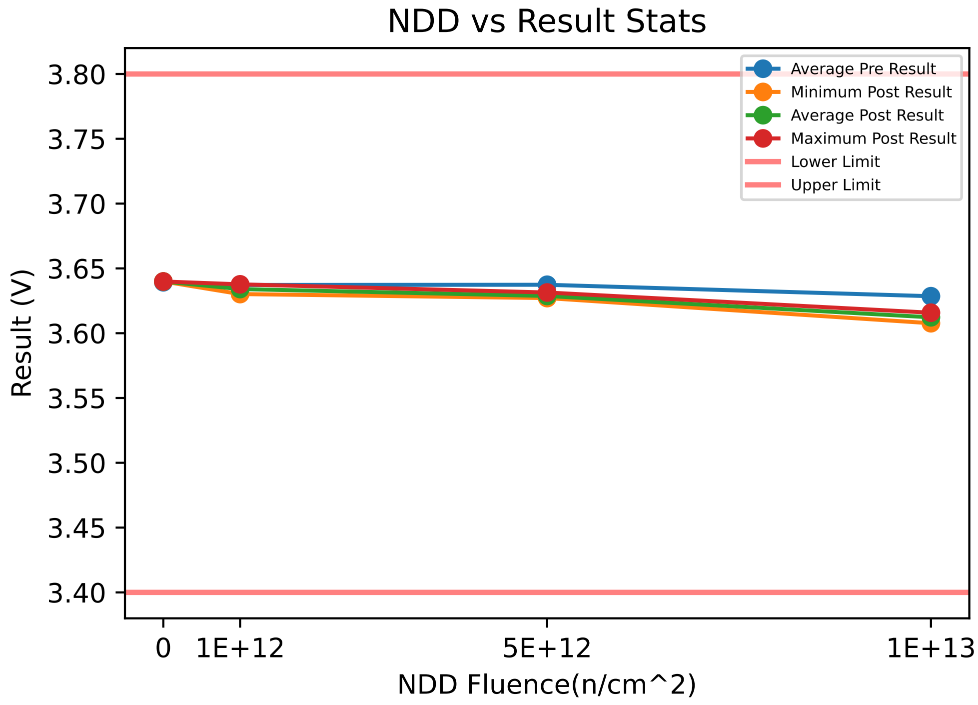
Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

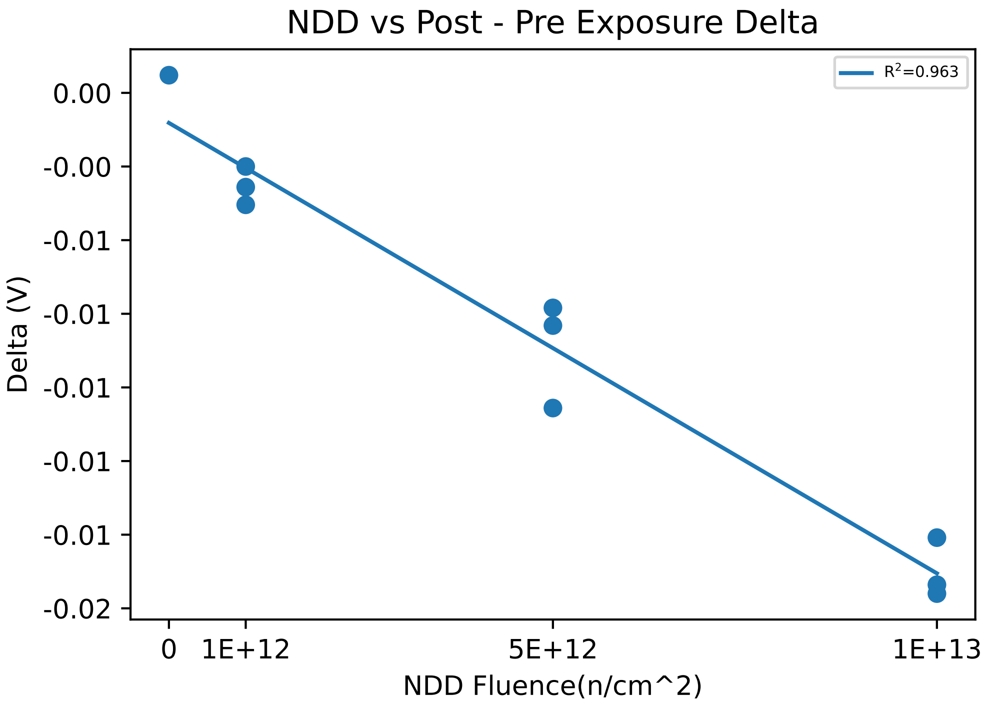
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	455.64	456.83	1.1916
504	1e+12	NDD	455.64	459.02	3.38
505	1e+12	NDD	455.96	452.77	-3.186
506	5e+12	NDD	456.27	454.33	-1.9346
507	5e+12	NDD	461.58	458.71	-2.8663
508	5e+12	NDD	459.08	458.09	-0.9932
509	1e+13	NDD	454.39	457.15	2.7535
510	1e+13	NDD	456.58	456.83	0.2546
511	1e+13	NDD	456.58	459.65	3.0685
512	0	Correlation	459.39	458.4	-0.9931

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	459.39	459.39	459.39		458.4	458.4	458.4		-0.9931	-0.9931	-0.9931	
1e+12	455.64	455.75	455.96	0.18039	452.77	456.21	459.02	3.1734	-3.186	0.46187	3.38	3.3433
5e+12	456.27	458.97	461.58	2.6562	454.33	457.04	458.71	2.3676	-2.8663	-1.9314	-0.9932	0.93655
1e+13	454.39	455.85	456.58	1.2623	456.83	457.88	459.65	1.5424	0.2546	2.0255	3.0685	1.5417

Device Test: 14.16 UVLO_RISE_VIN(THRESHOLD|RISE/VIN/12////@UVLO_RISE_VIN)





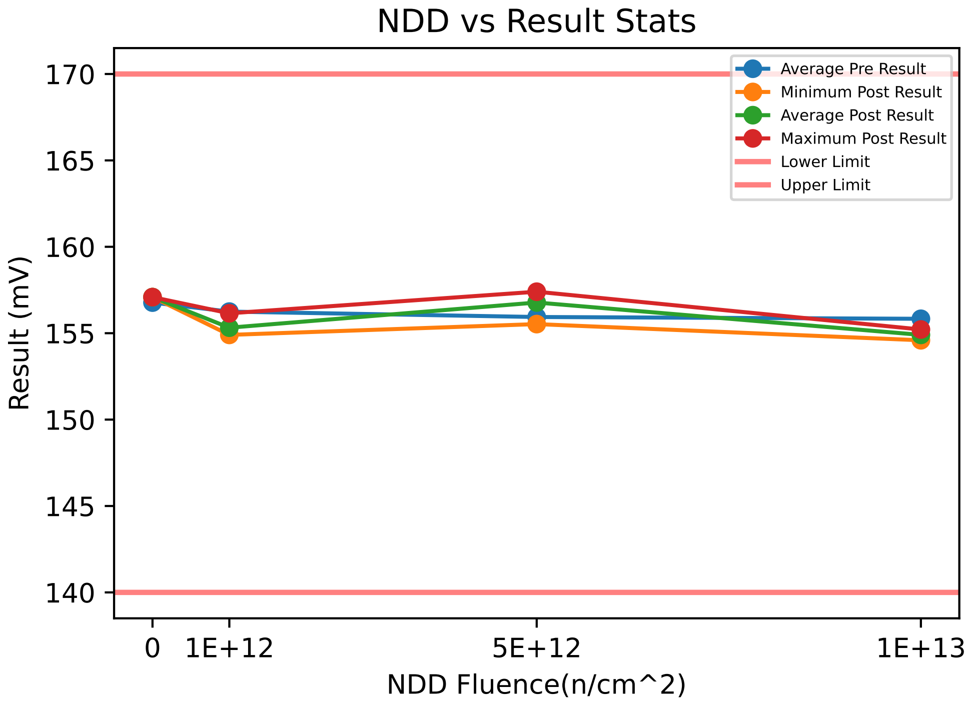
Test Results (Lower Limit = 3.4, Upper Limit = 3.8 (V))

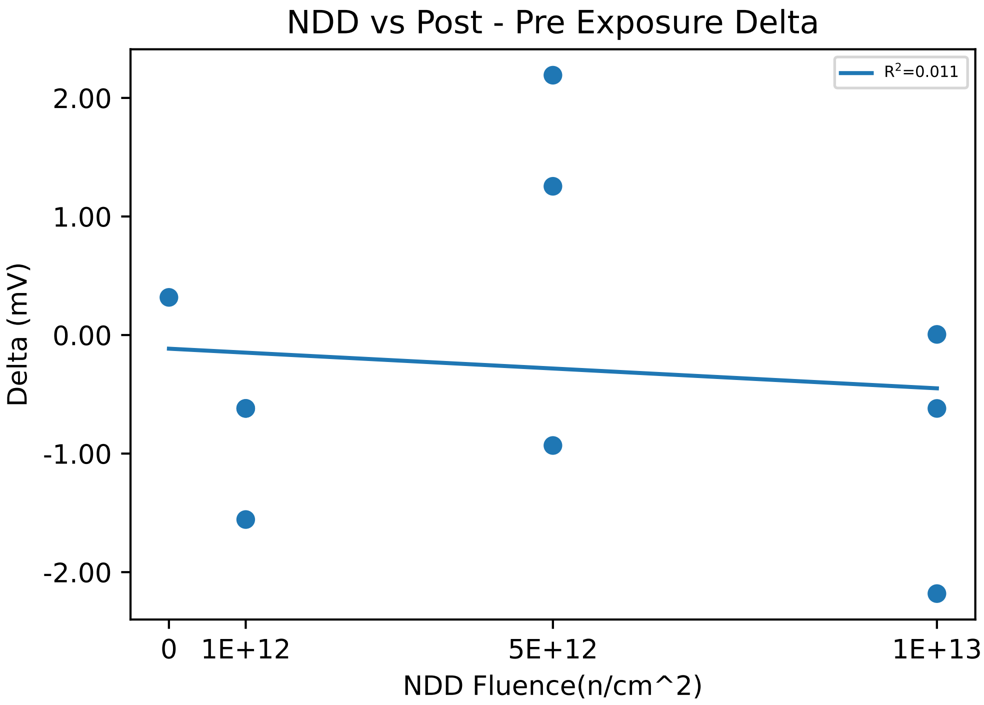
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.6368	3.6343	-0.0025
504	1e+12	NDD	3.634	3.6302	-0.0038
505	1e+12	NDD	3.6409	3.6377	-0.0032
506	5e+12	NDD	3.6378	3.6271	-0.0107
507	5e+12	NDD	3.6393	3.6314	-0.0079
508	5e+12	NDD	3.635	3.6277	-0.0073
509	1e+13	NDD	3.6309	3.6158	-0.0151
510	1e+13	NDD	3.63	3.6133	-0.0167
511	1e+13	NDD	3.6247	3.6077	-0.017
512	0	Correlation	3.6393	3.6399	0.0006

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.6393	3.6393	3.6393		3.6399	3.6399	3.6399		0.0006	0.0006	0.0006	
1e+12	3.634	3.6372	3.6409	0.0034704	3.6302	3.6341	3.6377	0.0037554	-0.0038	-0.0031667	-0.0025	0.00065064
5e+12	3.635	3.6374	3.6393	0.0021825	3.6271	3.6287	3.6314	0.0023288	-0.0107	-0.0086333	-0.0073	0.0018148
1e+13	3.6247	3.6285	3.6309	0.0033501	3.6077	3.6123	3.6158	0.0041477	-0.017	-0.016267	-0.0151	0.0010214

Device Test: 14.18 UVLO_HYST_VIN(THRESHOLD|HYST/VIN/12////@UVLO_HYST_VIN)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

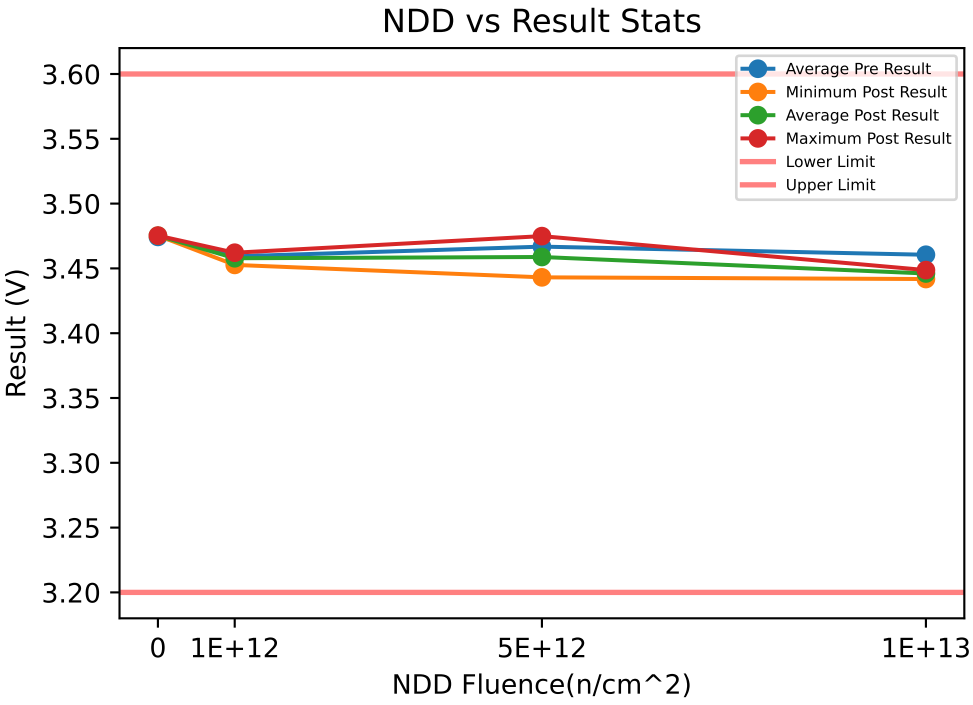
Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

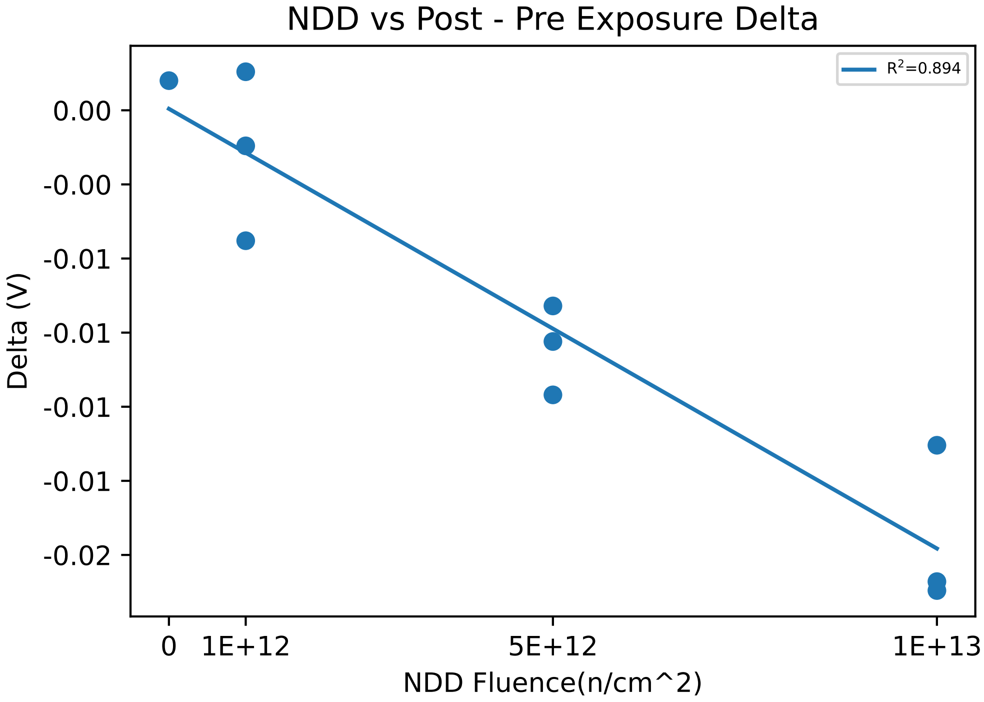
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	156.77	156.15	-0.6192
504	1e+12	NDD	156.46	154.9	-1.5562
505	1e+12	NDD	155.52	154.9	-0.6189
506	5e+12	NDD	156.46	155.53	-0.9317
507	5e+12	NDD	155.21	157.4	2.1917
508	5e+12	NDD	156.15	157.4	1.2546
509	1e+13	NDD	155.83	155.21	-0.6192
510	1e+13	NDD	154.58	154.59	0.0053
511	1e+13	NDD	157.08	154.9	-2.181
512	0	Correlation	156.77	157.09	0.3176

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	156.77	156.77	156.77		157.09	157.09	157.09		0.3176	0.3176	0.3176	
1e+12	155.52	156.25	156.77	0.65016	154.9	155.32	156.15	0.7212	-1.5562	-0.93143	-0.6189	0.54106
5e+12	155.21	155.94	156.46	0.65022	155.53	156.78	157.4	1.0818	-0.9317	0.8382	2.1917	1.6028
1e+13	154.58	155.83	157.08	1.2492	154.59	154.9	155.21	0.3123	-2.181	-0.93163	0.0053	1.1261

Device Test: 14.19 UVLO_RISE_PVIN(THRESHOLD|RISE/PVIN/14////@UVLO_RISE_PVIN)





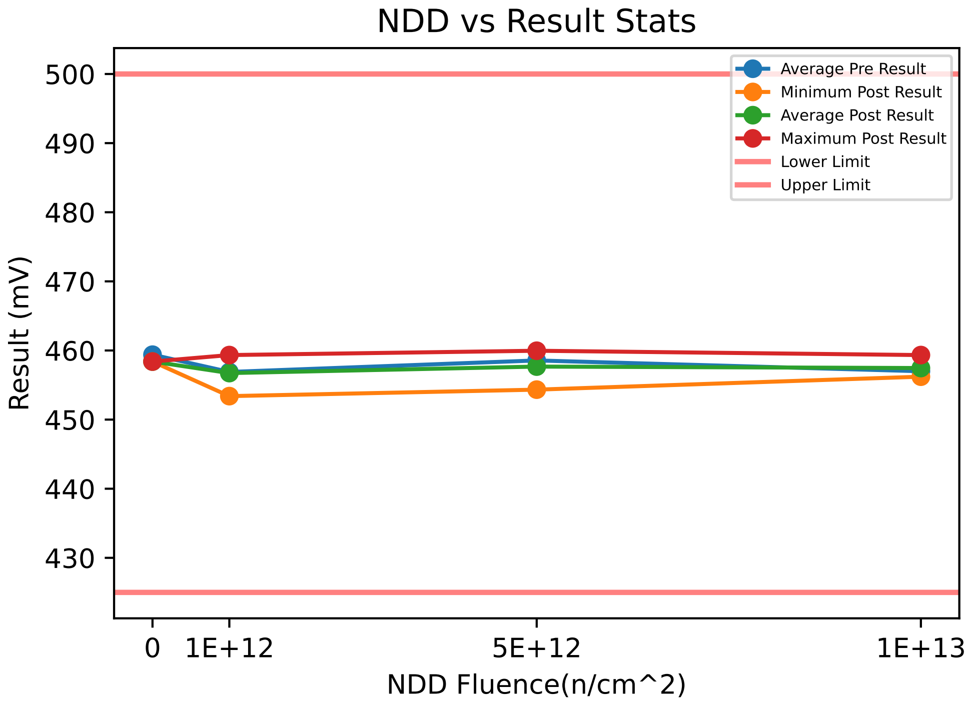
Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

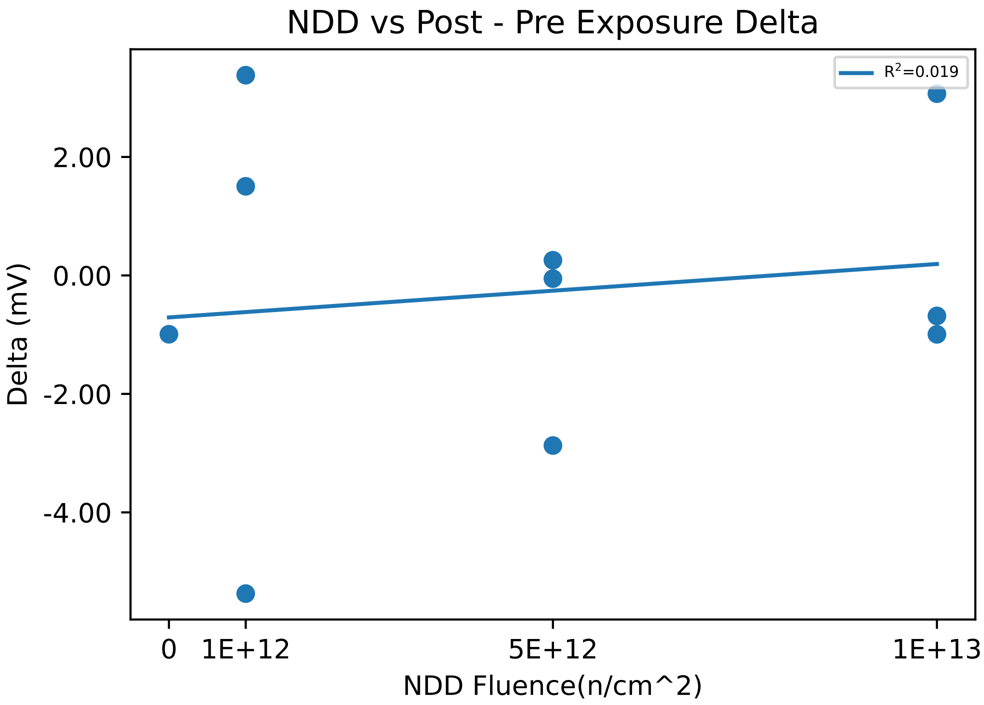
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.4633	3.4621	-0.0012
504	1e+12	NDD	3.4574	3.4587	0.0013
505	1e+12	NDD	3.4571	3.4527	-0.0044
506	5e+12	NDD	3.4509	3.4431	-0.0078
507	5e+12	NDD	3.4815	3.4749	-0.0066
508	5e+12	NDD	3.468	3.4584	-0.0096
509	1e+13	NDD	3.4646	3.4487	-0.0159
510	1e+13	NDD	3.458	3.4418	-0.0162
511	1e+13	NDD	3.459	3.4477	-0.0113
512	0	Correlation	3.4743	3.4753	0.001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4743	3.4743	3.4743		3.4753	3.4753	3.4753		0.001	0.001	0.001	
1e+12	3.4571	3.4593	3.4633	0.0034962	3.4527	3.4578	3.4621	0.0047596	-0.0044	-0.0014333	0.0013	0.0028572
5e+12	3.4509	3.4668	3.4815	0.015335	3.4431	3.4588	3.4749	0.015904	-0.0096	-0.008	-0.0066	0.00151
1e+13	3.458	3.4605	3.4646	0.0035572	3.4418	3.4461	3.4487	0.0037287	-0.0162	-0.014467	-0.0113	0.0027465

Device Test: 14.21 UVLO_HYST_PVIN(THRESHOLD|HYST/PVIN/14////@UVLO_HYST_PVIN)





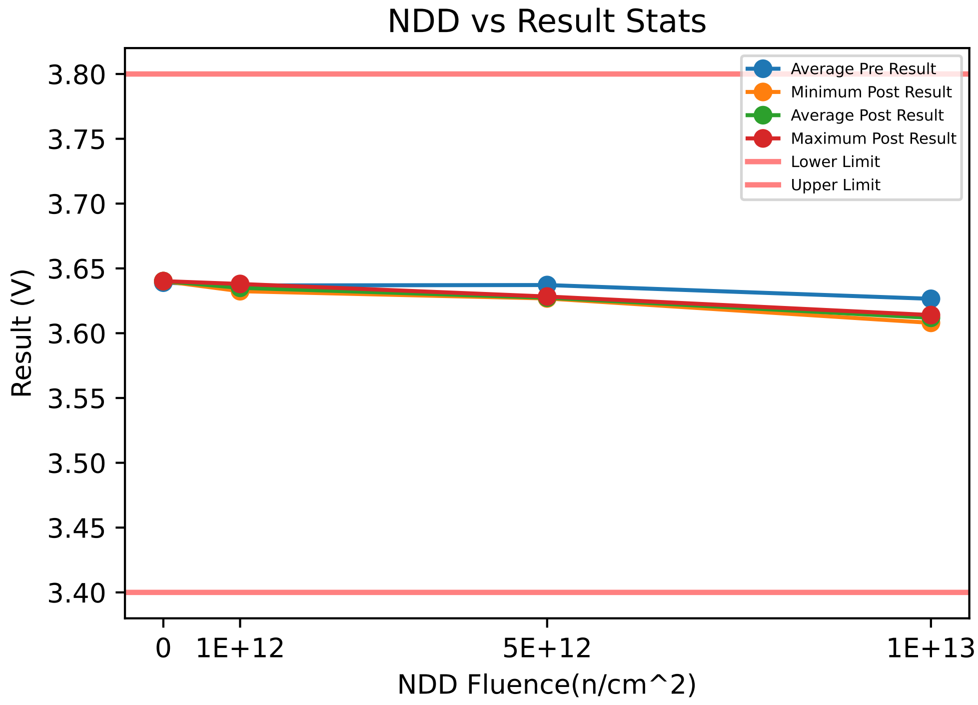
Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

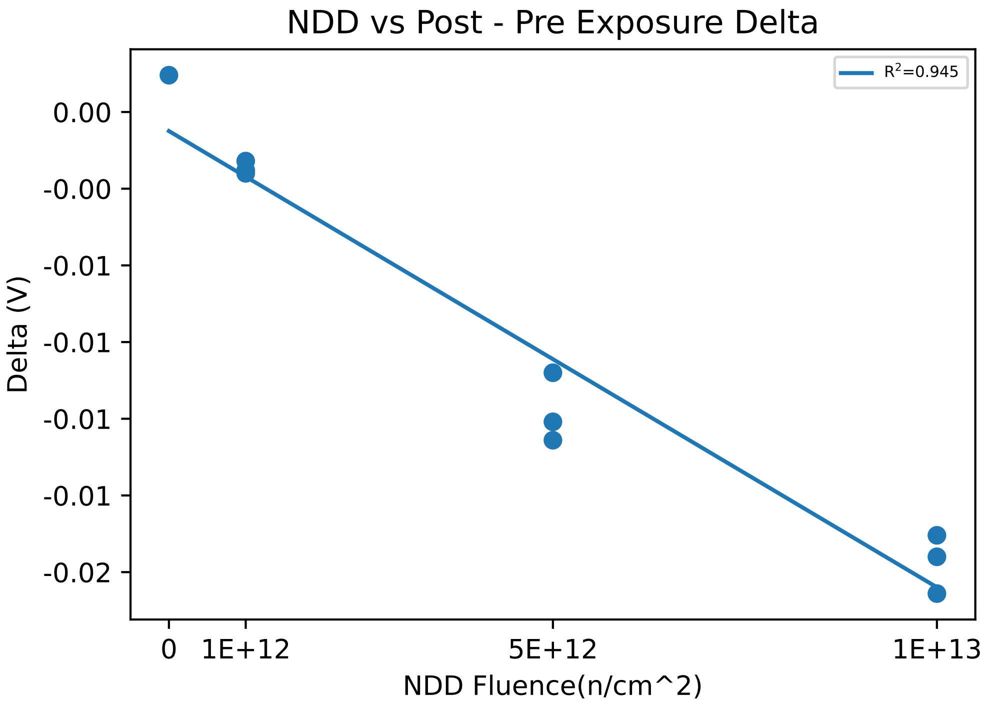
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	455.96	457.46	1.5045
504	1e+12	NDD	455.96	459.34	3.3803
505	1e+12	NDD	458.77	453.4	-5.3713
506	5e+12	NDD	457.21	454.33	-2.8716
507	5e+12	NDD	460.02	459.96	-0.0541
508	5e+12	NDD	458.45	458.71	0.2565
509	1e+13	NDD	457.83	456.83	-0.9947
510	1e+13	NDD	456.89	456.21	-0.6833
511	1e+13	NDD	456.27	459.34	3.0682
512	0	Correlation	459.39	458.4	-0.9931

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	459.39	459.39	459.39		458.4	458.4	458.4		-0.9931	-0.9931	-0.9931	
1e+12	455.96	456.89	458.77	1.6228	453.4	456.73	459.34	3.0369	-5.3713	-0.16217	3.3803	4.6077
5e+12	457.21	458.56	460.02	1.4082	454.33	457.67	459.96	2.9553	-2.8716	-0.88973	0.2565	1.7234
1e+13	456.27	457	457.83	0.7859	456.21	457.46	459.34	1.6547	-0.9947	0.4634	3.0682	2.2612

Device Test: 14.22 UVLO_RISE_VIN(THRESHOLD|RISE/VIN/14////@UVLO_RISE_VIN)





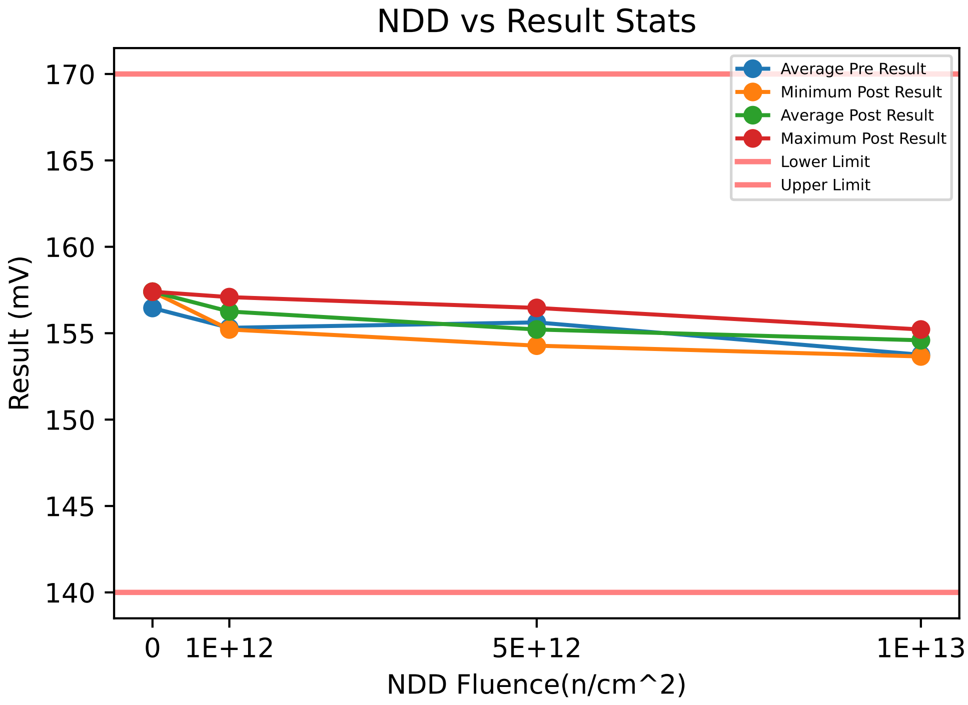
Test Results (Lower Limit = 3.4, Upper Limit = 3.8 (V))

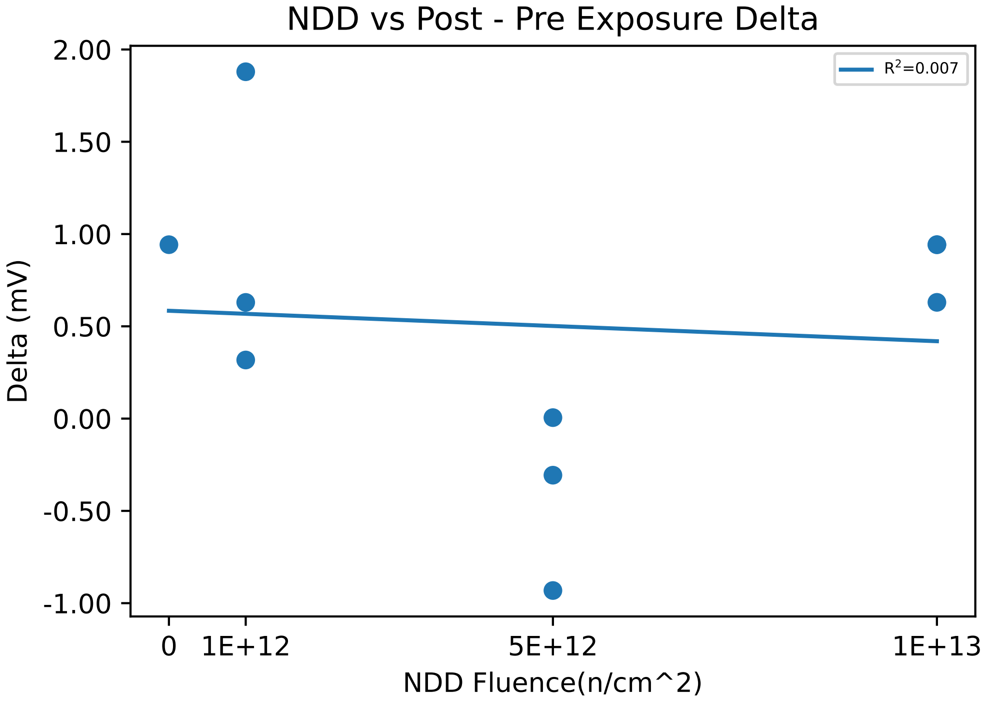
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.6362	3.6346	-0.0016
504	1e+12	NDD	3.6343	3.6324	-0.0019
505	1e+12	NDD	3.64	3.638	-0.002
506	5e+12	NDD	3.6375	3.6268	-0.0107
507	5e+12	NDD	3.6384	3.6283	-0.0101
508	5e+12	NDD	3.6356	3.6271	-0.0085
509	1e+13	NDD	3.6278	3.614	-0.0138
510	1e+13	NDD	3.6293	3.6136	-0.0157
511	1e+13	NDD	3.6225	3.608	-0.0145
512	0	Correlation	3.639	3.6402	0.0012

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.639	3.639	3.639		3.6402	3.6402	3.6402		0.0012	0.0012	0.0012	
1e+12	3.6343	3.6368	3.64	0.0029023	3.6324	3.635	3.638	0.0028213	-0.002	-0.0018333	-0.0016	0.00020817
5e+12	3.6356	3.6372	3.6384	0.0014295	3.6268	3.6274	3.6283	0.00079373	-0.0107	-0.0097667	-0.0085	0.0011372
1e+13	3.6225	3.6265	3.6293	0.0035726	3.608	3.6119	3.614	0.0033546	-0.0157	-0.014667	-0.0138	0.0009609

Device Test: 14.24 UVLO_HYST_VIN(THRESHOLD|HYST/VIN/14////@UVLO_HYST_VIN)





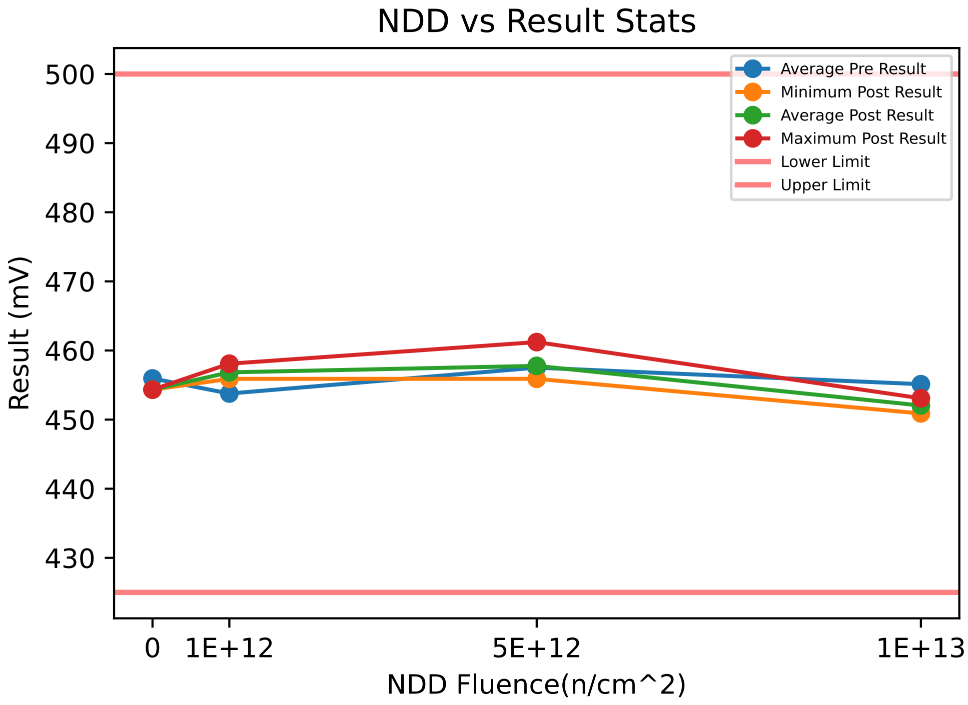
Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

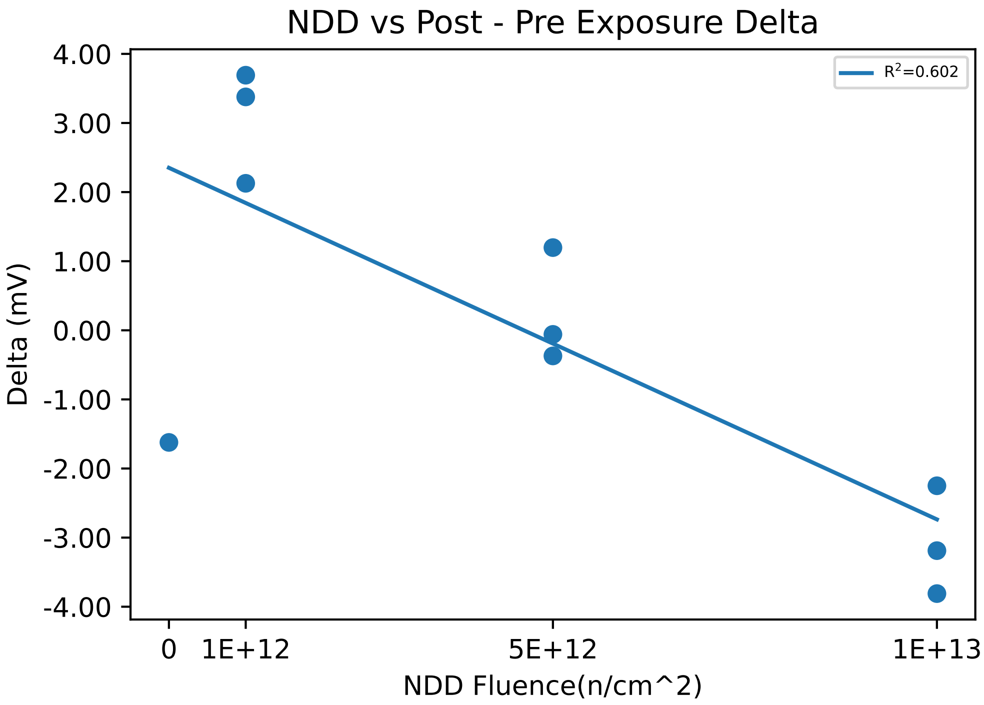
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	155.83	156.46	0.6296
504	1e+12	NDD	156.77	157.09	0.3176
505	1e+12	NDD	153.34	155.21	1.8794
506	5e+12	NDD	155.83	154.9	-0.9315
507	5e+12	NDD	154.27	154.28	0.0053
508	5e+12	NDD	156.77	156.46	-0.3066
509	1e+13	NDD	152.71	153.65	0.9427
510	1e+13	NDD	153.96	154.9	0.942
511	1e+13	NDD	154.58	155.21	0.6299
512	0	Correlation	156.46	157.4	0.9424

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	156.46	156.46	156.46		157.4	157.4	157.4		0.9424	0.9424	0.9424	
1e+12	153.34	155.31	156.77	1.776	155.21	156.26	157.09	0.95408	0.3176	0.9422	1.8794	0.82649
5e+12	154.27	155.63	156.77	1.262	154.28	155.21	156.46	1.1261	-0.9315	-0.41093	0.0053	0.47704
1e+13	152.71	153.75	154.58	0.95415	153.65	154.59	155.21	0.826	0.6299	0.8382	0.9427	0.18039

Device Test: 14.3 UVLO_HYST_PVIN(THRESHOLD|HYST/PVIN/4.5////@UVLO_HYST_PVIN)





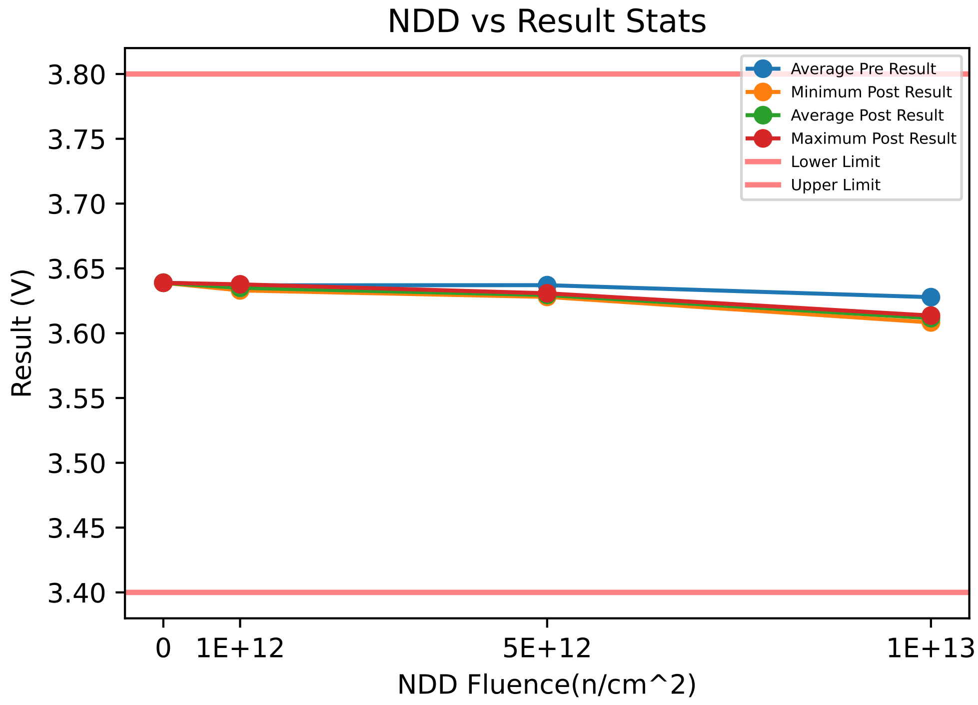
Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

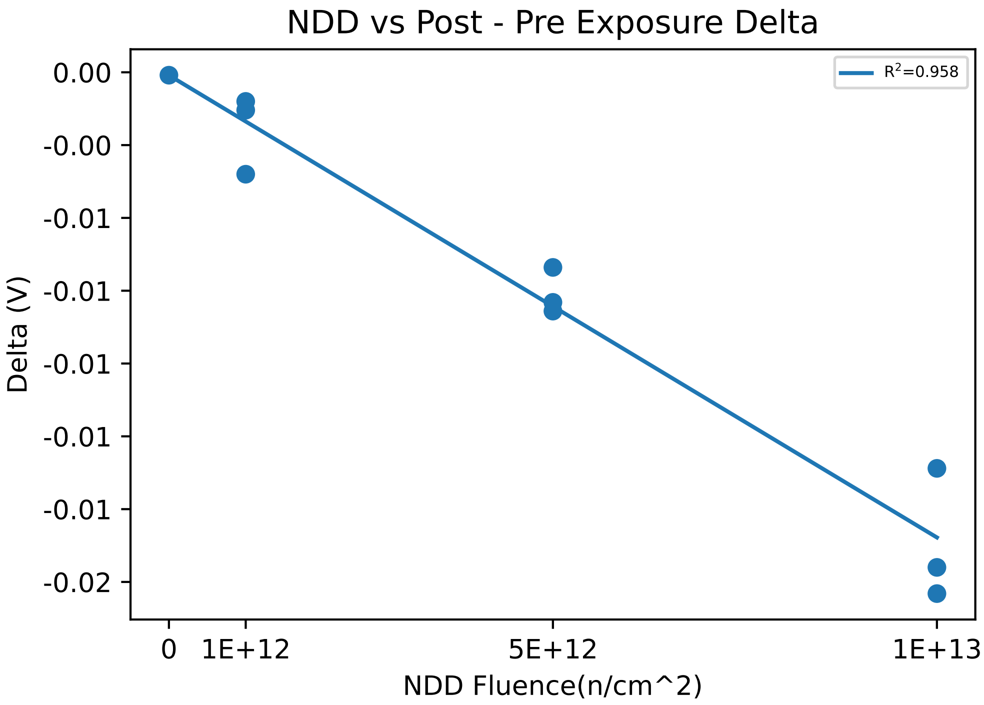
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	454.39	458.09	3.6915
504	1e+12	NDD	453.77	455.9	2.127
505	1e+12	NDD	453.15	456.52	3.3775
506	5e+12	NDD	455.96	455.9	-0.0591
507	5e+12	NDD	460.02	461.21	1.1968
508	5e+12	NDD	456.58	456.21	-0.3707
509	1e+13	NDD	456.89	453.08	-3.8102
510	1e+13	NDD	454.08	450.89	-3.1886
511	1e+13	NDD	454.39	452.14	-2.2497
512	0	Correlation	455.96	454.33	-1.6224

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	455.96	455.96	455.96		454.33	454.33	454.33		-1.6224	-1.6224	-1.6224	
1e+12	453.15	453.77	454.39	0.62465	455.9	456.84	458.09	1.1274	2.127	3.0653	3.6915	0.82765
5e+12	455.96	457.52	460.02	2.1861	455.9	457.77	461.21	2.9828	-0.3707	0.25567	1.1968	0.8298
1e+13	454.08	455.12	456.89	1.5405	450.89	452.04	453.08	1.0982	-3.8102	-3.0828	-2.2497	0.78561

Device Test: 14.4 UVLO_RISE_VIN(THRESHOLD|RISE/VIN/4.5////@UVLO_RISE_VIN)





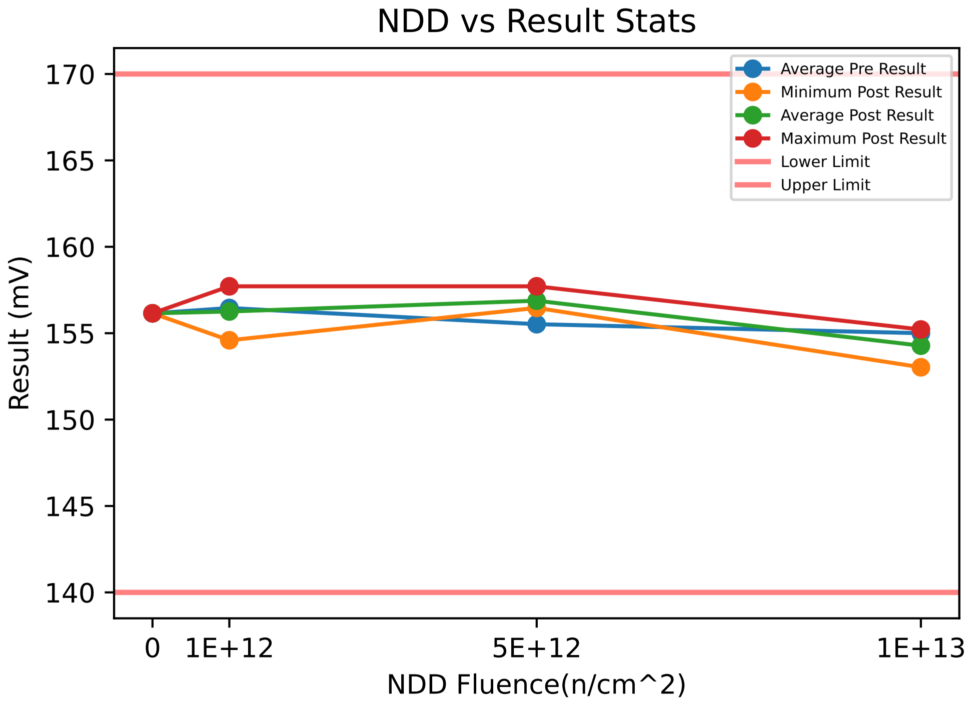
Test Results (Lower Limit = 3.4, Upper Limit = 3.8 (V))

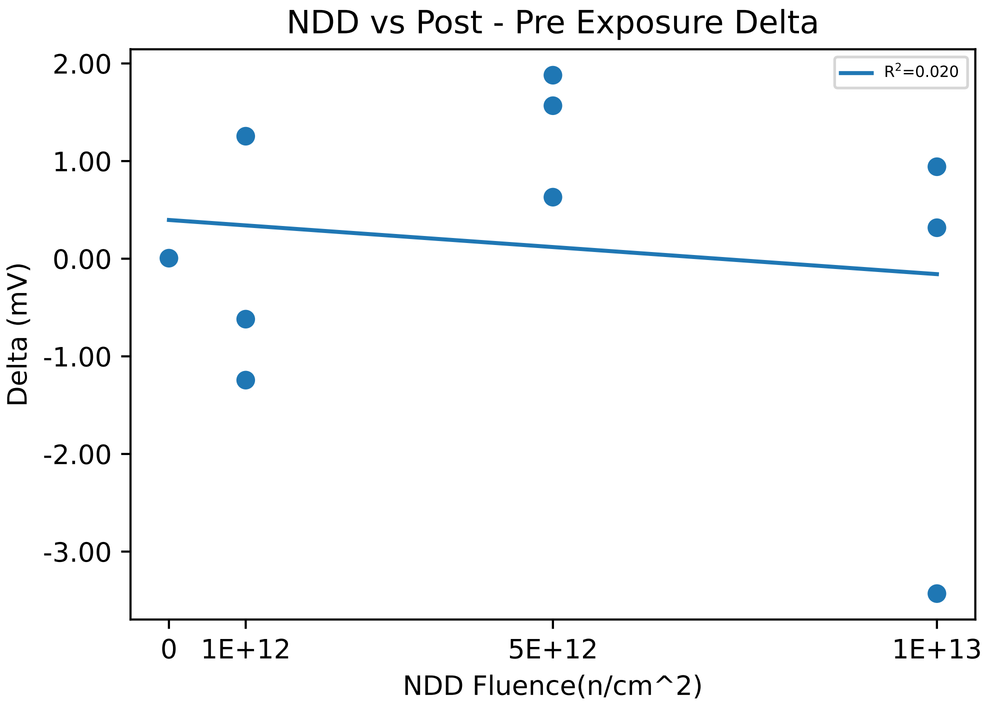
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.6356	3.6343	-0.0013
504	1e+12	NDD	3.634	3.633	-0.001
505	1e+12	NDD	3.6412	3.6377	-0.0035
506	5e+12	NDD	3.6375	3.6296	-0.0079
507	5e+12	NDD	3.639	3.6308	-0.0082
508	5e+12	NDD	3.6347	3.628	-0.0067
509	1e+13	NDD	3.6315	3.6136	-0.0179
510	1e+13	NDD	3.63	3.613	-0.017
511	1e+13	NDD	3.6219	3.6083	-0.0136
512	0	Correlation	3.639	3.6389	-0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.639	3.639	3.639		3.6389	3.6389	3.6389		-0.0001	-0.0001	-0.0001	
1e+12	3.634	3.6369	3.6412	0.0037807	3.633	3.635	3.6377	0.0024269	-0.0035	-0.0019333	-0.001	0.001365
5e+12	3.6347	3.6371	3.639	0.0021825	3.628	3.6295	3.6308	0.0014048	-0.0082	-0.0076	-0.0067	0.00079373
1e+13	3.6219	3.6278	3.6315	0.0051643	3.6083	3.6116	3.6136	0.0029023	-0.0179	-0.016167	-0.0136	0.0022679

Device Test: 14.6 UVLO_HYST_VIN(THRESHOLD|HYST/VIN/4.5////@UVLO_HYST_VIN)





Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

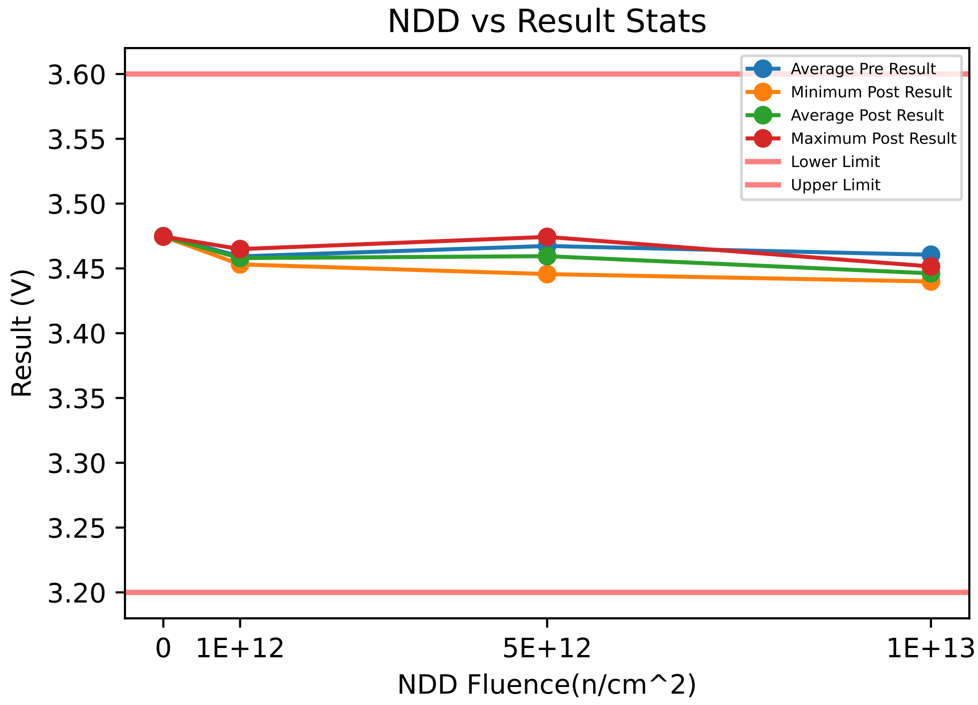
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	157.08	156.46	-0.6191
504	1e+12	NDD	156.46	157.71	1.2548
505	1e+12	NDD	155.83	154.59	-1.2436
506	5e+12	NDD	155.83	156.46	0.6304
507	5e+12	NDD	154.9	156.46	1.5672
508	5e+12	NDD	155.83	157.71	1.8797
509	1e+13	NDD	156.46	153.03	-3.4302
510	1e+13	NDD	154.9	155.21	0.3173
511	1e+13	NDD	153.65	154.59	0.9422
512	0	Correlation	156.15	156.15	0.0055

Test Statistics (mV)

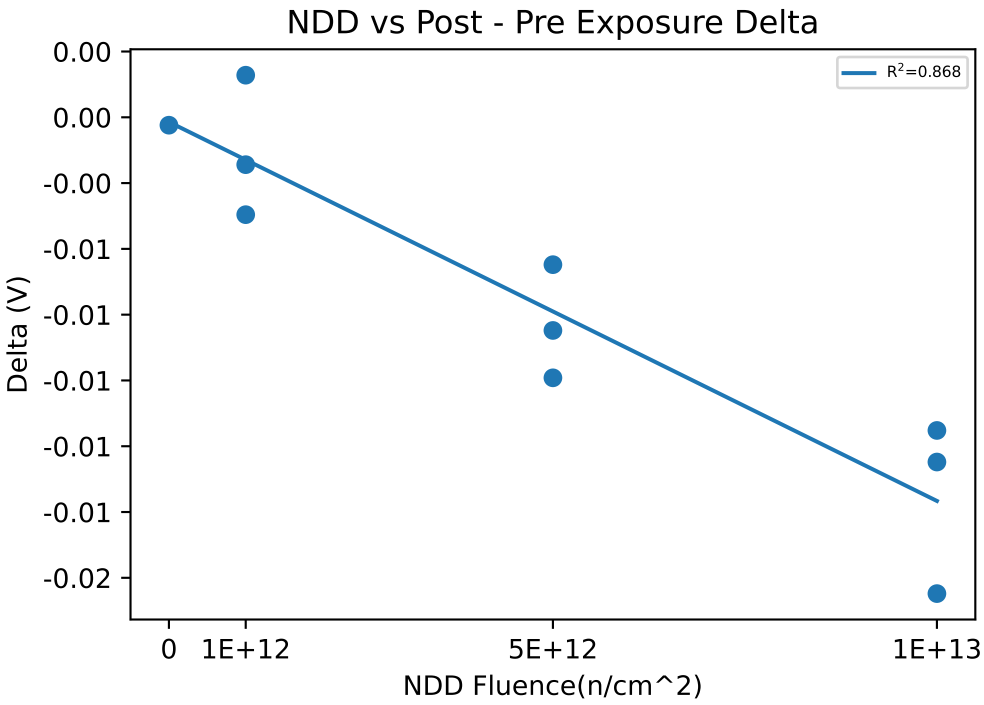
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	156.15	156.15	156.15		156.15	156.15	156.15		0.0055	0.0055	0.0055	
1e+12	155.83	156.46	157.08	0.62465	154.59	156.26	157.71	1.5719	-1.2436	-0.20263	1.2548	1.3002
5e+12	154.9	155.52	155.83	0.54092	156.46	156.88	157.71	0.72123	0.6304	1.3591	1.8797	0.65013
1e+13	153.65	155	156.46	1.4082	153.03	154.28	155.21	1.126	-3.4302	-0.72357	0.9422	2.3647

Device Test: 14.7 UVLO_RISE_PVIN(THRESHOLD|RISE/PVIN/5////@UVLO_RISE_PVIN)

NDD vs Result Stats



NDD vs Post - Pre Exposure Delta



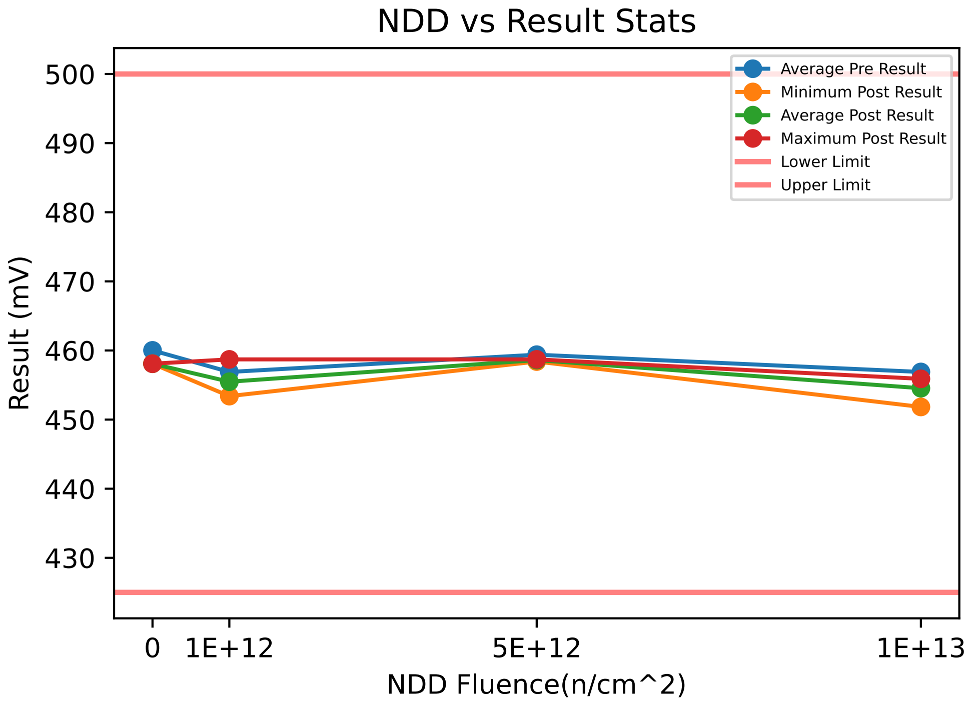
Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

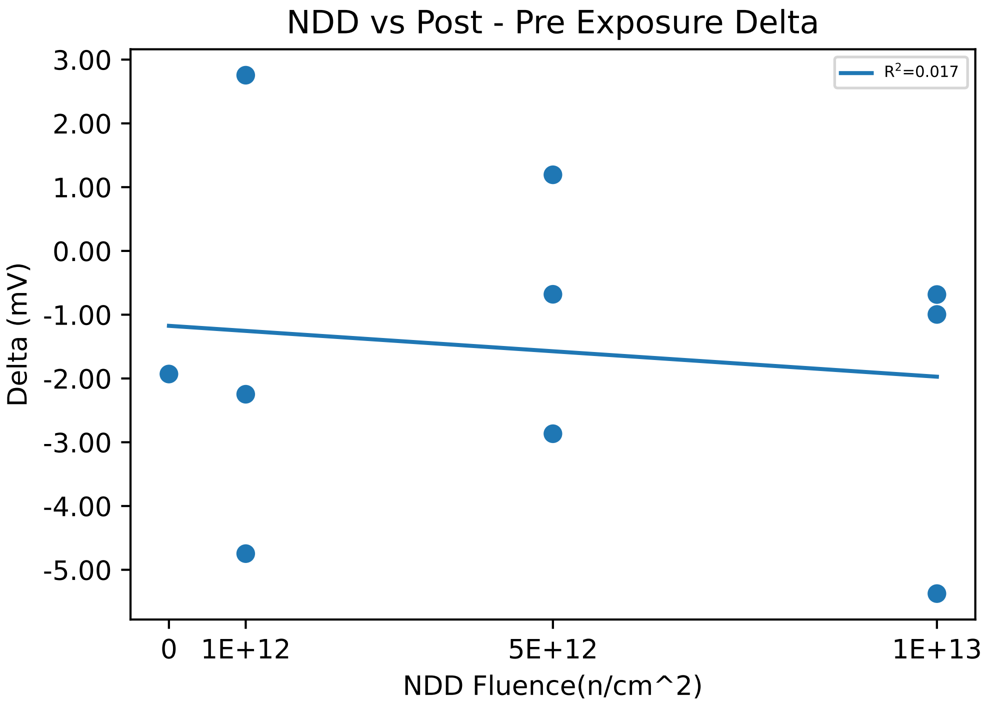
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.4633	3.4649	0.0016
504	1e+12	NDD	3.4577	3.4559	-0.0018
505	1e+12	NDD	3.4568	3.4531	-0.0037
506	5e+12	NDD	3.4512	3.4456	-0.0056
507	5e+12	NDD	3.4824	3.4743	-0.0081
508	5e+12	NDD	3.4683	3.4584	-0.0099
509	1e+13	NDD	3.4646	3.4515	-0.0131
510	1e+13	NDD	3.458	3.4399	-0.0181
511	1e+13	NDD	3.459	3.4471	-0.0119
512	0	Correlation	3.4749	3.4746	-0.0003

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4749	3.4749	3.4749		3.4746	3.4746	3.4746		-0.0003	-0.0003	-0.0003	
1e+12	3.4568	3.4593	3.4633	0.0035218	3.4531	3.458	3.4649	0.0061655	-0.0037	-0.0013	0.0016	0.0026851
5e+12	3.4512	3.4673	3.4824	0.015624	3.4456	3.4594	3.4743	0.014378	-0.0099	-0.0078667	-0.0056	0.0021595
1e+13	3.458	3.4605	3.4646	0.0035572	3.4399	3.4462	3.4515	0.0058561	-0.0181	-0.014367	-0.0119	0.0032884

Device Test: 14.9 UVLO_HYST_PVIN(THRESHOLD|HYST/PVIN/5////@UVLO_HYST_PVIN)





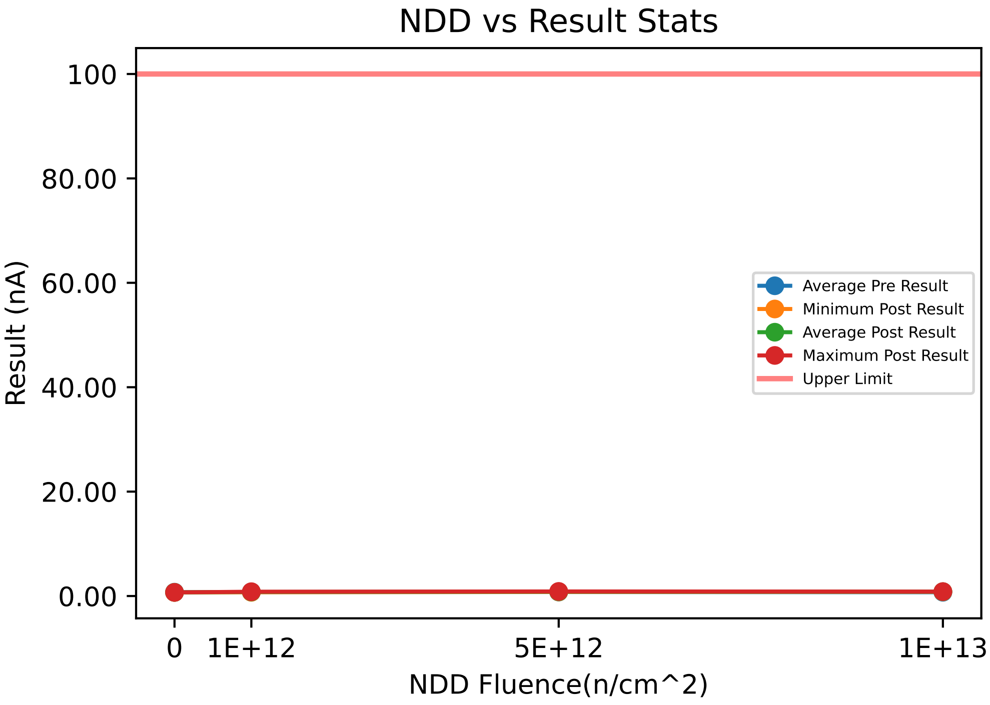
Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

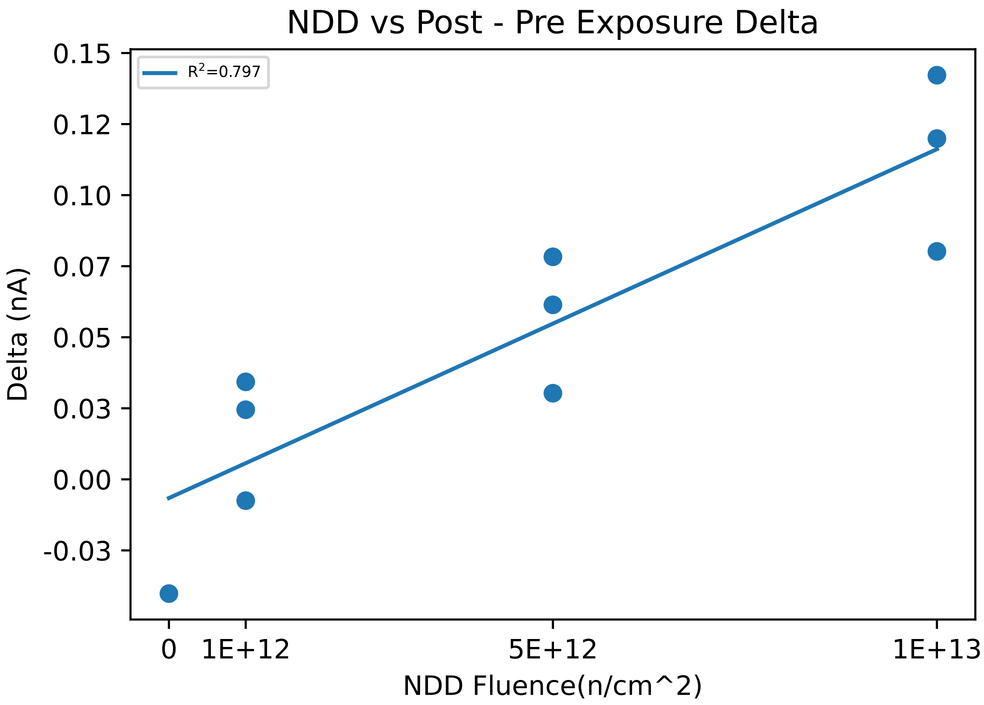
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	455.96	458.71	2.7554
504	1e+12	NDD	456.58	454.33	-2.2473
505	1e+12	NDD	458.14	453.4	-4.7466
506	5e+12	NDD	457.52	458.71	1.1937
507	5e+12	NDD	461.26	458.4	-2.8665
508	5e+12	NDD	459.39	458.71	-0.68
509	1e+13	NDD	456.89	455.9	-0.9961
510	1e+13	NDD	457.21	451.83	-5.3733
511	1e+13	NDD	456.58	455.9	-0.6837
512	0	Correlation	460.02	458.09	-1.9302

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	460.02	460.02	460.02		458.09	458.09	458.09		-1.9302	-1.9302	-1.9302	
1e+12	455.96	456.89	458.14	1.1261	453.4	455.48	458.71	2.8373	-4.7466	-1.4128	2.7554	3.82
5e+12	457.52	459.39	461.26	1.8737	458.4	458.61	458.71	0.1806	-2.8665	-0.78427	1.1937	2.0321
1e+13	456.58	456.89	457.21	0.31225	451.83	454.54	455.9	2.347	-5.3733	-2.351	-0.6837	2.622

Device Test: 15.1 EN_LKG_CURR(LEAK|UNPOWERED/EN/0////@EN_LKG_CURR)





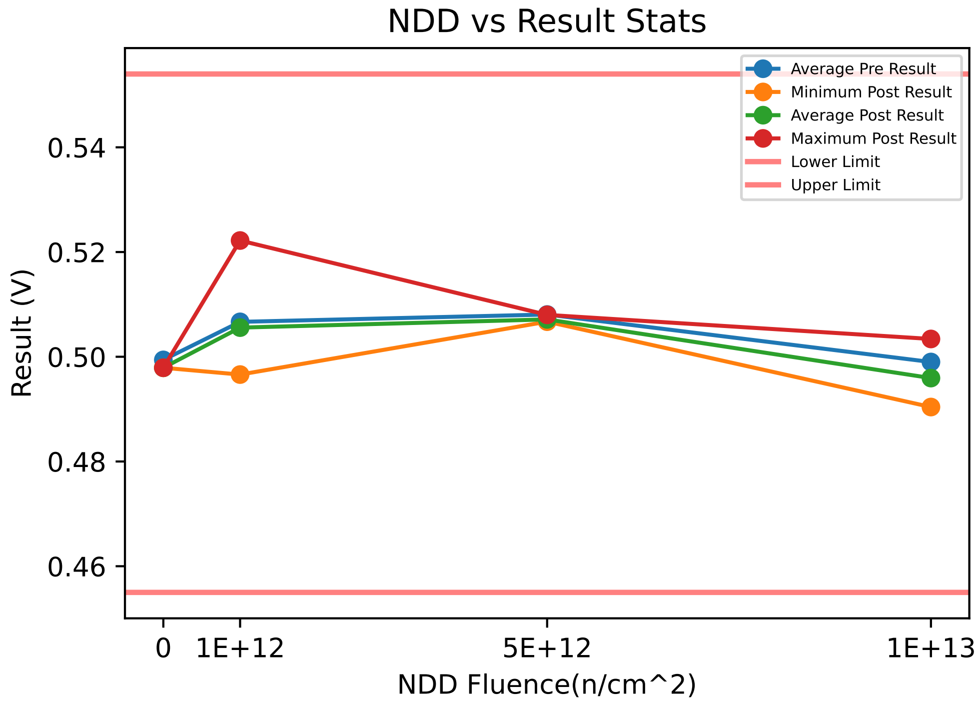
Test Results (Upper Limit = 100.0 (nA))

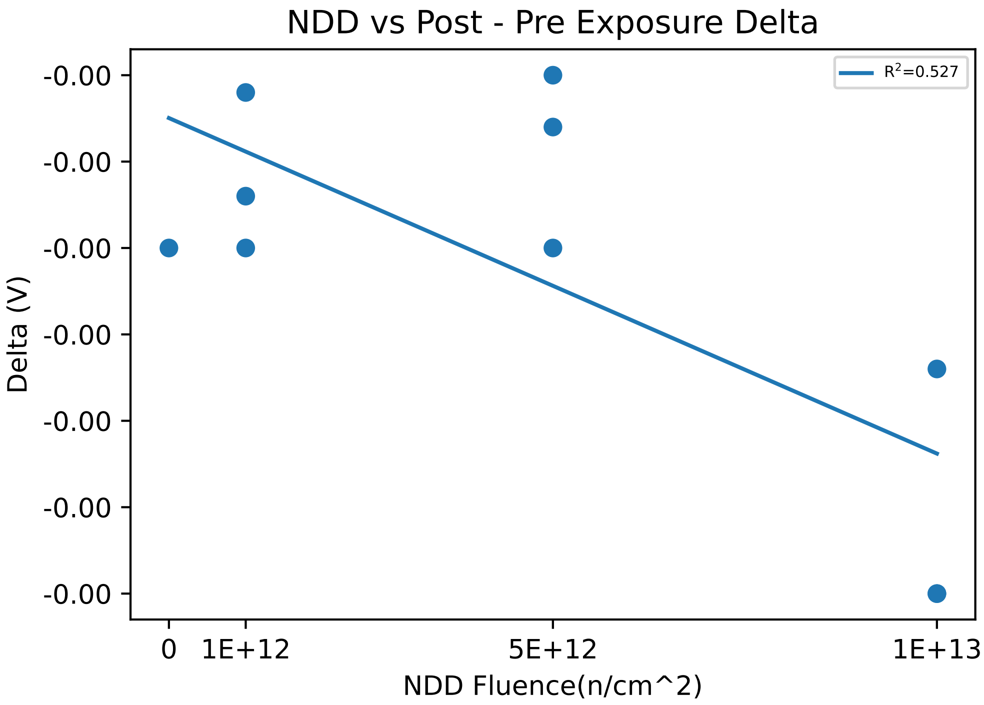
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.8031	0.8276	0.0245
504	1e+12	NDD	0.7644	0.7987	0.0343
505	1e+12	NDD	0.7222	0.7147	-0.0075
506	5e+12	NDD	0.82	0.8814	0.0614
507	5e+12	NDD	0.7278	0.8061	0.0783
508	5e+12	NDD	0.7524	0.7827	0.0303
509	1e+13	NDD	0.7057	0.8479	0.1422
510	1e+13	NDD	0.7274	0.8076	0.0802
511	1e+13	NDD	0.7315	0.8514	0.1199
512	0	Correlation	0.7352	0.695	-0.0402

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.7352	0.7352	0.7352		0.695	0.695	0.695		-0.0402	-0.0402	-0.0402	
1e+12	0.7222	0.76323	0.8031	0.040463	0.7147	0.78033	0.8276	0.058648	-0.0075	0.0171	0.0343	0.02186
5e+12	0.7278	0.76673	0.82	0.047742	0.7827	0.8234	0.8814	0.051574	0.0303	0.056667	0.0783	0.024348
1e+13	0.7057	0.72153	0.7315	0.013864	0.8076	0.83563	0.8514	0.024341	0.0802	0.1141	0.1422	0.031404

Device Test: 15.10 EN_VTH_FALLING(THRESHOLD|FALL/EN/12////@EN_VTH_FALLING)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

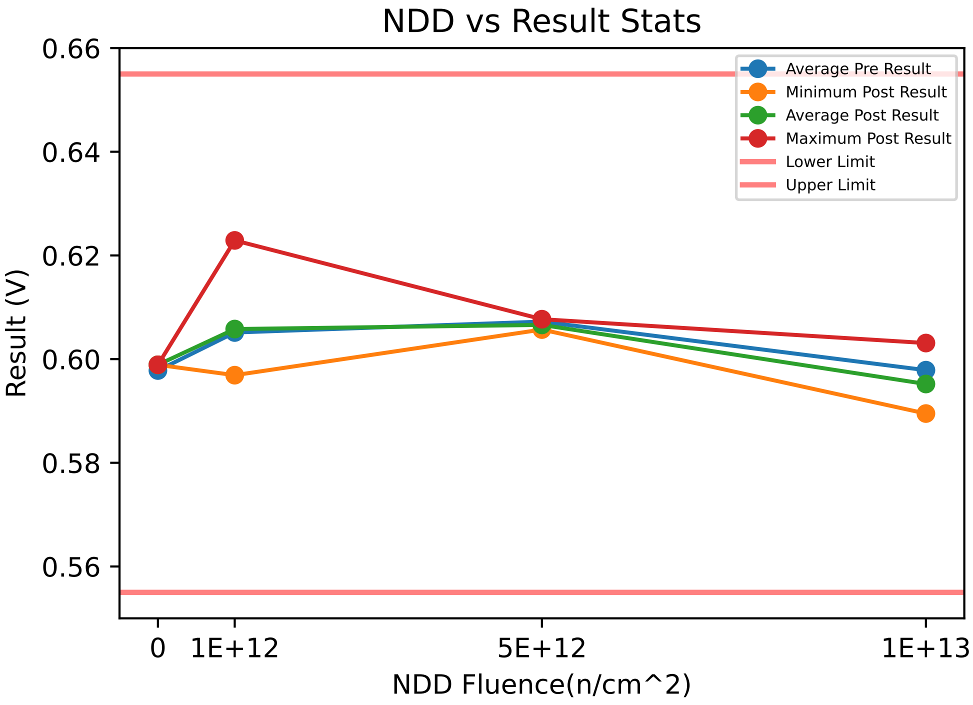
Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

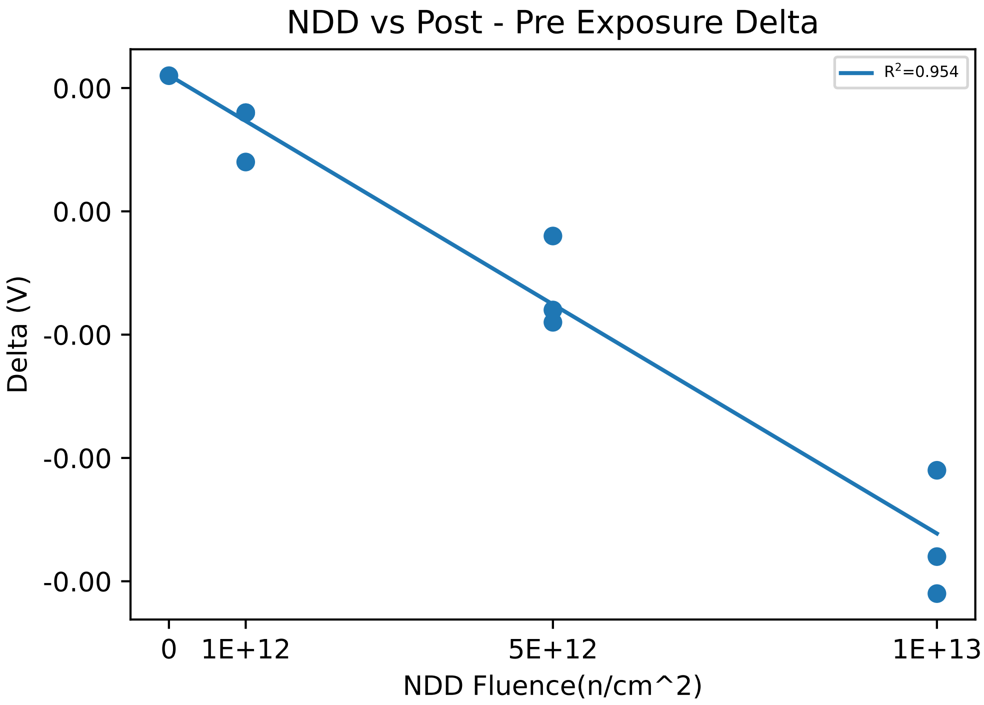
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5228	0.5222	-0.0006
504	1e+12	NDD	0.4994	0.4979	-0.0015
505	1e+12	NDD	0.4978	0.4966	-0.0012
506	5e+12	NDD	0.5082	0.5067	-0.0015
507	5e+12	NDD	0.5088	0.508	-0.0008
508	5e+12	NDD	0.5072	0.5067	-0.0005
509	1e+13	NDD	0.5069	0.5034	-0.0035
510	1e+13	NDD	0.4975	0.494	-0.0035
511	1e+13	NDD	0.4926	0.4904	-0.0022
512	0	Correlation	0.4994	0.4979	-0.0015

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4994	0.4994	0.4994		0.4979	0.4979	0.4979		-0.0015	-0.0015	-0.0015	
1e+12	0.4978	0.50667	0.5228	0.013995	0.4966	0.50557	0.5222	0.01442	-0.0015	-0.0011	-0.0006	0.00045826
5e+12	0.5072	0.50807	0.5088	0.00080829	0.5067	0.50713	0.508	0.00075056	-0.0015	-0.00093333	-0.0005	0.00051316
1e+13	0.4926	0.499	0.5069	0.007267	0.4904	0.49593	0.5034	0.0067122	-0.0035	-0.0030667	-0.0022	0.00075056

Device Test: 15.12 EN_VTH_RISING(THRESHOLD|RISE/EN/14////@EN_VTH_RISING)





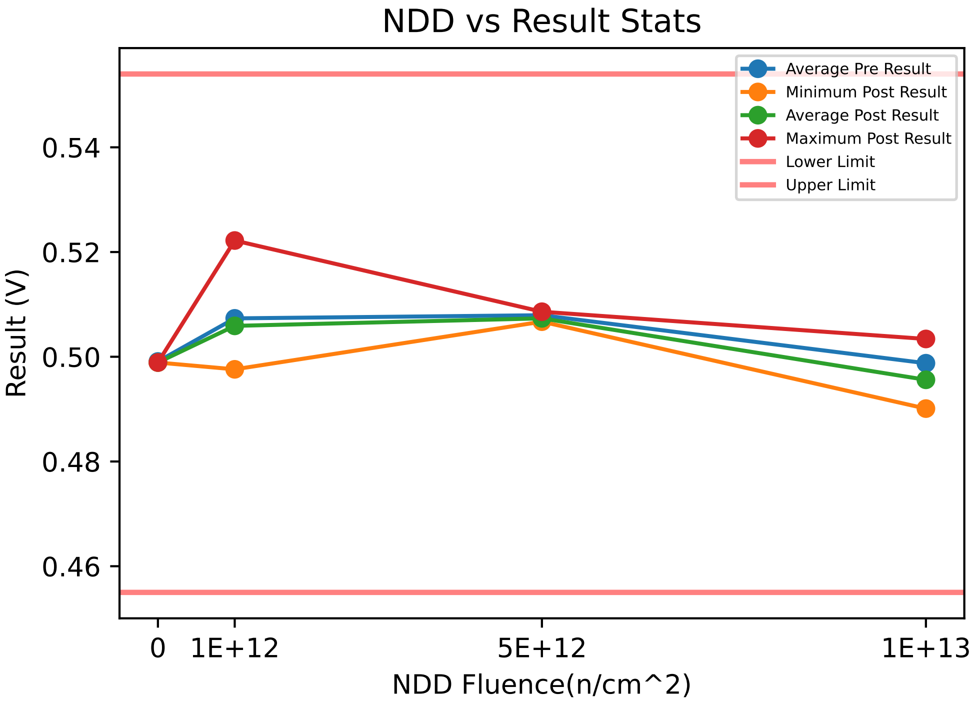
Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

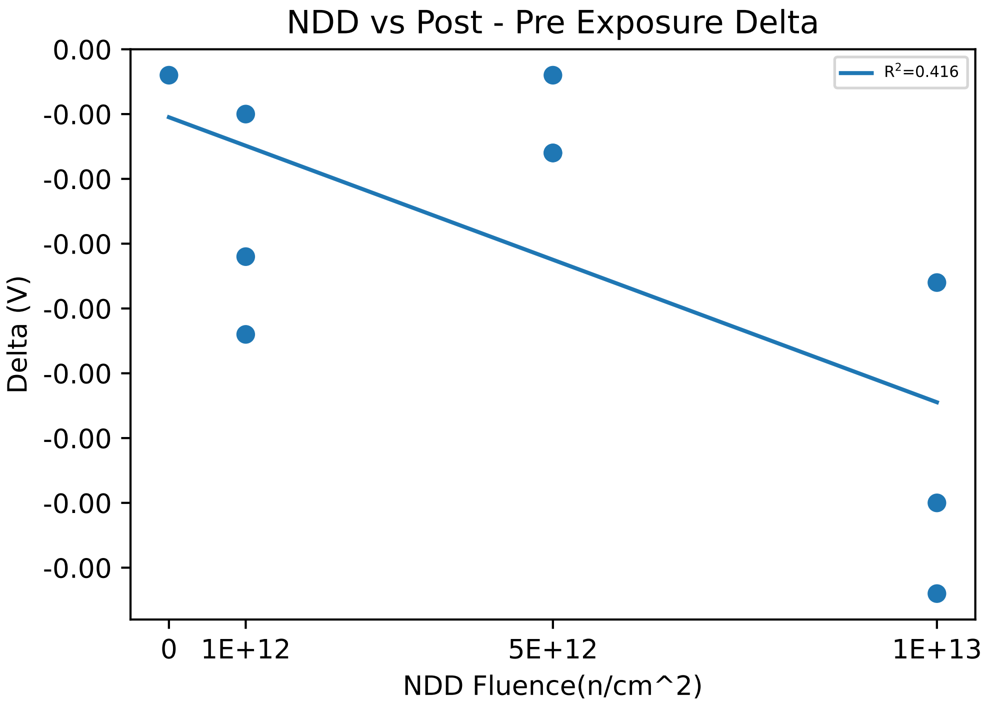
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6221	0.6229	0.0008
504	1e+12	NDD	0.5968	0.5976	0.0008
505	1e+12	NDD	0.5965	0.5969	0.0004
506	5e+12	NDD	0.6066	0.6057	-0.0009
507	5e+12	NDD	0.6085	0.6077	-0.0008
508	5e+12	NDD	0.6066	0.6064	-0.0002
509	1e+13	NDD	0.6062	0.6031	-0.0031
510	1e+13	NDD	0.5958	0.593	-0.0028
511	1e+13	NDD	0.5916	0.5895	-0.0021
512	0	Correlation	0.5978	0.5989	0.0011

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5978	0.5978	0.5978		0.5989	0.5989	0.5989		0.0011	0.0011	0.0011	
1e+12	0.5965	0.60513	0.6221	0.014694	0.5969	0.6058	0.6229	0.014813	0.0004	0.00066667	0.0008	0.00023094
5e+12	0.6066	0.60723	0.6085	0.001097	0.6057	0.6066	0.6077	0.0010149	-0.0009	-0.00063333	-0.0002	0.00037859
1e+13	0.5916	0.59787	0.6062	0.0075162	0.5895	0.5952	0.6031	0.0070619	-0.0031	-0.0026667	-0.0021	0.00051316

Device Test: 15.13 EN_VTH_FALLING(THRESHOLD|FALL/EN/14////@EN_VTH_FALLING)





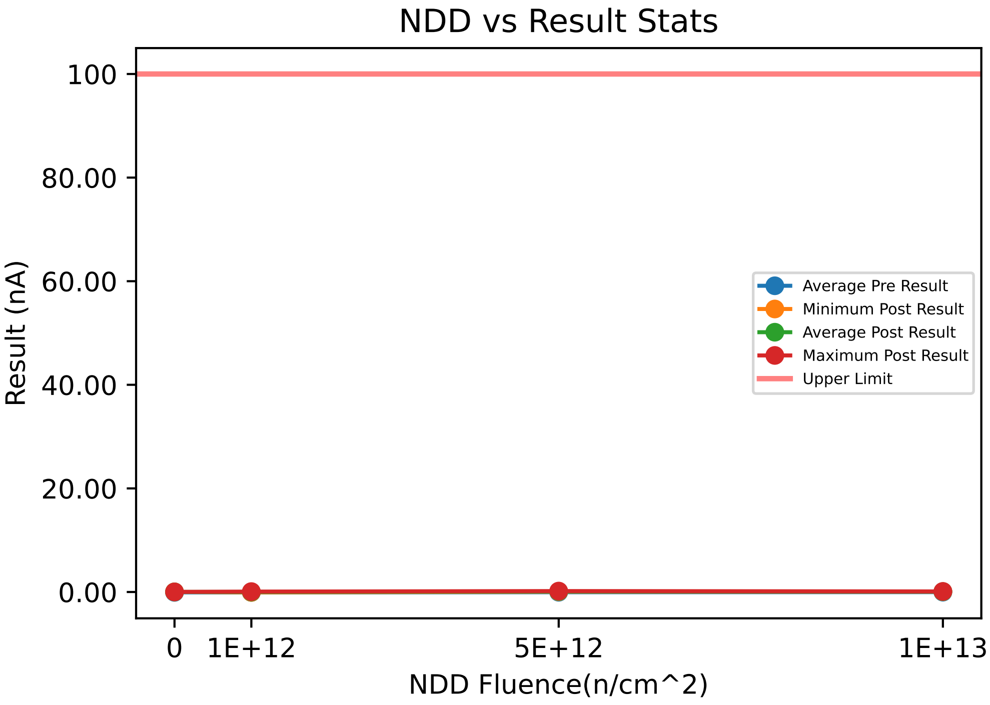
Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

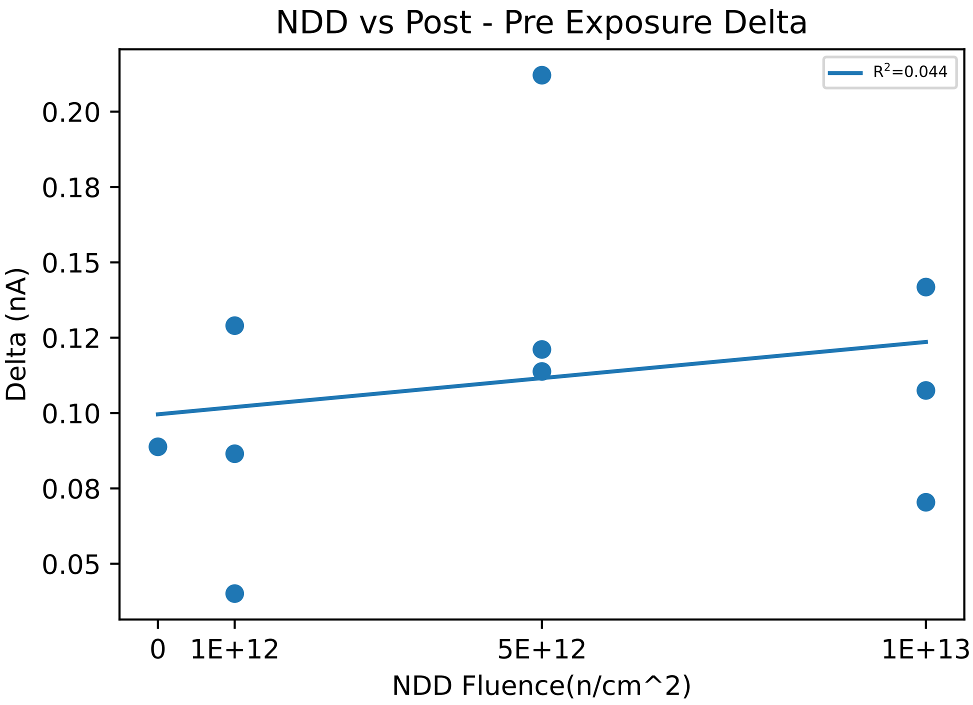
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5238	0.5222	-0.0016
504	1e+12	NDD	0.5001	0.4979	-0.0022
505	1e+12	NDD	0.4981	0.4976	-0.0005
506	5e+12	NDD	0.5075	0.5067	-0.0008
507	5e+12	NDD	0.5088	0.5086	-0.0002
508	5e+12	NDD	0.5075	0.5067	-0.0008
509	1e+13	NDD	0.5069	0.5034	-0.0035
510	1e+13	NDD	0.4975	0.4933	-0.0042
511	1e+13	NDD	0.4919	0.4901	-0.0018
512	0	Correlation	0.4991	0.4989	-0.0002

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4991	0.4991	0.4991		0.4989	0.4989	0.4989		-0.0002	-0.0002	-0.0002	
1e+12	0.4981	0.50733	0.5238	0.014296	0.4976	0.5059	0.5222	0.014117	-0.0022	-0.0014333	-0.0005	0.00086217
5e+12	0.5075	0.50793	0.5088	0.00075056	0.5067	0.50733	0.5086	0.001097	-0.0008	-0.0006	-0.0002	0.00034641
1e+13	0.4919	0.49877	0.5069	0.0075798	0.4901	0.4956	0.5034	0.0069419	-0.0042	-0.0031667	-0.0018	0.0012342

Device Test: 15.15 EN_LKG_CURR(LEAK|POWERED/EN/14////@EN_LKG_CURR)





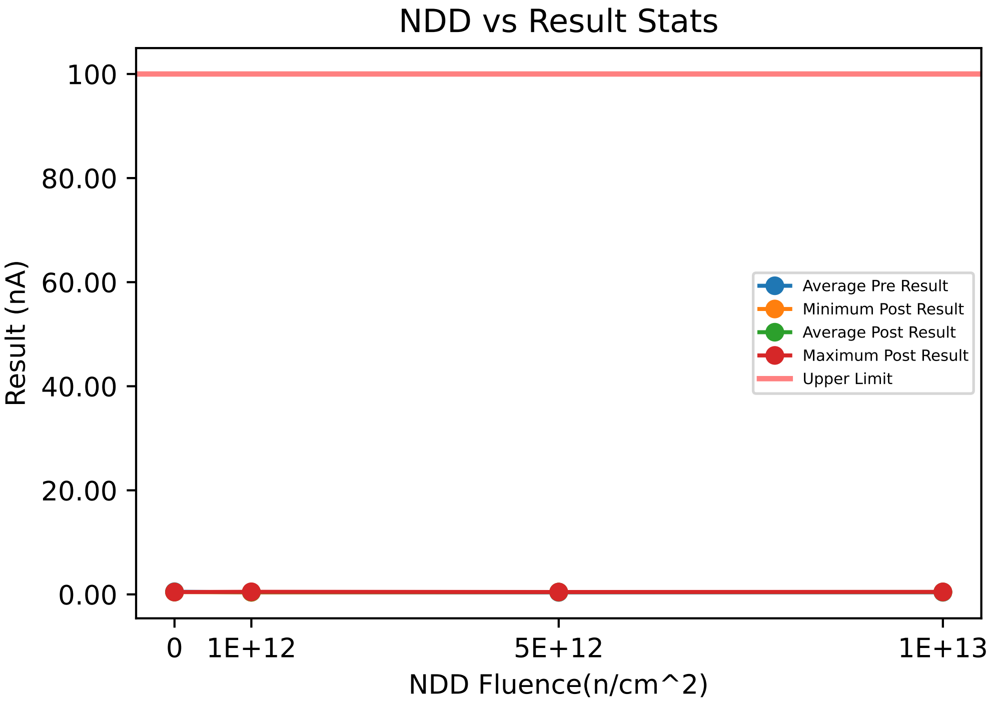
Test Results (Upper Limit = 100.0 (nA))

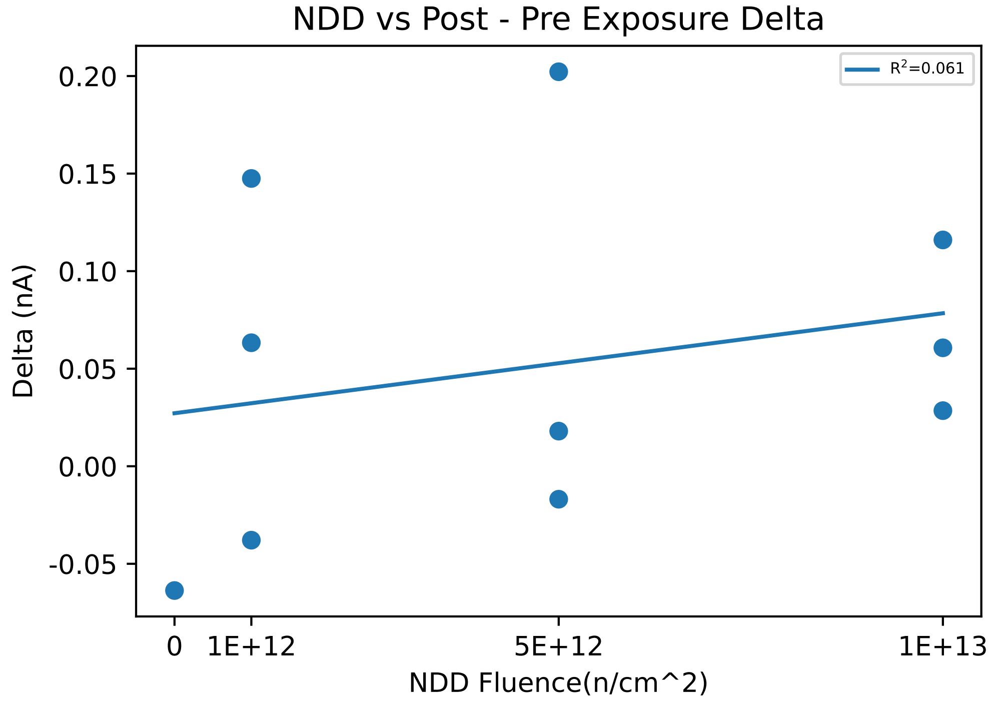
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	-0.0507	0.0783	0.129
504	1e+12	NDD	-0.0638	0.0227	0.0865
505	1e+12	NDD	-0.1164	-0.0763	0.0401
506	5e+12	NDD	0.0562	0.1773	0.1211
507	5e+12	NDD	-0.1345	0.0776	0.2121
508	5e+12	NDD	-0.0625	0.0513	0.1138
509	1e+13	NDD	-0.0299	0.1119	0.1418
510	1e+13	NDD	-0.0414	0.0661	0.1075
511	1e+13	NDD	-0.0086	0.0618	0.0704
512	0	Correlation	-0.0681	0.0207	0.0888

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.0681	-0.0681	-0.0681		0.0207	0.0207	0.0207		0.0888	0.0888	0.0888	
1e+12	-0.1164	-0.076967	-0.0507	0.034773	-0.0763	0.0082333	0.0783	0.078309	0.0401	0.0852	0.129	0.044464
5e+12	-0.1345	-0.046933	0.0562	0.096298	0.0513	0.10207	0.1773	0.066468	0.1138	0.149	0.2121	0.054768
1e+13	-0.0414	-0.026633	-0.0086	0.016642	0.0618	0.079933	0.1119	0.027767	0.0704	0.10657	0.1418	0.035709

Device Test: 15.16 ILIM_LKG_CURR(LEAK|POWERED/ILIM/14////@ILIM_LKG_CURR)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

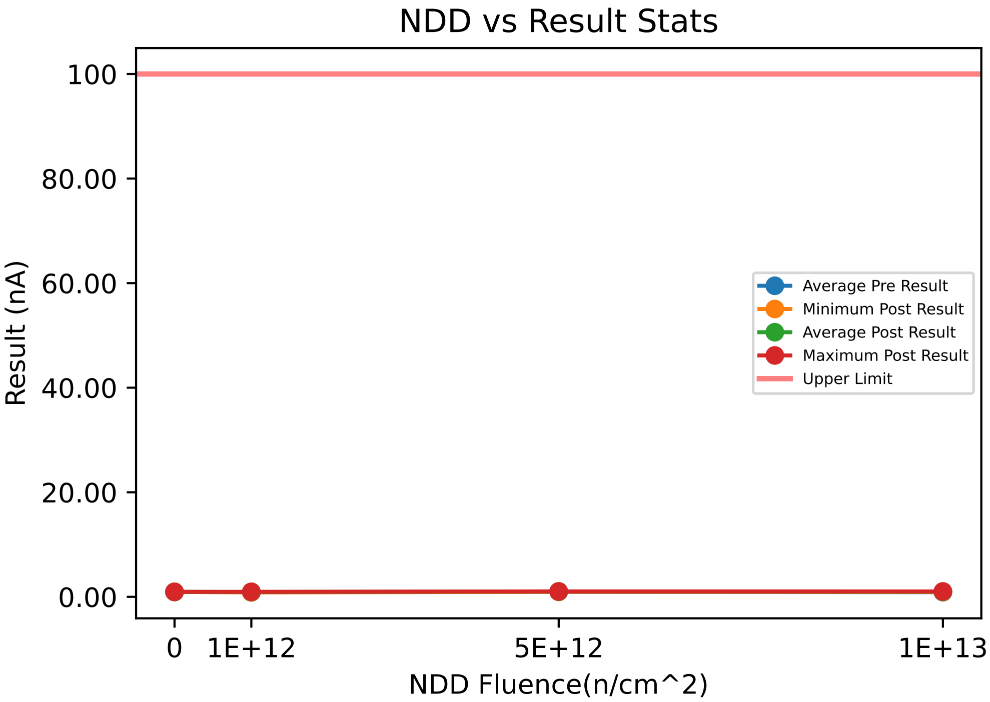
Test Results (Upper Limit = 100.0 (nA))

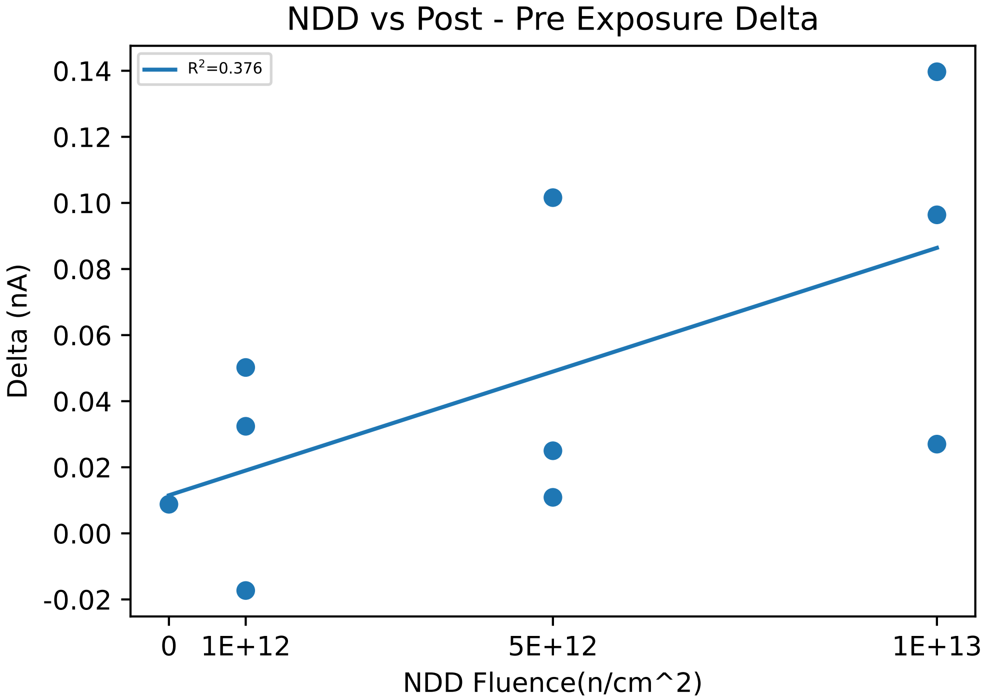
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.4094	0.4727	0.0633
504	1e+12	NDD	0.3495	0.497	0.1475
505	1e+12	NDD	0.4324	0.3945	-0.0379
506	5e+12	NDD	0.4515	0.4346	-0.0169
507	5e+12	NDD	0.4396	0.4576	0.018
508	5e+12	NDD	0.2547	0.4569	0.2022
509	1e+13	NDD	0.41	0.4385	0.0285
510	1e+13	NDD	0.4212	0.4819	0.0607
511	1e+13	NDD	0.36	0.476	0.116
512	0	Correlation	0.5127	0.449	-0.0637

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5127	0.5127	0.5127		0.449	0.449	0.449		-0.0637	-0.0637	-0.0637	
1e+12	0.3495	0.3971	0.4324	0.042797	0.3945	0.45473	0.497	0.05356	-0.0379	0.057633	0.1475	0.09283
5e+12	0.2547	0.38193	0.4515	0.11035	0.4346	0.4497	0.4576	0.013082	-0.0169	0.067767	0.2022	0.11772
1e+13	0.36	0.39707	0.4212	0.032585	0.4385	0.46547	0.4819	0.023539	0.0285	0.0684	0.116	0.044255

Device Test: 15.2 ILIM_LKG_CURR(LEAK|UNPOWERED/ILIM/0////@ILIM_LKG_CURR)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

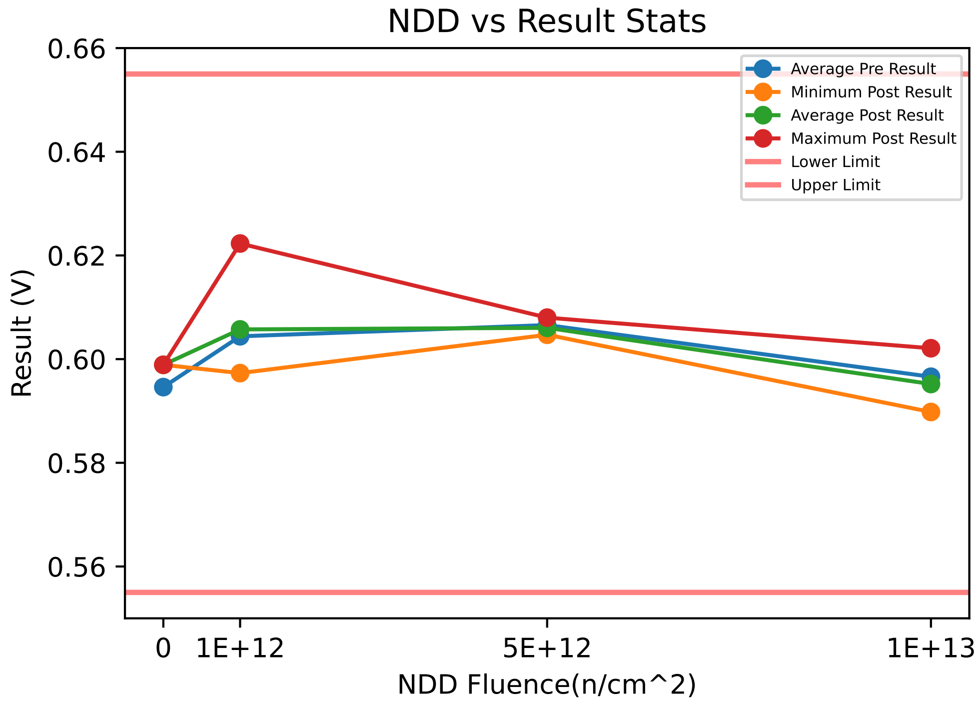
Test Results (Upper Limit = 100.0 (nA))

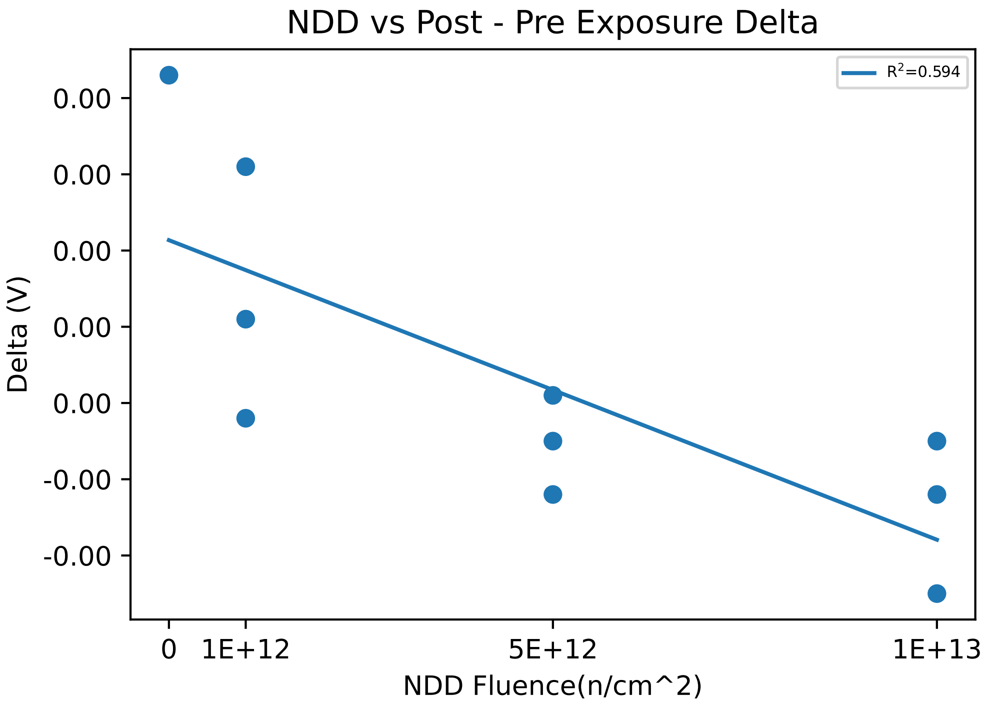
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.926	0.9584	0.0324
504	1e+12	NDD	0.9093	0.9595	0.0502
505	1e+12	NDD	0.8677	0.8504	-0.0173
506	5e+12	NDD	1.0144	1.0394	0.025
507	5e+12	NDD	0.93	1.0316	0.1016
508	5e+12	NDD	0.9517	0.9626	0.0109
509	1e+13	NDD	0.9344	1.0308	0.0964
510	1e+13	NDD	0.8312	0.9709	0.1397
511	1e+13	NDD	0.9082	0.9352	0.027
512	0	Correlation	0.9423	0.9511	0.0088

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9423	0.9423	0.9423		0.9511	0.9511	0.9511		0.0088	0.0088	0.0088	
1e+12	0.8677	0.901	0.926	0.030023	0.8504	0.92277	0.9595	0.062674	-0.0173	0.021767	0.0502	0.034984
5e+12	0.93	0.96537	1.0144	0.043828	0.9626	1.0112	1.0394	0.042269	0.0109	0.045833	0.1016	0.048807
1e+13	0.8312	0.89127	0.9344	0.053643	0.9352	0.97897	1.0308	0.048308	0.027	0.0877	0.1397	0.056851

Device Test: 15.3 EN_VTH_RISING(THRESHOLD|RISE/EN/4.5////@EN_VTH_RISING)





Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

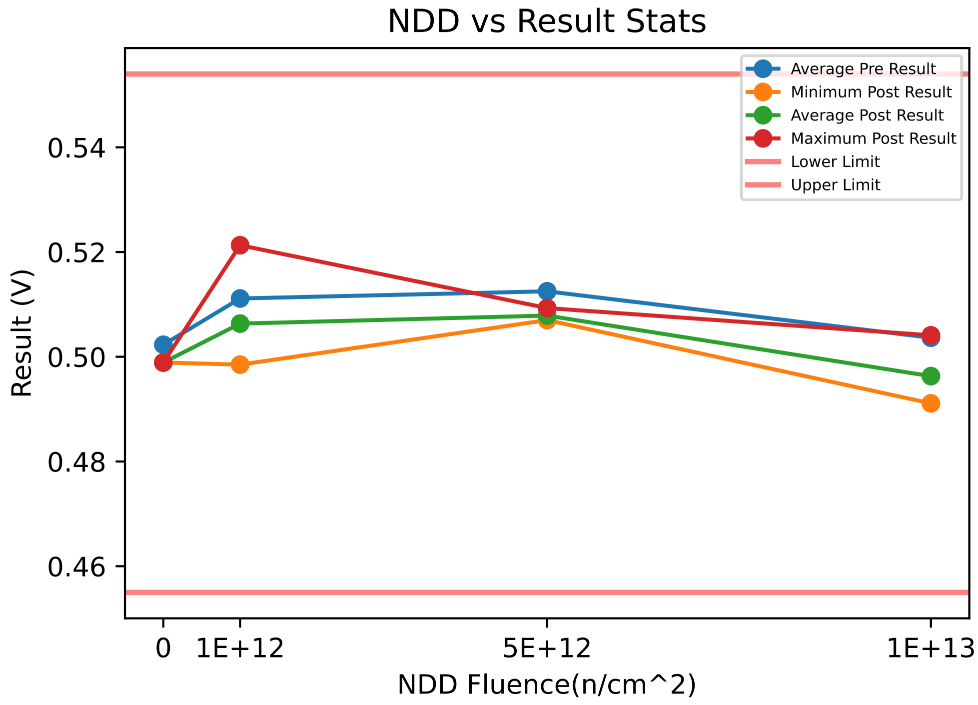
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6192	0.6223	0.0031
504	1e+12	NDD	0.5978	0.5976	-0.0002
505	1e+12	NDD	0.5962	0.5973	0.0011
506	5e+12	NDD	0.6053	0.6054	0.0001
507	5e+12	NDD	0.6085	0.608	-0.0005
508	5e+12	NDD	0.6059	0.6047	-0.0012
509	1e+13	NDD	0.6033	0.6021	-0.0012
510	1e+13	NDD	0.5962	0.5937	-0.0025
511	1e+13	NDD	0.5903	0.5898	-0.0005
512	0	Correlation	0.5946	0.5989	0.0043

Test Statistics (V)

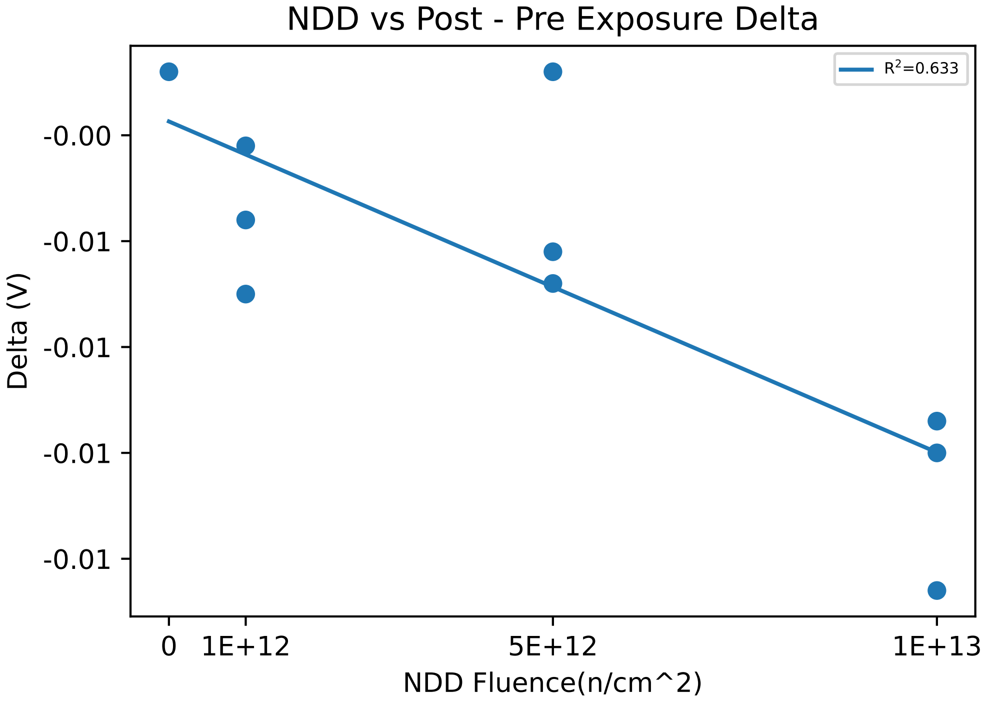
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5946	0.5946	0.5946		0.5989	0.5989	0.5989		0.0043	0.0043	0.0043	
1e+12	0.5962	0.6044	0.6192	0.012842	0.5973	0.60573	0.6223	0.014348	-0.0002	0.0013333	0.0031	0.0016623
5e+12	0.6053	0.60657	0.6085	0.001701	0.6047	0.60603	0.608	0.0017388	-0.0012	-0.00053333	0.0001	0.00065064
1e+13	0.5903	0.5966	0.6033	0.0065092	0.5898	0.5952	0.6021	0.0062857	-0.0025	-0.0014	-0.0005	0.0010149

Device Test: 15.4 EN_VTH_FALLING(THRESHOLD|FALL/EN/4.5////@EN_VTH_FALLING)

NDD vs Result Stats



NDD vs Post - Pre Exposure Delta



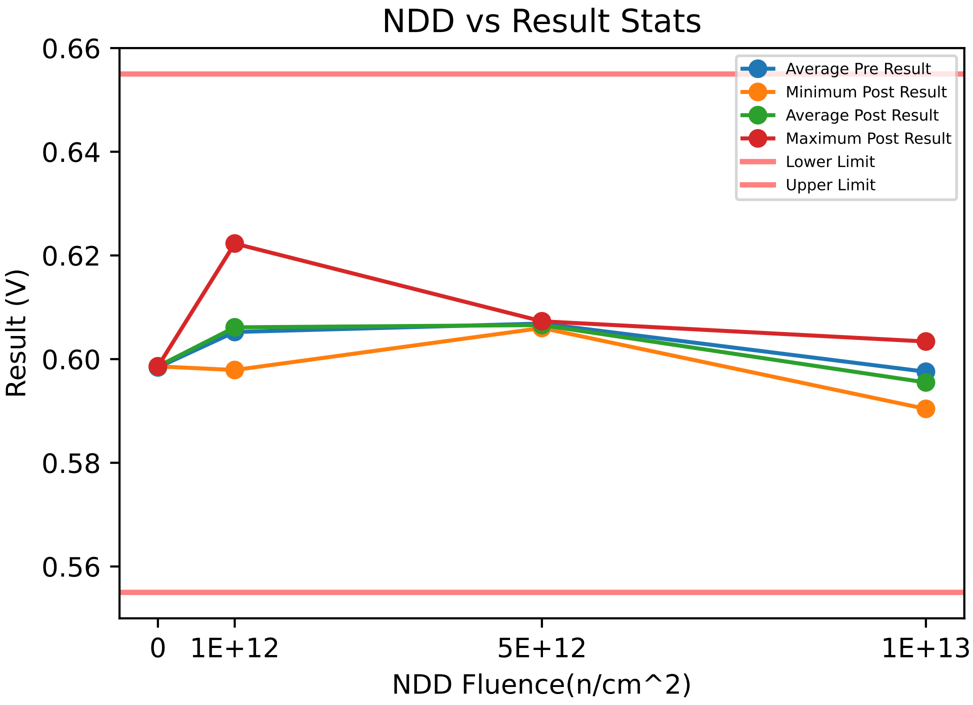
Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

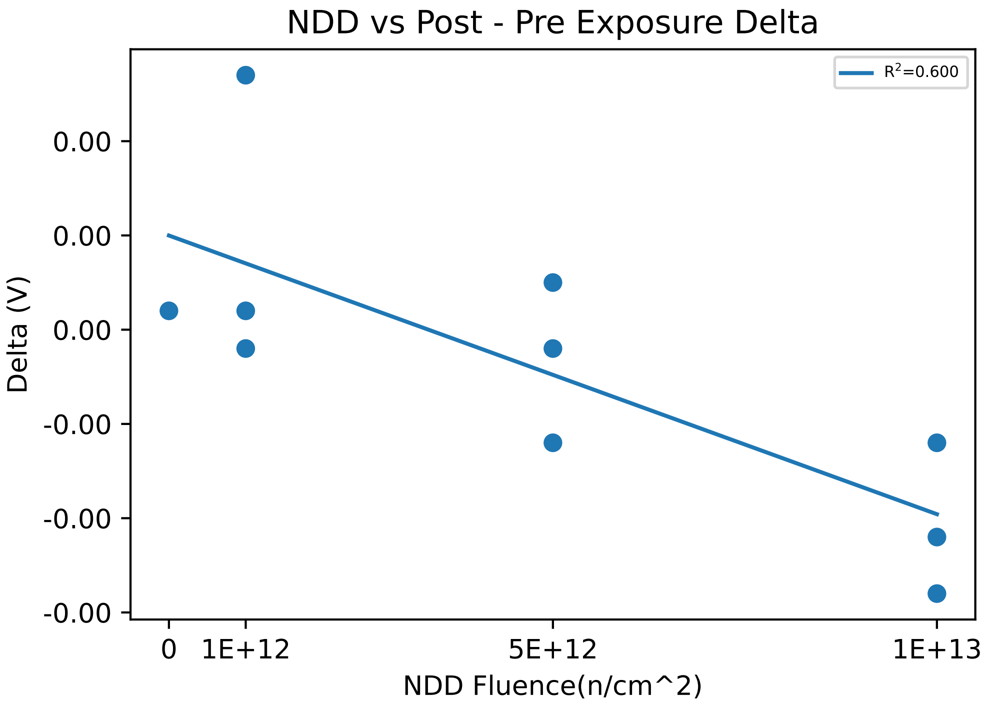
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5254	0.5213	-0.0041
504	1e+12	NDD	0.504	0.4992	-0.0048
505	1e+12	NDD	0.504	0.4985	-0.0055
506	5e+12	NDD	0.5124	0.5073	-0.0051
507	5e+12	NDD	0.5127	0.5093	-0.0034
508	5e+12	NDD	0.5124	0.507	-0.0054
509	1e+13	NDD	0.5108	0.5041	-0.0067
510	1e+13	NDD	0.502	0.4937	-0.0083
511	1e+13	NDD	0.4981	0.4911	-0.007
512	0	Correlation	0.5023	0.4989	-0.0034

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5023	0.5023	0.5023		0.4989	0.4989	0.4989		-0.0034	-0.0034	-0.0034	
1e+12	0.504	0.51113	0.5254	0.012355	0.4985	0.50633	0.5213	0.012966	-0.0055	-0.0048	-0.0041	0.0007
5e+12	0.5124	0.5125	0.5127	0.00017321	0.507	0.50787	0.5093	0.0012503	-0.0054	-0.0046333	-0.0034	0.0010786
1e+13	0.4981	0.50363	0.5108	0.0065056	0.4911	0.4963	0.5041	0.006879	-0.0083	-0.0073333	-0.0067	0.00085049

Device Test: 15.6 EN_VTH_RISING(THRESHOLD|RISE/EN/5////@EN_VTH_RISING)





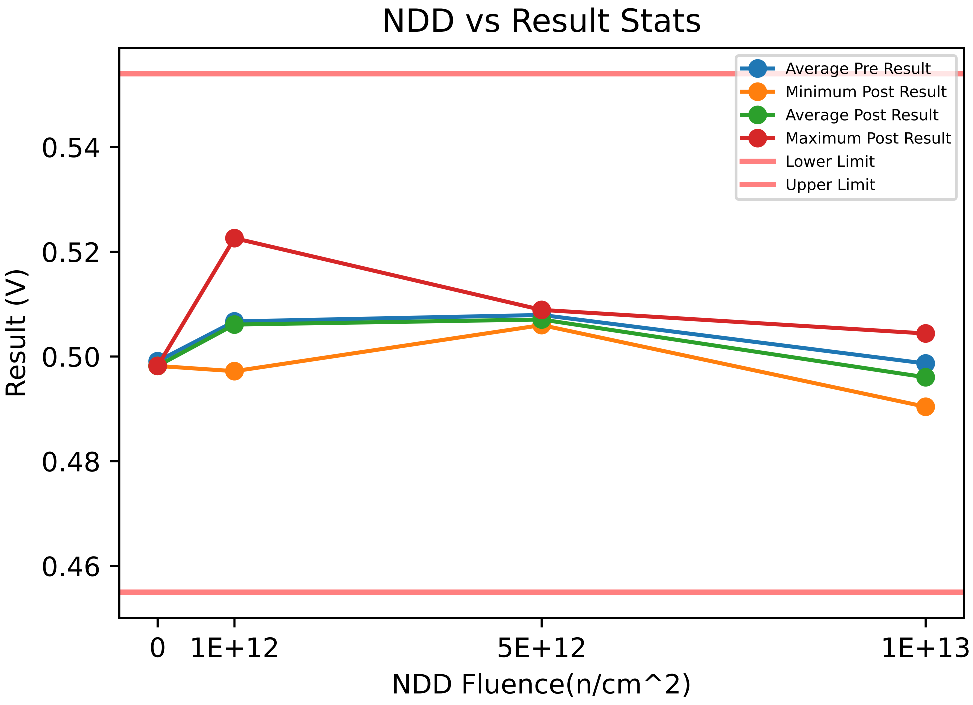
Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

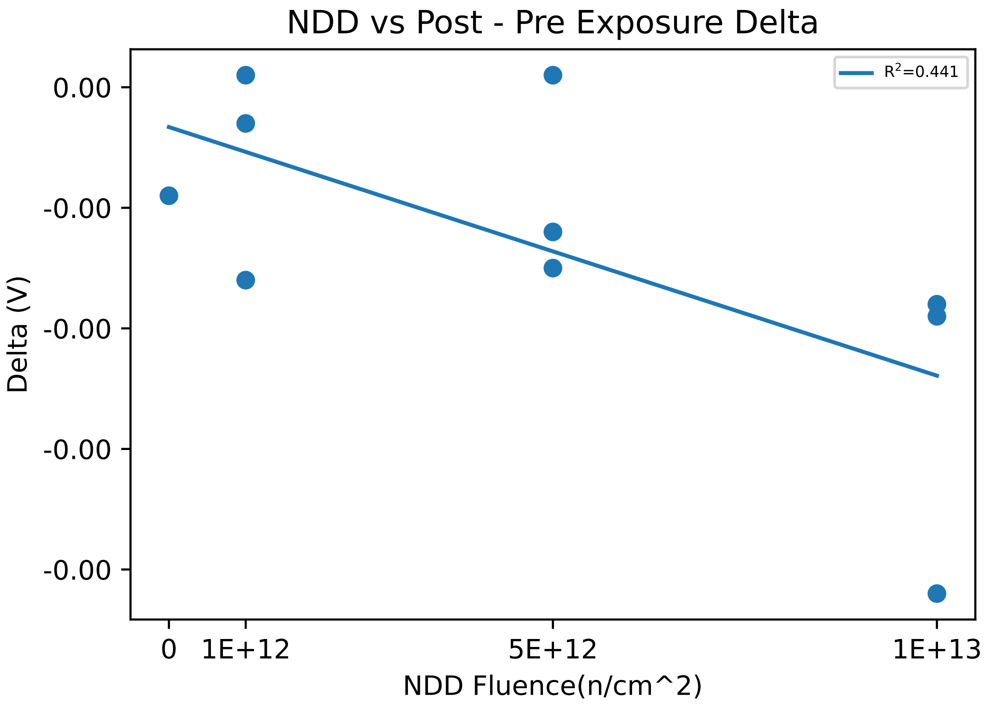
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6221	0.6223	0.0002
504	1e+12	NDD	0.5981	0.5979	-0.0002
505	1e+12	NDD	0.5955	0.5982	0.0027
506	5e+12	NDD	0.6062	0.606	-0.0002
507	5e+12	NDD	0.6085	0.6073	-0.0012
508	5e+12	NDD	0.6059	0.6064	0.0005
509	1e+13	NDD	0.6056	0.6034	-0.0022
510	1e+13	NDD	0.5955	0.5927	-0.0028
511	1e+13	NDD	0.5916	0.5904	-0.0012
512	0	Correlation	0.5984	0.5986	0.0002

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5984	0.5984	0.5984		0.5986	0.5986	0.5986		0.0002	0.0002	0.0002	
1e+12	0.5955	0.60523	0.6221	0.014665	0.5979	0.60613	0.6223	0.014002	-0.0002	0.0009	0.0027	0.0015716
5e+12	0.6059	0.60687	0.6085	0.0014224	0.606	0.60657	0.6073	0.00066583	-0.0012	-0.0003	0.0005	0.0008544
1e+13	0.5916	0.59757	0.6056	0.0072252	0.5904	0.5955	0.6034	0.0069376	-0.0028	-0.0020667	-0.0012	0.00080829

Device Test: 15.7 EN_VTH_FALLING(THRESHOLD|FALL/EN/5////@EN_VTH_FALLING)





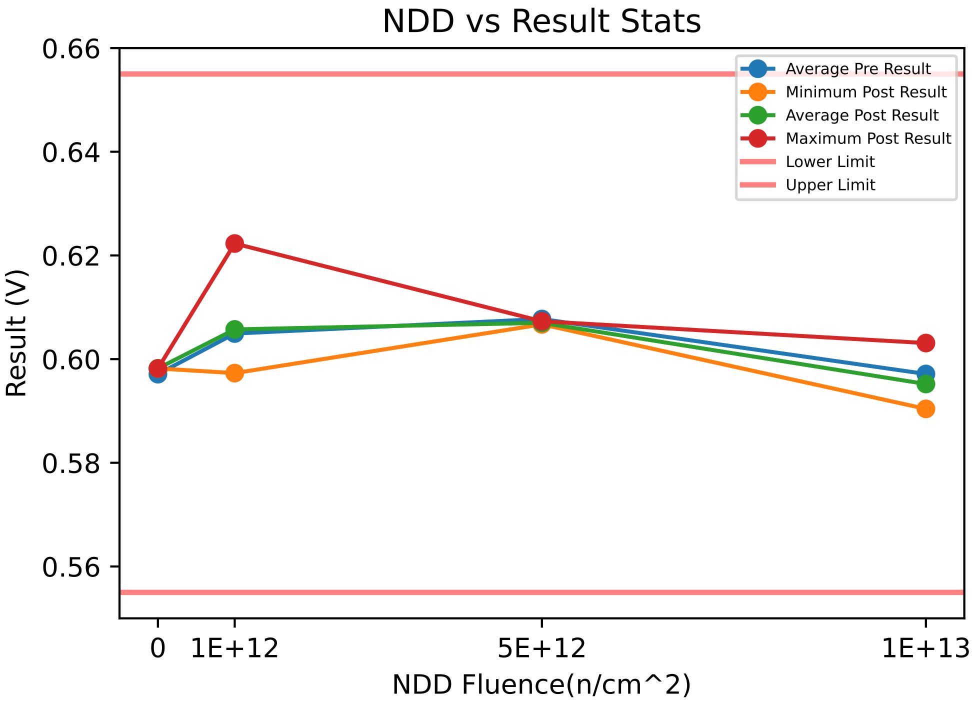
Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

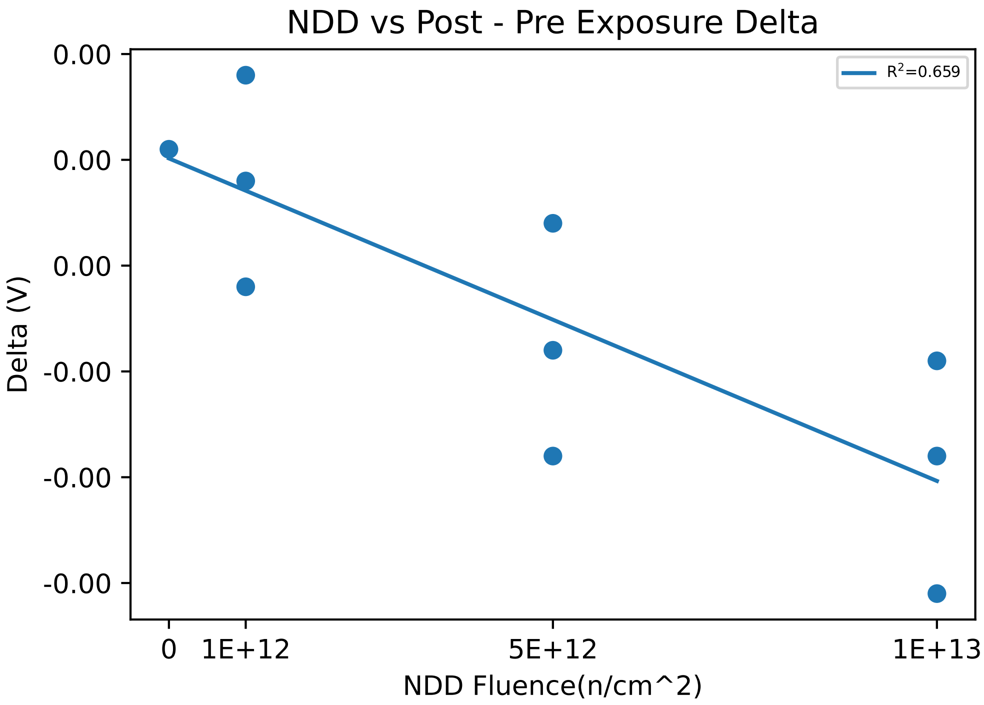
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5225	0.5226	0.0001
504	1e+12	NDD	0.5001	0.4985	-0.0016
505	1e+12	NDD	0.4975	0.4972	-0.0003
506	5e+12	NDD	0.5075	0.506	-0.0015
507	5e+12	NDD	0.5088	0.5089	0.0001
508	5e+12	NDD	0.5075	0.5063	-0.0012
509	1e+13	NDD	0.5062	0.5044	-0.0018
510	1e+13	NDD	0.4975	0.4933	-0.0042
511	1e+13	NDD	0.4923	0.4904	-0.0019
512	0	Correlation	0.4991	0.4982	-0.0009

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4991	0.4991	0.4991		0.4982	0.4982	0.4982		-0.0009	-0.0009	-0.0009	
1e+12	0.4975	0.5067	0.5225	0.013745	0.4972	0.5061	0.5226	0.014304	-0.0016	-0.0006	0.0001	0.00088882
5e+12	0.5075	0.50793	0.5088	0.00075056	0.506	0.50707	0.5089	0.0015948	-0.0015	-0.00086667	0.0001	0.00085049
1e+13	0.4923	0.49867	0.5062	0.0070231	0.4904	0.49603	0.5044	0.0073894	-0.0042	-0.0026333	-0.0018	0.0013577

Device Test: 15.9 EN_VTH_RISING(THRESHOLD|RISE/EN/12////@EN_VTH_RISING)





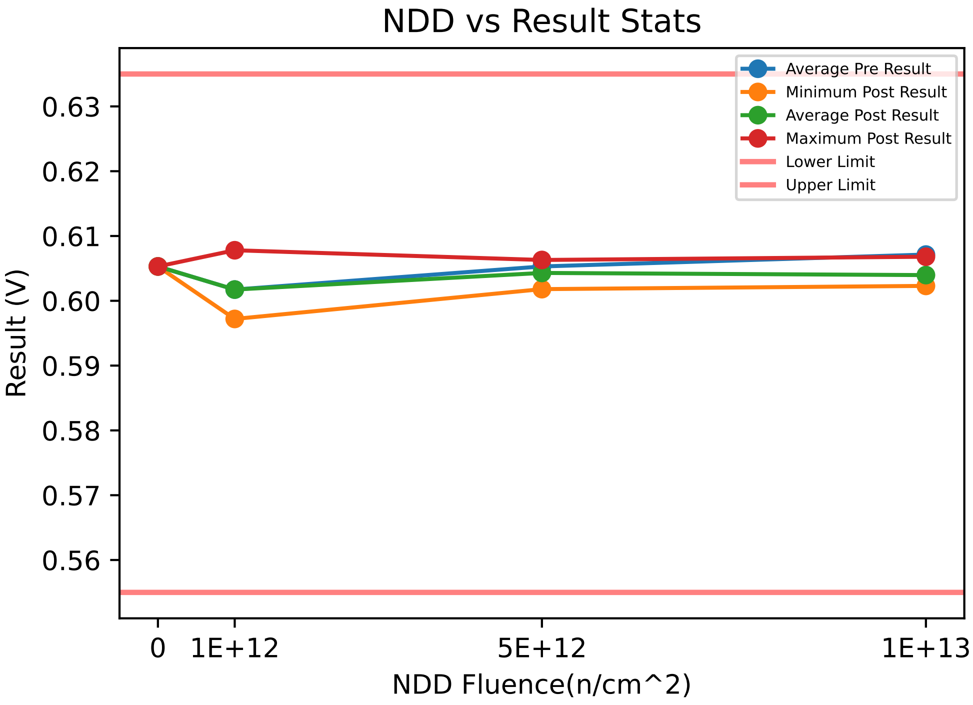
Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

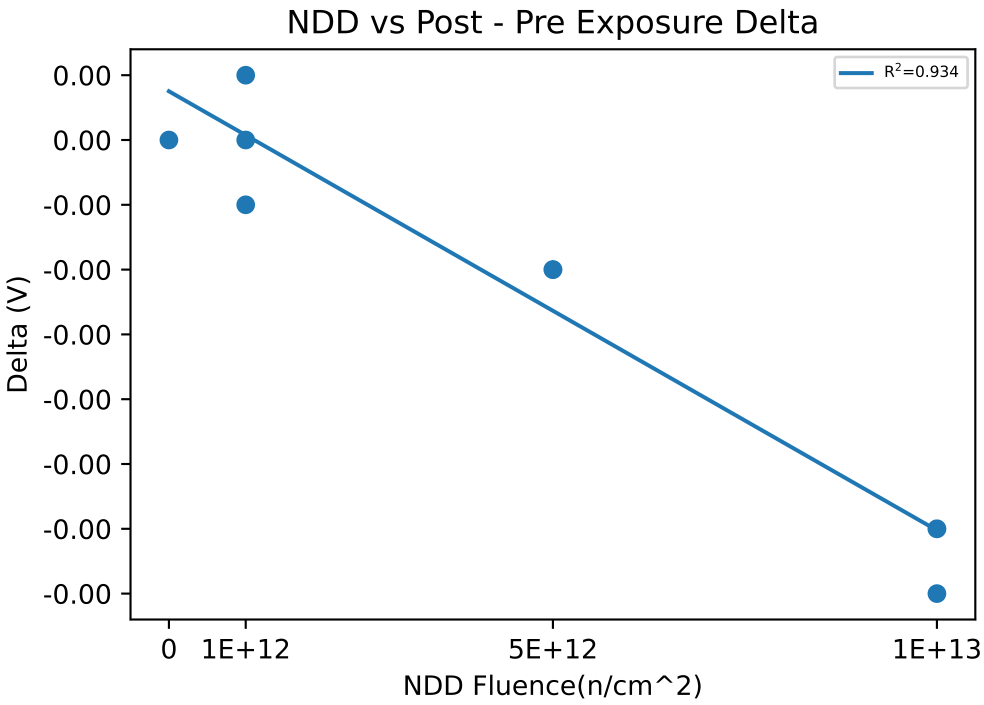
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6205	0.6223	0.0018
504	1e+12	NDD	0.5978	0.5976	-0.0002
505	1e+12	NDD	0.5965	0.5973	0.0008
506	5e+12	NDD	0.6075	0.6067	-0.0008
507	5e+12	NDD	0.6088	0.607	-0.0018
508	5e+12	NDD	0.6069	0.6073	0.0004
509	1e+13	NDD	0.6049	0.6031	-0.0018
510	1e+13	NDD	0.5952	0.5921	-0.0031
511	1e+13	NDD	0.5913	0.5904	-0.0009
512	0	Correlation	0.5971	0.5982	0.0011

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5971	0.5971	0.5971		0.5982	0.5982	0.5982		0.0011	0.0011	0.0011	
1e+12	0.5965	0.60493	0.6205	0.013497	0.5973	0.60573	0.6223	0.014348	-0.0002	0.0008	0.0018	0.001
5e+12	0.6069	0.60773	0.6088	0.00097125	0.6067	0.607	0.6073	0.0003	-0.0018	-0.00073333	0.0004	0.0011015
1e+13	0.5913	0.59713	0.6049	0.0070031	0.5904	0.5952	0.6031	0.0068942	-0.0031	-0.0019333	-0.0009	0.001106

Device Test: 16.1 FAULT_VTH_RISING(THRESHOLD|RISE/FAULT/4.5////@FAULT_VTH_RISING)





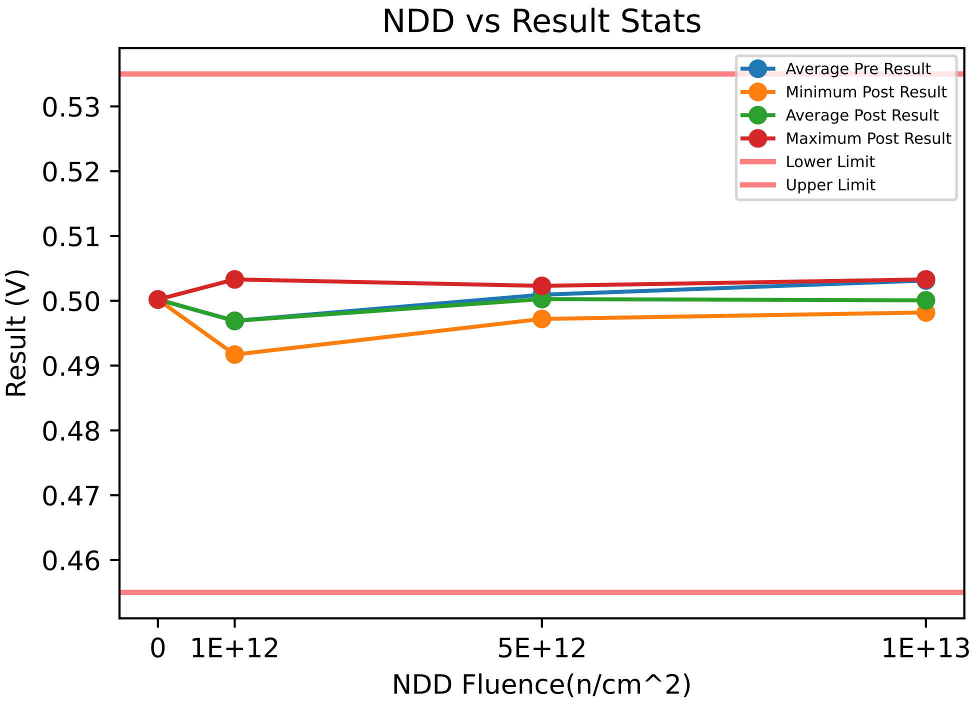
Test Results (Lower Limit = 0.555, Upper Limit = 0.635 (V))

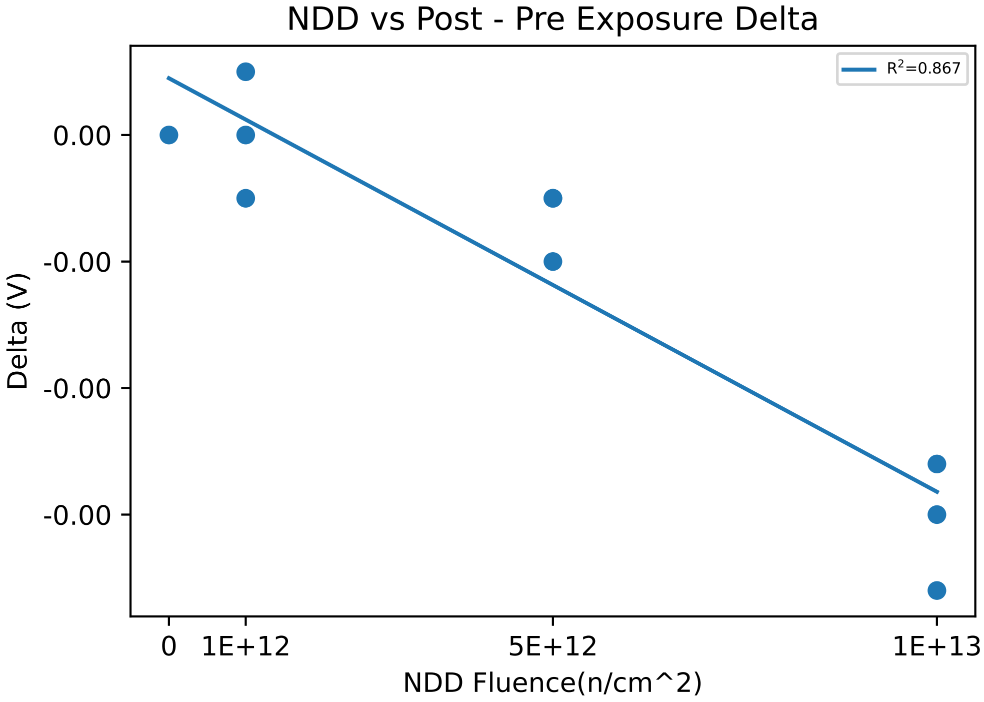
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6083	0.6078	-0.0005
504	1e+12	NDD	0.6002	0.6002	0
505	1e+12	NDD	0.5967	0.5972	0.0005
506	5e+12	NDD	0.6073	0.6063	-0.001
507	5e+12	NDD	0.6058	0.6048	-0.001
508	5e+12	NDD	0.6028	0.6018	-0.001
509	1e+13	NDD	0.6053	0.6023	-0.003
510	1e+13	NDD	0.6063	0.6028	-0.0035
511	1e+13	NDD	0.6098	0.6068	-0.003
512	0	Correlation	0.6053	0.6053	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6053	0.6053	0.6053		0.6053	0.6053	0.6053		0	0	0	
1e+12	0.5967	0.60173	0.6083	0.0059501	0.5972	0.60173	0.6078	0.0054638	-0.0005	0	0.0005	0.0005
5e+12	0.6028	0.6053	0.6073	0.0022913	0.6018	0.6043	0.6063	0.0022913	-0.001	-0.001	-0.001	0
1e+13	0.6053	0.60713	0.6098	0.0023629	0.6023	0.60397	0.6068	0.0024664	-0.0035	-0.0031667	-0.003	0.00028868

Device Test: 16.10 FAULT_VTH_FALLING(THRESHOLD|FALL/FAULT/12////@FAULT_VTH_FALLING)





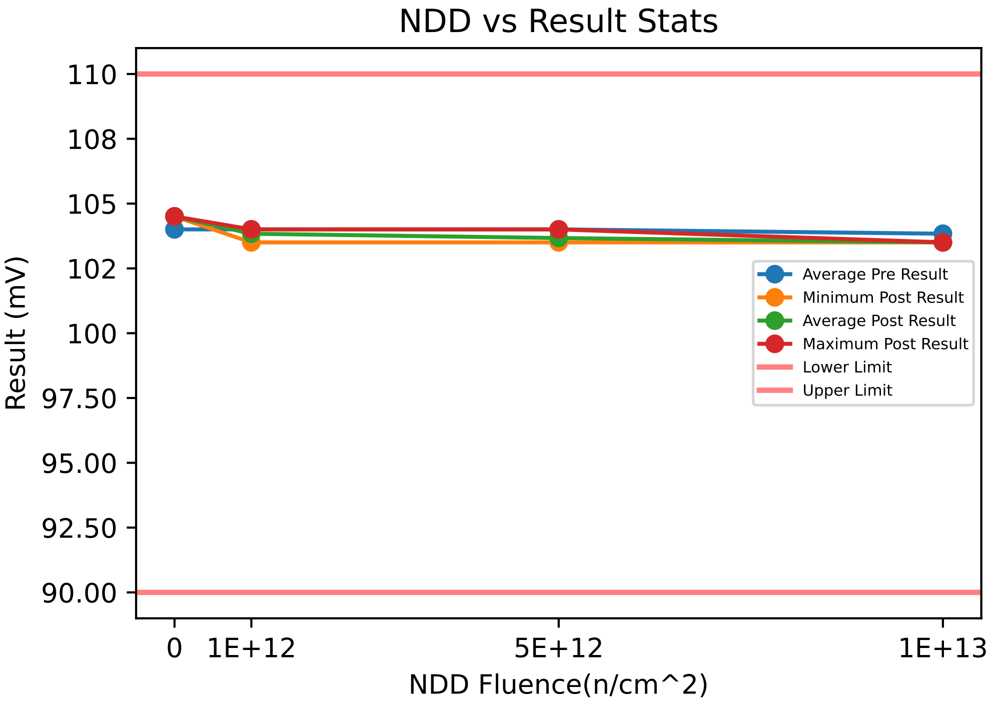
Test Results (Lower Limit = 0.455, Upper Limit = 0.535 (V))

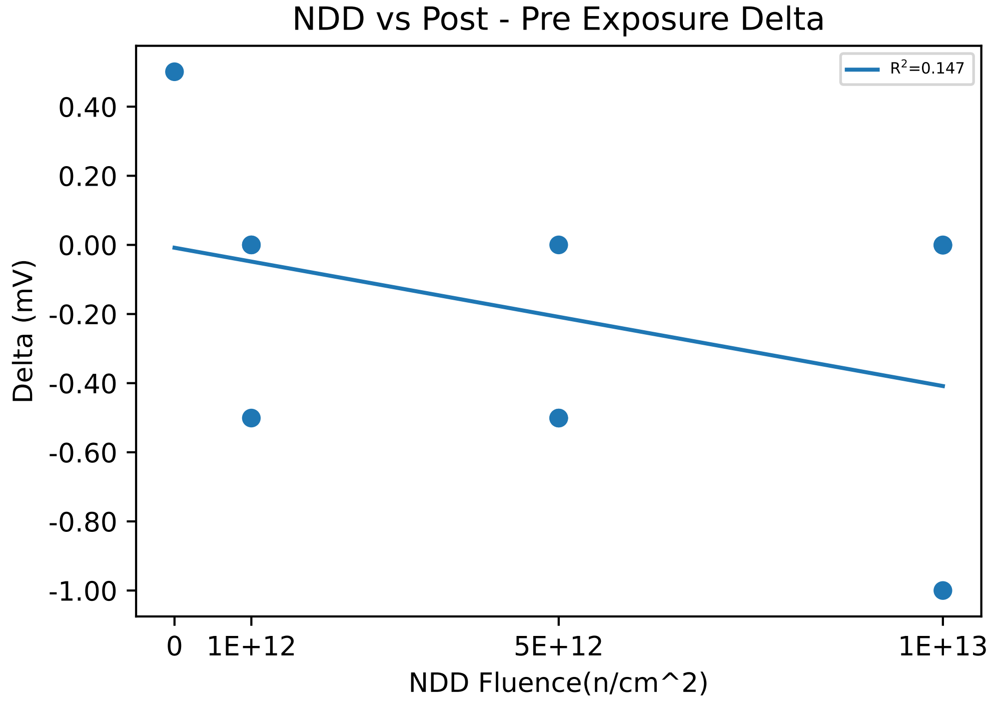
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5038	0.5033	-0.0005
504	1e+12	NDD	0.4952	0.4957	0.0005
505	1e+12	NDD	0.4917	0.4917	0
506	5e+12	NDD	0.5028	0.5023	-0.0005
507	5e+12	NDD	0.5018	0.5013	-0.0005
508	5e+12	NDD	0.4982	0.4972	-0.001
509	1e+13	NDD	0.5013	0.4987	-0.0026
510	1e+13	NDD	0.5018	0.4982	-0.0036
511	1e+13	NDD	0.5063	0.5033	-0.003
512	0	Correlation	0.5002	0.5002	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5002	0.5002	0.5002		0.5002	0.5002	0.5002		0	0	0	
1e+12	0.4917	0.4969	0.5038	0.0062266	0.4917	0.4969	0.5033	0.0058924	-0.0005	-1.8504e-17	0.0005	0.0005
5e+12	0.4982	0.50093	0.5028	0.0024194	0.4972	0.50027	0.5023	0.0027025	-0.001	-0.00066667	-0.0005	0.00028868
1e+13	0.5013	0.50313	0.5063	0.0027538	0.4982	0.50007	0.5033	0.0028113	-0.0036	-0.0030667	-0.0026	0.00050332

Device Test: 16.11 FAULT_VTH_HYST(THRESHOLD|HYST/FAULT/12////@FAULT_VTH_HYST)





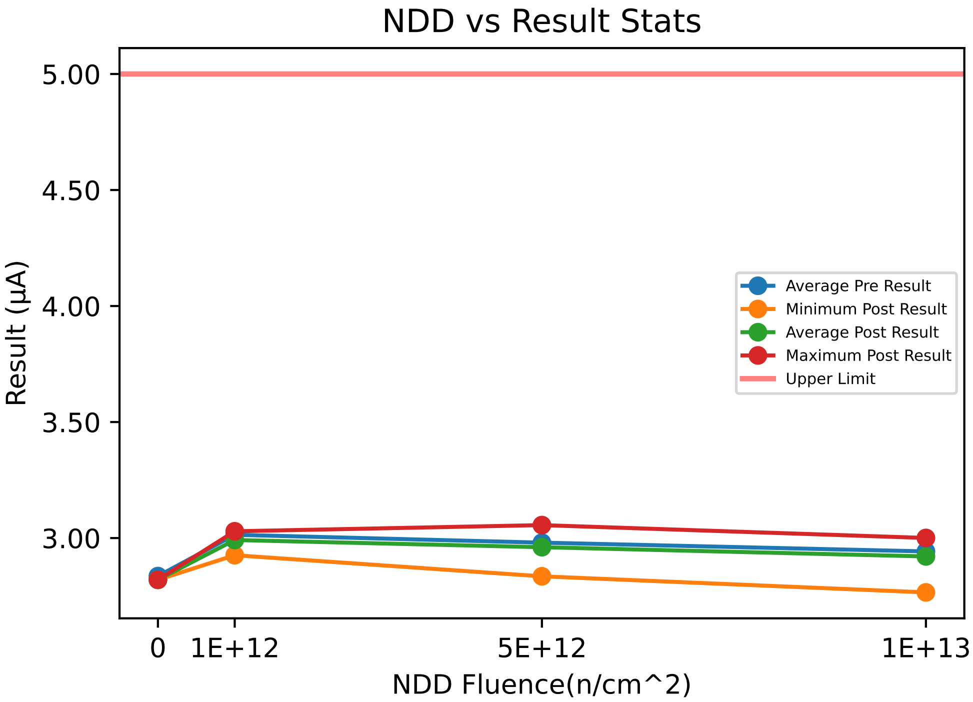
Test Results (Lower Limit = 90.0, Upper Limit = 110.0 (mV))

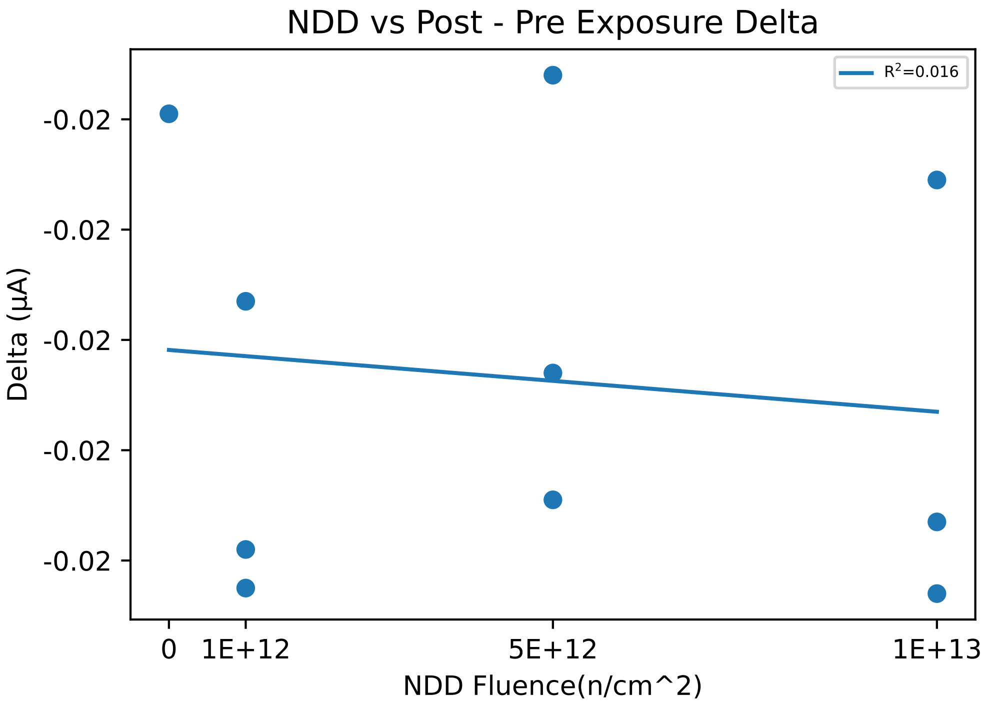
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	104	104	0
504	1e+12	NDD	104	103.5	-0.501
505	1e+12	NDD	104	104	0
506	5e+12	NDD	104	103.5	-0.501
507	5e+12	NDD	104	104	0
508	5e+12	NDD	104	103.5	-0.501
509	1e+13	NDD	104.5	103.5	-1
510	1e+13	NDD	103.5	103.5	-0.001
511	1e+13	NDD	103.5	103.5	0
512	0	Correlation	104	104.51	0.501

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	104	104	104		104.51	104.51	104.51		0.501	0.501	0.501	
1e+12	104	104	104	0	103.5	103.84	104	0.28925	-0.501	-0.167	0	0.28925
5e+12	104	104	104	0	103.5	103.67	104	0.28925	-0.501	-0.334	0	0.28925
1e+13	103.5	103.84	104.5	0.57764	103.5	103.5	103.5	0.00057735	-1	-0.33367	0	0.57706

Device Test: 16.12 FAULT_LKG_CURR(LEAK|POWERED/FAULT/12////@FAULT_LKG_CURR)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

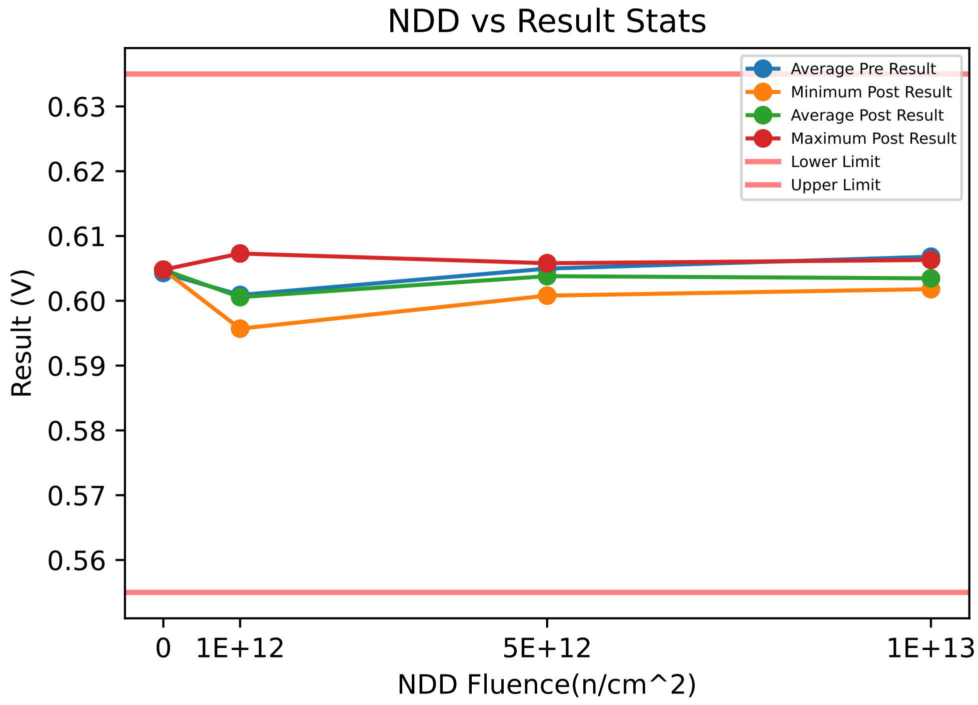
Test Results (Upper Limit = 5.0 (µA))

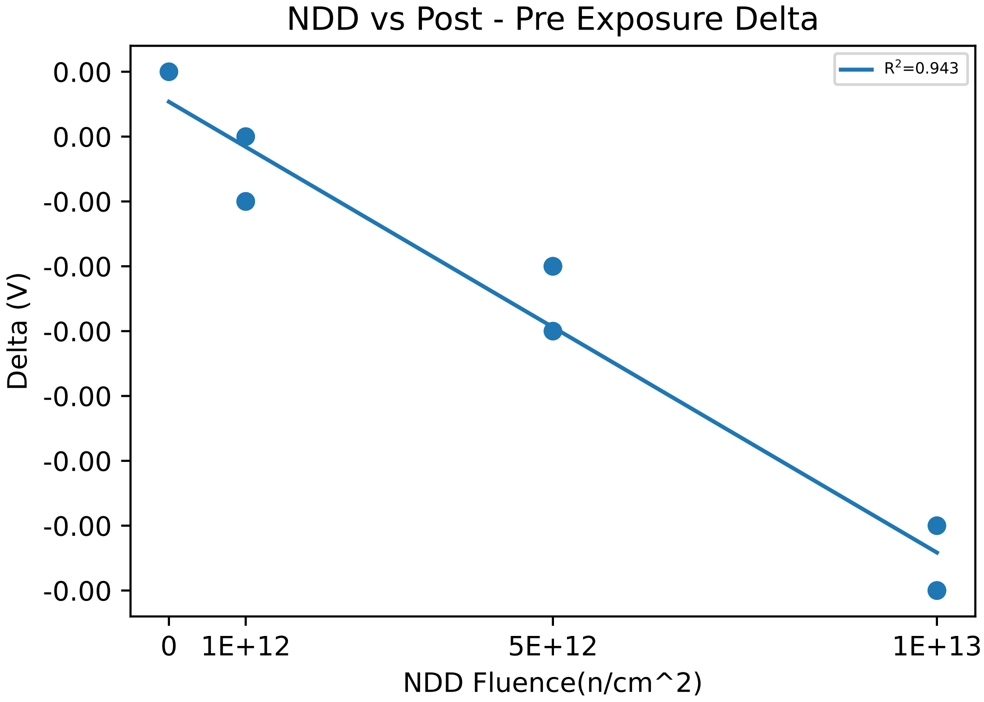
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.9453	2.926	-0.0193
504	1e+12	NDD	3.044	3.0195	-0.0245
505	1e+12	NDD	3.053	3.0292	-0.0238
506	5e+12	NDD	3.071	3.0558	-0.0152
507	5e+12	NDD	2.8557	2.8351	-0.0206
508	5e+12	NDD	3.0138	2.9909	-0.0229
509	1e+13	NDD	2.7829	2.7658	-0.0171
510	1e+13	NDD	3.0207	2.9961	-0.0246
511	1e+13	NDD	3.0237	3.0004	-0.0233
512	0	Correlation	2.836	2.8201	-0.0159

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.836	2.836	2.836		2.8201	2.8201	2.8201		-0.0159	-0.0159	-0.0159	
1e+12	2.9453	3.0141	3.053	0.059752	2.926	2.9916	3.0292	0.056989	-0.0245	-0.022533	-0.0193	0.0028219
5e+12	2.8557	2.9802	3.071	0.11152	2.8351	2.9606	3.0558	0.11343	-0.0229	-0.019567	-0.0152	0.0039526
1e+13	2.7829	2.9424	3.0237	0.13817	2.7658	2.9208	3.0004	0.13422	-0.0246	-0.021667	-0.0171	0.0040079

Device Test: 16.13 FAULT_VTH_RISING(THRESHOLD|RISE/FAULT/14////@FAULT_VTH_RISING)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

Test Results (Lower Limit = 0.555, Upper Limit = 0.635 (V))

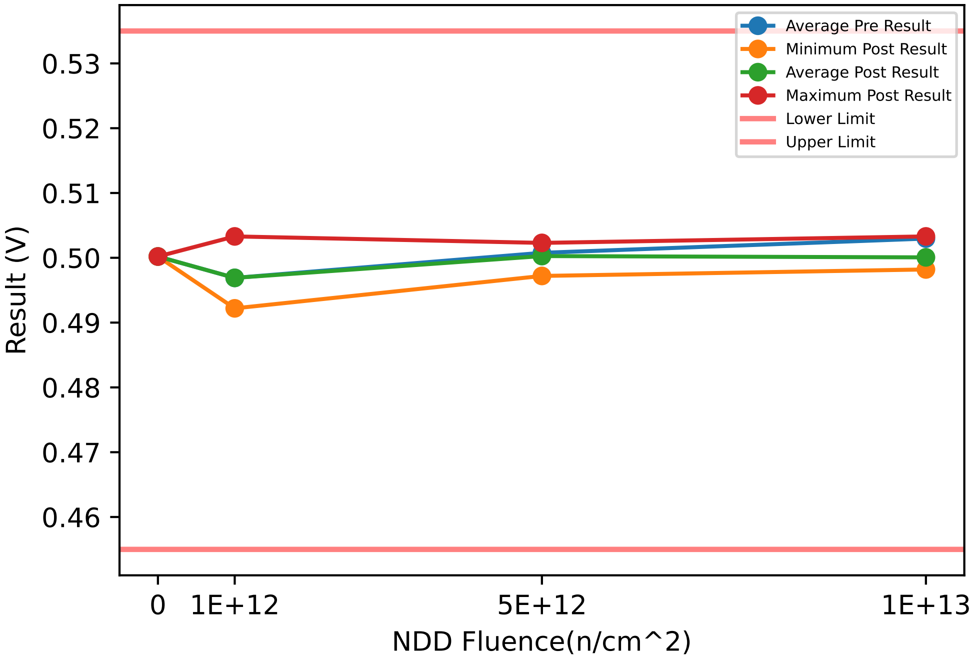
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6078	0.6073	-0.0005
504	1e+12	NDD	0.5992	0.5987	-0.0005
505	1e+12	NDD	0.5957	0.5957	0
506	5e+12	NDD	0.6068	0.6058	-0.001
507	5e+12	NDD	0.6058	0.6048	-0.001
508	5e+12	NDD	0.6023	0.6008	-0.0015
509	1e+13	NDD	0.6053	0.6023	-0.003
510	1e+13	NDD	0.6053	0.6018	-0.0035
511	1e+13	NDD	0.6098	0.6063	-0.0035
512	0	Correlation	0.6043	0.6048	0.0005

Test Statistics (V)

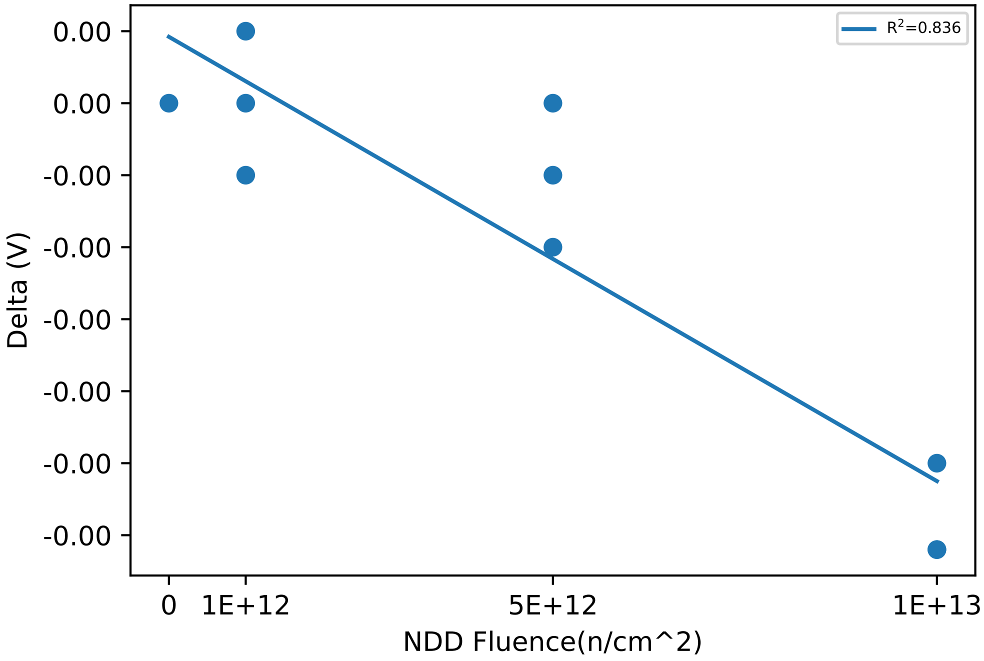
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6043	0.6043	0.6043		0.6048	0.6048	0.6048		0.0005	0.0005	0.0005	
1e+12	0.5957	0.6009	0.6078	0.0062266	0.5957	0.60057	0.6073	0.0060211	-0.0005	-0.00033333	0	0.00028868
5e+12	0.6023	0.60497	0.6068	0.0023629	0.6008	0.6038	0.6058	0.0026458	-0.0015	-0.0011667	-0.001	0.00028868
1e+13	0.6053	0.6068	0.6098	0.0025981	0.6018	0.60347	0.6063	0.0024664	-0.0035	-0.0033333	-0.003	0.00028868

Device Test: 16.14 FAULT_VTH_FALLING(THRESHOLD|FALL/FAULT/14////@FAULT_VTH_FALLING)

NDD vs Result Stats



NDD vs Post - Pre Exposure Delta



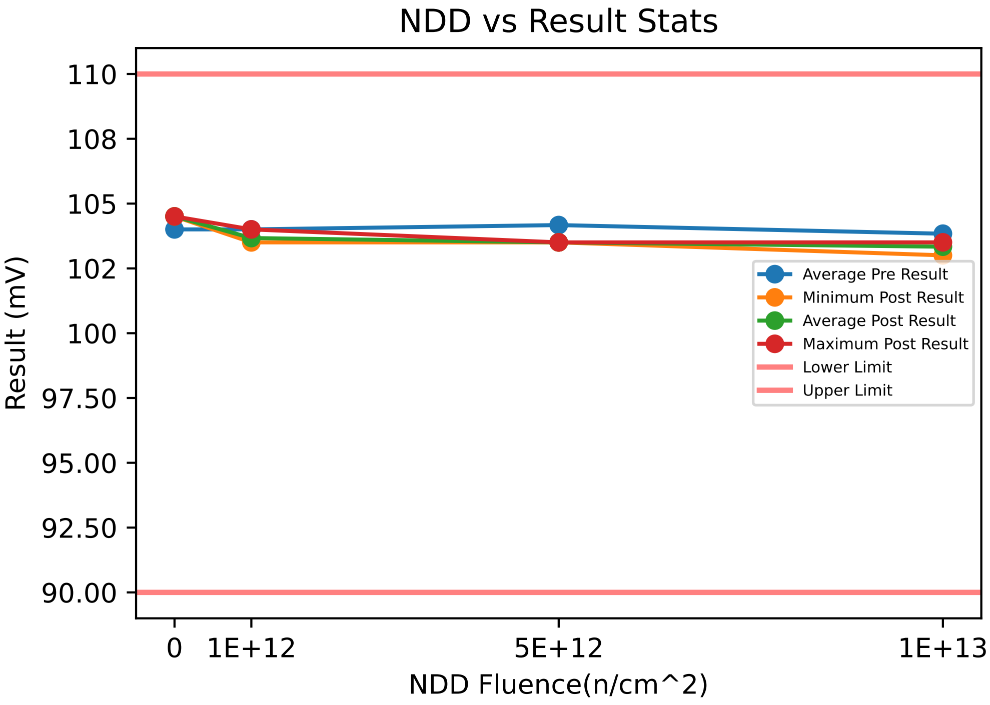
Test Results (Lower Limit = 0.455, Upper Limit = 0.535 (V))

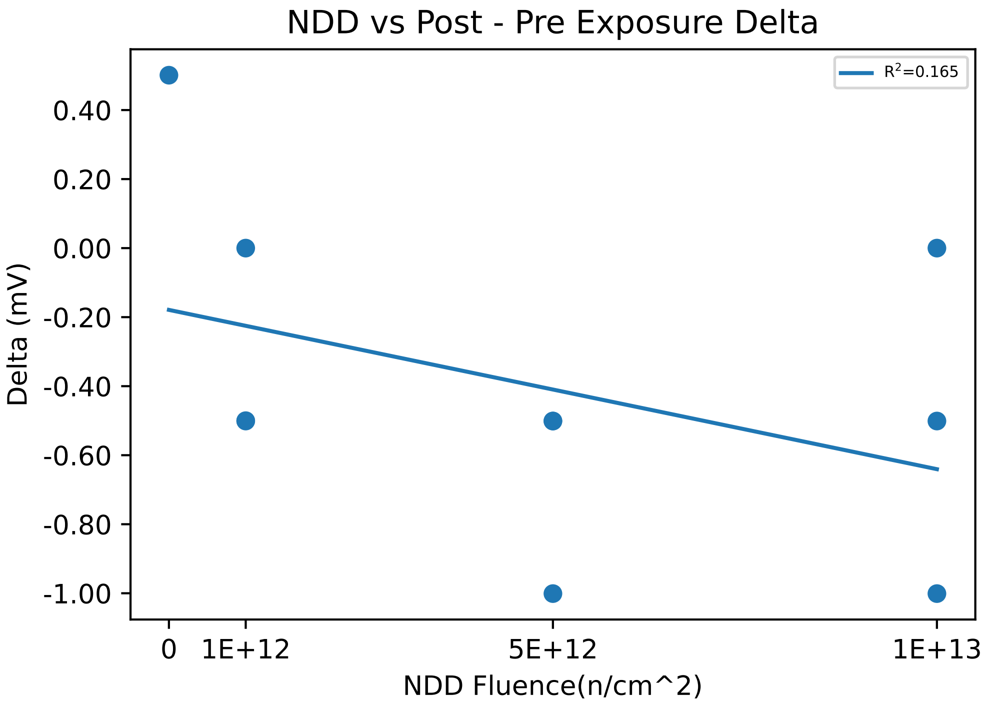
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5038	0.5033	-0.0005
504	1e+12	NDD	0.4952	0.4952	0
505	1e+12	NDD	0.4917	0.4922	0.0005
506	5e+12	NDD	0.5028	0.5023	-0.0005
507	5e+12	NDD	0.5013	0.5013	0
508	5e+12	NDD	0.4982	0.4972	-0.001
509	1e+13	NDD	0.5018	0.4987	-0.0031
510	1e+13	NDD	0.5013	0.4982	-0.0031
511	1e+13	NDD	0.5058	0.5033	-0.0025
512	0	Correlation	0.5002	0.5002	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5002	0.5002	0.5002		0.5002	0.5002	0.5002		0	0	0	
1e+12	0.4917	0.4969	0.5038	0.0062266	0.4922	0.4969	0.5033	0.005742	-0.0005	-1.8504e-17	0.0005	0.0005
5e+12	0.4982	0.50077	0.5028	0.0023459	0.4972	0.50027	0.5023	0.0027025	-0.001	-0.0005	0	0.0005
1e+13	0.5013	0.50297	0.5058	0.0024664	0.4982	0.50007	0.5033	0.0028113	-0.0031	-0.0029	-0.0025	0.00034641

Device Test: 16.15 FAULT_VTH_HYST(THRESHOLD|HYST/FAULT/14////@FAULT_VTH_HYST)





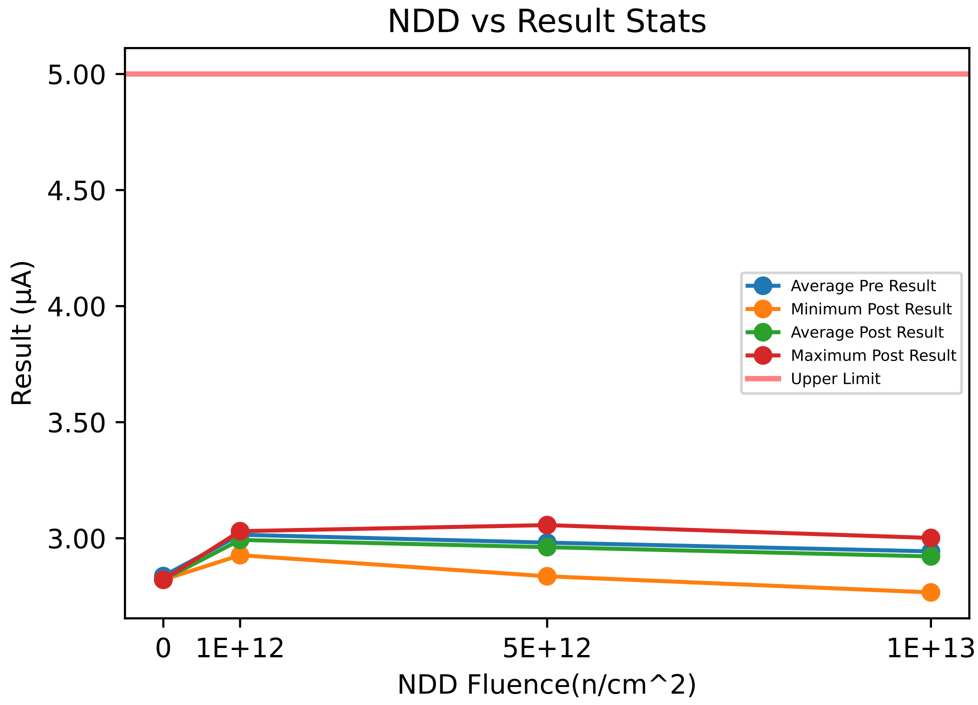
Test Results (Lower Limit = 90.0, Upper Limit = 110.0 (mV))

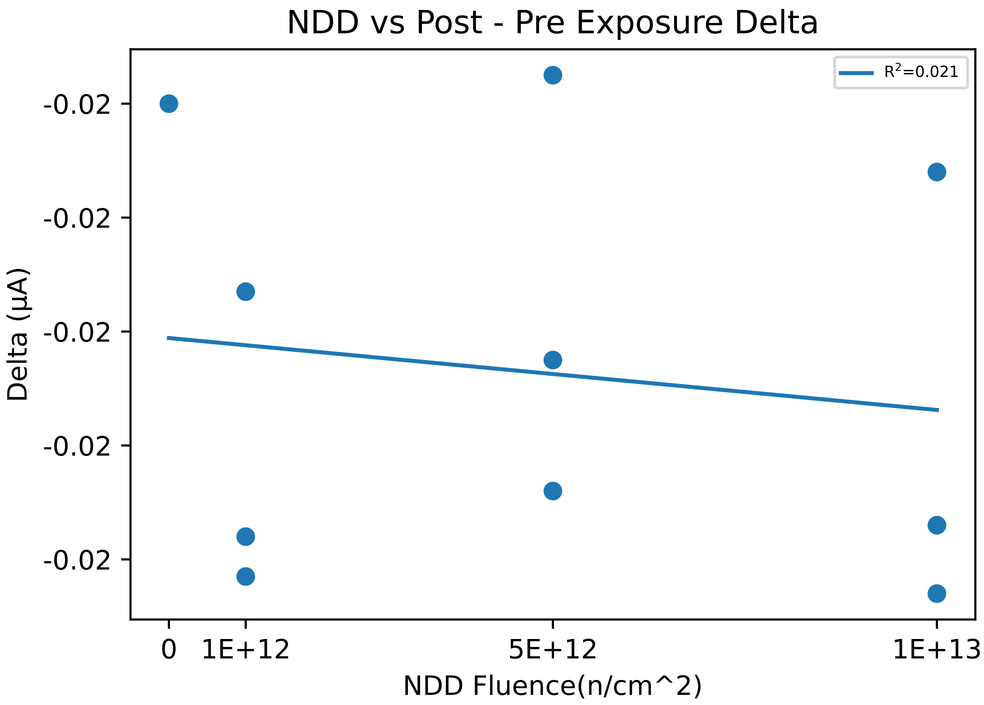
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	104	104	0
504	1e+12	NDD	104	103.5	-0.501
505	1e+12	NDD	104	103.5	-0.5
506	5e+12	NDD	104	103.5	-0.501
507	5e+12	NDD	104.5	103.5	-1.001
508	5e+12	NDD	104	103.5	-0.501
509	1e+13	NDD	103.5	103.5	0
510	1e+13	NDD	104	103.5	-0.501
511	1e+13	NDD	104	103	-1.001
512	0	Correlation	104	104.51	0.501

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	104	104	104		104.51	104.51	104.51		0.501	0.501	0.501	
1e+12	104	104	104	0	103.5	103.67	104	0.28896	-0.501	-0.33367	0	0.28896
5e+12	104	104.17	104.5	0.28868	103.5	103.5	103.5	0	-1.001	-0.66767	-0.501	0.28868
1e+13	103.5	103.84	104	0.28868	103	103.34	103.5	0.28896	-1.001	-0.50067	0	0.5005

Device Test: 16.16 FAULT_LKG_CURR(LEAK|POWERED/FAULT/14////@FAULT_LKG_CURR)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

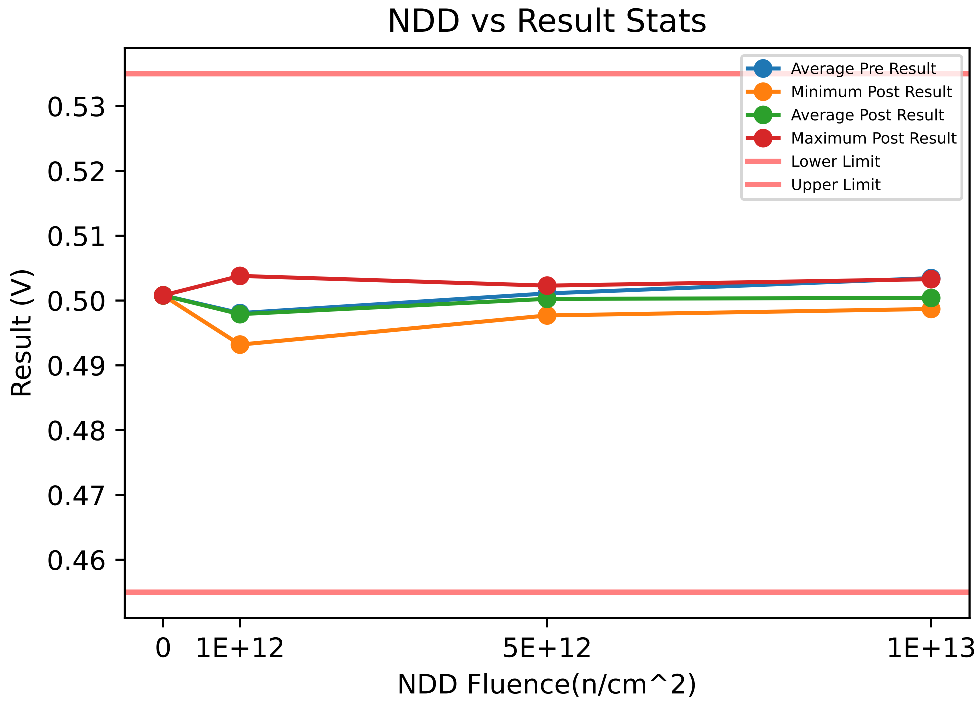
Test Results (Upper Limit = 5.0 (µA))

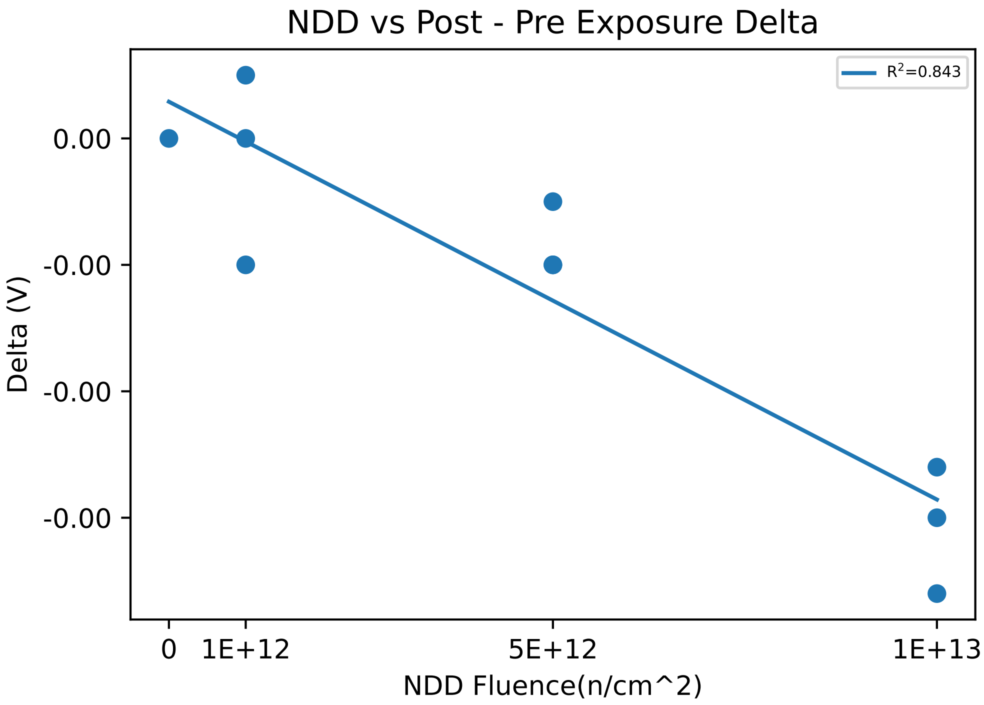
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.9463	2.927	-0.0193
504	1e+12	NDD	3.045	3.0207	-0.0243
505	1e+12	NDD	3.0541	3.0305	-0.0236
506	5e+12	NDD	3.0721	3.0566	-0.0155
507	5e+12	NDD	2.8566	2.8361	-0.0205
508	5e+12	NDD	3.0147	2.9919	-0.0228
509	1e+13	NDD	2.7839	2.7667	-0.0172
510	1e+13	NDD	3.0217	2.9971	-0.0246
511	1e+13	NDD	3.0247	3.0013	-0.0234
512	0	Correlation	2.8371	2.8211	-0.016

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.8371	2.8371	2.8371		2.8211	2.8211	2.8211		-0.016	-0.016	-0.016	
1e+12	2.9463	3.0151	3.0541	0.059785	2.927	2.9927	3.0305	0.057137	-0.0243	-0.0224	-0.0193	0.0027074
5e+12	2.8566	2.9811	3.0721	0.1116	2.8361	2.9615	3.0566	0.11334	-0.0228	-0.0196	-0.0155	0.0037323
1e+13	2.7839	2.9434	3.0247	0.13817	2.7667	2.9217	3.0013	0.13425	-0.0246	-0.021733	-0.0172	0.0039716

Device Test: 16.2 FAULT_VTH_FALLING(THRESHOLD|FALL/FAULT/4.5////@FAULT_VTH_FALLING)





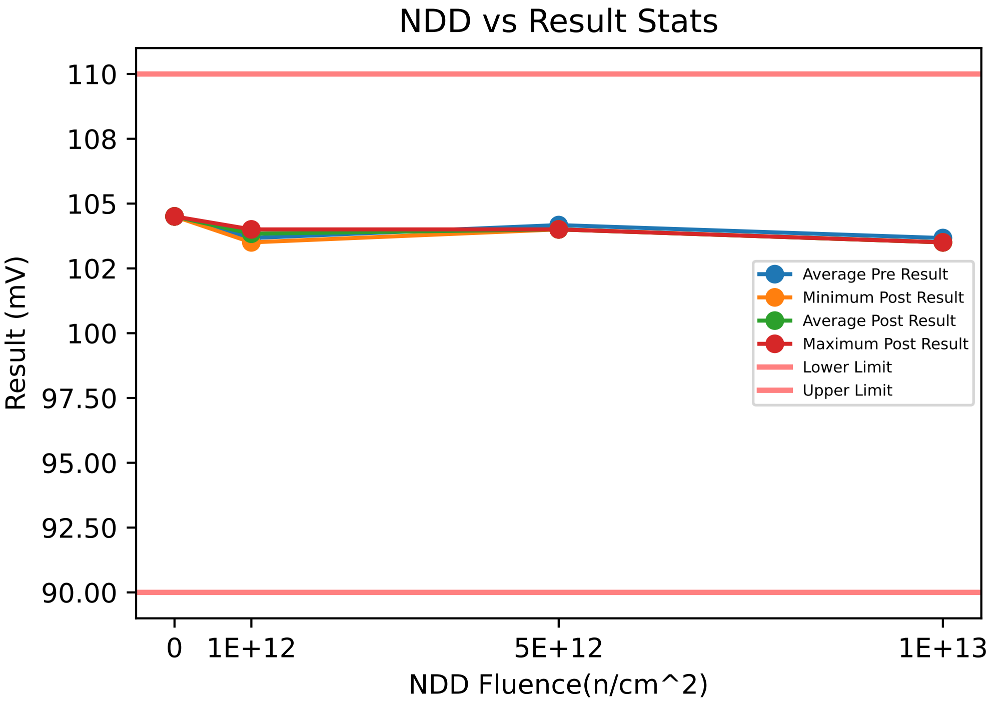
Test Results (Lower Limit = 0.455, Upper Limit = 0.535 (V))

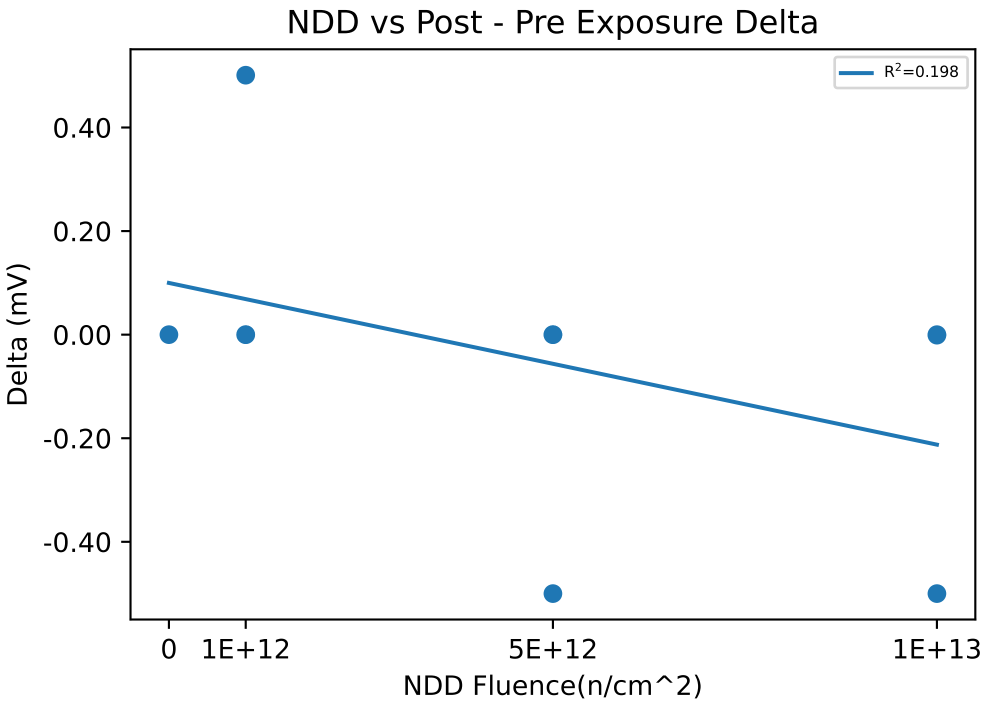
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5048	0.5038	-0.001
504	1e+12	NDD	0.4967	0.4967	0
505	1e+12	NDD	0.4927	0.4932	0.0005
506	5e+12	NDD	0.5033	0.5023	-0.001
507	5e+12	NDD	0.5013	0.5008	-0.0005
508	5e+12	NDD	0.4987	0.4977	-0.001
509	1e+13	NDD	0.5013	0.4987	-0.0026
510	1e+13	NDD	0.5028	0.4992	-0.0036
511	1e+13	NDD	0.5063	0.5033	-0.003
512	0	Correlation	0.5008	0.5008	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5008	0.5008	0.5008		0.5008	0.5008	0.5008		0	0	0	
1e+12	0.4927	0.49807	0.5048	0.0061647	0.4932	0.4979	0.5038	0.0054009	-0.001	-0.00016667	0.0005	0.00076376
5e+12	0.4987	0.5011	0.5033	0.0023065	0.4977	0.50027	0.5023	0.0023459	-0.001	-0.00083333	-0.0005	0.00028868
1e+13	0.5013	0.50347	0.5063	0.0025658	0.4987	0.5004	0.5033	0.0025239	-0.0036	-0.0030667	-0.0026	0.00050332

Device Test: 16.3 FAULT_VTH_HYST(THRESHOLD|HYST/FAULT/4.5////@FAULT_VTH_HYST)





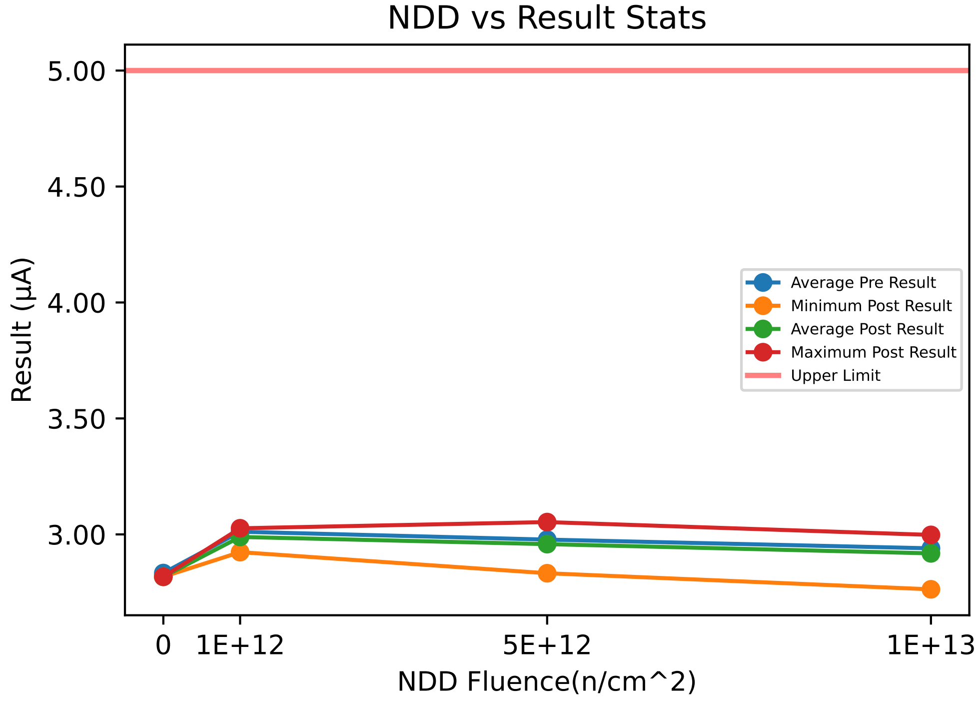
Test Results (Lower Limit = 90.0, Upper Limit = 110.0 (mV))

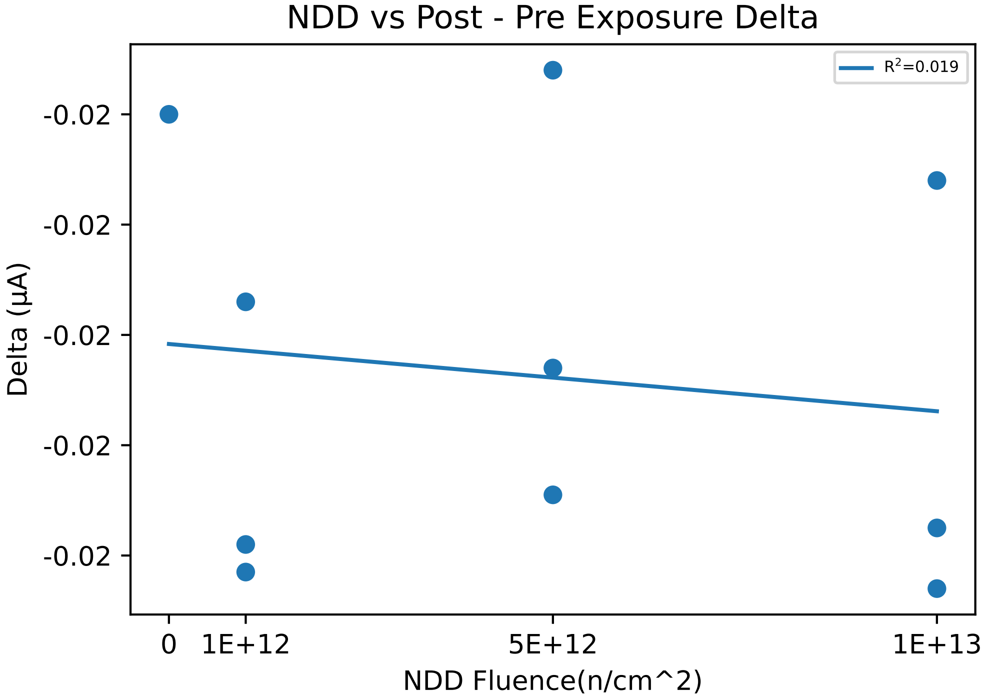
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	103.5	104	0.501
504	1e+12	NDD	103.5	103.5	0
505	1e+12	NDD	104	104	0
506	5e+12	NDD	104	104	0
507	5e+12	NDD	104.5	104	-0.5
508	5e+12	NDD	104	104	0
509	1e+13	NDD	104	103.5	-0.5
510	1e+13	NDD	103.5	103.5	-0.001
511	1e+13	NDD	103.5	103.5	0
512	0	Correlation	104.51	104.51	0

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	104.51	104.51	104.51		104.51	104.51	104.51		0	0	0	
1e+12	103.5	103.67	104	0.28925	103.5	103.84	104	0.28925	0	0.167	0.501	0.28925
5e+12	104	104.17	104.5	0.28868	104	104	104	0	-0.5	-0.16667	0	0.28868
1e+13	103.5	103.67	104	0.28896	103.5	103.5	103.5	0.00057735	-0.5	-0.167	0	0.28839

Device Test: 16.4 FAULT_LKG_CURR(LEAK|POWERED/FAULT/4.5////@FAULT_LKG_CURR)





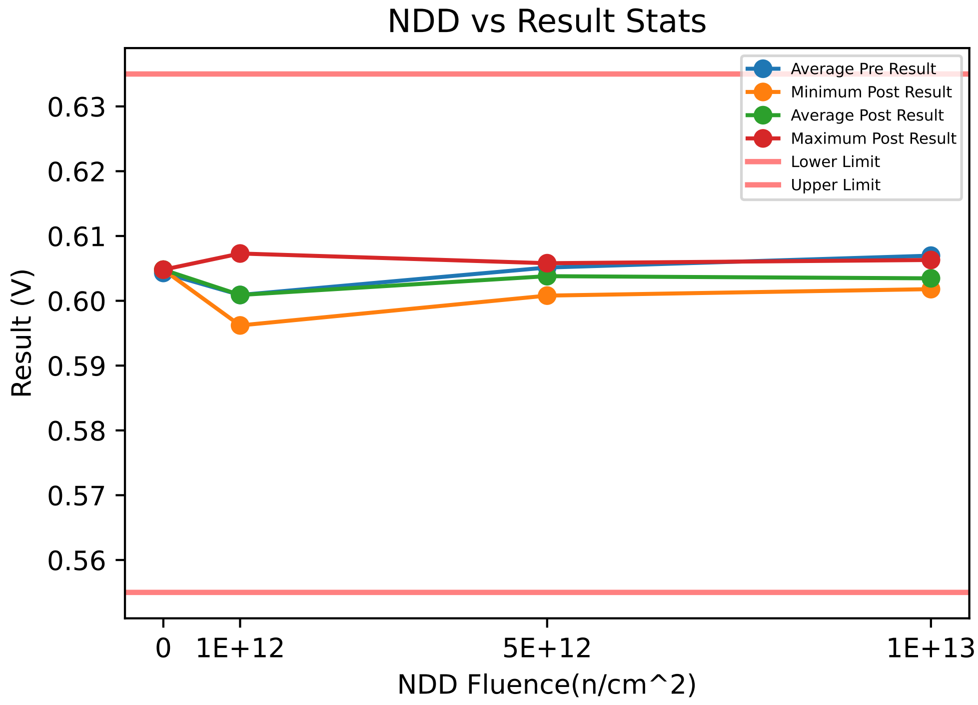
Test Results (Upper Limit = 5.0 (µA))

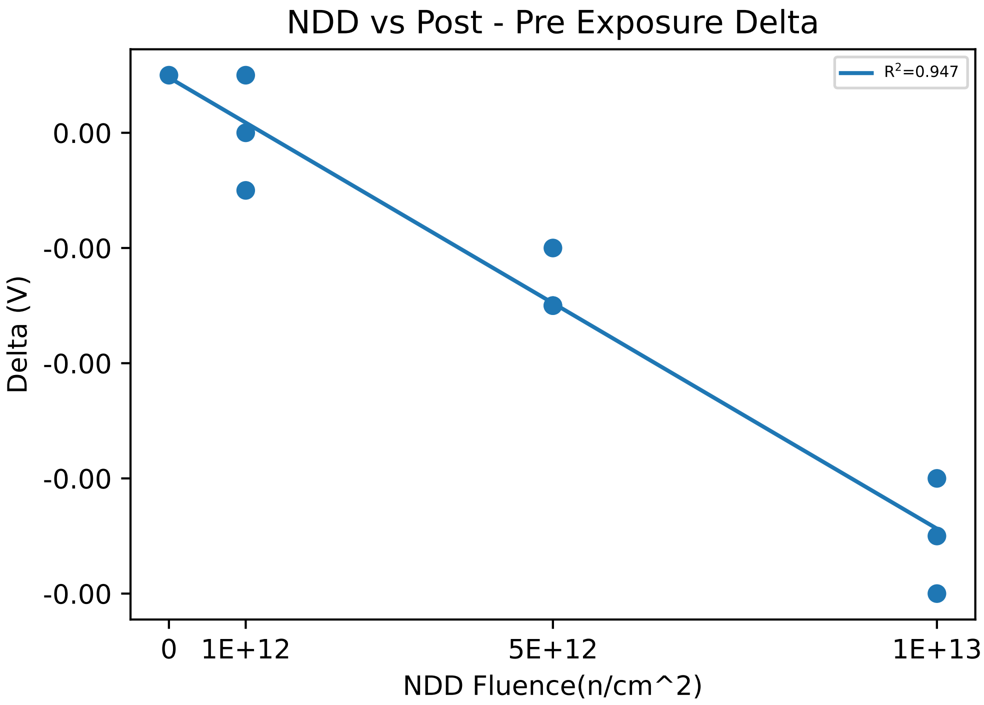
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.9429	2.9235	-0.0194
504	1e+12	NDD	3.0413	3.017	-0.0243
505	1e+12	NDD	3.0502	3.0264	-0.0238
506	5e+12	NDD	3.0683	3.0531	-0.0152
507	5e+12	NDD	2.8531	2.8325	-0.0206
508	5e+12	NDD	3.0113	2.9884	-0.0229
509	1e+13	NDD	2.7804	2.7632	-0.0172
510	1e+13	NDD	3.0182	2.9936	-0.0246
511	1e+13	NDD	3.0213	2.9978	-0.0235
512	0	Correlation	2.8333	2.8173	-0.016

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.8333	2.8333	2.8333		2.8173	2.8173	2.8173		-0.016	-0.016	-0.016	
1e+12	2.9429	3.0115	3.0502	0.059547	2.9235	2.989	3.0264	0.05689	-0.0243	-0.0225	-0.0194	0.0026963
5e+12	2.8531	2.9776	3.0683	0.1115	2.8325	2.958	3.0531	0.1134	-0.0229	-0.019567	-0.0152	0.0039526
1e+13	2.7804	2.94	3.0213	0.1382	2.7632	2.9182	2.9978	0.13425	-0.0246	-0.021767	-0.0172	0.0039929

Device Test: 16.5 FAULT_VTH_RISING(THRESHOLD|RISE/FAULT/5////@FAULT_VTH_RISING)





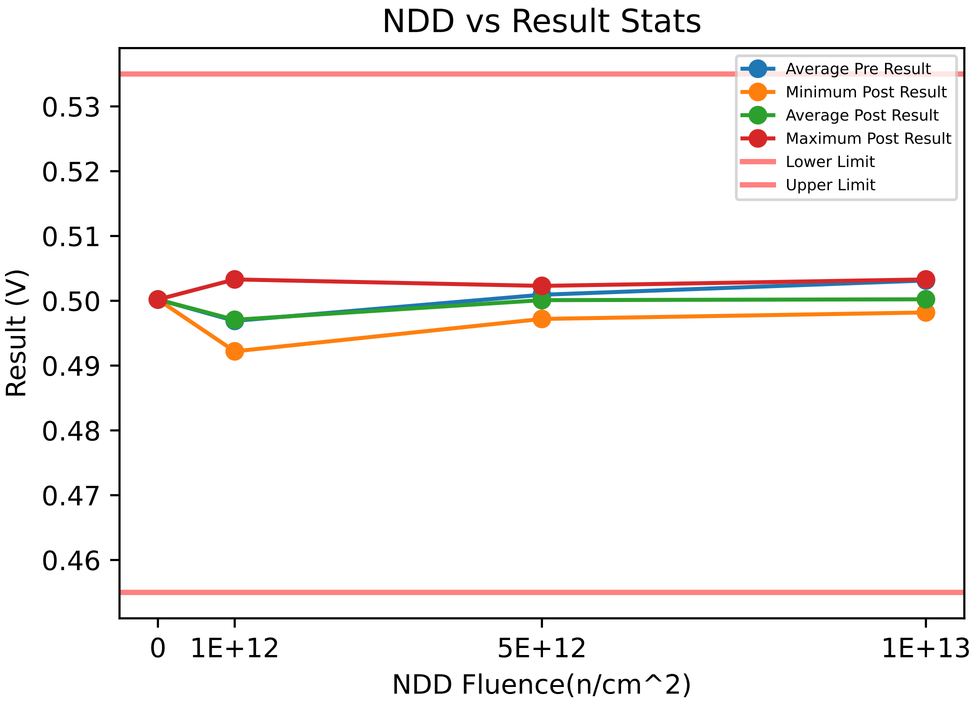
Test Results (Lower Limit = 0.555, Upper Limit = 0.635 (V))

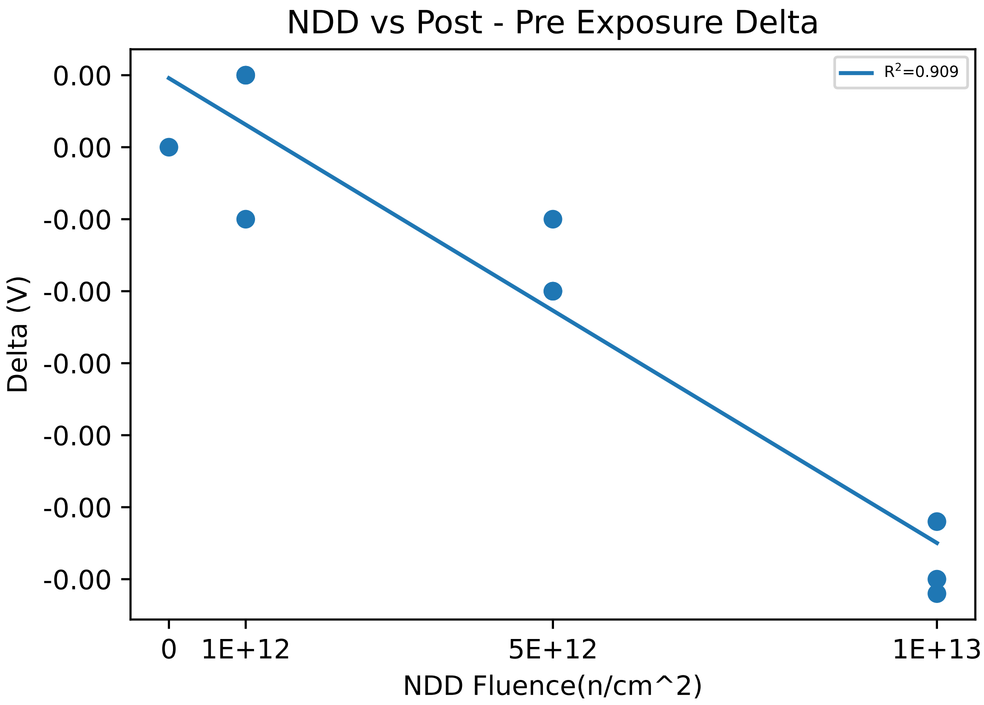
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6078	0.6073	-0.0005
504	1e+12	NDD	0.5992	0.5992	0
505	1e+12	NDD	0.5957	0.5962	0.0005
506	5e+12	NDD	0.6068	0.6058	-0.001
507	5e+12	NDD	0.6063	0.6048	-0.0015
508	5e+12	NDD	0.6023	0.6008	-0.0015
509	1e+13	NDD	0.6053	0.6023	-0.003
510	1e+13	NDD	0.6058	0.6018	-0.004
511	1e+13	NDD	0.6098	0.6063	-0.0035
512	0	Correlation	0.6043	0.6048	0.0005

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6043	0.6043	0.6043		0.6048	0.6048	0.6048		0.0005	0.0005	0.0005	
1e+12	0.5957	0.6009	0.6078	0.0062266	0.5962	0.6009	0.6073	0.005742	-0.0005	-3.7007e-17	0.0005	0.0005
5e+12	0.6023	0.60513	0.6068	0.0024664	0.6008	0.6038	0.6058	0.0026458	-0.0015	-0.0013333	-0.001	0.00028868
1e+13	0.6053	0.60697	0.6098	0.0024664	0.6018	0.60347	0.6063	0.0024664	-0.004	-0.0035	-0.003	0.0005

Device Test: 16.6 FAULT_VTH_FALLING(THRESHOLD|FALL/FAULT/5////@FAULT_VTH_FALLING)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

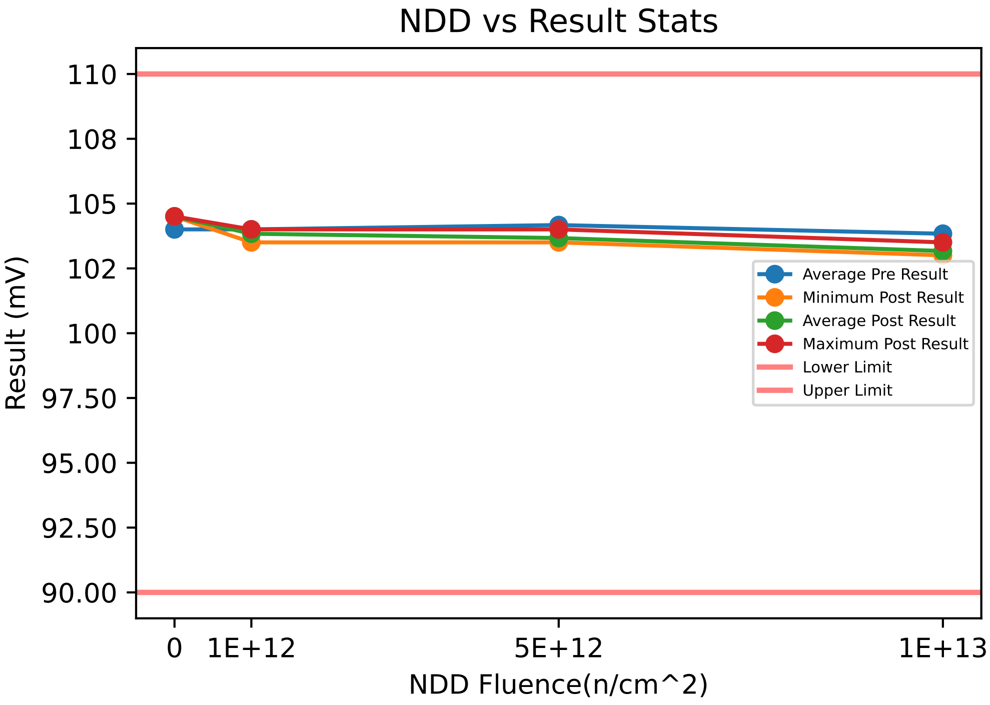
Test Results (Lower Limit = 0.455, Upper Limit = 0.535 (V))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5038	0.5033	-0.0005
504	1e+12	NDD	0.4952	0.4957	0.0005
505	1e+12	NDD	0.4917	0.4922	0.0005
506	5e+12	NDD	0.5028	0.5023	-0.0005
507	5e+12	NDD	0.5018	0.5008	-0.001
508	5e+12	NDD	0.4982	0.4972	-0.001
509	1e+13	NDD	0.5018	0.4992	-0.0026
510	1e+13	NDD	0.5013	0.4982	-0.0031
511	1e+13	NDD	0.5063	0.5033	-0.003
512	0	Correlation	0.5002	0.5002	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5002	0.5002	0.5002		0.5002	0.5002	0.5002		0	0	0	
1e+12	0.4917	0.4969	0.5038	0.0062266	0.4922	0.49707	0.5033	0.0056748	-0.0005	0.00016667	0.0005	0.00057735
5e+12	0.4982	0.50093	0.5028	0.0024194	0.4972	0.5001	0.5023	0.0026211	-0.001	-0.00083333	-0.0005	0.00028868
1e+13	0.5013	0.50313	0.5063	0.0027538	0.4982	0.50023	0.5033	0.0027025	-0.0031	-0.0029	-0.0026	0.00026458

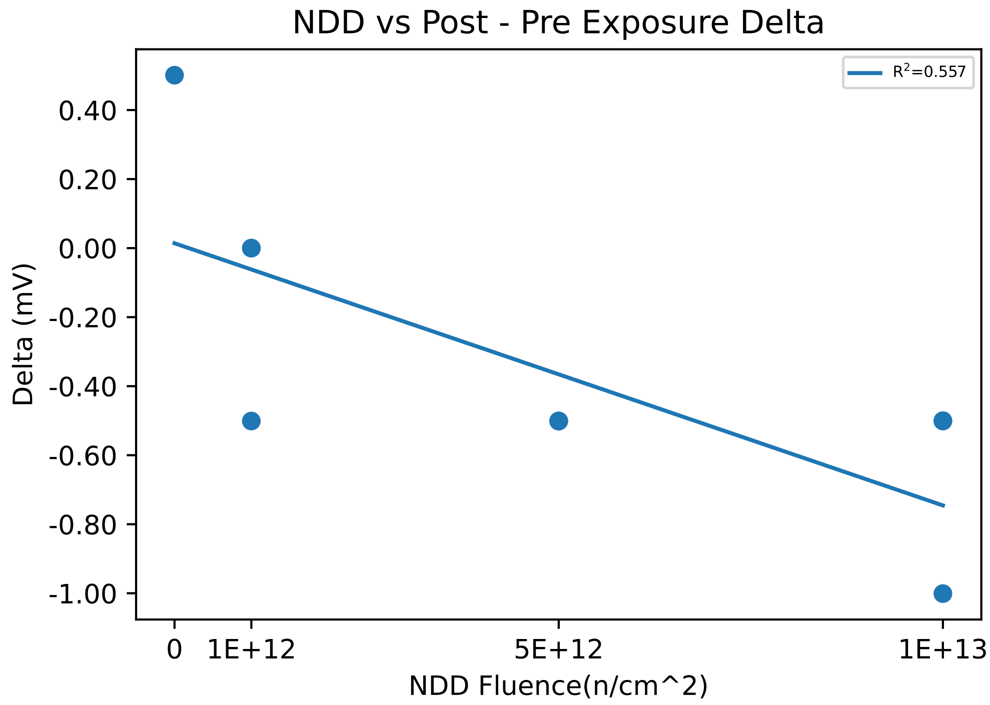
Device Test: 16.7 FAULT_VTH_HYST(THRESHOLD|HYST/FAULT/5////@FAULT_VTH_HYST)



NDD vs Result Stats

Test Results (Lower Limit = 90.0, Upper Limit = 110.0 (mV))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	104	104	0
504	1e+12	NDD	104	103.5	-0.501
505	1e+12	NDD	104	104	0
506	5e+12	NDD	104	103.5	-0.501
507	5e+12	NDD	104.51	104	-0.501
508	5e+12	NDD	104	103.5	-0.501
509	1e+13	NDD	103.5	103	-0.501
510	1e+13	NDD	104.5	103.5	-1.001
511	1e+13	NDD	103.5	103	-0.5
512	0	Correlation	104	104.51	0.501

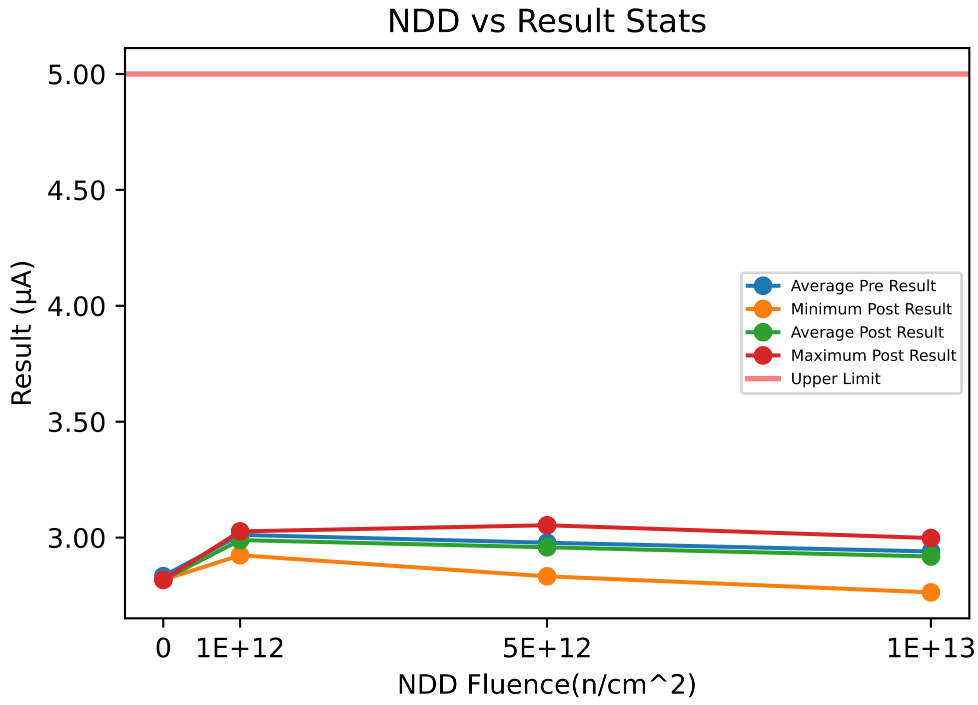


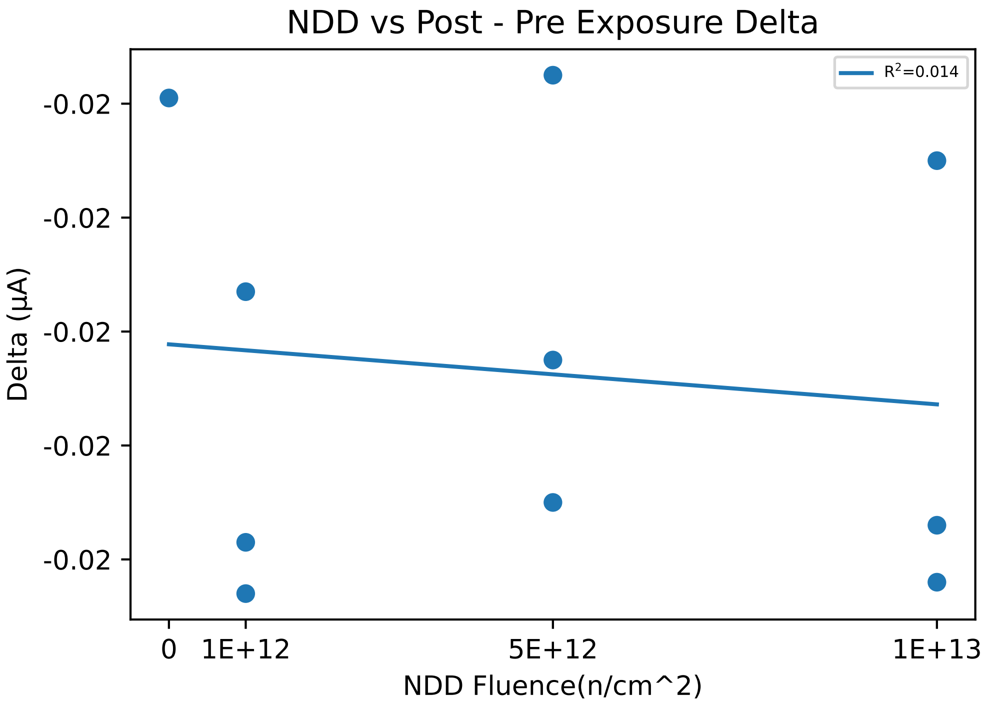
NDD vs Post - Pre Exposure Delta

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	104	104	104		104.51	104.51	104.51		0.501	0.501	0.501	
1e+12	104	104	104	0	103.5	103.84	104	0.28925	-0.501	-0.167	0	0.28925
5e+12	104	104.17	104.51	0.28925	103.5	103.67	104	0.28925	-0.501	-0.501	-0.501	8.2126e-15
1e+13	103.5	103.84	104.5	0.57764	103	103.17	103.5	0.28868	-1.001	-0.66733	-0.5	0.28896

Device Test: 16.8 FAULT_LKG_CURR(LEAK|POWERED/FAULT/5////@FAULT_LKG_CURR)





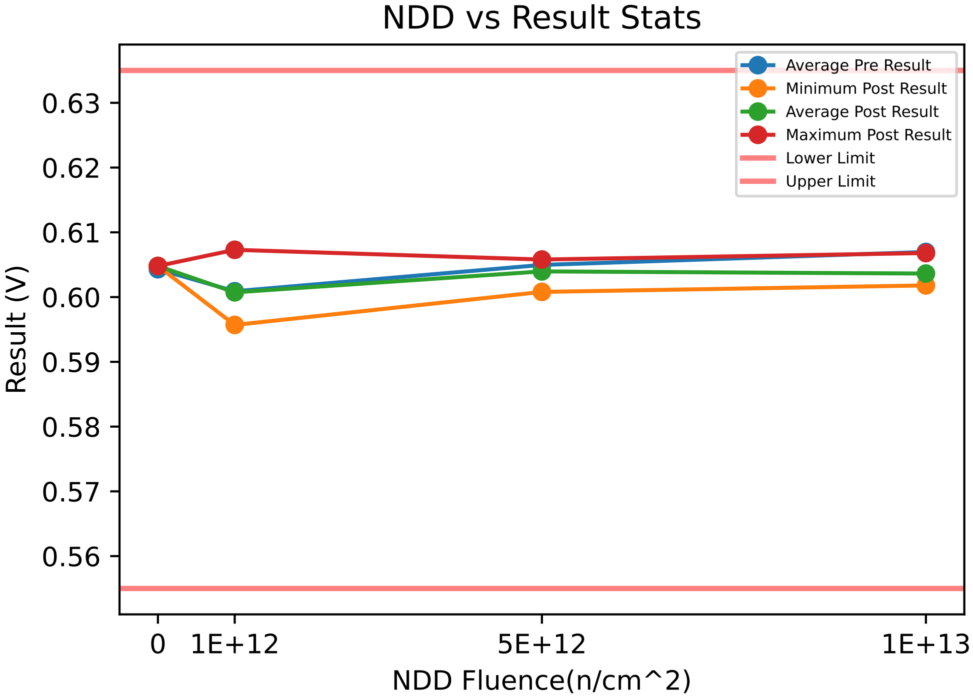
Test Results (Upper Limit = 5.0 (µA))

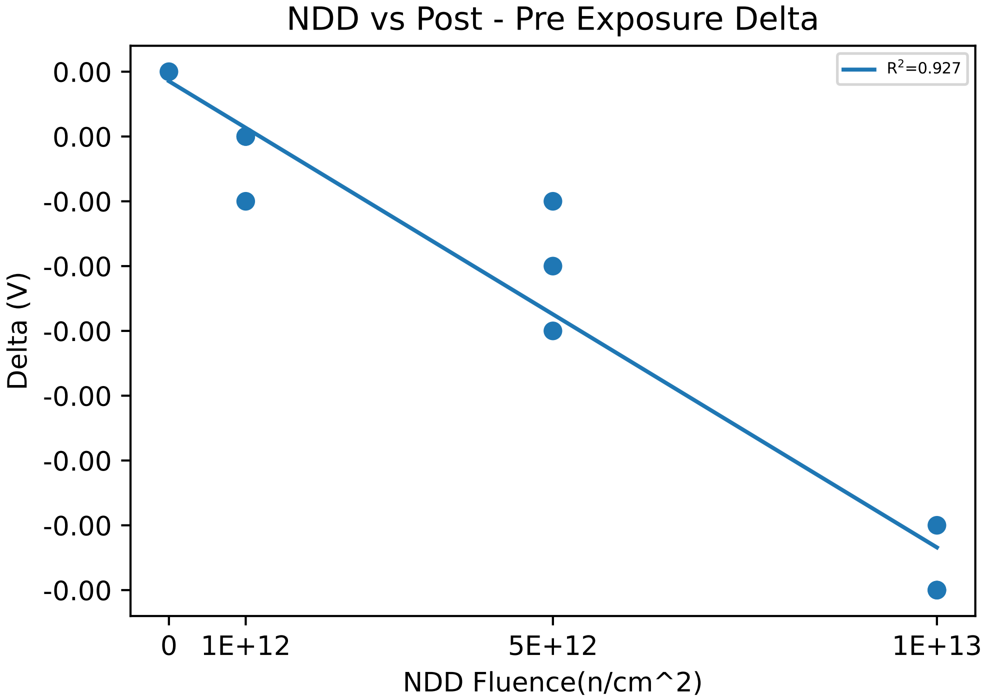
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.943	2.9237	-0.0193
504	1e+12	NDD	3.0416	3.017	-0.0246
505	1e+12	NDD	3.0505	3.0268	-0.0237
506	5e+12	NDD	3.0687	3.0532	-0.0155
507	5e+12	NDD	2.8534	2.8329	-0.0205
508	5e+12	NDD	3.0115	2.9885	-0.023
509	1e+13	NDD	2.7806	2.7636	-0.017
510	1e+13	NDD	3.0184	2.994	-0.0244
511	1e+13	NDD	3.0215	2.9981	-0.0234
512	0	Correlation	2.8336	2.8177	-0.0159

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.8336	2.8336	2.8336		2.8177	2.8177	2.8177		-0.0159	-0.0159	-0.0159	
1e+12	2.943	3.0117	3.0505	0.059662	2.9237	2.9892	3.0268	0.056907	-0.0246	-0.022533	-0.0193	0.0028361
5e+12	2.8534	2.9779	3.0687	0.11152	2.8329	2.9582	3.0532	0.11323	-0.023	-0.019667	-0.0155	0.0038188
1e+13	2.7806	2.9402	3.0215	0.1382	2.7636	2.9186	2.9981	0.13422	-0.0244	-0.0216	-0.017	0.004015

Device Test: 16.9 FAULT_VTH_RISING(THRESHOLD|RISE/FAULT/12////@FAULT_VTH_RISING)





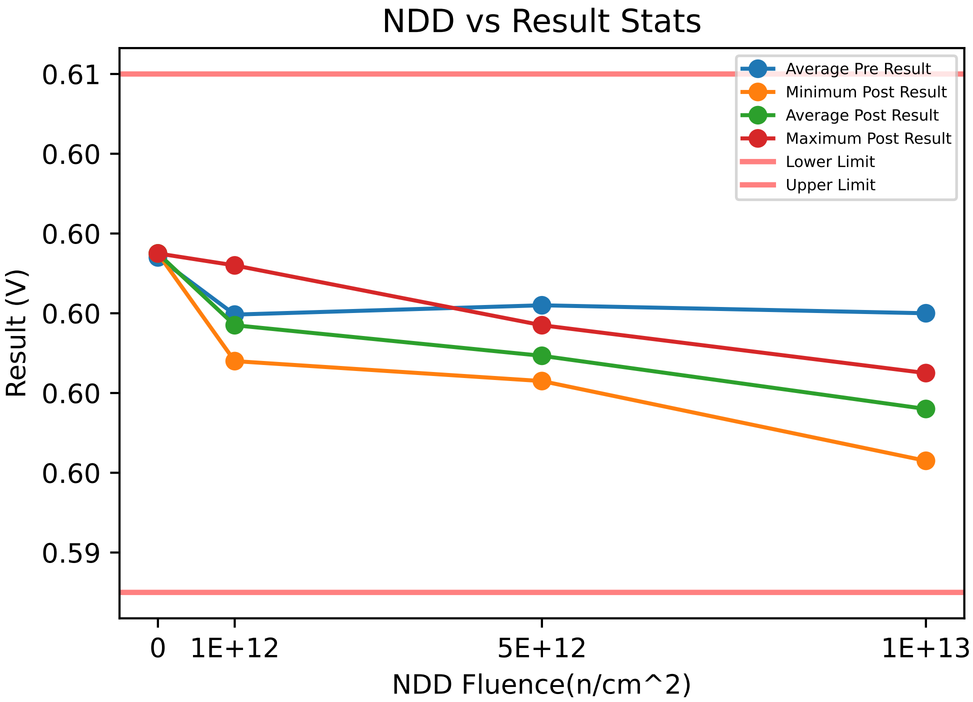
Test Results (Lower Limit = 0.555, Upper Limit = 0.635 (V))

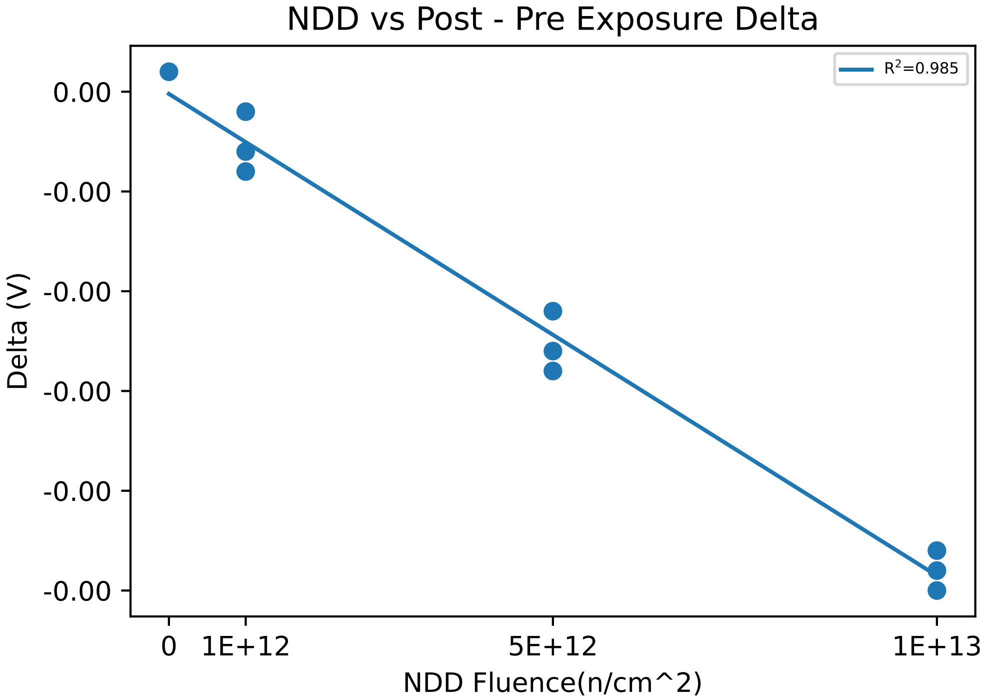
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6078	0.6073	-0.0005
504	1e+12	NDD	0.5992	0.5992	0
505	1e+12	NDD	0.5957	0.5957	0
506	5e+12	NDD	0.6068	0.6058	-0.001
507	5e+12	NDD	0.6058	0.6053	-0.0005
508	5e+12	NDD	0.6023	0.6008	-0.0015
509	1e+13	NDD	0.6058	0.6023	-0.0035
510	1e+13	NDD	0.6053	0.6018	-0.0035
511	1e+13	NDD	0.6098	0.6068	-0.003
512	0	Correlation	0.6043	0.6048	0.0005

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6043	0.6043	0.6043		0.6048	0.6048	0.6048		0.0005	0.0005	0.0005	
1e+12	0.5957	0.6009	0.6078	0.0062266	0.5957	0.60073	0.6073	0.0059501	-0.0005	-0.00016667	0	0.00028868
5e+12	0.6023	0.60497	0.6068	0.0023629	0.6008	0.60397	0.6058	0.0027538	-0.0015	-0.001	-0.0005	0.0005
1e+13	0.6053	0.60697	0.6098	0.0024664	0.6018	0.60363	0.6068	0.0027538	-0.0035	-0.0033333	-0.003	0.00028868

Device Test: 17.1 VREF_PLUS_OFFSET(LEVEL|STATIC/VSNSP/4.5////@VREF_PLUS_OFFSET)





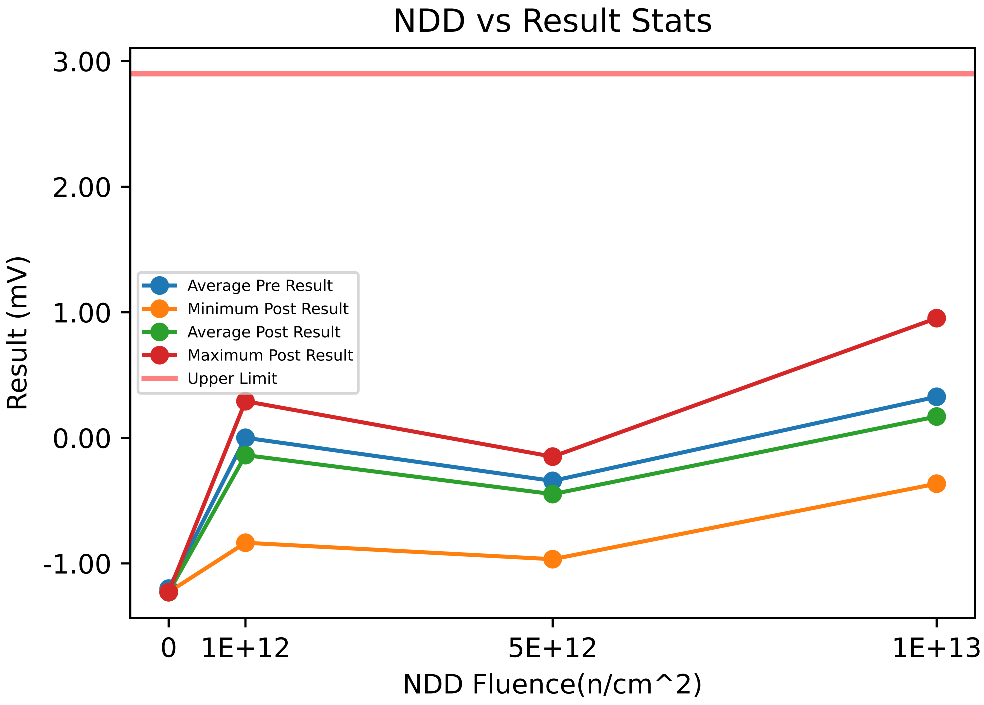
Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

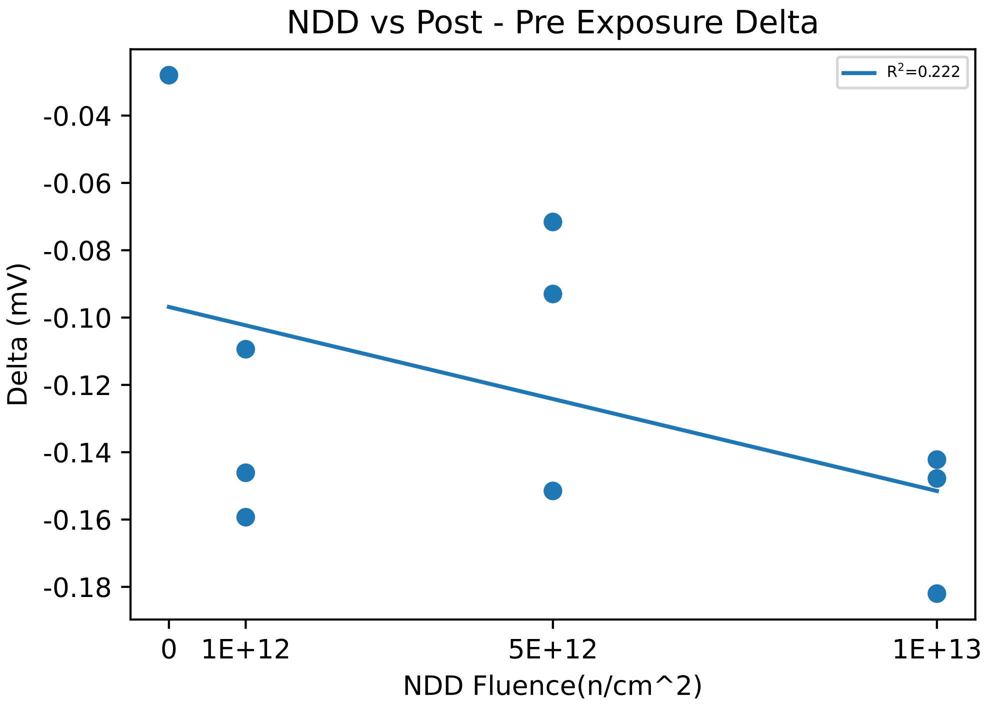
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5992	0.5991	-0.0001
504	1e+12	NDD	0.5991	0.5988	-0.0003
505	1e+12	NDD	0.6016	0.6012	-0.0004
506	5e+12	NDD	0.5999	0.5988	-0.0011
507	5e+12	NDD	0.5997	0.5983	-0.0014
508	5e+12	NDD	0.601	0.5997	-0.0013
509	1e+13	NDD	0.6008	0.5985	-0.0023
510	1e+13	NDD	0.6005	0.598	-0.0025
511	1e+13	NDD	0.5987	0.5963	-0.0024
512	0	Correlation	0.6014	0.6015	0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6014	0.6014	0.6014		0.6015	0.6015	0.6015		0.0001	0.0001	0.0001	
1e+12	0.5991	0.59997	0.6016	0.0014154	0.5988	0.5997	0.6012	0.0013077	-0.0004	-0.00026667	-0.0001	0.00015275
5e+12	0.5997	0.6002	0.601	0.0007	0.5983	0.59893	0.5997	0.00070946	-0.0014	-0.0012667	-0.0011	0.00015275
1e+13	0.5987	0.6	0.6008	0.0011358	0.5963	0.5976	0.5985	0.0011533	-0.0025	-0.0024	-0.0023	0.0001

Device Test: 17.10 EA_INPUT_OFFSET_V(LEVEL|STATIC/VSNSP/5////@EA_INPUT_OFFSET_V)





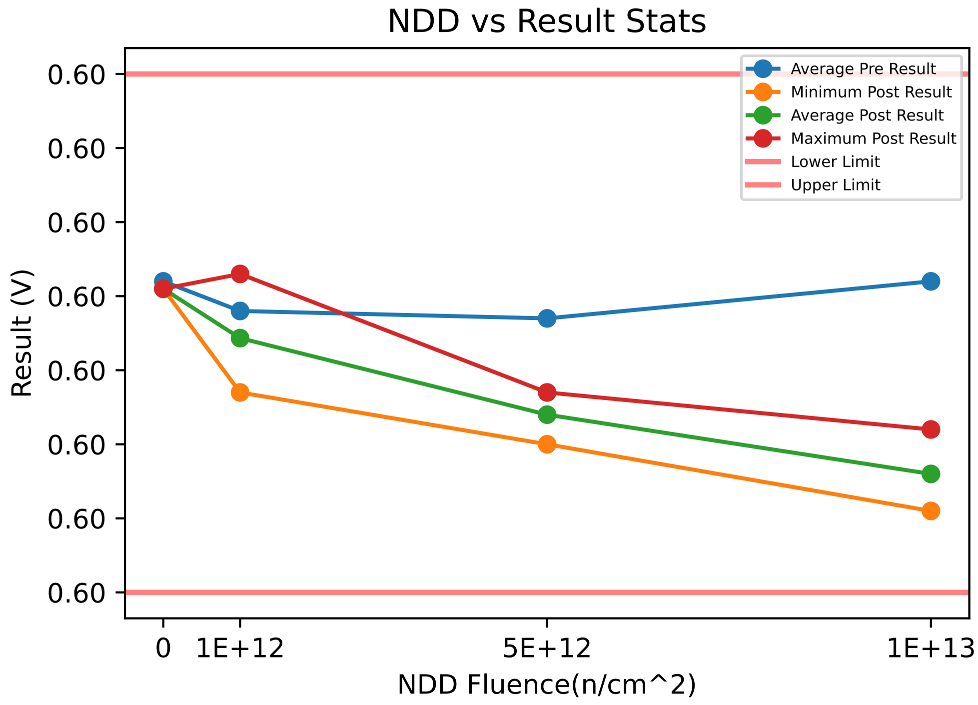
Test Results (Upper Limit = 2.9 (mV))

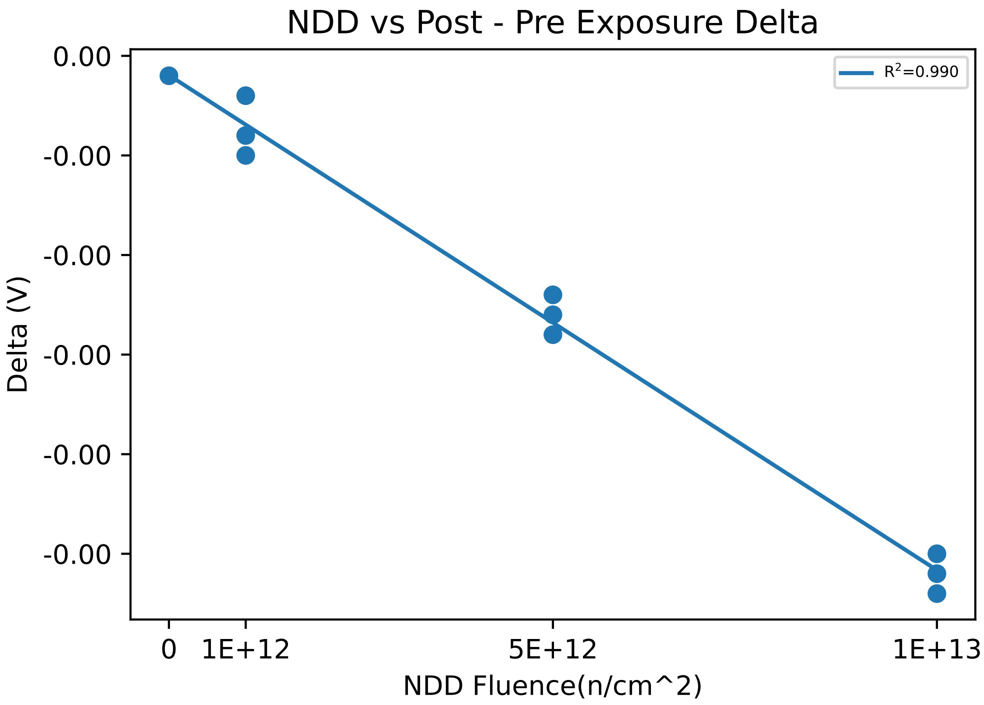
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.4378	0.2917	-0.1461
504	1e+12	NDD	0.2402	0.1308	-0.1094
505	1e+12	NDD	-0.6761	-0.8354	-0.1593
506	5e+12	NDD	-0.078	-0.1496	-0.0716
507	5e+12	NDD	-0.1347	-0.2277	-0.093
508	5e+12	NDD	-0.8151	-0.9666	-0.1515
509	1e+13	NDD	0.0689	-0.0789	-0.1478
510	1e+13	NDD	-0.1832	-0.3652	-0.182
511	1e+13	NDD	1.0954	0.9532	-0.1422
512	0	Correlation	-1.2009	-1.2289	-0.028

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-1.2009	-1.2009	-1.2009		-1.2289	-1.2289	-1.2289		-0.028	-0.028	-0.028	
1e+12	-0.6761	0.00063333	0.4378	0.59434	-0.8354	-0.13763	0.2917	0.60962	-0.1593	-0.13827	-0.1094	0.025856
5e+12	-0.8151	-0.3426	-0.078	0.41018	-0.9666	-0.44797	-0.1496	0.45084	-0.1515	-0.10537	-0.0716	0.041361
1e+13	-0.1832	0.32703	1.0954	0.67726	-0.3652	0.1697	0.9532	0.69347	-0.182	-0.15733	-0.1422	0.021545

Device Test: 17.11 VREF_25C(LEVEL|STATIC/SS_TR/5////@VREF_25C)





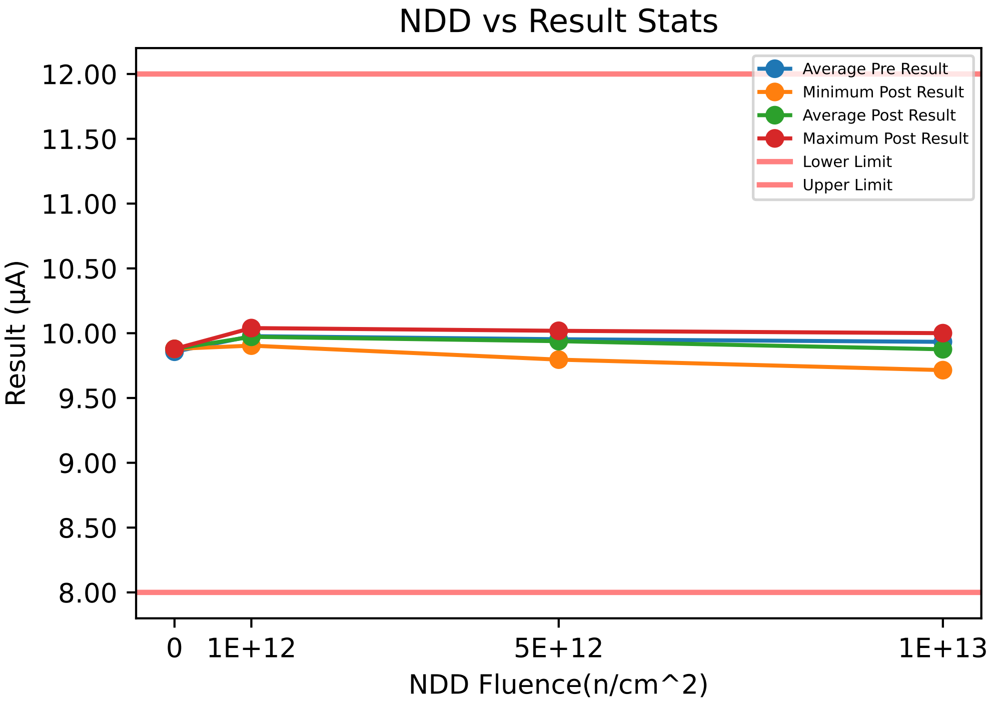
Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

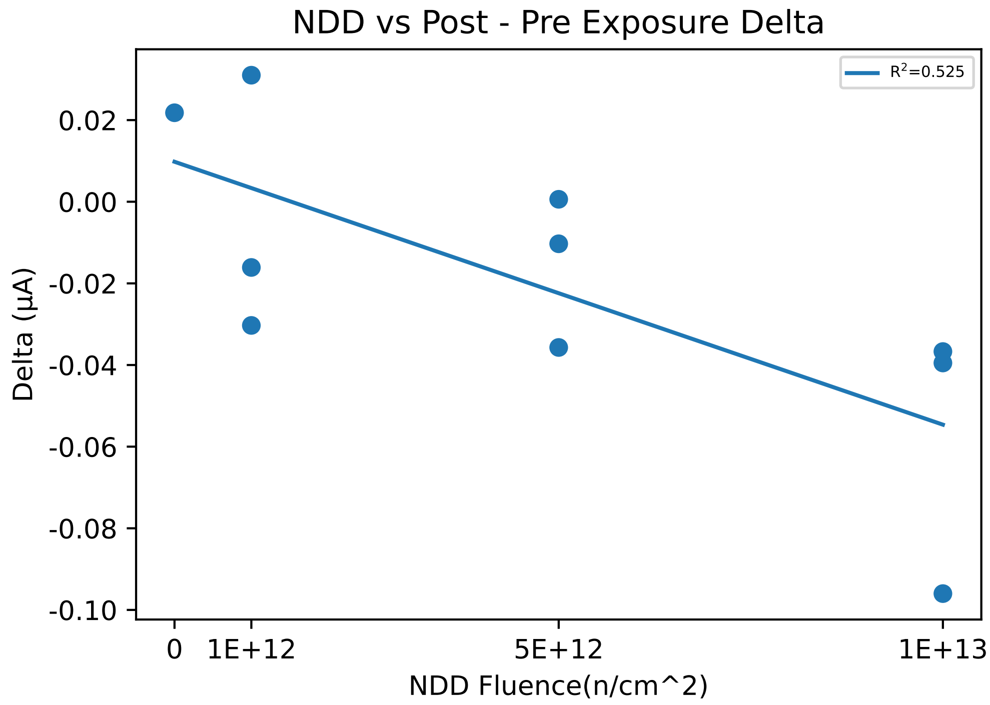
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5995	0.5993	-0.0002
504	1e+12	NDD	0.5992	0.5987	-0.0005
505	1e+12	NDD	0.6007	0.6003	-0.0004
506	5e+12	NDD	0.5997	0.5985	-0.0012
507	5e+12	NDD	0.5994	0.598	-0.0014
508	5e+12	NDD	0.6	0.5987	-0.0013
509	1e+13	NDD	0.6007	0.5982	-0.0025
510	1e+13	NDD	0.6002	0.5975	-0.0027
511	1e+13	NDD	0.5997	0.5971	-0.0026
512	0	Correlation	0.6002	0.6001	-0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6002	0.6002	0.6002		0.6001	0.6001	0.6001		-0.0001	-0.0001	-0.0001	
1e+12	0.5992	0.5998	0.6007	0.00079373	0.5987	0.59943	0.6003	0.00080829	-0.0005	-0.00036667	-0.0002	0.00015275
5e+12	0.5994	0.5997	0.6	0.0003	0.598	0.5984	0.5987	0.00036056	-0.0014	-0.0013	-0.0012	0.0001
1e+13	0.5997	0.6002	0.6007	0.0005	0.5971	0.5976	0.5982	0.00055678	-0.0027	-0.0026	-0.0025	0.0001

Device Test: 17.12 VSNSM_CURR(IDD|POWERED/VSNSN/5////@VSNSM_CURR)





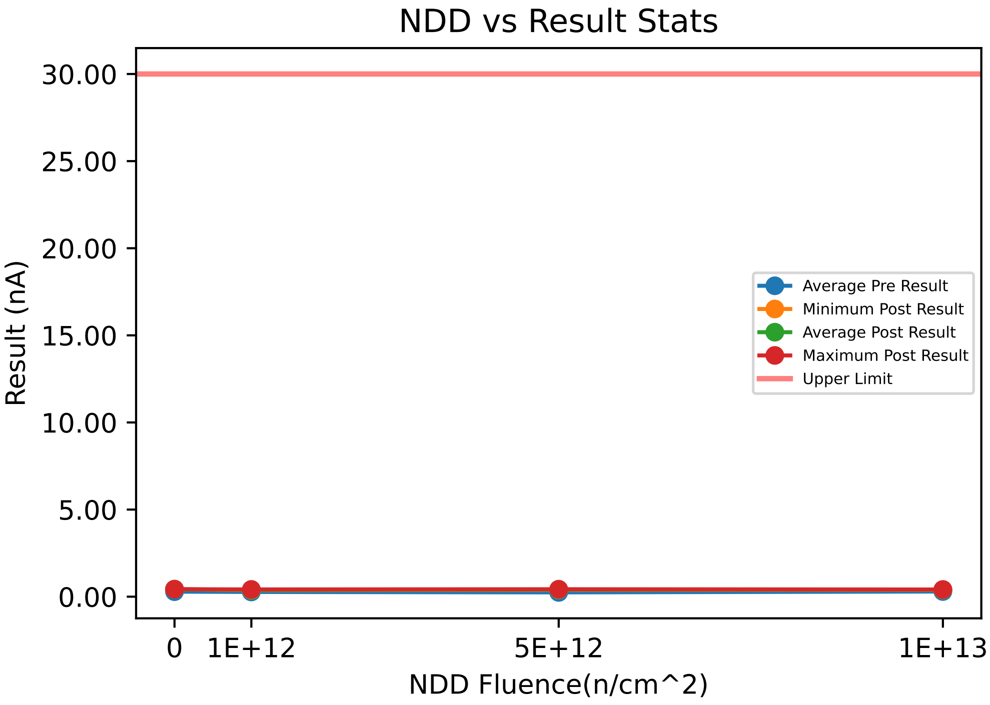
Test Results (Lower Limit = 8.0, Upper Limit = 12.0 (µA))

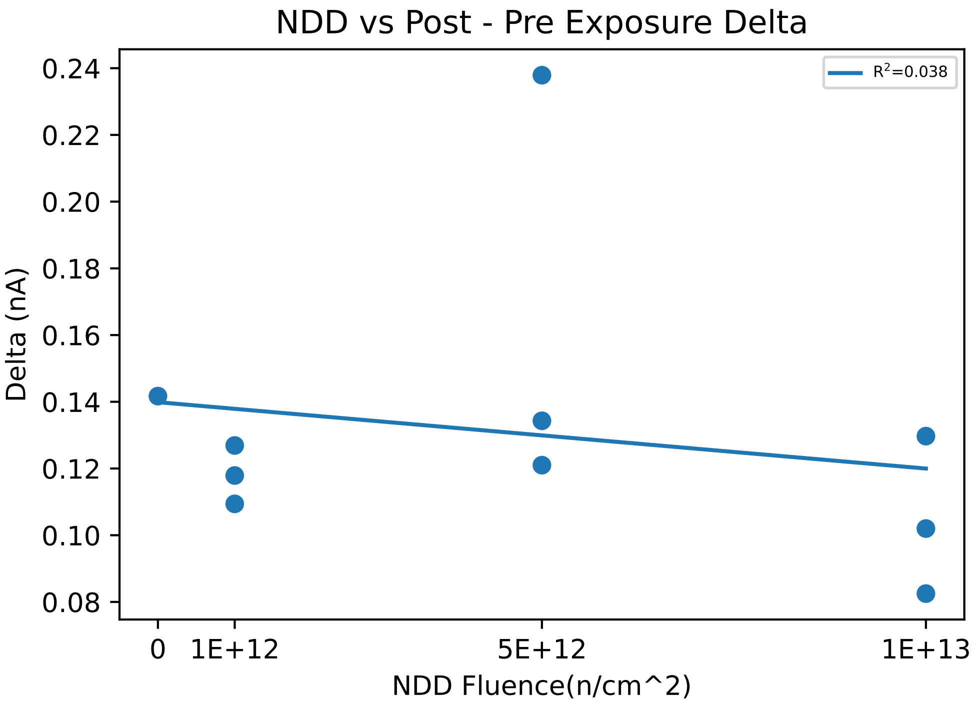
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.9344	9.9041	-0.0303
504	1e+12	NDD	9.9415	9.9725	0.031
505	1e+12	NDD	10.056	10.04	-0.0161
506	5e+12	NDD	10.011	10.001	-0.0103
507	5e+12	NDD	9.8317	9.796	-0.0357
508	5e+12	NDD	10.018	10.019	0.0006
509	1e+13	NDD	9.7545	9.715	-0.0395
510	1e+13	NDD	10.037	10	-0.0367
511	1e+13	NDD	10.008	9.9121	-0.096
512	0	Correlation	9.857	9.8788	0.0218

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.857	9.857	9.857		9.8788	9.8788	9.8788		0.0218	0.0218	0.0218	
1e+12	9.9344	9.9772	10.056	0.068076	9.9041	9.9721	10.04	0.067751	-0.0303	-0.0051333	0.031	0.032088
5e+12	9.8317	9.9536	10.018	0.10559	9.796	9.9384	10.019	0.12367	-0.0357	-0.015133	0.0006	0.018626
1e+13	9.7545	9.9332	10.037	0.15543	9.715	9.8758	10	0.14607	-0.096	-0.0574	-0.0367	0.033458

Device Test: 17.13 VSNSP_LKG_CURR_0P6V(LEAK|POWERED/VSNSP/5////@VSNSP_LKG_CURR_0P6V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

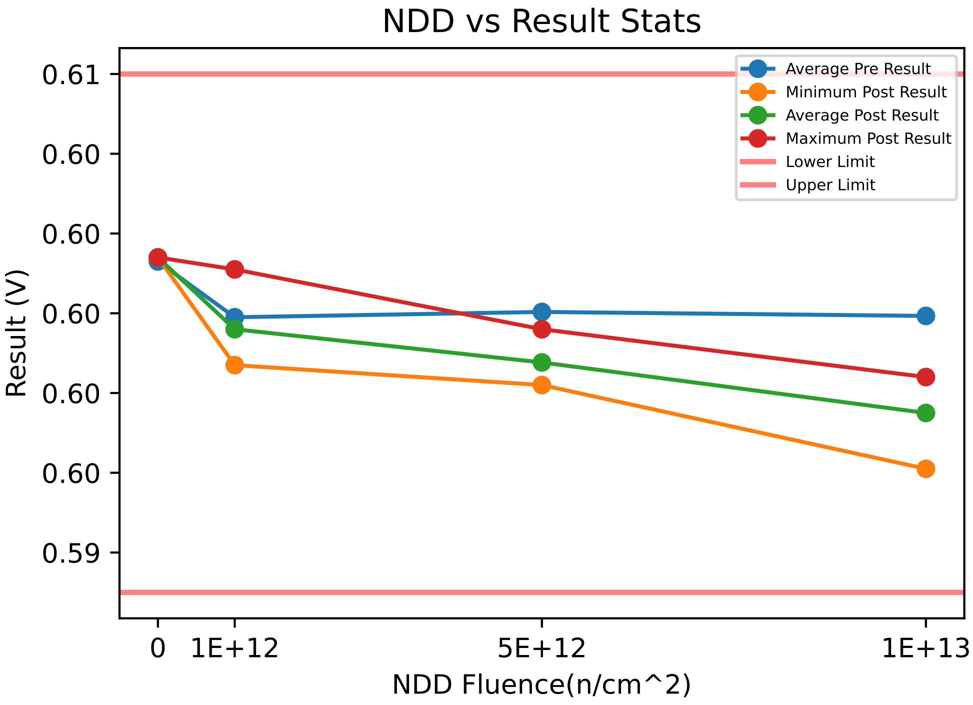
Test Results (Upper Limit = 30.0 (nA))

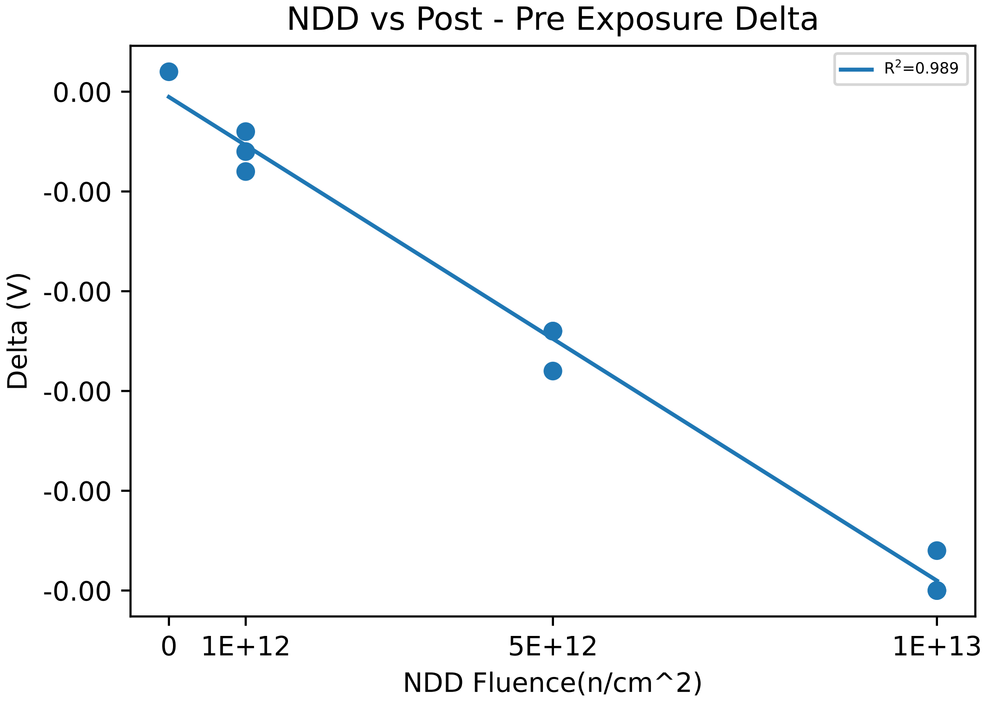
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.2546	0.3815	0.1269
504	1e+12	NDD	0.2532	0.3711	0.1179
505	1e+12	NDD	0.3067	0.4161	0.1094
506	5e+12	NDD	0.259	0.3933	0.1343
507	5e+12	NDD	0.2886	0.4096	0.121
508	5e+12	NDD	0.1902	0.4281	0.2379
509	1e+13	NDD	0.3298	0.4123	0.0825
510	1e+13	NDD	0.288	0.39	0.102
511	1e+13	NDD	0.2718	0.4015	0.1297
512	0	Correlation	0.2883	0.43	0.1417

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.2883	0.2883	0.2883		0.43	0.43	0.43		0.1417	0.1417	0.1417	
1e+12	0.2532	0.2715	0.3067	0.030492	0.3711	0.38957	0.4161	0.02356	0.1094	0.11807	0.1269	0.0087512
5e+12	0.1902	0.24593	0.2886	0.050485	0.3933	0.41033	0.4281	0.017412	0.121	0.1644	0.2379	0.063999
1e+13	0.2718	0.29653	0.3298	0.029927	0.39	0.40127	0.4123	0.011152	0.0825	0.10473	0.1297	0.023718

Device Test: 17.17 VREF_PLUS_OFFSET(LEVEL|STATIC/VSNSP/12////@VREF_PLUS_OFFSET)





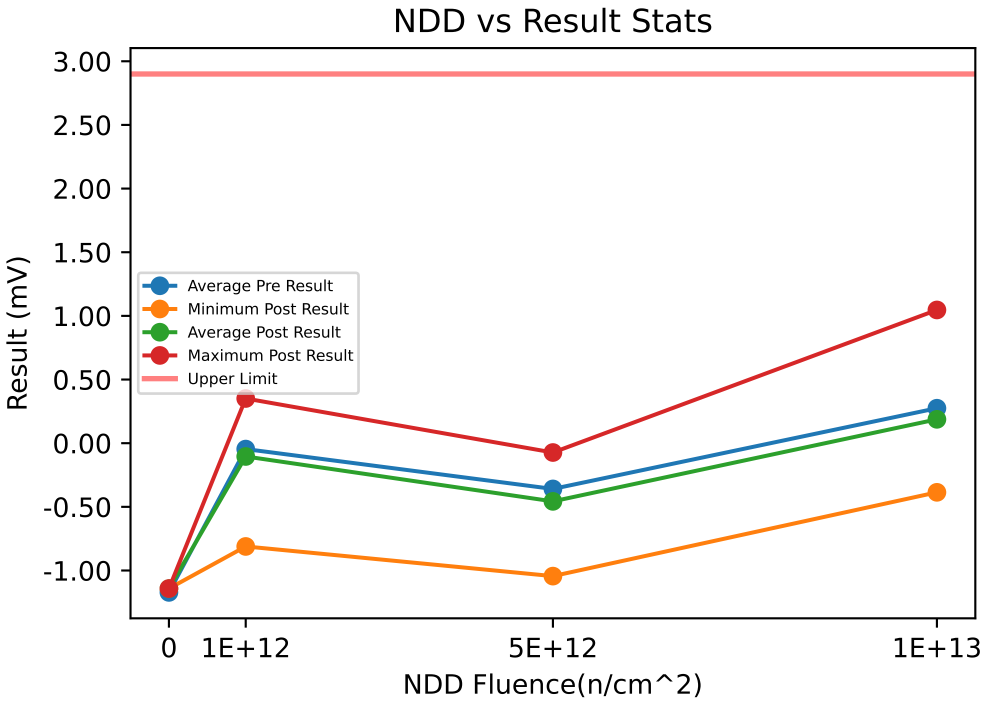
Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

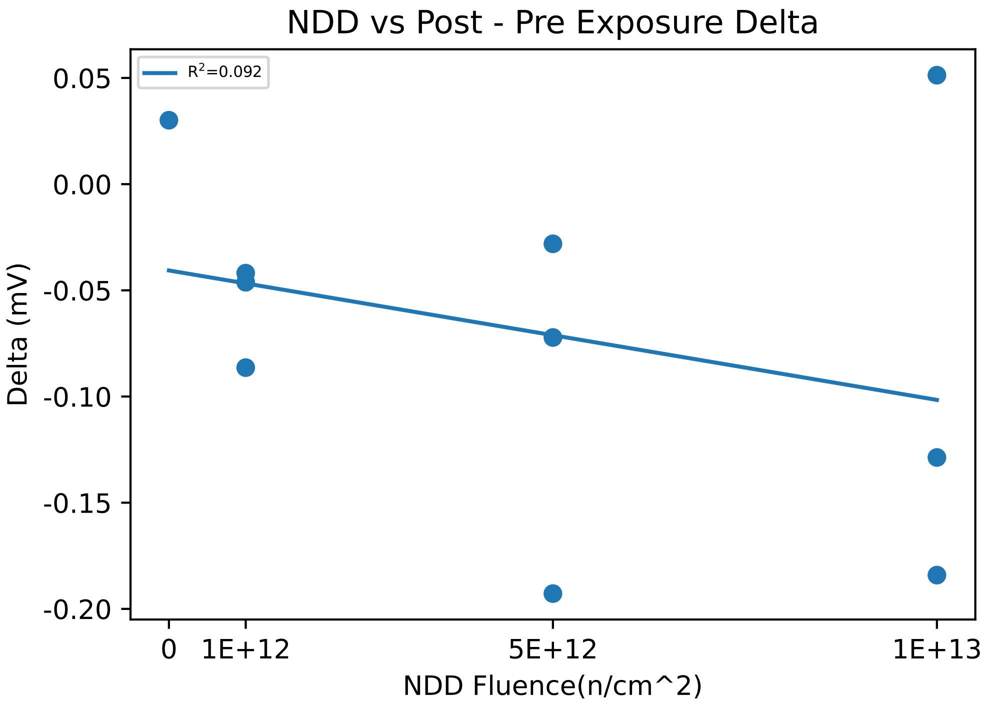
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5992	0.599	-0.0002
504	1e+12	NDD	0.5991	0.5987	-0.0004
505	1e+12	NDD	0.6014	0.6011	-0.0003
506	5e+12	NDD	0.5997	0.5985	-0.0012
507	5e+12	NDD	0.5996	0.5982	-0.0014
508	5e+12	NDD	0.6008	0.5996	-0.0012
509	1e+13	NDD	0.6007	0.5984	-0.0023
510	1e+13	NDD	0.6005	0.598	-0.0025
511	1e+13	NDD	0.5986	0.5961	-0.0025
512	0	Correlation	0.6013	0.6014	0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6013	0.6013	0.6013		0.6014	0.6014	0.6014		0.0001	0.0001	0.0001	
1e+12	0.5991	0.5999	0.6014	0.0013	0.5987	0.5996	0.6011	0.0013077	-0.0004	-0.0003	-0.0002	0.0001
5e+12	0.5996	0.60003	0.6008	0.00066583	0.5982	0.59877	0.5996	0.00073711	-0.0014	-0.0012667	-0.0012	0.00011547
1e+13	0.5986	0.59993	0.6007	0.001159	0.5961	0.5975	0.5984	0.0012288	-0.0025	-0.0024333	-0.0023	0.00011547

Device Test: 17.18 EA_INPUT_OFFSET_V(LEVEL|STATIC/VSNSP/12////@EA_INPUT_OFFSET_V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

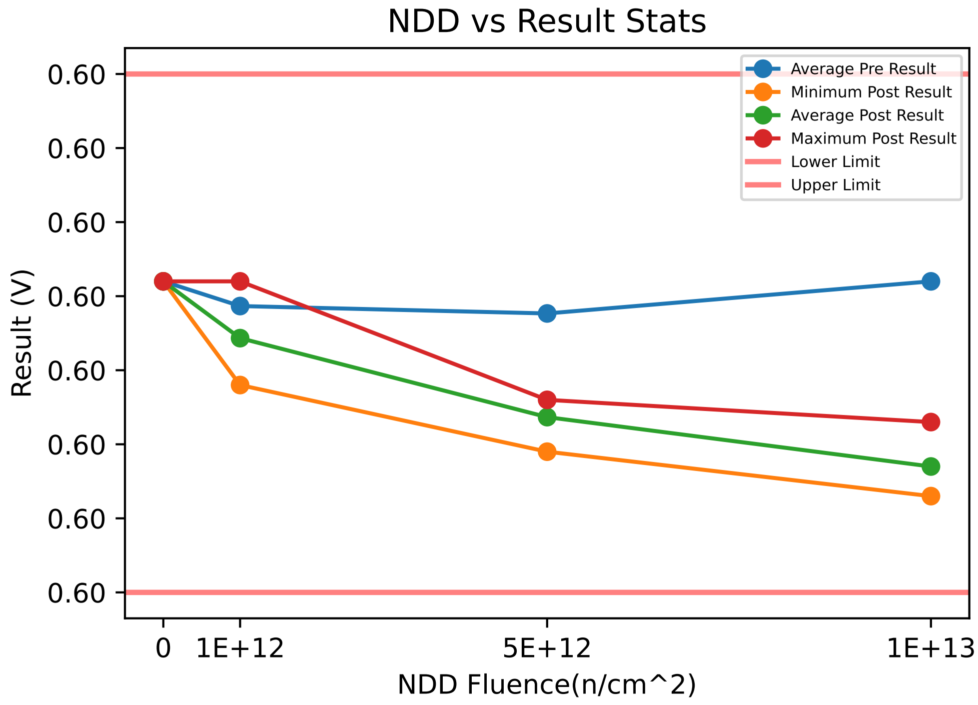
Test Results (Upper Limit = 2.9 (mV))

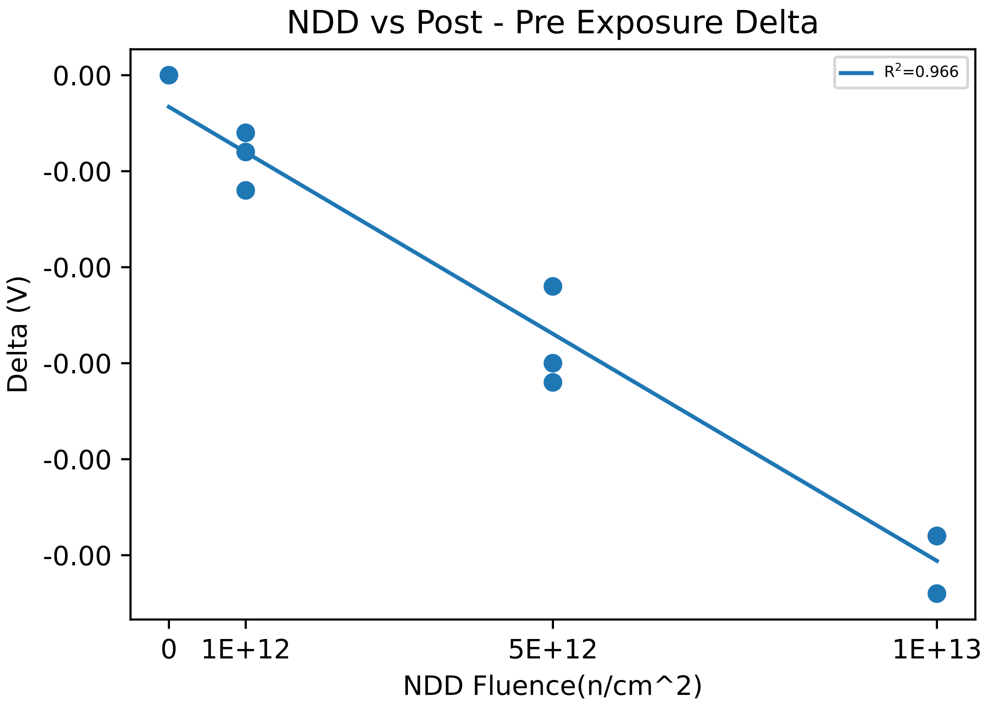
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.4375	0.3511	-0.0864
504	1e+12	NDD	0.1887	0.1468	-0.0419
505	1e+12	NDD	-0.7649	-0.8111	-0.0462
506	5e+12	NDD	-0.0451	-0.0732	-0.0281
507	5e+12	NDD	-0.1814	-0.2536	-0.0722
508	5e+12	NDD	-0.8513	-1.0441	-0.1928
509	1e+13	NDD	0.0305	-0.0982	-0.1287
510	1e+13	NDD	-0.2018	-0.3859	-0.1841
511	1e+13	NDD	0.9953	1.0466	0.0513
512	0	Correlation	-1.172	-1.1419	0.0301

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-1.172	-1.172	-1.172		-1.1419	-1.1419	-1.1419		0.0301	0.0301	0.0301	
1e+12	-0.7649	-0.046233	0.4375	0.63469	-0.8111	-0.1044	0.3511	0.62049	-0.0864	-0.058167	-0.0419	0.024545
5e+12	-0.8513	-0.35927	-0.0451	0.43153	-1.0441	-0.45697	-0.0732	0.51641	-0.1928	-0.0977	-0.0281	0.08526
1e+13	-0.2018	0.27467	0.9953	0.6348	-0.3859	0.1875	1.0466	0.75778	-0.1841	-0.087167	0.0513	0.12307

Device Test: 17.19 VREF_25C(LEVEL|STATIC/SS_TR/12////@VREF_25C)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

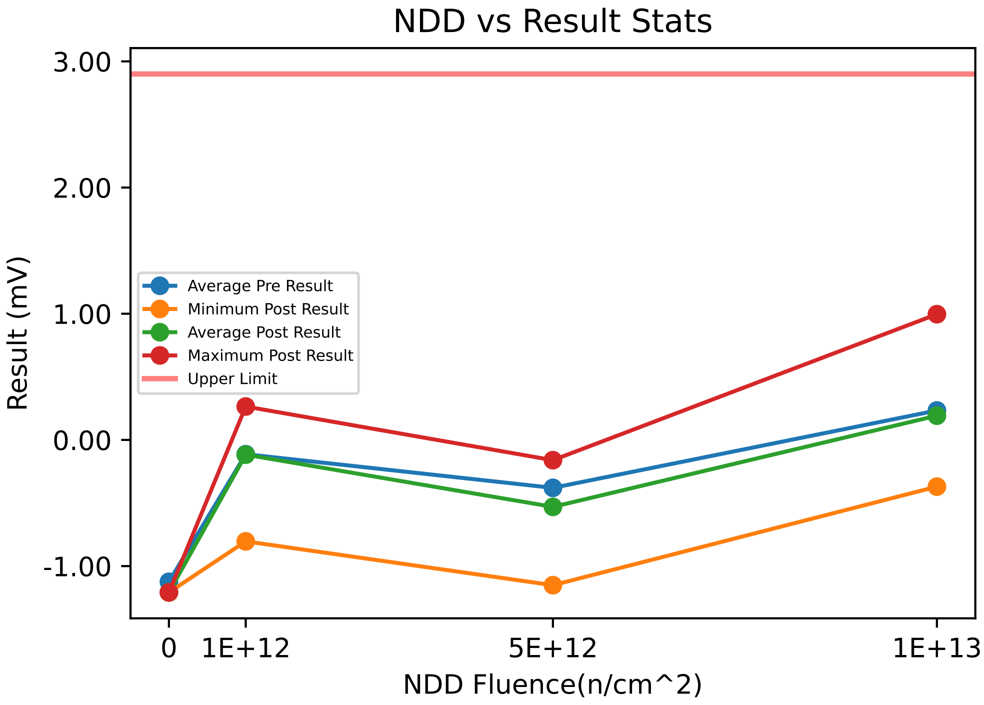
Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

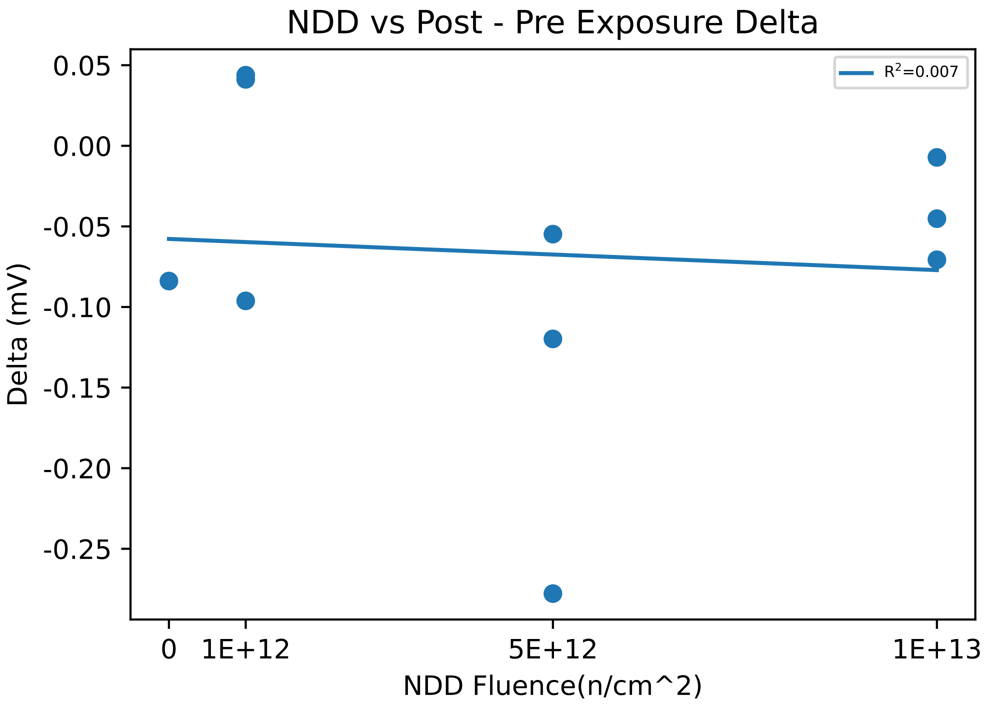
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5996	0.5993	-0.0003
504	1e+12	NDD	0.5992	0.5988	-0.0004
505	1e+12	NDD	0.6008	0.6002	-0.0006
506	5e+12	NDD	0.5997	0.5986	-0.0011
507	5e+12	NDD	0.5995	0.5979	-0.0016
508	5e+12	NDD	0.6001	0.5986	-0.0015
509	1e+13	NDD	0.6007	0.5983	-0.0024
510	1e+13	NDD	0.6002	0.5975	-0.0027
511	1e+13	NDD	0.5997	0.5973	-0.0024
512	0	Correlation	0.6002	0.6002	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6002	0.6002	0.6002		0.6002	0.6002	0.6002		0	0	0	
1e+12	0.5992	0.59987	0.6008	0.00083267	0.5988	0.59943	0.6002	0.00070946	-0.0006	-0.00043333	-0.0003	0.00015275
5e+12	0.5995	0.59977	0.6001	0.00030551	0.5979	0.59837	0.5986	0.00040415	-0.0016	-0.0014	-0.0011	0.00026458
1e+13	0.5997	0.6002	0.6007	0.0005	0.5973	0.5977	0.5983	0.00052915	-0.0027	-0.0025	-0.0024	0.00017321

Device Test: 17.2 EA_INPUT_OFFSET_V(LEVEL|STATIC/VSNSP/4.5////@EA_INPUT_OFFSET_V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

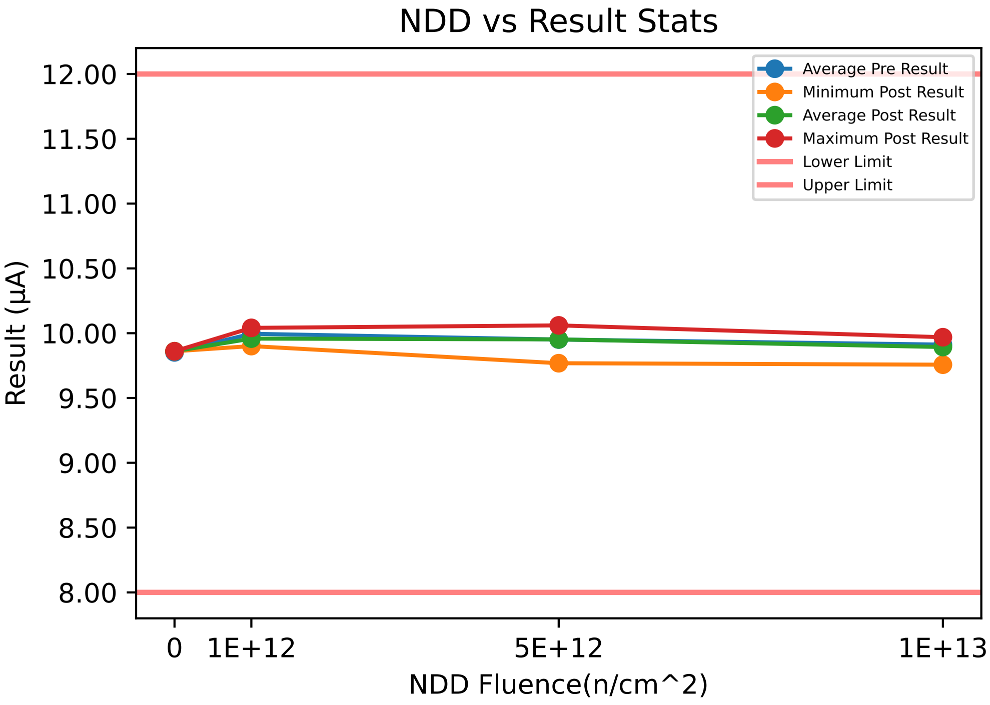
Test Results (Upper Limit = 2.9 (mV))

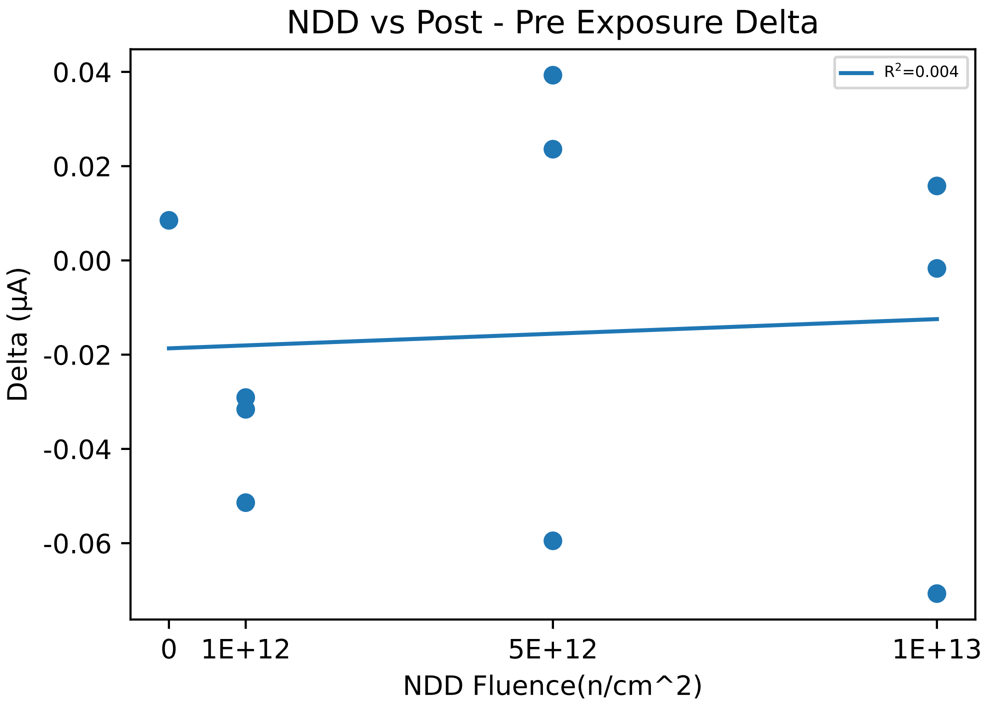
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.3609	0.2647	-0.0962
504	1e+12	NDD	0.1474	0.1886	0.0412
505	1e+12	NDD	-0.8477	-0.8039	0.0438
506	5e+12	NDD	-0.1057	-0.1605	-0.0548
507	5e+12	NDD	-0.1602	-0.28	-0.1198
508	5e+12	NDD	-0.8734	-1.1512	-0.2778
509	1e+13	NDD	-0.0424	-0.0496	-0.0072
510	1e+13	NDD	-0.2995	-0.3702	-0.0707
511	1e+13	NDD	1.0416	0.9964	-0.0452
512	0	Correlation	-1.1245	-1.2084	-0.0839

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-1.1245	-1.1245	-1.1245		-1.2084	-1.2084	-1.2084		-0.0839	-0.0839	-0.0839	
1e+12	-0.8477	-0.11313	0.3609	0.64505	-0.8039	-0.11687	0.2647	0.5962	-0.0962	-0.0037333	0.0438	0.080089
5e+12	-0.8734	-0.37977	-0.1057	0.42837	-1.1512	-0.53057	-0.1605	0.5408	-0.2778	-0.1508	-0.0548	0.11469
1e+13	-0.2995	0.23323	1.0416	0.71177	-0.3702	0.1922	0.9964	0.71467	-0.0707	-0.041033	-0.0072	0.031954

Device Test: 17.20 VSNSM_CURR(IDD|POWERED/VSNSN/12////@VSNSM_CURR)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

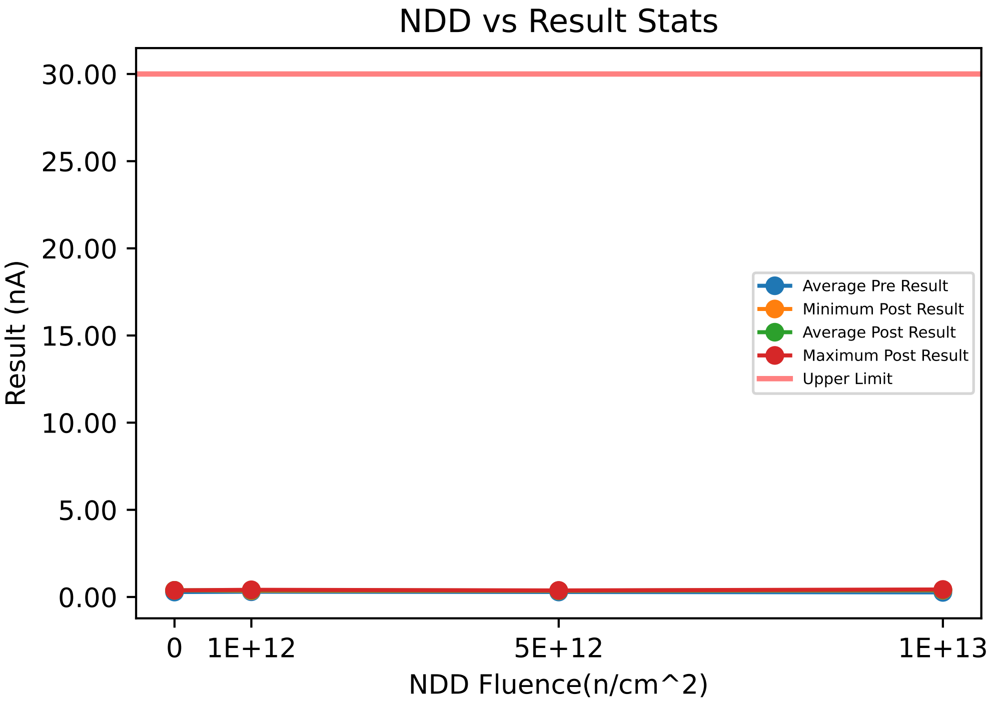
Test Results (Lower Limit = 8.0, Upper Limit = 12.0 (µA))

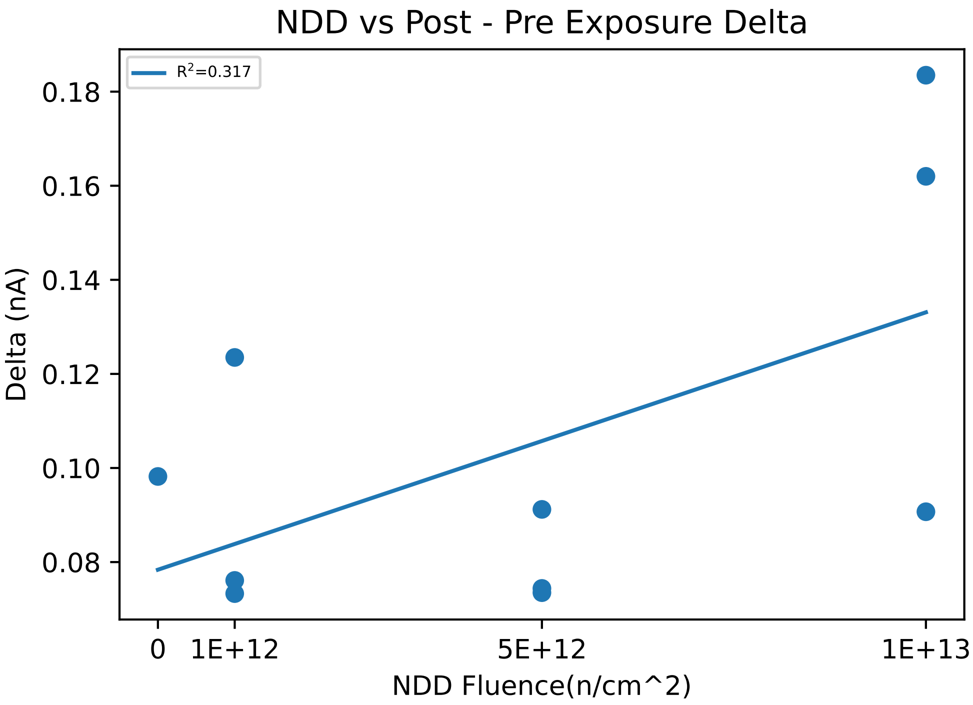
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.9322	9.9006	-0.0316
504	1e+12	NDD	9.9622	9.9331	-0.0291
505	1e+12	NDD	10.093	10.041	-0.0514
506	5e+12	NDD	9.9885	10.028	0.0393
507	5e+12	NDD	9.8279	9.7684	-0.0595
508	5e+12	NDD	10.037	10.06	0.0236
509	1e+13	NDD	9.7588	9.7571	-0.0017
510	1e+13	NDD	10.024	9.9538	-0.0707
511	1e+13	NDD	9.9531	9.9689	0.0158
512	0	Correlation	9.8521	9.8606	0.0085

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.8521	9.8521	9.8521		9.8606	9.8606	9.8606		0.0085	0.0085	0.0085	
1e+12	9.9322	9.9956	10.093	0.08522	9.9006	9.9583	10.041	0.073553	-0.0514	-0.037367	-0.0291	0.012217
5e+12	9.8279	9.951	10.037	0.10933	9.7684	9.9522	10.06	0.15997	-0.0595	0.0011333	0.0393	0.053094
1e+13	9.7588	9.9121	10.024	0.13751	9.7571	9.8933	9.9689	0.11817	-0.0707	-0.018867	0.0158	0.045734

Device Test: 17.21 VSNSP_LKG_CURR_0P6V(LEAK|POWERED/VSNSP/12////@VSNSP_LKG_CURR_0P6V)





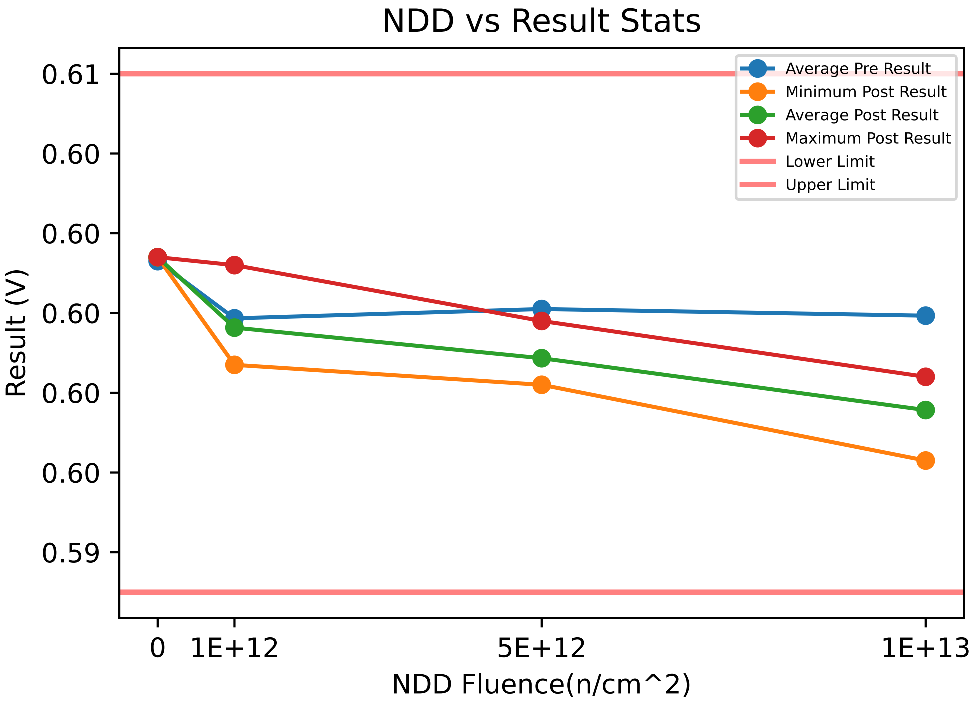
Test Results (Upper Limit = 30.0 (nA))

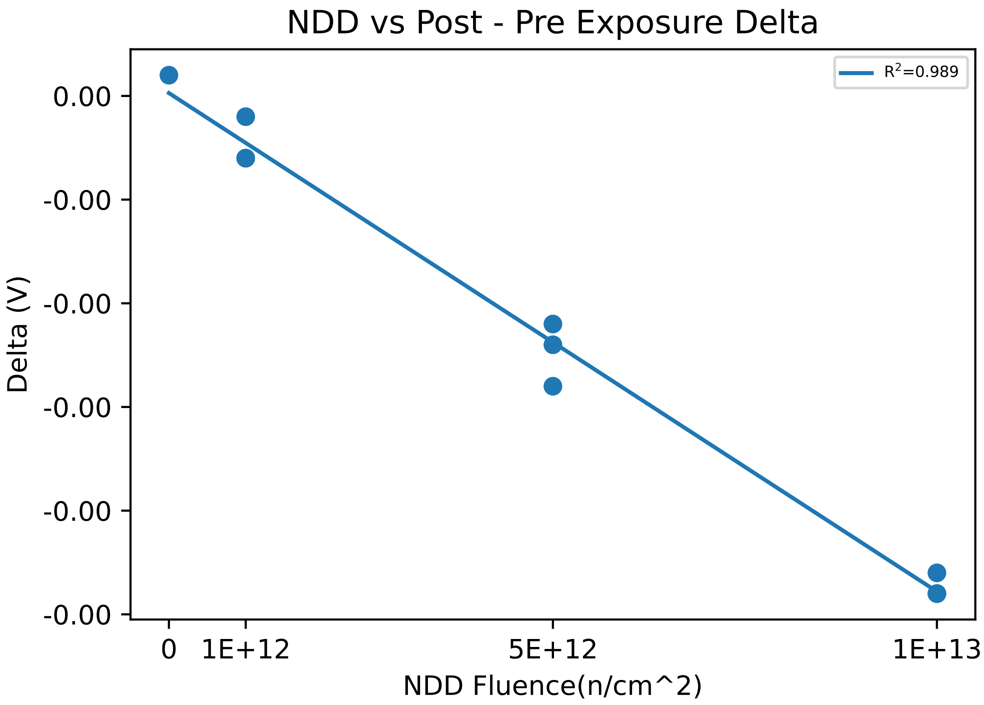
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.2856	0.3589	0.0733
504	1e+12	NDD	0.2895	0.413	0.1235
505	1e+12	NDD	0.3268	0.4029	0.0761
506	5e+12	NDD	0.2918	0.3662	0.0744
507	5e+12	NDD	0.2863	0.3775	0.0912
508	5e+12	NDD	0.2801	0.3536	0.0735
509	1e+13	NDD	0.2939	0.3846	0.0907
510	1e+13	NDD	0.2488	0.4323	0.1835
511	1e+13	NDD	0.2477	0.4097	0.162
512	0	Correlation	0.2831	0.3813	0.0982

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.2831	0.2831	0.2831		0.3813	0.3813	0.3813		0.0982	0.0982	0.0982	
1e+12	0.2856	0.30063	0.3268	0.022745	0.3589	0.3916	0.413	0.028766	0.0733	0.090967	0.1235	0.028209
5e+12	0.2801	0.28607	0.2918	0.0058535	0.3536	0.36577	0.3775	0.011956	0.0735	0.0797	0.0912	0.0099695
1e+13	0.2477	0.26347	0.2939	0.026362	0.3846	0.40887	0.4323	0.023861	0.0907	0.1454	0.1835	0.048576

Device Test: 17.25 VREF_PLUS_OFFSET(LEVEL|STATIC/VSNSP/14////@VREF_PLUS_OFFSET)





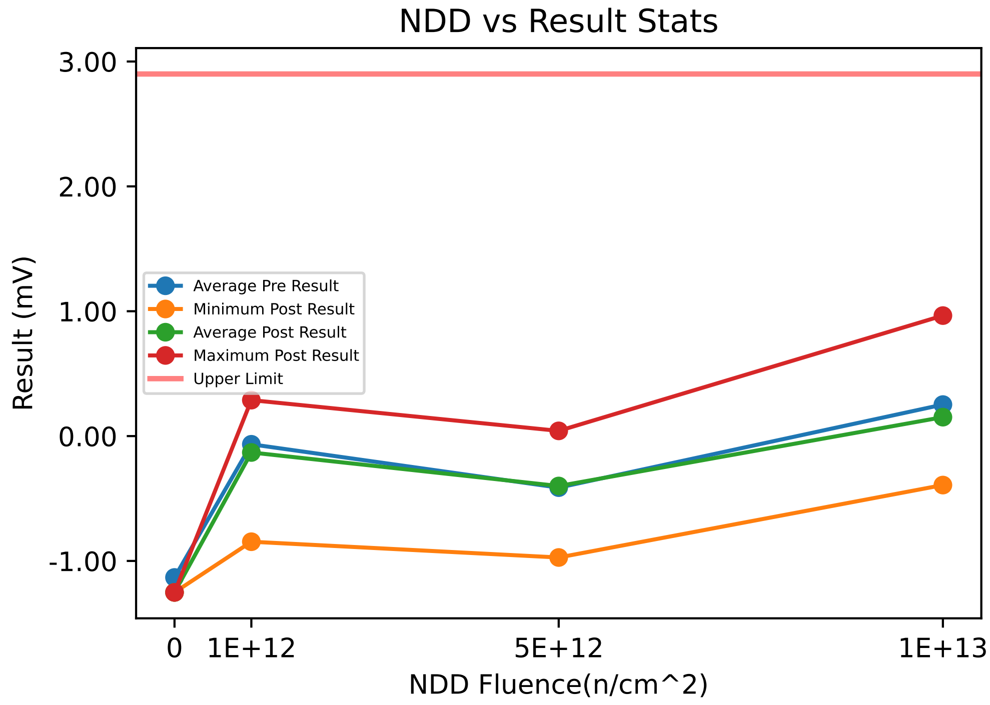
Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5991	0.599	-0.0001
504	1e+12	NDD	0.599	0.5987	-0.0003
505	1e+12	NDD	0.6015	0.6012	-0.0003
506	5e+12	NDD	0.5998	0.5986	-0.0012
507	5e+12	NDD	0.5996	0.5982	-0.0014
508	5e+12	NDD	0.6009	0.5998	-0.0011
509	1e+13	NDD	0.6007	0.5984	-0.0023
510	1e+13	NDD	0.6004	0.598	-0.0024
511	1e+13	NDD	0.5987	0.5963	-0.0024
512	0	Correlation	0.6013	0.6014	0.0001

Test Statistics (V)

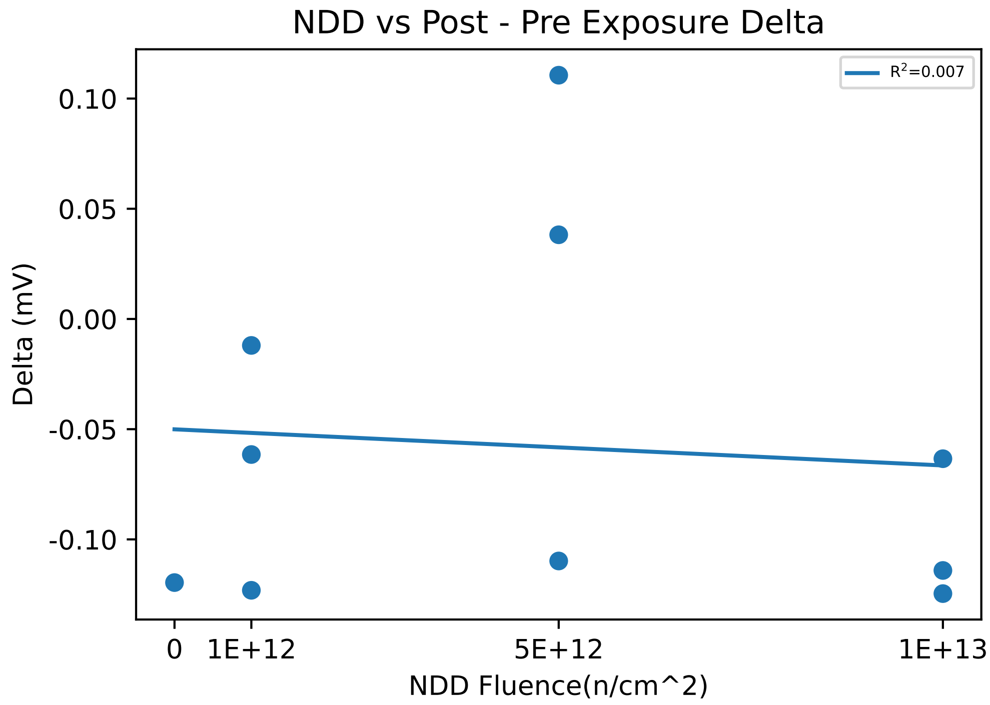
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6013	0.6013	0.6013		0.6014	0.6014	0.6014		0.0001	0.0001	0.0001	
1e+12	0.599	0.59987	0.6015	0.0014154	0.5987	0.59963	0.6012	0.001365	-0.0003	-0.00023333	-0.0001	0.00011547
5e+12	0.5996	0.6001	0.6009	0.0007	0.5982	0.59887	0.5998	0.00083267	-0.0014	-0.0012333	-0.0011	0.00015275
1e+13	0.5987	0.59993	0.6007	0.0010786	0.5963	0.59757	0.5984	0.001115	-0.0024	-0.0023667	-0.0023	5.7735e-05

Device Test: 17.26 EA_INPUT_OFFSET_V(LEVEL|STATIC/VSNSP/14////@EA_INPUT_OFFSET_V)



Test Results (Upper Limit = 2.9 (mV))

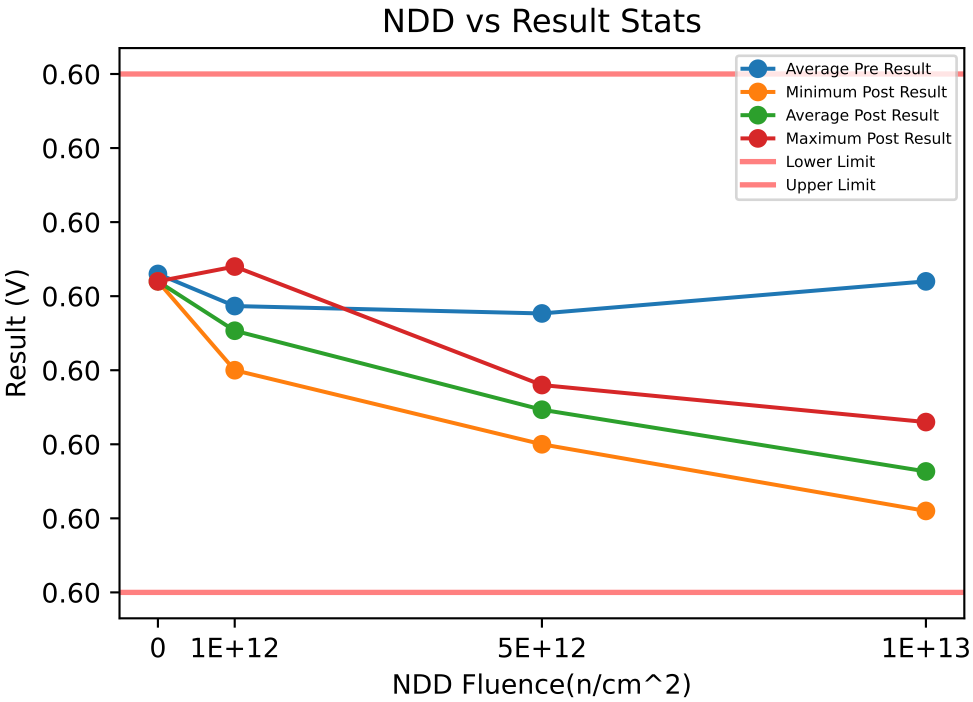
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.3	0.288	-0.012
504	1e+12	NDD	0.2258	0.1643	-0.0615
505	1e+12	NDD	-0.7229	-0.846	-0.1231
506	5e+12	NDD	-0.0688	0.0418	0.1106
507	5e+12	NDD	-0.307	-0.2688	0.0382
508	5e+12	NDD	-0.8625	-0.9723	-0.1098
509	1e+13	NDD	0.0067	-0.1179	-0.1246
510	1e+13	NDD	-0.2782	-0.3923	-0.1141
511	1e+13	NDD	1.0285	0.9651	-0.0634
512	0	Correlation	-1.1323	-1.2519	-0.1196

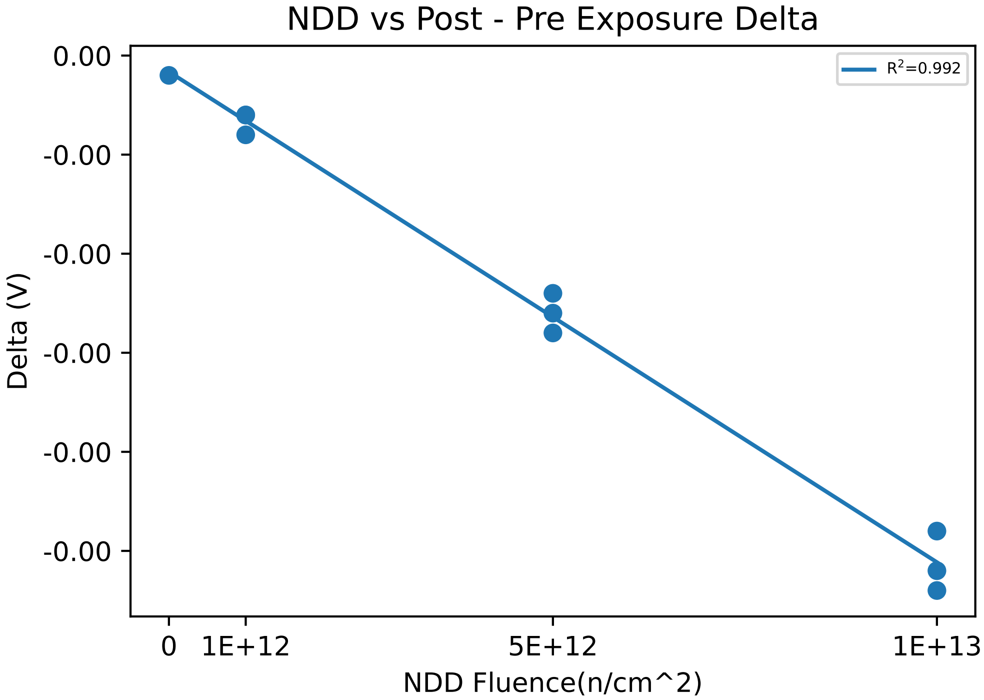


Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-1.1323	-1.1323	-1.1323		-1.2519	-1.2519	-1.2519		-0.1196	-0.1196	-0.1196	
1e+12	-0.7229	-0.0657	0.3	0.57036	-0.846	-0.13123	0.288	0.62209	-0.1231	-0.065533	-0.012	0.05566
5e+12	-0.8625	-0.41277	-0.0688	0.40728	-0.9723	-0.39977	0.0418	0.51958	-0.1098	0.013	0.1106	0.11234
1e+13	-0.2782	0.25233	1.0285	0.68711	-0.3923	0.15163	0.9651	0.71772	-0.1246	-0.1007	-0.0634	0.032727

Device Test: 17.27 VREF_25C(LEVEL|STATIC/SS_TR/14////@VREF_25C)





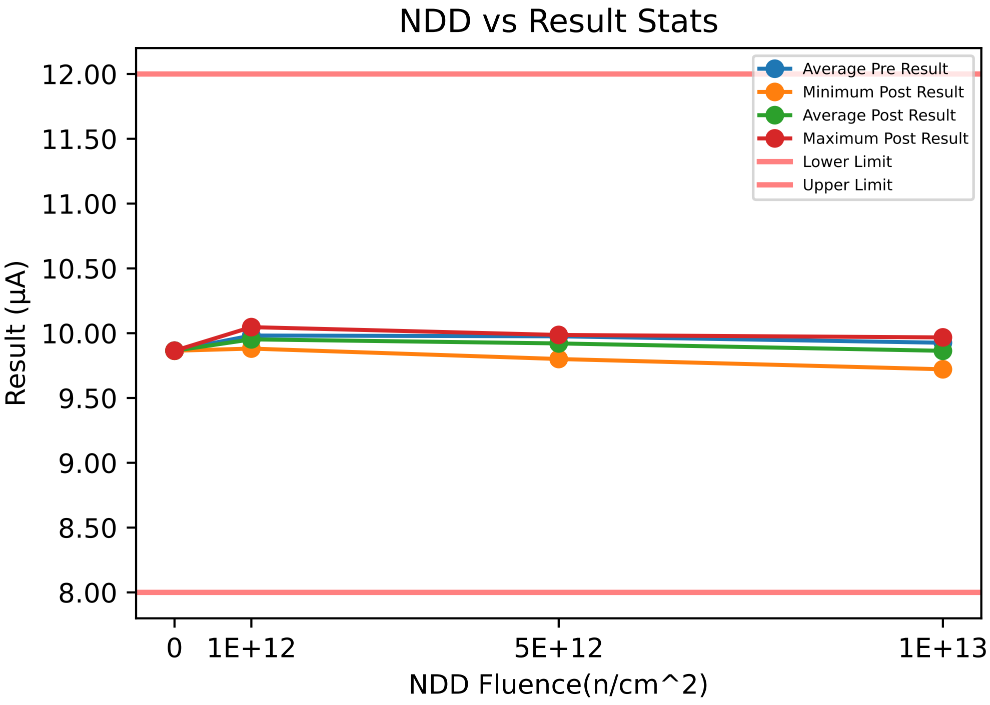
Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

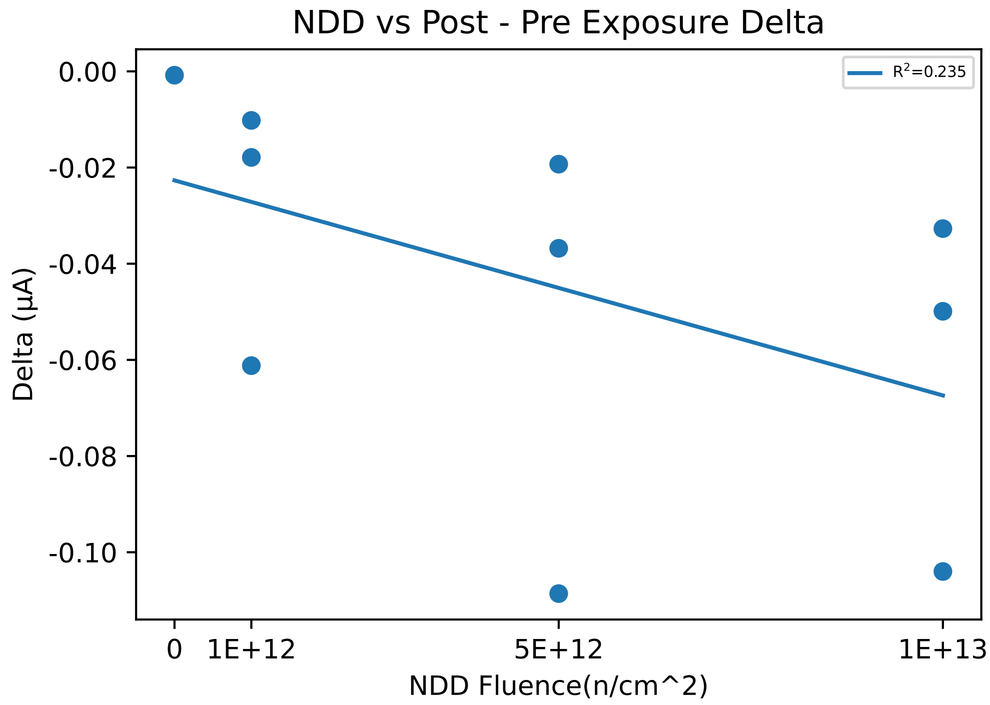
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5995	0.5992	-0.0003
504	1e+12	NDD	0.5993	0.599	-0.0003
505	1e+12	NDD	0.6008	0.6004	-0.0004
506	5e+12	NDD	0.5998	0.5986	-0.0012
507	5e+12	NDD	0.5994	0.598	-0.0014
508	5e+12	NDD	0.6001	0.5988	-0.0013
509	1e+13	NDD	0.6007	0.5983	-0.0024
510	1e+13	NDD	0.6002	0.5975	-0.0027
511	1e+13	NDD	0.5997	0.5971	-0.0026
512	0	Correlation	0.6003	0.6002	-0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6003	0.6003	0.6003		0.6002	0.6002	0.6002		-0.0001	-0.0001	-0.0001	
1e+12	0.5993	0.59987	0.6008	0.00081445	0.599	0.59953	0.6004	0.00075719	-0.0004	-0.00033333	-0.0003	5.7735e-05
5e+12	0.5994	0.59977	0.6001	0.00035119	0.598	0.59847	0.5988	0.00041633	-0.0014	-0.0013	-0.0012	0.0001
1e+13	0.5997	0.6002	0.6007	0.0005	0.5971	0.59763	0.5983	0.00061101	-0.0027	-0.0025667	-0.0024	0.00015275

Device Test: 17.28 VSNSM_CURR(IDD|POWERED/VSNSN/14////@VSNSM_CURR)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

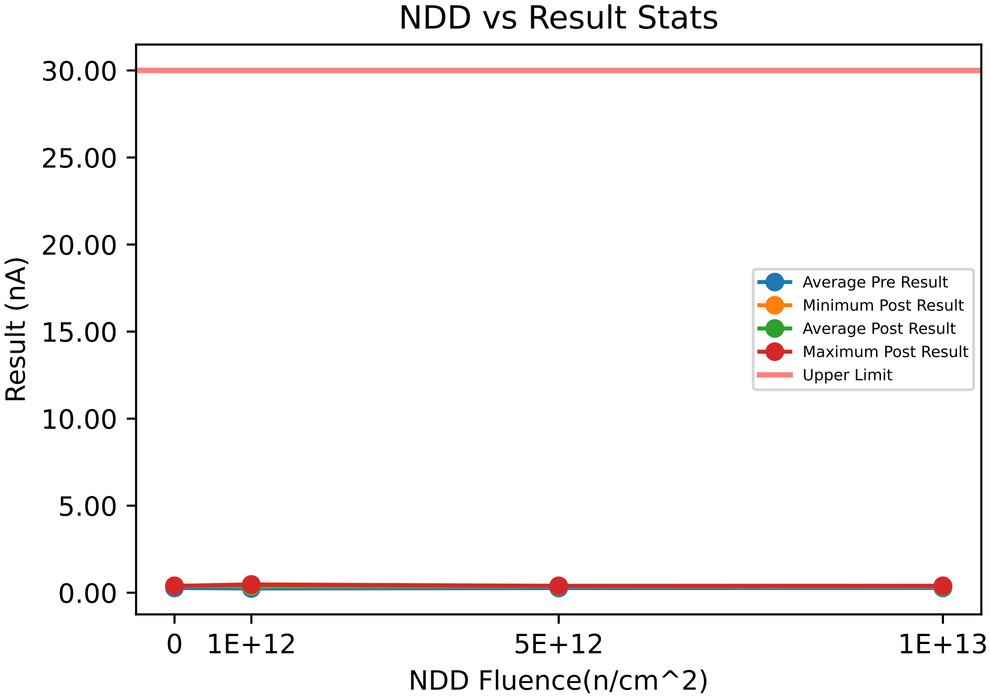
Test Results (Lower Limit = 8.0, Upper Limit = 12.0 (µA))

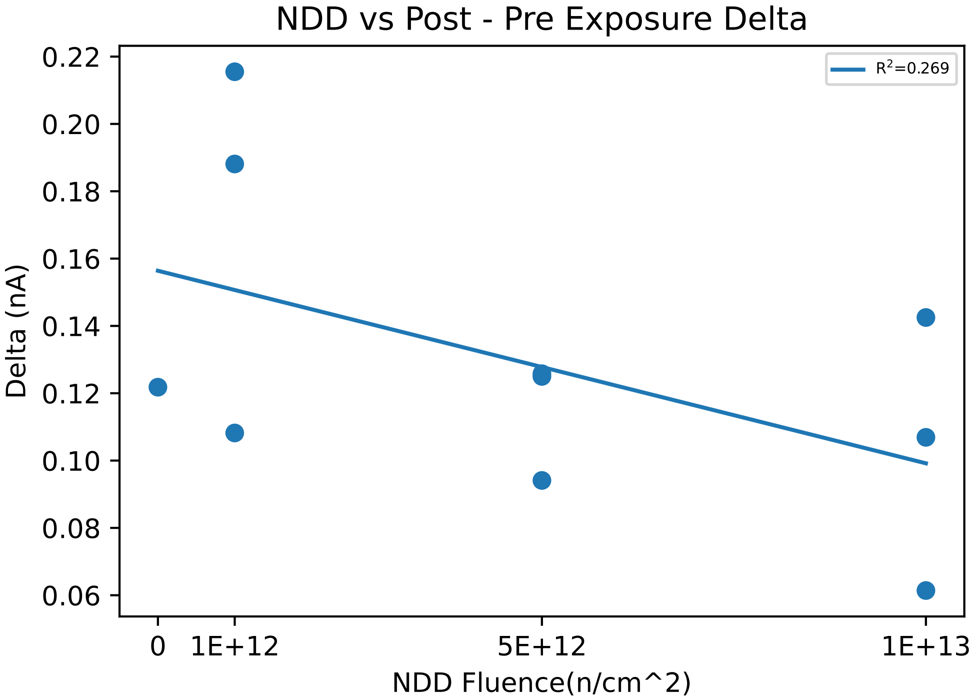
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.8915	9.8813	-0.0102
504	1e+12	NDD	9.9902	9.929	-0.0612
505	1e+12	NDD	10.065	10.047	-0.0179
506	5e+12	NDD	10.006	9.9865	-0.0193
507	5e+12	NDD	9.8377	9.8009	-0.0368
508	5e+12	NDD	10.085	9.976	-0.1086
509	1e+13	NDD	9.7714	9.7215	-0.0499
510	1e+13	NDD	10	9.9676	-0.0327
511	1e+13	NDD	10.007	9.903	-0.104
512	0	Correlation	9.8655	9.8647	-0.0008

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.8655	9.8655	9.8655		9.8647	9.8647	9.8647		-0.0008	-0.0008	-0.0008	
1e+12	9.8915	9.9821	10.065	0.086881	9.8813	9.9524	10.047	0.085188	-0.0612	-0.029767	-0.0102	0.027493
5e+12	9.8377	9.976	10.085	0.12611	9.8009	9.9211	9.9865	0.10426	-0.1086	-0.0549	-0.0193	0.047322
1e+13	9.7714	9.9262	10.007	0.13413	9.7215	9.864	9.9676	0.12759	-0.104	-0.0622	-0.0327	0.037207

Device Test: 17.29 VSNSP_LKG_CURR_0P6V(LEAK|POWERED/VSNSP/14////@VSNSP_LKG_CURR_0P6V)





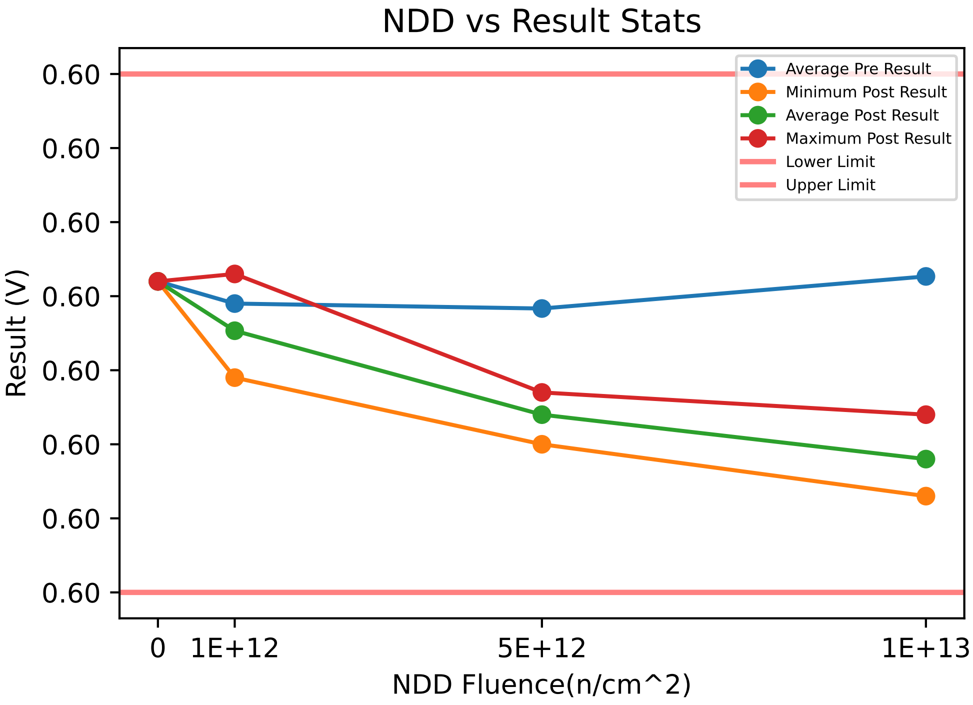
Test Results (Upper Limit = 30.0 (nA))

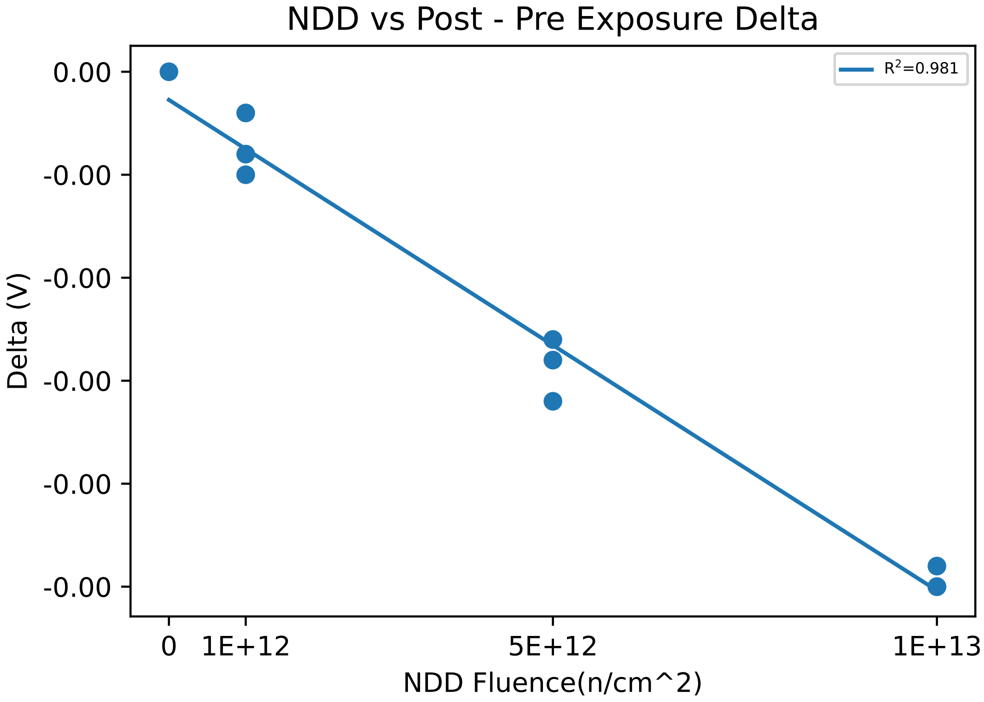
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.2606	0.4761	0.2155
504	1e+12	NDD	0.2073	0.3954	0.1881
505	1e+12	NDD	0.2642	0.3724	0.1082
506	5e+12	NDD	0.2721	0.3971	0.125
507	5e+12	NDD	0.26	0.3858	0.1258
508	5e+12	NDD	0.2695	0.3636	0.0941
509	1e+13	NDD	0.2671	0.374	0.1069
510	1e+13	NDD	0.2577	0.4002	0.1425
511	1e+13	NDD	0.2927	0.3541	0.0614
512	0	Correlation	0.2715	0.3933	0.1218

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.2715	0.2715	0.2715		0.3933	0.3933	0.3933		0.1218	0.1218	0.1218	
1e+12	0.2073	0.24403	0.2642	0.031863	0.3724	0.41463	0.4761	0.05446	0.1082	0.1706	0.2155	0.05575
5e+12	0.26	0.2672	0.2721	0.0063695	0.3636	0.38217	0.3971	0.017043	0.0941	0.11497	0.1258	0.018075
1e+13	0.2577	0.2725	0.2927	0.018114	0.3541	0.3761	0.4002	0.023122	0.0614	0.1036	0.1425	0.040651

Device Test: 17.3 VREF_25C(LEVEL|STATIC/SS_TR/4.5////@VREF_25C)





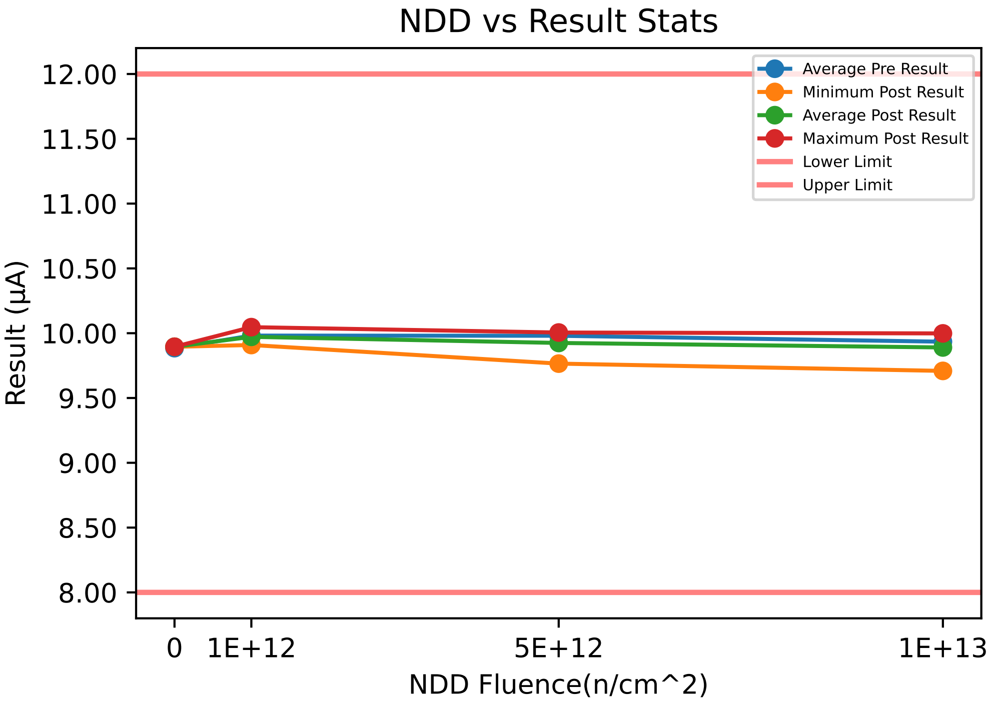
Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

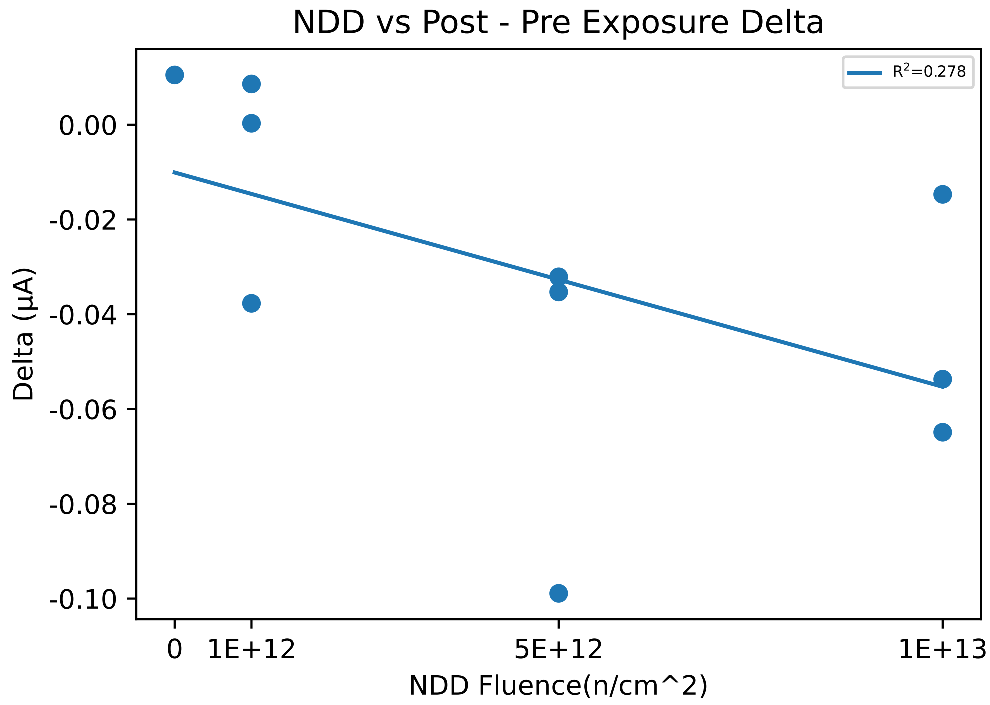
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5996	0.5994	-0.0002
504	1e+12	NDD	0.5993	0.5989	-0.0004
505	1e+12	NDD	0.6008	0.6003	-0.0005
506	5e+12	NDD	0.5998	0.5985	-0.0013
507	5e+12	NDD	0.5996	0.598	-0.0016
508	5e+12	NDD	0.6001	0.5987	-0.0014
509	1e+13	NDD	0.6008	0.5984	-0.0024
510	1e+13	NDD	0.6002	0.5977	-0.0025
511	1e+13	NDD	0.5998	0.5973	-0.0025
512	0	Correlation	0.6002	0.6002	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6002	0.6002	0.6002		0.6002	0.6002	0.6002		0	0	0	
1e+12	0.5993	0.5999	0.6008	0.00079373	0.5989	0.59953	0.6003	0.00070946	-0.0005	-0.00036667	-0.0002	0.00015275
5e+12	0.5996	0.59983	0.6001	0.00025166	0.598	0.5984	0.5987	0.00036056	-0.0016	-0.0014333	-0.0013	0.00015275
1e+13	0.5998	0.60027	0.6008	0.00050332	0.5973	0.5978	0.5984	0.00055678	-0.0025	-0.0024667	-0.0024	5.7735e-05

Device Test: 17.4 VSNSM_CURR(IDD|POWERED/VSNSN/4.5////@VSNSM_CURR)





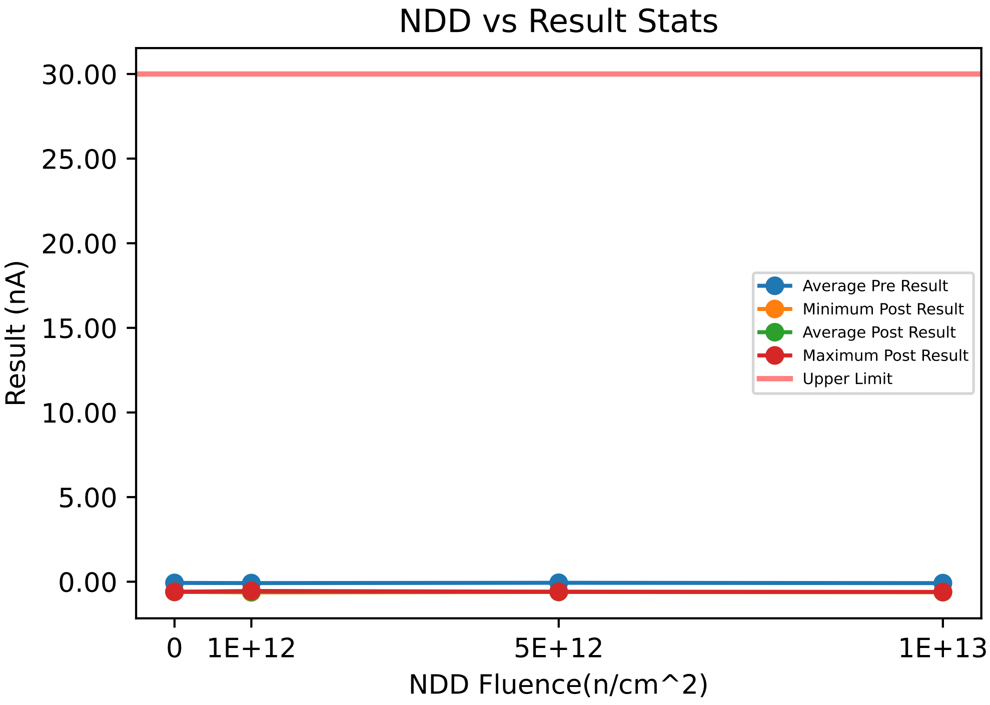
Test Results (Lower Limit = 8.0, Upper Limit = 12.0 (µA))

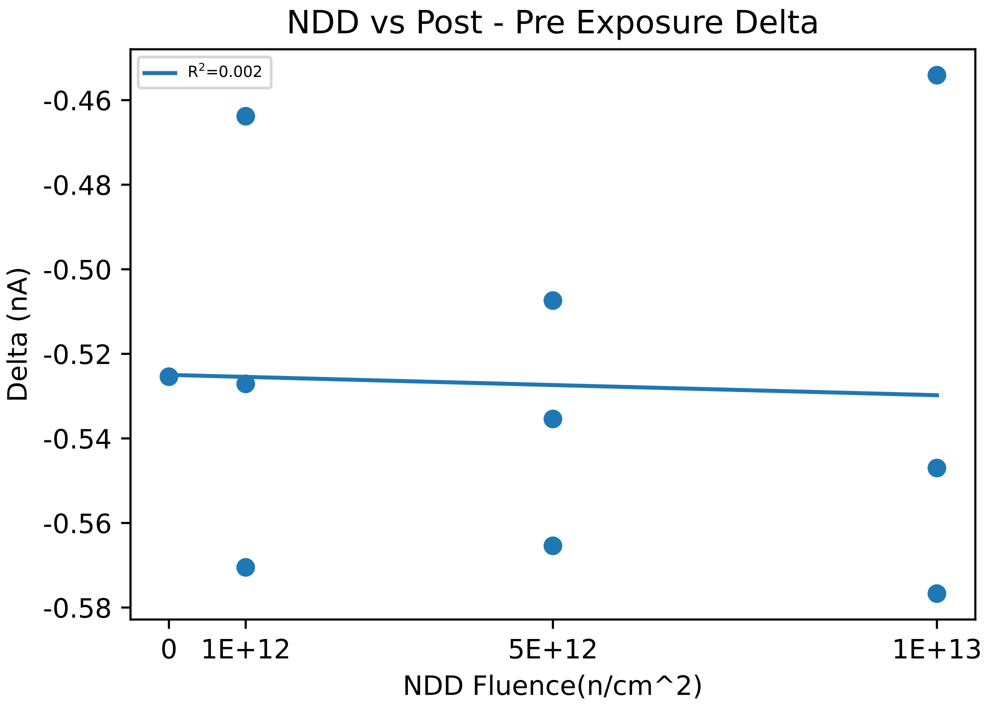
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.9003	9.9089	0.0086
504	1e+12	NDD	9.96	9.9603	0.0003
505	1e+12	NDD	10.084	10.047	-0.0377
506	5e+12	NDD	10.039	10.004	-0.0353
507	5e+12	NDD	9.7974	9.7653	-0.0321
508	5e+12	NDD	10.104	10.005	-0.0989
509	1e+13	NDD	9.774	9.7091	-0.0649
510	1e+13	NDD	10.052	9.9984	-0.0537
511	1e+13	NDD	9.9772	9.9625	-0.0147
512	0	Correlation	9.8848	9.8953	0.0105

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.8848	9.8848	9.8848		9.8953	9.8953	9.8953		0.0105	0.0105	0.0105	
1e+12	9.9003	9.9815	10.084	0.093871	9.9089	9.9719	10.047	0.069583	-0.0377	-0.0096	0.0086	0.024687
5e+12	9.7974	9.9802	10.104	0.16163	9.7653	9.9248	10.005	0.13813	-0.0989	-0.055433	-0.0321	0.037677
1e+13	9.774	9.9344	10.052	0.1439	9.7091	9.89	9.9984	0.15769	-0.0649	-0.044433	-0.0147	0.026352

Device Test: 17.5 VSNSP_LKG_CURR_0P6V(LEAK|POWERED/VSNSP/4.5////@VSNSP_LKG_CURR_0P6V)





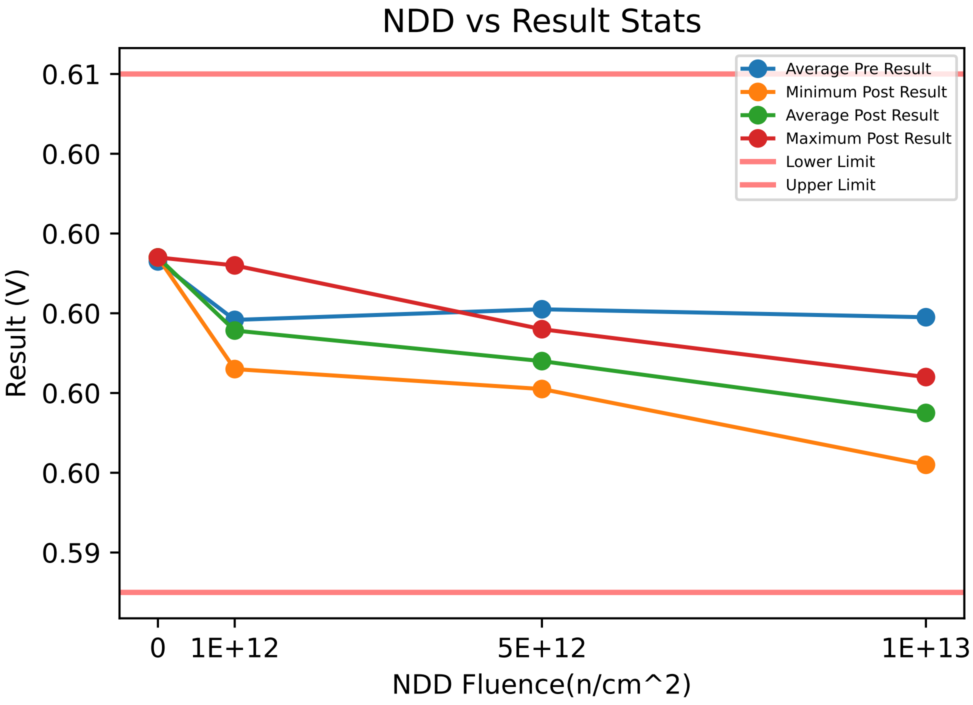
Test Results (Upper Limit = 30.0 (nA))

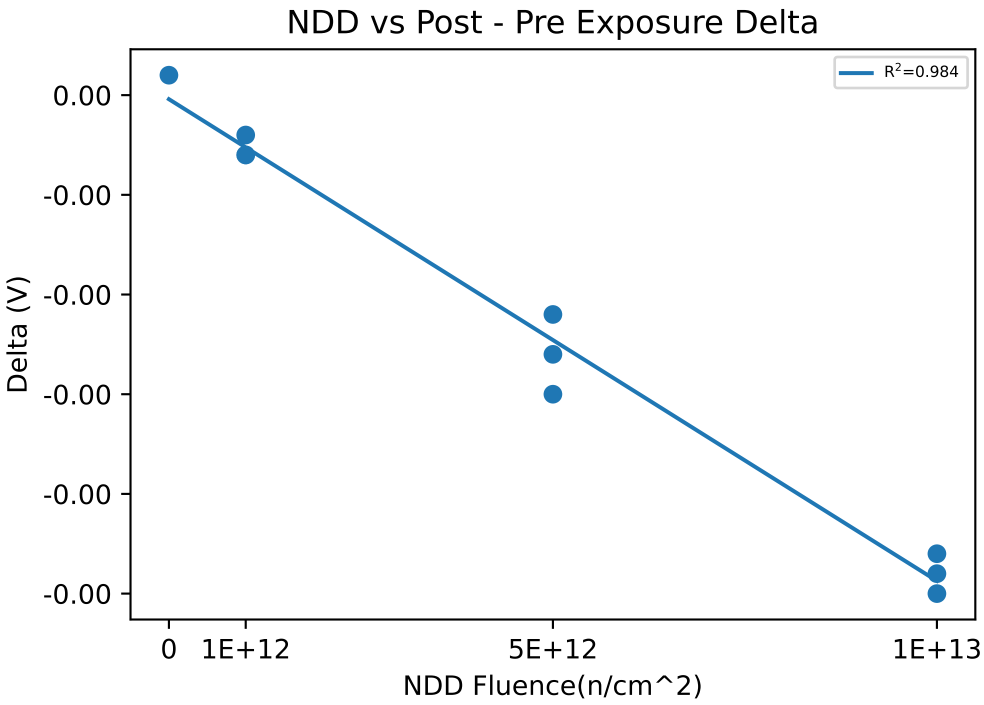
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	-0.0825	-0.5463	-0.4638
504	1e+12	NDD	-0.0606	-0.6311	-0.5705
505	1e+12	NDD	-0.0996	-0.6267	-0.5271
506	5e+12	NDD	-0.0651	-0.6005	-0.5354
507	5e+12	NDD	-0.084	-0.5914	-0.5074
508	5e+12	NDD	-0.0406	-0.606	-0.5654
509	1e+13	NDD	-0.0743	-0.6213	-0.547
510	1e+13	NDD	-0.1507	-0.6048	-0.4541
511	1e+13	NDD	-0.0251	-0.6018	-0.5767
512	0	Correlation	-0.0704	-0.5958	-0.5254

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.0704	-0.0704	-0.0704		-0.5958	-0.5958	-0.5958		-0.5254	-0.5254	-0.5254	
1e+12	-0.0996	-0.0809	-0.0606	0.019549	-0.6311	-0.60137	-0.5463	0.04774	-0.5705	-0.52047	-0.4638	0.053658
5e+12	-0.084	-0.063233	-0.0406	0.02176	-0.606	-0.5993	-0.5914	0.0073736	-0.5654	-0.53607	-0.5074	0.029006
1e+13	-0.1507	-0.083367	-0.0251	0.063289	-0.6213	-0.6093	-0.6018	0.0105	-0.5767	-0.52593	-0.4541	0.063957

Device Test: 17.9 VREF_PLUS_OFFSET(LEVEL|STATIC/VSNSP/5////@VREF_PLUS_OFFSET)





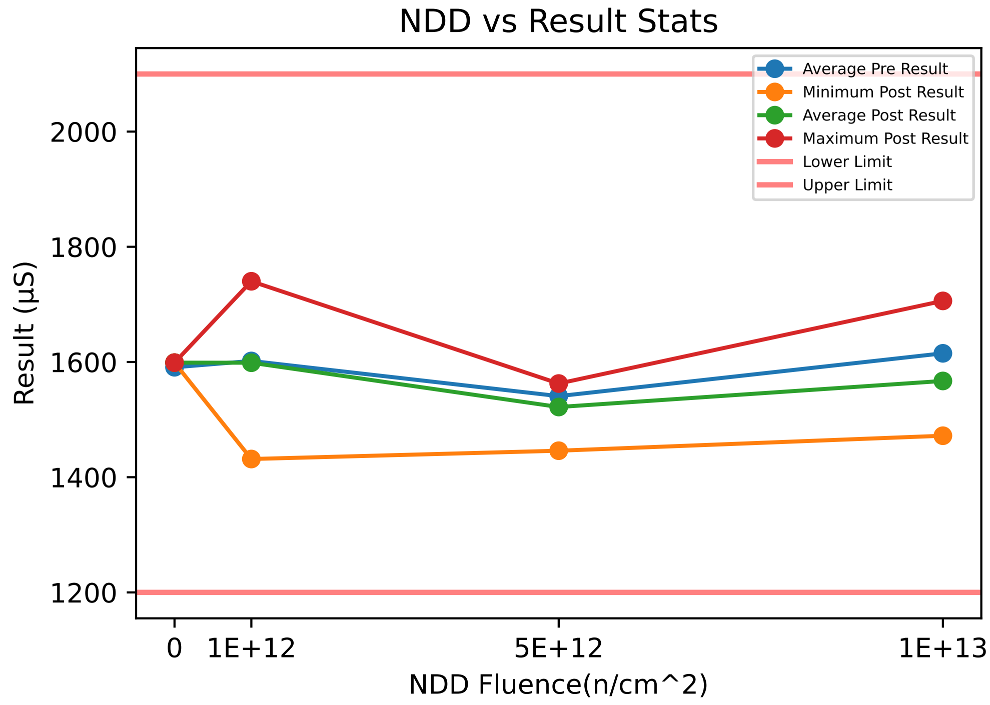
Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

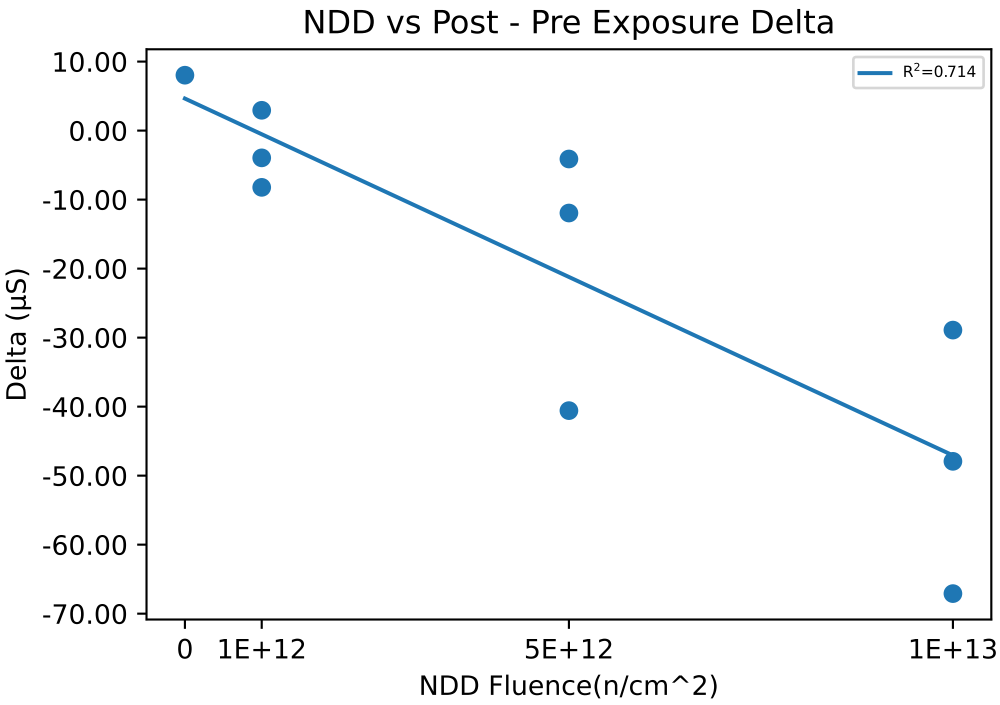
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5991	0.5989	-0.0002
504	1e+12	NDD	0.5989	0.5986	-0.0003
505	1e+12	NDD	0.6015	0.6012	-0.0003
506	5e+12	NDD	0.5998	0.5987	-0.0011
507	5e+12	NDD	0.5996	0.5981	-0.0015
508	5e+12	NDD	0.6009	0.5996	-0.0013
509	1e+13	NDD	0.6007	0.5984	-0.0023
510	1e+13	NDD	0.6004	0.5979	-0.0025
511	1e+13	NDD	0.5986	0.5962	-0.0024
512	0	Correlation	0.6013	0.6014	0.0001

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6013	0.6013	0.6013		0.6014	0.6014	0.6014		0.0001	0.0001	0.0001	
1e+12	0.5989	0.59983	0.6015	0.0014468	0.5986	0.59957	0.6012	0.0014224	-0.0003	-0.00026667	-0.0002	5.7735e-05
5e+12	0.5996	0.6001	0.6009	0.0007	0.5981	0.5988	0.5996	0.00075498	-0.0015	-0.0013	-0.0011	0.0002
1e+13	0.5986	0.5999	0.6007	0.0011358	0.5962	0.5975	0.5984	0.0011533	-0.0025	-0.0024	-0.0023	0.0001

Device Test: 18.1 EA_GM(EA|STATIC/COMP/4.5////@EA_GM)





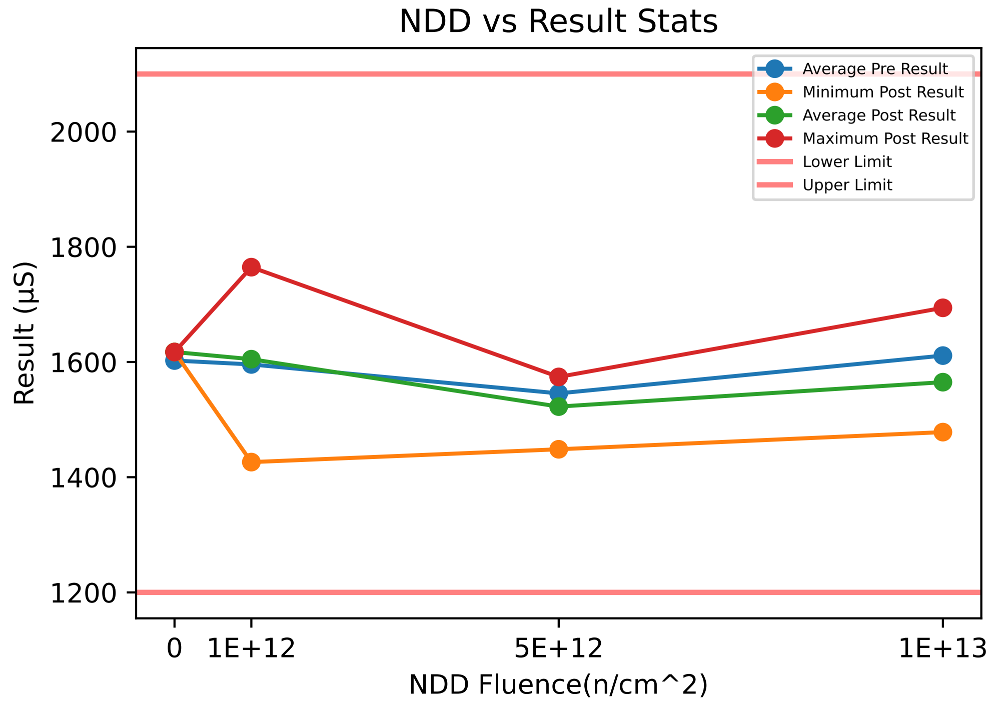
Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

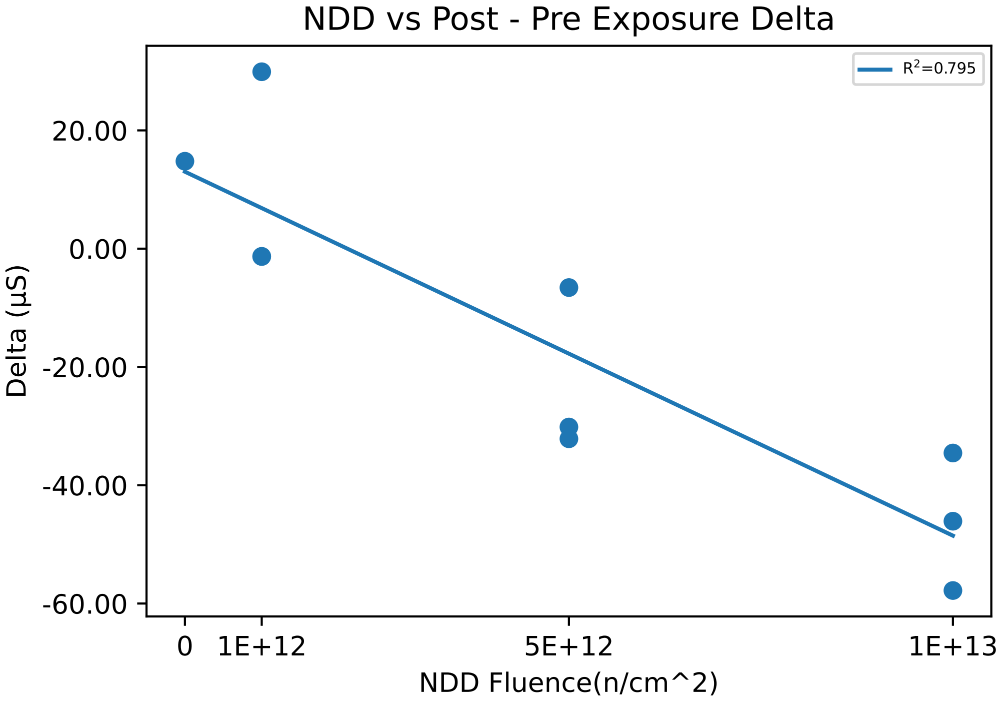
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1621.5	1624.5	2.9438
504	1e+12	NDD	1748.4	1740.1	-8.2239
505	1e+12	NDD	1435.5	1431.6	-3.9503
506	5e+12	NDD	1603.2	1562.6	-40.577
507	5e+12	NDD	1561.1	1557	-4.1145
508	5e+12	NDD	1457.9	1446	-11.943
509	1e+13	NDD	1571.1	1523.2	-47.927
510	1e+13	NDD	1735	1706.1	-28.908
511	1e+13	NDD	1539.1	1472	-67.092
512	0	Correlation	1590.9	1598.9	8.0277

Test Statistics (µS)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1590.9	1590.9	1590.9		1598.9	1598.9	1598.9		8.0277	8.0277	8.0277	
1e+12	1435.5	1601.8	1748.4	157.35	1431.6	1598.7	1740.1	155.88	-8.2239	-3.0768	2.9438	5.6349
5e+12	1457.9	1540.7	1603.2	74.749	1446	1521.9	1562.6	65.782	-40.577	-18.878	-4.1145	19.195
1e+13	1539.1	1615.1	1735	105.09	1472	1567.1	1706.1	123.06	-67.092	-47.976	-28.908	19.092

Device Test: 18.10 EA_GM(EA|STATIC/COMP/14////@EA_GM)





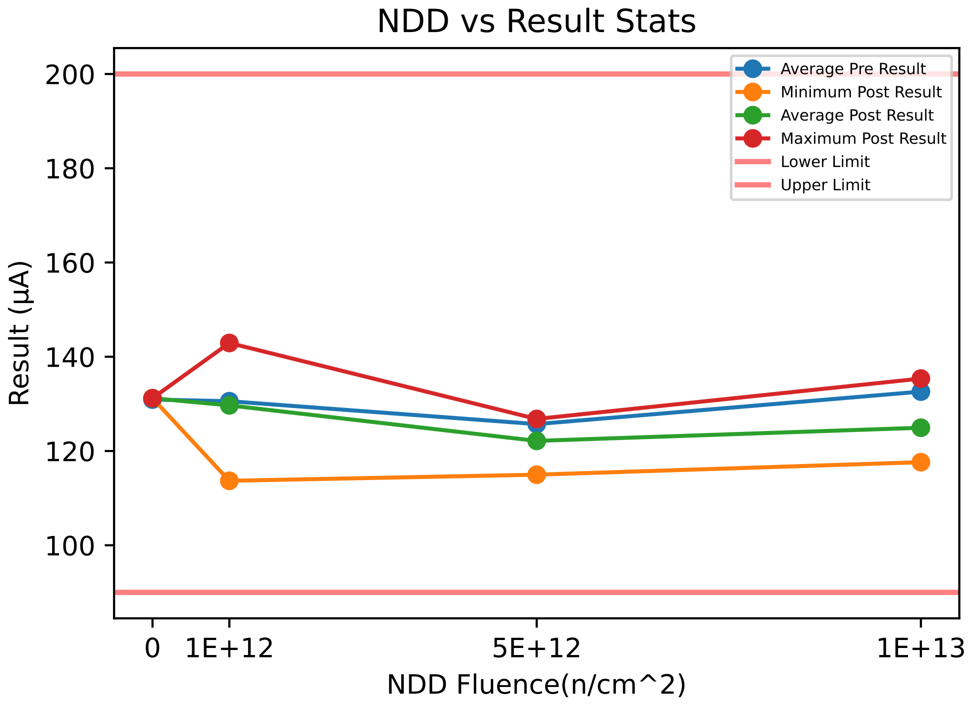
Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

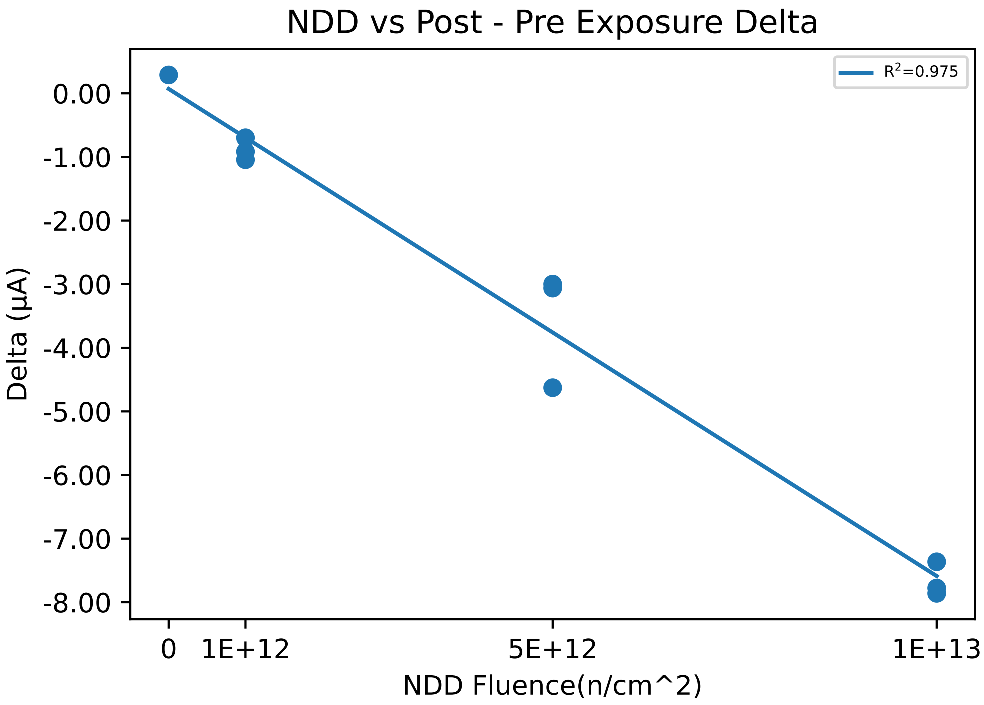
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1625.1	1623.8	-1.3055
504	1e+12	NDD	1734.7	1764.6	29.914
505	1e+12	NDD	1427.5	1426.2	-1.3166
506	5e+12	NDD	1606.2	1574.1	-32.145
507	5e+12	NDD	1575.3	1545.2	-30.156
508	5e+12	NDD	1455	1448.5	-6.5763
509	1e+13	NDD	1580.4	1522.6	-57.801
510	1e+13	NDD	1728.6	1694.1	-34.551
511	1e+13	NDD	1524.3	1478.3	-46.082
512	0	Correlation	1602.5	1617.3	14.784

Test Statistics (µS)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1602.5	1602.5	1602.5		1617.3	1617.3	1617.3		14.784	14.784	14.784	
1e+12	1427.5	1595.8	1734.7	155.68	1426.2	1604.9	1764.6	170	-1.3166	9.0973	29.914	18.028
5e+12	1455	1545.5	1606.2	79.878	1448.5	1522.6	1574.1	65.79	-32.145	-22.959	-6.5763	14.223
1e+13	1524.3	1611.1	1728.6	105.54	1478.3	1565	1694.1	113.97	-57.801	-46.145	-34.551	11.625

Device Test: 18.11 EA_SOURCE(ERROR_AMP|STATIC/COMP/14////@EA_SOURCE)





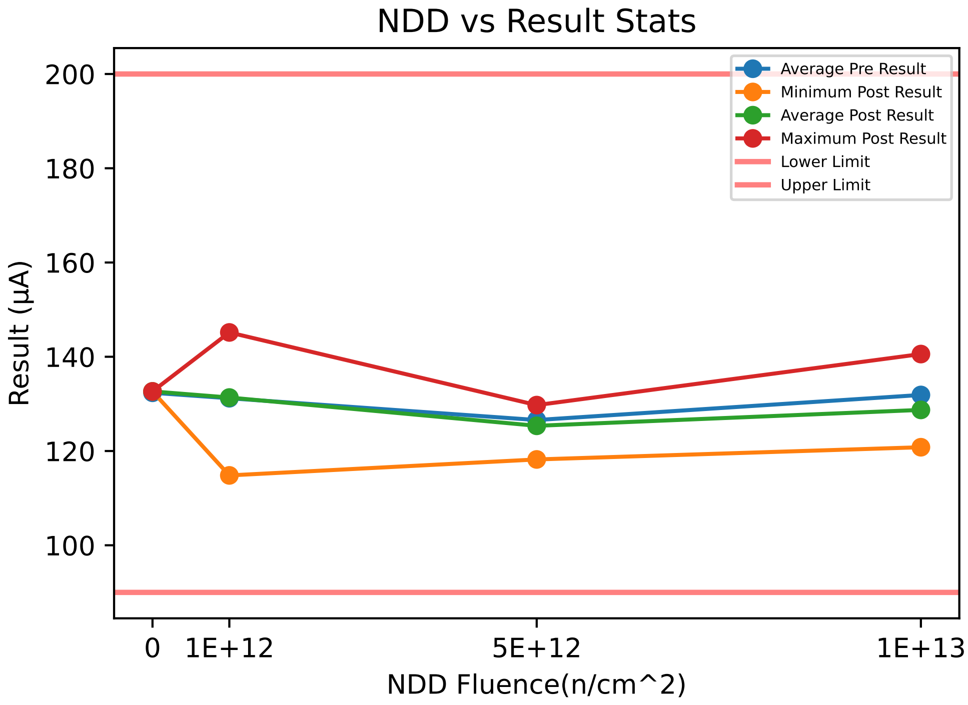
Test Results (Lower Limit = 90.0,
Upper Limit = 200.0 (µA))

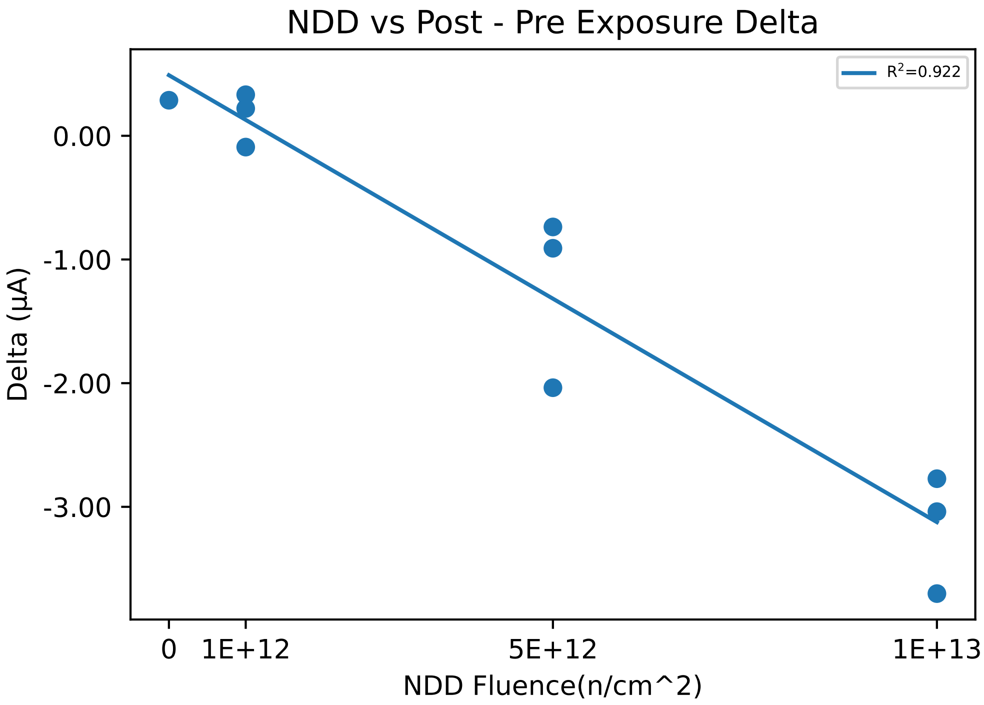
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	133.35	132.44	-0.9163
504	1e+12	NDD	143.62	142.93	-0.698
505	1e+12	NDD	114.72	113.68	-1.0436
506	5e+12	NDD	131.43	126.8	-4.6273
507	5e+12	NDD	127.67	124.67	-2.9986
508	5e+12	NDD	118.04	114.98	-3.0618
509	1e+13	NDD	129.59	121.81	-7.7767
510	1e+13	NDD	143.23	135.37	-7.8602
511	1e+13	NDD	124.99	117.63	-7.3639
512	0	Correlation	130.92	131.21	0.2891

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	130.92	130.92	130.92		131.21	131.21	131.21		0.2891	0.2891	0.2891	
1e+12	114.72	130.57	143.62	14.649	113.68	129.68	142.93	14.816	-1.0436	-0.88597	-0.698	0.17479
5e+12	118.04	125.71	131.43	6.9076	114.98	122.15	126.8	6.3035	-4.6273	-3.5626	-2.9986	0.92263
1e+13	124.99	132.6	143.23	9.4865	117.63	124.94	135.37	9.2755	-7.8602	-7.6669	-7.3639	0.26573

Device Test: 18.12 EA_SINK(ERROR_AMP|STATIC/COMP/14////@EA_SINK)





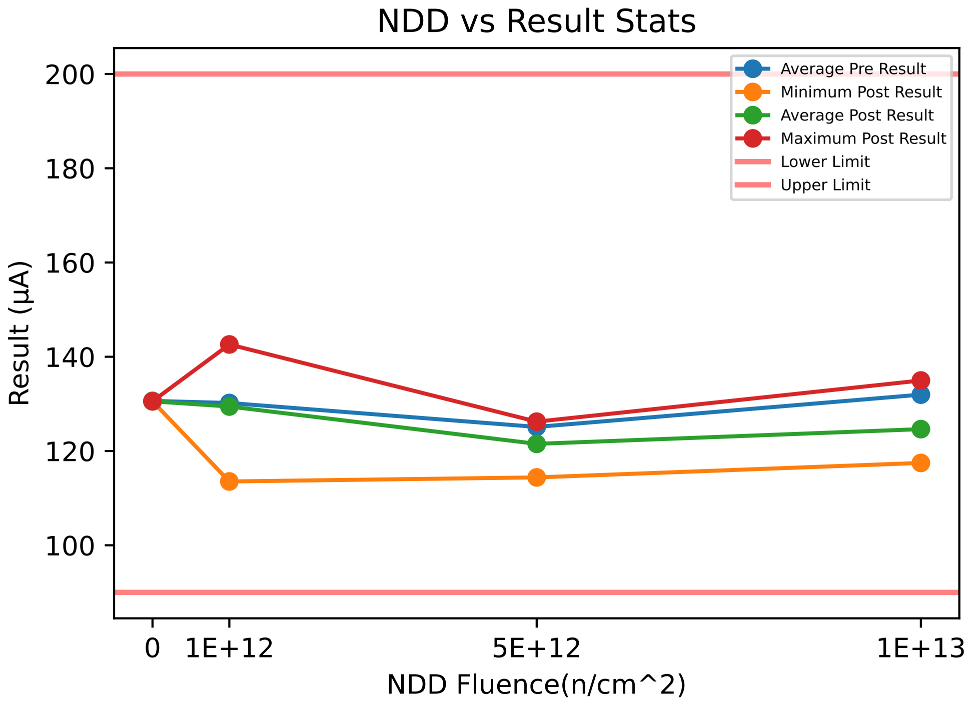
Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

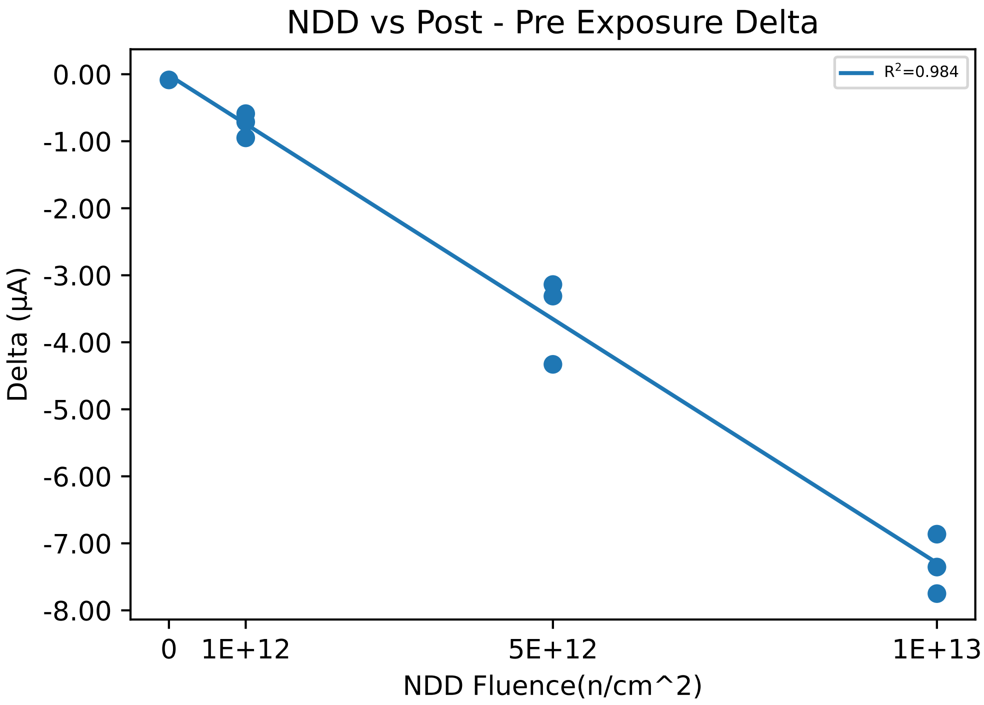
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	133.73	134.07	0.3321
504	1e+12	NDD	144.94	145.16	0.2212
505	1e+12	NDD	114.92	114.83	-0.0913
506	5e+12	NDD	131.78	129.74	-2.0368
507	5e+12	NDD	128.83	128.09	-0.737
508	5e+12	NDD	119.12	118.21	-0.9093
509	1e+13	NDD	128.5	124.8	-3.7015
510	1e+13	NDD	143.35	140.57	-2.7725
511	1e+13	NDD	123.84	120.8	-3.0389
512	0	Correlation	132.36	132.65	0.2875

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	132.36	132.36	132.36		132.65	132.65	132.65		0.2875	0.2875	0.2875	
1e+12	114.92	131.2	144.94	15.172	114.83	131.35	145.16	15.349	-0.0913	0.154	0.3321	0.21955
5e+12	119.12	126.58	131.78	6.6231	118.21	125.35	129.74	6.2357	-2.0368	-1.2277	-0.737	0.70598
1e+13	123.84	131.9	143.35	10.187	120.8	128.72	140.57	10.455	-3.7015	-3.171	-2.7725	0.47837

Device Test: 18.2 EA_SOURCE(ERROR_AMP|STATIC/COMP/4.5////@EA_SOURCE)





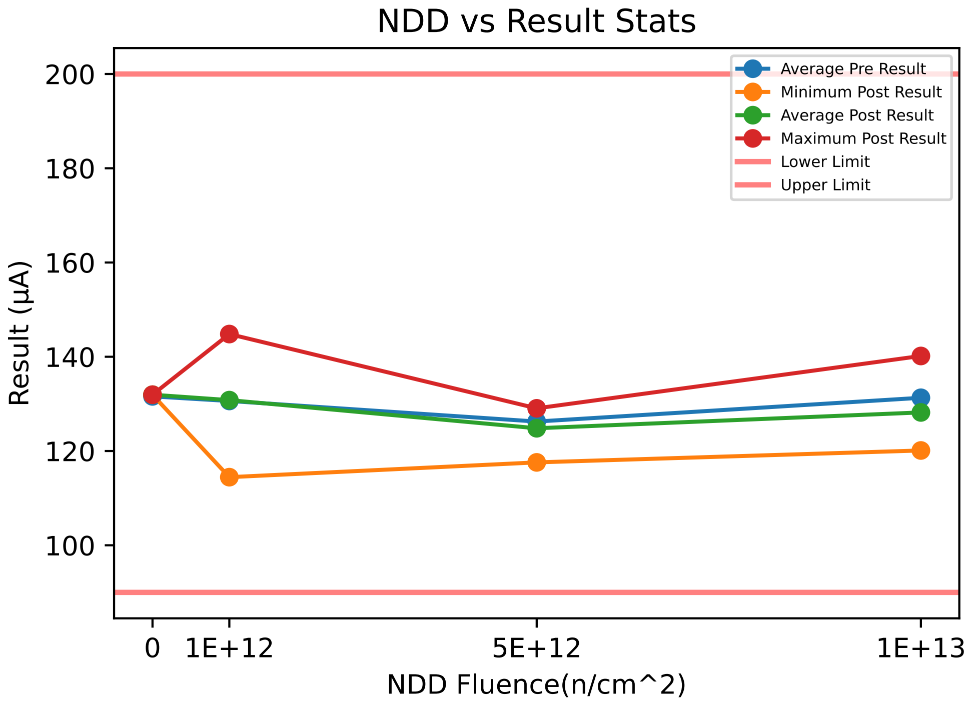
Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

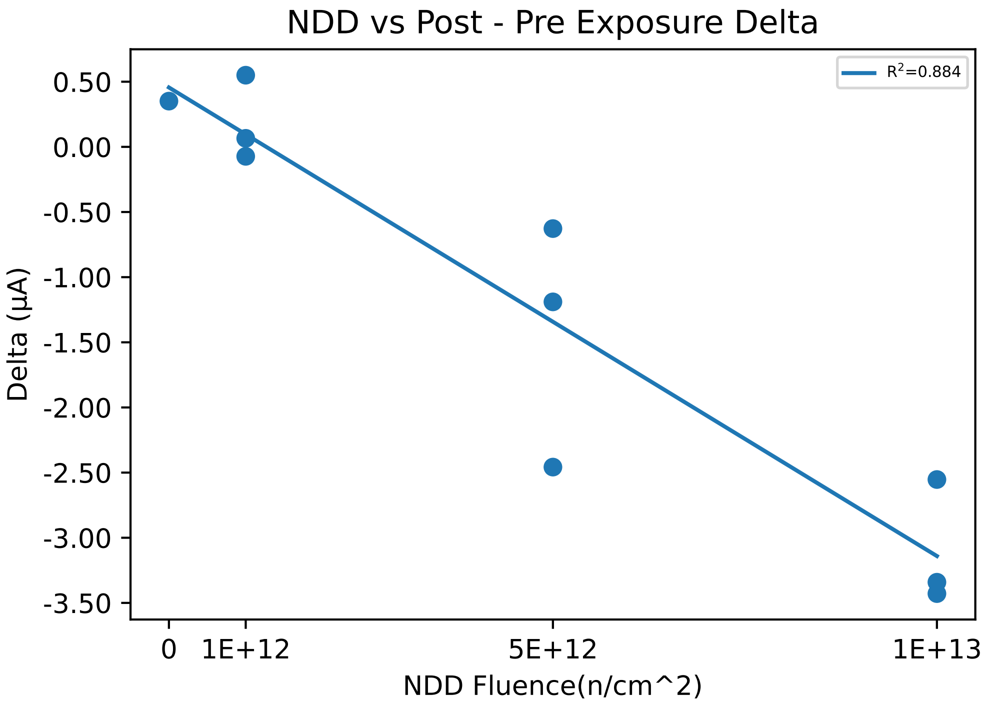
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	132.89	132.17	-0.7127
504	1e+12	NDD	143.2	142.61	-0.5881
505	1e+12	NDD	114.49	113.54	-0.9495
506	5e+12	NDD	130.56	126.23	-4.3294
507	5e+12	NDD	127.07	123.93	-3.1381
508	5e+12	NDD	117.71	114.4	-3.3109
509	1e+13	NDD	128.84	121.48	-7.3542
510	1e+13	NDD	142.72	134.97	-7.7502
511	1e+13	NDD	124.34	117.47	-6.8635
512	0	Correlation	130.64	130.55	-0.085

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	130.64	130.64	130.64		130.55	130.55	130.55		-0.085	-0.085	-0.085	
1e+12	114.49	130.19	143.2	14.544	113.54	129.44	142.61	14.727	-0.9495	-0.7501	-0.5881	0.18358
5e+12	117.71	125.11	130.56	6.6438	114.4	121.52	126.23	6.2728	-4.3294	-3.5928	-3.1381	0.64374
1e+13	124.34	131.96	142.72	9.5804	117.47	124.64	134.97	9.1641	-7.7502	-7.3226	-6.8635	0.44419

Device Test: 18.3 EA_SINK(ERROR_AMP|STATIC/COMP/4.5////@EA_SINK)





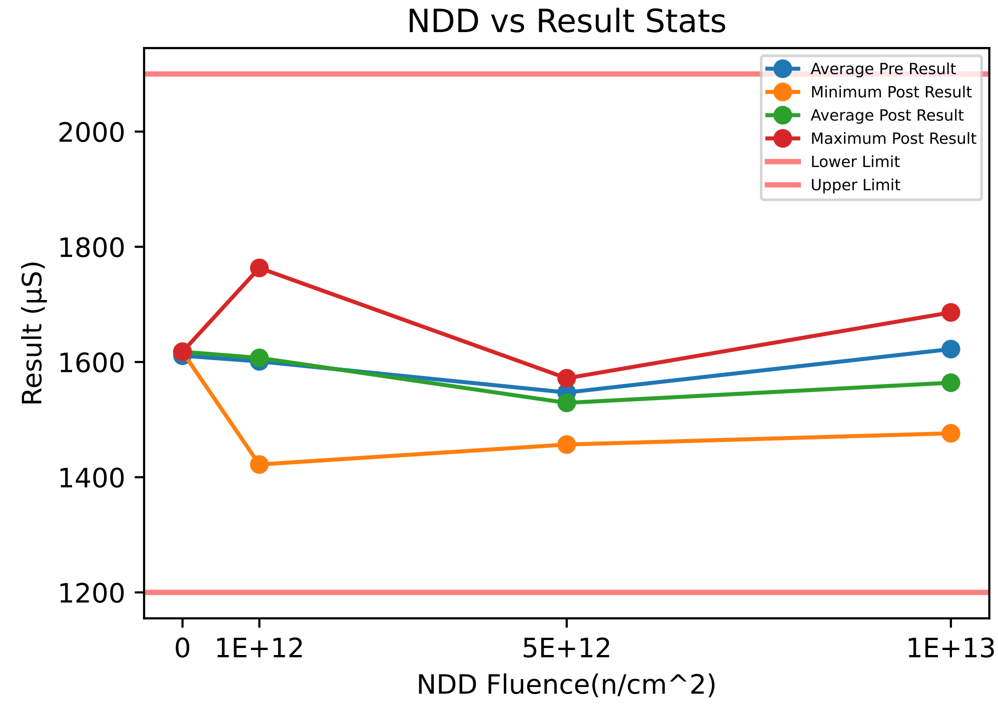
Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

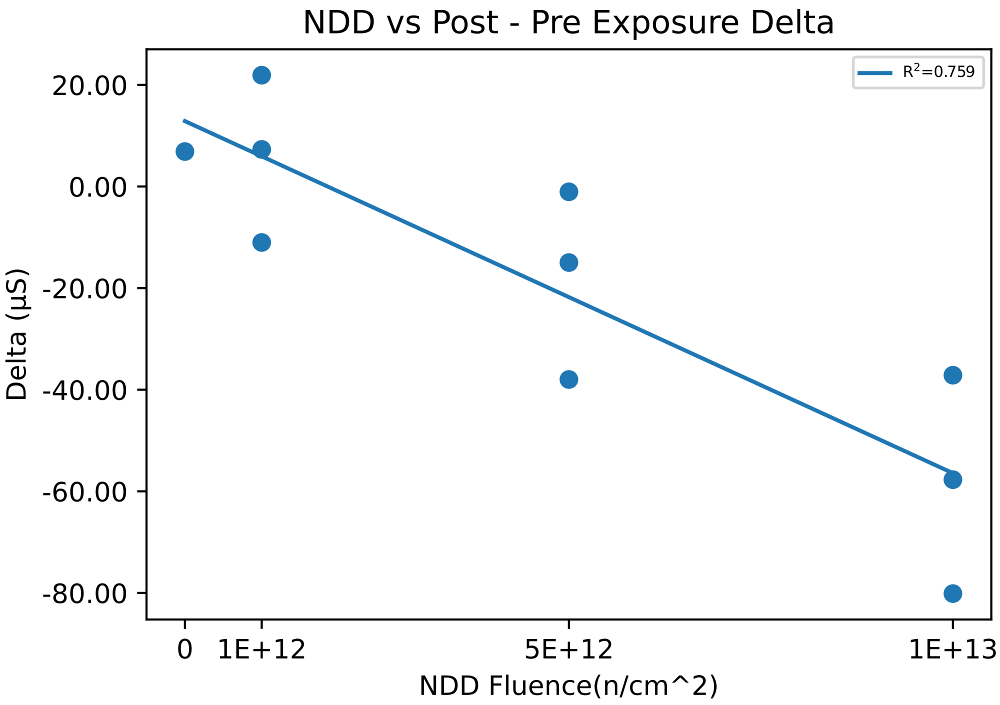
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	133.2	133.13	-0.0728
504	1e+12	NDD	144.27	144.82	0.55
505	1e+12	NDD	114.39	114.45	0.0655
506	5e+12	NDD	131.51	129.06	-2.4577
507	5e+12	NDD	128.47	127.84	-0.6272
508	5e+12	NDD	118.78	117.59	-1.1897
509	1e+13	NDD	127.62	124.28	-3.3413
510	1e+13	NDD	142.72	140.17	-2.5531
511	1e+13	NDD	123.54	120.12	-3.4286
512	0	Correlation	131.59	131.94	0.351

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	131.59	131.59	131.59		131.94	131.94	131.94		0.351	0.351	0.351	
1e+12	114.39	130.62	144.27	15.108	114.45	130.8	144.82	15.317	-0.0728	0.1809	0.55	0.32704
5e+12	118.78	126.25	131.51	6.6513	117.59	124.83	129.06	6.3002	-2.4577	-1.4249	-0.6272	0.93764
1e+13	123.54	131.3	142.72	10.102	120.12	128.19	140.17	10.582	-3.4286	-3.1077	-2.5531	0.48225

Device Test: 18.4 EA_GM(EA|STATIC/COMP/5////@EA_GM)





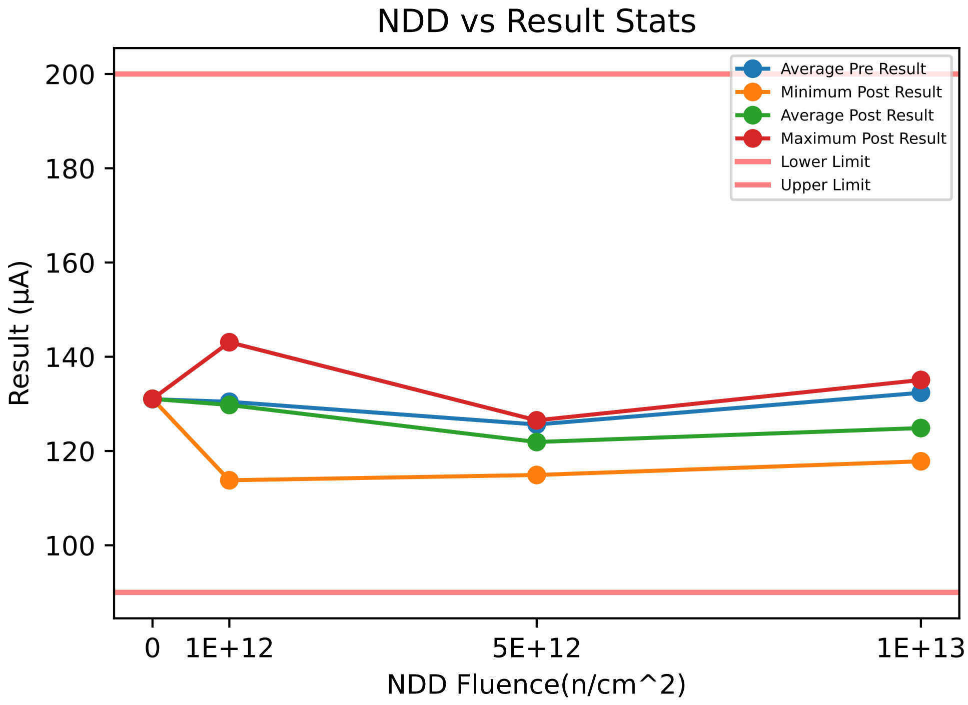
Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

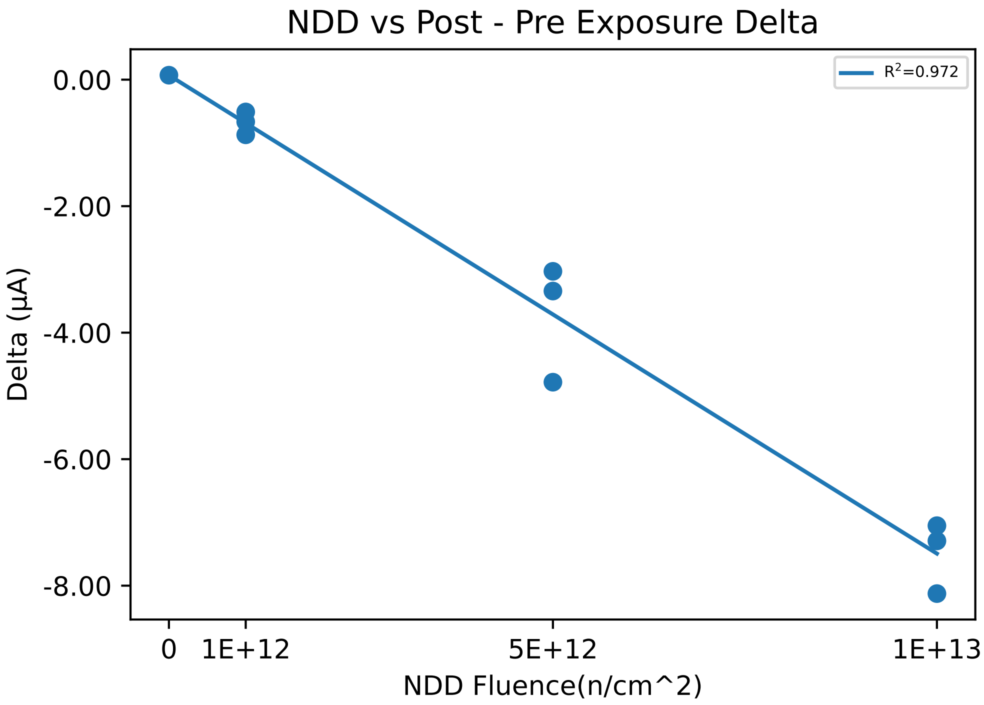
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1628.7	1636	7.2975
504	1e+12	NDD	1741.4	1763.3	21.908
505	1e+12	NDD	1433.1	1422.1	-11.017
506	5e+12	NDD	1609.8	1571.8	-37.989
507	5e+12	NDD	1573.6	1558.7	-14.971
508	5e+12	NDD	1457.7	1456.7	-1.0442
509	1e+13	NDD	1587.6	1529.9	-57.707
510	1e+13	NDD	1766.2	1686.1	-80.132
511	1e+13	NDD	1513.4	1476.2	-37.145
512	0	Correlation	1610.9	1617.8	6.8811

Test Statistics (µS)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1610.9	1610.9	1610.9		1617.8	1617.8	1617.8		6.8811	6.8811	6.8811	
1e+12	1433.1	1601.1	1741.4	156	1422.1	1607.1	1763.3	172.44	-11.017	6.0627	21.908	16.497
5e+12	1457.7	1547.1	1609.8	79.421	1456.7	1529	1571.8	62.996	-37.989	-18.001	-1.0442	18.658
1e+13	1513.4	1622.4	1766.2	129.96	1476.2	1564.1	1686.1	109.01	-80.132	-58.328	-37.145	21.5

Device Test: 18.5 EA_SOURCE(ERROR_AMP|STATIC/COMP/5////@EA_SOURCE)





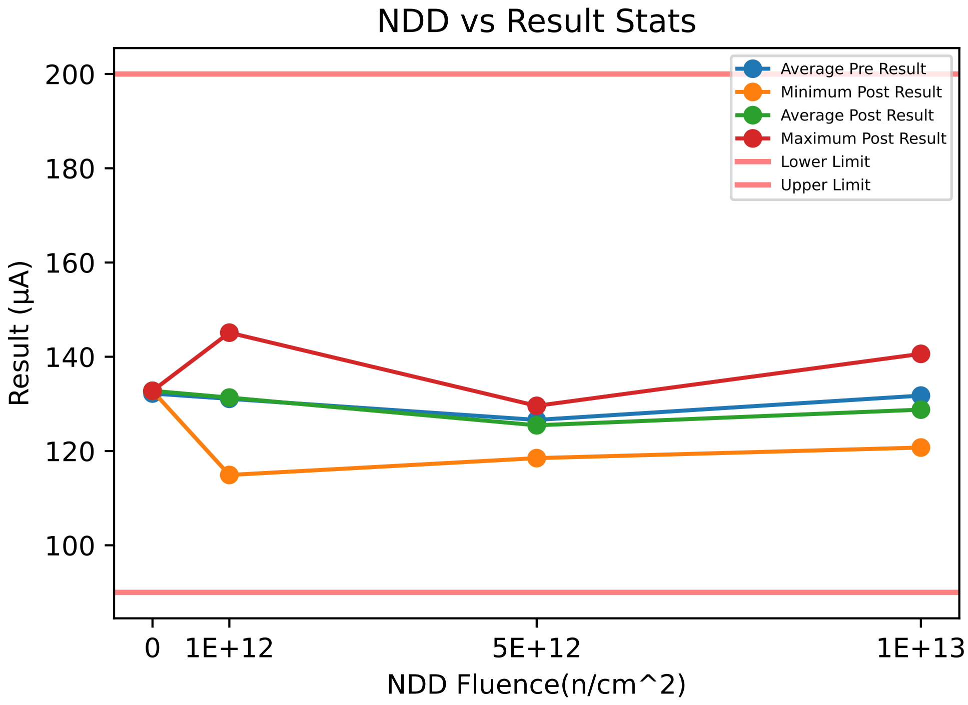
Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

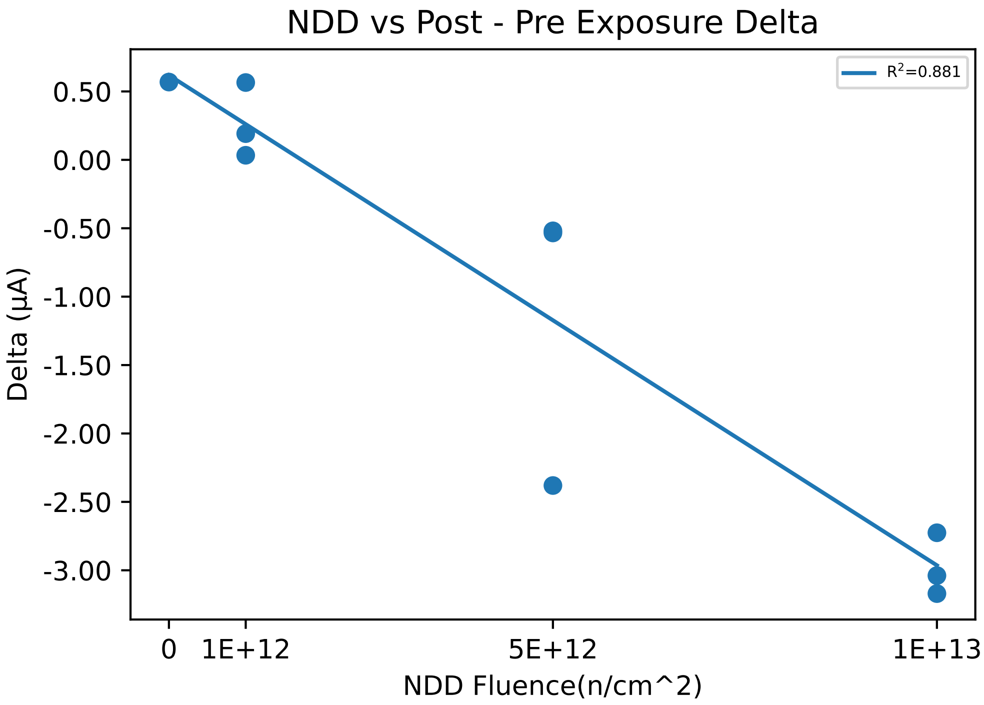
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	133.1	132.44	-0.6662
504	1e+12	NDD	143.59	143.08	-0.5108
505	1e+12	NDD	114.66	113.79	-0.8718
506	5e+12	NDD	131.29	126.51	-4.7831
507	5e+12	NDD	127.65	124.31	-3.3419
508	5e+12	NDD	117.94	114.91	-3.0304
509	1e+13	NDD	129.03	121.73	-7.2921
510	1e+13	NDD	143.2	135.08	-8.1254
511	1e+13	NDD	124.87	117.82	-7.0516
512	0	Correlation	130.99	131.07	0.0705

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	130.99	130.99	130.99		131.07	131.07	131.07		0.0705	0.0705	0.0705	
1e+12	114.66	130.45	143.59	14.646	113.79	129.77	143.08	14.827	-0.8718	-0.68293	-0.5108	0.18108
5e+12	117.94	125.63	131.29	6.8995	114.91	121.91	126.51	6.1581	-4.7831	-3.7185	-3.0304	0.93506
1e+13	124.87	132.36	143.2	9.6119	117.82	124.88	135.08	9.0484	-8.1254	-7.4897	-7.0516	0.56351

Device Test: 18.6 EA_SINK(ERROR_AMP|STATIC/COMP/5////@EA_SINK)





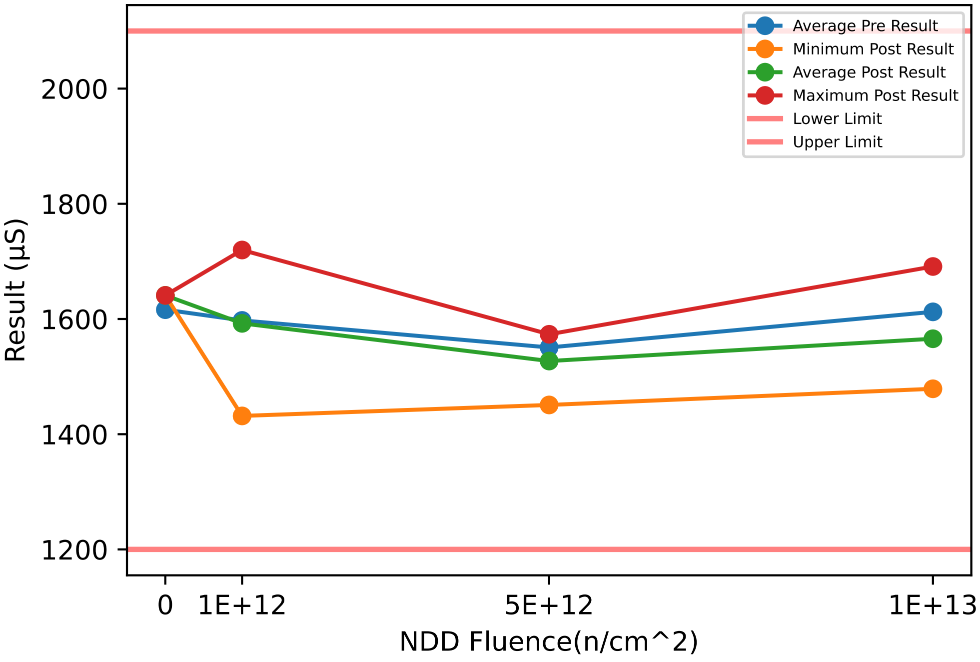
Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

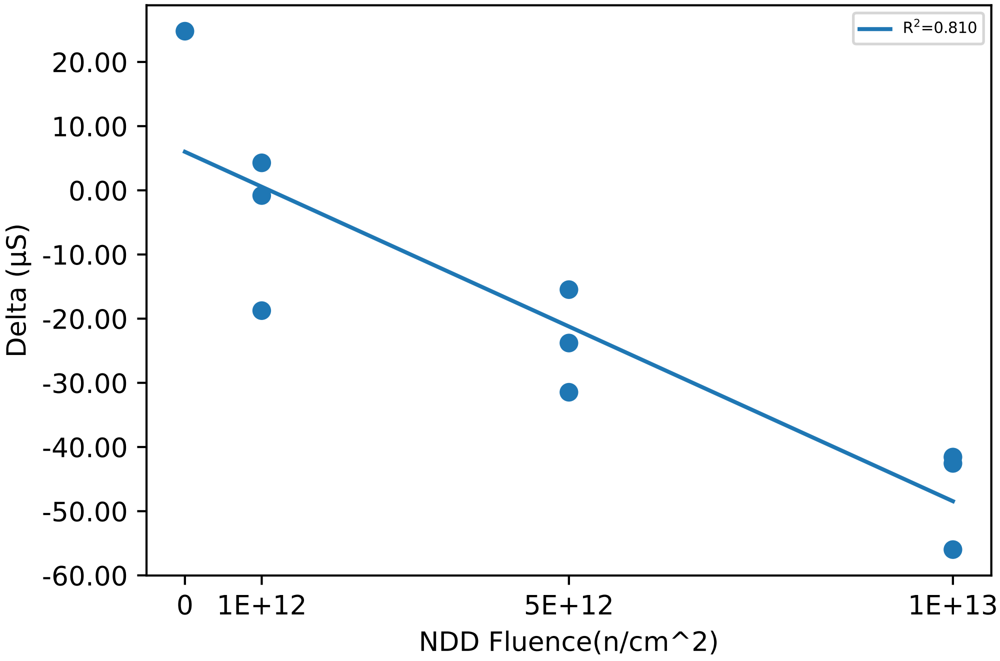
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	133.8	133.99	0.1916
504	1e+12	NDD	144.55	145.11	0.5651
505	1e+12	NDD	114.89	114.92	0.0335
506	5e+12	NDD	131.97	129.59	-2.3804
507	5e+12	NDD	128.83	128.29	-0.5342
508	5e+12	NDD	119.01	118.49	-0.519
509	1e+13	NDD	128.15	124.98	-3.1704
510	1e+13	NDD	143.35	140.62	-2.7257
511	1e+13	NDD	123.78	120.74	-3.0388
512	0	Correlation	132.2	132.77	0.5686

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	132.2	132.2	132.2		132.77	132.77	132.77		0.5686	0.5686	0.5686	
1e+12	114.89	131.08	144.55	15.018	114.92	131.34	145.11	15.271	0.0335	0.2634	0.5651	0.27298
5e+12	119.01	126.6	131.97	6.7587	118.49	125.46	129.59	6.0666	-2.3804	-1.1445	-0.519	1.0703
1e+13	123.78	131.76	143.35	10.27	120.74	128.78	140.62	10.47	-3.1704	-2.9783	-2.7257	0.22844

Device Test: 18.7 EA_GM(EA|STATIC/COMP/12////@EA_GM)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

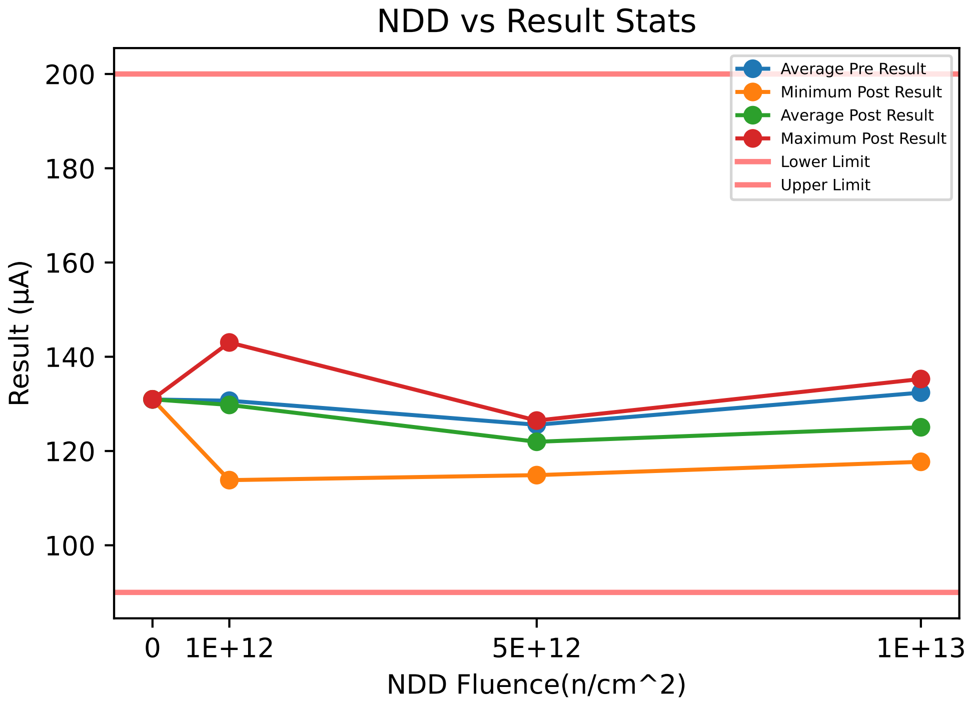
Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

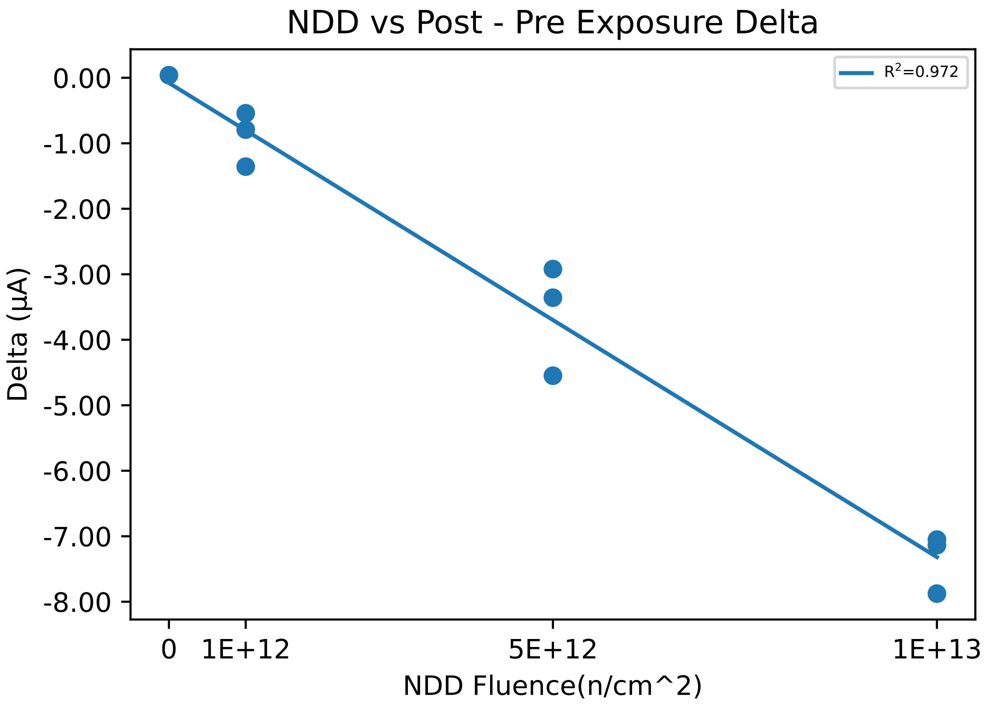
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1621.5	1625.8	4.2818
504	1e+12	NDD	1738.5	1719.8	-18.748
505	1e+12	NDD	1432.6	1431.7	-0.813
506	5e+12	NDD	1604.9	1573.5	-31.466
507	5e+12	NDD	1580.6	1556.8	-23.797
508	5e+12	NDD	1466.3	1450.8	-15.475
509	1e+13	NDD	1583.1	1527.2	-55.985
510	1e+13	NDD	1733.7	1691.1	-42.554
511	1e+13	NDD	1520.4	1478.8	-41.565
512	0	Correlation	1616.2	1641	24.794

Test Statistics (µS)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1616.2	1616.2	1616.2		1641	1641	1641		24.794	24.794	24.794	
1e+12	1432.6	1597.5	1738.5	154.4	1431.7	1592.4	1719.8	146.89	-18.748	-5.0931	4.2818	12.097
5e+12	1466.3	1550.6	1604.9	74.039	1450.8	1527	1573.5	66.538	-31.466	-23.579	-15.475	7.9976
1e+13	1520.4	1612.4	1733.7	109.62	1478.8	1565.7	1691.1	111.29	-55.985	-46.701	-41.565	8.0552

Device Test: 18.8 EA_SOURCE(ERROR_AMP|STATIC/COMP/12////@EA_SOURCE)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

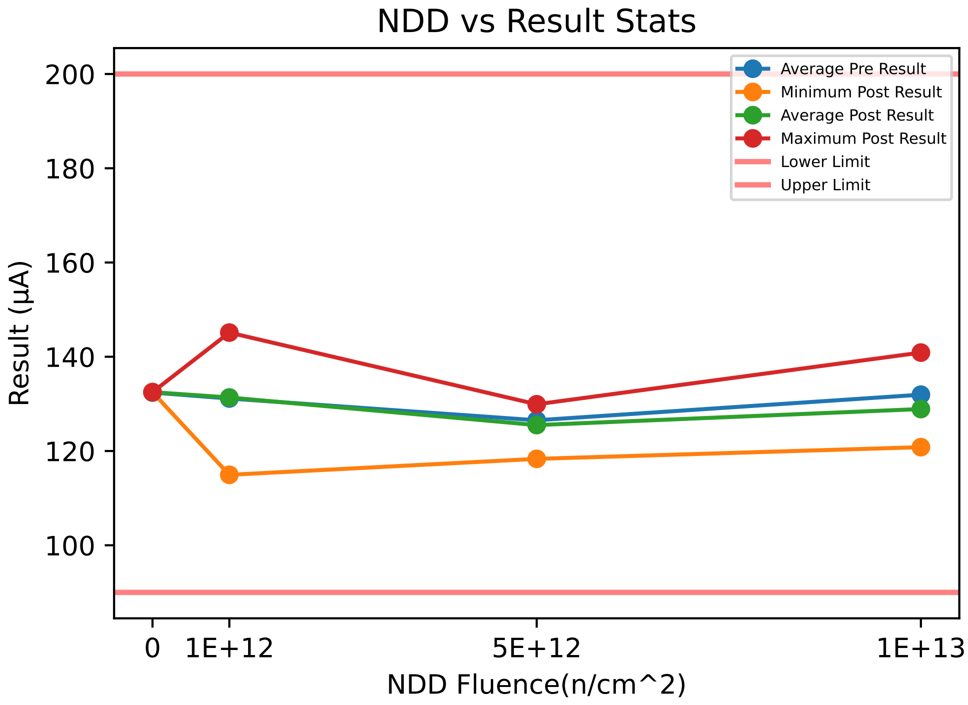
Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

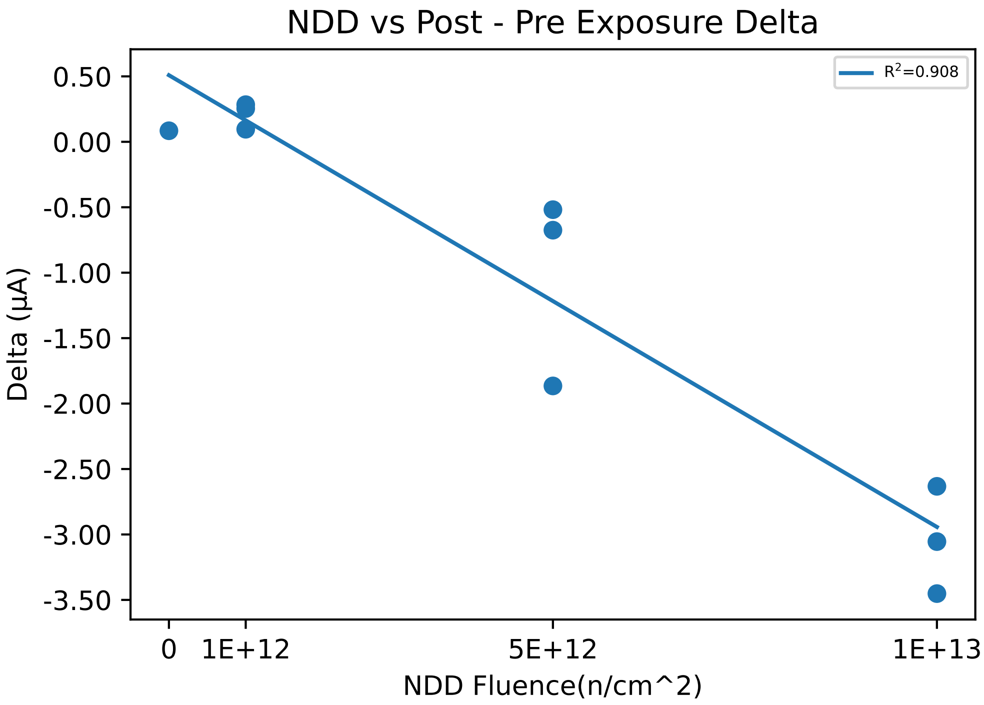
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	133.28	132.49	-0.7913
504	1e+12	NDD	143.58	143.03	-0.5419
505	1e+12	NDD	115.18	113.82	-1.3563
506	5e+12	NDD	131.01	126.46	-4.5487
507	5e+12	NDD	127.9	124.54	-3.3579
508	5e+12	NDD	117.8	114.88	-2.9209
509	1e+13	NDD	129.26	122.12	-7.1364
510	1e+13	NDD	143.15	135.28	-7.8757
511	1e+13	NDD	124.76	117.71	-7.0514
512	0	Correlation	130.93	130.97	0.0394

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	130.93	130.93	130.93		130.97	130.97	130.97		0.0394	0.0394	0.0394	
1e+12	115.18	130.68	143.58	14.377	113.82	129.78	143.03	14.793	-1.3563	-0.8965	-0.5419	0.41727
5e+12	117.8	125.57	131.01	6.9045	114.88	121.96	126.46	6.2057	-4.5487	-3.6092	-2.9209	0.84249
1e+13	124.76	132.39	143.15	9.5892	117.71	125.04	135.28	9.1407	-7.8757	-7.3545	-7.0514	0.45337

Device Test: 18.9 EA_SINK(ERROR_AMP|STATIC/COMP/12////@EA_SINK)





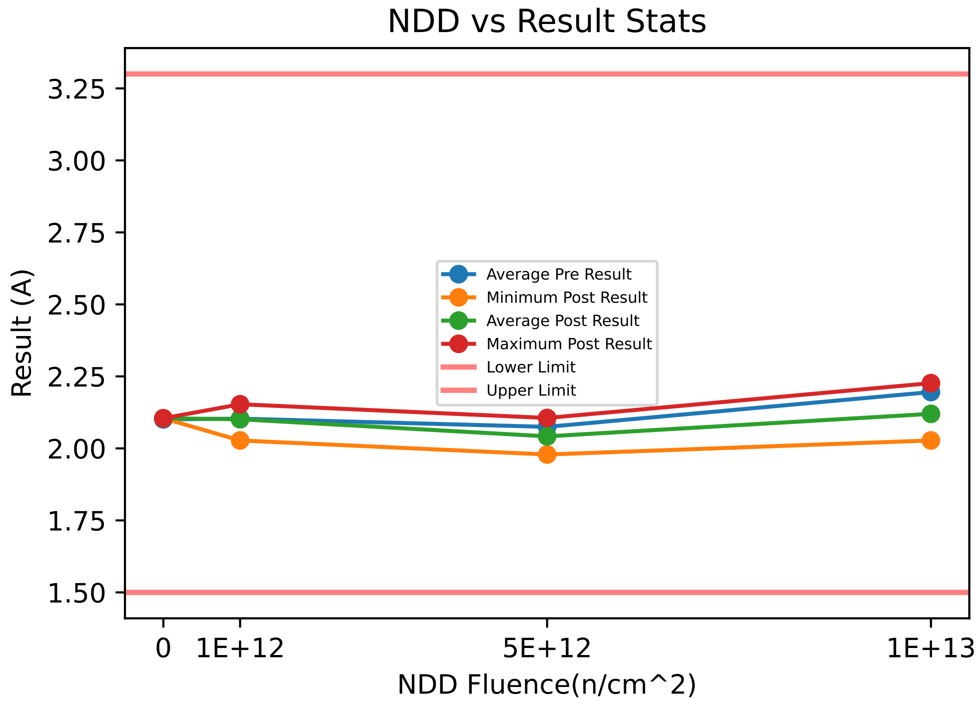
Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

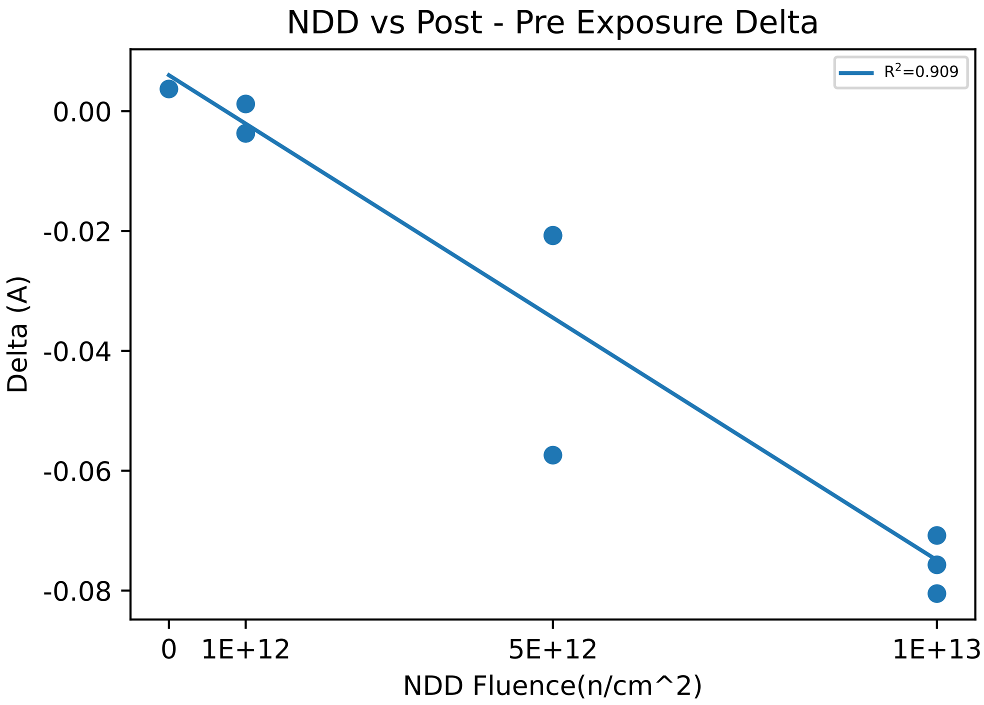
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	133.73	133.99	0.2541
504	1e+12	NDD	144.85	145.13	0.2838
505	1e+12	NDD	114.85	114.95	0.096
506	5e+12	NDD	131.78	129.92	-1.8651
507	5e+12	NDD	128.78	128.26	-0.5185
508	5e+12	NDD	119.01	118.34	-0.6751
509	1e+13	NDD	128.47	125.02	-3.4518
510	1e+13	NDD	143.52	140.89	-2.6323
511	1e+13	NDD	123.87	120.82	-3.0545
512	0	Correlation	132.41	132.49	0.0845

Test Statistics (µA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	132.41	132.41	132.41		132.49	132.49	132.49		0.0845	0.0845	0.0845	
1e+12	114.85	131.14	144.85	15.163	114.95	131.36	145.13	15.261	0.096	0.2113	0.2838	0.10095
5e+12	119.01	126.52	131.78	6.6768	118.34	125.5	129.92	6.2625	-1.8651	-1.0196	-0.5185	0.73643
1e+13	123.87	131.95	143.52	10.276	120.82	128.91	140.89	10.585	-3.4518	-3.0462	-2.6323	0.40981

Device Test: 19.11 LOWSIDE_CURR_LIM_SINKING_25C(LEVEL|SINK/SW/14////@LOWSIDE_CURR_LIM_SINKING_25C)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

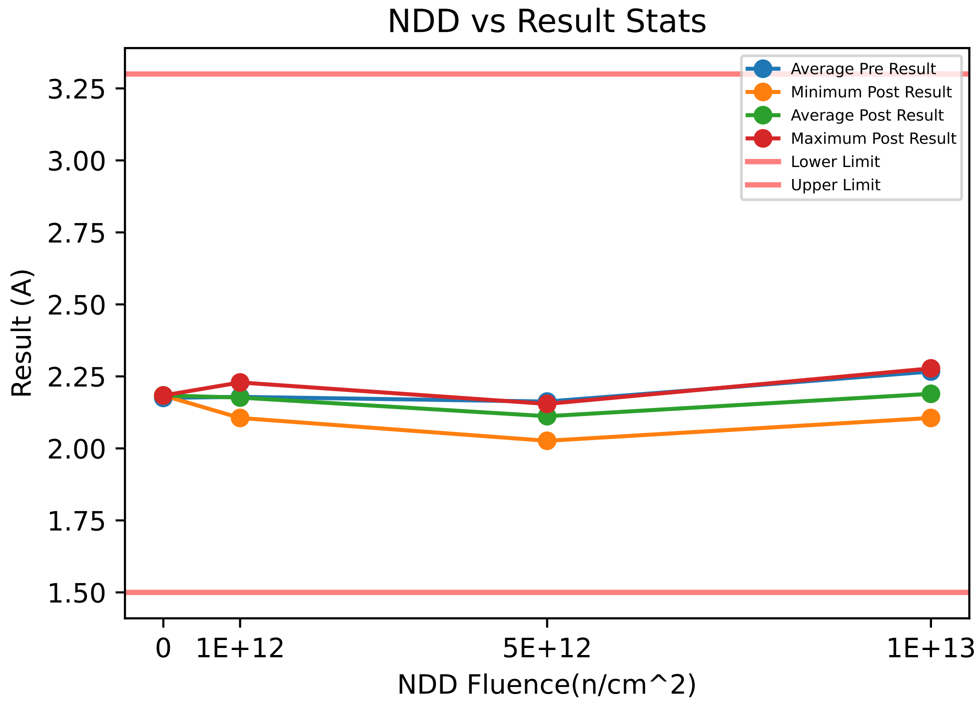
Test Results (Lower Limit = 1.5, Upper Limit = 3.3 (A))

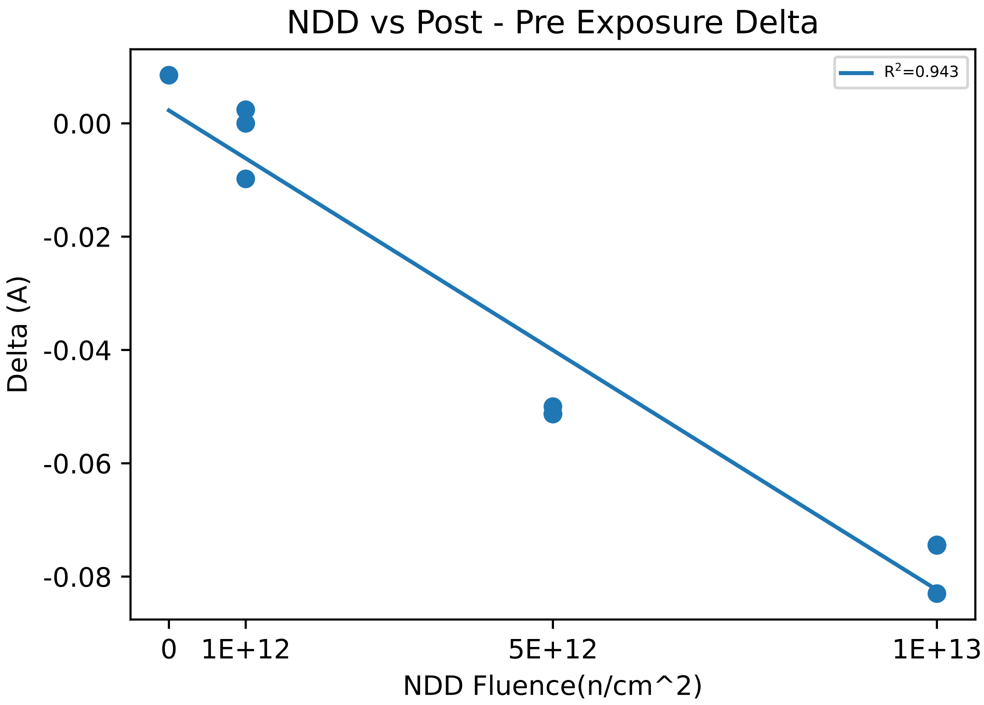
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.0264	2.0276	0.0012
504	1e+12	NDD	2.1265	2.1228	-0.0037
505	1e+12	NDD	2.157	2.1533	-0.0037
506	5e+12	NDD	2.0984	2.041	-0.0574
507	5e+12	NDD	1.9995	1.9788	-0.0207
508	5e+12	NDD	2.1265	2.1057	-0.0208
509	1e+13	NDD	2.0984	2.0276	-0.0708
510	1e+13	NDD	2.3071	2.2266	-0.0805
511	1e+13	NDD	2.1814	2.1057	-0.0757
512	0	Correlation	2.1008	2.1045	0.0037

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.1008	2.1008	2.1008		2.1045	2.1045	2.1045		0.0037	0.0037	0.0037	
1e+12	2.0264	2.1033	2.157	0.068321	2.0276	2.1012	2.1533	0.065566	-0.0037	-0.0020667	0.0012	0.002829
5e+12	1.9995	2.0748	2.1265	0.066708	1.9788	2.0418	2.1057	0.063454	-0.0574	-0.032967	-0.0207	0.02116
1e+13	2.0984	2.1956	2.3071	0.10508	2.0276	2.12	2.2266	0.10026	-0.0805	-0.075667	-0.0708	0.0048501

Device Test: 19.2 LOWSIDE_CURR_LIM_SINKING_25C(LEVEL|SINK/SW/4.5////@LOWSIDE_CURR_LIM_SINKING_25C)





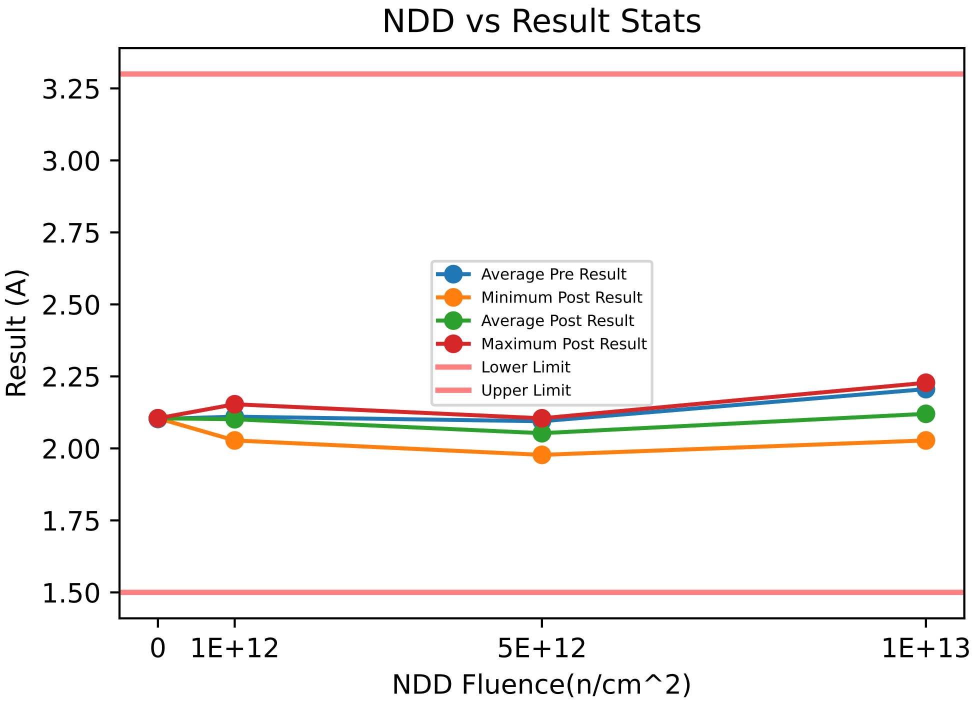
Test Results (Lower Limit = 1.5, Upper Limit = 3.3 (A))

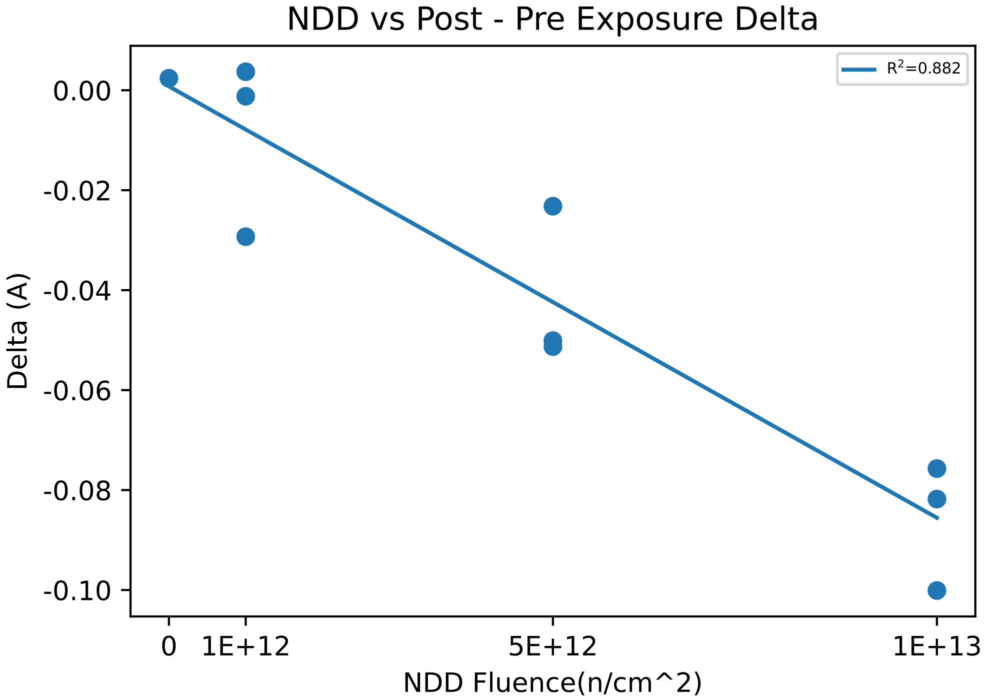
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.1033	2.1057	0.0024
504	1e+12	NDD	2.2046	2.1948	-0.0098
505	1e+12	NDD	2.229	2.229	0
506	5e+12	NDD	2.2058	2.1545	-0.0513
507	5e+12	NDD	2.0764	2.0264	-0.05
508	5e+12	NDD	2.2058	2.1545	-0.0513
509	1e+13	NDD	2.1802	2.1057	-0.0745
510	1e+13	NDD	2.3608	2.2778	-0.083
511	1e+13	NDD	2.2595	2.1851	-0.0744
512	0	Correlation	2.1753	2.1838	0.0085

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.1753	2.1753	2.1753		2.1838	2.1838	2.1838		0.0085	0.0085	0.0085	
1e+12	2.1033	2.179	2.229	0.066655	2.1057	2.1765	2.229	0.063654	-0.0098	-0.0024667	0.0024	0.0064632
5e+12	2.0764	2.1627	2.2058	0.074709	2.0264	2.1118	2.1545	0.073959	-0.0513	-0.050867	-0.05	0.00075056
1e+13	2.1802	2.2668	2.3608	0.090523	2.1057	2.1895	2.2778	0.086136	-0.083	-0.0773	-0.0744	0.0049366

Device Test: 19.5 LOWSIDE_CURR_LIM_SINKING_25C(LEVEL|SINK/SW/5////@LOWSIDE_CURR_LIM_SINKING_25C)





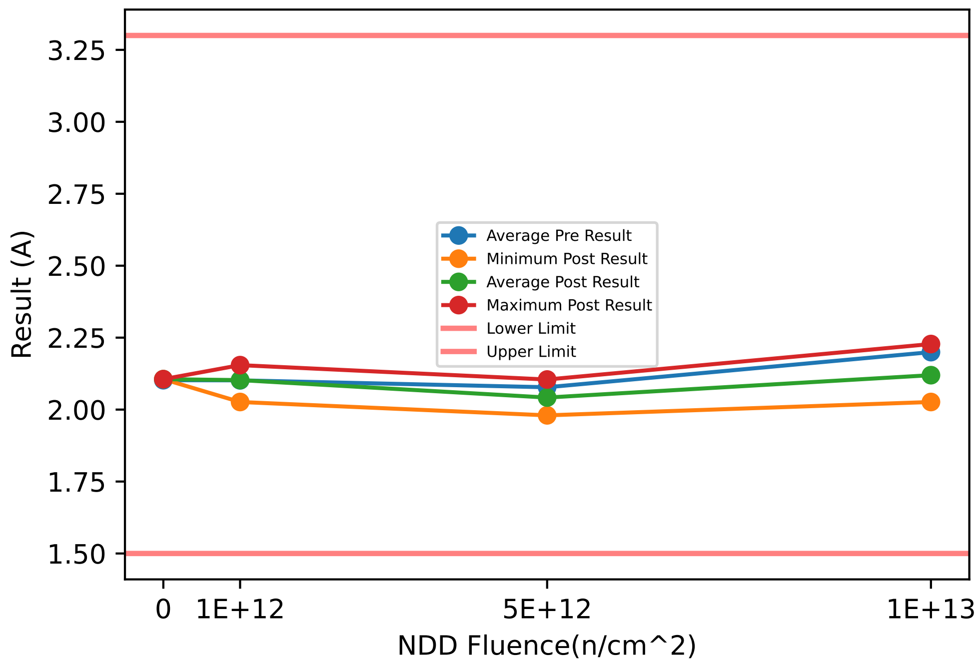
Test Results (Lower Limit = 1.5, Upper Limit = 3.3 (A))

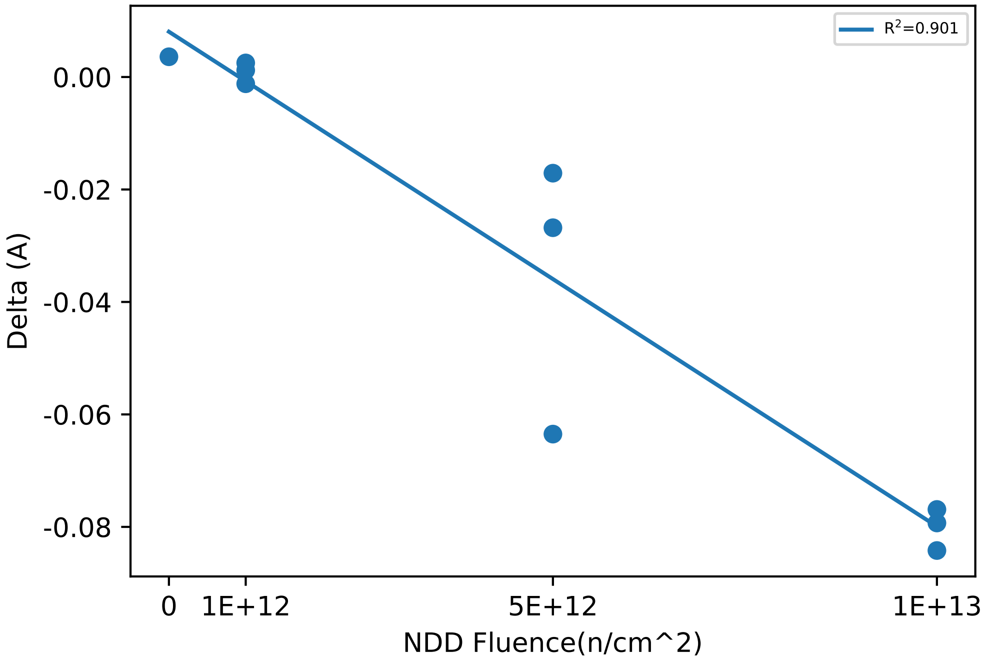
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.0239	2.0276	0.0037
504	1e+12	NDD	2.1521	2.1228	-0.0293
505	1e+12	NDD	2.1545	2.1533	-0.0012
506	5e+12	NDD	2.1265	2.0764	-0.0501
507	5e+12	NDD	2.0288	1.9775	-0.0513
508	5e+12	NDD	2.1277	2.1045	-0.0232
509	1e+13	NDD	2.1277	2.0276	-0.1001
510	1e+13	NDD	2.3096	2.2278	-0.0818
511	1e+13	NDD	2.1802	2.1045	-0.0757
512	0	Correlation	2.1021	2.1045	0.0024

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.1021	2.1021	2.1021		2.1045	2.1045	2.1045		0.0024	0.0024	0.0024	
1e+12	2.0239	2.1102	2.1545	0.074719	2.0276	2.1012	2.1533	0.065566	-0.0293	-0.0089333	0.0037	0.017807
5e+12	2.0288	2.0943	2.1277	0.056757	1.9775	2.0528	2.1045	0.066708	-0.0513	-0.041533	-0.0232	0.015888
1e+13	2.1277	2.2058	2.3096	0.09362	2.0276	2.12	2.2278	0.10099	-0.1001	-0.085867	-0.0757	0.012698

Device Test: 19.8 LOWSIDE_CURR_LIM_SINKING_25C(LEVEL|SINK/SW/12////@LOWSIDE_CURR_LIM_SINKING_25C)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

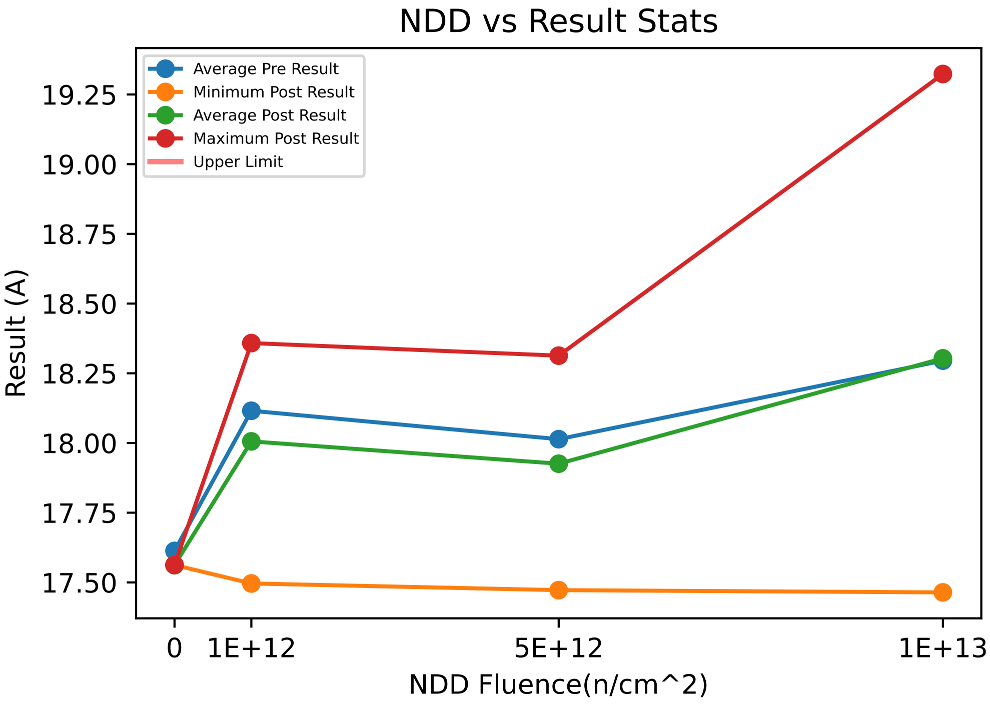
Test Results (Lower Limit = 1.5, Upper Limit = 3.3 (A))

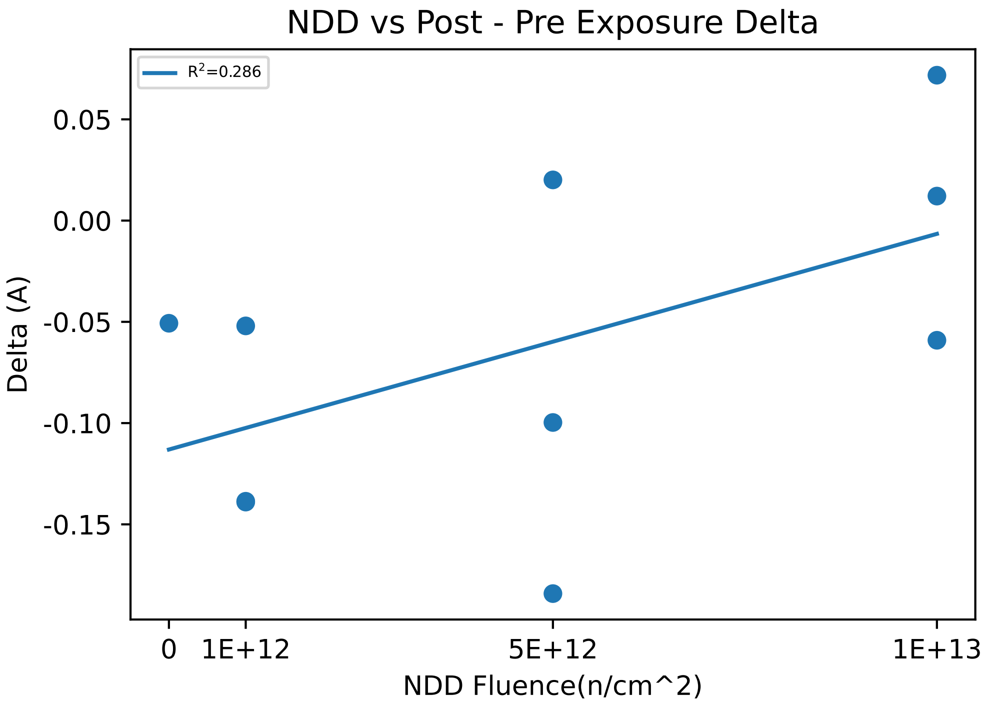
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.0239	2.0264	0.0025
504	1e+12	NDD	2.1277	2.1265	-0.0012
505	1e+12	NDD	2.1533	2.1545	0.0012
506	5e+12	NDD	2.1045	2.041	-0.0635
507	5e+12	NDD	1.9971	1.98	-0.0171
508	5e+12	NDD	2.1313	2.1045	-0.0268
509	1e+13	NDD	2.1057	2.0264	-0.0793
510	1e+13	NDD	2.312	2.2278	-0.0842
511	1e+13	NDD	2.1814	2.1045	-0.0769
512	0	Correlation	2.1021	2.1057	0.0036

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.1021	2.1021	2.1021		2.1057	2.1057	2.1057		0.0036	0.0036	0.0036	
1e+12	2.0239	2.1016	2.1533	0.068525	2.0264	2.1025	2.1545	0.067347	-0.0012	0.00083333	0.0025	0.0018771
5e+12	1.9971	2.0776	2.1313	0.07102	1.98	2.0418	2.1045	0.062254	-0.0635	-0.0358	-0.0171	0.024474
1e+13	2.1057	2.1997	2.312	0.10436	2.0264	2.1196	2.2278	0.10154	-0.0842	-0.080133	-0.0769	0.0037207

Device Test: 20.10 HIGHSIDE_CURR_LIM2_13A(THRESHOLD|RISE/SW/4.5////@HIGHSIDE_CURR_LIM2_13A)





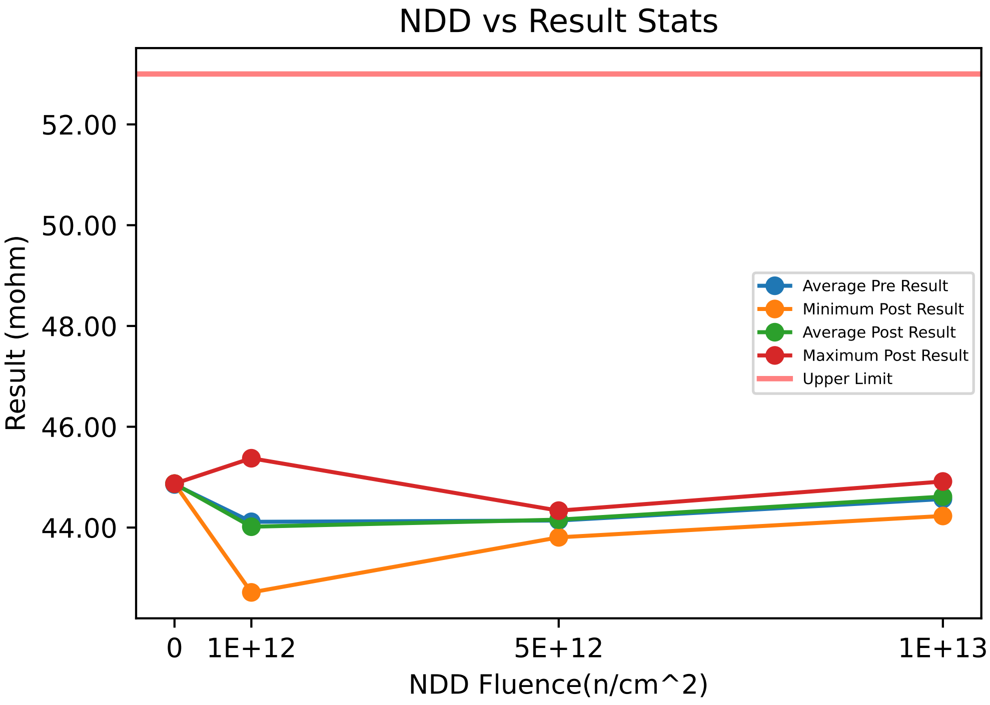
Test Results (No Limits Specified (A))

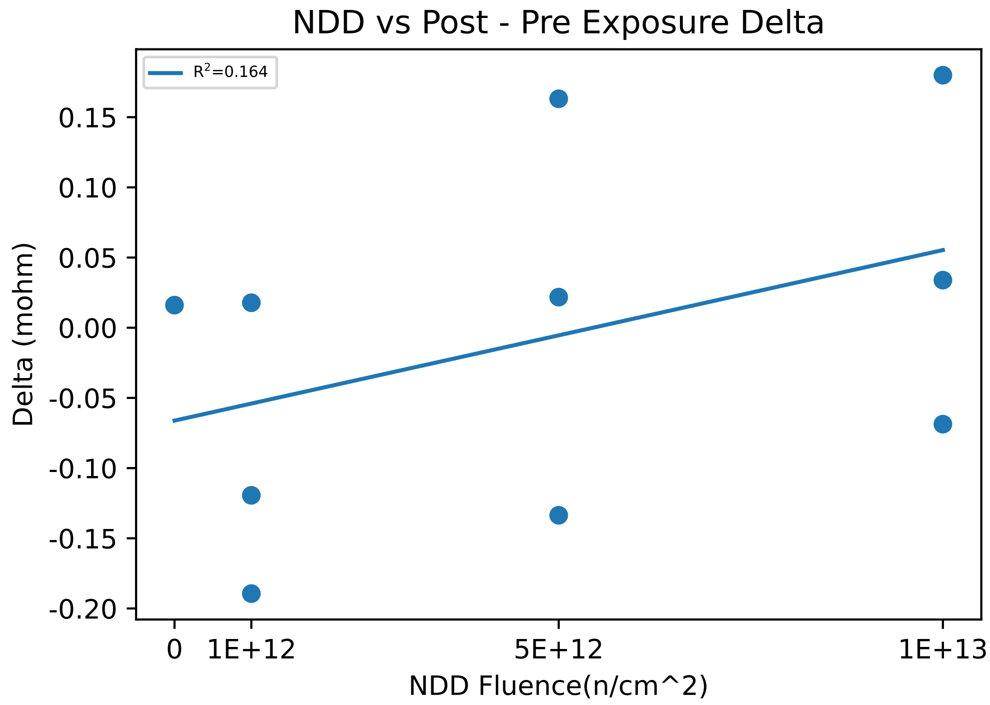
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	17.635	17.496	-0.1386
504	1e+12	NDD	18.41	18.358	-0.052
505	1e+12	NDD	18.302	18.163	-0.139
506	5e+12	NDD	17.657	17.472	-0.1842
507	5e+12	NDD	18.293	18.313	0.0201
508	5e+12	NDD	18.091	17.992	-0.0997
509	1e+13	NDD	17.452	17.464	0.0121
510	1e+13	NDD	18.183	18.123	-0.0591
511	1e+13	NDD	19.252	19.323	0.0718
512	0	Correlation	17.613	17.562	-0.0507

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	17.613	17.613	17.613		17.562	17.562	17.562		-0.0507	-0.0507	-0.0507	
1e+12	17.635	18.116	18.41	0.41996	17.496	18.006	18.358	0.45201	-0.139	-0.10987	-0.052	0.050114
5e+12	17.657	18.014	18.293	0.32538	17.472	17.926	18.313	0.42436	-0.1842	-0.087933	0.0201	0.10266
1e+13	17.452	18.295	19.252	0.90505	17.464	18.304	19.323	0.94262	-0.0591	0.0082667	0.0718	0.065534

Device Test: 20.104 R_HIGHSIDE_14V_25C(LEVEL|HIGHSIDE/SW/14/2///@R_HIGHSIDE_14V_25C)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

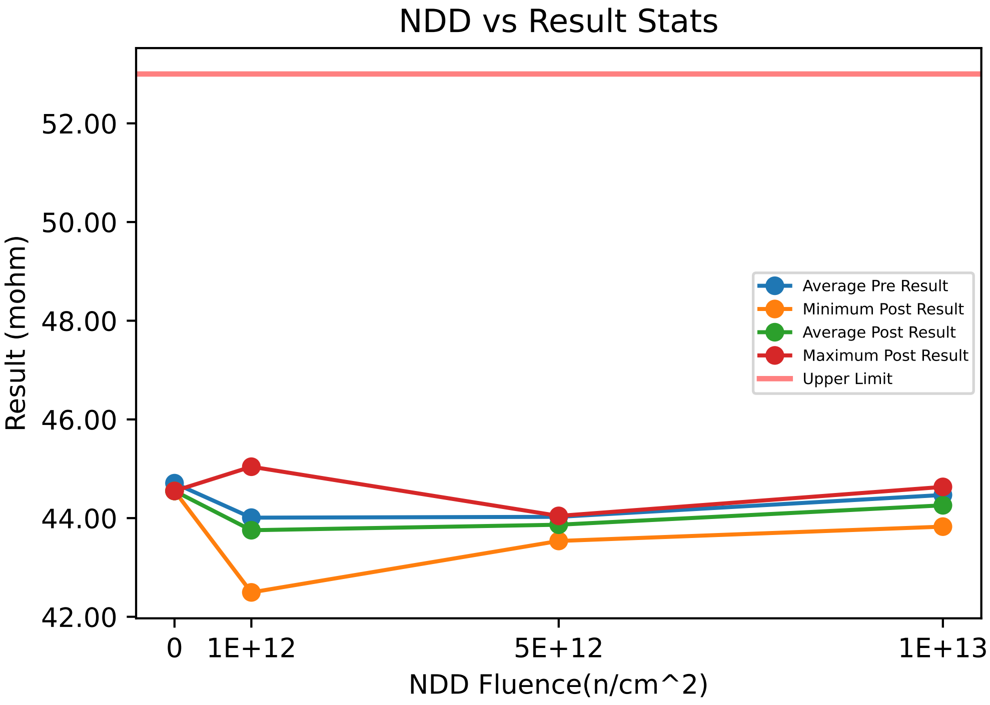
Test Results (Upper Limit = 53.0 (mohm))

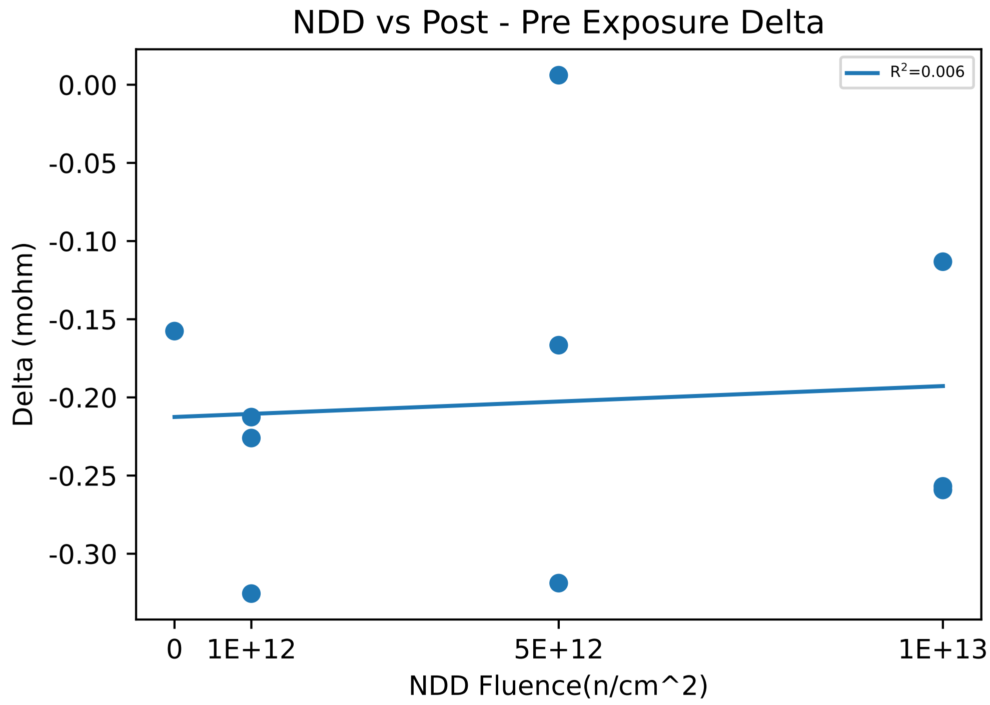
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	44.081	43.962	-0.1194
504	1e+12	NDD	42.903	42.713	-0.1894
505	1e+12	NDD	45.358	45.375	0.0178
506	5e+12	NDD	44.166	44.329	0.1631
507	5e+12	NDD	43.939	43.806	-0.1336
508	5e+12	NDD	44.314	44.335	0.0218
509	1e+13	NDD	44.519	44.699	0.1799
510	1e+13	NDD	44.983	44.914	-0.0687
511	1e+13	NDD	44.196	44.23	0.0339
512	0	Correlation	44.855	44.871	0.0161

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	44.855	44.855	44.855		44.871	44.871	44.871		0.0161	0.0161	0.0161	
1e+12	42.903	44.114	45.358	1.2278	42.713	44.017	45.375	1.3319	-0.1894	-0.097	0.0178	0.1054
5e+12	43.939	44.14	44.314	0.18848	43.806	44.157	44.335	0.30393	-0.1336	0.0171	0.1631	0.14841
1e+13	44.196	44.566	44.983	0.39554	44.23	44.614	44.914	0.34991	-0.0687	0.048367	0.1799	0.12493

Device Test: 20.105 R_HIGHSIDE_14V_25C(LEVEL|HIGHSIDE/SW/14/12///@R_HIGHSIDE_14V_25C)





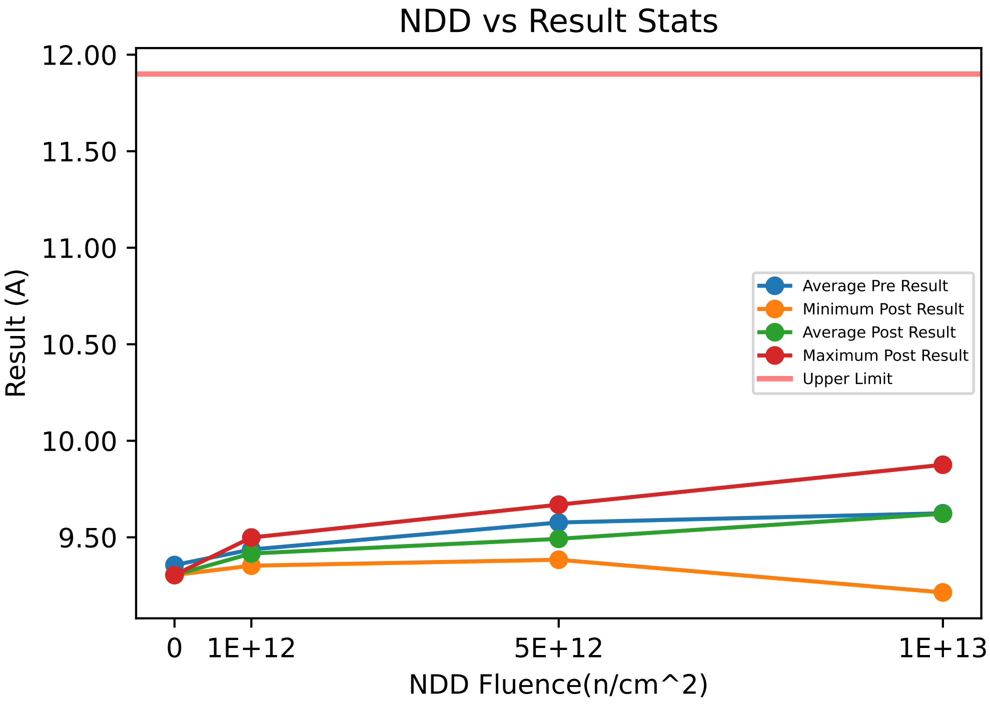
Test Results (Upper Limit = 53.0 (mohm))

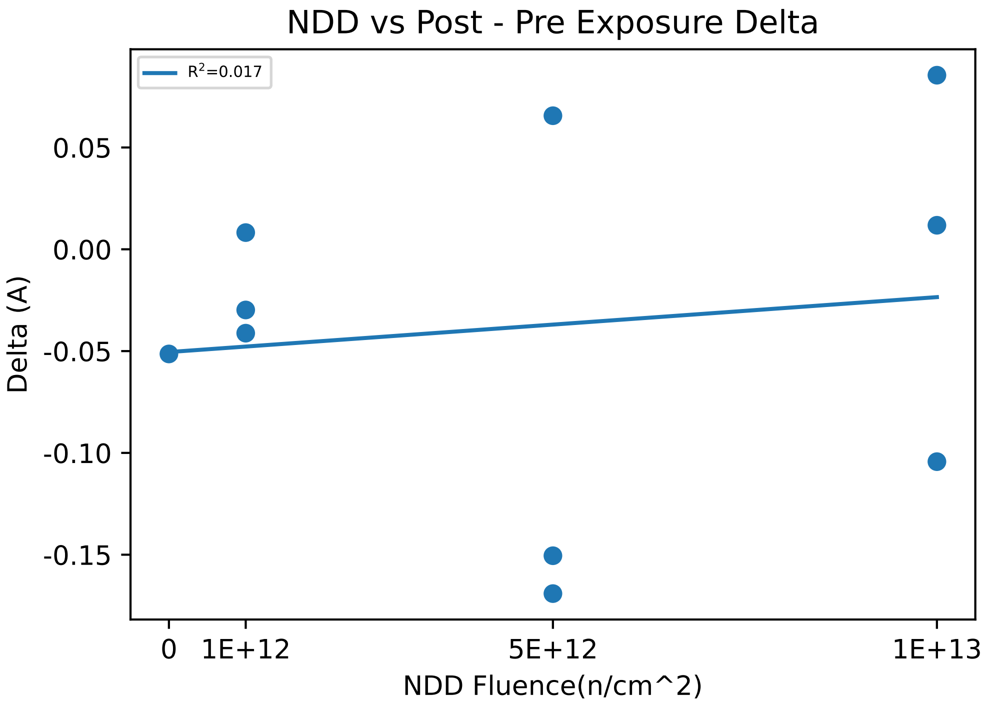
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	43.953	43.727	-0.226
504	1e+12	NDD	42.82	42.494	-0.3255
505	1e+12	NDD	45.254	45.041	-0.2126
506	5e+12	NDD	44.039	44.045	0.0061
507	5e+12	NDD	43.855	43.537	-0.3188
508	5e+12	NDD	44.183	44.016	-0.1666
509	1e+13	NDD	44.431	44.318	-0.1132
510	1e+13	NDD	44.889	44.632	-0.2569
511	1e+13	NDD	44.086	43.827	-0.2592
512	0	Correlation	44.708	44.55	-0.1576

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	44.708	44.708	44.708		44.55	44.55	44.55		-0.1576	-0.1576	-0.1576	
1e+12	42.82	44.009	45.254	1.2181	42.494	43.754	45.041	1.2738	-0.3255	-0.2547	-0.2126	0.06168
5e+12	43.855	44.026	44.183	0.16409	43.537	43.866	44.045	0.28548	-0.3188	-0.15977	0.0061	0.16256
1e+13	44.086	44.469	44.889	0.40284	43.827	44.259	44.632	0.40585	-0.2592	-0.20977	-0.1132	0.083637

Device Test: 20.107 HIGHSIDE_CURR_LIM_9A(THRESHOLD|RISE/SW/14////@HIGHSIDE_CURR_LIM_9A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

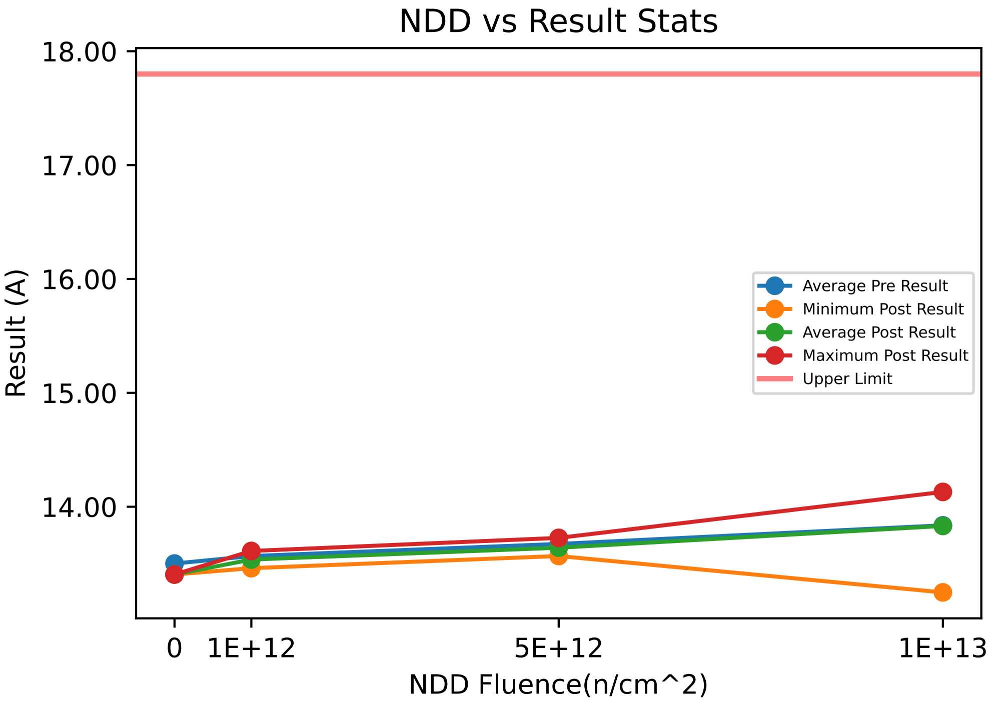
Test Results (Upper Limit = 11.9 (A))

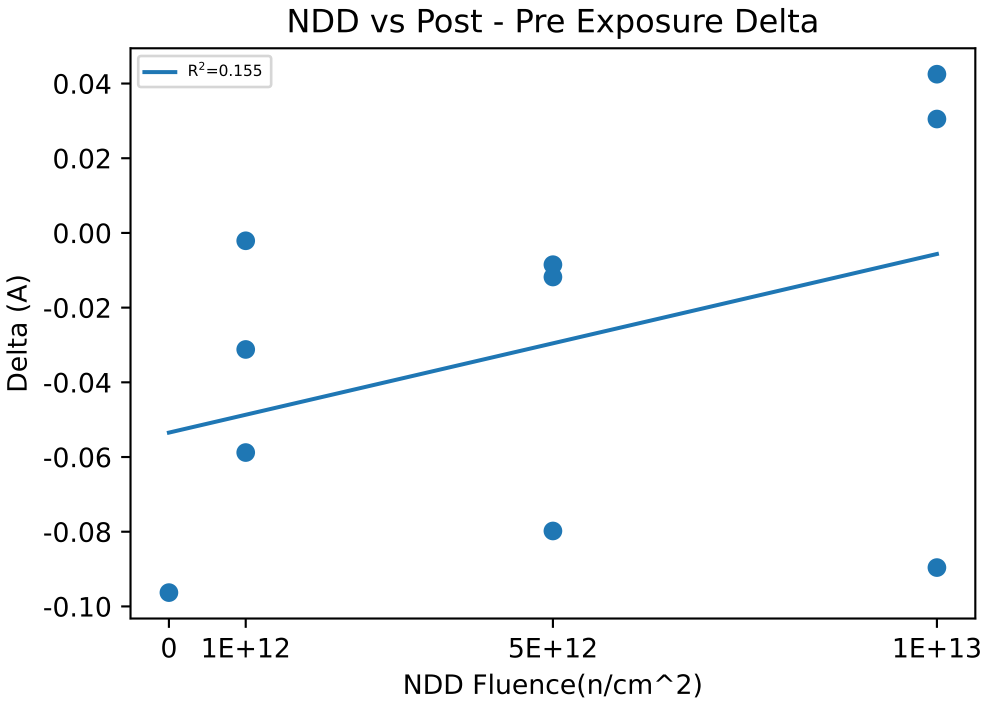
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.3881	9.3963	0.0082
504	1e+12	NDD	9.5401	9.4989	-0.0412
505	1e+12	NDD	9.3829	9.3531	-0.0298
506	5e+12	NDD	9.553	9.3839	-0.1691
507	5e+12	NDD	9.6036	9.6692	0.0656
508	5e+12	NDD	9.5736	9.4231	-0.1505
509	1e+13	NDD	9.3189	9.2146	-0.1043
510	1e+13	NDD	9.7642	9.776	0.0118
511	1e+13	NDD	9.7904	9.8759	0.0855
512	0	Correlation	9.3564	9.305	-0.0514

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.3564	9.3564	9.3564		9.305	9.305	9.305		-0.0514	-0.0514	-0.0514	
1e+12	9.3829	9.437	9.5401	0.089296	9.3531	9.4161	9.4989	0.07489	-0.0412	-0.020933	0.0082	0.025866
5e+12	9.553	9.5767	9.6036	0.025445	9.3839	9.4921	9.6692	0.15465	-0.1691	-0.084667	0.0656	0.13047
1e+13	9.3189	9.6245	9.7904	0.26498	9.2146	9.6222	9.8759	0.35648	-0.1043	-0.0023333	0.0855	0.095686

Device Test: 20.108 HIGHSIDE_CURR_LIM_13A(THRESHOLD|RISE/SW/14////@HIGHSIDE_CURR_LIM_13A)





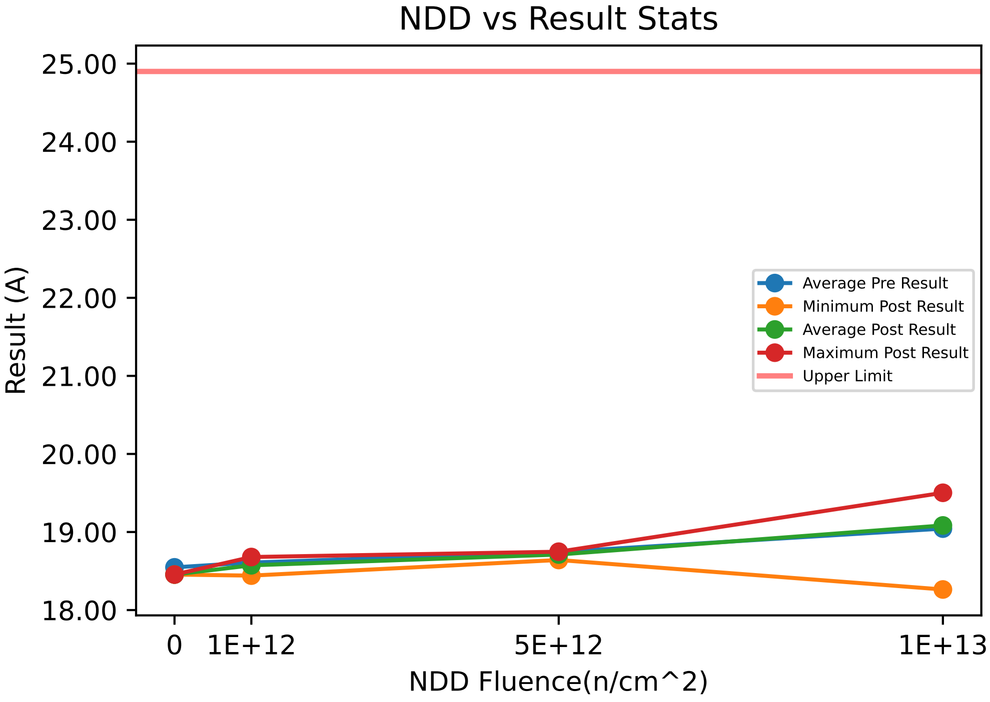
Test Results (Upper Limit = 17.8 (A))

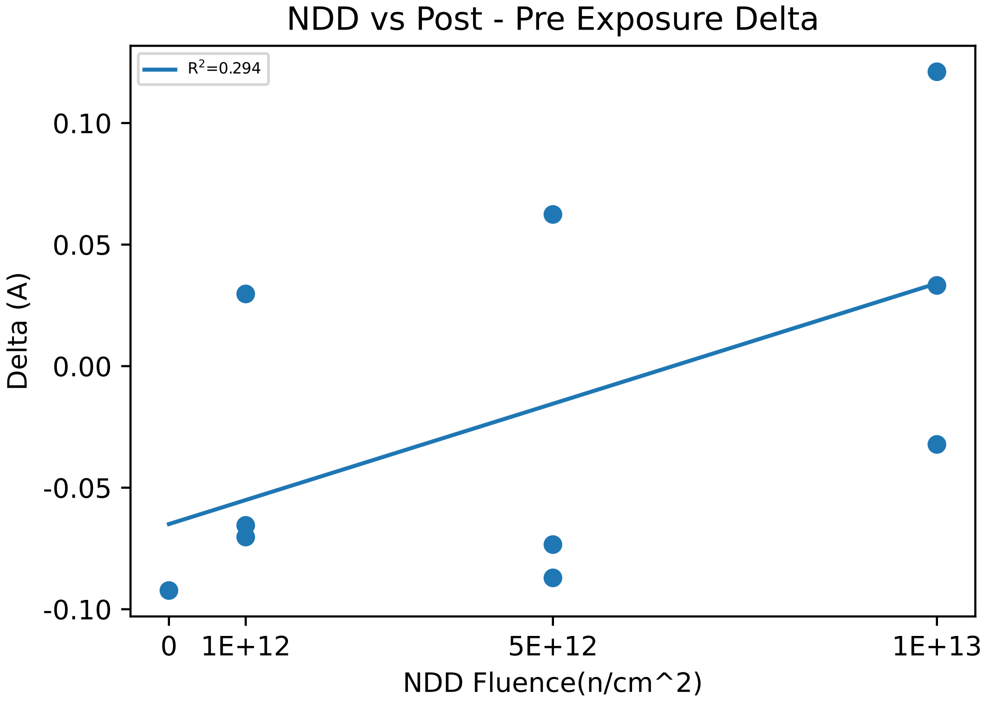
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	13.463	13.461	-0.0021
504	1e+12	NDD	13.643	13.612	-0.0312
505	1e+12	NDD	13.596	13.537	-0.0588
506	5e+12	NDD	13.647	13.567	-0.0798
507	5e+12	NDD	13.735	13.726	-0.0085
508	5e+12	NDD	13.638	13.626	-0.0118
509	1e+13	NDD	13.338	13.248	-0.0896
510	1e+13	NDD	14.085	14.116	0.0305
511	1e+13	NDD	14.088	14.13	0.0425
512	0	Correlation	13.501	13.405	-0.0963

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	13.501	13.501	13.501		13.405	13.405	13.405		-0.0963	-0.0963	-0.0963	
1e+12	13.463	13.567	13.643	0.093442	13.461	13.536	13.612	0.075551	-0.0588	-0.0307	-0.0021	0.028353
5e+12	13.638	13.673	13.735	0.053479	13.567	13.64	13.726	0.08043	-0.0798	-0.033367	-0.0085	0.040246
1e+13	13.338	13.837	14.088	0.43249	13.248	13.831	14.13	0.50535	-0.0896	-0.0055333	0.0425	0.073051

Device Test: 20.109 HIGHSIDE_CURR_LIM_19A(THRESHOLD|RISE/SW/14////@HIGHSIDE_CURR_LIM_19A)





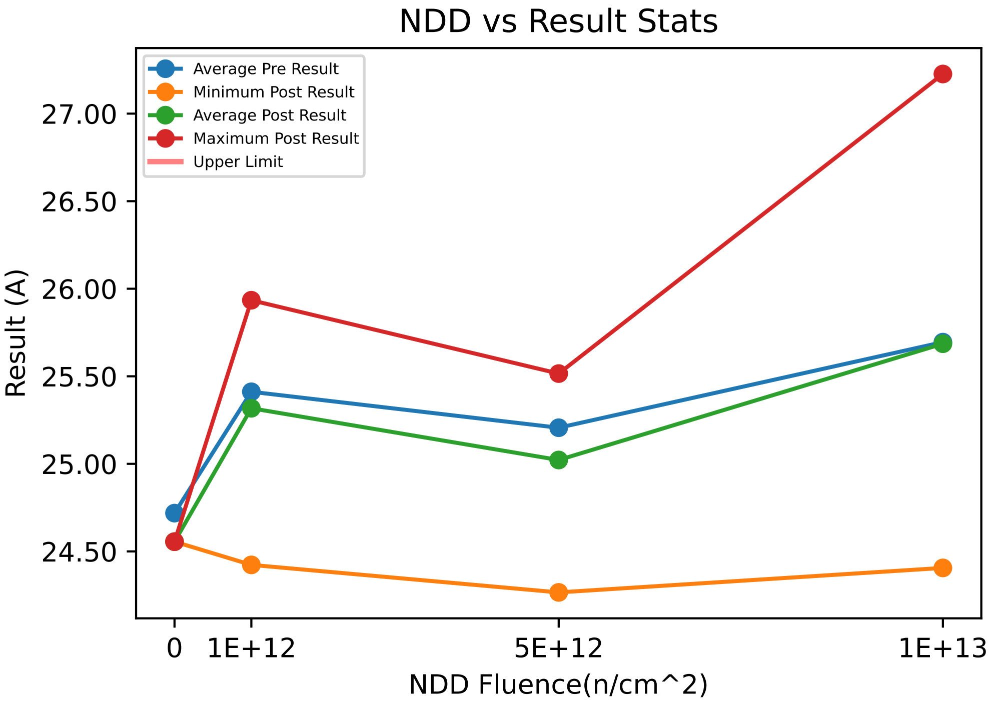
Test Results (Upper Limit = 24.9 (A))

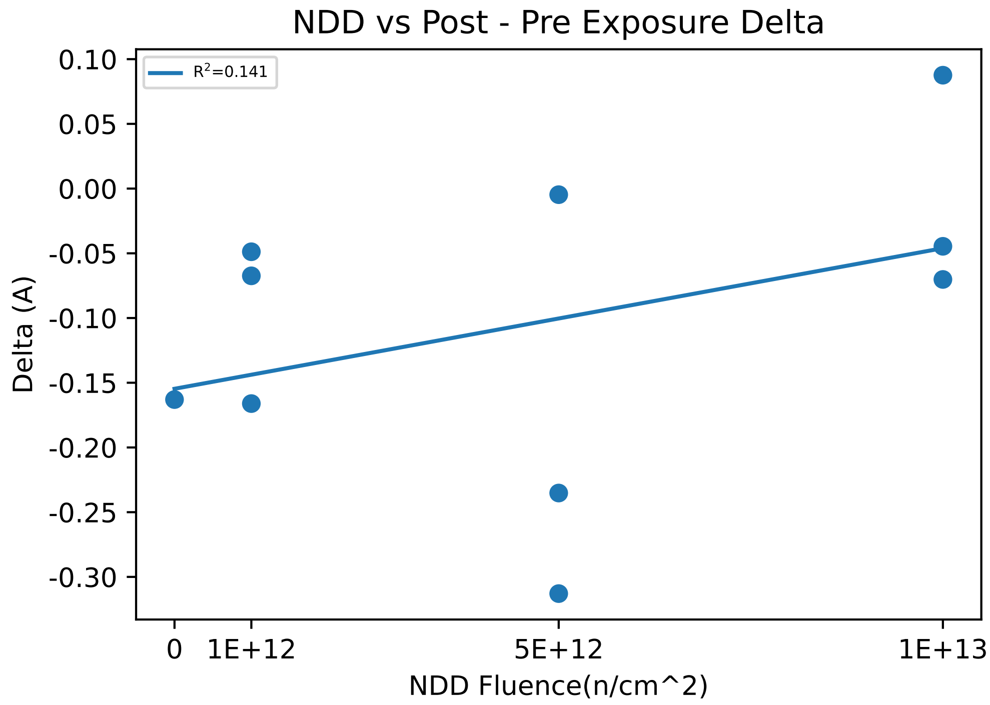
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	18.412	18.441	0.0297
504	1e+12	NDD	18.75	18.68	-0.0703
505	1e+12	NDD	18.664	18.599	-0.0655
506	5e+12	NDD	18.729	18.642	-0.0871
507	5e+12	NDD	18.818	18.745	-0.0734
508	5e+12	NDD	18.685	18.748	0.0624
509	1e+13	NDD	18.296	18.264	-0.0322
510	1e+13	NDD	19.453	19.486	0.0332
511	1e+13	NDD	19.381	19.502	0.1211
512	0	Correlation	18.547	18.455	-0.0923

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	18.547	18.547	18.547		18.455	18.455	18.455		-0.0923	-0.0923	-0.0923	
1e+12	18.412	18.609	18.75	0.17581	18.441	18.573	18.68	0.1211	-0.0703	-0.035367	0.0297	0.0564
5e+12	18.685	18.744	18.818	0.067922	18.642	18.711	18.748	0.060463	-0.0871	-0.0327	0.0624	0.082643
1e+13	18.296	19.043	19.453	0.64835	18.264	19.084	19.502	0.71053	-0.0322	0.0407	0.1211	0.076925

Device Test: 20.11 HIGHSIDE_CURR_LIM2_19A(THRESHOLD|RISE/SW/4.5////@HIGHSIDE_CURR_LIM2_19A)





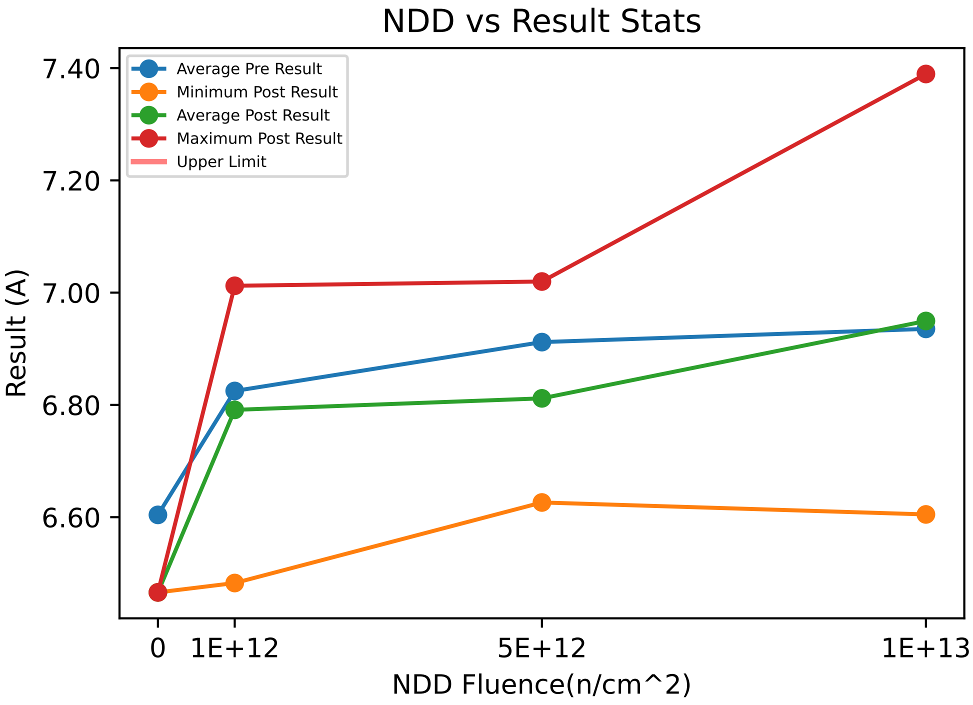
Test Results (No Limits Specified (A))

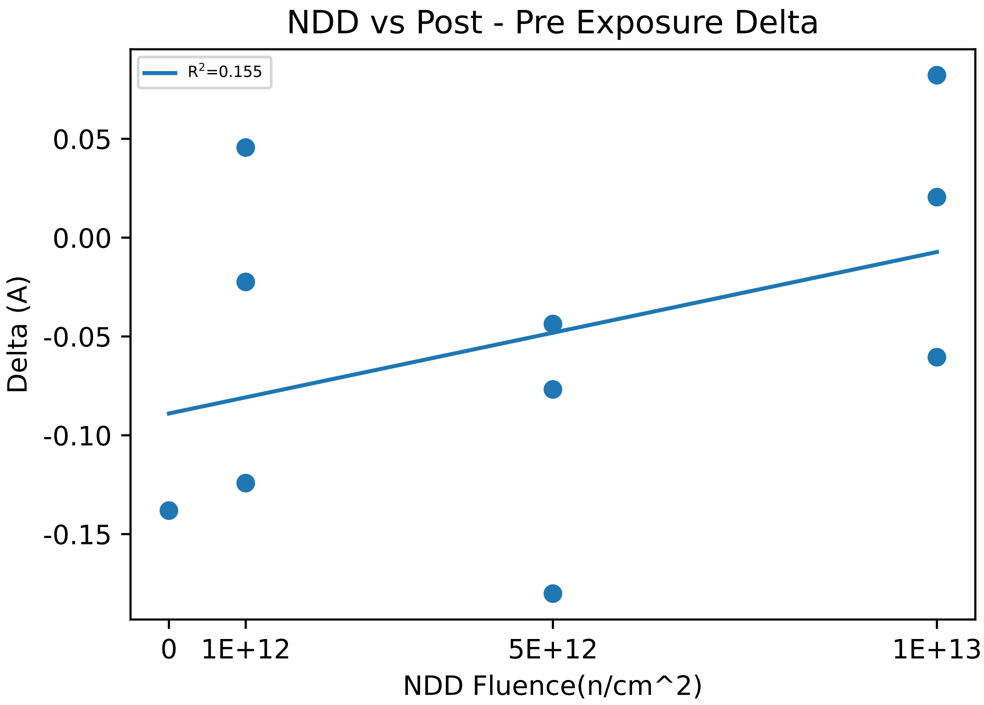
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	24.472	24.423	-0.0488
504	1e+12	NDD	25.662	25.595	-0.0674
505	1e+12	NDD	26.101	25.934	-0.1661
506	5e+12	NDD	24.579	24.266	-0.3129
507	5e+12	NDD	25.52	25.515	-0.0047
508	5e+12	NDD	25.52	25.285	-0.2352
509	1e+13	NDD	24.45	24.406	-0.0446
510	1e+13	NDD	25.496	25.426	-0.0702
511	1e+13	NDD	27.139	27.226	0.0876
512	0	Correlation	24.719	24.556	-0.163

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	24.719	24.719	24.719		24.556	24.556	24.556		-0.163	-0.163	-0.163	
1e+12	24.472	25.412	26.101	0.84281	24.423	25.317	25.934	0.79298	-0.1661	-0.0941	-0.0488	0.063044
5e+12	24.579	25.206	25.52	0.54337	24.266	25.022	25.515	0.66488	-0.3129	-0.18427	-0.0047	0.16029
1e+13	24.45	25.695	27.139	1.3552	24.406	25.686	27.226	1.4282	-0.0702	-0.0090667	0.0876	0.084689

Device Test: 20.110 HIGHSIDE_CURR_LIM2_6A(THRESHOLD|RISE/SW/14////@HIGHSIDE_CURR_LIM2_6A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

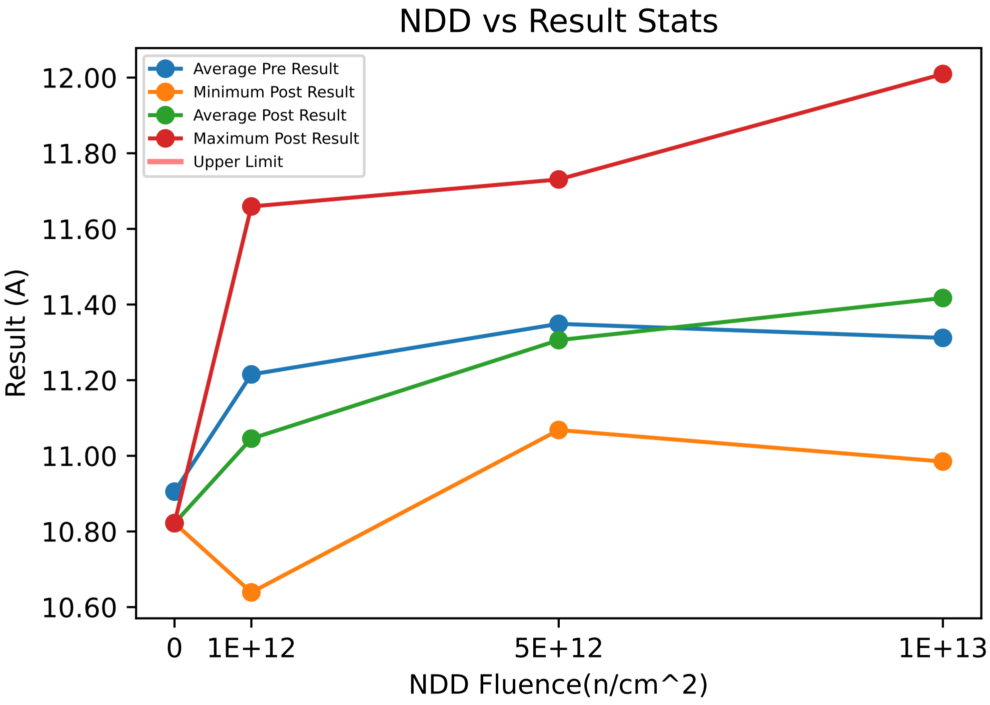
Test Results (No Limits Specified (A))

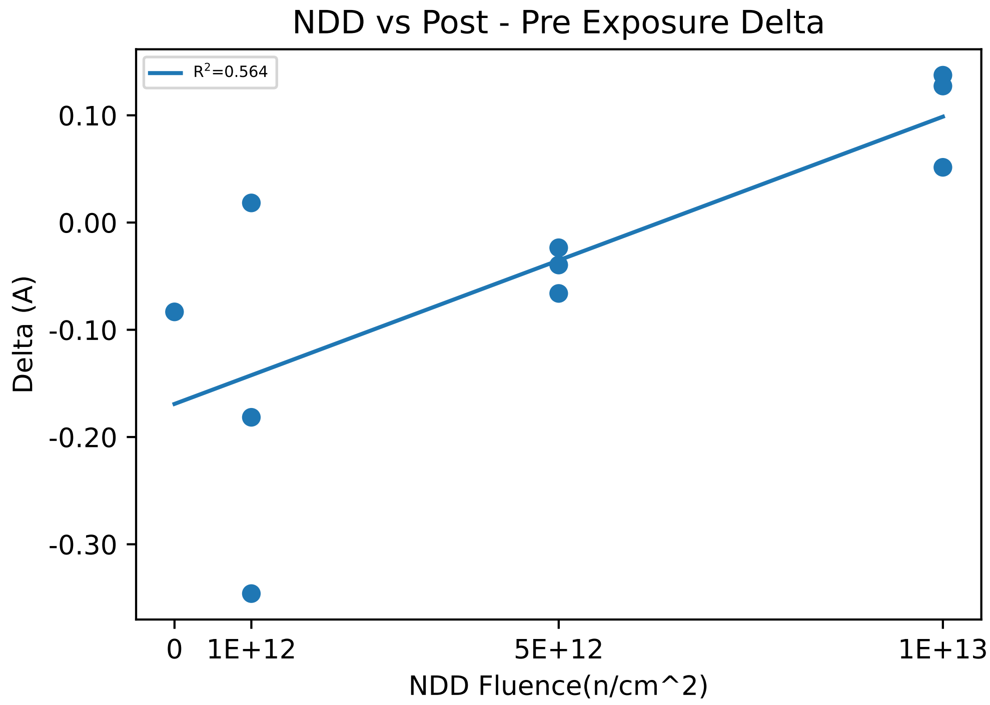
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	6.901	6.8786	-0.0224
504	1e+12	NDD	7.1364	7.0122	-0.1242
505	1e+12	NDD	6.4371	6.4827	0.0456
506	5e+12	NDD	6.8063	6.6262	-0.1801
507	5e+12	NDD	7.0966	7.0198	-0.0768
508	5e+12	NDD	6.8327	6.789	-0.0437
509	1e+13	NDD	6.6654	6.6049	-0.0605
510	1e+13	NDD	6.7719	6.8541	0.0822
511	1e+13	NDD	7.369	7.3895	0.0205
512	0	Correlation	6.6041	6.466	-0.1381

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	6.6041	6.6041	6.6041		6.466	6.466	6.466		-0.1381	-0.1381	-0.1381	
1e+12	6.4371	6.8248	7.1364	0.35582	6.4827	6.7912	7.0122	0.27537	-0.1242	-0.033667	0.0456	0.085459
5e+12	6.8063	6.9119	7.0966	0.16053	6.6262	6.8117	7.0198	0.19778	-0.1801	-0.1002	-0.0437	0.071147
1e+13	6.6654	6.9354	7.369	0.37924	6.6049	6.9495	7.3895	0.40091	-0.0605	0.014067	0.0822	0.071567

Device Test: 20.111 HIGHSIDE_CURR_LIM2_9A(THRESHOLD|RISE/SW/14////@HIGHSIDE_CURR_LIM2_9A)





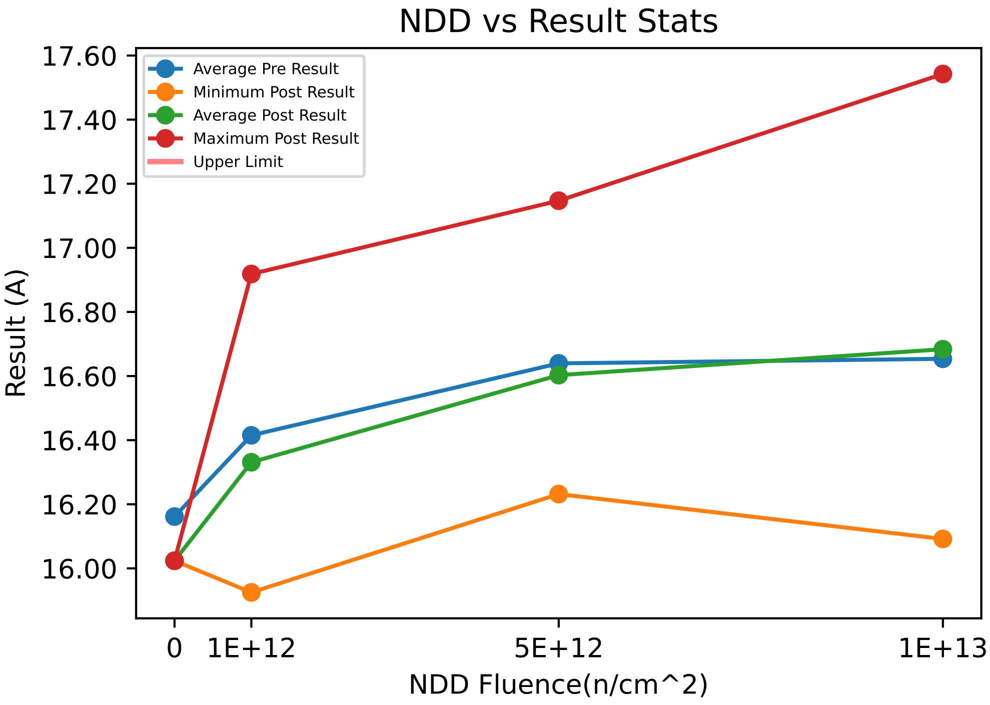
Test Results (No Limits Specified (A))

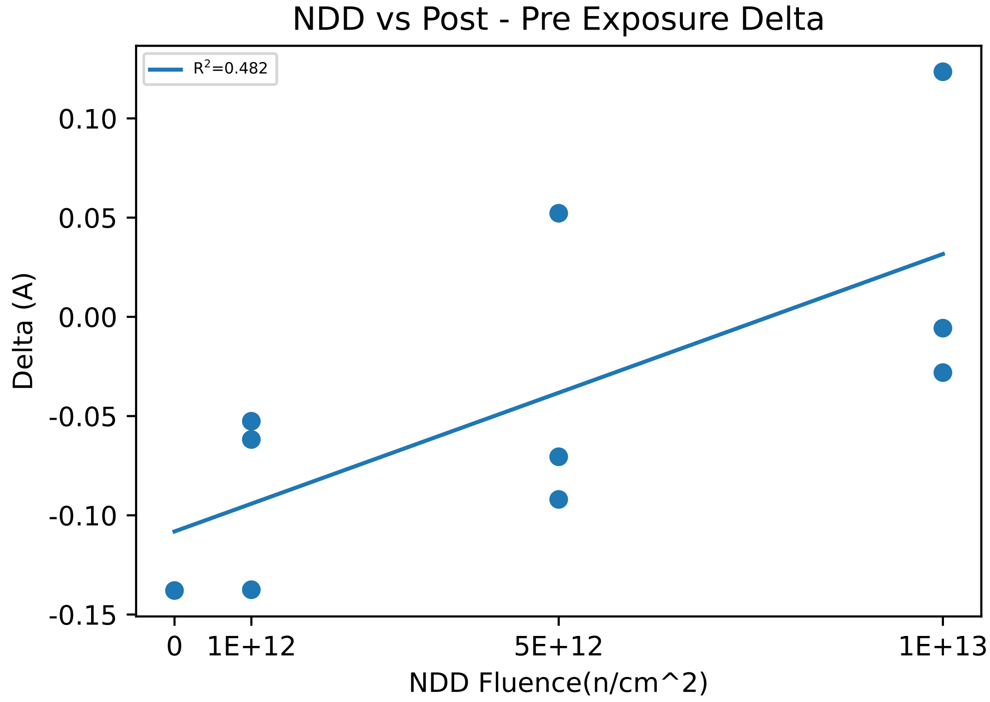
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	11.184	10.838	-0.346
504	1e+12	NDD	11.641	11.659	0.0183
505	1e+12	NDD	10.82	10.639	-0.1816
506	5e+12	NDD	11.134	11.068	-0.0661
507	5e+12	NDD	11.754	11.731	-0.0235
508	5e+12	NDD	11.159	11.119	-0.0396
509	1e+13	NDD	10.933	10.985	0.0515
510	1e+13	NDD	11.13	11.257	0.1273
511	1e+13	NDD	11.872	12.009	0.1374
512	0	Correlation	10.905	10.822	-0.0833

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	10.905	10.905	10.905		10.822	10.822	10.822		-0.0833	-0.0833	-0.0833	
1e+12	10.82	11.215	11.641	0.41113	10.639	11.045	11.659	0.54087	-0.346	-0.16977	0.0183	0.18244
5e+12	11.134	11.349	11.754	0.35112	11.068	11.306	11.731	0.36873	-0.0661	-0.043067	-0.0235	0.021511
1e+13	10.933	11.312	11.872	0.49508	10.985	11.417	12.009	0.53071	0.0515	0.1054	0.1374	0.046951

Device Test: 20.112 HIGHSIDE_CURR_LIM2_13A(THRESHOLD|RISE/SW/14////@HIGHSIDE_CURR_LIM2_13A)





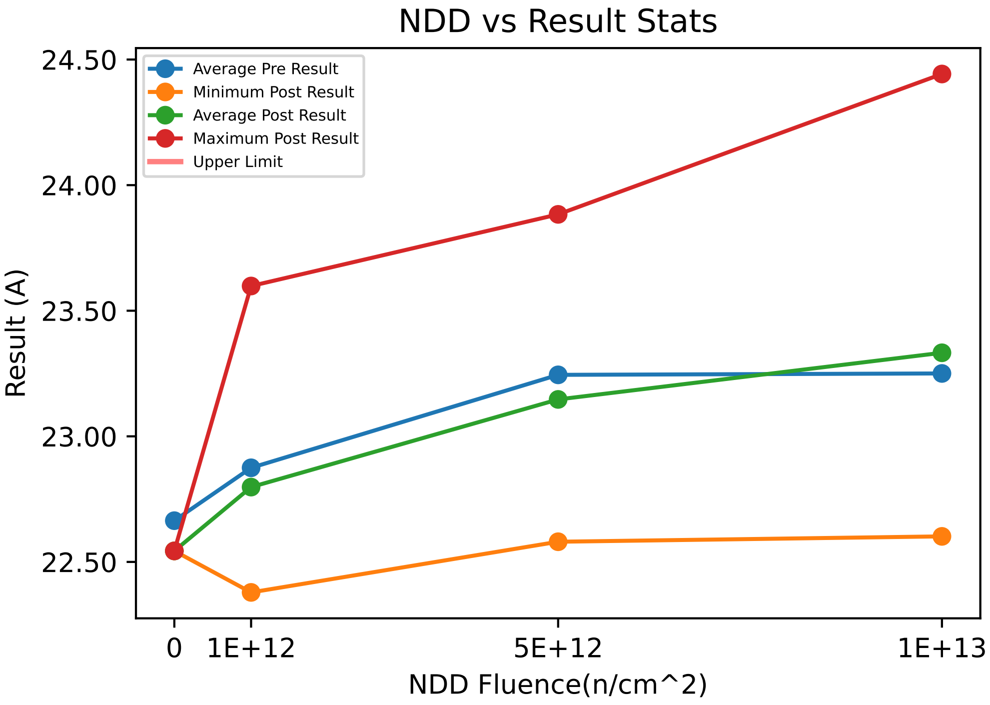
Test Results (No Limits Specified (A))

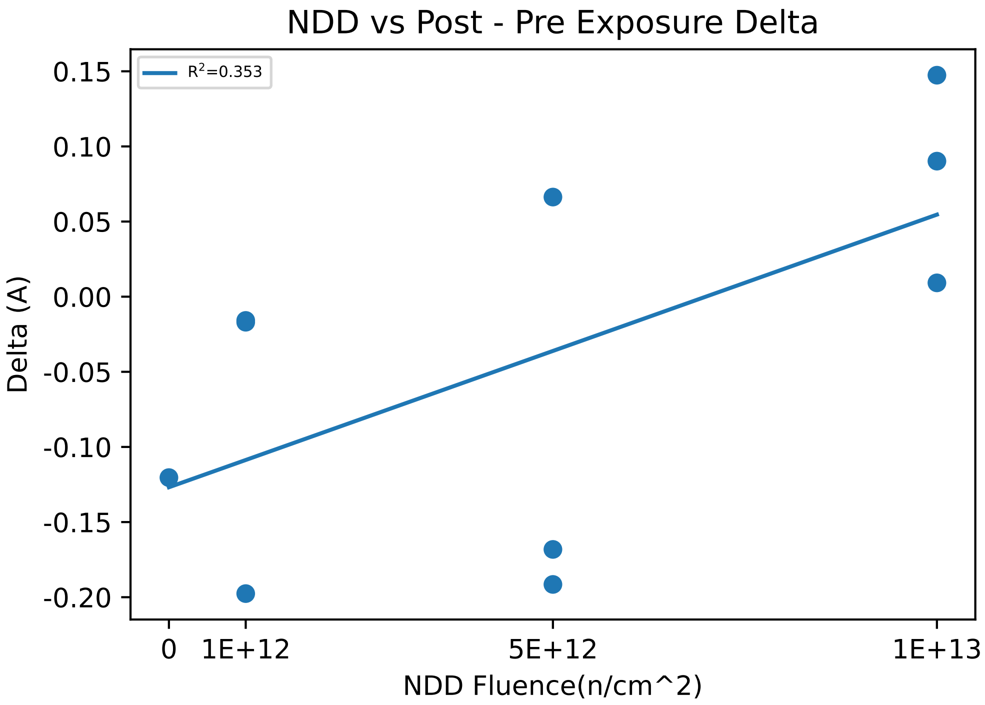
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	16.202	16.15	-0.0526
504	1e+12	NDD	16.98	16.918	-0.0618
505	1e+12	NDD	16.062	15.925	-0.1375
506	5e+12	NDD	16.324	16.232	-0.092
507	5e+12	NDD	17.095	17.147	0.0522
508	5e+12	NDD	16.5	16.43	-0.0705
509	1e+13	NDD	16.098	16.092	-0.0057
510	1e+13	NDD	16.445	16.417	-0.0281
511	1e+13	NDD	17.419	17.542	0.1235
512	0	Correlation	16.162	16.024	-0.1379

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	16.162	16.162	16.162		16.024	16.024	16.024		-0.1379	-0.1379	-0.1379	
1e+12	16.062	16.415	16.98	0.49442	15.925	16.331	16.918	0.52092	-0.1375	-0.083967	-0.0526	0.046589
5e+12	16.324	16.64	17.095	0.404	16.232	16.603	17.147	0.48158	-0.092	-0.036767	0.0522	0.077794
1e+13	16.098	16.654	17.419	0.685	16.092	16.684	17.542	0.76121	-0.0281	0.0299	0.1235	0.08183

Device Test: 20.113 HIGHSIDE_CURR_LIM2_19A(THRESHOLD|RISE/SW/14////@HIGHSIDE_CURR_LIM2_19A)





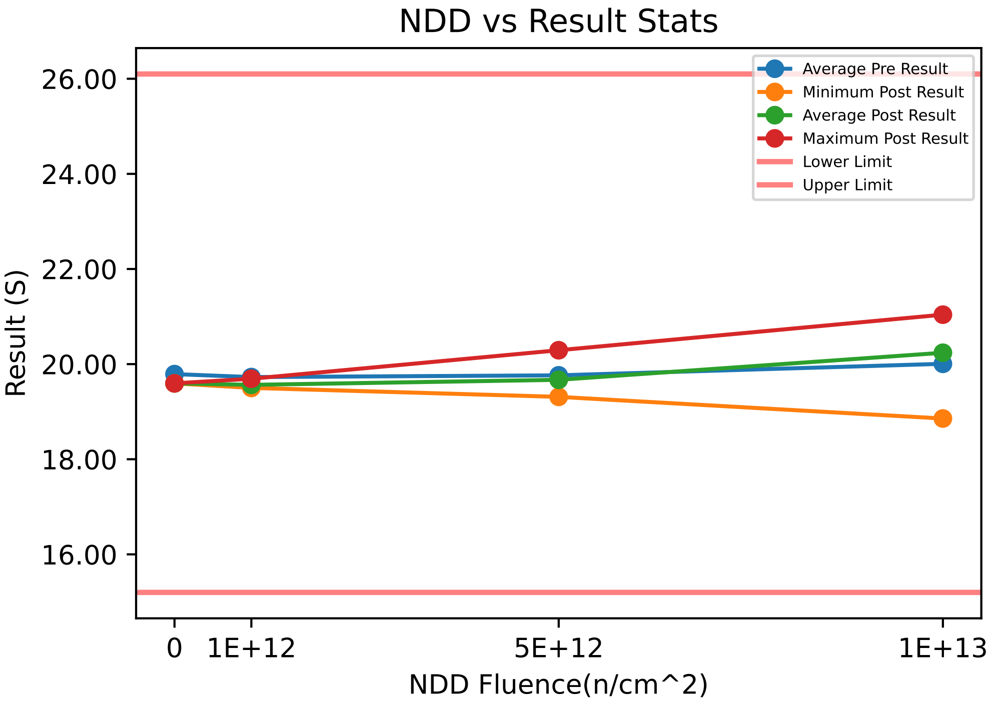
Test Results (No Limits Specified (A))

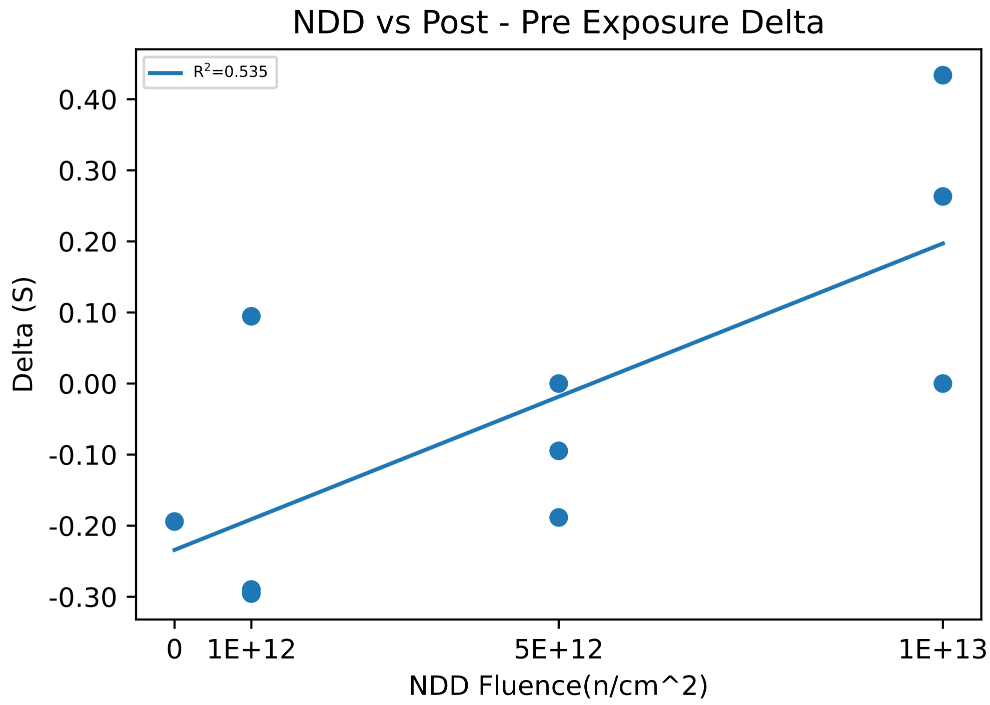
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	22.433	22.417	-0.0158
504	1e+12	NDD	23.615	23.598	-0.017
505	1e+12	NDD	22.576	22.379	-0.1976
506	5e+12	NDD	22.772	22.58	-0.1915
507	5e+12	NDD	23.817	23.884	0.0663
508	5e+12	NDD	23.145	22.977	-0.1682
509	1e+13	NDD	22.512	22.602	0.0902
510	1e+13	NDD	22.945	22.954	0.0092
511	1e+13	NDD	24.295	24.442	0.1474
512	0	Correlation	22.664	22.544	-0.1204

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	22.664	22.664	22.664		22.544	22.544	22.544		-0.1204	-0.1204	-0.1204	
1e+12	22.433	22.875	23.615	0.64545	22.379	22.798	23.598	0.69348	-0.1976	-0.0768	-0.0158	0.10462
5e+12	22.772	23.245	23.817	0.52979	22.58	23.147	23.884	0.66805	-0.1915	-0.0978	0.0663	0.14259
1e+13	22.512	23.25	24.295	0.93025	22.602	23.333	24.442	0.9771	0.0092	0.082267	0.1474	0.069441

Device Test: 20.114 EA_COMP_ISWITCH_GM_19A_25C(GMPS|STATIC/SW/14////@EA_COMP_ISWITCH_GM_19A_25C)





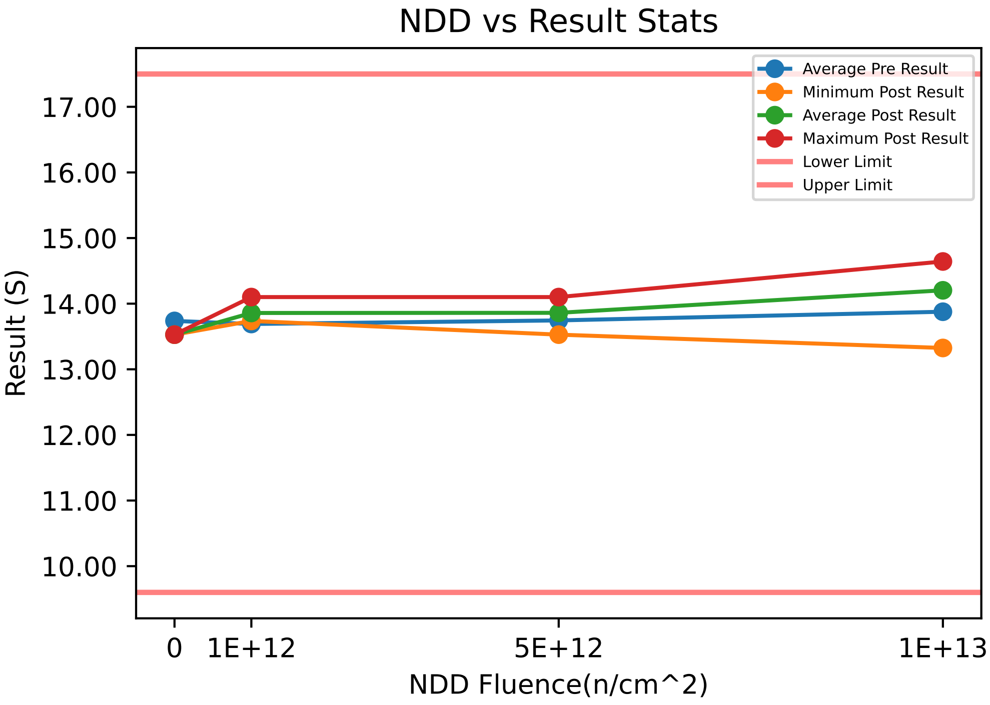
Test Results (Lower Limit = 15.2, Upper Limit = 26.1 (S))

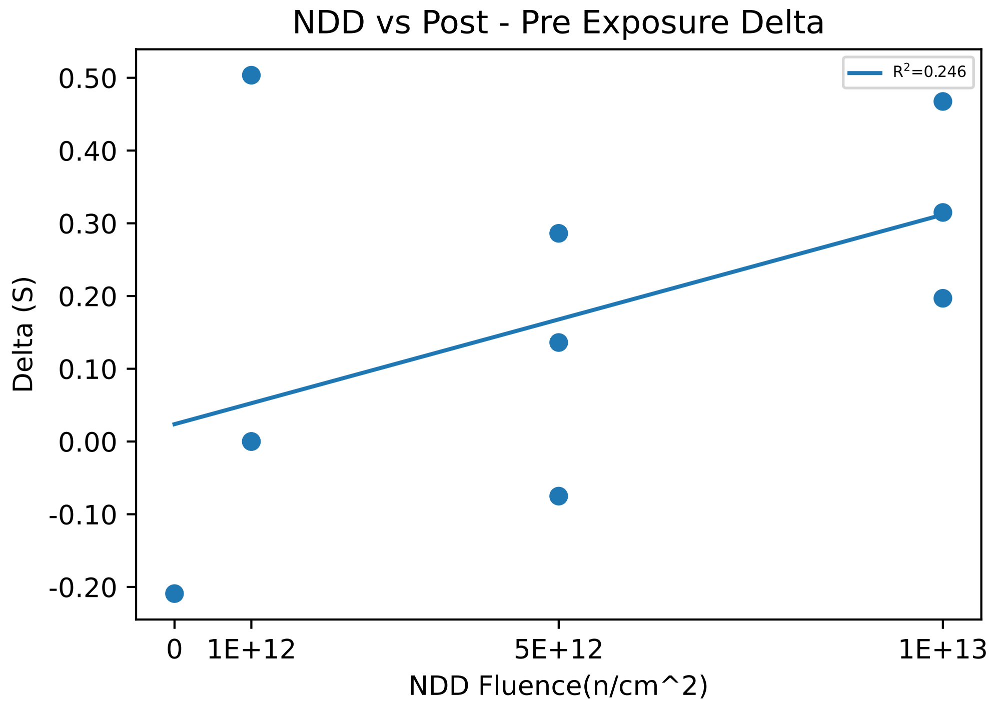
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	19.988	19.692	-0.2955
504	1e+12	NDD	19.405	19.5	0.0946
505	1e+12	NDD	19.79	19.5	-0.2897
506	5e+12	NDD	20.292	20.292	0
507	5e+12	NDD	19.5	19.405	-0.0947
508	5e+12	NDD	19.5	19.312	-0.1884
509	1e+13	NDD	18.593	18.856	0.2632
510	1e+13	NDD	20.82	20.82	0
511	1e+13	NDD	20.606	21.04	0.4338
512	0	Correlation	19.79	19.596	-0.1941

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	19.79	19.79	19.79		19.596	19.596	19.596		-0.1941	-0.1941	-0.1941	
1e+12	19.405	19.728	19.988	0.29602	19.5	19.564	19.692	0.11094	-0.2955	-0.16353	0.0946	0.22357
5e+12	19.5	19.764	20.292	0.45715	19.312	19.67	20.292	0.5409	-0.1884	-0.094367	0	0.0942
1e+13	18.593	20.006	20.82	1.2287	18.856	20.239	21.04	1.2023	0	0.23233	0.4338	0.21854

Device Test: 20.115 EA_COMP_ISWITCH_GM_13A_25C(GMPS|STATIC/SW/14////@EA_COMP_ISWITCH_GM_13A_25C)





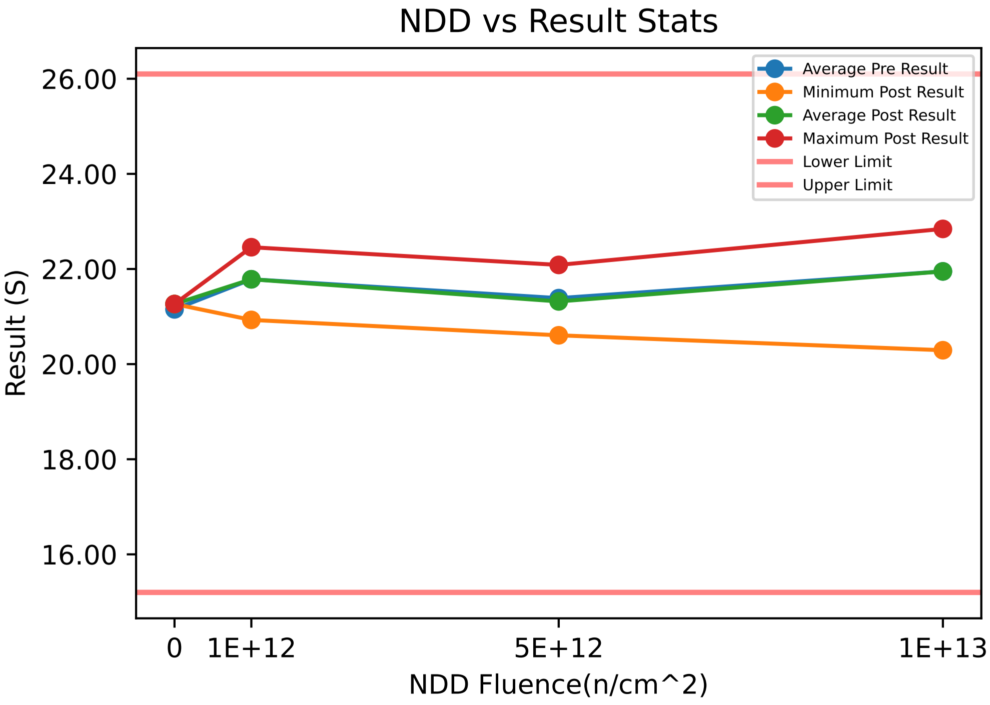
Test Results (Lower Limit = 9.6, Upper Limit = 17.5 (S))

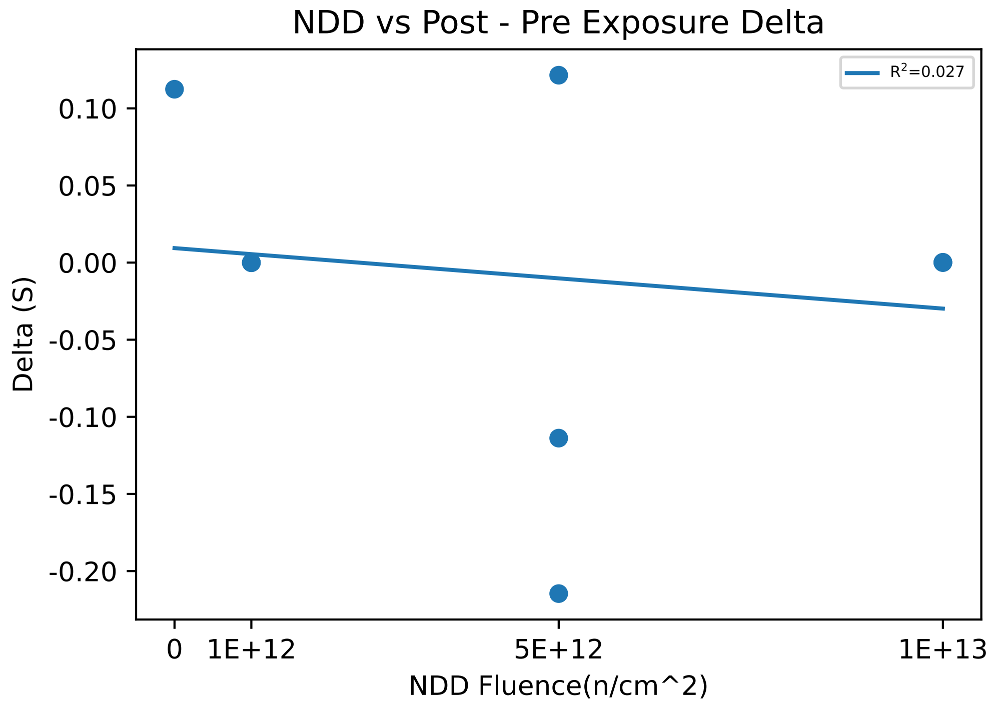
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	13.737	13.737	0
504	1e+12	NDD	13.597	14.101	0.5036
505	1e+12	NDD	13.737	13.737	0
506	5e+12	NDD	14.176	14.101	-0.0751
507	5e+12	NDD	13.667	13.953	0.2862
508	5e+12	NDD	13.392	13.528	0.1361
509	1e+13	NDD	13.128	13.325	0.1969
510	1e+13	NDD	14.328	14.643	0.3149
511	1e+13	NDD	14.175	14.643	0.4675
512	0	Correlation	13.737	13.528	-0.2091

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	13.737	13.737	13.737		13.528	13.528	13.528		-0.2091	-0.2091	-0.2091	
1e+12	13.597	13.69	13.737	0.080945	13.737	13.858	14.101	0.20981	0	0.16787	0.5036	0.29075
5e+12	13.392	13.745	14.176	0.39764	13.528	13.86	14.101	0.29722	-0.0751	0.11573	0.2862	0.18151
1e+13	13.128	13.877	14.328	0.65315	13.325	14.204	14.643	0.76086	0.1969	0.32643	0.4675	0.13567

Device Test: 20.12 EA_COMP_ISWITCH_GM_19A_25C(GMPS|STATIC/SW/4.5////@EA_COMP_ISWITCH_GM_19A_25C)





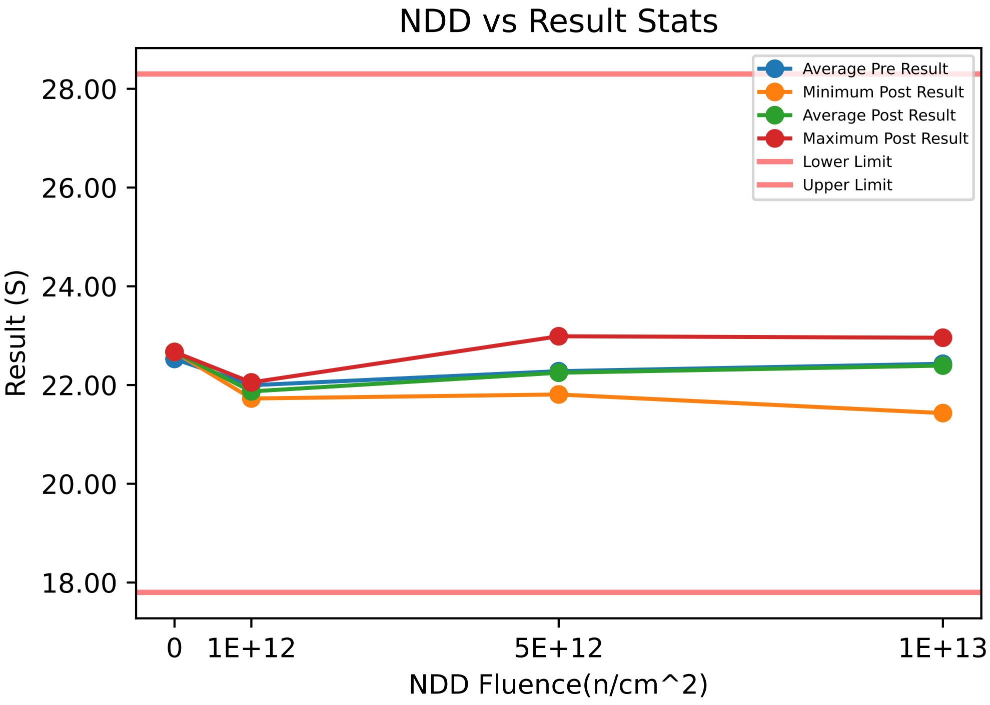
Test Results (Lower Limit = 15.2, Upper Limit = 26.1 (S))

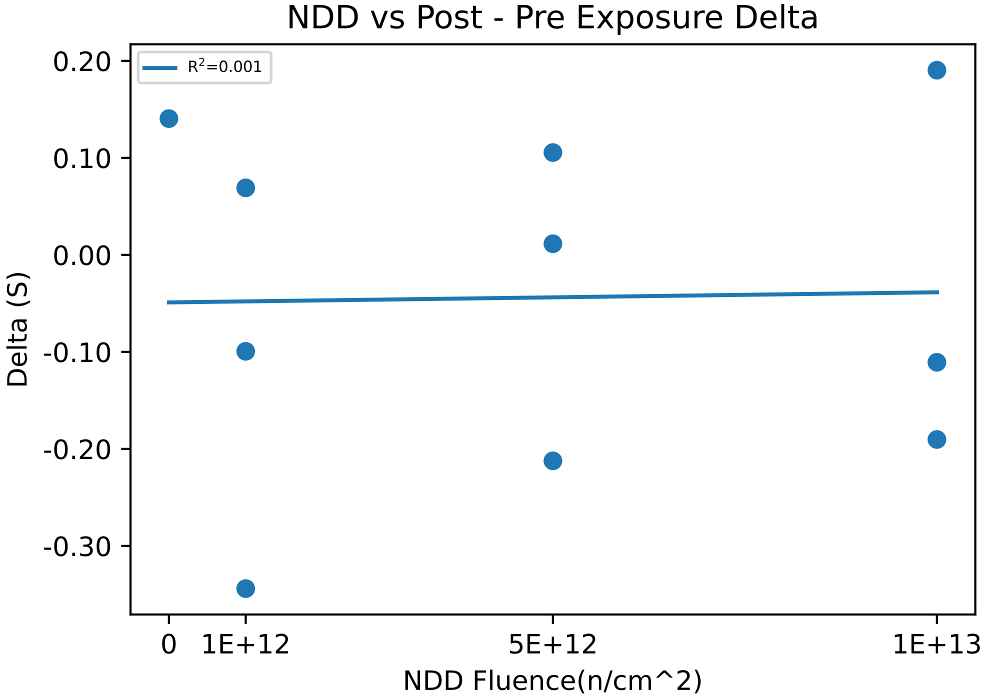
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	21.964	21.964	0
504	1e+12	NDD	20.929	20.929	0
505	1e+12	NDD	22.458	22.458	-0.0001
506	5e+12	NDD	21.964	22.086	0.1215
507	5e+12	NDD	20.82	20.606	-0.2146
508	5e+12	NDD	21.377	21.263	-0.1138
509	1e+13	NDD	20.292	20.292	0.0001
510	1e+13	NDD	22.843	22.843	0
511	1e+13	NDD	22.713	22.713	0.0002
512	0	Correlation	21.151	21.263	0.1124

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	21.151	21.151	21.151		21.263	21.263	21.263		0.1124	0.1124	0.1124	
1e+12	20.929	21.784	22.458	0.78012	20.929	21.784	22.458	0.78007	-0.0001	-3.3333e-05	0	5.7735e-05
5e+12	20.82	21.387	21.964	0.57207	20.606	21.318	22.086	0.74158	-0.2146	-0.068967	0.1215	0.17248
1e+13	20.292	21.949	22.843	1.4368	20.292	21.949	22.843	1.4368	0	0.0001	0.0002	0.0001

evice Test: 20.120 EA_COMP_ISWITCH_GM_0P5V_19A(GMPS|STATIC/SW/14////@EA_COMP_ISWITCH_GM_0P5V_19A





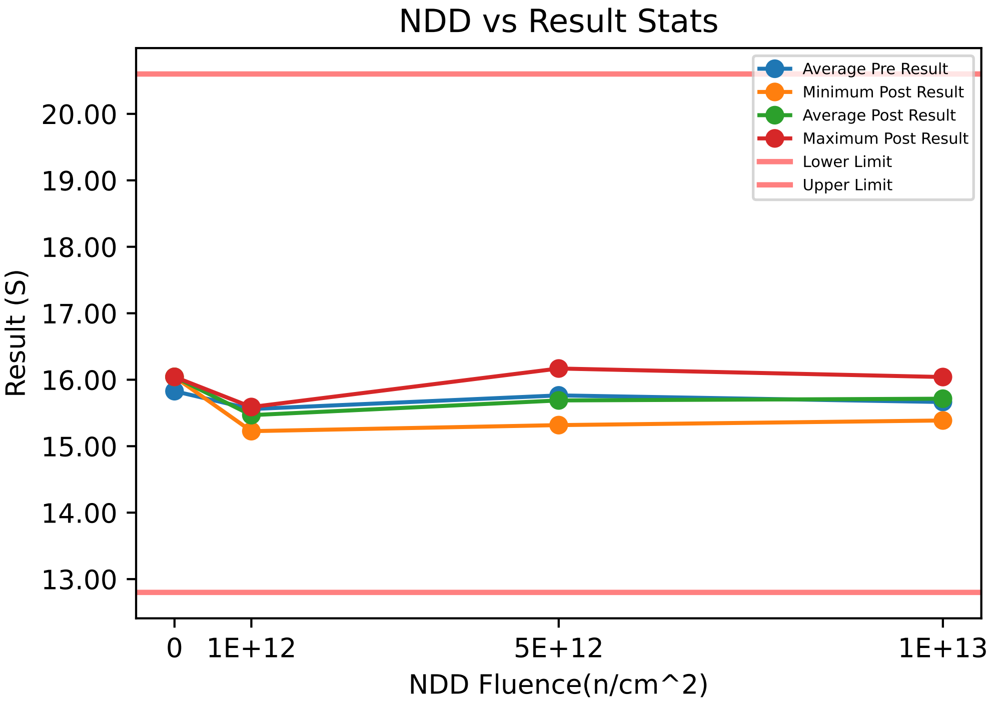
Test Results (Lower Limit = 17.8, Upper Limit = 28.3 (S))

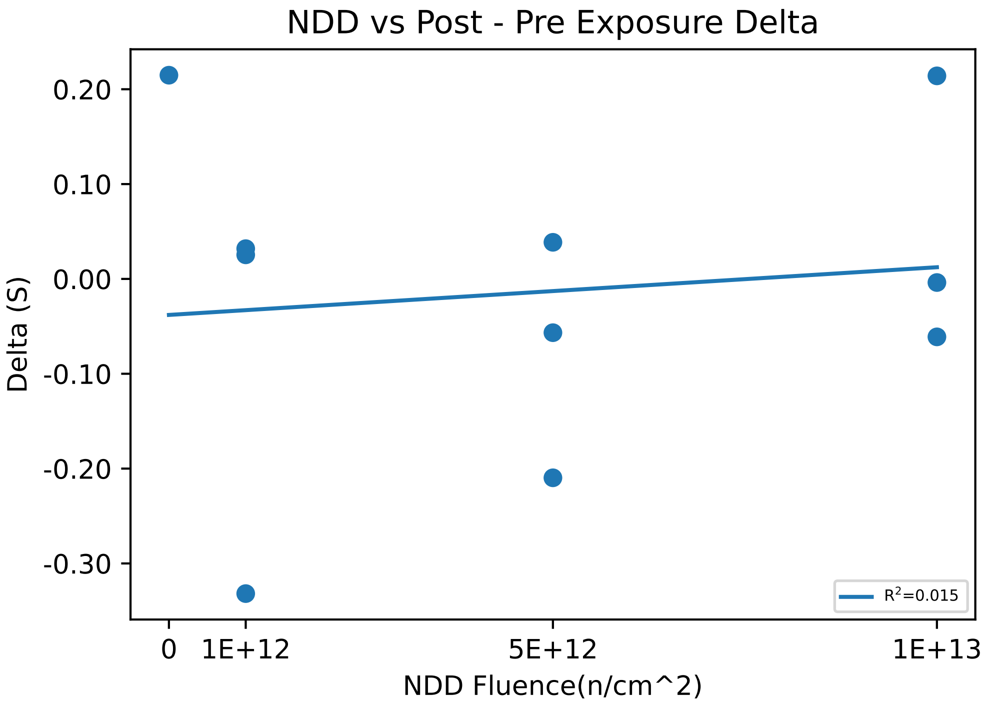
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	21.984	22.053	0.0691
504	1e+12	NDD	21.827	21.727	-0.0994
505	1e+12	NDD	22.177	21.833	-0.344
506	5e+12	NDD	23.2	22.988	-0.2123
507	5e+12	NDD	21.797	21.809	0.0115
508	5e+12	NDD	21.845	21.95	0.1055
509	1e+13	NDD	21.622	21.432	-0.1903
510	1e+13	NDD	22.903	22.792	-0.1107
511	1e+13	NDD	22.768	22.958	0.1904
512	0	Correlation	22.528	22.669	0.1405

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	22.528	22.528	22.528		22.669	22.669	22.669		0.1405	0.1405	0.1405	
1e+12	21.827	21.996	22.177	0.17535	21.727	21.871	22.053	0.16624	-0.344	-0.12477	0.0691	0.20771
5e+12	21.797	22.281	23.2	0.79663	21.809	22.249	22.988	0.64383	-0.2123	-0.031767	0.1055	0.16326
1e+13	21.622	22.431	22.903	0.70357	21.432	22.394	22.958	0.83733	-0.1903	-0.036867	0.1904	0.2008

evice Test: 20.121 EA_COMP_ISWITCH_GM_0P5V_13A(GMPS|STATIC/SW/14////@EA_COMP_ISWITCH_GM_0P5V_13A


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

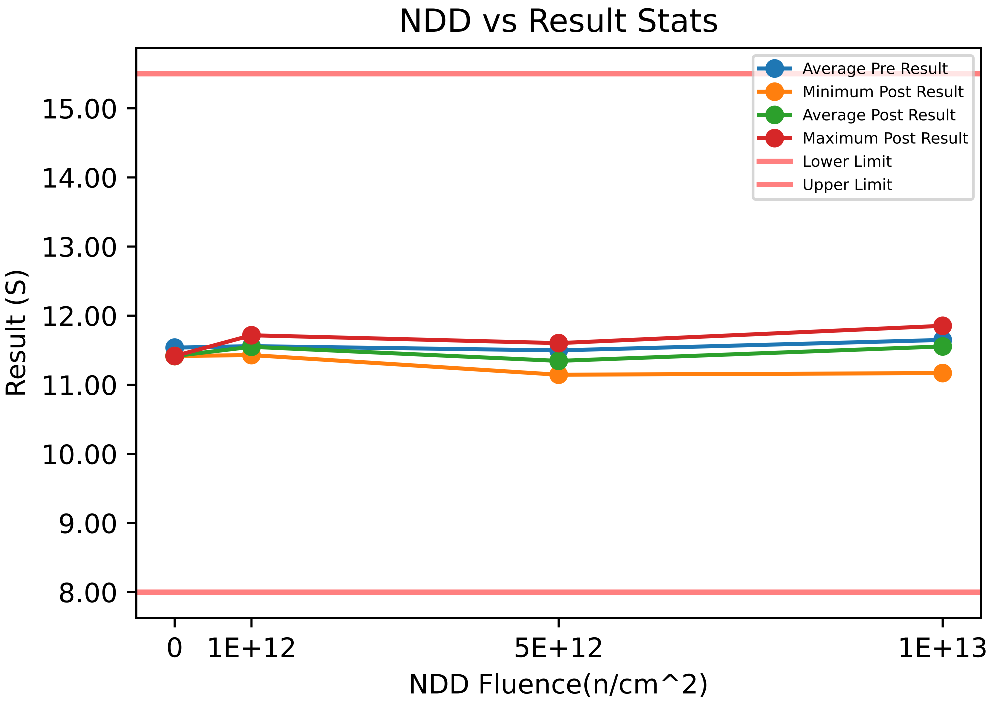
Test Results (Lower Limit = 12.8, Upper Limit = 20.6 (S))

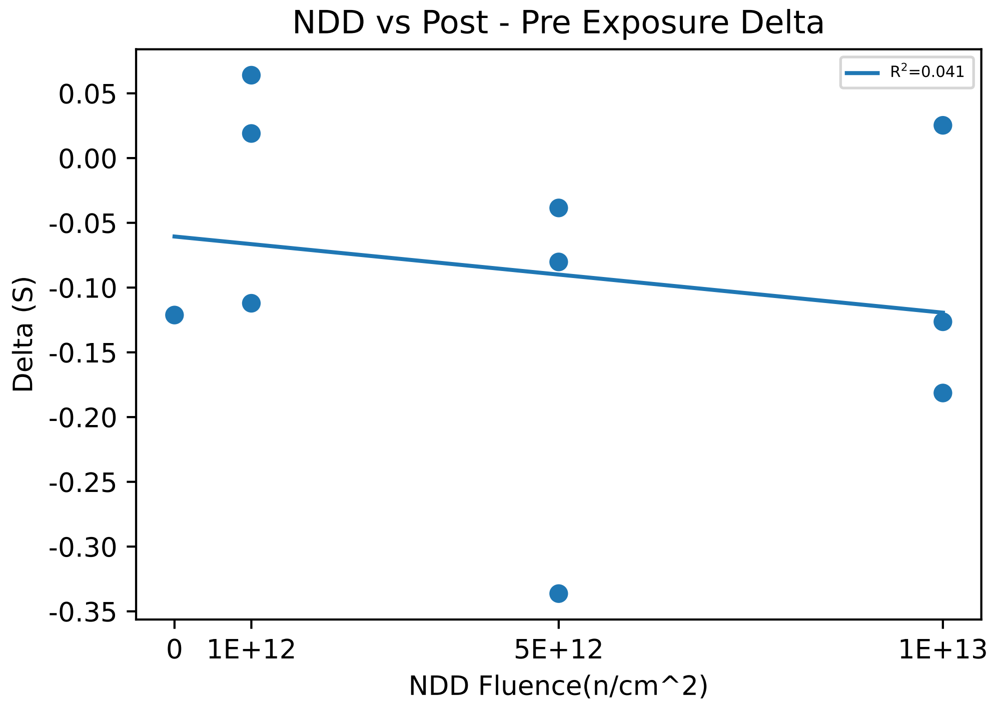
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	15.564	15.589	0.0254
504	1e+12	NDD	15.554	15.585	0.0319
505	1e+12	NDD	15.558	15.226	-0.3318
506	5e+12	NDD	16.226	16.169	-0.0567
507	5e+12	NDD	15.541	15.579	0.0386
508	5e+12	NDD	15.527	15.317	-0.2097
509	1e+13	NDD	15.173	15.387	0.2141
510	1e+13	NDD	15.777	15.716	-0.0611
511	1e+13	NDD	16.044	16.041	-0.0038
512	0	Correlation	15.828	16.043	0.2148

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	15.828	15.828	15.828		16.043	16.043	16.043		0.2148	0.2148	0.2148	
1e+12	15.554	15.559	15.564	0.0052786	15.226	15.467	15.589	0.20866	-0.3318	-0.0915	0.0319	0.20813
5e+12	15.527	15.764	16.226	0.3995	15.317	15.688	16.169	0.43626	-0.2097	-0.075933	0.0386	0.12526
1e+13	15.173	15.665	16.044	0.44651	15.387	15.714	16.041	0.32685	-0.0611	0.049733	0.2141	0.1452

Device Test: 20.122 EA_COMP_ISWITCH_GM_9A(GMPS|STATIC/SW/14////@EA_COMP_ISWITCH_GM_9A)





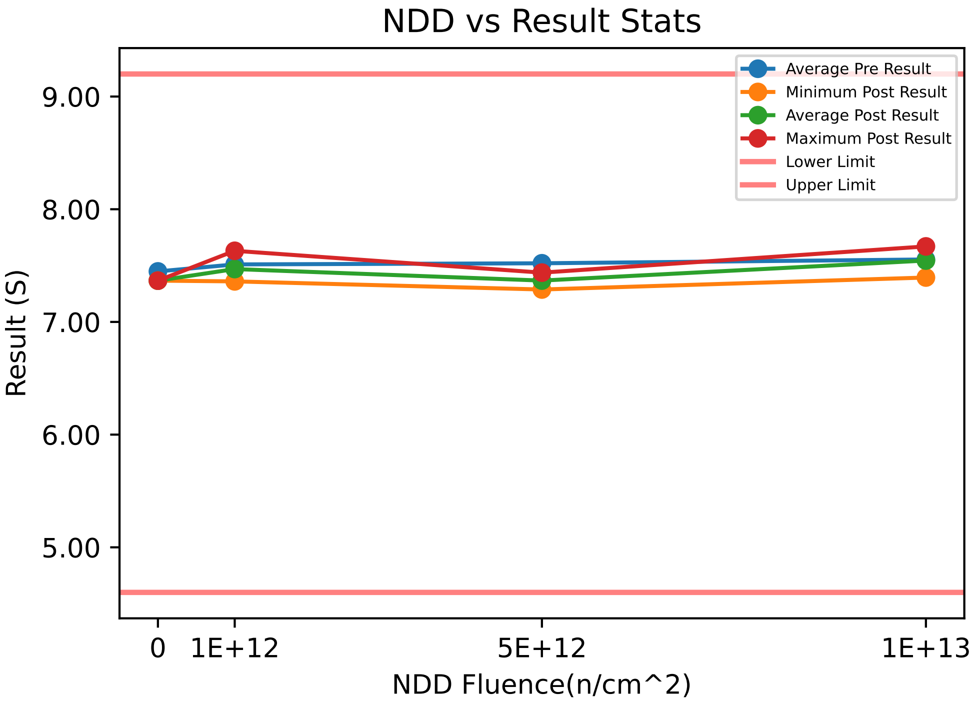
Test Results (Lower Limit = 8.0, Upper Limit = 15.5 (S))

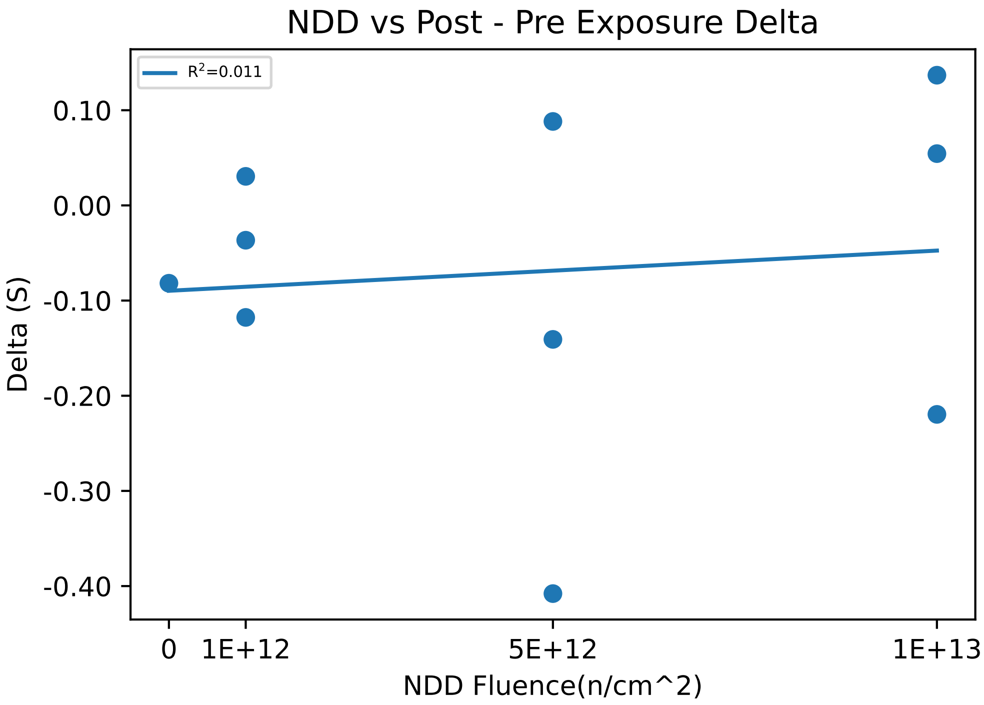
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	11.483	11.502	0.019
504	1e+12	NDD	11.652	11.716	0.064
505	1e+12	NDD	11.542	11.43	-0.1121
506	5e+12	NDD	11.683	11.603	-0.0802
507	5e+12	NDD	11.327	11.289	-0.0385
508	5e+12	NDD	11.482	11.146	-0.3363
509	1e+13	NDD	11.296	11.169	-0.1264
510	1e+13	NDD	11.617	11.642	0.0253
511	1e+13	NDD	12.035	11.853	-0.1814
512	0	Correlation	11.537	11.416	-0.1212

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	11.537	11.537	11.537		11.416	11.416	11.416		-0.1212	-0.1212	-0.1212	
1e+12	11.483	11.559	11.652	0.085877	11.43	11.55	11.716	0.14906	-0.1121	-0.0097	0.064	0.091491
5e+12	11.327	11.497	11.683	0.17836	11.146	11.346	11.603	0.2339	-0.3363	-0.15167	-0.0385	0.16125
1e+13	11.296	11.649	12.035	0.37057	11.169	11.555	11.853	0.3502	-0.1814	-0.094167	0.0253	0.10705

Device Test: 20.123 EA_COMP_ISWITCH_GM_6A(GMPS|STATIC/SW/14////@EA_COMP_ISWITCH_GM_6A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

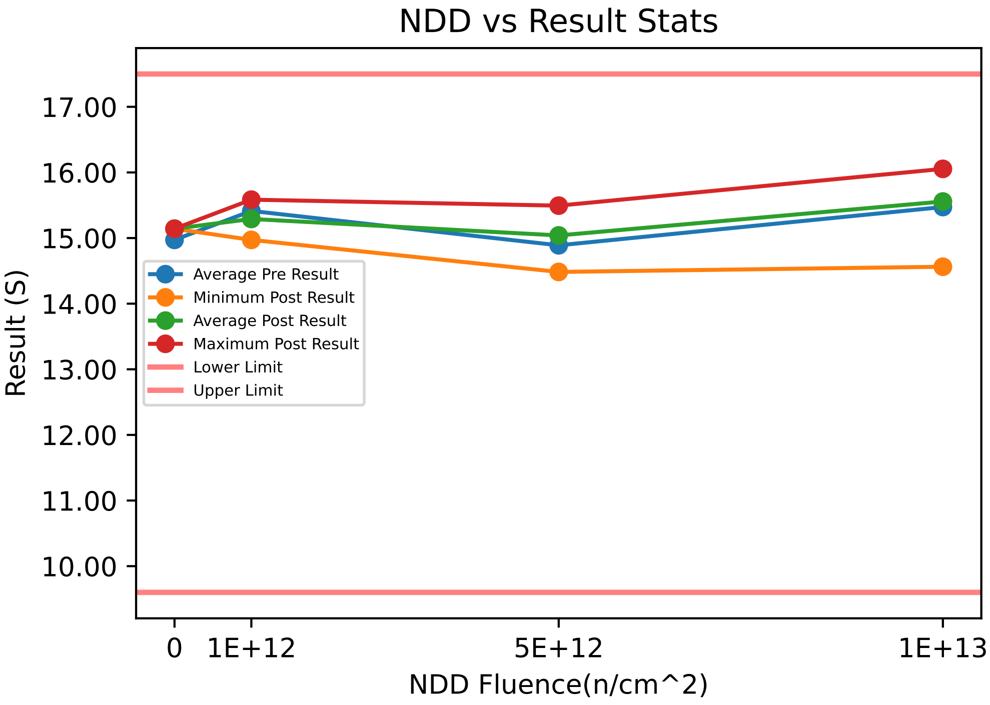
Test Results (Lower Limit = 4.6, Upper Limit = 9.2 (S))

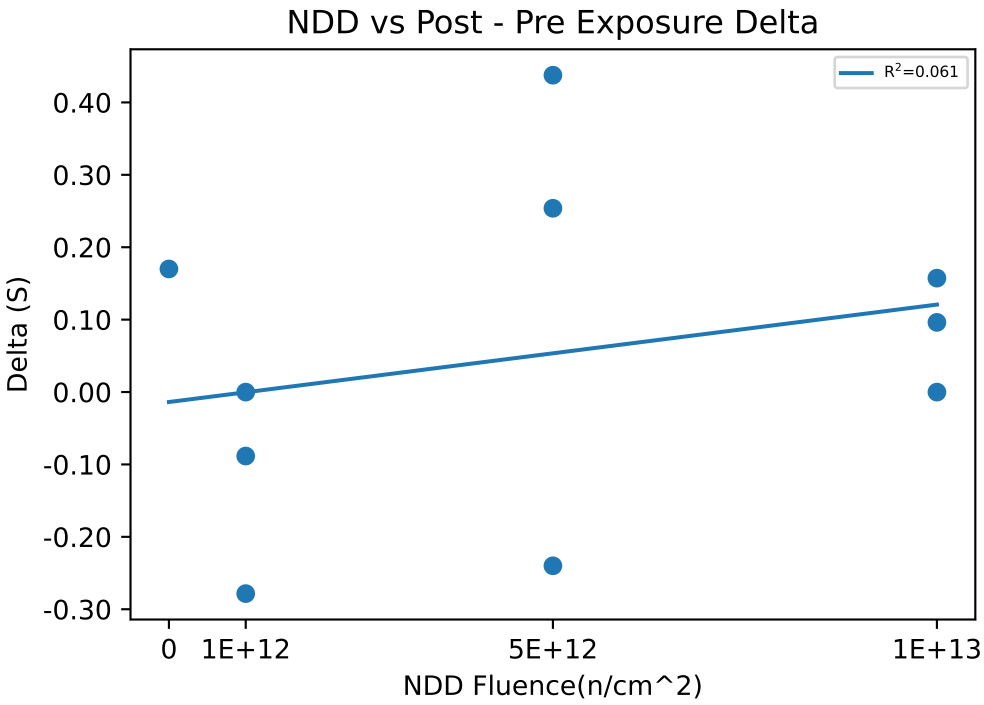
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.4775	7.3598	-0.1177
504	1e+12	NDD	7.6677	7.6311	-0.0366
505	1e+12	NDD	7.386	7.4165	0.0305
506	5e+12	NDD	7.6956	7.2877	-0.4079
507	5e+12	NDD	7.3492	7.4374	0.0882
508	5e+12	NDD	7.5165	7.3757	-0.1408
509	1e+13	NDD	7.2572	7.394	0.1368
510	1e+13	NDD	7.6156	7.67	0.0544
511	1e+13	NDD	7.7898	7.5702	-0.2196
512	0	Correlation	7.4482	7.3664	-0.0818

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	7.4482	7.4482	7.4482		7.3664	7.3664	7.3664		-0.0818	-0.0818	-0.0818	
1e+12	7.386	7.5104	7.6677	0.1437	7.3598	7.4691	7.6311	0.1431	-0.1177	-0.041267	0.0305	0.07421
5e+12	7.3492	7.5204	7.6956	0.17323	7.2877	7.3669	7.4374	0.075234	-0.4079	-0.1535	0.0882	0.24829
1e+13	7.2572	7.5542	7.7898	0.27156	7.394	7.5447	7.67	0.13975	-0.2196	-0.0094667	0.1368	0.18659

Device Test: 20.13 EA_COMP_ISWITCH_GM_13A_25C(GMPS|STATIC/SW/4.5////@EA_COMP_ISWITCH_GM_13A_25C)





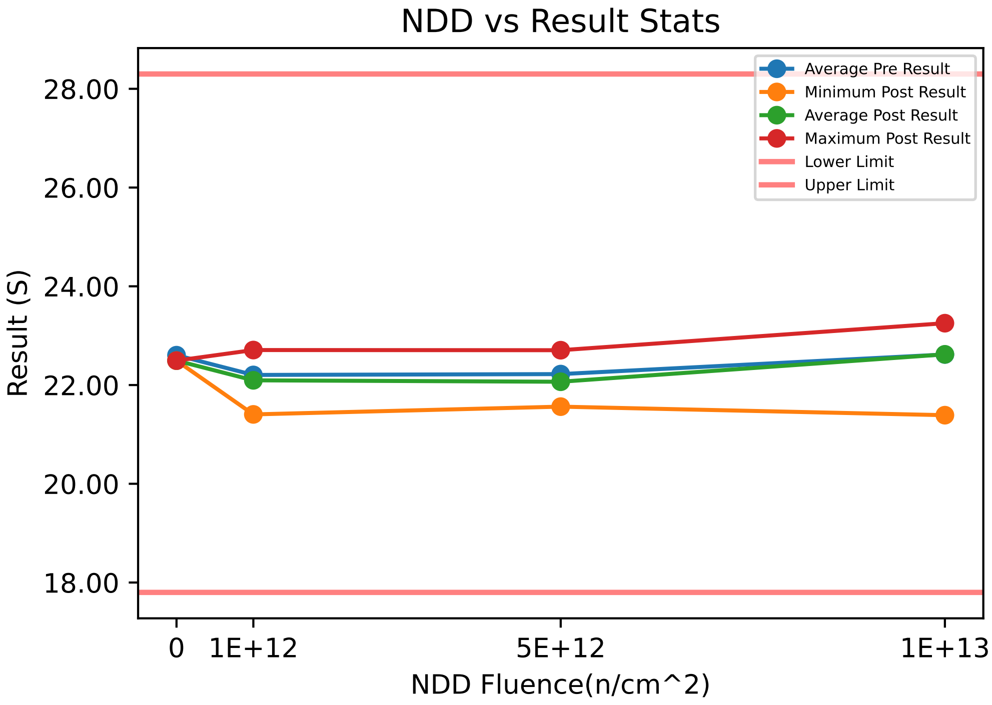
Test Results (Lower Limit = 9.6, Upper Limit = 17.5 (S))

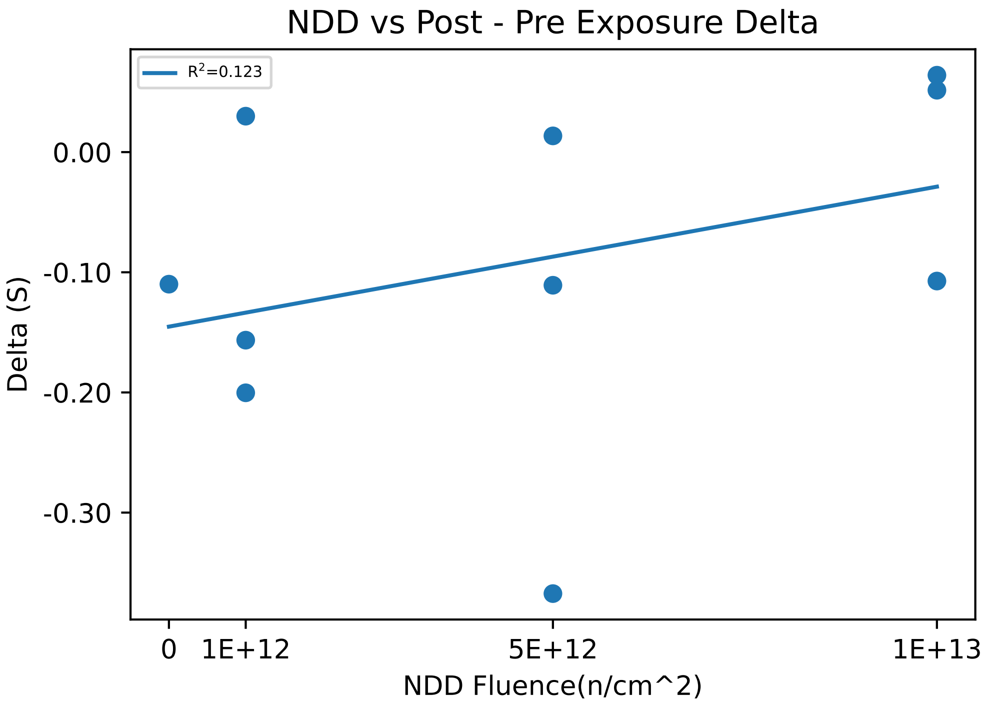
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	15.405	15.316	-0.0884
504	1e+12	NDD	14.972	14.972	-0.0001
505	1e+12	NDD	15.863	15.585	-0.2784
506	5e+12	NDD	15.056	15.494	0.4376
507	5e+12	NDD	14.724	14.484	-0.24
508	5e+12	NDD	14.888	15.142	0.2538
509	1e+13	NDD	14.405	14.563	0.1573
510	1e+13	NDD	16.054	16.054	-0.0001
511	1e+13	NDD	15.958	16.054	0.0962
512	0	Correlation	14.972	15.142	0.17

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	14.972	14.972	14.972		15.142	15.142	15.142		0.17	0.17	0.17	
1e+12	14.972	15.413	15.863	0.44566	14.972	15.291	15.585	0.30723	-0.2784	-0.1223	-0.0001	0.14221
5e+12	14.724	14.889	15.056	0.1664	14.484	15.04	15.494	0.51288	-0.24	0.15047	0.4376	0.35042
1e+13	14.405	15.473	16.054	0.92539	14.563	15.557	16.054	0.86106	-0.0001	0.084467	0.1573	0.079353

Device Test: 20.18 EA_COMP_ISWITCH_GM_0P5V_19A(GMPS|STATIC/SW/4.5////@EA_COMP_ISWITCH_GM_0P5V_19A





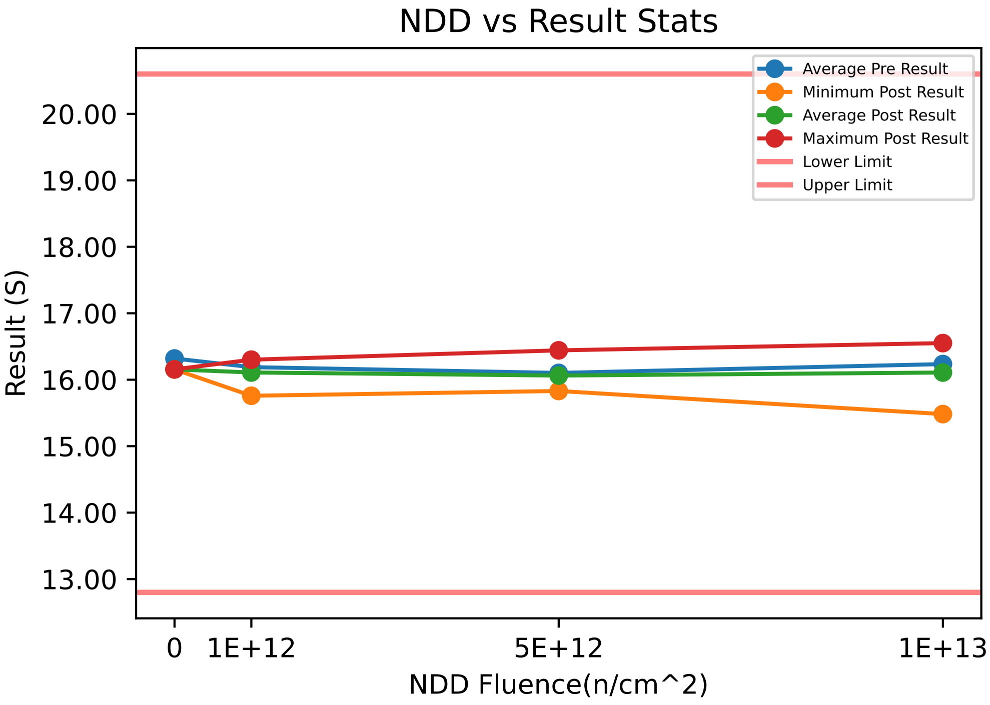
Test Results (Lower Limit = 17.8, Upper Limit = 28.3 (S))

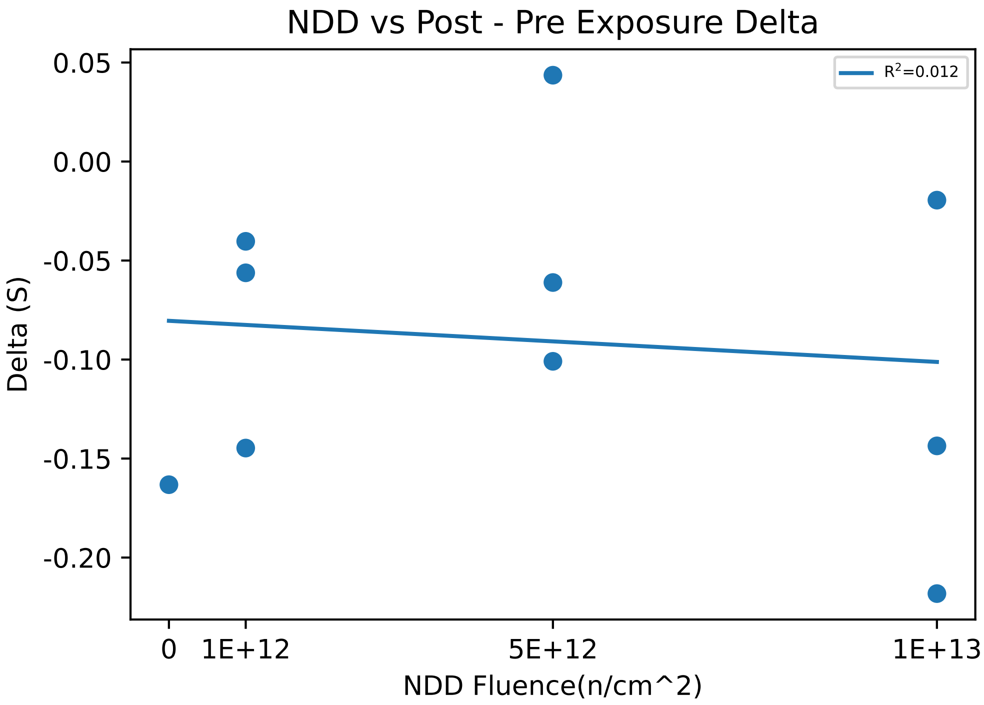
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	22.143	22.173	0.0299
504	1e+12	NDD	21.605	21.405	-0.2003
505	1e+12	NDD	22.865	22.709	-0.1565
506	5e+12	NDD	23.073	22.706	-0.3674
507	5e+12	NDD	21.549	21.562	0.0135
508	5e+12	NDD	22.043	21.932	-0.1108
509	1e+13	NDD	21.325	21.389	0.064
510	1e+13	NDD	23.33	23.222	-0.1073
511	1e+13	NDD	23.201	23.253	0.0515
512	0	Correlation	22.605	22.495	-0.1099

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	22.605	22.605	22.605		22.495	22.495	22.495		-0.1099	-0.1099	-0.1099	
1e+12	21.605	22.204	22.865	0.63217	21.405	22.096	22.709	0.65521	-0.2003	-0.10897	0.0299	0.12224
5e+12	21.549	22.222	23.073	0.77753	21.562	22.067	22.706	0.58329	-0.3674	-0.1549	0.0135	0.19424
1e+13	21.325	22.619	23.33	1.122	21.389	22.621	23.253	1.0672	-0.1073	0.0027333	0.064	0.095496

Device Test: 20.19 EA_COMP_ISWITCH_GM_0P5V_13A(GMPS|STATIC/SW/4.5////@EA_COMP_ISWITCH_GM_0P5V_13A





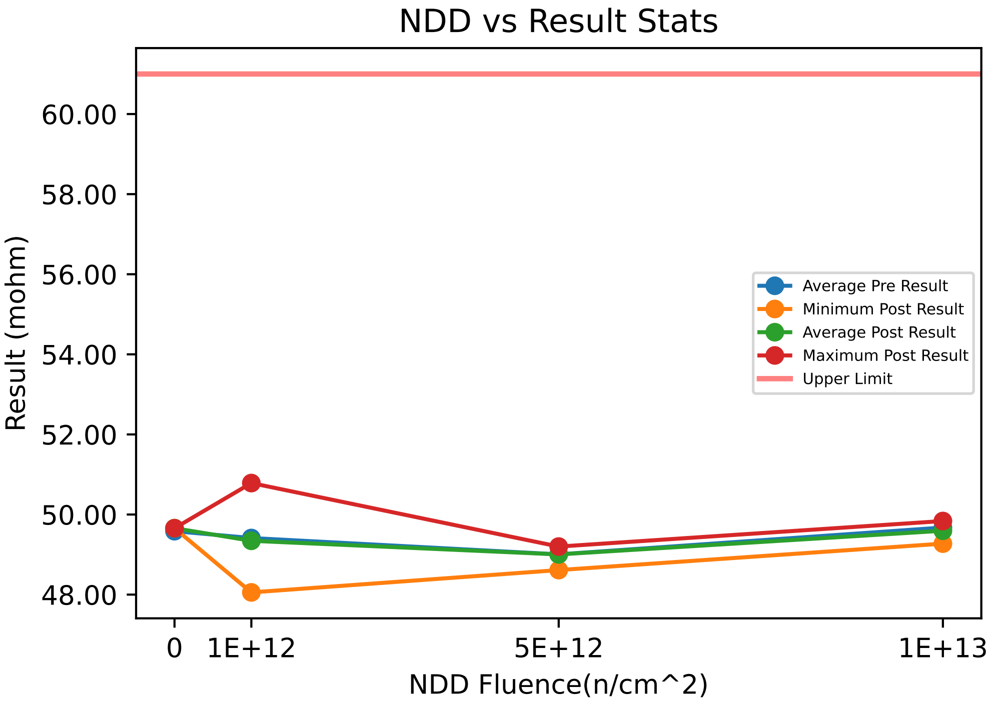
Test Results (Lower Limit = 12.8, Upper Limit = 20.6 (S))

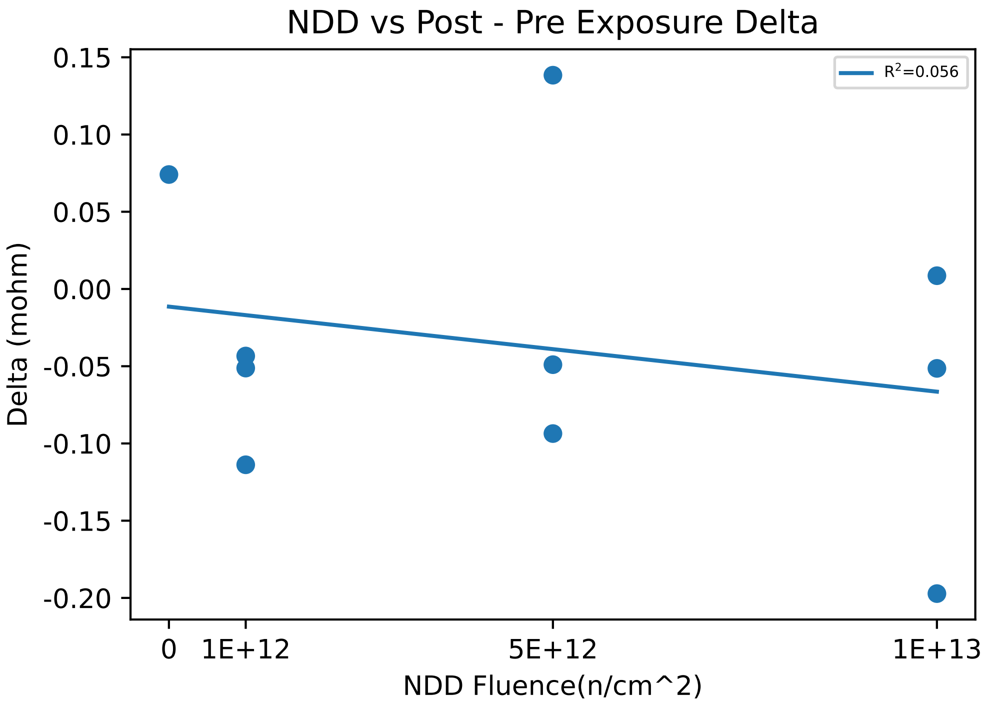
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	16.307	16.267	-0.0403
504	1e+12	NDD	15.815	15.759	-0.0562
505	1e+12	NDD	16.446	16.301	-0.1447
506	5e+12	NDD	16.503	16.442	-0.0611
507	5e+12	NDD	15.787	15.831	0.0436
508	5e+12	NDD	16.017	15.916	-0.1009
509	1e+13	NDD	15.626	15.483	-0.1436
510	1e+13	NDD	16.509	16.291	-0.2182
511	1e+13	NDD	16.57	16.551	-0.0195
512	0	Correlation	16.319	16.156	-0.1632

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	16.319	16.319	16.319		16.156	16.156	16.156		-0.1632	-0.1632	-0.1632	
1e+12	15.815	16.189	16.446	0.33168	15.759	16.109	16.301	0.30384	-0.1447	-0.0804	-0.0403	0.05625
5e+12	15.787	16.102	16.503	0.36554	15.831	16.063	16.442	0.33106	-0.1009	-0.039467	0.0436	0.07464
1e+13	15.626	16.235	16.57	0.52816	15.483	16.108	16.551	0.55696	-0.2182	-0.1271	-0.0195	0.10037

Device Test: 20.2 R_HIGHSIDE_4V_25C(LEVEL|HIGHSIDE/SW/4.5/2///@R_HIGHSIDE_4V_25C)





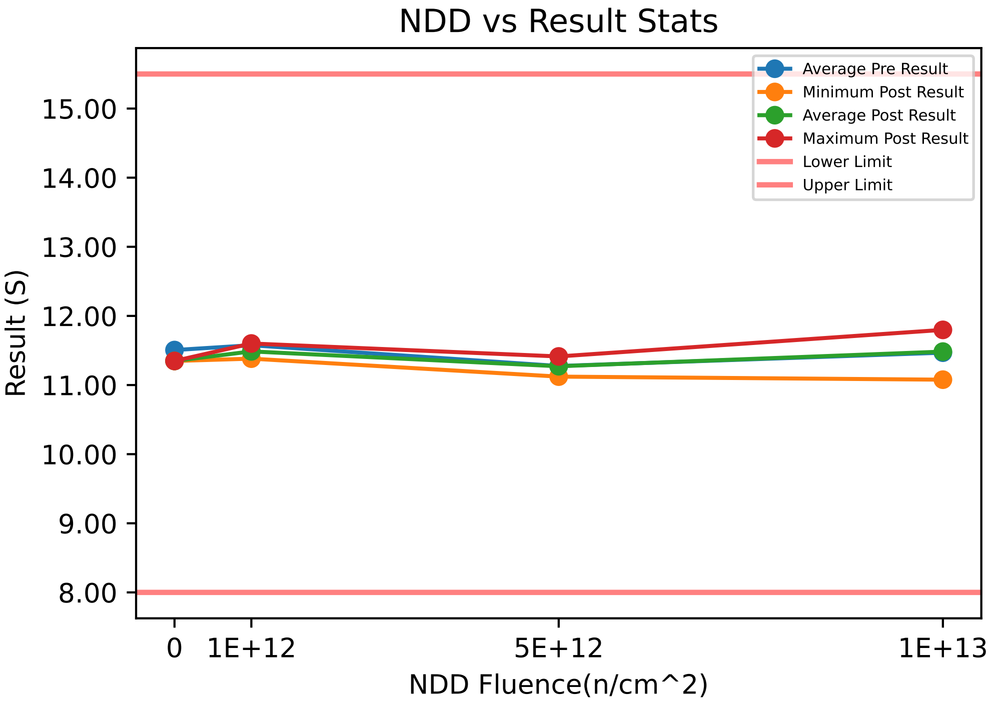
Test Results (Upper Limit = 61.0 (mohm))

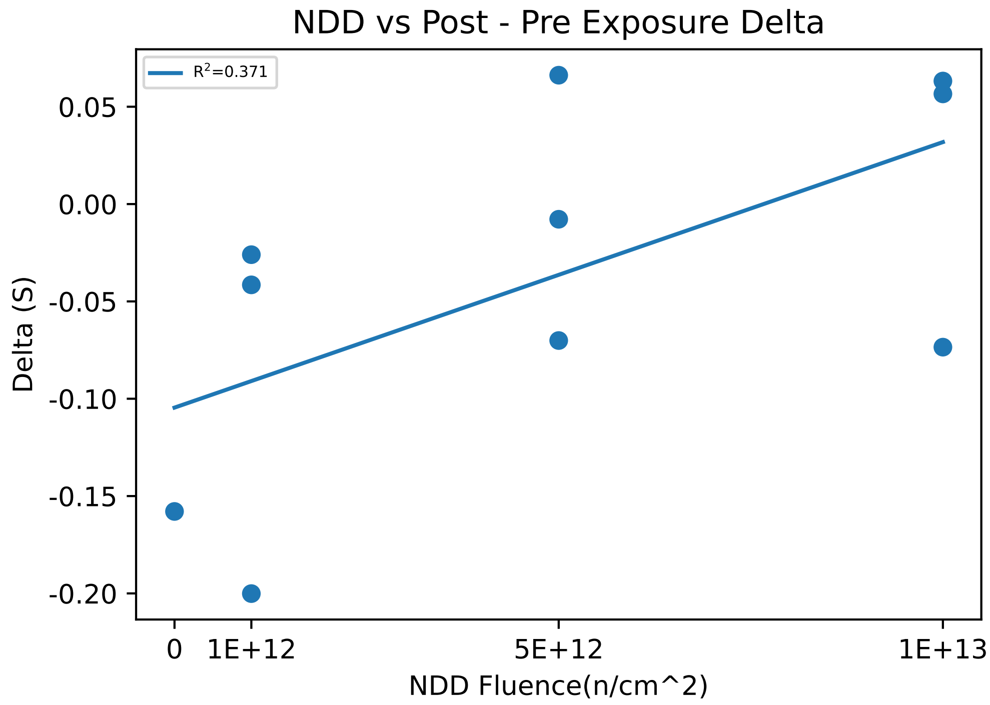
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	49.241	49.19	-0.0512
504	1e+12	NDD	48.169	48.055	-0.1138
505	1e+12	NDD	50.829	50.786	-0.0434
506	5e+12	NDD	49.061	49.199	0.1384
507	5e+12	NDD	48.706	48.613	-0.0936
508	5e+12	NDD	49.249	49.2	-0.049
509	1e+13	NDD	49.265	49.273	0.0086
510	1e+13	NDD	50.035	49.837	-0.1972
511	1e+13	NDD	49.725	49.673	-0.0514
512	0	Correlation	49.584	49.658	0.0741

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	49.584	49.584	49.584		49.658	49.658	49.658		0.0741	0.0741	0.0741	
1e+12	48.169	49.413	50.829	1.3382	48.055	49.344	50.786	1.3716	-0.1138	-0.069467	-0.0434	0.038591
5e+12	48.706	49.005	49.249	0.27531	48.613	49.004	49.2	0.33862	-0.0936	-0.0014	0.1384	0.12311
1e+13	49.265	49.675	50.035	0.38742	49.273	49.595	49.837	0.29018	-0.1972	-0.08	0.0086	0.10584

Device Test: 20.20 EA_COMP_ISWITCH_GM_9A(GMPS|STATIC/SW/4.5////@EA_COMP_ISWITCH_GM_9A)





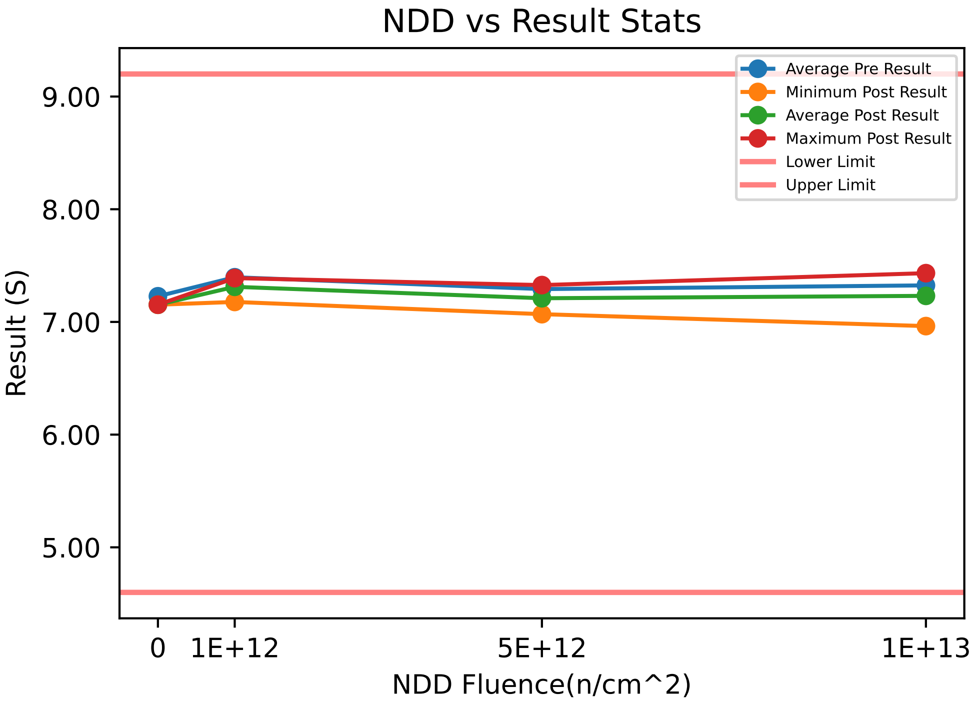
Test Results (Lower Limit = 8.0, Upper Limit = 15.5 (S))

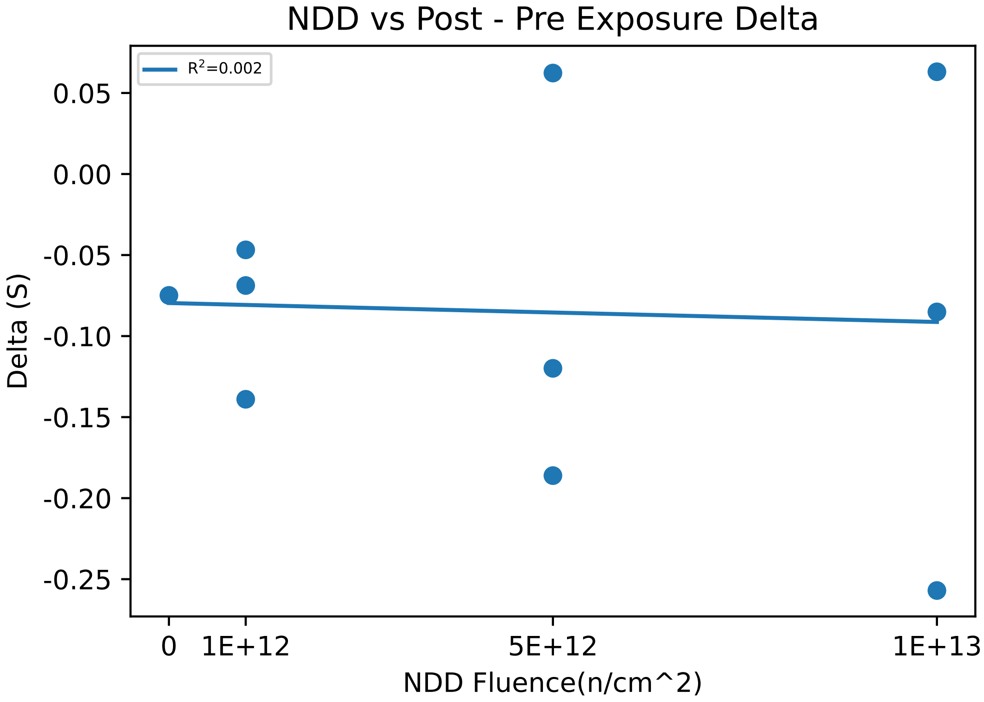
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	11.518	11.477	-0.0415
504	1e+12	NDD	11.582	11.382	-0.2001
505	1e+12	NDD	11.627	11.601	-0.026
506	5e+12	NDD	11.484	11.414	-0.0701
507	5e+12	NDD	11.13	11.122	-0.0078
508	5e+12	NDD	11.213	11.279	0.0662
509	1e+13	NDD	11.014	11.078	0.0632
510	1e+13	NDD	11.649	11.575	-0.0735
511	1e+13	NDD	11.742	11.798	0.0566
512	0	Correlation	11.506	11.348	-0.1579

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	11.506	11.506	11.506		11.348	11.348	11.348		-0.1579	-0.1579	-0.1579	
1e+12	11.518	11.576	11.627	0.054554	11.382	11.487	11.601	0.10997	-0.2001	-0.0892	-0.026	0.096354
5e+12	11.13	11.275	11.484	0.1852	11.122	11.272	11.414	0.1461	-0.0701	-0.0039	0.0662	0.068234
1e+13	11.014	11.468	11.742	0.39577	11.078	11.484	11.798	0.36892	-0.0735	0.015433	0.0632	0.077089

Device Test: 20.21 EA_COMP_ISWITCH_GM_6A(GMPS|STATIC/SW/4.5////@EA_COMP_ISWITCH_GM_6A)





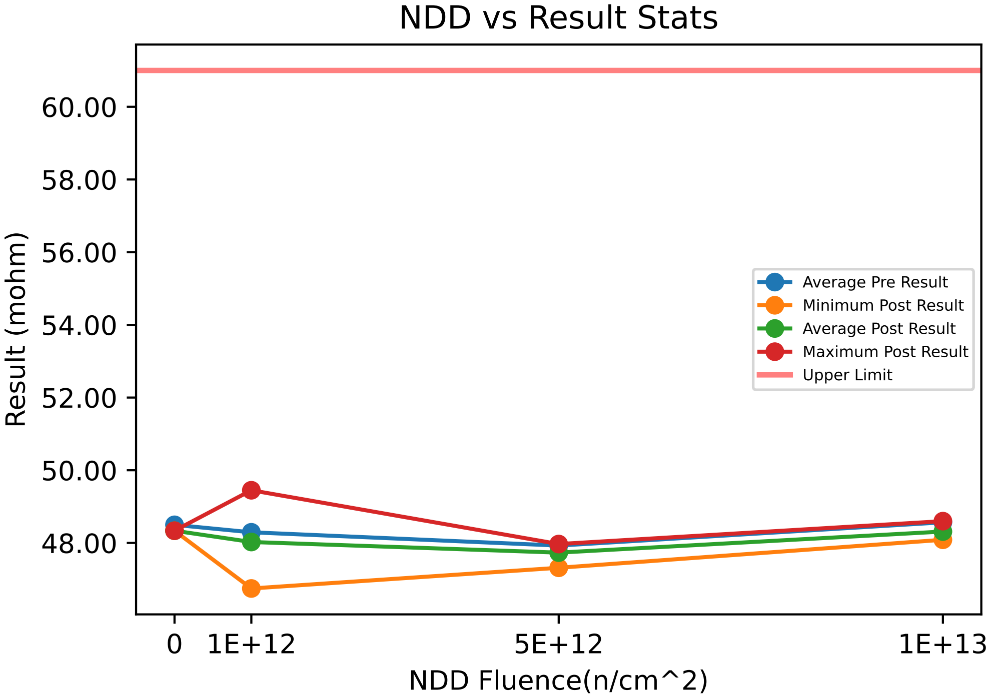
Test Results (Lower Limit = 4.6, Upper Limit = 9.2 (S))

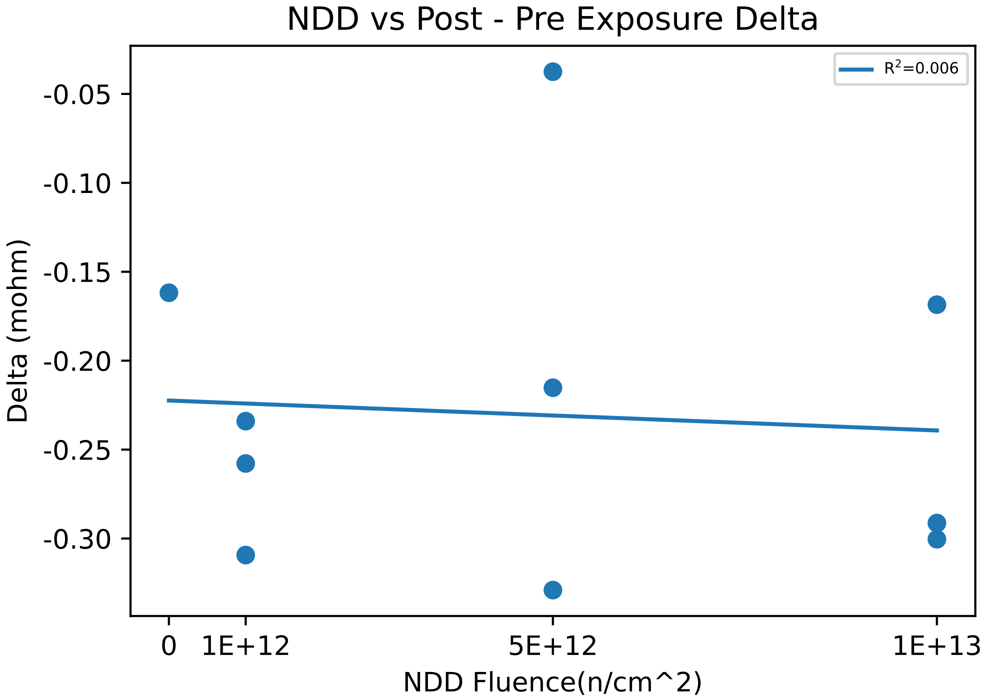
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.3164	7.1774	-0.139
504	1e+12	NDD	7.4356	7.3888	-0.0468
505	1e+12	NDD	7.4373	7.3685	-0.0688
506	5e+12	NDD	7.4208	7.2347	-0.1861
507	5e+12	NDD	7.1888	7.0689	-0.1199
508	5e+12	NDD	7.2646	7.3269	0.0623
509	1e+13	NDD	6.8999	6.963	0.0631
510	1e+13	NDD	7.5555	7.2985	-0.257
511	1e+13	NDD	7.5178	7.4327	-0.0851
512	0	Correlation	7.2276	7.1527	-0.0749

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	7.2276	7.2276	7.2276		7.1527	7.1527	7.1527		-0.0749	-0.0749	-0.0749	
1e+12	7.3164	7.3964	7.4373	0.069316	7.1774	7.3116	7.3888	0.11663	-0.139	-0.084867	-0.0468	0.048154
5e+12	7.1888	7.2914	7.4208	0.1183	7.0689	7.2102	7.3269	0.13074	-0.1861	-0.081233	0.0623	0.12864
1e+13	6.8999	7.3244	7.5555	0.36811	6.963	7.2314	7.4327	0.24193	-0.257	-0.093	0.0631	0.1602

Device Test: 20.3 R_HIGHSIDE_4V_25C(LEVEL|HIGHSIDE/SW/4.5/12///@R_HIGHSIDE_4V_25C)





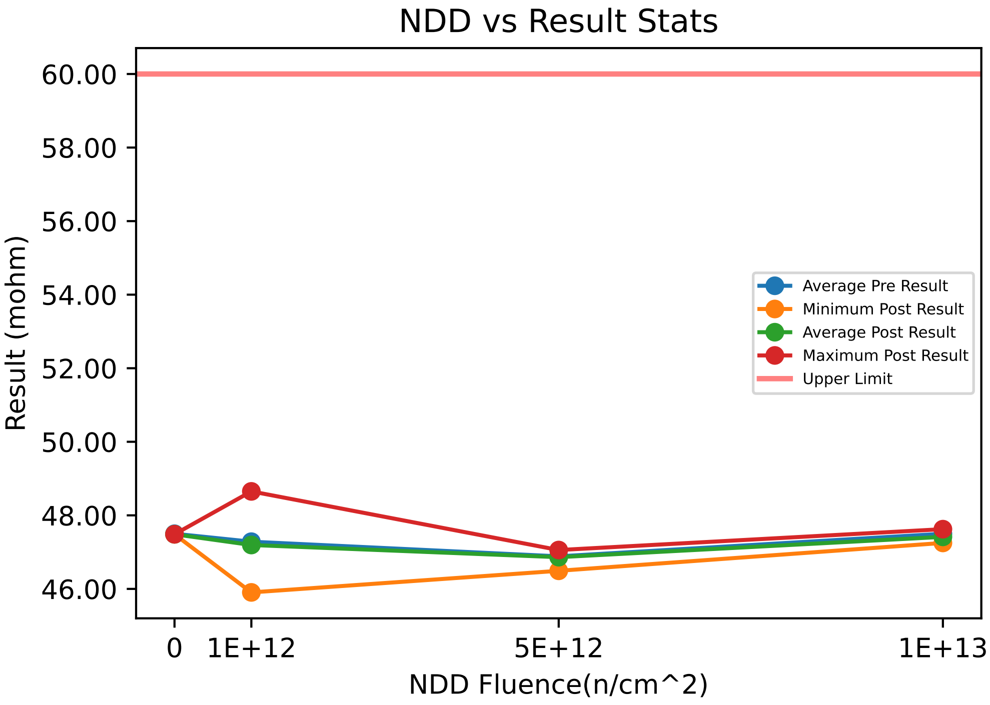
Test Results (Upper Limit = 61.0 (mohm))

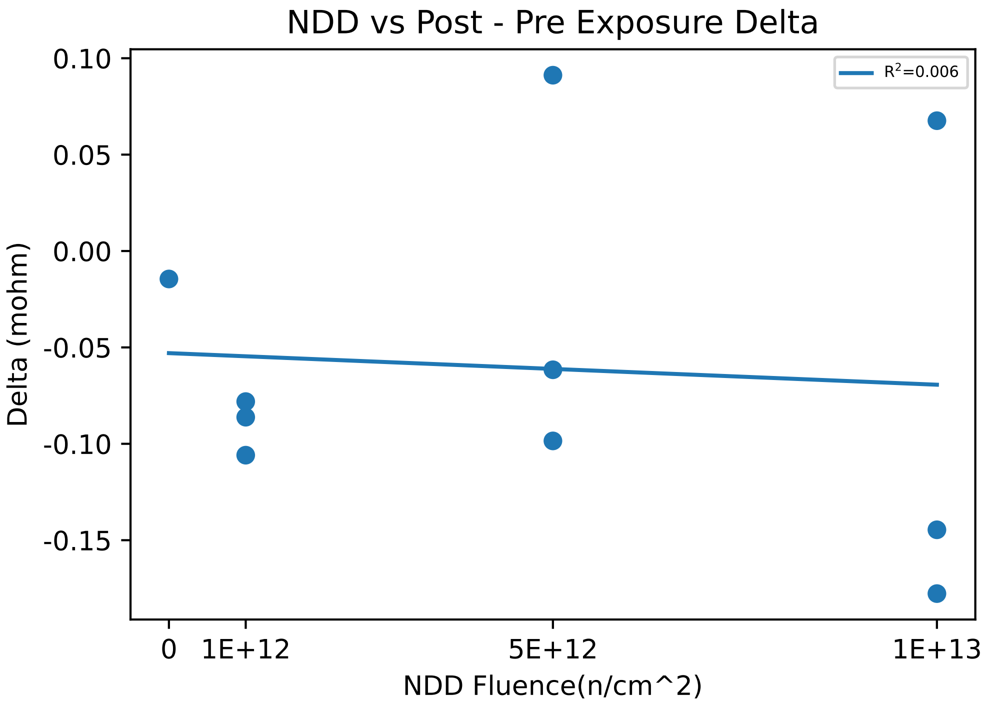
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	48.138	47.88	-0.2578
504	1e+12	NDD	47.056	46.747	-0.3093
505	1e+12	NDD	49.683	49.449	-0.234
506	5e+12	NDD	47.952	47.914	-0.0375
507	5e+12	NDD	47.645	47.316	-0.329
508	5e+12	NDD	48.184	47.969	-0.2152
509	1e+13	NDD	48.255	48.086	-0.1685
510	1e+13	NDD	48.89	48.599	-0.2913
511	1e+13	NDD	48.555	48.254	-0.3004
512	0	Correlation	48.498	48.336	-0.1618

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	48.498	48.498	48.498		48.336	48.336	48.336		-0.1618	-0.1618	-0.1618	
1e+12	47.056	48.292	49.683	1.3203	46.747	48.025	49.449	1.357	-0.3093	-0.26703	-0.234	0.03849
5e+12	47.645	47.927	48.184	0.27061	47.316	47.733	47.969	0.3624	-0.329	-0.1939	-0.0375	0.14691
1e+13	48.255	48.567	48.89	0.31782	48.086	48.313	48.599	0.26128	-0.3004	-0.2534	-0.1685	0.073666

Device Test: 20.36 R_HIGHSIDE_5V_25C(LEVEL|HIGHSIDE/SW/5/2///@R_HIGHSIDE_5V_25C)





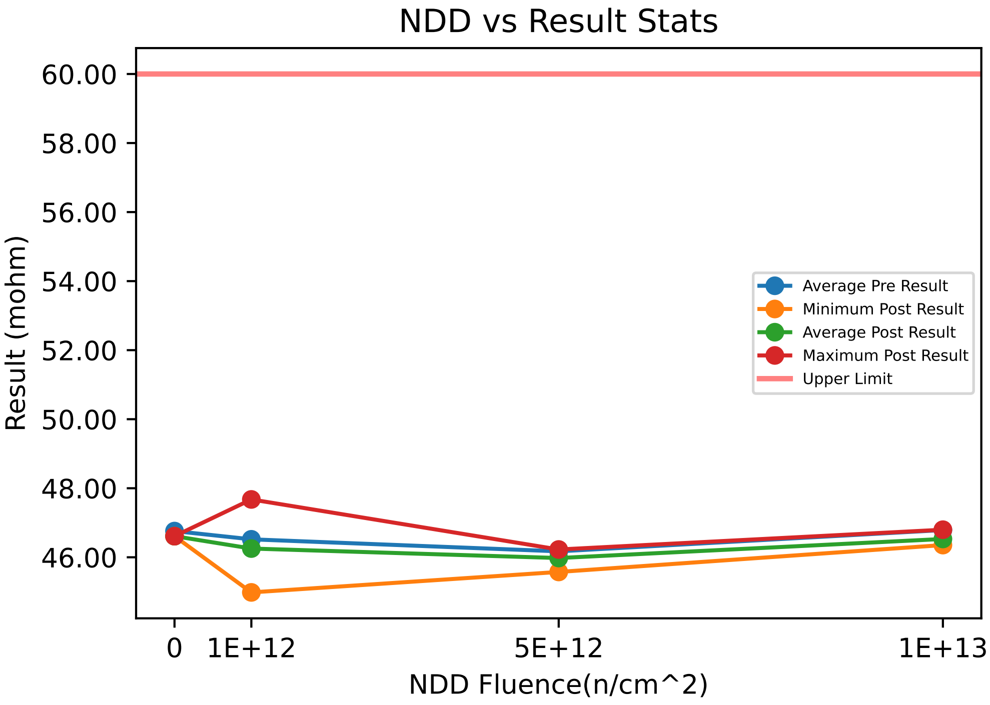
Test Results (Upper Limit = 60.0 (mohm))

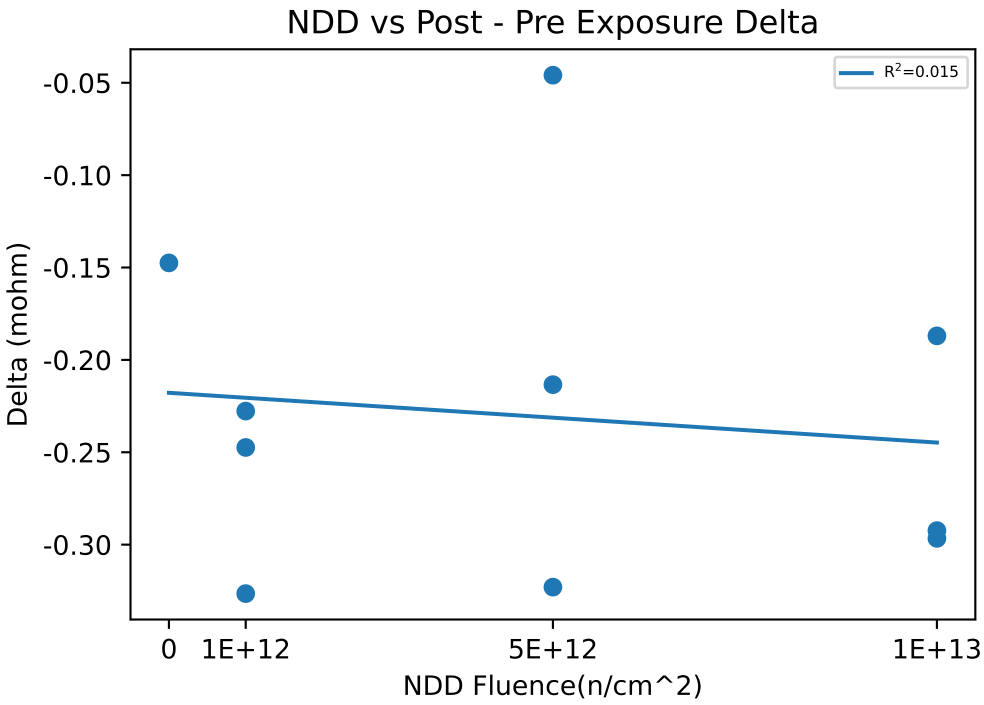
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	47.103	47.025	-0.0781
504	1e+12	NDD	46.011	45.905	-0.1059
505	1e+12	NDD	48.738	48.651	-0.0862
506	5e+12	NDD	46.948	47.039	0.0912
507	5e+12	NDD	46.59	46.492	-0.0985
508	5e+12	NDD	47.118	47.057	-0.0616
509	1e+13	NDD	47.183	47.25	0.0676
510	1e+13	NDD	47.802	47.624	-0.1777
511	1e+13	NDD	47.514	47.37	-0.1446
512	0	Correlation	47.5	47.485	-0.0145

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	47.5	47.5	47.5		47.485	47.485	47.485		-0.0145	-0.0145	-0.0145	
1e+12	46.011	47.284	48.738	1.3723	45.905	47.194	48.651	1.381	-0.1059	-0.090067	-0.0781	0.014298
5e+12	46.59	46.886	47.118	0.26934	46.492	46.863	47.057	0.32109	-0.0985	-0.022967	0.0912	0.10058
1e+13	47.183	47.5	47.802	0.30986	47.25	47.415	47.624	0.19096	-0.1777	-0.0849	0.0676	0.1331

Device Test: 20.37 R_HIGHSIDE_5V_25C(LEVEL|HIGHSIDE/SW/5/12///@R_HIGHSIDE_5V_25C)





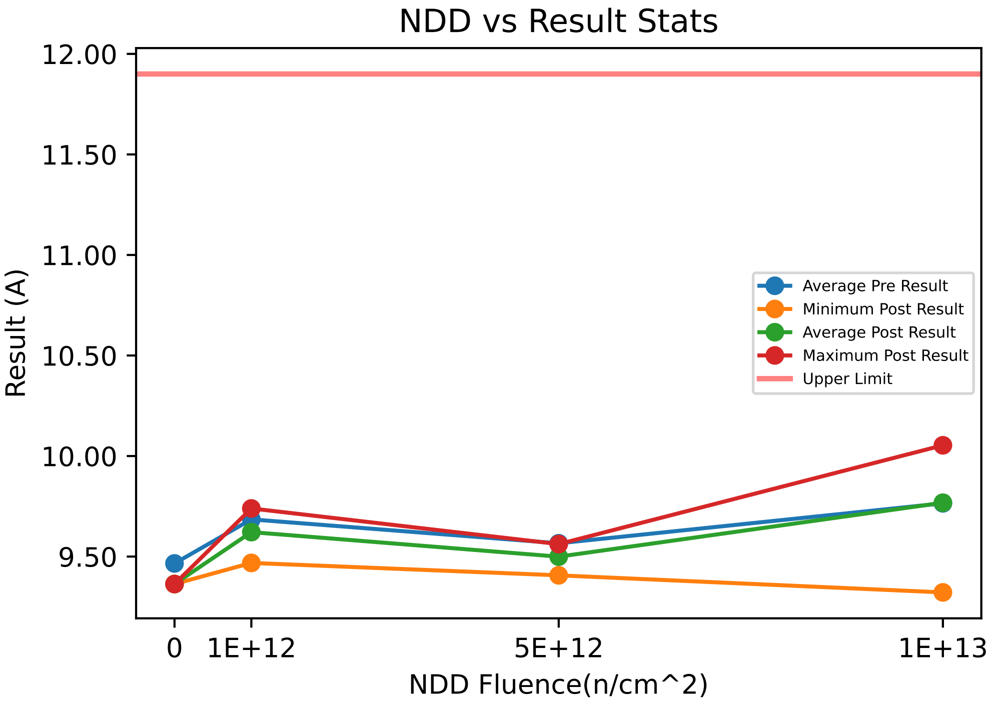
Test Results (Upper Limit = 60.0 (mohm))

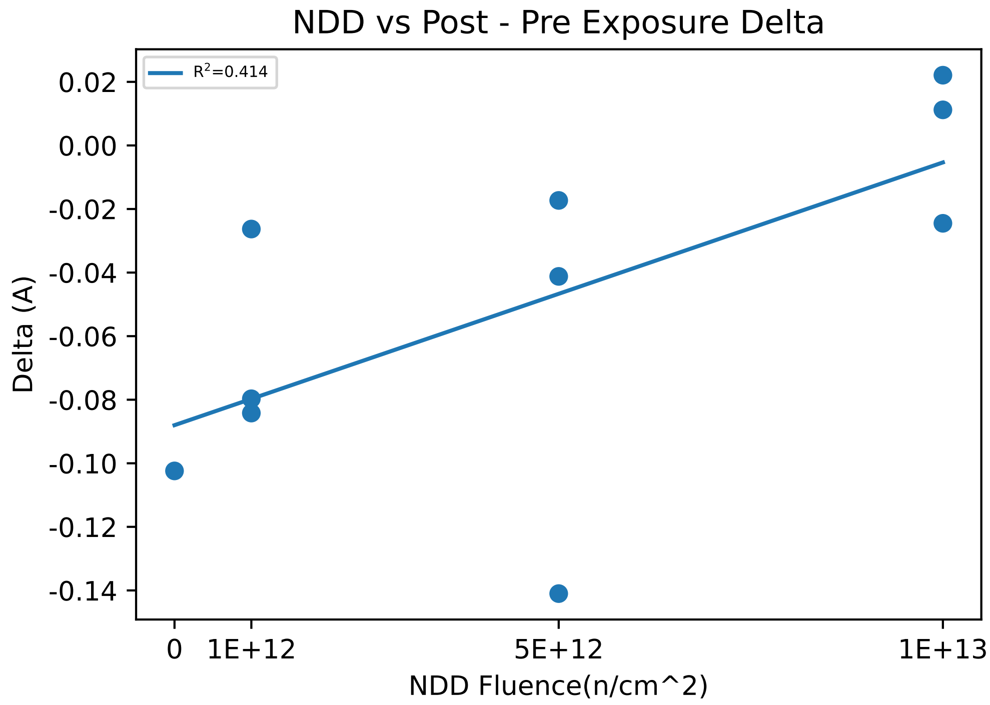
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	46.348	46.101	-0.2474
504	1e+12	NDD	45.309	44.983	-0.3265
505	1e+12	NDD	47.903	47.676	-0.2277
506	5e+12	NDD	46.18	46.134	-0.0459
507	5e+12	NDD	45.898	45.575	-0.323
508	5e+12	NDD	46.439	46.225	-0.2134
509	1e+13	NDD	46.54	46.353	-0.187
510	1e+13	NDD	47.095	46.798	-0.2966
511	1e+13	NDD	46.731	46.438	-0.2924
512	0	Correlation	46.759	46.611	-0.1475

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	46.759	46.759	46.759		46.611	46.611	46.611		-0.1475	-0.1475	-0.1475	
1e+12	45.309	46.52	47.903	1.3057	44.983	46.253	47.676	1.353	-0.3265	-0.2672	-0.2277	0.052291
5e+12	45.898	46.172	46.439	0.27043	45.575	45.978	46.225	0.35207	-0.323	-0.1941	-0.0459	0.13955
1e+13	46.54	46.789	47.095	0.28187	46.353	46.53	46.798	0.23631	-0.2966	-0.25867	-0.187	0.062101

Device Test: 20.39 HIGHSIDE_CURR_LIM_9A(THRESHOLD|RISE/SW/5////@HIGHSIDE_CURR_LIM_9A)





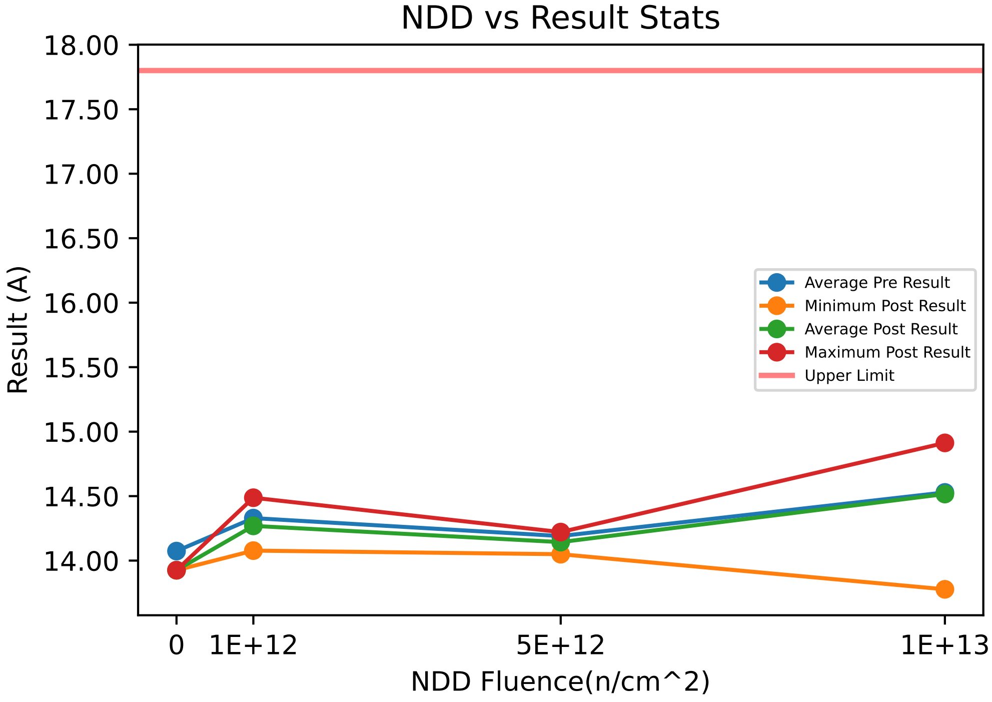
Test Results (Upper Limit = 11.9 (A))

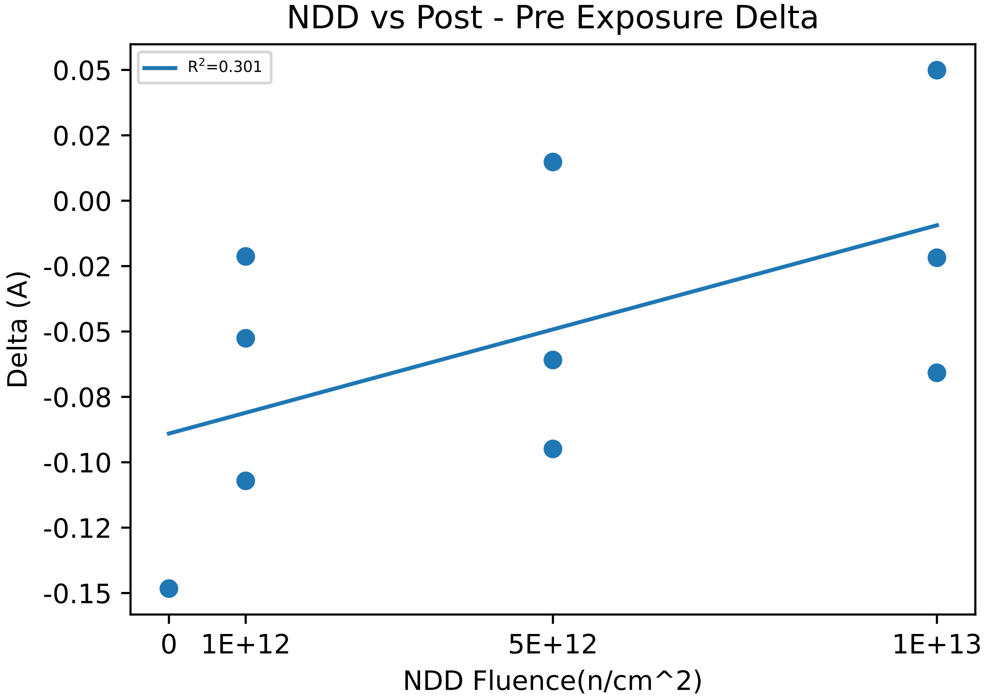
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.5526	9.4684	-0.0842
504	1e+12	NDD	9.7367	9.657	-0.0797
505	1e+12	NDD	9.7656	9.7393	-0.0263
506	5e+12	NDD	9.5477	9.4067	-0.141
507	5e+12	NDD	9.5712	9.53	-0.0412
508	5e+12	NDD	9.5793	9.562	-0.0173
509	1e+13	NDD	9.3463	9.3218	-0.0245
510	1e+13	NDD	9.906	9.9281	0.0221
511	1e+13	NDD	10.042	10.053	0.0112
512	0	Correlation	9.4658	9.3634	-0.1024

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.4658	9.4658	9.4658		9.3634	9.3634	9.3634		-0.1024	-0.1024	-0.1024	
1e+12	9.5526	9.685	9.7656	0.11554	9.4684	9.6216	9.7393	0.13888	-0.0842	-0.0634	-0.0263	0.032208
5e+12	9.5477	9.5661	9.5793	0.016414	9.4067	9.4996	9.562	0.082001	-0.141	-0.0665	-0.0173	0.065616
1e+13	9.3463	9.7648	10.042	0.3688	9.3218	9.7678	10.053	0.39127	-0.0245	0.0029333	0.0221	0.024375

Device Test: 20.40 HIGHSIDE_CURR_LIM_13A(THRESHOLD|RISE/SW/5////@HIGHSIDE_CURR_LIM_13A)





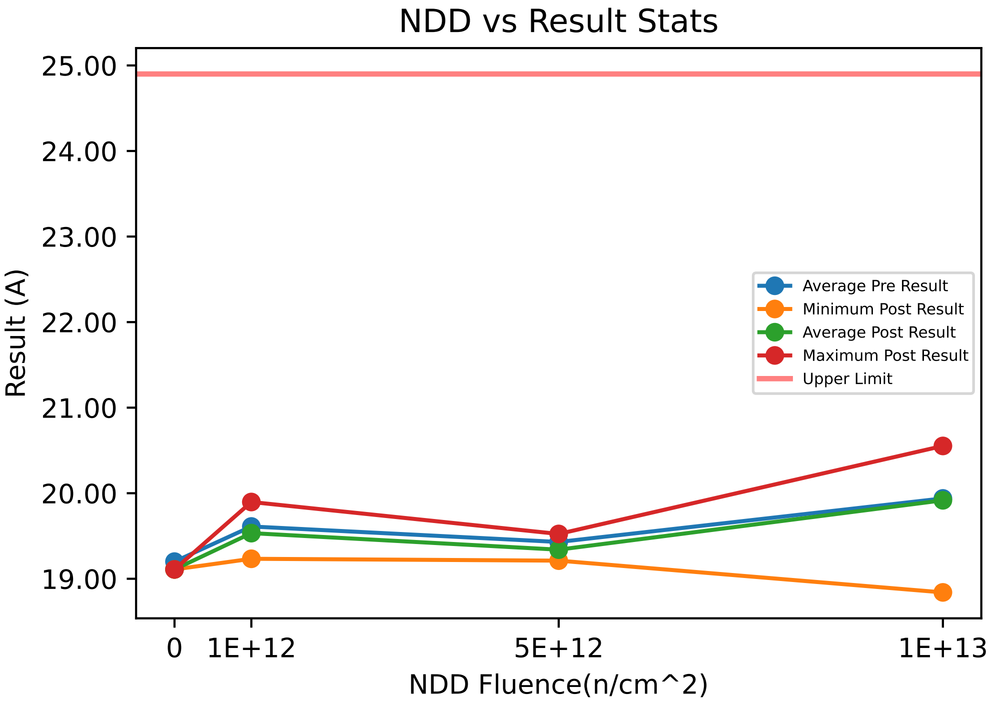
Test Results (Upper Limit = 17.8 (A))

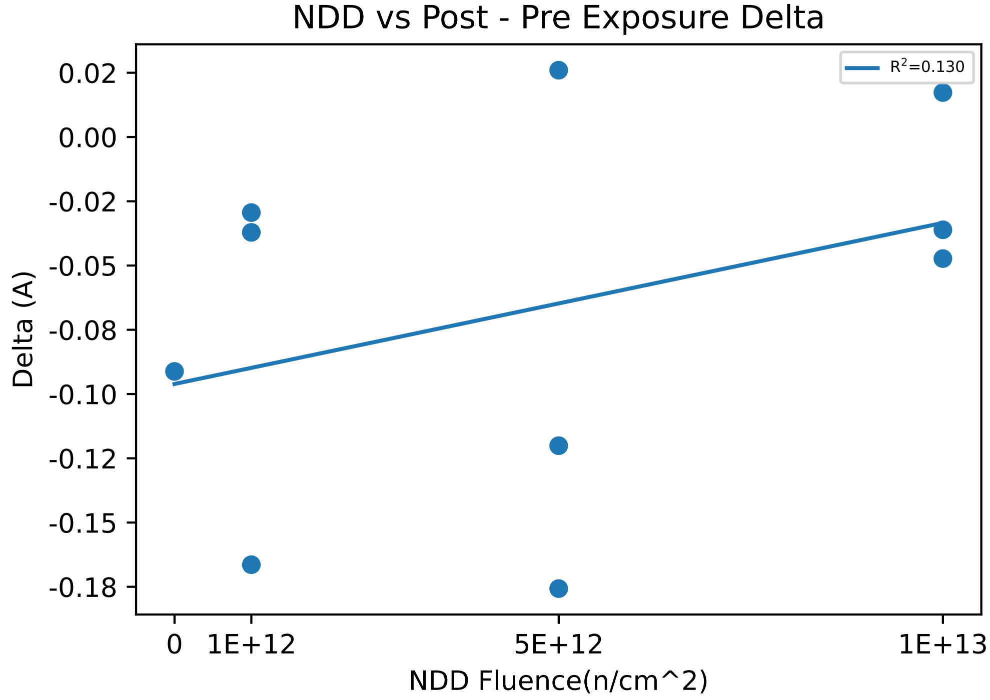
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	14.13	14.077	-0.0526
504	1e+12	NDD	14.264	14.243	-0.0213
505	1e+12	NDD	14.595	14.488	-0.1071
506	5e+12	NDD	14.145	14.05	-0.0949
507	5e+12	NDD	14.145	14.159	0.0148
508	5e+12	NDD	14.282	14.221	-0.0609
509	1e+13	NDD	13.843	13.777	-0.0658
510	1e+13	NDD	14.808	14.858	0.0499
511	1e+13	NDD	14.934	14.913	-0.0218
512	0	Correlation	14.074	13.925	-0.1483

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	14.074	14.074	14.074		13.925	13.925	13.925		-0.1483	-0.1483	-0.1483	
1e+12	14.13	14.33	14.595	0.23915	14.077	14.269	14.488	0.20634	-0.1071	-0.060333	-0.0213	0.04342
5e+12	14.145	14.19	14.282	0.079328	14.05	14.143	14.221	0.086876	-0.0949	-0.047	0.0148	0.056155
1e+13	13.843	14.529	14.934	0.59706	13.777	14.516	14.913	0.6404	-0.0658	-0.012567	0.0499	0.0584

Device Test: 20.41 HIGHSIDE_CURR_LIM_19A(THRESHOLD|RISE/SW/5////@HIGHSIDE_CURR_LIM_19A)





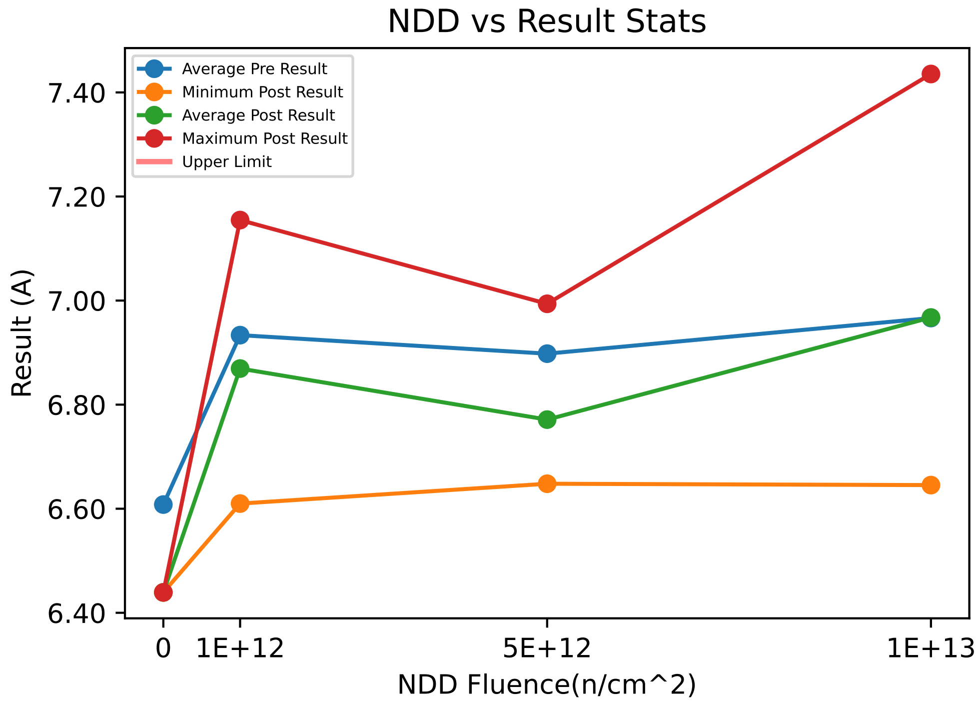
Test Results (Upper Limit = 24.9 (A))

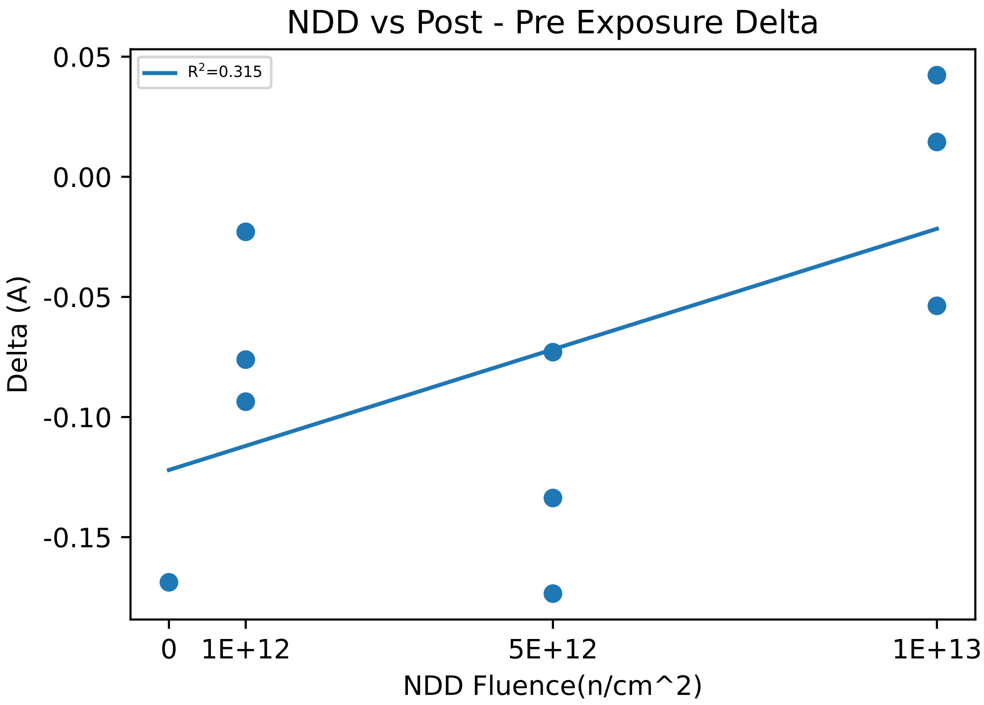
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	19.263	19.234	-0.0294
504	1e+12	NDD	19.507	19.47	-0.0371
505	1e+12	NDD	20.064	19.897	-0.1664
506	5e+12	NDD	19.388	19.212	-0.1757
507	5e+12	NDD	19.259	19.285	0.026
508	5e+12	NDD	19.644	19.524	-0.1201
509	1e+13	NDD	18.877	18.841	-0.0361
510	1e+13	NDD	20.405	20.358	-0.0473
511	1e+13	NDD	20.535	20.553	0.0173
512	0	Correlation	19.201	19.109	-0.0912

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	19.201	19.201	19.201		19.109	19.109	19.109		-0.0912	-0.0912	-0.0912	
1e+12	19.263	19.611	20.064	0.41037	19.234	19.534	19.897	0.33637	-0.1664	-0.077633	-0.0294	0.076971
5e+12	19.259	19.43	19.644	0.19609	19.212	19.34	19.524	0.16321	-0.1757	-0.089933	0.026	0.10418
1e+13	18.877	19.939	20.535	0.92225	18.841	19.917	20.553	0.93721	-0.0473	-0.022033	0.0173	0.034521

Device Test: 20.42 HIGHSIDE_CURR_LIM2_6A(THRESHOLD|RISE/SW/5////@HIGHSIDE_CURR_LIM2_6A)





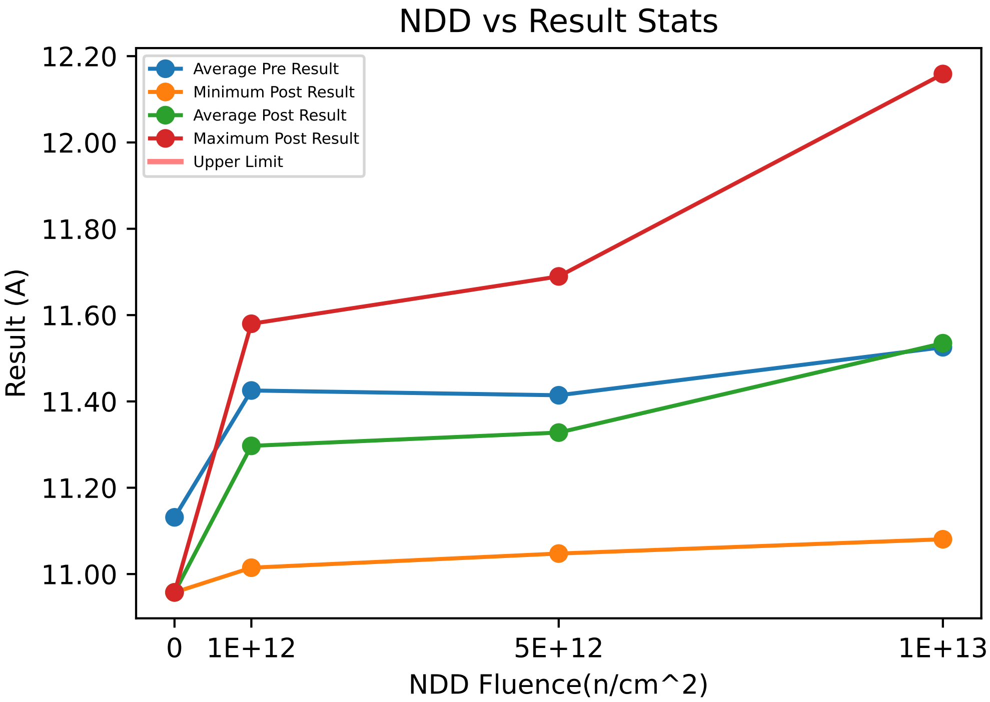
Test Results (No Limits Specified (A))

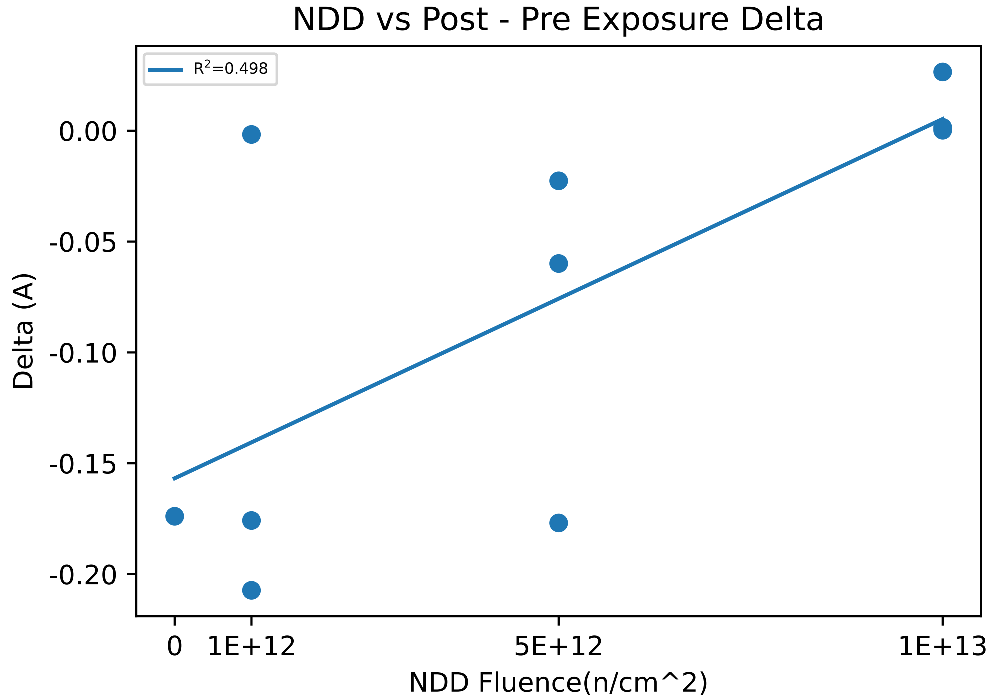
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	6.9371	6.8435	-0.0936
504	1e+12	NDD	7.1776	7.1547	-0.0229
505	1e+12	NDD	6.686	6.6099	-0.0761
506	5e+12	NDD	6.7817	6.648	-0.1337
507	5e+12	NDD	7.0668	6.9938	-0.073
508	5e+12	NDD	6.8454	6.6719	-0.1735
509	1e+13	NDD	6.6031	6.6454	0.0423
510	1e+13	NDD	6.8753	6.8216	-0.0537
511	1e+13	NDD	7.4209	7.4354	0.0145
512	0	Correlation	6.608	6.4392	-0.1688

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	6.608	6.608	6.608		6.4392	6.4392	6.4392		-0.1688	-0.1688	-0.1688	
1e+12	6.686	6.9336	7.1776	0.24582	6.6099	6.8694	7.1547	0.27332	-0.0936	-0.0642	-0.0229	0.036822
5e+12	6.7817	6.898	7.0668	0.14964	6.648	6.7712	6.9938	0.19312	-0.1735	-0.12673	-0.073	0.050611
1e+13	6.6031	6.9664	7.4209	0.41645	6.6454	6.9675	7.4354	0.41471	-0.0537	0.0010333	0.0423	0.049396

Device Test: 20.43 HIGHSIDE_CURR_LIM2_9A(THRESHOLD|RISE/SW/5////@HIGHSIDE_CURR_LIM2_9A)





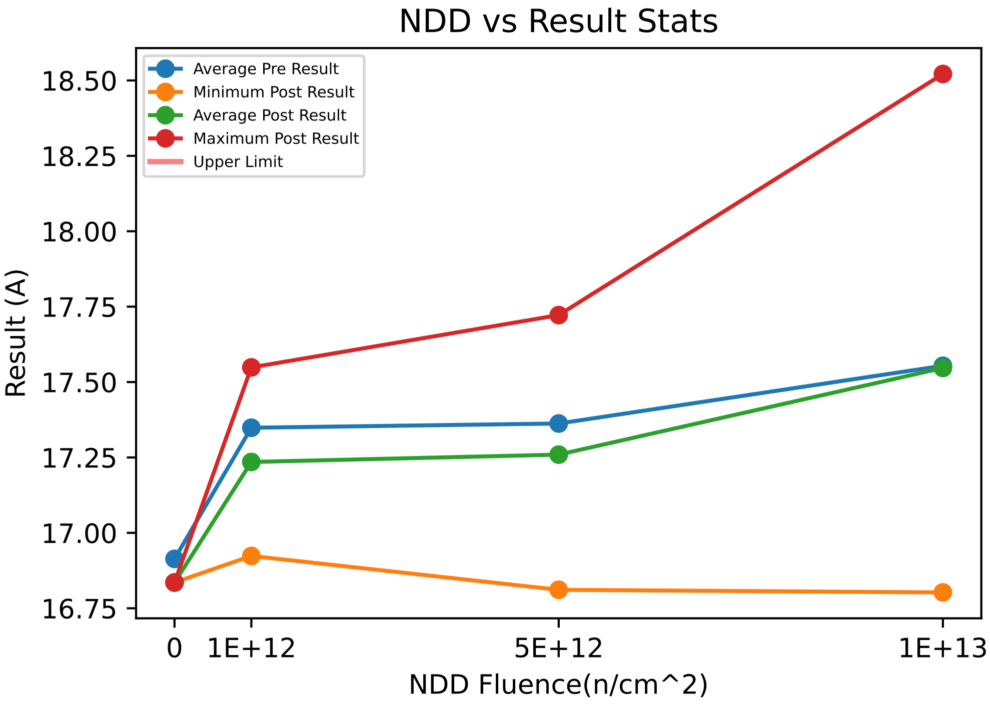
Test Results (No Limits Specified (A))

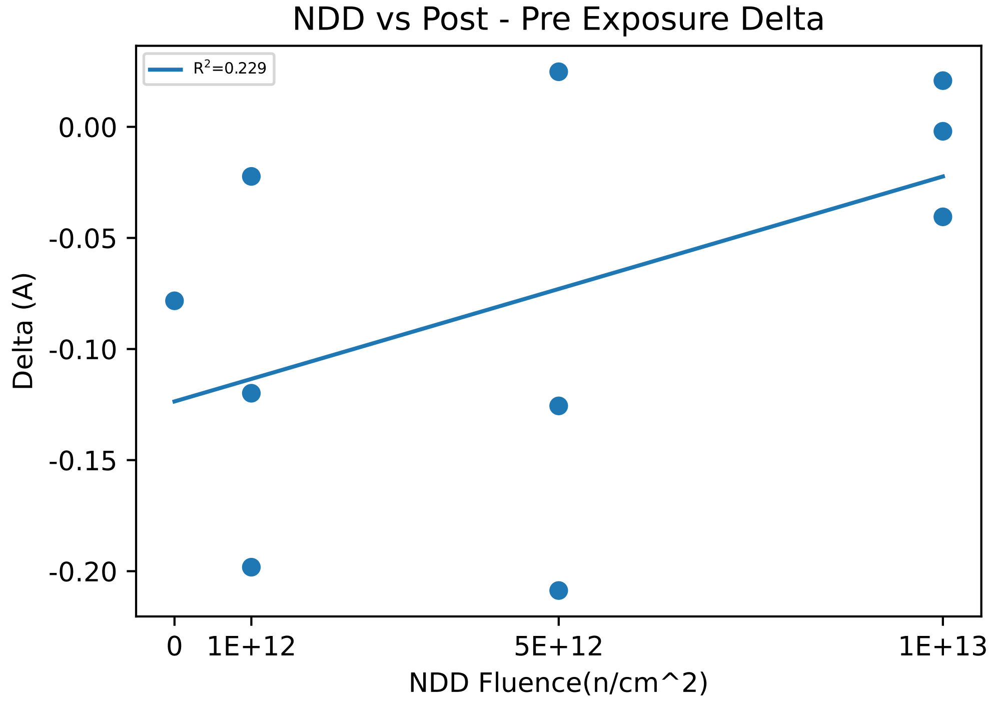
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	11.298	11.296	-0.0017
504	1e+12	NDD	11.756	11.58	-0.1758
505	1e+12	NDD	11.222	11.015	-0.2073
506	5e+12	NDD	11.224	11.047	-0.1769
507	5e+12	NDD	11.712	11.69	-0.0226
508	5e+12	NDD	11.306	11.246	-0.0599
509	1e+13	NDD	11.079	11.081	0.0015
510	1e+13	NDD	11.365	11.365	0.0002
511	1e+13	NDD	12.132	12.159	0.0265
512	0	Correlation	11.131	10.957	-0.1739

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	11.131	11.131	11.131		10.957	10.957	10.957		-0.1739	-0.1739	-0.1739	
1e+12	11.222	11.425	11.756	0.28866	11.015	11.297	11.58	0.2826	-0.2073	-0.12827	-0.0017	0.11074
5e+12	11.224	11.414	11.712	0.26126	11.047	11.328	11.69	0.32873	-0.1769	-0.086467	-0.0226	0.080508
1e+13	11.079	11.525	12.132	0.54449	11.081	11.535	12.159	0.55862	0.0002	0.0094	0.0265	0.014823

Device Test: 20.44 HIGHSIDE_CURR_LIM2_13A(THRESHOLD|RISE/SW/5////@HIGHSIDE_CURR_LIM2_13A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

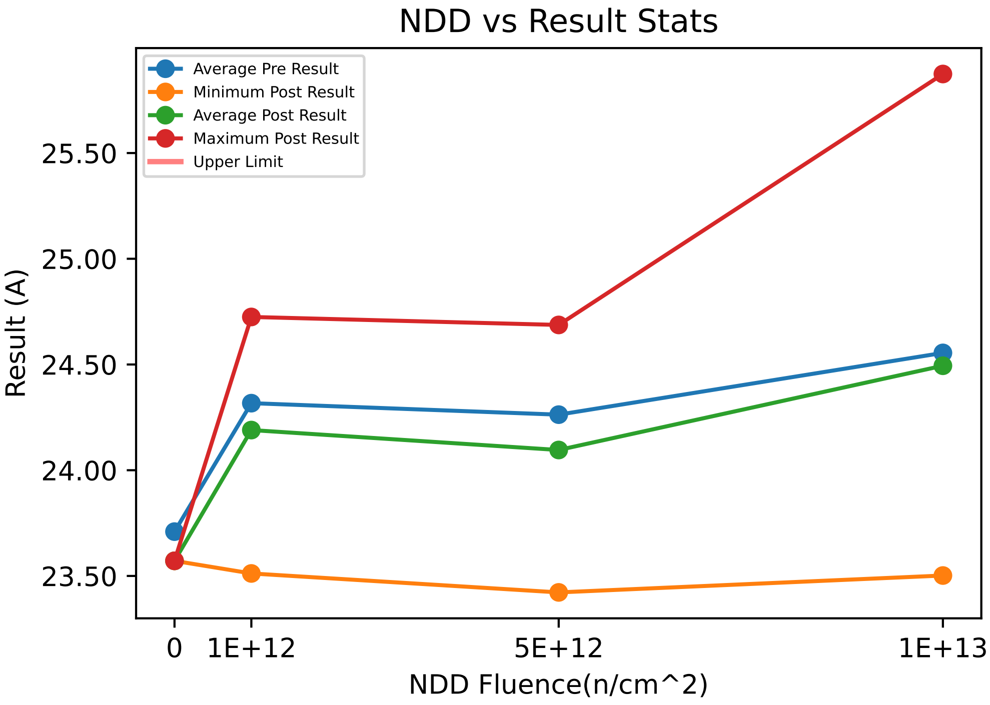
Test Results (No Limits Specified (A))

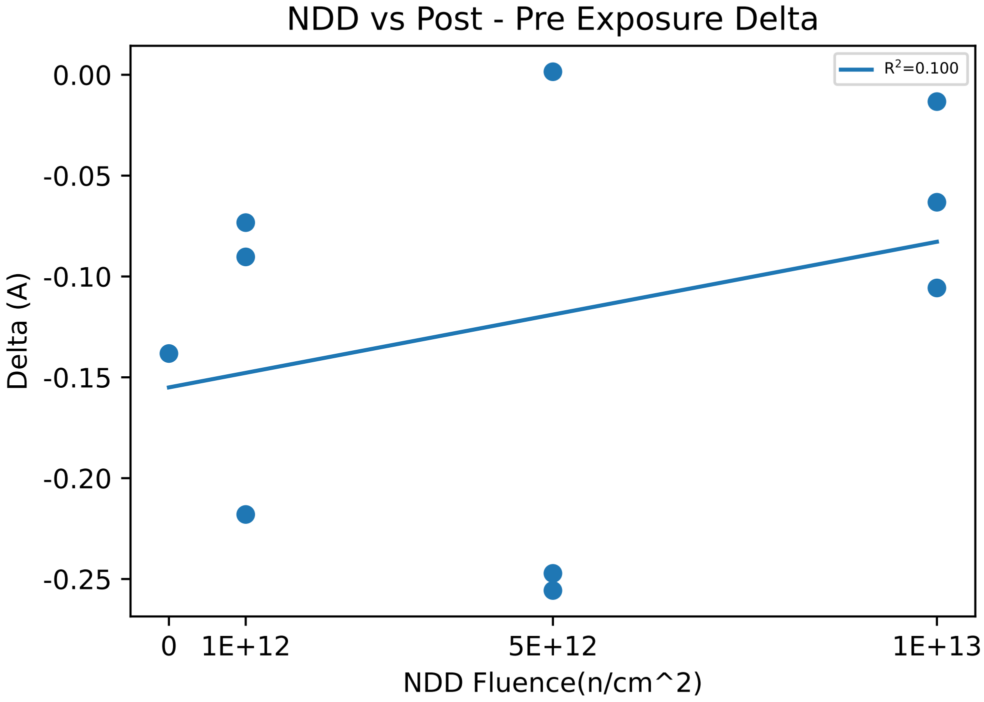
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	16.946	16.923	-0.0223
504	1e+12	NDD	17.747	17.549	-0.1982
505	1e+12	NDD	17.353	17.233	-0.1199
506	5e+12	NDD	17.02	16.811	-0.2087
507	5e+12	NDD	17.697	17.722	0.0248
508	5e+12	NDD	17.371	17.245	-0.1256
509	1e+13	NDD	16.843	16.803	-0.0405
510	1e+13	NDD	17.318	17.316	-0.002
511	1e+13	NDD	18.501	18.521	0.0208
512	0	Correlation	16.914	16.835	-0.0783

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	16.914	16.914	16.914		16.835	16.835	16.835		-0.0783	-0.0783	-0.0783	
1e+12	16.946	17.349	17.747	0.40057	16.923	17.235	17.549	0.3126	-0.1982	-0.11347	-0.0223	0.088126
5e+12	17.02	17.363	17.697	0.33872	16.811	17.259	17.722	0.45557	-0.2087	-0.10317	0.0248	0.11836
1e+13	16.843	17.554	18.501	0.85355	16.803	17.547	18.521	0.8823	-0.0405	-0.0072333	0.0208	0.030983

Device Test: 20.45 HIGHSIDE_CURR_LIM2_19A(THRESHOLD|RISE/SW/5////@HIGHSIDE_CURR_LIM2_19A)





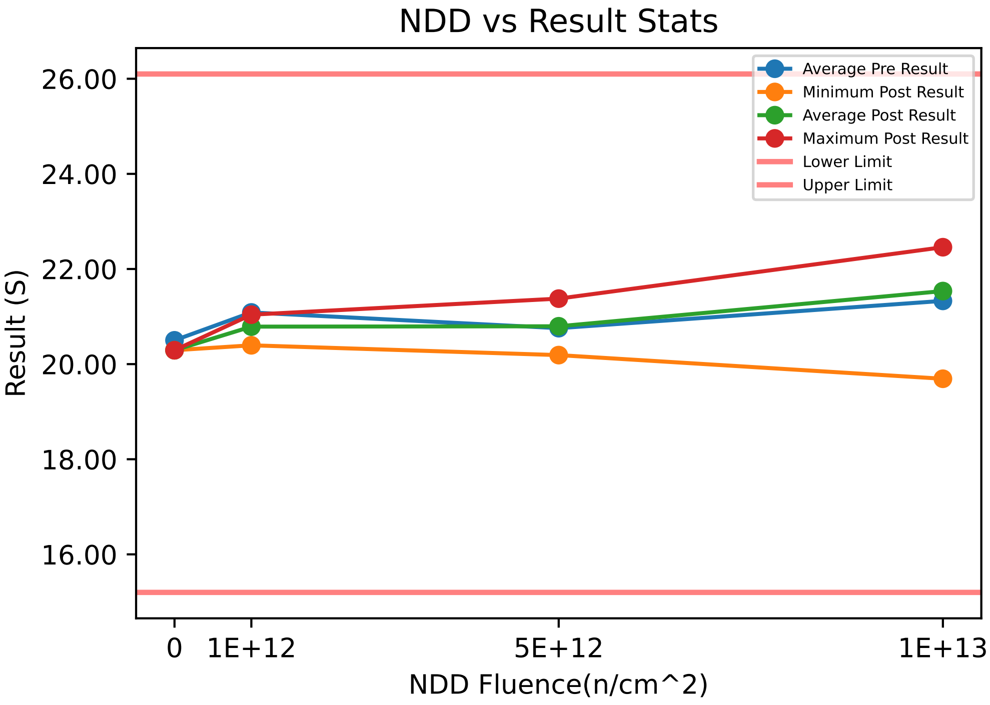
Test Results (No Limits Specified (A))

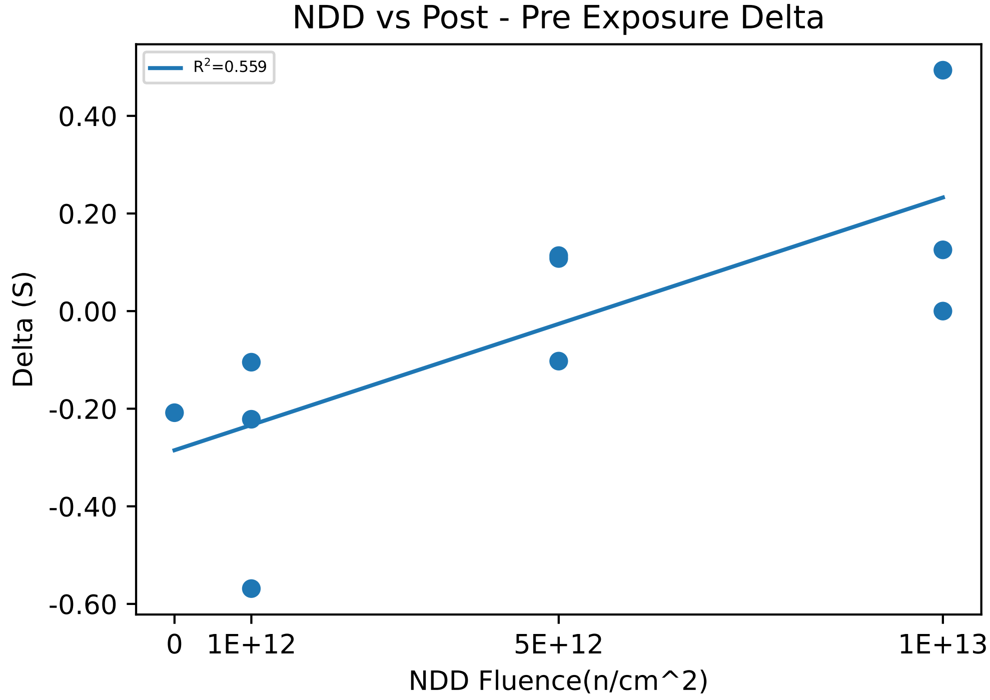
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	23.585	23.512	-0.0733
504	1e+12	NDD	24.815	24.725	-0.0903
505	1e+12	NDD	24.551	24.333	-0.218
506	5e+12	NDD	23.678	23.422	-0.2557
507	5e+12	NDD	24.686	24.687	0.0015
508	5e+12	NDD	24.425	24.178	-0.2472
509	1e+13	NDD	23.565	23.502	-0.0632
510	1e+13	NDD	24.212	24.106	-0.1057
511	1e+13	NDD	25.887	25.874	-0.0133
512	0	Correlation	23.71	23.571	-0.1382

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	23.71	23.71	23.71		23.571	23.571	23.571		-0.1382	-0.1382	-0.1382	
1e+12	23.585	24.317	24.815	0.64753	23.512	24.19	24.725	0.61905	-0.218	-0.1272	-0.0733	0.079093
5e+12	23.678	24.263	24.686	0.52304	23.422	24.096	24.687	0.63643	-0.2557	-0.16713	0.0015	0.1461
1e+13	23.565	24.555	25.887	1.1983	23.502	24.494	25.874	1.2325	-0.1057	-0.060733	-0.0133	0.046249

Device Test: 20.46 EA_COMP_ISWITCH_GM_19A_25C(GMPS|STATIC/SW/5////@EA_COMP_ISWITCH_GM_19A_25C)





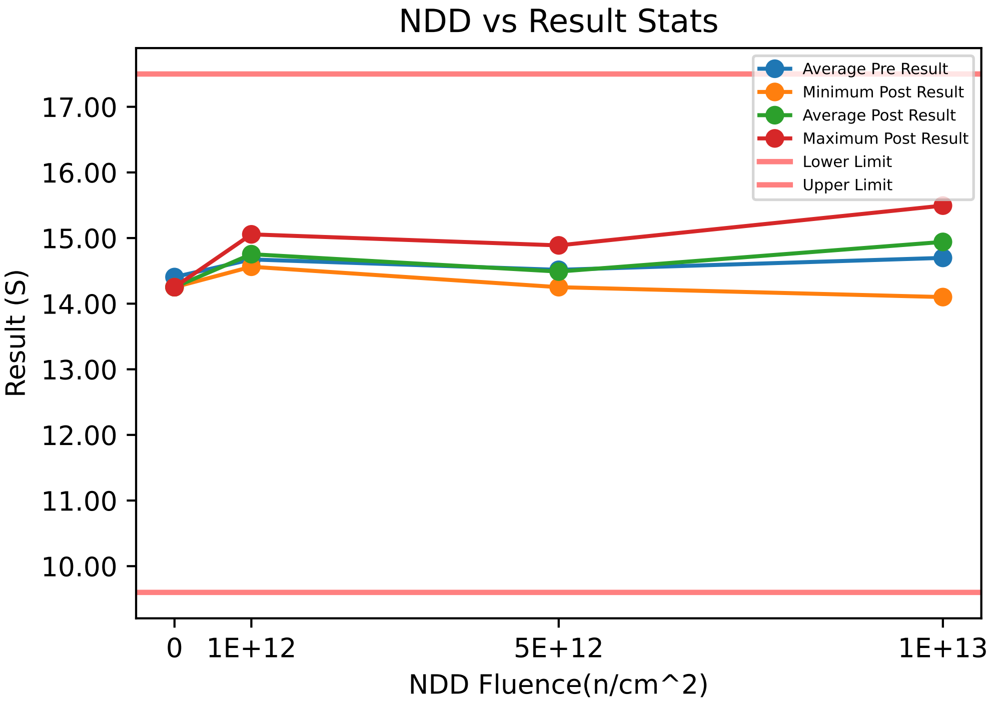
Test Results (Lower Limit = 15.2, Upper Limit = 26.1 (S))

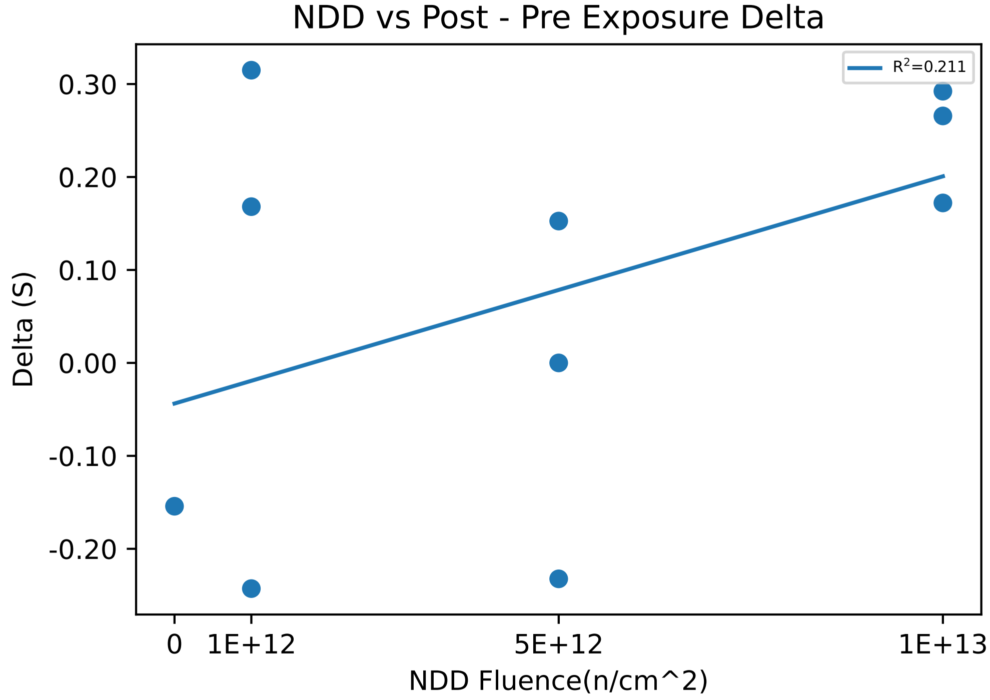
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	21.151	20.929	-0.2216
504	1e+12	NDD	20.5	20.395	-0.1047
505	1e+12	NDD	21.608	21.04	-0.5686
506	5e+12	NDD	21.263	21.377	0.1137
507	5e+12	NDD	20.292	20.189	-0.1025
508	5e+12	NDD	20.712	20.82	0.1078
509	1e+13	NDD	19.692	19.692	0
510	1e+13	NDD	21.964	22.458	0.4936
511	1e+13	NDD	22.332	22.458	0.1255
512	0	Correlation	20.5	20.292	-0.2082

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	20.5	20.5	20.5		20.292	20.292	20.292		-0.2082	-0.2082	-0.2082	
1e+12	20.5	21.086	21.608	0.55681	20.395	20.788	21.04	0.34449	-0.5686	-0.2983	-0.1047	0.24127
5e+12	20.292	20.756	21.263	0.48715	20.189	20.796	21.377	0.59419	-0.1025	0.039667	0.1137	0.12316
1e+13	19.692	21.33	22.332	1.43	19.692	21.536	22.458	1.5968	0	0.20637	0.4936	0.25654

Device Test: 20.47 EA_COMP_ISWITCH_GM_13A_25C(GMPS|STATIC/SW/5////@EA_COMP_ISWITCH_GM_13A_25C)





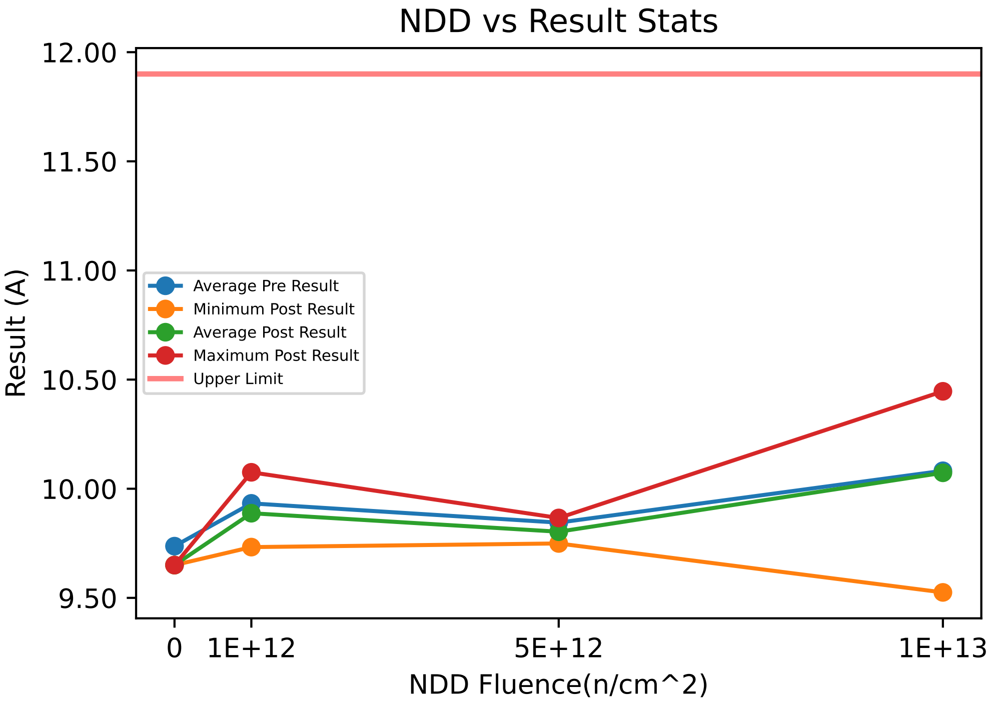
Test Results (Lower Limit = 9.6, Upper Limit = 17.5 (S))

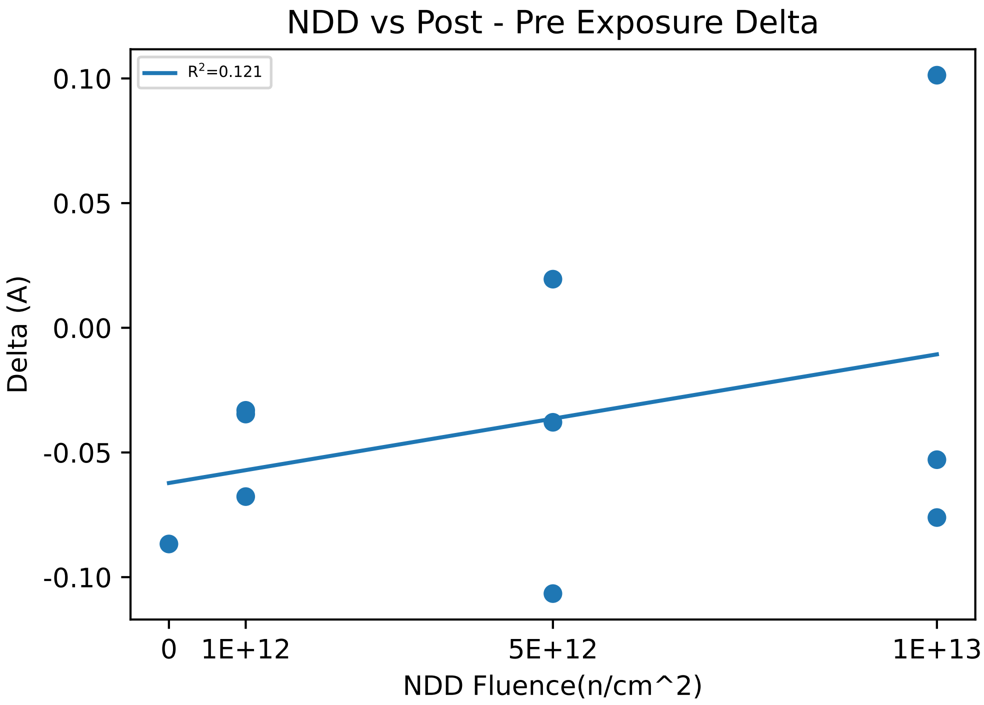
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	14.888	15.056	0.1681
504	1e+12	NDD	14.328	14.643	0.3149
505	1e+12	NDD	14.806	14.563	-0.2428
506	5e+12	NDD	14.888	14.888	0
507	5e+12	NDD	14.175	14.328	0.1526
508	5e+12	NDD	14.484	14.251	-0.2323
509	1e+13	NDD	13.808	14.101	0.2923
510	1e+13	NDD	15.056	15.229	0.1721
511	1e+13	NDD	15.229	15.494	0.2657
512	0	Correlation	14.405	14.251	-0.1542

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	14.405	14.405	14.405		14.251	14.251	14.251		-0.1542	-0.1542	-0.1542	
1e+12	14.328	14.674	14.888	0.30249	14.563	14.754	15.056	0.26496	-0.2428	0.080067	0.3149	0.28908
5e+12	14.175	14.516	14.888	0.35753	14.251	14.489	14.888	0.34772	-0.2323	-0.026567	0.1526	0.19382
1e+13	13.808	14.698	15.229	0.77518	14.101	14.941	15.494	0.74003	0.1721	0.24337	0.2923	0.063136

Device Test: 20.5 HIGHSIDE_CURR_LIM_9A(THRESHOLD|RISE/SW/4.5////@HIGHSIDE_CURR_LIM_9A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

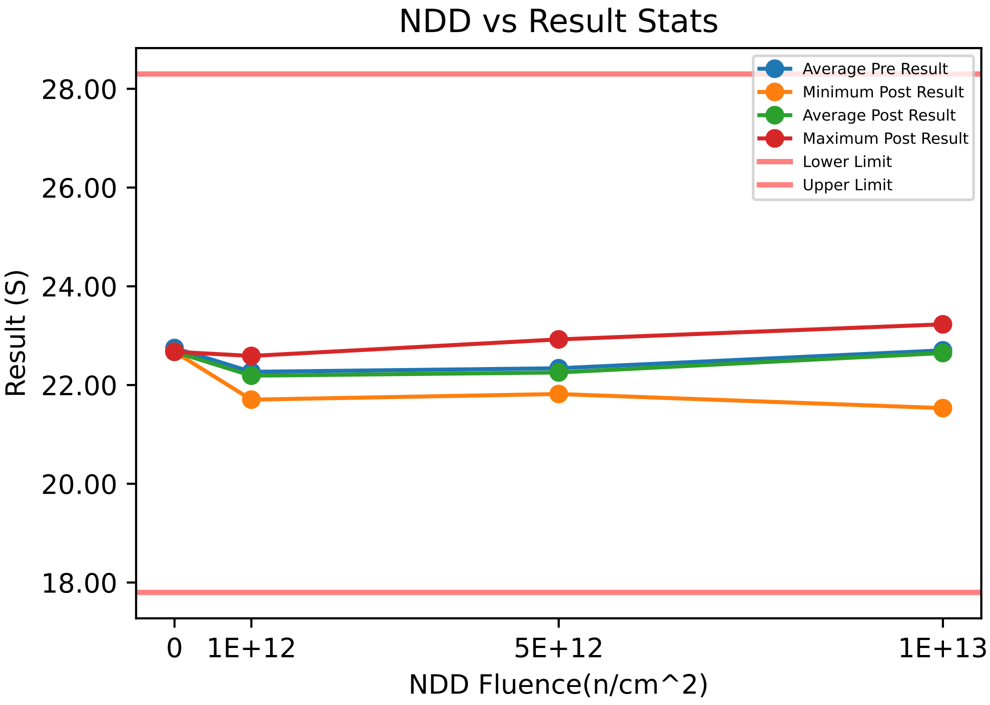
Test Results (Upper Limit = 11.9 (A))

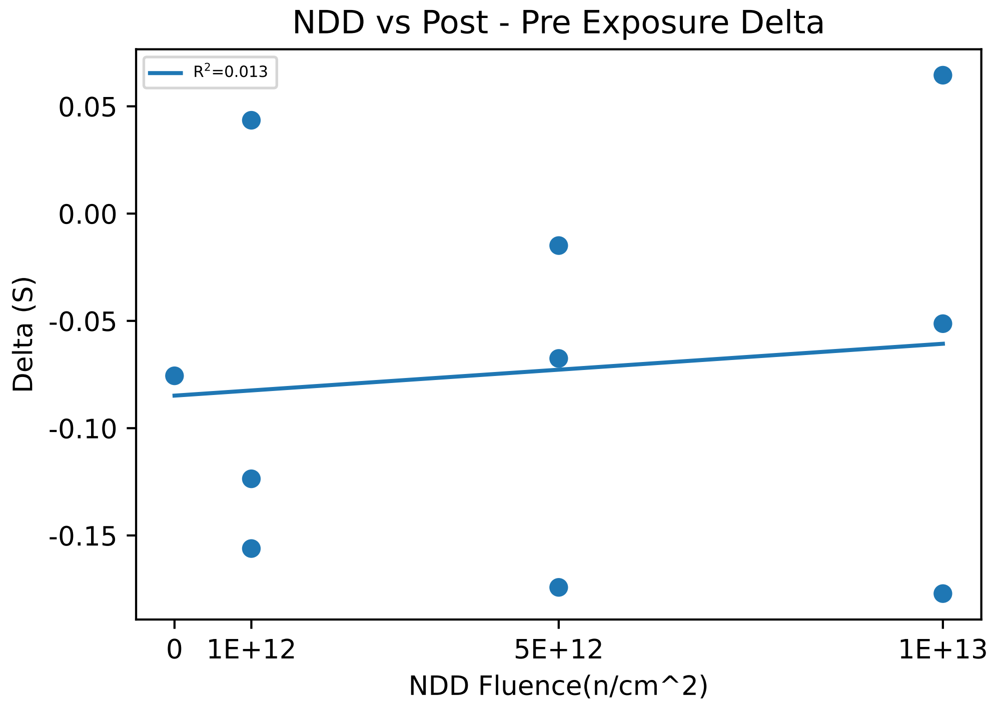
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.7657	9.7326	-0.0331
504	1e+12	NDD	9.8902	9.8556	-0.0346
505	1e+12	NDD	10.143	10.075	-0.0677
506	5e+12	NDD	9.8559	9.7493	-0.1066
507	5e+12	NDD	9.7745	9.794	0.0195
508	5e+12	NDD	9.904	9.8661	-0.0379
509	1e+13	NDD	9.6012	9.5251	-0.0761
510	1e+13	NDD	10.301	10.248	-0.0529
511	1e+13	NDD	10.345	10.446	0.1013
512	0	Correlation	9.7369	9.6502	-0.0867

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.7369	9.7369	9.7369		9.6502	9.6502	9.6502		-0.0867	-0.0867	-0.0867	
1e+12	9.7657	9.933	10.143	0.19225	9.7326	9.8878	10.075	0.17361	-0.0677	-0.045133	-0.0331	0.019558
5e+12	9.7745	9.8448	9.904	0.06546	9.7493	9.8031	9.8661	0.058933	-0.1066	-0.041667	0.0195	0.063134
1e+13	9.6012	10.082	10.345	0.41721	9.5251	10.073	10.446	0.4848	-0.0761	-0.0092333	0.1013	0.096425

Device Test: 20.52 EA_COMP_ISWITCH_GM_0P5V_19A(GMPS|STATIC/SW/5////@EA_COMP_ISWITCH_GM_0P5V_19A)





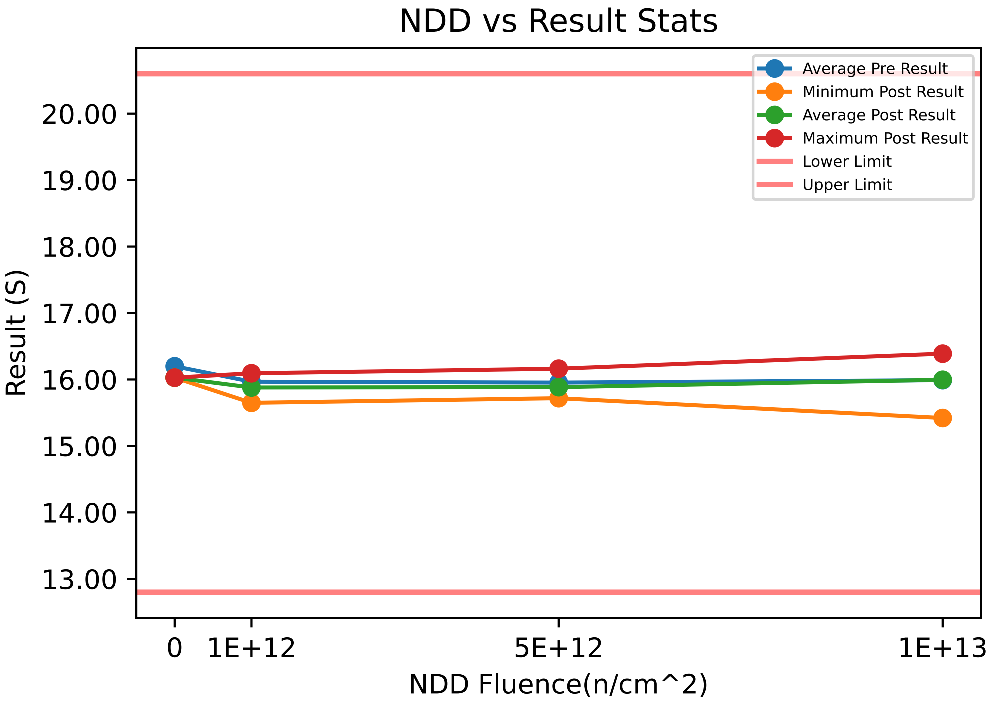
Test Results (Lower Limit = 17.8, Upper Limit = 28.3 (S))

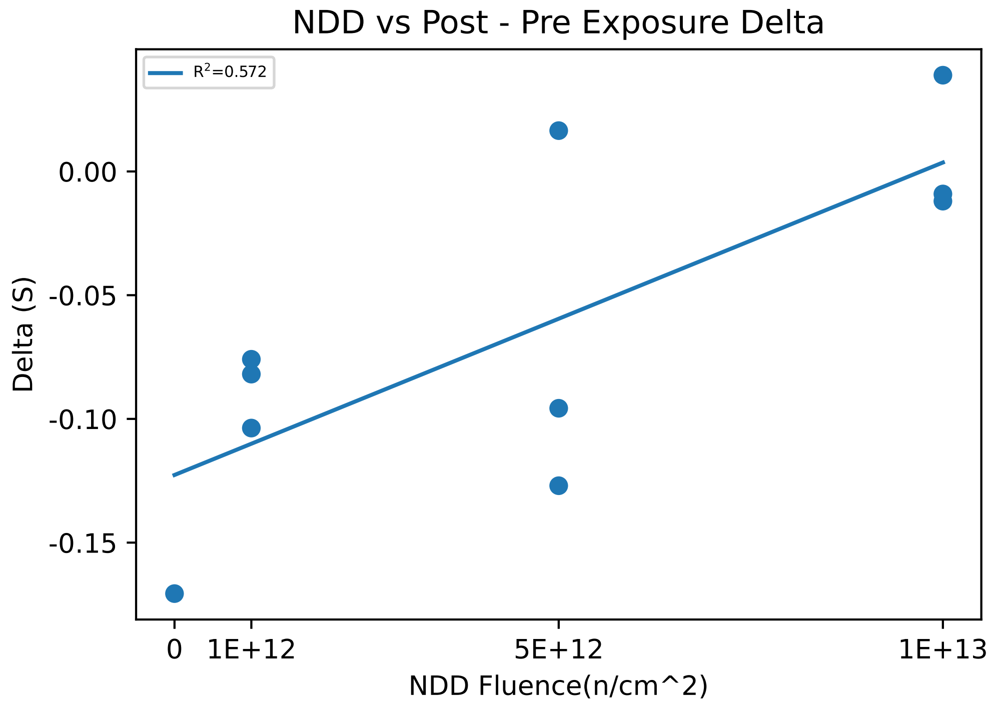
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	22.231	22.275	0.0435
504	1e+12	NDD	21.86	21.704	-0.1561
505	1e+12	NDD	22.713	22.589	-0.1236
506	5e+12	NDD	23.098	22.924	-0.1742
507	5e+12	NDD	21.833	21.819	-0.0149
508	5e+12	NDD	22.088	22.021	-0.0675
509	1e+13	NDD	21.468	21.532	0.0645
510	1e+13	NDD	23.359	23.182	-0.1771
511	1e+13	NDD	23.281	23.23	-0.0513
512	0	Correlation	22.75	22.674	-0.0756

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	22.75	22.75	22.75		22.674	22.674	22.674		-0.0756	-0.0756	-0.0756	
1e+12	21.86	22.268	22.713	0.42744	21.704	22.189	22.589	0.44864	-0.1561	-0.078733	0.0435	0.1071
5e+12	21.833	22.34	23.098	0.66905	21.819	22.254	22.924	0.58877	-0.1742	-0.085533	-0.0149	0.081167
1e+13	21.468	22.703	23.359	1.0701	21.532	22.648	23.23	0.96654	-0.1771	-0.054633	0.0645	0.12083

Device Test: 20.53 EA_COMP_ISWITCH_GM_0P5V_13A(GMPS|STATIC/SW/5////@EA_COMP_ISWITCH_GM_0P5V_13A)





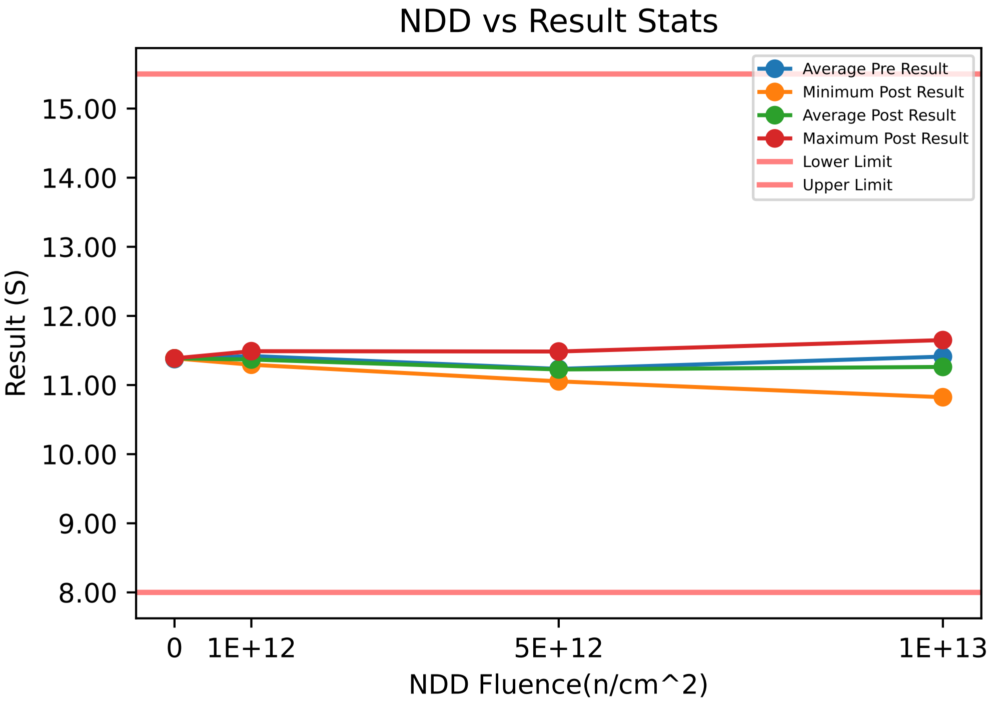
Test Results (Lower Limit = 12.8, Upper Limit = 20.6 (S))

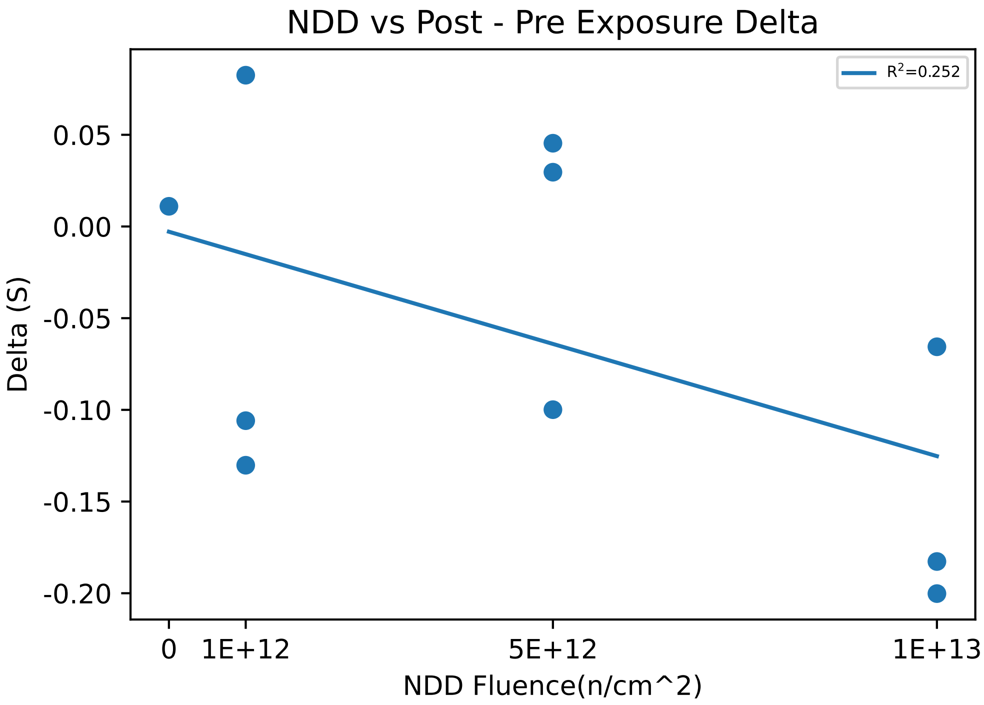
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	16.169	16.093	-0.0759
504	1e+12	NDD	15.731	15.649	-0.0819
505	1e+12	NDD	16	15.896	-0.1037
506	5e+12	NDD	16.289	16.162	-0.127
507	5e+12	NDD	15.702	15.718	0.0165
508	5e+12	NDD	15.869	15.773	-0.0957
509	1e+13	NDD	15.381	15.42	0.0389
510	1e+13	NDD	16.19	16.178	-0.012
511	1e+13	NDD	16.397	16.388	-0.0091
512	0	Correlation	16.198	16.028	-0.1706

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	16.198	16.198	16.198		16.028	16.028	16.028		-0.1706	-0.1706	-0.1706	
1e+12	15.731	15.967	16.169	0.22121	15.649	15.88	16.093	0.22279	-0.1037	-0.087167	-0.0759	0.014629
5e+12	15.702	15.953	16.289	0.30263	15.718	15.885	16.162	0.24199	-0.127	-0.068733	0.0165	0.075455
1e+13	15.381	15.99	16.397	0.53685	15.42	15.996	16.388	0.50916	-0.012	0.0059333	0.0389	0.028587

Device Test: 20.54 EA_COMP_ISWITCH_GM_9A(GMPS|STATIC/SW/5////@EA_COMP_ISWITCH_GM_9A)





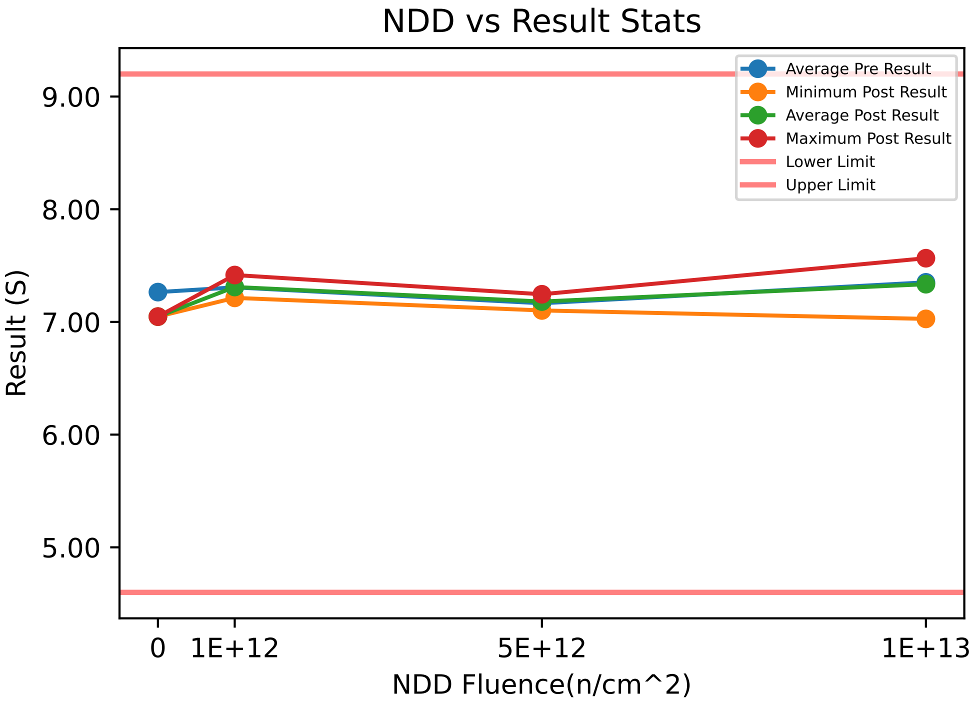
Test Results (Lower Limit = 8.0, Upper Limit = 15.5 (S))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	11.454	11.324	-0.1302
504	1e+12	NDD	11.407	11.49	0.0825
505	1e+12	NDD	11.4	11.294	-0.1059
506	5e+12	NDD	11.455	11.485	0.0296
507	5e+12	NDD	11.008	11.053	0.0454
508	5e+12	NDD	11.238	11.138	-0.0999
509	1e+13	NDD	11.006	10.824	-0.1827
510	1e+13	NDD	11.512	11.312	-0.2002
511	1e+13	NDD	11.716	11.65	-0.0656
512	0	Correlation	11.375	11.386	0.011

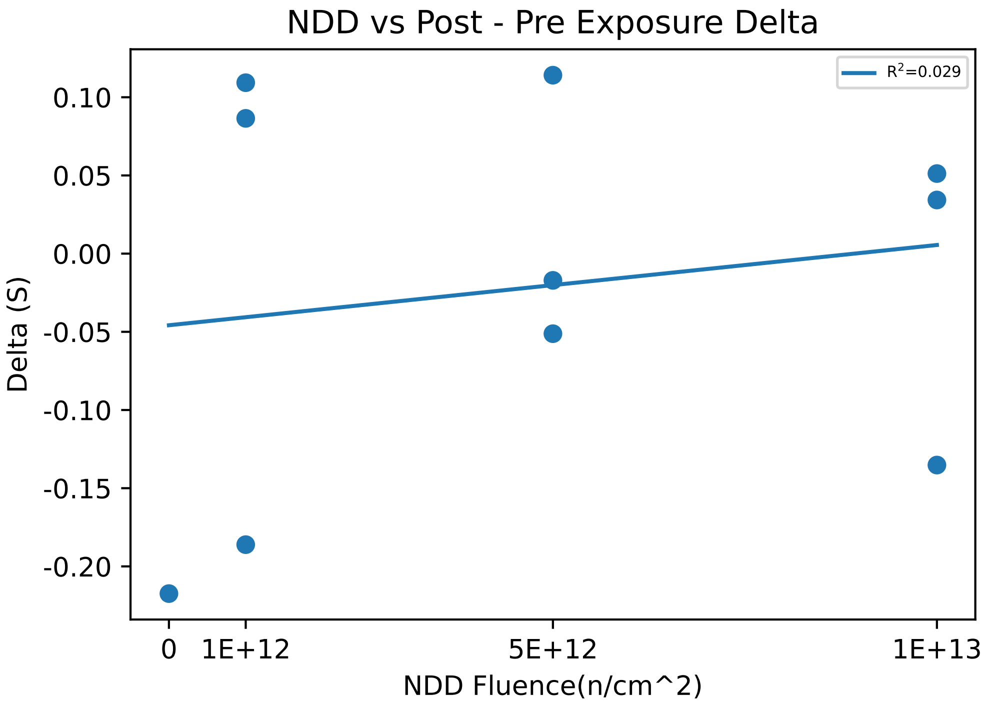
Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	11.375	11.375	11.375		11.386	11.386	11.386		0.011	0.011	0.011	
1e+12	11.4	11.42	11.454	0.02939	11.294	11.369	11.49	0.10548	-0.1302	-0.0512	0.0825	0.11642
5e+12	11.008	11.234	11.455	0.22378	11.053	11.225	11.485	0.22882	-0.0999	-0.0083	0.0454	0.07972
1e+13	11.006	11.412	11.716	0.3654	10.824	11.262	11.65	0.41563	-0.2002	-0.1495	-0.0656	0.073184

Device Test: 20.55 EA_COMP_ISWITCH_GM_6A(GMPS|STATIC/SW/5////@EA_COMP_ISWITCH_GM_6A)



NDD vs Result Stats



NDD vs Post - Pre Exposure Delta

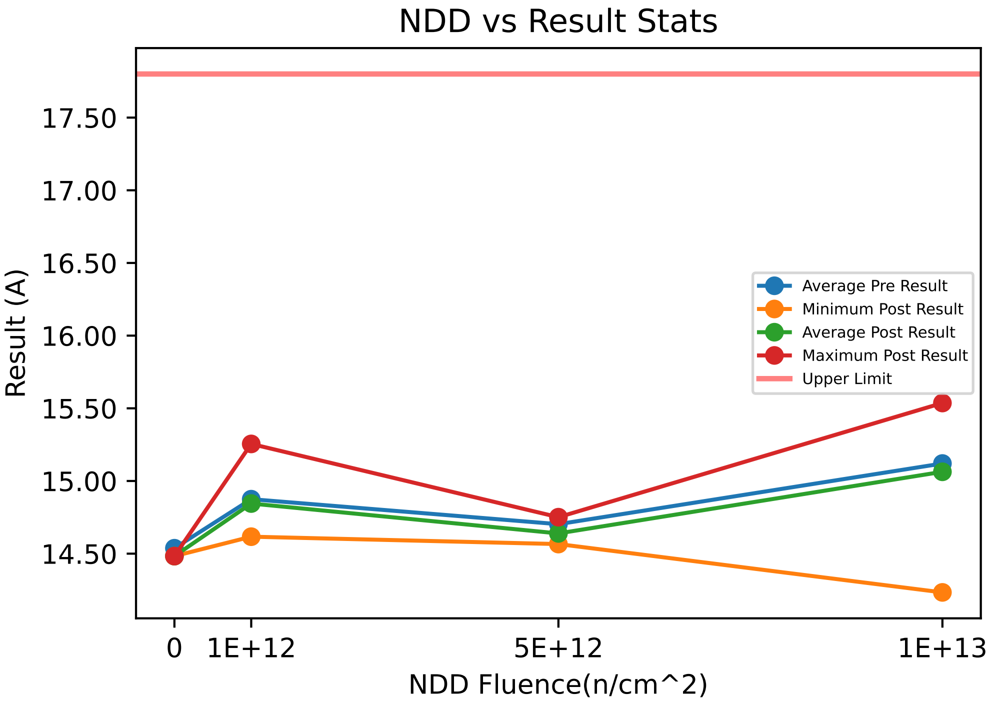
Test Results (Lower Limit = 4.6, Upper Limit = 9.2 (S))

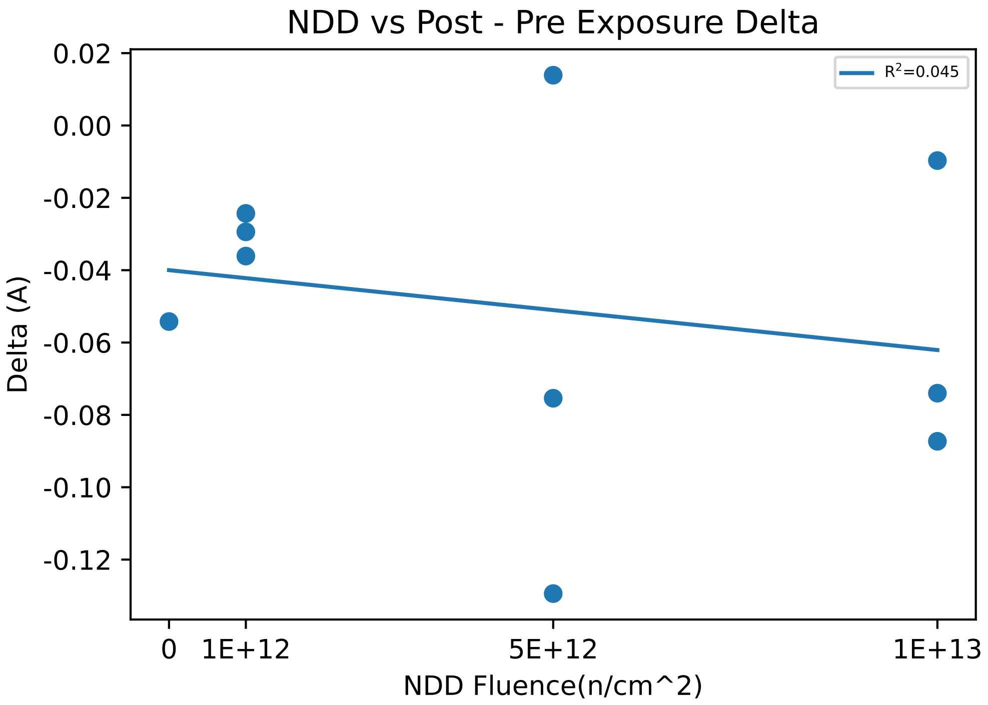
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.3296	7.4161	0.0865
504	1e+12	NDD	7.3996	7.2135	-0.1861
505	1e+12	NDD	7.1907	7.3	0.1093
506	5e+12	NDD	7.2967	7.2455	-0.0512
507	5e+12	NDD	7.0812	7.1953	0.1141
508	5e+12	NDD	7.1189	7.1018	-0.0171
509	1e+13	NDD	6.9926	7.0269	0.0343
510	1e+13	NDD	7.5471	7.4119	-0.1352
511	1e+13	NDD	7.5142	7.5654	0.0512
512	0	Correlation	7.2646	7.0472	-0.2174

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	7.2646	7.2646	7.2646		7.0472	7.0472	7.0472		-0.2174	-0.2174	-0.2174	
1e+12	7.1907	7.3066	7.3996	0.10633	7.2135	7.3099	7.4161	0.10166	-0.1861	0.0032333	0.1093	0.16436
5e+12	7.0812	7.1656	7.2967	0.11509	7.1018	7.1809	7.2455	0.072929	-0.0512	0.015267	0.1141	0.087274
1e+13	6.9926	7.3513	7.5471	0.31108	7.0269	7.3347	7.5654	0.27742	-0.1352	-0.016567	0.0512	0.10309

Device Test: 20.6 HIGHSIDE_CURR_LIM_13A(THRESHOLD|RISE/SW/4.5////@HIGHSIDE_CURR_LIM_13A)





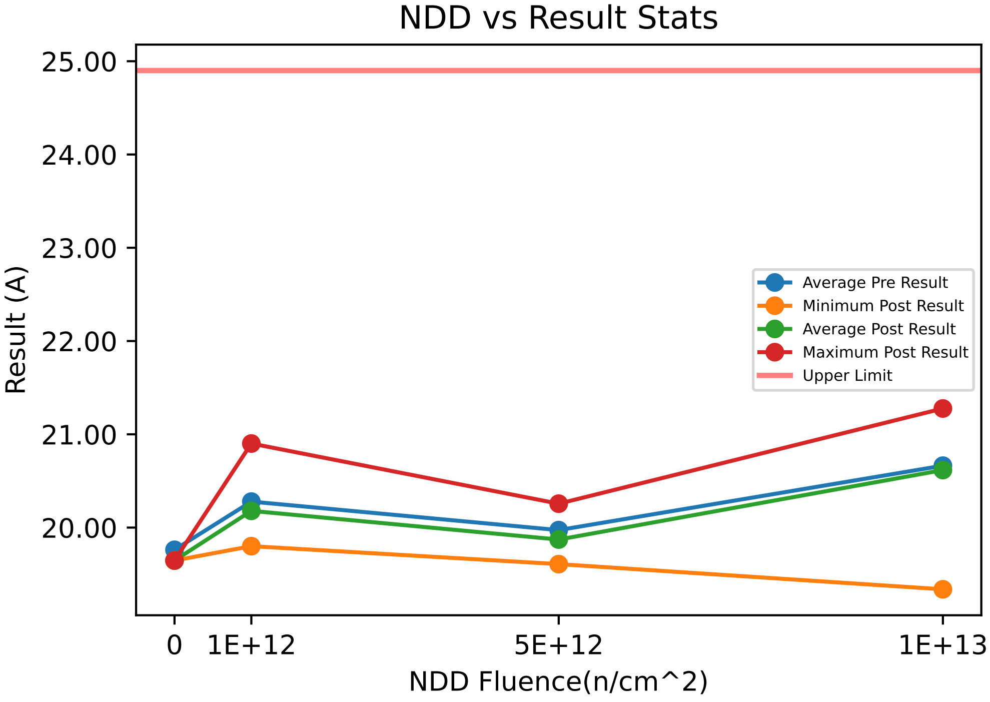
Test Results (Upper Limit = 17.8 (A))

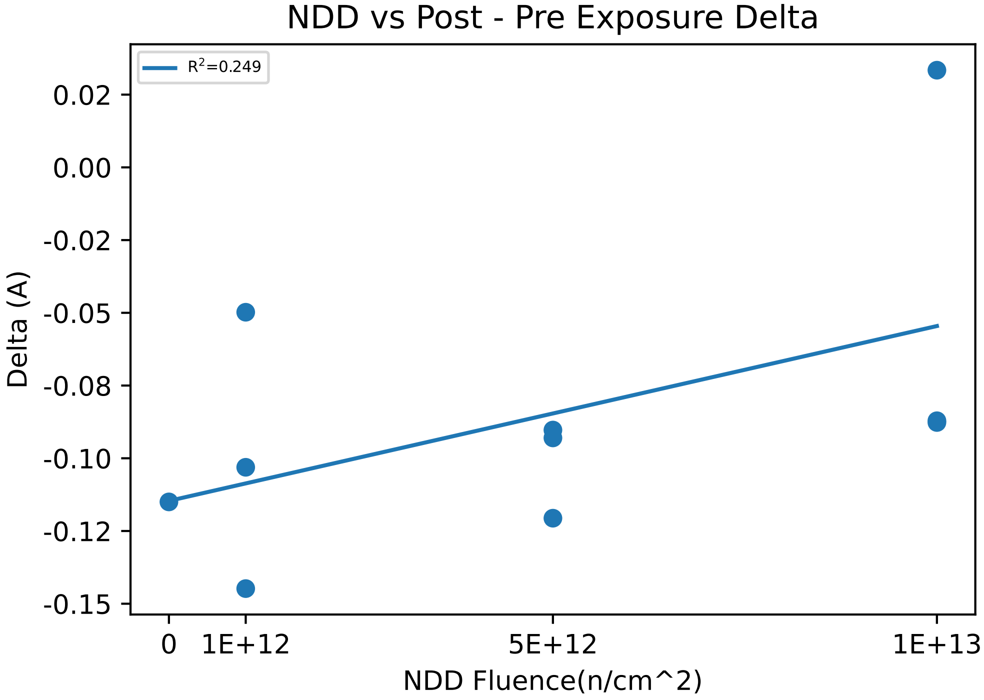
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	14.653	14.617	-0.0361
504	1e+12	NDD	14.692	14.663	-0.0294
505	1e+12	NDD	15.279	15.255	-0.0243
506	5e+12	NDD	14.641	14.566	-0.0754
507	5e+12	NDD	14.587	14.601	0.0139
508	5e+12	NDD	14.88	14.751	-0.1294
509	1e+13	NDD	14.307	14.233	-0.074
510	1e+13	NDD	15.507	15.42	-0.0873
511	1e+13	NDD	15.546	15.537	-0.0097
512	0	Correlation	14.537	14.483	-0.0542

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	14.537	14.537	14.537		14.483	14.483	14.483		-0.0542	-0.0542	-0.0542	
1e+12	14.653	14.875	15.279	0.35088	14.617	14.845	15.255	0.35596	-0.0361	-0.029933	-0.0243	0.0059181
5e+12	14.587	14.703	14.88	0.15595	14.566	14.639	14.751	0.098201	-0.1294	-0.063633	0.0139	0.072371
1e+13	14.307	15.12	15.546	0.70409	14.233	15.063	15.537	0.72091	-0.0873	-0.057	-0.0097	0.041499

Device Test: 20.7 HIGHSIDE_CURR_LIM_19A(THRESHOLD|RISE/SW/4.5////@HIGHSIDE_CURR_LIM_19A)





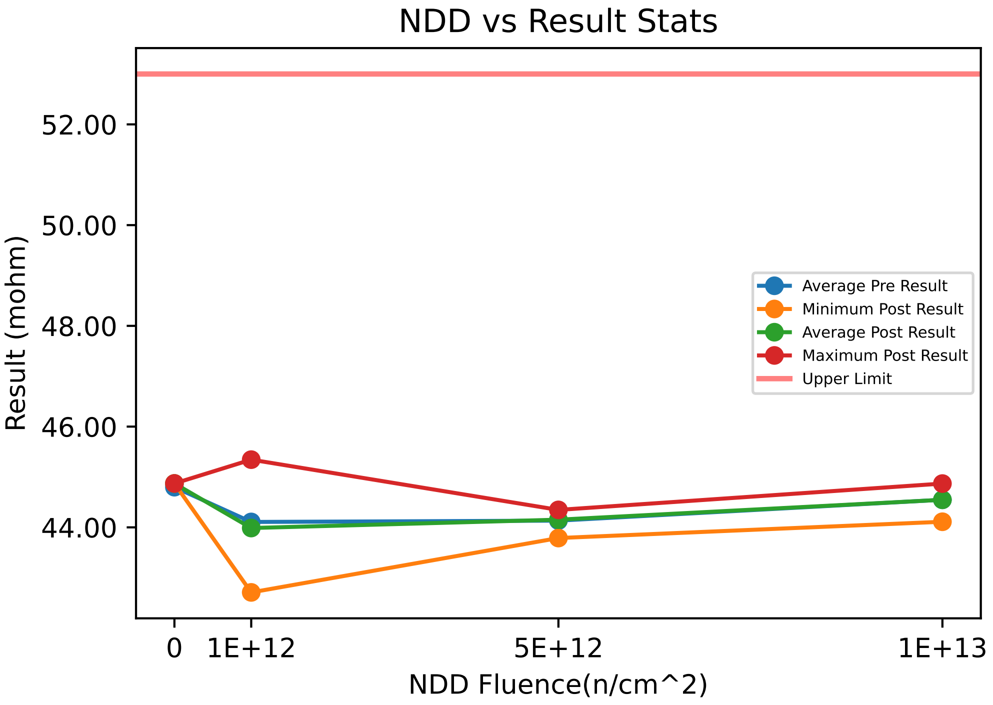
Test Results (Upper Limit = 24.9 (A))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	19.851	19.801	-0.0498
504	1e+12	NDD	19.939	19.836	-0.1031
505	1e+12	NDD	21.046	20.901	-0.1448
506	5e+12	NDD	19.871	19.75	-0.1206
507	5e+12	NDD	19.699	19.608	-0.0903
508	5e+12	NDD	20.349	20.256	-0.093
509	1e+13	NDD	19.425	19.338	-0.0871
510	1e+13	NDD	21.323	21.235	-0.0877
511	1e+13	NDD	21.243	21.277	0.0334
512	0	Correlation	19.762	19.647	-0.115

Test Statistics (A)

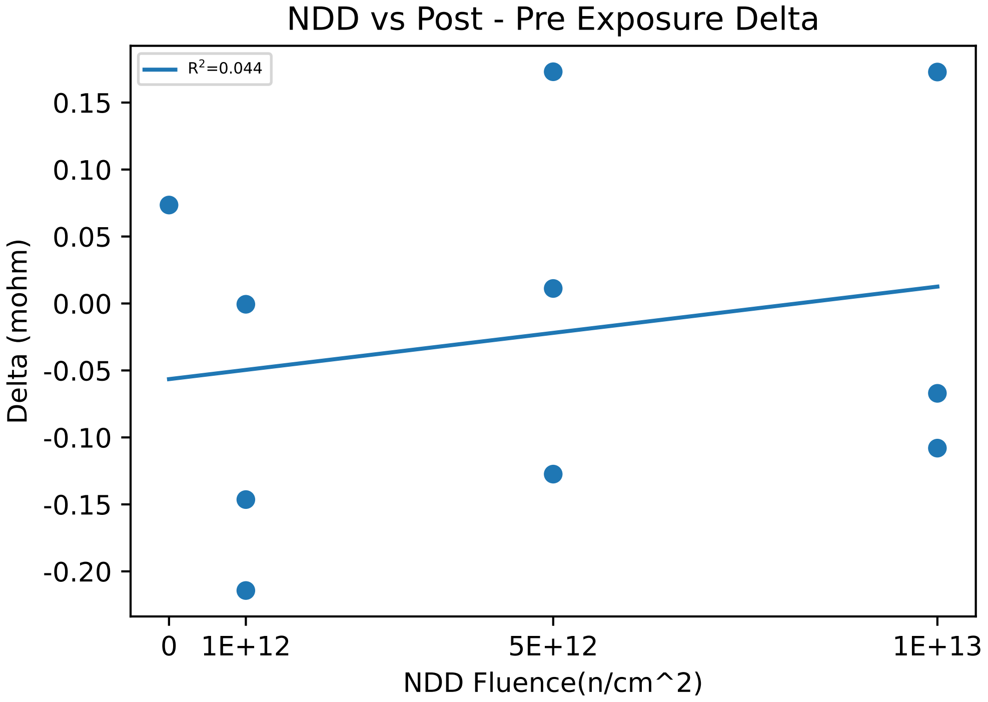
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	19.762	19.762	19.762		19.647	19.647	19.647		-0.115	-0.115	-0.115	
1e+12	19.851	20.279	21.046	0.66606	19.801	20.179	20.901	0.62537	-0.1448	-0.099233	-0.0498	0.047618
5e+12	19.699	19.973	20.349	0.33705	19.608	19.872	20.256	0.34052	-0.1206	-0.1013	-0.0903	0.016769
1e+13	19.425	20.664	21.323	1.0733	19.338	20.617	21.277	1.1074	-0.0877	-0.047133	0.0334	0.069745

Device Test: 20.70 R_HIGHSIDE_12V_25C(LEVEL|HIGHSIDE/SW/12/2///@R_HIGHSIDE_12V_25C)



Test Results (Upper Limit = 53.0 (mohm))

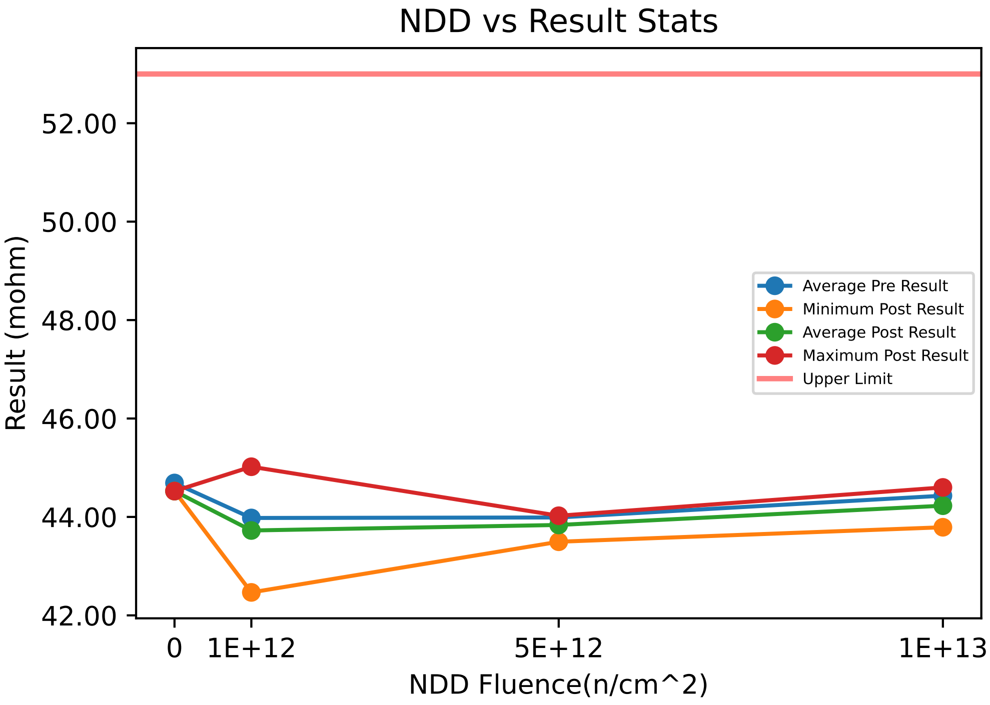
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	44.122	43.908	-0.2143
504	1e+12	NDD	42.855	42.709	-0.1464
505	1e+12	NDD	45.345	45.344	-0.0006
506	5e+12	NDD	44.173	44.346	0.173
507	5e+12	NDD	43.915	43.788	-0.1274
508	5e+12	NDD	44.311	44.323	0.0112
509	1e+13	NDD	44.488	44.661	0.1728
510	1e+13	NDD	44.936	44.869	-0.0671
511	1e+13	NDD	44.219	44.111	-0.108
512	0	Correlation	44.798	44.871	0.0735

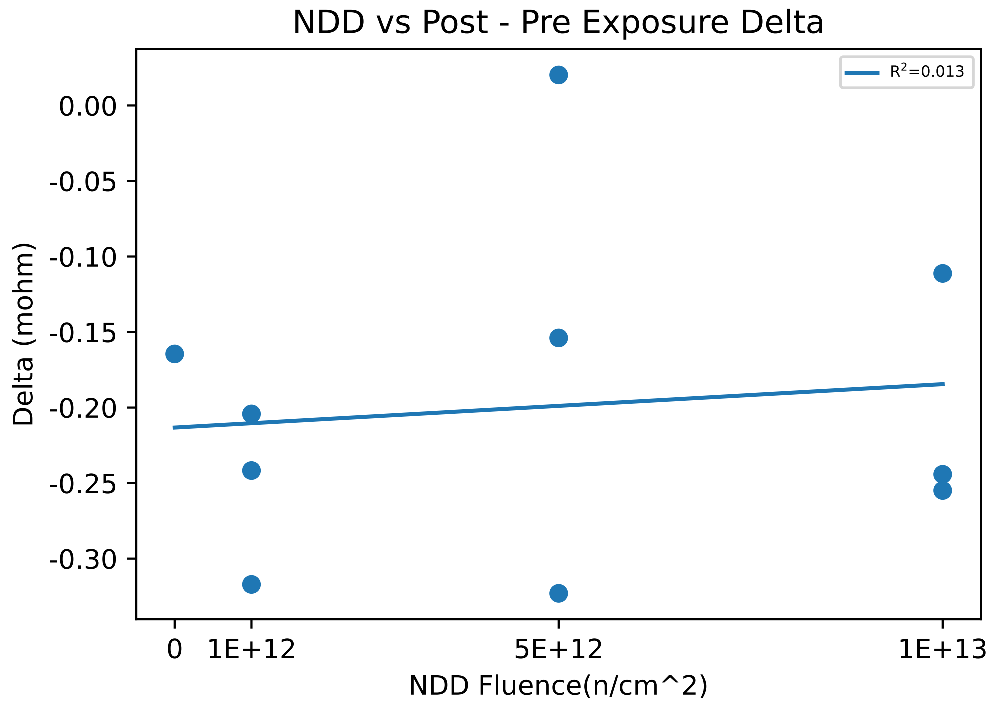


Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	44.798	44.798	44.798		44.871	44.871	44.871		0.0735	0.0735	0.0735	
1e+12	42.855	44.107	45.345	1.2449	42.709	43.987	45.344	1.3195	-0.2143	-0.12043	-0.0006	0.10919
5e+12	43.915	44.133	44.311	0.20107	43.788	44.152	44.346	0.31583	-0.1274	0.018933	0.173	0.15035
1e+13	44.219	44.548	44.936	0.36227	44.111	44.547	44.869	0.3916	-0.108	-0.00076667	0.1728	0.1517

Device Test: 20.71 R_HIGHSIDE_12V_25C(LEVEL|HIGHSIDE/SW/12/12///@R_HIGHSIDE_12V_25C)





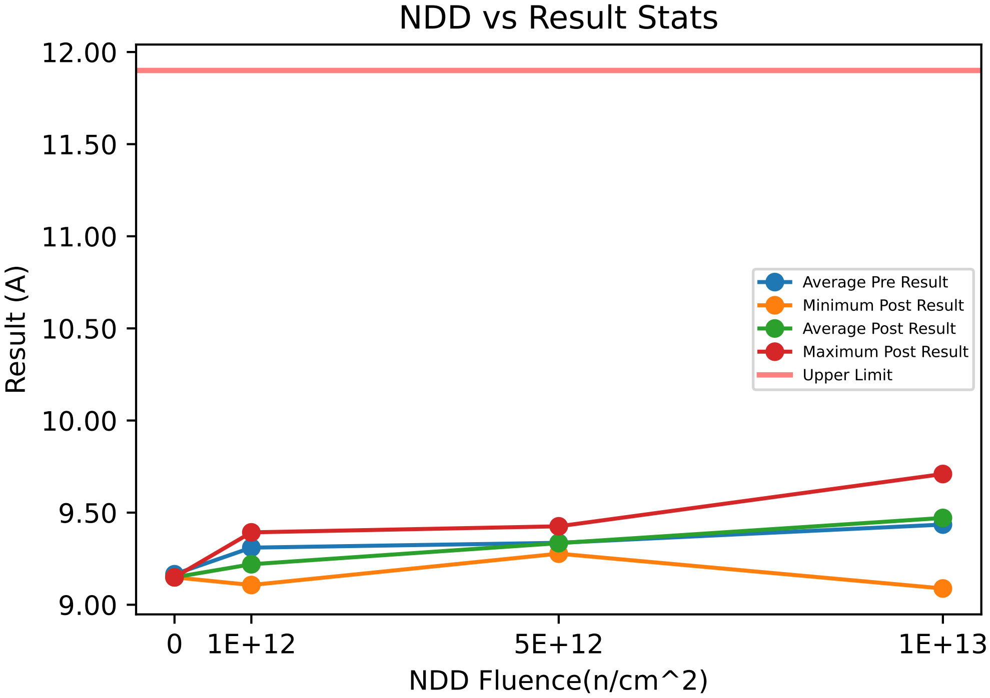
Test Results (Upper Limit = 53.0 (mohm))

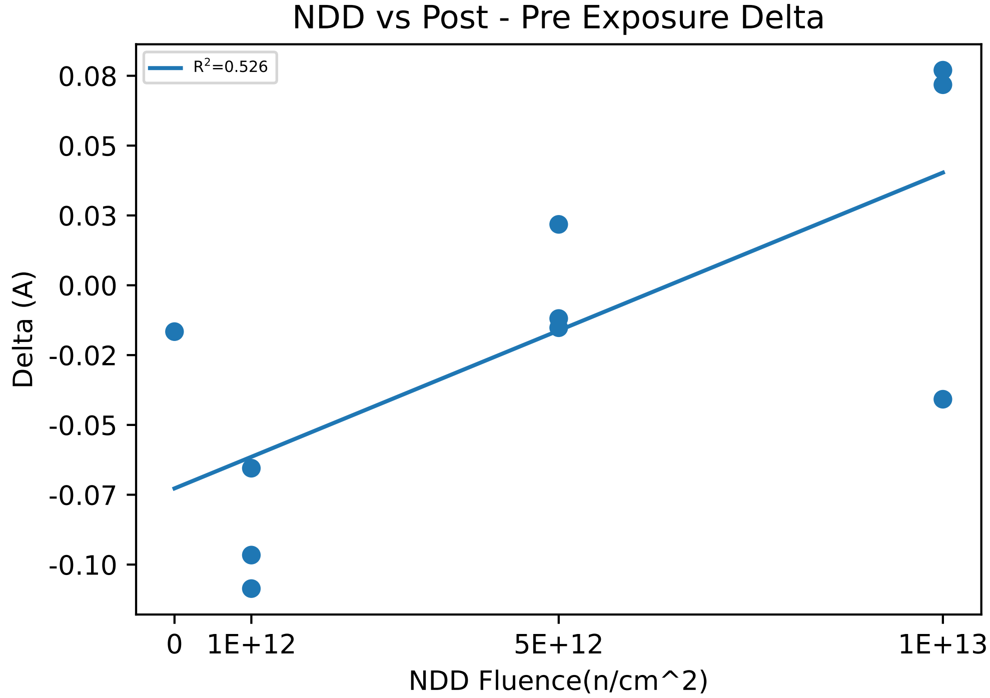
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	43.929	43.687	-0.2417
504	1e+12	NDD	42.784	42.467	-0.3171
505	1e+12	NDD	45.224	45.02	-0.2042
506	5e+12	NDD	44.004	44.024	0.0202
507	5e+12	NDD	43.819	43.496	-0.323
508	5e+12	NDD	44.144	43.99	-0.1539
509	1e+13	NDD	44.406	44.295	-0.1112
510	1e+13	NDD	44.855	44.6	-0.2549
511	1e+13	NDD	44.034	43.79	-0.2442
512	0	Correlation	44.69	44.525	-0.1645

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	44.69	44.69	44.69		44.525	44.525	44.525		-0.1645	-0.1645	-0.1645	
1e+12	42.784	43.979	45.224	1.2211	42.467	43.725	45.02	1.2772	-0.3171	-0.25433	-0.2042	0.0575
5e+12	43.819	43.989	44.144	0.16321	43.496	43.837	44.024	0.29571	-0.323	-0.15223	0.0202	0.17161
1e+13	44.034	44.432	44.855	0.41074	43.79	44.228	44.6	0.4089	-0.2549	-0.20343	-0.1112	0.080055

Device Test: 20.73 HIGHSIDE_CURR_LIM_9A(THRESHOLD|RISE/SW/12////@HIGHSIDE_CURR_LIM_9A)





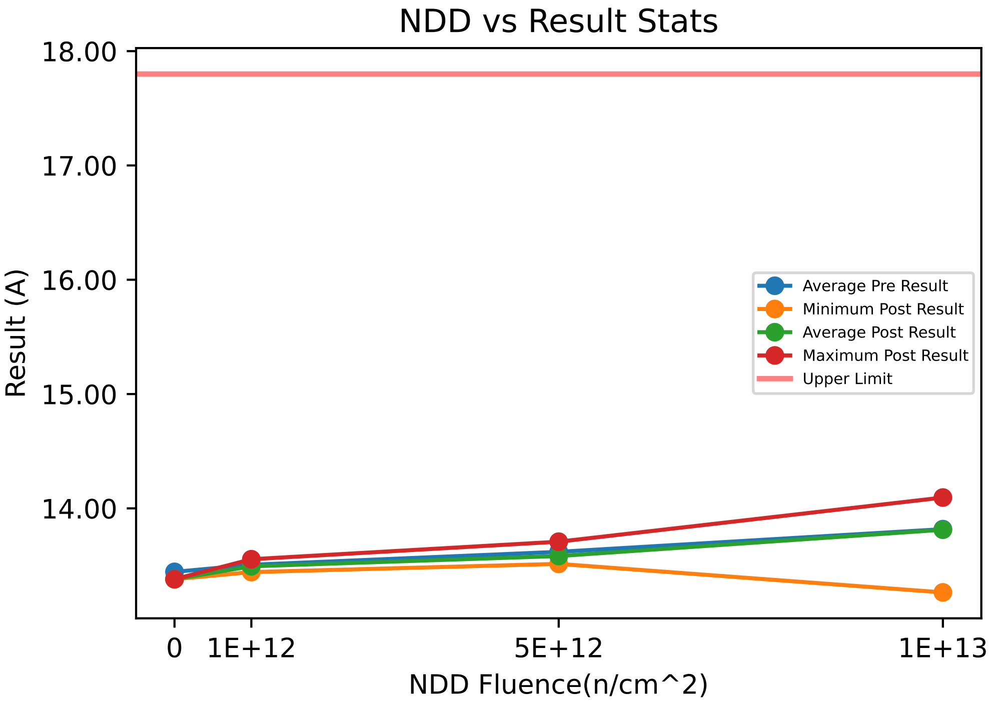
Test Results (Upper Limit = 11.9 (A))

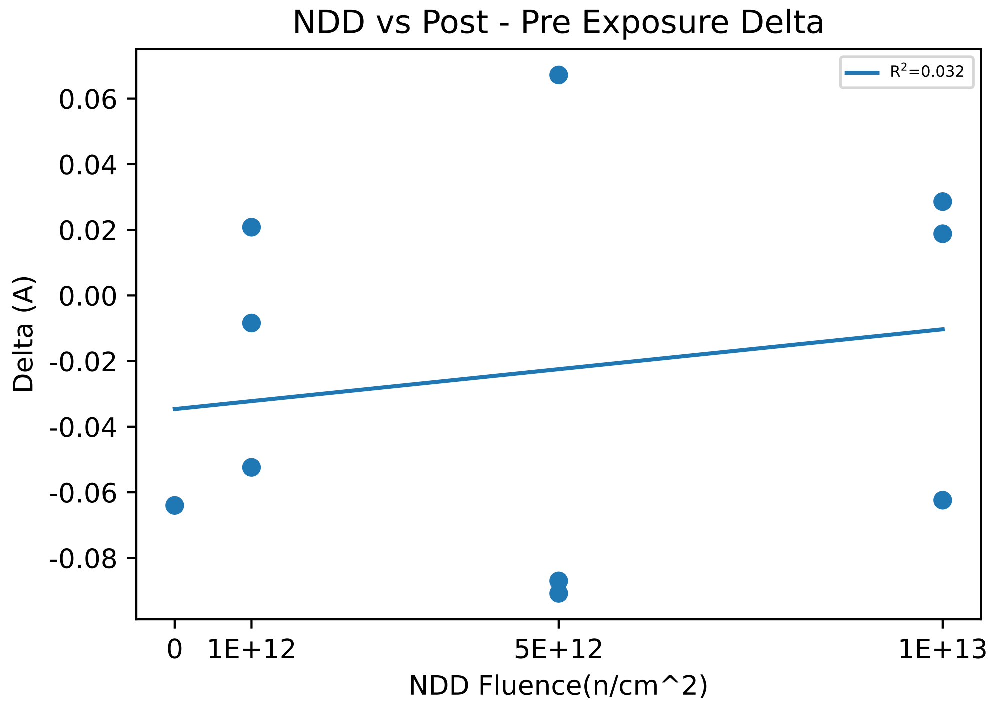
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.2247	9.1592	-0.0655
504	1e+12	NDD	9.4895	9.3929	-0.0966
505	1e+12	NDD	9.2157	9.1071	-0.1086
506	5e+12	NDD	9.3118	9.2999	-0.0119
507	5e+12	NDD	9.4409	9.4257	-0.0152
508	5e+12	NDD	9.2554	9.2772	0.0218
509	1e+13	NDD	9.1291	9.0883	-0.0408
510	1e+13	NDD	9.5437	9.6155	0.0718
511	1e+13	NDD	9.6326	9.7096	0.077
512	0	Correlation	9.1655	9.1489	-0.0166

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.1655	9.1655	9.1655		9.1489	9.1489	9.1489		-0.0166	-0.0166	-0.0166	
1e+12	9.2157	9.31	9.4895	0.15555	9.1071	9.2197	9.3929	0.15221	-0.1086	-0.090233	-0.0655	0.022244
5e+12	9.2554	9.336	9.4409	0.095095	9.2772	9.3343	9.4257	0.079993	-0.0152	-0.0017667	0.0218	0.020476
1e+13	9.1291	9.4351	9.6326	0.26873	9.0883	9.4711	9.7096	0.33487	-0.0408	0.036	0.077	0.066562

Device Test: 20.74 HIGHSIDE_CURR_LIM_13A(THRESHOLD|RISE/SW/12////@HIGHSIDE_CURR_LIM_13A)





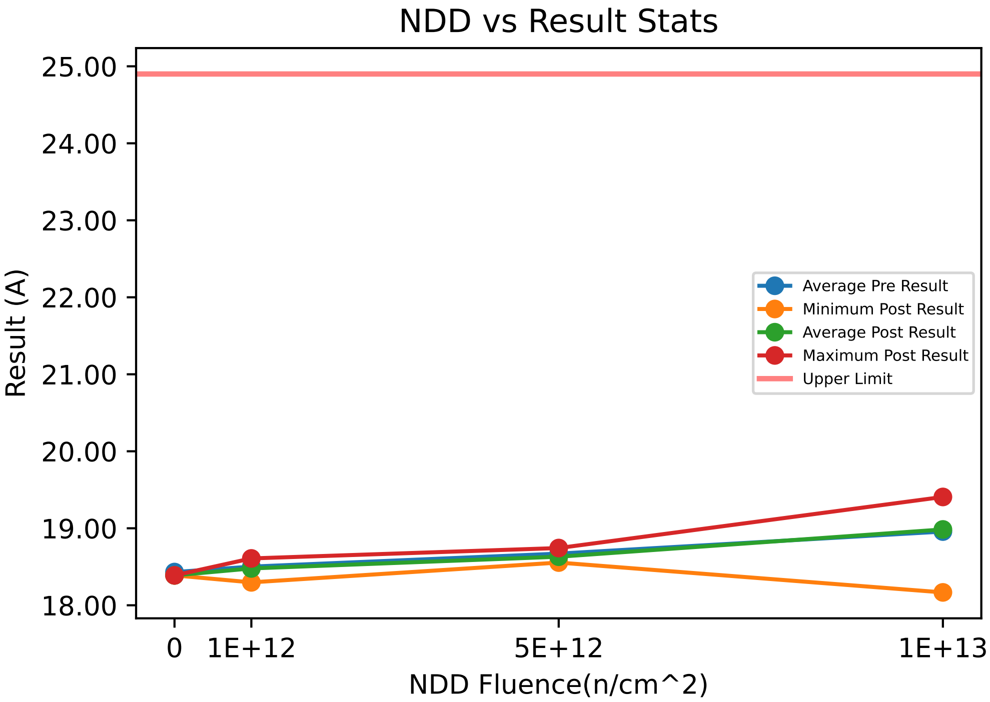
Test Results (Upper Limit = 17.8 (A))

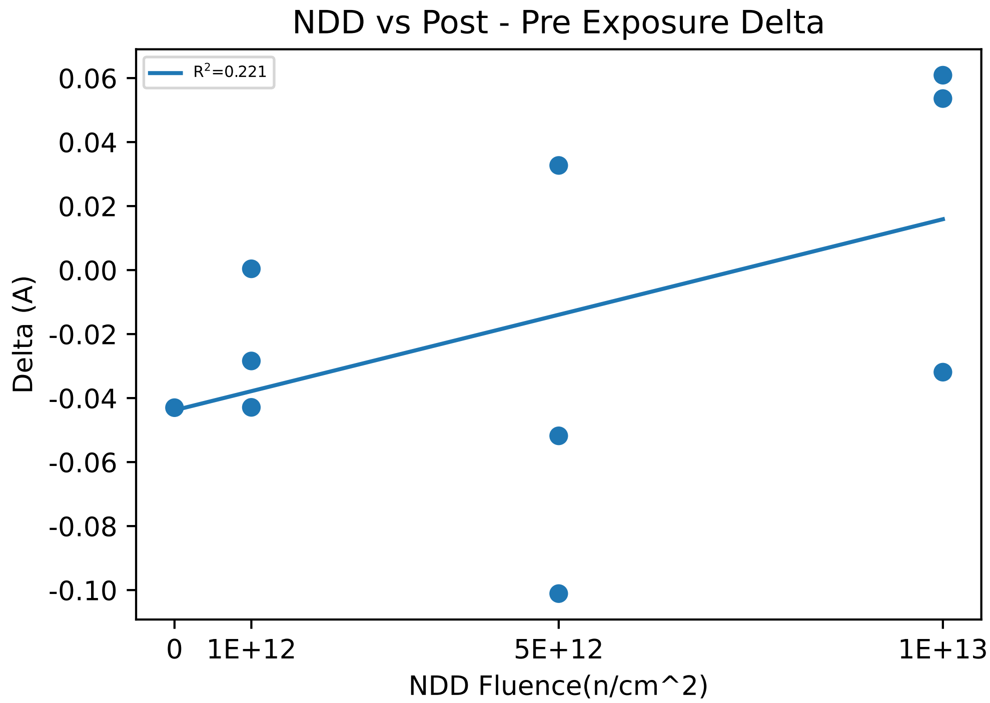
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	13.422	13.443	0.0208
504	1e+12	NDD	13.607	13.555	-0.0524
505	1e+12	NDD	13.49	13.482	-0.0084
506	5e+12	NDD	13.613	13.526	-0.087
507	5e+12	NDD	13.641	13.708	0.0672
508	5e+12	NDD	13.605	13.514	-0.0908
509	1e+13	NDD	13.327	13.265	-0.0624
510	1e+13	NDD	14.051	14.079	0.0286
511	1e+13	NDD	14.076	14.095	0.0188
512	0	Correlation	13.444	13.38	-0.064

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	13.444	13.444	13.444		13.38	13.38	13.38		-0.064	-0.064	-0.064	
1e+12	13.422	13.506	13.607	0.093846	13.443	13.493	13.555	0.057031	-0.0524	-0.013333	0.0208	0.036849
5e+12	13.605	13.62	13.641	0.019088	13.514	13.583	13.708	0.10898	-0.0908	-0.036867	0.0672	0.090144
1e+13	13.327	13.818	14.076	0.42523	13.265	13.813	14.095	0.47482	-0.0624	-0.005	0.0286	0.049951

Device Test: 20.75 HIGHSIDE_CURR_LIM_19A(THRESHOLD|RISE/SW/12////@HIGHSIDE_CURR_LIM_19A)





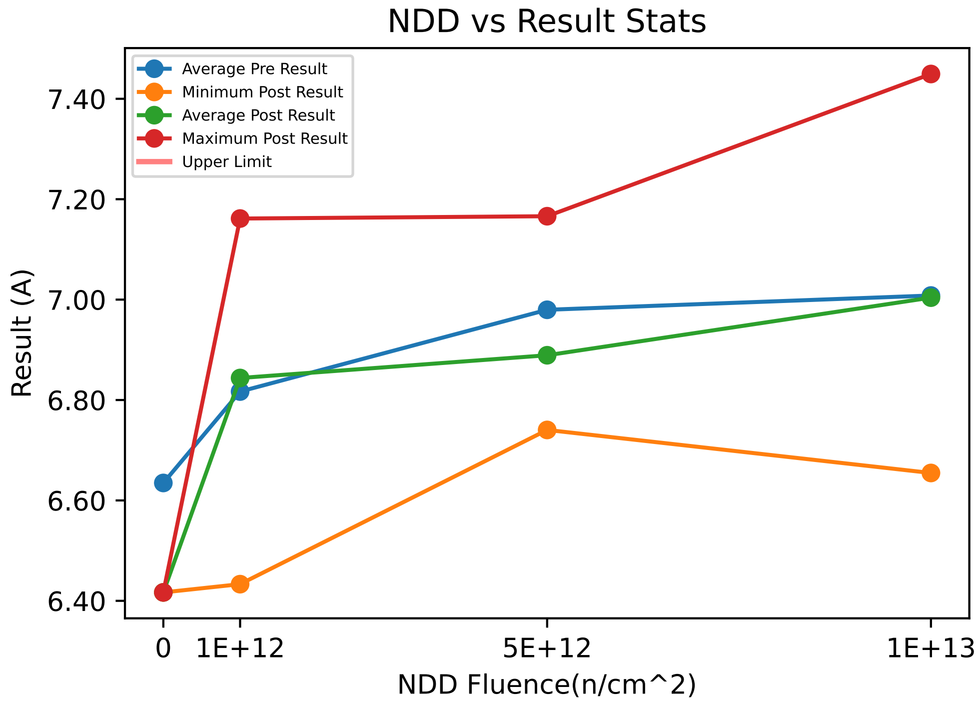
Test Results (Upper Limit = 24.9 (A))

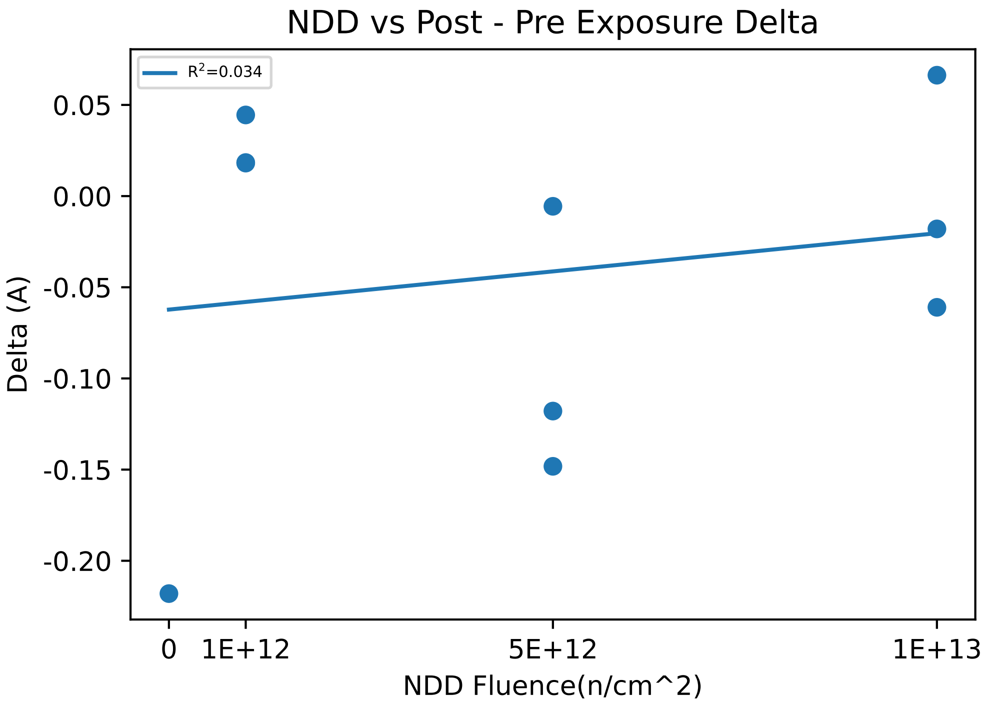
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	18.326	18.298	-0.0284
504	1e+12	NDD	18.608	18.608	0.0004
505	1e+12	NDD	18.572	18.529	-0.0429
506	5e+12	NDD	18.607	18.555	-0.0518
507	5e+12	NDD	18.711	18.743	0.0327
508	5e+12	NDD	18.695	18.594	-0.1011
509	1e+13	NDD	18.199	18.167	-0.0319
510	1e+13	NDD	19.346	19.407	0.0609
511	1e+13	NDD	19.327	19.38	0.0536
512	0	Correlation	18.431	18.388	-0.043

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	18.431	18.431	18.431		18.388	18.388	18.388		-0.043	-0.043	-0.043	
1e+12	18.326	18.502	18.608	0.15355	18.298	18.478	18.608	0.16154	-0.0429	-0.023633	0.0004	0.02204
5e+12	18.607	18.671	18.711	0.056143	18.555	18.631	18.743	0.099521	-0.1011	-0.040067	0.0327	0.067667
1e+13	18.199	18.957	19.346	0.65663	18.167	18.985	19.407	0.70816	-0.0319	0.027533	0.0609	0.0516

Device Test: 20.76 HIGHSIDE_CURR_LIM2_6A(THRESHOLD|RISE/SW/12////@HIGHSIDE_CURR_LIM2_6A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

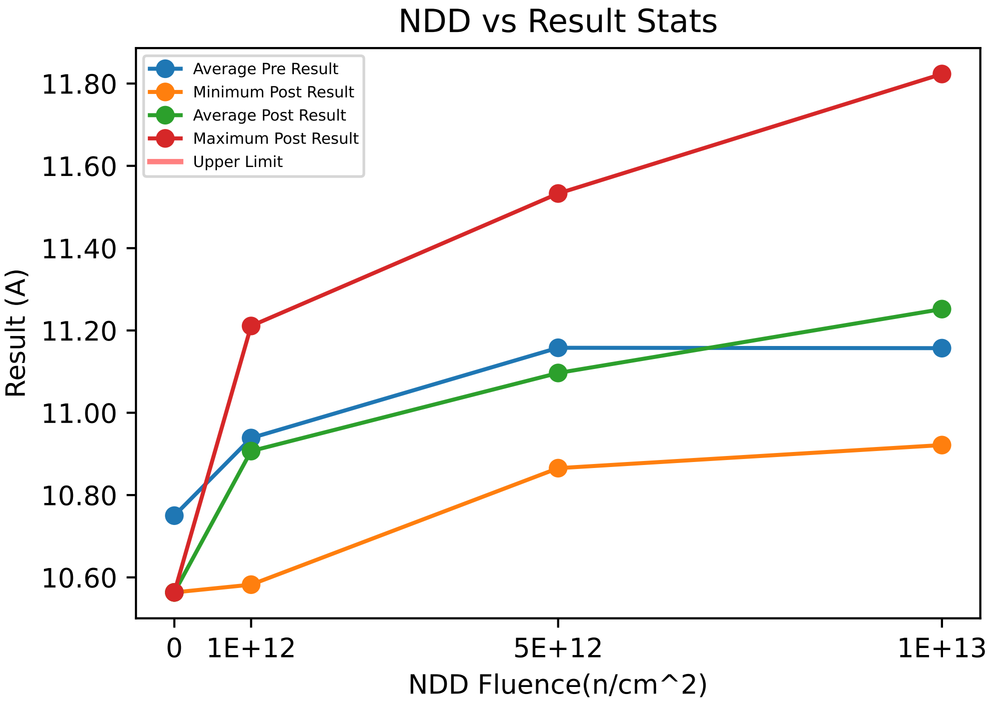
Test Results (No Limits Specified (A))

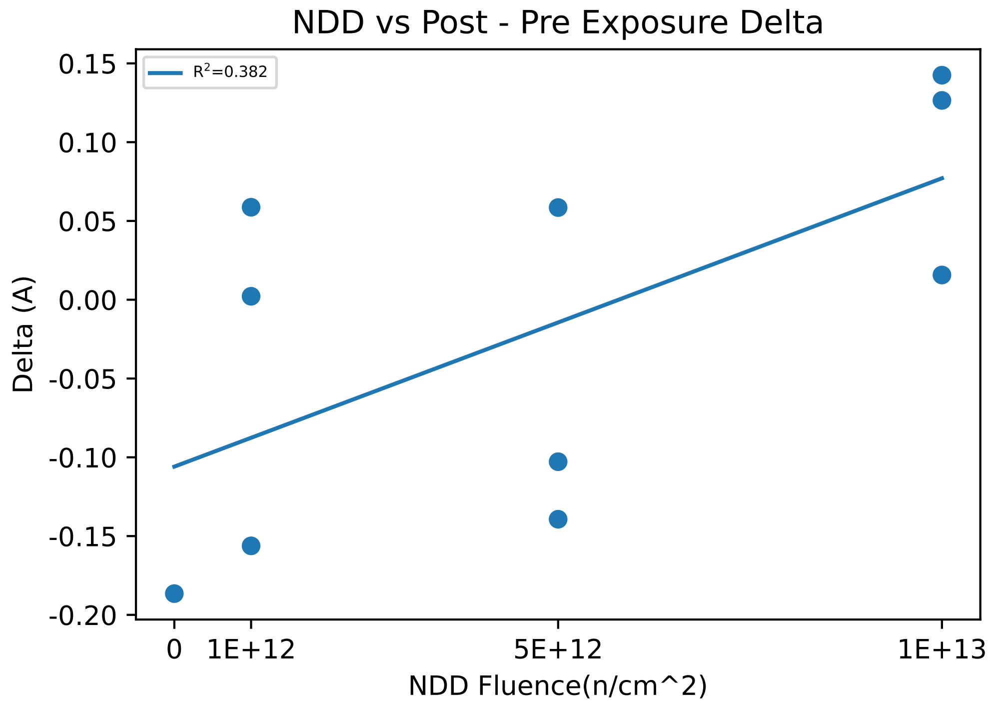
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	6.9188	6.9369	0.0181
504	1e+12	NDD	7.1431	7.1615	0.0184
505	1e+12	NDD	6.3887	6.4332	0.0445
506	5e+12	NDD	6.8789	6.761	-0.1179
507	5e+12	NDD	7.1717	7.1661	-0.0056
508	5e+12	NDD	6.8886	6.7404	-0.1482
509	1e+13	NDD	6.7157	6.6547	-0.061
510	1e+13	NDD	6.8414	6.9077	0.0663
511	1e+13	NDD	7.4674	7.4494	-0.018
512	0	Correlation	6.6348	6.4168	-0.218

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	6.6348	6.6348	6.6348		6.4168	6.4168	6.4168		-0.218	-0.218	-0.218	
1e+12	6.3887	6.8169	7.1431	0.38739	6.4332	6.8439	7.1615	0.37296	0.0181	0.027	0.0445	0.015156
5e+12	6.8789	6.9797	7.1717	0.16632	6.7404	6.8892	7.1661	0.24005	-0.1482	-0.090567	-0.0056	0.075127
1e+13	6.7157	7.0082	7.4674	0.40264	6.6547	7.0039	7.4494	0.406	-0.061	-0.0042333	0.0663	0.064757

Device Test: 20.77 HIGHSIDE_CURR_LIM2_9A(THRESHOLD|RISE/SW/12////@HIGHSIDE_CURR_LIM2_9A)





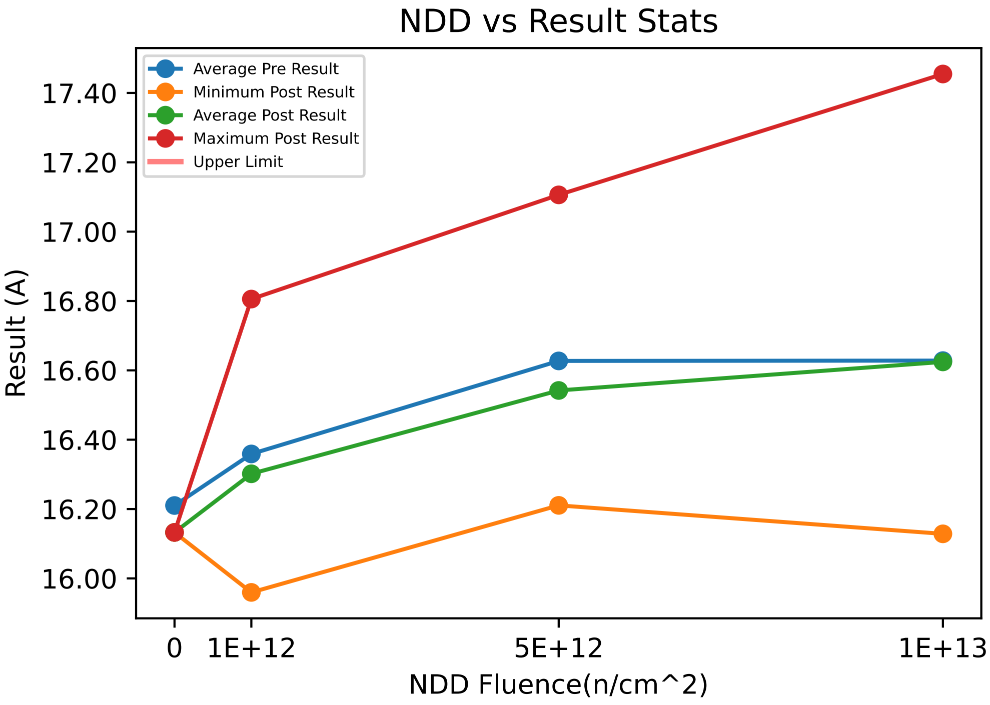
Test Results (No Limits Specified (A))

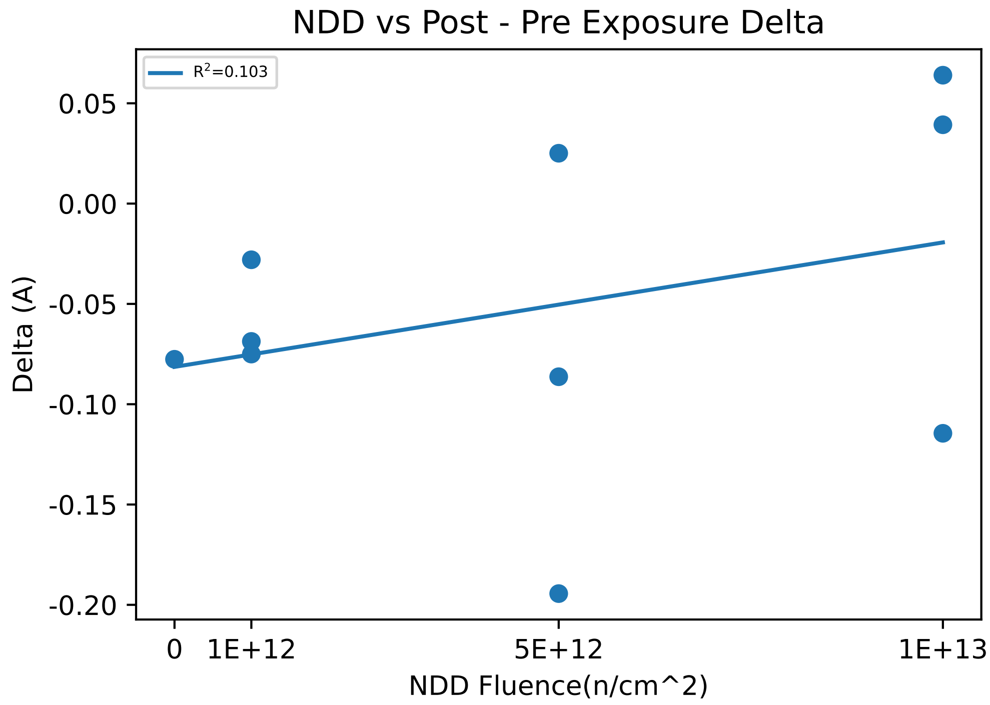
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	10.925	10.927	0.0022
504	1e+12	NDD	11.367	11.211	-0.1562
505	1e+12	NDD	10.524	10.582	0.0587
506	5e+12	NDD	10.995	10.892	-0.1028
507	5e+12	NDD	11.474	11.533	0.0585
508	5e+12	NDD	11.005	10.865	-0.1393
509	1e+13	NDD	10.779	10.921	0.1425
510	1e+13	NDD	10.995	11.011	0.0157
511	1e+13	NDD	11.697	11.823	0.1265
512	0	Correlation	10.75	10.563	-0.1865

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	10.75	10.75	10.75		10.563	10.563	10.563		-0.1865	-0.1865	-0.1865	
1e+12	10.524	10.939	11.367	0.42191	10.582	10.907	11.211	0.3148	-0.1562	-0.031767	0.0587	0.1114
5e+12	10.995	11.158	11.474	0.27406	10.865	11.097	11.533	0.37791	-0.1393	-0.0612	0.0585	0.10526
1e+13	10.779	11.157	11.697	0.47974	10.921	11.252	11.823	0.49678	0.0157	0.0949	0.1425	0.069054

Device Test: 20.78 HIGHSIDE_CURR_LIM2_13A(THRESHOLD|RISE/SW/12////@HIGHSIDE_CURR_LIM2_13A)





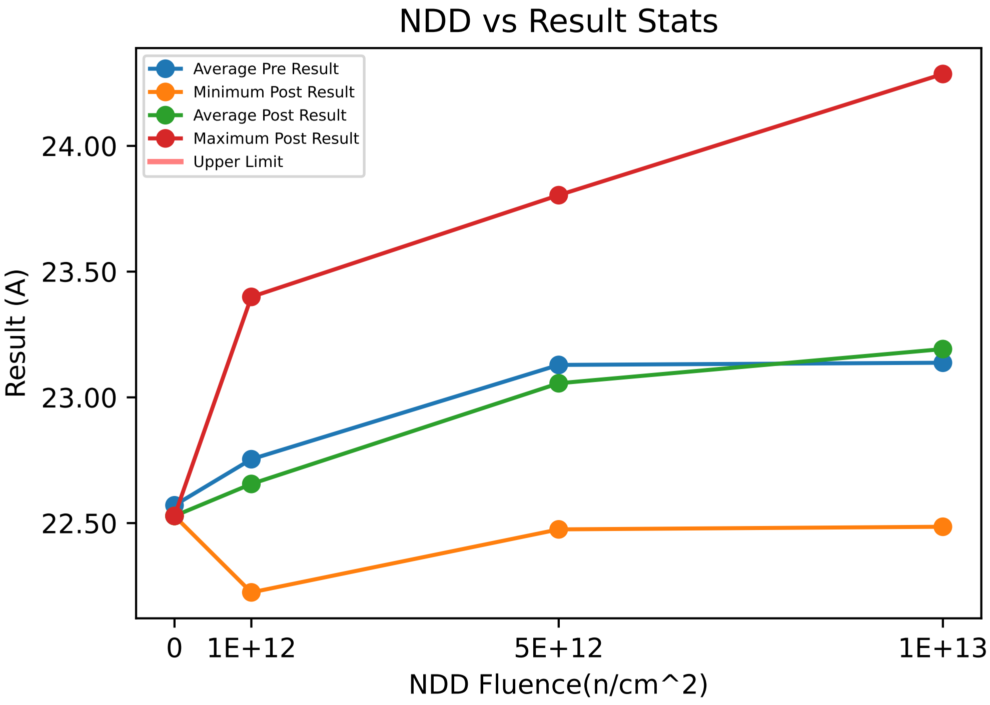
Test Results (No Limits Specified (A))

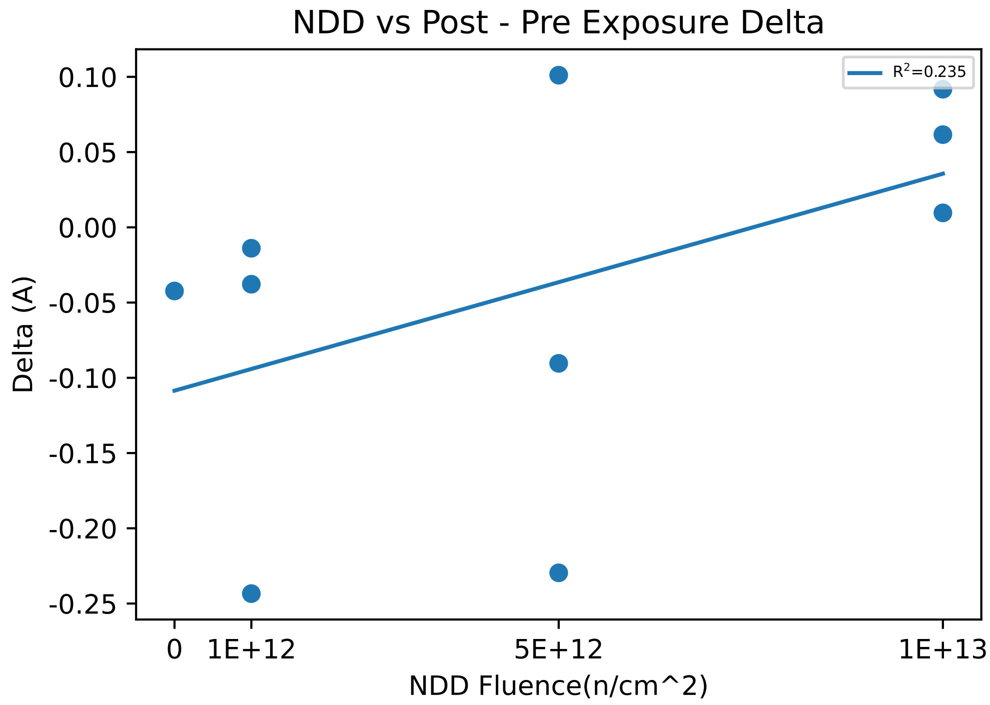
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	16.168	16.14	-0.028
504	1e+12	NDD	16.874	16.806	-0.0687
505	1e+12	NDD	16.035	15.96	-0.075
506	5e+12	NDD	16.297	16.211	-0.0863
507	5e+12	NDD	17.081	17.106	0.0251
508	5e+12	NDD	16.504	16.309	-0.1944
509	1e+13	NDD	16.064	16.128	0.064
510	1e+13	NDD	16.404	16.29	-0.1145
511	1e+13	NDD	17.415	17.455	0.0393
512	0	Correlation	16.21	16.133	-0.0776

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	16.21	16.21	16.21		16.133	16.133	16.133		-0.0776	-0.0776	-0.0776	
1e+12	16.035	16.359	16.874	0.45129	15.96	16.302	16.806	0.44562	-0.075	-0.057233	-0.028	0.025512
5e+12	16.297	16.627	17.081	0.40638	16.211	16.542	17.106	0.49101	-0.1944	-0.0852	0.0251	0.10975
1e+13	16.064	16.628	17.415	0.70268	16.128	16.624	17.455	0.7236	-0.1145	-0.0037333	0.064	0.096718

Device Test: 20.79 HIGHSIDE_CURR_LIM2_19A(THRESHOLD|RISE/SW/12////@HIGHSIDE_CURR_LIM2_19A)





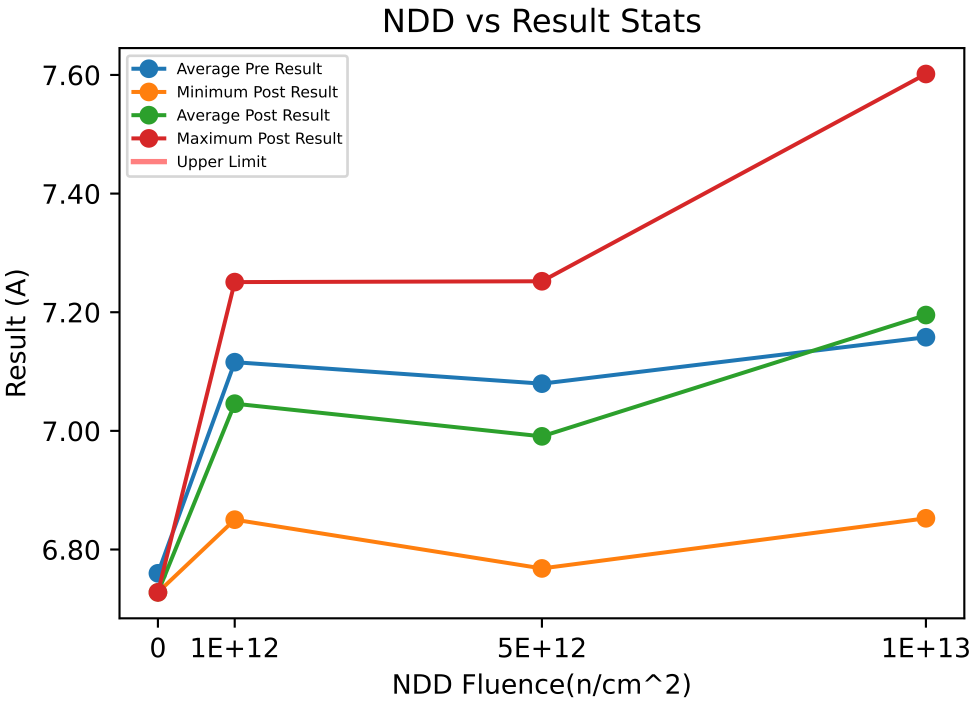
Test Results (No Limits Specified (A))

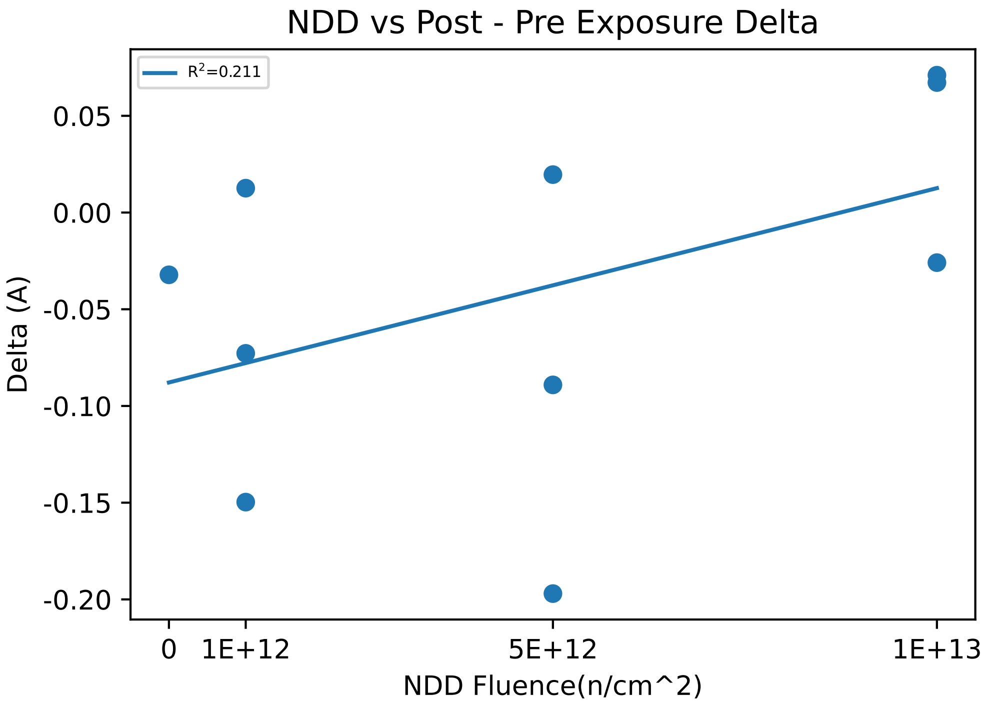
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	22.357	22.343	-0.0139
504	1e+12	NDD	23.437	23.399	-0.0378
505	1e+12	NDD	22.468	22.224	-0.2434
506	5e+12	NDD	22.705	22.475	-0.2296
507	5e+12	NDD	23.703	23.804	0.1011
508	5e+12	NDD	22.98	22.889	-0.0904
509	1e+13	NDD	22.424	22.485	0.0616
510	1e+13	NDD	22.795	22.805	0.0096
511	1e+13	NDD	24.194	24.286	0.0918
512	0	Correlation	22.571	22.528	-0.0423

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	22.571	22.571	22.571		22.528	22.528	22.528		-0.0423	-0.0423	-0.0423	
1e+12	22.357	22.754	23.437	0.59435	22.224	22.656	23.399	0.64693	-0.2434	-0.098367	-0.0139	0.12617
5e+12	22.705	23.129	23.703	0.51567	22.475	23.056	23.804	0.68004	-0.2296	-0.072967	0.1011	0.16604
1e+13	22.424	23.138	24.194	0.93353	22.485	23.192	24.286	0.96068	0.0096	0.054333	0.0918	0.041579

Device Test: 20.8 HIGHSIDE_CURR_LIM2_6A(THRESHOLD|RISE/SW/4.5////@HIGHSIDE_CURR_LIM2_6A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

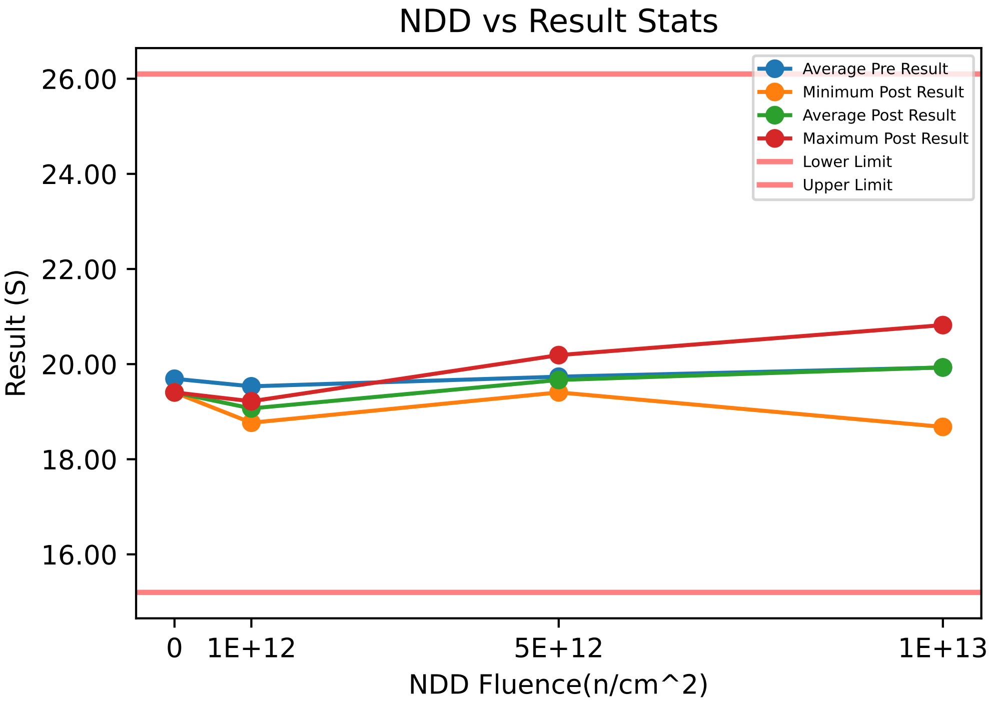
Test Results (No Limits Specified (A))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.0238	7.0364	0.0126
504	1e+12	NDD	7.3236	7.2508	-0.0728
505	1e+12	NDD	7	6.8503	-0.1497
506	5e+12	NDD	6.9651	6.7681	-0.197
507	5e+12	NDD	7.2326	7.2522	0.0196
508	5e+12	NDD	7.0411	6.952	-0.0891
509	1e+13	NDD	6.8785	6.8526	-0.0259
510	1e+13	NDD	7.0644	7.1316	0.0672
511	1e+13	NDD	7.5306	7.6016	0.071
512	0	Correlation	6.7599	6.7277	-0.0322

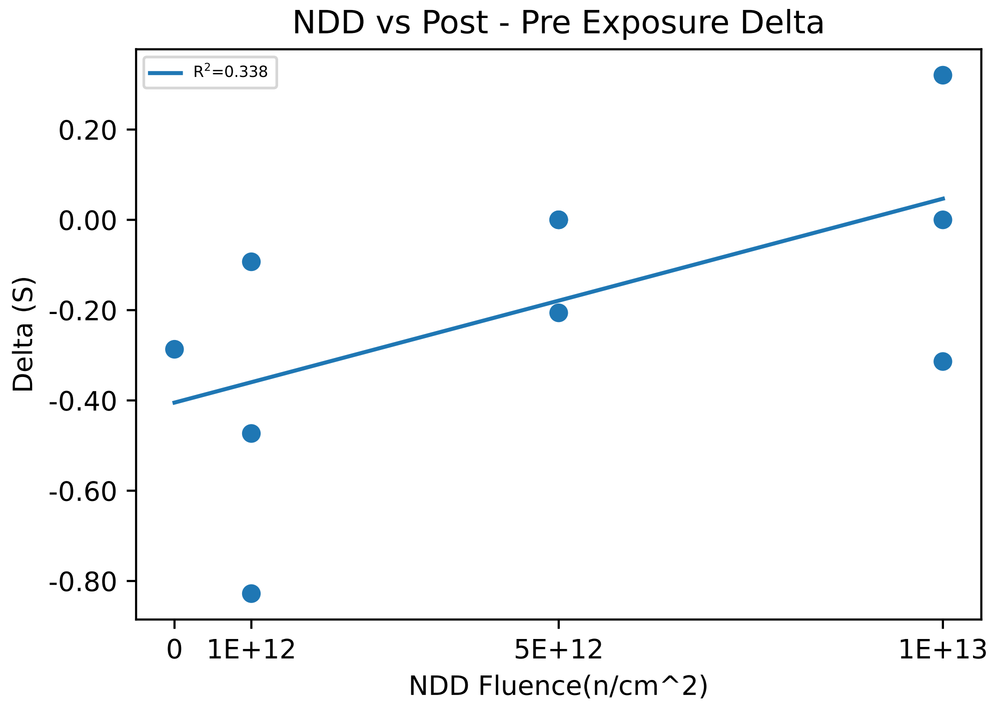
Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	6.7599	6.7599	6.7599		6.7277	6.7277	6.7277		-0.0322	-0.0322	-0.0322	
1e+12	7	7.1158	7.3236	0.18035	6.8503	7.0458	7.2508	0.20042	-0.1497	-0.069967	0.0126	0.081187
5e+12	6.9651	7.0796	7.2326	0.13784	6.7681	6.9908	7.2522	0.24437	-0.197	-0.088833	0.0196	0.1083
1e+13	6.8785	7.1578	7.5306	0.33594	6.8526	7.1953	7.6016	0.37854	-0.0259	0.037433	0.071	0.054881

Device Test: 20.80 EA_COMP_ISWITCH_GM_19A_25C(GMPS|STATIC/SW/12////@EA_COMP_ISWITCH_GM_19A_25C)



NDD vs Result Stats



NDD vs Post - Pre Exposure Delta

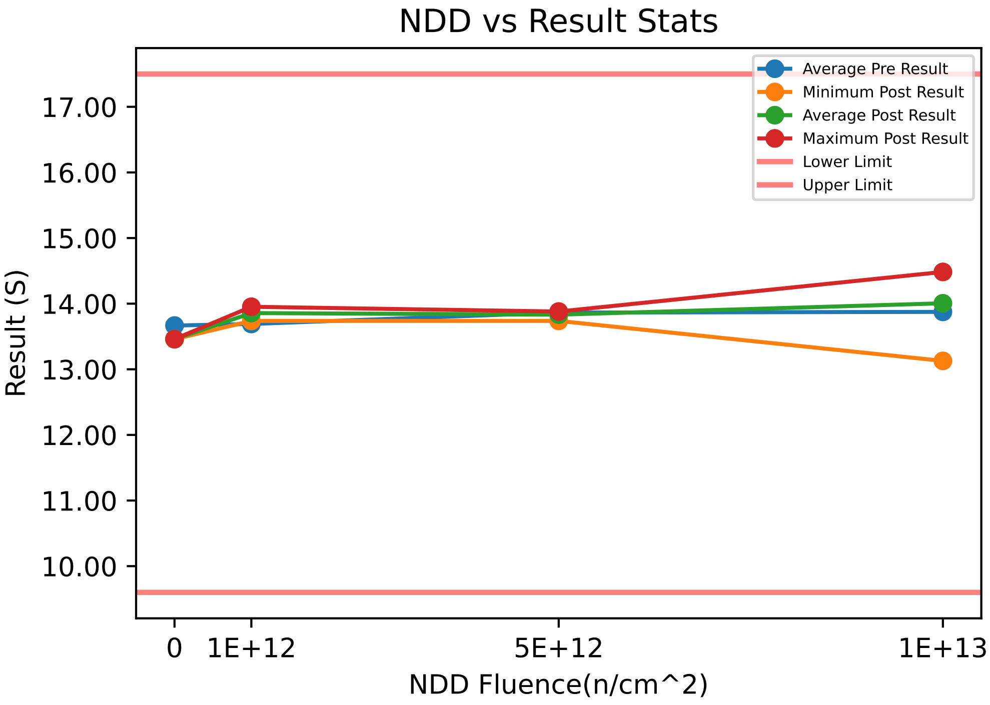
Test Results (Lower Limit = 15.2, Upper Limit = 26.1 (S))

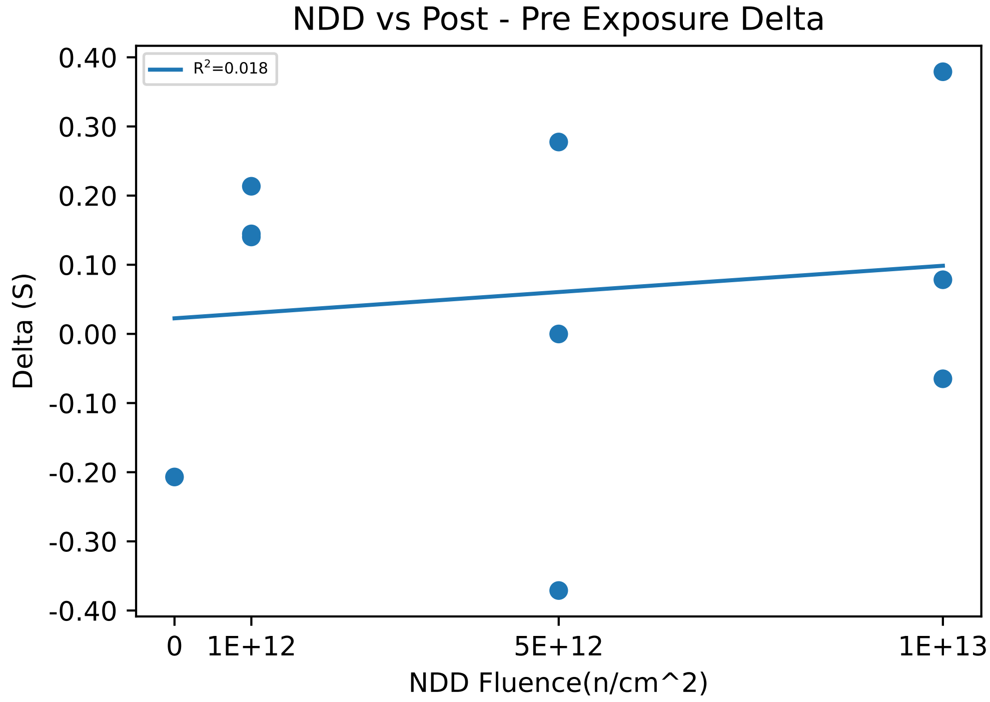
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	19.692	19.219	-0.4732
504	1e+12	NDD	19.312	19.219	-0.0929
505	1e+12	NDD	19.596	18.768	-0.8279
506	5e+12	NDD	20.395	20.189	-0.206
507	5e+12	NDD	19.405	19.405	0.0001
508	5e+12	NDD	19.405	19.405	0
509	1e+13	NDD	18.68	18.68	0
510	1e+13	NDD	20.606	20.292	-0.3138
511	1e+13	NDD	20.5	20.82	0.3204
512	0	Correlation	19.692	19.405	-0.2867

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	19.692	19.692	19.692		19.405	19.405	19.405		-0.2867	-0.2867	-0.2867	
1e+12	19.312	19.533	19.692	0.19774	18.768	19.068	19.219	0.26047	-0.8279	-0.46467	-0.0929	0.36757
5e+12	19.405	19.735	20.395	0.57163	19.405	19.667	20.189	0.45267	-0.206	-0.068633	0.0001	0.11896
1e+13	18.68	19.928	20.606	1.0827	18.68	19.931	20.82	1.115	-0.3138	0.0022	0.3204	0.31711

Device Test: 20.81 EA_COMP_ISWITCH_GM_13A_25C(GMPS|STATIC/SW/12////@EA_COMP_ISWITCH_GM_13A_25C)





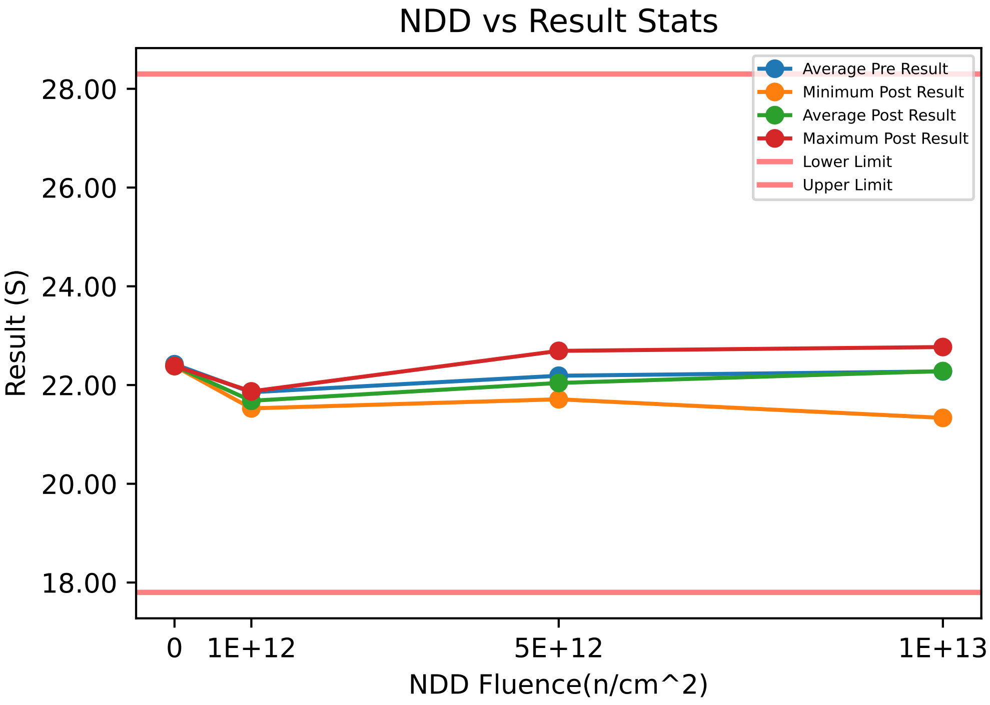
Test Results (Lower Limit = 9.6, Upper Limit = 17.5 (S))

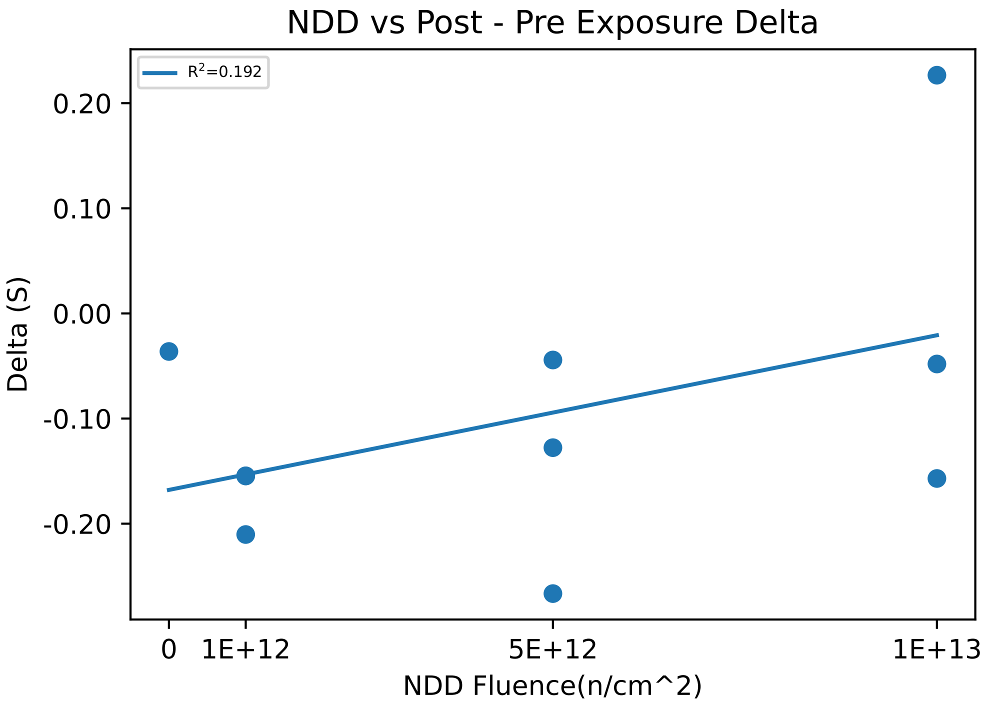
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	13.808	13.953	0.1446
504	1e+12	NDD	13.597	13.737	0.1402
505	1e+12	NDD	13.667	13.88	0.2135
506	5e+12	NDD	14.251	13.88	-0.3711
507	5e+12	NDD	13.88	13.88	-0.0001
508	5e+12	NDD	13.46	13.737	0.2775
509	1e+13	NDD	13.193	13.128	-0.0649
510	1e+13	NDD	14.026	14.405	0.3791
511	1e+13	NDD	14.405	14.484	0.0783
512	0	Correlation	13.667	13.46	-0.2069

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	13.667	13.667	13.667		13.46	13.46	13.46		-0.2069	-0.2069	-0.2069	
1e+12	13.597	13.691	13.808	0.10766	13.737	13.857	13.953	0.10975	0.1402	0.1661	0.2135	0.041109
5e+12	13.46	13.864	14.251	0.39611	13.737	13.832	13.88	0.08259	-0.3711	-0.031233	0.2775	0.32542
1e+13	13.193	13.875	14.405	0.62022	13.128	14.006	14.484	0.76106	-0.0649	0.13083	0.3791	0.22661

Device Test: 20.86 EA_COMP_ISWITCH_GM_0P5V_19A(GMPS|STATIC/SW/12////@EA_COMP_ISWITCH_GM_0P5V_19A





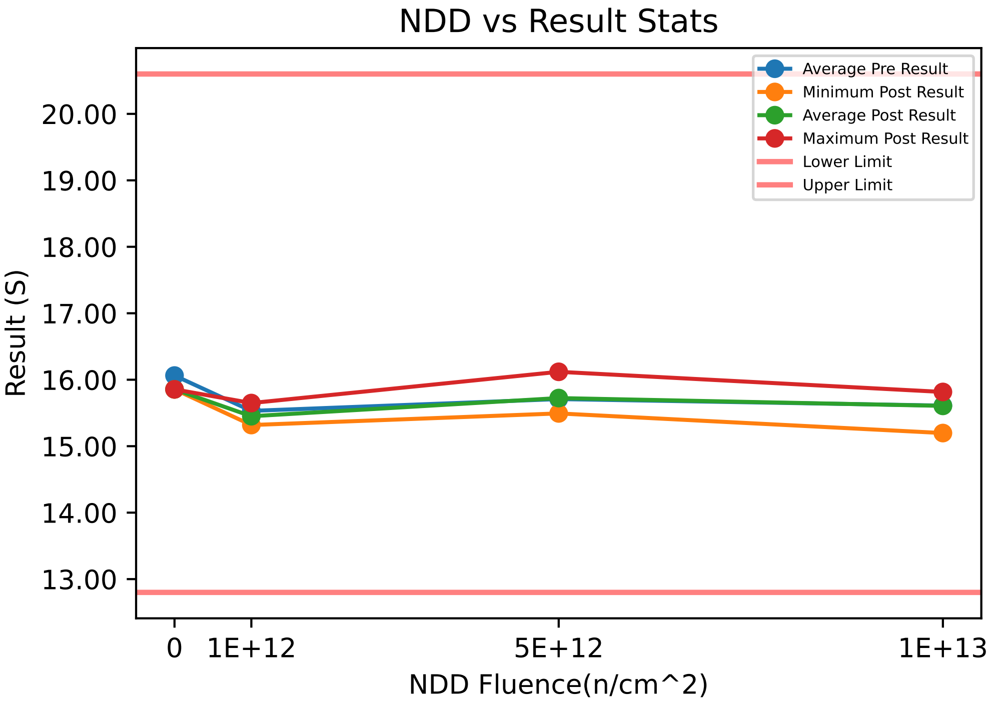
Test Results (Lower Limit = 17.8, Upper Limit = 28.3 (S))

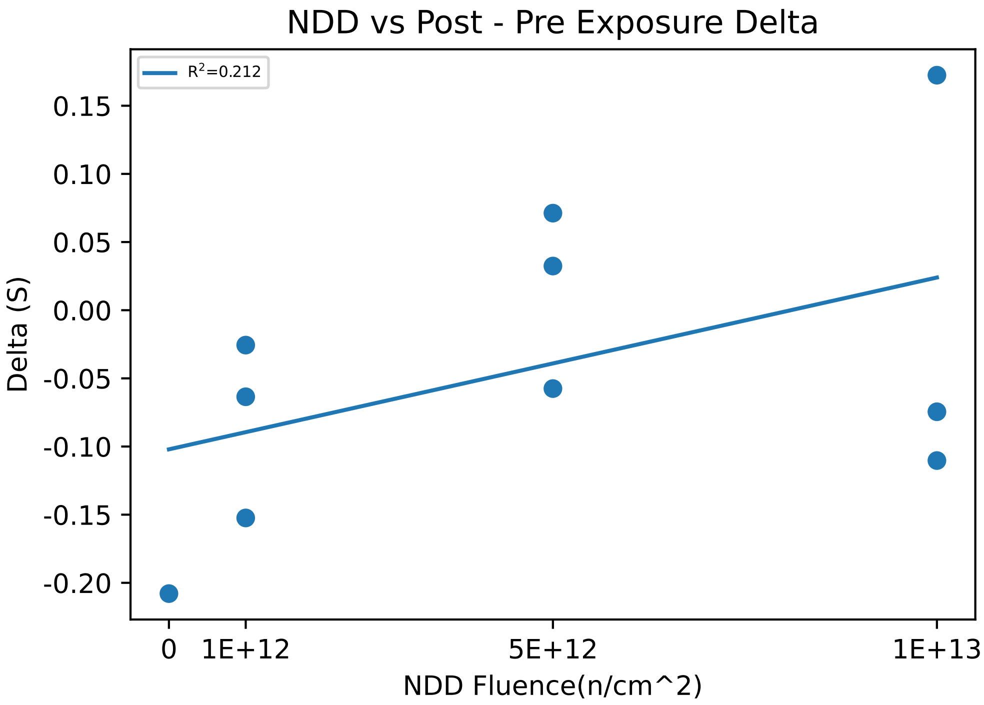
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	22.026	21.871	-0.1545
504	1e+12	NDD	21.682	21.527	-0.1546
505	1e+12	NDD	21.855	21.645	-0.2103
506	5e+12	NDD	22.959	22.692	-0.2665
507	5e+12	NDD	21.851	21.723	-0.1277
508	5e+12	NDD	21.756	21.712	-0.0443
509	1e+13	NDD	21.383	21.335	-0.0481
510	1e+13	NDD	22.902	22.745	-0.157
511	1e+13	NDD	22.543	22.77	0.2266
512	0	Correlation	22.422	22.385	-0.0362

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	22.422	22.422	22.422		22.385	22.385	22.385		-0.0362	-0.0362	-0.0362	
1e+12	21.682	21.854	22.026	0.17205	21.527	21.681	21.871	0.17494	-0.2103	-0.17313	-0.1545	0.032187
5e+12	21.756	22.188	22.959	0.66866	21.712	22.042	22.692	0.5628	-0.2665	-0.14617	-0.0443	0.11225
1e+13	21.383	22.276	22.902	0.79392	21.335	22.283	22.77	0.82132	-0.157	0.0071667	0.2266	0.19768

Device Test: 20.87 EA_COMP_ISWITCH_GM_0P5V_13A(GMPS|STATIC/SW/12////@EA_COMP_ISWITCH_GM_0P5V_13A





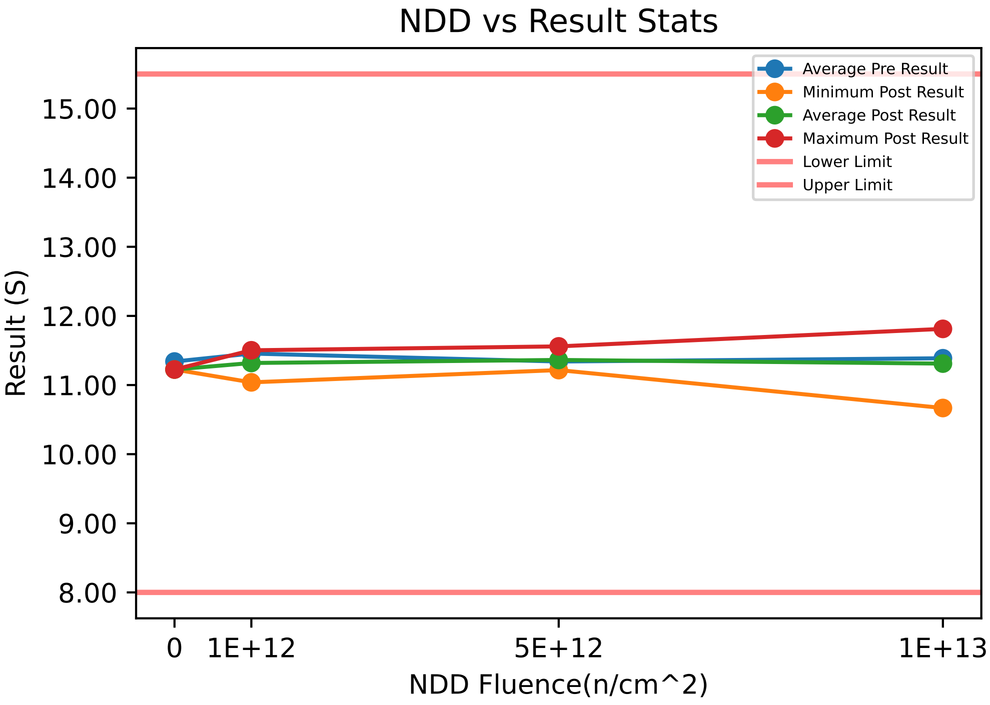
Test Results (Lower Limit = 12.8, Upper Limit = 20.6 (S))

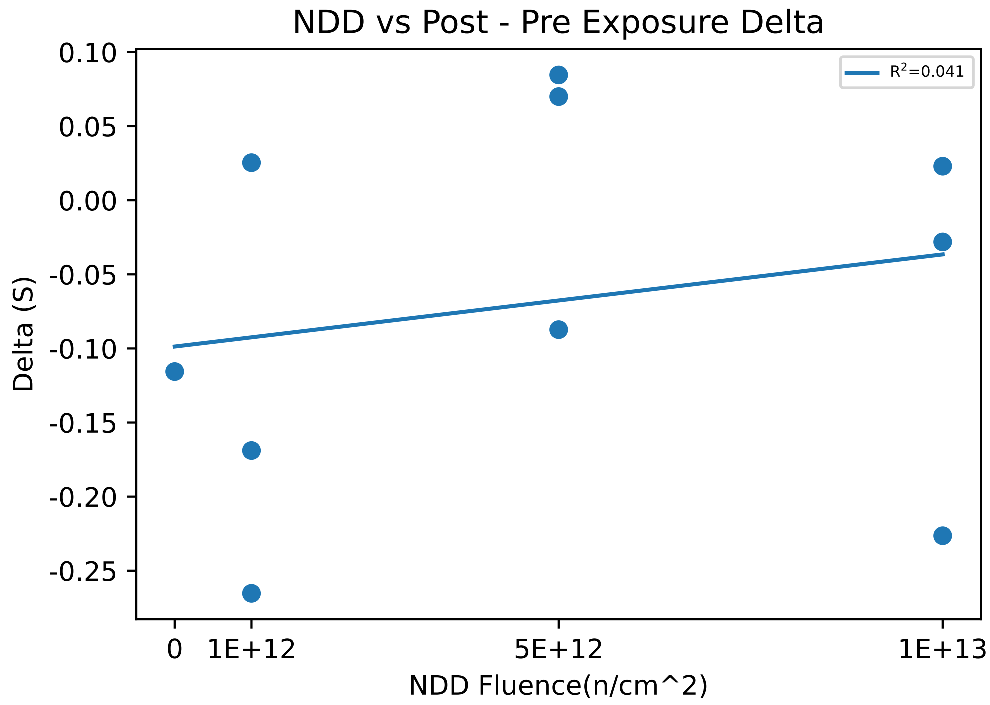
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	15.713	15.649	-0.0635
504	1e+12	NDD	15.41	15.385	-0.0256
505	1e+12	NDD	15.471	15.318	-0.1524
506	5e+12	NDD	16.087	16.119	0.0324
507	5e+12	NDD	15.55	15.493	-0.0575
508	5e+12	NDD	15.489	15.56	0.0712
509	1e+13	NDD	15.272	15.198	-0.0745
510	1e+13	NDD	15.643	15.816	0.1724
511	1e+13	NDD	15.916	15.806	-0.1103
512	0	Correlation	16.063	15.855	-0.2079

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	16.063	16.063	16.063		15.855	15.855	15.855		-0.2079	-0.2079	-0.2079	
1e+12	15.41	15.531	15.713	0.15992	15.318	15.451	15.649	0.17494	-0.1524	-0.0805	-0.0256	0.065087
5e+12	15.489	15.709	16.087	0.3288	15.493	15.724	16.119	0.34375	-0.0575	0.015367	0.0712	0.066019
1e+13	15.272	15.611	15.916	0.32345	15.198	15.607	15.816	0.35421	-0.1103	-0.0041333	0.1724	0.15393

Device Test: 20.88 EA_COMP_ISWITCH_GM_9A(GMPS|STATIC/SW/12////@EA_COMP_ISWITCH_GM_9A)





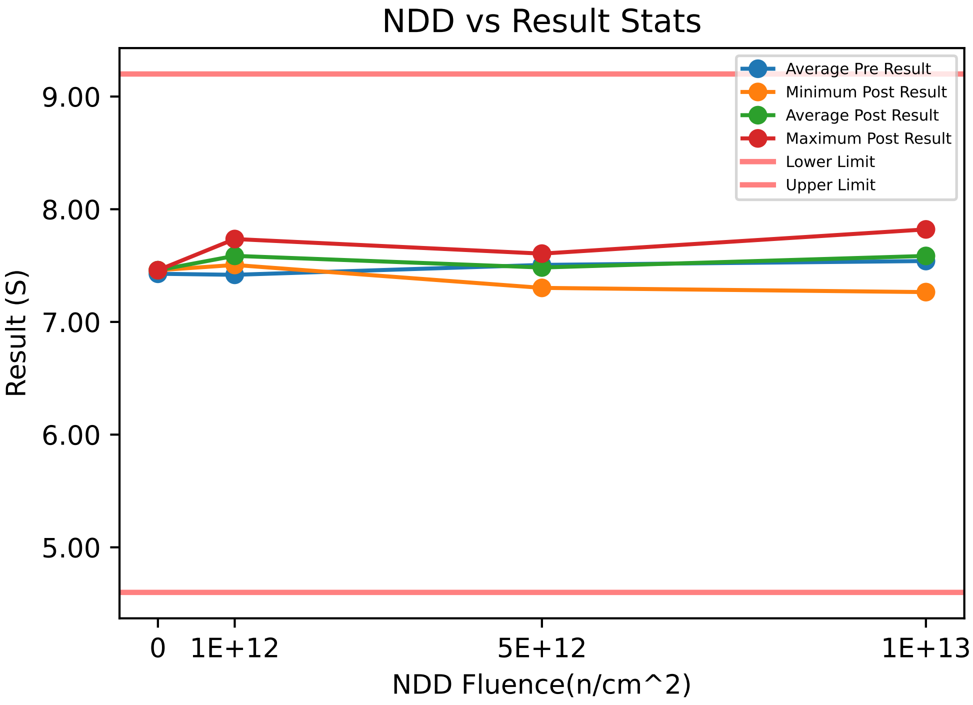
Test Results (Lower Limit = 8.0, Upper Limit = 15.5 (S))

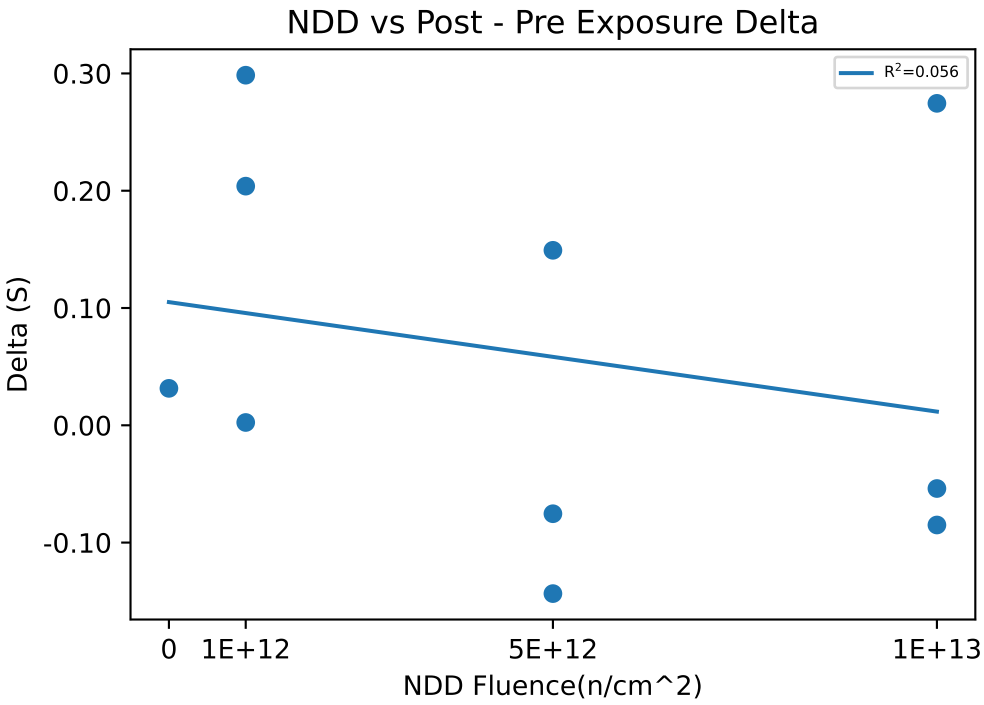
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	11.39	11.416	0.0254
504	1e+12	NDD	11.672	11.503	-0.1689
505	1e+12	NDD	11.304	11.039	-0.2653
506	5e+12	NDD	11.646	11.559	-0.0873
507	5e+12	NDD	11.243	11.313	0.07
508	5e+12	NDD	11.132	11.216	0.0846
509	1e+13	NDD	10.894	10.668	-0.2264
510	1e+13	NDD	11.428	11.451	0.023
511	1e+13	NDD	11.841	11.813	-0.0281
512	0	Correlation	11.34	11.225	-0.1156

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	11.34	11.34	11.34		11.225	11.225	11.225		-0.1156	-0.1156	-0.1156	
1e+12	11.304	11.455	11.672	0.19211	11.039	11.319	11.503	0.24657	-0.2653	-0.13627	0.0254	0.14807
5e+12	11.132	11.34	11.646	0.27079	11.216	11.363	11.559	0.17672	-0.0873	0.022433	0.0846	0.095312
1e+13	10.894	11.388	11.841	0.47453	10.668	11.31	11.813	0.58516	-0.2264	-0.077167	0.023	0.13174

Device Test: 20.89 EA_COMP_ISWITCH_GM_6A(GMPS|STATIC/SW/12////@EA_COMP_ISWITCH_GM_6A)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

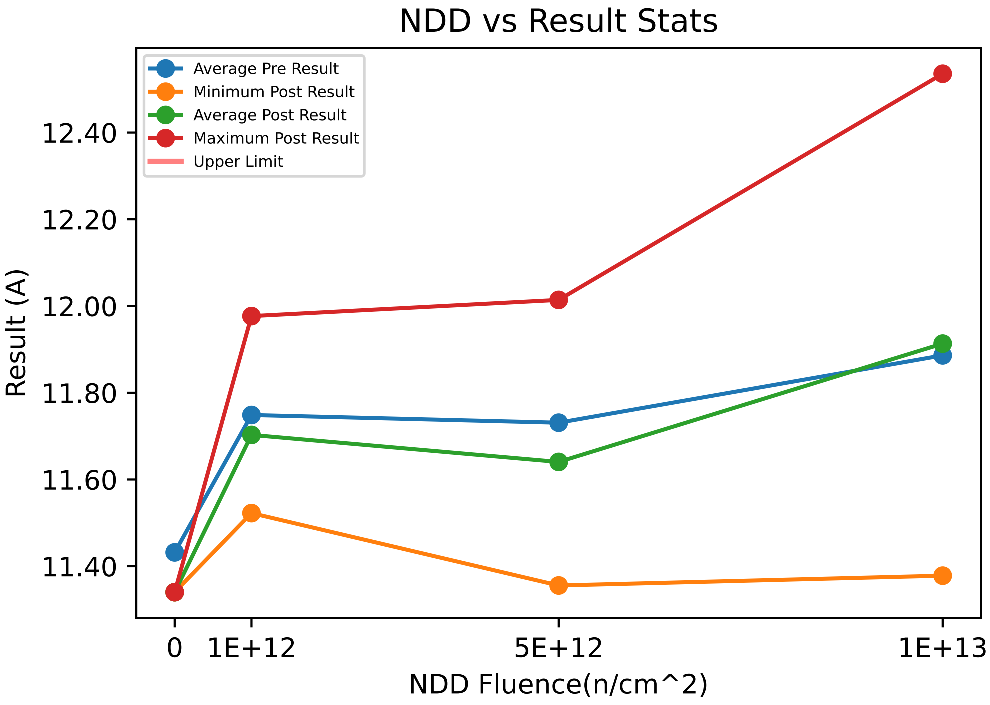
Test Results (Lower Limit = 4.6, Upper Limit = 9.2 (S))

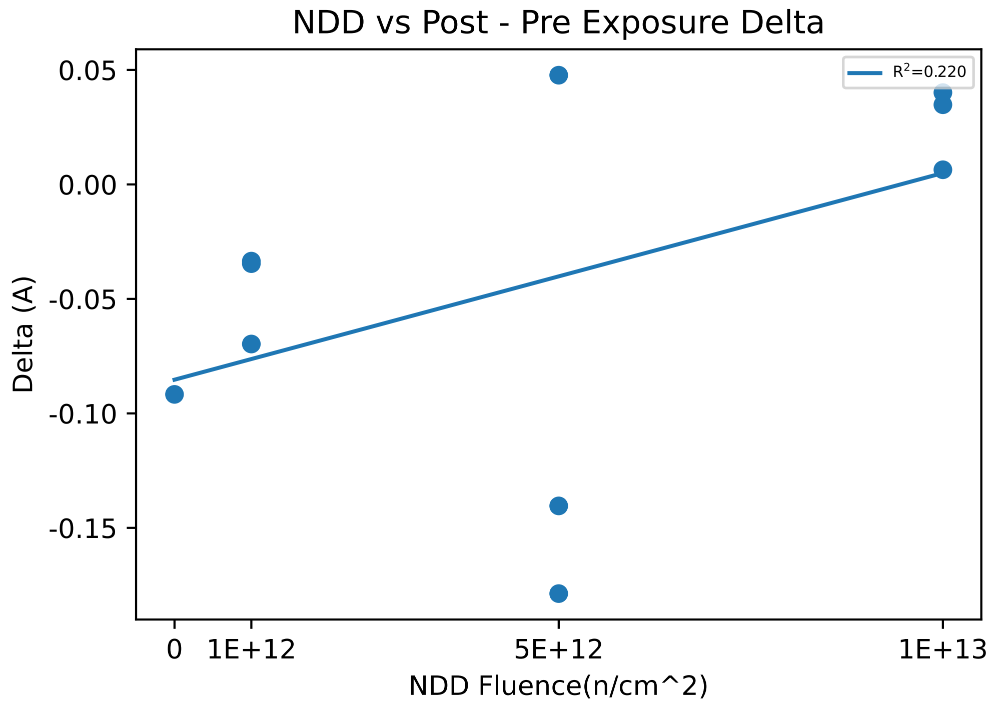
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.5155	7.5179	0.0024
504	1e+12	NDD	7.5318	7.7357	0.2039
505	1e+12	NDD	7.2069	7.5054	0.2985
506	5e+12	NDD	7.6815	7.6061	-0.0754
507	5e+12	NDD	7.3911	7.5403	0.1492
508	5e+12	NDD	7.4456	7.3021	-0.1435
509	1e+13	NDD	7.3497	7.2647	-0.085
510	1e+13	NDD	7.5465	7.821	0.2745
511	1e+13	NDD	7.7249	7.671	-0.0539
512	0	Correlation	7.4274	7.4589	0.0315

Test Statistics (S)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	7.4274	7.4274	7.4274		7.4589	7.4589	7.4589		0.0315	0.0315	0.0315	
1e+12	7.2069	7.4181	7.5318	0.18306	7.5054	7.5863	7.7357	0.12951	0.0024	0.16827	0.2985	0.15123
5e+12	7.3911	7.5061	7.6815	0.15435	7.3021	7.4828	7.6061	0.15994	-0.1435	-0.023233	0.1492	0.15316
1e+13	7.3497	7.5404	7.7249	0.18768	7.2647	7.5856	7.821	0.28782	-0.085	0.0452	0.2745	0.19919

Device Test: 20.9 HIGHSIDE_CURR_LIM2_9A(THRESHOLD|RISE/SW/4.5////@HIGHSIDE_CURR_LIM2_9A)





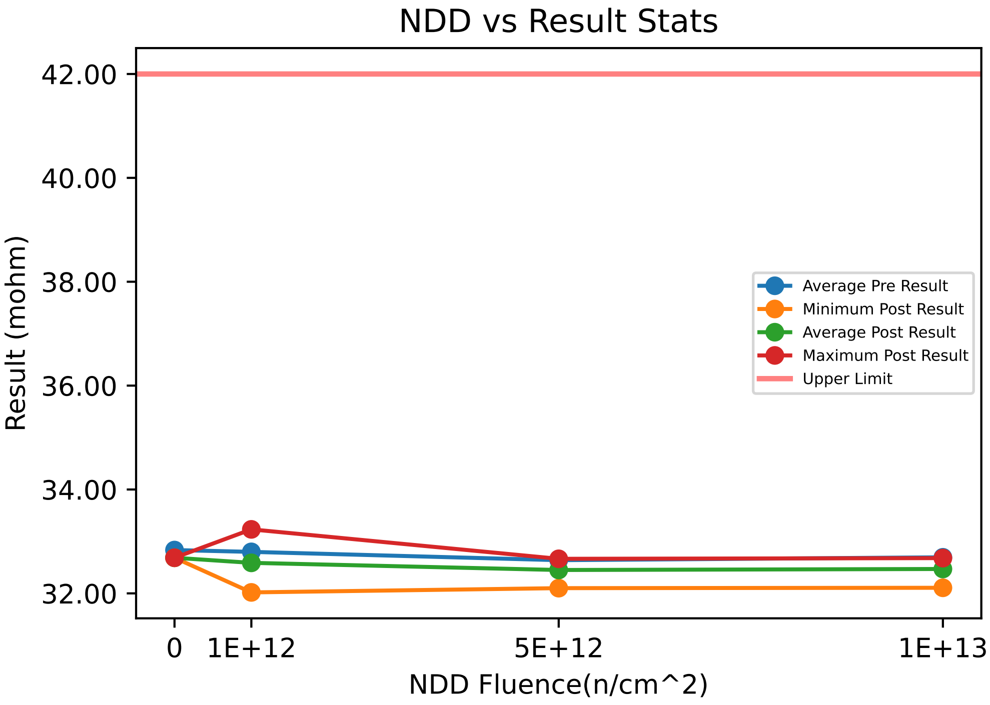
Test Results (No Limits Specified (A))

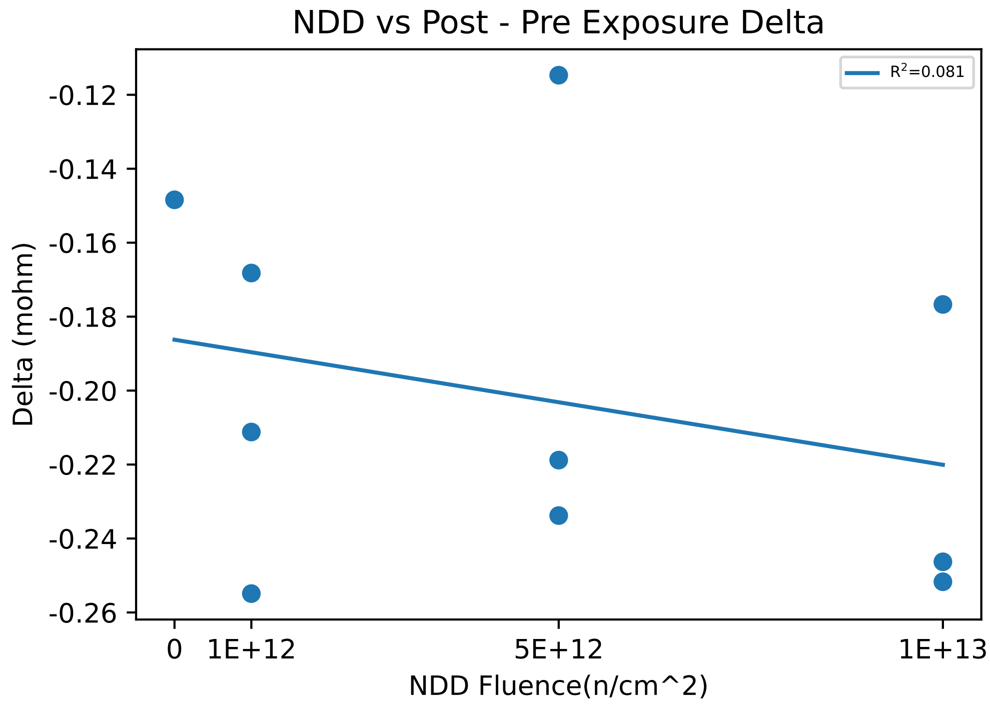
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	11.556	11.523	-0.0335
504	1e+12	NDD	12.011	11.977	-0.0346
505	1e+12	NDD	11.679	11.609	-0.0697
506	5e+12	NDD	11.534	11.356	-0.1787
507	5e+12	NDD	11.966	12.014	0.0477
508	5e+12	NDD	11.692	11.552	-0.1404
509	1e+13	NDD	11.372	11.378	0.0064
510	1e+13	NDD	11.791	11.826	0.0348
511	1e+13	NDD	12.495	12.536	0.0401
512	0	Correlation	11.432	11.34	-0.0917

Test Statistics (A)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	11.432	11.432	11.432		11.34	11.34	11.34		-0.0917	-0.0917	-0.0917	
1e+12	11.556	11.749	12.011	0.23563	11.523	11.703	11.977	0.24123	-0.0697	-0.045933	-0.0335	0.02059
5e+12	11.534	11.731	11.966	0.21864	11.356	11.641	12.014	0.33809	-0.1787	-0.090467	0.0477	0.12118
1e+13	11.372	11.886	12.495	0.56783	11.378	11.913	12.536	0.58361	0.0064	0.0271	0.0401	0.018122

Device Test: 21.14 R_LOWSIDE_12V_25C(LEVEL|LOWSIDE/SW/12/2///@R_LOWSIDE_12V_25C)





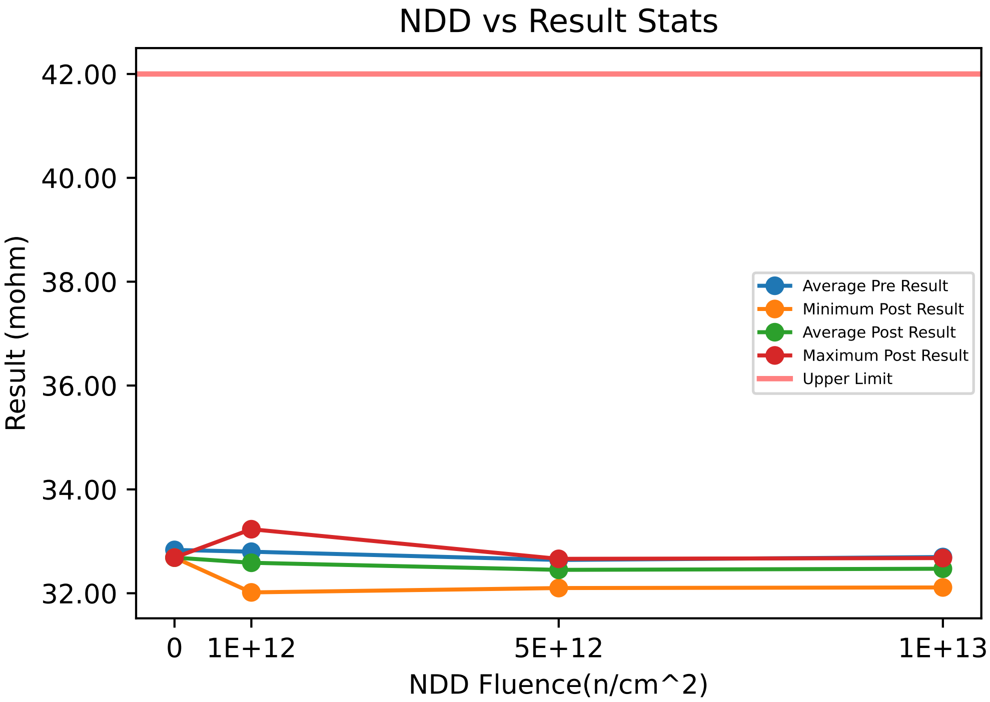
Test Results (Upper Limit = 42.0 (mohm))

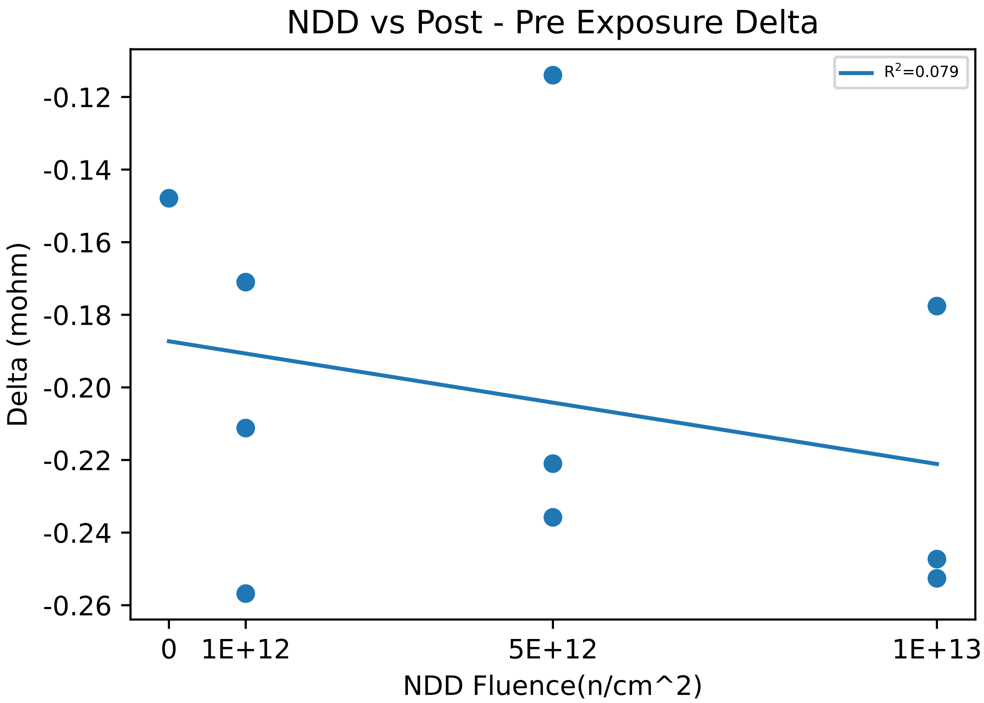
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	32.68	32.512	-0.1682
504	1e+12	NDD	32.274	32.019	-0.2549
505	1e+12	NDD	33.443	33.232	-0.2112
506	5e+12	NDD	32.699	32.584	-0.1147
507	5e+12	NDD	32.319	32.1	-0.2188
508	5e+12	NDD	32.899	32.665	-0.2338
509	1e+13	NDD	32.855	32.679	-0.1767
510	1e+13	NDD	32.874	32.622	-0.2517
511	1e+13	NDD	32.354	32.107	-0.2463
512	0	Correlation	32.834	32.686	-0.1484

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	32.834	32.834	32.834		32.686	32.686	32.686		-0.1484	-0.1484	-0.1484	
1e+12	32.274	32.799	33.443	0.59388	32.019	32.588	33.232	0.61027	-0.2549	-0.21143	-0.1682	0.04335
5e+12	32.319	32.639	32.899	0.29449	32.1	32.45	32.665	0.30538	-0.2338	-0.1891	-0.1147	0.064867
1e+13	32.354	32.694	32.874	0.29508	32.107	32.469	32.679	0.31475	-0.2517	-0.2249	-0.1767	0.04183

Device Test: 21.15 R_LOWSIDE_12V_25C(LEVEL|LOWSIDE/SW/12/12///@R_LOWSIDE_12V_25C)





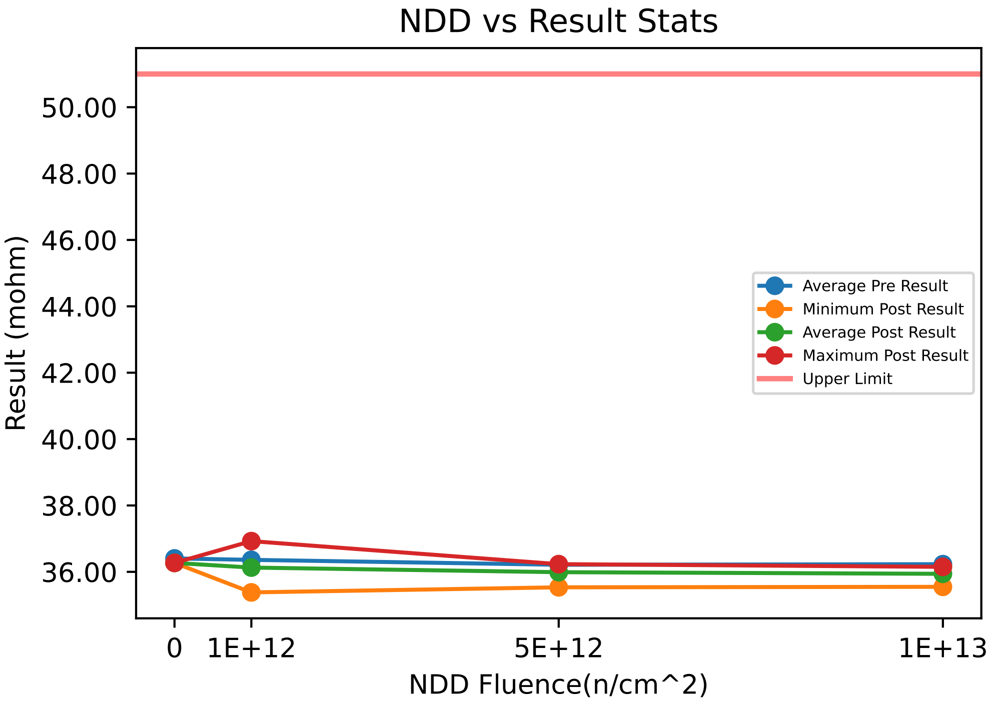
Test Results (Upper Limit = 42.0 (mohm))

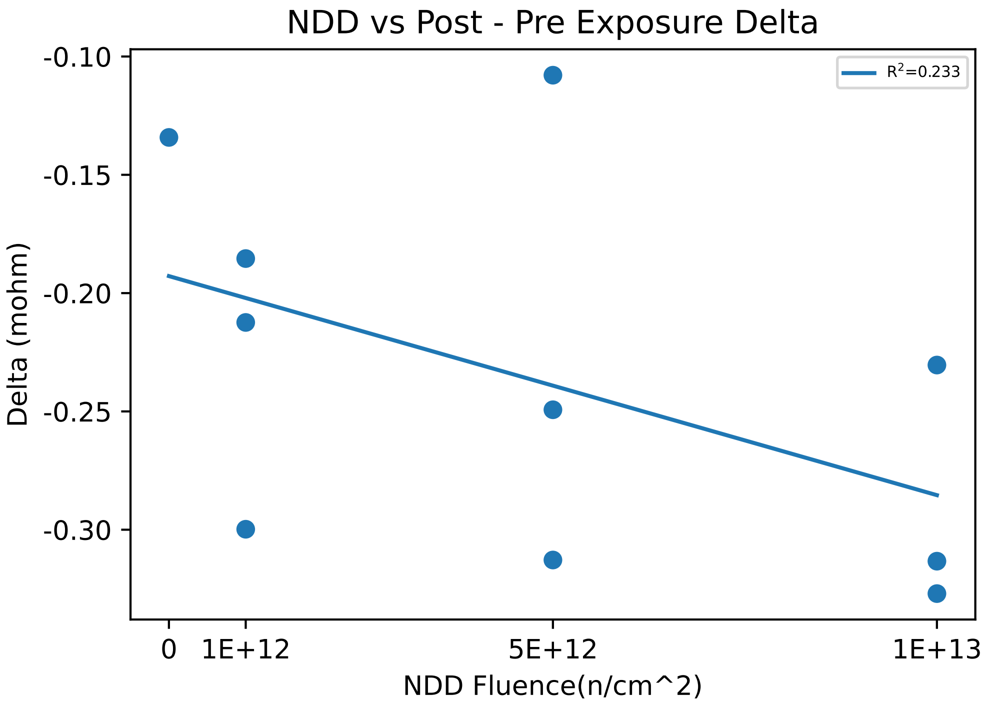
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	32.683	32.511	-0.171
504	1e+12	NDD	32.273	32.016	-0.2568
505	1e+12	NDD	33.444	33.233	-0.2112
506	5e+12	NDD	32.703	32.588	-0.114
507	5e+12	NDD	32.321	32.1	-0.221
508	5e+12	NDD	32.898	32.662	-0.2358
509	1e+13	NDD	32.855	32.677	-0.1776
510	1e+13	NDD	32.879	32.626	-0.2526
511	1e+13	NDD	32.359	32.112	-0.2473
512	0	Correlation	32.835	32.687	-0.1479

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	32.835	32.835	32.835		32.687	32.687	32.687		-0.1479	-0.1479	-0.1479	
1e+12	32.273	32.8	33.444	0.59441	32.016	32.587	33.233	0.61195	-0.2568	-0.213	-0.171	0.042928
5e+12	32.321	32.641	32.898	0.29354	32.1	32.45	32.662	0.30561	-0.2358	-0.19027	-0.114	0.066462
1e+13	32.359	32.698	32.879	0.29351	32.112	32.472	32.677	0.31289	-0.2526	-0.22583	-0.1776	0.041855

Device Test: 21.2 R_LOWSIDE_4V_25C(LEVEL|LOWSIDE/SW/4.5/2///@R_LOWSIDE_4V_25C)





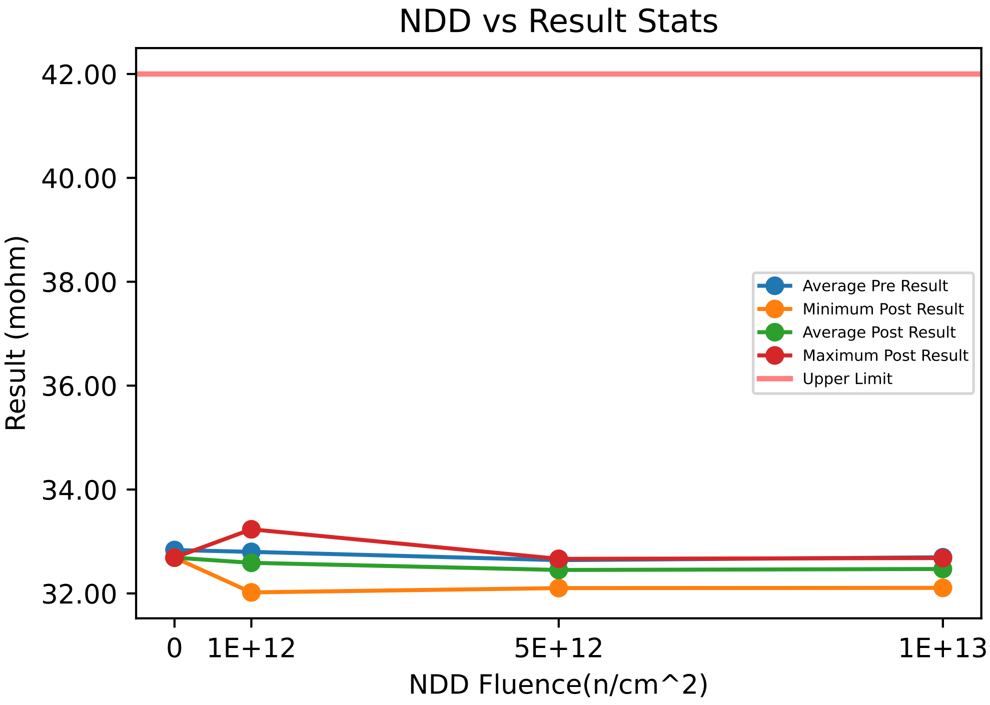
Test Results (Upper Limit = 51.0 (mohm))

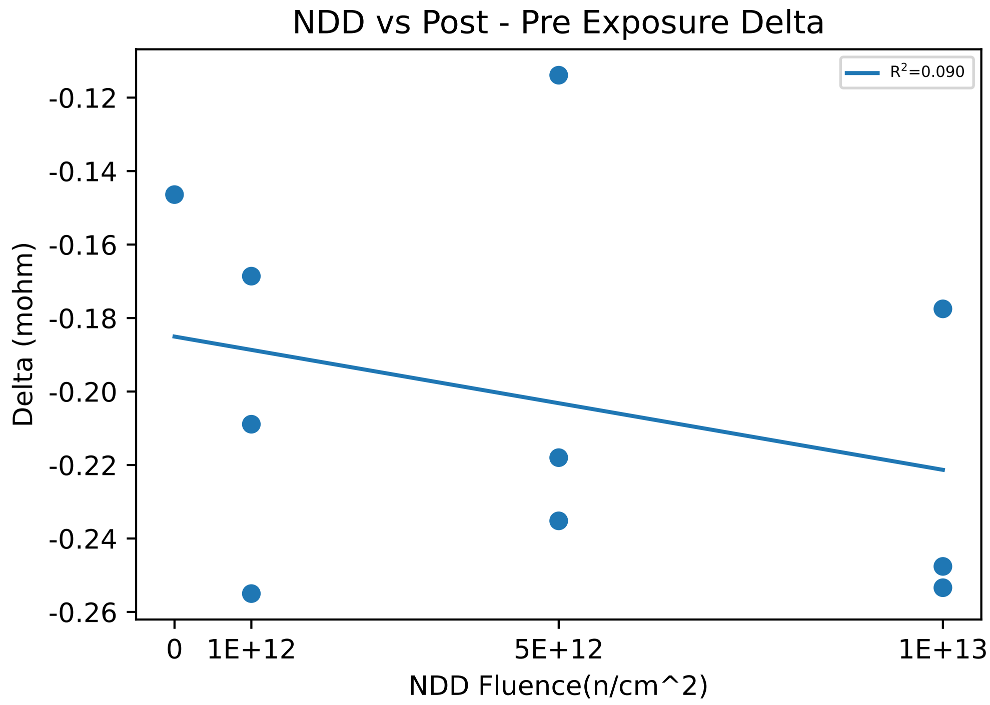
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	36.265	36.08	-0.1854
504	1e+12	NDD	35.681	35.381	-0.2998
505	1e+12	NDD	37.138	36.926	-0.2124
506	5e+12	NDD	36.34	36.232	-0.1079
507	5e+12	NDD	35.847	35.534	-0.3128
508	5e+12	NDD	36.453	36.204	-0.2493
509	1e+13	NDD	36.381	36.151	-0.2304
510	1e+13	NDD	36.45	36.123	-0.327
511	1e+13	NDD	35.862	35.548	-0.3133
512	0	Correlation	36.404	36.27	-0.1342

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	36.404	36.404	36.404		36.27	36.27	36.27		-0.1342	-0.1342	-0.1342	
1e+12	35.681	36.361	37.138	0.73347	35.381	36.129	36.926	0.7736	-0.2998	-0.23253	-0.1854	0.059798
5e+12	35.847	36.213	36.453	0.32253	35.534	35.99	36.232	0.39528	-0.3128	-0.22333	-0.1079	0.10489
1e+13	35.862	36.231	36.45	0.32165	35.548	35.941	36.151	0.34005	-0.327	-0.29023	-0.2304	0.052268

Device Test: 21.20 R_LOWSIDE_14V_25C(LEVEL|LOWSIDE/SW/14/2///@R_LOWSIDE_14V_25C)





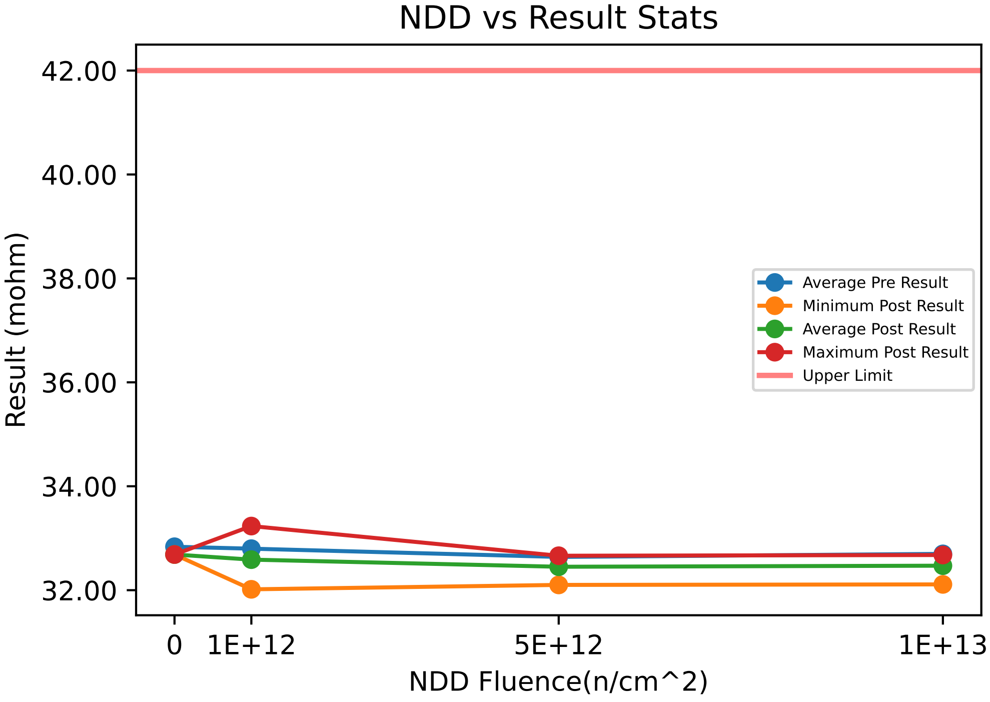
Test Results (Upper Limit = 42.0 (mohm))

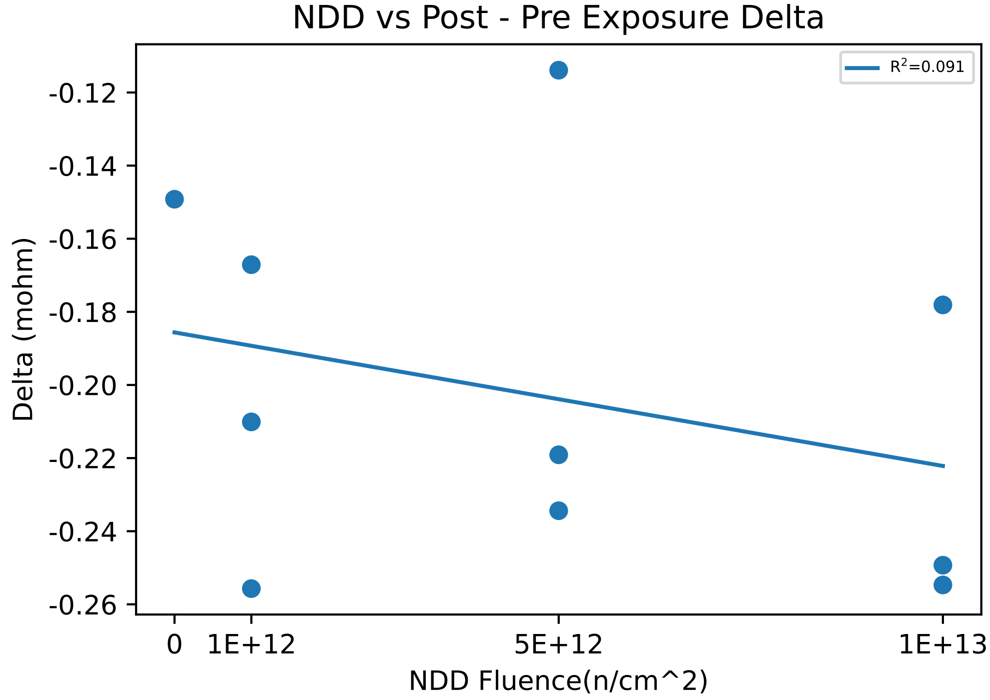
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	32.682	32.514	-0.1686
504	1e+12	NDD	32.275	32.02	-0.255
505	1e+12	NDD	33.443	33.234	-0.2089
506	5e+12	NDD	32.7	32.586	-0.1139
507	5e+12	NDD	32.321	32.103	-0.218
508	5e+12	NDD	32.901	32.666	-0.2352
509	1e+13	NDD	32.858	32.681	-0.1775
510	1e+13	NDD	32.876	32.623	-0.2534
511	1e+13	NDD	32.354	32.107	-0.2476
512	0	Correlation	32.836	32.689	-0.1464

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	32.836	32.836	32.836		32.689	32.689	32.689		-0.1464	-0.1464	-0.1464	
1e+12	32.275	32.8	33.443	0.59326	32.02	32.589	33.234	0.61098	-0.255	-0.21083	-0.1686	0.043232
5e+12	32.321	32.64	32.901	0.29461	32.103	32.451	32.666	0.30461	-0.2352	-0.18903	-0.1139	0.065633
1e+13	32.354	32.696	32.876	0.29632	32.107	32.47	32.681	0.31606	-0.2534	-0.22617	-0.1775	0.042246

Device Test: 21.21 R_LOWSIDE_14V_25C(LEVEL|LOWSIDE/SW/14/12///@R_LOWSIDE_14V_25C)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

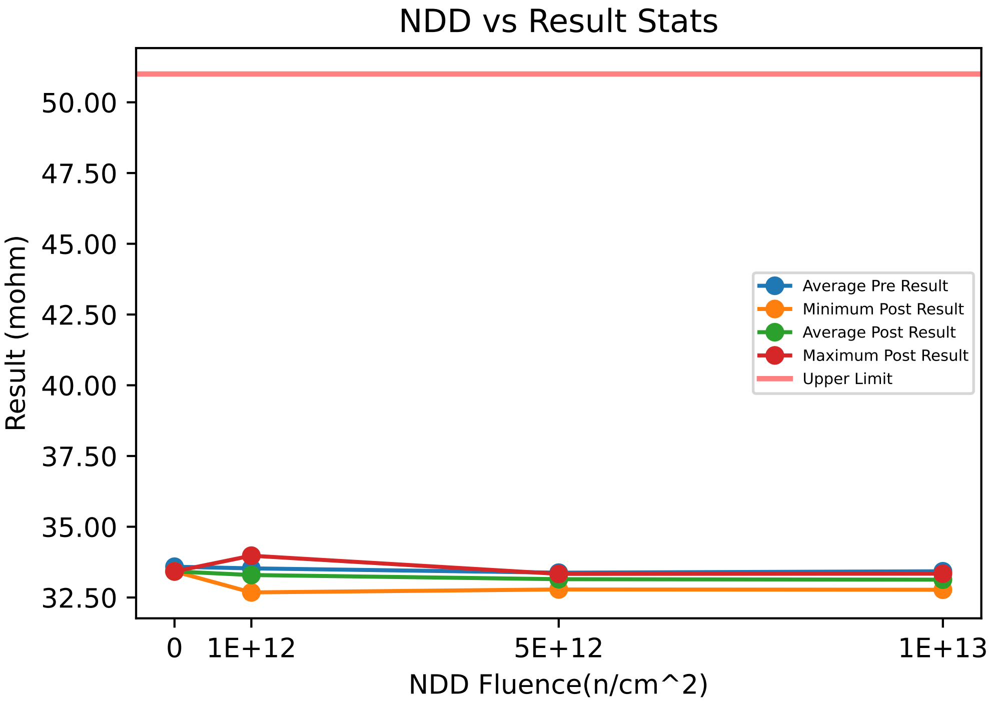
Test Results (Upper Limit = 42.0 (mohm))

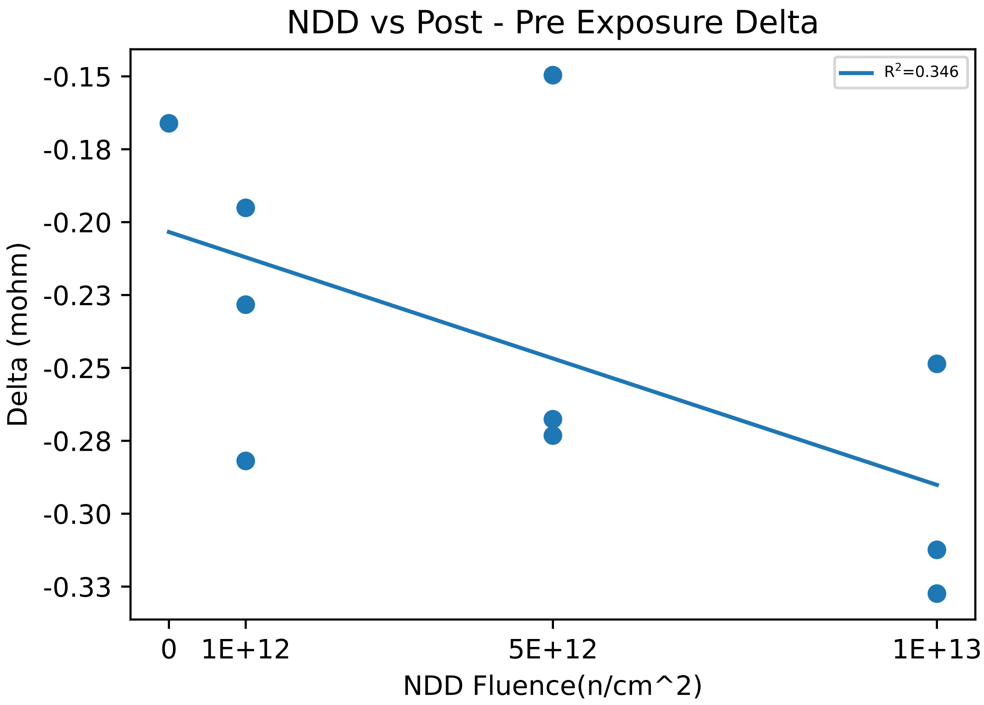
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	32.68	32.513	-0.1671
504	1e+12	NDD	32.272	32.017	-0.2557
505	1e+12	NDD	33.444	33.234	-0.2101
506	5e+12	NDD	32.702	32.588	-0.1139
507	5e+12	NDD	32.321	32.102	-0.2191
508	5e+12	NDD	32.897	32.663	-0.2344
509	1e+13	NDD	32.855	32.677	-0.1781
510	1e+13	NDD	32.88	32.626	-0.2547
511	1e+13	NDD	32.361	32.111	-0.2493
512	0	Correlation	32.836	32.687	-0.1492

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	32.836	32.836	32.836		32.687	32.687	32.687		-0.1492	-0.1492	-0.1492	
1e+12	32.272	32.799	33.444	0.59487	32.017	32.588	33.234	0.61216	-0.2557	-0.21097	-0.1671	0.044306
5e+12	32.321	32.64	32.897	0.29335	32.102	32.451	32.663	0.30492	-0.2344	-0.18913	-0.1139	0.065602
1e+13	32.361	32.699	32.88	0.29296	32.111	32.471	32.677	0.31274	-0.2547	-0.22737	-0.1781	0.042752

Device Test: 21.3 R_LOWSIDE_4V_25C(LEVEL|LOWSIDE/SW/4.5/12///@R_LOWSIDE_4V_25C)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

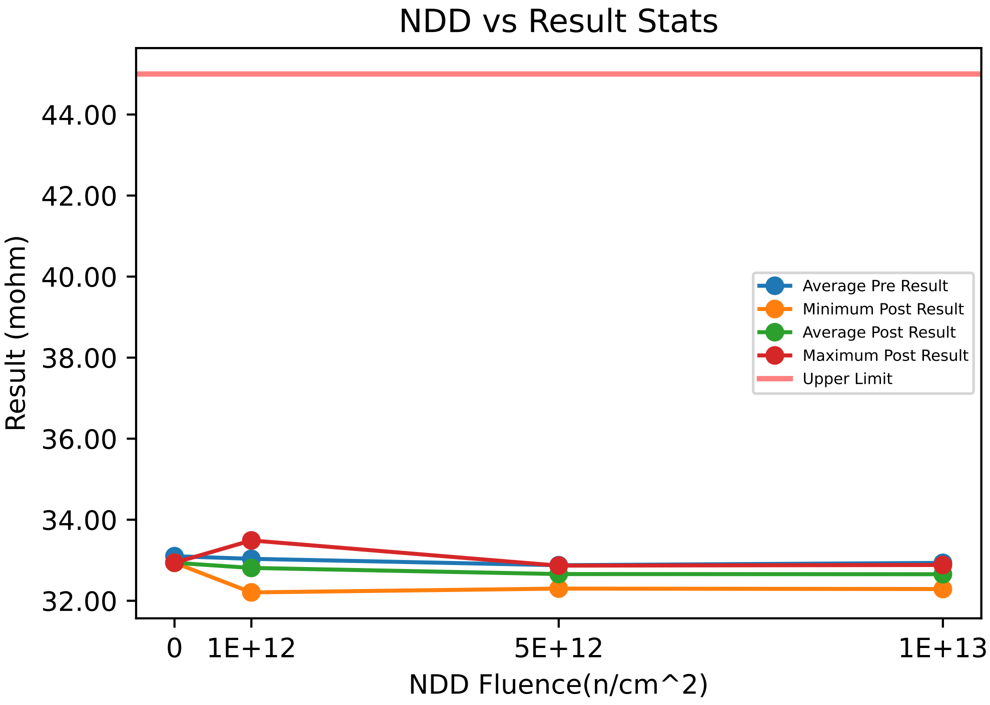
Test Results (Upper Limit = 51.0 (mohm))

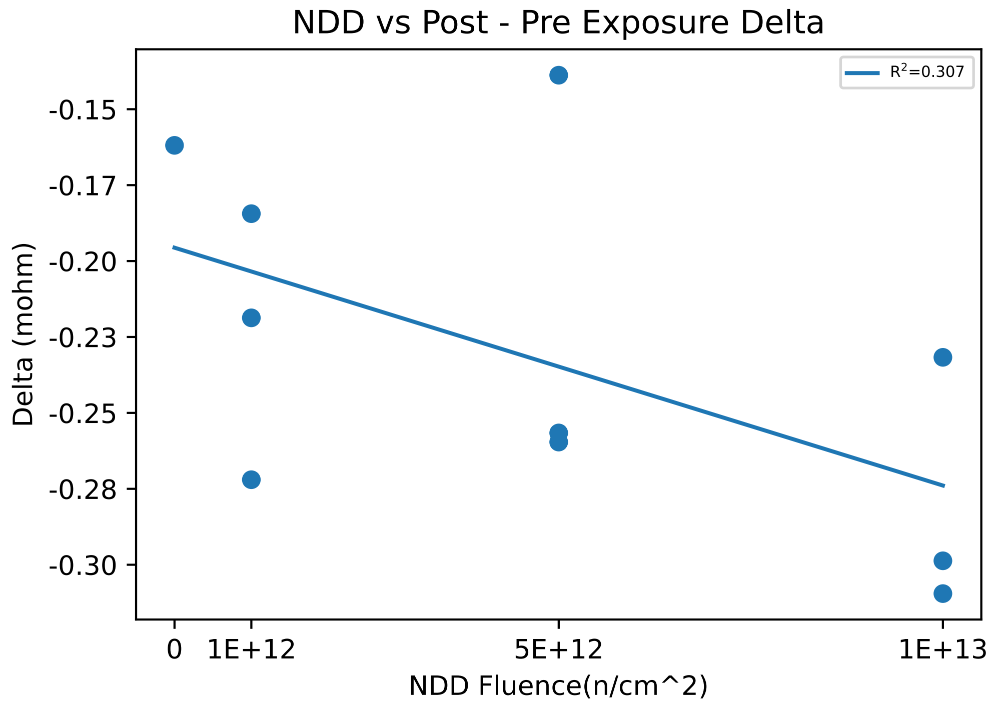
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	33.42	33.225	-0.1951
504	1e+12	NDD	32.962	32.68	-0.2819
505	1e+12	NDD	34.205	33.977	-0.2283
506	5e+12	NDD	33.473	33.323	-0.1496
507	5e+12	NDD	33.051	32.784	-0.2676
508	5e+12	NDD	33.607	33.334	-0.2732
509	1e+13	NDD	33.59	33.342	-0.2486
510	1e+13	NDD	33.603	33.275	-0.3274
511	1e+13	NDD	33.086	32.774	-0.3124
512	0	Correlation	33.587	33.421	-0.1661

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	33.587	33.587	33.587		33.421	33.421	33.421		-0.1661	-0.1661	-0.1661	
1e+12	32.962	33.529	34.205	0.62885	32.68	33.294	33.977	0.65128	-0.2819	-0.2351	-0.1951	0.043798
5e+12	33.051	33.377	33.607	0.29006	32.784	33.147	33.334	0.31467	-0.2732	-0.23013	-0.1496	0.0698
1e+13	33.086	33.426	33.603	0.29483	32.774	33.13	33.342	0.31064	-0.3274	-0.29613	-0.2486	0.041843

Device Test: 21.8 R_LOWSIDE_5V_25C(LEVEL|LOWSIDE/SW/5/2///@R_LOWSIDE_5V_25C)





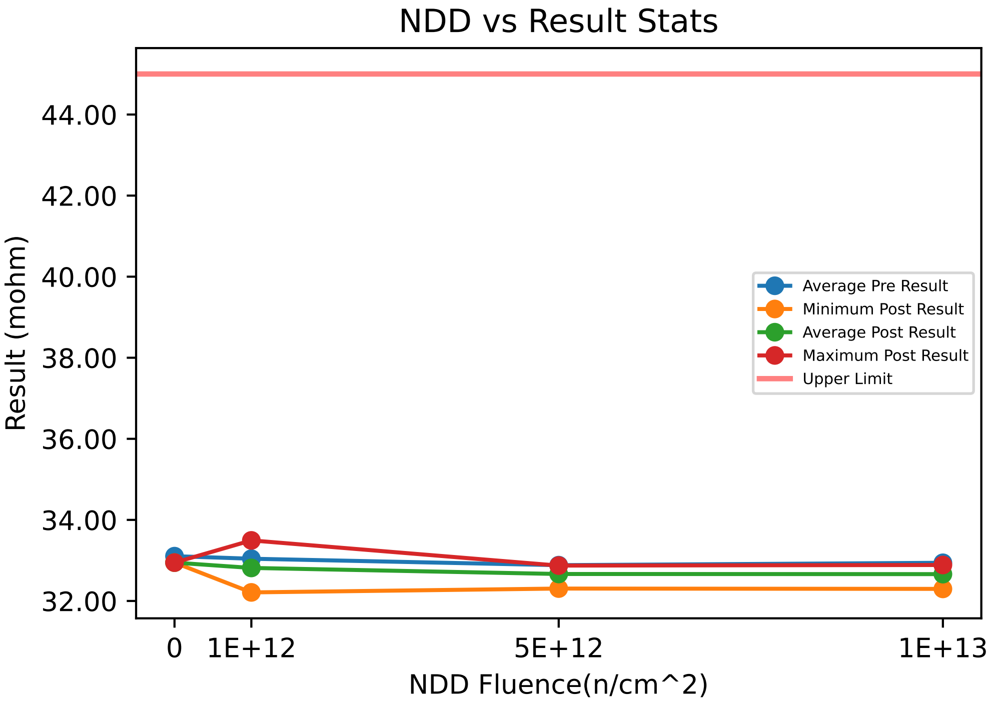
Test Results (Upper Limit = 45.0 (mohm))

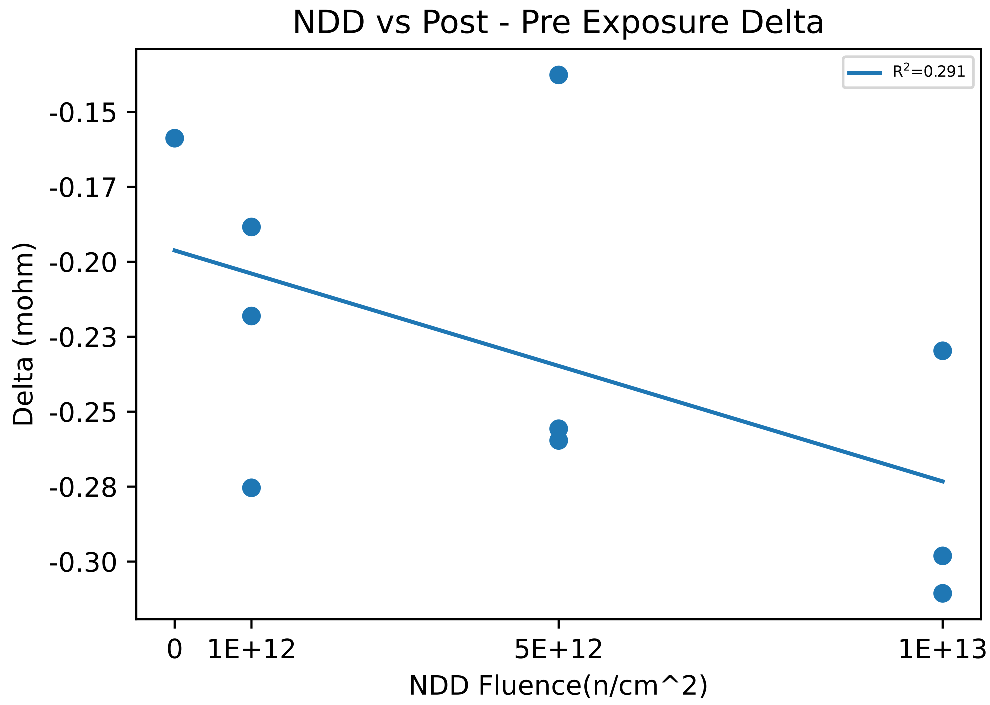
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	32.92	32.736	-0.1844
504	1e+12	NDD	32.479	32.207	-0.272
505	1e+12	NDD	33.708	33.489	-0.2187
506	5e+12	NDD	32.949	32.81	-0.1388
507	5e+12	NDD	32.557	32.3	-0.2566
508	5e+12	NDD	33.127	32.867	-0.2596
509	1e+13	NDD	33.115	32.883	-0.2317
510	1e+13	NDD	33.102	32.793	-0.3095
511	1e+13	NDD	32.588	32.29	-0.2987
512	0	Correlation	33.1	32.939	-0.1619

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	33.1	33.1	33.1		32.939	32.939	32.939		-0.1619	-0.1619	-0.1619	
1e+12	32.479	33.036	33.708	0.62268	32.207	32.811	33.489	0.64452	-0.272	-0.22503	-0.1844	0.044142
5e+12	32.557	32.878	33.127	0.29155	32.3	32.659	32.867	0.31208	-0.2596	-0.21833	-0.1388	0.068894
1e+13	32.588	32.935	33.115	0.30044	32.29	32.655	32.883	0.31982	-0.3095	-0.27997	-0.2317	0.042148

Device Test: 21.9 R_LOWSIDE_5V_25C(LEVEL|LOWSIDE/SW/5/12///@R_LOWSIDE_5V_25C)





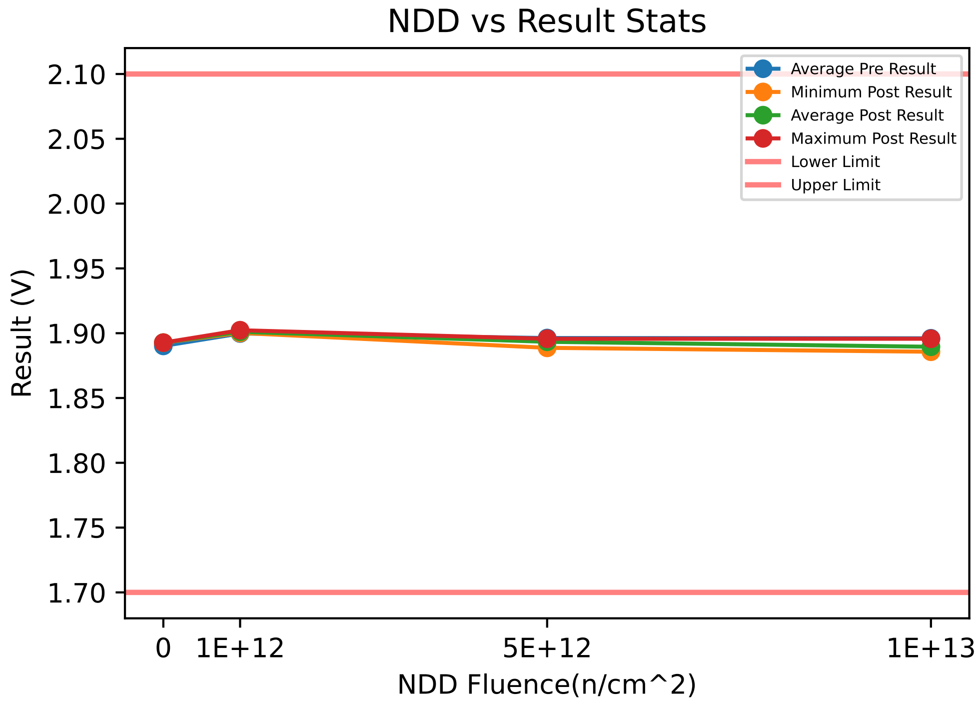
Test Results (Upper Limit = 45.0 (mohm))

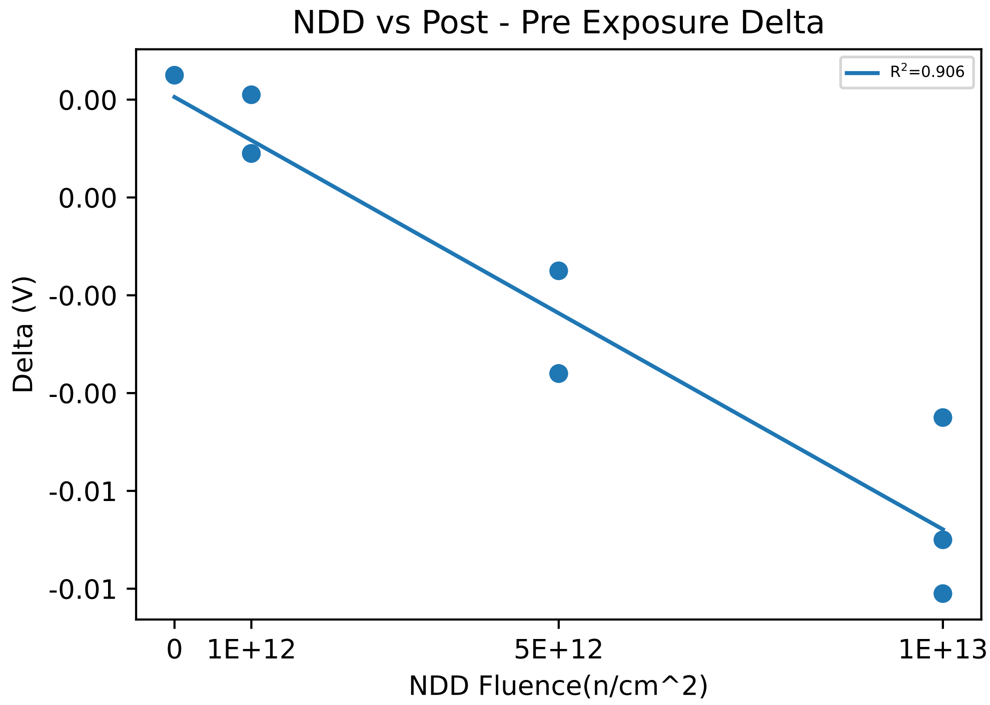
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	32.928	32.739	-0.1884
504	1e+12	NDD	32.487	32.211	-0.2754
505	1e+12	NDD	33.712	33.494	-0.2181
506	5e+12	NDD	32.956	32.818	-0.1377
507	5e+12	NDD	32.562	32.306	-0.2557
508	5e+12	NDD	33.132	32.873	-0.2596
509	1e+13	NDD	33.117	32.888	-0.2297
510	1e+13	NDD	33.111	32.8	-0.3106
511	1e+13	NDD	32.596	32.298	-0.2981
512	0	Correlation	33.105	32.946	-0.1588

Test Statistics (mohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	33.105	33.105	33.105		32.946	32.946	32.946		-0.1588	-0.1588	-0.1588	
1e+12	32.487	33.042	33.712	0.62074	32.211	32.815	33.494	0.64474	-0.2754	-0.2273	-0.1884	0.044224
5e+12	32.562	32.883	33.132	0.29201	32.306	32.666	32.873	0.31248	-0.2596	-0.21767	-0.1377	0.069281
1e+13	32.596	32.941	33.117	0.29914	32.298	32.662	32.888	0.31827	-0.3106	-0.27947	-0.2297	0.04355

Device Test: 22.1 V_COMP_SD(LEVEL|RISE/COMP/4.5////@V_COMP_SD)





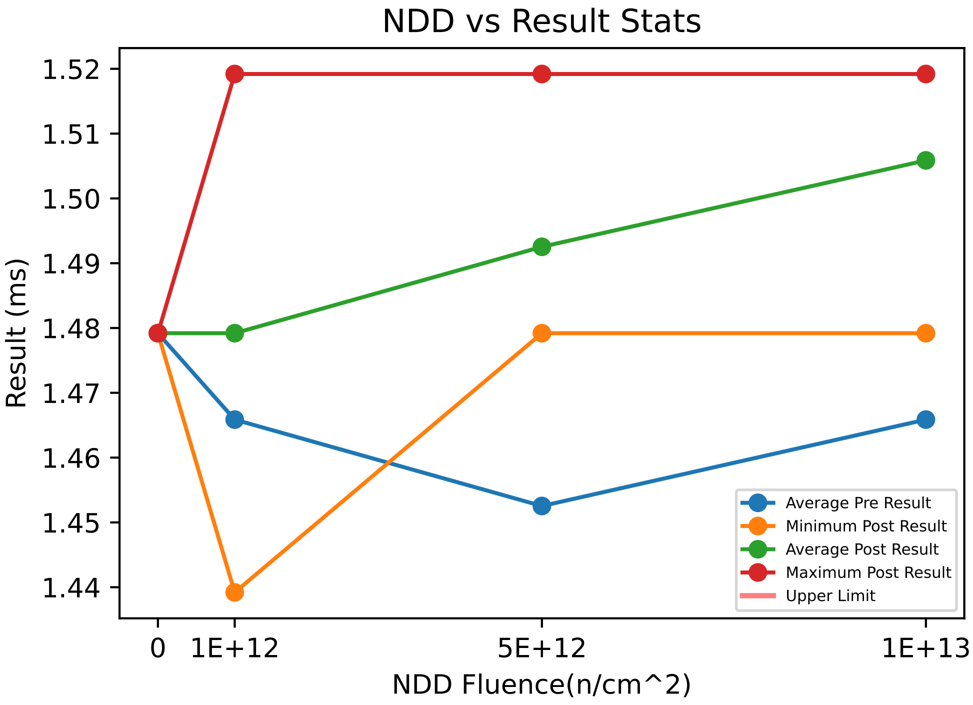
Test Results (Lower Limit = 1.7, Upper Limit = 2.1 (V))

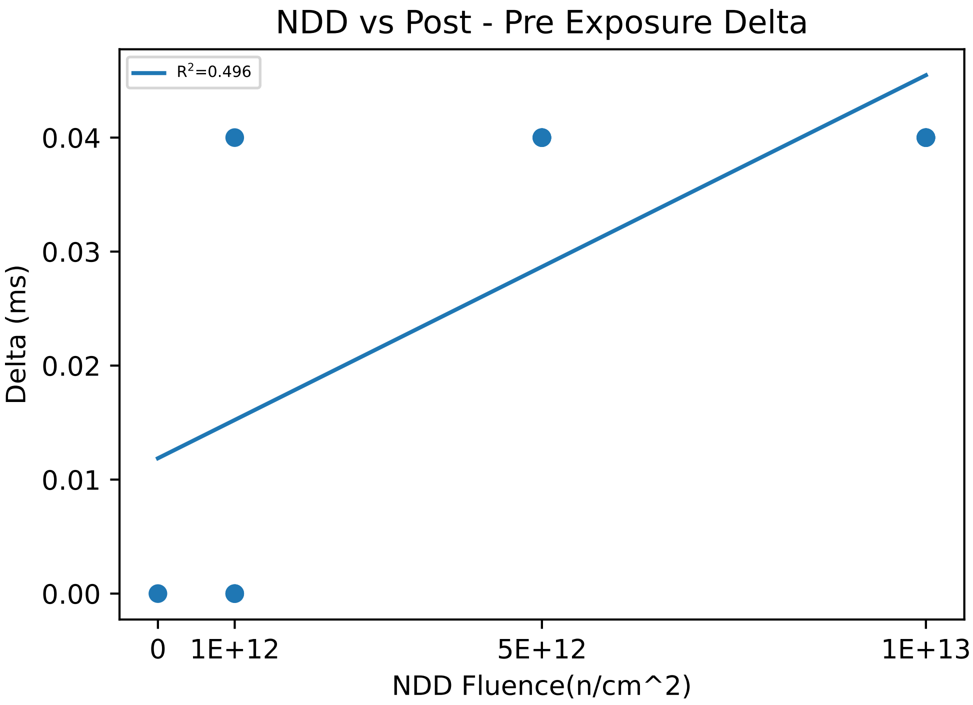
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.8998	1.9007	0.0009
504	1e+12	NDD	1.9002	1.9023	0.0021
505	1e+12	NDD	1.8993	1.9002	0.0009
506	5e+12	NDD	1.8993	1.8957	-0.0036
507	5e+12	NDD	1.8993	1.8957	-0.0036
508	5e+12	NDD	1.8902	1.8887	-0.0015
509	1e+13	NDD	1.8902	1.8857	-0.0045
510	1e+13	NDD	1.9038	1.8957	-0.0081
511	1e+13	NDD	1.8942	1.8872	-0.007
512	0	Correlation	1.8902	1.8927	0.0025

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.8902	1.8902	1.8902		1.8927	1.8927	1.8927		0.0025	0.0025	0.0025	
1e+12	1.8993	1.8998	1.9002	0.00045092	1.9002	1.9011	1.9023	0.001097	0.0009	0.0013	0.0021	0.00069282
5e+12	1.8902	1.8963	1.8993	0.0052539	1.8887	1.8934	1.8957	0.0040415	-0.0036	-0.0029	-0.0015	0.0012124
1e+13	1.8902	1.8961	1.9038	0.0069895	1.8857	1.8895	1.8957	0.0053929	-0.0081	-0.0065333	-0.0045	0.0018448

Device Test: 22.10 T_SS_5P6NF(TIMING|STARTUP/SS_TR/5////@T_SS_5P6NF)





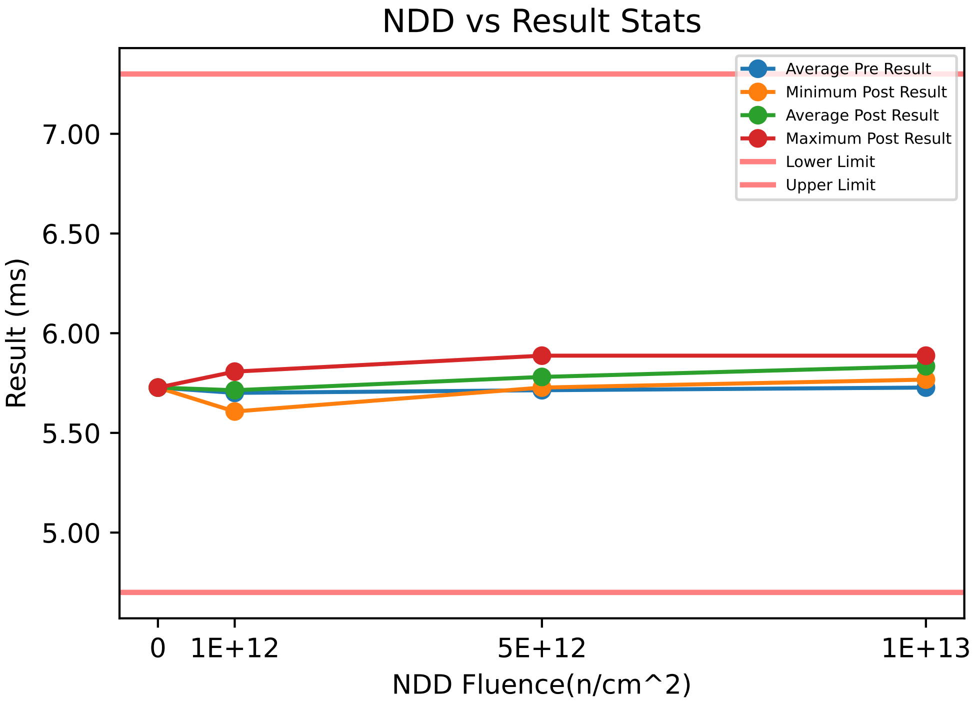
Test Results (No Limits Specified (ms))

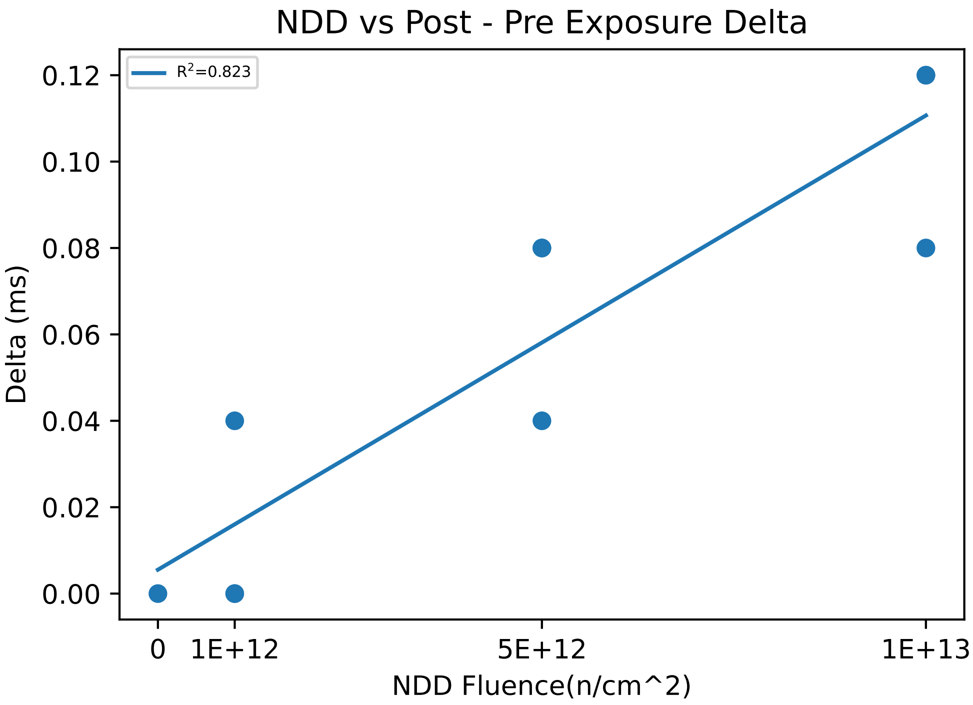
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.4792	1.5192	0.04
504	1e+12	NDD	1.4792	1.4792	0
505	1e+12	NDD	1.4392	1.4392	0
506	5e+12	NDD	1.4392	1.4792	0.04
507	5e+12	NDD	1.4792	1.5192	0.04
508	5e+12	NDD	1.4392	1.4792	0.04
509	1e+13	NDD	1.4792	1.5192	0.04
510	1e+13	NDD	1.4392	1.4792	0.04
511	1e+13	NDD	1.4792	1.5192	0.04
512	0	Correlation	1.4792	1.4792	0

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.4792	1.4792	1.4792		1.4792	1.4792	1.4792		0	0	0	
1e+12	1.4392	1.4659	1.4792	0.023094	1.4392	1.4792	1.5192	0.04	0	0.013333	0.04	0.023094
5e+12	1.4392	1.4525	1.4792	0.023094	1.4792	1.4925	1.5192	0.023094	0.04	0.04	0.04	0
1e+13	1.4392	1.4659	1.4792	0.023094	1.4792	1.5059	1.5192	0.023094	0.04	0.04	0.04	0

Device Test: 22.11 T_SS_22NF(TIMING|STARTUP/SS_TR/5////@T_SS_22NF)





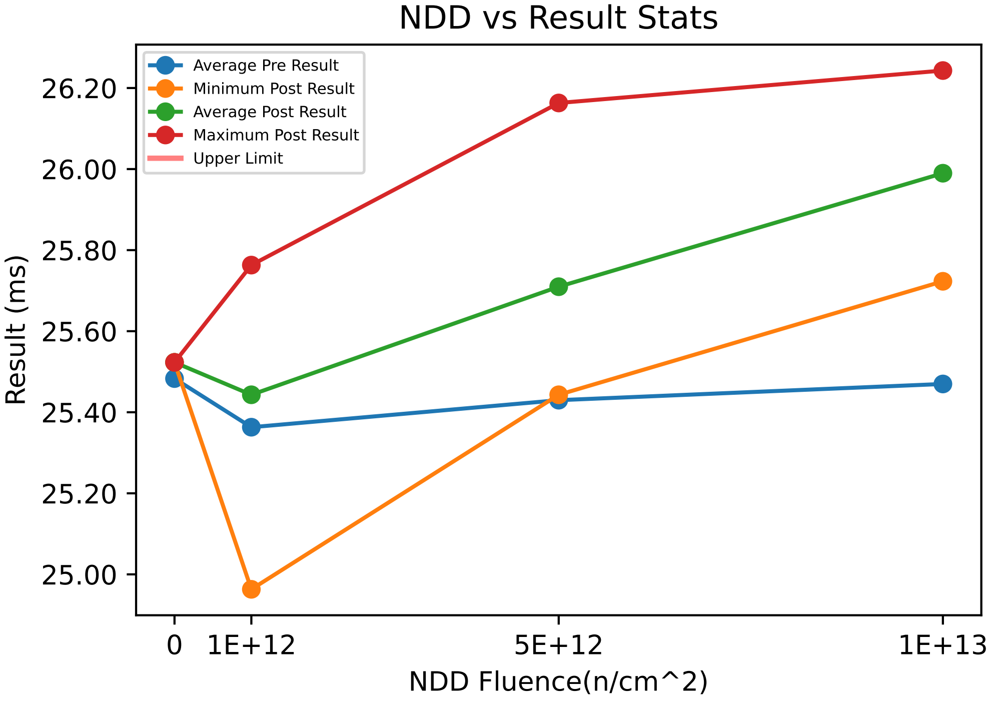
Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

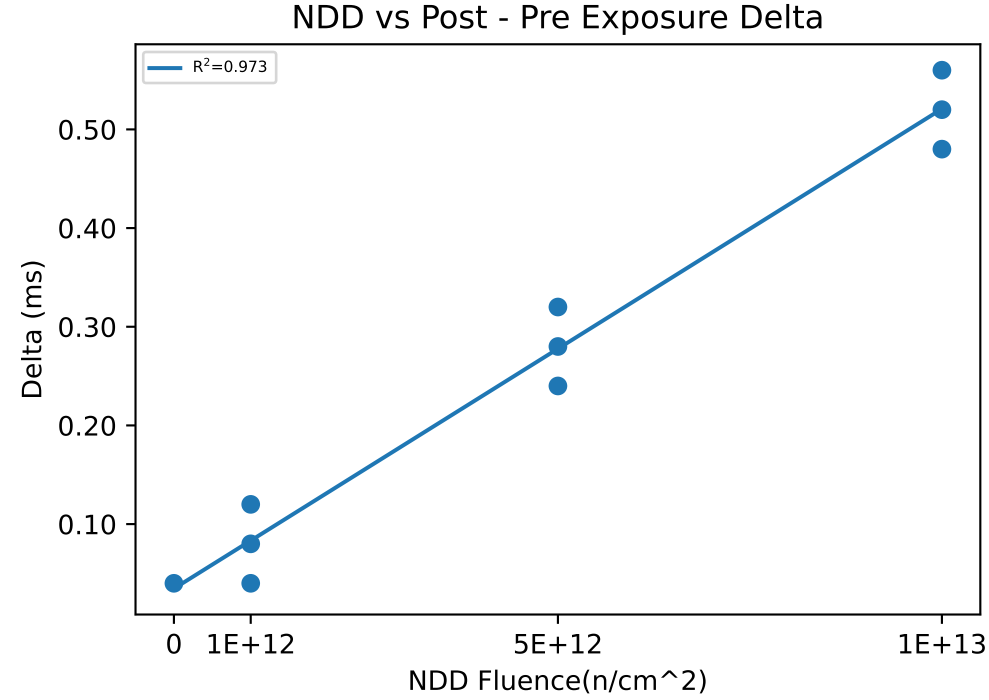
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5.7673	5.8073	0.04
504	1e+12	NDD	5.7273	5.7273	0
505	1e+12	NDD	5.6073	5.6073	0
506	5e+12	NDD	5.6873	5.7273	0.04
507	5e+12	NDD	5.8073	5.8873	0.08
508	5e+12	NDD	5.6473	5.7273	0.08
509	1e+13	NDD	5.8073	5.8873	0.08
510	1e+13	NDD	5.6473	5.7673	0.12
511	1e+13	NDD	5.7273	5.8473	0.12
512	0	Correlation	5.7273	5.7273	0

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.7273	5.7273	5.7273		5.7273	5.7273	5.7273		0	0	0	
1e+12	5.6073	5.7006	5.7673	0.083267	5.6073	5.714	5.8073	0.10066	0	0.013333	0.04	0.023094
5e+12	5.6473	5.714	5.8073	0.083267	5.7273	5.7806	5.8873	0.092376	0.04	0.066667	0.08	0.023094
1e+13	5.6473	5.7273	5.8073	0.08	5.7673	5.834	5.8873	0.061101	0.08	0.10667	0.12	0.023094

Device Test: 22.12 T_SS_100NF(TIMING|STARTUP/SS_TR/5////@T_SS_100NF)





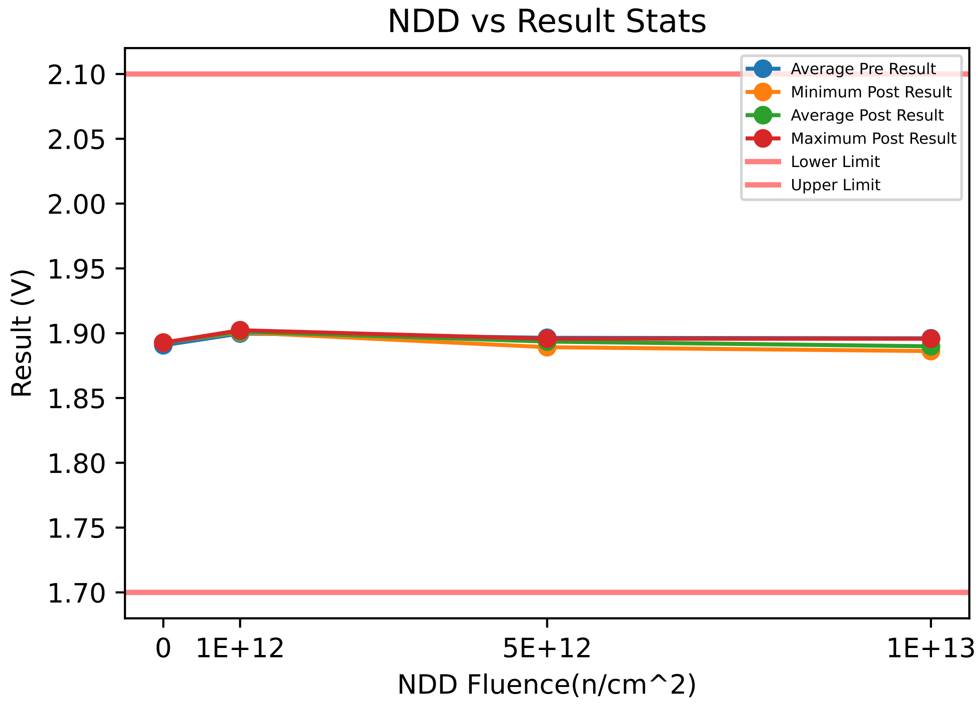
Test Results (No Limits Specified (ms))

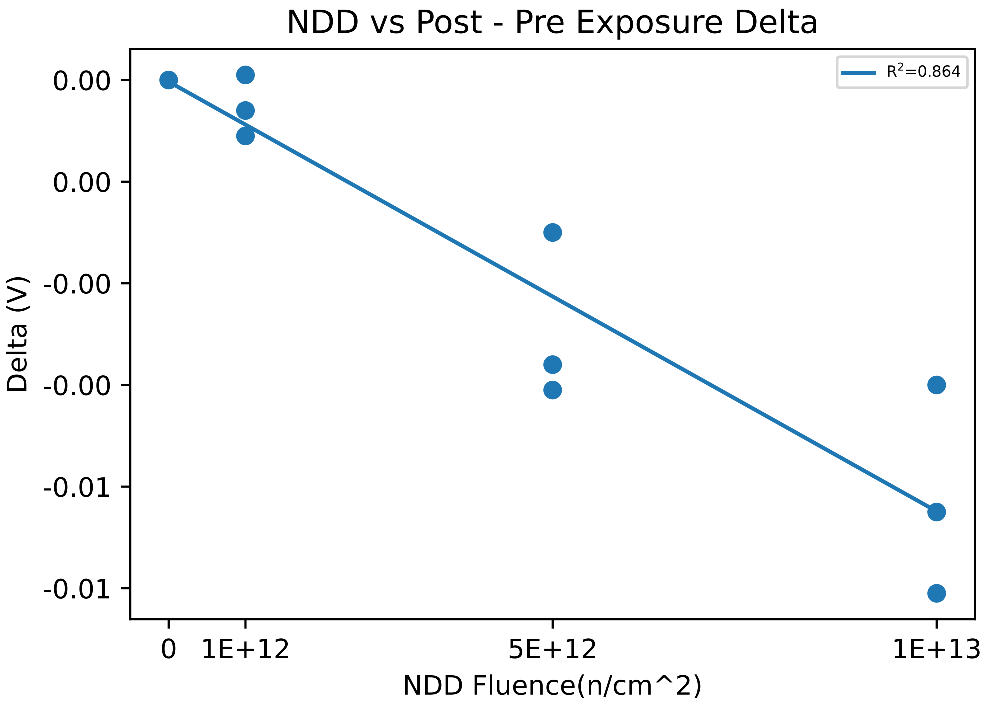
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	25.683	25.763	0.08
504	1e+12	NDD	25.483	25.603	0.12
505	1e+12	NDD	24.923	24.963	0.04
506	5e+12	NDD	25.243	25.523	0.28
507	5e+12	NDD	25.843	26.163	0.32
508	5e+12	NDD	25.203	25.443	0.24
509	1e+13	NDD	25.723	26.243	0.52
510	1e+13	NDD	25.163	25.723	0.56
511	1e+13	NDD	25.523	26.003	0.48
512	0	Correlation	25.483	25.523	0.04

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	25.483	25.483	25.483		25.523	25.523	25.523		0.04	0.04	0.04	
1e+12	24.923	25.363	25.683	0.39395	24.963	25.443	25.763	0.42332	0.04	0.08	0.12	0.04
5e+12	25.203	25.43	25.843	0.35852	25.443	25.71	26.163	0.39463	0.24	0.28	0.32	0.04
1e+13	25.163	25.47	25.723	0.28378	25.723	25.99	26.243	0.26026	0.48	0.52	0.56	0.04

Device Test: 22.13 V_COMP_SD(LEVEL|RISE/COMP/12////@V_COMP_SD)





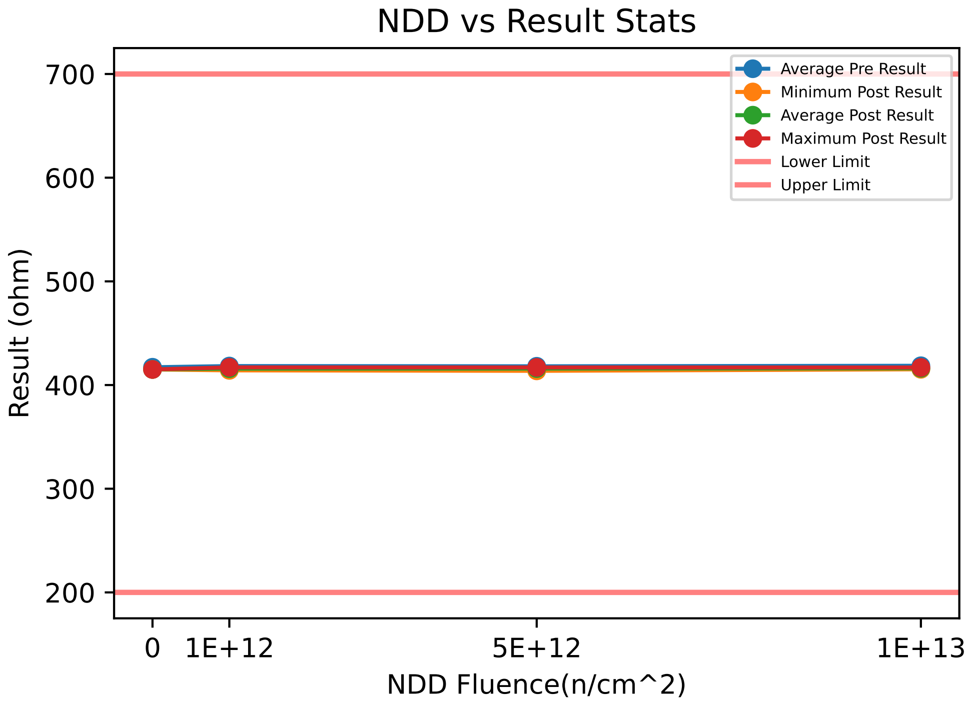
Test Results (Lower Limit = 1.7, Upper Limit = 2.1 (V))

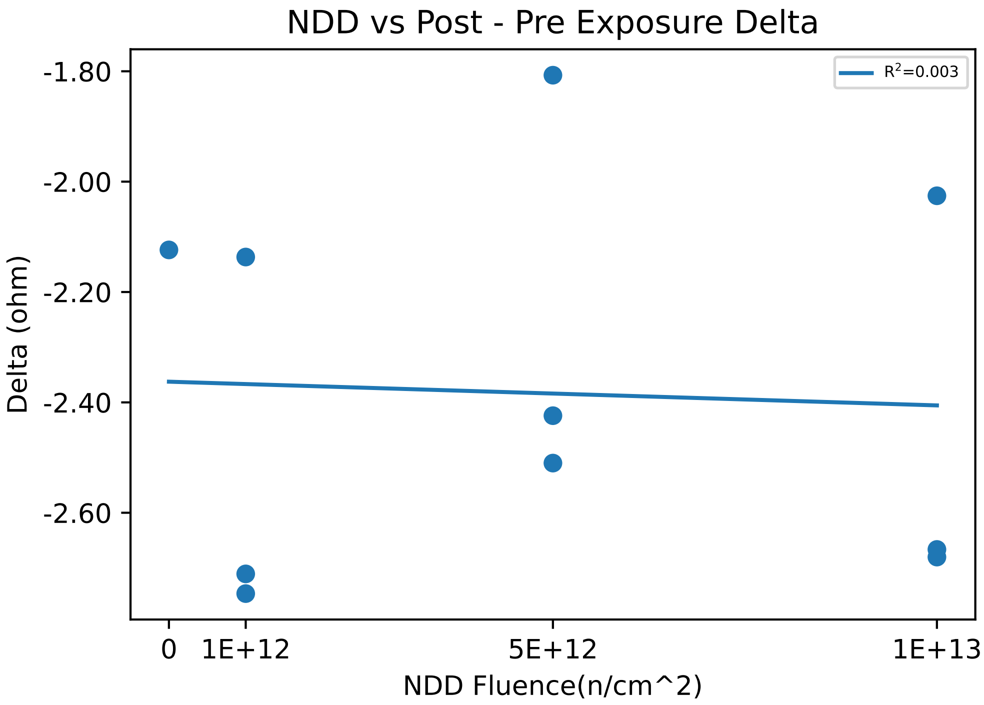
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.8998	1.9007	0.0009
504	1e+12	NDD	1.9002	1.9023	0.0021
505	1e+12	NDD	1.8993	1.9007	0.0014
506	5e+12	NDD	1.8993	1.8957	-0.0036
507	5e+12	NDD	1.8998	1.8957	-0.0041
508	5e+12	NDD	1.8902	1.8892	-0.001
509	1e+13	NDD	1.8902	1.8862	-0.004
510	1e+13	NDD	1.9038	1.8957	-0.0081
511	1e+13	NDD	1.8942	1.8877	-0.0065
512	0	Correlation	1.8907	1.8927	0.002

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.8907	1.8907	1.8907		1.8927	1.8927	1.8927		0.002	0.002	0.002	
1e+12	1.8993	1.8998	1.9002	0.00045092	1.9007	1.9012	1.9023	0.00092376	0.0009	0.0014667	0.0021	0.00060277
5e+12	1.8902	1.8964	1.8998	0.005404	1.8892	1.8935	1.8957	0.0037528	-0.0041	-0.0029	-0.001	0.0016643
1e+13	1.8902	1.8961	1.9038	0.0069895	1.8862	1.8899	1.8957	0.0051072	-0.0081	-0.0062	-0.004	0.0020664

Device Test: 22.14 R_SS_DISCHARGE(LEVEL|SINK/SS_TR/12////@R_SS_DISCHARGE)





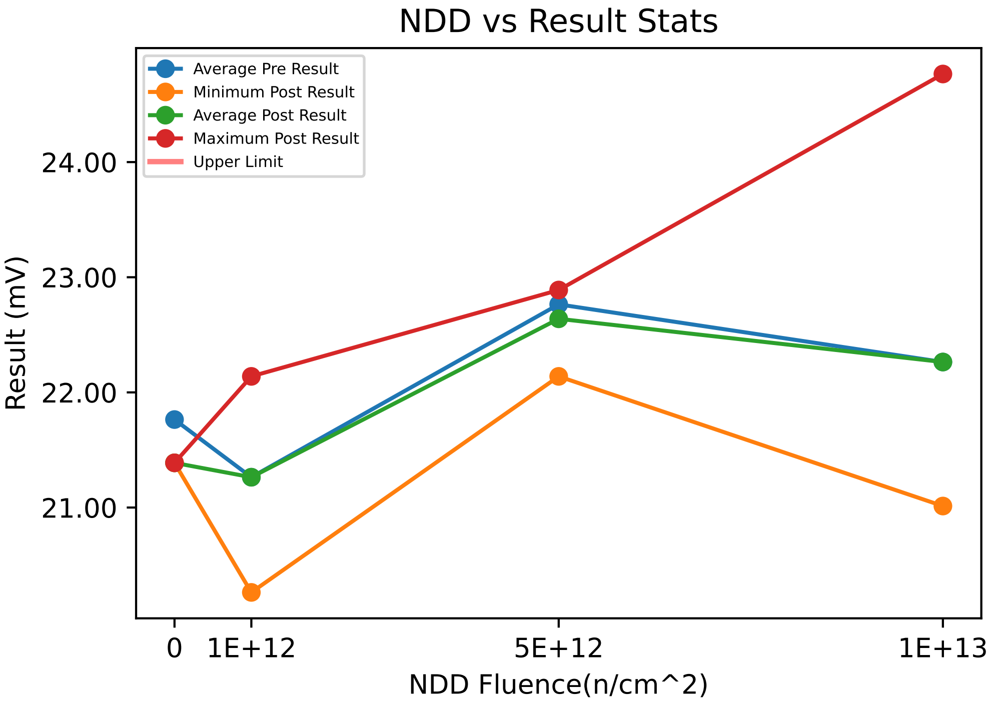
Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (ohm))

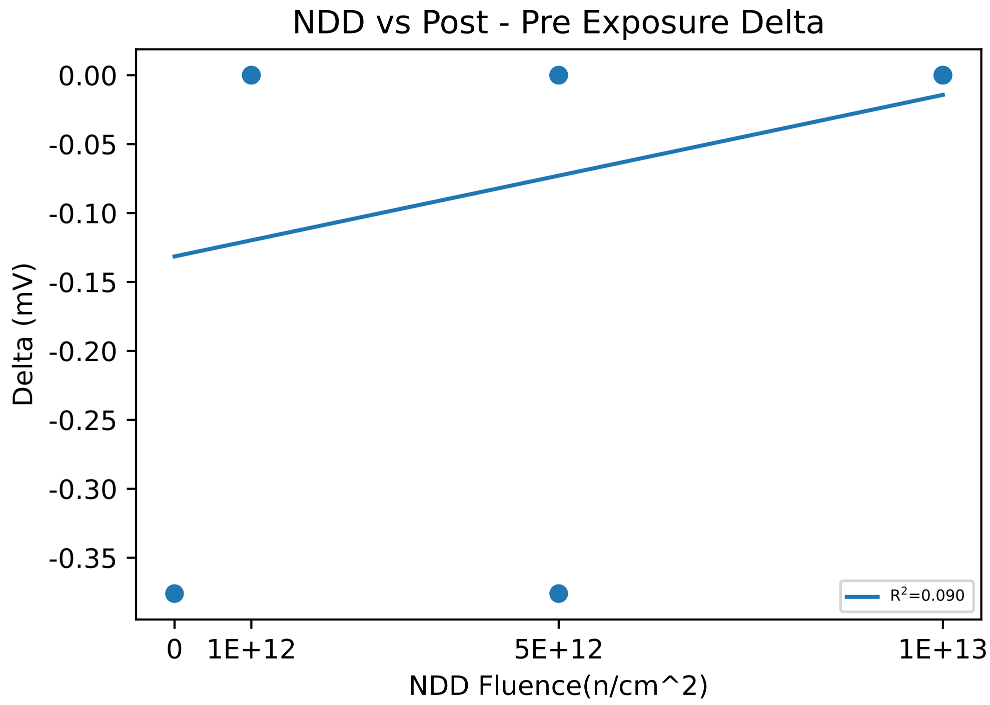
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	419.18	417.04	-2.1366
504	1e+12	NDD	418.87	416.16	-2.7108
505	1e+12	NDD	416.9	414.15	-2.7465
506	5e+12	NDD	418.81	417	-1.8071
507	5e+12	NDD	416.1	413.67	-2.4241
508	5e+12	NDD	419.39	416.88	-2.51
509	1e+13	NDD	417.21	415.18	-2.0256
510	1e+13	NDD	419.61	416.94	-2.6665
511	1e+13	NDD	418.96	416.28	-2.6803
512	0	Correlation	417.15	415.03	-2.1237

Test Statistics (ohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	417.15	417.15	417.15		415.03	415.03	415.03		-2.1237	-2.1237	-2.1237	
1e+12	416.9	418.31	419.18	1.238	414.15	415.78	417.04	1.4814	-2.7465	-2.5313	-2.1366	0.34229
5e+12	416.1	418.1	419.39	1.7571	413.67	415.85	417	1.8868	-2.51	-2.2471	-1.8071	0.38344
1e+13	417.21	418.59	419.61	1.2398	415.18	416.13	416.94	0.88684	-2.6803	-2.4575	-2.0256	0.37407

Device Test: 22.15 V_SS_START(LEVEL|STATIC/SS_TR/12////@V_SS_START)





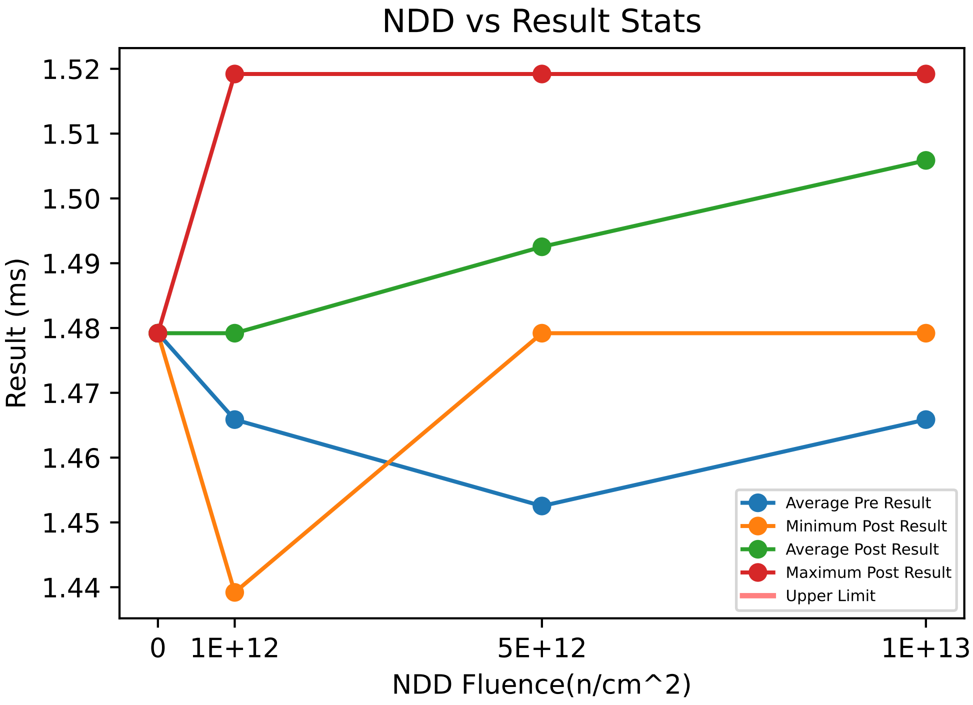
Test Results (No Limits Specified (mV))

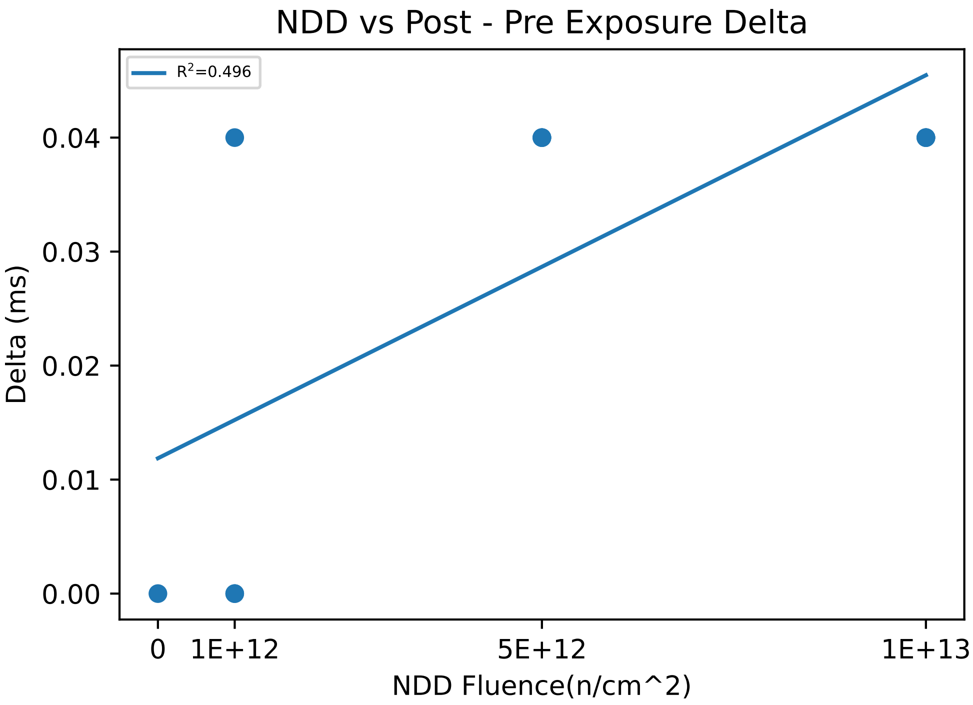
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	22.139	22.139	0
504	1e+12	NDD	21.388	21.388	0
505	1e+12	NDD	20.263	20.263	0
506	5e+12	NDD	22.889	22.889	0
507	5e+12	NDD	22.139	22.139	0
508	5e+12	NDD	23.265	22.889	-0.376
509	1e+13	NDD	21.013	21.013	0
510	1e+13	NDD	21.013	21.013	0
511	1e+13	NDD	24.765	24.765	0
512	0	Correlation	21.764	21.388	-0.376

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	21.764	21.764	21.764		21.388	21.388	21.388		-0.376	-0.376	-0.376	
1e+12	20.263	21.263	22.139	0.94419	20.263	21.263	22.139	0.94419	0	0	0	0
5e+12	22.139	22.764	23.265	0.57326	22.139	22.639	22.889	0.43301	-0.376	-0.12533	0	0.21708
1e+13	21.013	22.264	24.765	2.1662	21.013	22.264	24.765	2.1662	0	0	0	0

Device Test: 22.16 T_SS_5P6NF(TIMING|STARTUP/SS_TR/12////@T_SS_5P6NF)





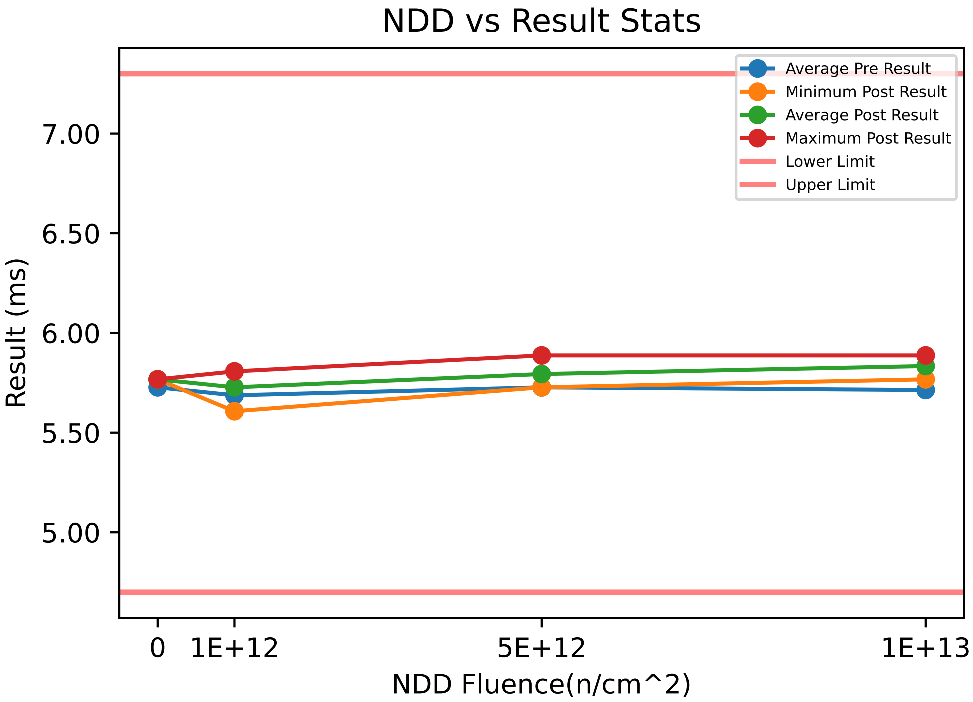
Test Results (No Limits Specified (ms))

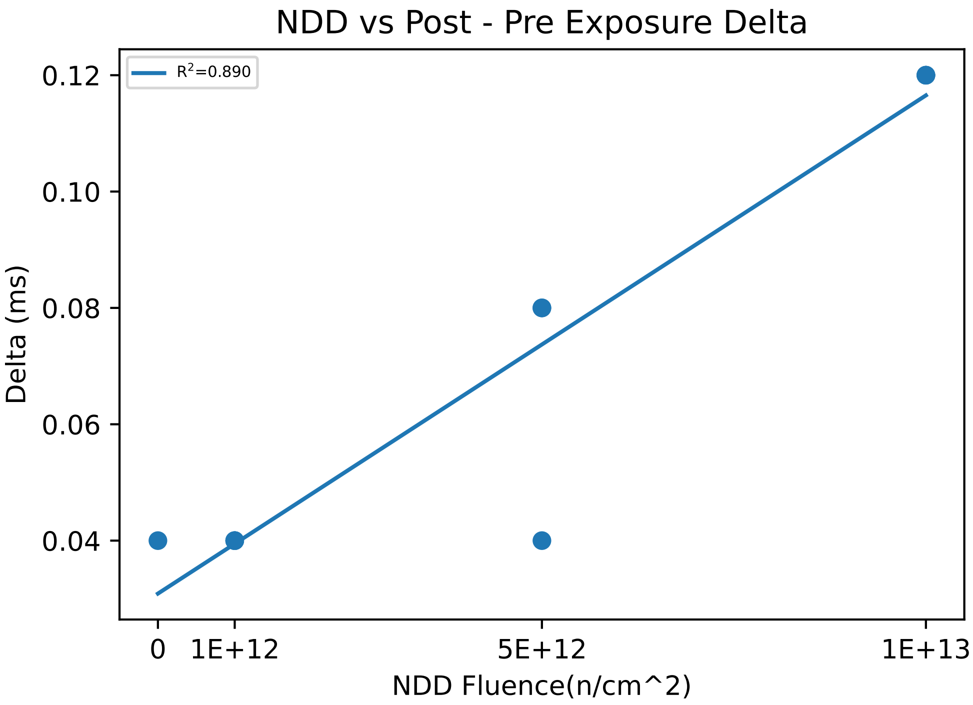
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.4792	1.5192	0.04
504	1e+12	NDD	1.4792	1.4792	0
505	1e+12	NDD	1.4392	1.4392	0
506	5e+12	NDD	1.4392	1.4792	0.04
507	5e+12	NDD	1.4792	1.5192	0.04
508	5e+12	NDD	1.4392	1.4792	0.04
509	1e+13	NDD	1.4792	1.5192	0.04
510	1e+13	NDD	1.4392	1.4792	0.04
511	1e+13	NDD	1.4792	1.5192	0.04
512	0	Correlation	1.4792	1.4792	0

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.4792	1.4792	1.4792		1.4792	1.4792	1.4792		0	0	0	
1e+12	1.4392	1.4659	1.4792	0.023094	1.4392	1.4792	1.5192	0.04	0	0.013333	0.04	0.023094
5e+12	1.4392	1.4525	1.4792	0.023094	1.4792	1.4925	1.5192	0.023094	0.04	0.04	0.04	0
1e+13	1.4392	1.4659	1.4792	0.023094	1.4792	1.5059	1.5192	0.023094	0.04	0.04	0.04	0

Device Test: 22.17 T_SS_22NF(TIMING|STARTUP/SS_TR/12////@T_SS_22NF)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

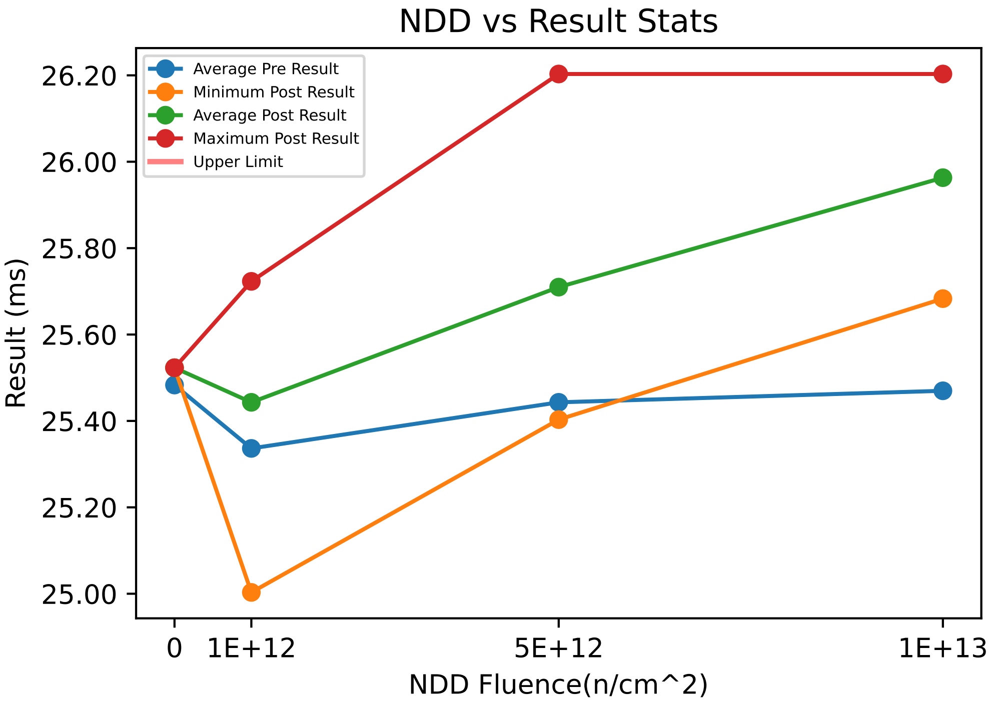
Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

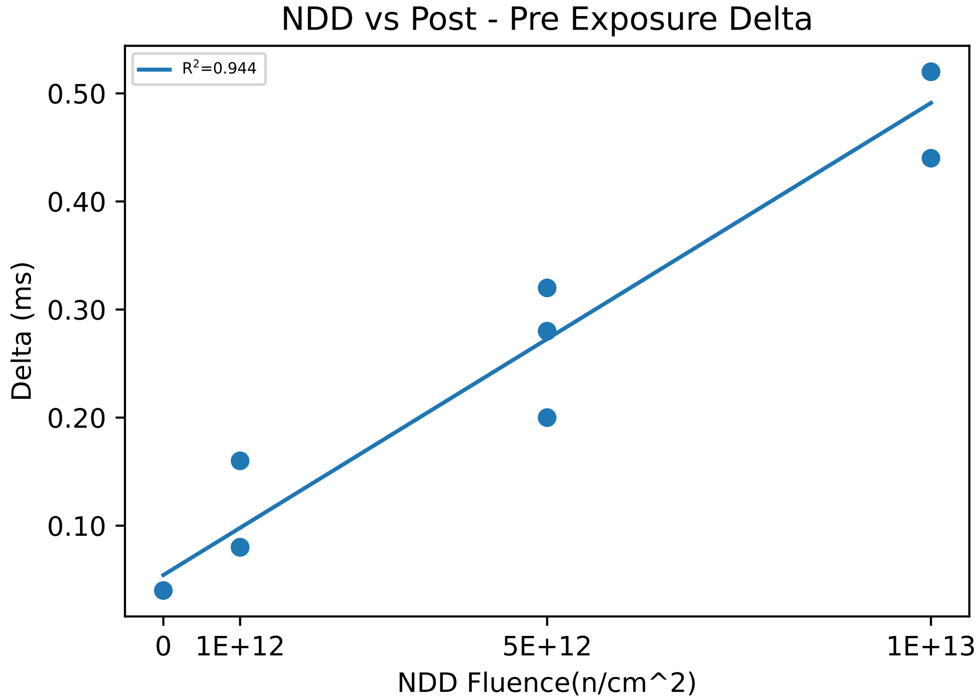
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5.7673	5.8073	0.04
504	1e+12	NDD	5.7273	5.7673	0.04
505	1e+12	NDD	5.5673	5.6073	0.04
506	5e+12	NDD	5.6873	5.7673	0.08
507	5e+12	NDD	5.8073	5.8873	0.08
508	5e+12	NDD	5.6873	5.7273	0.04
509	1e+13	NDD	5.7673	5.8873	0.12
510	1e+13	NDD	5.6473	5.7673	0.12
511	1e+13	NDD	5.7273	5.8473	0.12
512	0	Correlation	5.7273	5.7673	0.04

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.7273	5.7273	5.7273		5.7673	5.7673	5.7673		0.04	0.04	0.04	
1e+12	5.5673	5.6873	5.7673	0.10583	5.6073	5.7273	5.8073	0.10583	0.04	0.04	0.04	8.8818e-16
5e+12	5.6873	5.7273	5.8073	0.069282	5.7273	5.794	5.8873	0.083267	0.04	0.066667	0.08	0.023094
1e+13	5.6473	5.714	5.7673	0.061101	5.7673	5.834	5.8873	0.061101	0.12	0.12	0.12	5.1179e-16

Device Test: 22.18 T_SS_100NF(TIMING|STARTUP/SS_TR/12////@T_SS_100NF)





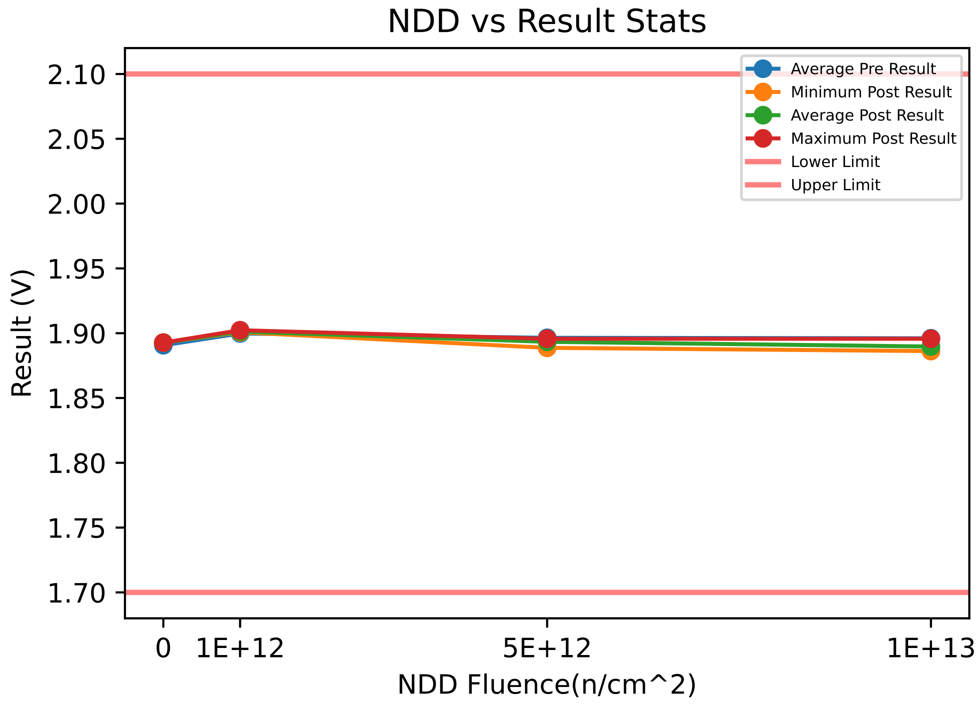
Test Results (No Limits Specified (ms))

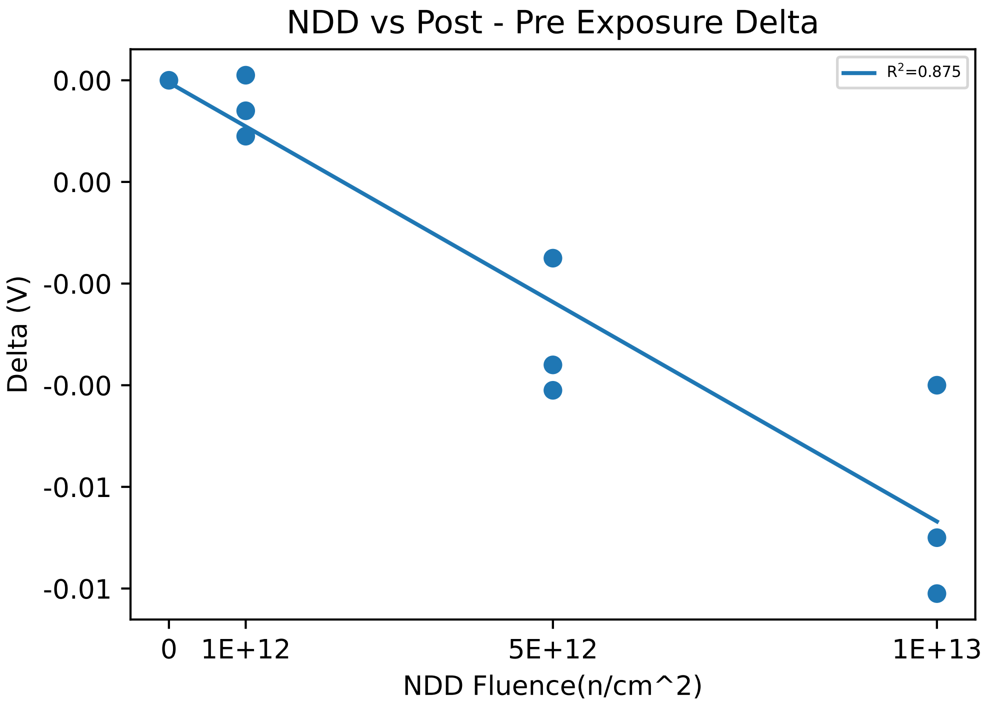
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	25.643	25.723	0.08
504	1e+12	NDD	25.443	25.603	0.16
505	1e+12	NDD	24.923	25.003	0.08
506	5e+12	NDD	25.323	25.523	0.2
507	5e+12	NDD	25.883	26.203	0.32
508	5e+12	NDD	25.123	25.403	0.28
509	1e+13	NDD	25.683	26.203	0.52
510	1e+13	NDD	25.163	25.683	0.52
511	1e+13	NDD	25.563	26.003	0.44
512	0	Correlation	25.483	25.523	0.04

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	25.483	25.483	25.483		25.523	25.523	25.523		0.04	0.04	0.04	
1e+12	24.923	25.336	25.643	0.37166	25.003	25.443	25.723	0.38575	0.08	0.10667	0.16	0.046188
5e+12	25.123	25.443	25.883	0.39395	25.403	25.71	26.203	0.43143	0.2	0.26667	0.32	0.061101
1e+13	25.163	25.47	25.683	0.27227	25.683	25.963	26.203	0.2623	0.44	0.49333	0.52	0.046188

Device Test: 22.19 V_COMP_SD(LEVEL|RISE/COMP/14////@V_COMP_SD)





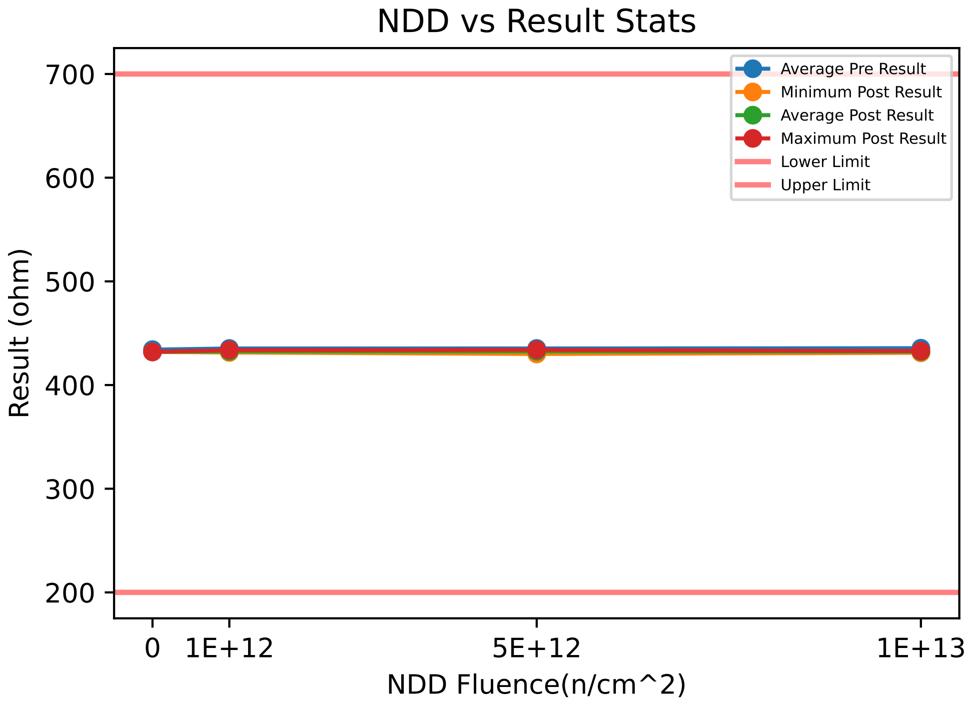
Test Results (Lower Limit = 1.7, Upper Limit = 2.1 (V))

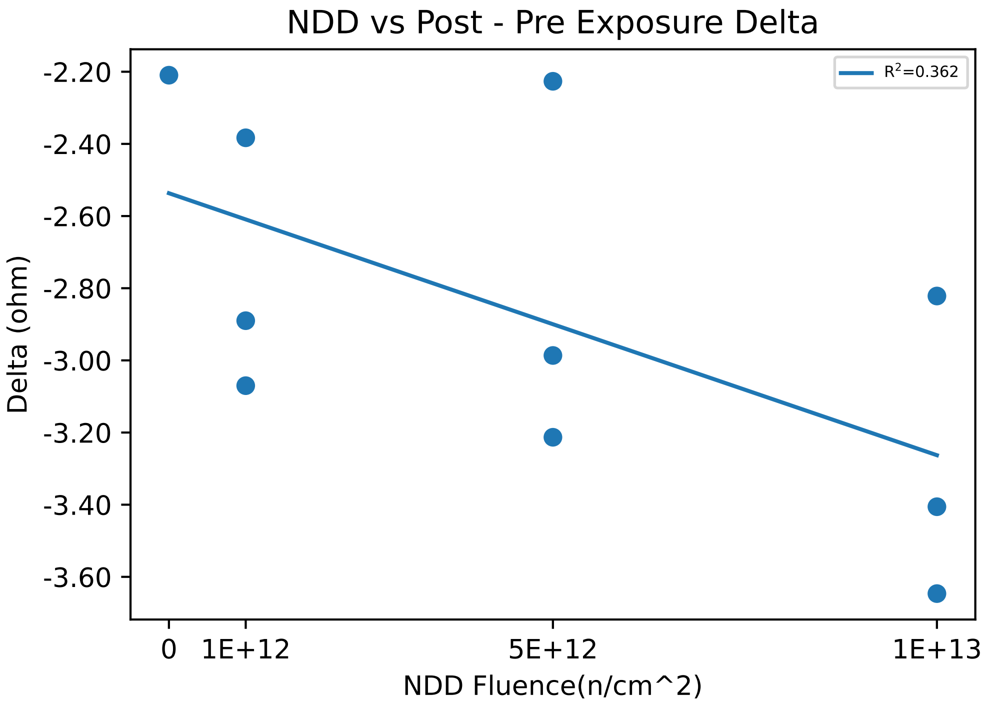
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.8998	1.9007	0.0009
504	1e+12	NDD	1.9002	1.9023	0.0021
505	1e+12	NDD	1.8993	1.9007	0.0014
506	5e+12	NDD	1.8993	1.8957	-0.0036
507	5e+12	NDD	1.8998	1.8957	-0.0041
508	5e+12	NDD	1.8902	1.8887	-0.0015
509	1e+13	NDD	1.8902	1.8862	-0.004
510	1e+13	NDD	1.9038	1.8957	-0.0081
511	1e+13	NDD	1.8942	1.8872	-0.007
512	0	Correlation	1.8907	1.8927	0.002

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.8907	1.8907	1.8907		1.8927	1.8927	1.8927		0.002	0.002	0.002	
1e+12	1.8993	1.8998	1.9002	0.00045092	1.9007	1.9012	1.9023	0.00092376	0.0009	0.0014667	0.0021	0.00060277
5e+12	1.8902	1.8964	1.8998	0.005404	1.8887	1.8934	1.8957	0.0040415	-0.0041	-0.0030667	-0.0015	0.0013796
1e+13	1.8902	1.8961	1.9038	0.0069895	1.8862	1.8897	1.8957	0.0052202	-0.0081	-0.0063667	-0.004	0.0021221

Device Test: 22.2 R_SS_DISCHARGE(LEVEL|SINK/SS_TR/4.5////@R_SS_DISCHARGE)





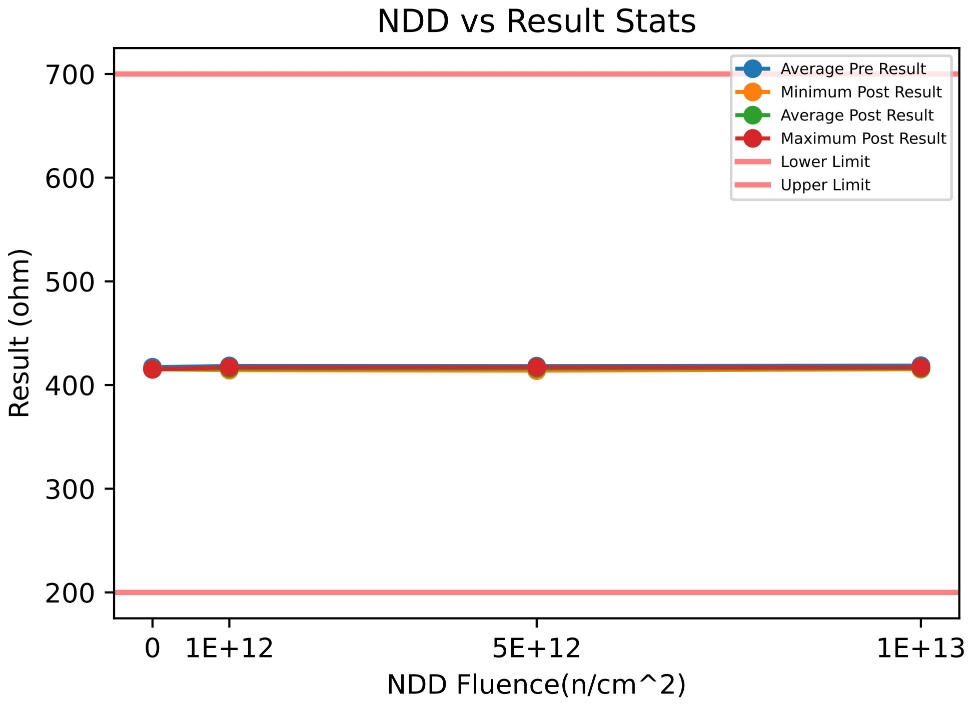
Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (ohm))

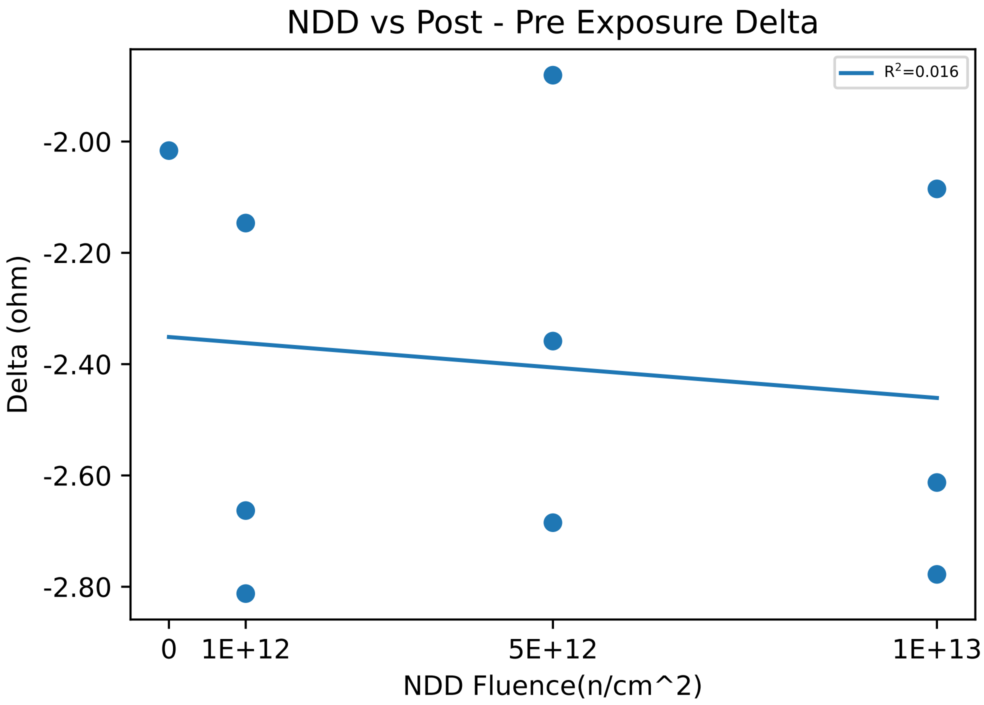
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	436.16	433.77	-2.3831
504	1e+12	NDD	435.36	432.29	-3.0701
505	1e+12	NDD	434.29	431.4	-2.89
506	5e+12	NDD	436.17	433.94	-2.2265
507	5e+12	NDD	432.92	429.94	-2.9864
508	5e+12	NDD	436.76	433.55	-3.2131
509	1e+13	NDD	433.9	431.07	-2.8216
510	1e+13	NDD	436.39	432.74	-3.6464
511	1e+13	NDD	436.27	432.87	-3.4056
512	0	Correlation	434.16	431.95	-2.2096

Test Statistics (ohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	434.16	434.16	434.16		431.95	431.95	431.95		-2.2096	-2.2096	-2.2096	
1e+12	434.29	435.27	436.16	0.93502	431.4	432.49	433.77	1.1982	-3.0701	-2.7811	-2.3831	0.35622
5e+12	432.92	435.28	436.76	2.0664	429.94	432.47	433.94	2.2075	-3.2131	-2.8087	-2.2265	0.51676
1e+13	433.9	435.52	436.39	1.407	431.07	432.23	432.87	1.0009	-3.6464	-3.2912	-2.8216	0.42413

Device Test: 22.20 R_SS_DISCHARGE(LEVEL|SINK/SS_TR/14////@R_SS_DISCHARGE)





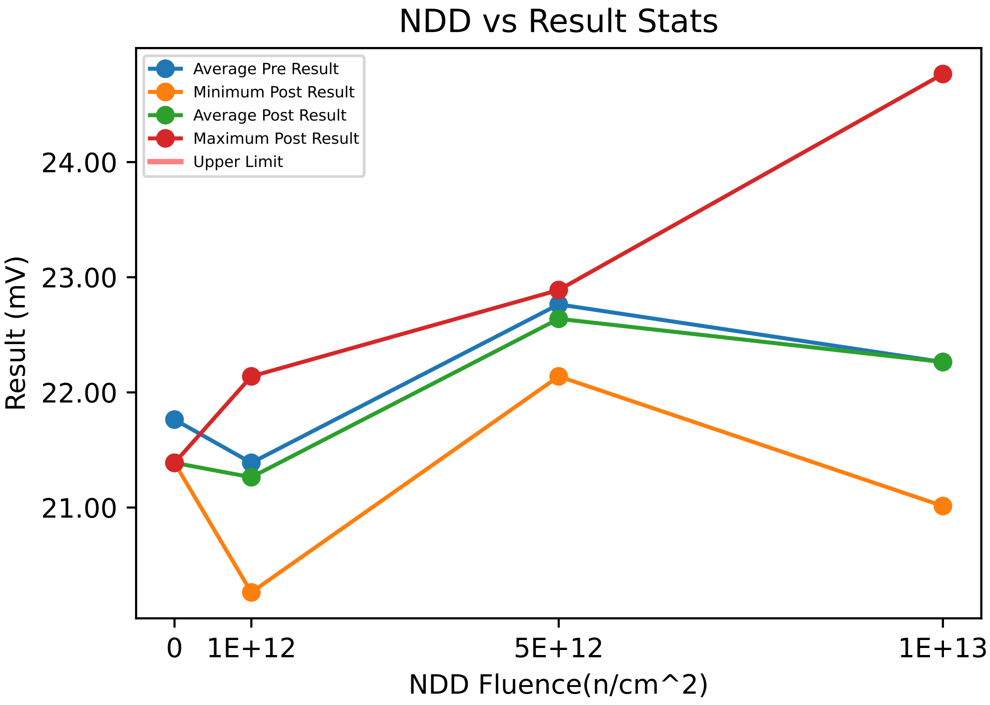
Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (ohm))

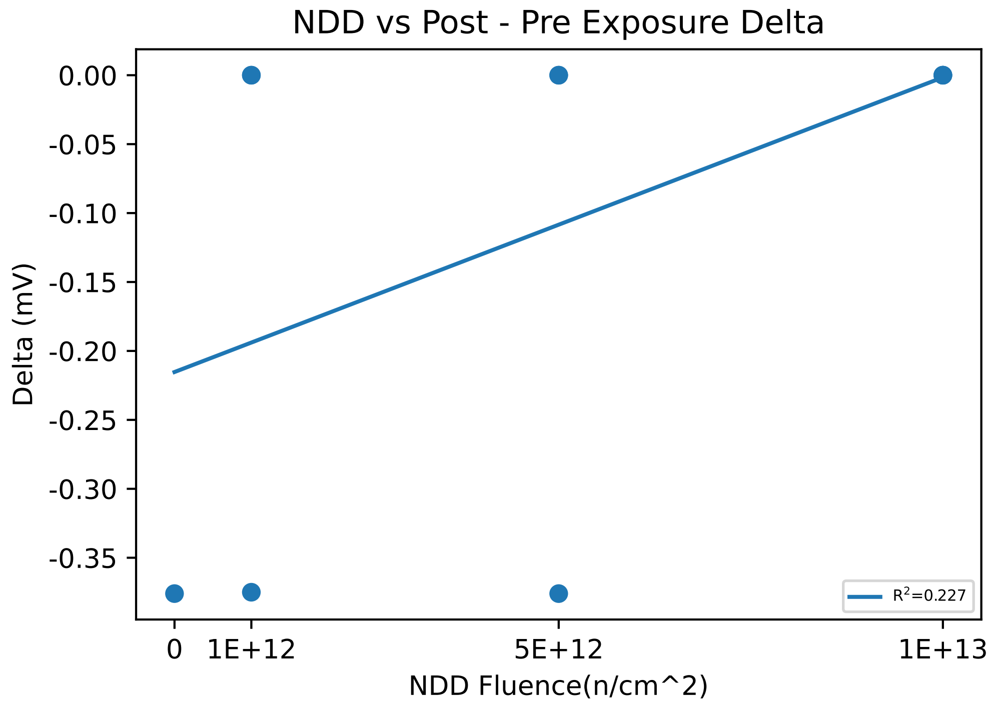
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	419.26	417.11	-2.1465
504	1e+12	NDD	419.05	416.23	-2.8123
505	1e+12	NDD	417	414.33	-2.6631
506	5e+12	NDD	418.94	417.06	-1.8808
507	5e+12	NDD	416.2	413.85	-2.3586
508	5e+12	NDD	419.63	416.94	-2.6849
509	1e+13	NDD	417.32	415.23	-2.0851
510	1e+13	NDD	419.65	417.03	-2.6127
511	1e+13	NDD	419.16	416.38	-2.7778
512	0	Correlation	417.18	415.16	-2.0163

Test Statistics (ohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	417.18	417.18	417.18		415.16	415.16	415.16		-2.0163	-2.0163	-2.0163	
1e+12	417	418.43	419.26	1.2496	414.33	415.89	417.11	1.4205	-2.8123	-2.5406	-2.1465	0.34939
5e+12	416.2	418.26	419.63	1.8104	413.85	415.95	417.06	1.8218	-2.6849	-2.3081	-1.8808	0.40442
1e+13	417.32	418.71	419.65	1.2282	415.23	416.22	417.03	0.91213	-2.7778	-2.4919	-2.0851	0.36181

Device Test: 22.21 V_SS_START(LEVEL|STATIC/SS_TR/14////@V_SS_START)





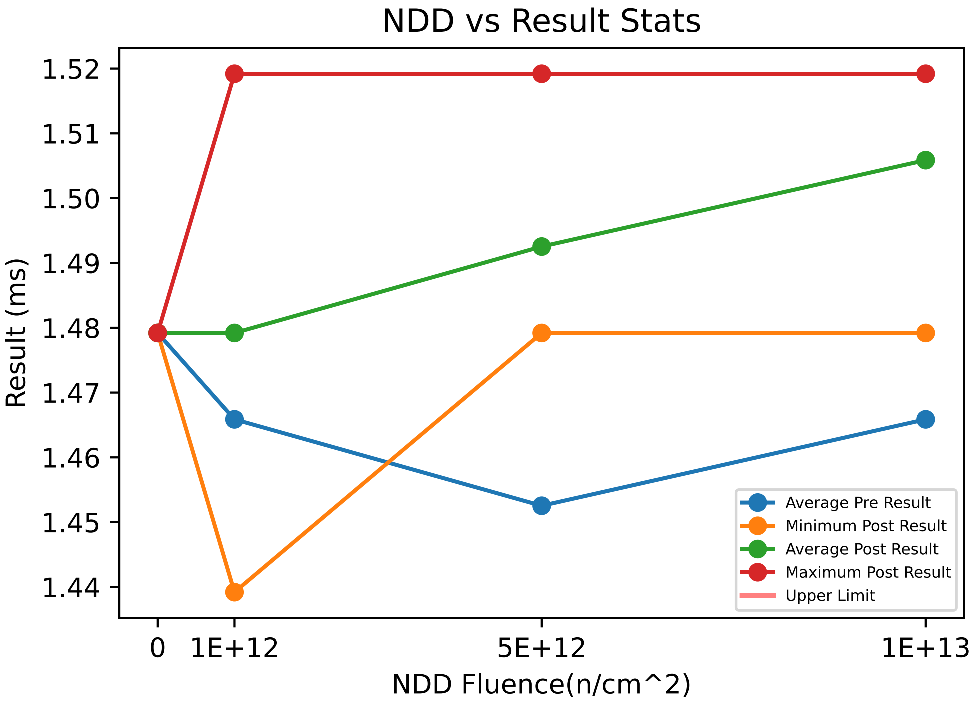
Test Results (No Limits Specified (mV))

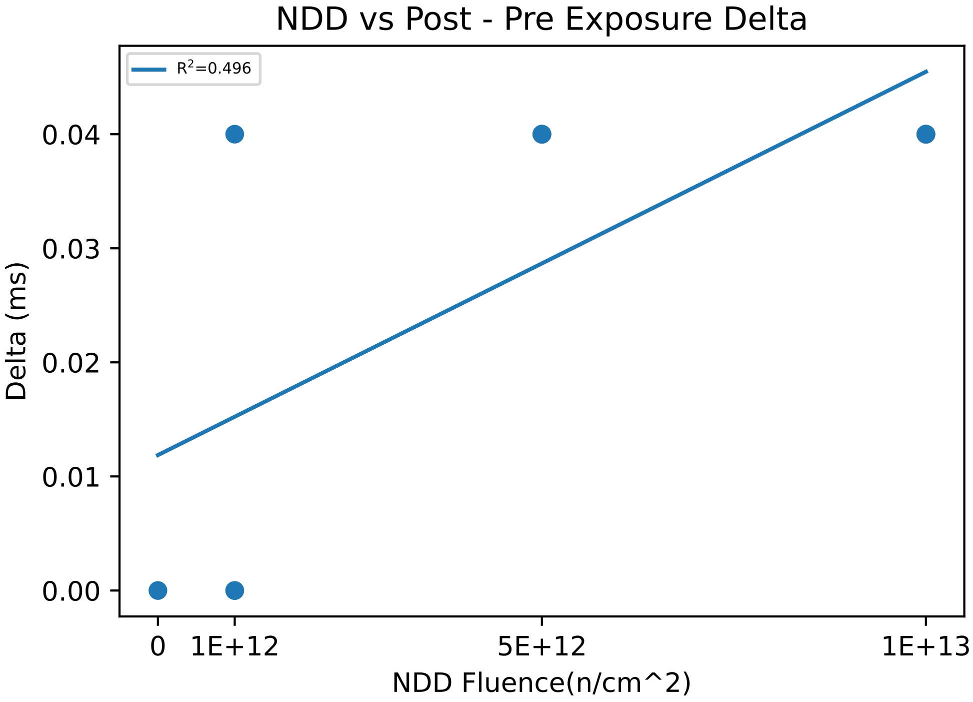
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	22.139	22.139	0
504	1e+12	NDD	21.388	21.388	0
505	1e+12	NDD	20.638	20.263	-0.375
506	5e+12	NDD	22.889	22.889	0
507	5e+12	NDD	22.139	22.139	0
508	5e+12	NDD	23.265	22.889	-0.376
509	1e+13	NDD	21.013	21.013	0
510	1e+13	NDD	21.013	21.013	0
511	1e+13	NDD	24.765	24.765	0
512	0	Correlation	21.764	21.388	-0.376

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	21.764	21.764	21.764		21.388	21.388	21.388		-0.376	-0.376	-0.376	
1e+12	20.638	21.388	22.139	0.7505	20.263	21.263	22.139	0.94419	-0.375	-0.125	0	0.21651
5e+12	22.139	22.764	23.265	0.57326	22.139	22.639	22.889	0.43301	-0.376	-0.12533	0	0.21708
1e+13	21.013	22.264	24.765	2.1662	21.013	22.264	24.765	2.1662	0	0	0	0

Device Test: 22.22 T_SS_5P6NF(TIMING|STARTUP/SS_TR/14////@T_SS_5P6NF)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

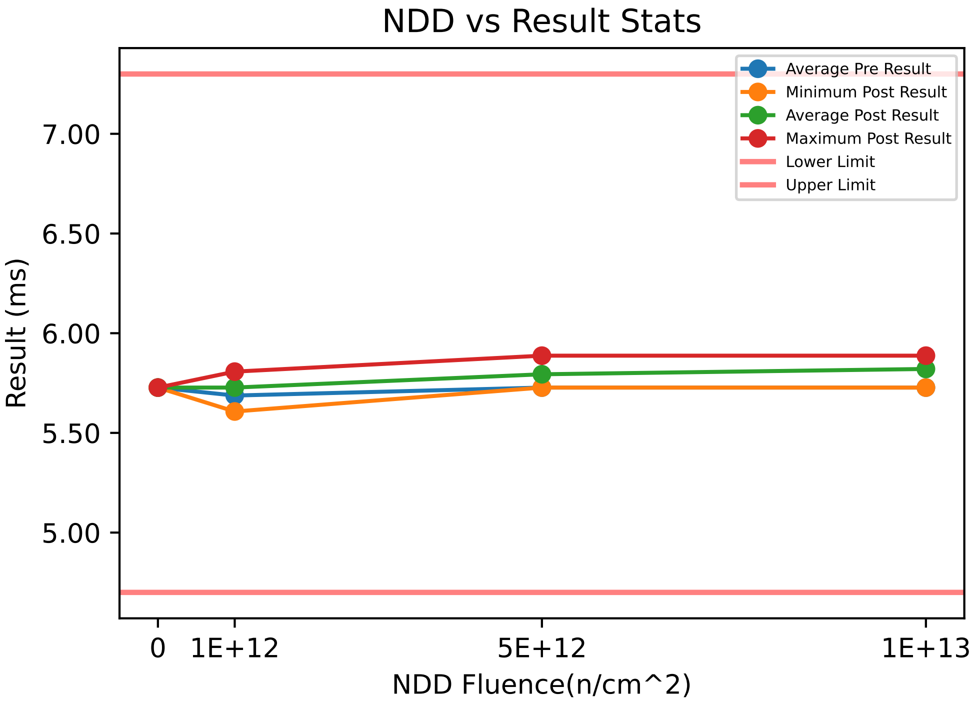
Test Results (No Limits Specified (ms))

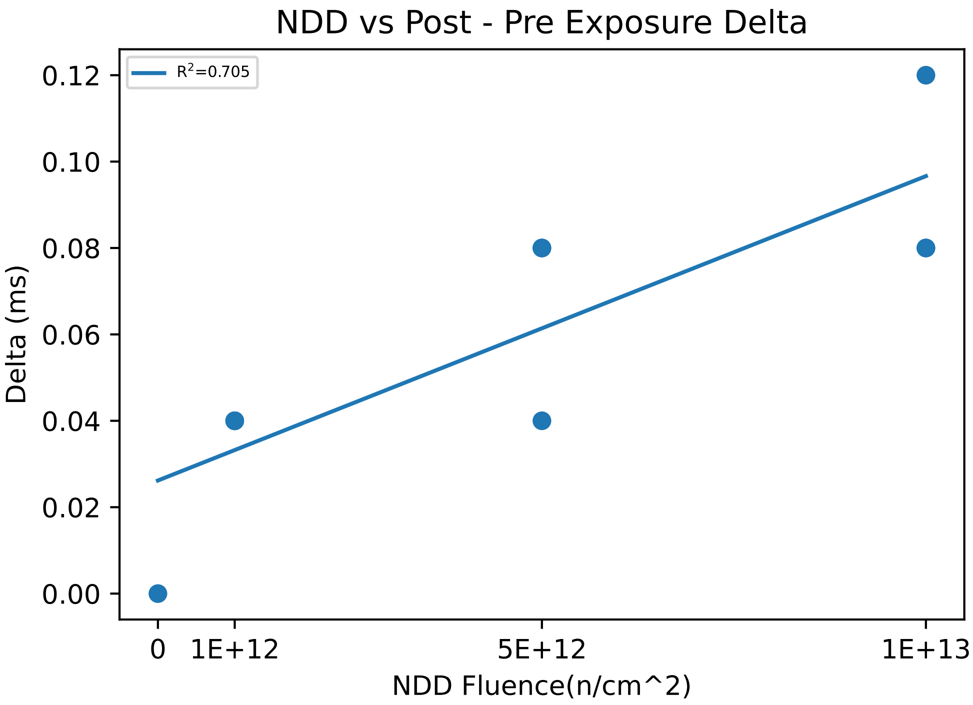
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.4792	1.5192	0.04
504	1e+12	NDD	1.4792	1.4792	0
505	1e+12	NDD	1.4392	1.4392	0
506	5e+12	NDD	1.4392	1.4792	0.04
507	5e+12	NDD	1.4792	1.5192	0.04
508	5e+12	NDD	1.4392	1.4792	0.04
509	1e+13	NDD	1.4792	1.5192	0.04
510	1e+13	NDD	1.4392	1.4792	0.04
511	1e+13	NDD	1.4792	1.5192	0.04
512	0	Correlation	1.4792	1.4792	0

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.4792	1.4792	1.4792		1.4792	1.4792	1.4792		0	0	0	
1e+12	1.4392	1.4659	1.4792	0.023094	1.4392	1.4792	1.5192	0.04	0	0.013333	0.04	0.023094
5e+12	1.4392	1.4525	1.4792	0.023094	1.4792	1.4925	1.5192	0.023094	0.04	0.04	0.04	0
1e+13	1.4392	1.4659	1.4792	0.023094	1.4792	1.5059	1.5192	0.023094	0.04	0.04	0.04	0

Device Test: 22.23 T_SS_22NF(TIMING|STARTUP/SS_TR/14////@T_SS_22NF)





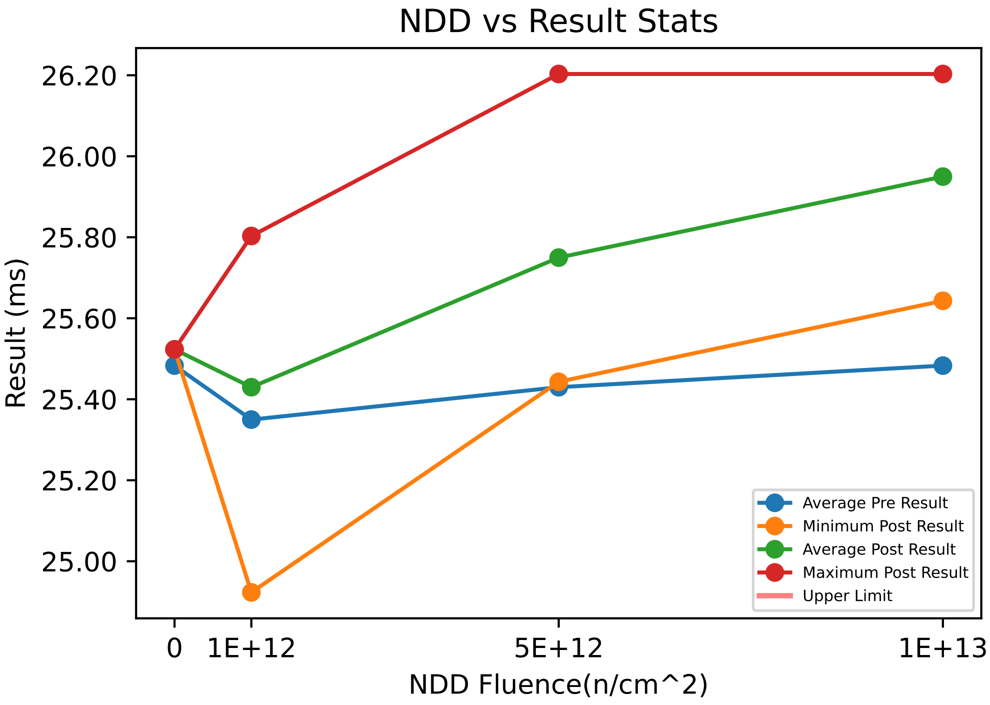
Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

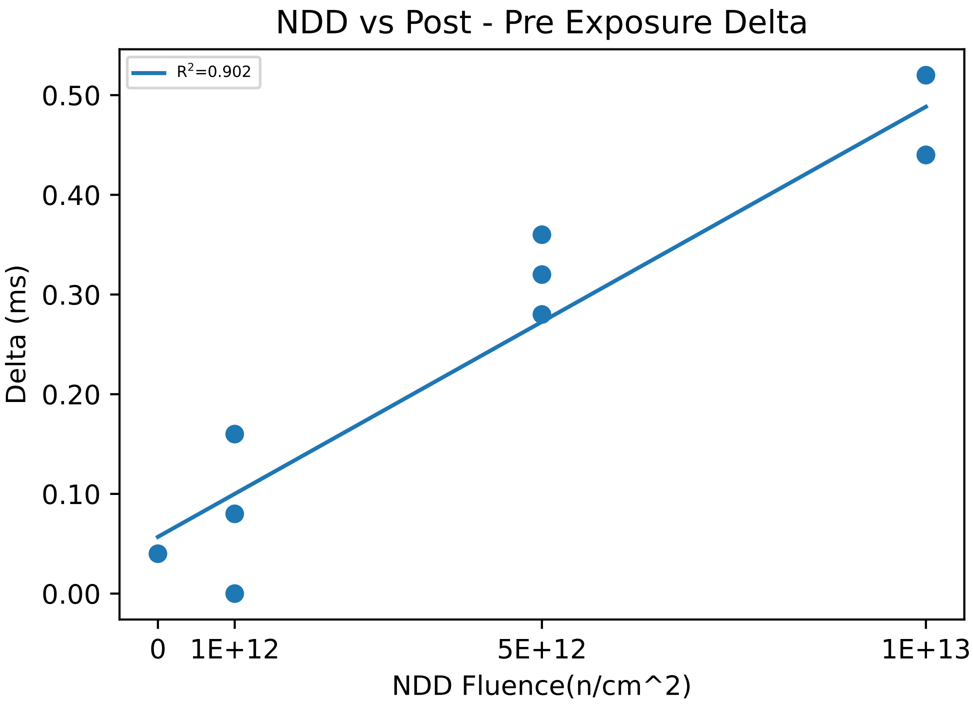
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5.7673	5.8073	0.04
504	1e+12	NDD	5.7273	5.7673	0.04
505	1e+12	NDD	5.5673	5.6073	0.04
506	5e+12	NDD	5.6873	5.7673	0.08
507	5e+12	NDD	5.8073	5.8873	0.08
508	5e+12	NDD	5.6873	5.7273	0.04
509	1e+13	NDD	5.8073	5.8873	0.08
510	1e+13	NDD	5.6473	5.7273	0.08
511	1e+13	NDD	5.7273	5.8473	0.12
512	0	Correlation	5.7273	5.7273	0

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.7273	5.7273	5.7273		5.7273	5.7273	5.7273		0	0	0	
1e+12	5.5673	5.6873	5.7673	0.10583	5.6073	5.7273	5.8073	0.10583	0.04	0.04	0.04	8.8818e-16
5e+12	5.6873	5.7273	5.8073	0.069282	5.7273	5.794	5.8873	0.083267	0.04	0.066667	0.08	0.023094
1e+13	5.6473	5.7273	5.8073	0.08	5.7273	5.8206	5.8873	0.083267	0.08	0.093333	0.12	0.023094

Device Test: 22.24 T_SS_100NF(TIMING|STARTUP/SS_TR/14////@T_SS_100NF)





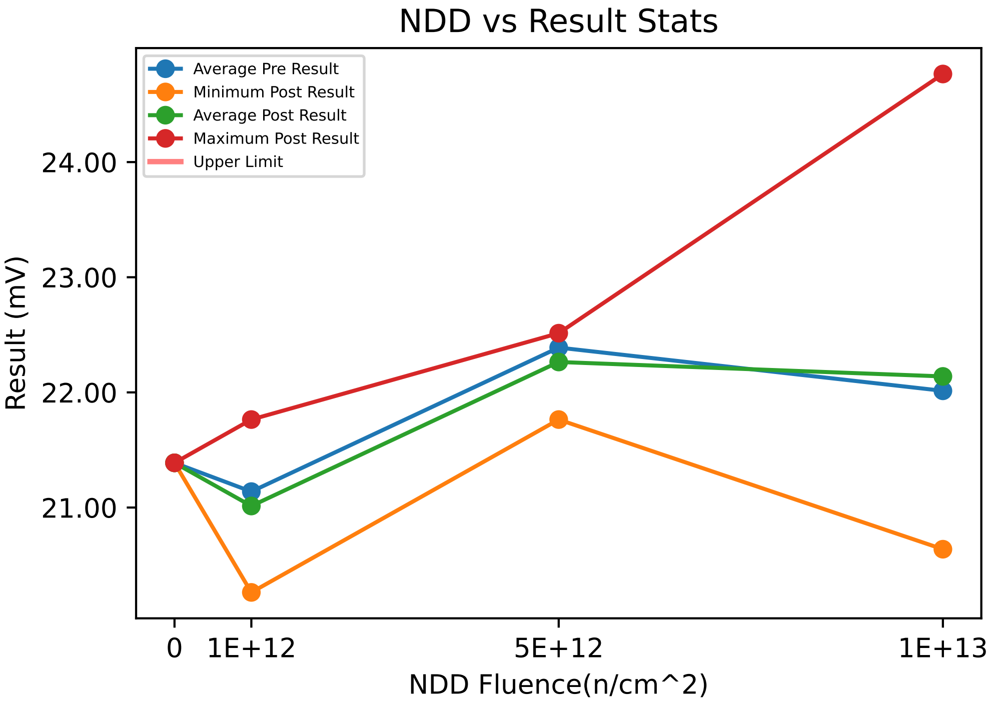
Test Results (No Limits Specified (ms))

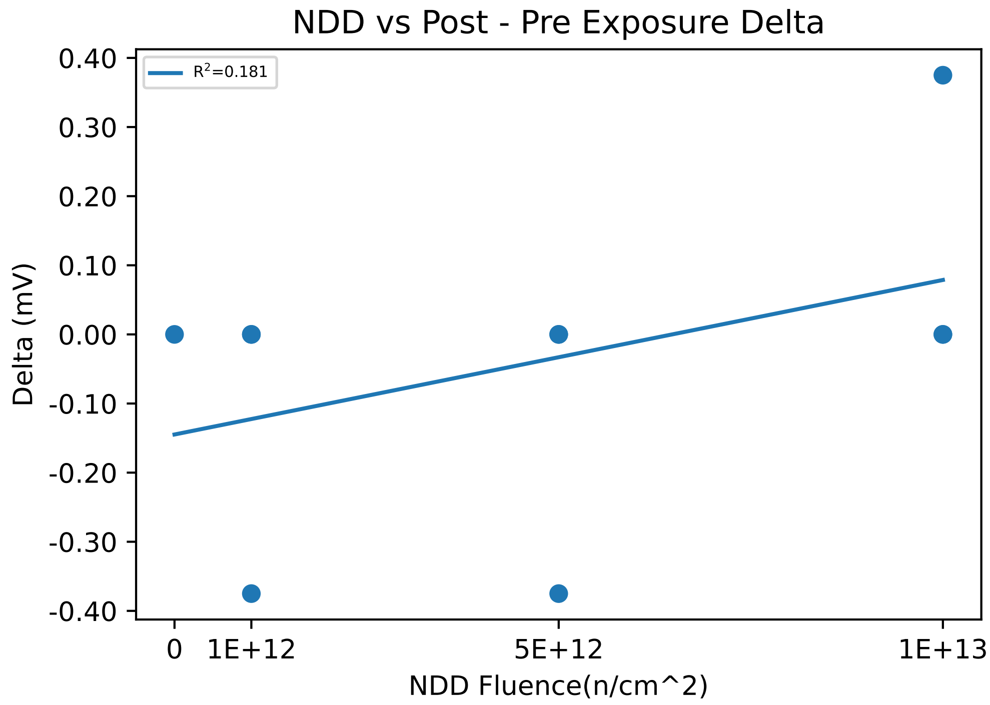
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	25.643	25.803	0.16
504	1e+12	NDD	25.483	25.563	0.08
505	1e+12	NDD	24.923	24.923	0
506	5e+12	NDD	25.323	25.603	0.28
507	5e+12	NDD	25.843	26.203	0.36
508	5e+12	NDD	25.123	25.443	0.32
509	1e+13	NDD	25.683	26.203	0.52
510	1e+13	NDD	25.203	25.643	0.44
511	1e+13	NDD	25.563	26.003	0.44
512	0	Correlation	25.483	25.523	0.04

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	25.483	25.483	25.483		25.523	25.523	25.523		0.04	0.04	0.04	
1e+12	24.923	25.35	25.643	0.37807	24.923	25.43	25.803	0.4549	0	0.08	0.16	0.08
5e+12	25.123	25.43	25.843	0.37166	25.443	25.75	26.203	0.40067	0.28	0.32	0.36	0.04
1e+13	25.203	25.483	25.683	0.2498	25.643	25.95	26.203	0.28378	0.44	0.46667	0.52	0.046188

Device Test: 22.3 V_SS_START(LEVEL|STATIC/SS_TR/4.5////@V_SS_START)





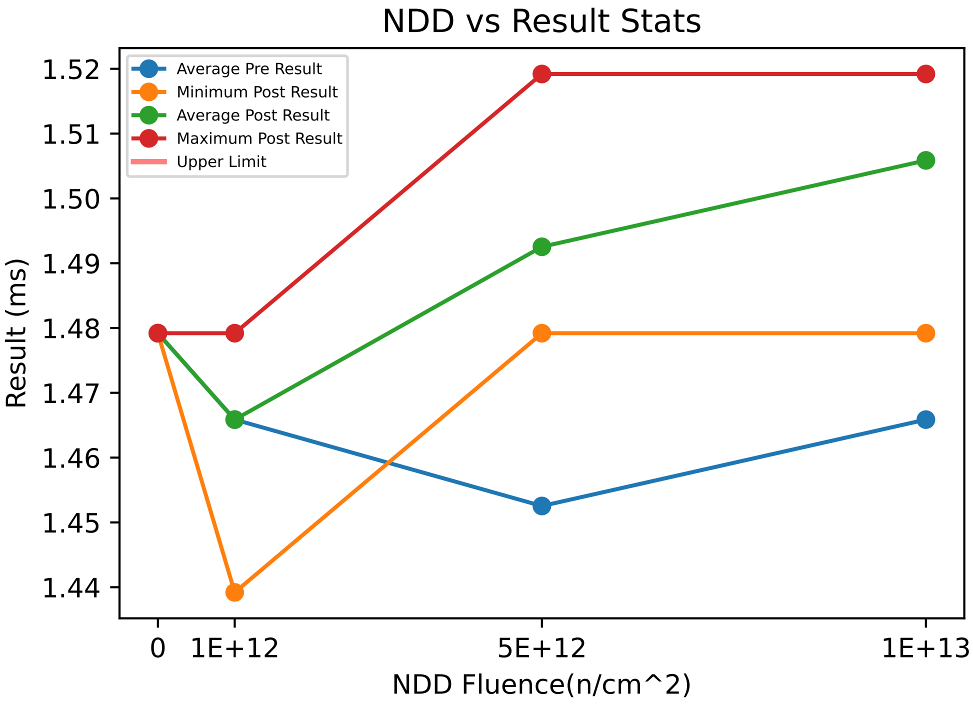
Test Results (No Limits Specified (mV))

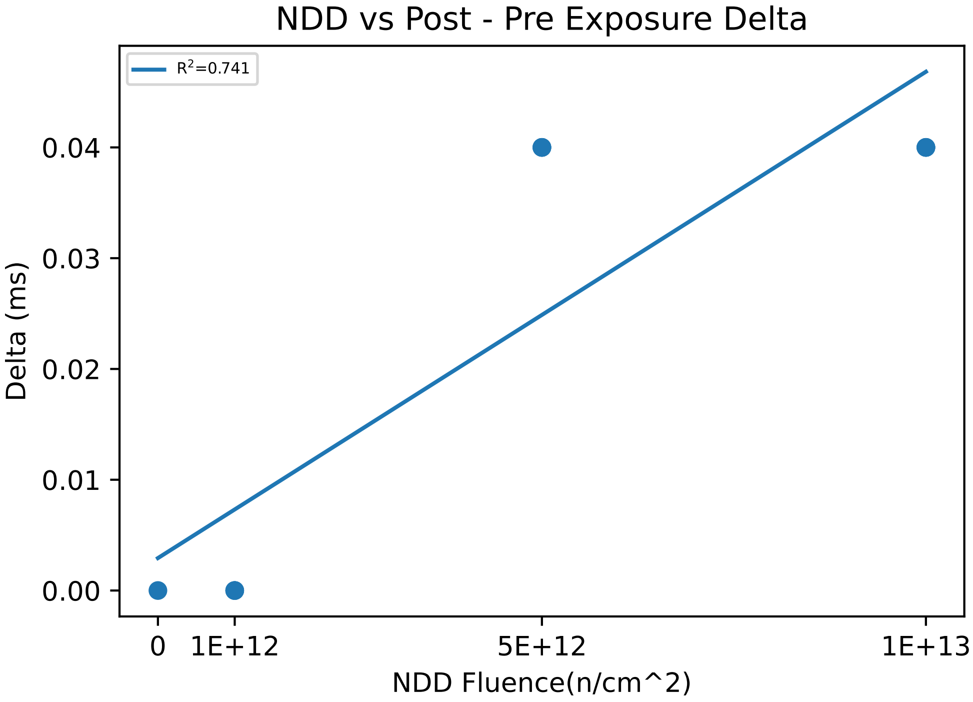
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	21.764	21.764	0
504	1e+12	NDD	21.388	21.013	-0.375
505	1e+12	NDD	20.263	20.263	0
506	5e+12	NDD	22.514	22.514	0
507	5e+12	NDD	21.764	21.764	0
508	5e+12	NDD	22.889	22.514	-0.375
509	1e+13	NDD	20.638	20.638	0
510	1e+13	NDD	21.013	21.013	0
511	1e+13	NDD	24.39	24.765	0.375
512	0	Correlation	21.388	21.388	0

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	21.388	21.388	21.388		21.388	21.388	21.388		0	0	0	
1e+12	20.263	21.138	21.764	0.78103	20.263	21.013	21.764	0.7505	-0.375	-0.125	0	0.21651
5e+12	21.764	22.389	22.889	0.57282	21.764	22.264	22.514	0.43301	-0.375	-0.125	0	0.21651
1e+13	20.638	22.014	24.39	2.0665	20.638	22.139	24.765	2.2822	0	0.125	0.375	0.21651

Device Test: 22.4 T_SS_5P6NF(TIMING|STARTUP/SS_TR/4.5////@T_SS_5P6NF)





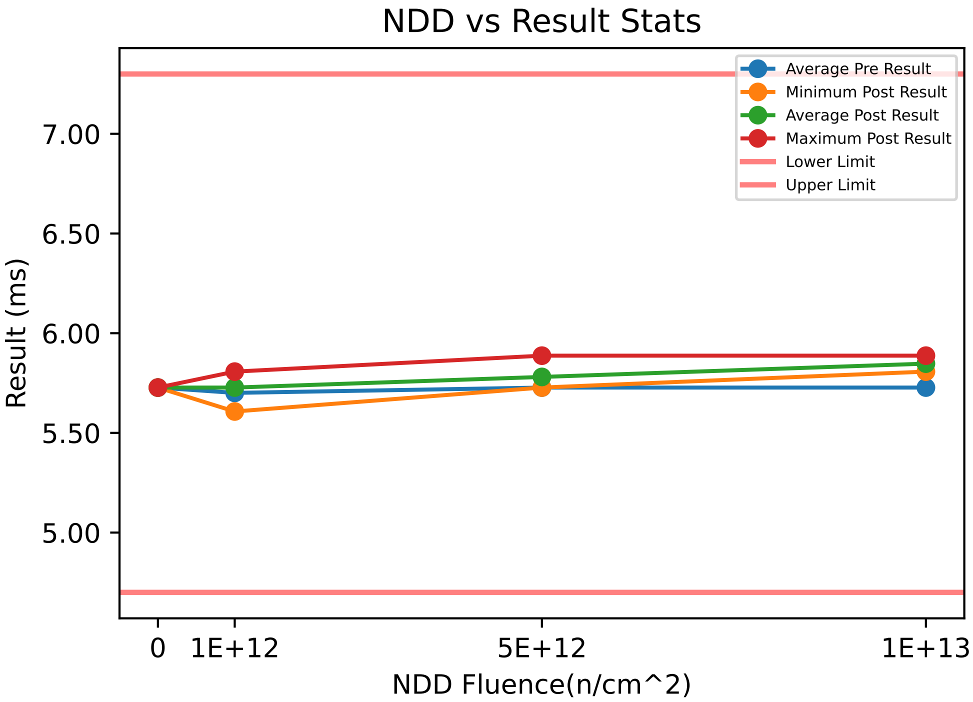
Test Results (No Limits Specified (ms))

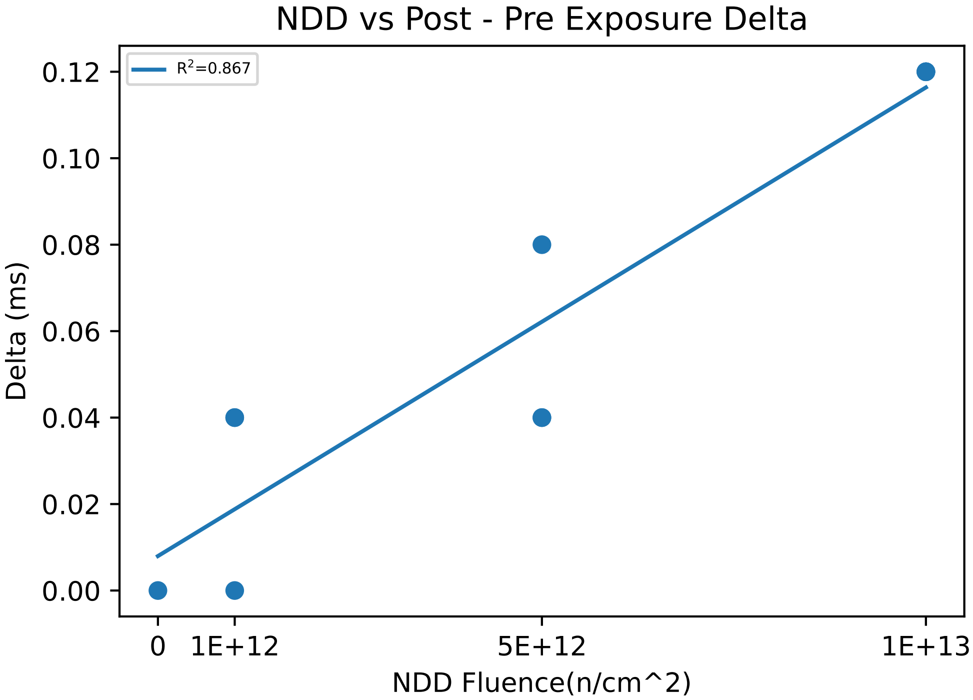
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.4792	1.4792	0
504	1e+12	NDD	1.4792	1.4792	0
505	1e+12	NDD	1.4392	1.4392	0
506	5e+12	NDD	1.4392	1.4792	0.04
507	5e+12	NDD	1.4792	1.5192	0.04
508	5e+12	NDD	1.4392	1.4792	0.04
509	1e+13	NDD	1.4792	1.5192	0.04
510	1e+13	NDD	1.4392	1.4792	0.04
511	1e+13	NDD	1.4792	1.5192	0.04
512	0	Correlation	1.4792	1.4792	0

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.4792	1.4792	1.4792		1.4792	1.4792	1.4792		0	0	0	
1e+12	1.4392	1.4659	1.4792	0.023094	1.4392	1.4659	1.4792	0.023094	0	0	0	0
5e+12	1.4392	1.4525	1.4792	0.023094	1.4792	1.4925	1.5192	0.023094	0.04	0.04	0.04	0
1e+13	1.4392	1.4659	1.4792	0.023094	1.4792	1.5059	1.5192	0.023094	0.04	0.04	0.04	0

Device Test: 22.5 T_SS_22NF(TIMING|STARTUP/SS_TR/4.5////@T_SS_22NF)





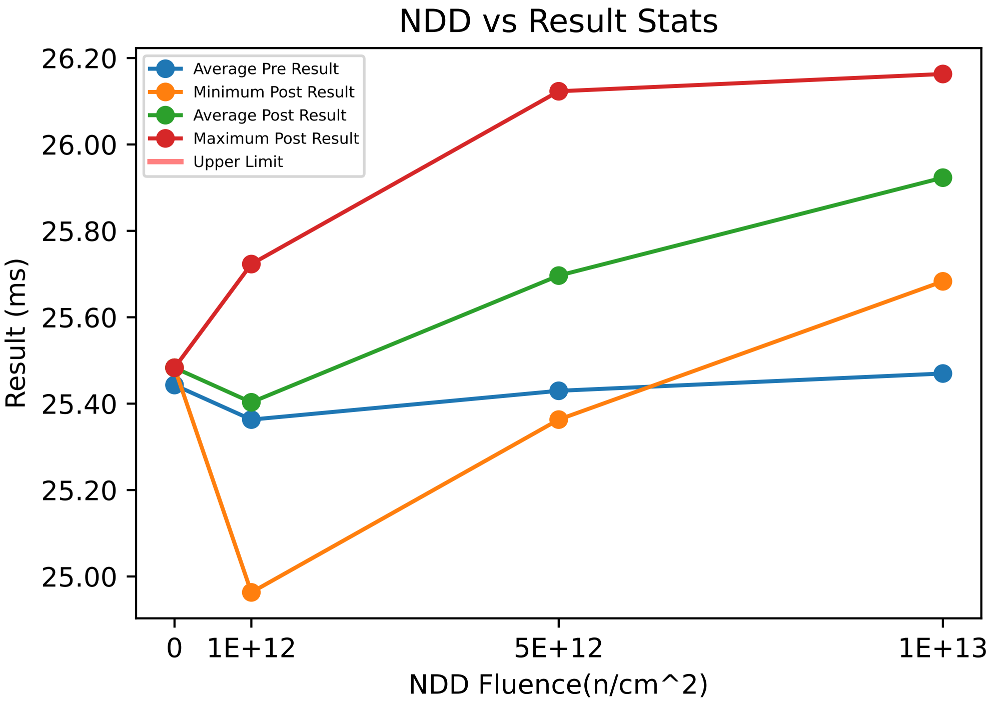
Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

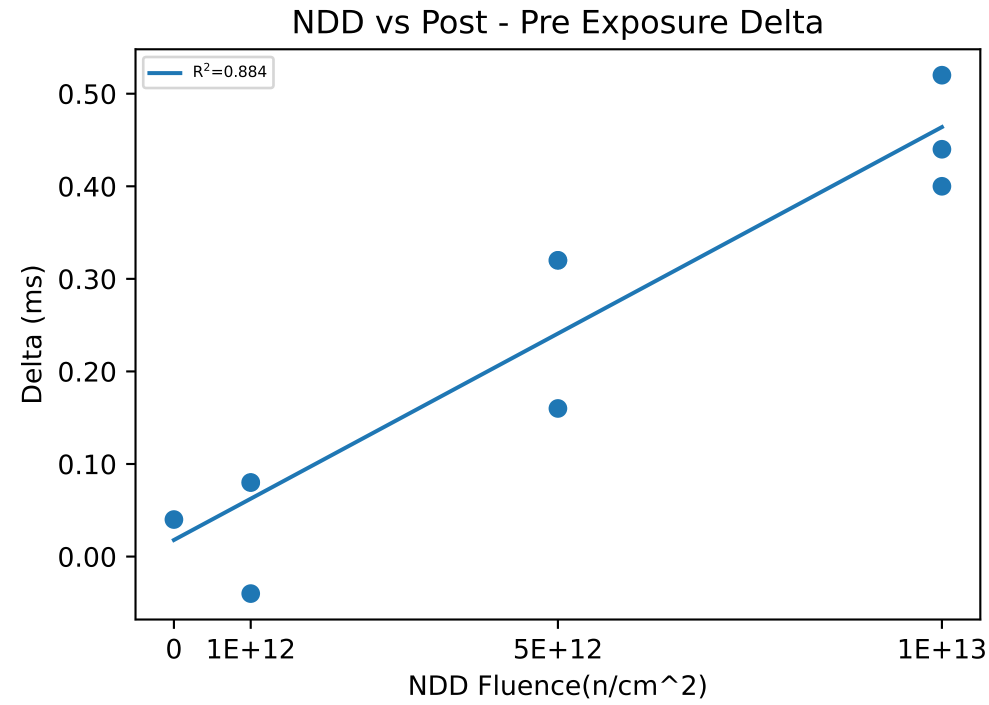
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5.7673	5.8073	0.04
504	1e+12	NDD	5.7273	5.7673	0.04
505	1e+12	NDD	5.6073	5.6073	0
506	5e+12	NDD	5.6873	5.7273	0.04
507	5e+12	NDD	5.8073	5.8873	0.08
508	5e+12	NDD	5.6873	5.7273	0.04
509	1e+13	NDD	5.7673	5.8873	0.12
510	1e+13	NDD	5.6873	5.8073	0.12
511	1e+13	NDD	5.7273	5.8473	0.12
512	0	Correlation	5.7273	5.7273	0

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.7273	5.7273	5.7273		5.7273	5.7273	5.7273		0	0	0	
1e+12	5.6073	5.7006	5.7673	0.083267	5.6073	5.7273	5.8073	0.10583	0	0.026667	0.04	0.023094
5e+12	5.6873	5.7273	5.8073	0.069282	5.7273	5.7806	5.8873	0.092376	0.04	0.053333	0.08	0.023094
1e+13	5.6873	5.7273	5.7673	0.04	5.8073	5.8473	5.8873	0.04	0.12	0.12	0.12	0

Device Test: 22.6 T_SS_100NF(TIMING|STARTUP/SS_TR/4.5////@T_SS_100NF)





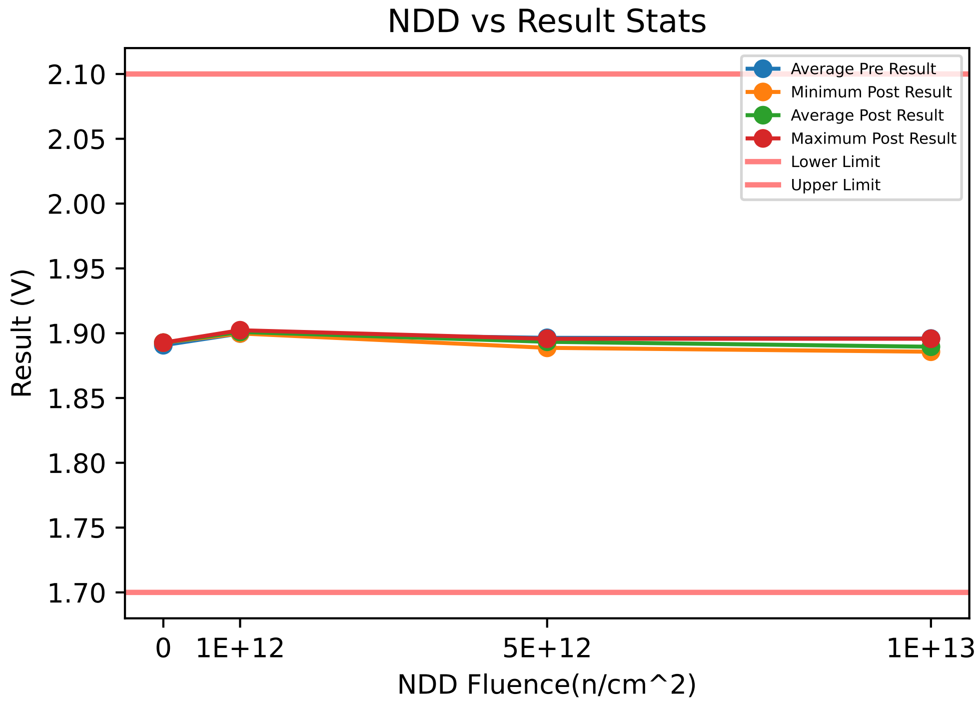
Test Results (No Limits Specified (ms))

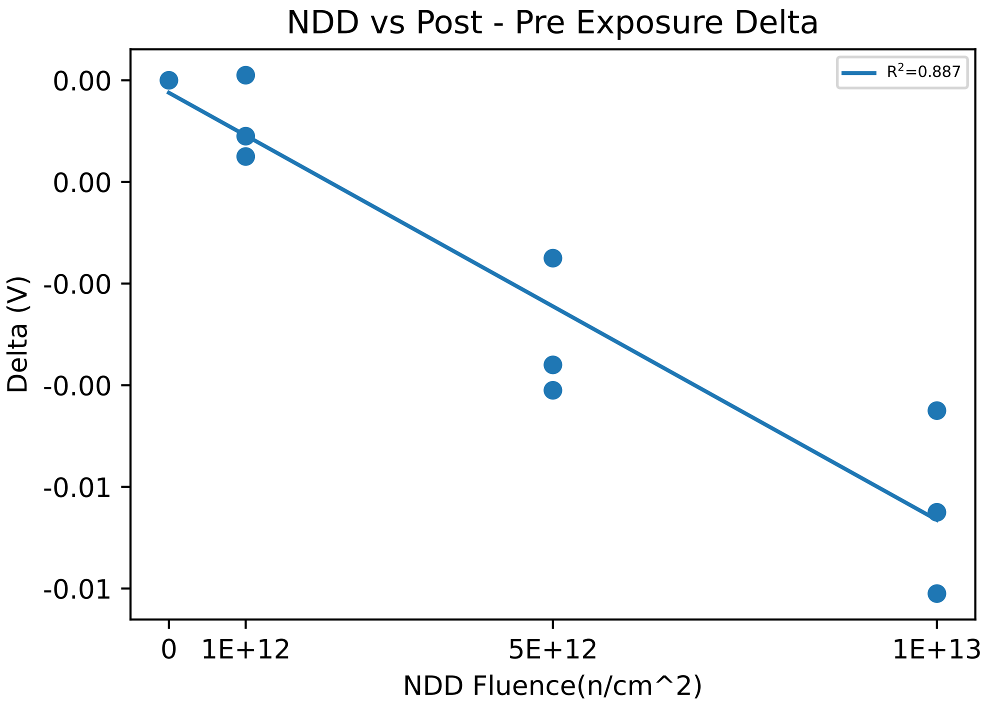
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	25.763	25.723	-0.04
504	1e+12	NDD	25.443	25.523	0.08
505	1e+12	NDD	24.883	24.963	0.08
506	5e+12	NDD	25.283	25.603	0.32
507	5e+12	NDD	25.803	26.123	0.32
508	5e+12	NDD	25.203	25.363	0.16
509	1e+13	NDD	25.763	26.163	0.4
510	1e+13	NDD	25.163	25.683	0.52
511	1e+13	NDD	25.483	25.923	0.44
512	0	Correlation	25.443	25.483	0.04

Test Statistics (ms)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	25.443	25.443	25.443		25.483	25.483	25.483		0.04	0.04	0.04	
1e+12	24.883	25.363	25.763	0.44542	24.963	25.403	25.723	0.39395	-0.04	0.04	0.08	0.069282
5e+12	25.203	25.43	25.803	0.32578	25.363	25.696	26.123	0.3885	0.16	0.26667	0.32	0.092376
1e+13	25.163	25.47	25.763	0.30022	25.683	25.923	26.163	0.24	0.4	0.45333	0.52	0.061101

Device Test: 22.7 V_COMP_SD(LEVEL|RISE/COMP/5////@V_COMP_SD)





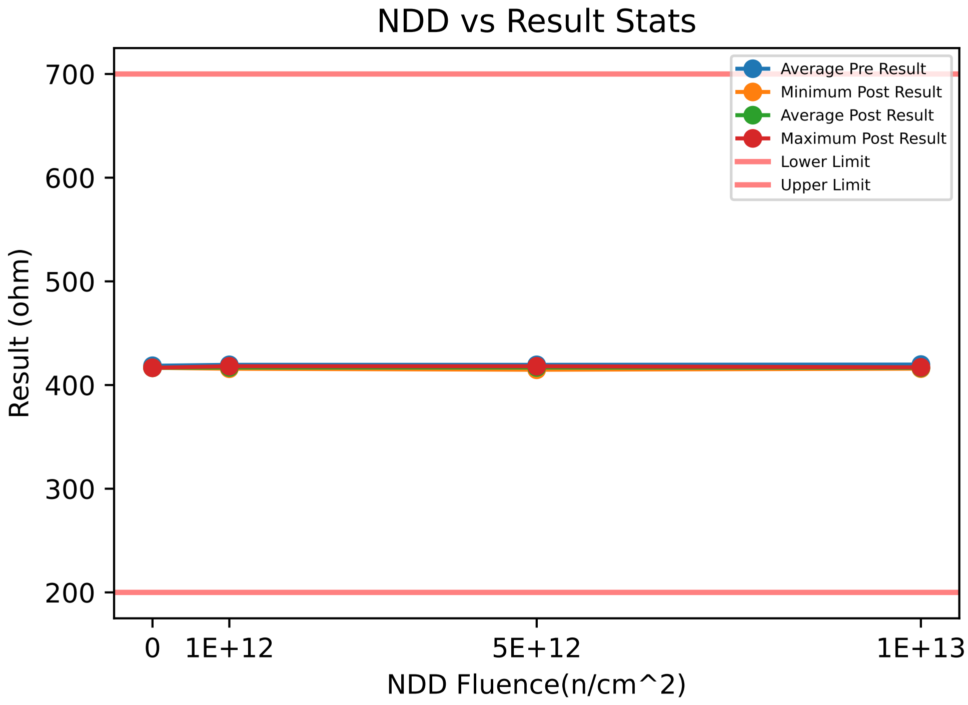
Test Results (Lower Limit = 1.7, Upper Limit = 2.1 (V))

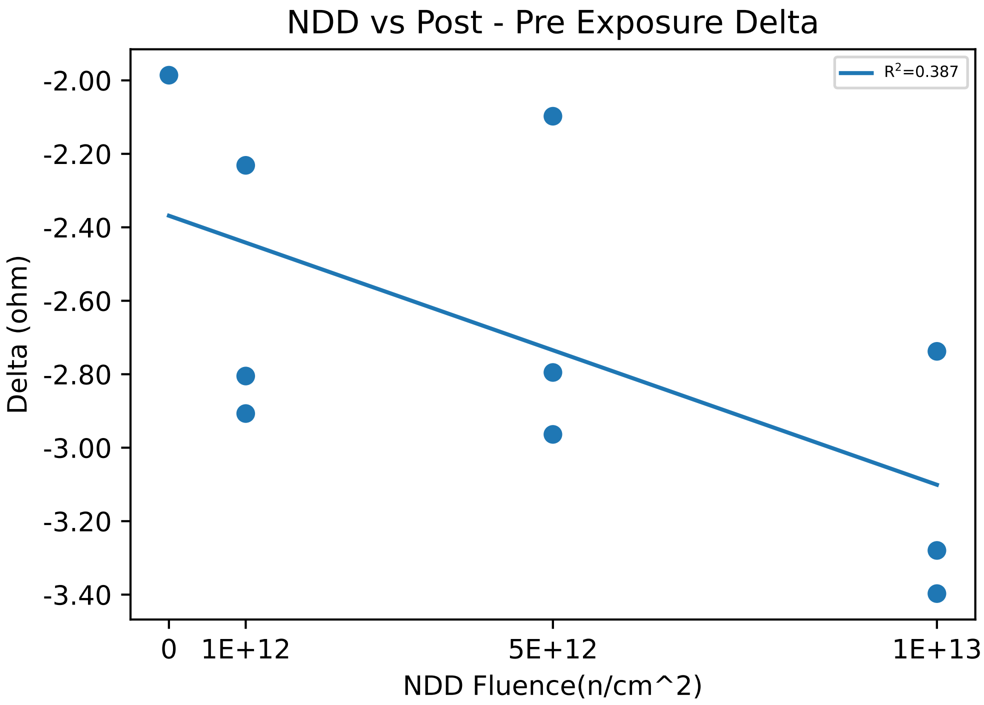
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.8998	1.9007	0.0009
504	1e+12	NDD	1.9002	1.9023	0.0021
505	1e+12	NDD	1.8993	1.8998	0.0005
506	5e+12	NDD	1.8993	1.8957	-0.0036
507	5e+12	NDD	1.8998	1.8957	-0.0041
508	5e+12	NDD	1.8902	1.8887	-0.0015
509	1e+13	NDD	1.8902	1.8857	-0.0045
510	1e+13	NDD	1.9038	1.8957	-0.0081
511	1e+13	NDD	1.8937	1.8872	-0.0065
512	0	Correlation	1.8907	1.8927	0.002

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.8907	1.8907	1.8907		1.8927	1.8927	1.8927		0.002	0.002	0.002	
1e+12	1.8993	1.8998	1.9002	0.00045092	1.8998	1.9009	1.9023	0.0012662	0.0005	0.0011667	0.0021	0.00083267
5e+12	1.8902	1.8964	1.8998	0.005404	1.8887	1.8934	1.8957	0.0040415	-0.0041	-0.0030667	-0.0015	0.0013796
1e+13	1.8902	1.8959	1.9038	0.0070619	1.8857	1.8895	1.8957	0.0053929	-0.0081	-0.0063667	-0.0045	0.0018037

Device Test: 22.8 R_SS_DISCHARGE(LEVEL|SINK/SS_TR/5////@R_SS_DISCHARGE)





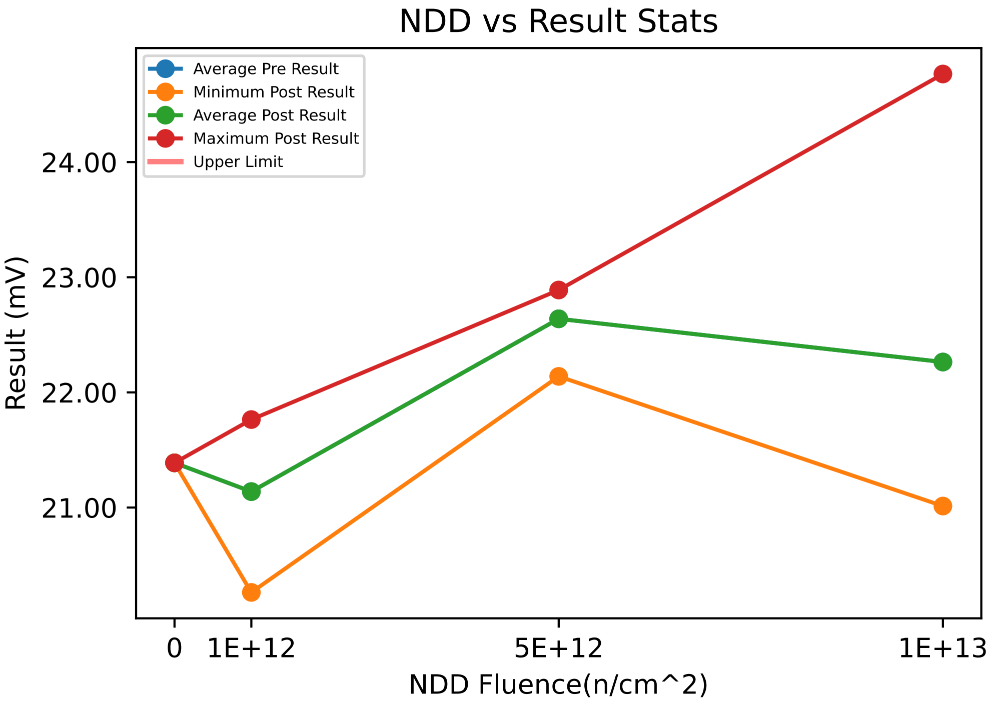
Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (ohm))

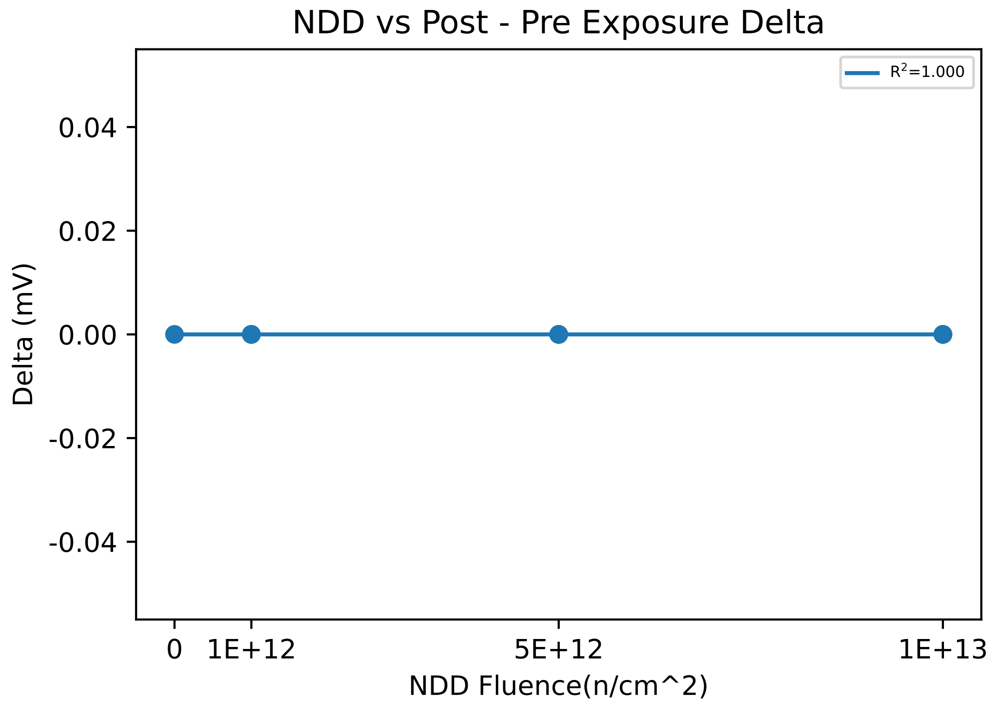
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	420.36	418.13	-2.2313
504	1e+12	NDD	419.67	416.76	-2.907
505	1e+12	NDD	418.52	415.71	-2.8049
506	5e+12	NDD	420.2	418.1	-2.0976
507	5e+12	NDD	417.51	414.72	-2.7952
508	5e+12	NDD	420.78	417.81	-2.9638
509	1e+13	NDD	418.54	415.8	-2.7377
510	1e+13	NDD	420.38	416.98	-3.3972
511	1e+13	NDD	420.39	417.11	-3.2797
512	0	Correlation	418.6	416.62	-1.9859

Test Statistics (ohm)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	418.6	418.6	418.6		416.62	416.62	416.62		-1.9859	-1.9859	-1.9859	
1e+12	418.52	419.52	420.36	0.93231	415.71	416.87	418.13	1.2131	-2.907	-2.6477	-2.2313	0.36424
5e+12	417.51	419.5	420.78	1.7422	414.72	416.88	418.1	1.8761	-2.9638	-2.6189	-2.0976	0.45923
1e+13	418.54	419.77	420.39	1.0657	415.8	416.63	417.11	0.72162	-3.3972	-3.1382	-2.7377	0.35178

Device Test: 22.9 V_SS_START(LEVEL|STATIC/SS_TR/5////@V_SS_START)





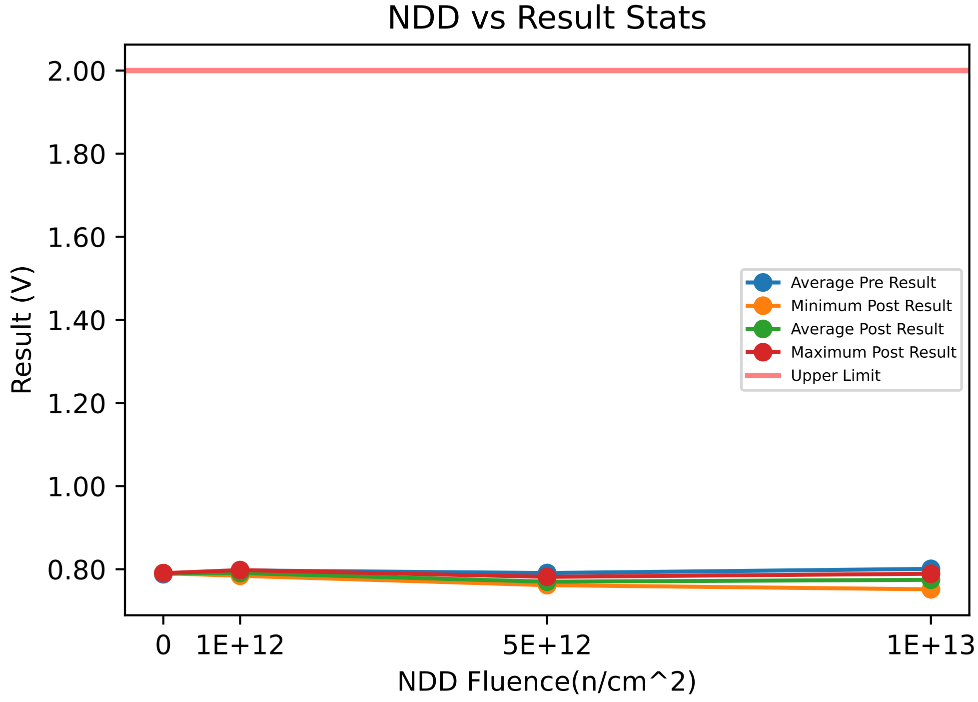
Test Results (No Limits Specified (mV))

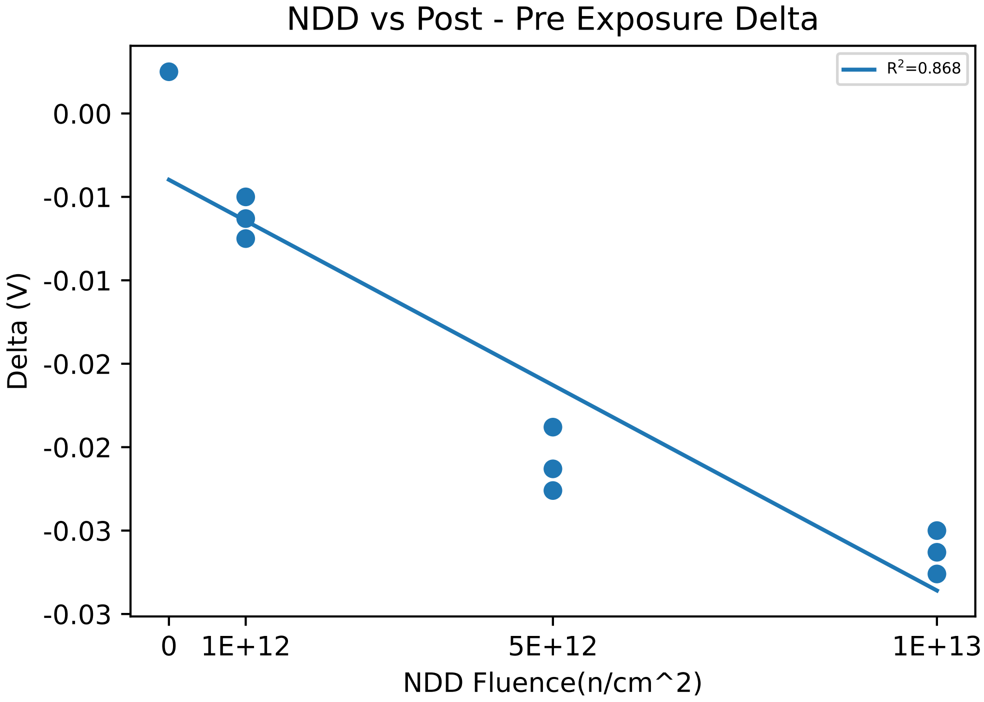
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	21.764	21.764	0
504	1e+12	NDD	21.388	21.388	0
505	1e+12	NDD	20.263	20.263	0
506	5e+12	NDD	22.889	22.889	0
507	5e+12	NDD	22.139	22.139	0
508	5e+12	NDD	22.889	22.889	0
509	1e+13	NDD	21.013	21.013	0
510	1e+13	NDD	21.013	21.013	0
511	1e+13	NDD	24.765	24.765	0
512	0	Correlation	21.388	21.388	0

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	21.388	21.388	21.388		21.388	21.388	21.388		0	0	0	
1e+12	20.263	21.138	21.764	0.78103	20.263	21.138	21.764	0.78103	0	0	0	0
5e+12	22.139	22.639	22.889	0.43301	22.139	22.639	22.889	0.43301	0	0	0	0
1e+13	21.013	22.264	24.765	2.1662	21.013	22.264	24.765	2.1662	0	0	0	0

Device Test: 23.1 MIN_VIN_FOR_PWRGD_OUTPUT(VIN|VALID/PWRGD/0////@MIN_VIN_FOR_PWRGD_OUTPUT)





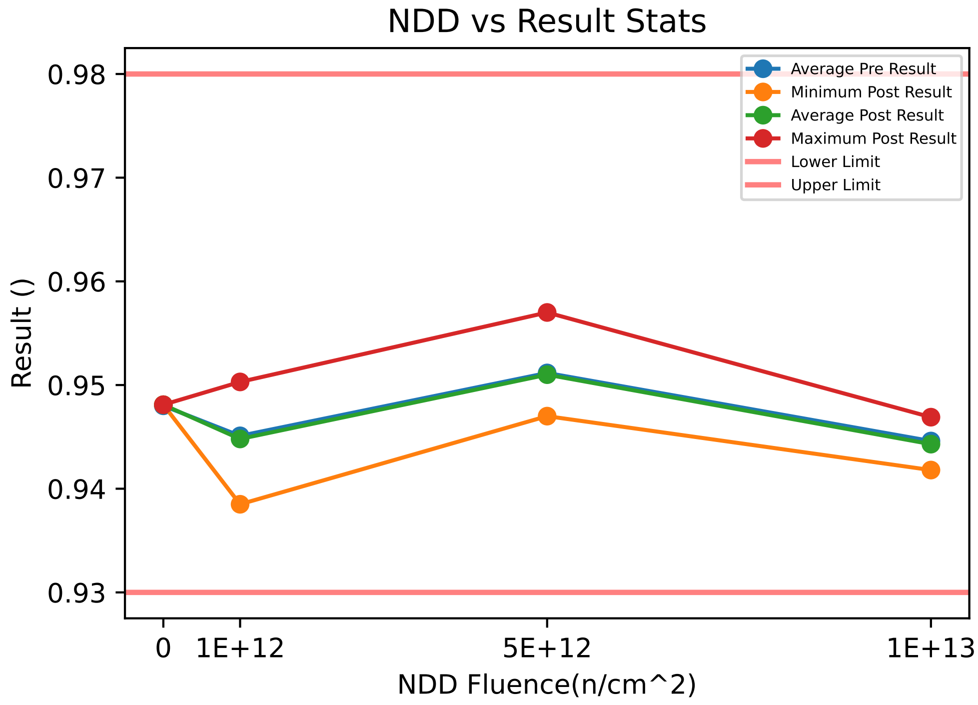
Test Results (Upper Limit = 2.0 (V))

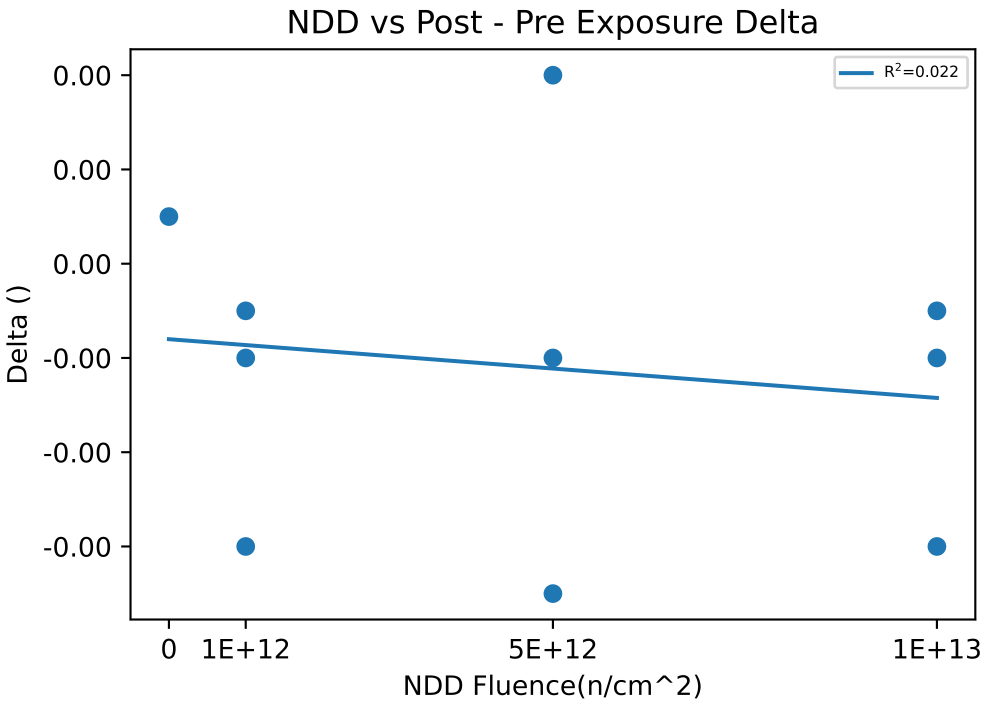
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.798	0.7905	-0.0075
504	1e+12	NDD	0.8043	0.798	-0.0063
505	1e+12	NDD	0.7892	0.7842	-0.005
506	5e+12	NDD	0.8043	0.7817	-0.0226
507	5e+12	NDD	0.7805	0.7617	-0.0188
508	5e+12	NDD	0.788	0.7667	-0.0213
509	1e+13	NDD	0.7767	0.7517	-0.025
510	1e+13	NDD	0.8168	0.7892	-0.0276
511	1e+13	NDD	0.8093	0.783	-0.0263
512	0	Correlation	0.788	0.7905	0.0025

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.788	0.788	0.788		0.7905	0.7905	0.7905		0.0025	0.0025	0.0025	
1e+12	0.7892	0.79717	0.8043	0.0075844	0.7842	0.7909	0.798	0.0069087	-0.0075	-0.0062667	-0.005	0.0012503
5e+12	0.7805	0.79093	0.8043	0.012168	0.7617	0.77003	0.7817	0.010408	-0.0226	-0.0209	-0.0188	0.0019313
1e+13	0.7767	0.80093	0.8168	0.021319	0.7517	0.77463	0.7892	0.020101	-0.0276	-0.0263	-0.025	0.0013

Device Test: 23.10 VSENSE_VTH_RISING_GOOD(THRESHOLD|RISE/PWRGD/5////@VSENSE_VTH_RISING_GOOD)





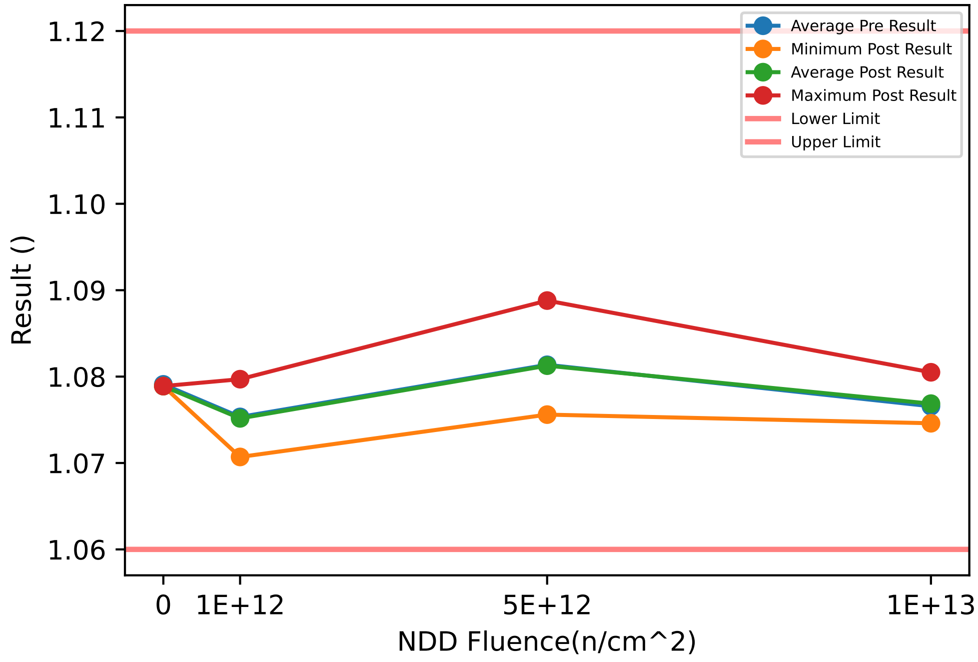
Test Results (Lower Limit = 0.93, Upper Limit = 0.98 ())

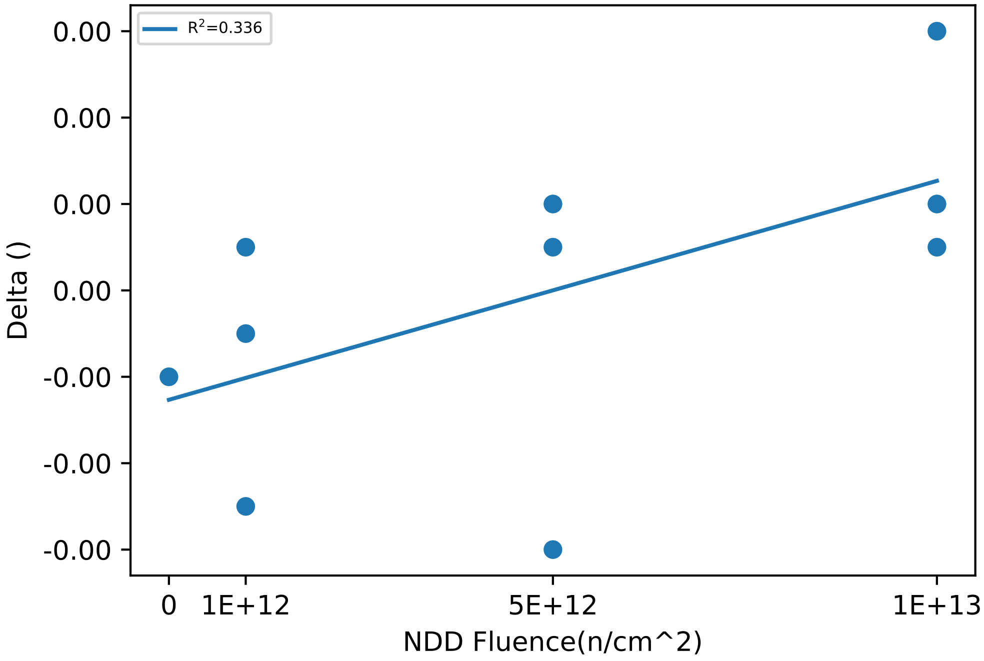
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.9509	0.9503	-0.0006
504	1e+12	NDD	0.9387	0.9385	-0.0002
505	1e+12	NDD	0.9457	0.9456	-0.0001
506	5e+12	NDD	0.9492	0.949	-0.0002
507	5e+12	NDD	0.9477	0.947	-0.0007
508	5e+12	NDD	0.9566	0.957	0.0004
509	1e+13	NDD	0.942	0.9418	-0.0002
510	1e+13	NDD	0.9475	0.9469	-0.0006
511	1e+13	NDD	0.9443	0.9442	-0.0001
512	0	Correlation	0.948	0.9481	0.0001

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.948	0.948	0.948		0.9481	0.9481	0.9481		0.0001	0.0001	0.0001	
1e+12	0.9387	0.9451	0.9509	0.0061221	0.9385	0.9448	0.9503	0.0059405	-0.0006	-0.0003	-0.0001	0.00026458
5e+12	0.9477	0.95117	0.9566	0.0047648	0.947	0.951	0.957	0.0052915	-0.0007	-0.00016667	0.0004	0.00055076
1e+13	0.942	0.9446	0.9475	0.0027622	0.9418	0.9443	0.9469	0.0025515	-0.0006	-0.0003	-0.0001	0.00026458

Device Test: 23.11 VSENSE_VTH_RISING_FAULT(THRESHOLD|RISE/PWRGD/5////@VSENSE_VTH_RISING_FAULT)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

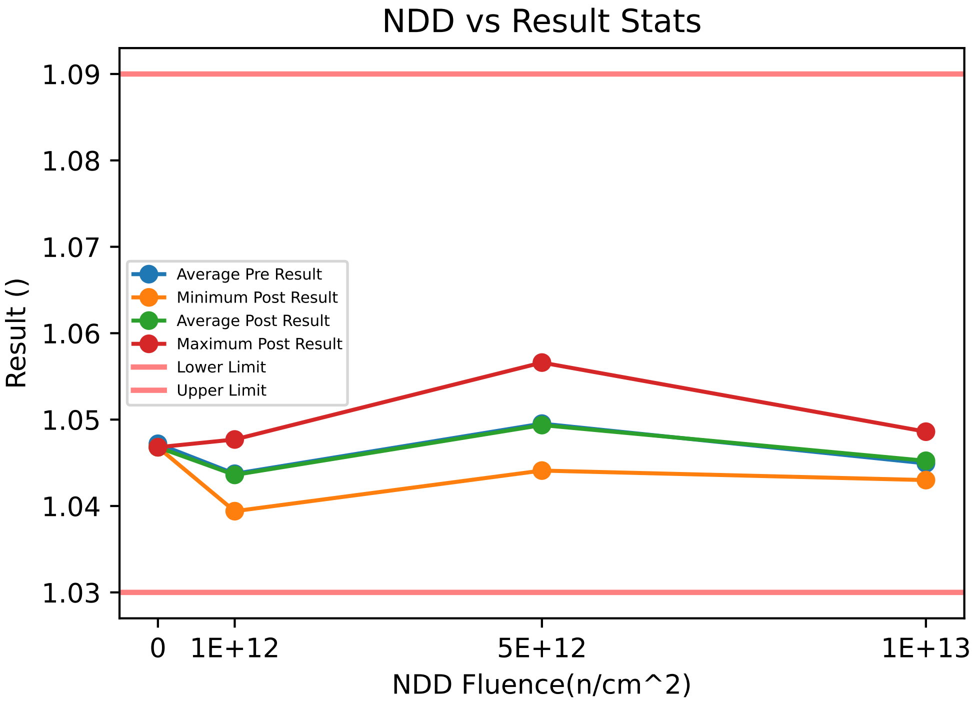
Test Results (Lower Limit = 1.06, Upper Limit = 1.12 ())

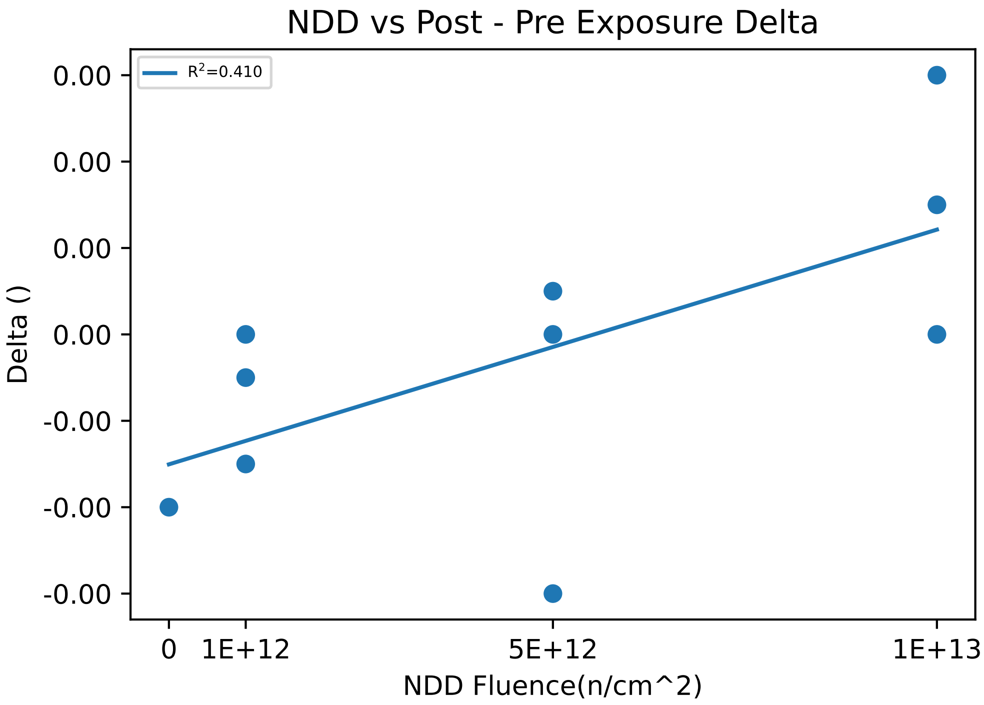
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.0798	1.0797	-0.0001
504	1e+12	NDD	1.0712	1.0707	-0.0005
505	1e+12	NDD	1.075	1.0751	0.0001
506	5e+12	NDD	1.0793	1.0794	0.0001
507	5e+12	NDD	1.0762	1.0756	-0.0006
508	5e+12	NDD	1.0886	1.0888	0.0002
509	1e+13	NDD	1.0745	1.0746	0.0001
510	1e+13	NDD	1.0799	1.0805	0.0006
511	1e+13	NDD	1.0753	1.0755	0.0002
512	0	Correlation	1.0791	1.0789	-0.0002

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0791	1.0791	1.0791		1.0789	1.0789	1.0789		-0.0002	-0.0002	-0.0002	
1e+12	1.0712	1.0753	1.0798	0.0043097	1.0707	1.0752	1.0797	0.0045004	-0.0005	-0.00016667	0.0001	0.00030551
5e+12	1.0762	1.0814	1.0886	0.0064532	1.0756	1.0813	1.0888	0.0067951	-0.0006	-0.0001	0.0002	0.00043589
1e+13	1.0745	1.0766	1.0799	0.0029143	1.0746	1.0769	1.0805	0.0031786	0.0001	0.0003	0.0006	0.00026458

Device Test: 23.12 VSENSE_VTH_FALLING_GOOD(THRESHOLD|FALL/PWRGD/5////@VSENSE_VTH_FALLING_GOOD)





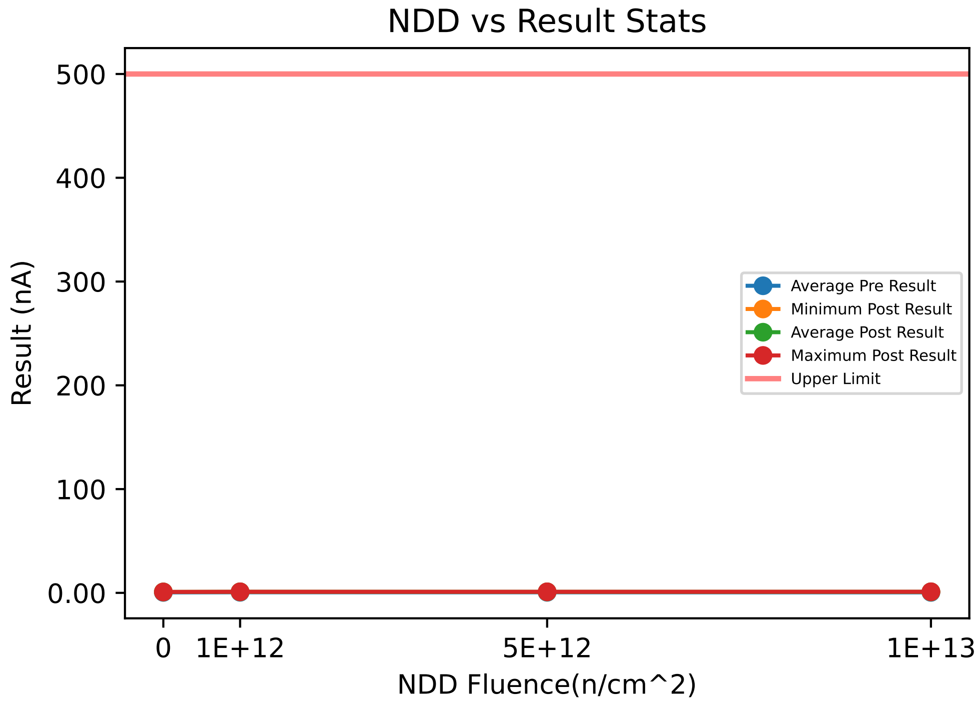
Test Results (Lower Limit = 1.03, Upper Limit = 1.09 ())

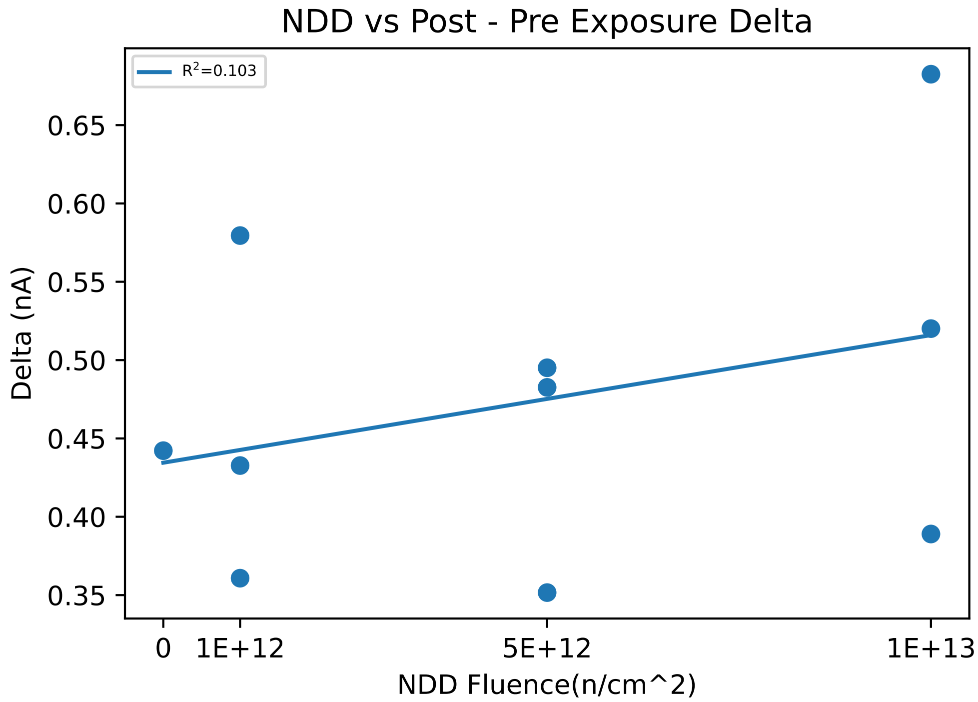
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.0477	1.0477	0
504	1e+12	NDD	1.0397	1.0394	-0.0003
505	1e+12	NDD	1.0438	1.0437	-0.0001
506	5e+12	NDD	1.0474	1.0474	0
507	5e+12	NDD	1.0447	1.0441	-0.0006
508	5e+12	NDD	1.0565	1.0566	0.0001
509	1e+13	NDD	1.043	1.043	0
510	1e+13	NDD	1.048	1.0486	0.0006
511	1e+13	NDD	1.0438	1.0441	0.0003
512	0	Correlation	1.0472	1.0468	-0.0004

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0472	1.0472	1.0472		1.0468	1.0468	1.0468		-0.0004	-0.0004	-0.0004	
1e+12	1.0397	1.0437	1.0477	0.0040004	1.0394	1.0436	1.0477	0.0041509	-0.0003	-0.00013333	0	0.00015275
5e+12	1.0447	1.0495	1.0565	0.0061825	1.0441	1.0494	1.0566	0.0064779	-0.0006	-0.00016667	0.0001	0.00037859
1e+13	1.043	1.0449	1.048	0.0026858	1.043	1.0452	1.0486	0.002967	0	0.0003	0.0006	0.0003

Device Test: 23.13 PWRGD_OUTPUT_HIGH_LEAK(LEAK|MAX/PWRGD/5////@PWRGD_OUTPUT_HIGH_LEAK)





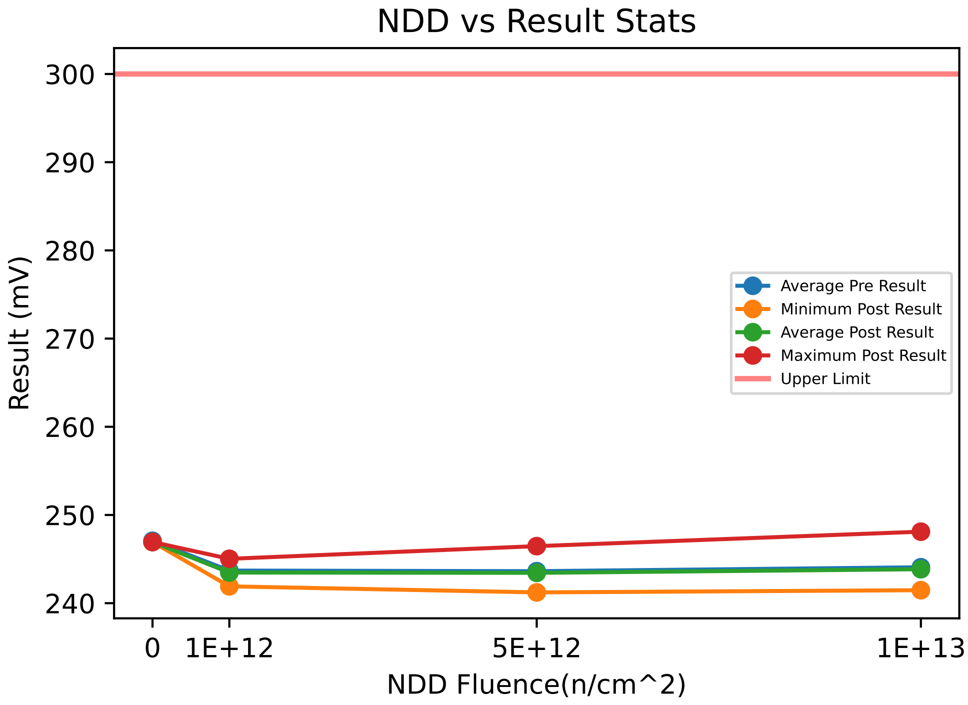
Test Results (Upper Limit = 500.0 (nA))

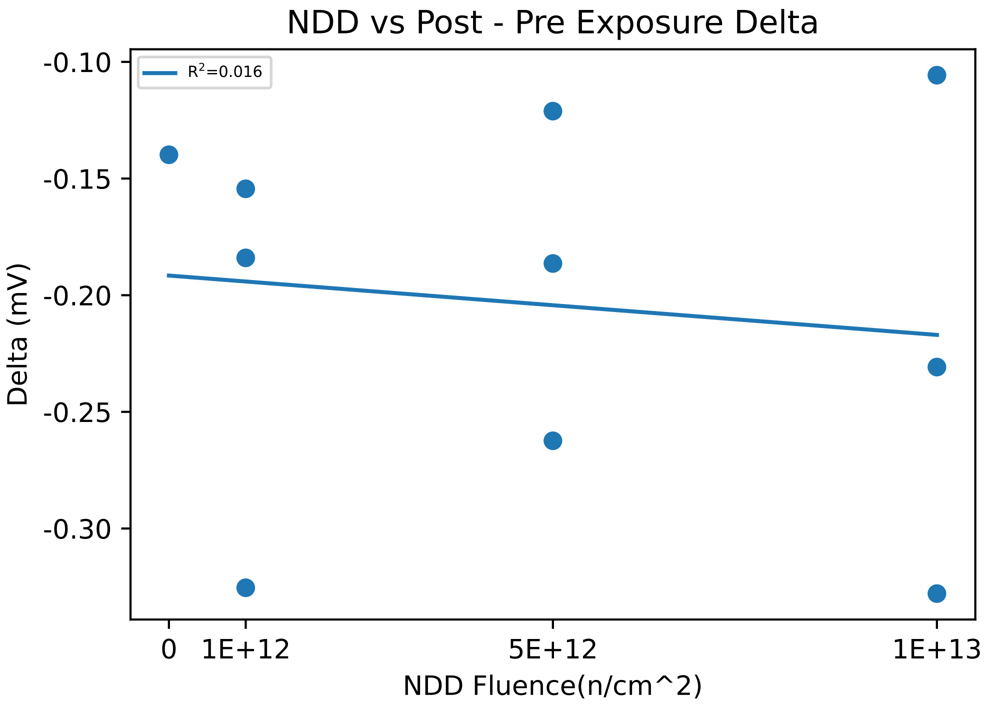
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5576	0.9903	0.4327
504	1e+12	NDD	0.6763	1.0371	0.3608
505	1e+12	NDD	0.4202	0.9997	0.5795
506	5e+12	NDD	0.4733	0.9684	0.4951
507	5e+12	NDD	0.5919	0.9435	0.3516
508	5e+12	NDD	0.542	1.0246	0.4826
509	1e+13	NDD	0.3952	1.0777	0.6825
510	1e+13	NDD	0.567	0.956	0.389
511	1e+13	NDD	0.4608	0.9809	0.5201
512	0	Correlation	0.4545	0.8967	0.4422

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4545	0.4545	0.4545		0.8967	0.8967	0.8967		0.4422	0.4422	0.4422	
1e+12	0.4202	0.55137	0.6763	0.12816	0.9903	1.009	1.0371	0.024757	0.3608	0.45767	0.5795	0.11147
5e+12	0.4733	0.53573	0.5919	0.059548	0.9435	0.97883	1.0246	0.041544	0.3516	0.4431	0.4951	0.079487
1e+13	0.3952	0.47433	0.567	0.086696	0.956	1.0049	1.0777	0.064292	0.389	0.53053	0.6825	0.14703

Device Test: 23.14 PWRGD_OUTPUT_LOW(VOL|2mA/PWRGD/5////@PWRGD_OUTPUT_LOW)





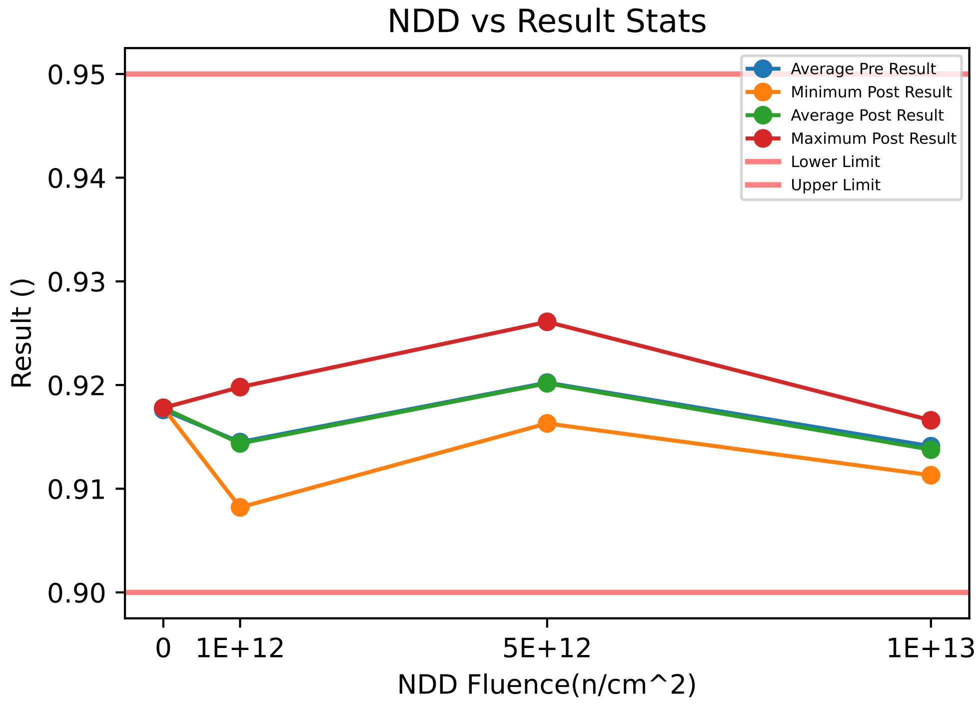
Test Results (Upper Limit = 300.0 (mV))

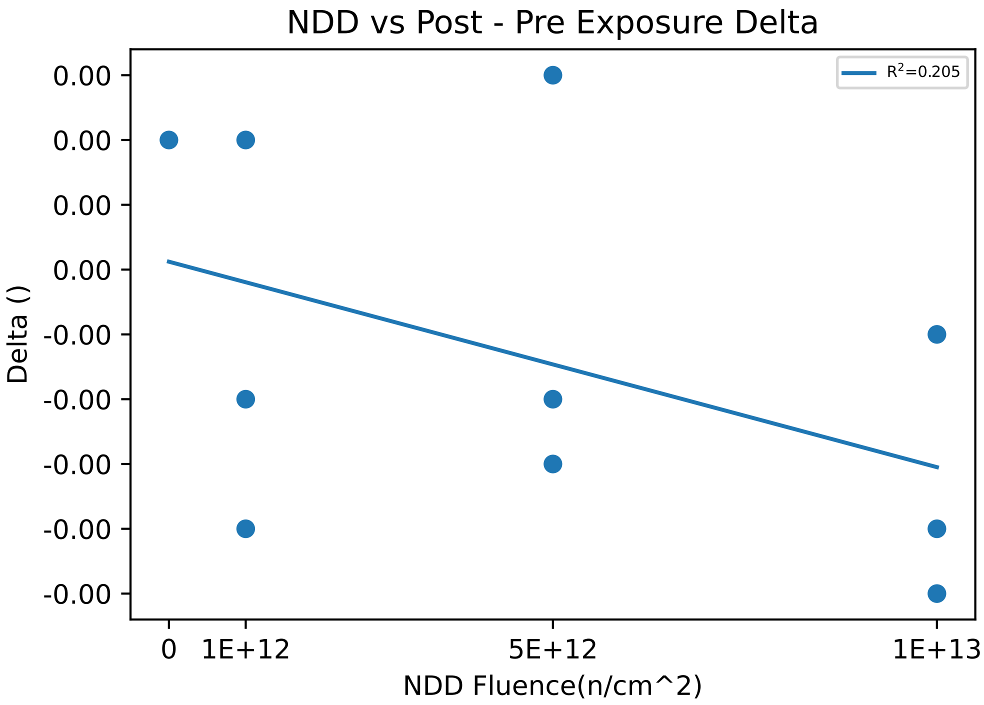
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	245.18	245.03	-0.1544
504	1e+12	NDD	243.81	243.49	-0.3254
505	1e+12	NDD	242.09	241.91	-0.184
506	5e+12	NDD	241.34	241.22	-0.1211
507	5e+12	NDD	246.65	246.47	-0.1864
508	5e+12	NDD	242.89	242.63	-0.2624
509	1e+13	NDD	248.43	248.11	-0.3279
510	1e+13	NDD	241.58	241.47	-0.1057
511	1e+13	NDD	242.2	241.97	-0.2308
512	0	Correlation	247.07	246.93	-0.1398

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	247.07	247.07	247.07		246.93	246.93	246.93		-0.1398	-0.1398	-0.1398	
1e+12	242.09	243.7	245.18	1.5494	241.91	243.47	245.03	1.561	-0.3254	-0.22127	-0.1544	0.091388
5e+12	241.34	243.63	246.65	2.7313	241.22	243.44	246.47	2.7151	-0.2624	-0.18997	-0.1211	0.070717
1e+13	241.58	244.07	248.43	3.7912	241.47	243.85	248.11	3.6945	-0.3279	-0.22147	-0.1057	0.11139

Device Test: 23.16 VSENSE_VTH_FALLING_FAULT(THRESHOLD|FALL/PWRGD/12////@VSENSE_VTH_FALLING_FAULT)





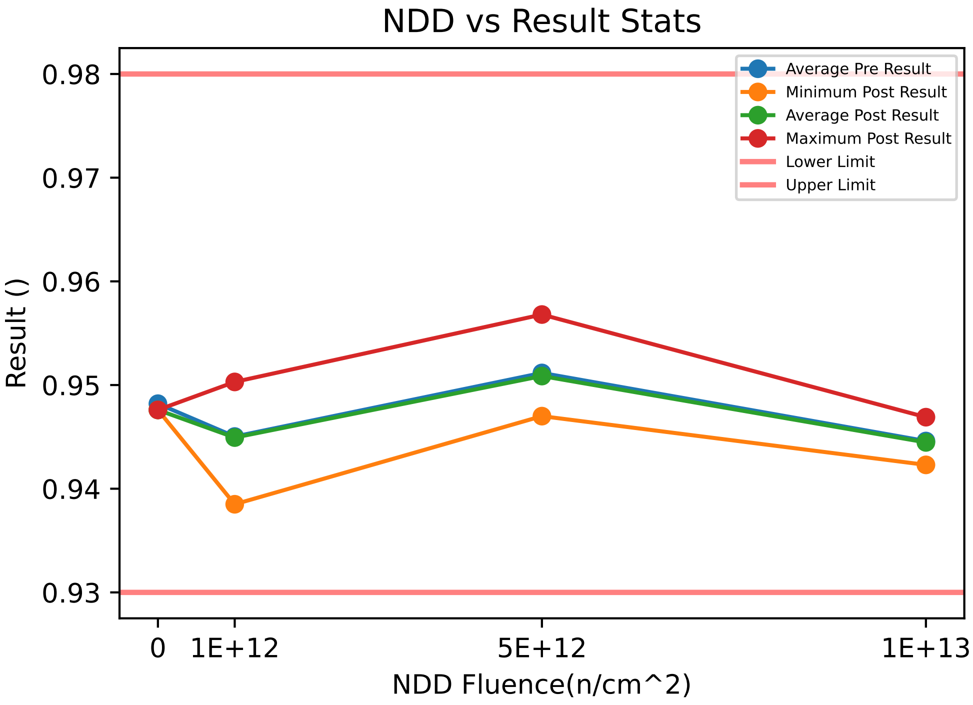
Test Results (Lower Limit = 0.9, Upper Limit = 0.95 ())

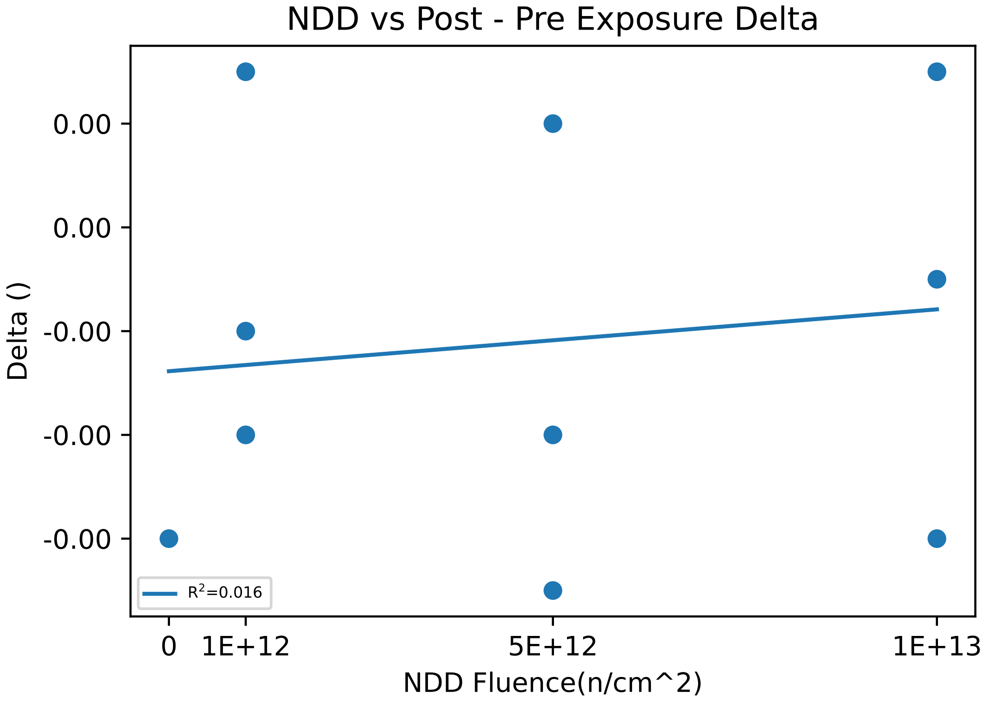
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.92	0.9198	-0.0002
504	1e+12	NDD	0.9086	0.9082	-0.0004
505	1e+12	NDD	0.9149	0.9151	0.0002
506	5e+12	NDD	0.9183	0.9181	-0.0002
507	5e+12	NDD	0.9166	0.9163	-0.0003
508	5e+12	NDD	0.9258	0.9261	0.0003
509	1e+13	NDD	0.9117	0.9113	-0.0004
510	1e+13	NDD	0.9167	0.9166	-0.0001
511	1e+13	NDD	0.9139	0.9134	-0.0005
512	0	Correlation	0.9176	0.9178	0.0002

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9176	0.9176	0.9176		0.9178	0.9178	0.9178		0.0002	0.0002	0.0002	
1e+12	0.9086	0.9145	0.92	0.0057105	0.9082	0.91437	0.9198	0.0058347	-0.0004	-0.00013333	0.0002	0.00030551
5e+12	0.9166	0.92023	0.9258	0.0048952	0.9163	0.92017	0.9261	0.0052166	-0.0003	-6.6667e-05	0.0003	0.00032146
1e+13	0.9117	0.9141	0.9167	0.002506	0.9113	0.91377	0.9166	0.002669	-0.0005	-0.00033333	-0.0001	0.00020817

Device Test: 23.17 VSENSE_VTH_RISING_GOOD(THRESHOLD|RISE/PWRGD/12////@VSENSE_VTH_RISING_GOOD)





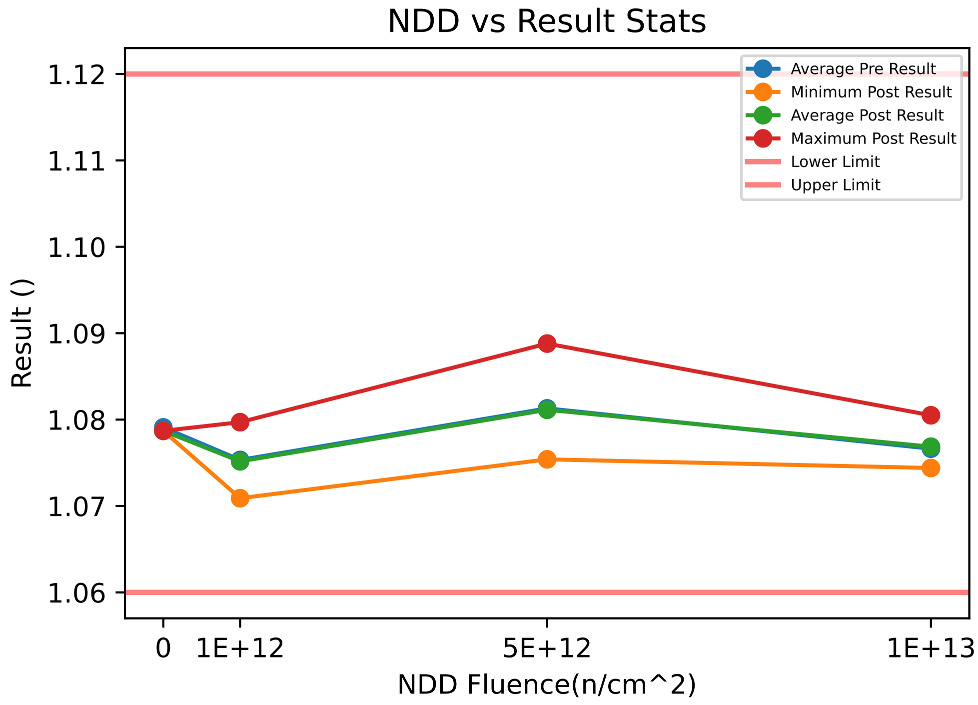
Test Results (Lower Limit = 0.93, Upper Limit = 0.98 ())

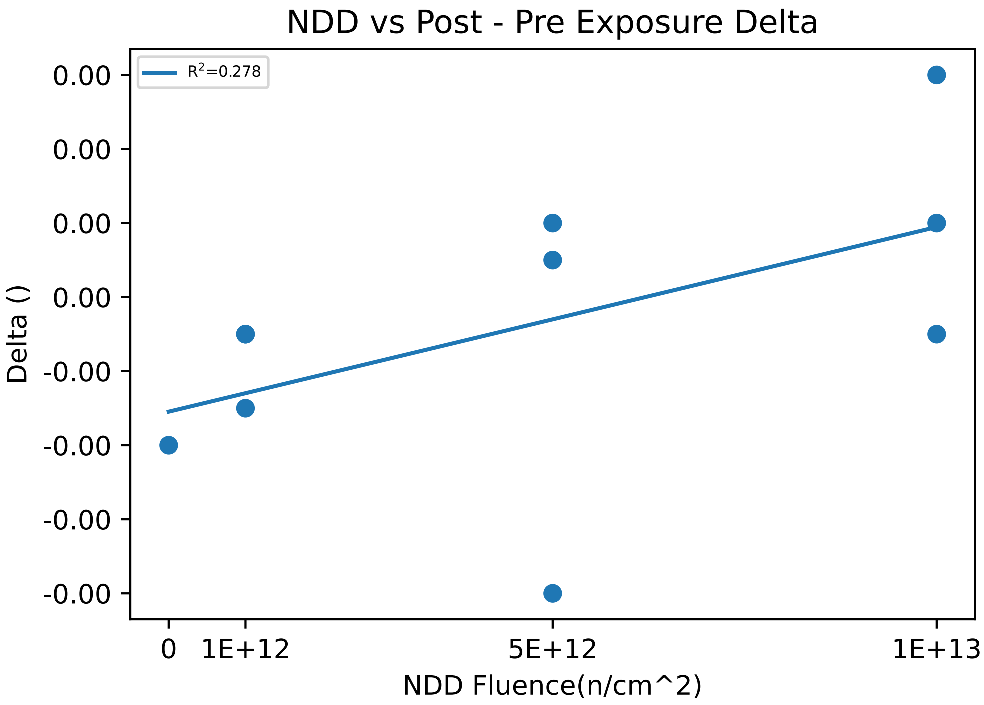
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.9505	0.9503	-0.0002
504	1e+12	NDD	0.9389	0.9385	-0.0004
505	1e+12	NDD	0.9457	0.946	0.0003
506	5e+12	NDD	0.9492	0.9488	-0.0004
507	5e+12	NDD	0.9477	0.947	-0.0007
508	5e+12	NDD	0.9566	0.9568	0.0002
509	1e+13	NDD	0.942	0.9423	0.0003
510	1e+13	NDD	0.9475	0.9469	-0.0006
511	1e+13	NDD	0.9443	0.9442	-0.0001
512	0	Correlation	0.9482	0.9476	-0.0006

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9482	0.9482	0.9482		0.9476	0.9476	0.9476		-0.0006	-0.0006	-0.0006	
1e+12	0.9389	0.94503	0.9505	0.0058287	0.9385	0.94493	0.9503	0.0059719	-0.0004	-0.0001	0.0003	0.00036056
5e+12	0.9477	0.95117	0.9566	0.0047648	0.947	0.95087	0.9568	0.0052166	-0.0007	-0.0003	0.0002	0.00045826
1e+13	0.942	0.9446	0.9475	0.0027622	0.9423	0.94447	0.9469	0.0023116	-0.0006	-0.00013333	0.0003	0.00045092

Device Test: 23.18 VSENSE_VTH_RISING_FAULT(THRESHOLD|RISE/PWRGD/12////@VSENSE_VTH_RISING_FAULT)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

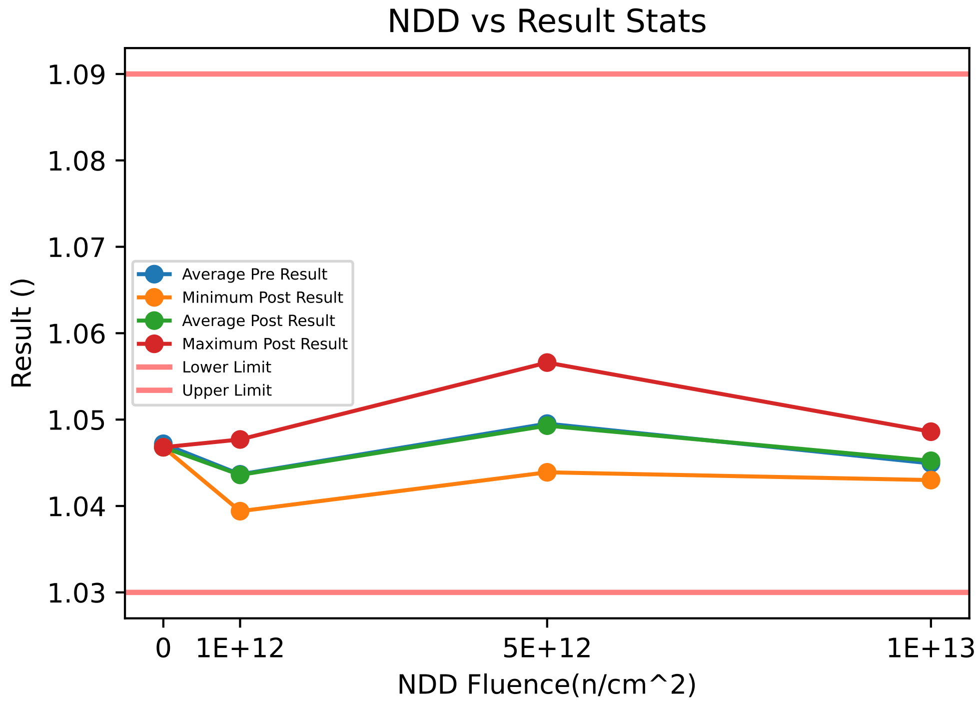
Test Results (Lower Limit = 1.06, Upper Limit = 1.12 ())

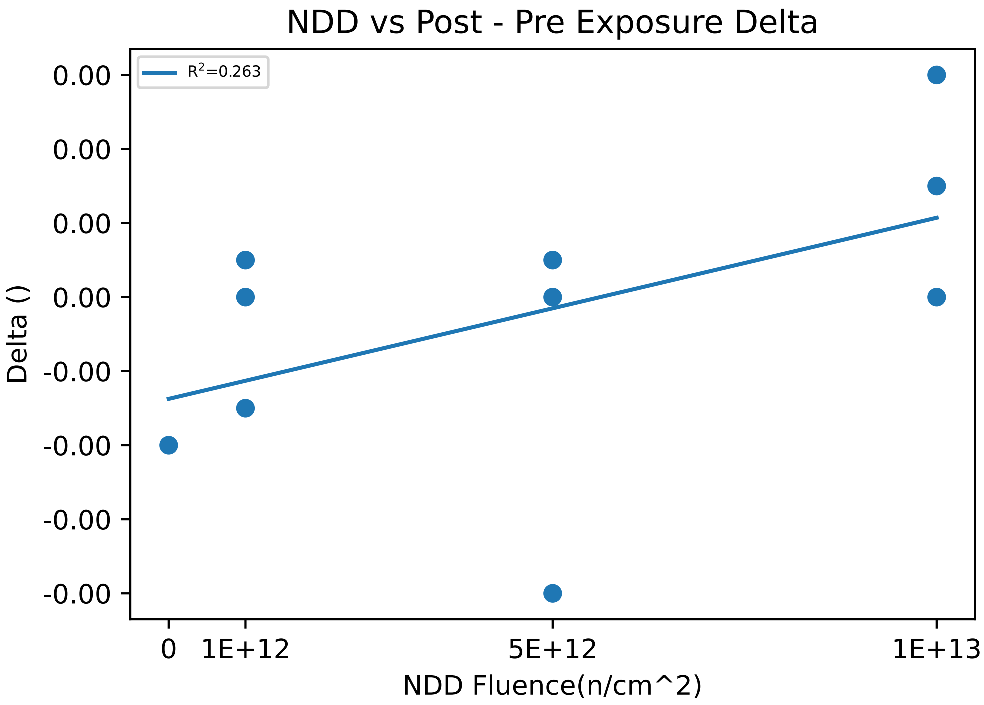
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.0798	1.0797	-0.0001
504	1e+12	NDD	1.0712	1.0709	-0.0003
505	1e+12	NDD	1.075	1.0749	-0.0001
506	5e+12	NDD	1.0791	1.0792	0.0001
507	5e+12	NDD	1.0762	1.0754	-0.0008
508	5e+12	NDD	1.0886	1.0888	0.0002
509	1e+13	NDD	1.0745	1.0744	-0.0001
510	1e+13	NDD	1.0799	1.0805	0.0006
511	1e+13	NDD	1.0755	1.0757	0.0002
512	0	Correlation	1.0791	1.0787	-0.0004

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0791	1.0791	1.0791		1.0787	1.0787	1.0787		-0.0004	-0.0004	-0.0004	
1e+12	1.0712	1.0753	1.0798	0.0043097	1.0709	1.0752	1.0797	0.0044061	-0.0003	-0.00016667	-0.0001	0.00011547
5e+12	1.0762	1.0813	1.0886	0.0064861	1.0754	1.0811	1.0888	0.006906	-0.0008	-0.00016667	0.0002	0.00055076
1e+13	1.0745	1.0766	1.0799	0.0028729	1.0744	1.0769	1.0805	0.003213	-0.0001	0.00023333	0.0006	0.00035119

Device Test: 23.19 VSENSE_VTH_FALLING_GOOD(THRESHOLD|FALL/PWRGD/12////@VSENSE_VTH_FALLING_GOOD)





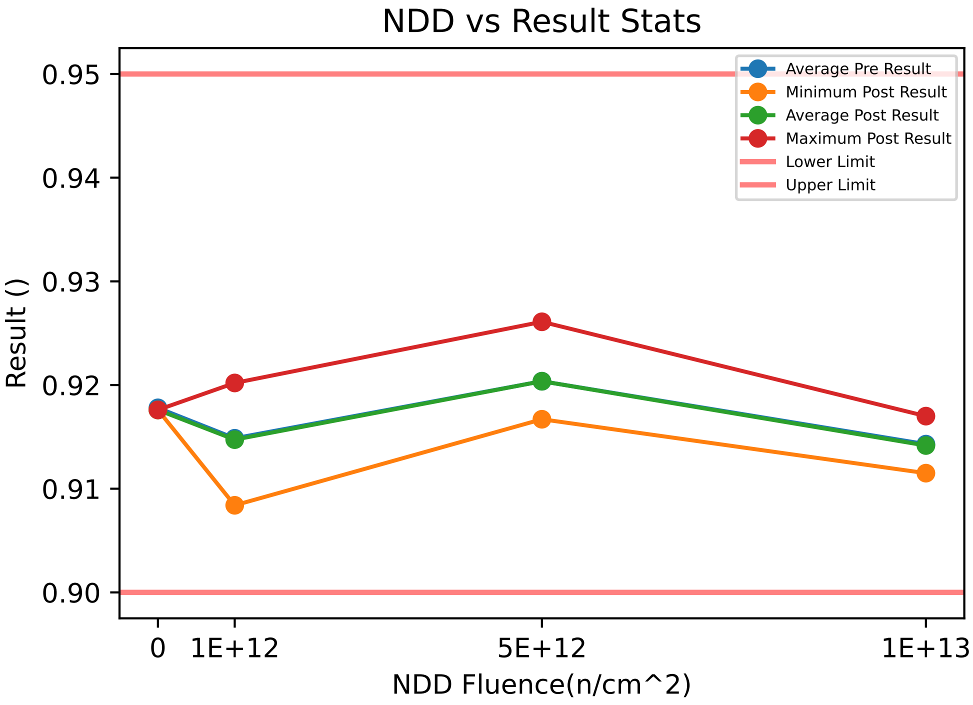
Test Results (Lower Limit = 1.03, Upper Limit = 1.09 ())

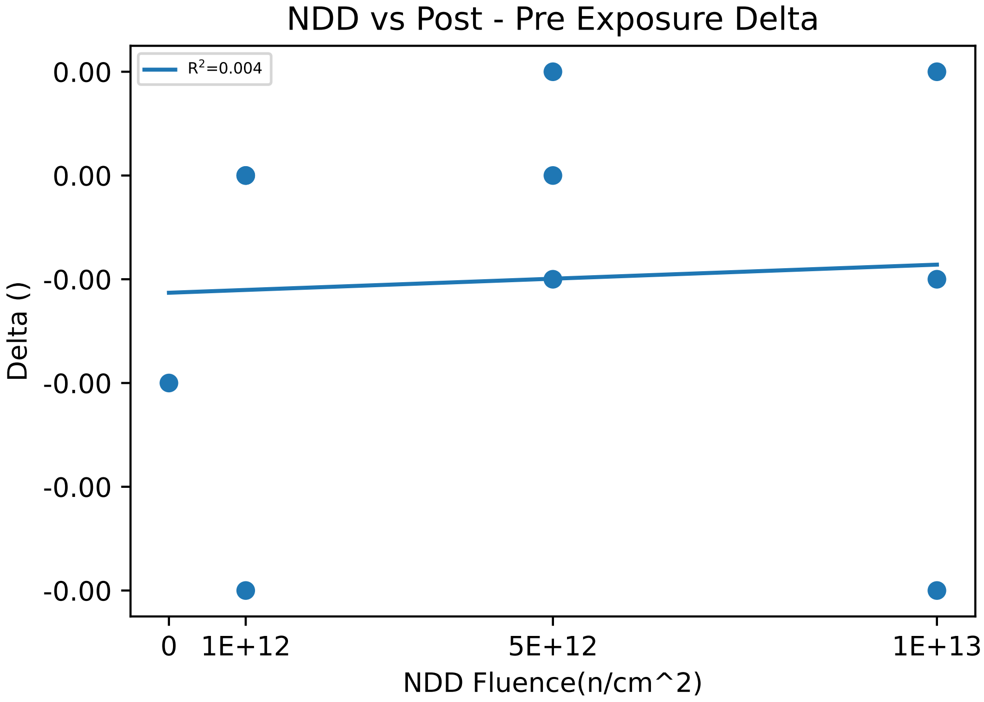
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.0477	1.0477	0
504	1e+12	NDD	1.0397	1.0394	-0.0003
505	1e+12	NDD	1.0436	1.0437	0.0001
506	5e+12	NDD	1.0474	1.0474	0
507	5e+12	NDD	1.0447	1.0439	-0.0008
508	5e+12	NDD	1.0565	1.0566	0.0001
509	1e+13	NDD	1.043	1.043	0
510	1e+13	NDD	1.048	1.0486	0.0006
511	1e+13	NDD	1.0438	1.0441	0.0003
512	0	Correlation	1.0472	1.0468	-0.0004

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0472	1.0472	1.0472		1.0468	1.0468	1.0468		-0.0004	-0.0004	-0.0004	
1e+12	1.0397	1.0437	1.0477	0.0040004	1.0394	1.0436	1.0477	0.0041509	-0.0003	-6.6667e-05	0.0001	0.00020817
5e+12	1.0447	1.0495	1.0565	0.0061825	1.0439	1.0493	1.0566	0.0065597	-0.0008	-0.00023333	0.0001	0.00049329
1e+13	1.043	1.0449	1.048	0.0026858	1.043	1.0452	1.0486	0.002967	0	0.0003	0.0006	0.0003

Device Test: 23.2 VSENSE_VTH_FALLING_FAULT(THRESHOLD|FALL/PWRGD/4.5////@VSENSE_VTH_FALLING_FAULT)





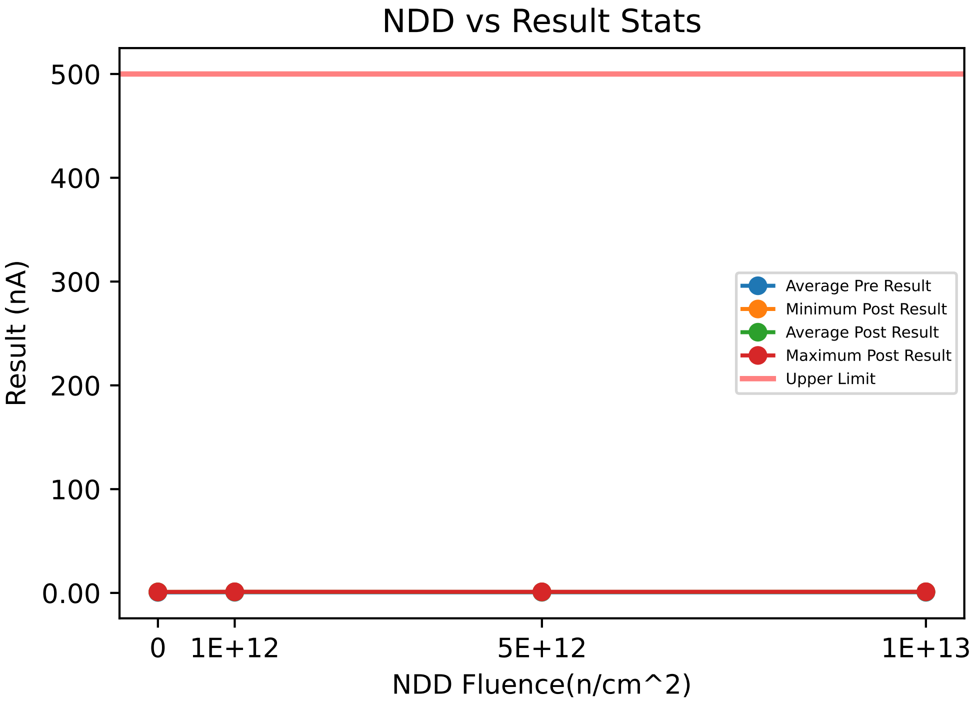
Test Results (Lower Limit = 0.9, Upper Limit = 0.95 ())

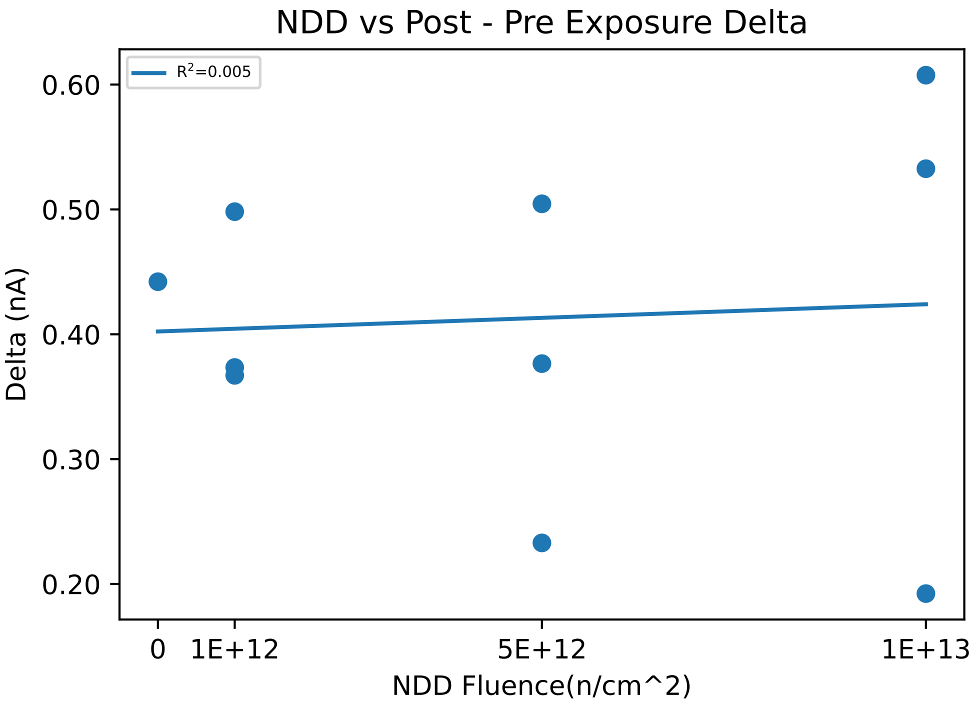
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.9202	0.9202	0
504	1e+12	NDD	0.9088	0.9084	-0.0004
505	1e+12	NDD	0.9156	0.9156	0
506	5e+12	NDD	0.9183	0.9183	0
507	5e+12	NDD	0.9168	0.9167	-0.0001
508	5e+12	NDD	0.926	0.9261	0.0001
509	1e+13	NDD	0.9119	0.9115	-0.0004
510	1e+13	NDD	0.9169	0.917	0.0001
511	1e+13	NDD	0.9141	0.914	-0.0001
512	0	Correlation	0.9178	0.9176	-0.0002

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9178	0.9178	0.9178		0.9176	0.9176	0.9176		-0.0002	-0.0002	-0.0002	
1e+12	0.9088	0.91487	0.9202	0.0057353	0.9084	0.91473	0.9202	0.0059475	-0.0004	-0.00013333	0	0.00023094
5e+12	0.9168	0.92037	0.926	0.0049359	0.9167	0.92037	0.9261	0.0050292	-0.0001	0	0.0001	0.0001
1e+13	0.9119	0.9143	0.9169	0.002506	0.9115	0.91417	0.917	0.0027538	-0.0004	-0.00013333	0.0001	0.00025166

Device Test: 23.20 PWRGD_OUTPUT_HIGH_LEAK(LEAK|MAX/PWRGD/12////@PWRGD_OUTPUT_HIGH_LEAK)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

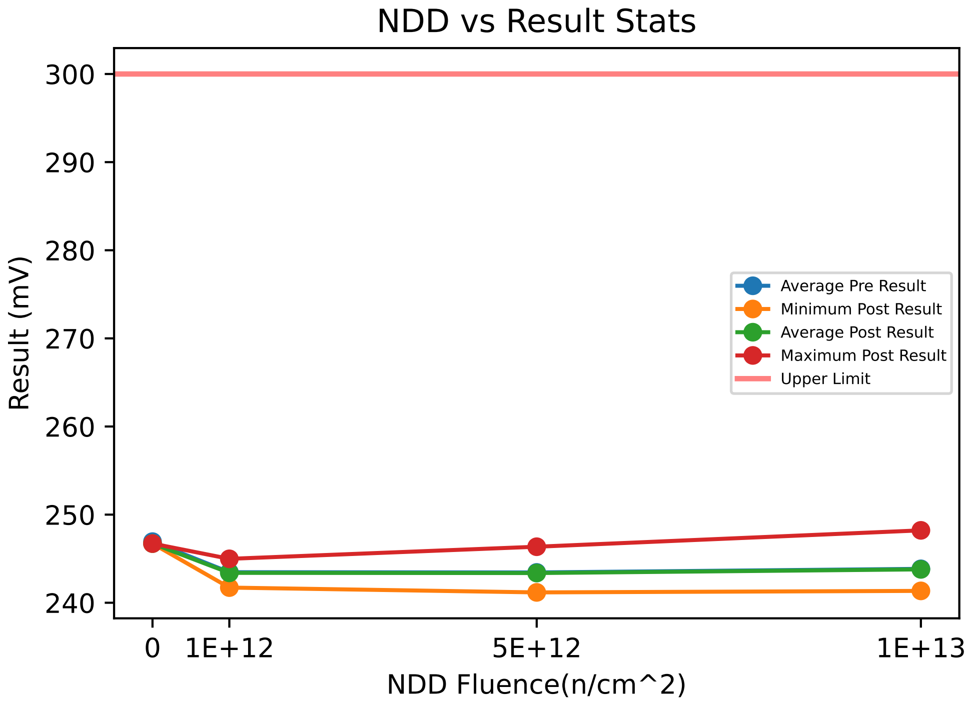
Test Results (Upper Limit = 500.0 (nA))

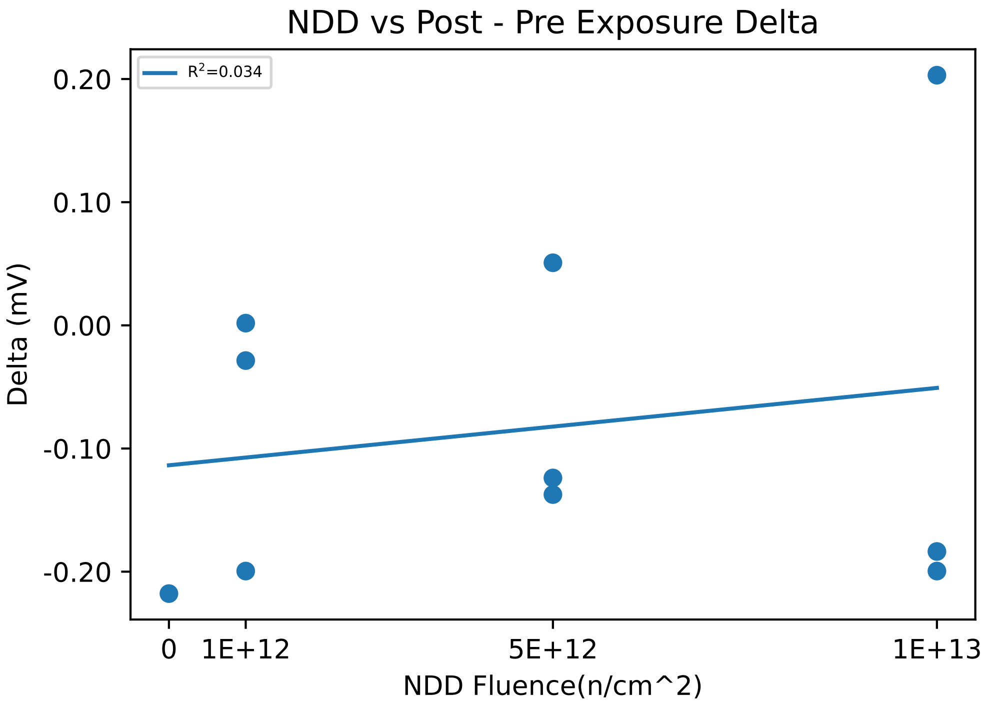
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6263	0.9934	0.3671
504	1e+12	NDD	0.5888	0.9622	0.3734
505	1e+12	NDD	0.6013	1.0995	0.4982
506	5e+12	NDD	0.5545	1.059	0.5045
507	5e+12	NDD	0.6388	0.8717	0.2329
508	5e+12	NDD	0.5982	0.9747	0.3765
509	1e+13	NDD	0.5076	1.0402	0.5326
510	1e+13	NDD	0.8074	0.9997	0.1923
511	1e+13	NDD	0.4983	1.1058	0.6075
512	0	Correlation	0.5076	0.9497	0.4421

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5076	0.5076	0.5076		0.9497	0.9497	0.9497		0.4421	0.4421	0.4421	
1e+12	0.5888	0.60547	0.6263	0.019094	0.9622	1.0184	1.0995	0.071974	0.3671	0.4129	0.4982	0.073939
5e+12	0.5545	0.59717	0.6388	0.042159	0.8717	0.96847	1.059	0.093805	0.2329	0.3713	0.5045	0.13587
1e+13	0.4983	0.60443	0.8074	0.17584	0.9997	1.0486	1.1058	0.053543	0.1923	0.44413	0.6075	0.22129

Device Test: 23.21 PWRGD_OUTPUT_LOW(VOL|2mA/PWRGD/12////@PWRGD_OUTPUT_LOW)





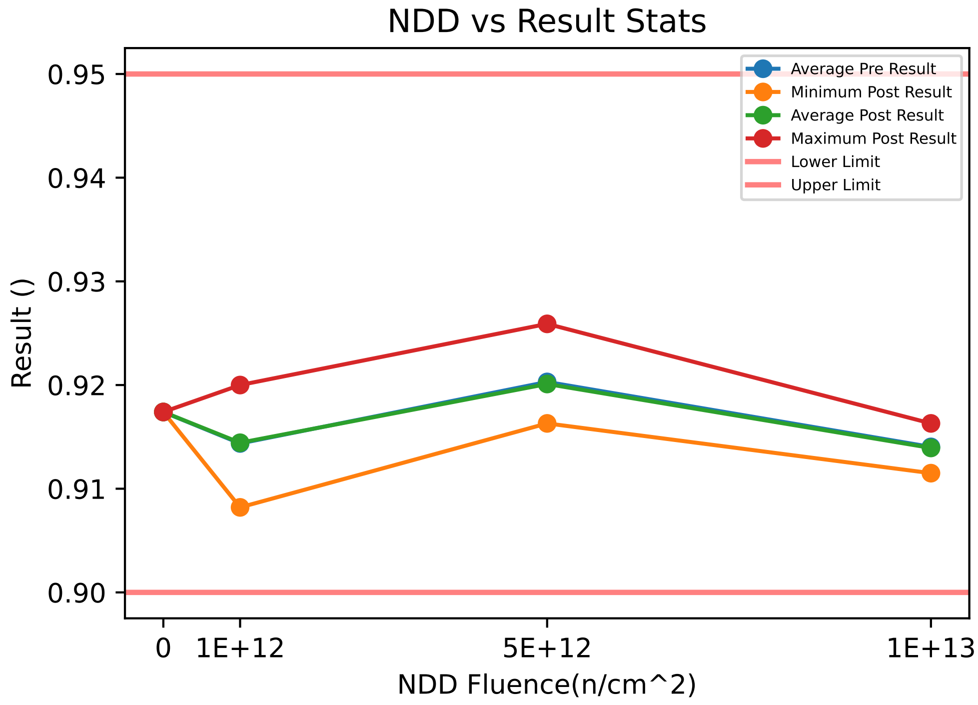
Test Results (Upper Limit = 300.0 (mV))

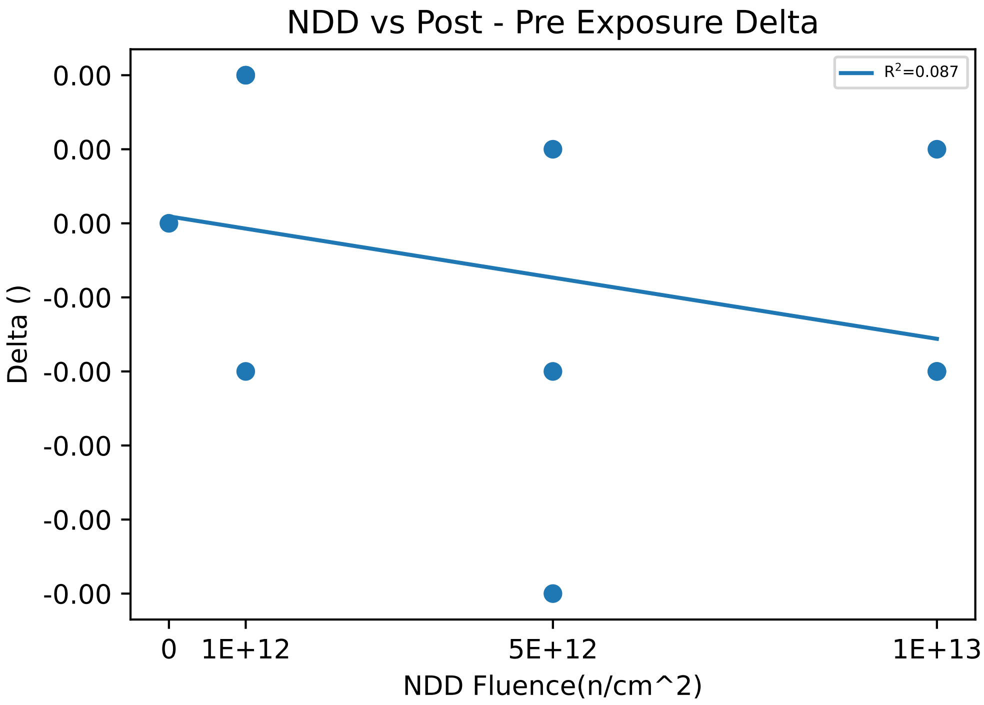
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	244.98	244.98	0.0018
504	1e+12	NDD	243.5	243.47	-0.0286
505	1e+12	NDD	241.92	241.72	-0.1995
506	5e+12	NDD	241.12	241.17	0.0508
507	5e+12	NDD	246.48	246.36	-0.1239
508	5e+12	NDD	242.72	242.58	-0.1374
509	1e+13	NDD	248.01	248.21	0.2031
510	1e+13	NDD	241.53	241.35	-0.1836
511	1e+13	NDD	242	241.8	-0.1995
512	0	Correlation	246.93	246.72	-0.2178

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	246.93	246.93	246.93		246.72	246.72	246.72		-0.2178	-0.2178	-0.2178	
1e+12	241.92	243.47	244.98	1.5308	241.72	243.39	244.98	1.6326	-0.1995	-0.075433	0.0018	0.10851
5e+12	241.12	243.44	246.48	2.7509	241.17	243.37	246.36	2.6802	-0.1374	-0.070167	0.0508	0.10498
1e+13	241.53	243.85	248.01	3.6145	241.35	243.79	248.21	3.8415	-0.1995	-0.06	0.2031	0.22799

Device Test: 23.23 VSENSE_VTH_FALLING_FAULT(THRESHOLD|FALL/PWRGD/14////@VSENSE_VTH_FALLING_FAULT)





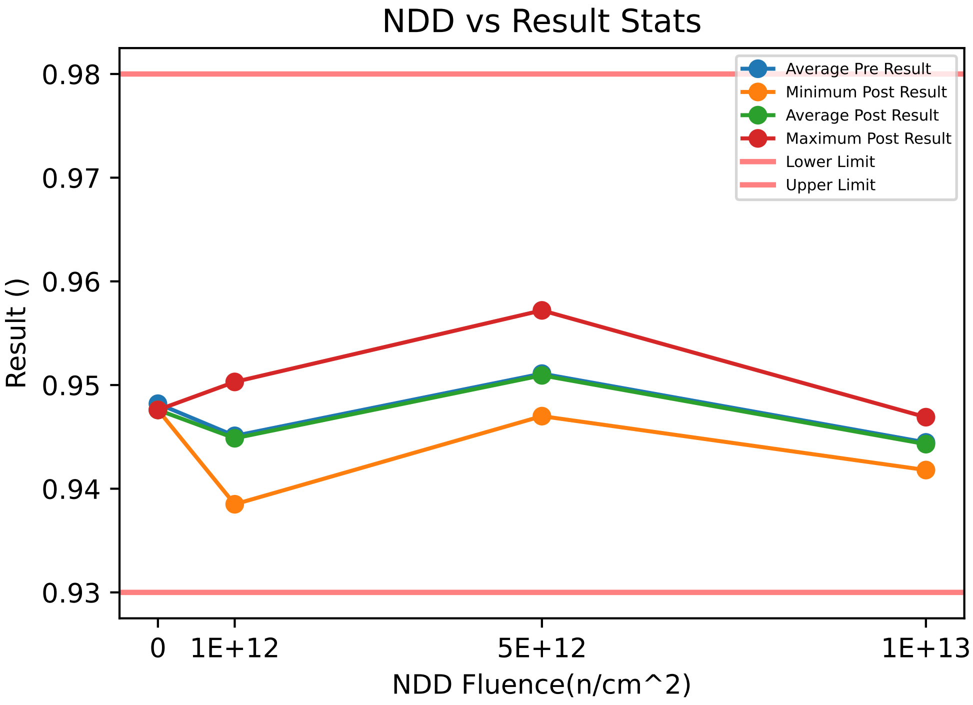
Test Results (Lower Limit = 0.9, Upper Limit = 0.95 ())

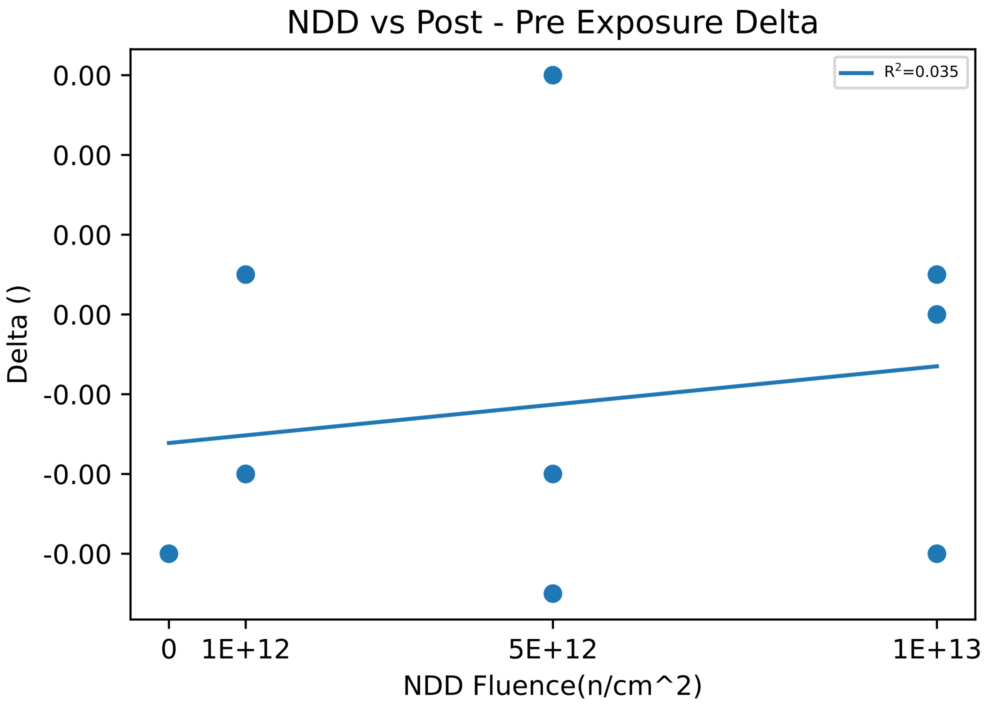
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.9198	0.92	0.0002
504	1e+12	NDD	0.9084	0.9082	-0.0002
505	1e+12	NDD	0.9149	0.9151	0.0002
506	5e+12	NDD	0.9183	0.9181	-0.0002
507	5e+12	NDD	0.9168	0.9163	-0.0005
508	5e+12	NDD	0.9258	0.9259	0.0001
509	1e+13	NDD	0.9117	0.9115	-0.0002
510	1e+13	NDD	0.9165	0.9163	-0.0002
511	1e+13	NDD	0.9139	0.914	0.0001
512	0	Correlation	0.9174	0.9174	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9174	0.9174	0.9174		0.9174	0.9174	0.9174		0	0	0	
1e+12	0.9084	0.91437	0.9198	0.0057187	0.9082	0.91443	0.92	0.0059282	-0.0002	6.6667e-05	0.0002	0.00023094
5e+12	0.9168	0.9203	0.9258	0.0048218	0.9163	0.9201	0.9259	0.0051029	-0.0005	-0.0002	0.0001	0.0003
1e+13	0.9117	0.91403	0.9165	0.0024028	0.9115	0.91393	0.9163	0.0024007	-0.0002	-0.0001	0.0001	0.00017321

Device Test: 23.24 VSENSE_VTH_RISING_GOOD(THRESHOLD|RISE/PWRGD/14////@VSENSE_VTH_RISING_GOOD)





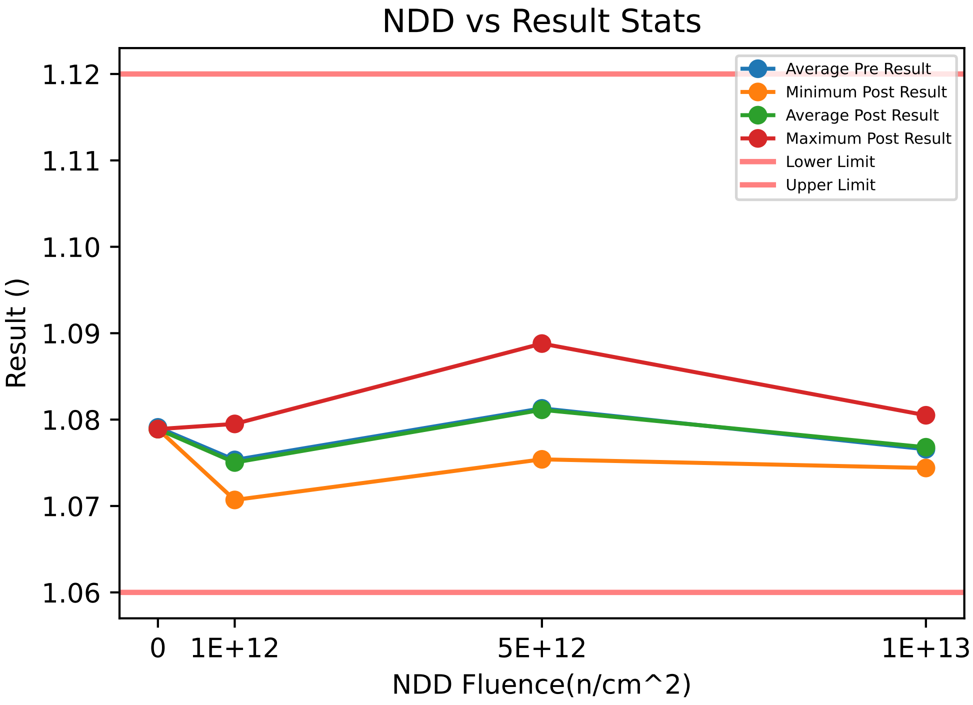
Test Results (Lower Limit = 0.93, Upper Limit = 0.98 ())

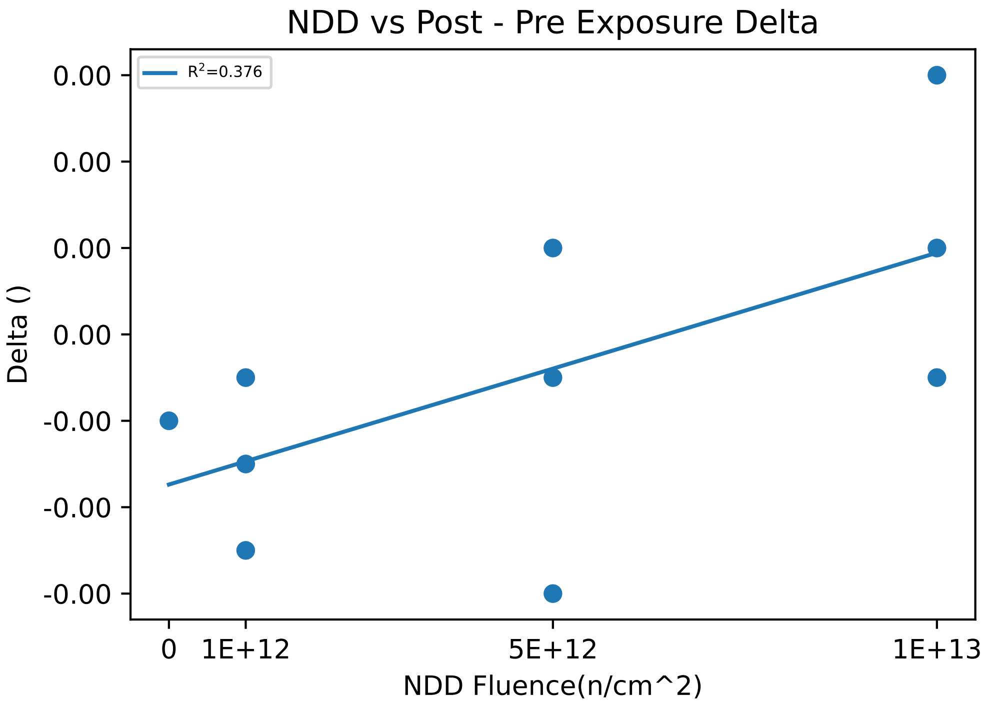
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.9507	0.9503	-0.0004
504	1e+12	NDD	0.9389	0.9385	-0.0004
505	1e+12	NDD	0.9457	0.9458	0.0001
506	5e+12	NDD	0.949	0.9486	-0.0004
507	5e+12	NDD	0.9477	0.947	-0.0007
508	5e+12	NDD	0.9566	0.9572	0.0006
509	1e+13	NDD	0.9418	0.9418	0
510	1e+13	NDD	0.9475	0.9469	-0.0006
511	1e+13	NDD	0.9441	0.9442	0.0001
512	0	Correlation	0.9482	0.9476	-0.0006

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9482	0.9482	0.9482		0.9476	0.9476	0.9476		-0.0006	-0.0006	-0.0006	
1e+12	0.9389	0.9451	0.9507	0.0059228	0.9385	0.94487	0.9503	0.0059551	-0.0004	-0.00023333	0.0001	0.00028868
5e+12	0.9477	0.9511	0.9566	0.0048073	0.947	0.95093	0.9572	0.0054857	-0.0007	-0.00016667	0.0006	0.00068069
1e+13	0.9418	0.94447	0.9475	0.0028676	0.9418	0.9443	0.9469	0.0025515	-0.0006	-0.00016667	0.0001	0.00037859

Device Test: 23.25 VSENSE_VTH_RISING_FAULT(THRESHOLD|RISE/PWRGD/14////@VSENSE_VTH_RISING_FAULT)





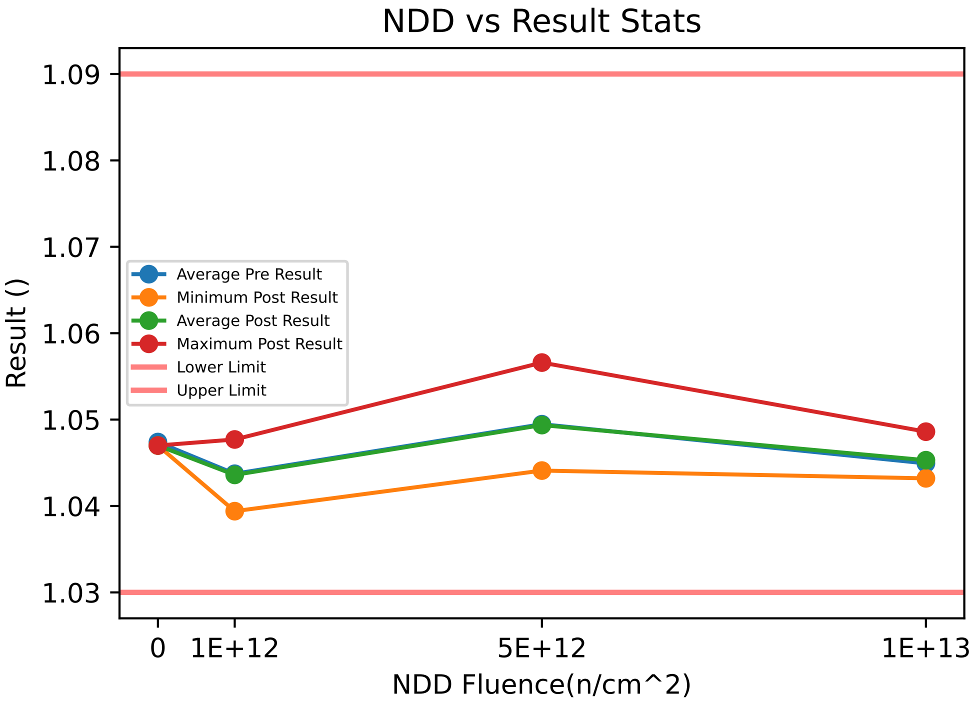
Test Results (Lower Limit = 1.06, Upper Limit = 1.12 ())

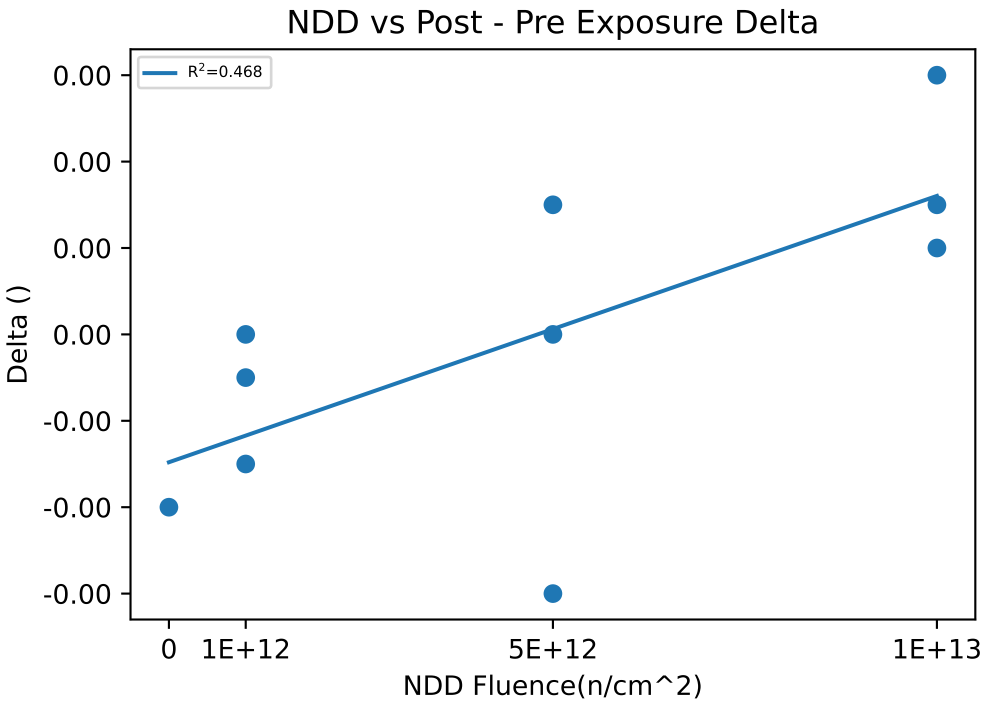
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.0798	1.0795	-0.0003
504	1e+12	NDD	1.0712	1.0707	-0.0005
505	1e+12	NDD	1.075	1.0749	-0.0001
506	5e+12	NDD	1.0793	1.0792	-0.0001
507	5e+12	NDD	1.076	1.0754	-0.0006
508	5e+12	NDD	1.0886	1.0888	0.0002
509	1e+13	NDD	1.0745	1.0744	-0.0001
510	1e+13	NDD	1.0799	1.0805	0.0006
511	1e+13	NDD	1.0753	1.0755	0.0002
512	0	Correlation	1.0791	1.0789	-0.0002

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0791	1.0791	1.0791		1.0789	1.0789	1.0789		-0.0002	-0.0002	-0.0002	
1e+12	1.0712	1.0753	1.0798	0.0043097	1.0707	1.075	1.0795	0.0044015	-0.0005	-0.0003	-0.0001	0.0002
5e+12	1.076	1.0813	1.0886	0.0065338	1.0754	1.0811	1.0888	0.006906	-0.0006	-0.00016667	0.0002	0.00040415
1e+13	1.0745	1.0766	1.0799	0.0029143	1.0744	1.0768	1.0805	0.0032512	-0.0001	0.00023333	0.0006	0.00035119

Device Test: 23.26 VSENSE_VTH_FALLING_GOOD(THRESHOLD|FALL/PWRGD/14////@VSENSE_VTH_FALLING_GOOD)





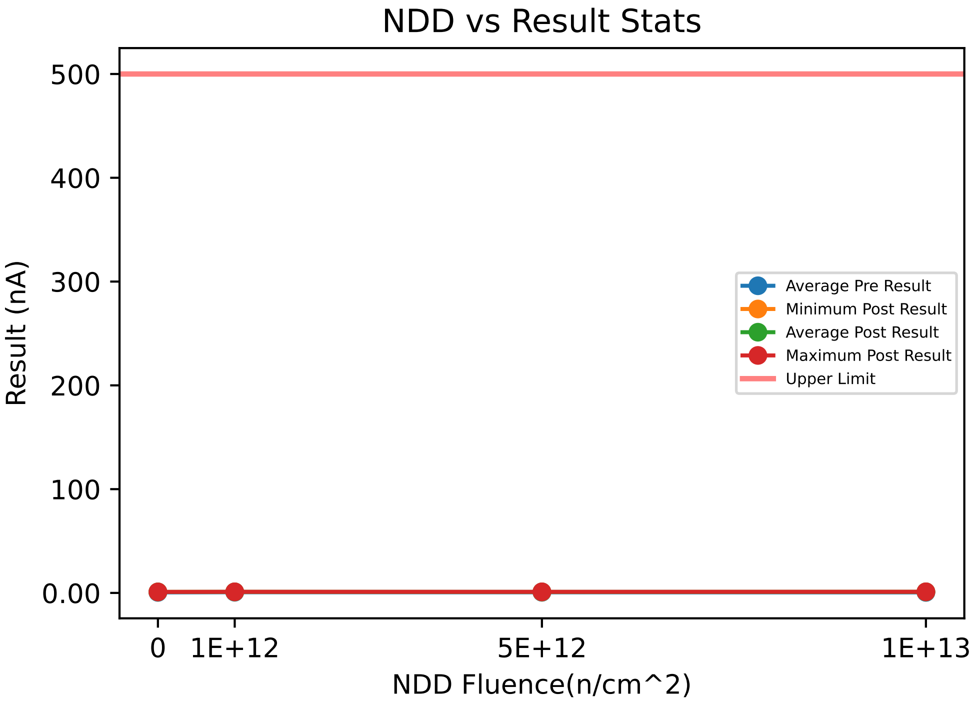
Test Results (Lower Limit = 1.03, Upper Limit = 1.09 ())

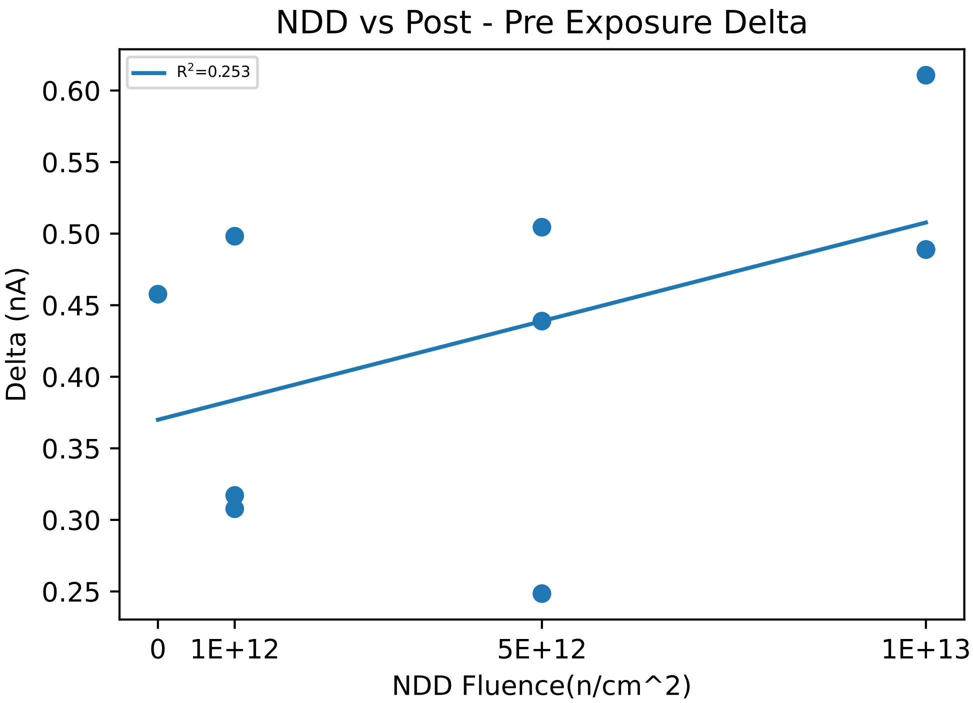
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.0477	1.0477	0
504	1e+12	NDD	1.0397	1.0394	-0.0003
505	1e+12	NDD	1.0438	1.0437	-0.0001
506	5e+12	NDD	1.0474	1.0474	0
507	5e+12	NDD	1.0447	1.0441	-0.0006
508	5e+12	NDD	1.0563	1.0566	0.0003
509	1e+13	NDD	1.043	1.0432	0.0002
510	1e+13	NDD	1.048	1.0486	0.0006
511	1e+13	NDD	1.0438	1.0441	0.0003
512	0	Correlation	1.0474	1.047	-0.0004

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0474	1.0474	1.0474		1.047	1.047	1.047		-0.0004	-0.0004	-0.0004	
1e+12	1.0397	1.0437	1.0477	0.0040004	1.0394	1.0436	1.0477	0.0041509	-0.0003	-0.00013333	0	0.00015275
5e+12	1.0447	1.0495	1.0563	0.0060699	1.0441	1.0494	1.0566	0.0064779	-0.0006	-0.0001	0.0003	0.00045826
1e+13	1.043	1.0449	1.048	0.0026858	1.0432	1.0453	1.0486	0.0028931	0.0002	0.00036667	0.0006	0.00020817

Device Test: 23.27 PWRGD_OUTPUT_HIGH_LEAK(LEAK|MAX/PWRGD/14////@PWRGD_OUTPUT_HIGH_LEAK)





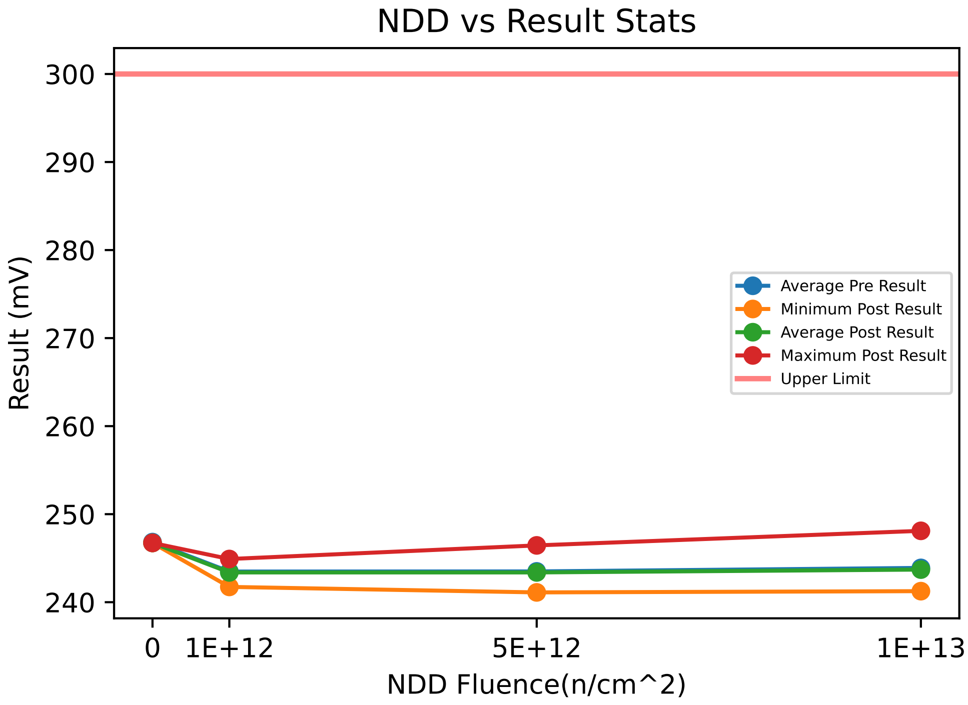
Test Results (Upper Limit = 500.0 (nA))

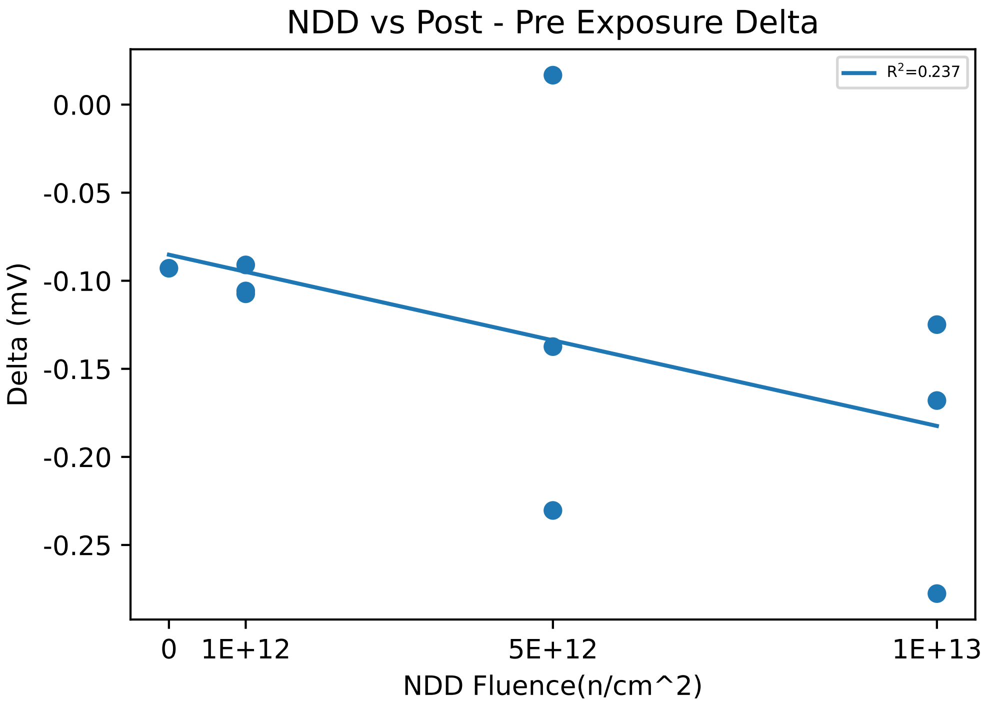
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6856	0.9934	0.3078
504	1e+12	NDD	0.695	1.0121	0.3171
505	1e+12	NDD	0.5826	1.0808	0.4982
506	5e+12	NDD	0.5451	1.0496	0.5045
507	5e+12	NDD	0.6201	0.8686	0.2485
508	5e+12	NDD	0.6294	1.0683	0.4389
509	1e+13	NDD	0.4077	1.0184	0.6107
510	1e+13	NDD	0.6138	1.1027	0.4889
511	1e+13	NDD	0.5357	1.0246	0.4889
512	0	Correlation	0.5139	0.9716	0.4577

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5139	0.5139	0.5139		0.9716	0.9716	0.9716		0.4577	0.4577	0.4577	
1e+12	0.5826	0.6544	0.695	0.062358	0.9934	1.0288	1.0808	0.046022	0.3078	0.37437	0.4982	0.10734
5e+12	0.5451	0.5982	0.6294	0.04622	0.8686	0.9955	1.0683	0.1103	0.2485	0.3973	0.5045	0.13297
1e+13	0.4077	0.51907	0.6138	0.10405	1.0184	1.0486	1.1027	0.046983	0.4889	0.5295	0.6107	0.070321

Device Test: 23.28 PWRGD_OUTPUT_LOW(VOL|2mA/PWRGD/14////@PWRGD_OUTPUT_LOW)





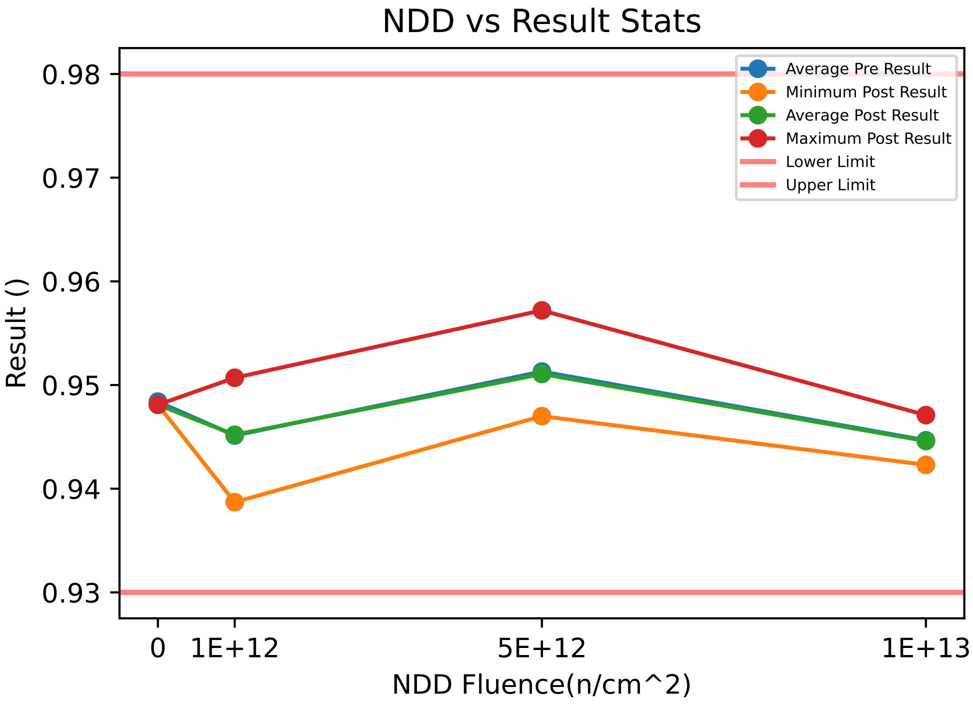
Test Results (Upper Limit = 300.0 (mV))

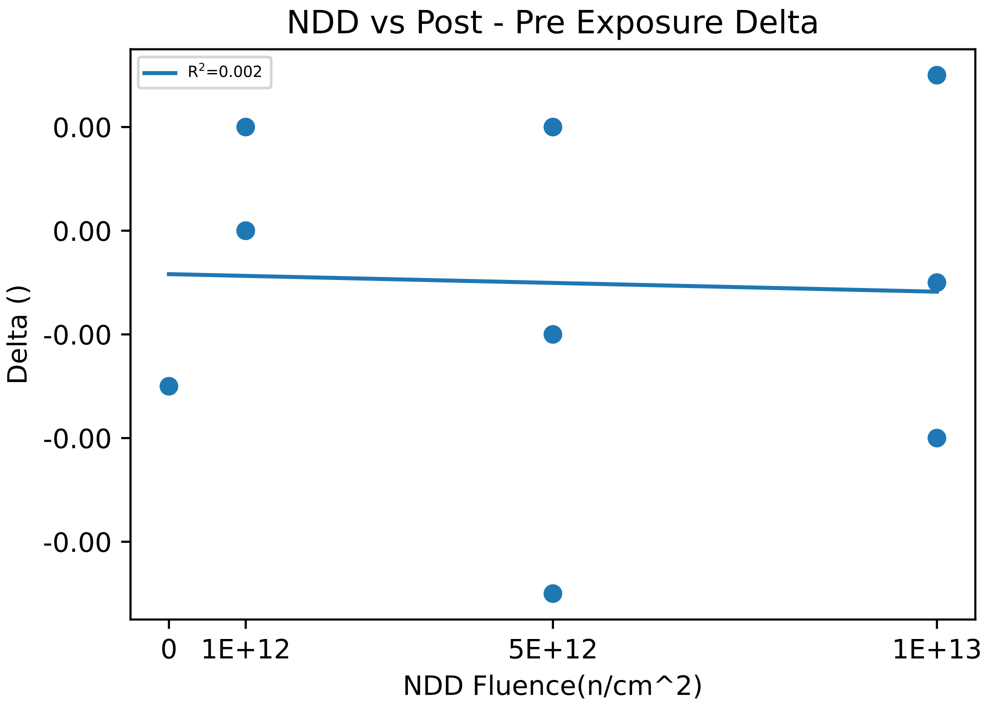
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	245.01	244.91	-0.1074
504	1e+12	NDD	243.59	243.5	-0.091
505	1e+12	NDD	241.84	241.74	-0.1058
506	5e+12	NDD	241.34	241.11	-0.2304
507	5e+12	NDD	246.43	246.45	0.0167
508	5e+12	NDD	242.72	242.58	-0.1374
509	1e+13	NDD	248.23	248.11	-0.1249
510	1e+13	NDD	241.42	241.25	-0.168
511	1e+13	NDD	242.03	241.75	-0.2776
512	0	Correlation	246.82	246.73	-0.0929

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	246.82	246.82	246.82		246.73	246.73	246.73		-0.0929	-0.0929	-0.0929	
1e+12	241.84	243.48	245.01	1.5881	241.74	243.38	244.91	1.5878	-0.1074	-0.1014	-0.091	0.0090421
5e+12	241.34	243.5	246.43	2.6341	241.11	243.38	246.45	2.7581	-0.2304	-0.11703	0.0167	0.1248
1e+13	241.42	243.89	248.23	3.7681	241.25	243.7	248.11	3.8204	-0.2776	-0.19017	-0.1249	0.078726

Device Test: 23.3 VSENSE_VTH_RISING_GOOD(THRESHOLD|RISE/PWRGD/4.5////@VSENSE_VTH_RISING_GOOD)





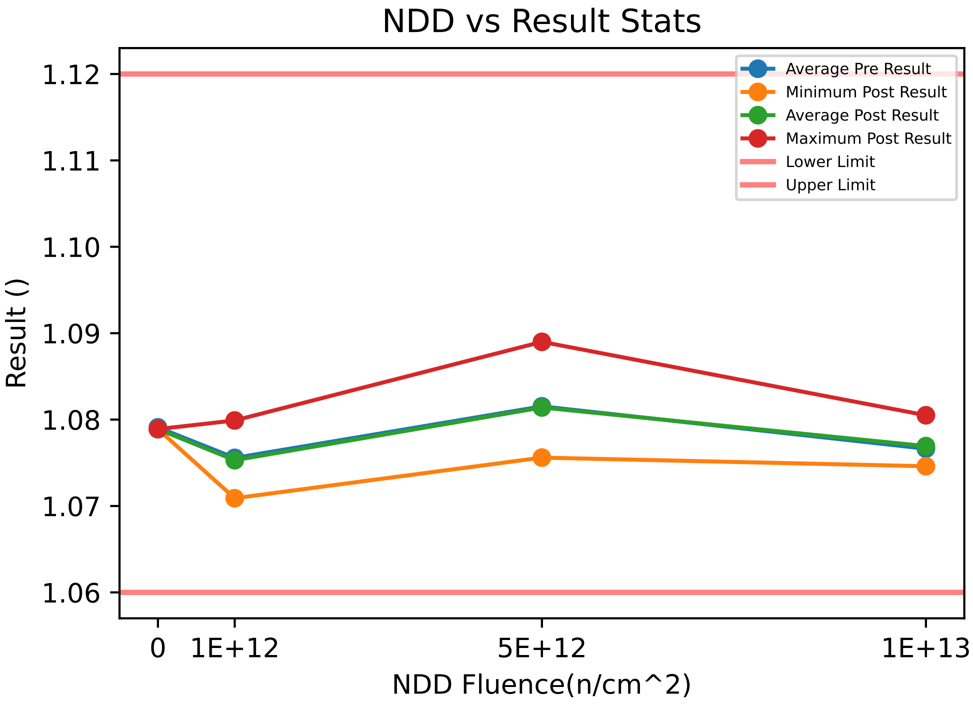
Test Results (Lower Limit = 0.93, Upper Limit = 0.98 ())

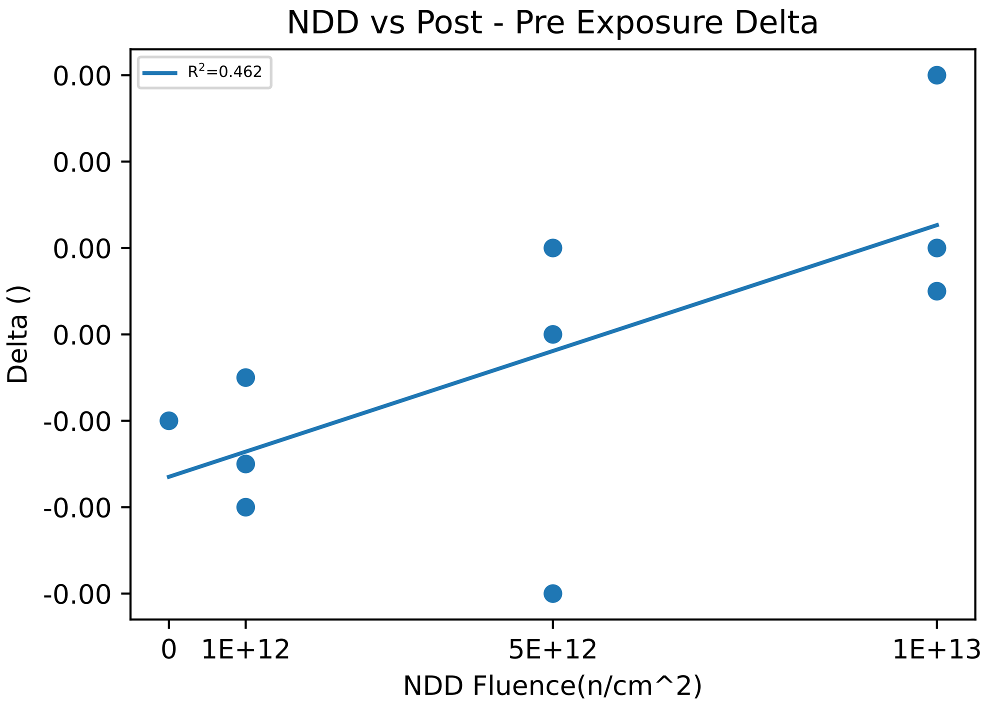
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.9507	0.9507	0
504	1e+12	NDD	0.9387	0.9387	0
505	1e+12	NDD	0.946	0.9462	0.0002
506	5e+12	NDD	0.9492	0.949	-0.0002
507	5e+12	NDD	0.9477	0.947	-0.0007
508	5e+12	NDD	0.957	0.9572	0.0002
509	1e+13	NDD	0.942	0.9423	0.0003
510	1e+13	NDD	0.9475	0.9471	-0.0004
511	1e+13	NDD	0.9445	0.9444	-0.0001
512	0	Correlation	0.9484	0.9481	-0.0003

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9484	0.9484	0.9484		0.9481	0.9481	0.9481		-0.0003	-0.0003	-0.0003	
1e+12	0.9387	0.94513	0.9507	0.0060468	0.9387	0.9452	0.9507	0.0060622	0	6.6667e-05	0.0002	0.00011547
5e+12	0.9477	0.9513	0.957	0.004993	0.947	0.95107	0.9572	0.0054049	-0.0007	-0.00023333	0.0002	0.00045092
1e+13	0.942	0.94467	0.9475	0.0027538	0.9423	0.9446	0.9471	0.0024062	-0.0004	-6.6667e-05	0.0003	0.00035119

Device Test: 23.4 VSENSE_VTH_RISING_FAULT(THRESHOLD|RISE/PWRGD/4.5////@VSENSE_VTH_RISING_FAULT)





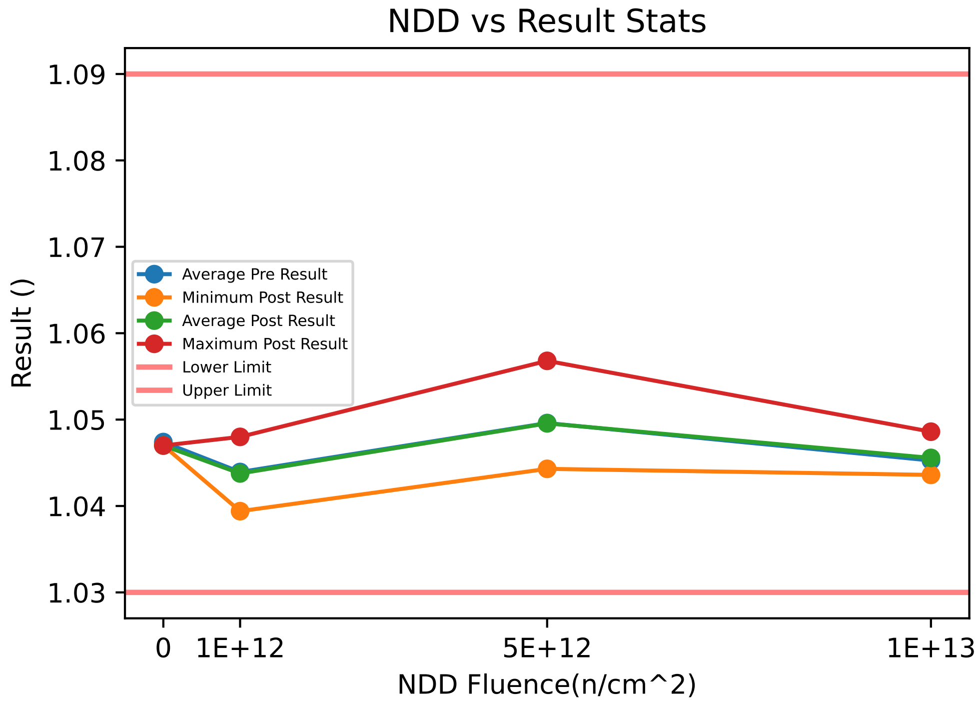
Test Results (Lower Limit = 1.06, Upper Limit = 1.12 ())

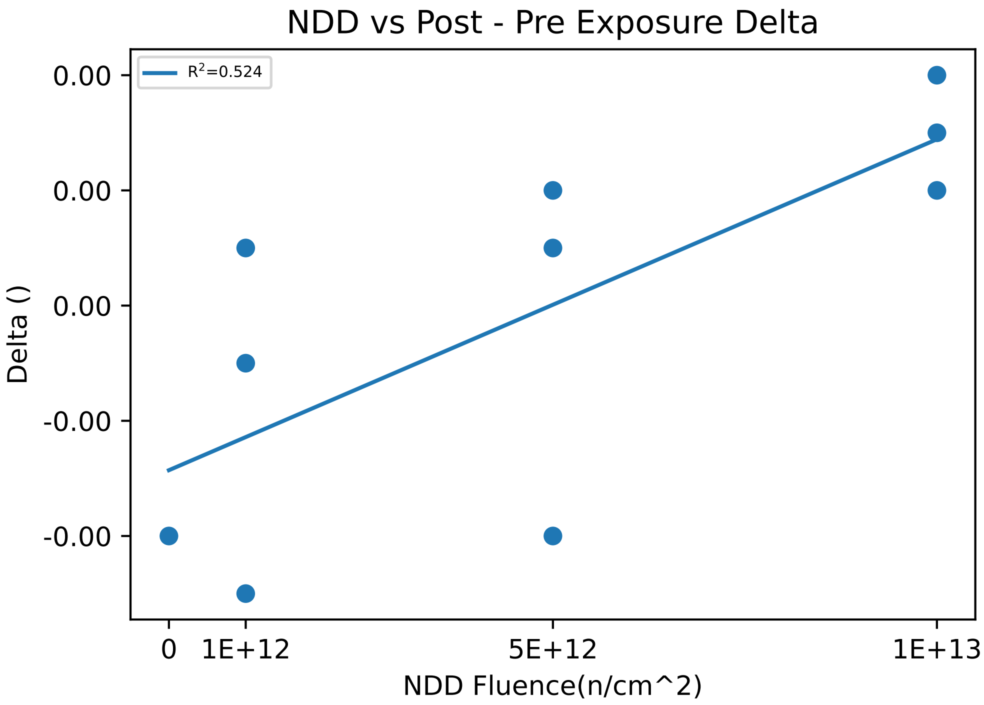
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.08	1.0799	-0.0001
504	1e+12	NDD	1.0712	1.0709	-0.0003
505	1e+12	NDD	1.0755	1.0751	-0.0004
506	5e+12	NDD	1.0796	1.0796	0
507	5e+12	NDD	1.0762	1.0756	-0.0006
508	5e+12	NDD	1.0888	1.089	0.0002
509	1e+13	NDD	1.0745	1.0746	0.0001
510	1e+13	NDD	1.0799	1.0805	0.0006
511	1e+13	NDD	1.0755	1.0757	0.0002
512	0	Correlation	1.0791	1.0789	-0.0002

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0791	1.0791	1.0791		1.0789	1.0789	1.0789		-0.0002	-0.0002	-0.0002	
1e+12	1.0712	1.0756	1.08	0.0044004	1.0709	1.0753	1.0799	0.0045033	-0.0004	-0.00026667	-0.0001	0.00015275
5e+12	1.0762	1.0815	1.0888	0.0065187	1.0756	1.0814	1.089	0.006879	-0.0006	-0.00013333	0.0002	0.00041633
1e+13	1.0745	1.0766	1.0799	0.0028729	1.0746	1.0769	1.0805	0.0031374	0.0001	0.0003	0.0006	0.00026458

Device Test: 23.5 VSENSE_VTH_FALLING_GOOD(THRESHOLD|FALL/PWRGD/4.5////@VSENSE_VTH_FALLING_GOOD)





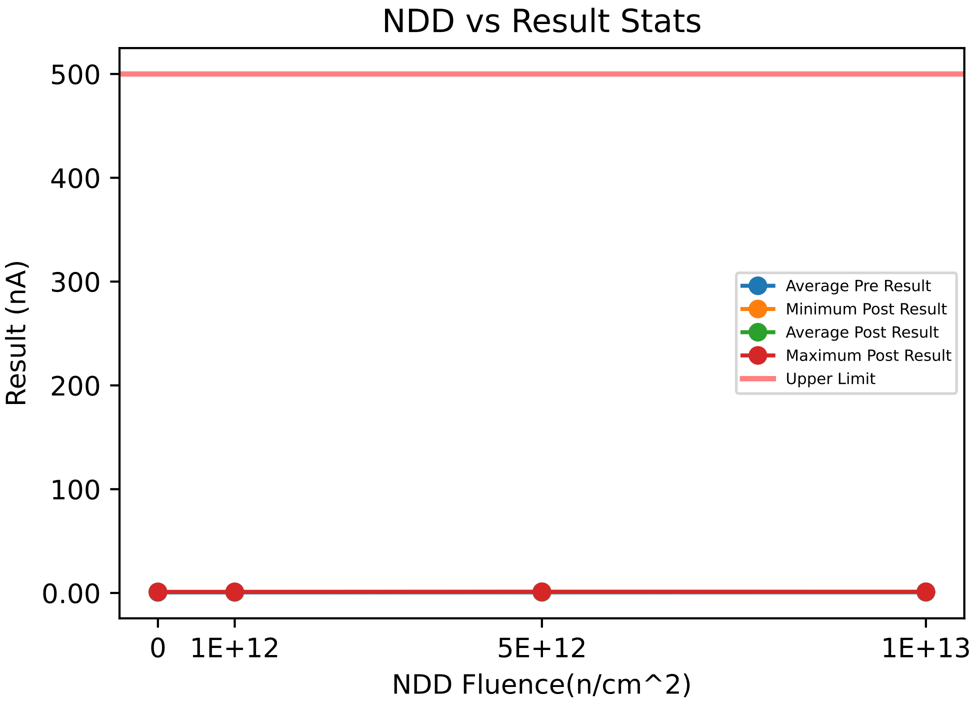
Test Results (Lower Limit = 1.03, Upper Limit = 1.09 ())

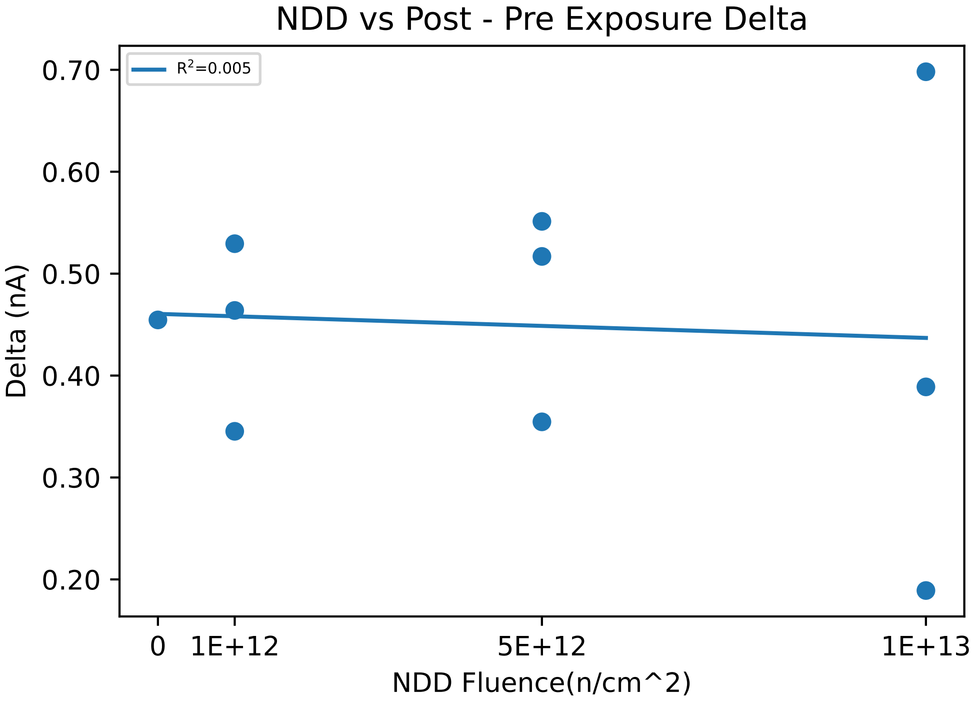
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.0481	1.048	-0.0001
504	1e+12	NDD	1.0399	1.0394	-0.0005
505	1e+12	NDD	1.0438	1.0439	0.0001
506	5e+12	NDD	1.0474	1.0476	0.0002
507	5e+12	NDD	1.0447	1.0443	-0.0004
508	5e+12	NDD	1.0567	1.0568	0.0001
509	1e+13	NDD	1.0434	1.0436	0.0002
510	1e+13	NDD	1.0482	1.0486	0.0004
511	1e+13	NDD	1.0442	1.0445	0.0003
512	0	Correlation	1.0474	1.047	-0.0004

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0474	1.0474	1.0474		1.047	1.047	1.047		-0.0004	-0.0004	-0.0004	
1e+12	1.0399	1.0439	1.0481	0.0041016	1.0394	1.0438	1.048	0.0043016	-0.0005	-0.00016667	0.0001	0.00030551
5e+12	1.0447	1.0496	1.0567	0.0062952	1.0443	1.0496	1.0568	0.0064779	-0.0004	-3.3333e-05	0.0002	0.00032146
1e+13	1.0434	1.0453	1.0482	0.0025716	1.0436	1.0456	1.0486	0.0026652	0.0002	0.0003	0.0004	0.0001

Device Test: 23.6 PWRGD_OUTPUT_HIGH_LEAK(LEAK|MAX/PWRGD/4.5////@PWRGD_OUTPUT_HIGH_LEAK)





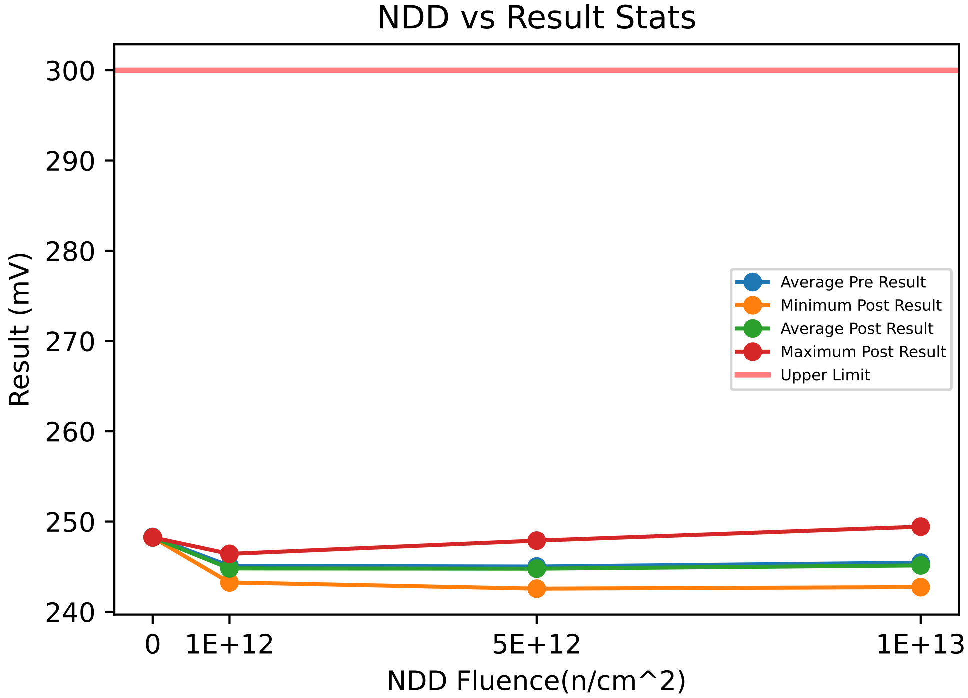
Test Results (Upper Limit = 500.0 (nA))

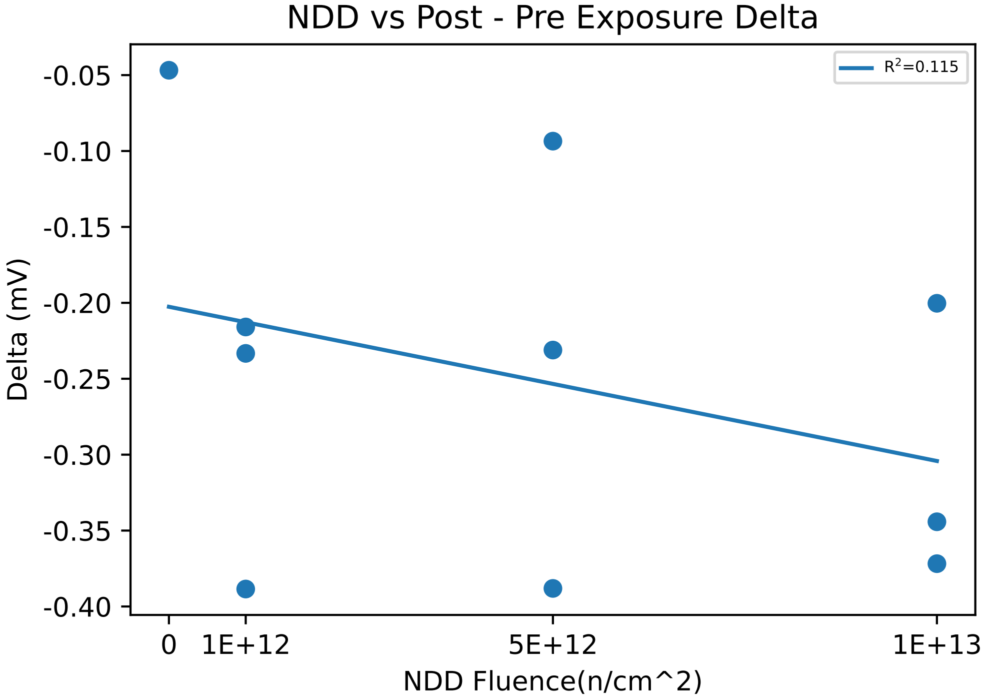
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.5576	1.0215	0.4639
504	1e+12	NDD	0.5389	1.0683	0.5294
505	1e+12	NDD	0.6013	0.9466	0.3453
506	5e+12	NDD	0.5982	0.9528	0.3546
507	5e+12	NDD	0.6763	1.1932	0.5169
508	5e+12	NDD	0.5139	1.0652	0.5513
509	1e+13	NDD	0.4389	1.137	0.6981
510	1e+13	NDD	0.8012	0.9903	0.1891
511	1e+13	NDD	0.695	1.0839	0.3889
512	0	Correlation	0.5607	1.0153	0.4546

Test Statistics (nA)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5607	0.5607	0.5607		1.0153	1.0153	1.0153		0.4546	0.4546	0.4546	
1e+12	0.5389	0.56593	0.6013	0.032024	0.9466	1.0121	1.0683	0.061388	0.3453	0.4462	0.5294	0.093318
5e+12	0.5139	0.59613	0.6763	0.08122	0.9528	1.0704	1.1932	0.12028	0.3546	0.47427	0.5513	0.10505
1e+13	0.4389	0.64503	0.8012	0.18625	0.9903	1.0704	1.137	0.074276	0.1891	0.42537	0.6981	0.25645

Device Test: 23.7 PWRGD_OUTPUT_LOW(VOL|2mA/PWRGD/4.5////@PWRGD_OUTPUT_LOW)





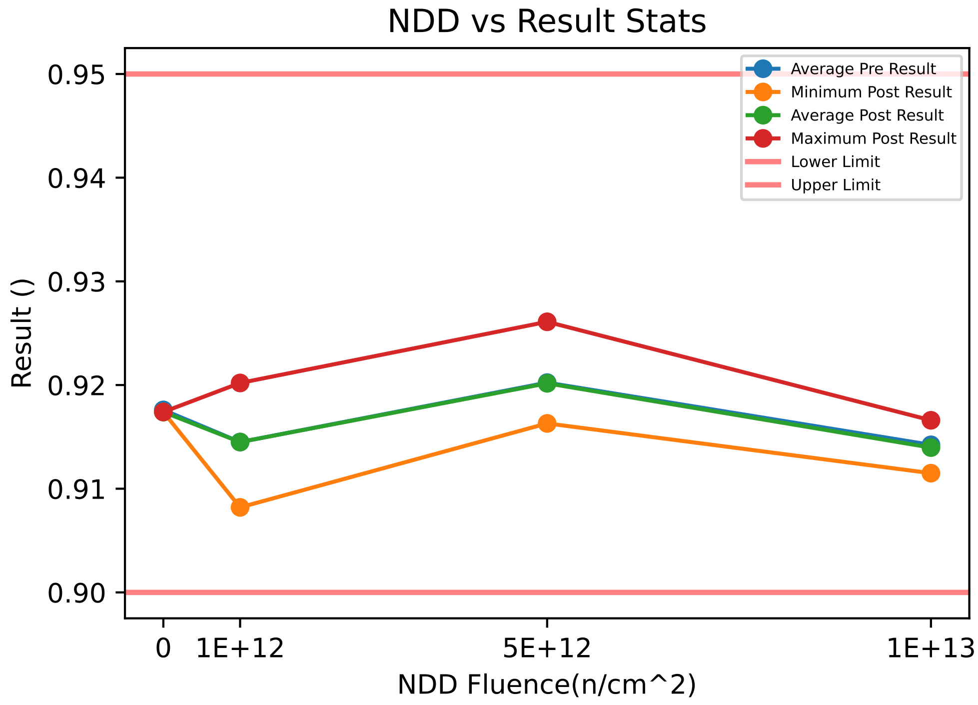
Test Results (Upper Limit = 300.0 (mV))

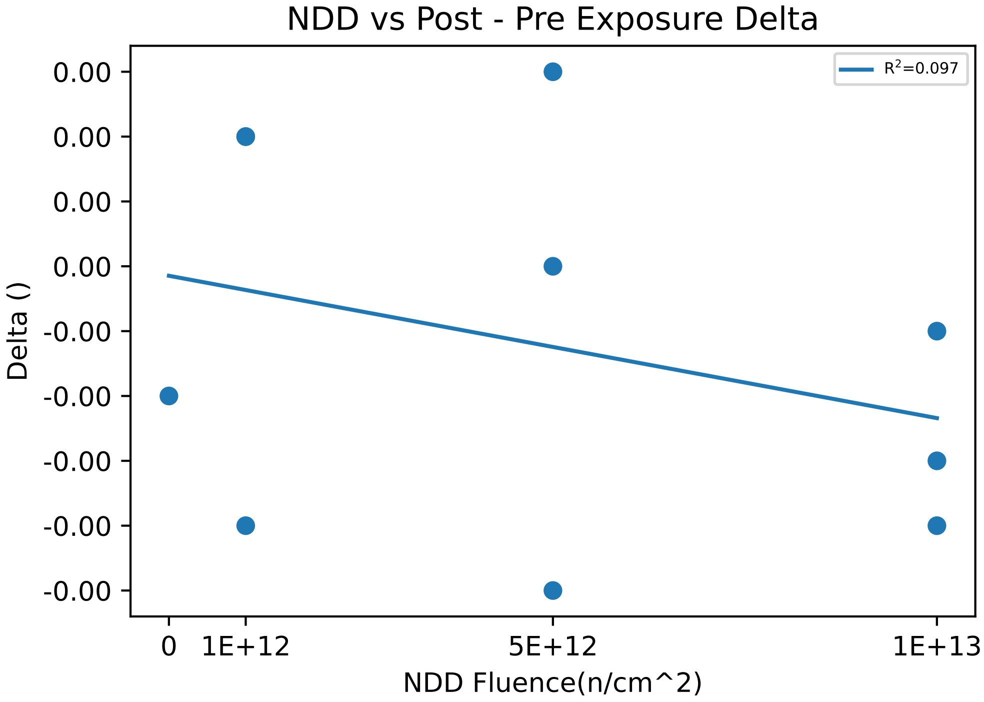
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	246.65	246.42	-0.2333
504	1e+12	NDD	245.14	244.75	-0.3885
505	1e+12	NDD	243.47	243.25	-0.2159
506	5e+12	NDD	242.8	242.56	-0.2311
507	5e+12	NDD	247.98	247.89	-0.0935
508	5e+12	NDD	244.28	243.89	-0.3881
509	1e+13	NDD	249.78	249.43	-0.3442
510	1e+13	NDD	243.11	242.74	-0.3718
511	1e+13	NDD	243.45	243.25	-0.2003
512	0	Correlation	248.29	248.25	-0.0468

Test Statistics (mV)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	248.29	248.29	248.29		248.25	248.25	248.25		-0.0468	-0.0468	-0.0468	
1e+12	243.47	245.09	246.65	1.5937	243.25	244.81	246.42	1.5852	-0.3885	-0.27923	-0.2159	0.095027
5e+12	242.8	245.02	247.98	2.6706	242.56	244.78	247.89	2.7708	-0.3881	-0.23757	-0.0935	0.14741
1e+13	243.11	245.45	249.78	3.7551	242.74	245.14	249.43	3.7266	-0.3718	-0.30543	-0.2003	0.092088

Device Test: 23.9 VSENSE_VTH_FALLING_FAULT(THRESHOLD|FALL/PWRGD/5////@VSENSE_VTH_FALLING_FAULT)





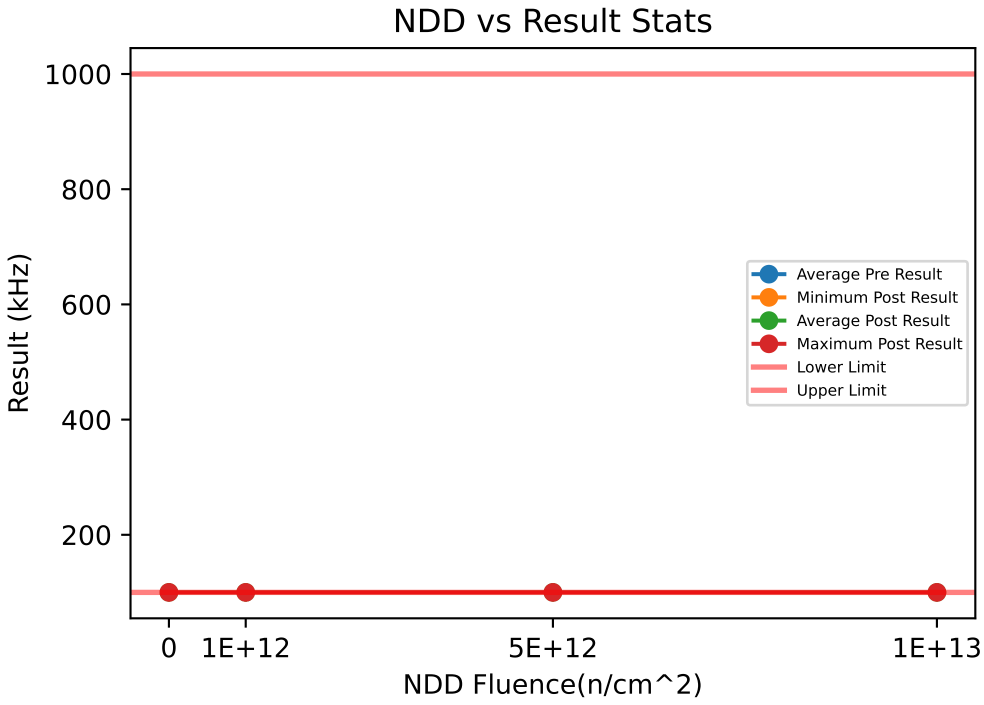
Test Results (Lower Limit = 0.9,
Upper Limit = 0.95 ())

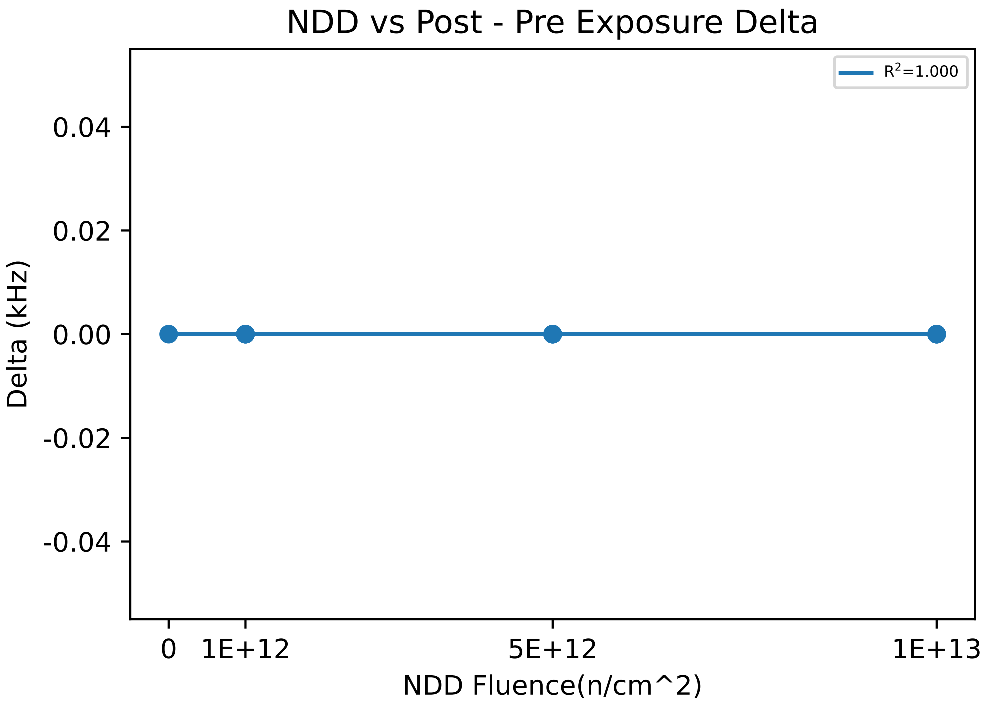
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.92	0.9202	0.0002
504	1e+12	NDD	0.9086	0.9082	-0.0004
505	1e+12	NDD	0.9149	0.9151	0.0002
506	5e+12	NDD	0.9181	0.9181	0
507	5e+12	NDD	0.9168	0.9163	-0.0005
508	5e+12	NDD	0.9258	0.9261	0.0003
509	1e+13	NDD	0.9119	0.9115	-0.0004
510	1e+13	NDD	0.9169	0.9166	-0.0003
511	1e+13	NDD	0.9139	0.9138	-0.0001
512	0	Correlation	0.9176	0.9174	-0.0002

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9176	0.9176	0.9176		0.9174	0.9174	0.9174		-0.0002	-0.0002	-0.0002	
1e+12	0.9086	0.9145	0.92	0.0057105	0.9082	0.9145	0.9202	0.0060225	-0.0004	0	0.0002	0.00034641
5e+12	0.9168	0.92023	0.9258	0.0048645	0.9163	0.92017	0.9261	0.0052166	-0.0005	-6.6667e-05	0.0003	0.00040415
1e+13	0.9119	0.91423	0.9169	0.0025166	0.9115	0.91397	0.9166	0.0025541	-0.0004	-0.00026667	-0.0001	0.00015275

Device Test: 24.1 SYNC_FREQ_RANGE(FREQ|100kHz/SYNC1/4.5//OPEN//@SYNC_FREQ_RANGE)





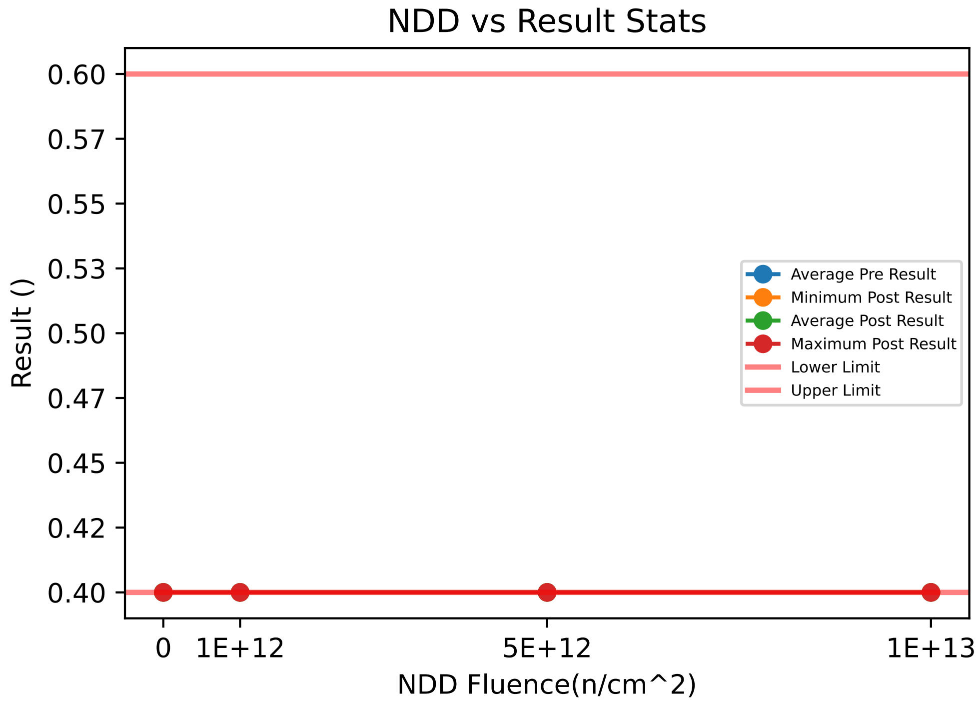
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

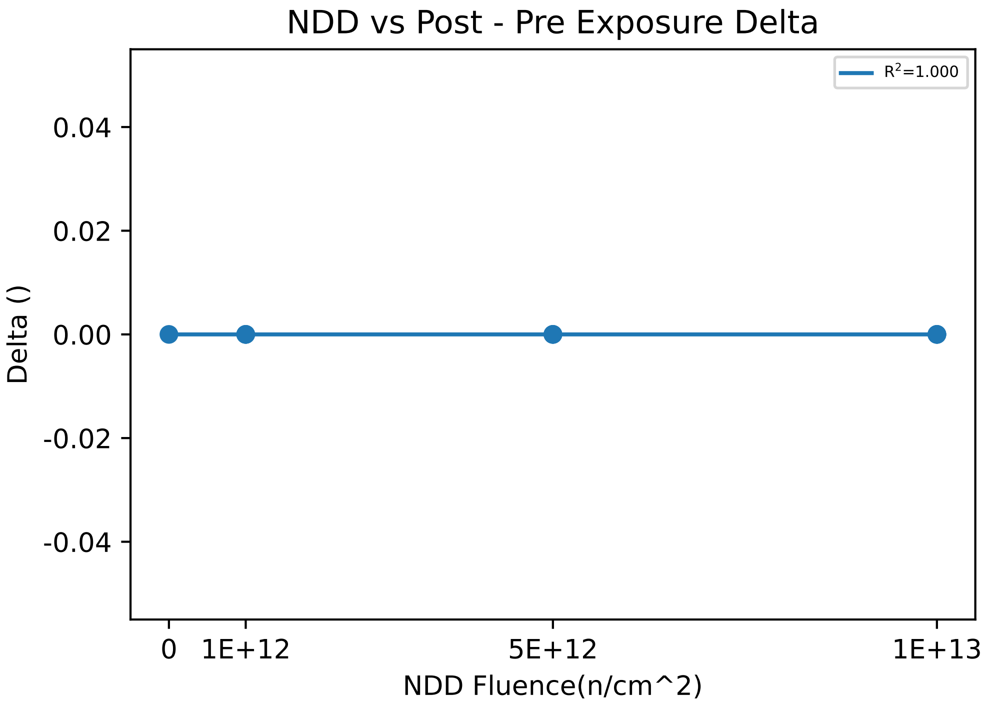
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	100	100	0
504	1e+12	NDD	100	100	0
505	1e+12	NDD	100	100	0
506	5e+12	NDD	100	100	0
507	5e+12	NDD	100	100	0
508	5e+12	NDD	100	100	0
509	1e+13	NDD	100	100	0
510	1e+13	NDD	100	100	0
511	1e+13	NDD	100	100	0
512	0	Correlation	100	100	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100		100	100	100		0	0	0	
1e+12	100	100	100	0	100	100	100	0	0	0	0	0
5e+12	100	100	100	0	100	100	100	0	0	0	0	0
1e+13	100	100	100	0	100	100	100	0	0	0	0	0

e Test: 24.10 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_40%/SYNC1/4.5//OPEN//@SYNC_IN_DUTY_CYCLE_RA





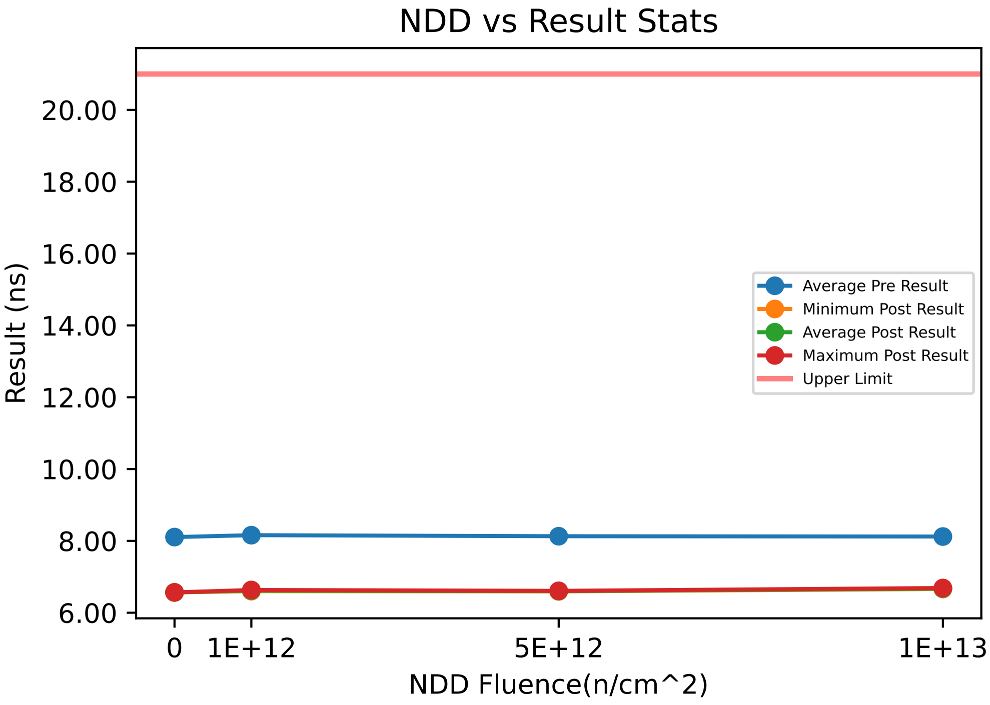
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 ())

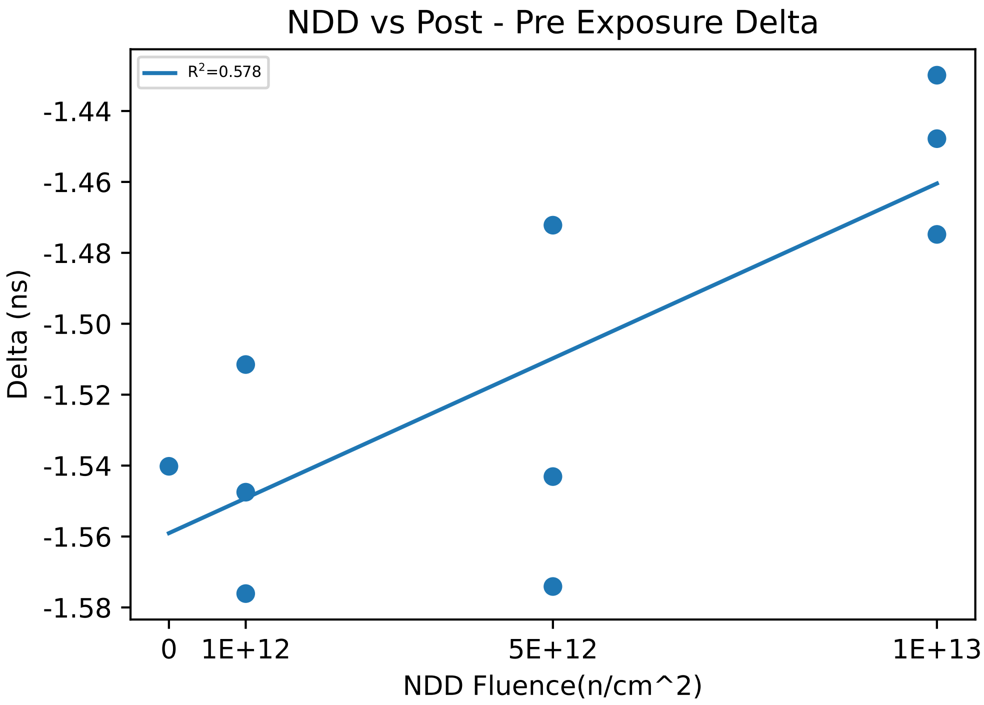
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.4	0.4	0
504	1e+12	NDD	0.4	0.4	0
505	1e+12	NDD	0.4	0.4	0
506	5e+12	NDD	0.4	0.4	0
507	5e+12	NDD	0.4	0.4	0
508	5e+12	NDD	0.4	0.4	0
509	1e+13	NDD	0.4	0.4	0
510	1e+13	NDD	0.4	0.4	0
511	1e+13	NDD	0.4	0.4	0
512	0	Correlation	0.4	0.4	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4		0.4	0.4	0.4		0	0	0	
1e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
5e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
1e+13	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

Device Test: 24.100 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC1/12//511k//@SYNC_HL_FALL_TIME)





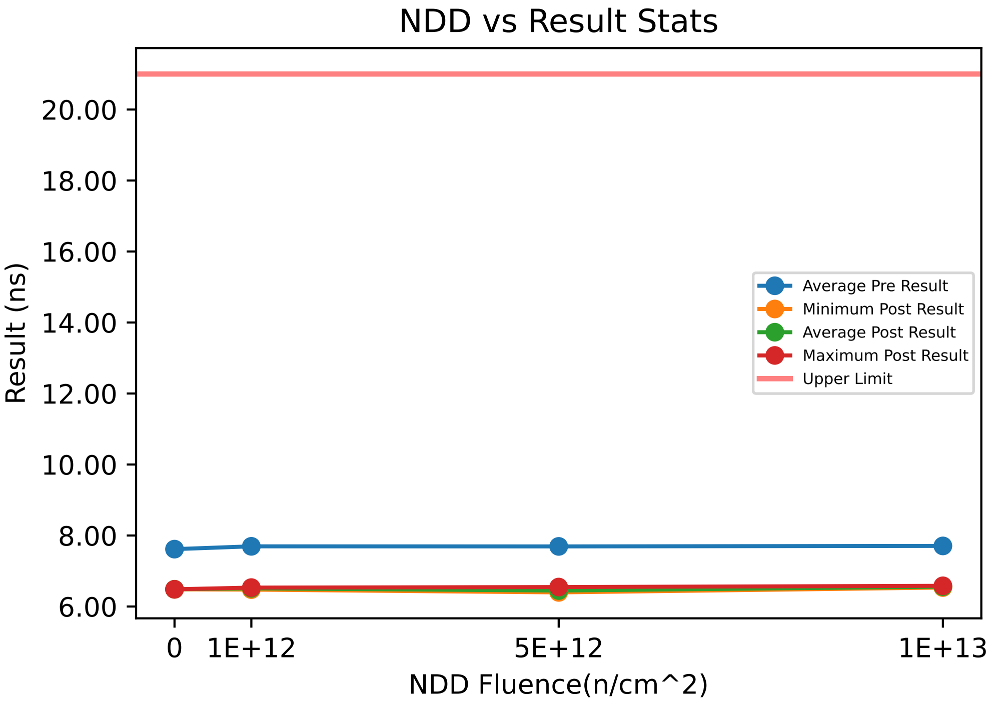
Test Results (Upper Limit = 21.0 (ns))

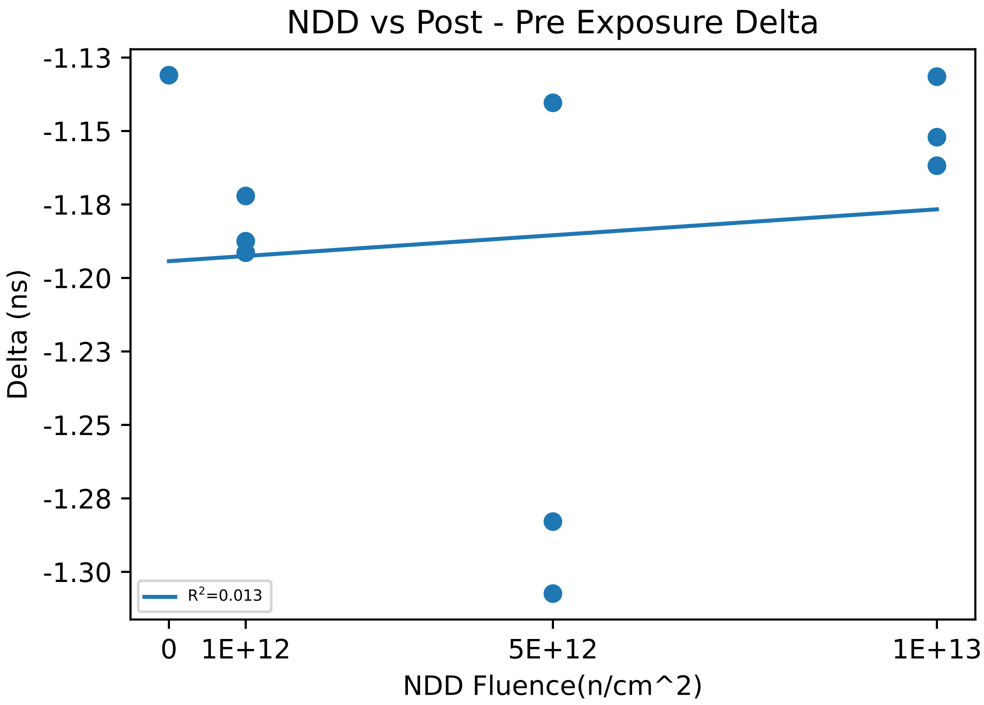
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	8.1477	6.6002	-1.5475
504	1e+12	NDD	8.1858	6.6097	-1.5761
505	1e+12	NDD	8.1451	6.6336	-1.5115
506	5e+12	NDD	8.082	6.6098	-1.4722
507	5e+12	NDD	8.1688	6.5947	-1.5741
508	5e+12	NDD	8.1403	6.5972	-1.5431
509	1e+13	NDD	8.1363	6.6885	-1.4478
510	1e+13	NDD	8.1384	6.6636	-1.4748
511	1e+13	NDD	8.0905	6.6606	-1.4299
512	0	Correlation	8.1064	6.5662	-1.5402

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.1064	8.1064	8.1064		6.5662	6.5662	6.5662		-1.5402	-1.5402	-1.5402	
1e+12	8.1451	8.1595	8.1858	0.022785	6.6002	6.6145	6.6336	0.01721	-1.5761	-1.545	-1.5115	0.032371
5e+12	8.082	8.1304	8.1688	0.044244	6.5947	6.6006	6.6098	0.0080934	-1.5741	-1.5298	-1.4722	0.052236
1e+13	8.0905	8.1217	8.1384	0.027069	6.6606	6.6709	6.6885	0.015316	-1.4748	-1.4508	-1.4299	0.022603

Device Test: 24.101 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC2/12//511k//@SYNC_HL_FALL_TIME)





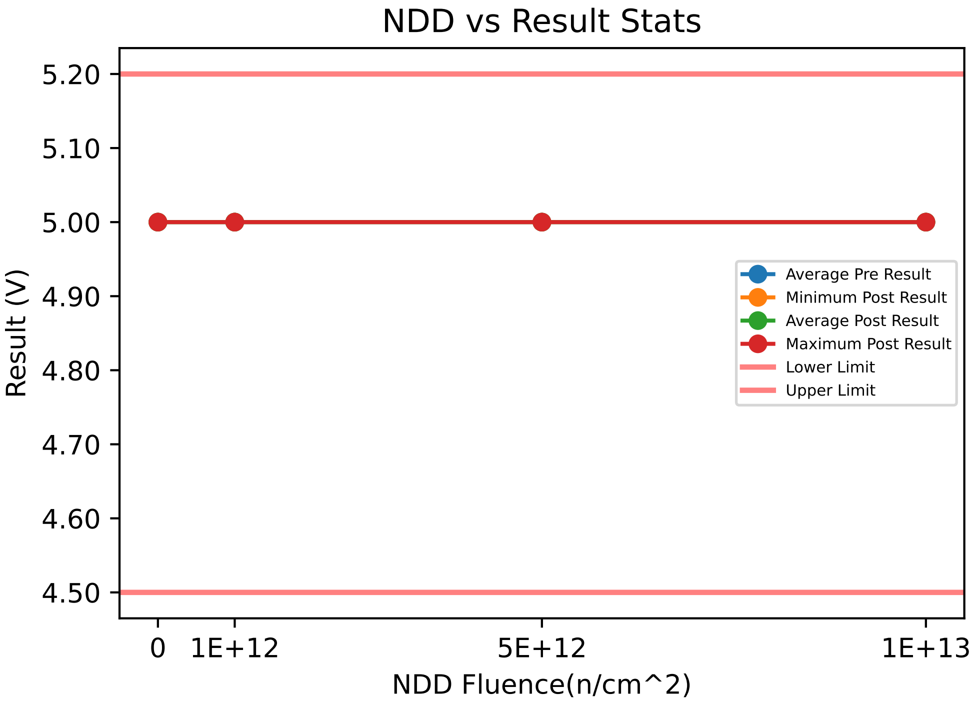
Test Results (Upper Limit = 21.0 (ns))

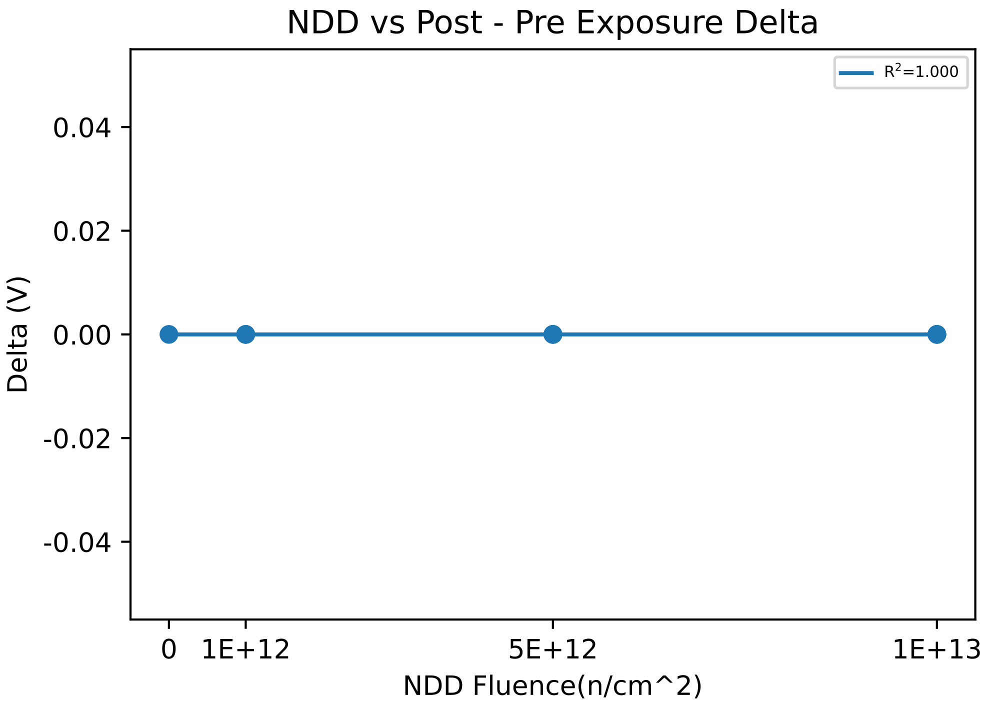
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.7203	6.5328	-1.1875
504	1e+12	NDD	7.6978	6.5257	-1.1721
505	1e+12	NDD	7.6672	6.4758	-1.1914
506	5e+12	NDD	7.6884	6.548	-1.1404
507	5e+12	NDD	7.686	6.4031	-1.2829
508	5e+12	NDD	7.7049	6.3975	-1.3074
509	1e+13	NDD	7.6858	6.5337	-1.1521
510	1e+13	NDD	7.7146	6.5831	-1.1315
511	1e+13	NDD	7.7197	6.5579	-1.1618
512	0	Correlation	7.6161	6.4851	-1.131

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	7.6161	7.6161	7.6161		6.4851	6.4851	6.4851		-1.131	-1.131	-1.131	
1e+12	7.6672	7.6951	7.7203	0.026653	6.4758	6.5114	6.5328	0.031063	-1.1914	-1.1837	-1.1721	0.010205
5e+12	7.686	7.6931	7.7049	0.010289	6.3975	6.4495	6.548	0.085321	-1.3074	-1.2436	-1.1404	0.090181
1e+13	7.6858	7.7067	7.7197	0.018279	6.5337	6.5582	6.5831	0.024702	-1.1618	-1.1485	-1.1315	0.015473

Device Test: 24.102 SYNC_OUT_HIGH_7V(LEVELS|VOH/SYNC1/12//511k//@SYNC_OUT_HIGH_7V)





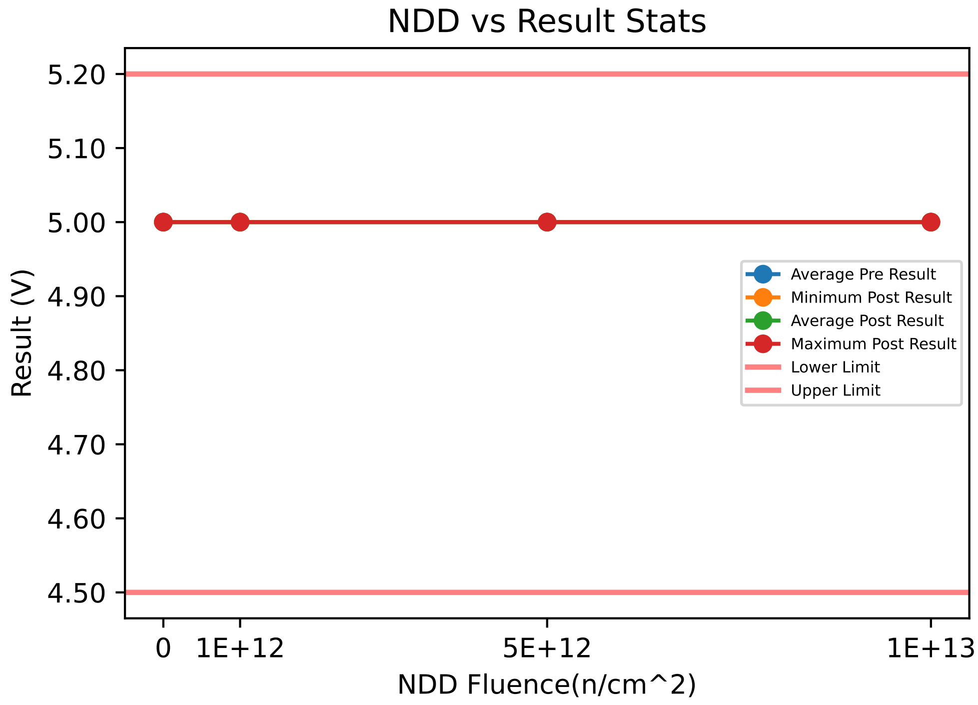
Test Results (Lower Limit = 4.5, Upper Limit = 5.2 (V))

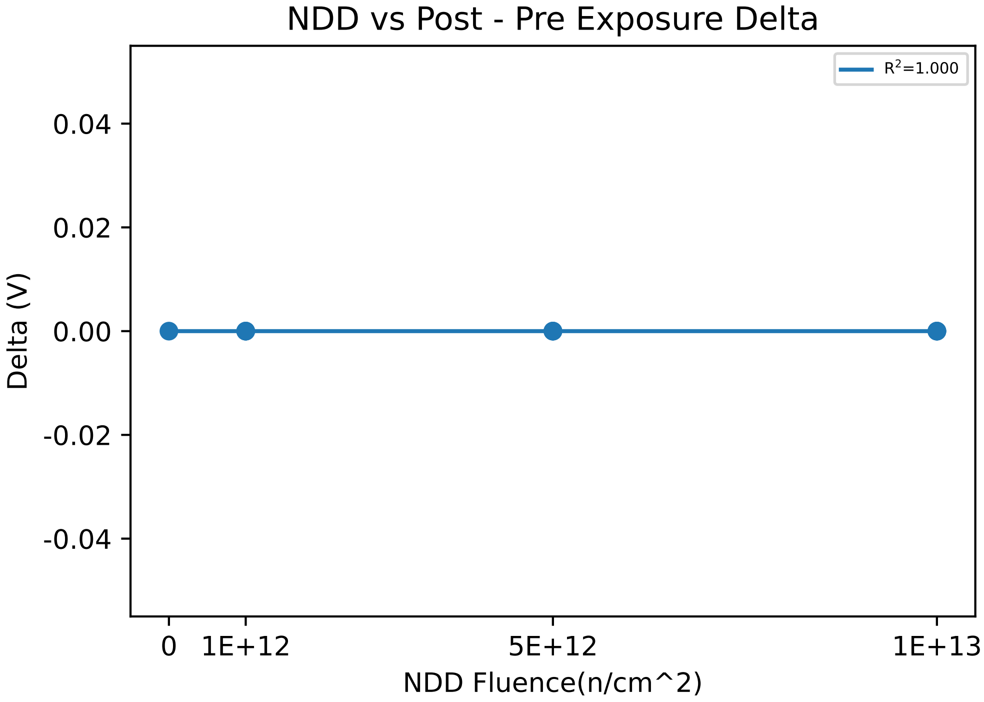
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5	5	0
504	1e+12	NDD	5	5	0
505	1e+12	NDD	5	5	0
506	5e+12	NDD	5	5	0
507	5e+12	NDD	5	5	0
508	5e+12	NDD	5	5	0
509	1e+13	NDD	5	5	0
510	1e+13	NDD	5	5	0
511	1e+13	NDD	5	5	0
512	0	Correlation	5	5	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5	5	5		5	5	5		0	0	0	
1e+12	5	5	5	0	5	5	5	0	0	0	0	0
5e+12	5	5	5	0	5	5	5	0	0	0	0	0
1e+13	5	5	5	0	5	5	5	0	0	0	0	0

Device Test: 24.103 SYNC_OUT_HIGH_7V(LEVELS|VOH/SYNC2/12//511k//@SYNC_OUT_HIGH_7V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

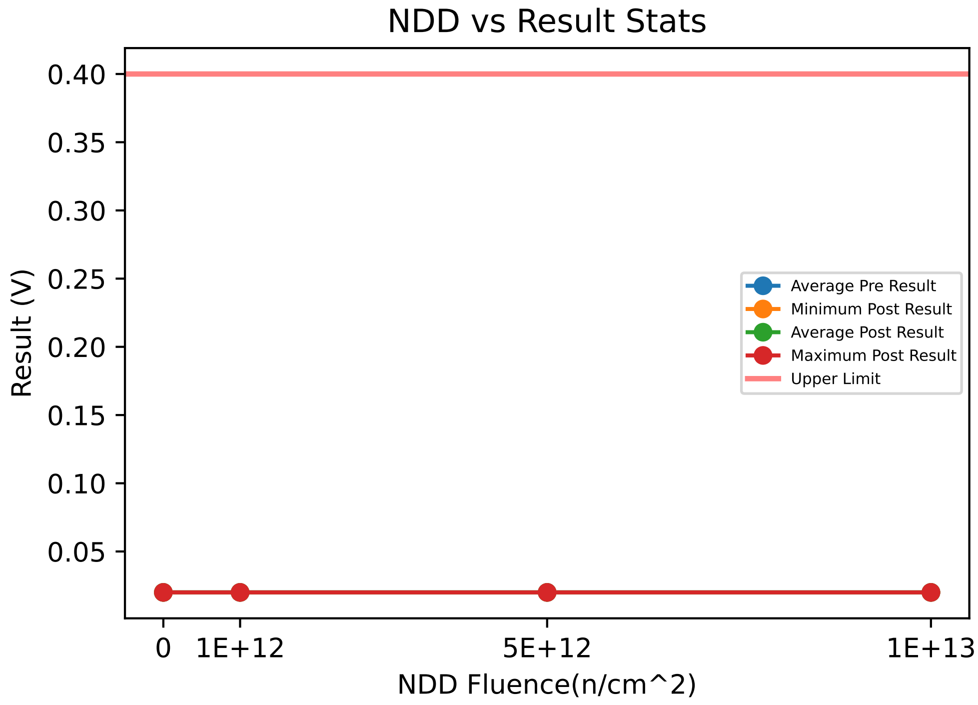
Test Results (Lower Limit = 4.5, Upper Limit = 5.2 (V))

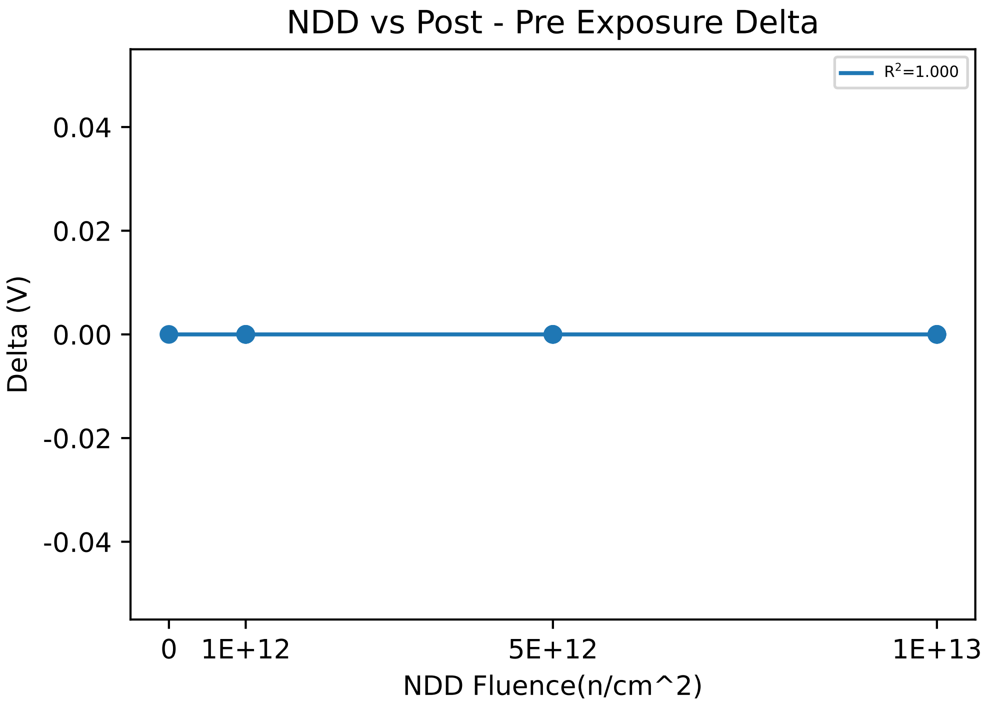
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5	5	0
504	1e+12	NDD	5	5	0
505	1e+12	NDD	5	5	0
506	5e+12	NDD	5	5	0
507	5e+12	NDD	5	5	0
508	5e+12	NDD	5	5	0
509	1e+13	NDD	5	5	0
510	1e+13	NDD	5	5	0
511	1e+13	NDD	5	5	0
512	0	Correlation	5	5	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5	5	5		5	5	5		0	0	0	
1e+12	5	5	5	0	5	5	5	0	0	0	0	0
5e+12	5	5	5	0	5	5	5	0	0	0	0	0
1e+13	5	5	5	0	5	5	5	0	0	0	0	0

Device Test: 24.104 SYNC_OUT_LOW(LEVELS|VOL/SYNC1/12//511k//@SYNC_OUT_LOW)





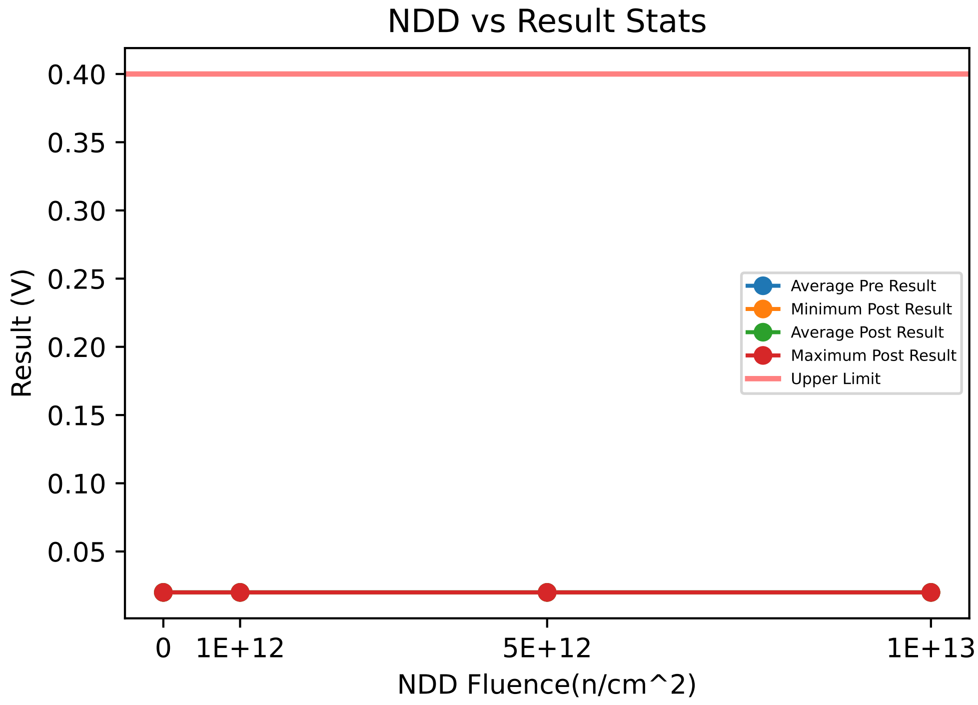
Test Results (Upper Limit = 0.4 (V))

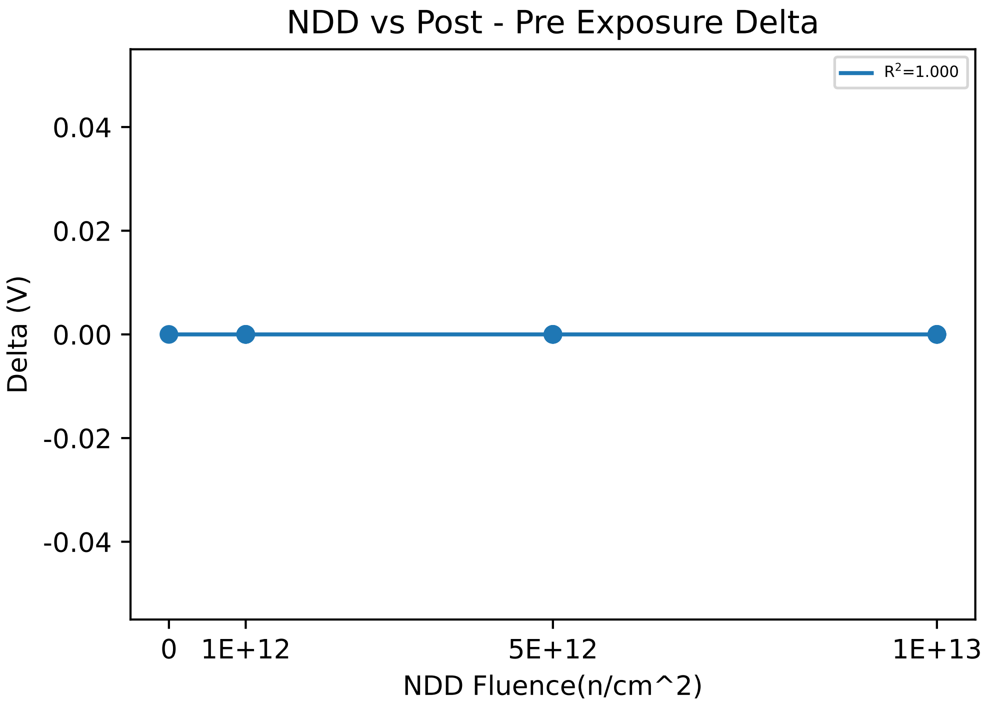
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.105 SYNC_OUT_LOW(LEVELS|VOL/SYNC2/12//511k//@SYNC_OUT_LOW)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

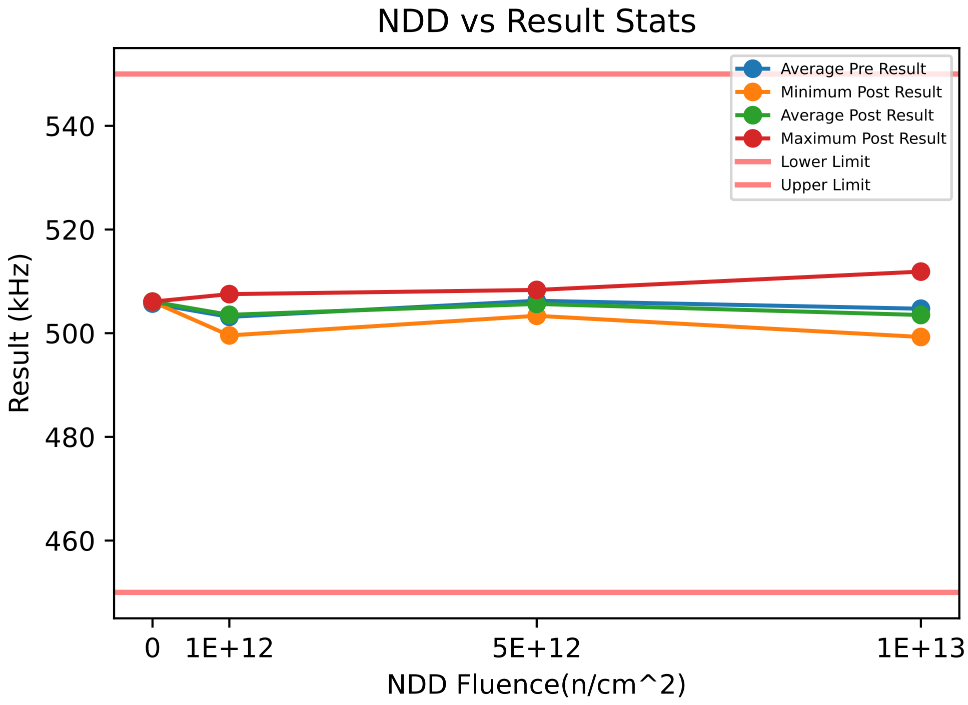
Test Results (Upper Limit = 0.4 (V))

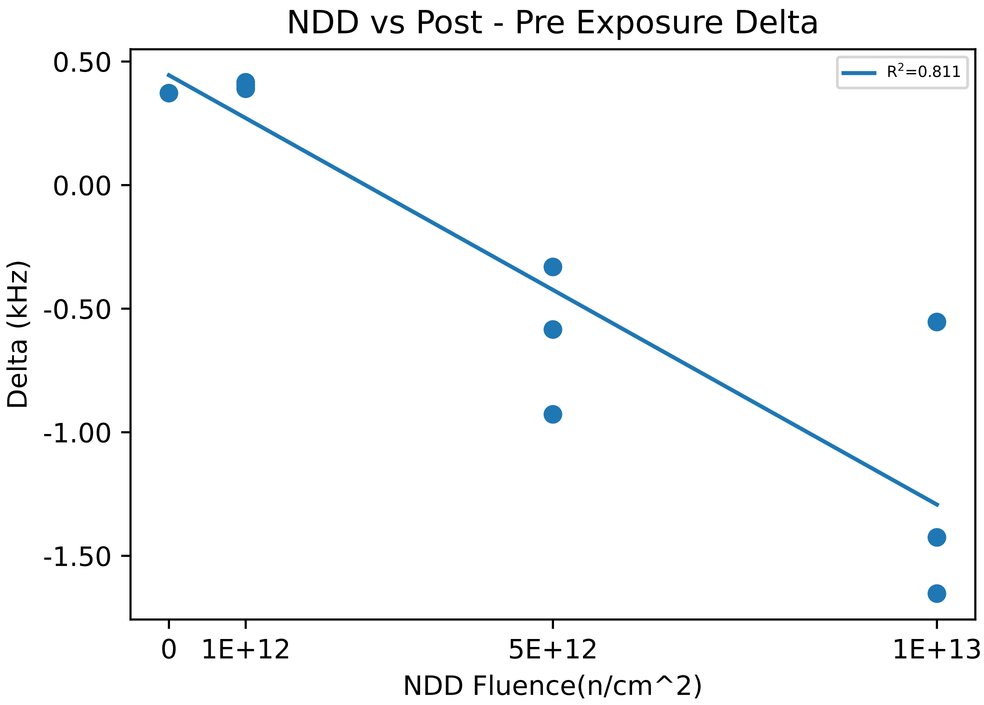
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.106 EXT_SET_FREQ_500KHZ_12V(FREQ|500kHz/SYNC1/12//90.9k//@EXT_SET_FREQ_500KHZ_12V


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

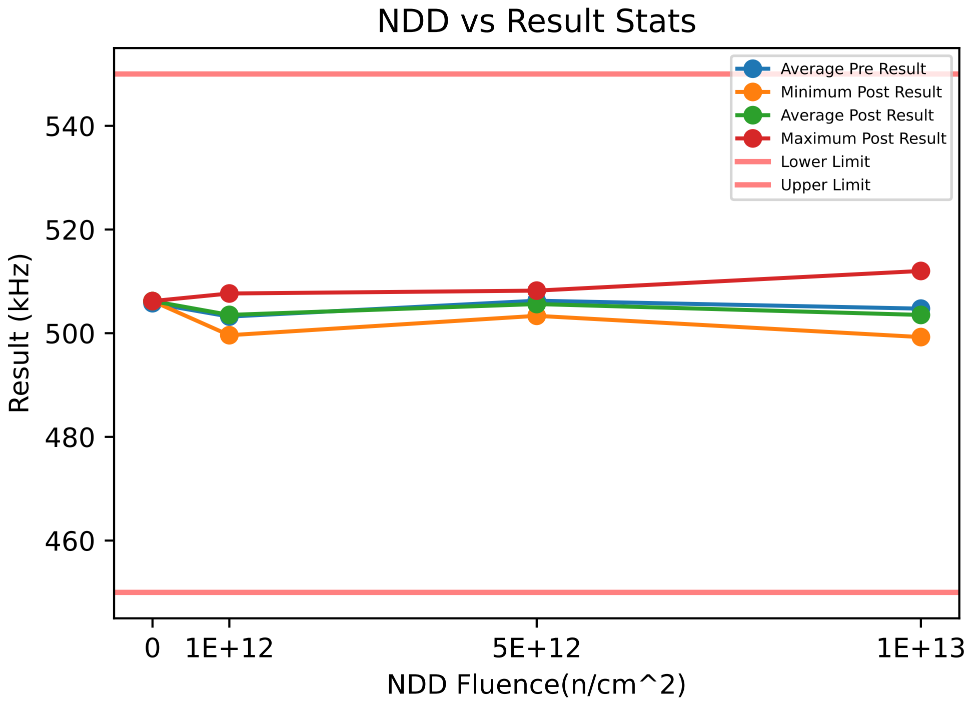
Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

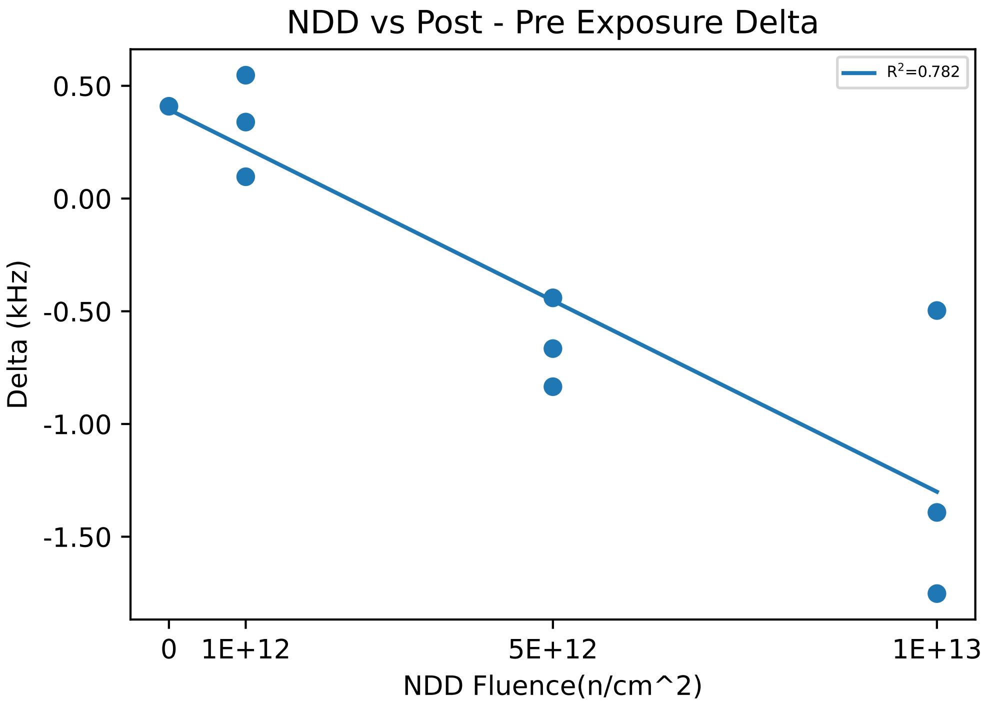
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	507.15	507.54	0.3899
504	1e+12	NDD	503.13	503.54	0.416
505	1e+12	NDD	499.17	499.57	0.4051
506	5e+12	NDD	504.28	503.36	-0.9276
507	5e+12	NDD	505.56	505.23	-0.3311
508	5e+12	NDD	508.93	508.35	-0.5843
509	1e+13	NDD	512.43	511.88	-0.5539
510	1e+13	NDD	500.92	499.27	-1.6528
511	1e+13	NDD	500.81	499.38	-1.4254
512	0	Correlation	505.71	506.09	0.3721

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	505.71	505.71	505.71		506.09	506.09	506.09		0.3721	0.3721	0.3721	
1e+12	499.17	503.15	507.15	3.9912	499.57	503.55	507.54	3.9836	0.3899	0.40367	0.416	0.013109
5e+12	504.28	506.26	508.93	2.3998	503.36	505.64	508.35	2.52	-0.9276	-0.61433	-0.3311	0.29938
1e+13	500.81	504.72	512.43	6.6795	499.27	503.51	511.88	7.2482	-1.6528	-1.2107	-0.5539	0.58006

Device Test: 24.107 EXT_SET_FREQ_500KHZ_12V(FREQ|500kHz/SYNC2/12//90.9k//@EXT_SET_FREQ_500KHZ_12V





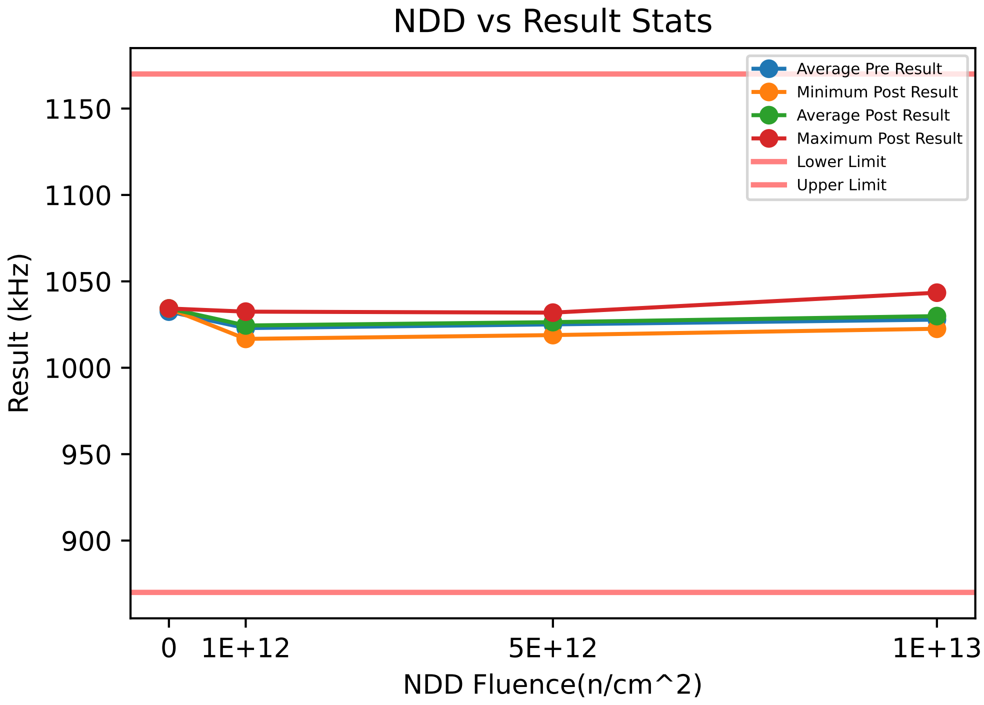
Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

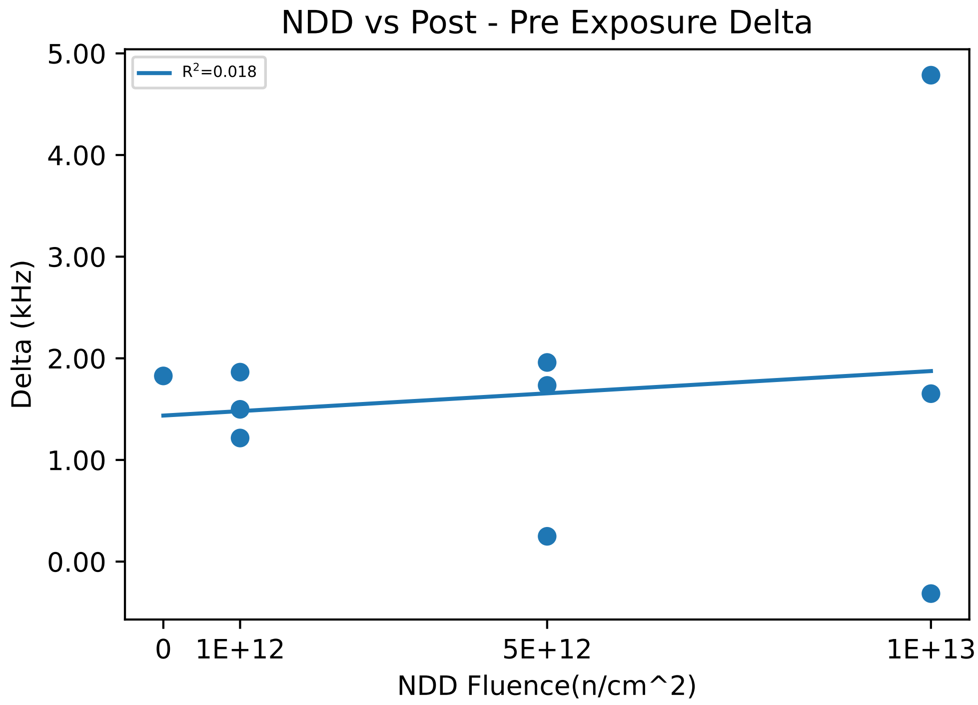
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	507.32	507.66	0.3392
504	1e+12	NDD	503.22	503.32	0.0967
505	1e+12	NDD	499.06	499.61	0.5471
506	5e+12	NDD	504.19	503.35	-0.8346
507	5e+12	NDD	505.75	505.31	-0.4405
508	5e+12	NDD	508.88	508.21	-0.6656
509	1e+13	NDD	512.5	512	-0.4967
510	1e+13	NDD	501	499.25	-1.7523
511	1e+13	NDD	500.71	499.32	-1.3923
512	0	Correlation	505.79	506.2	0.4093

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	505.79	505.79	505.79		506.2	506.2	506.2		0.4093	0.4093	0.4093	
1e+12	499.06	503.2	507.32	4.1288	499.61	503.53	507.66	4.0291	0.0967	0.32767	0.5471	0.22542
5e+12	504.19	506.27	508.88	2.3881	503.35	505.62	508.21	2.4447	-0.8346	-0.6469	-0.4405	0.19771
1e+13	500.71	504.74	512.5	6.7246	499.25	503.52	512	7.3441	-1.7523	-1.2138	-0.4967	0.64656

Device Test: 24.108 EXT_SET_FREQ_1000KHZ_12V(FREQ|1MHz/SYNC1/12//34.8k//@EXT_SET_FREQ_1000KHZ_12V





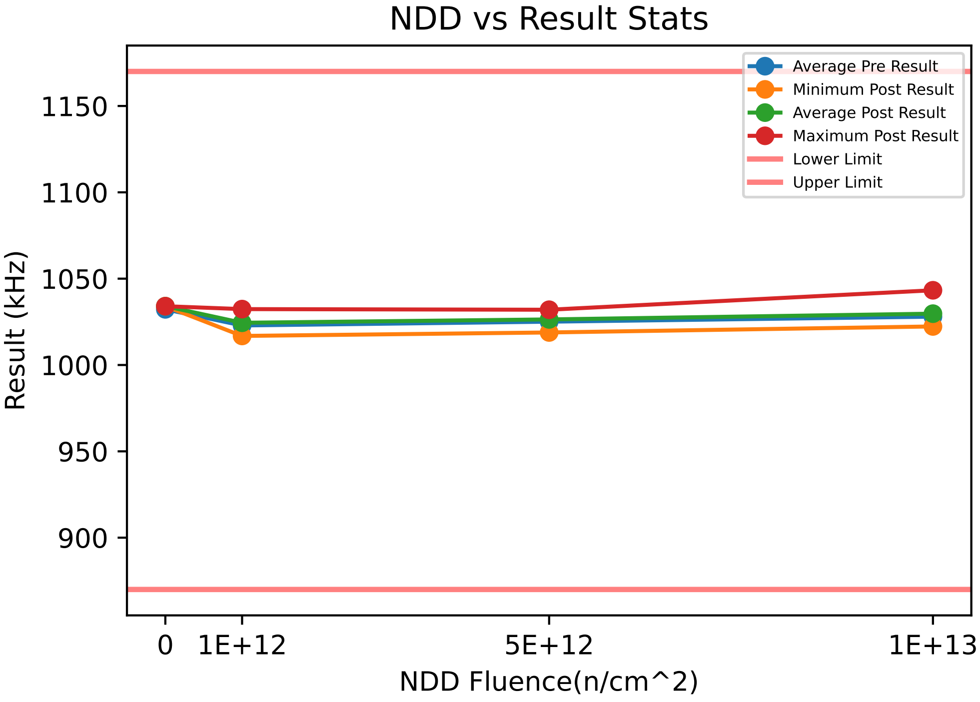
Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

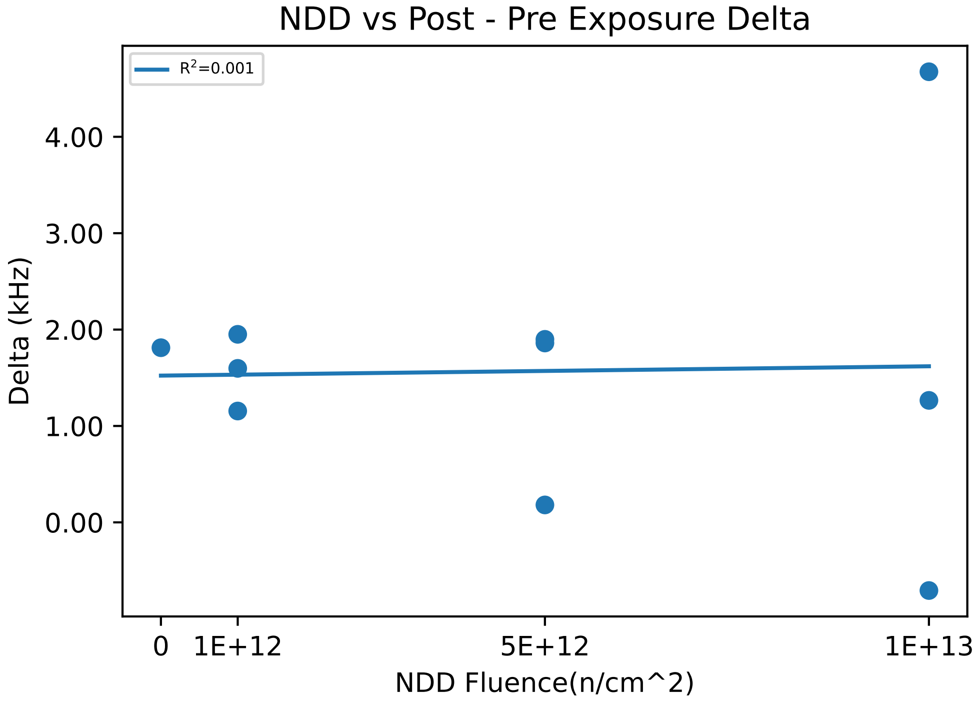
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1023	1024.2	1.2159
504	1e+12	NDD	1031	1032.5	1.4981
505	1e+12	NDD	1014.8	1016.7	1.8638
506	5e+12	NDD	1018.7	1018.9	0.2488
507	5e+12	NDD	1026.5	1028.4	1.9592
508	5e+12	NDD	1030.2	1031.9	1.7334
509	1e+13	NDD	1038.7	1043.4	4.7853
510	1e+13	NDD	1022	1023.7	1.652
511	1e+13	NDD	1022.9	1022.6	-0.3148
512	0	Correlation	1032.5	1034.3	1.8267

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1032.5	1032.5	1032.5		1034.3	1034.3	1034.3		1.8267	1.8267	1.8267	
1e+12	1014.8	1022.9	1031	8.067	1016.7	1024.5	1032.5	7.8865	1.2159	1.5259	1.8638	0.32485
5e+12	1018.7	1025.1	1030.2	5.8726	1018.9	1026.4	1031.9	6.7241	0.2488	1.3138	1.9592	0.9292
1e+13	1022	1027.9	1038.7	9.3666	1022.6	1029.9	1043.4	11.747	-0.3148	2.0408	4.7853	2.5722

Device Test: 24.109 EXT_SET_FREQ_1000KHZ_12V(FREQ|1MHz/SYNC2/12//34.8k//@EXT_SET_FREQ_1000KHZ_12V


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

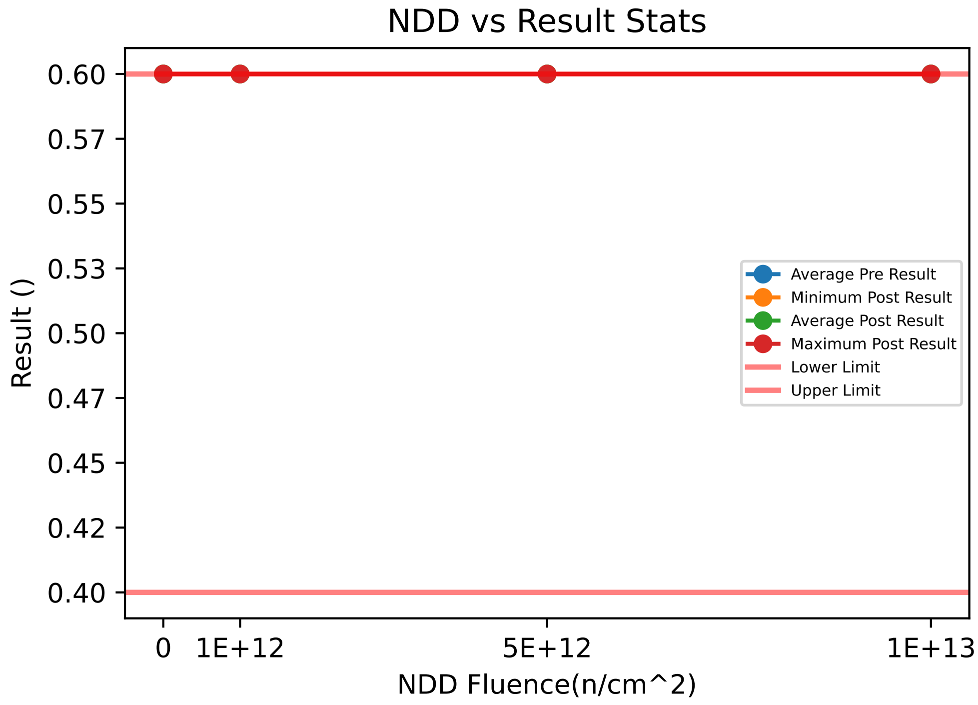
Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

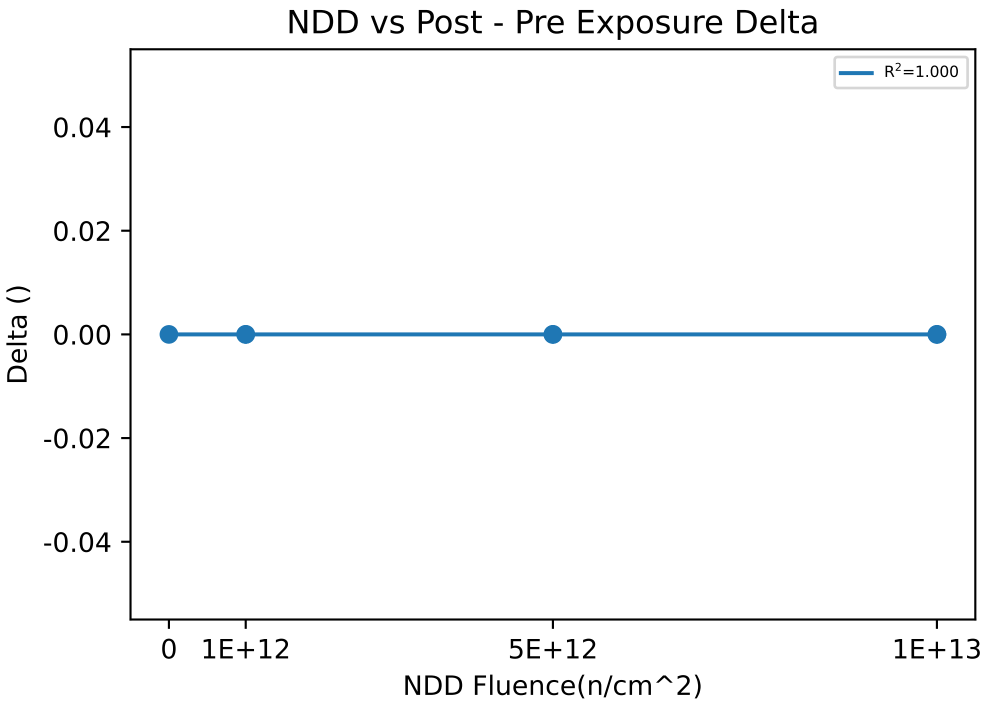
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1023	1024.2	1.1551
504	1e+12	NDD	1030.8	1032.4	1.5976
505	1e+12	NDD	1014.9	1016.8	1.9507
506	5e+12	NDD	1018.7	1018.8	0.1808
507	5e+12	NDD	1026.4	1028.3	1.8987
508	5e+12	NDD	1030.1	1032	1.8609
509	1e+13	NDD	1038.6	1043.3	4.6749
510	1e+13	NDD	1022.3	1023.6	1.2654
511	1e+13	NDD	1023	1022.3	-0.7072
512	0	Correlation	1032.2	1034	1.8119

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1032.2	1032.2	1032.2		1034	1034	1034		1.8119	1.8119	1.8119	
1e+12	1014.9	1022.9	1030.8	7.9453	1016.8	1024.5	1032.4	7.7718	1.1551	1.5678	1.9507	0.39864
5e+12	1018.7	1025.1	1030.1	5.8597	1018.8	1026.4	1032	6.7926	0.1808	1.3135	1.8987	0.9811
1e+13	1022.3	1028	1038.6	9.201	1022.3	1029.7	1043.3	11.748	-0.7072	1.7444	4.6749	2.7228

e Test: 24.11 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_60%/SYNC1/4.5//OPEN//@SYNC_IN_DUTY_CYCLE_RA





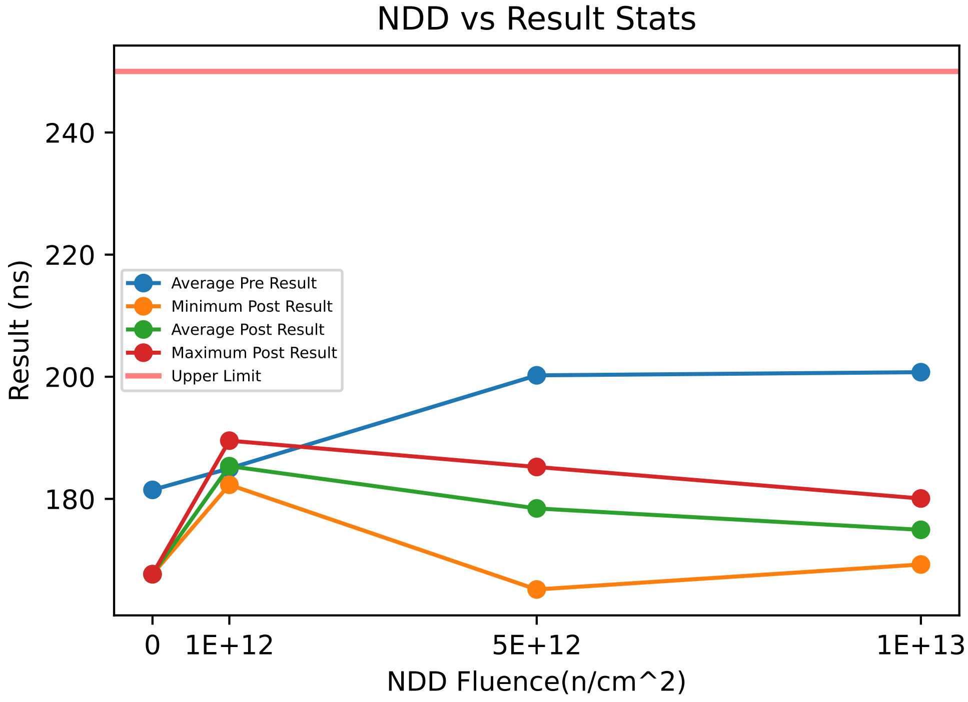
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 ())

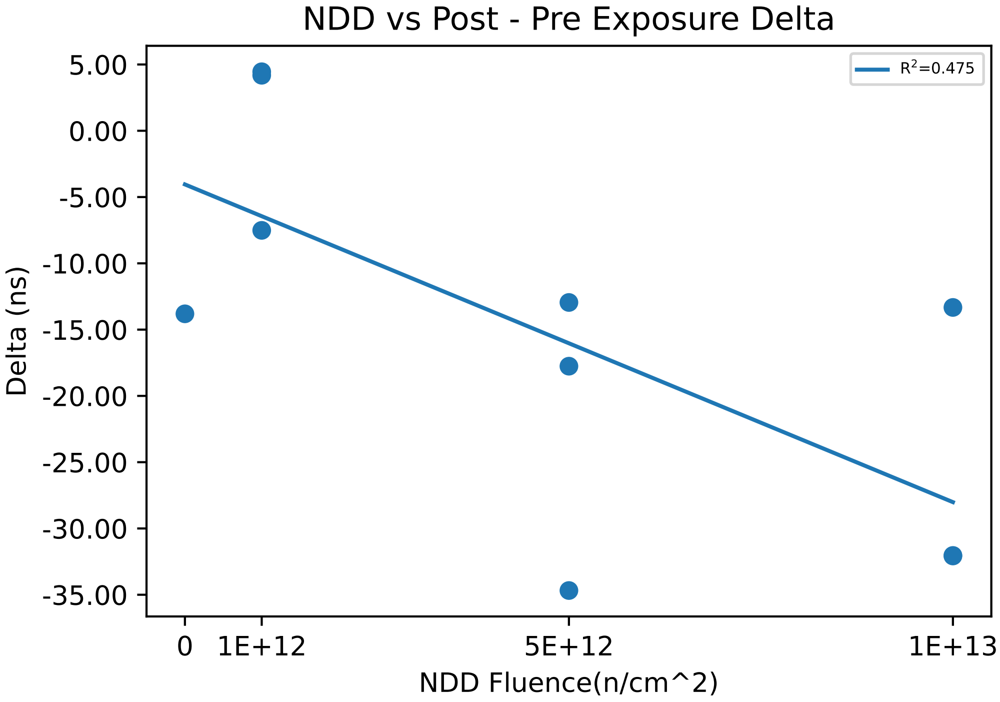
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6	0.6	0
504	1e+12	NDD	0.6	0.6	0
505	1e+12	NDD	0.6	0.6	0
506	5e+12	NDD	0.6	0.6	0
507	5e+12	NDD	0.6	0.6	0
508	5e+12	NDD	0.6	0.6	0
509	1e+13	NDD	0.6	0.6	0
510	1e+13	NDD	0.6	0.6	0
511	1e+13	NDD	0.6	0.6	0
512	0	Correlation	0.6	0.6	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6		0.6	0.6	0.6		0	0	0	
1e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
5e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
1e+13	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

Device Test: 24.111 ON_TIME_MIN_12V(TIMING|MINON/SW/12//511k//@ON_TIME_MIN_12V)





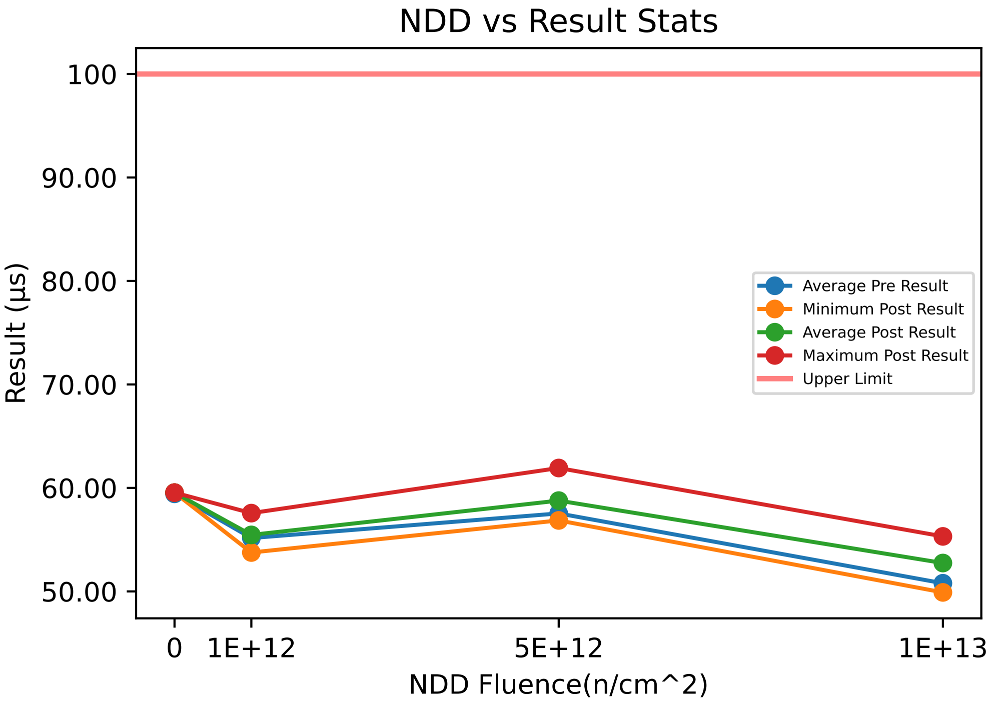
Test Results (Upper Limit = 250.0 (ns))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	197.05	189.54	-7.5127
504	1e+12	NDD	178.13	182.31	4.1866
505	1e+12	NDD	179.8	184.25	4.4517
506	5e+12	NDD	199.84	165.16	-34.681
507	5e+12	NDD	202.98	185.22	-17.759
508	5e+12	NDD	197.87	184.92	-12.952
509	1e+13	NDD	207.55	175.48	-32.075
510	1e+13	NDD	193.39	180.07	-13.327
511	1e+13	NDD	201.29	169.25	-32.035
512	0	Correlation	181.47	167.66	-13.808

Test Statistics (ns)

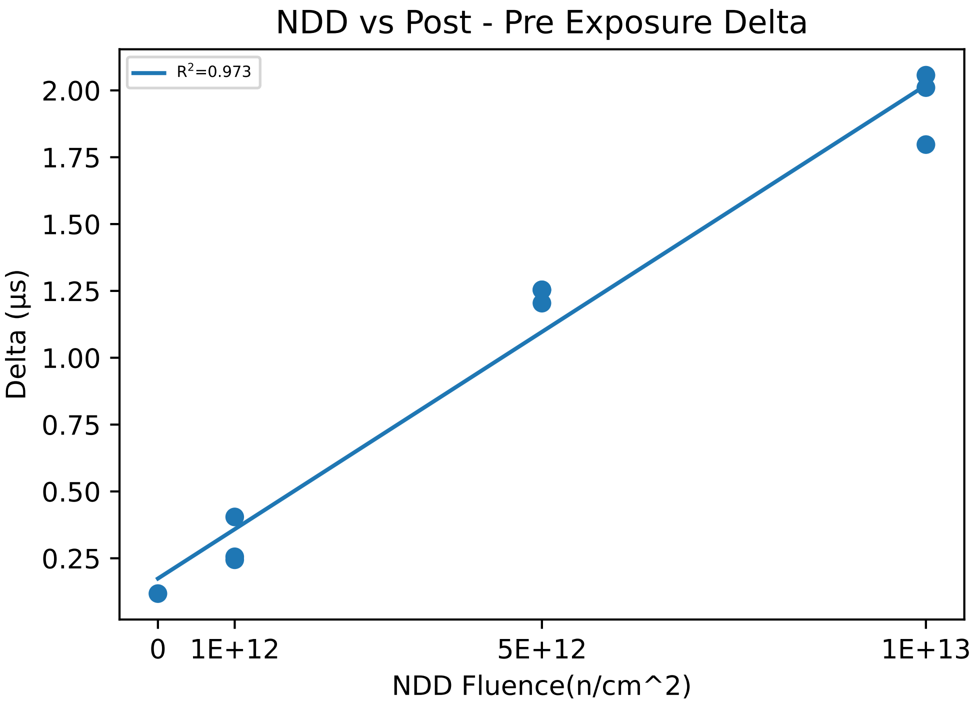
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	181.47	181.47	181.47		167.66	167.66	167.66		-13.808	-13.808	-13.808	
1e+12	178.13	184.99	197.05	10.476	182.31	185.36	189.54	3.7392	-7.5127	0.3752	4.4517	6.8324
5e+12	197.87	200.23	202.98	2.5776	165.16	178.44	185.22	11.496	-34.681	-21.797	-12.952	11.413
1e+13	193.39	200.75	207.55	7.0968	169.25	174.93	180.07	5.4259	-32.075	-25.812	-13.327	10.813

Device Test: 24.112 T_EN_DELAY(TIMING|DELAY/EN/12//511k//@T_EN_DELAY)


NDD vs Result Stats

Test Results (Upper Limit = 100.0 (µs))

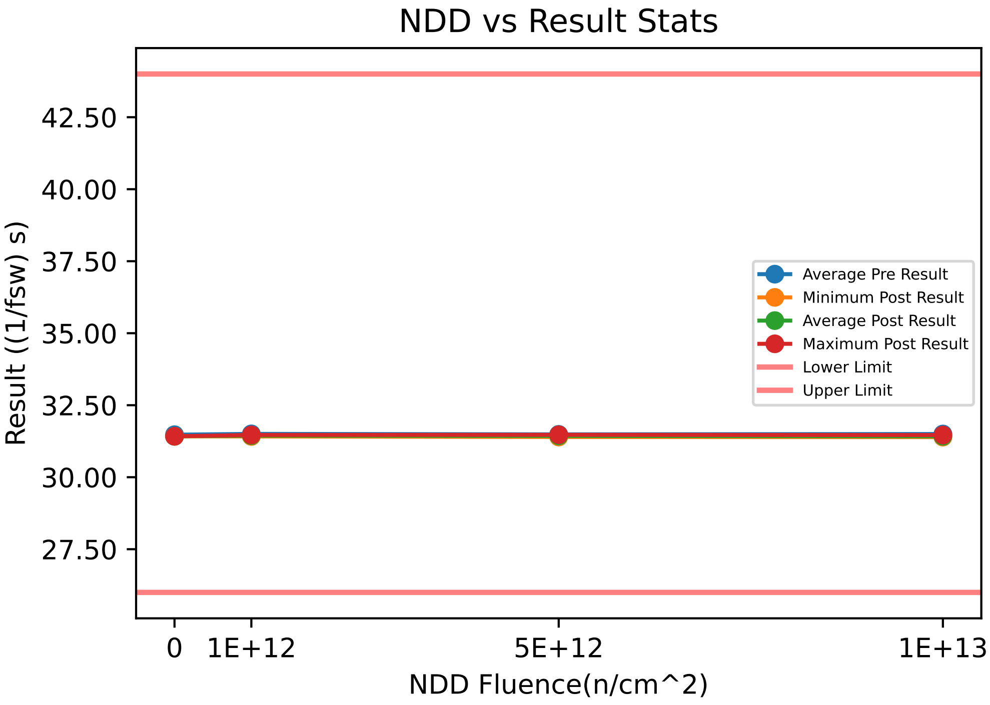
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	54.81	55.055	0.2444
504	1e+12	NDD	57.16	57.565	0.4046
505	1e+12	NDD	53.504	53.759	0.2555
506	5e+12	NDD	55.655	56.859	1.2042
507	5e+12	NDD	56.285	57.538	1.2537
508	5e+12	NDD	60.671	61.925	1.2541
509	1e+13	NDD	51.21	53.007	1.7973
510	1e+13	NDD	47.894	49.904	2.0104
511	1e+13	NDD	53.259	55.316	2.0568
512	0	Correlation	59.429	59.547	0.1179

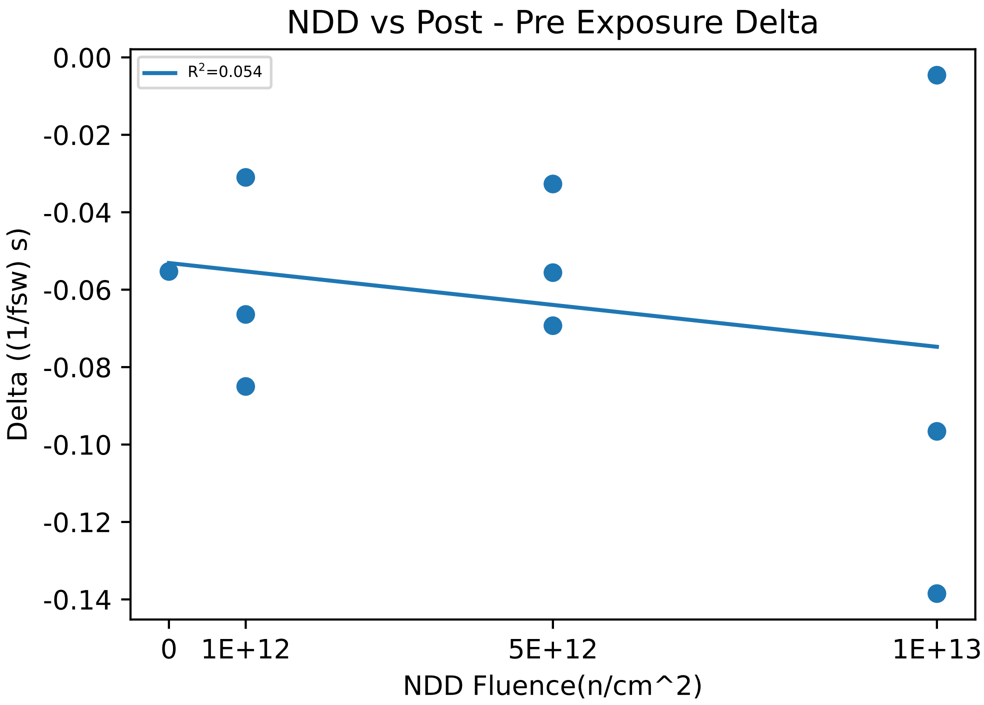

NDD vs Post - Pre Exposure Delta

Test Statistics (µs)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	59.429	59.429	59.429		59.547	59.547	59.547		0.1179	0.1179	0.1179	
1e+12	53.504	55.158	57.16	1.8529	53.759	55.46	57.565	1.9348	0.2444	0.3015	0.4046	0.08946
5e+12	55.655	57.537	60.671	2.7326	56.859	58.774	61.925	2.75	1.2042	1.2373	1.2541	0.028695
1e+13	47.894	50.788	53.259	2.7074	49.904	52.742	55.316	2.7155	1.7973	1.9548	2.0568	0.13839

Device Test: 24.114 T_FAULT_DELAY(TIMING|DELAY/FAULT/12//511k//@T_FAULT_DELAY)





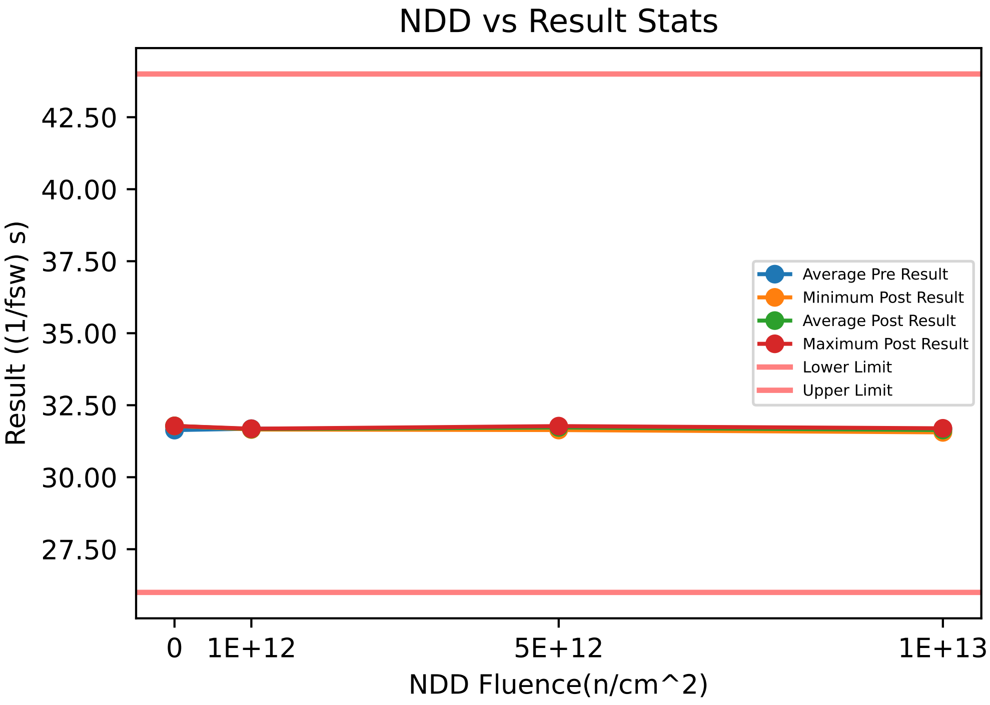
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

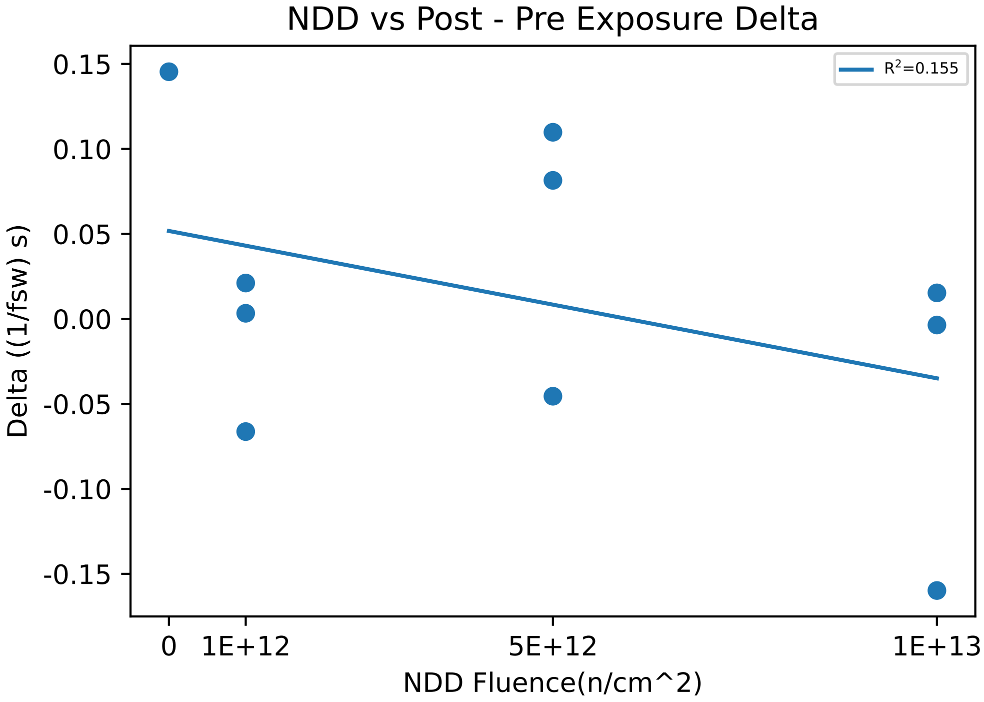
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.532	31.447	-0.085
504	1e+12	NDD	31.497	31.466	-0.031
505	1e+12	NDD	31.482	31.416	-0.0664
506	5e+12	NDD	31.505	31.472	-0.0327
507	5e+12	NDD	31.49	31.434	-0.0556
508	5e+12	NDD	31.465	31.396	-0.0693
509	1e+13	NDD	31.543	31.404	-0.1385
510	1e+13	NDD	31.467	31.462	-0.0046
511	1e+13	NDD	31.488	31.392	-0.0966
512	0	Correlation	31.476	31.42	-0.0553

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.476	31.476	31.476		31.42	31.42	31.42		-0.0553	-0.0553	-0.0553	
1e+12	31.482	31.504	31.532	0.025497	31.416	31.443	31.466	0.02562	-0.085	-0.0608	-0.031	0.027432
5e+12	31.465	31.487	31.505	0.020084	31.396	31.434	31.472	0.0382	-0.0693	-0.052533	-0.0327	0.018492
1e+13	31.467	31.499	31.543	0.038996	31.392	31.419	31.462	0.037788	-0.1385	-0.0799	-0.0046	0.068494

Device Test: 24.116 T_FAULT_DELAY(TIMING|DELAY/FAULT/12//90.9k//@T_FAULT_DELAY)





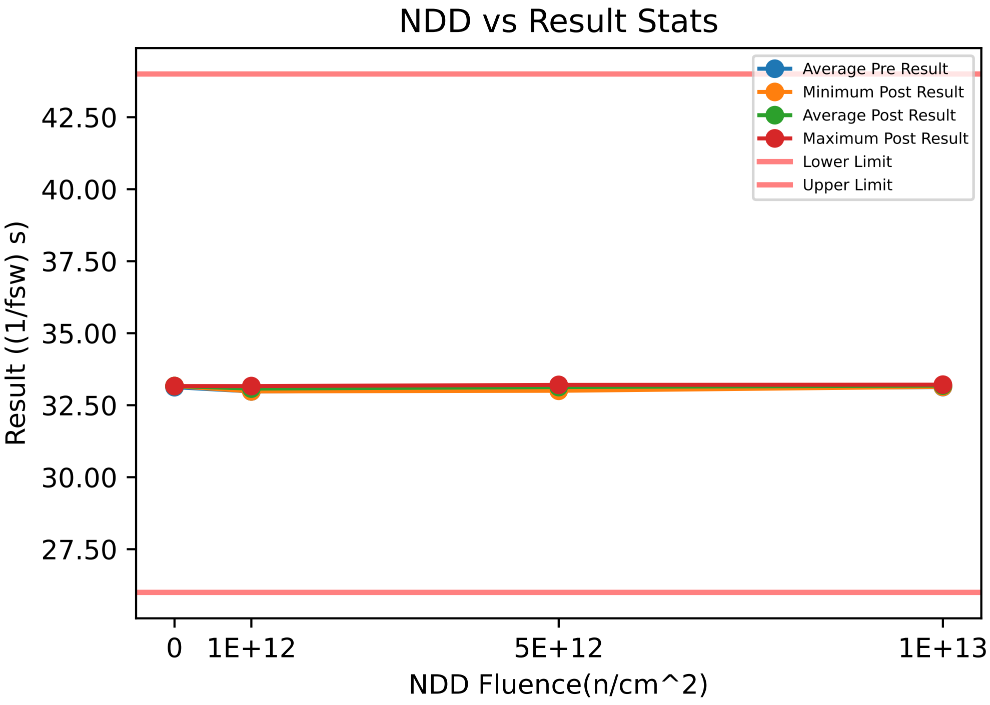
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

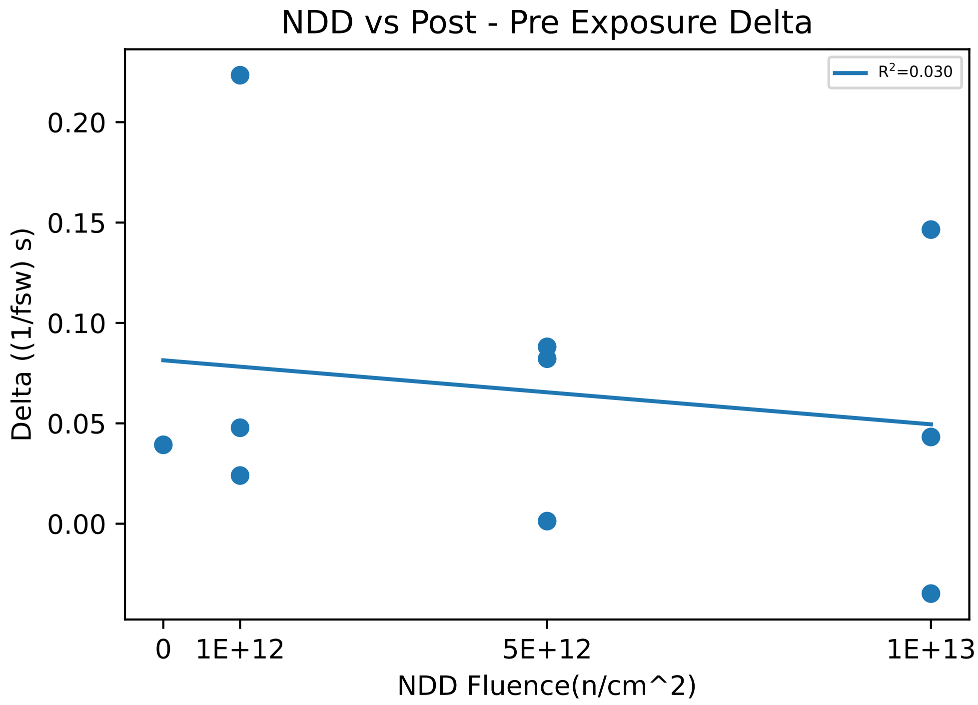
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.634	31.655	0.0211
504	1e+12	NDD	31.74	31.674	-0.0663
505	1e+12	NDD	31.68	31.683	0.0033
506	5e+12	NDD	31.682	31.637	-0.0455
507	5e+12	NDD	31.659	31.769	0.1098
508	5e+12	NDD	31.692	31.774	0.0815
509	1e+13	NDD	31.682	31.697	0.0153
510	1e+13	NDD	31.663	31.659	-0.0036
511	1e+13	NDD	31.716	31.556	-0.1598
512	0	Correlation	31.635	31.781	0.1454

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.635	31.635	31.635		31.781	31.781	31.781		0.1454	0.1454	0.1454	
1e+12	31.634	31.685	31.74	0.053072	31.655	31.671	31.683	0.014097	-0.0663	-0.013967	0.0211	0.046188
5e+12	31.659	31.678	31.692	0.017169	31.637	31.726	31.774	0.077551	-0.0455	0.0486	0.1098	0.082712
1e+13	31.663	31.687	31.716	0.02704	31.556	31.638	31.697	0.072925	-0.1598	-0.049367	0.0153	0.096104

Device Test: 24.118 T_FAULT_DELAY(TIMING|DELAY/FAULT/12//34.8k//@T_FAULT_DELAY)





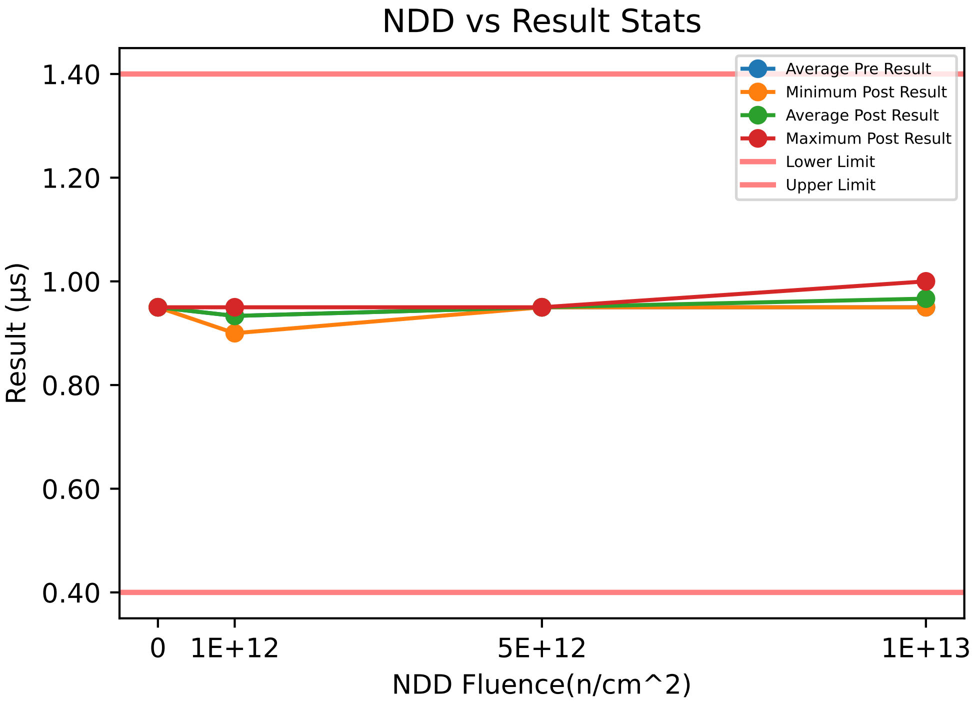
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

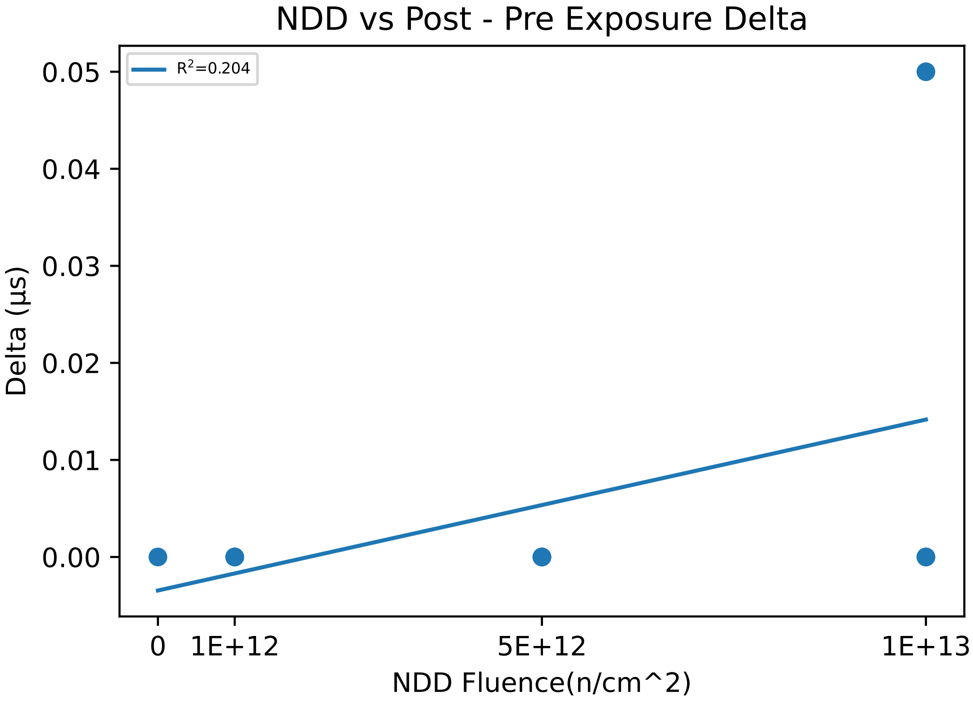
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	33.062	33.086	0.024
504	1e+12	NDD	33.116	33.164	0.0478
505	1e+12	NDD	32.755	32.979	0.2234
506	5e+12	NDD	32.999	33	0.0013
507	5e+12	NDD	33.117	33.205	0.0881
508	5e+12	NDD	33.1	33.182	0.0822
509	1e+13	NDD	33.066	33.213	0.1465
510	1e+13	NDD	33.15	33.194	0.0432
511	1e+13	NDD	33.171	33.136	-0.0348
512	0	Correlation	33.125	33.164	0.0393

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	33.125	33.125	33.125		33.164	33.164	33.164		0.0393	0.0393	0.0393	
1e+12	32.755	32.978	33.116	0.19444	32.979	33.076	33.164	0.0928	0.024	0.0984	0.2234	0.10891
5e+12	32.999	33.072	33.117	0.063833	33	33.129	33.205	0.11226	0.0013	0.0572	0.0881	0.048501
1e+13	33.066	33.129	33.171	0.05558	33.136	33.181	33.213	0.039688	-0.0348	0.051633	0.1465	0.090944

Device Test: 24.119 T_FAULT_MIN(TIMING|MINON/FAULT/12//511k//@T_FAULT_MIN)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

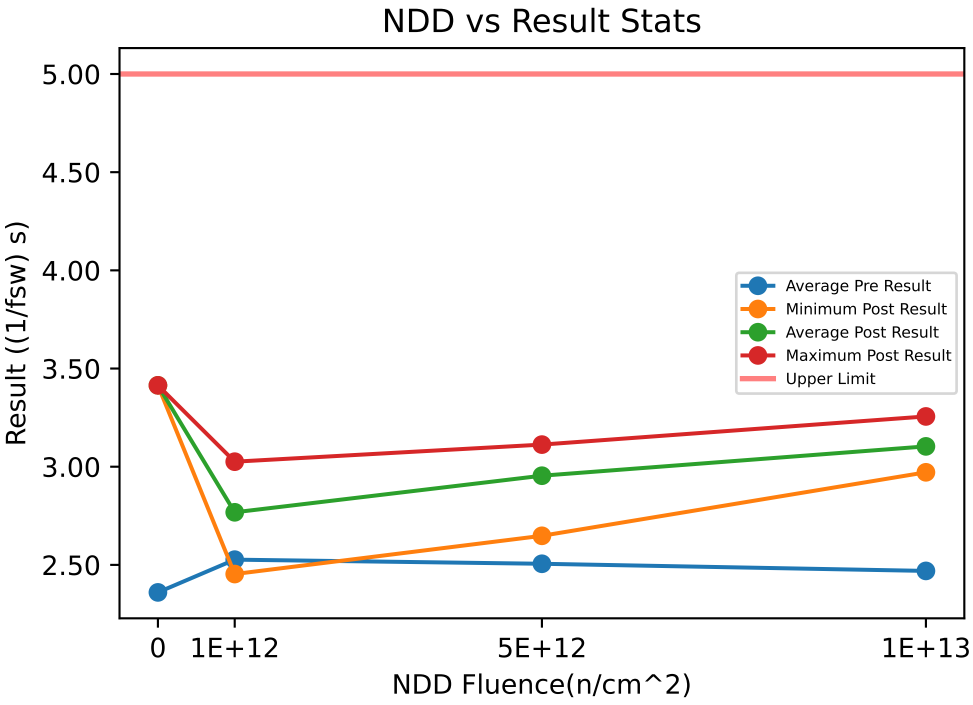
Test Results (Lower Limit = 0.4, Upper Limit = 1.4 (µs))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.95	0.95	0
504	1e+12	NDD	0.95	0.95	0
505	1e+12	NDD	0.9	0.9	0
506	5e+12	NDD	0.95	0.95	0
507	5e+12	NDD	0.95	0.95	0
508	5e+12	NDD	0.95	0.95	0
509	1e+13	NDD	0.95	1	0.05
510	1e+13	NDD	0.95	0.95	0
511	1e+13	NDD	0.95	0.95	0
512	0	Correlation	0.95	0.95	0

Test Statistics (µs)

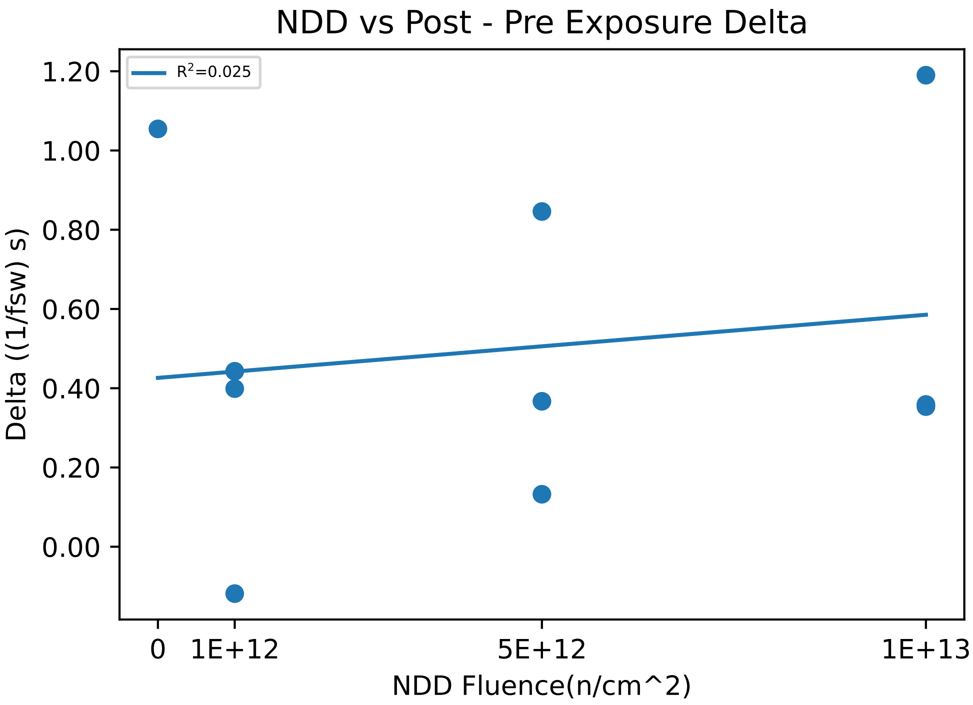
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.95	0.95	0.95		0.95	0.95	0.95		0	0	0	
1e+12	0.9	0.93333	0.95	0.028868	0.9	0.93333	0.95	0.028868	0	0	0	0
5e+12	0.95	0.95	0.95	0	0.95	0.95	0.95	0	0	0	0	0
1e+13	0.95	0.95	0.95	0	0.95	0.96667	1	0.028868	0	0.016667	0.05	0.028868

Device Test: 24.12 T_CLOCK_DET(TIMING|CLKDETECT/SYNC1/4.5//511k//@T_CLOCK_DET)



Test Results (Upper Limit = 5.0 ((1/fsw) s))

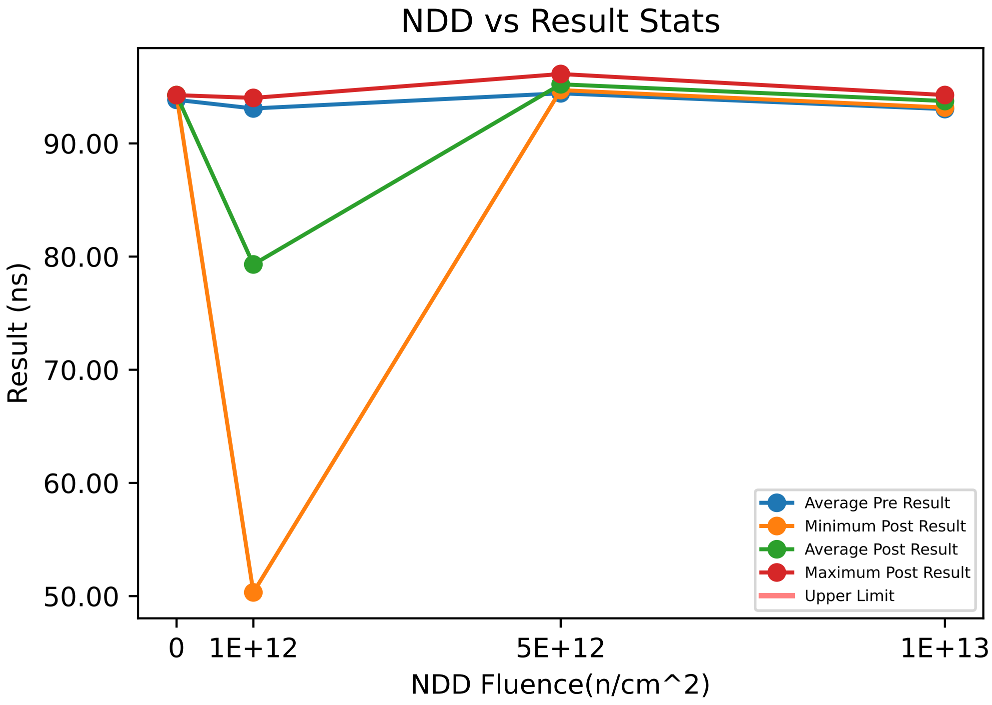
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	2.9428	2.8245	-0.1183
504	1e+12	NDD	2.0106	2.4534	0.4428
505	1e+12	NDD	2.6266	3.0256	0.399
506	5e+12	NDD	2.9694	3.1018	0.1324
507	5e+12	NDD	2.2666	3.1126	0.846
508	5e+12	NDD	2.2811	2.6481	0.367
509	1e+13	NDD	2.066	3.256	1.19
510	1e+13	NDD	2.6179	2.9715	0.3536
511	1e+13	NDD	2.7241	3.0831	0.359
512	0	Correlation	2.3599	3.4144	1.0545

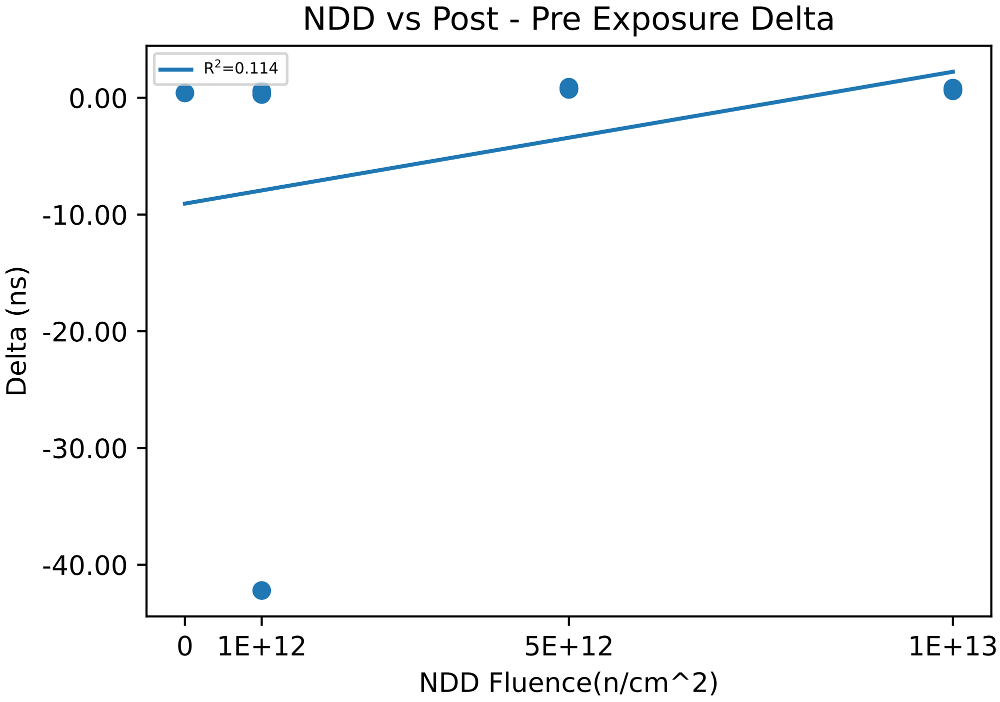


Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.3599	2.3599	2.3599		3.4144	3.4144	3.4144		1.0545	1.0545	1.0545	
1e+12	2.0106	2.5267	2.9428	0.47407	2.4534	2.7678	3.0256	0.29028	-0.1183	0.24117	0.4428	0.31208
5e+12	2.2666	2.5057	2.9694	0.40164	2.6481	2.9542	3.1126	0.26512	0.1324	0.44847	0.846	0.36371
1e+13	2.066	2.4693	2.7241	0.35331	2.9715	3.1035	3.256	0.14335	0.3536	0.6342	1.19	0.48134

Device Test: 24.120 T_DEAD(TIMING|DELAY/SW/12//511k//@T_DEAD)





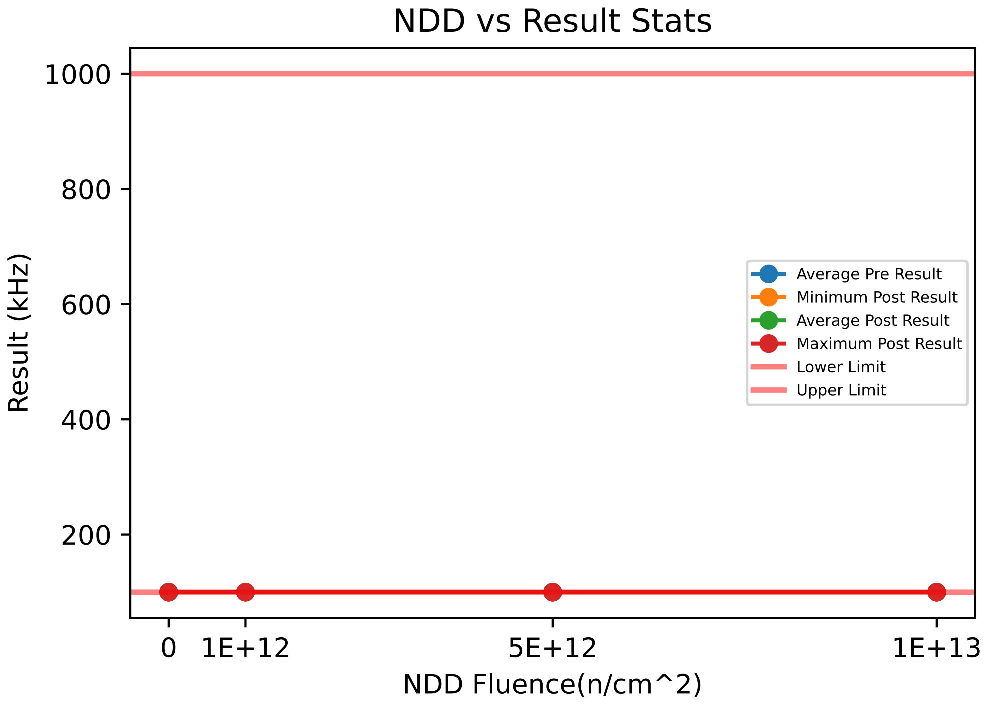
Test Results (No Limits Specified (ns))

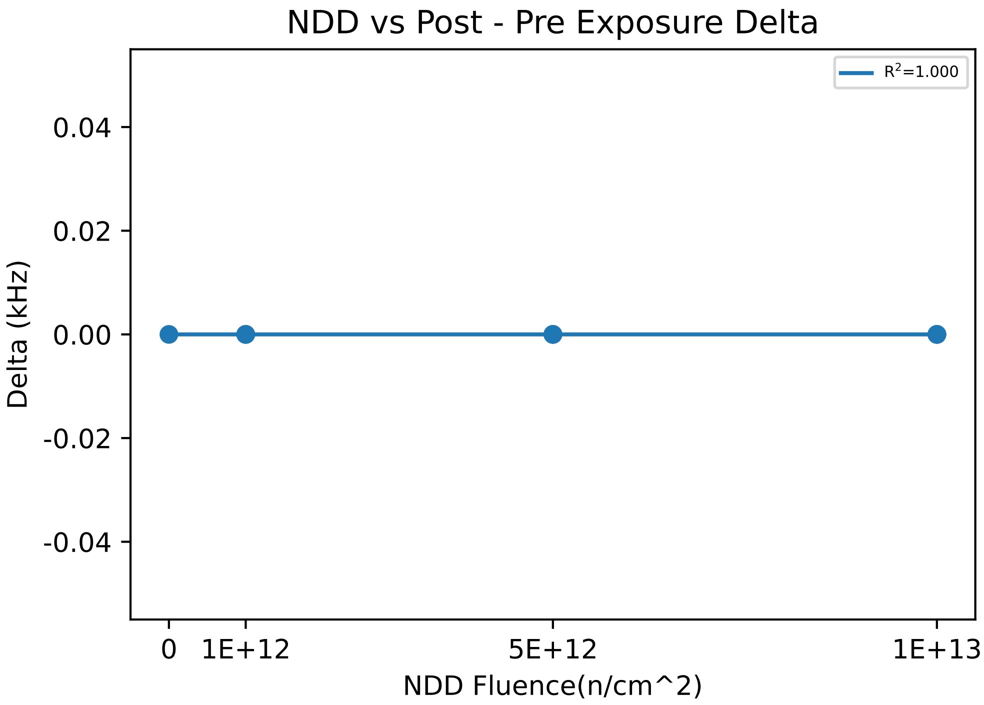
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	93.737	94.02	0.2832
504	1e+12	NDD	92.538	50.33	-42.208
505	1e+12	NDD	92.993	93.567	0.5741
506	5e+12	NDD	95.368	96.133	0.7649
507	5e+12	NDD	93.802	94.71	0.9082
508	5e+12	NDD	94.111	94.827	0.716
509	1e+13	NDD	92.962	93.791	0.8298
510	1e+13	NDD	93.679	94.274	0.5953
511	1e+13	NDD	92.463	93.169	0.7056
512	0	Correlation	93.851	94.266	0.4144

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	93.851	93.851	93.851		94.266	94.266	94.266		0.4144	0.4144	0.4144	
1e+12	92.538	93.089	93.737	0.60544	50.33	79.306	94.02	25.095	-42.208	-13.783	0.5741	24.617
5e+12	93.802	94.427	95.368	0.82977	94.71	95.223	96.133	0.79016	0.716	0.79637	0.9082	0.099889
1e+13	92.463	93.034	93.679	0.61132	93.169	93.745	94.274	0.55437	0.5953	0.71023	0.8298	0.11732

Device Test: 24.121 SYNC_FREQ_RANGE(FREQ|100kHz/SYNC1/14//OPEN//@SYNC_FREQ_RANGE)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

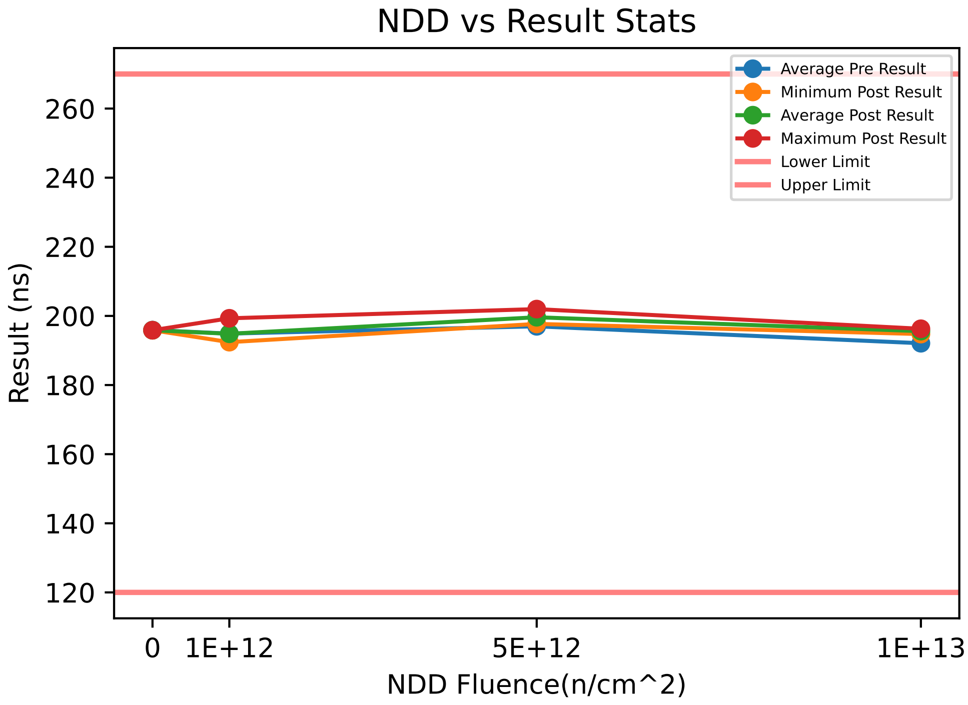
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

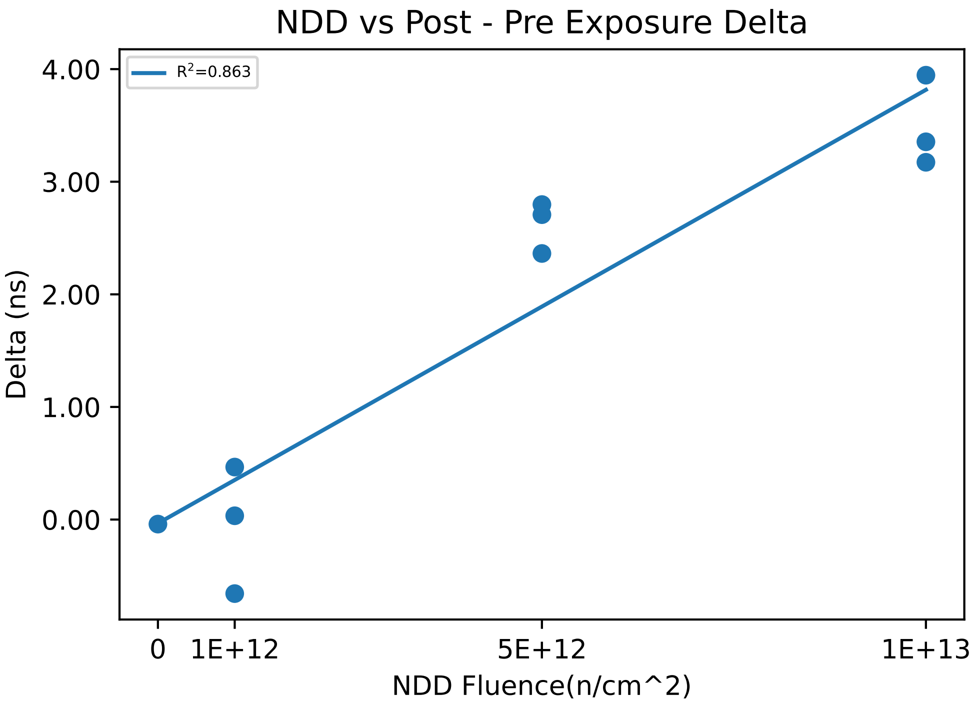
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	100	100	0
504	1e+12	NDD	100	100	0
505	1e+12	NDD	100	100	0
506	5e+12	NDD	100	100	0
507	5e+12	NDD	100	100	0
508	5e+12	NDD	100	100	0
509	1e+13	NDD	100	100	0
510	1e+13	NDD	100	100	0
511	1e+13	NDD	100	100	0
512	0	Correlation	100	100	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100		100	100	100		0	0	0	
1e+12	100	100	100	0	100	100	100	0	0	0	0	0
5e+12	100	100	100	0	100	100	100	0	0	0	0	0
1e+13	100	100	100	0	100	100	100	0	0	0	0	0

Device Test: 24.122 SYNC1_SW_DELAY(TIMING|DELAY/SYNC1/14//OPEN//@SYNC1_SW_DELAY)





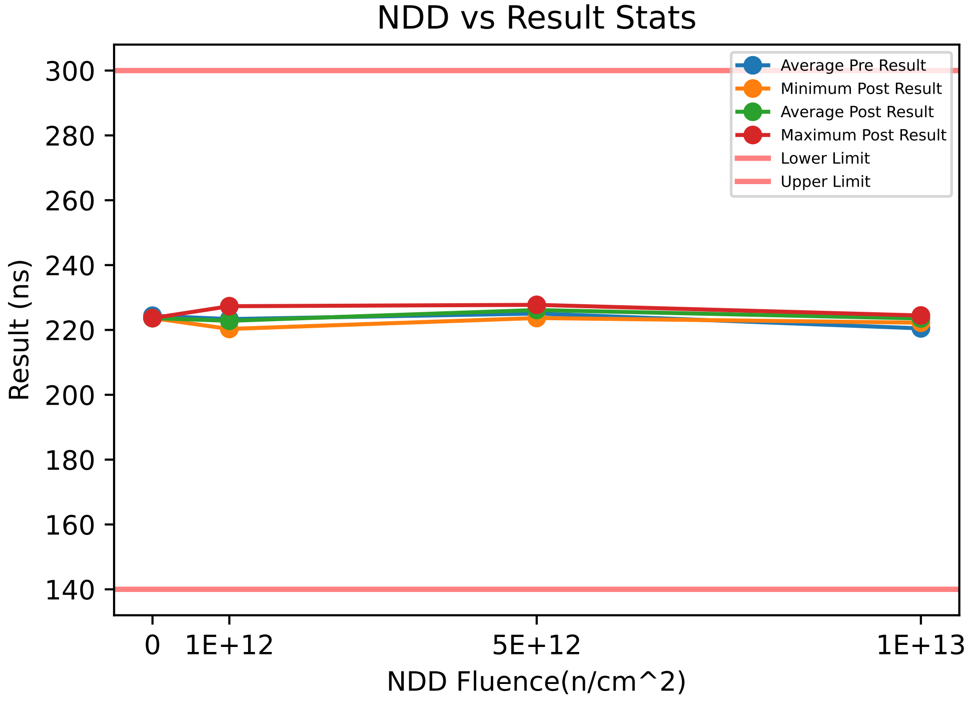
Test Results (Lower Limit = 120.0, Upper Limit = 270.0 (ns))

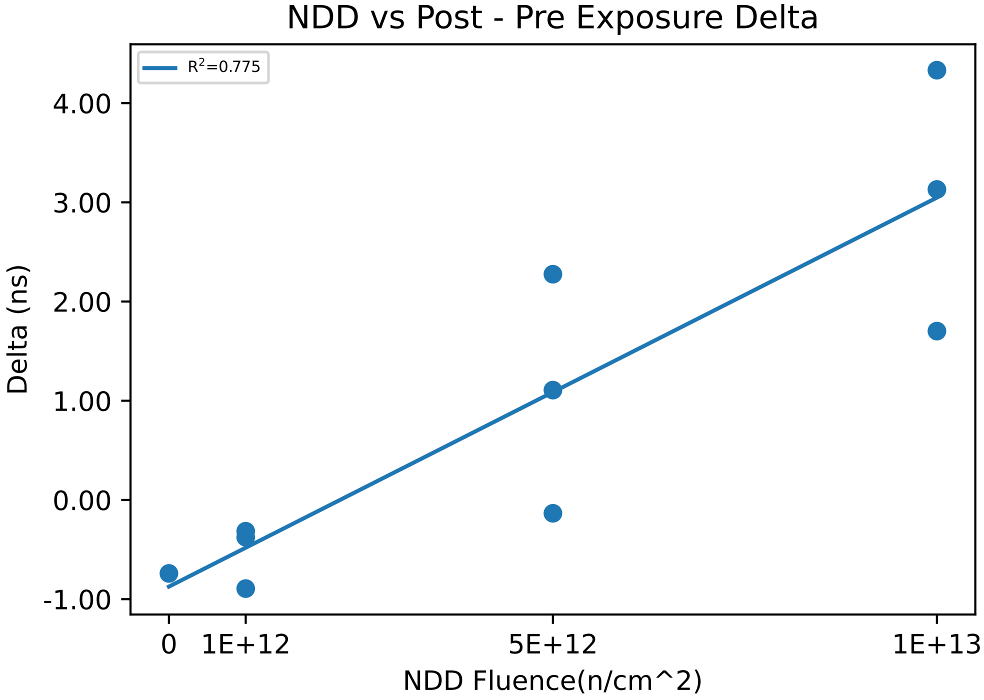
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	199.28	199.31	0.0337
504	1e+12	NDD	191.94	192.41	0.4661
505	1e+12	NDD	193.43	192.77	-0.6575
506	5e+12	NDD	199.18	201.98	2.7973
507	5e+12	NDD	196.47	199.17	2.7076
508	5e+12	NDD	195.33	197.69	2.3629
509	1e+13	NDD	192.93	196.28	3.3545
510	1e+13	NDD	191.58	194.75	3.1727
511	1e+13	NDD	191.78	195.73	3.946
512	0	Correlation	195.9	195.86	-0.0403

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	195.9	195.9	195.9		195.86	195.86	195.86		-0.0403	-0.0403	-0.0403	
1e+12	191.94	194.88	199.28	3.8791	192.41	194.83	199.31	3.8861	-0.6575	-0.052567	0.4661	0.56675
5e+12	195.33	196.99	199.18	1.9775	197.69	199.61	201.98	2.1753	2.3629	2.6226	2.7973	0.22934
1e+13	191.58	192.1	192.93	0.72791	194.75	195.59	196.28	0.77652	3.1727	3.4911	3.946	0.40433

Device Test: 24.123 SYNC1_SW_DELAY_INV(TIMING|DELAY/SYNC1/14//OPEN//@SYNC1_SW_DELAY_INV)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

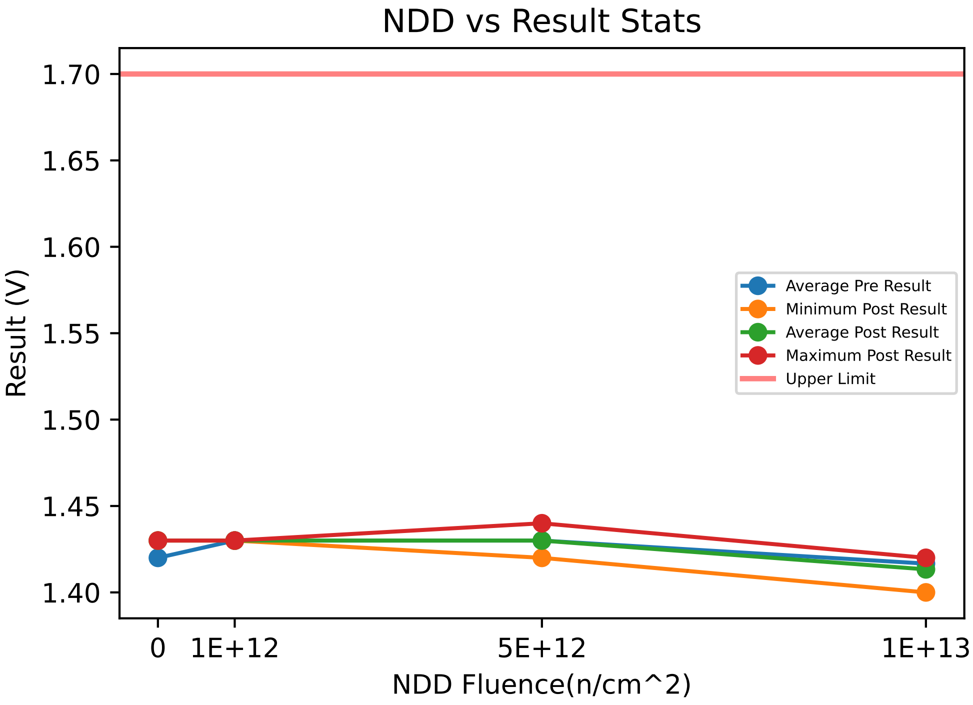
Test Results (Lower Limit = 140.0, Upper Limit = 300.0 (ns))

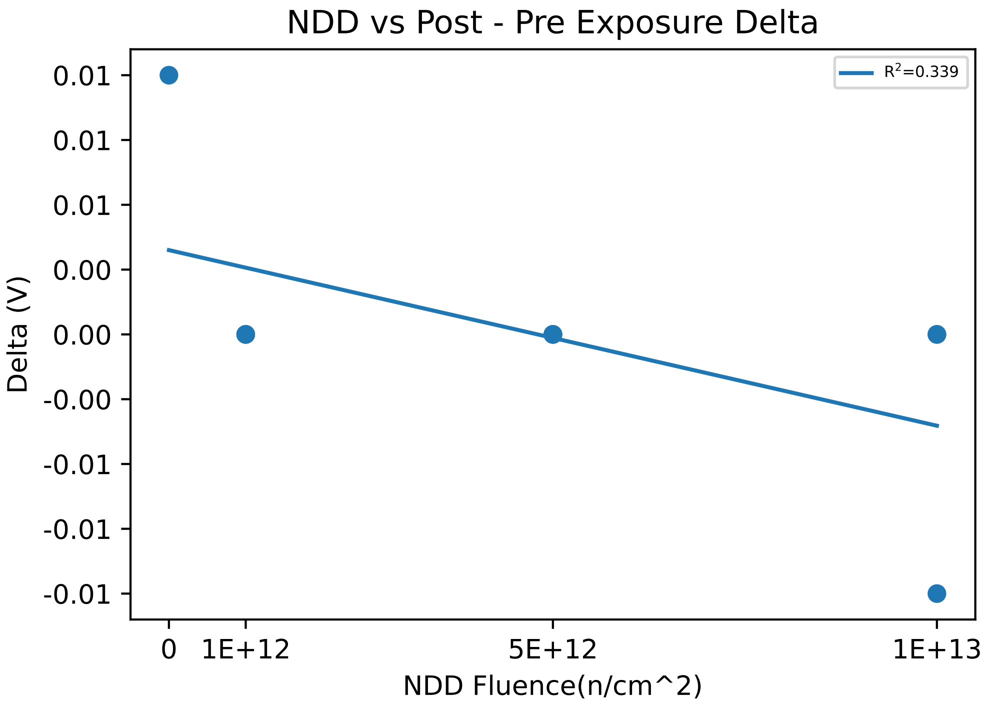
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	228.21	227.32	-0.8935
504	1e+12	NDD	220.68	220.3	-0.3757
505	1e+12	NDD	221.15	220.84	-0.3152
506	5e+12	NDD	226.63	227.74	1.1071
507	5e+12	NDD	224.74	227.01	2.2755
508	5e+12	NDD	223.81	223.67	-0.1345
509	1e+13	NDD	221.32	224.45	3.1298
510	1e+13	NDD	219.58	223.91	4.3319
511	1e+13	NDD	220.53	222.23	1.702
512	0	Correlation	224.39	223.65	-0.7407

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	224.39	224.39	224.39		223.65	223.65	223.65		-0.7407	-0.7407	-0.7407	
1e+12	220.68	223.35	228.21	4.2213	220.3	222.82	227.32	3.9074	-0.8935	-0.52813	-0.3152	0.31786
5e+12	223.81	225.06	226.63	1.4382	223.67	226.14	227.74	2.168	-0.1345	1.0827	2.2755	1.2052
1e+13	219.58	220.48	221.32	0.87372	222.23	223.53	224.45	1.1575	1.702	3.0546	4.3319	1.3166

Device Test: 24.124 SYNC1_VIH(THRESHOLD|RISE/SYNC1/14//OPEN//@SYNC1_VIH)





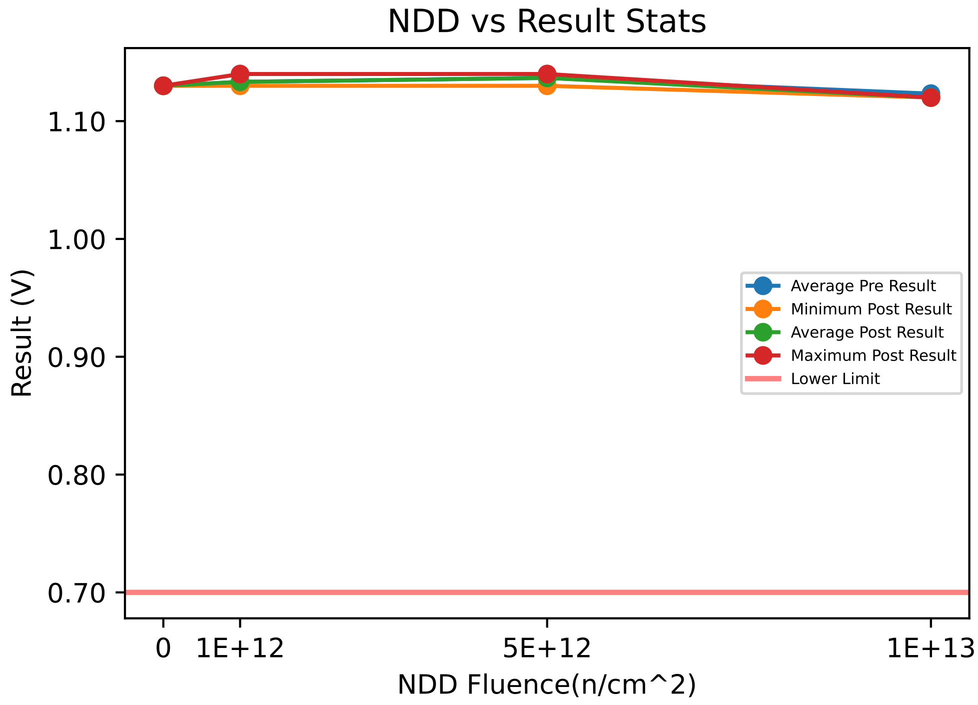
Test Results (Upper Limit = 1.7 (V))

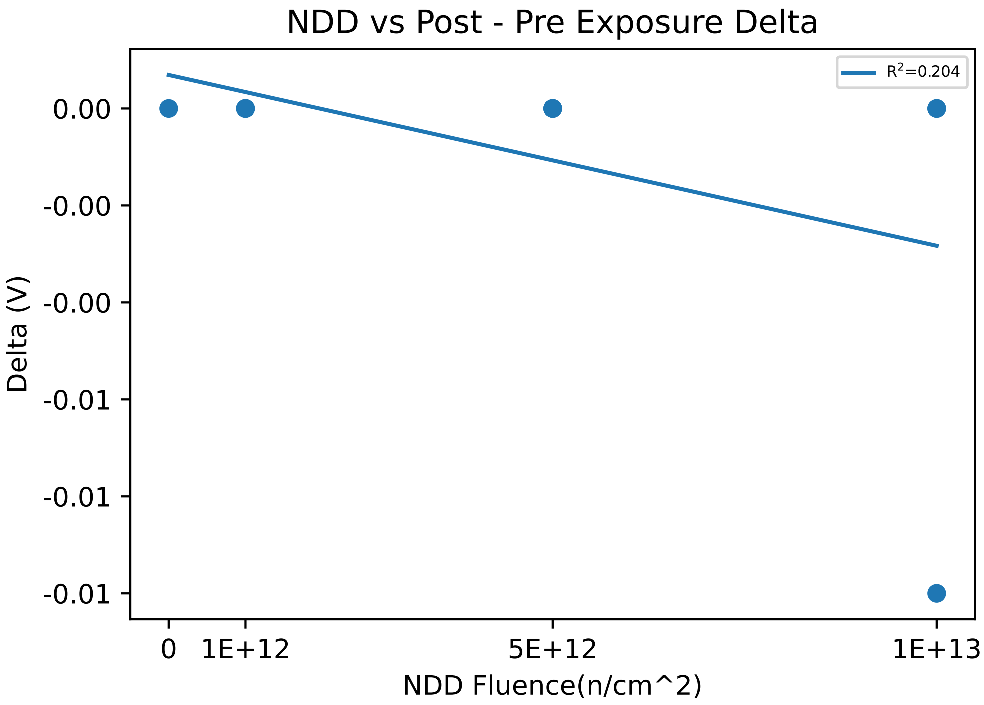
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.43	1.43	0
504	1e+12	NDD	1.43	1.43	0
505	1e+12	NDD	1.43	1.43	0
506	5e+12	NDD	1.44	1.44	0
507	5e+12	NDD	1.42	1.42	0
508	5e+12	NDD	1.43	1.43	0
509	1e+13	NDD	1.41	1.4	-0.01
510	1e+13	NDD	1.42	1.42	0
511	1e+13	NDD	1.42	1.42	0
512	0	Correlation	1.42	1.43	0.01

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.42	1.42	1.42		1.43	1.43	1.43		0.01	0.01	0.01	
1e+12	1.43	1.43	1.43	0	1.43	1.43	1.43	0	0	0	0	0
5e+12	1.42	1.43	1.44	0.01	1.42	1.43	1.44	0.01	0	0	0	0
1e+13	1.41	1.4167	1.42	0.0057735	1.4	1.4133	1.42	0.011547	-0.01	-0.0033333	0	0.0057735

Device Test: 24.125 SYNC1_VIL(THRESHOLD|FALL/SYNC1/14//OPEN//@SYNC1_VIL)





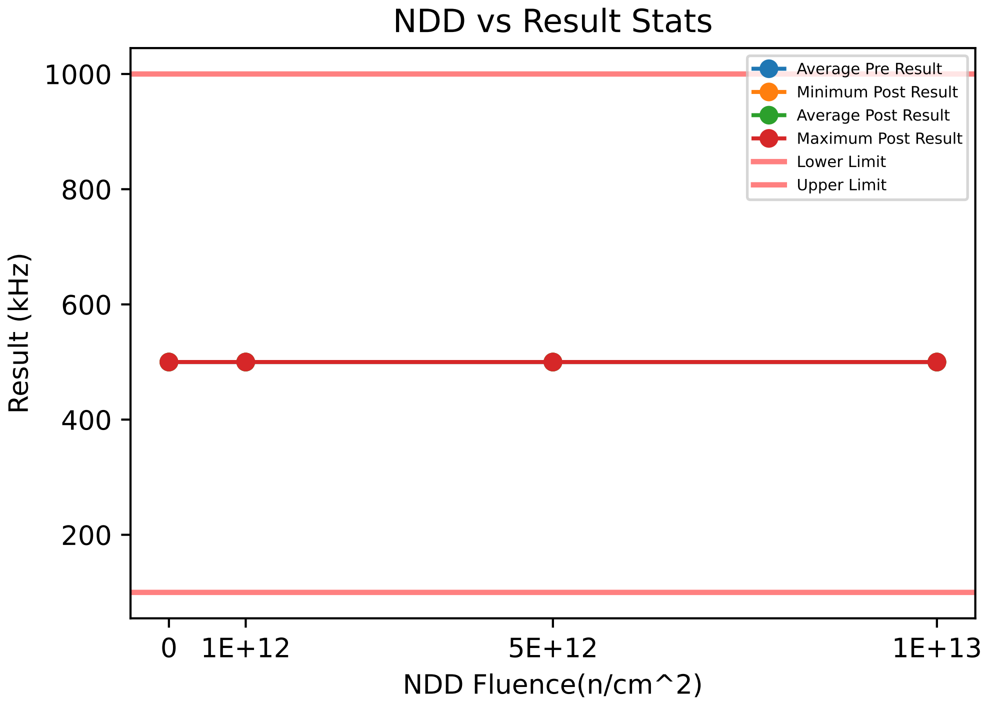
Test Results (Lower Limit = 0.7 (V))

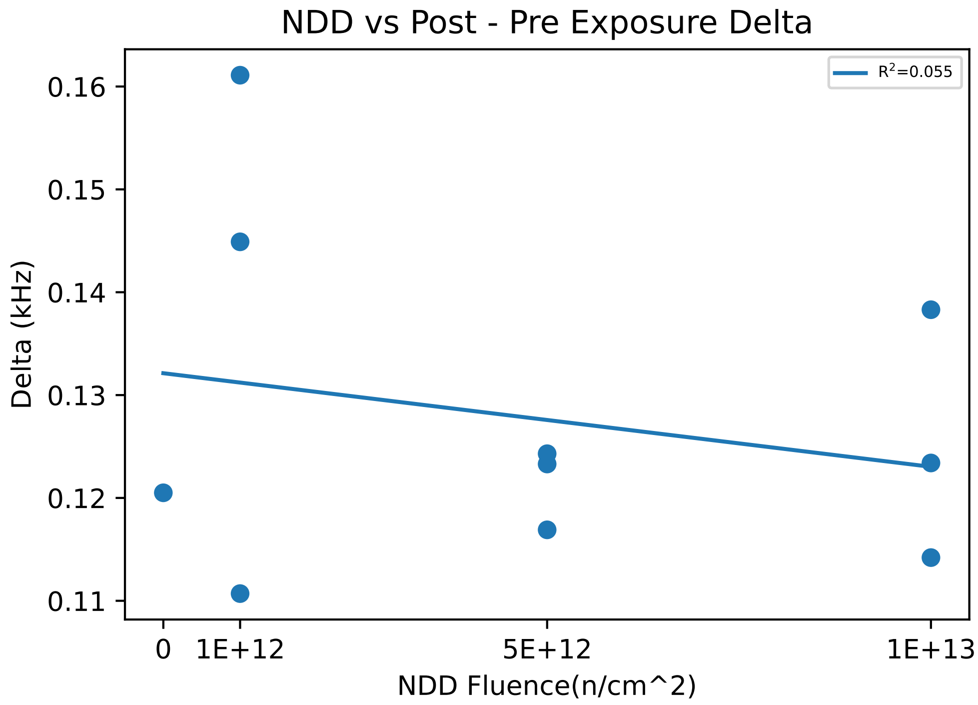
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.14	1.14	0
504	1e+12	NDD	1.13	1.13	0
505	1e+12	NDD	1.13	1.13	0
506	5e+12	NDD	1.14	1.14	0
507	5e+12	NDD	1.13	1.13	0
508	5e+12	NDD	1.14	1.14	0
509	1e+13	NDD	1.12	1.12	0
510	1e+13	NDD	1.13	1.12	-0.01
511	1e+13	NDD	1.12	1.12	0
512	0	Correlation	1.13	1.13	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.13	1.13	1.13		1.13	1.13	1.13		0	0	0	
1e+12	1.13	1.1333	1.14	0.0057735	1.13	1.1333	1.14	0.0057735	0	0	0	0
5e+12	1.13	1.1367	1.14	0.0057735	1.13	1.1367	1.14	0.0057735	0	0	0	0
1e+13	1.12	1.1233	1.13	0.0057735	1.12	1.12	1.12	0	-0.01	-0.0033333	0	0.0057735

Device Test: 24.128 SYNC_FREQ_RANGE(FREQ|500kHz/SYNC1/14//OPEN//@SYNC_FREQ_RANGE)





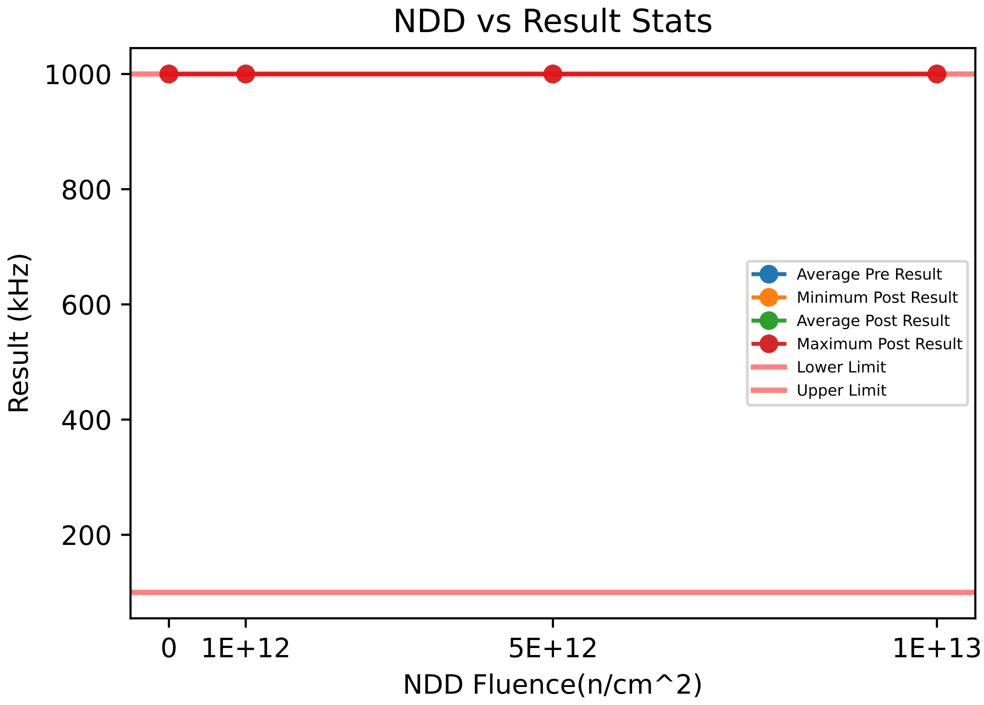
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

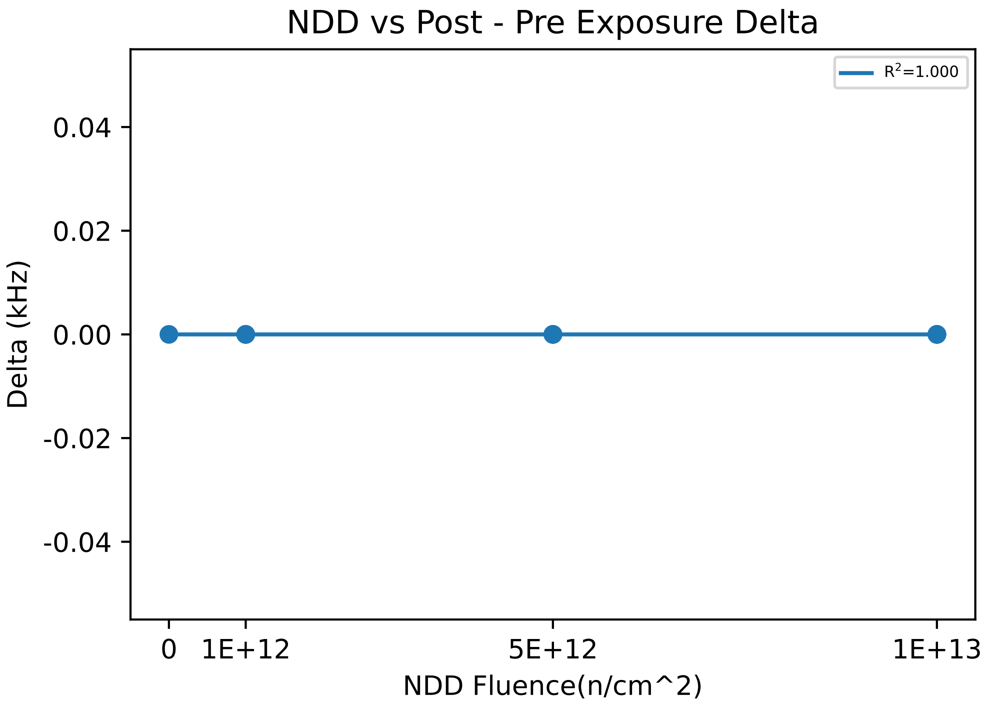
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	499.82	499.96	0.1449
504	1e+12	NDD	499.82	499.99	0.1611
505	1e+12	NDD	499.84	499.95	0.1107
506	5e+12	NDD	499.82	499.95	0.1243
507	5e+12	NDD	499.84	499.96	0.1233
508	5e+12	NDD	499.82	499.94	0.1169
509	1e+13	NDD	499.81	499.93	0.1234
510	1e+13	NDD	499.82	499.96	0.1383
511	1e+13	NDD	499.83	499.95	0.1142
512	0	Correlation	499.85	499.97	0.1205

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.85	499.85	499.85		499.97	499.97	499.97		0.1205	0.1205	0.1205	
1e+12	499.82	499.83	499.84	0.0098224	499.95	499.97	499.99	0.018716	0.1107	0.1389	0.1611	0.02573
5e+12	499.82	499.83	499.84	0.0083863	499.94	499.95	499.96	0.010978	0.1169	0.1215	0.1243	0.004015
1e+13	499.81	499.82	499.83	0.010912	499.93	499.95	499.96	0.014238	0.1142	0.1253	0.1383	0.012162

Device Test: 24.129 SYNC_FREQ_RANGE(FREQ|1000kHz/SYNC1/14//OPEN//@SYNC_FREQ_RANGE)





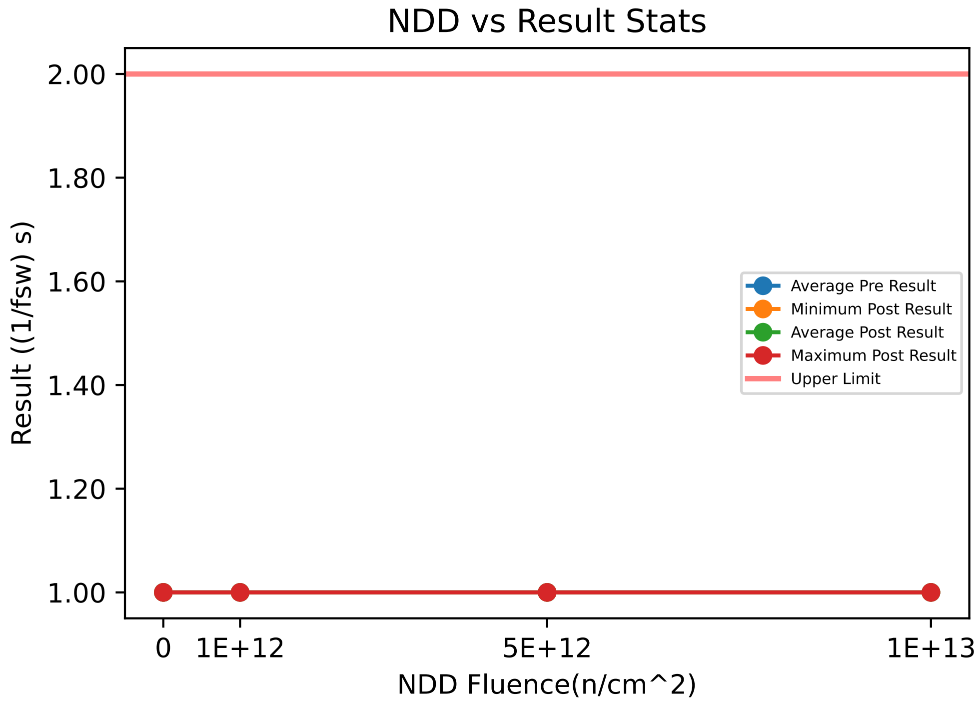
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

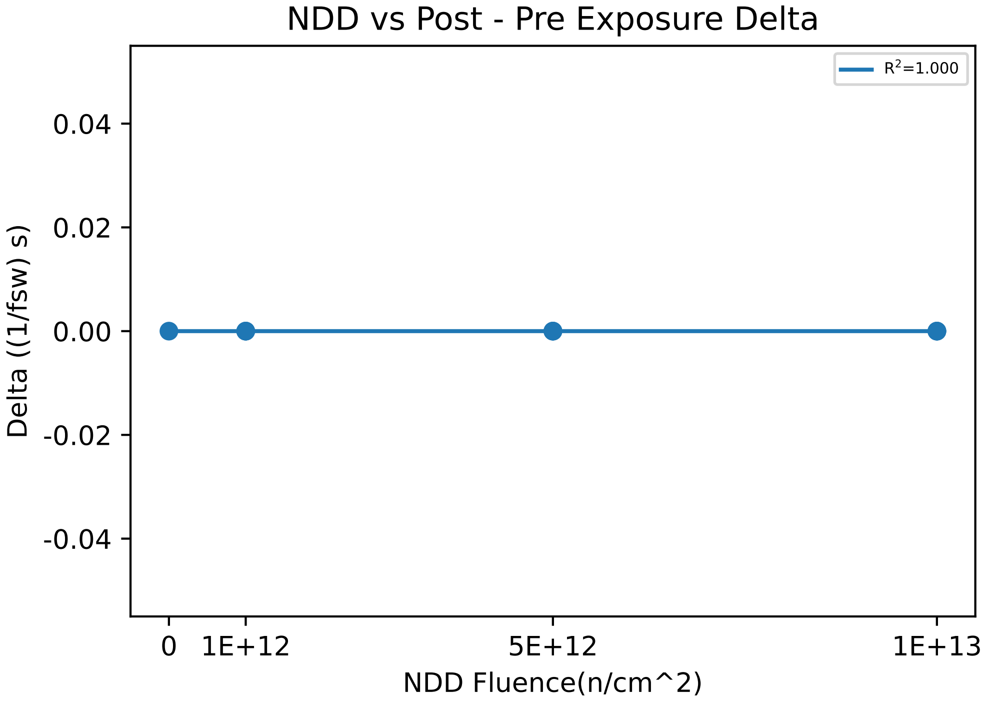
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1000	1000	0
504	1e+12	NDD	1000	1000	0
505	1e+12	NDD	1000	1000	0
506	5e+12	NDD	1000	1000	0
507	5e+12	NDD	1000	1000	0
508	5e+12	NDD	1000	1000	0
509	1e+13	NDD	1000	1000	0
510	1e+13	NDD	1000	1000	0
511	1e+13	NDD	1000	1000	0
512	0	Correlation	1000	1000	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000		1000	1000	1000		0	0	0	
1e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
5e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
1e+13	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

Device Test: 24.13 T_CLOCK_DET_EXT(TIMING|CLKDETECT/SYNC1/4.5//511k//@T_CLOCK_DET_EXT)





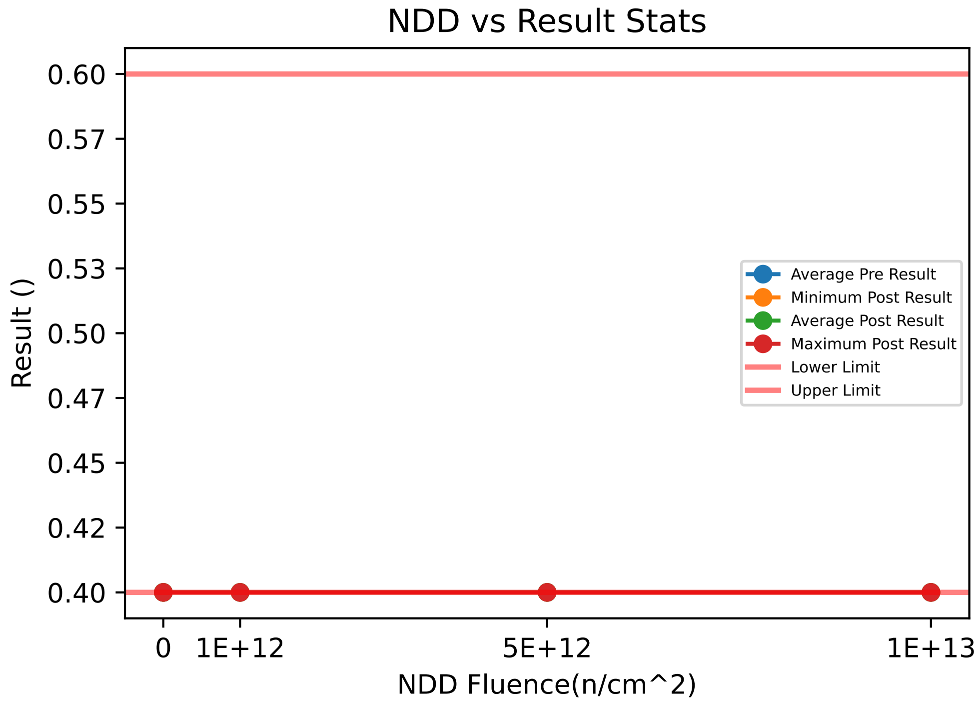
Test Results (Upper Limit = 2.0 ((1/fsw) s))

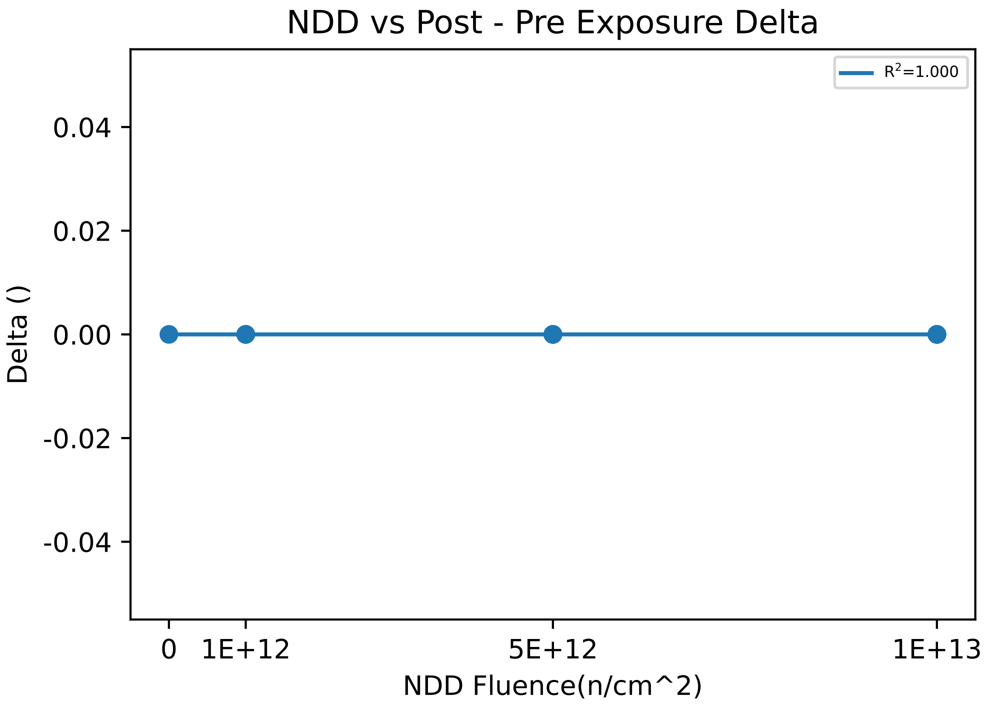
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1	1	0
504	1e+12	NDD	1	1	0
505	1e+12	NDD	1	1	0
506	5e+12	NDD	1	1	0
507	5e+12	NDD	1	1	0
508	5e+12	NDD	1	1	0
509	1e+13	NDD	1	1	0
510	1e+13	NDD	1	1	0
511	1e+13	NDD	1	1	0
512	0	Correlation	1	1	0

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1		1	1	1		0	0	0	
1e+12	1	1	1	0	1	1	1	0	0	0	0	0
5e+12	1	1	1	0	1	1	1	0	0	0	0	0
1e+13	1	1	1	0	1	1	1	0	0	0	0	0

e Test: 24.130 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_40%/SYNC1/14//OPEN//@SYNC_IN_DUTY_CYCLE_R


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

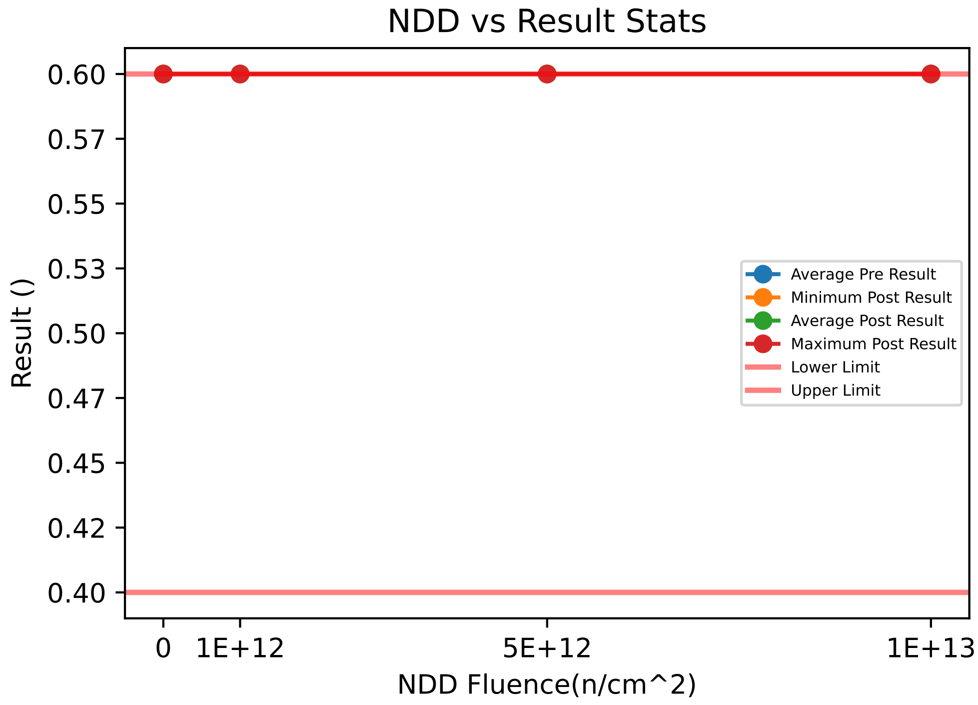
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 ())

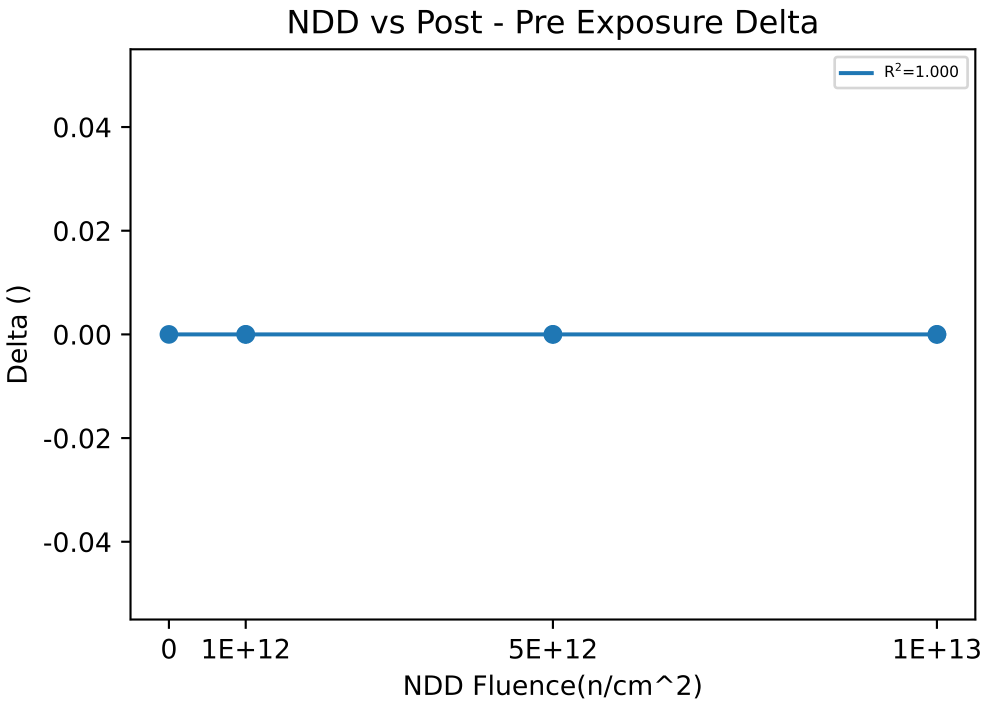
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.4	0.4	0
504	1e+12	NDD	0.4	0.4	0
505	1e+12	NDD	0.4	0.4	0
506	5e+12	NDD	0.4	0.4	0
507	5e+12	NDD	0.4	0.4	0
508	5e+12	NDD	0.4	0.4	0
509	1e+13	NDD	0.4	0.4	0
510	1e+13	NDD	0.4	0.4	0
511	1e+13	NDD	0.4	0.4	0
512	0	Correlation	0.4	0.4	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4		0.4	0.4	0.4		0	0	0	
1e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
5e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
1e+13	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

e Test: 24.131 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_60%/SYNC1/14//OPEN//@SYNC_IN_DUTY_CYCLE_R





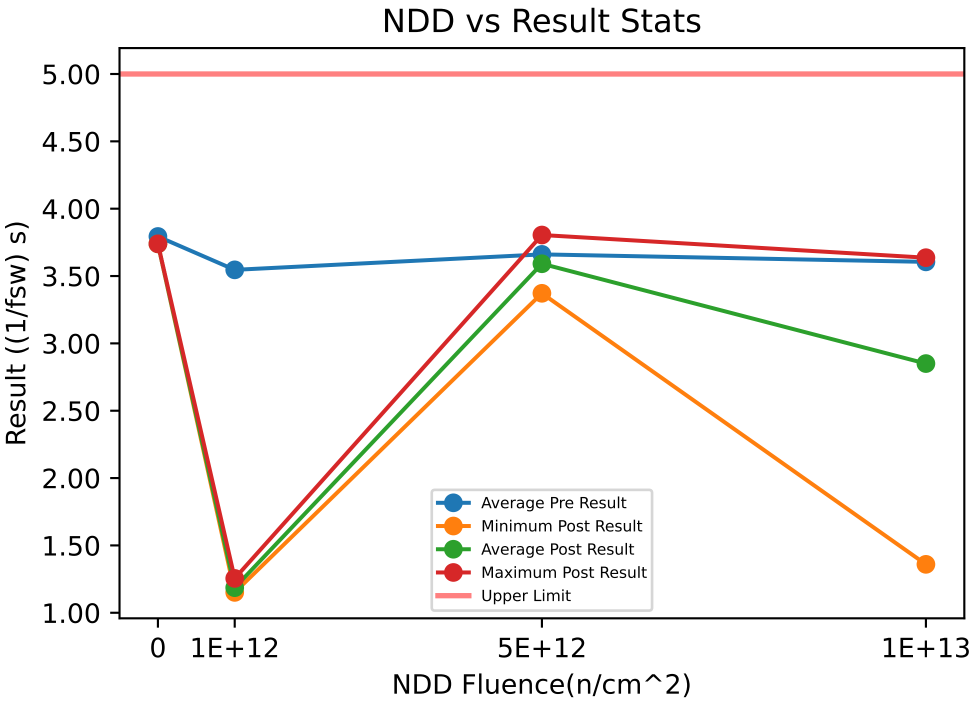
Test Results (Lower Limit = 0.4,
Upper Limit = 0.6 ())

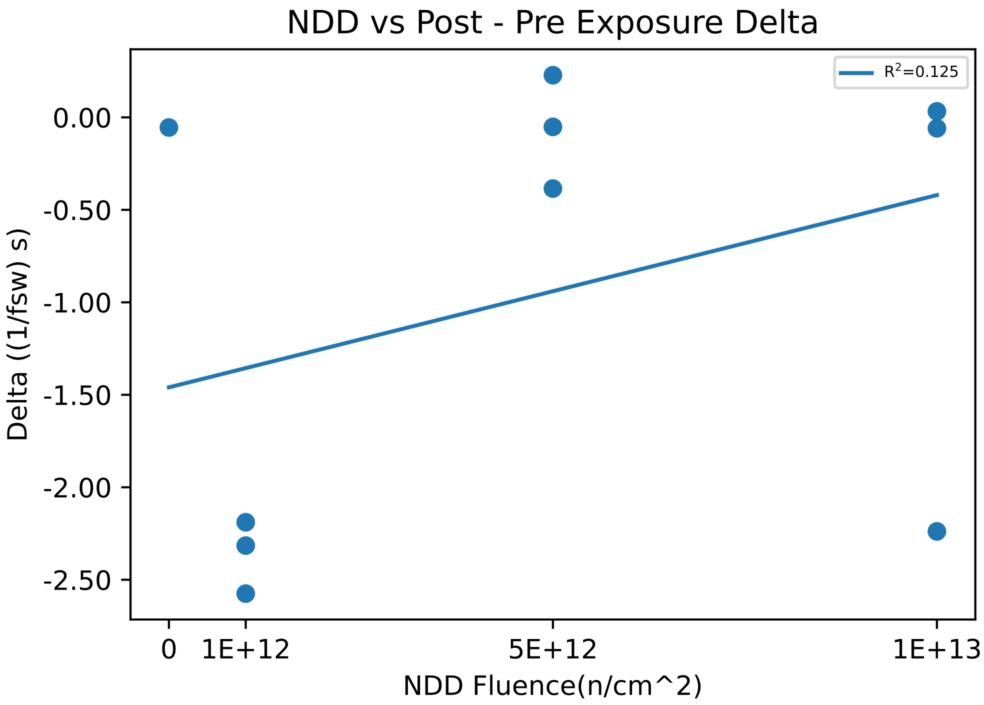
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6	0.6	0
504	1e+12	NDD	0.6	0.6	0
505	1e+12	NDD	0.6	0.6	0
506	5e+12	NDD	0.6	0.6	0
507	5e+12	NDD	0.6	0.6	0
508	5e+12	NDD	0.6	0.6	0
509	1e+13	NDD	0.6	0.6	0
510	1e+13	NDD	0.6	0.6	0
511	1e+13	NDD	0.6	0.6	0
512	0	Correlation	0.6	0.6	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6		0.6	0.6	0.6		0	0	0	
1e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
5e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
1e+13	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

Device Test: 24.132 T_CLOCK_DET(TIMING|CLKDETECT/SYNC1/14//511k//@T_CLOCK_DET)





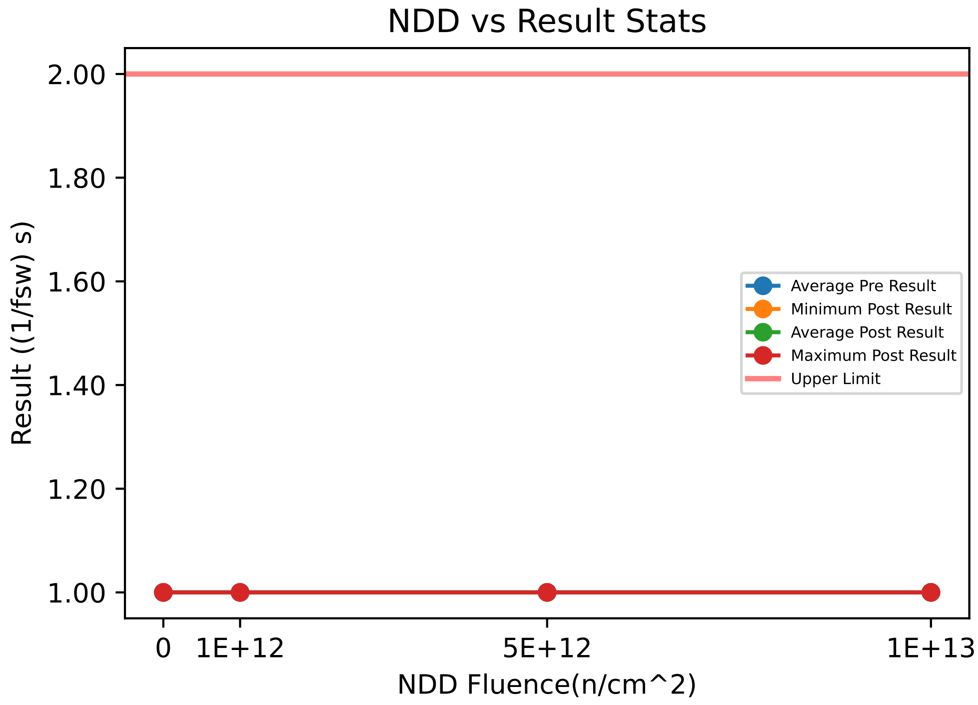
Test Results (Upper Limit = 5.0 ((1/fsw) s))

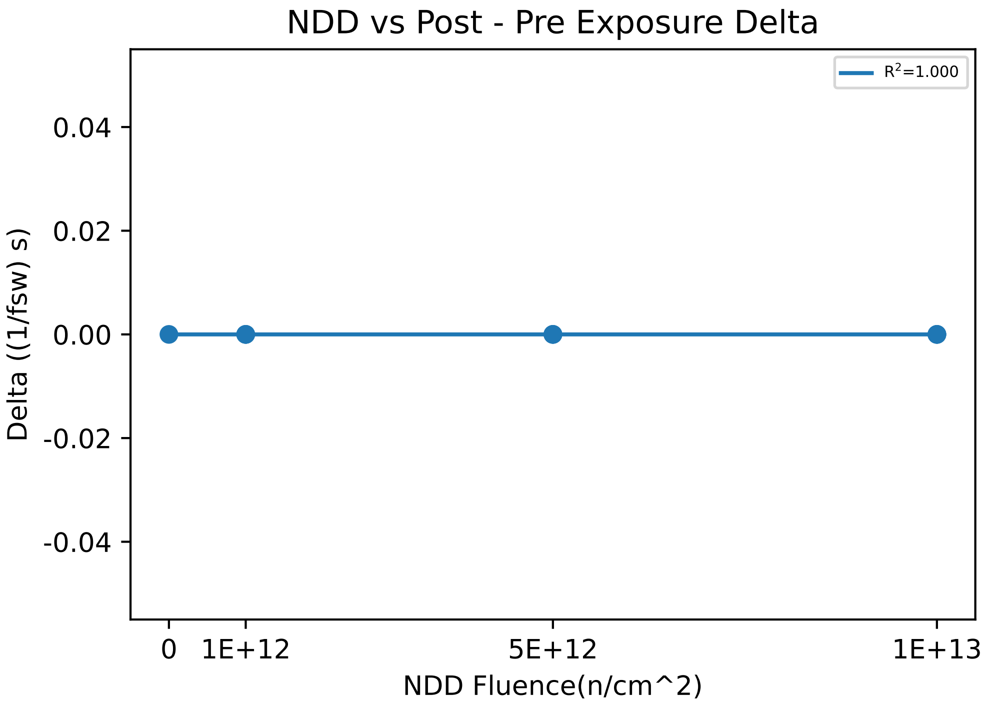
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.4675	1.1522	-2.3153
504	1e+12	NDD	3.8299	1.255	-2.5749
505	1e+12	NDD	3.3405	1.1512	-2.1893
506	5e+12	NDD	3.7568	3.3718	-0.385
507	5e+12	NDD	3.8561	3.8046	-0.0515
508	5e+12	NDD	3.3693	3.5973	0.228
509	1e+13	NDD	3.6138	3.5547	-0.0591
510	1e+13	NDD	3.6037	3.6362	0.0325
511	1e+13	NDD	3.5981	1.3595	-2.2386
512	0	Correlation	3.7937	3.739	-0.0547

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.7937	3.7937	3.7937		3.739	3.739	3.739		-0.0547	-0.0547	-0.0547	
1e+12	3.3405	3.546	3.8299	0.25396	1.1512	1.1861	1.255	0.059642	-2.5749	-2.3598	-2.1893	0.19662
5e+12	3.3693	3.6607	3.8561	0.25723	3.3718	3.5912	3.8046	0.21646	-0.385	-0.0695	0.228	0.3069
1e+13	3.5981	3.6052	3.6138	0.0079568	1.3595	2.8501	3.6362	1.2916	-2.2386	-0.75507	0.0325	1.2856

Device Test: 24.133 T_CLOCK_DET_EXT(TIMING|CLKDETECT/SYNC1/14//511k//@T_CLOCK_DET_EXT)





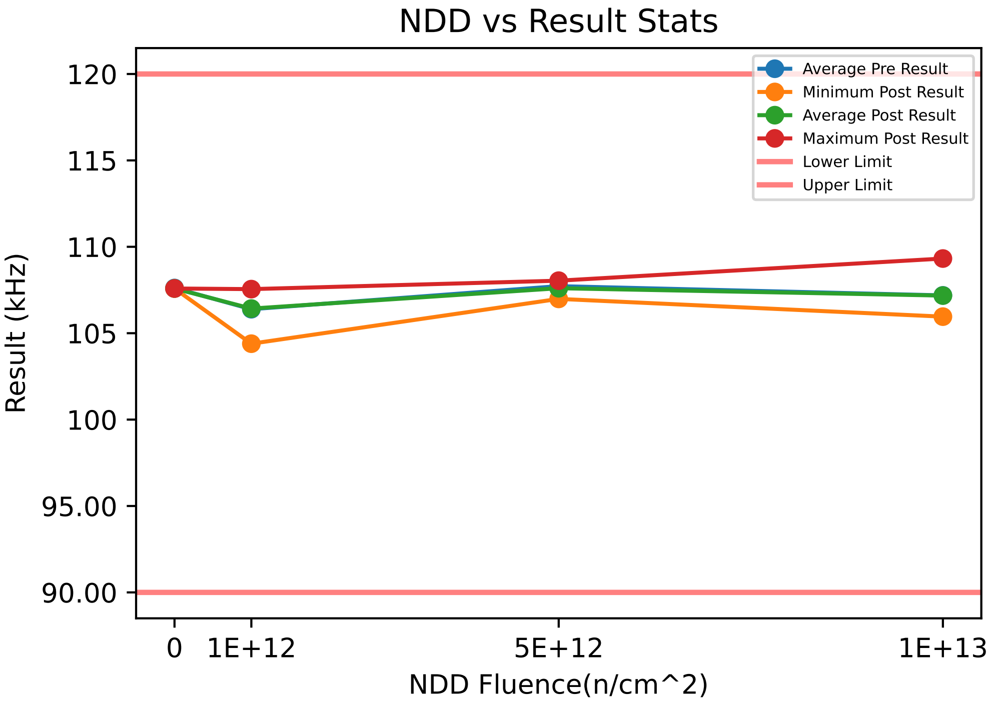
Test Results (Upper Limit = 2.0 ((1/fsw) s))

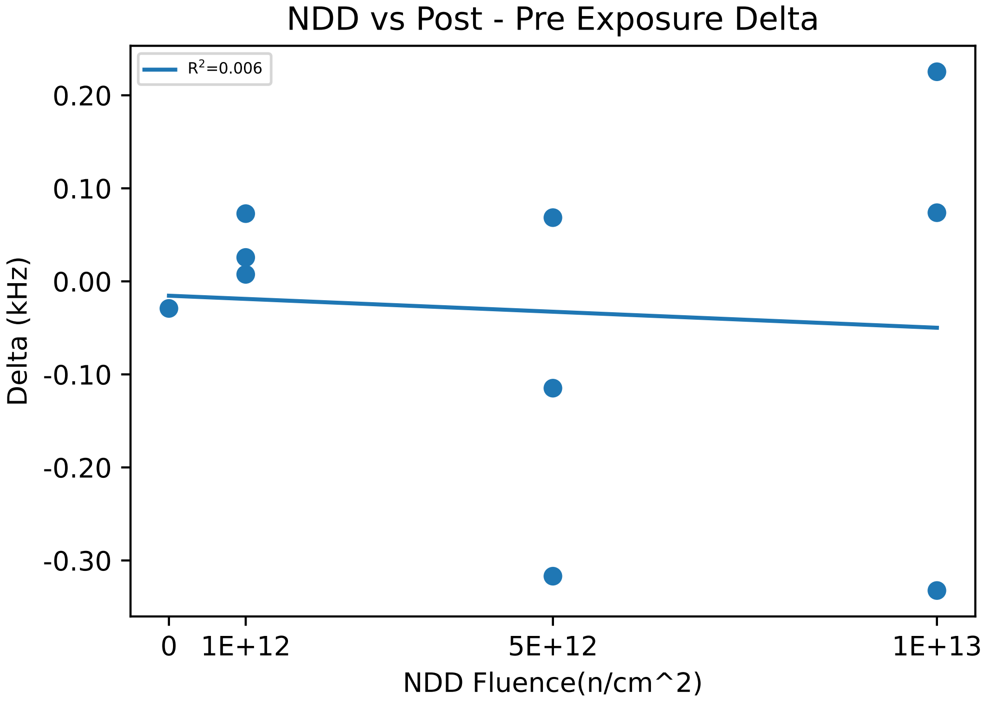
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1	1	0
504	1e+12	NDD	1	1	0
505	1e+12	NDD	1	1	0
506	5e+12	NDD	1	1	0
507	5e+12	NDD	1	1	0
508	5e+12	NDD	1	1	0
509	1e+13	NDD	1	1	0
510	1e+13	NDD	1	1	0
511	1e+13	NDD	1	1	0
512	0	Correlation	1	1	0

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1		1	1	1		0	0	0	
1e+12	1	1	1	0	1	1	1	0	0	0	0	0
5e+12	1	1	1	0	1	1	1	0	0	0	0	0
1e+13	1	1	1	0	1	1	1	0	0	0	0	0

Device Test: 24.134 EXT_SET_FREQ_100KHZ_14V(FREQ|100kHz/SYNC1/14//511k//@EXT_SET_FREQ_100KHZ_14V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

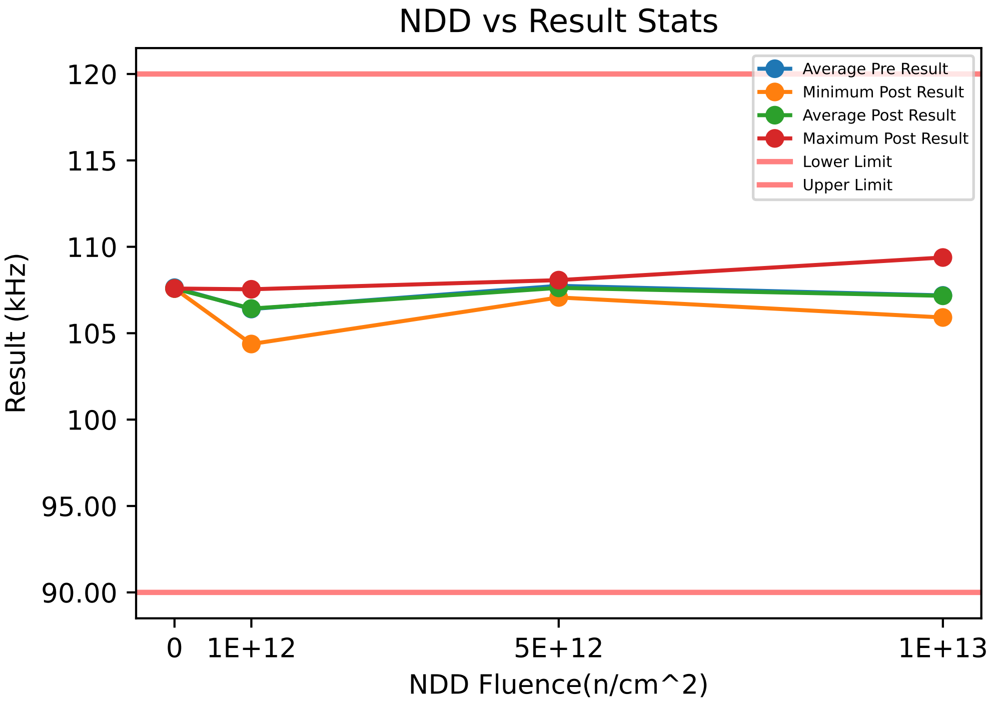
Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

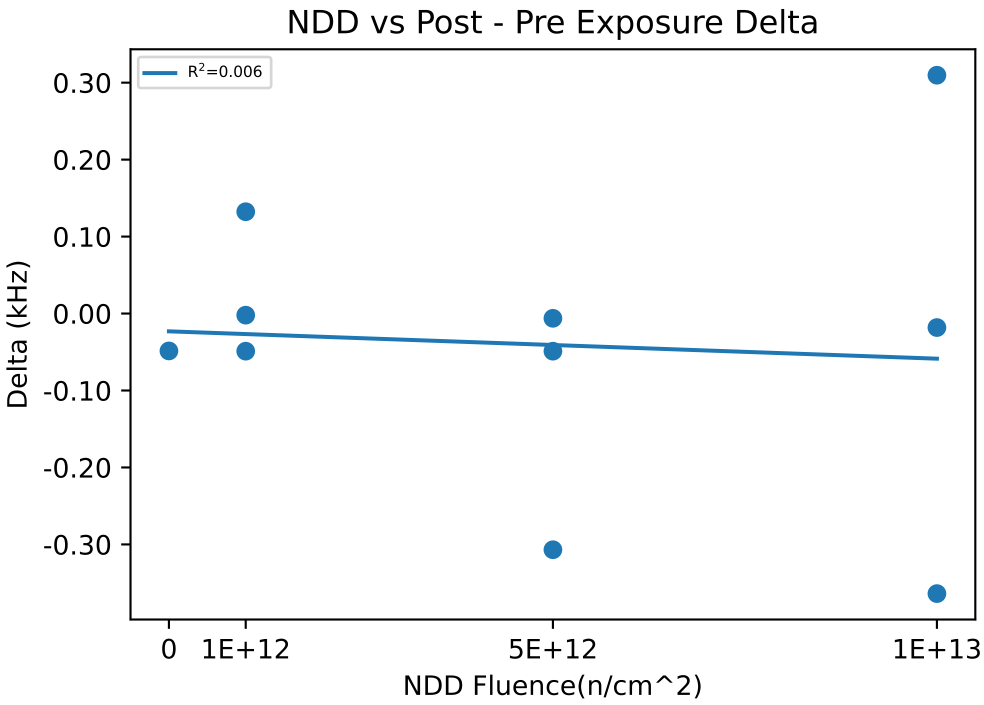
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	107.53	107.55	0.0257
504	1e+12	NDD	107.26	107.33	0.0728
505	1e+12	NDD	104.39	104.39	0.0075
506	5e+12	NDD	107.1	106.99	-0.1148
507	5e+12	NDD	107.71	107.78	0.0685
508	5e+12	NDD	108.36	108.04	-0.3169
509	1e+13	NDD	109.1	109.32	0.2253
510	1e+13	NDD	106.29	105.96	-0.3323
511	1e+13	NDD	106.18	106.25	0.0738
512	0	Correlation	107.62	107.59	-0.0291

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.62	107.62	107.62		107.59	107.59	107.59		-0.0291	-0.0291	-0.0291	
1e+12	104.39	106.39	107.53	1.7407	104.39	106.42	107.55	1.7631	0.0075	0.035333	0.0728	0.033699
5e+12	107.1	107.72	108.36	0.62806	106.99	107.6	108.04	0.54948	-0.3169	-0.12107	0.0685	0.19278
1e+13	106.18	107.19	109.1	1.6525	105.96	107.18	109.32	1.8621	-0.3323	-0.011067	0.2253	0.28832

Device Test: 24.135 EXT_SET_FREQ_100KHZ_14V(FREQ|100kHz/SYNC2/14//511k//@EXT_SET_FREQ_100KHZ_14V)





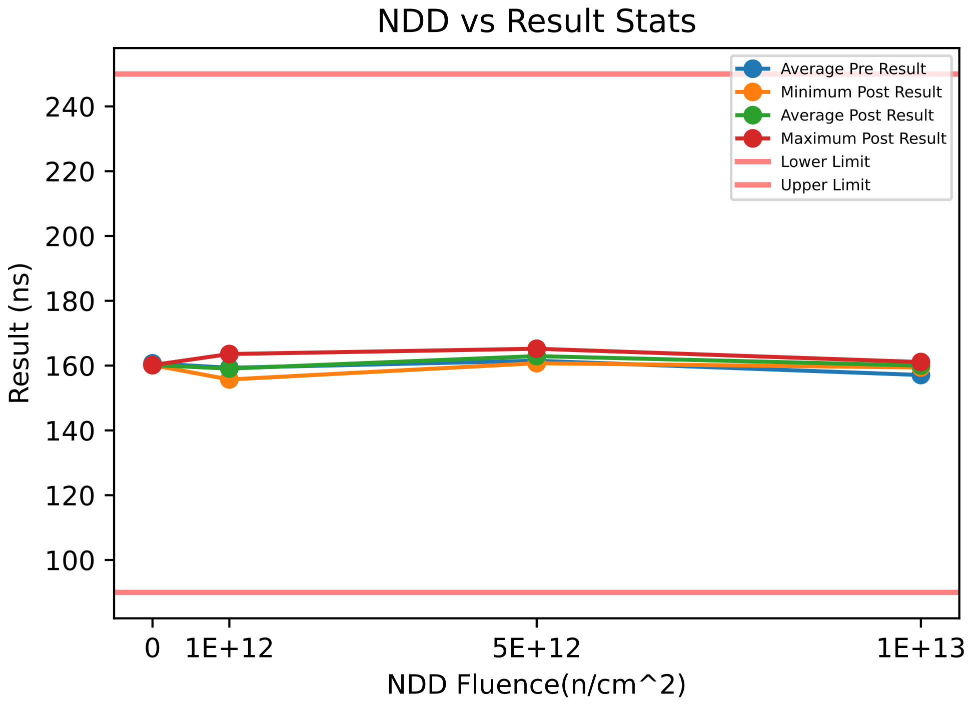
Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	107.54	107.54	-0.0021
504	1e+12	NDD	107.23	107.36	0.1323
505	1e+12	NDD	104.42	104.37	-0.0489
506	5e+12	NDD	107.12	107.07	-0.0489
507	5e+12	NDD	107.73	107.73	-0.0062
508	5e+12	NDD	108.38	108.07	-0.3069
509	1e+13	NDD	109.07	109.38	0.3097
510	1e+13	NDD	106.27	105.91	-0.3639
511	1e+13	NDD	106.22	106.2	-0.0182
512	0	Correlation	107.63	107.59	-0.0486

Test Statistics (kHz)

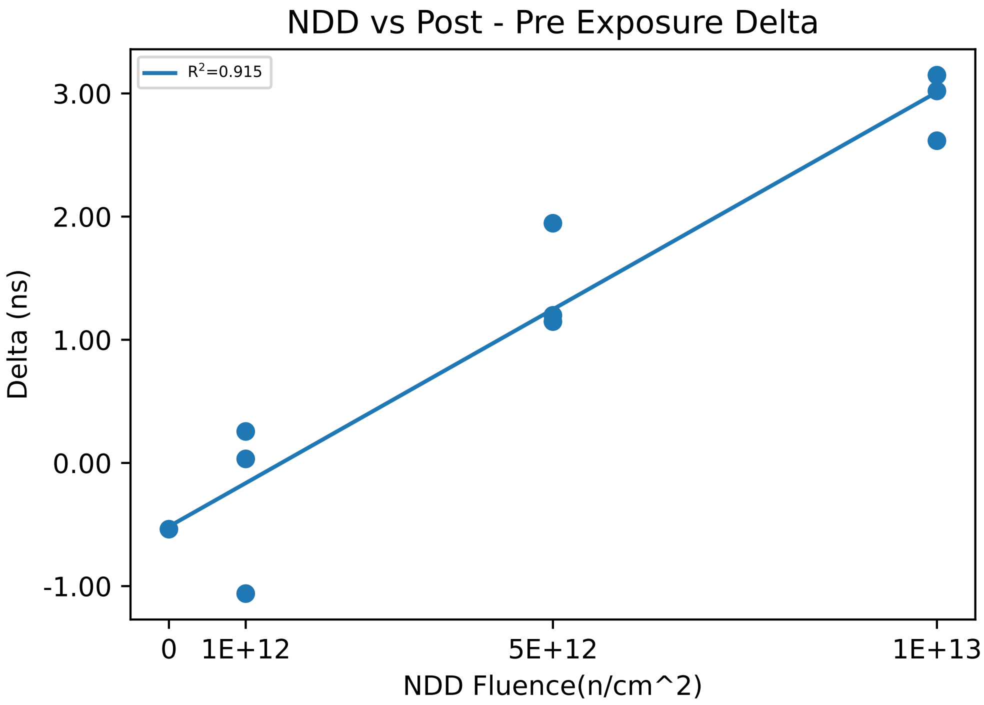
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.63	107.63	107.63		107.59	107.59	107.59		-0.0486	-0.0486	-0.0486	
1e+12	104.42	106.4	107.54	1.7175	104.37	106.42	107.54	1.7783	-0.0489	0.0271	0.1323	0.094063
5e+12	107.12	107.74	108.38	0.63012	107.07	107.62	108.07	0.50901	-0.3069	-0.12067	-0.0062	0.16269
1e+13	106.22	107.19	109.07	1.6309	105.91	107.16	109.38	1.9253	-0.3639	-0.024133	0.3097	0.33684

Device Test: 24.136 SYNC1_SW_DELAY_OUTPUT(TIMING|DELAY/SYNC1/14//511k//@SYNC1_SW_DELAY_OUTPUT)



Test Results (Lower Limit = 90.0, Upper Limit = 250.0 (ns))

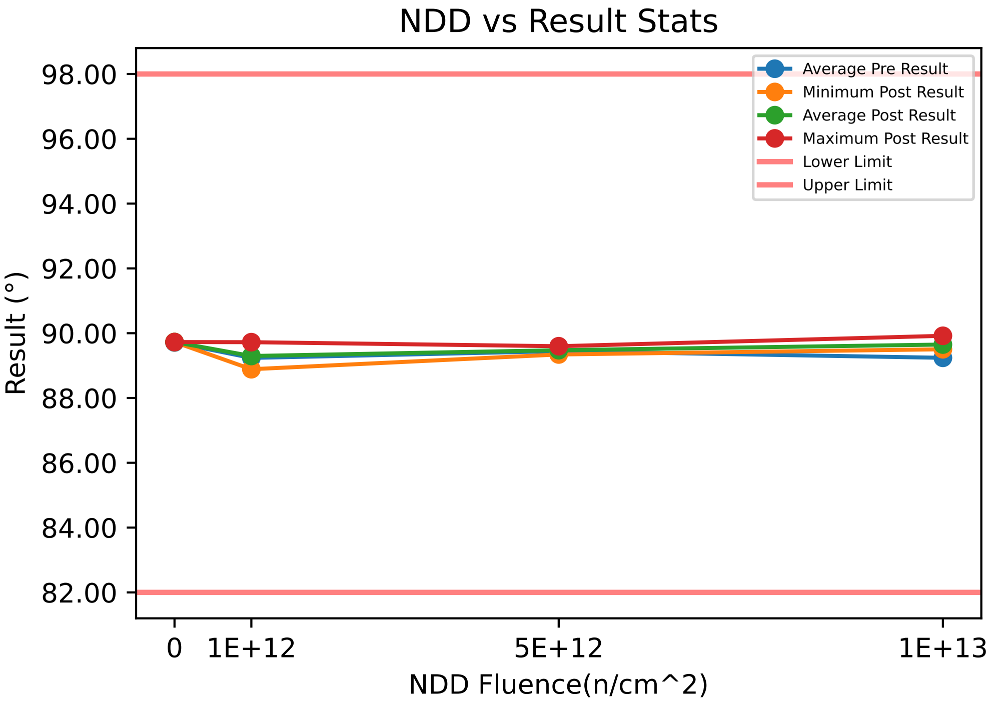
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	163.54	163.58	0.0328
504	1e+12	NDD	156.78	155.72	-1.0607
505	1e+12	NDD	157.66	157.91	0.2557
506	5e+12	NDD	164.06	165.21	1.1475
507	5e+12	NDD	160.89	162.84	1.9461
508	5e+12	NDD	159.55	160.75	1.1984
509	1e+13	NDD	157.95	161.1	3.1481
510	1e+13	NDD	156.52	159.54	3.0202
511	1e+13	NDD	156.8	159.42	2.6161
512	0	Correlation	160.69	160.16	-0.5377

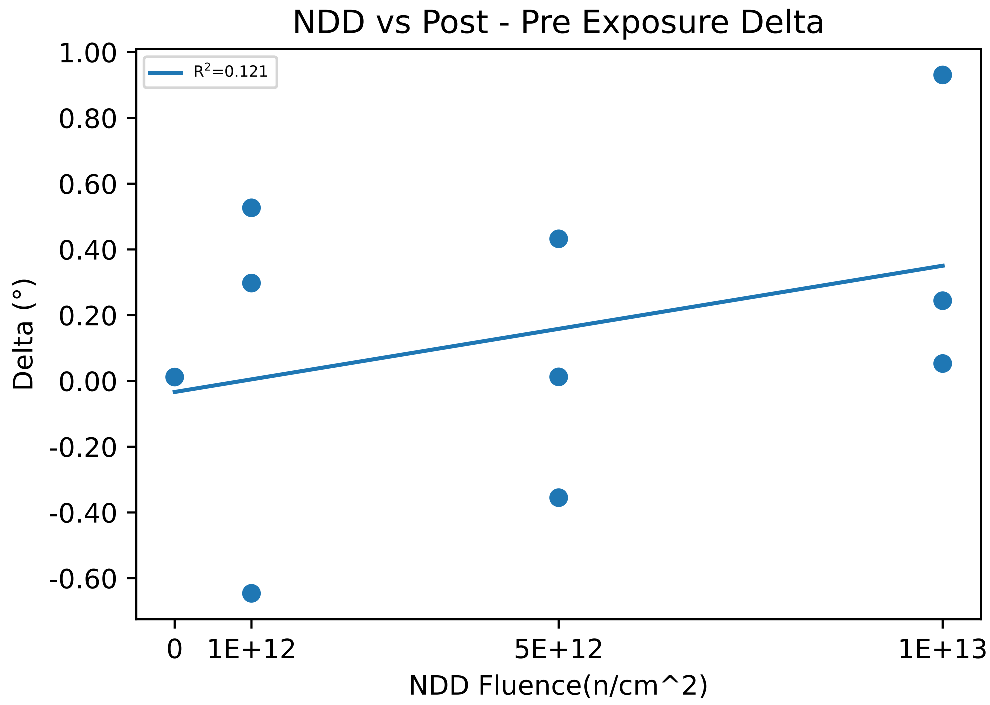


Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	160.69	160.69	160.69		160.16	160.16	160.16		-0.5377	-0.5377	-0.5377	
1e+12	156.78	159.33	163.54	3.6788	155.72	159.07	163.58	4.055	-1.0607	-0.2574	0.2557	0.70455
5e+12	159.55	161.5	164.06	2.3162	160.75	162.93	165.21	2.232	1.1475	1.4307	1.9461	0.4471
1e+13	156.52	157.09	157.95	0.75786	159.42	160.02	161.1	0.93713	2.6161	2.9281	3.1481	0.27769

Device Test: 24.137 SYNC_PH_SHIFT(TIMING|PHASESHIFT/SYNC1/14//511k//@SYNC_PH_SHIFT)





Test Results (Lower Limit = 82.0, Upper Limit = 98.0 (°))

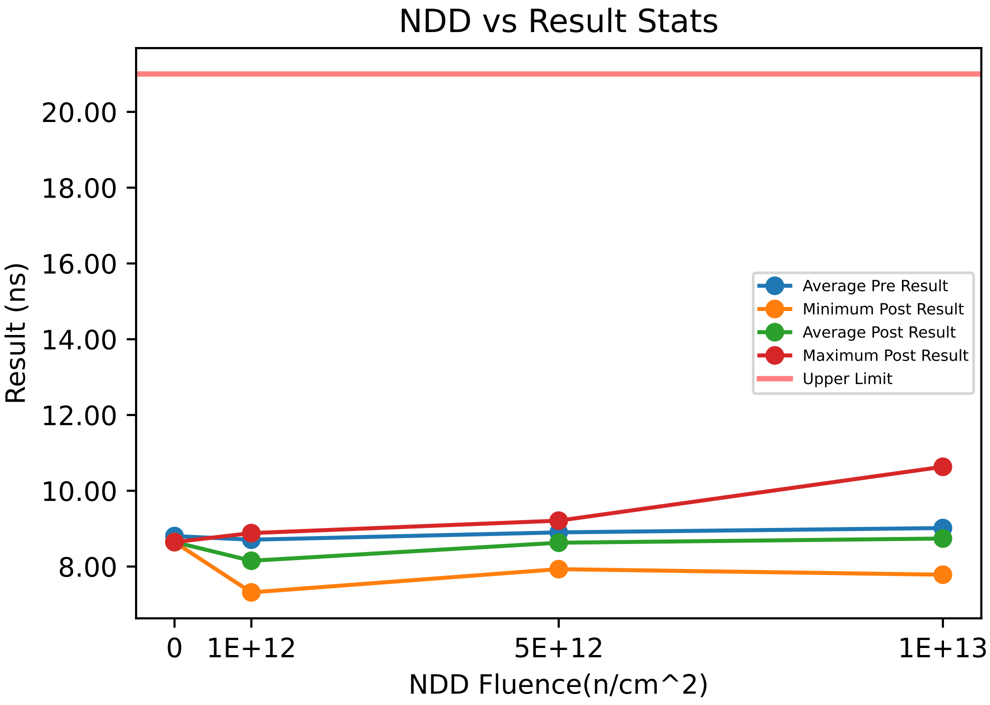
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	89.534	88.888	-0.646
504	1e+12	NDD	89.196	89.723	0.5266
505	1e+12	NDD	88.981	89.278	0.2977
506	5e+12	NDD	89.165	89.598	0.4323
507	5e+12	NDD	89.698	89.343	-0.355
508	5e+12	NDD	89.473	89.485	0.0124
509	1e+13	NDD	88.989	89.919	0.9307
510	1e+13	NDD	89.26	89.504	0.2441
511	1e+13	NDD	89.473	89.526	0.053
512	0	Correlation	89.715	89.727	0.0119

Test Statistics (°)

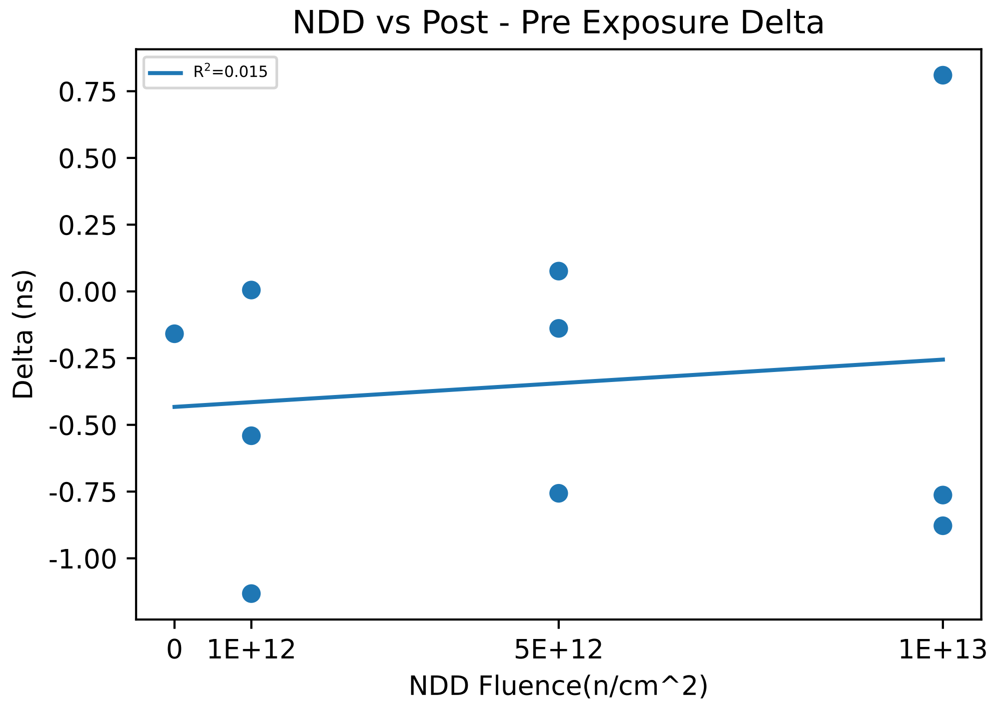
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	89.715	89.715	89.715		89.727	89.727	89.727		0.0119	0.0119	0.0119	
1e+12	88.981	89.237	89.534	0.27906	88.888	89.296	89.723	0.41749	-0.646	0.059433	0.5266	0.62155
5e+12	89.165	89.446	89.698	0.26749	89.343	89.475	89.598	0.12748	-0.355	0.0299	0.4323	0.39394
1e+13	88.989	89.24	89.473	0.24249	89.504	89.65	89.919	0.2339	0.053	0.40927	0.9307	0.46157

Device Test: 24.138 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC1/14//511k//@SYNC_LH_RISE_TIME)

NDD vs Result Stats



NDD vs Post - Pre Exposure Delta



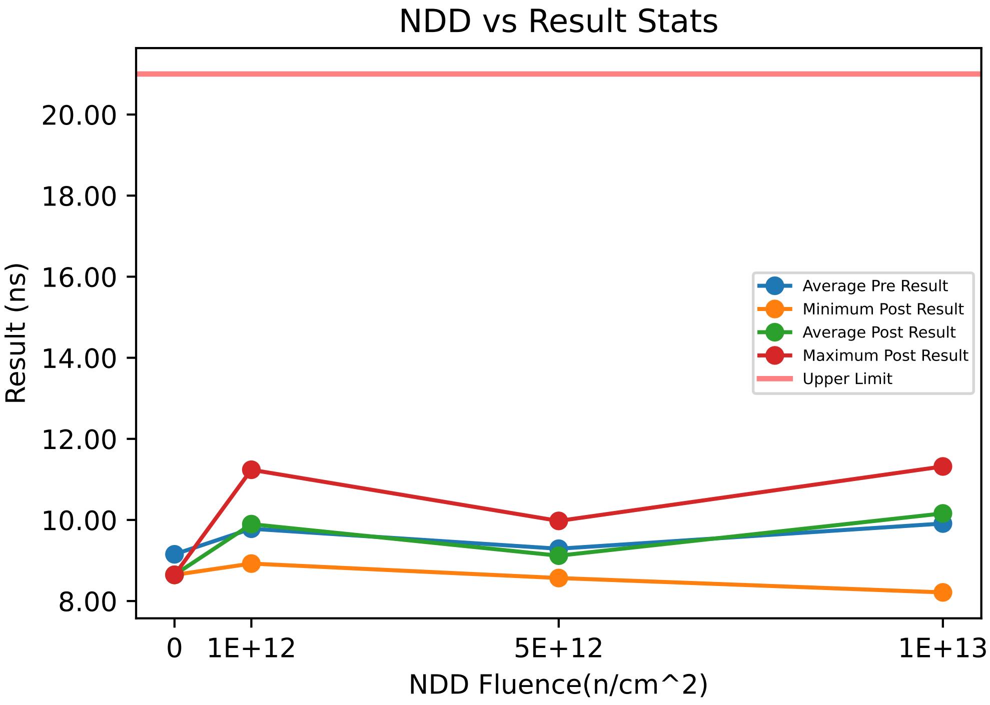
Test Results (Upper Limit = 21.0 (ns))

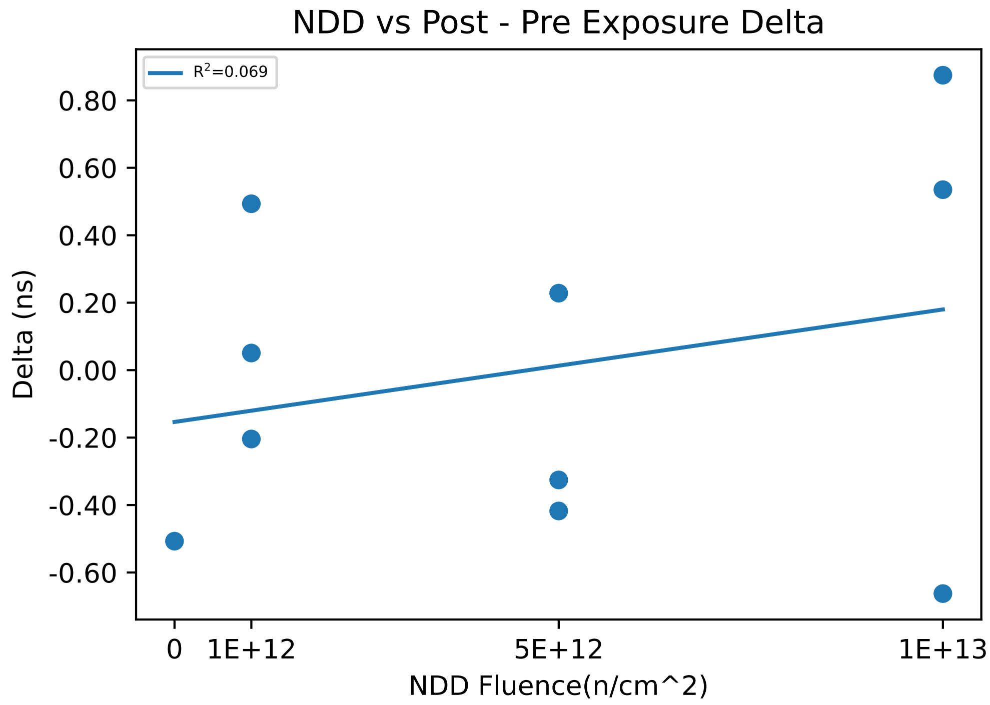
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	8.8777	8.8828	0.0051
504	1e+12	NDD	8.7987	8.2579	-0.5408
505	1e+12	NDD	8.4502	7.318	-1.1322
506	5e+12	NDD	8.6881	7.9317	-0.7564
507	5e+12	NDD	8.8819	8.7433	-0.1386
508	5e+12	NDD	9.1356	9.2116	0.076
509	1e+13	NDD	9.8234	10.633	0.81
510	1e+13	NDD	8.663	7.785	-0.878
511	1e+13	NDD	8.5634	7.8004	-0.763
512	0	Correlation	8.8048	8.6461	-0.1587

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.8048	8.8048	8.8048		8.6461	8.6461	8.6461		-0.1587	-0.1587	-0.1587	
1e+12	8.4502	8.7089	8.8777	0.22747	7.318	8.1529	8.8828	0.78767	-1.1322	-0.55597	0.0051	0.5688
5e+12	8.6881	8.9019	9.1356	0.22442	7.9317	8.6289	9.2116	0.64758	-0.7564	-0.273	0.076	0.43217
1e+13	8.5634	9.0166	9.8234	0.70048	7.785	8.7396	10.633	1.6401	-0.878	-0.277	0.81	0.94312

Device Test: 24.139 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC2/14//511k//@SYNC_LH_RISE_TIME)





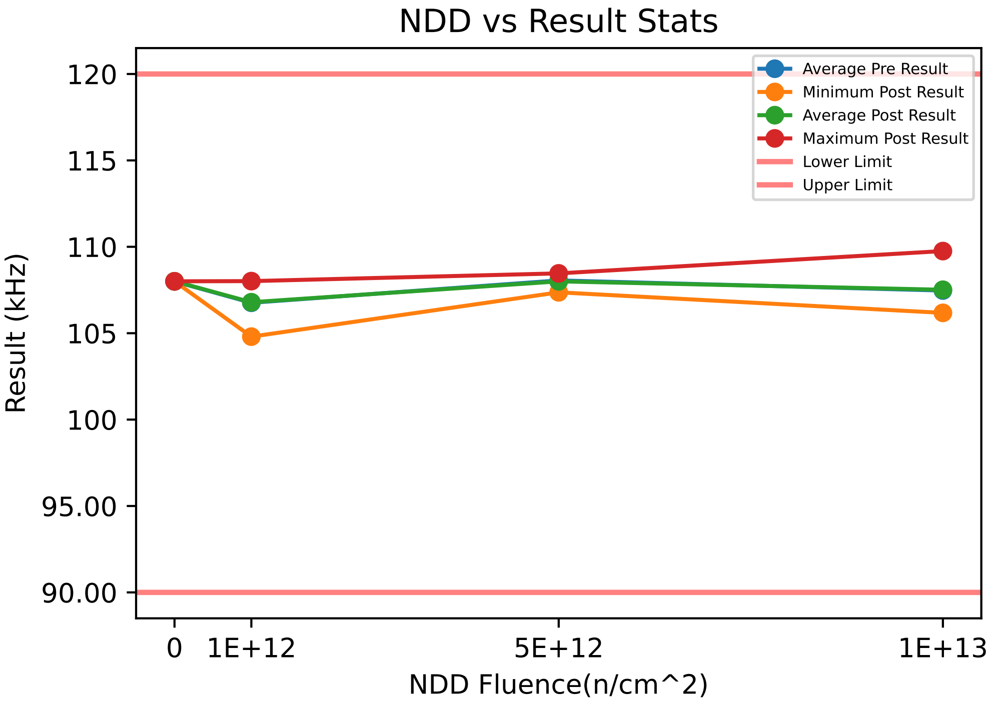
Test Results (Upper Limit = 21.0 (ns))

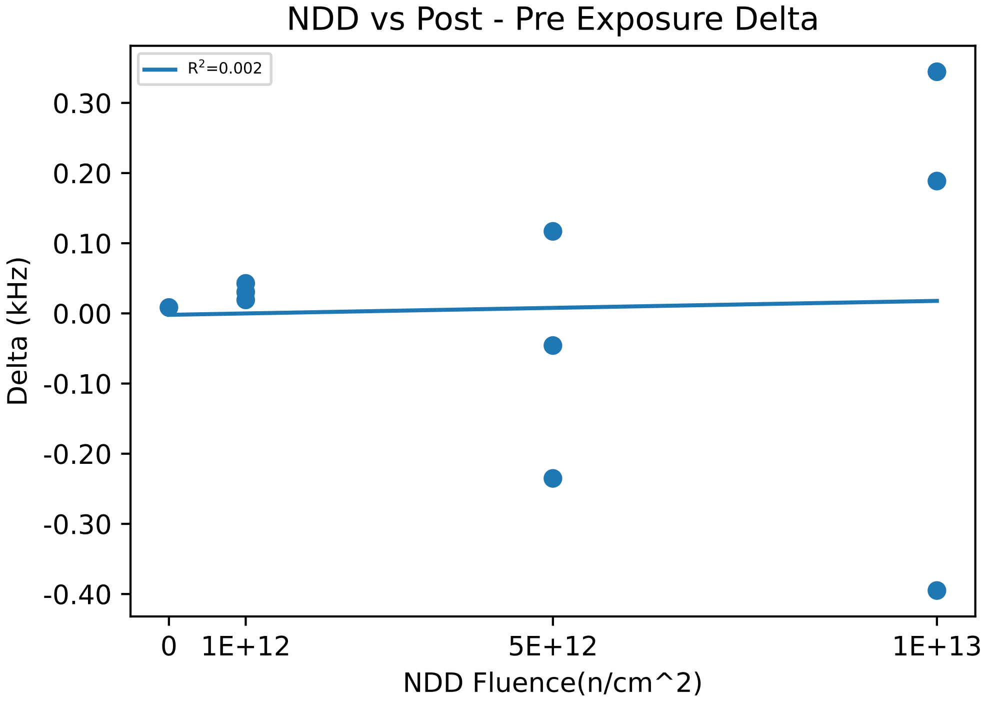
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.1283	8.9241	-0.2042
504	1e+12	NDD	9.4768	9.5276	0.0508
505	1e+12	NDD	10.745	11.238	0.4934
506	5e+12	NDD	9.7481	9.9764	0.2283
507	5e+12	NDD	9.1386	8.813	-0.3256
508	5e+12	NDD	8.9852	8.5676	-0.4176
509	1e+13	NDD	8.8757	8.2131	-0.6626
510	1e+13	NDD	10.445	11.32	0.8746
511	1e+13	NDD	10.415	10.95	0.5351
512	0	Correlation	9.1525	8.6454	-0.5071

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.1525	9.1525	9.1525		8.6454	8.6454	8.6454		-0.5071	-0.5071	-0.5071	
1e+12	9.1283	9.7834	10.745	0.85083	8.9241	9.8967	11.238	1.2005	-0.2042	0.11333	0.4934	0.35298
5e+12	8.9852	9.2906	9.7481	0.40353	8.5676	9.119	9.9764	0.7526	-0.4176	-0.17163	0.2283	0.34939
1e+13	8.8757	9.9118	10.445	0.89739	8.2131	10.161	11.32	1.6969	-0.6626	0.24903	0.8746	0.80754

Device Test: 24.14 EXT_SET_FREQ_100KHZ_4V(FREQ|100kHz/SYNC1/4.5//511k//@EXT_SET_FREQ_100KHZ_4V)





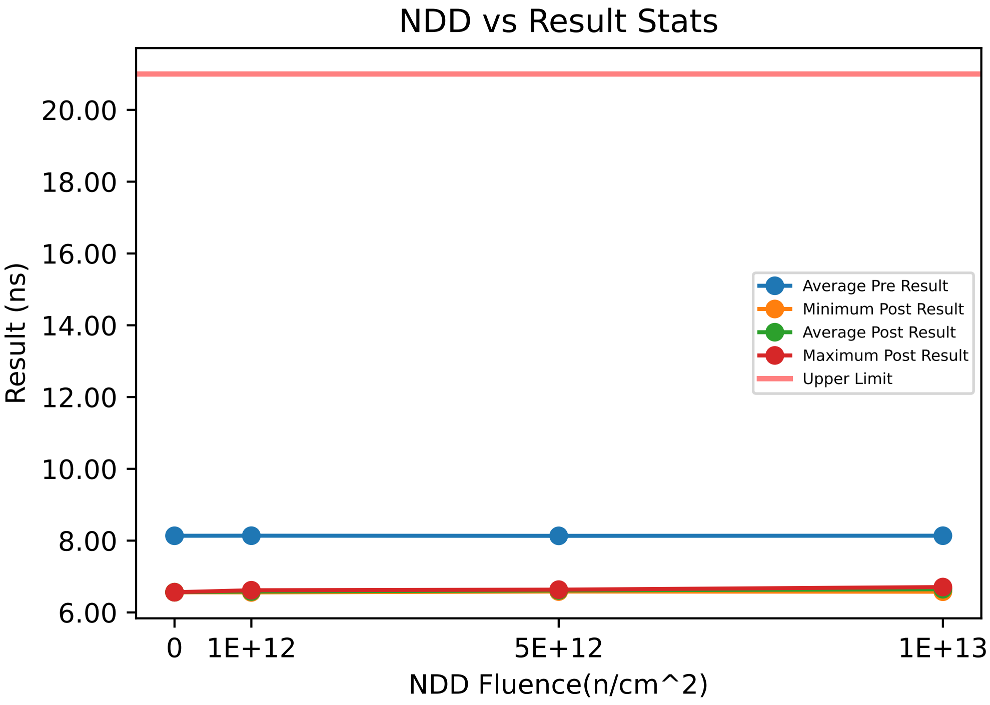
Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

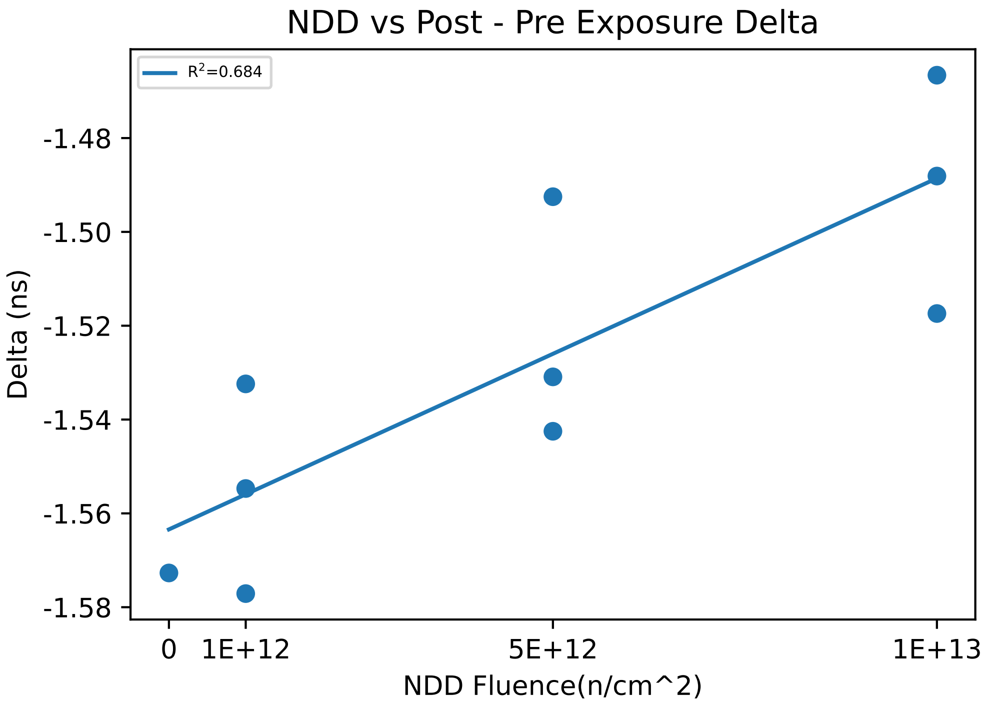
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	107.98	108.01	0.0304
504	1e+12	NDD	107.52	107.56	0.0428
505	1e+12	NDD	104.78	104.8	0.0192
506	5e+12	NDD	107.41	107.37	-0.0458
507	5e+12	NDD	108.06	108.17	0.1169
508	5e+12	NDD	108.7	108.46	-0.2352
509	1e+13	NDD	109.41	109.75	0.3444
510	1e+13	NDD	106.57	106.18	-0.395
511	1e+13	NDD	106.43	106.62	0.1886
512	0	Correlation	108	108	0.0084

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	108	108	108		108	108	108		0.0084	0.0084	0.0084	
1e+12	104.78	106.76	107.98	1.7302	104.8	106.79	108.01	1.7394	0.0192	0.0308	0.0428	0.011805
5e+12	107.41	108.05	108.7	0.6428	107.37	108	108.46	0.56804	-0.2352	-0.0547	0.1169	0.17622
1e+13	106.43	107.47	109.41	1.6812	106.18	107.51	109.75	1.9505	-0.395	0.046	0.3444	0.38978

Device Test: 24.140 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC1/14//511k//@SYNC_HL_FALL_TIME)





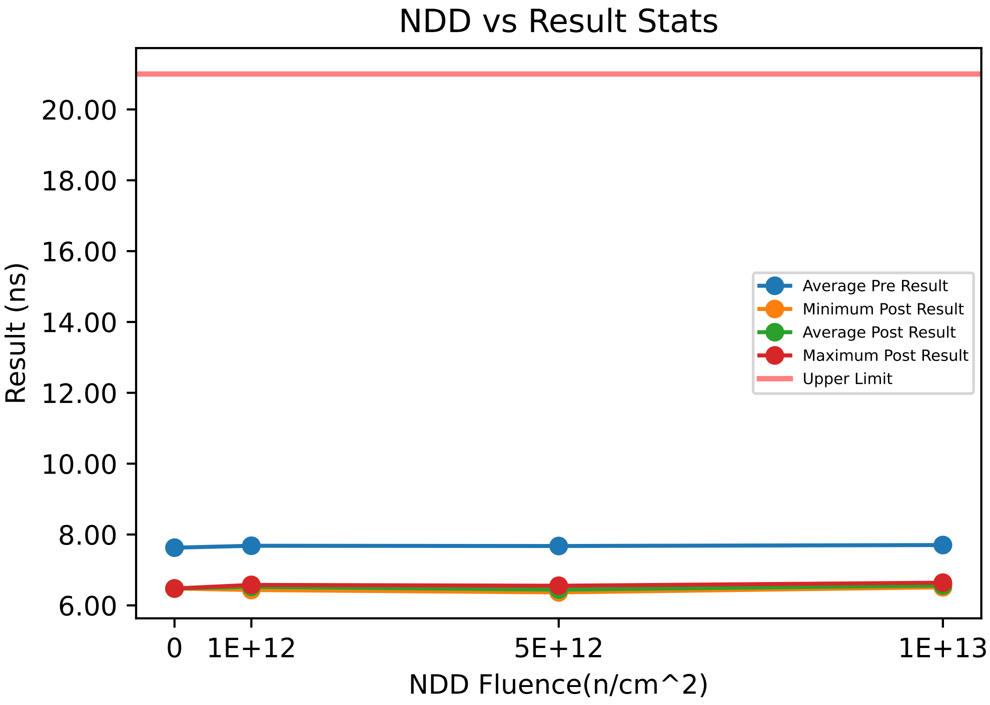
Test Results (Upper Limit = 21.0 (ns))

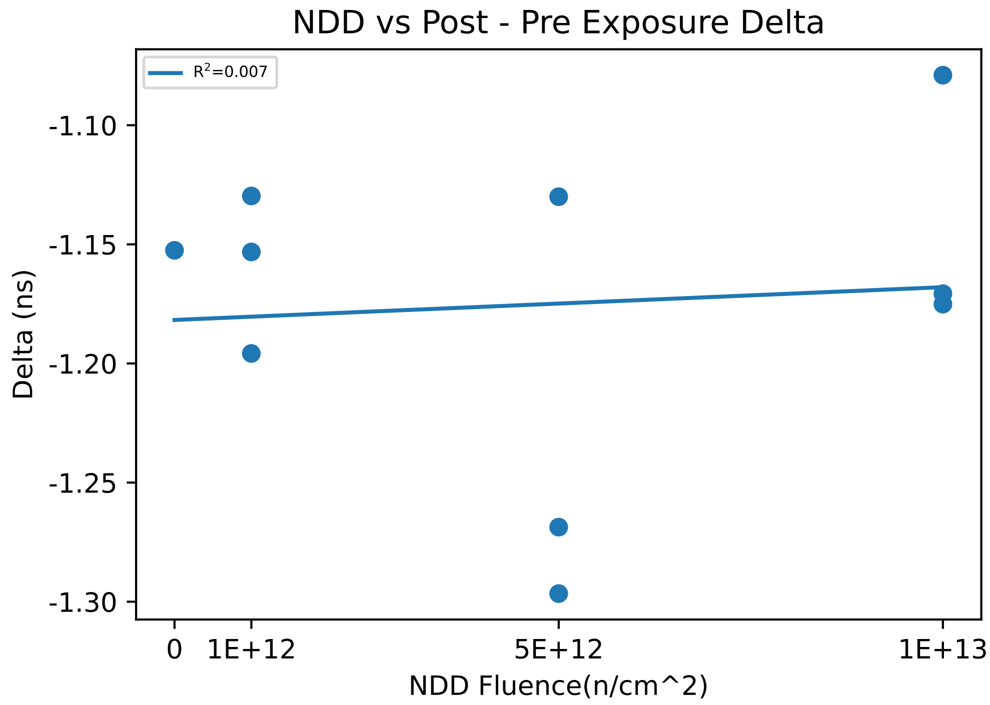
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	8.1265	6.5718	-1.5547
504	1e+12	NDD	8.1504	6.618	-1.5324
505	1e+12	NDD	8.135	6.5579	-1.5771
506	5e+12	NDD	8.1657	6.6348	-1.5309
507	5e+12	NDD	8.124	6.5815	-1.5425
508	5e+12	NDD	8.1106	6.6181	-1.4925
509	1e+13	NDD	8.1445	6.6564	-1.4881
510	1e+13	NDD	8.1732	6.7066	-1.4666
511	1e+13	NDD	8.0938	6.5764	-1.5174
512	0	Correlation	8.1354	6.5627	-1.5727

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.1354	8.1354	8.1354		6.5627	6.5627	6.5627		-1.5727	-1.5727	-1.5727	
1e+12	8.1265	8.1373	8.1504	0.012115	6.5579	6.5826	6.618	0.031463	-1.5771	-1.5547	-1.5324	0.02235
5e+12	8.1106	8.1334	8.1657	0.028736	6.5815	6.6115	6.6348	0.027262	-1.5425	-1.522	-1.4925	0.02617
1e+13	8.0938	8.1372	8.1732	0.040205	6.5764	6.6465	6.7066	0.065666	-1.5174	-1.4907	-1.4666	0.0255

Device Test: 24.141 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC2/14//511k//@SYNC_HL_FALL_TIME)





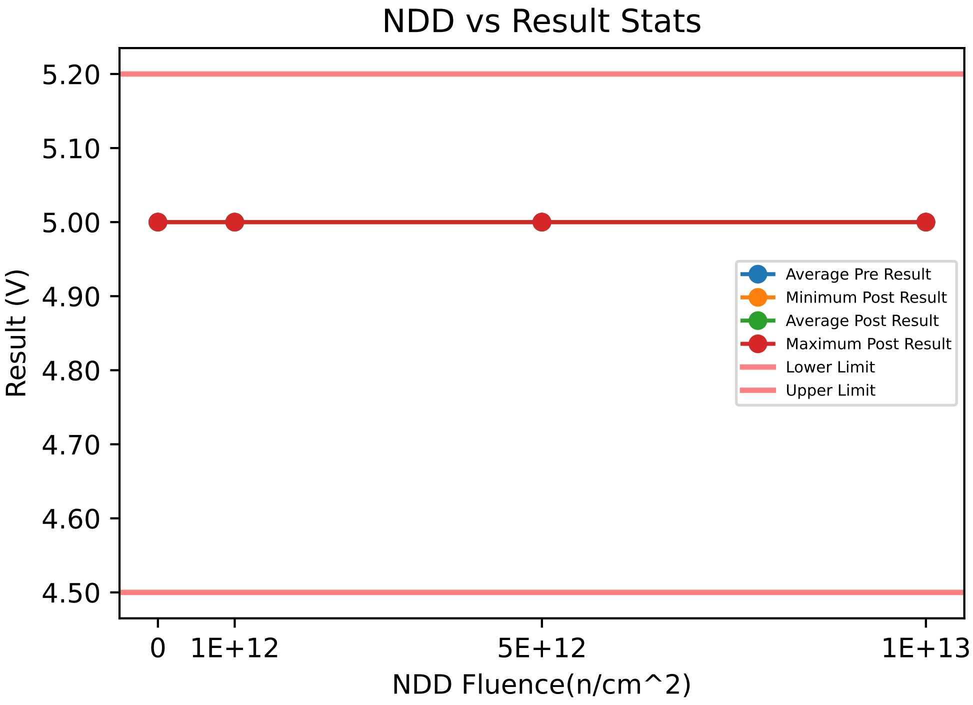
Test Results (Upper Limit = 21.0 (ns))

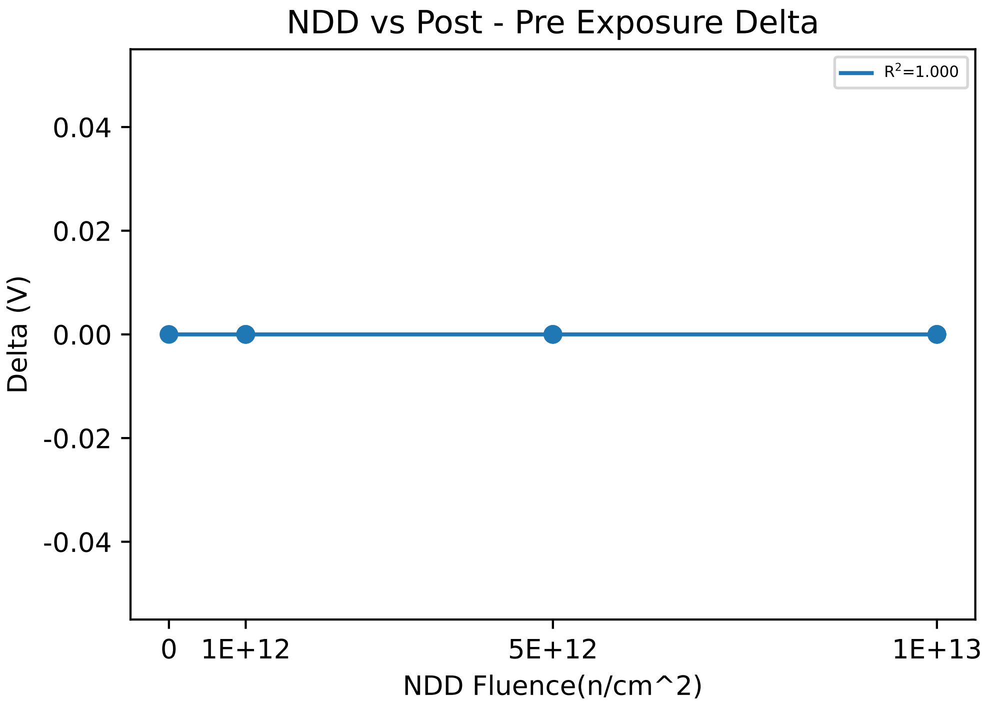
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.6877	6.558	-1.1297
504	1e+12	NDD	7.7312	6.578	-1.1532
505	1e+12	NDD	7.6285	6.4327	-1.1958
506	5e+12	NDD	7.6842	6.5542	-1.13
507	5e+12	NDD	7.6805	6.4118	-1.2687
508	5e+12	NDD	7.6628	6.3662	-1.2966
509	1e+13	NDD	7.6808	6.5101	-1.1707
510	1e+13	NDD	7.7194	6.6404	-1.079
511	1e+13	NDD	7.7087	6.5336	-1.1751
512	0	Correlation	7.6286	6.4761	-1.1525

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	7.6286	7.6286	7.6286		6.4761	6.4761	6.4761		-1.1525	-1.1525	-1.1525	
1e+12	7.6285	7.6825	7.7312	0.05155	6.4327	6.5229	6.578	0.078753	-1.1958	-1.1596	-1.1297	0.033507
5e+12	7.6628	7.6758	7.6842	0.011438	6.3662	6.4441	6.5542	0.098066	-1.2966	-1.2318	-1.13	0.08923
1e+13	7.6808	7.703	7.7194	0.019928	6.5101	6.5614	6.6404	0.069446	-1.1751	-1.1416	-1.079	0.054258

Device Test: 24.142 SYNC_OUT_HIGH_7V(LEVELS|VOH/SYNC1/14//511k//@SYNC_OUT_HIGH_7V)





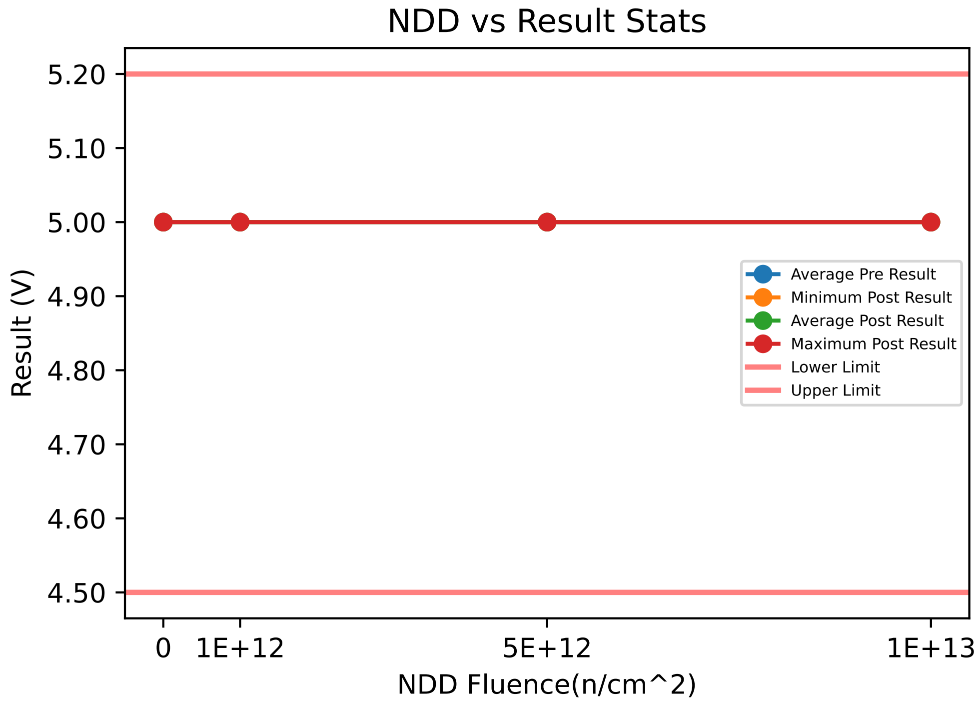
Test Results (Lower Limit = 4.5, Upper Limit = 5.2 (V))

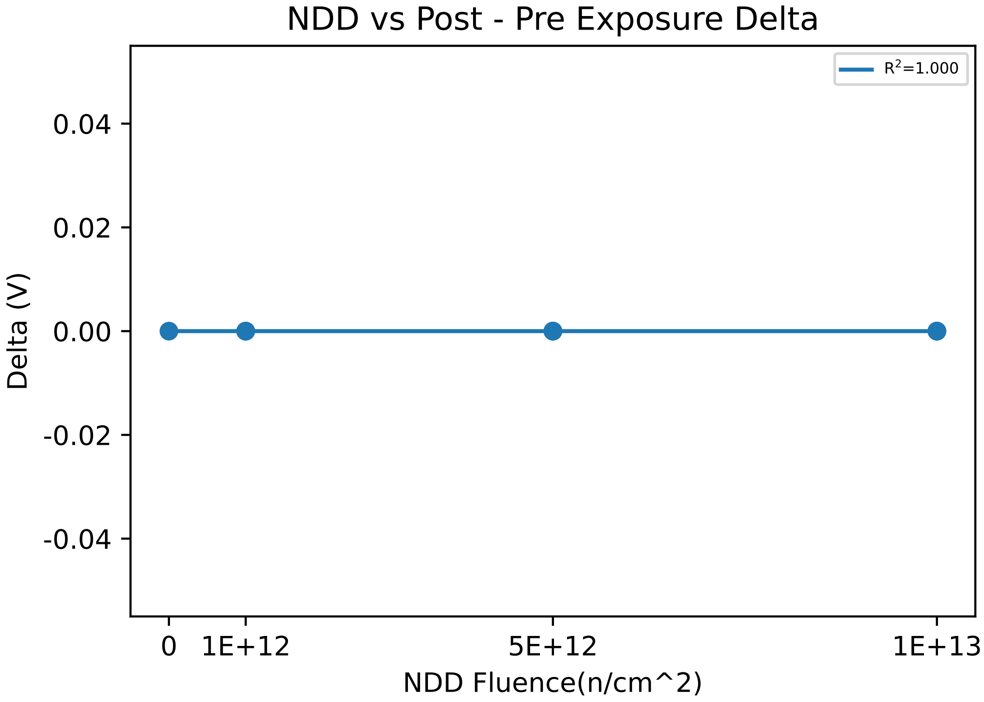
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5	5	0
504	1e+12	NDD	5	5	0
505	1e+12	NDD	5	5	0
506	5e+12	NDD	5	5	0
507	5e+12	NDD	5	5	0
508	5e+12	NDD	5	5	0
509	1e+13	NDD	5	5	0
510	1e+13	NDD	5	5	0
511	1e+13	NDD	5	5	0
512	0	Correlation	5	5	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5	5	5		5	5	5		0	0	0	
1e+12	5	5	5	0	5	5	5	0	0	0	0	0
5e+12	5	5	5	0	5	5	5	0	0	0	0	0
1e+13	5	5	5	0	5	5	5	0	0	0	0	0

Device Test: 24.143 SYNC_OUT_HIGH_7V(LEVELS|VOH/SYNC2/14//511k//@SYNC_OUT_HIGH_7V)





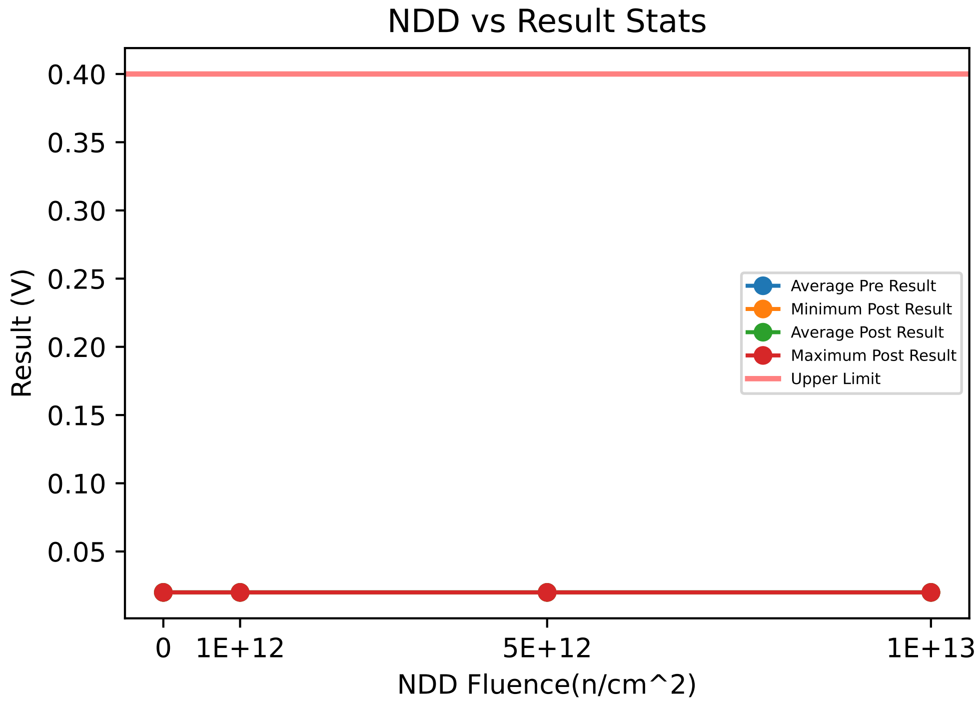
Test Results (Lower Limit = 4.5, Upper Limit = 5.2 (V))

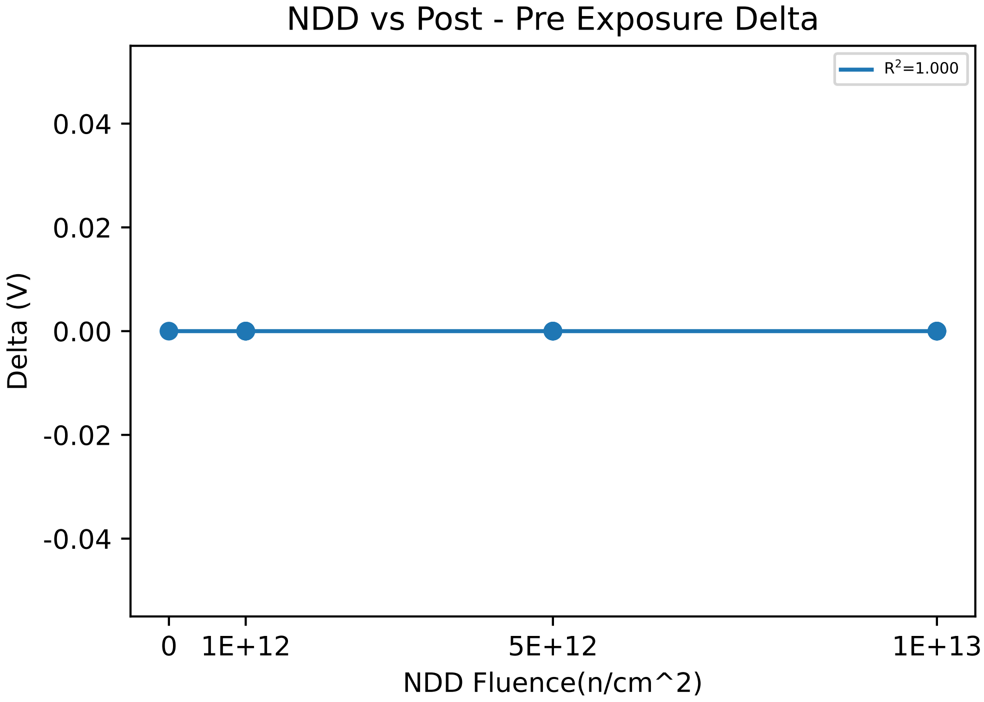
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	5	5	0
504	1e+12	NDD	5	5	0
505	1e+12	NDD	5	5	0
506	5e+12	NDD	5	5	0
507	5e+12	NDD	5	5	0
508	5e+12	NDD	5	5	0
509	1e+13	NDD	5	5	0
510	1e+13	NDD	5	5	0
511	1e+13	NDD	5	5	0
512	0	Correlation	5	5	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5	5	5		5	5	5		0	0	0	
1e+12	5	5	5	0	5	5	5	0	0	0	0	0
5e+12	5	5	5	0	5	5	5	0	0	0	0	0
1e+13	5	5	5	0	5	5	5	0	0	0	0	0

Device Test: 24.144 SYNC_OUT_LOW(LEVELS|VOL/SYNC1/14//511k//@SYNC_OUT_LOW)





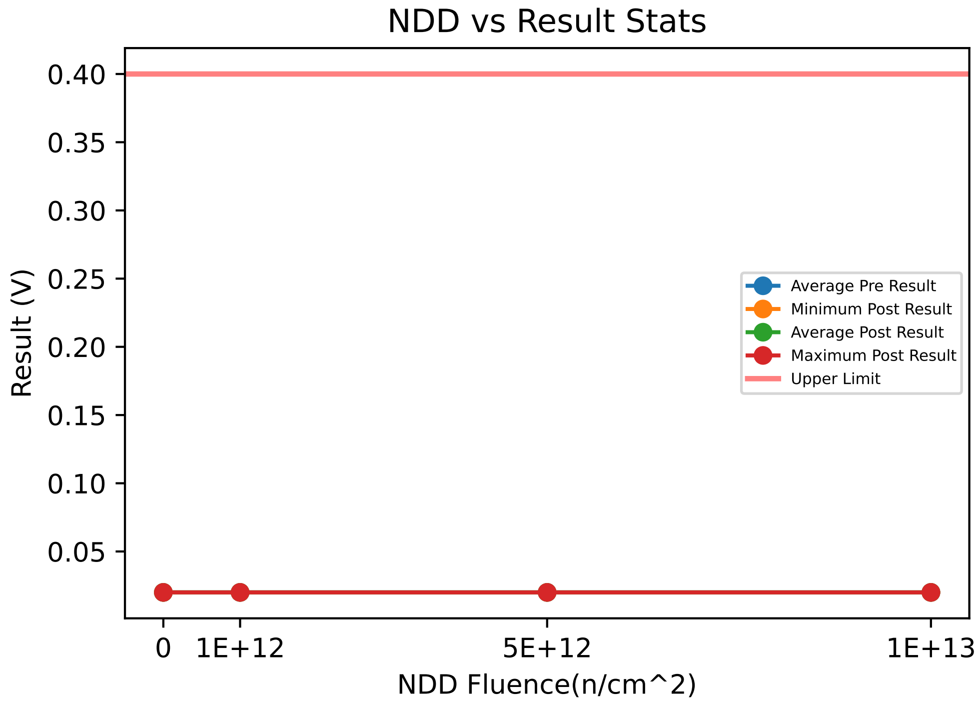
Test Results (Upper Limit = 0.4 (V))

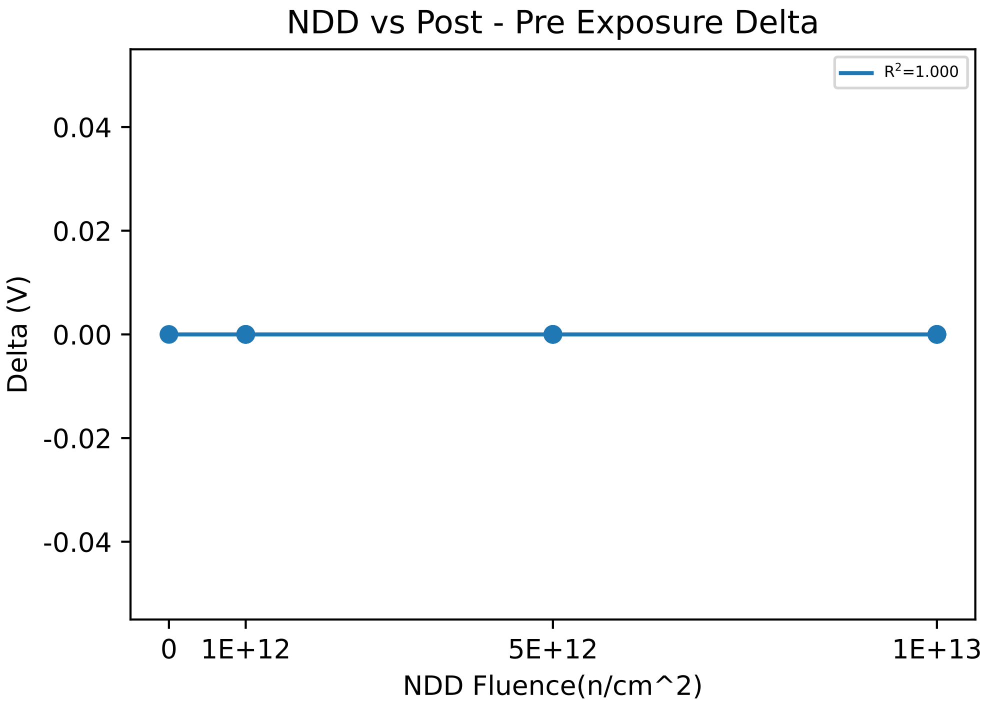
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.145 SYNC_OUT_LOW(LEVELS|VOL/SYNC2/14//511k//@SYNC_OUT_LOW)





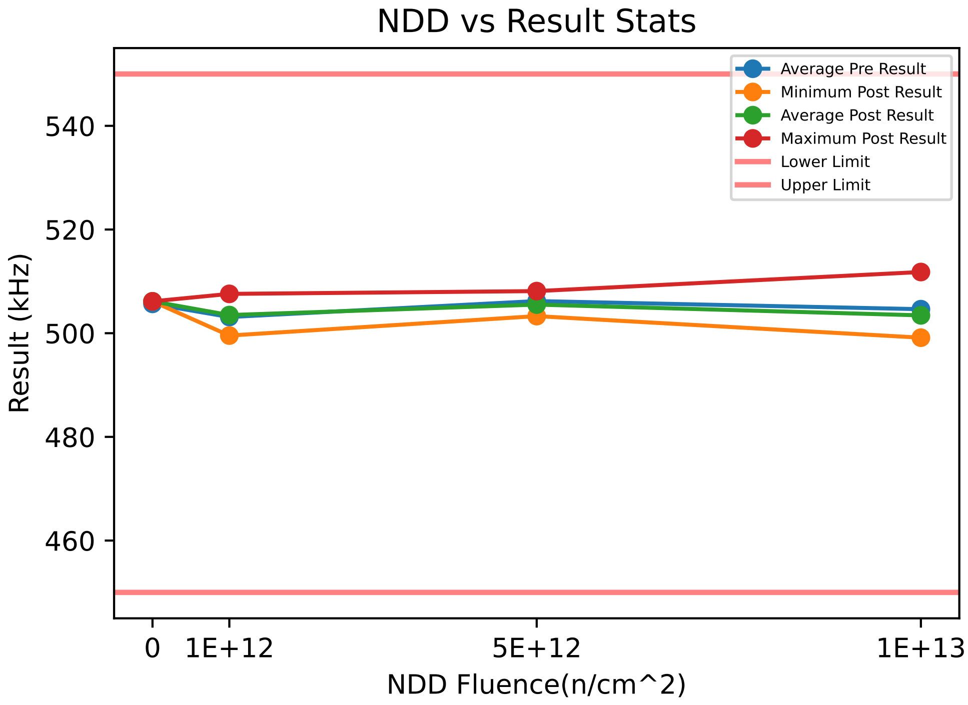
Test Results (Upper Limit = 0.4 (V))

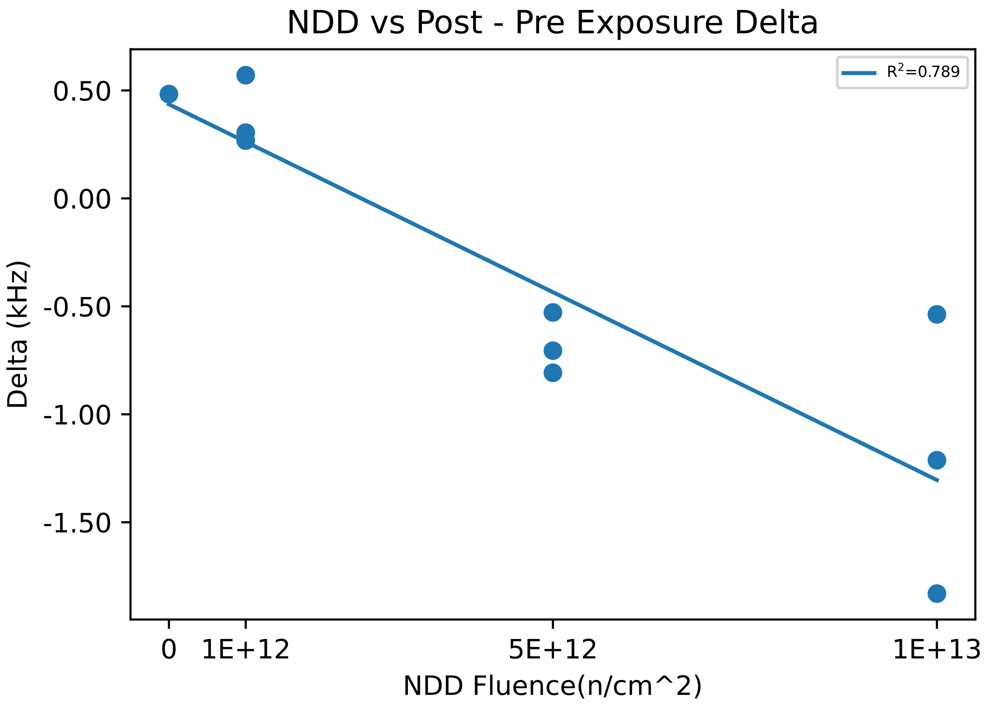
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.146 EXT_SET_FREQ_500KHZ_14V(FREQ|500kHz/SYNC1/14//90.9k//@EXT_SET_FREQ_500KHZ_14V)





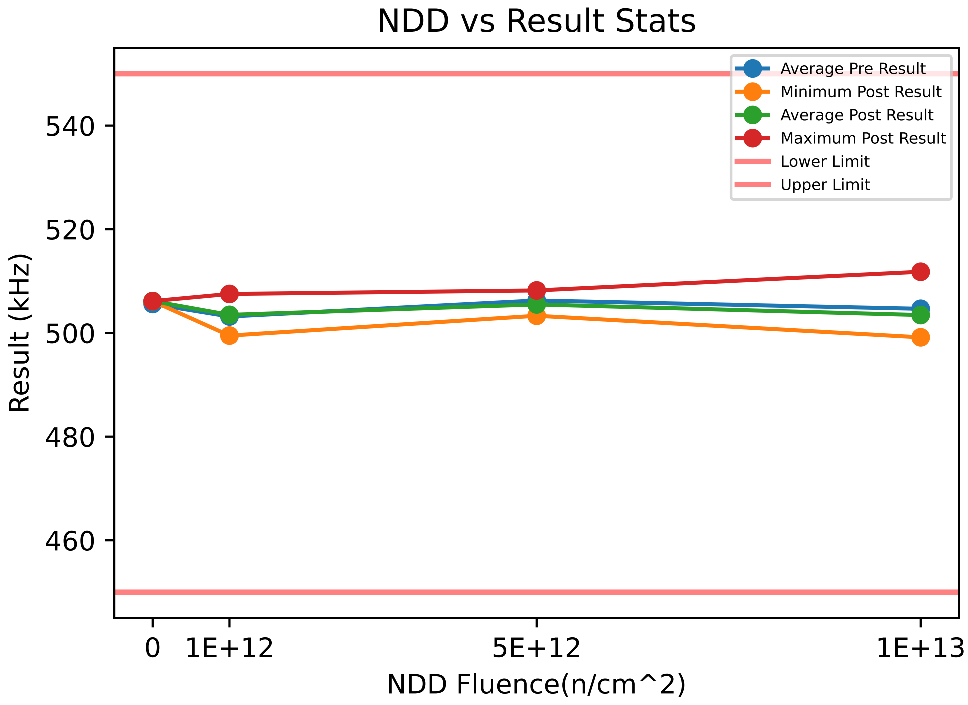
Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

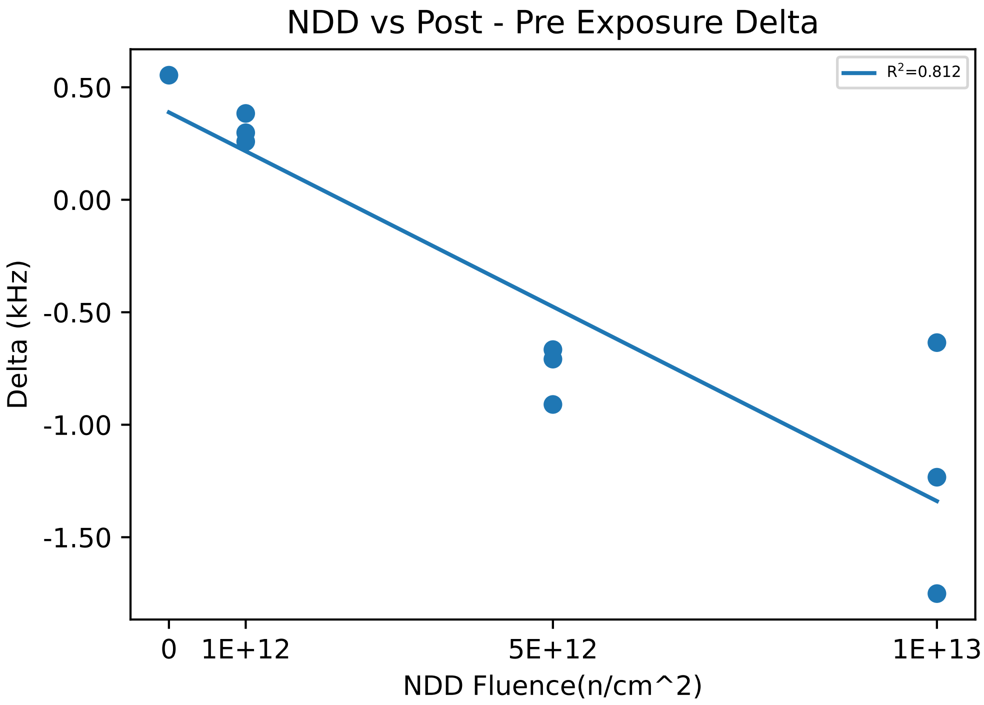
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	507.28	507.58	0.3046
504	1e+12	NDD	503.1	503.37	0.2678
505	1e+12	NDD	498.97	499.55	0.5706
506	5e+12	NDD	504.1	503.29	-0.8077
507	5e+12	NDD	505.67	505.14	-0.5283
508	5e+12	NDD	508.82	508.12	-0.7054
509	1e+13	NDD	512.34	511.8	-0.5372
510	1e+13	NDD	500.97	499.14	-1.8305
511	1e+13	NDD	500.6	499.38	-1.2128
512	0	Correlation	505.66	506.14	0.4832

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	505.66	505.66	505.66		506.14	506.14	506.14		0.4832	0.4832	0.4832	
1e+12	498.97	503.12	507.28	4.1526	499.55	503.5	507.58	4.0212	0.2678	0.381	0.5706	0.16523
5e+12	504.1	506.2	508.82	2.405	503.29	505.52	508.12	2.4341	-0.8077	-0.68047	-0.5283	0.14136
1e+13	500.6	504.63	512.34	6.6745	499.14	503.44	511.8	7.2414	-1.8305	-1.1935	-0.5372	0.64687

Device Test: 24.147 EXT_SET_FREQ_500KHZ_14V(FREQ|500kHz/SYNC2/14//90.9k//@EXT_SET_FREQ_500KHZ_14V





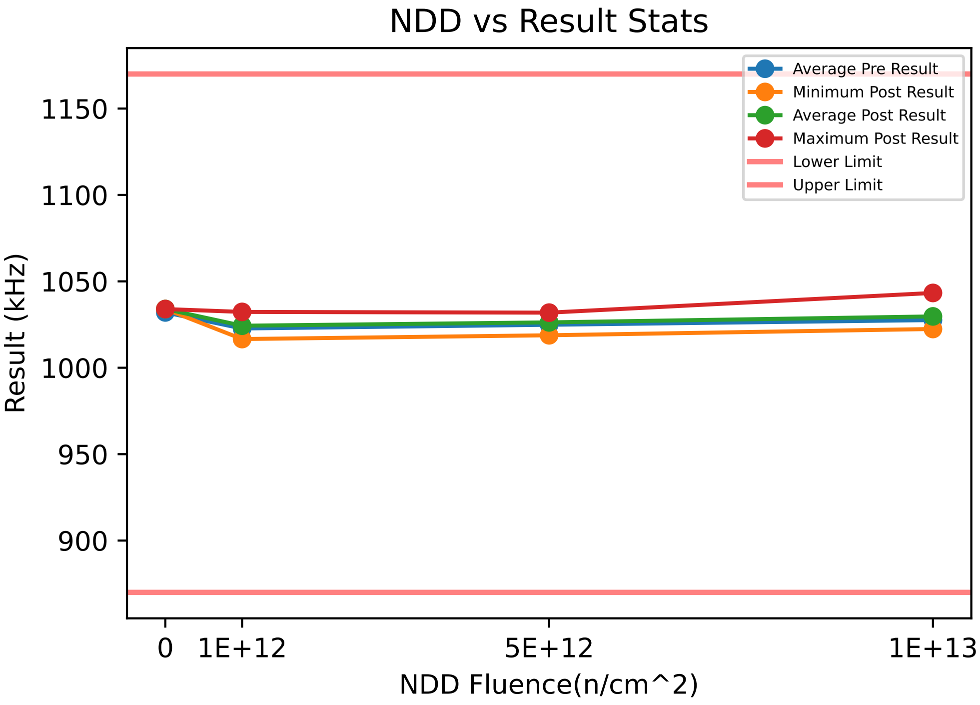
Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

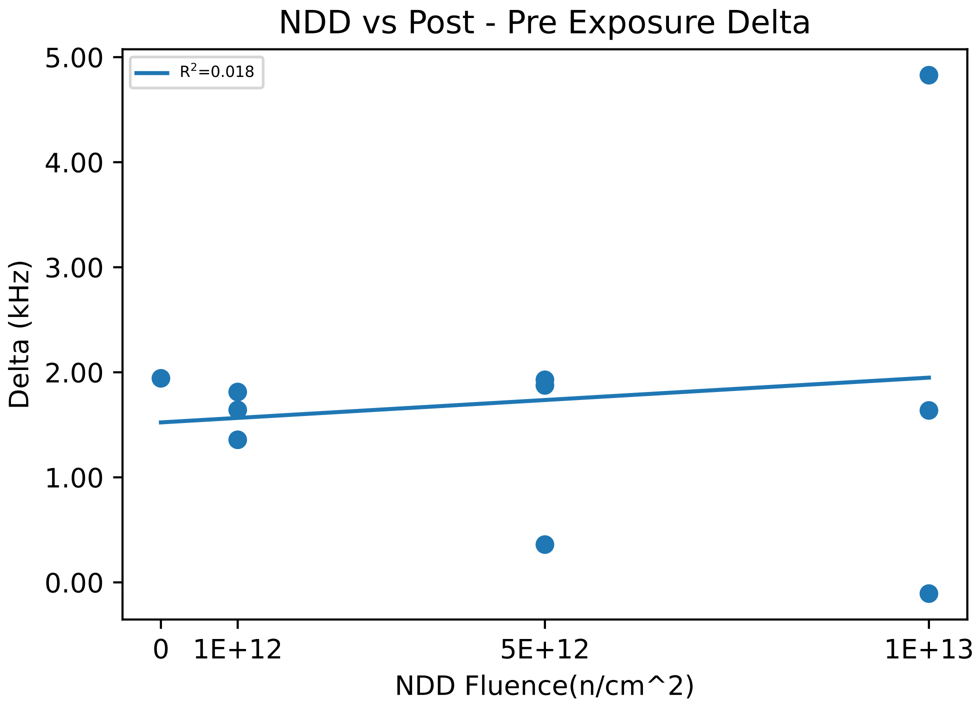
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	507.22	507.52	0.298
504	1e+12	NDD	503.2	503.45	0.2586
505	1e+12	NDD	499.11	499.49	0.3837
506	5e+12	NDD	504.23	503.32	-0.9099
507	5e+12	NDD	505.69	504.99	-0.7084
508	5e+12	NDD	508.87	508.2	-0.666
509	1e+13	NDD	512.44	511.8	-0.635
510	1e+13	NDD	500.91	499.16	-1.7506
511	1e+13	NDD	500.64	499.41	-1.2333
512	0	Correlation	505.59	506.14	0.5537

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	505.59	505.59	505.59		506.14	506.14	506.14		0.5537	0.5537	0.5537	
1e+12	499.11	503.18	507.22	4.0576	499.49	503.49	507.52	4.0149	0.2586	0.31343	0.3837	0.063962
5e+12	504.23	506.26	508.87	2.3706	503.32	505.5	508.2	2.4814	-0.9099	-0.76143	-0.666	0.13031
1e+13	500.64	504.66	512.44	6.7351	499.16	503.46	511.8	7.2296	-1.7506	-1.2063	-0.635	0.55829

Device Test: 24.148 EXT_SET_FREQ_1000KHZ14V(FREQ|1MHz/SYNC1/14//34.8k//@EXT_SET_FREQ_1000KHZ14V)





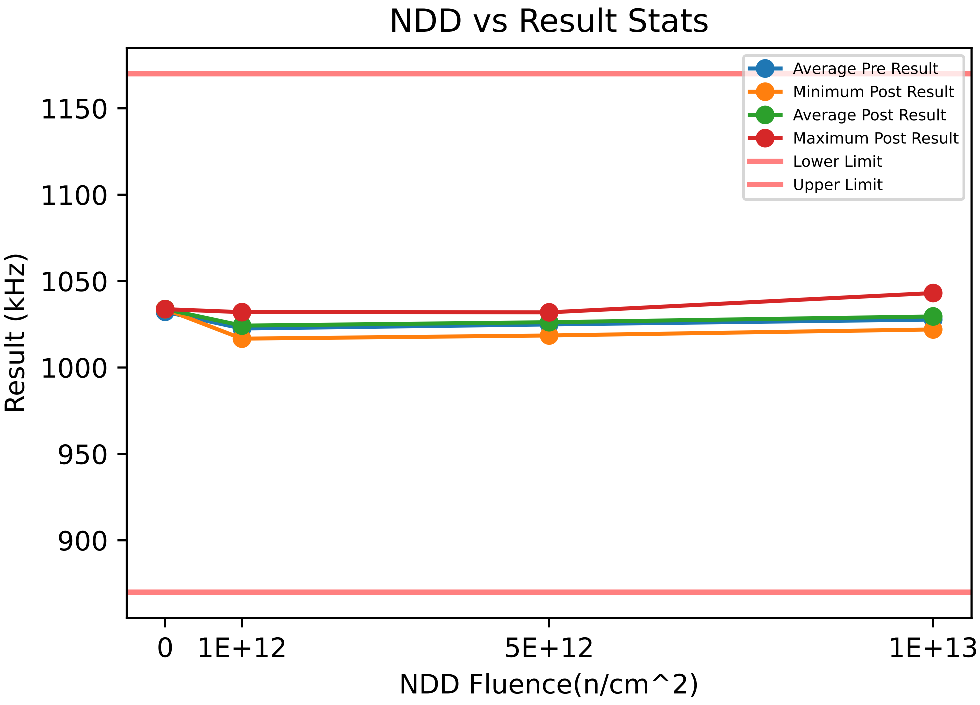
Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

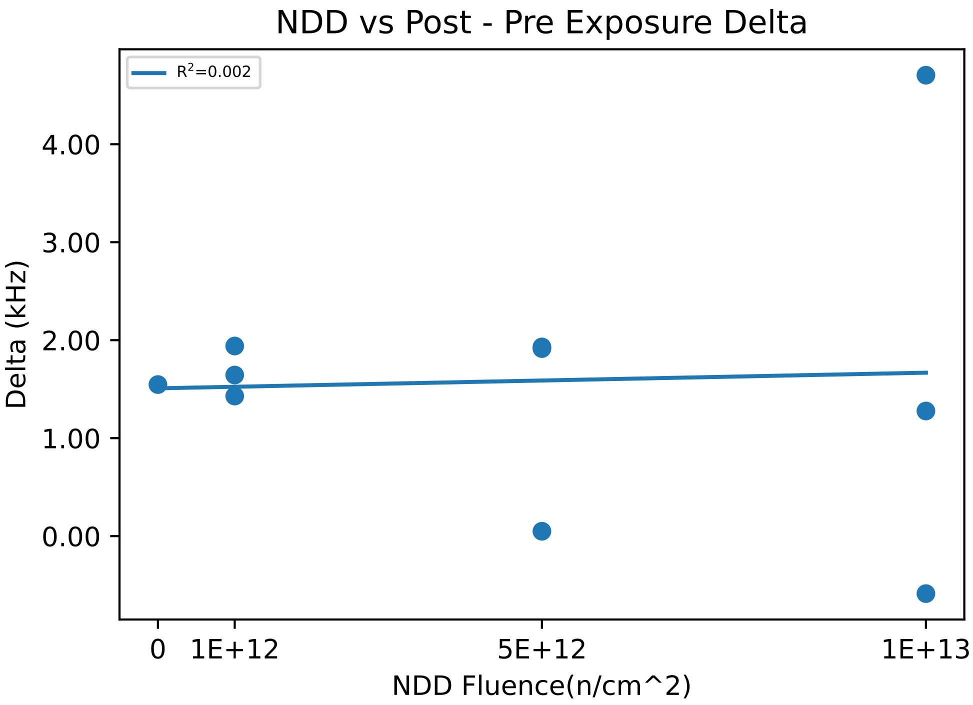
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1022.7	1024.1	1.3573
504	1e+12	NDD	1030.5	1032.3	1.8123
505	1e+12	NDD	1015	1016.6	1.6415
506	5e+12	NDD	1018.4	1018.8	0.3597
507	5e+12	NDD	1026.2	1028.1	1.9283
508	5e+12	NDD	1030	1031.9	1.875
509	1e+13	NDD	1038.5	1043.3	4.8282
510	1e+13	NDD	1021.8	1023.4	1.6367
511	1e+13	NDD	1022.5	1022.4	-0.1069
512	0	Correlation	1032	1034	1.9424

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1032	1032	1032		1034	1034	1034		1.9424	1.9424	1.9424	
1e+12	1015	1022.7	1030.5	7.7671	1016.6	1024.3	1032.3	7.8558	1.3573	1.6037	1.8123	0.22984
5e+12	1018.4	1024.9	1030	5.8964	1018.8	1026.3	1031.9	6.7366	0.3597	1.3877	1.9283	0.89064
1e+13	1021.8	1027.6	1038.5	9.4259	1022.4	1029.7	1043.3	11.774	-0.1069	2.1193	4.8282	2.5027

Device Test: 24.149 EXT_SET_FREQ_1000KHZ14V(FREQ|1MHz/SYNC2/14//34.8k//@EXT_SET_FREQ_1000KHZ14V)





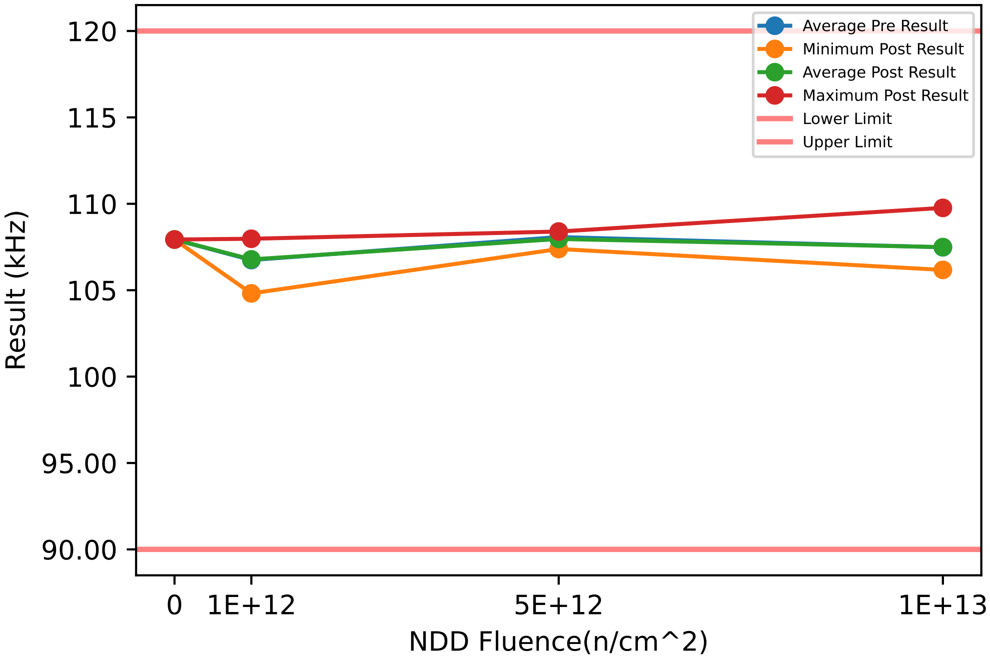
Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

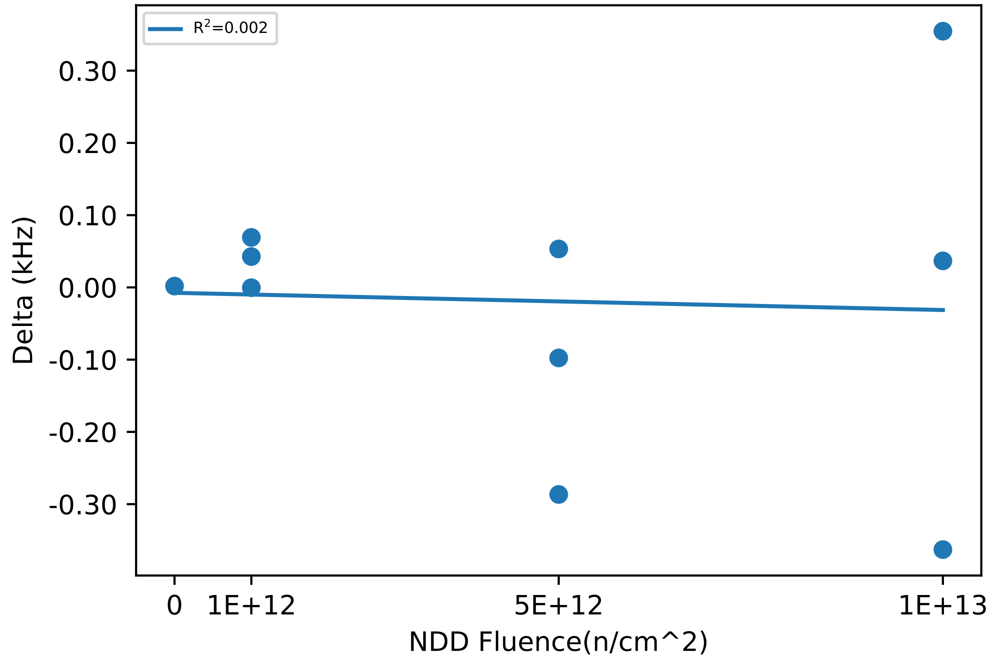
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1022.6	1024	1.4294
504	1e+12	NDD	1030.4	1032	1.6439
505	1e+12	NDD	1014.8	1016.7	1.9403
506	5e+12	NDD	1018.5	1018.5	0.0496
507	5e+12	NDD	1026.3	1028.2	1.9141
508	5e+12	NDD	1030	1031.9	1.9308
509	1e+13	NDD	1038.4	1043.1	4.7043
510	1e+13	NDD	1022.2	1023.5	1.277
511	1e+13	NDD	1022.6	1022	-0.5867
512	0	Correlation	1032.2	1033.8	1.5468

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1032.2	1032.2	1032.2		1033.8	1033.8	1033.8		1.5468	1.5468	1.5468	
1e+12	1014.8	1022.6	1030.4	7.8161	1016.7	1024.2	1032	7.6708	1.4294	1.6712	1.9403	0.25654
5e+12	1018.5	1024.9	1030	5.873	1018.5	1026.2	1031.9	6.9096	0.0496	1.2982	1.9308	1.0813
1e+13	1022.2	1027.7	1038.4	9.2207	1022	1029.5	1043.1	11.759	-0.5867	1.7982	4.7043	2.6837

Device Test: 24.15 EXT_SET_FREQ_100KHZ_4V(FREQ|100kHz/SYNC2/4.5//511k//@EXT_SET_FREQ_100KHZ_4V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

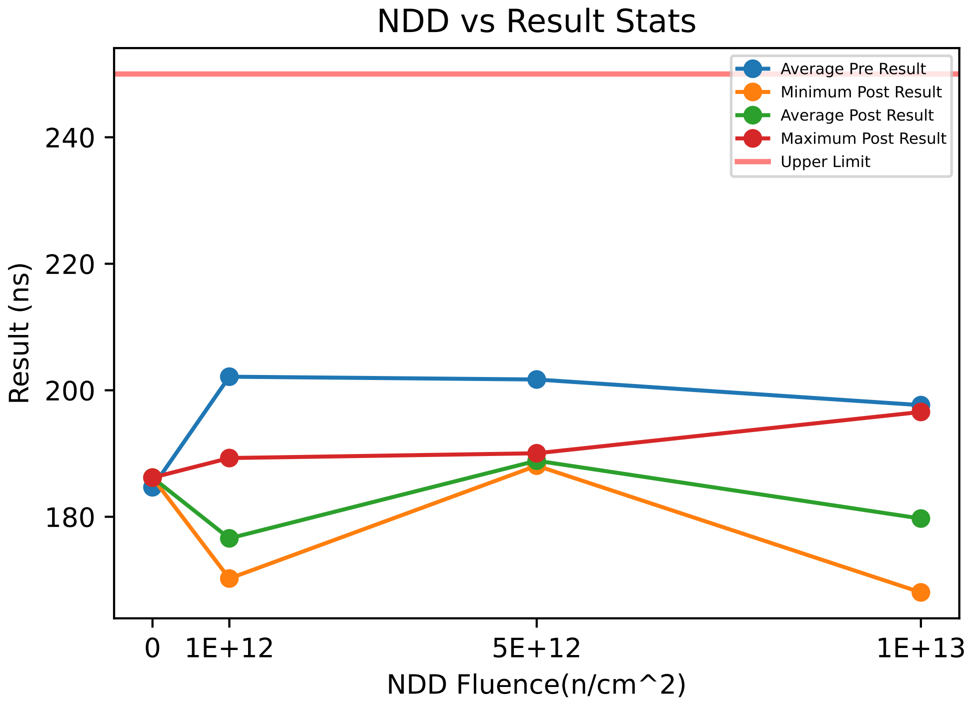
Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

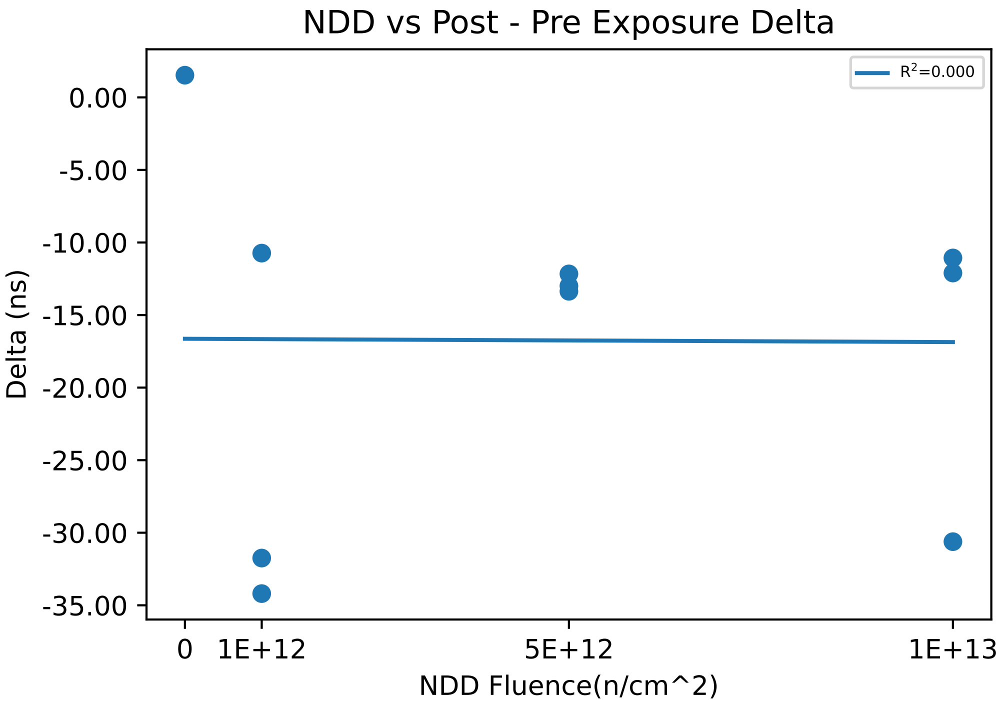
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	107.93	107.98	0.0427
504	1e+12	NDD	107.55	107.55	-0.0004
505	1e+12	NDD	104.75	104.82	0.0692
506	5e+12	NDD	107.48	107.38	-0.0976
507	5e+12	NDD	108.06	108.12	0.0532
508	5e+12	NDD	108.68	108.39	-0.2866
509	1e+13	NDD	109.41	109.76	0.3546
510	1e+13	NDD	106.54	106.17	-0.3629
511	1e+13	NDD	106.5	106.54	0.0367
512	0	Correlation	107.93	107.93	0.0018

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.93	107.93	107.93		107.93	107.93	107.93		0.0018	0.0018	0.0018	
1e+12	104.75	106.74	107.93	1.7411	104.82	106.78	107.98	1.7161	-0.0004	0.037167	0.0692	0.035128
5e+12	107.48	108.08	108.68	0.59954	107.38	107.97	108.39	0.52173	-0.2866	-0.11033	0.0532	0.17026
1e+13	106.5	107.48	109.41	1.6676	106.17	107.49	109.76	1.975	-0.3629	0.0094667	0.3546	0.35952

Device Test: 24.151 ON_TIME_MIN_14V(TIMING|MINON/SW/14//511k//@ON_TIME_MIN_14V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

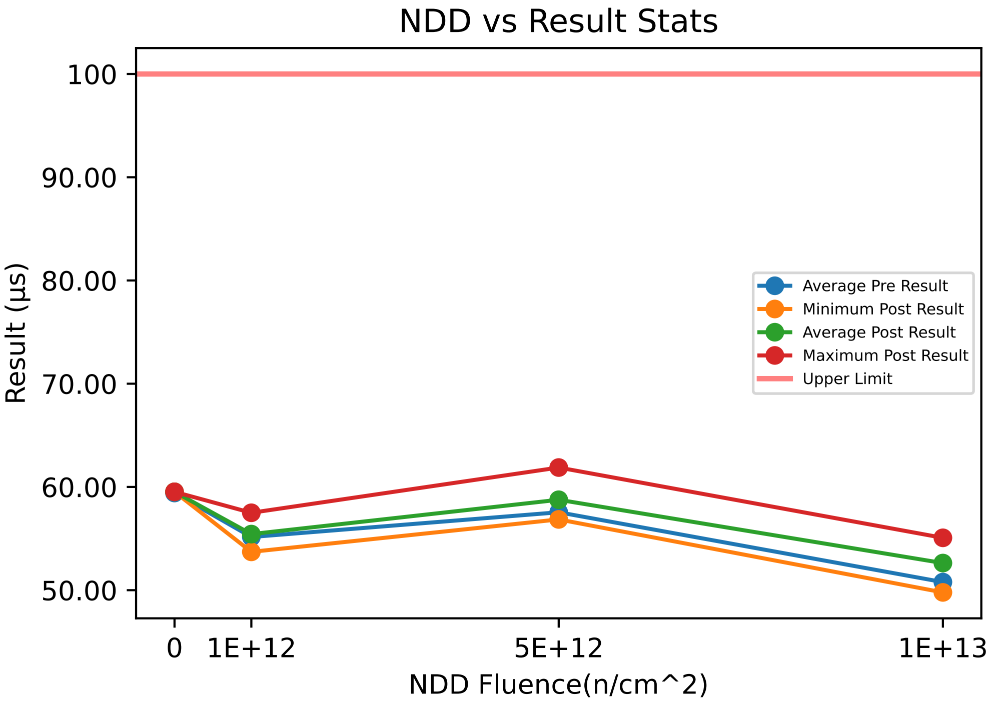
Test Results (Upper Limit = 250.0 (ns))

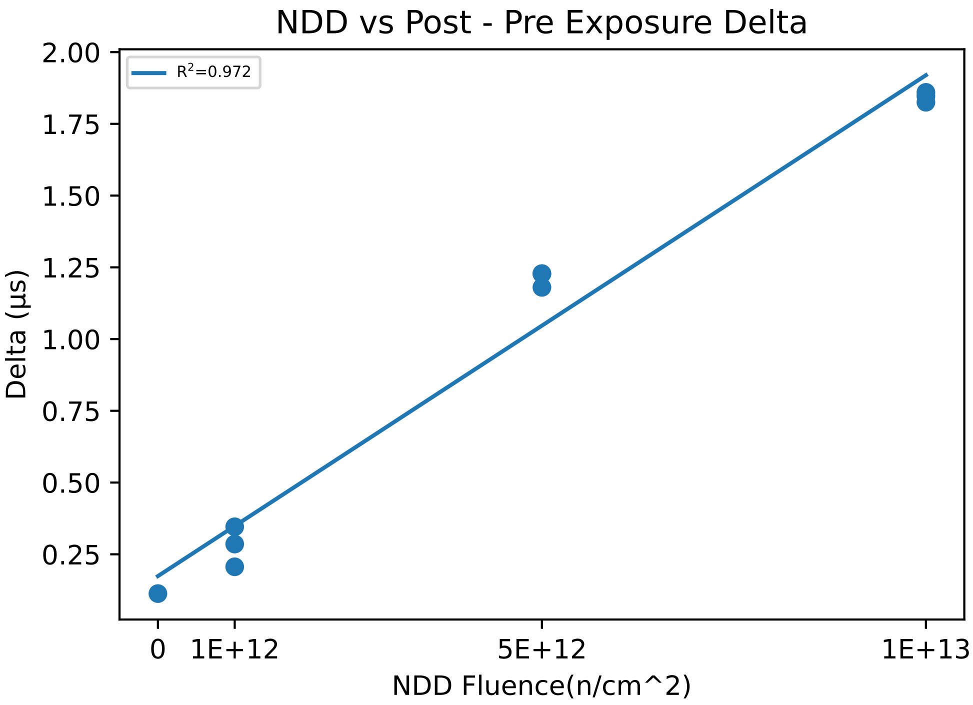
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	204.44	170.24	-34.195
504	1e+12	NDD	200.02	189.29	-10.732
505	1e+12	NDD	201.99	170.24	-31.745
506	5e+12	NDD	201.44	188.08	-13.363
507	5e+12	NDD	201.47	188.48	-12.993
508	5e+12	NDD	202.21	190.04	-12.165
509	1e+13	NDD	208.68	196.57	-12.103
510	1e+13	NDD	179.11	168.05	-11.065
511	1e+13	NDD	205.17	174.55	-30.616
512	0	Correlation	184.66	186.19	1.5281

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	184.66	184.66	184.66		186.19	186.19	186.19		1.5281	1.5281	1.5281	
1e+12	200.02	202.15	204.44	2.2137	170.24	176.59	189.29	10.996	-34.195	-25.557	-10.732	12.897
5e+12	201.44	201.71	202.21	0.43349	188.08	188.87	190.04	1.0373	-13.363	-12.84	-12.165	0.61338
1e+13	179.11	197.65	208.68	16.151	168.05	179.72	196.57	14.95	-30.616	-17.928	-11.065	11

Device Test: 24.152 T_EN_DELAY(TIMING|DELAY/EN/14//511k//@T_EN_DELAY)





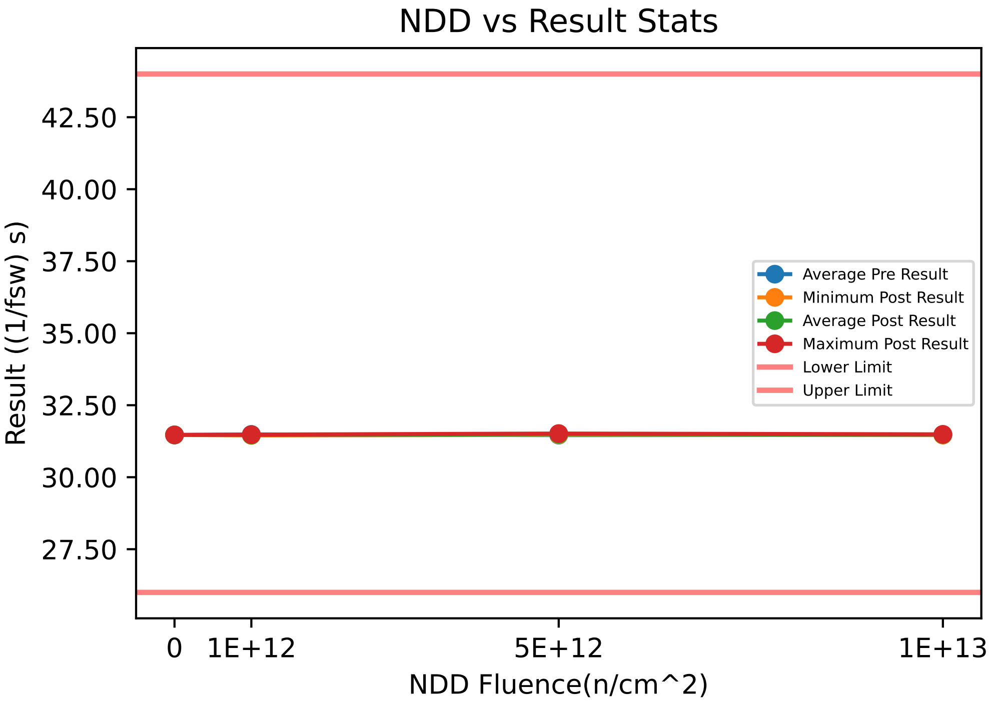
Test Results (Upper Limit = 100.0 (µs))

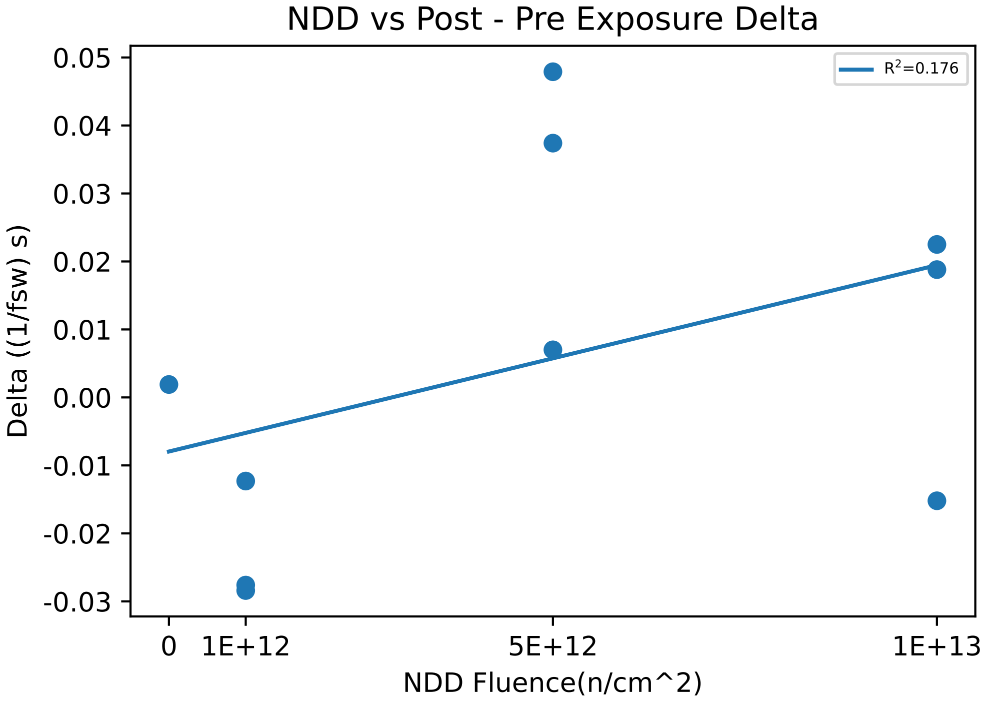
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	54.801	55.087	0.2856
504	1e+12	NDD	57.152	57.497	0.3459
505	1e+12	NDD	53.506	53.712	0.2064
506	5e+12	NDD	55.675	56.855	1.1802
507	5e+12	NDD	56.314	57.542	1.228
508	5e+12	NDD	60.653	61.881	1.2278
509	1e+13	NDD	51.177	53.024	1.8465
510	1e+13	NDD	47.926	49.785	1.8598
511	1e+13	NDD	53.247	55.072	1.8253
512	0	Correlation	59.414	59.527	0.113

Test Statistics (µs)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	59.414	59.414	59.414		59.527	59.527	59.527		0.113	0.113	0.113	
1e+12	53.506	55.153	57.152	1.848	53.712	55.432	57.497	1.916	0.2064	0.2793	0.3459	0.069963
5e+12	55.675	57.547	60.653	2.7087	56.855	58.759	61.881	2.7252	1.1802	1.212	1.228	0.02754
1e+13	47.926	50.783	53.247	2.6823	49.785	52.627	55.072	2.6655	1.8253	1.8439	1.8598	0.0174

Device Test: 24.154 T_FAULT_DELAY(TIMING|DELAY/FAULT/14//511k//@T_FAULT_DELAY)





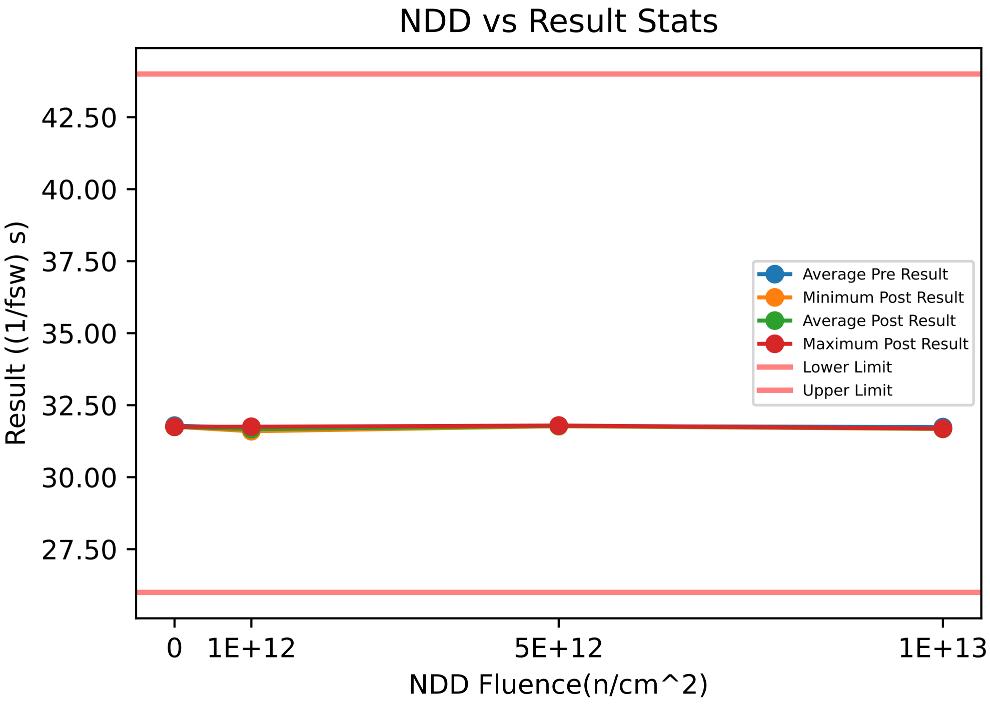
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

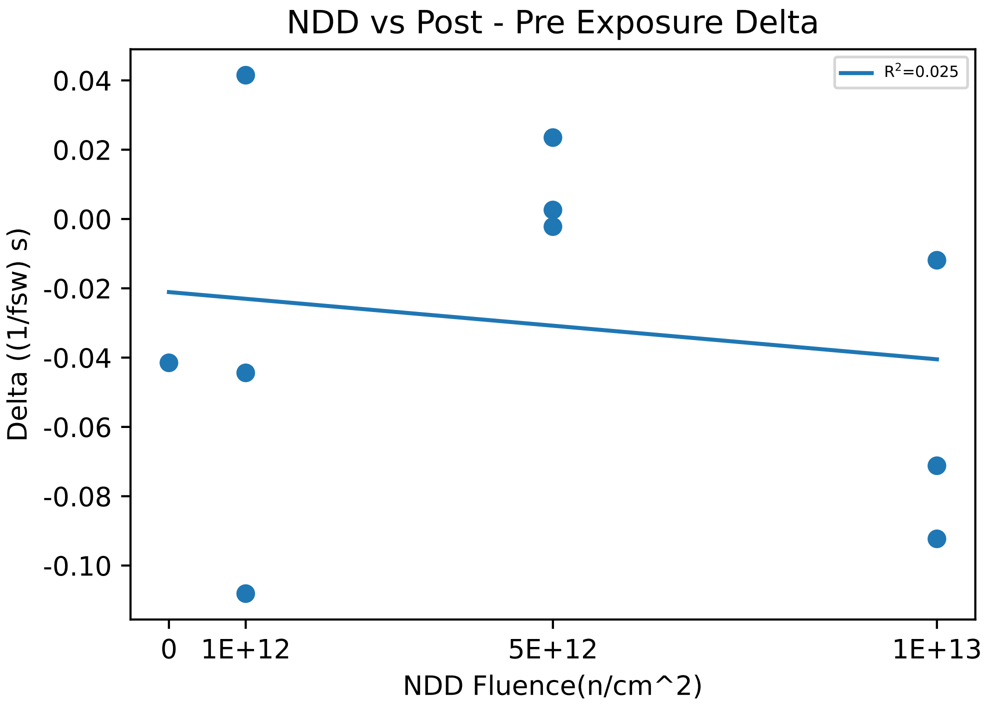
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.492	31.479	-0.0123
504	1e+12	NDD	31.479	31.452	-0.0276
505	1e+12	NDD	31.486	31.458	-0.0284
506	5e+12	NDD	31.468	31.515	0.0479
507	5e+12	NDD	31.431	31.468	0.0374
508	5e+12	NDD	31.48	31.487	0.007
509	1e+13	NDD	31.477	31.462	-0.0152
510	1e+13	NDD	31.47	31.489	0.0188
511	1e+13	NDD	31.463	31.486	0.0225
512	0	Correlation	31.466	31.468	0.0019

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.466	31.466	31.466		31.468	31.468	31.468		0.0019	0.0019	0.0019	
1e+12	31.479	31.486	31.492	0.0062268	31.452	31.463	31.479	0.014503	-0.0284	-0.022767	-0.0123	0.0090732
5e+12	31.431	31.459	31.48	0.025661	31.468	31.49	31.515	0.023915	0.007	0.030767	0.0479	0.021242
1e+13	31.463	31.47	31.477	0.0067022	31.462	31.479	31.489	0.01487	-0.0152	0.0087	0.0225	0.020781

Device Test: 24.156 T_FAULT_DELAY(TIMING|DELAY/FAULT/14//90.9k//@T_FAULT_DELAY)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

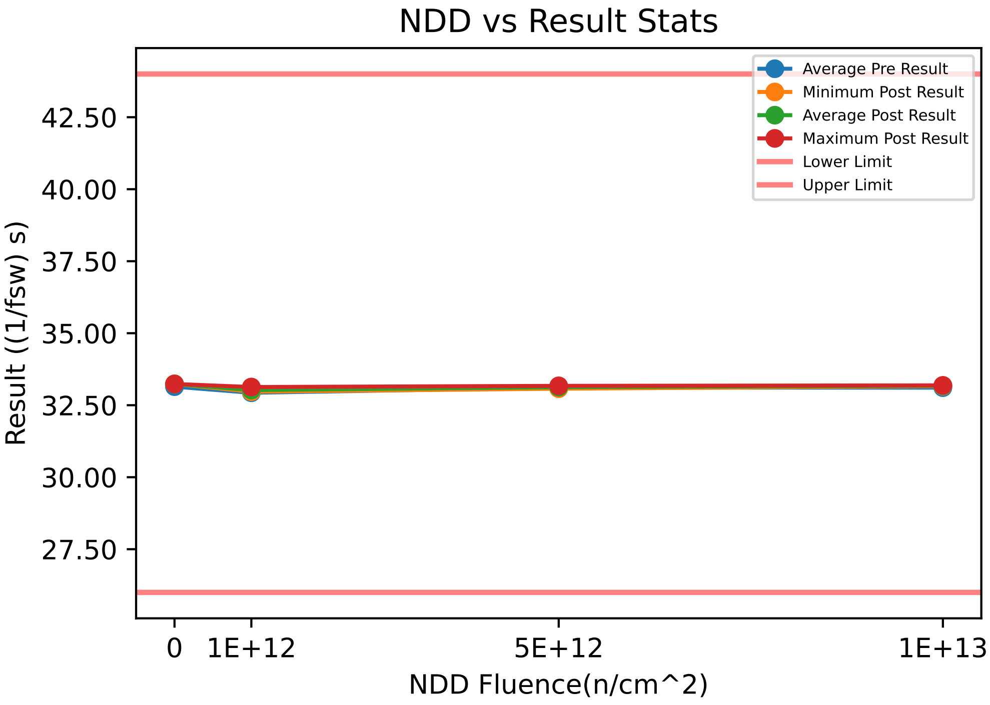
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

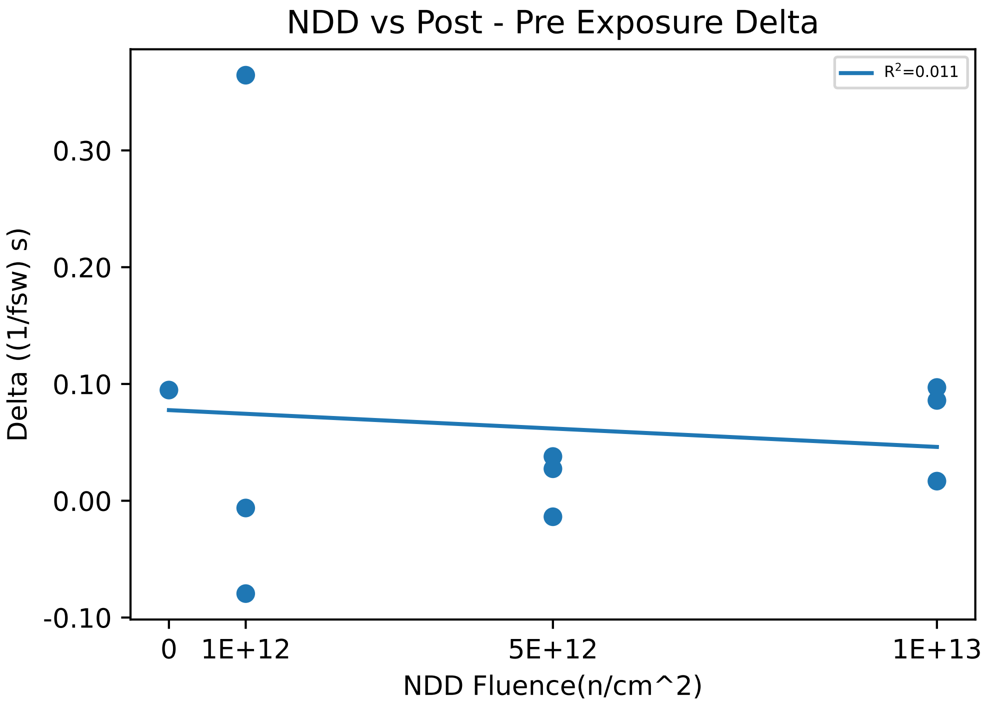
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.71	31.752	0.0415
504	1e+12	NDD	31.694	31.65	-0.0444
505	1e+12	NDD	31.703	31.595	-0.1081
506	5e+12	NDD	31.771	31.795	0.0235
507	5e+12	NDD	31.772	31.77	-0.0022
508	5e+12	NDD	31.779	31.782	0.0026
509	1e+13	NDD	31.782	31.689	-0.0923
510	1e+13	NDD	31.695	31.683	-0.0119
511	1e+13	NDD	31.745	31.674	-0.0712
512	0	Correlation	31.792	31.75	-0.0415

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.792	31.792	31.792		31.75	31.75	31.75		-0.0415	-0.0415	-0.0415	
1e+12	31.694	31.703	31.71	0.0081725	31.595	31.665	31.752	0.079551	-0.1081	-0.037	0.0415	0.075074
5e+12	31.771	31.774	31.779	0.0043589	31.77	31.782	31.795	0.012354	-0.0022	0.0079667	0.0235	0.013665
1e+13	31.695	31.741	31.782	0.043342	31.674	31.682	31.689	0.0075567	-0.0923	-0.058467	-0.0119	0.041685

Device Test: 24.158 T_FAULT_DELAY(TIMING|DELAY/FAULT/14//34.8k//@T_FAULT_DELAY)





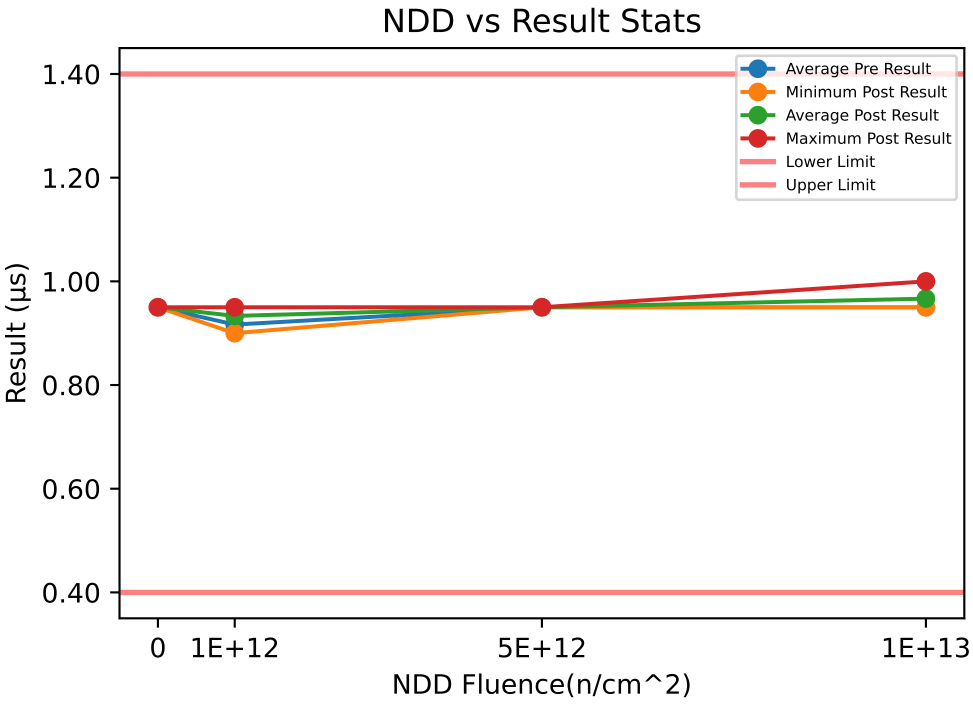
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

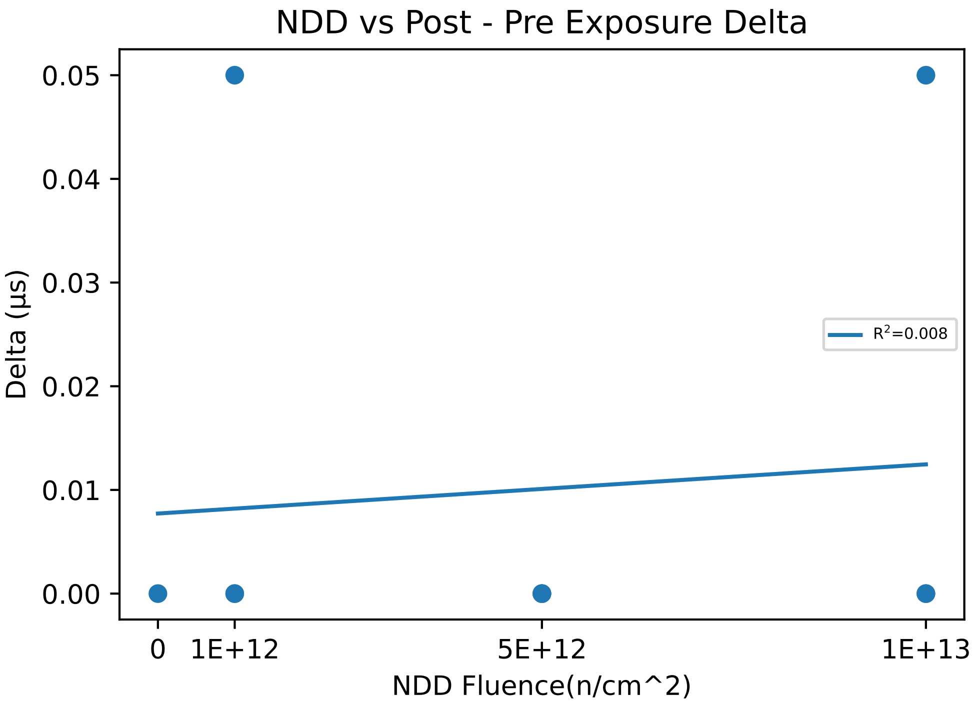
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	33.048	32.969	-0.0795
504	1e+12	NDD	33.137	33.131	-0.0062
505	1e+12	NDD	32.613	32.977	0.3644
506	5e+12	NDD	33.035	33.073	0.0379
507	5e+12	NDD	33.185	33.172	-0.0137
508	5e+12	NDD	33.108	33.135	0.0274
509	1e+13	NDD	33.144	33.161	0.0168
510	1e+13	NDD	33.103	33.189	0.0859
511	1e+13	NDD	33.083	33.18	0.097
512	0	Correlation	33.143	33.237	0.0948

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	33.143	33.143	33.143		33.237	33.237	33.237		0.0948	0.0948	0.0948	
1e+12	32.613	32.933	33.137	0.28068	32.969	33.026	33.131	0.091376	-0.0795	0.0929	0.3644	0.23797
5e+12	33.035	33.109	33.185	0.075016	33.073	33.127	33.172	0.049735	-0.0137	0.0172	0.0379	0.02727
1e+13	33.083	33.11	33.144	0.031359	33.161	33.176	33.189	0.01413	0.0168	0.066567	0.097	0.043455

Device Test: 24.159 T_FAULT_MIN(TIMING|MINON/FAULT/14//511k//@T_FAULT_MIN)





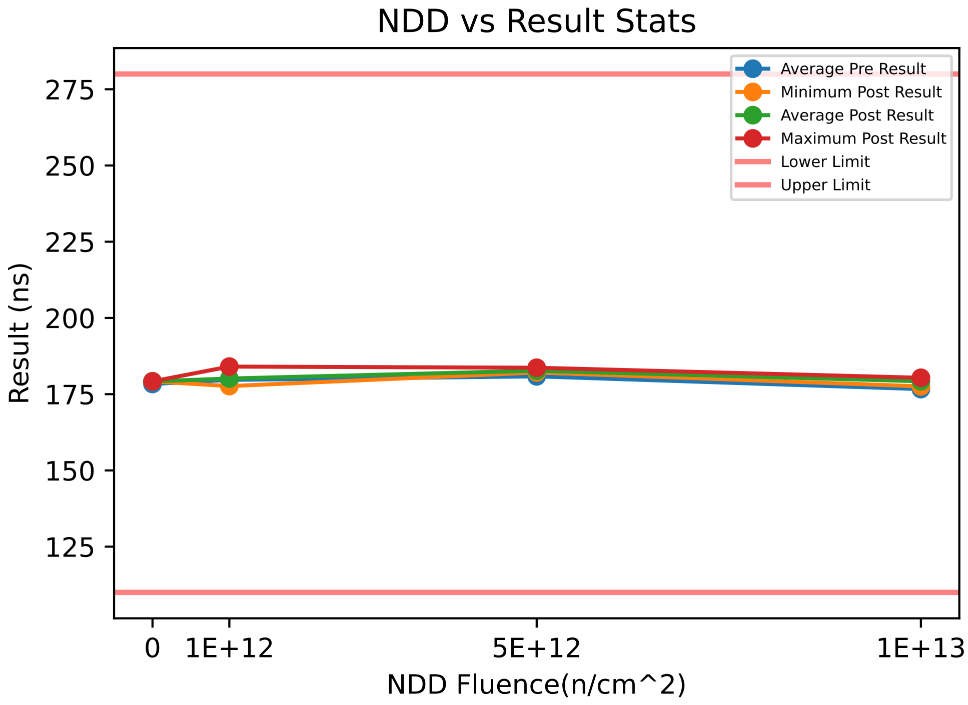
Test Results (Lower Limit = 0.4, Upper Limit = 1.4 (µs))

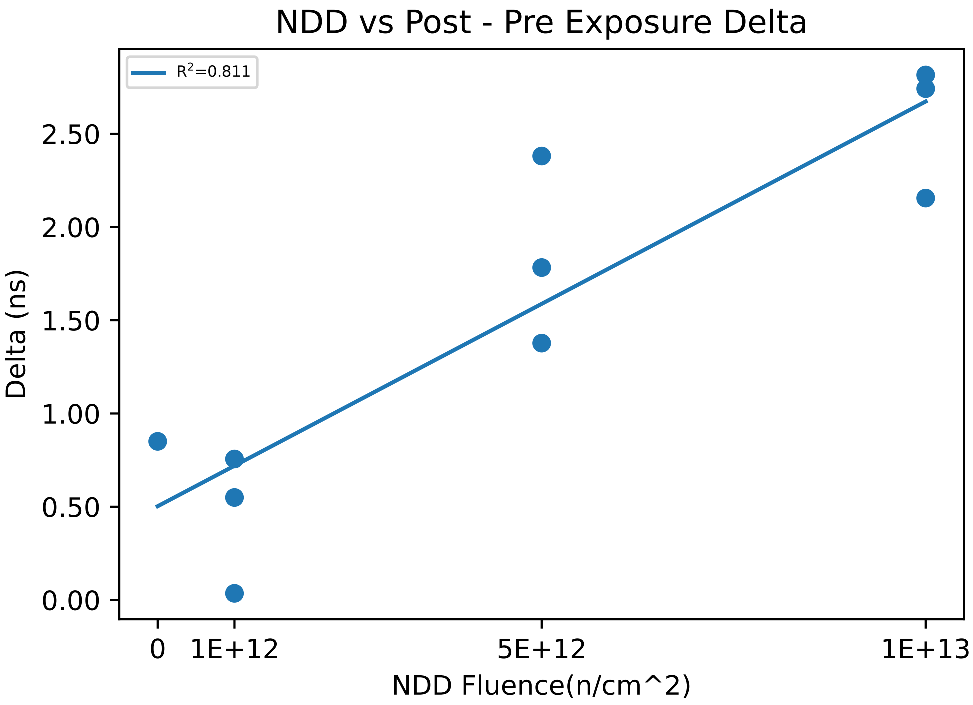
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.95	0.95	0
504	1e+12	NDD	0.9	0.95	0.05
505	1e+12	NDD	0.9	0.9	0
506	5e+12	NDD	0.95	0.95	0
507	5e+12	NDD	0.95	0.95	0
508	5e+12	NDD	0.95	0.95	0
509	1e+13	NDD	0.95	1	0.05
510	1e+13	NDD	0.95	0.95	0
511	1e+13	NDD	0.95	0.95	0
512	0	Correlation	0.95	0.95	0

Test Statistics (µs)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.95	0.95	0.95		0.95	0.95	0.95		0	0	0	
1e+12	0.9	0.91667	0.95	0.028868	0.9	0.93333	0.95	0.028868	0	0.016667	0.05	0.028868
5e+12	0.95	0.95	0.95	0	0.95	0.95	0.95	0	0	0	0	0
1e+13	0.95	0.95	0.95	0	0.95	0.96667	1	0.028868	0	0.016667	0.05	0.028868

evice Test: 24.16 SYNC1_SW_DELAY_OUTPUT_4V(TIMING|DELAY/SYNC1/4.5//511k//@SYNC1_SW_DELAY_OUTPUT_4





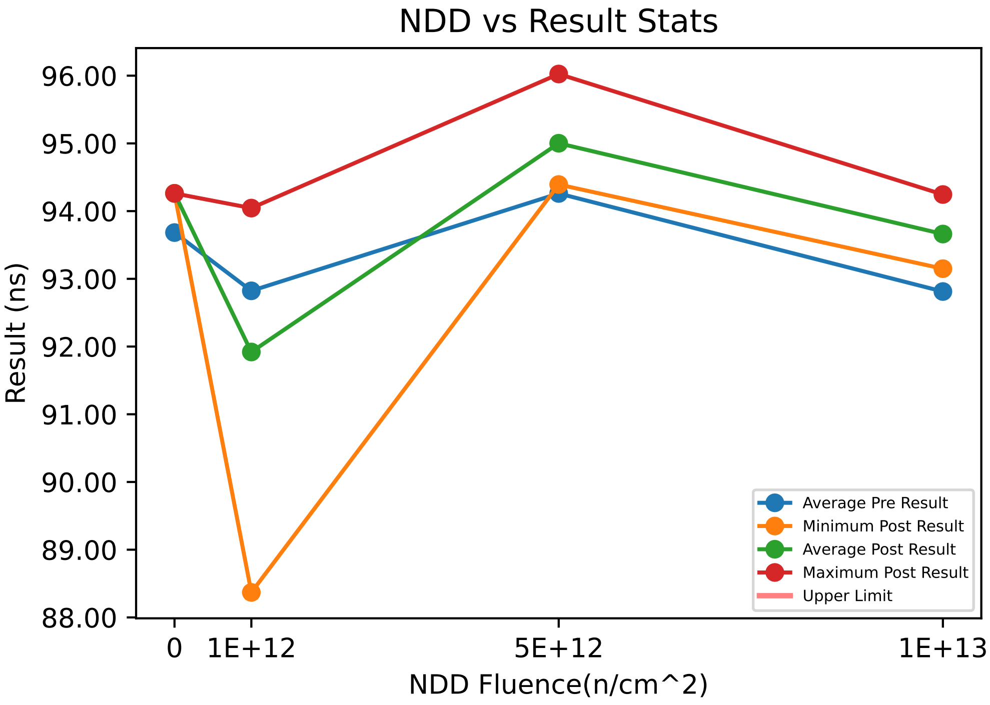
Test Results (Lower Limit = 110.0, Upper Limit = 280.0 (ns))

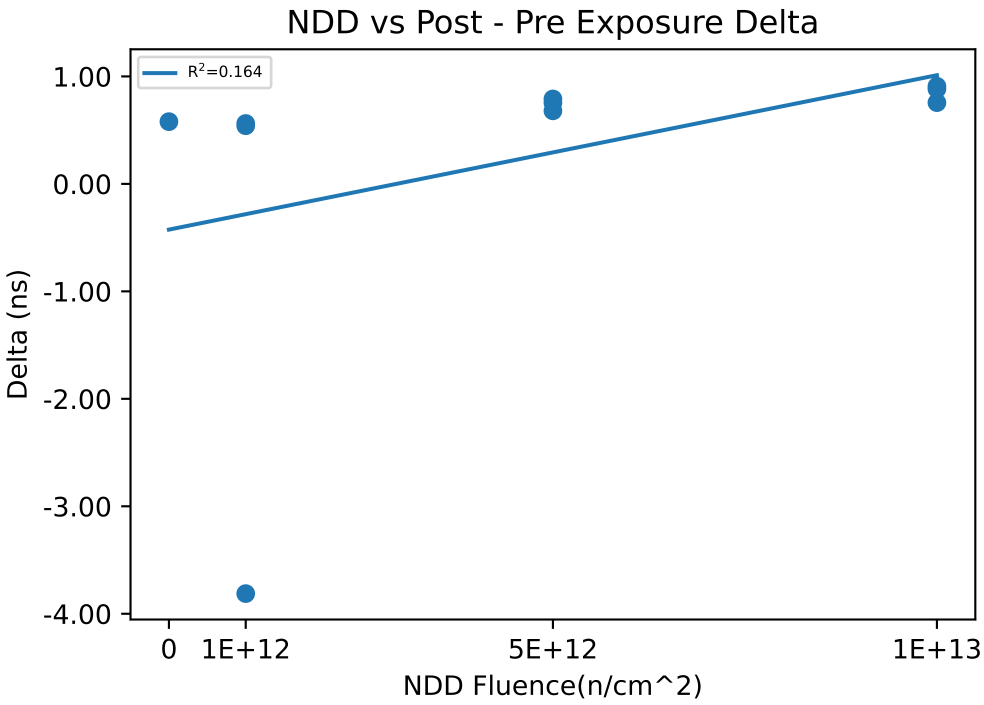
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	183.3	184.05	0.7559
504	1e+12	NDD	177.1	177.65	0.5495
505	1e+12	NDD	178.67	178.7	0.0354
506	5e+12	NDD	182.3	183.68	1.3773
507	5e+12	NDD	179.9	182.28	2.3807
508	5e+12	NDD	180.34	182.12	1.7826
509	1e+13	NDD	177.57	180.38	2.8155
510	1e+13	NDD	174.83	177.57	2.7421
511	1e+13	NDD	177.62	179.77	2.1552
512	0	Correlation	178.35	179.2	0.8504

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	178.35	178.35	178.35		179.2	179.2	179.2		0.8504	0.8504	0.8504	
1e+12	177.1	179.69	183.3	3.2198	177.65	180.14	184.05	3.4313	0.0354	0.44693	0.7559	0.37104
5e+12	179.9	180.85	182.3	1.2776	182.12	182.69	183.68	0.85553	1.3773	1.8469	2.3807	0.50478
1e+13	174.83	176.67	177.62	1.5961	177.57	179.24	180.38	1.4791	2.1552	2.5709	2.8155	0.3619

Device Test: 24.160 T_DEAD(TIMING|DELAY/SW/14//511k//@T_DEAD)





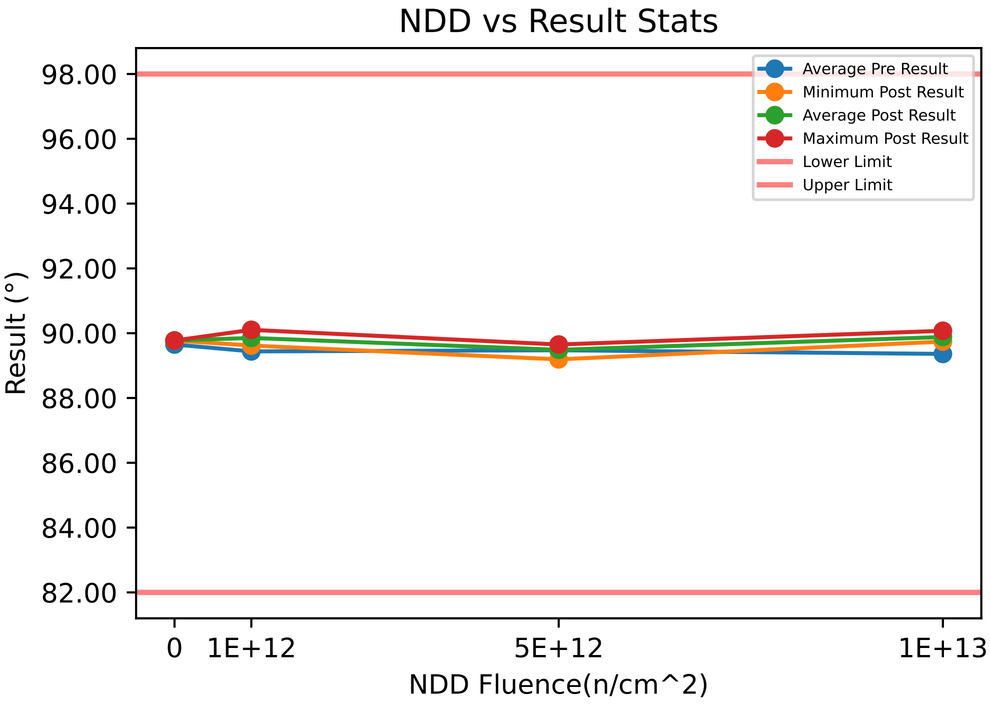
Test Results (No Limits Specified (ns))

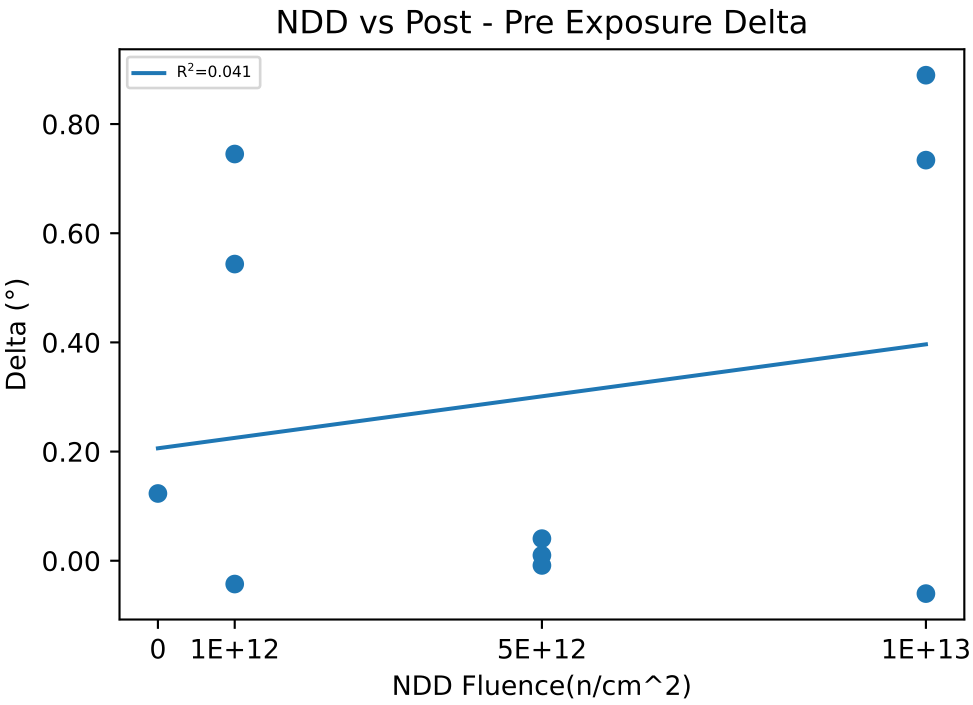
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	93.483	94.045	0.562
504	1e+12	NDD	92.182	88.369	-3.8124
505	1e+12	NDD	92.803	93.345	0.5411
506	5e+12	NDD	95.27	96.025	0.7545
507	5e+12	NDD	93.713	94.393	0.6797
508	5e+12	NDD	93.799	94.589	0.7903
509	1e+13	NDD	92.707	93.59	0.8832
510	1e+13	NDD	93.489	94.245	0.756
511	1e+13	NDD	92.242	93.15	0.9083
512	0	Correlation	93.683	94.262	0.5791

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	93.683	93.683	93.683		94.262	94.262	94.262		0.5791	0.5791	0.5791	
1e+12	92.182	92.823	93.483	0.65066	88.369	91.92	94.045	3.0944	-3.8124	-0.9031	0.562	2.5195
5e+12	93.713	94.261	95.27	0.87539	94.393	95.002	96.025	0.89103	0.6797	0.7415	0.7903	0.056434
1e+13	92.242	92.812	93.489	0.63043	93.15	93.662	94.245	0.55111	0.756	0.84917	0.9083	0.081655

Device Test: 24.17 SYNC_PH_SHIFT(TIMING|PHASESHIFT/SYNC1/4.5//511k//@SYNC_PH_SHIFT)





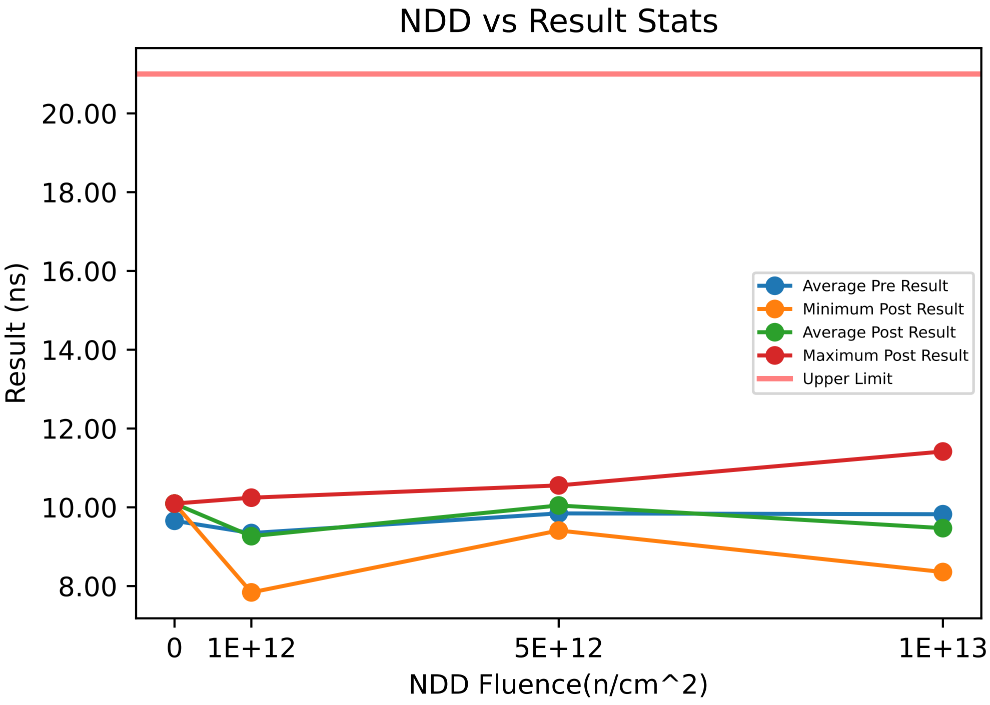
Test Results (Lower Limit = 82.0, Upper Limit = 98.0 (°))

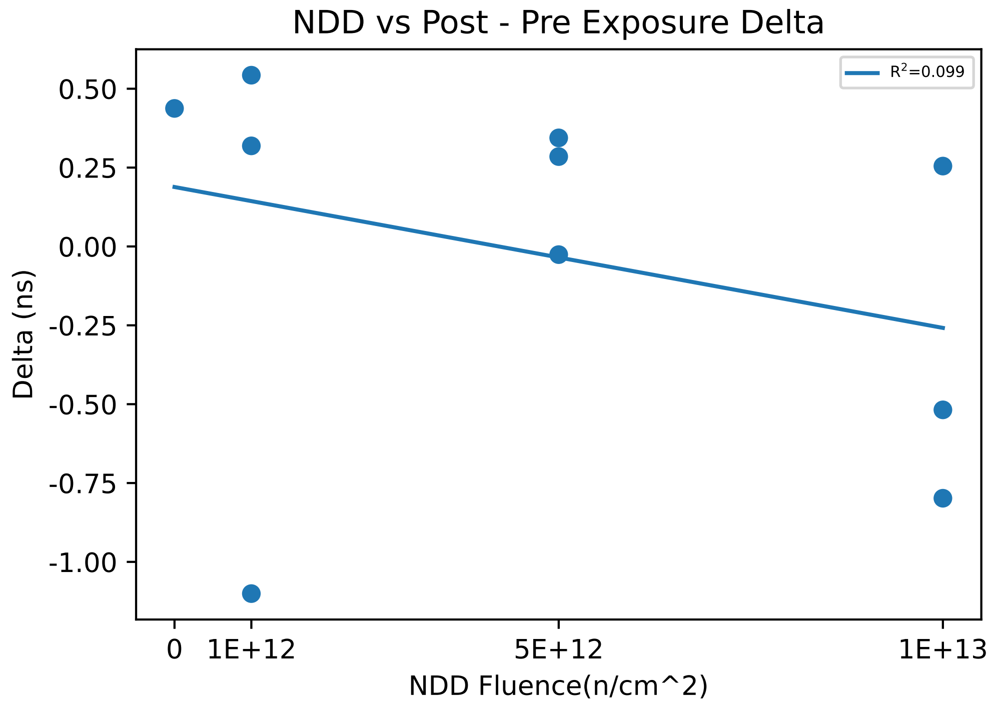
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	89.094	89.839	0.7451
504	1e+12	NDD	89.56	90.103	0.5435
505	1e+12	NDD	89.662	89.619	-0.0427
506	5e+12	NDD	89.659	89.65	-0.0086
507	5e+12	NDD	89.579	89.62	0.0405
508	5e+12	NDD	89.183	89.193	0.01
509	1e+13	NDD	89.801	89.74	-0.0602
510	1e+13	NDD	89.097	89.831	0.7339
511	1e+13	NDD	89.184	90.074	0.8895
512	0	Correlation	89.651	89.774	0.1232

Test Statistics (°)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	89.651	89.651	89.651		89.774	89.774	89.774		0.1232	0.1232	0.1232	
1e+12	89.094	89.438	89.662	0.30293	89.619	89.854	90.103	0.24245	-0.0427	0.4153	0.7451	0.40925
5e+12	89.183	89.474	89.659	0.25499	89.193	89.488	89.65	0.25576	-0.0086	0.013967	0.0405	0.024789
1e+13	89.097	89.361	89.801	0.38335	89.74	89.882	90.074	0.1724	-0.0602	0.52107	0.8895	0.50937

Device Test: 24.18 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC1/4.5//511k//@SYNC_LH_RISE_TIME)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

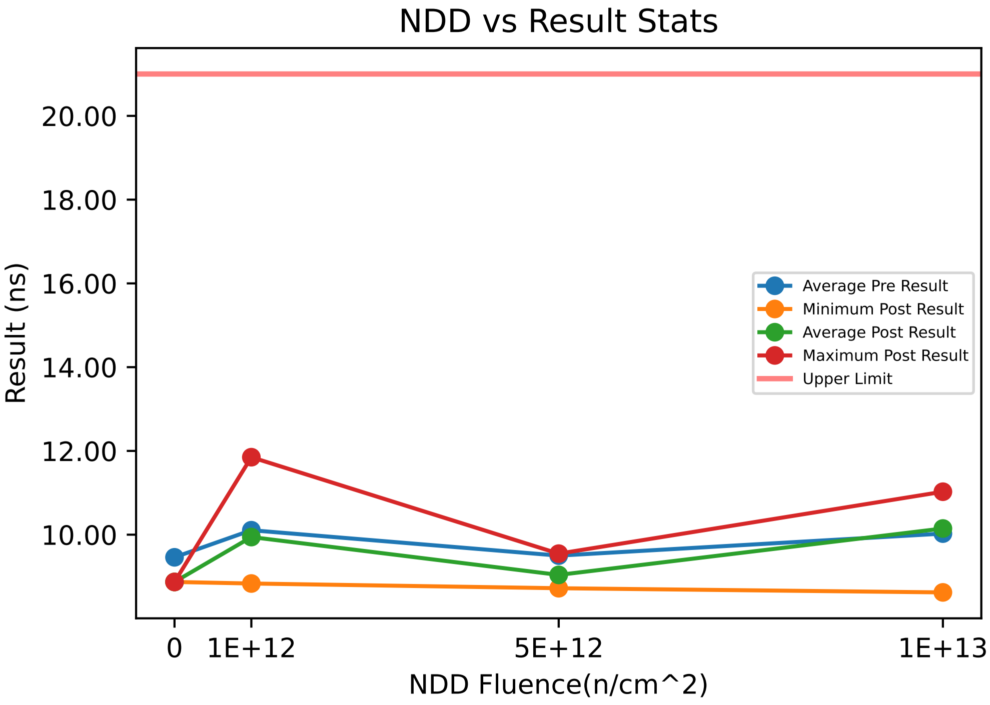
Test Results (Upper Limit = 21.0 (ns))

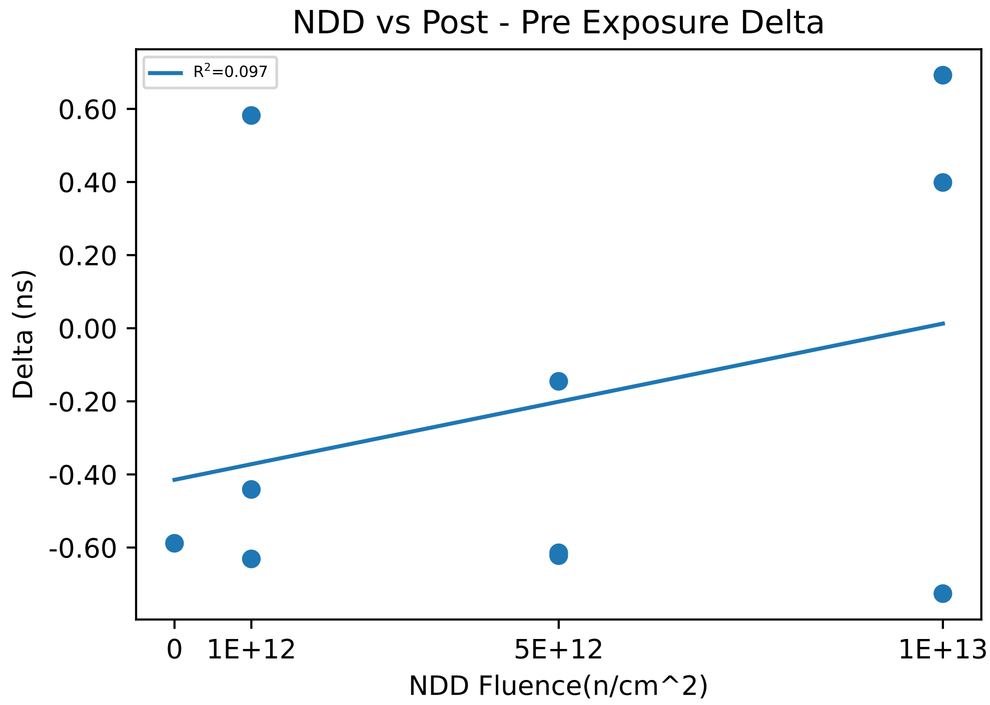
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.7012	10.244	0.5429
504	1e+12	NDD	9.3988	9.7177	0.3189
505	1e+12	NDD	8.9403	7.8398	-1.1005
506	5e+12	NDD	9.4373	9.4114	-0.0259
507	5e+12	NDD	9.8876	10.173	0.2849
508	5e+12	NDD	10.212	10.556	0.3442
509	1e+13	NDD	11.162	11.417	0.2548
510	1e+13	NDD	9.1545	8.3563	-0.7982
511	1e+13	NDD	9.1576	8.6396	-0.518
512	0	Correlation	9.6573	10.095	0.4376

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.6573	9.6573	9.6573		10.095	10.095	10.095		0.4376	0.4376	0.4376	
1e+12	8.9403	9.3468	9.7012	0.38311	7.8398	9.2672	10.244	1.2639	-1.1005	-0.079567	0.5429	0.89122
5e+12	9.4373	9.8455	10.212	0.38882	9.4114	10.047	10.556	0.58246	-0.0259	0.20107	0.3442	0.19878
1e+13	9.1545	9.8247	11.162	1.1581	8.3563	9.4709	11.417	1.6911	-0.7982	-0.3538	0.2548	0.54537

Device Test: 24.19 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC2/4.5//511k//@SYNC_LH_RISE_TIME)





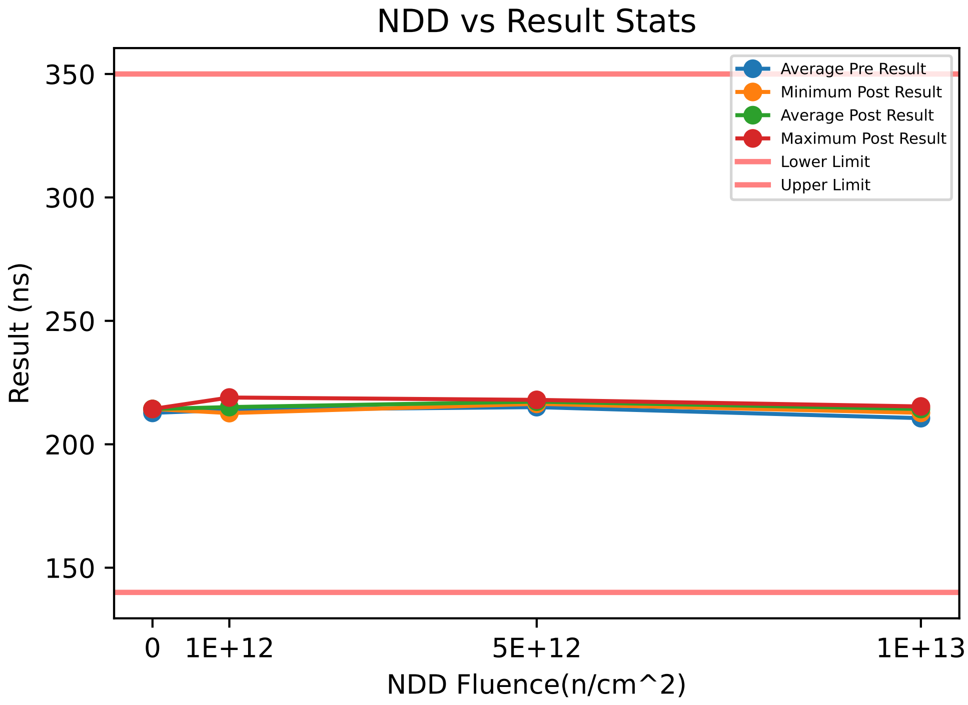
Test Results (Upper Limit = 21.0 (ns))

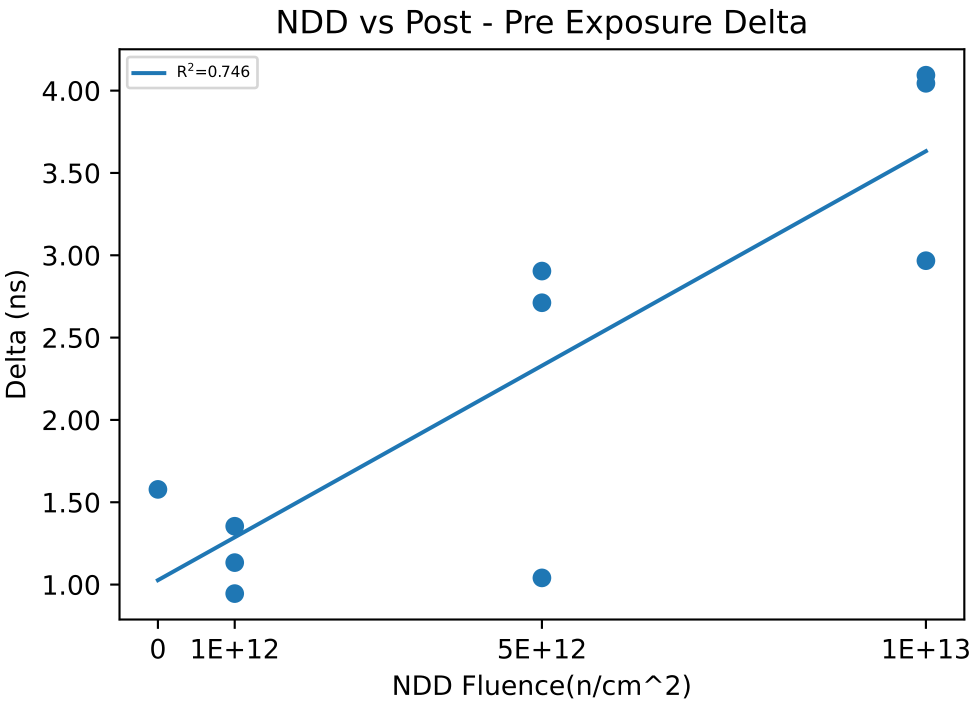
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.4652	8.8341	-0.6311
504	1e+12	NDD	9.5866	9.1455	-0.4411
505	1e+12	NDD	11.268	11.85	0.582
506	5e+12	NDD	9.6922	9.5469	-0.1453
507	5e+12	NDD	9.4724	8.8502	-0.6222
508	5e+12	NDD	9.3358	8.7214	-0.6144
509	1e+13	NDD	9.3478	8.6218	-0.726
510	1e+13	NDD	10.334	11.026	0.6922
511	1e+13	NDD	10.396	10.795	0.3987
512	0	Correlation	9.4595	8.8711	-0.5884

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.4595	9.4595	9.4595		8.8711	8.8711	8.8711		-0.5884	-0.5884	-0.5884	
1e+12	9.4652	10.107	11.268	1.0077	8.8341	9.9433	11.85	1.6588	-0.6311	-0.1634	0.582	0.65249
5e+12	9.3358	9.5001	9.6922	0.17981	8.7214	9.0395	9.5469	0.44412	-0.6222	-0.46063	-0.1453	0.27311
1e+13	9.3478	10.026	10.396	0.58803	8.6218	10.147	11.026	1.3263	-0.726	0.12163	0.6922	0.7486

Device Test: 24.2 SYNC1_SW_DELAY_4V(TIMING|DELAY/SYNC1/4.5//OPEN//@SYNC1_SW_DELAY_4V)





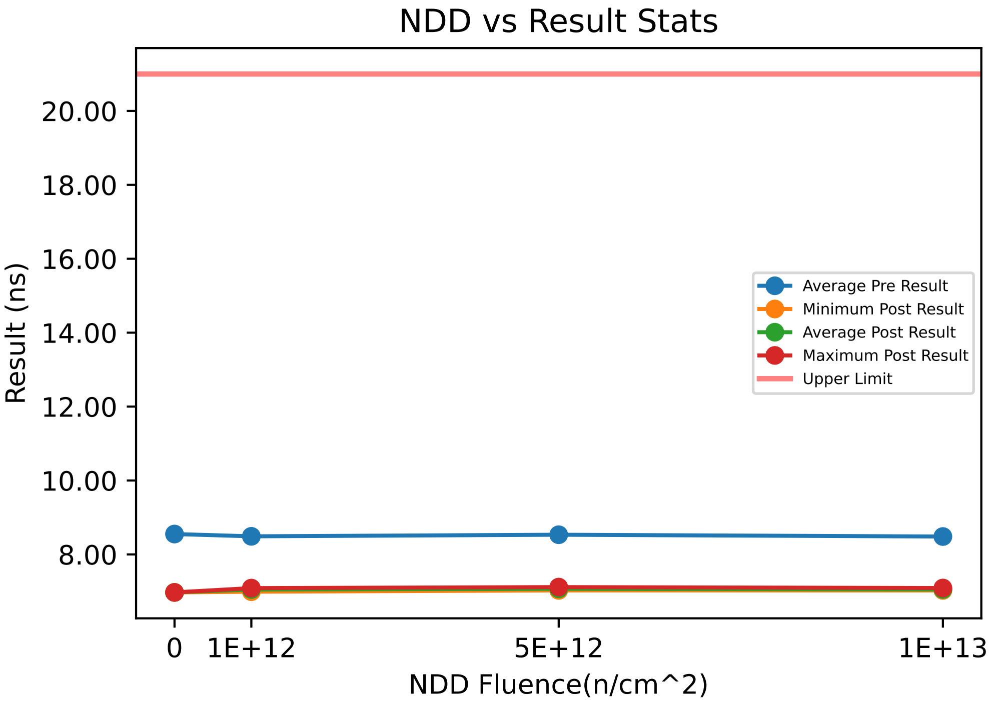
Test Results (Lower Limit = 140.0, Upper Limit = 350.0 (ns))

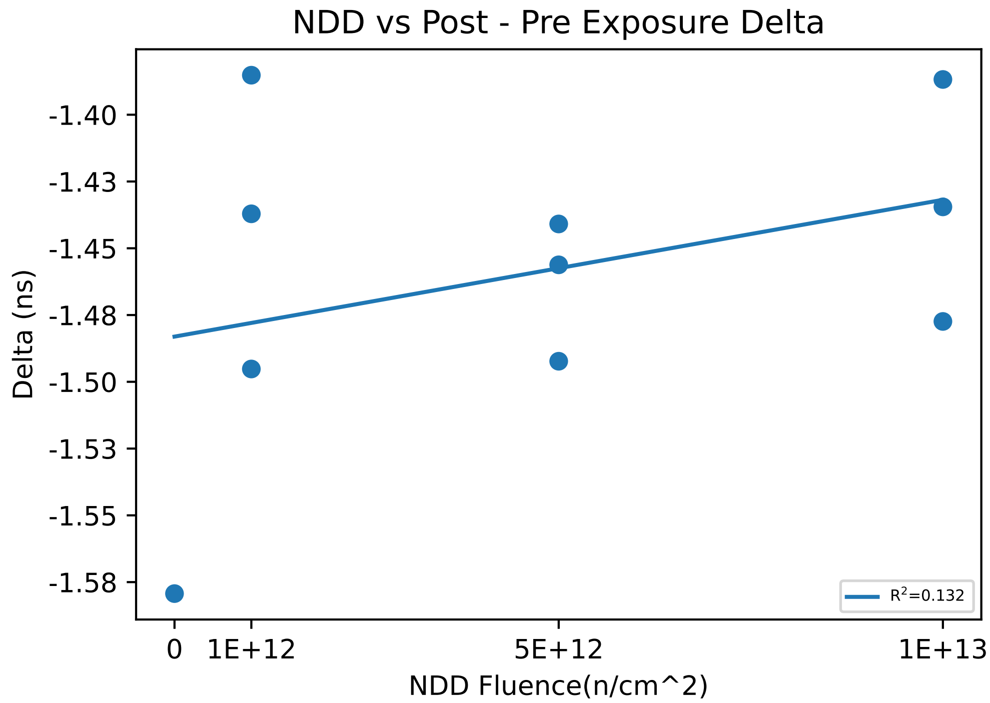
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	217.59	218.95	1.3543
504	1e+12	NDD	211.69	212.64	0.9452
505	1e+12	NDD	212.48	213.61	1.1334
506	5e+12	NDD	216.95	217.99	1.0406
507	5e+12	NDD	214.53	217.43	2.9041
508	5e+12	NDD	213.67	216.38	2.7117
509	1e+13	NDD	210.75	214.8	4.0444
510	1e+13	NDD	208.64	212.73	4.0937
511	1e+13	NDD	212.36	215.33	2.9671
512	0	Correlation	212.72	214.3	1.5781

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	212.72	212.72	212.72		214.3	214.3	214.3		1.5781	1.5781	1.5781	
1e+12	211.69	213.92	217.59	3.2048	212.64	215.06	218.95	3.3976	0.9452	1.1443	1.3543	0.20477
5e+12	213.67	215.05	216.95	1.7018	216.38	217.27	217.99	0.81736	1.0406	2.2188	2.9041	1.0249
1e+13	208.64	210.58	212.36	1.8655	212.73	214.29	215.33	1.3696	2.9671	3.7017	4.0937	0.63669

Device Test: 24.20 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC1/4.5//511k//@SYNC_HL_FALL_TIME)





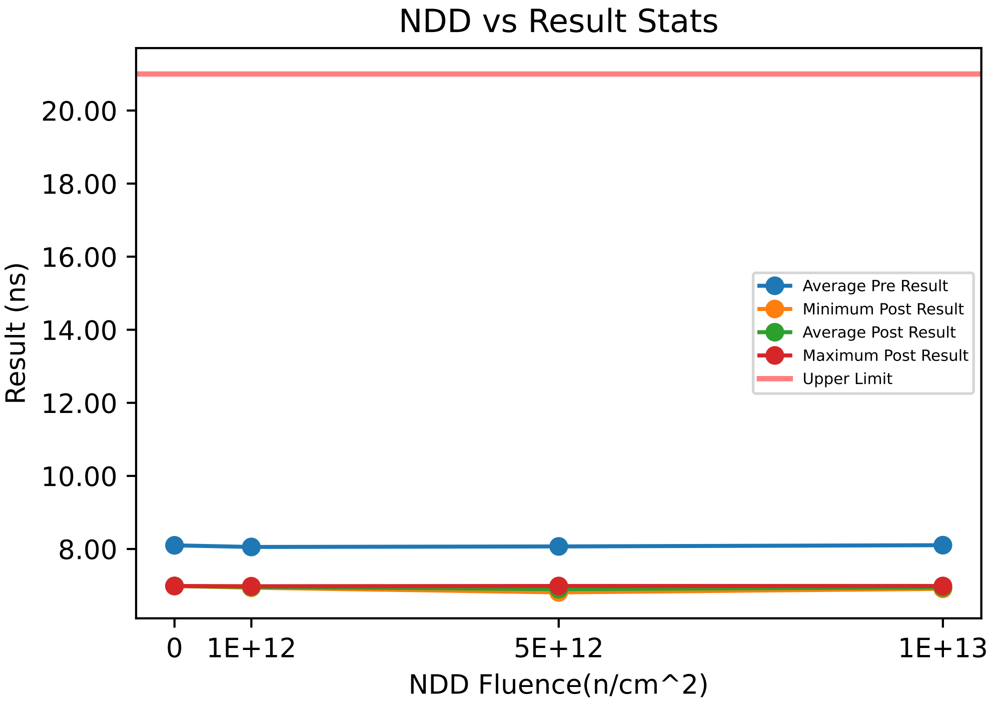
Test Results (Upper Limit = 21.0 (ns))

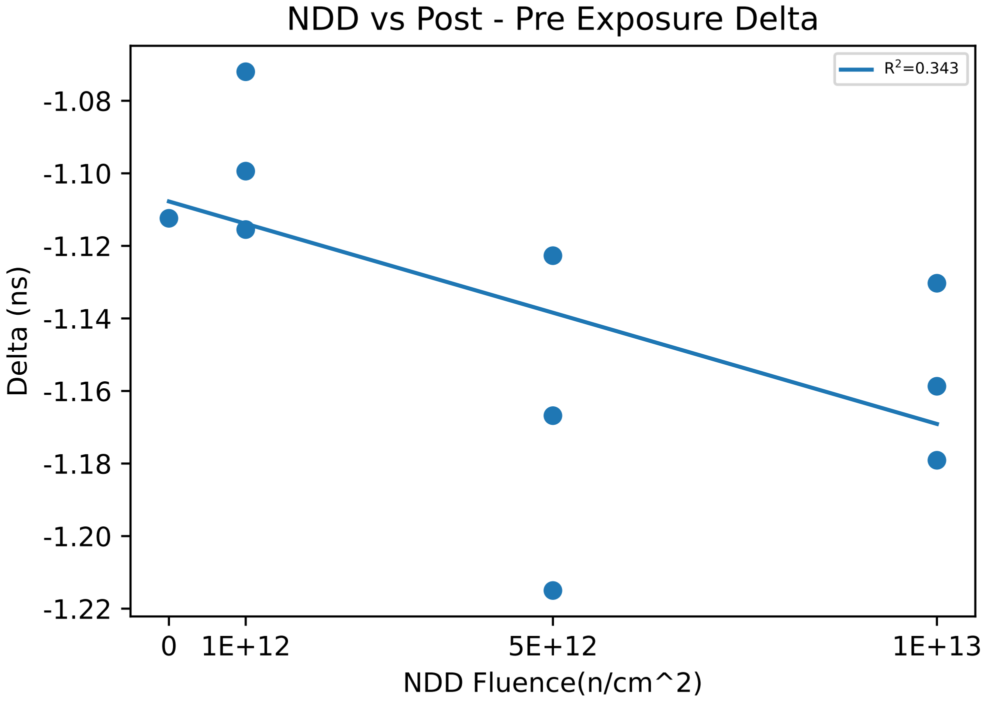
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	8.5094	7.0723	-1.4371
504	1e+12	NDD	8.4859	6.9907	-1.4952
505	1e+12	NDD	8.4735	7.0883	-1.3852
506	5e+12	NDD	8.6076	7.1153	-1.4923
507	5e+12	NDD	8.467	7.0261	-1.4409
508	5e+12	NDD	8.5224	7.0662	-1.4562
509	1e+13	NDD	8.5029	7.0255	-1.4774
510	1e+13	NDD	8.477	7.0902	-1.3868
511	1e+13	NDD	8.4728	7.0383	-1.4345
512	0	Correlation	8.5514	6.9721	-1.5793

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.5514	8.5514	8.5514		6.9721	6.9721	6.9721		-1.5793	-1.5793	-1.5793	
1e+12	8.4735	8.4896	8.5094	0.018234	6.9907	7.0504	7.0883	0.052346	-1.4952	-1.4392	-1.3852	0.055029
5e+12	8.467	8.5323	8.6076	0.070824	7.0261	7.0692	7.1153	0.044676	-1.4923	-1.4631	-1.4409	0.026392
1e+13	8.4728	8.4842	8.5029	0.016302	7.0255	7.0513	7.0902	0.034263	-1.4774	-1.4329	-1.3868	0.045321

Device Test: 24.21 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC2/4.5//511k//@SYNC_HL_FALL_TIME)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

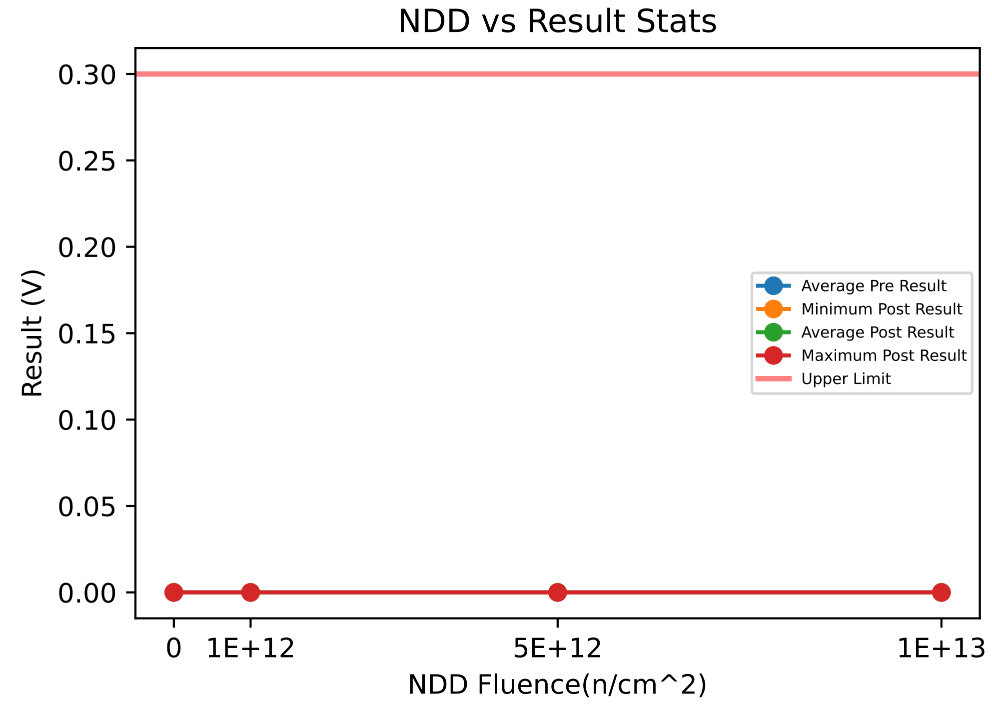
Test Results (Upper Limit = 21.0 (ns))

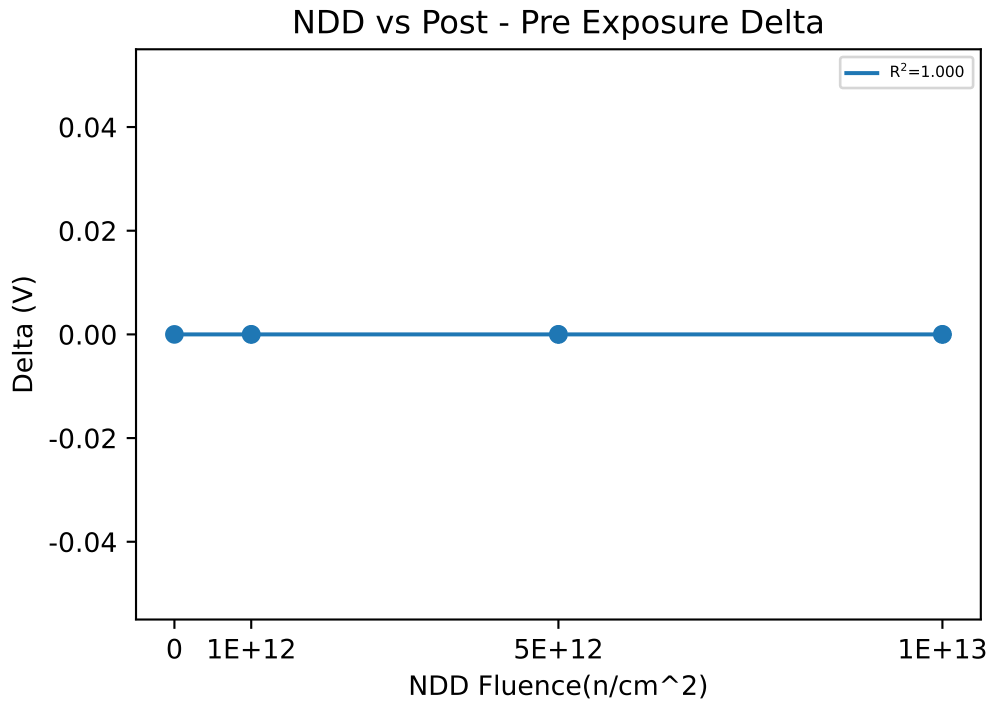
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	8.0306	6.9586	-1.072
504	1e+12	NDD	8.0559	6.9404	-1.1155
505	1e+12	NDD	8.0804	6.981	-1.0994
506	5e+12	NDD	8.1544	6.9876	-1.1668
507	5e+12	NDD	8.0289	6.9062	-1.1227
508	5e+12	NDD	8.027	6.812	-1.215
509	1e+13	NDD	8.0888	6.9097	-1.1791
510	1e+13	NDD	8.1185	6.9882	-1.1303
511	1e+13	NDD	8.1054	6.9467	-1.1587
512	0	Correlation	8.0998	6.9874	-1.1124

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.0998	8.0998	8.0998		6.9874	6.9874	6.9874		-1.1124	-1.1124	-1.1124	
1e+12	8.0306	8.0556	8.0804	0.024901	6.9404	6.96	6.981	0.020336	-1.1155	-1.0956	-1.072	0.021993
5e+12	8.027	8.0701	8.1544	0.073012	6.812	6.9019	6.9876	0.087878	-1.215	-1.1682	-1.1227	0.046165
1e+13	8.0888	8.1042	8.1185	0.014884	6.9097	6.9482	6.9882	0.039271	-1.1791	-1.156	-1.1303	0.024509

Device Test: 24.22 SYNC_OUT_HIGH(LEVELS|VOH/SYNC1/4.5//511k//@SYNC_OUT_HIGH)





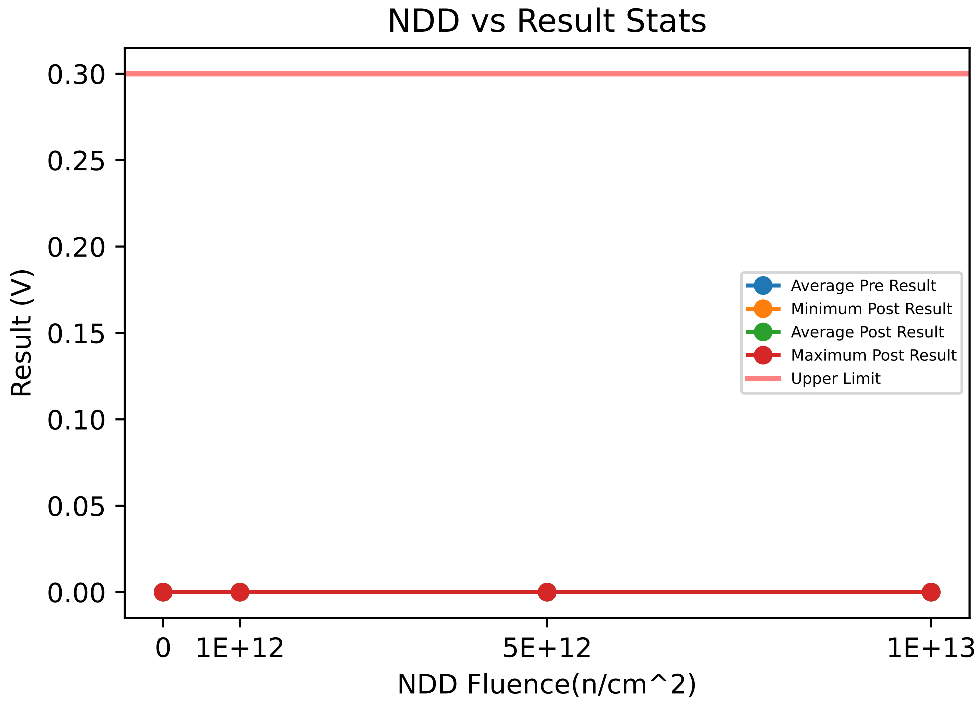
Test Results (Upper Limit = 0.3 (V))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0	0	0
504	1e+12	NDD	0	0	0
505	1e+12	NDD	0	0	0
506	5e+12	NDD	0	0	0
507	5e+12	NDD	0	0	0
508	5e+12	NDD	0	0	0
509	1e+13	NDD	0	0	0
510	1e+13	NDD	0	0	0
511	1e+13	NDD	0	0	0
512	0	Correlation	0	0	0

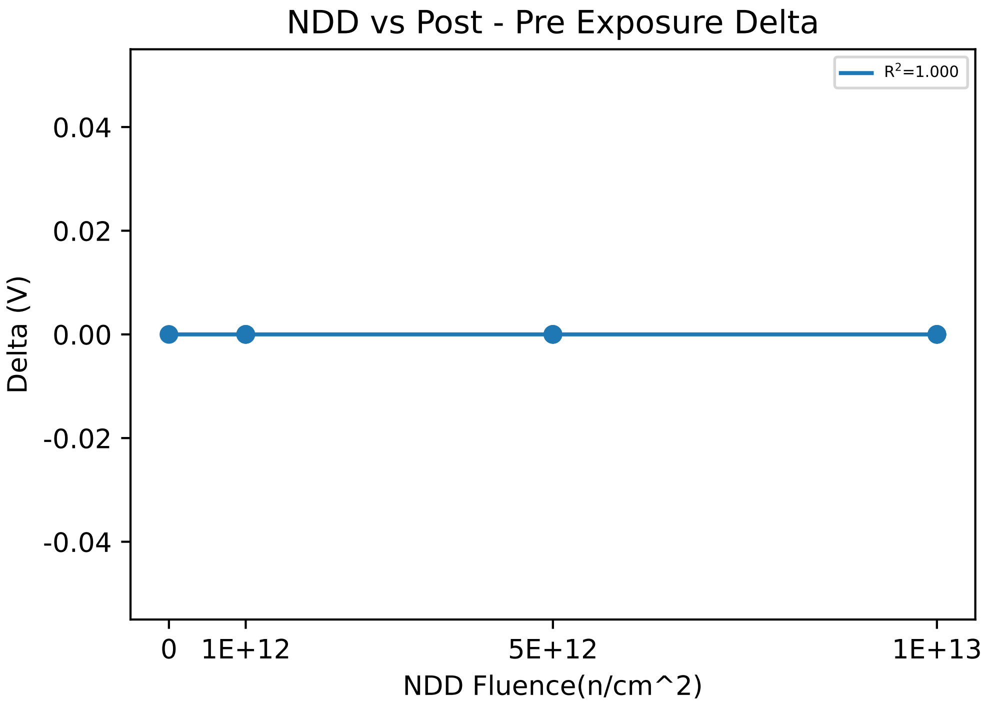
Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0	0	0		0	0	0		0	0	0	
1e+12	0	0	0	0	0	0	0	0	0	0	0	0
5e+12	0	0	0	0	0	0	0	0	0	0	0	0
1e+13	0	0	0	0	0	0	0	0	0	0	0	0

Device Test: 24.23 SYNC_OUT_HIGH(LEVELS|VOH/SYNC2/4.5//511k//@SYNC_OUT_HIGH)



NDD vs Result Stats



NDD vs Post - Pre Exposure Delta

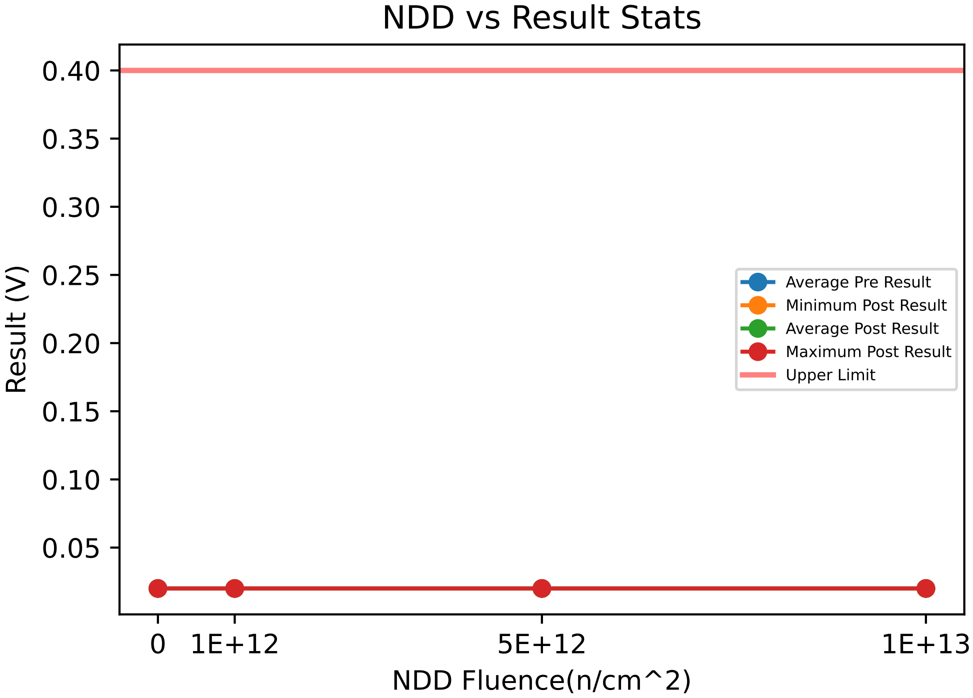
Test Results (Upper Limit = 0.3 (V))

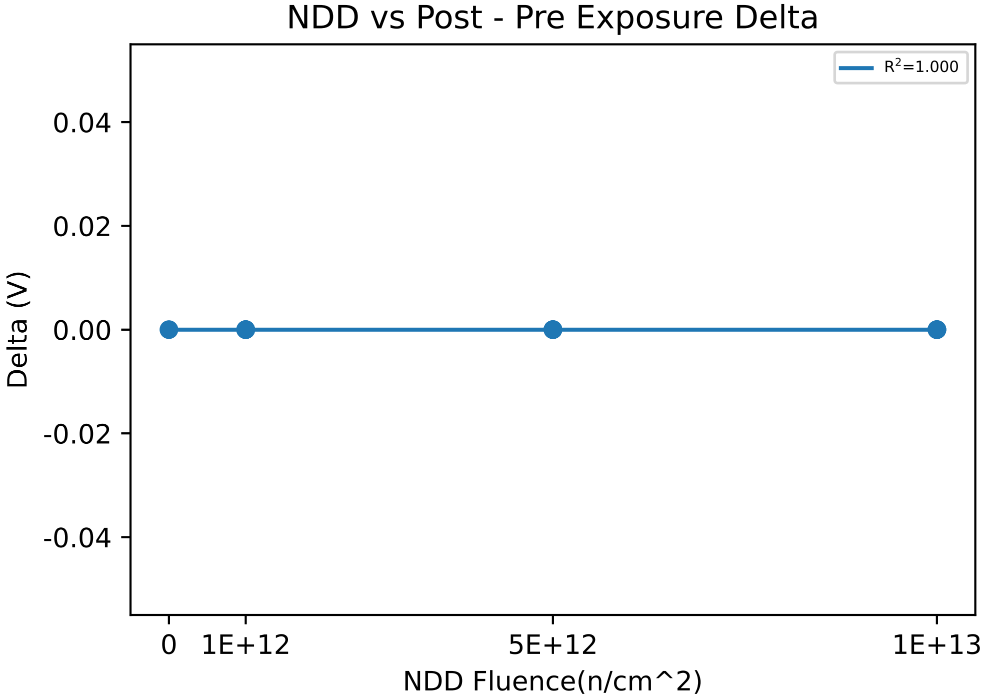
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0	0	0
504	1e+12	NDD	0	0	0
505	1e+12	NDD	0	0	0
506	5e+12	NDD	0	0	0
507	5e+12	NDD	0	0	0
508	5e+12	NDD	0	0	0
509	1e+13	NDD	0	0	0
510	1e+13	NDD	0	0	0
511	1e+13	NDD	0	0	0
512	0	Correlation	0	0	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0	0	0		0	0	0		0	0	0	
1e+12	0	0	0	0	0	0	0	0	0	0	0	0
5e+12	0	0	0	0	0	0	0	0	0	0	0	0
1e+13	0	0	0	0	0	0	0	0	0	0	0	0

Device Test: 24.24 SYNC_OUT_LOW(LEVELS|VOL/SYNC1/4.5//511k//@SYNC_OUT_LOW)





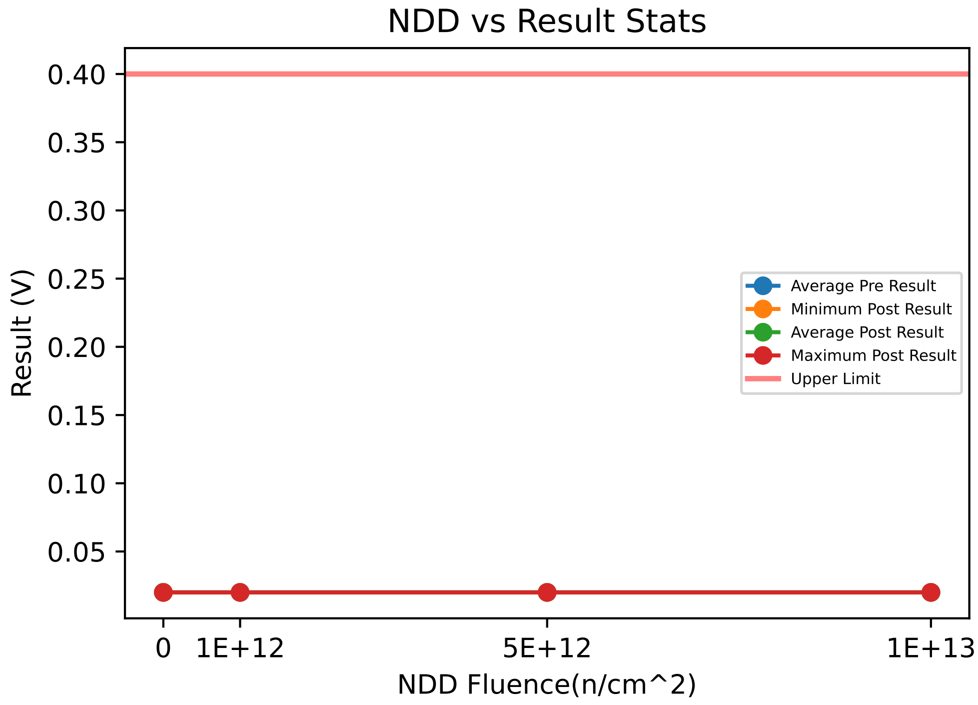
Test Results (Upper Limit = 0.4 (V))

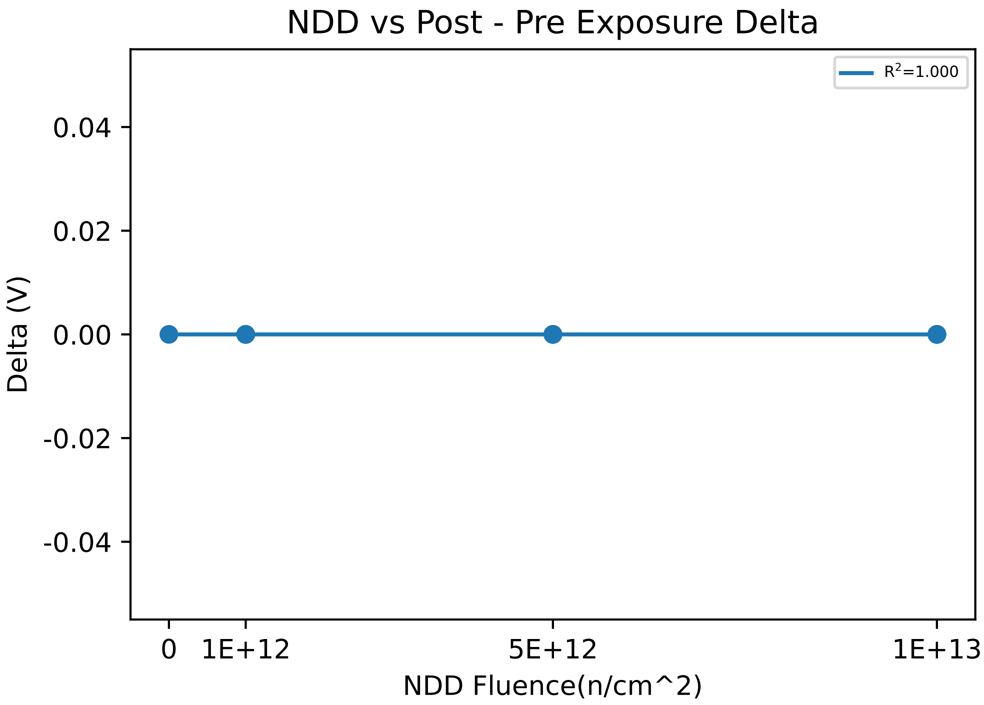
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.25 SYNC_OUT_LOW(LEVELS|VOL/SYNC2/4.5//511k//@SYNC_OUT_LOW)





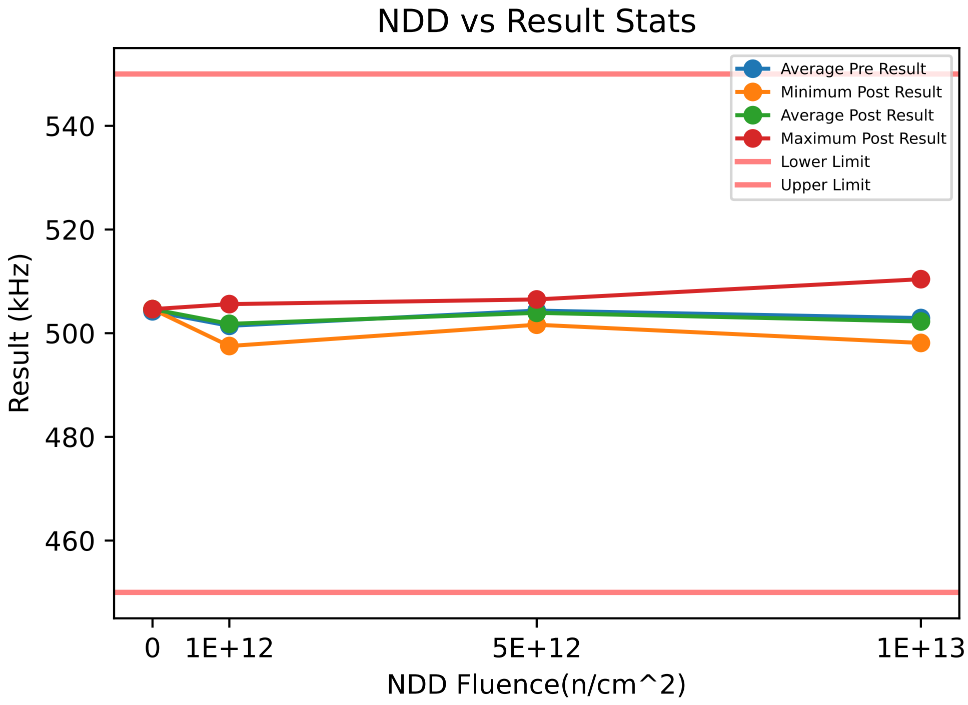
Test Results (Upper Limit = 0.4 (V))

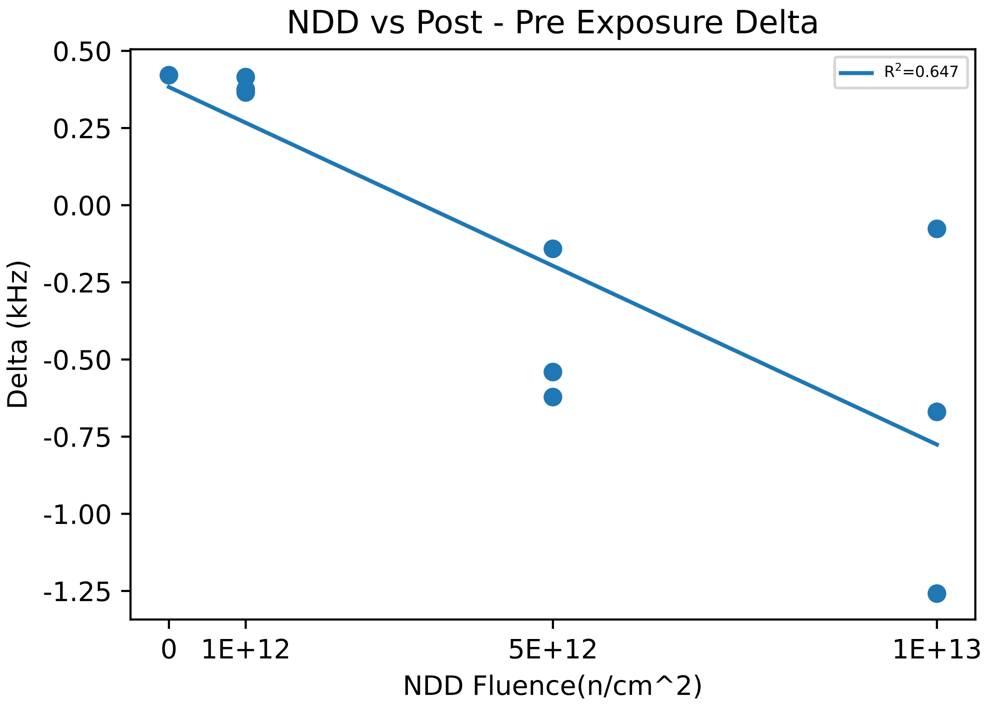
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.26 EXT_SET_FREQ_500KHZ_4V(FREQ|500kHz/SYNC1/4.5//90.9k//@EXT_SET_FREQ_500KHZ_4V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

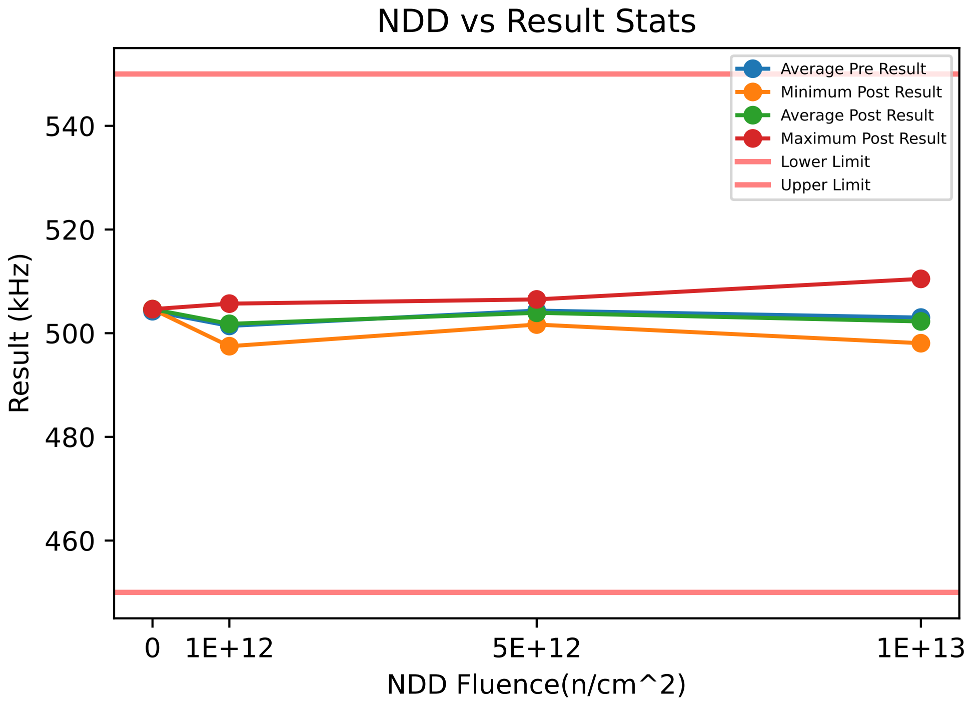
Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

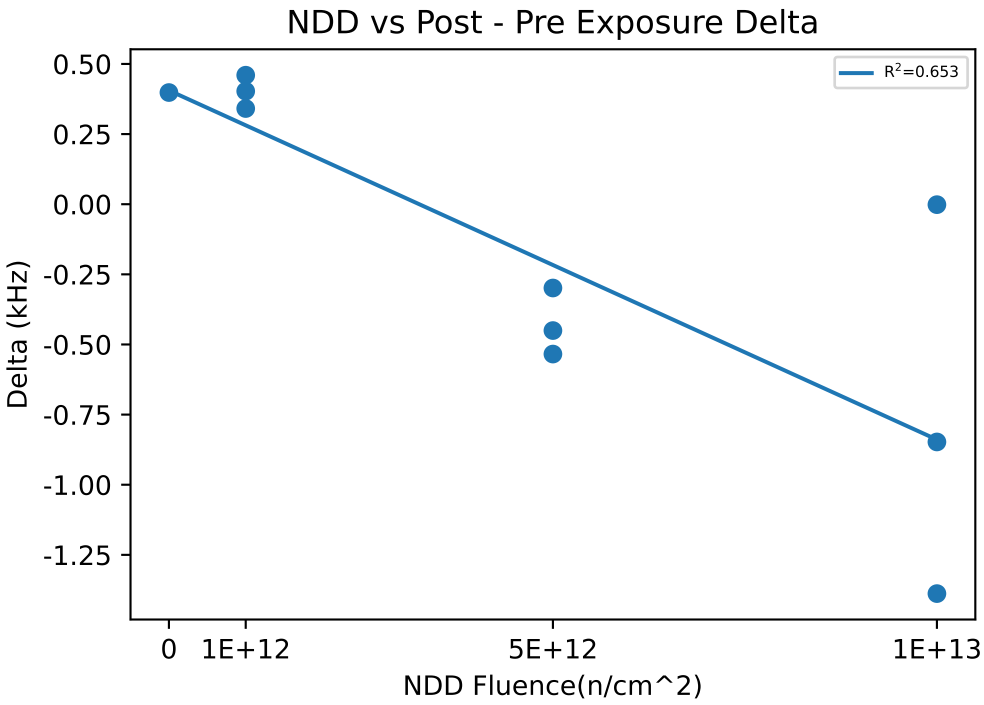
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	505.23	505.61	0.3752
504	1e+12	NDD	501.87	502.28	0.4151
505	1e+12	NDD	497.16	497.53	0.3652
506	5e+12	NDD	502.26	501.63	-0.6217
507	5e+12	NDD	503.78	503.63	-0.1414
508	5e+12	NDD	507.05	506.51	-0.5406
509	1e+13	NDD	510.5	510.42	-0.0767
510	1e+13	NDD	499.38	498.12	-1.2585
511	1e+13	NDD	498.9	498.23	-0.6697
512	0	Correlation	504.22	504.64	0.4212

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	504.22	504.22	504.22		504.64	504.64	504.64		0.4212	0.4212	0.4212	
1e+12	497.16	501.42	505.23	4.0541	497.53	501.81	505.61	4.0616	0.3652	0.38517	0.4151	0.026401
5e+12	502.26	504.36	507.05	2.4515	501.63	503.93	506.51	2.4521	-0.6217	-0.43457	-0.1414	0.25711
1e+13	498.9	502.93	510.5	6.5608	498.12	502.26	510.42	7.069	-1.2585	-0.6683	-0.0767	0.5909

Device Test: 24.27 EXT_SET_FREQ_500KHZ_4V(FREQ|500kHz/SYNC2/4.5//90.9k//@EXT_SET_FREQ_500KHZ_4V)





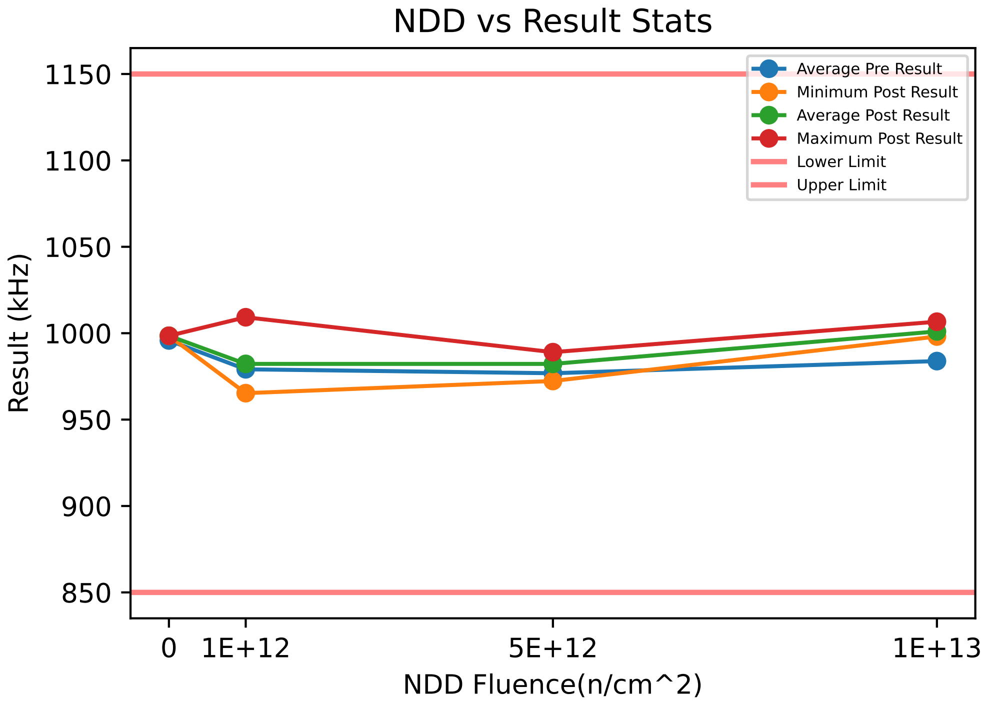
Test Results (Lower Limit = 450.0,
Upper Limit = 550.0 (kHz))

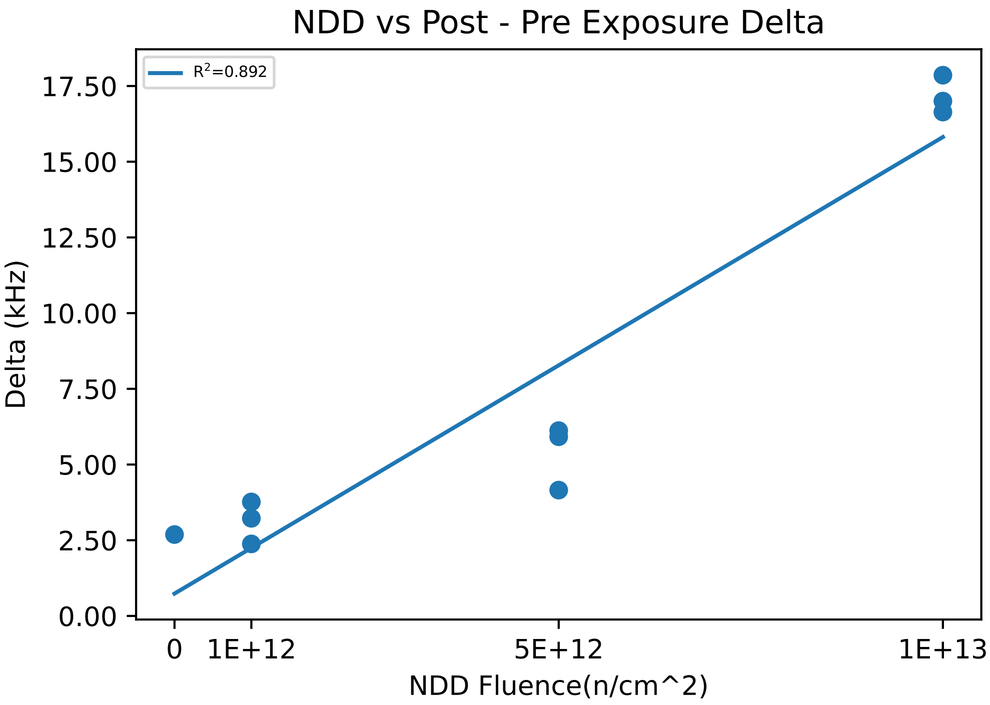
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	505.3	505.7	0.4029
504	1e+12	NDD	501.77	502.23	0.4599
505	1e+12	NDD	497.15	497.49	0.3411
506	5e+12	NDD	502.2	501.67	-0.5342
507	5e+12	NDD	503.92	503.62	-0.2987
508	5e+12	NDD	506.97	506.52	-0.4504
509	1e+13	NDD	510.48	510.48	-0.0016
510	1e+13	NDD	499.46	498.07	-1.3881
511	1e+13	NDD	499.11	498.26	-0.8475
512	0	Correlation	504.24	504.64	0.3981

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	504.24	504.24	504.24		504.64	504.64	504.64		0.3981	0.3981	0.3981	
1e+12	497.15	501.41	505.3	4.0859	497.49	501.81	505.7	4.1209	0.3411	0.4013	0.4599	0.059416
5e+12	502.2	504.36	506.97	2.4137	501.67	503.93	506.52	2.44	-0.5342	-0.42777	-0.2987	0.11937
1e+13	499.11	503.02	510.48	6.4671	498.07	502.27	510.48	7.1099	-1.3881	-0.74573	-0.0016	0.69883

Device Test: 24.28 EXT_SET_FREQ_1000KHZ_4V(FREQ|1MHz/SYNC1/4.5//34.8k//@EXT_SET_FREQ_1000KHZ_4V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

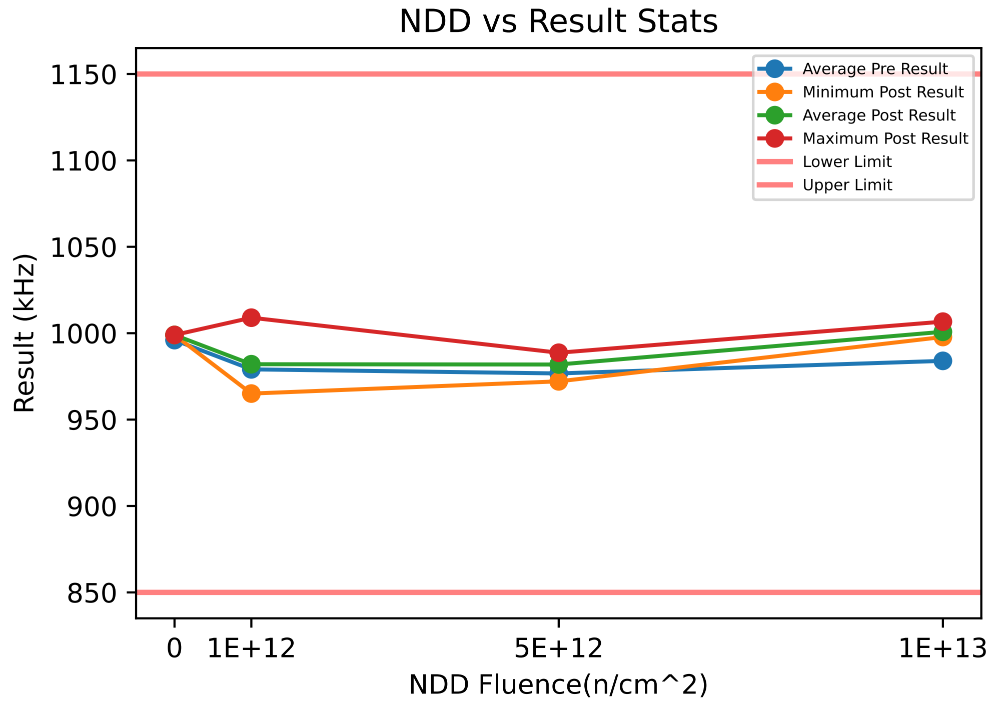
Test Results (Lower Limit = 850.0, Upper Limit = 1150.0 (kHz))

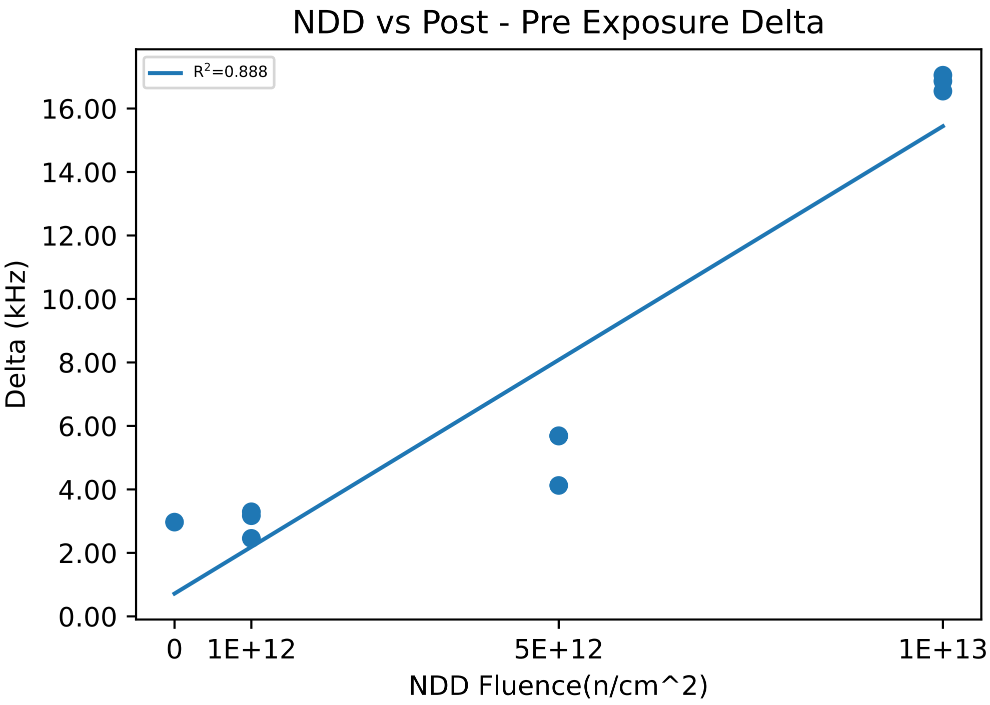
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	969.8	972.18	2.3788
504	1e+12	NDD	1005.5	1009.2	3.7644
505	1e+12	NDD	962.07	965.3	3.2241
506	5e+12	NDD	968.18	972.34	4.1554
507	5e+12	NDD	979.19	985.31	6.1198
508	5e+12	NDD	983.11	989.02	5.9175
509	1e+13	NDD	989.65	1006.6	17.001
510	1e+13	NDD	981.44	998.08	16.64
511	1e+13	NDD	980.49	998.35	17.857
512	0	Correlation	995.8	998.49	2.6879

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	995.8	995.8	995.8		998.49	998.49	998.49		2.6879	2.6879	2.6879	
1e+12	962.07	979.11	1005.5	23.146	965.3	982.23	1009.2	23.629	2.3788	3.1224	3.7644	0.69837
5e+12	968.18	976.83	983.11	7.7385	972.34	982.23	989.02	8.7615	4.1554	5.3976	6.1198	1.0805
1e+13	980.49	983.86	989.65	5.0364	998.08	1001	1006.6	4.8735	16.64	17.166	17.857	0.62522

Device Test: 24.29 EXT_SET_FREQ_1000KHZ_4V(FREQ|1MHz/SYNC2/4.5//34.8k//@EXT_SET_FREQ_1000KHZ_4V)





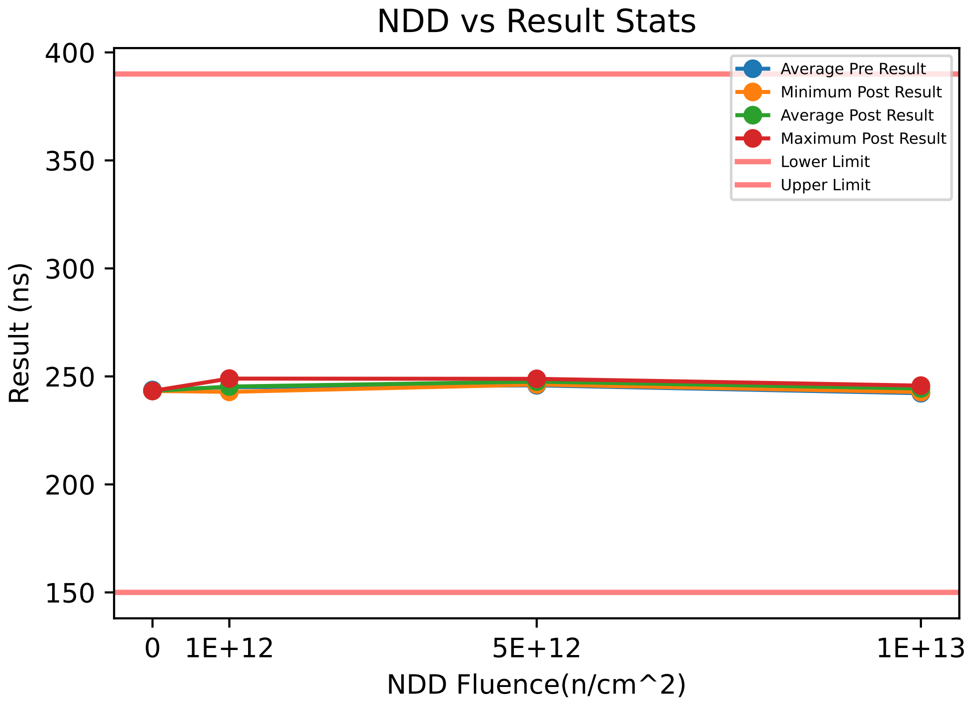
Test Results (Lower Limit = 850.0, Upper Limit = 1150.0 (kHz))

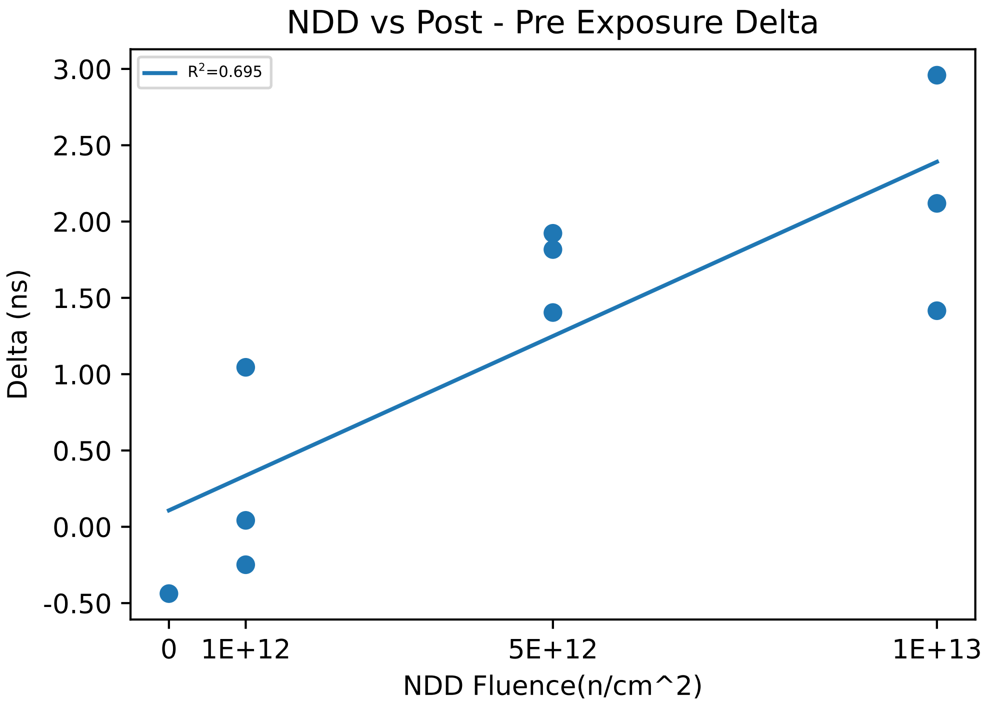
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	969.64	972.1	2.458
504	1e+12	NDD	1005.7	1009	3.2955
505	1e+12	NDD	961.89	965.06	3.1707
506	5e+12	NDD	968.01	972.13	4.1245
507	5e+12	NDD	979.13	984.82	5.6806
508	5e+12	NDD	983	988.69	5.6915
509	1e+13	NDD	989.82	1006.7	16.864
510	1e+13	NDD	981.25	997.8	16.548
511	1e+13	NDD	980.89	997.94	17.05
512	0	Correlation	996	998.97	2.9695

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	996	996	996		998.97	998.97	998.97		2.9695	2.9695	2.9695	
1e+12	961.89	979.07	1005.7	23.364	965.06	982.04	1009	23.583	2.458	2.9747	3.2955	0.45183
5e+12	968.01	976.71	983	7.7833	972.13	981.88	988.69	8.6608	4.1245	5.1655	5.6915	0.90158
1e+13	980.89	983.99	989.82	5.0535	997.8	1000.8	1006.7	5.0881	16.548	16.821	17.05	0.25366

Device Test: 24.3 SYNC1_SW_DELAY_INV_4V(TIMING|DELAY/SYNC1/4.5//OPEN//@SYNC1_SW_DELAY_INV_4V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

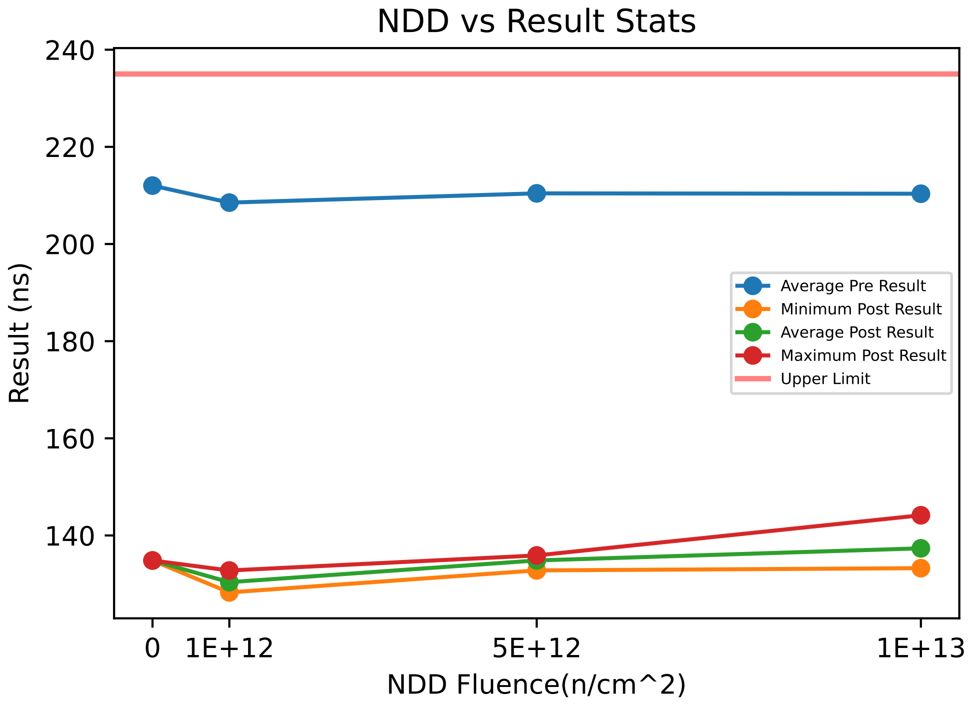
Test Results (Lower Limit = 150.0, Upper Limit = 390.0 (ns))

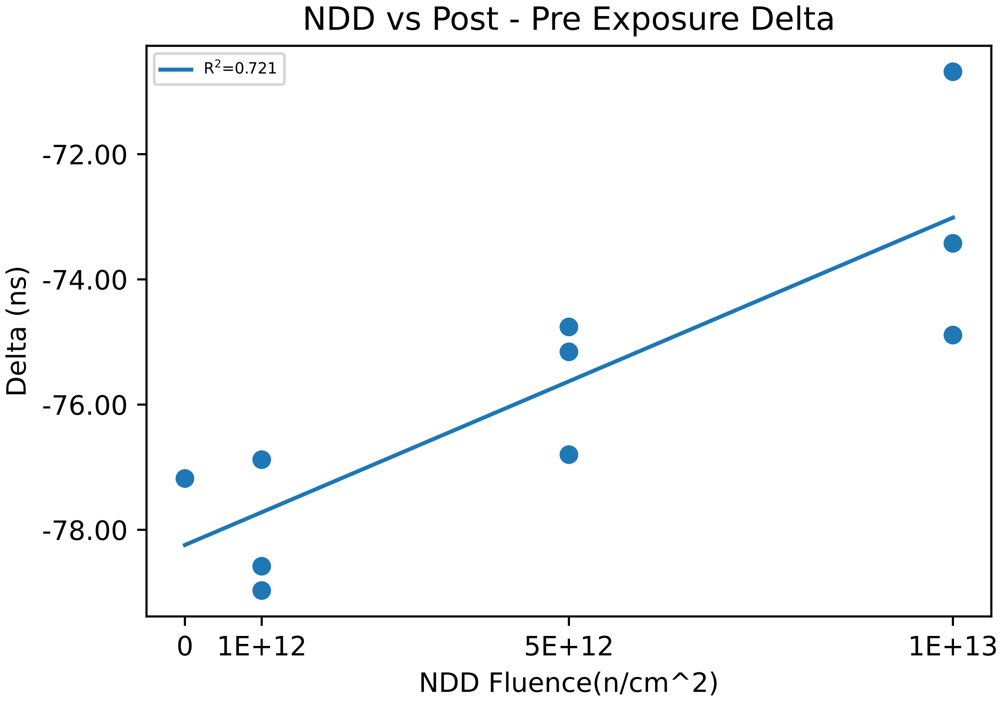
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	247.94	248.99	1.0449
504	1e+12	NDD	242.79	242.83	0.0421
505	1e+12	NDD	244.31	244.06	-0.2485
506	5e+12	NDD	247.47	248.87	1.4039
507	5e+12	NDD	245.8	247.62	1.8166
508	5e+12	NDD	244.32	246.24	1.923
509	1e+13	NDD	242.77	245.73	2.9589
510	1e+13	NDD	240.6	242.72	2.119
511	1e+13	NDD	243.26	244.68	1.4158
512	0	Correlation	243.71	243.27	-0.4377

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	243.71	243.71	243.71		243.27	243.27	243.27		-0.4377	-0.4377	-0.4377	
1e+12	242.79	245.01	247.94	2.6474	242.83	245.29	248.99	3.2575	-0.2485	0.2795	1.0449	0.67859
5e+12	244.32	245.86	247.47	1.5751	246.24	247.58	248.87	1.3152	1.4039	1.7145	1.923	0.2742
1e+13	240.6	242.21	243.26	1.4144	242.72	244.38	245.73	1.5253	1.4158	2.1646	2.9589	0.77256

Device Test: 24.31 ON_TIME_MIN_4V(TIMING|MINON/SW/4.5//511k//@ON_TIME_MIN_4V)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

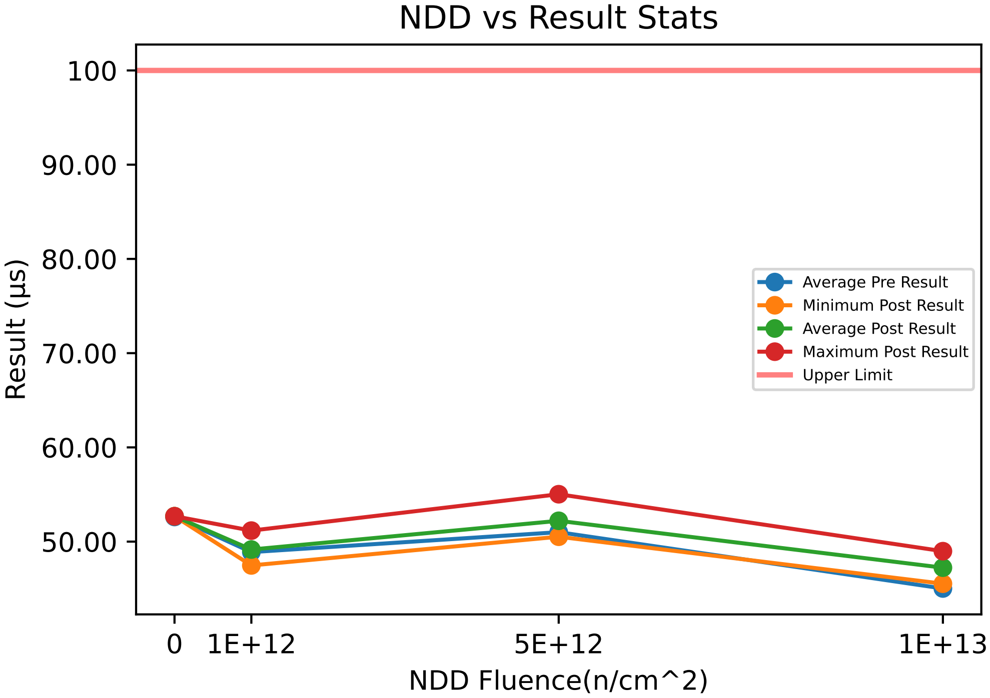
Test Results (Upper Limit = 235.0 (ns))

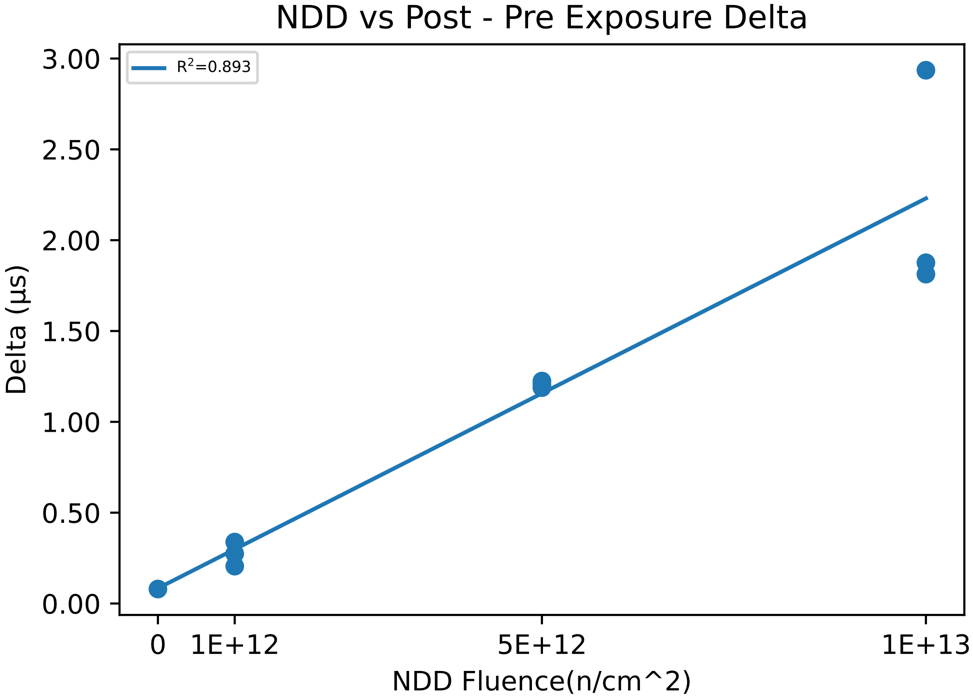
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	209.67	132.79	-76.88
504	1e+12	NDD	206.86	128.28	-78.582
505	1e+12	NDD	209.05	130.08	-78.97
506	5e+12	NDD	209.61	132.81	-76.799
507	5e+12	NDD	210.63	135.87	-74.76
508	5e+12	NDD	211.04	135.89	-75.157
509	1e+13	NDD	214.84	144.16	-70.683
510	1e+13	NDD	208.16	133.27	-74.89
511	1e+13	NDD	208.06	134.64	-73.424
512	0	Correlation	212.03	134.85	-77.18

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	212.03	212.03	212.03		134.85	134.85	134.85		-77.18	-77.18	-77.18	
1e+12	206.86	208.52	209.67	1.4745	128.28	130.38	132.79	2.2701	-78.97	-78.144	-76.88	1.1119
5e+12	209.61	210.43	211.04	0.73908	132.81	134.86	135.89	1.7728	-76.799	-75.572	-74.76	1.0813
1e+13	208.06	210.35	214.84	3.8871	133.27	137.35	144.16	5.932	-74.89	-72.999	-70.683	2.1352

Device Test: 24.32 T_EN_DELAY(TIMING|DELAY/EN/4.5//511k//@T_EN_DELAY)





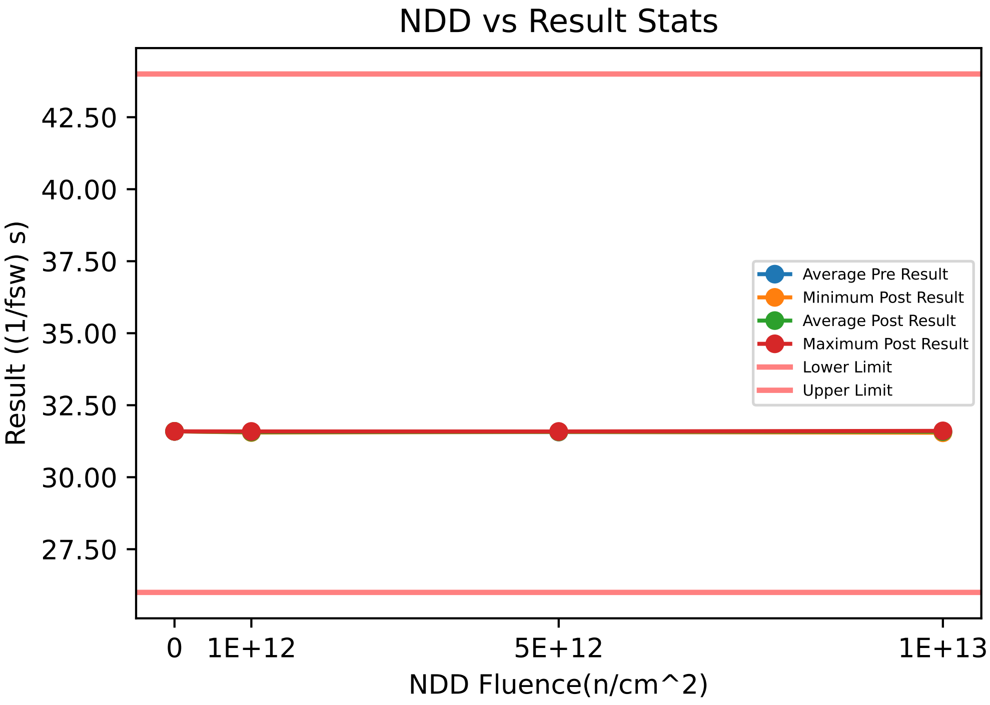
Test Results (Upper Limit = 100.0 (µs))

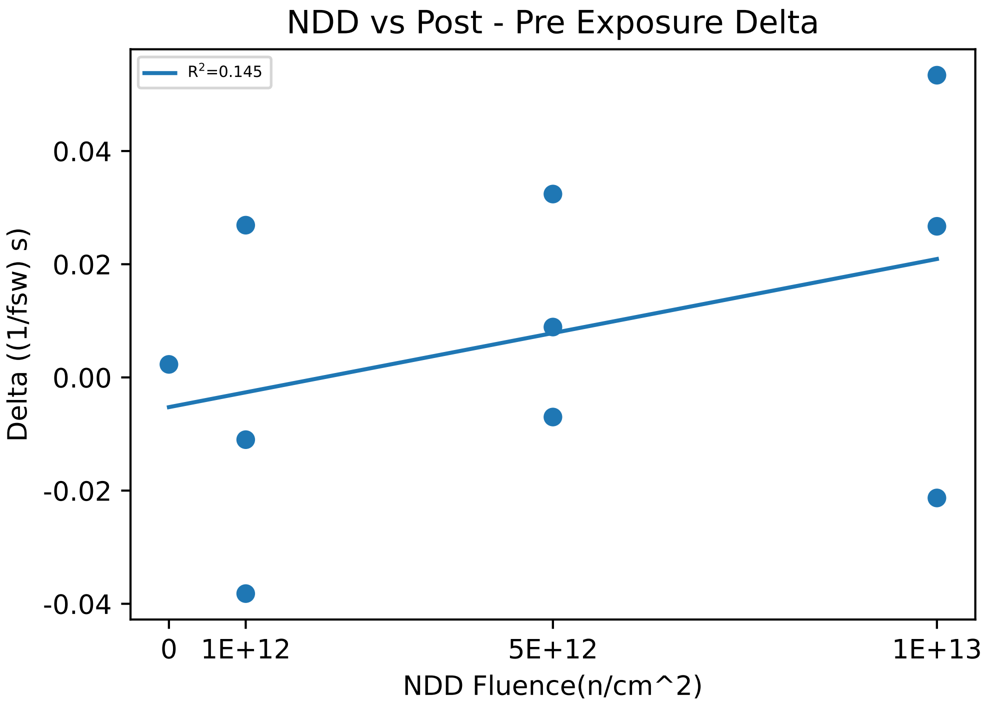
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	48.566	48.84	0.2745
504	1e+12	NDD	50.83	51.168	0.3383
505	1e+12	NDD	47.267	47.473	0.2057
506	5e+12	NDD	49.313	50.518	1.2051
507	5e+12	NDD	49.89	51.078	1.1883
508	5e+12	NDD	53.804	55.029	1.2246
509	1e+13	NDD	45.376	47.189	1.8132
510	1e+13	NDD	42.598	45.533	2.9355
511	1e+13	NDD	47.108	48.984	1.8758
512	0	Correlation	52.616	52.695	0.0798

Test Statistics (µs)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	52.616	52.616	52.616		52.695	52.695	52.695		0.0798	0.0798	0.0798	
1e+12	47.267	48.887	50.83	1.8028	47.473	49.16	51.168	1.8681	0.2057	0.27283	0.3383	0.066316
5e+12	49.313	51.002	53.804	2.4437	50.518	52.208	55.029	2.4587	1.1883	1.206	1.2246	0.018167
1e+13	42.598	45.027	47.108	2.2751	45.533	47.235	48.984	1.7256	1.8132	2.2082	2.9355	0.63067

Device Test: 24.34 T_FAULT_DELAY(TIMING|DELAY/FAULT/4.5//511k//@T_FAULT_DELAY)





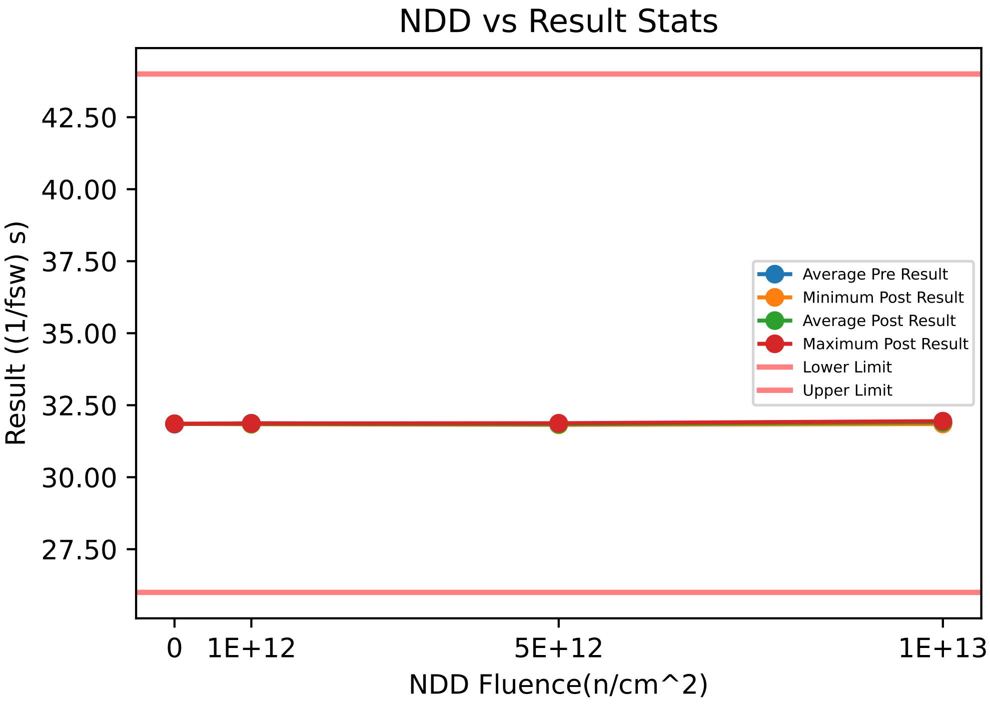
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

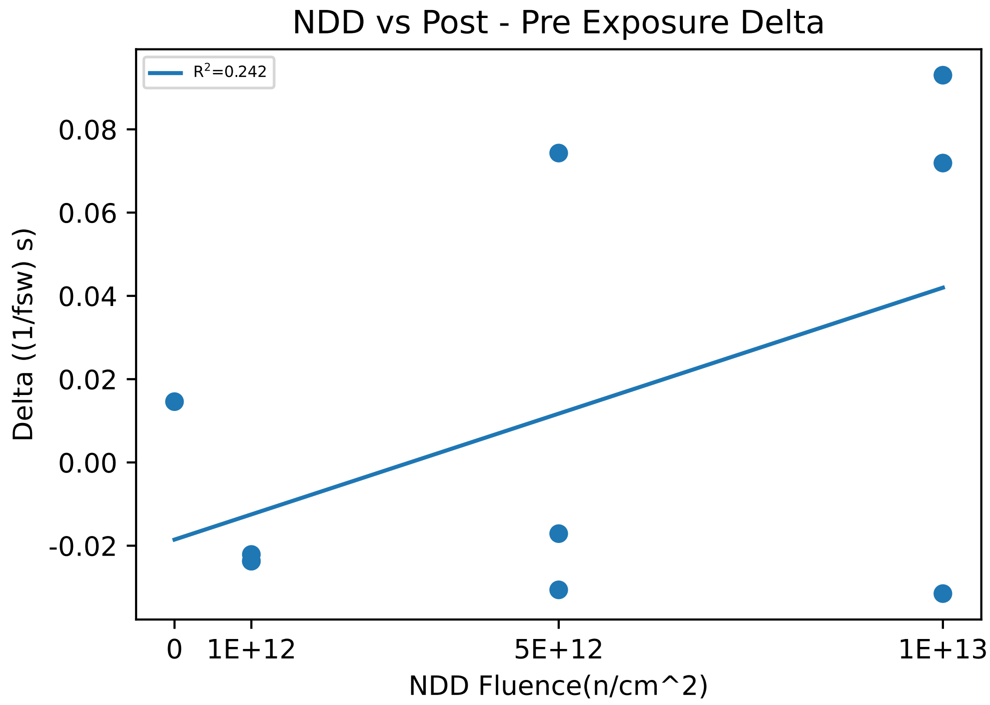
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.589	31.551	-0.0382
504	1e+12	NDD	31.566	31.555	-0.011
505	1e+12	NDD	31.562	31.589	0.0269
506	5e+12	NDD	31.563	31.572	0.0089
507	5e+12	NDD	31.542	31.574	0.0324
508	5e+12	NDD	31.595	31.588	-0.007
509	1e+13	NDD	31.564	31.542	-0.0213
510	1e+13	NDD	31.582	31.609	0.0267
511	1e+13	NDD	31.539	31.593	0.0534
512	0	Correlation	31.59	31.592	0.0023

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.59	31.59	31.59		31.592	31.592	31.592		0.0023	0.0023	0.0023	
1e+12	31.562	31.572	31.589	0.014466	31.551	31.565	31.589	0.021063	-0.0382	-0.0074333	0.0269	0.032696
5e+12	31.542	31.567	31.595	0.027034	31.572	31.578	31.588	0.0089243	-0.007	0.011433	0.0324	0.019822
1e+13	31.539	31.562	31.582	0.021422	31.542	31.581	31.609	0.034597	-0.0213	0.0196	0.0534	0.037853

Device Test: 24.36 T_FAULT_DELAY(TIMING|DELAY/FAULT/4.5//90.9k//@T_FAULT_DELAY)





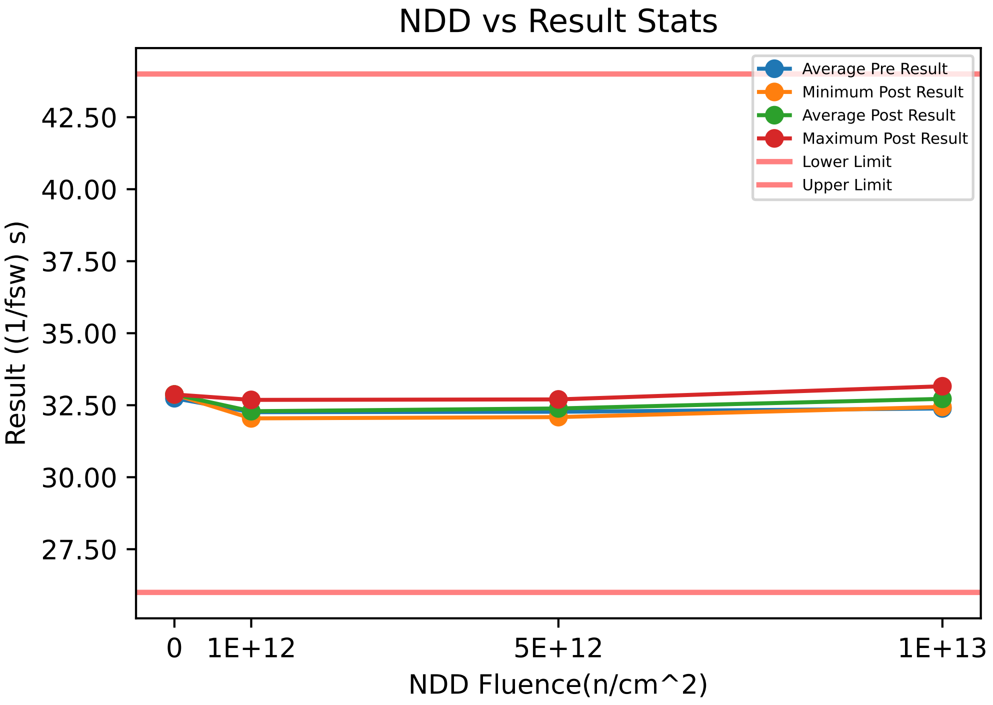
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

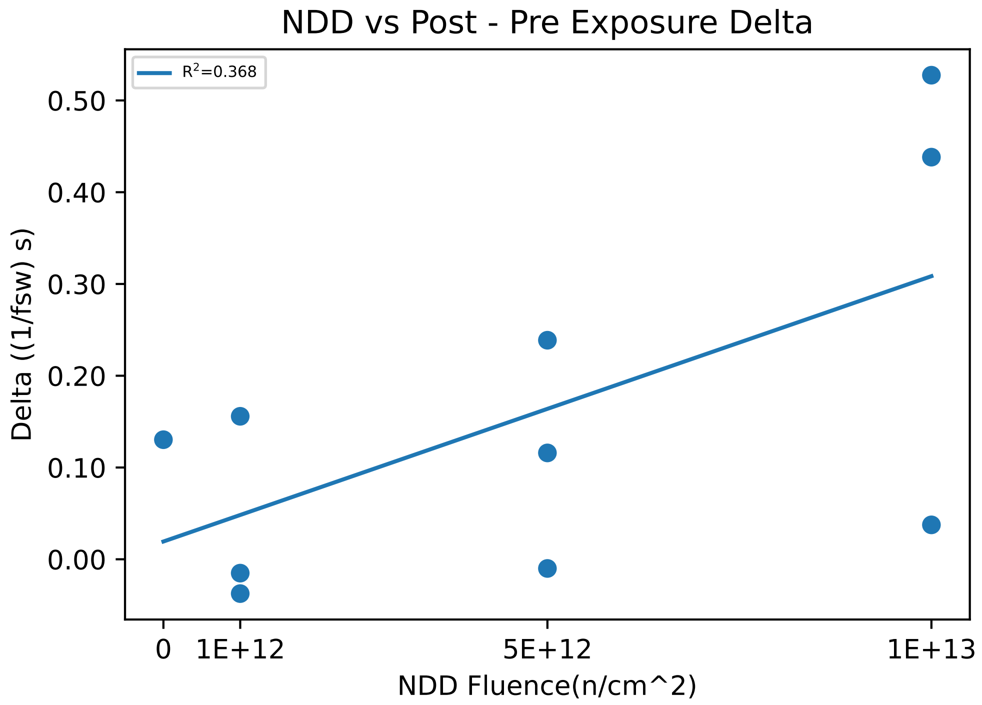
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.891	31.869	-0.0221
504	1e+12	NDD	31.861	31.838	-0.0237
505	1e+12	NDD	31.87	31.846	-0.0237
506	5e+12	NDD	31.855	31.825	-0.0306
507	5e+12	NDD	31.8	31.874	0.0743
508	5e+12	NDD	31.835	31.818	-0.0171
509	1e+13	NDD	31.877	31.845	-0.0315
510	1e+13	NDD	31.848	31.92	0.0719
511	1e+13	NDD	31.853	31.946	0.093
512	0	Correlation	31.84	31.854	0.0146

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.84	31.84	31.84		31.854	31.854	31.854		0.0146	0.0146	0.0146	
1e+12	31.861	31.874	31.891	0.015061	31.838	31.851	31.869	0.015948	-0.0237	-0.023167	-0.0221	0.00092376
5e+12	31.8	31.83	31.855	0.028054	31.818	31.839	31.874	0.030628	-0.0306	0.0088667	0.0743	0.057068
1e+13	31.848	31.859	31.877	0.015373	31.845	31.903	31.946	0.052235	-0.0315	0.044467	0.093	0.06663

Device Test: 24.38 T_FAULT_DELAY(TIMING|DELAY/FAULT/4.5//34.8k//@T_FAULT_DELAY)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

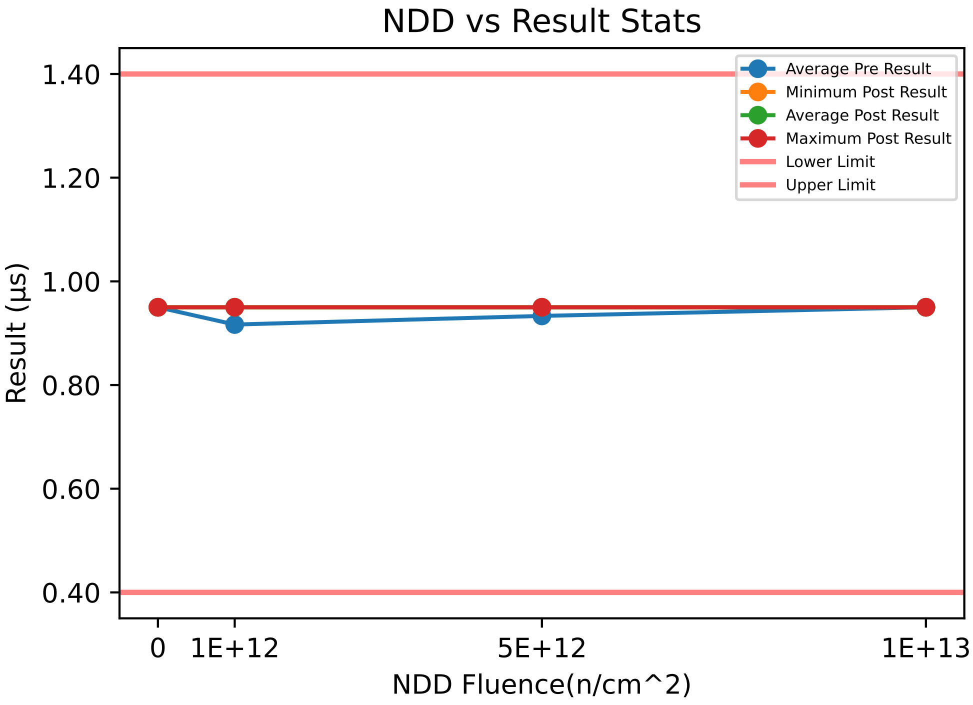
Test Results (Lower Limit = 26.0,
Upper Limit = 44.0 ((1/fsw) s))

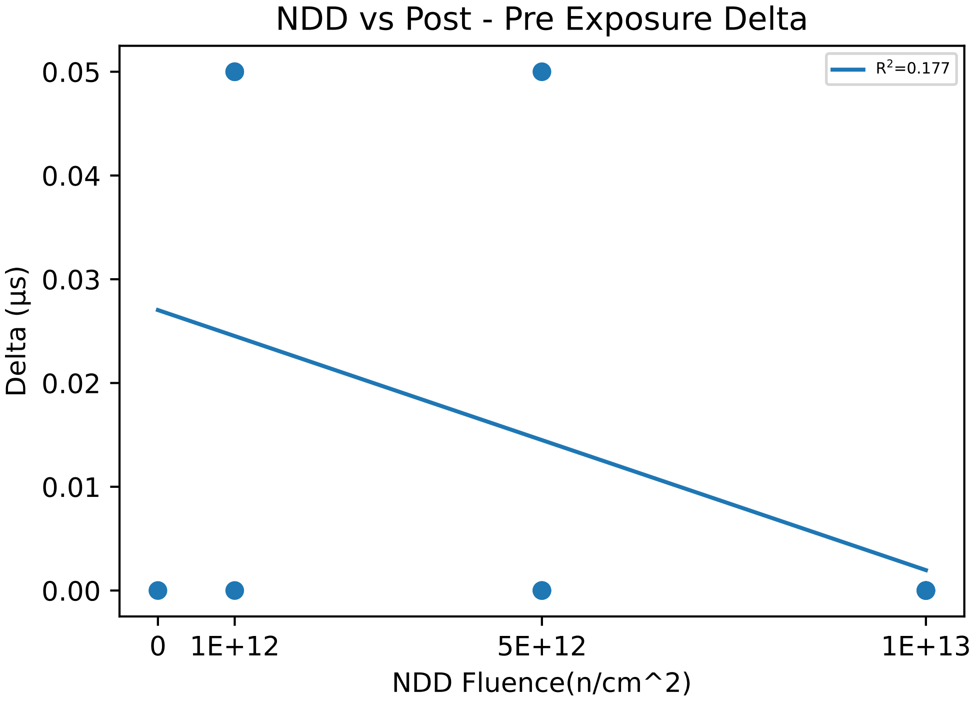
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	32.161	32.146	-0.0151
504	1e+12	NDD	32.529	32.684	0.1558
505	1e+12	NDD	32.08	32.042	-0.0374
506	5e+12	NDD	32.096	32.087	-0.01
507	5e+12	NDD	32.585	32.701	0.1159
508	5e+12	NDD	32.134	32.373	0.2387
509	1e+13	NDD	33.12	33.157	0.0375
510	1e+13	NDD	32.002	32.441	0.4382
511	1e+13	NDD	32.036	32.564	0.5275
512	0	Correlation	32.742	32.872	0.1303

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	32.742	32.742	32.742		32.872	32.872	32.872		0.1303	0.1303	0.1303	
1e+12	32.08	32.257	32.529	0.23907	32.042	32.291	32.684	0.3446	-0.0374	0.034433	0.1558	0.1057
5e+12	32.096	32.272	32.585	0.272	32.087	32.387	32.701	0.30754	-0.01	0.11487	0.2387	0.12435
1e+13	32.002	32.386	33.12	0.63571	32.441	32.721	33.157	0.38334	0.0375	0.3344	0.5275	0.26097

Device Test: 24.39 T_FAULT_MIN(TIMING|MINON/FAULT/4.5//511k//@T_FAULT_MIN)





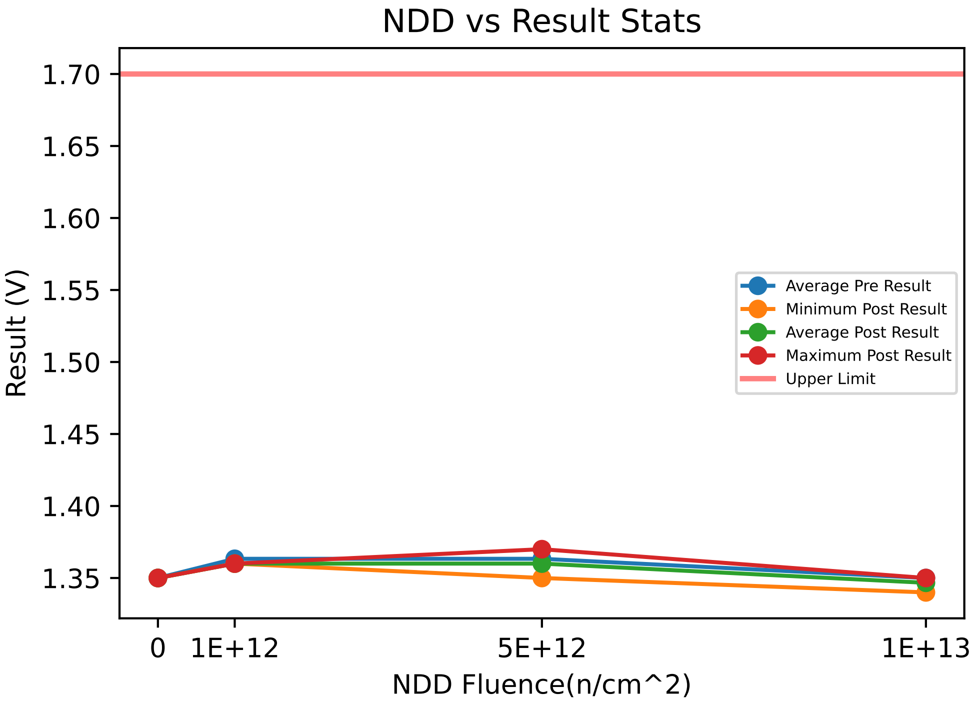
Test Results (Lower Limit = 0.4, Upper Limit = 1.4 (µs))

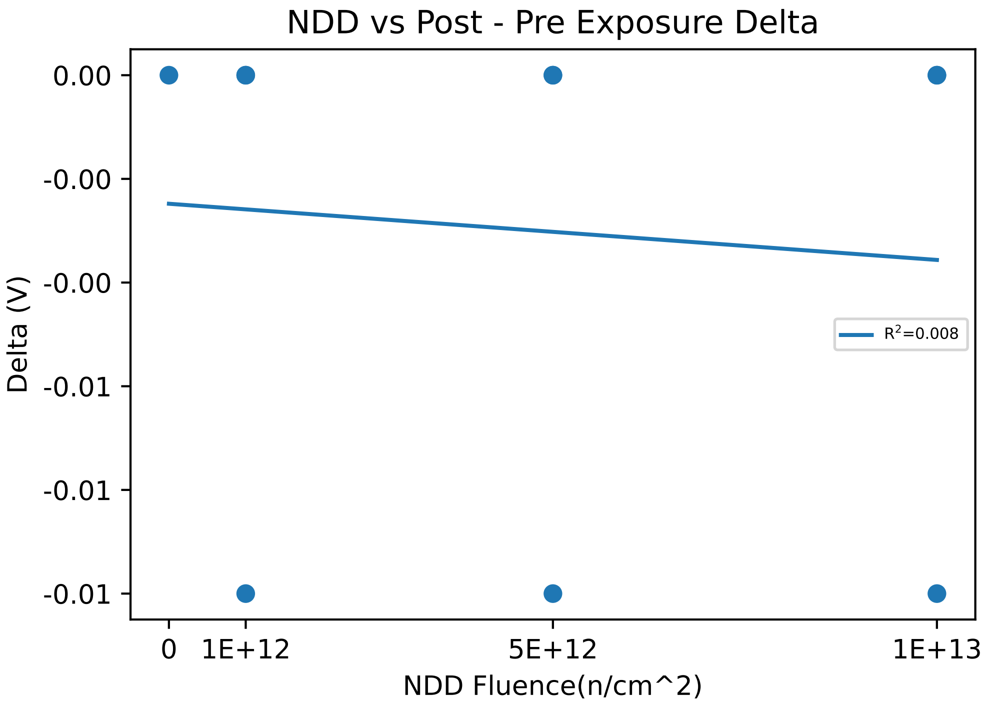
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.95	0.95	0
504	1e+12	NDD	0.9	0.95	0.05
505	1e+12	NDD	0.9	0.95	0.05
506	5e+12	NDD	0.9	0.95	0.05
507	5e+12	NDD	0.95	0.95	0
508	5e+12	NDD	0.95	0.95	0
509	1e+13	NDD	0.95	0.95	0
510	1e+13	NDD	0.95	0.95	0
511	1e+13	NDD	0.95	0.95	0
512	0	Correlation	0.95	0.95	0

Test Statistics (µs)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.95	0.95	0.95		0.95	0.95	0.95		0	0	0	
1e+12	0.9	0.91667	0.95	0.028868	0.95	0.95	0.95	0	0	0.033333	0.05	0.028868
5e+12	0.9	0.93333	0.95	0.028868	0.95	0.95	0.95	0	0	0.016667	0.05	0.028868
1e+13	0.95	0.95	0.95	0	0.95	0.95	0.95	0	0	0	0	0

Device Test: 24.4 SYNC1_VIH(THRESHOLD|RISE/SYNC1/4.5//OPEN//@SYNC1_VIH)





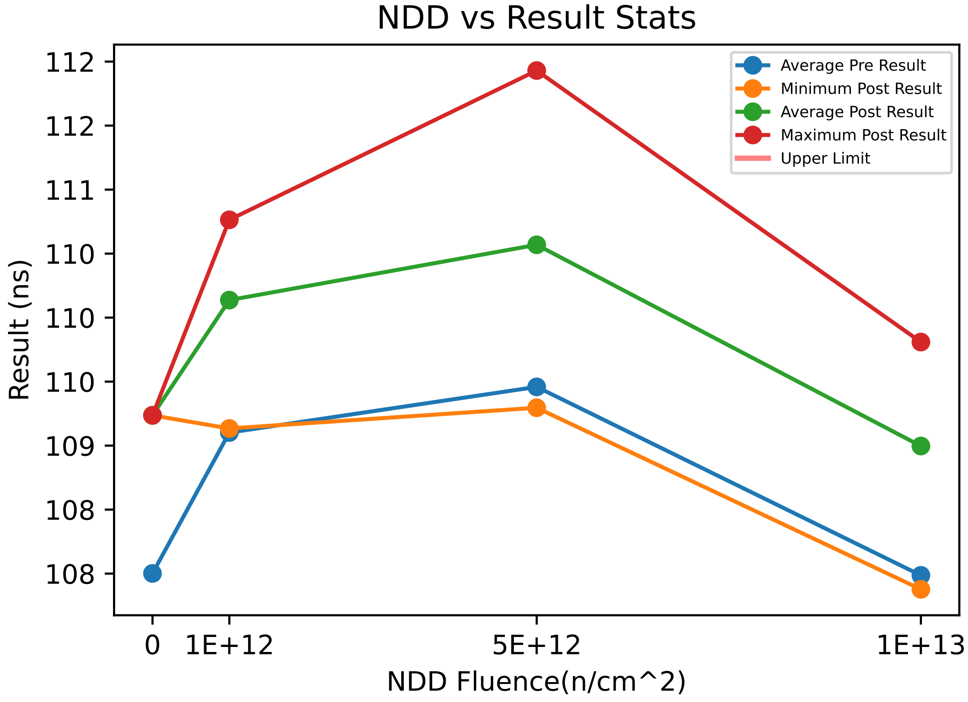
Test Results (Upper Limit = 1.7 (V))

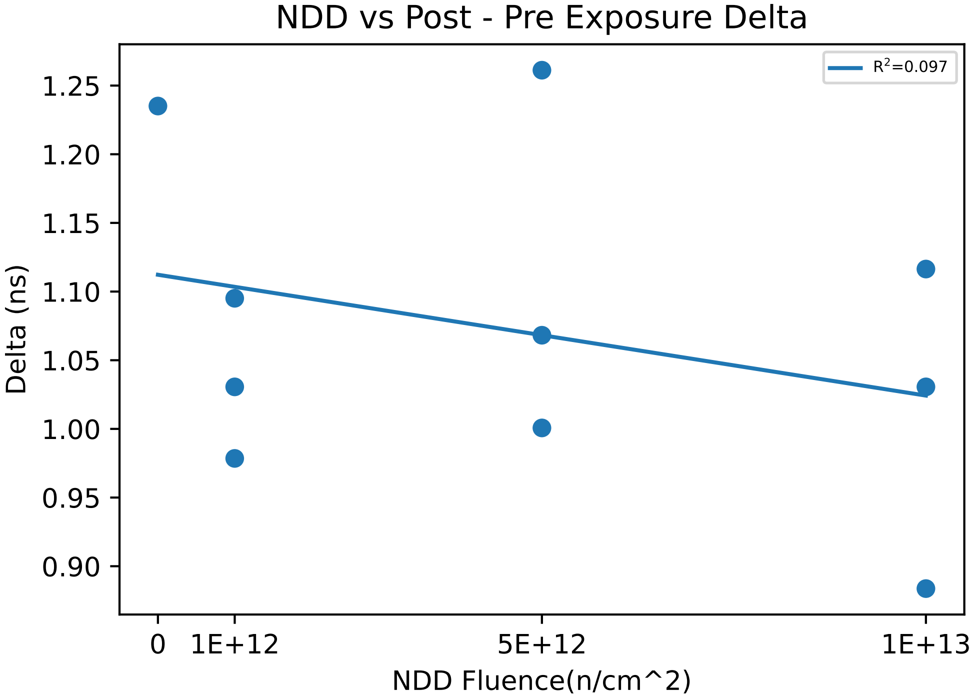
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.37	1.36	-0.01
504	1e+12	NDD	1.36	1.36	0
505	1e+12	NDD	1.36	1.36	0
506	5e+12	NDD	1.38	1.37	-0.01
507	5e+12	NDD	1.35	1.35	0
508	5e+12	NDD	1.36	1.36	0
509	1e+13	NDD	1.34	1.34	0
510	1e+13	NDD	1.36	1.35	-0.01
511	1e+13	NDD	1.35	1.35	0
512	0	Correlation	1.35	1.35	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.35	1.35	1.35		1.35	1.35	1.35		0	0	0	
1e+12	1.36	1.3633	1.37	0.0057735	1.36	1.36	1.36	0	-0.01	-0.0033333	0	0.0057735
5e+12	1.35	1.3633	1.38	0.015275	1.35	1.36	1.37	0.01	-0.01	-0.0033333	0	0.0057735
1e+13	1.34	1.35	1.36	0.01	1.34	1.3467	1.35	0.0057735	-0.01	-0.0033333	0	0.0057735

Device Test: 24.40 T_DEAD(TIMING|DELAY/SW/4.5//511k//@T_DEAD)





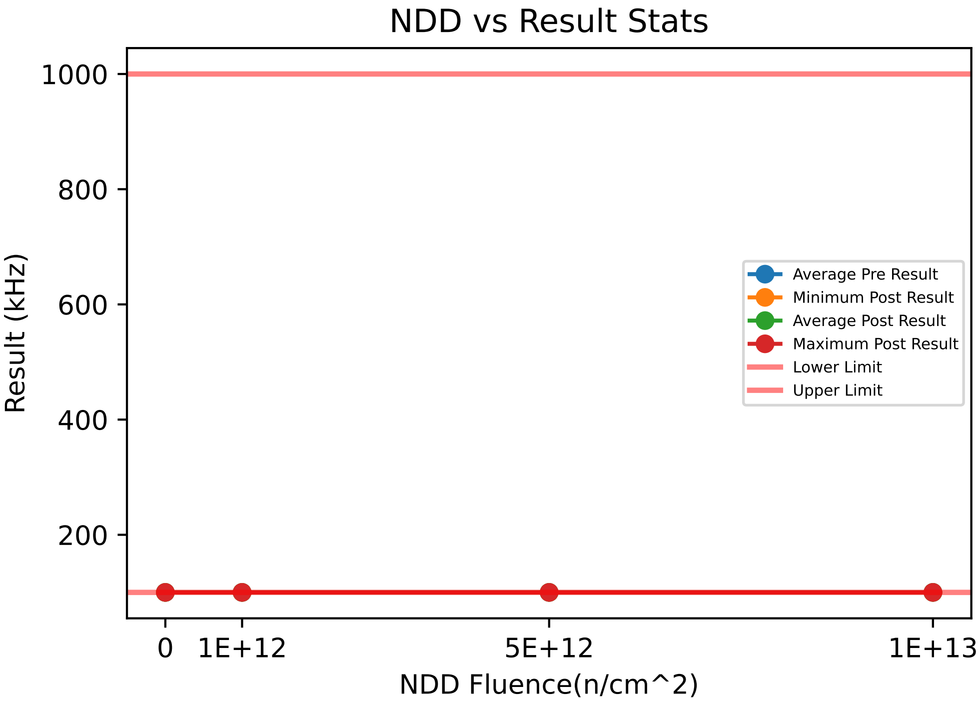
Test Results (No Limits Specified (ns))

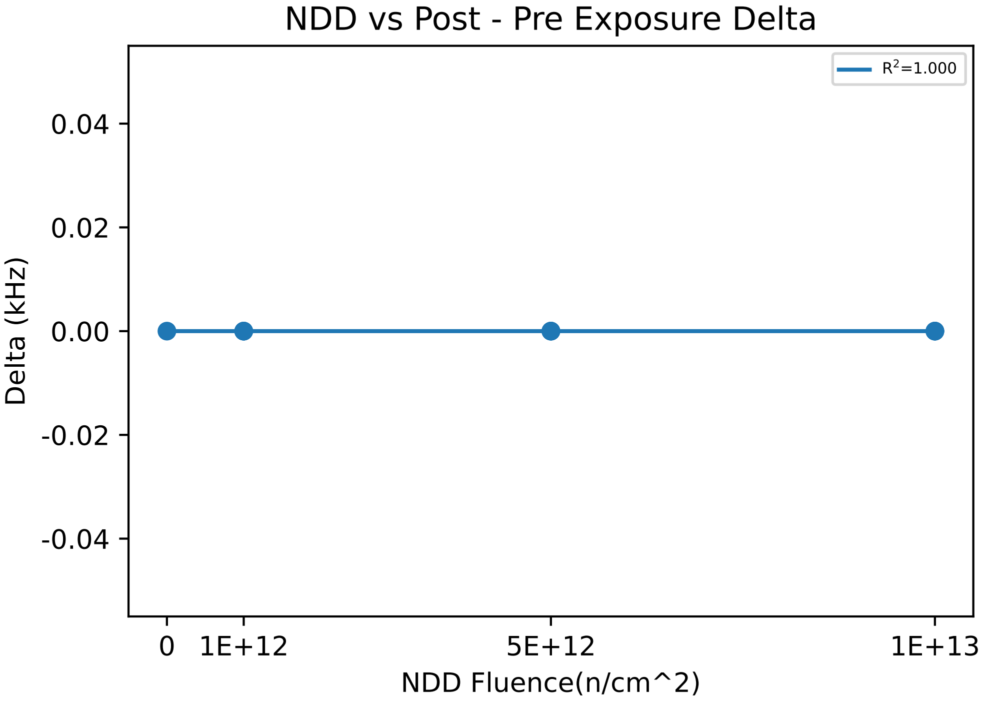
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	109.42	110.51	1.0951
504	1e+12	NDD	108.16	109.13	0.9785
505	1e+12	NDD	109.73	110.76	1.0306
506	5e+12	NDD	110.86	111.93	1.0682
507	5e+12	NDD	108.03	109.3	1.2612
508	5e+12	NDD	109.48	110.48	1.0007
509	1e+13	NDD	106.76	107.88	1.1164
510	1e+13	NDD	108.42	109.3	0.8837
511	1e+13	NDD	108.78	109.81	1.0306
512	0	Correlation	108	109.24	1.2351

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	108	108	108		109.24	109.24	109.24		1.2351	1.2351	1.2351	
1e+12	108.16	109.1	109.73	0.8349	109.13	110.14	110.76	0.87758	0.9785	1.0347	1.0951	0.05841
5e+12	108.03	109.46	110.86	1.4138	109.3	110.57	111.93	1.3194	1.0007	1.11	1.2612	0.13519
1e+13	106.76	107.99	108.78	1.0764	107.88	109	109.81	1.0018	0.8837	1.0102	1.1164	0.11768

Device Test: 24.41 SYNC_FREQ_RANGE(FREQ|100kHz/SYNC1/5//OPEN//@SYNC_FREQ_RANGE)





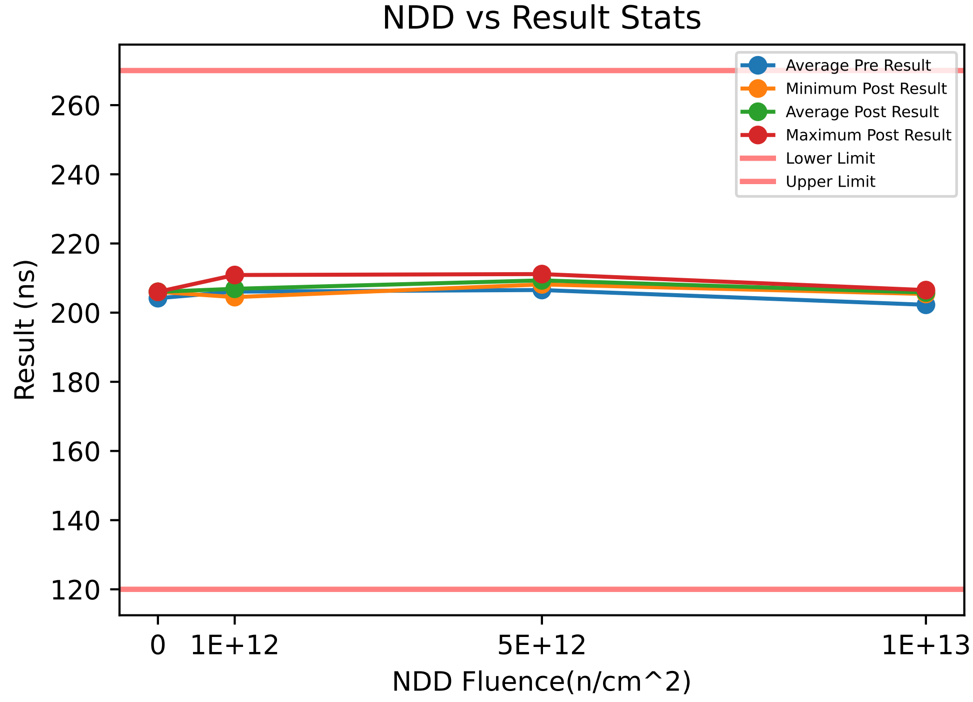
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

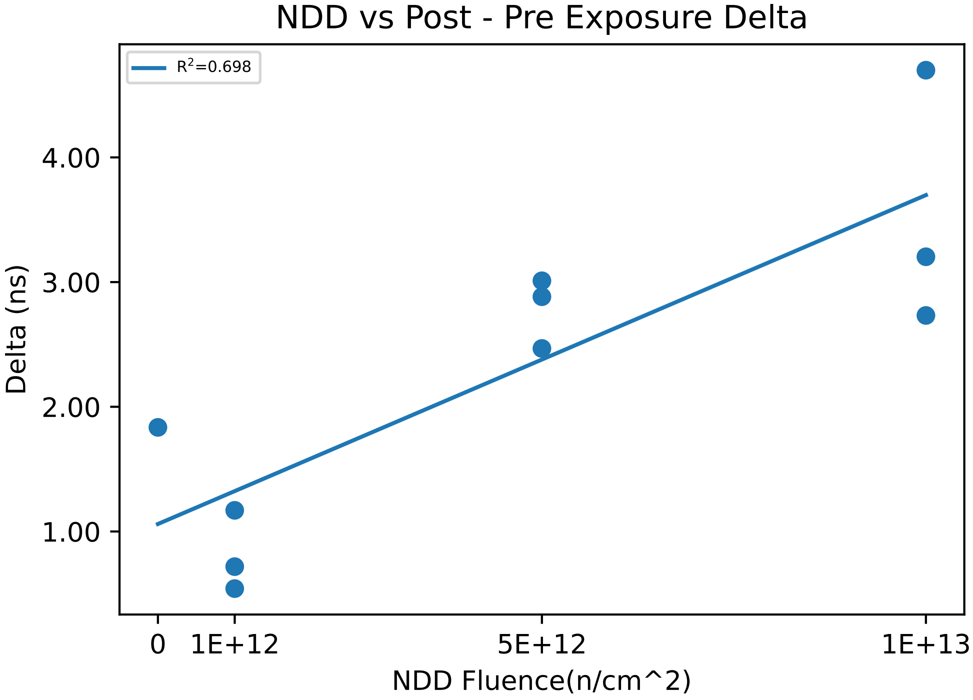
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	100	100	0
504	1e+12	NDD	100	100	0
505	1e+12	NDD	100	100	0
506	5e+12	NDD	100	100	0
507	5e+12	NDD	100	100	0
508	5e+12	NDD	100	100	0
509	1e+13	NDD	100	100	0
510	1e+13	NDD	100	100	0
511	1e+13	NDD	100	100	0
512	0	Correlation	100	100	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100		100	100	100		0	0	0	
1e+12	100	100	100	0	100	100	100	0	0	0	0	0
5e+12	100	100	100	0	100	100	100	0	0	0	0	0
1e+13	100	100	100	0	100	100	100	0	0	0	0	0

Device Test: 24.42 SYNC1_SW_DELAY(TIMING|DELAY/SYNC1/5//OPEN//@SYNC1_SW_DELAY)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

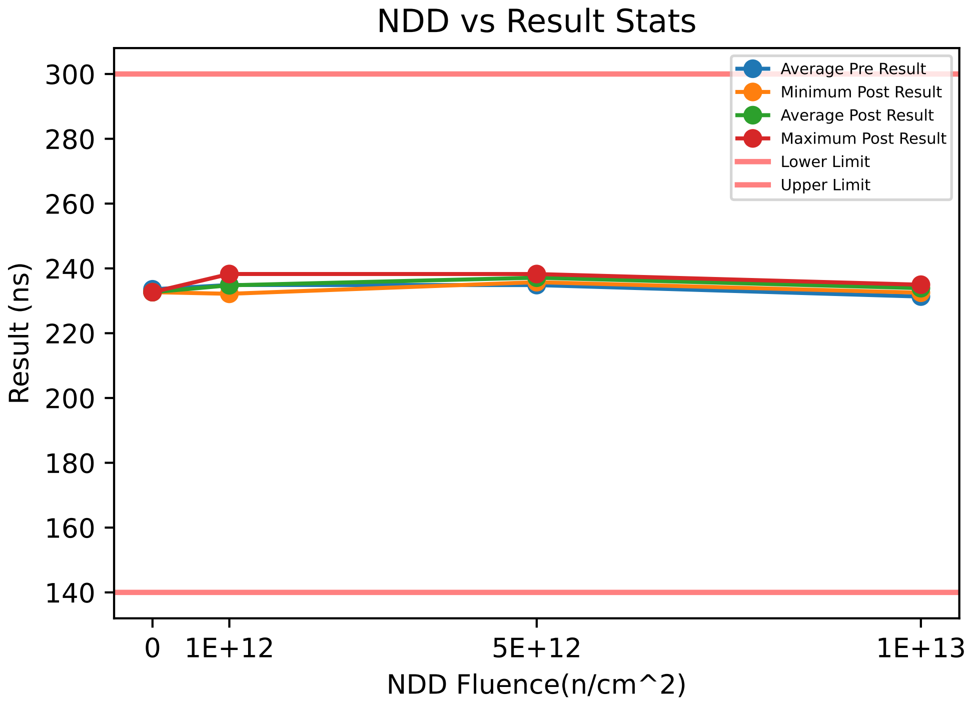
Test Results (Lower Limit = 120.0, Upper Limit = 270.0 (ns))

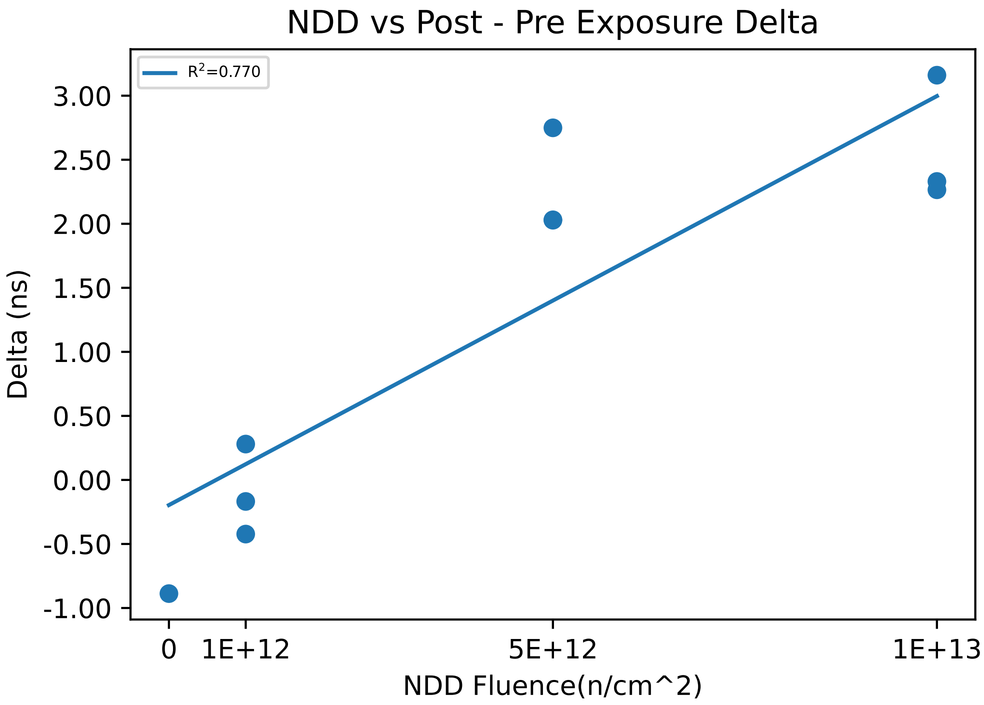
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	210.16	210.88	0.7182
504	1e+12	NDD	203.94	204.49	0.542
505	1e+12	NDD	204.14	205.31	1.1695
506	5e+12	NDD	208.27	211.15	2.8828
507	5e+12	NDD	205.66	208.67	3.0105
508	5e+12	NDD	205.7	208.17	2.4677
509	1e+13	NDD	202.79	205.53	2.7325
510	1e+13	NDD	200.7	205.4	4.6992
511	1e+13	NDD	203.32	206.52	3.2031
512	0	Correlation	204.18	206.02	1.8349

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	204.18	204.18	204.18		206.02	206.02	206.02		1.8349	1.8349	1.8349	
1e+12	203.94	206.08	210.16	3.5349	204.49	206.89	210.88	3.4787	0.542	0.8099	1.1695	0.32364
5e+12	205.66	206.54	208.27	1.4939	208.17	209.33	211.15	1.5971	2.4677	2.787	3.0105	0.2838
1e+13	200.7	202.27	203.32	1.3873	205.4	205.81	206.52	0.61574	2.7325	3.5449	4.6992	1.0269

Device Test: 24.43 SYNC1_SW_DELAY_INV(TIMING|DELAY/SYNC1/5//OPEN//@SYNC1_SW_DELAY_INV)





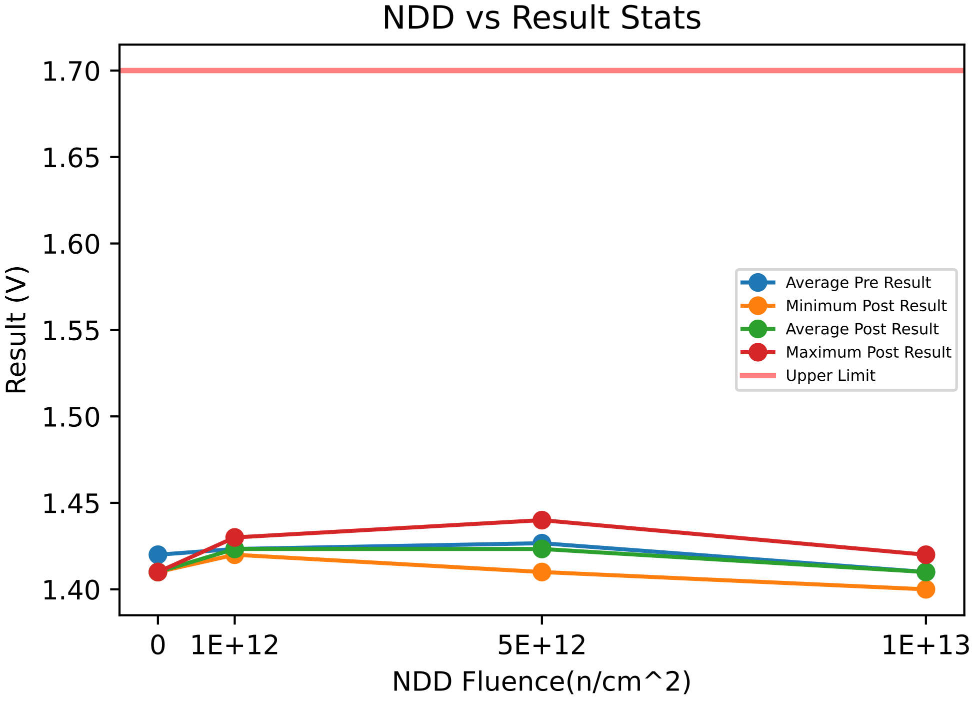
Test Results (Lower Limit = 140.0, Upper Limit = 300.0 (ns))

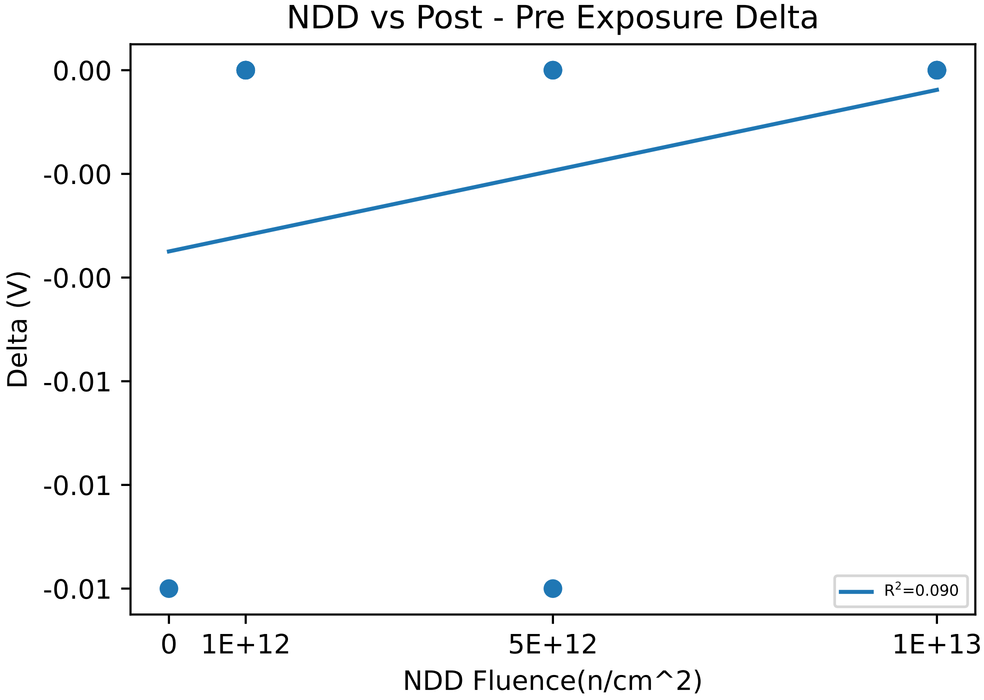
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	238.44	238.27	-0.1681
504	1e+12	NDD	232.58	232.16	-0.4228
505	1e+12	NDD	233.62	233.9	0.28
506	5e+12	NDD	236.23	238.26	2.031
507	5e+12	NDD	234.6	237.35	2.7492
508	5e+12	NDD	233.73	235.75	2.0278
509	1e+13	NDD	231.81	234.97	3.1601
510	1e+13	NDD	230.23	232.5	2.2655
511	1e+13	NDD	231.89	234.22	2.3304
512	0	Correlation	233.55	232.67	-0.8875

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	233.55	233.55	233.55		232.67	232.67	232.67		-0.8875	-0.8875	-0.8875	
1e+12	232.58	234.88	238.44	3.1263	232.16	234.78	238.27	3.1499	-0.4228	-0.10363	0.28	0.35581
5e+12	233.73	234.85	236.23	1.2706	235.75	237.12	238.26	1.2695	2.0278	2.2693	2.7492	0.41558
1e+13	230.23	231.31	231.89	0.93281	232.5	233.89	234.97	1.2658	2.2655	2.5853	3.1601	0.49882

Device Test: 24.44 SYNC1_VIH(THRESHOLD|RISE/SYNC1/5//OPEN//@SYNC1_VIH)





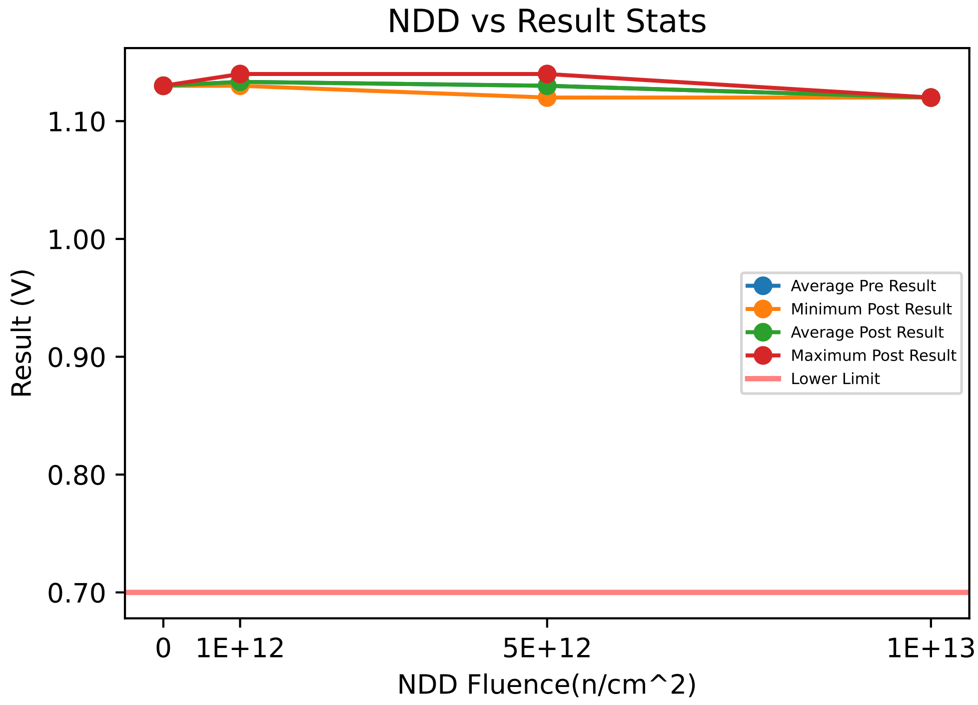
Test Results (Upper Limit = 1.7 (V))

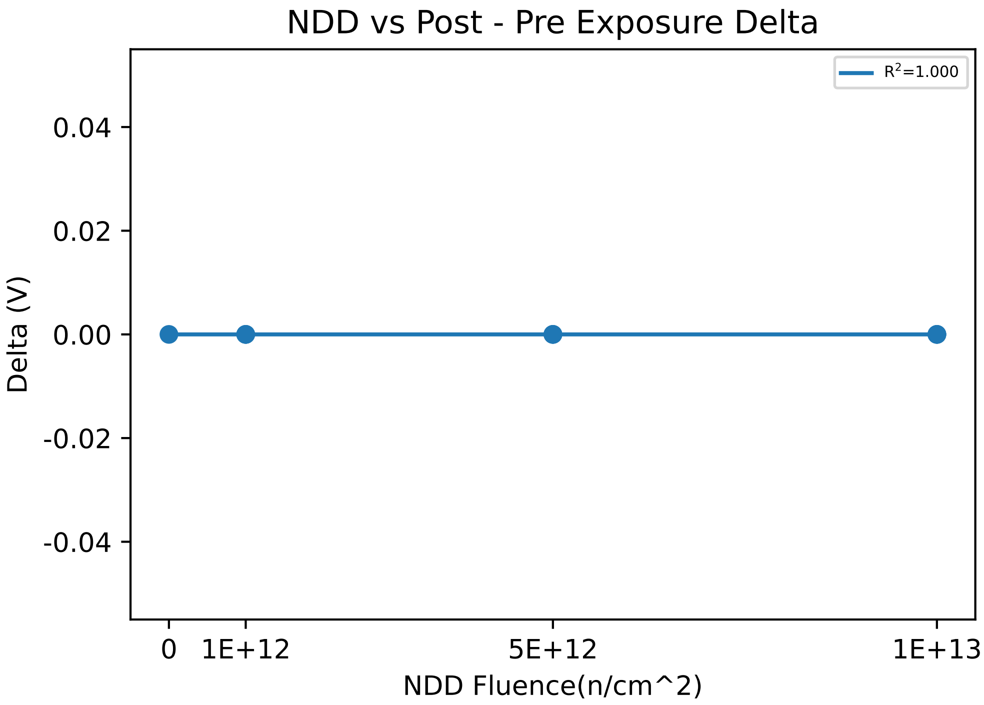
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.43	1.43	0
504	1e+12	NDD	1.42	1.42	0
505	1e+12	NDD	1.42	1.42	0
506	5e+12	NDD	1.44	1.44	0
507	5e+12	NDD	1.41	1.41	0
508	5e+12	NDD	1.43	1.42	-0.01
509	1e+13	NDD	1.4	1.4	0
510	1e+13	NDD	1.42	1.42	0
511	1e+13	NDD	1.41	1.41	0
512	0	Correlation	1.42	1.41	-0.01

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.42	1.42	1.42		1.41	1.41	1.41		-0.01	-0.01	-0.01	
1e+12	1.42	1.4233	1.43	0.0057735	1.42	1.4233	1.43	0.0057735	0	0	0	0
5e+12	1.41	1.4267	1.44	0.015275	1.41	1.4233	1.44	0.015275	-0.01	-0.0033333	0	0.0057735
1e+13	1.4	1.41	1.42	0.01	1.4	1.41	1.42	0.01	0	0	0	0

Device Test: 24.45 SYNC1_VIL(THRESHOLD|FALL/SYNC1/5//OPEN//@SYNC1_VIL)





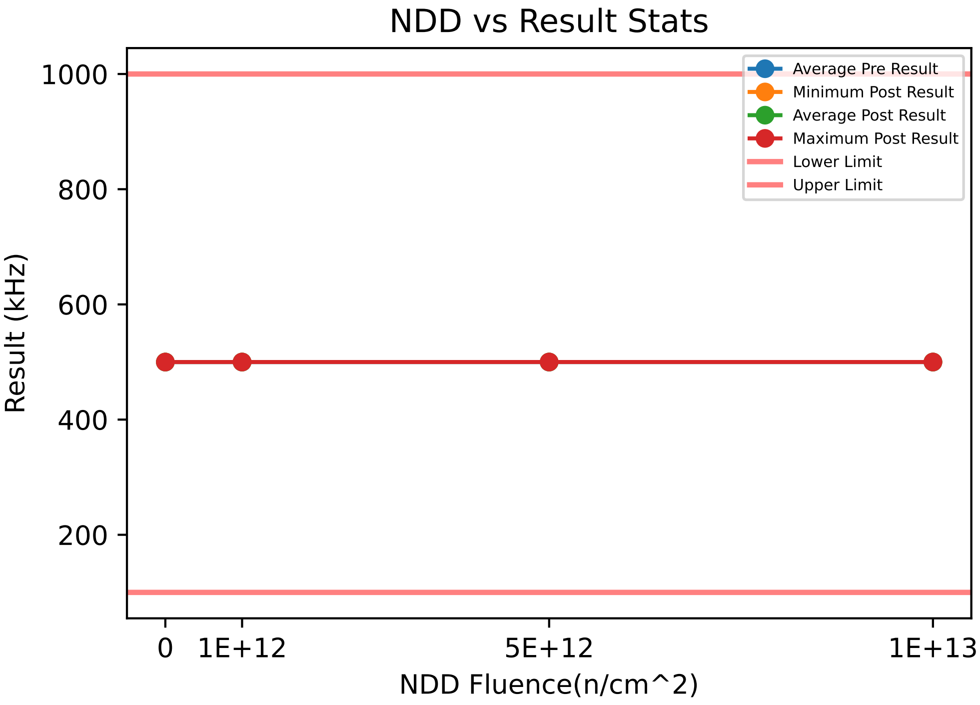
Test Results (Lower Limit = 0.7 (V))

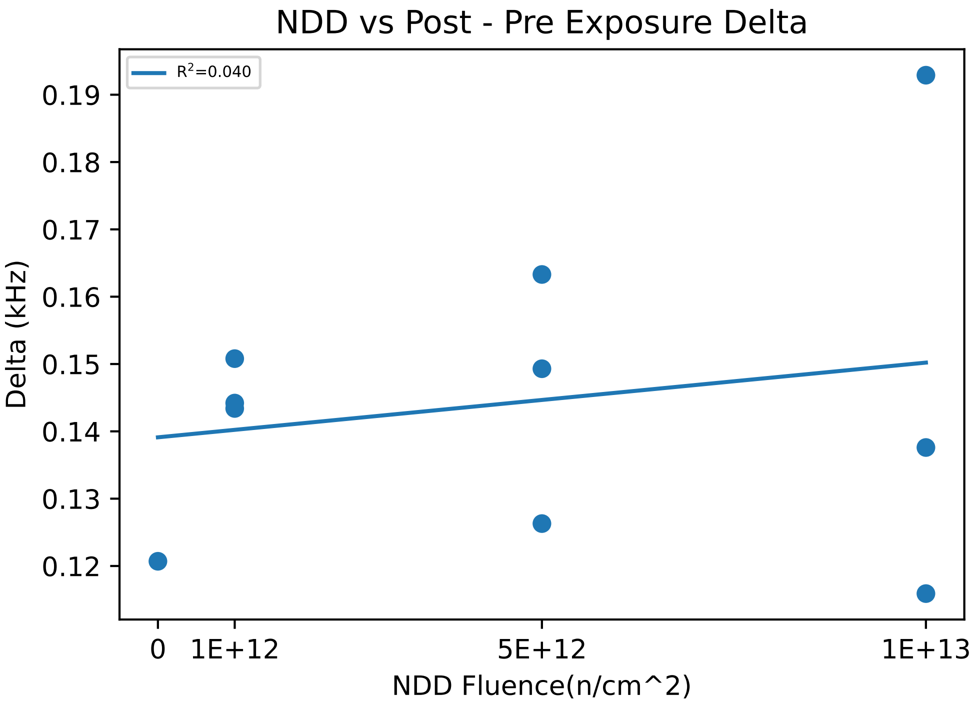
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.14	1.14	0
504	1e+12	NDD	1.13	1.13	0
505	1e+12	NDD	1.13	1.13	0
506	5e+12	NDD	1.14	1.14	0
507	5e+12	NDD	1.12	1.12	0
508	5e+12	NDD	1.13	1.13	0
509	1e+13	NDD	1.12	1.12	0
510	1e+13	NDD	1.12	1.12	0
511	1e+13	NDD	1.12	1.12	0
512	0	Correlation	1.13	1.13	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.13	1.13	1.13		1.13	1.13	1.13		0	0	0	
1e+12	1.13	1.1333	1.14	0.0057735	1.13	1.1333	1.14	0.0057735	0	0	0	0
5e+12	1.12	1.13	1.14	0.01	1.12	1.13	1.14	0.01	0	0	0	0
1e+13	1.12	1.12	1.12	0	1.12	1.12	1.12	0	0	0	0	0

Device Test: 24.48 SYNC_FREQ_RANGE(FREQ|500kHz/SYNC1/5//OPEN//@SYNC_FREQ_RANGE)





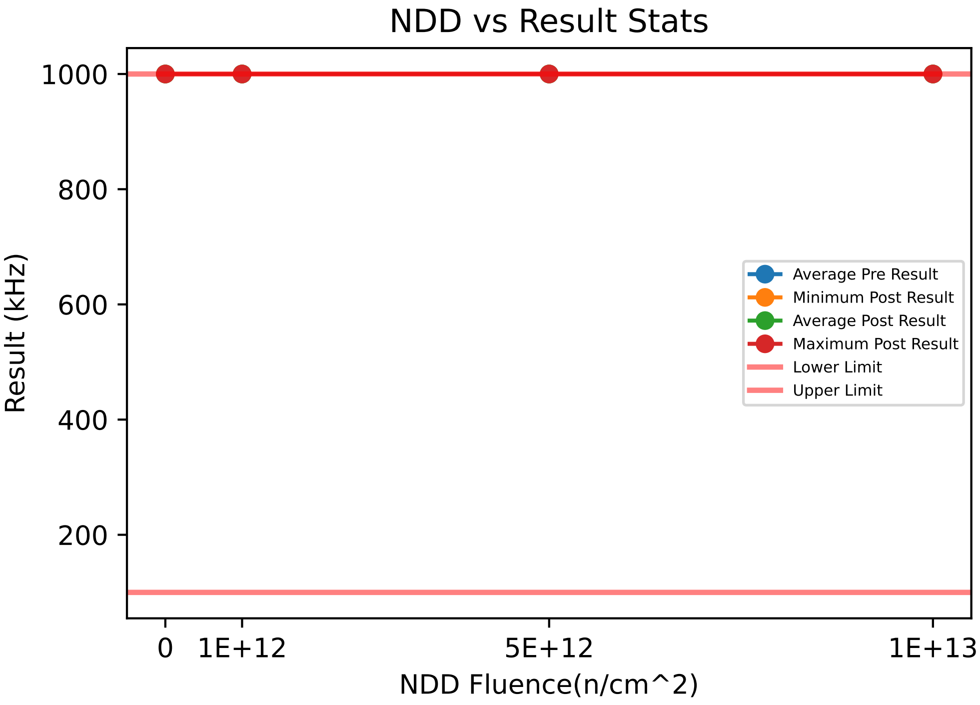
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

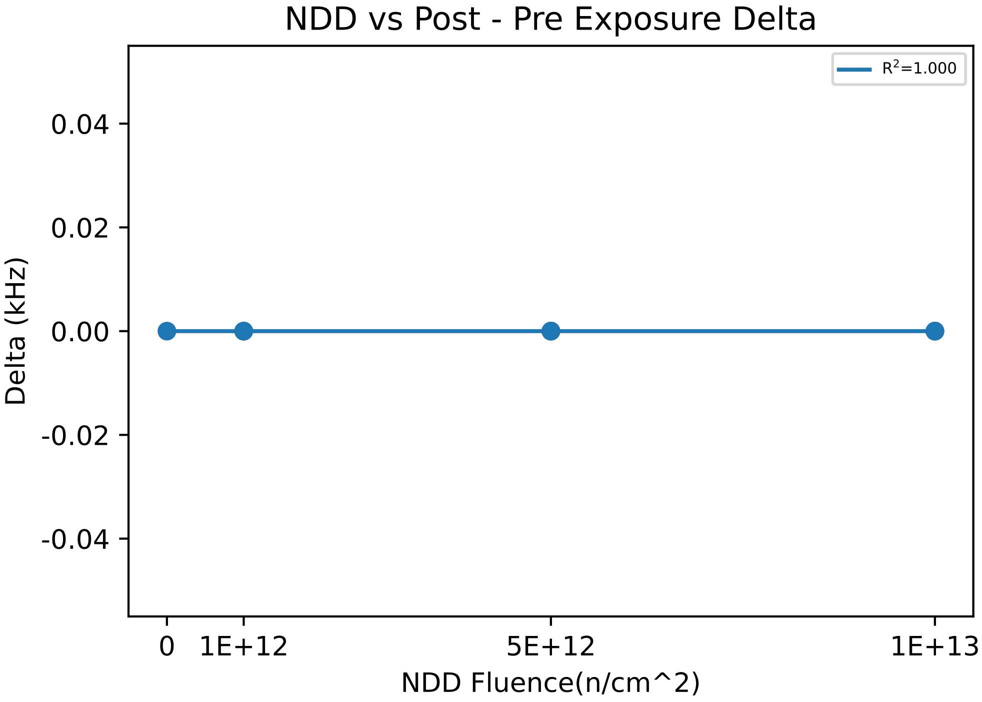
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	499.82	499.96	0.1442
504	1e+12	NDD	499.81	499.95	0.1434
505	1e+12	NDD	499.81	499.96	0.1508
506	5e+12	NDD	499.82	499.99	0.1633
507	5e+12	NDD	499.81	499.96	0.1493
508	5e+12	NDD	499.83	499.95	0.1263
509	1e+13	NDD	499.8	499.99	0.1929
510	1e+13	NDD	499.82	499.94	0.1159
511	1e+13	NDD	499.82	499.95	0.1376
512	0	Correlation	499.81	499.93	0.1207

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.81	499.81	499.81		499.93	499.93	499.93		0.1207	0.1207	0.1207	
1e+12	499.81	499.81	499.82	0.0059925	499.95	499.96	499.96	0.005391	0.1434	0.14613	0.1508	0.0040612
5e+12	499.81	499.82	499.83	0.010614	499.95	499.97	499.99	0.01875	0.1263	0.1463	0.1633	0.018682
1e+13	499.8	499.81	499.82	0.011974	499.94	499.96	499.99	0.027886	0.1159	0.1488	0.1929	0.039703

Device Test: 24.49 SYNC_FREQ_RANGE(FREQ|1000kHz/SYNC1/5//OPEN//@SYNC_FREQ_RANGE)





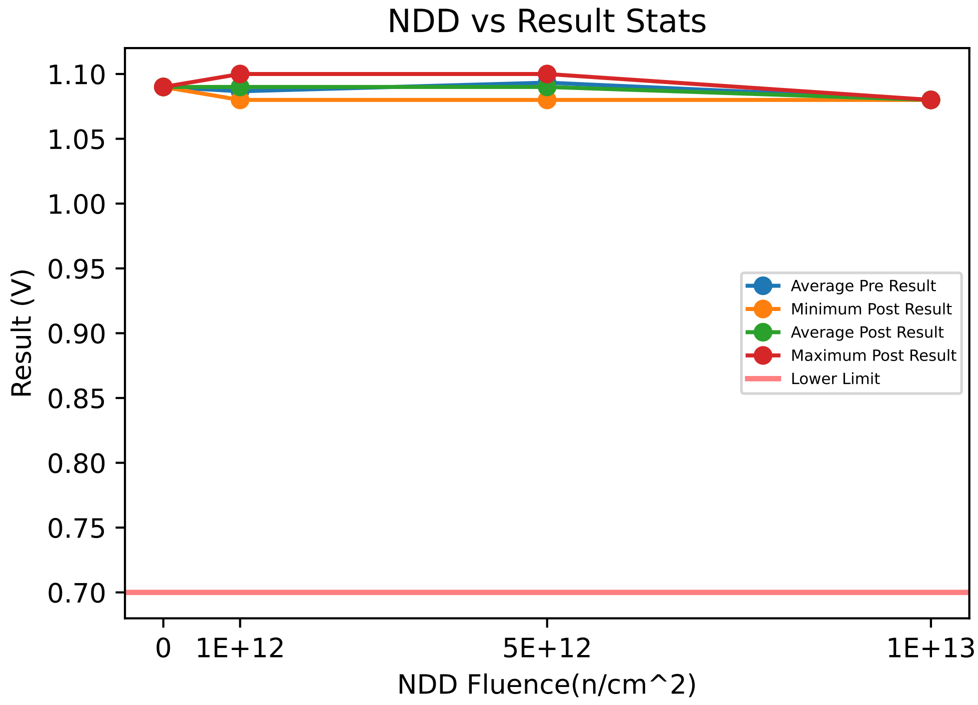
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

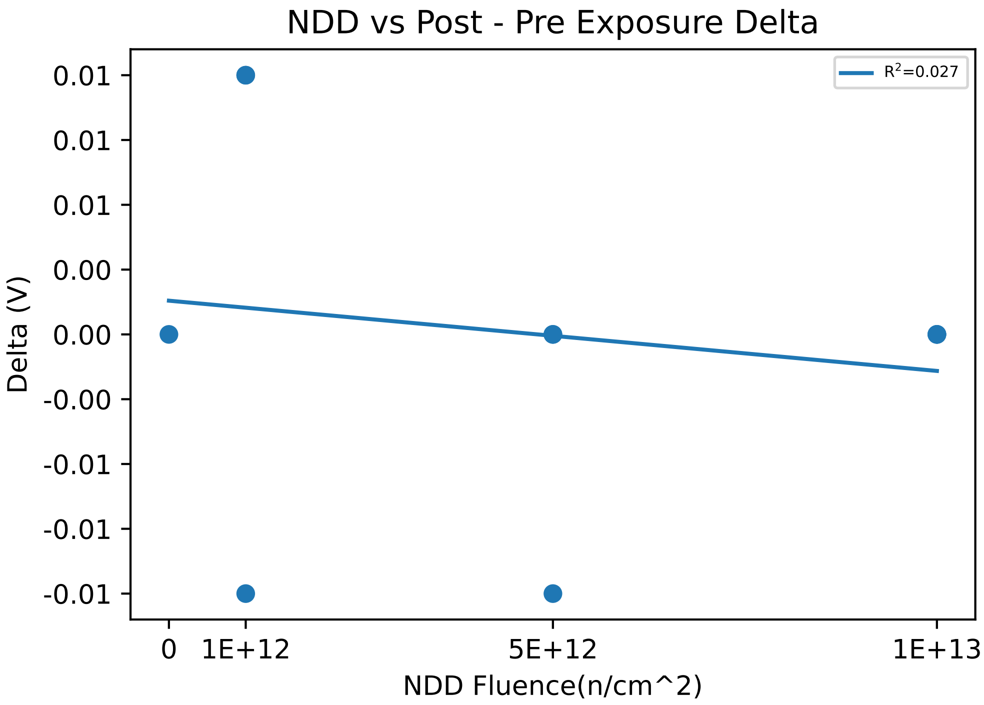
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1000	1000	0
504	1e+12	NDD	1000	1000	0
505	1e+12	NDD	1000	1000	0
506	5e+12	NDD	1000	1000	0
507	5e+12	NDD	1000	1000	0
508	5e+12	NDD	1000	1000	0
509	1e+13	NDD	1000	1000	0
510	1e+13	NDD	1000	1000	0
511	1e+13	NDD	1000	1000	0
512	0	Correlation	1000	1000	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000		1000	1000	1000		0	0	0	
1e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
5e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
1e+13	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

Device Test: 24.5 SYNC1_VIL(THRESHOLD|FALL/SYNC1/4.5//OPEN//@SYNC1_VIL)





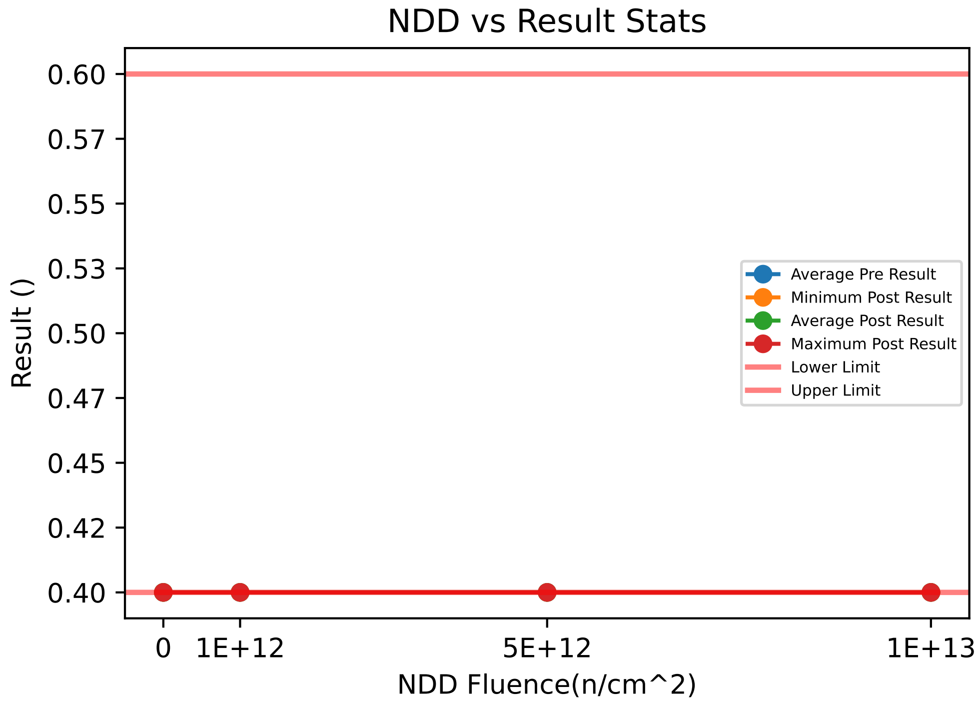
Test Results (Lower Limit = 0.7 (V))

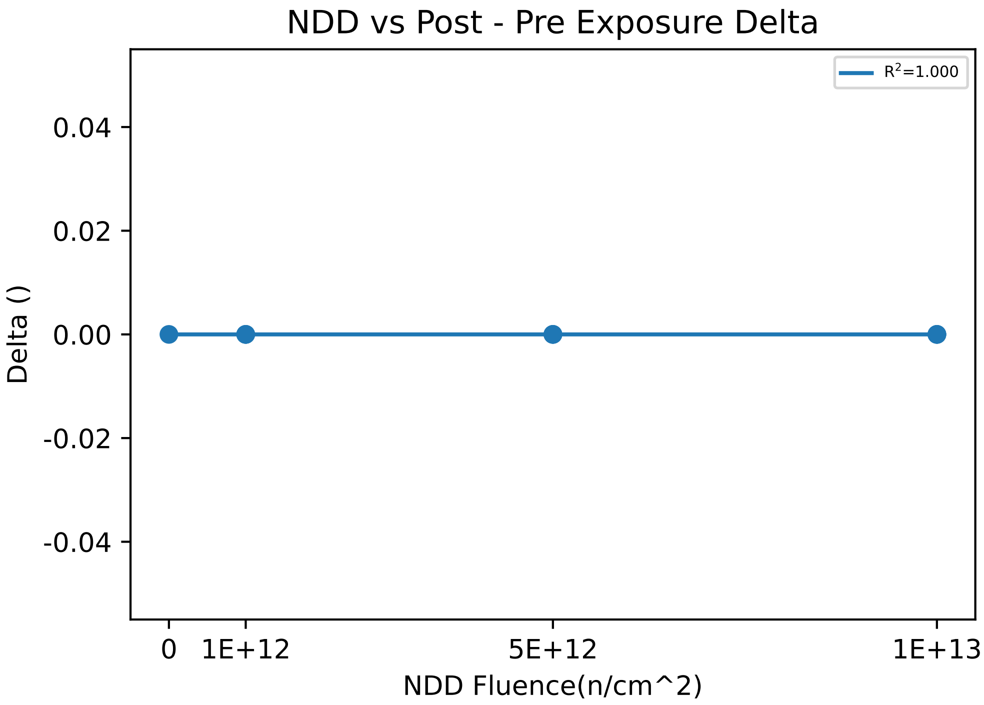
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.09	1.1	0.01
504	1e+12	NDD	1.09	1.08	-0.01
505	1e+12	NDD	1.08	1.09	0.01
506	5e+12	NDD	1.1	1.1	0
507	5e+12	NDD	1.08	1.08	0
508	5e+12	NDD	1.1	1.09	-0.01
509	1e+13	NDD	1.08	1.08	0
510	1e+13	NDD	1.08	1.08	0
511	1e+13	NDD	1.08	1.08	0
512	0	Correlation	1.09	1.09	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.09	1.09	1.09		1.09	1.09	1.09		0	0	0	
1e+12	1.08	1.0867	1.09	0.0057735	1.08	1.09	1.1	0.01	-0.01	0.0033333	0.01	0.011547
5e+12	1.08	1.0933	1.1	0.011547	1.08	1.09	1.1	0.01	-0.01	-0.0033333	0	0.0057735
1e+13	1.08	1.08	1.08	0	1.08	1.08	1.08	0	0	0	0	0

ce Test: 24.50 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_40%/SYNC1/5//OPEN//@SYNC_IN_DUTY_CYCLE_RA





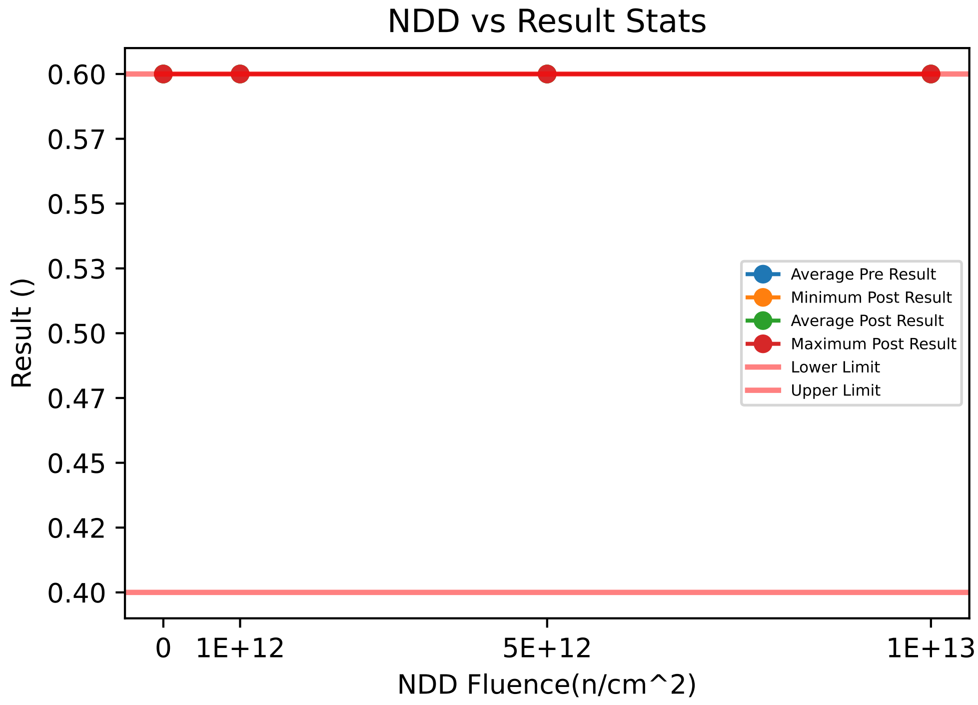
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 ())

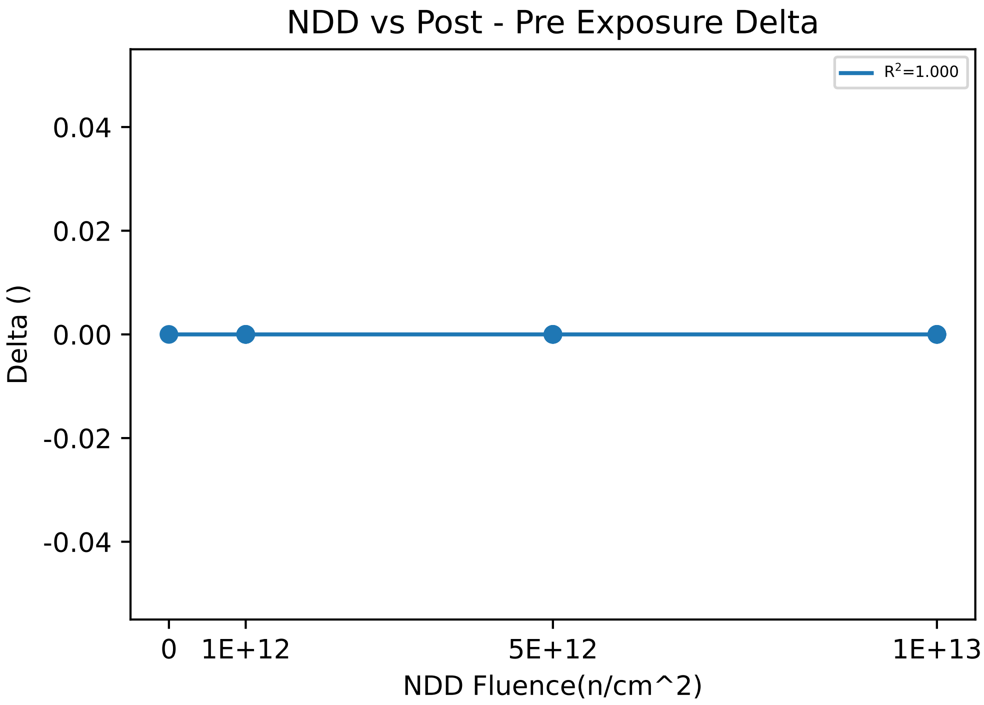
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.4	0.4	0
504	1e+12	NDD	0.4	0.4	0
505	1e+12	NDD	0.4	0.4	0
506	5e+12	NDD	0.4	0.4	0
507	5e+12	NDD	0.4	0.4	0
508	5e+12	NDD	0.4	0.4	0
509	1e+13	NDD	0.4	0.4	0
510	1e+13	NDD	0.4	0.4	0
511	1e+13	NDD	0.4	0.4	0
512	0	Correlation	0.4	0.4	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4		0.4	0.4	0.4		0	0	0	
1e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
5e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
1e+13	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

ce Test: 24.51 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_60%/SYNC1/5//OPEN//@SYNC_IN_DUTY_CYCLE_RA





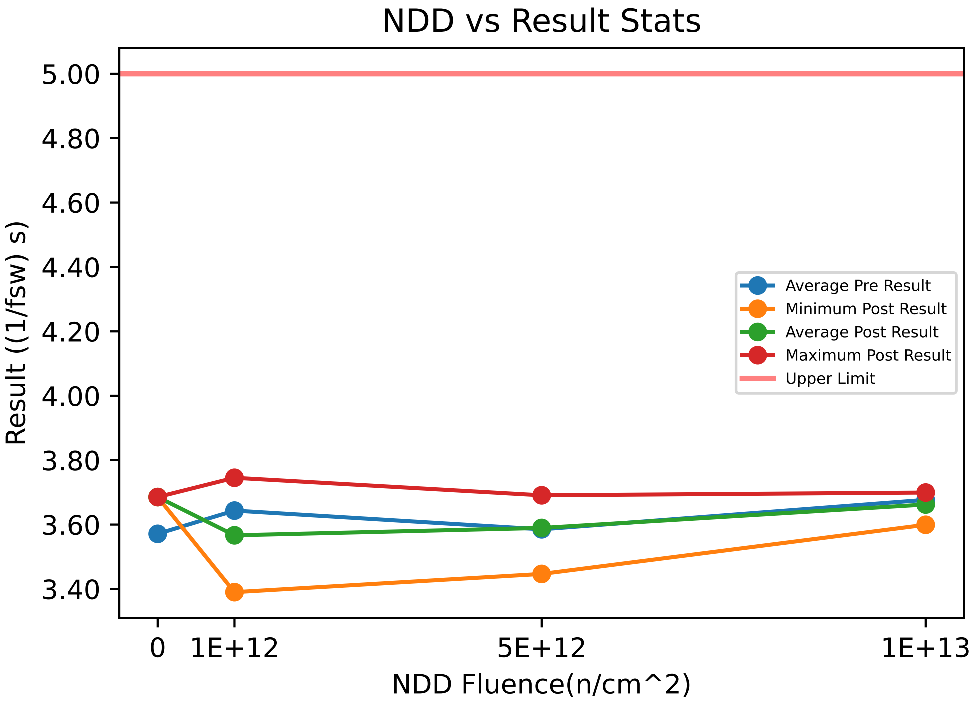
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 ())

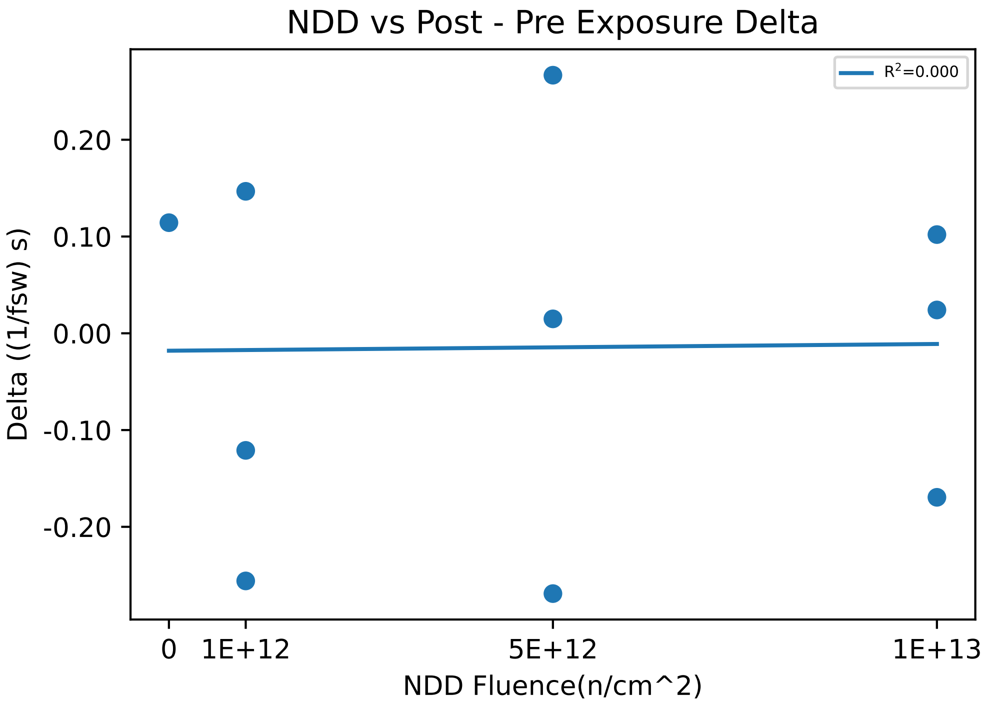
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6	0.6	0
504	1e+12	NDD	0.6	0.6	0
505	1e+12	NDD	0.6	0.6	0
506	5e+12	NDD	0.6	0.6	0
507	5e+12	NDD	0.6	0.6	0
508	5e+12	NDD	0.6	0.6	0
509	1e+13	NDD	0.6	0.6	0
510	1e+13	NDD	0.6	0.6	0
511	1e+13	NDD	0.6	0.6	0
512	0	Correlation	0.6	0.6	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6		0.6	0.6	0.6		0	0	0	
1e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
5e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
1e+13	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

Device Test: 24.52 T_CLOCK_DET(TIMING|CLKDETECT/SYNC1/5//511k//@T_CLOCK_DET)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

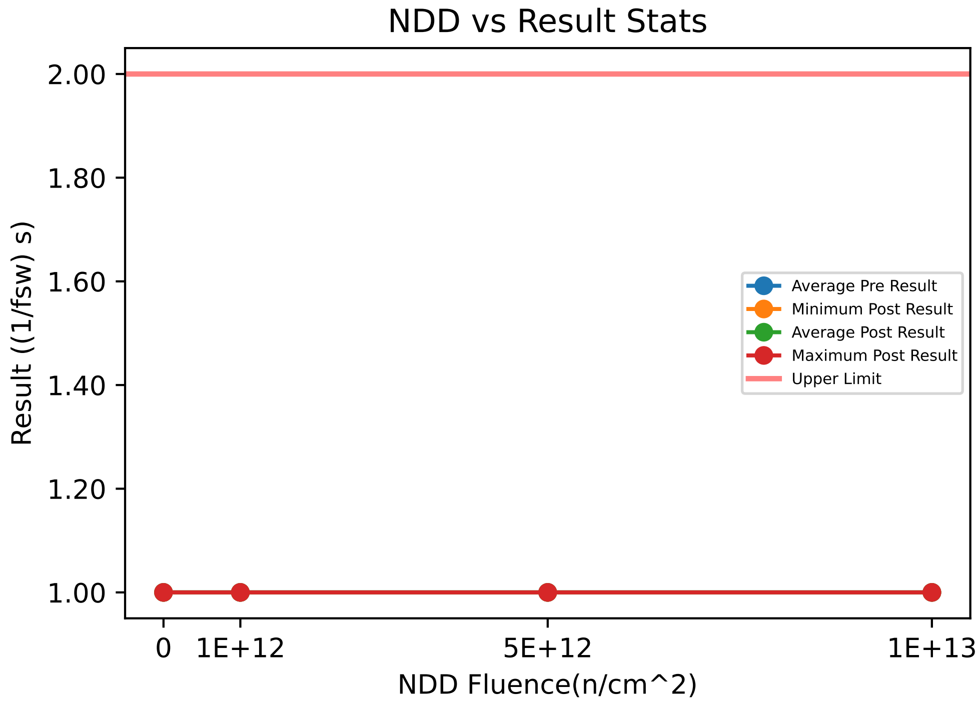
Test Results (Upper Limit = 5.0 ((1/fsw) s))

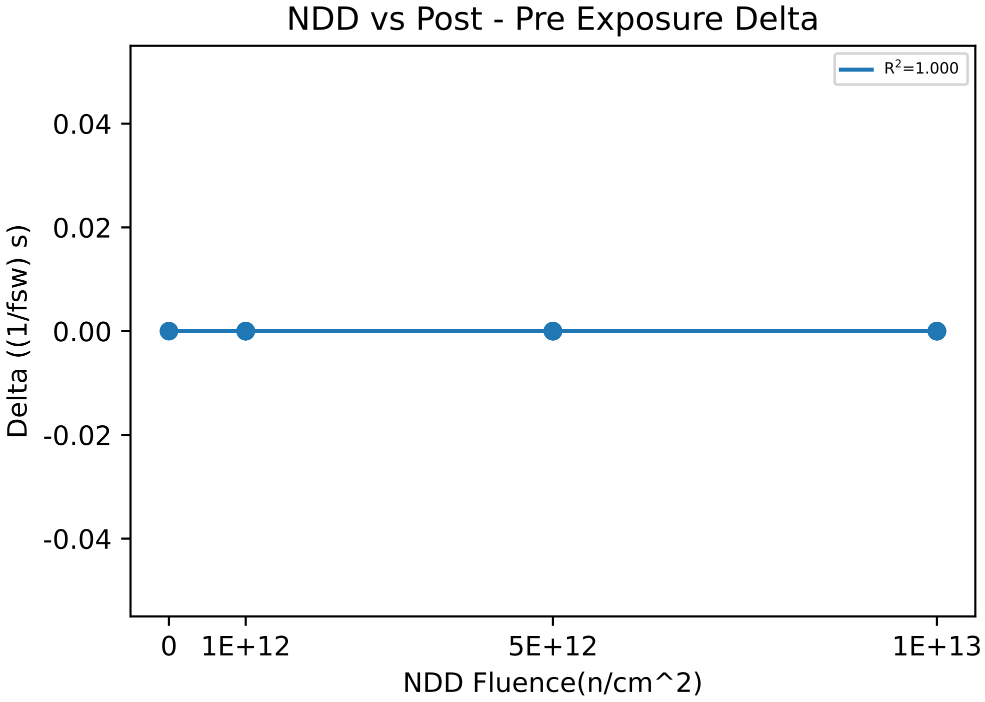
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.646	3.3901	-0.2559
504	1e+12	NDD	3.5986	3.7453	0.1467
505	1e+12	NDD	3.6855	3.5645	-0.121
506	5e+12	NDD	3.616	3.6309	0.0149
507	5e+12	NDD	3.4242	3.6909	0.2667
508	5e+12	NDD	3.7157	3.4467	-0.269
509	1e+13	NDD	3.5752	3.5993	0.0241
510	1e+13	NDD	3.5974	3.6994	0.102
511	1e+13	NDD	3.8576	3.6881	-0.1695
512	0	Correlation	3.5712	3.6855	0.1143

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.5712	3.5712	3.5712		3.6855	3.6855	3.6855		0.1143	0.1143	0.1143	
1e+12	3.5986	3.6434	3.6855	0.04351	3.3901	3.5666	3.7453	0.17761	-0.2559	-0.076733	0.1467	0.20492
5e+12	3.4242	3.5853	3.7157	0.14816	3.4467	3.5895	3.6909	0.12726	-0.269	0.0042	0.2667	0.26801
1e+13	3.5752	3.6767	3.8576	0.15703	3.5993	3.6623	3.6994	0.054823	-0.1695	-0.014467	0.102	0.1398

Device Test: 24.53 T_CLOCK_DET_EXT(TIMING|CLKDETECT/SYNC1/5//511k//@T_CLOCK_DET_EXT)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

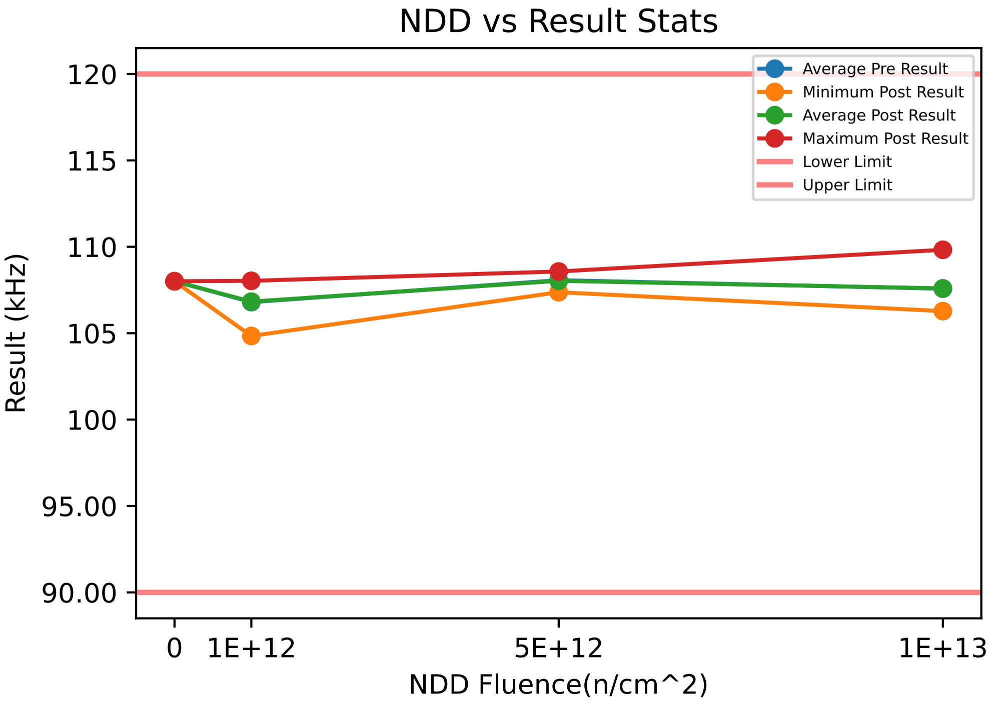
Test Results (Upper Limit = 2.0 ((1/fsw) s))

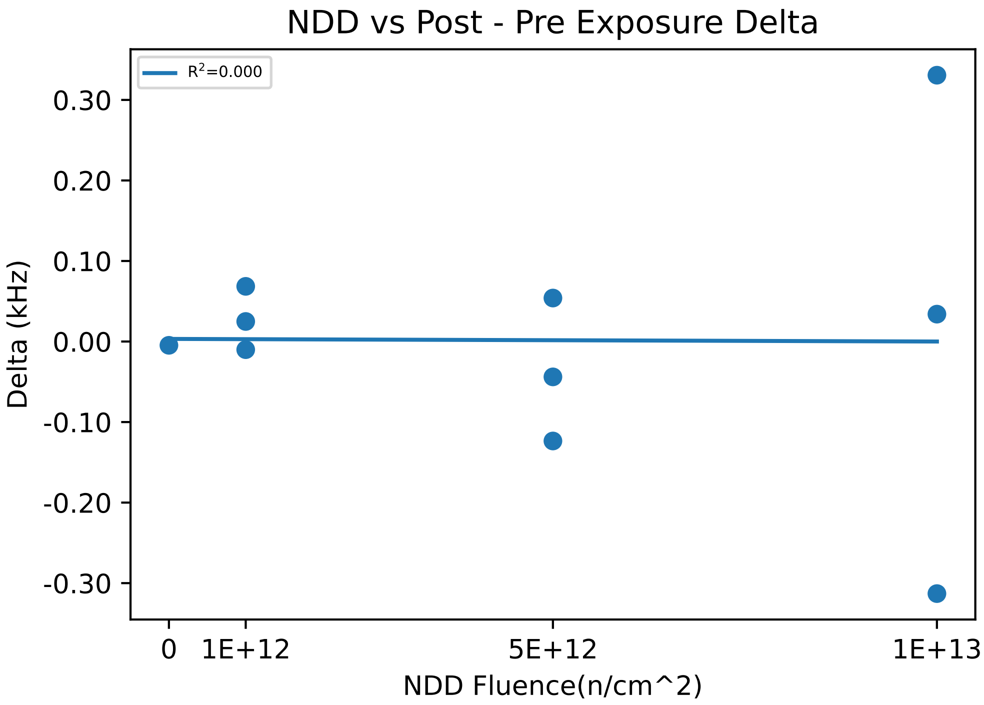
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1	1	0
504	1e+12	NDD	1	1	0
505	1e+12	NDD	1	1	0
506	5e+12	NDD	1	1	0
507	5e+12	NDD	1	1	0
508	5e+12	NDD	1	1	0
509	1e+13	NDD	1	1	0
510	1e+13	NDD	1	1	0
511	1e+13	NDD	1	1	0
512	0	Correlation	1	1	0

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1		1	1	1		0	0	0	
1e+12	1	1	1	0	1	1	1	0	0	0	0	0
5e+12	1	1	1	0	1	1	1	0	0	0	0	0
1e+13	1	1	1	0	1	1	1	0	0	0	0	0

Device Test: 24.54 EXT_SET_FREQ_100KHZ_5V(FREQ|100kHz/SYNC1/5//511k//@EXT_SET_FREQ_100KHZ_5V)





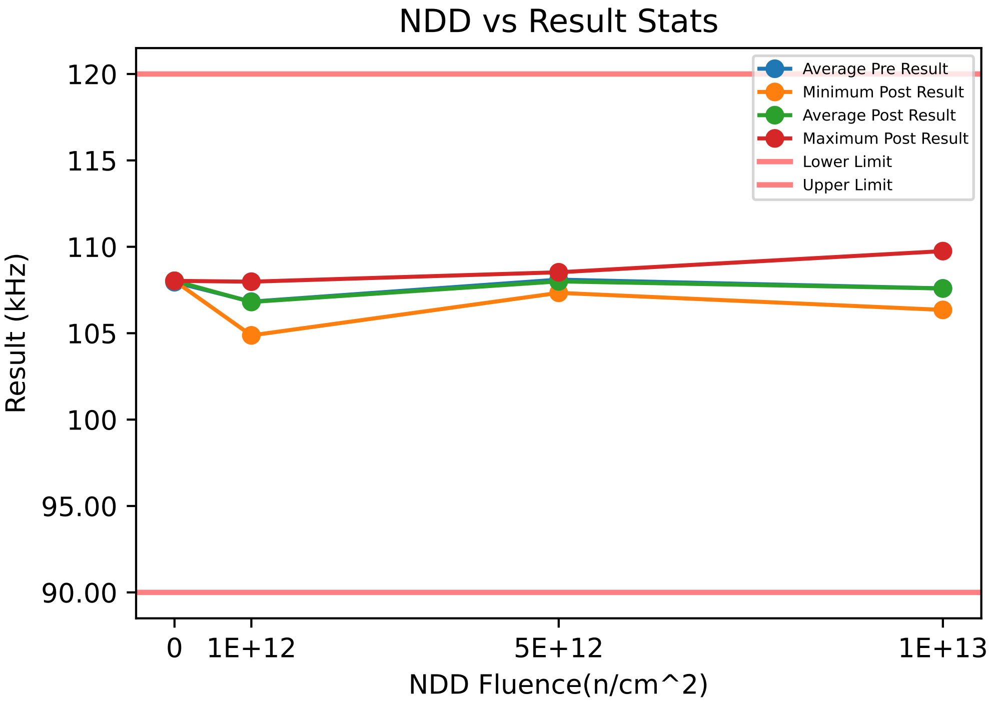
Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

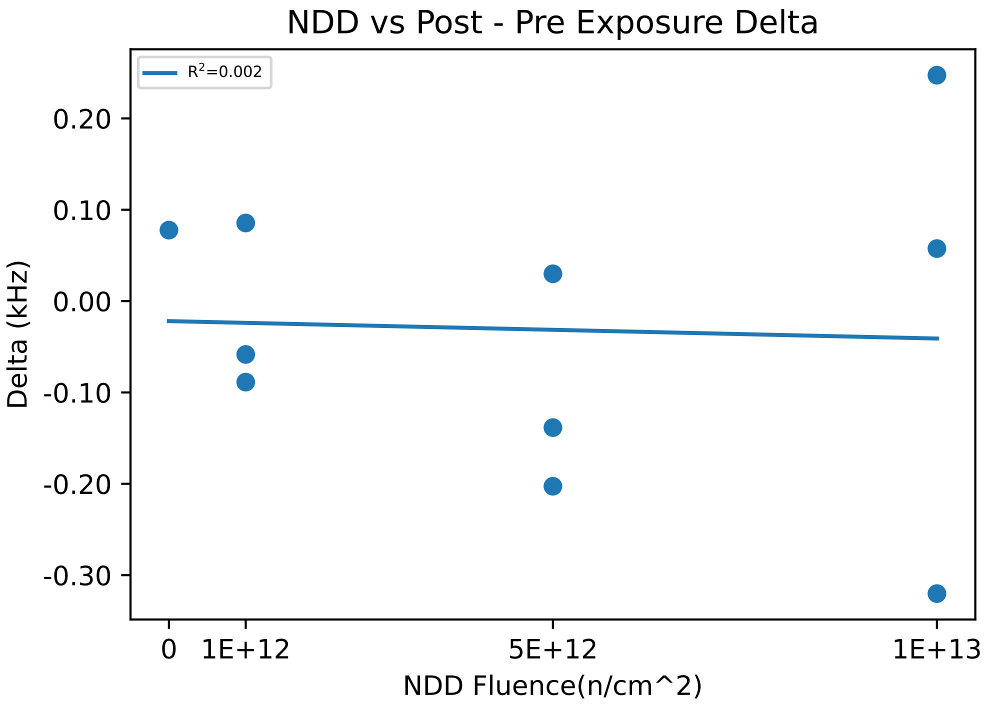
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	107.96	108.03	0.0685
504	1e+12	NDD	107.62	107.61	-0.0101
505	1e+12	NDD	104.82	104.84	0.0249
506	5e+12	NDD	107.42	107.37	-0.0439
507	5e+12	NDD	108.09	108.15	0.054
508	5e+12	NDD	108.69	108.57	-0.1235
509	1e+13	NDD	109.5	109.83	0.3307
510	1e+13	NDD	106.59	106.28	-0.313
511	1e+13	NDD	106.64	106.67	0.034
512	0	Correlation	108.01	108.01	-0.0047

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	108.01	108.01	108.01		108.01	108.01	108.01		-0.0047	-0.0047	-0.0047	
1e+12	104.82	106.8	107.96	1.7261	104.84	106.83	108.03	1.733	-0.0101	0.027767	0.0685	0.039378
5e+12	107.42	108.07	108.69	0.6398	107.37	108.03	108.57	0.60824	-0.1235	-0.0378	0.054	0.088907
1e+13	106.59	107.58	109.5	1.6639	106.28	107.59	109.83	1.9452	-0.313	0.017233	0.3307	0.32218

Device Test: 24.55 EXT_SET_FREQ_100KHZ_5V(FREQ|100kHz/SYNC2/5//511k//@EXT_SET_FREQ_100KHZ_5V)





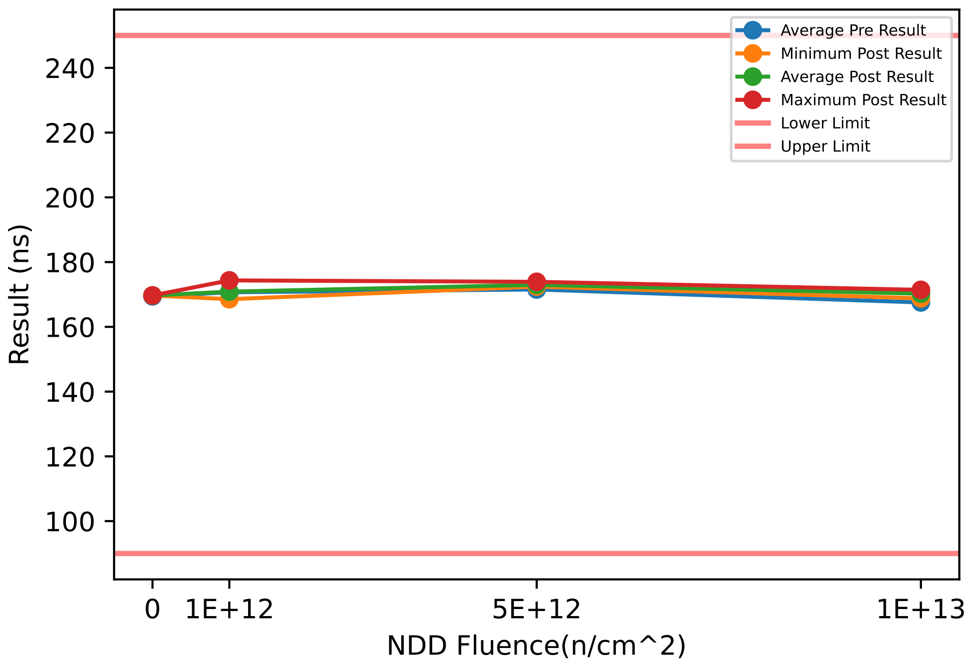
Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

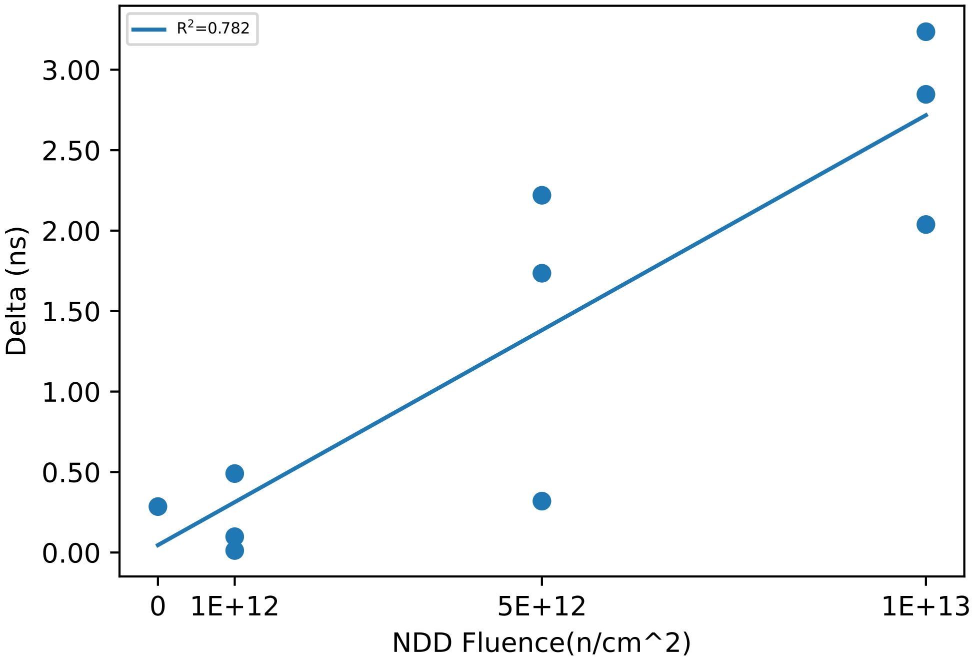
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	108.04	107.98	-0.0584
504	1e+12	NDD	107.65	107.56	-0.0887
505	1e+12	NDD	104.79	104.87	0.0855
506	5e+12	NDD	107.47	107.34	-0.1385
507	5e+12	NDD	108.1	108.13	0.0299
508	5e+12	NDD	108.73	108.53	-0.2027
509	1e+13	NDD	109.5	109.75	0.2473
510	1e+13	NDD	106.67	106.35	-0.3202
511	1e+13	NDD	106.61	106.66	0.0575
512	0	Correlation	107.95	108.03	0.0777

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.95	107.95	107.95		108.03	108.03	108.03		0.0777	0.0777	0.0777	
1e+12	104.79	106.83	108.04	1.7753	104.87	106.81	107.98	1.6859	-0.0887	-0.020533	0.0855	0.093069
5e+12	107.47	108.1	108.73	0.62735	107.34	108	108.53	0.60645	-0.2027	-0.10377	0.0299	0.12013
1e+13	106.61	107.59	109.5	1.655	106.35	107.59	109.75	1.88	-0.3202	-0.0051333	0.2473	0.28889

Device Test: 24.56 SYNC1_SW_DELAY_OUTPUT(TIMING|DELAY/SYNC1/5//511k//@SYNC1_SW_DELAY_OUTPUT)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

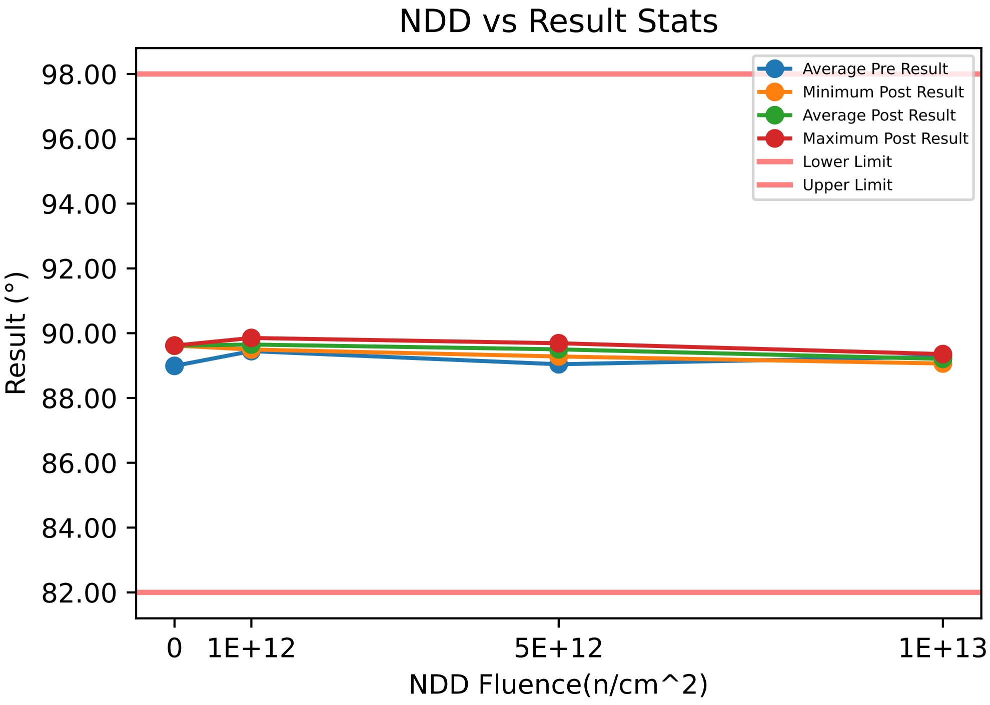
Test Results (Lower Limit = 90.0, Upper Limit = 250.0 (ns))

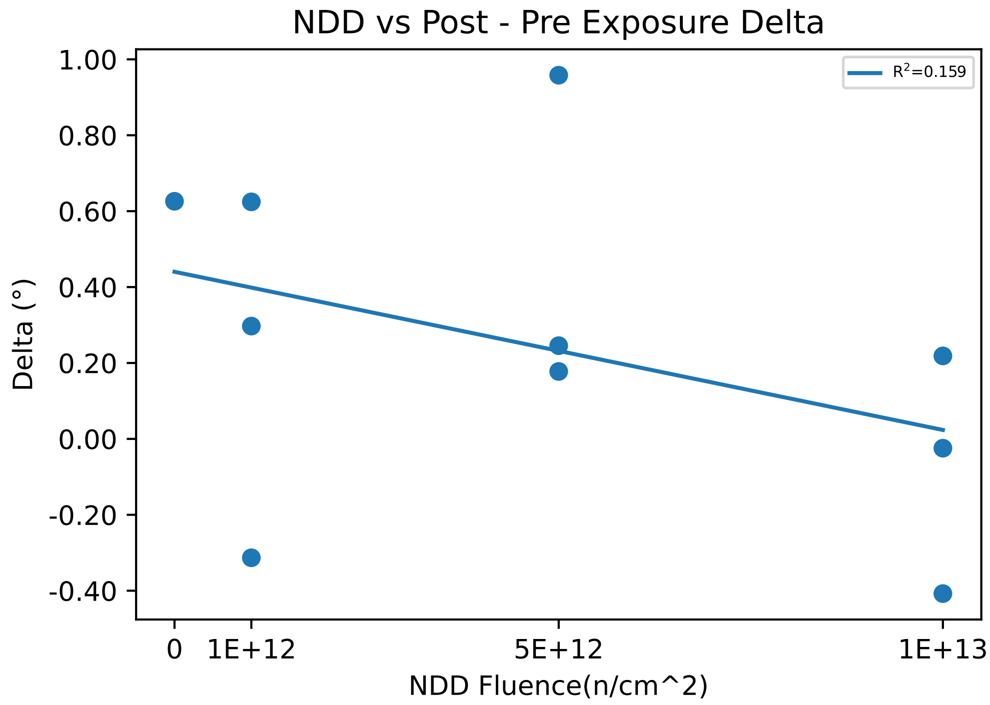
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	173.86	174.35	0.4905
504	1e+12	NDD	168.53	168.55	0.0124
505	1e+12	NDD	169.64	169.74	0.0982
506	5e+12	NDD	173.59	173.91	0.3192
507	5e+12	NDD	170.22	172.44	2.2198
508	5e+12	NDD	170.83	172.56	1.7353
509	1e+13	NDD	168.19	171.43	3.236
510	1e+13	NDD	165.95	168.8	2.8469
511	1e+13	NDD	168.49	170.53	2.038
512	0	Correlation	169.41	169.7	0.2853

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	169.41	169.41	169.41		169.7	169.7	169.7		0.2853	0.2853	0.2853	
1e+12	168.53	170.68	173.86	2.8108	168.55	170.88	174.35	3.0656	0.0124	0.20037	0.4905	0.2549
5e+12	170.22	171.55	173.59	1.7978	172.44	172.97	173.91	0.81686	0.3192	1.4248	2.2198	0.98762
1e+13	165.95	167.54	168.49	1.3866	168.8	170.25	171.43	1.3358	2.038	2.707	3.236	0.61114

Device Test: 24.57 SYNC_PH_SHIFT(TIMING|PHASESHIFT/SYNC1/5//511k//@SYNC_PH_SHIFT)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

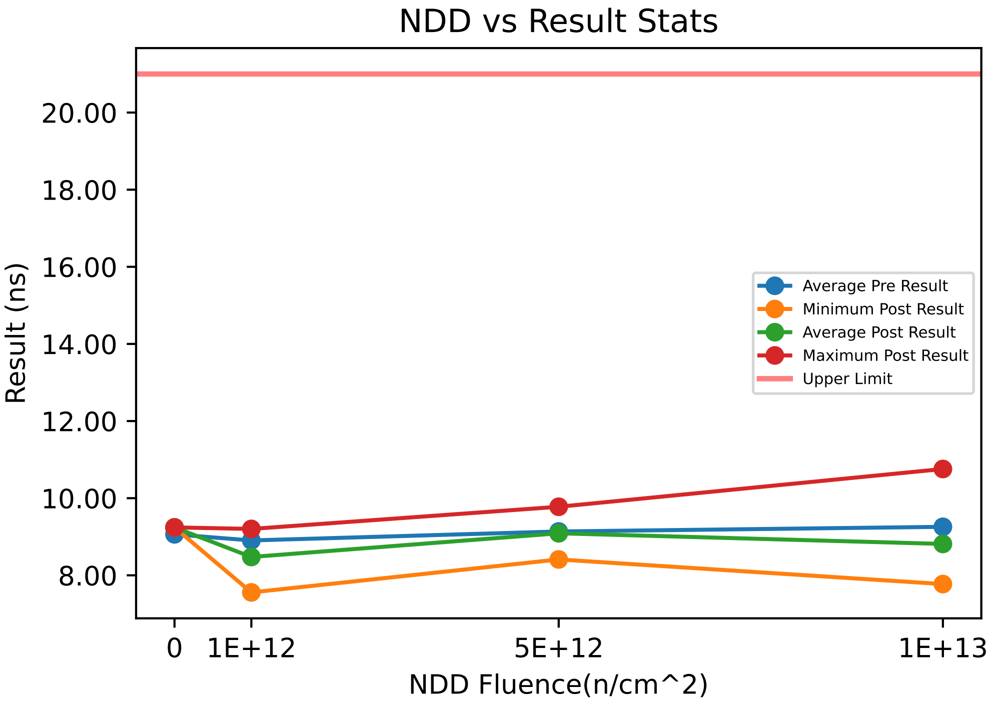
Test Results (Lower Limit = 82.0, Upper Limit = 98.0 (°))

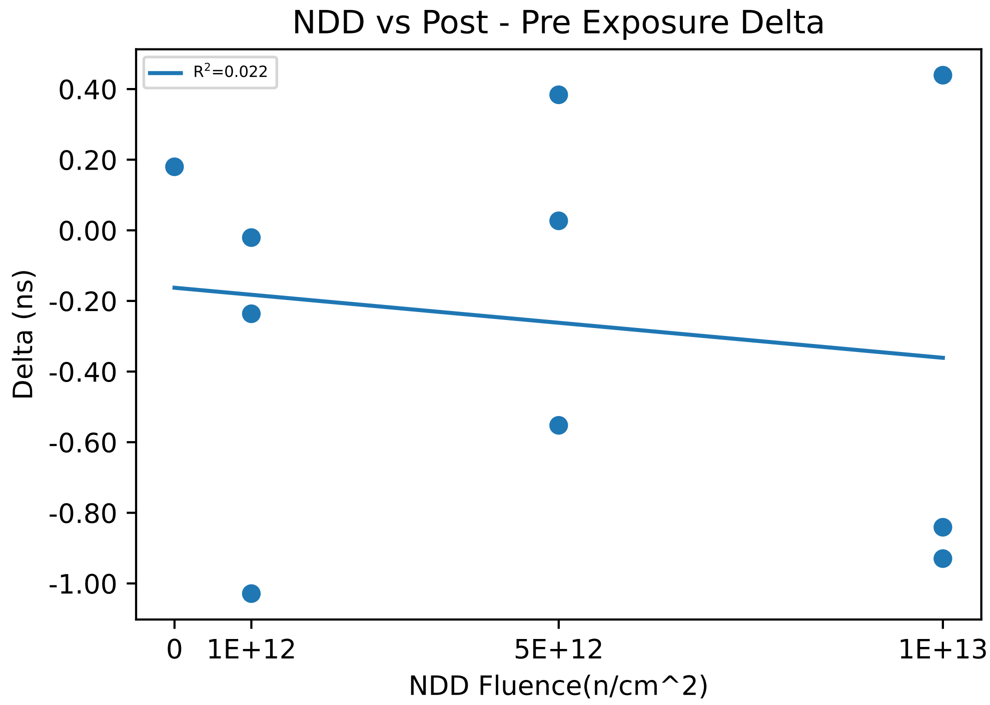
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	89.81	89.497	-0.3132
504	1e+12	NDD	89.301	89.599	0.2972
505	1e+12	NDD	89.229	89.853	0.6245
506	5e+12	NDD	88.732	89.69	0.9582
507	5e+12	NDD	89.355	89.533	0.1777
508	5e+12	NDD	89.036	89.282	0.2456
509	1e+13	NDD	89.379	89.355	-0.0245
510	1e+13	NDD	88.98	89.199	0.2186
511	1e+13	NDD	89.472	89.064	-0.4076
512	0	Correlation	88.991	89.617	0.626

Test Statistics (°)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	88.991	88.991	88.991		89.617	89.617	89.617		0.626	0.626	0.626	
1e+12	89.229	89.447	89.81	0.31671	89.497	89.65	89.853	0.18365	-0.3132	0.20283	0.6245	0.47592
5e+12	88.732	89.041	89.355	0.31158	89.282	89.501	89.69	0.20603	0.1777	0.4605	0.9582	0.43236
1e+13	88.98	89.277	89.472	0.26114	89.064	89.206	89.355	0.14558	-0.4076	-0.071167	0.2186	0.3157

Device Test: 24.58 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC1/5//511k//@SYNC_LH_RISE_TIME)





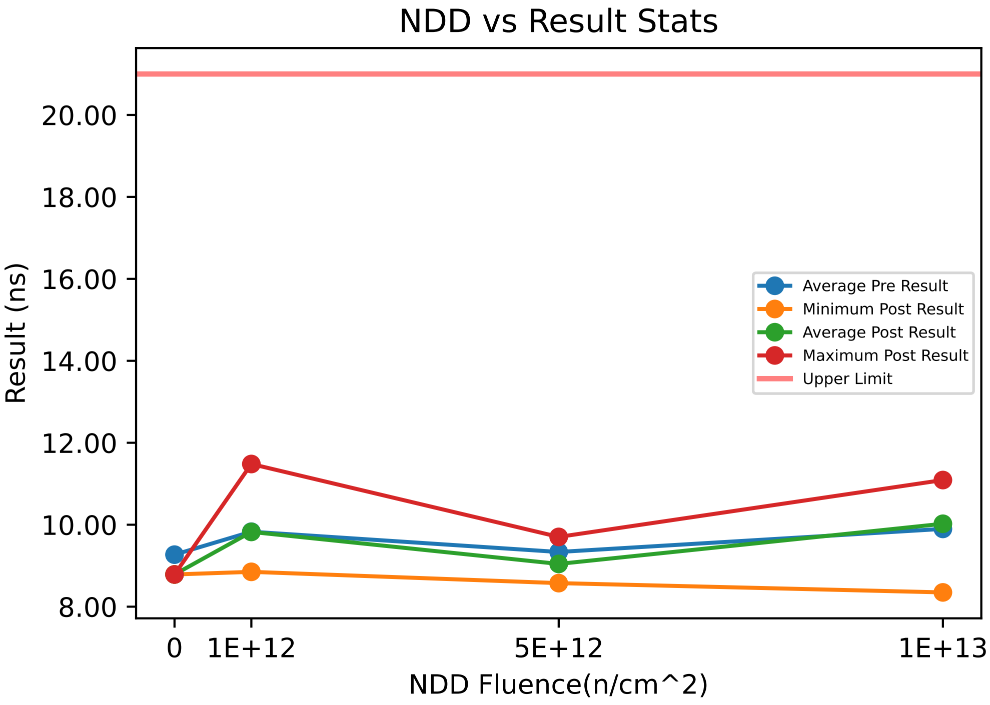
Test Results (Upper Limit = 21.0 (ns))

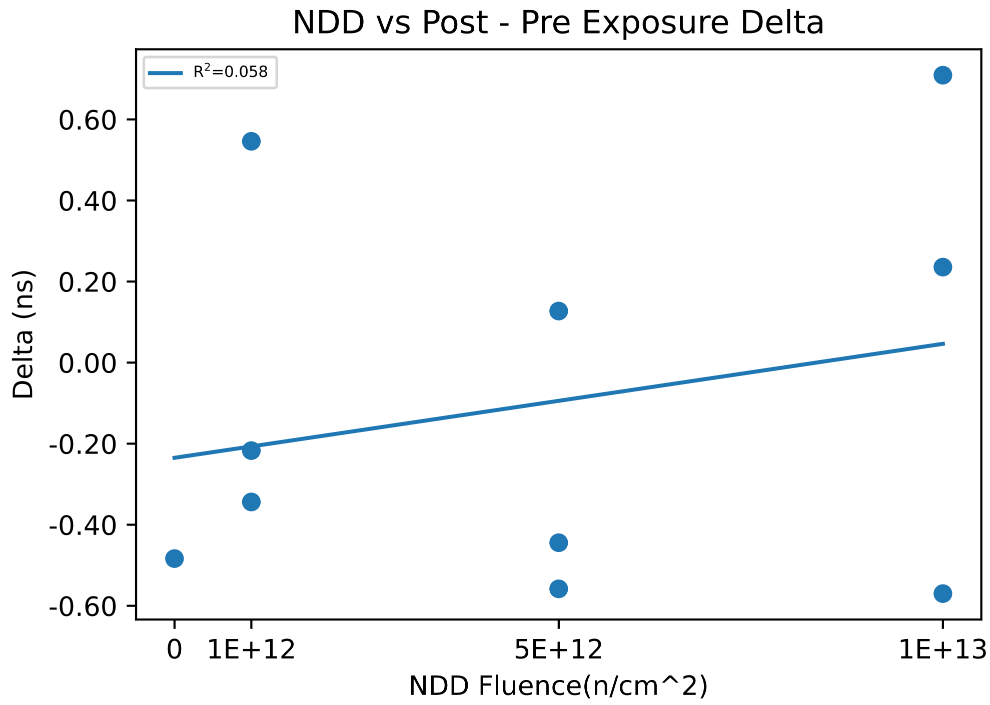
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.2233	9.2027	-0.0206
504	1e+12	NDD	8.9031	8.6668	-0.2363
505	1e+12	NDD	8.5855	7.5567	-1.0288
506	5e+12	NDD	8.9637	8.4114	-0.5523
507	5e+12	NDD	9.0526	9.0795	0.0269
508	5e+12	NDD	9.3935	9.7773	0.3838
509	1e+13	NDD	10.317	10.757	0.4393
510	1e+13	NDD	8.7027	7.773	-0.9297
511	1e+13	NDD	8.7516	7.9107	-0.8409
512	0	Correlation	9.0623	9.2422	0.1799

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.0623	9.0623	9.0623		9.2422	9.2422	9.2422		0.1799	0.1799	0.1799	
1e+12	8.5855	8.904	9.2233	0.3189	7.5567	8.4754	9.2027	0.83953	-1.0288	-0.42857	-0.0206	0.53089
5e+12	8.9637	9.1366	9.3935	0.22688	8.4114	9.0894	9.7773	0.683	-0.5523	-0.0472	0.3838	0.47243
1e+13	8.7027	9.2573	10.317	0.91851	7.773	8.8135	10.757	1.6844	-0.9297	-0.44377	0.4393	0.76605

Device Test: 24.59 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC2/5//511k//@SYNC_LH_RISE_TIME)





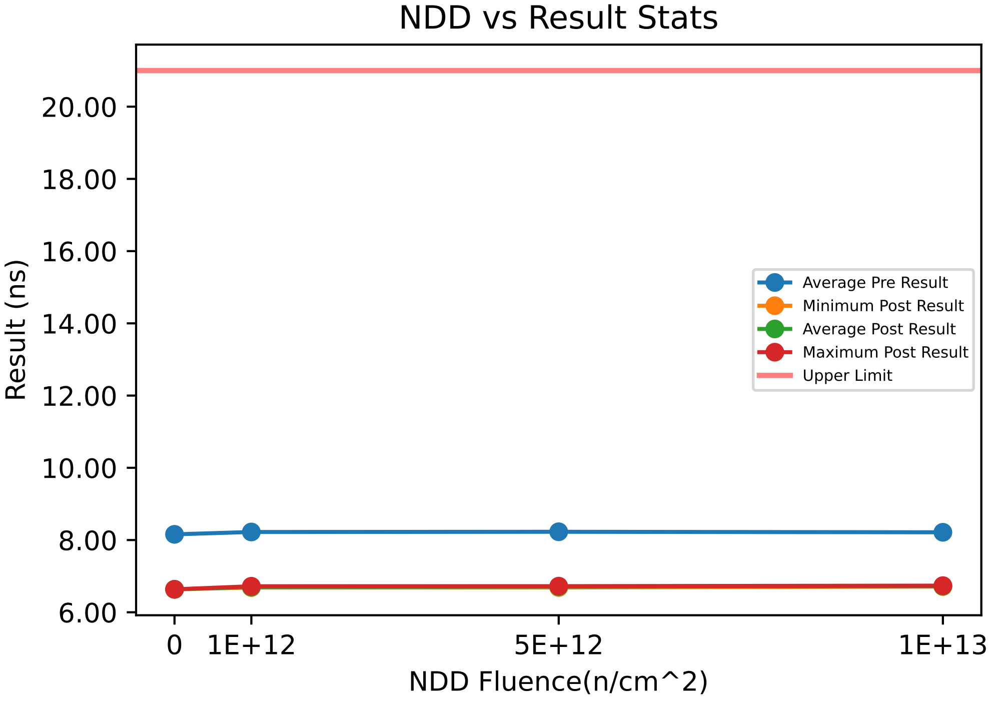
Test Results (Upper Limit = 21.0 (ns))

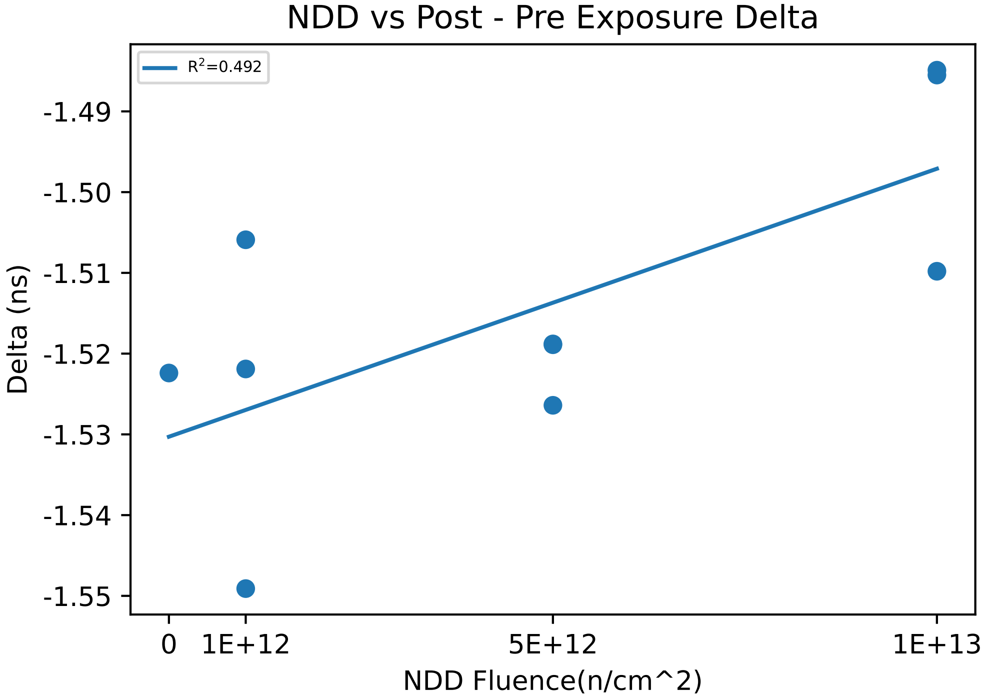
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.1941	8.8503	-0.3438
504	1e+12	NDD	9.359	9.1419	-0.2171
505	1e+12	NDD	10.936	11.482	0.546
506	5e+12	NDD	9.5755	9.7027	0.1272
507	5e+12	NDD	9.2968	8.8524	-0.4444
508	5e+12	NDD	9.1334	8.5752	-0.5582
509	1e+13	NDD	8.9185	8.3486	-0.5699
510	1e+13	NDD	10.381	11.09	0.7091
511	1e+13	NDD	10.395	10.631	0.2356
512	0	Correlation	9.2696	8.7861	-0.4835

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.2696	9.2696	9.2696		8.7861	8.7861	8.7861		-0.4835	-0.4835	-0.4835	
1e+12	9.1941	9.8297	10.936	0.96168	8.8503	9.8248	11.482	1.4427	-0.3438	-0.0049667	0.546	0.48134
5e+12	9.1334	9.3352	9.5755	0.22354	8.5752	9.0434	9.7027	0.58752	-0.5582	-0.2918	0.1272	0.3673
1e+13	8.9185	9.8984	10.395	0.84862	8.3486	10.023	11.09	1.4684	-0.5699	0.12493	0.7091	0.64664

Device Test: 24.60 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC1/5//511k//@SYNC_HL_FALL_TIME)





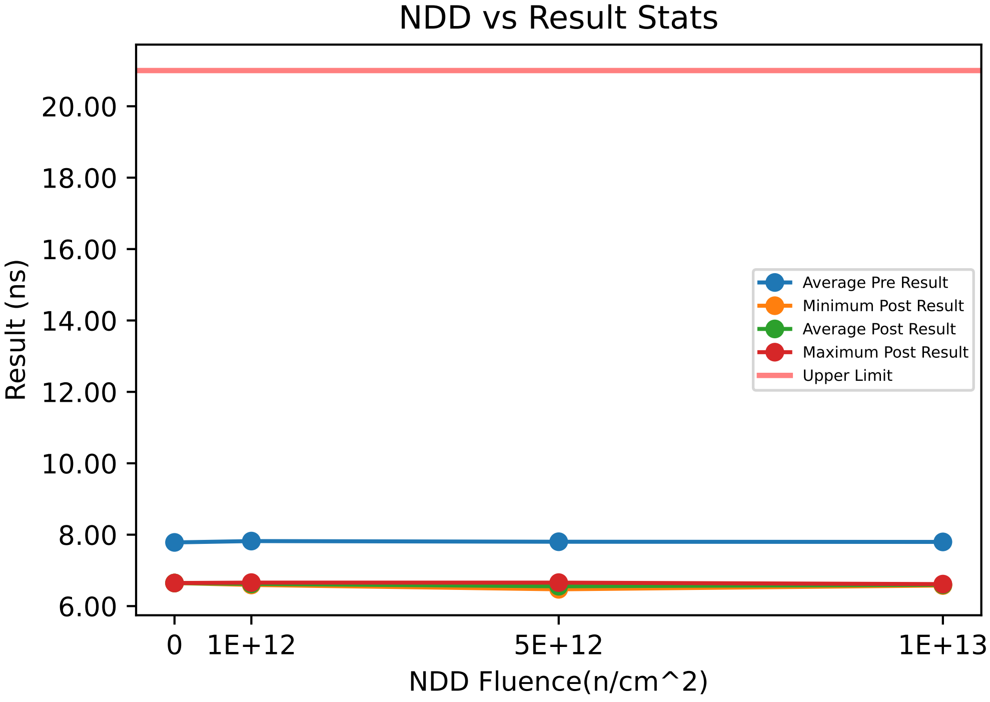
Test Results (Upper Limit = 21.0 (ns))

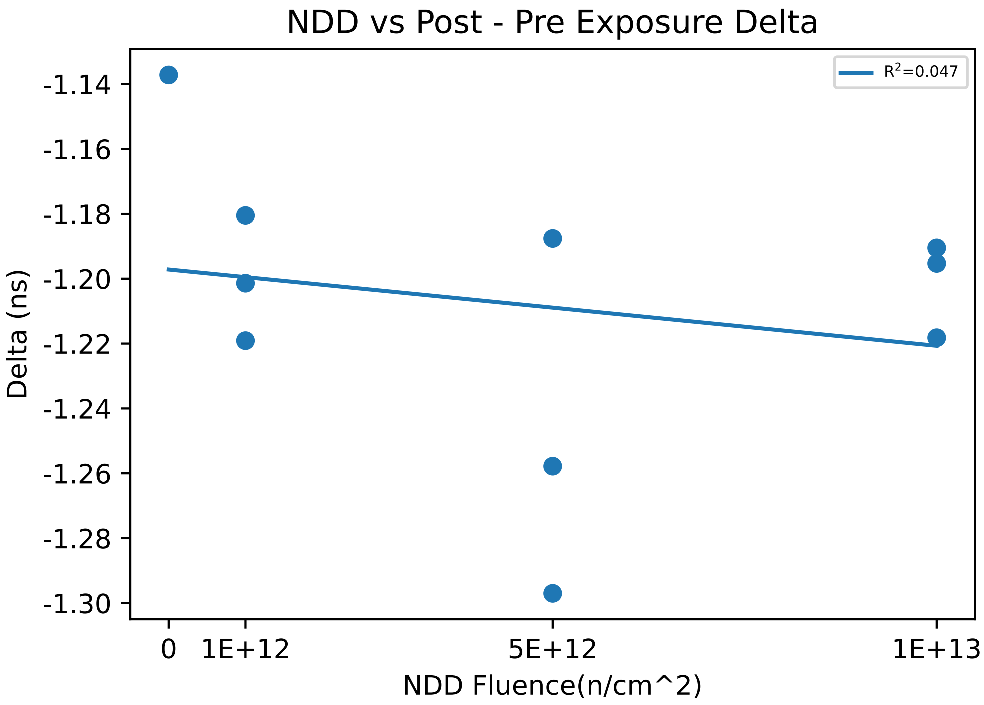
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	8.2268	6.7209	-1.5059
504	1e+12	NDD	8.2059	6.684	-1.5219
505	1e+12	NDD	8.2363	6.6872	-1.5491
506	5e+12	NDD	8.2335	6.7147	-1.5188
507	5e+12	NDD	8.2115	6.6851	-1.5264
508	5e+12	NDD	8.2421	6.7232	-1.5189
509	1e+13	NDD	8.2005	6.715	-1.4855
510	1e+13	NDD	8.2226	6.7377	-1.4849
511	1e+13	NDD	8.2216	6.7118	-1.5098
512	0	Correlation	8.1579	6.6355	-1.5224

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.1579	8.1579	8.1579		6.6355	6.6355	6.6355		-1.5224	-1.5224	-1.5224	
1e+12	8.2059	8.223	8.2363	0.015552	6.684	6.6974	6.7209	0.020443	-1.5491	-1.5256	-1.5059	0.021841
5e+12	8.2115	8.229	8.2421	0.015781	6.6851	6.7077	6.7232	0.02	-1.5264	-1.5214	-1.5188	0.0043593
1e+13	8.2005	8.2149	8.2226	0.012481	6.7118	6.7215	6.7377	0.014121	-1.5098	-1.4934	-1.4849	0.014206

Device Test: 24.61 SYNC_HL_FALL_TIME(TIMING|FALL/SYNC2/5//511k//@SYNC_HL_FALL_TIME)





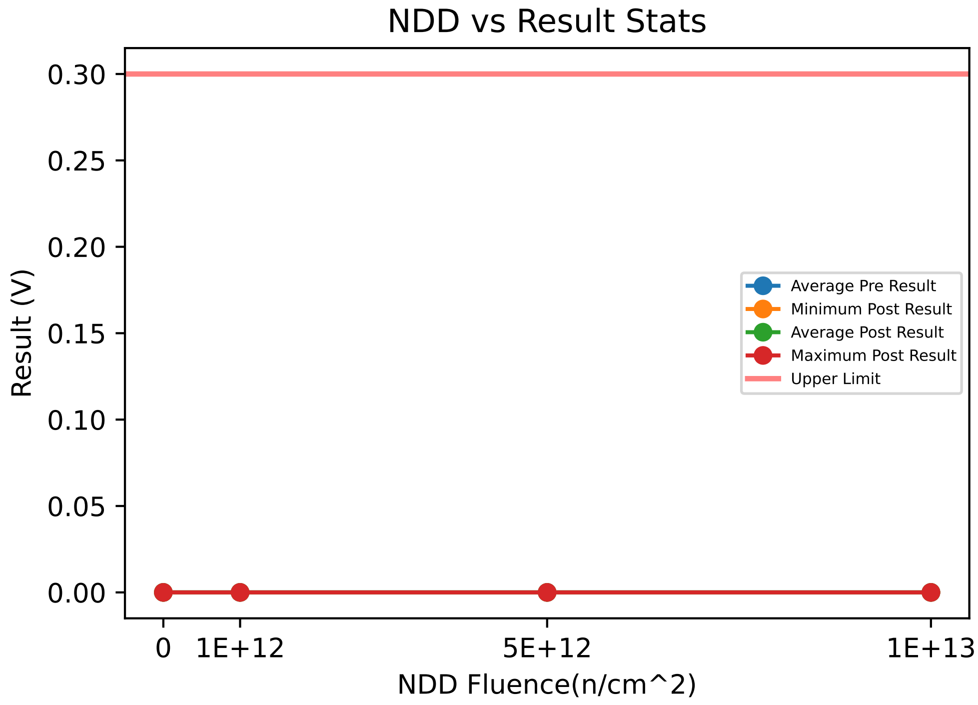
Test Results (Upper Limit = 21.0 (ns))

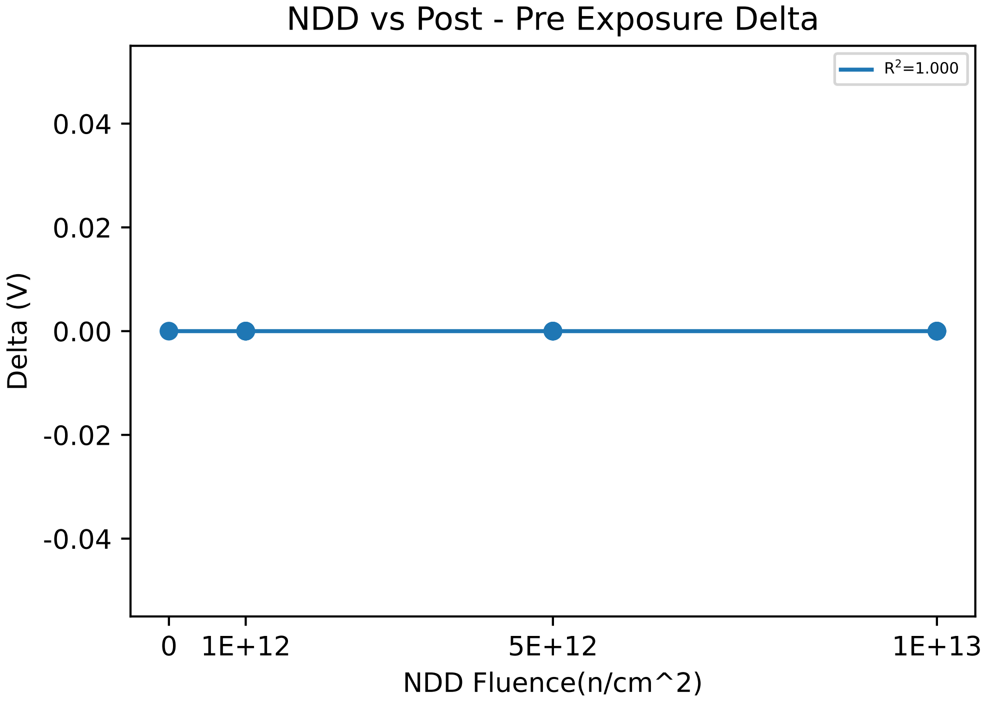
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	7.8385	6.658	-1.1805
504	1e+12	NDD	7.8109	6.5918	-1.2191
505	1e+12	NDD	7.8138	6.6124	-1.2014
506	5e+12	NDD	7.8449	6.6573	-1.1876
507	5e+12	NDD	7.7959	6.5381	-1.2578
508	5e+12	NDD	7.7669	6.4699	-1.297
509	1e+13	NDD	7.788	6.5975	-1.1905
510	1e+13	NDD	7.7942	6.576	-1.2182
511	1e+13	NDD	7.811	6.6157	-1.1953
512	0	Correlation	7.7837	6.6465	-1.1372

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	7.7837	7.7837	7.7837		6.6465	6.6465	6.6465		-1.1372	-1.1372	-1.1372	
1e+12	7.8109	7.8211	7.8385	0.015167	6.5918	6.6207	6.658	0.033878	-1.2191	-1.2003	-1.1805	0.019322
5e+12	7.7669	7.8026	7.8449	0.039425	6.4699	6.5551	6.6573	0.09485	-1.297	-1.2475	-1.1876	0.055427
1e+13	7.788	7.7977	7.811	0.0119	6.576	6.5964	6.6157	0.019873	-1.2182	-1.2013	-1.1905	0.014803

Device Test: 24.62 SYNC_OUT_HIGH(LEVELS|VOH/SYNC1/5//511k//@SYNC_OUT_HIGH)





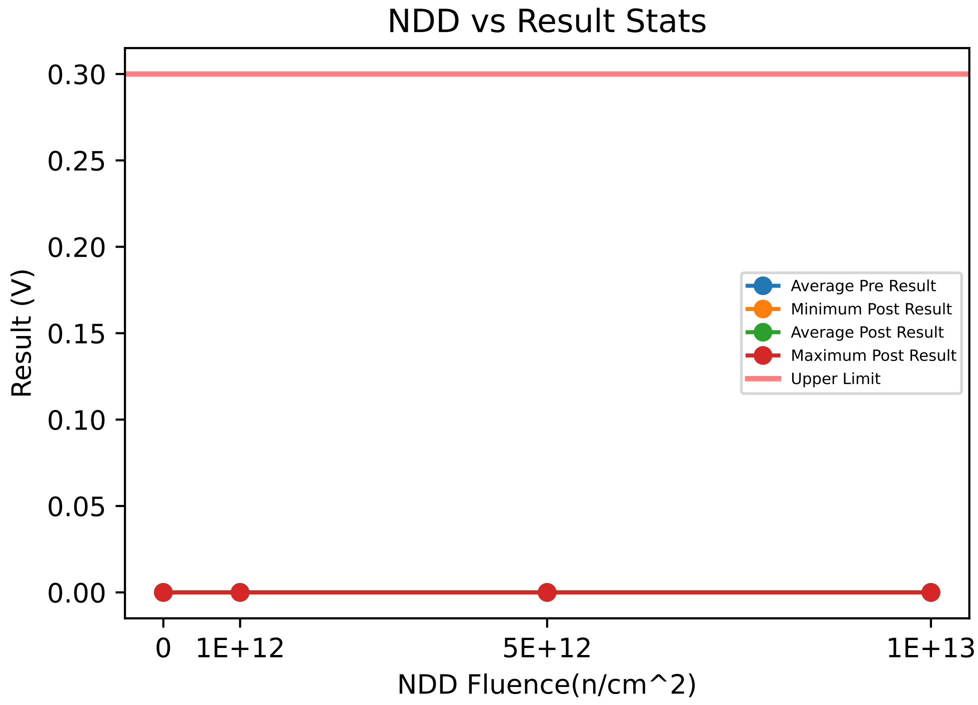
Test Results (Upper Limit = 0.3 (V))

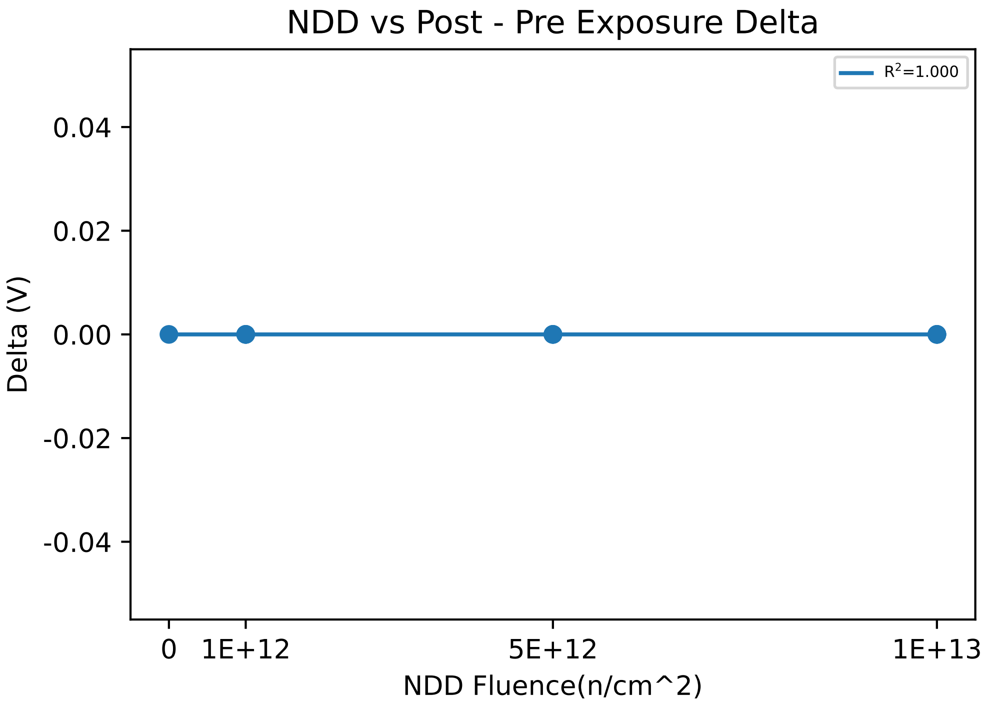
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0	0	0
504	1e+12	NDD	0	0	0
505	1e+12	NDD	0	0	0
506	5e+12	NDD	0	0	0
507	5e+12	NDD	0	0	0
508	5e+12	NDD	0	0	0
509	1e+13	NDD	0	0	0
510	1e+13	NDD	0	0	0
511	1e+13	NDD	0	0	0
512	0	Correlation	0	0	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0	0	0		0	0	0		0	0	0	
1e+12	0	0	0	0	0	0	0	0	0	0	0	0
5e+12	0	0	0	0	0	0	0	0	0	0	0	0
1e+13	0	0	0	0	0	0	0	0	0	0	0	0

Device Test: 24.63 SYNC_OUT_HIGH(LEVELS|VOH/SYNC2/5//511k//@SYNC_OUT_HIGH)





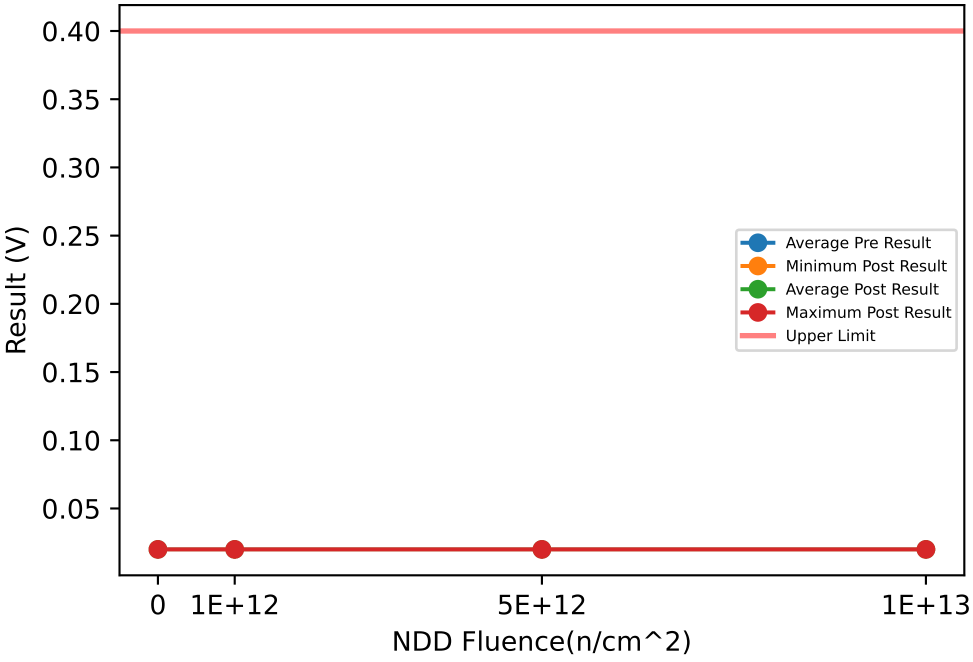
Test Results (Upper Limit = 0.3 (V))

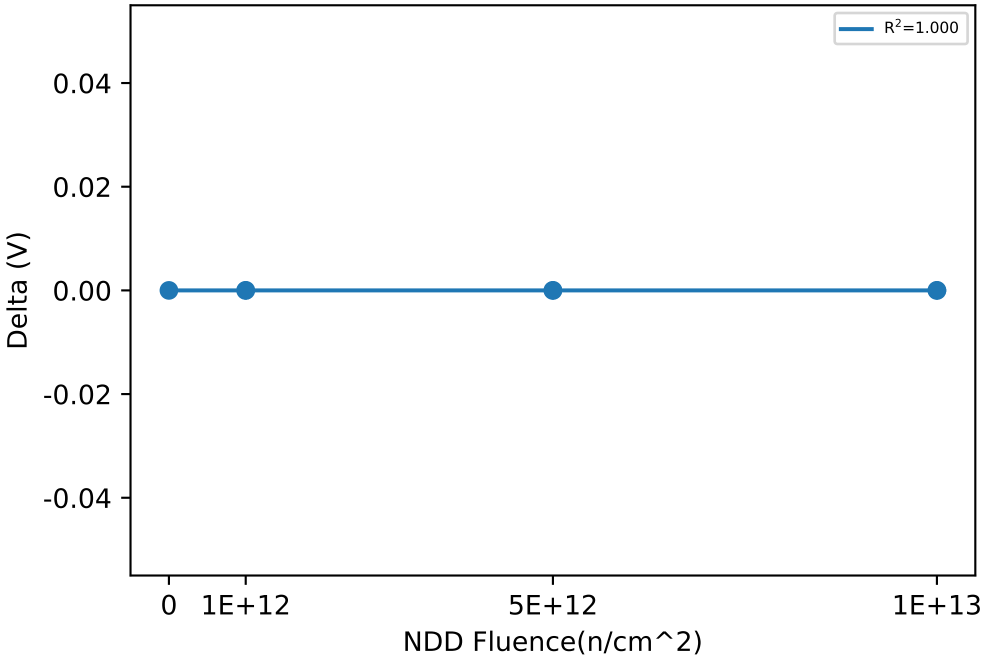
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0	0	0
504	1e+12	NDD	0	0	0
505	1e+12	NDD	0	0	0
506	5e+12	NDD	0	0	0
507	5e+12	NDD	0	0	0
508	5e+12	NDD	0	0	0
509	1e+13	NDD	0	0	0
510	1e+13	NDD	0	0	0
511	1e+13	NDD	0	0	0
512	0	Correlation	0	0	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0	0	0		0	0	0		0	0	0	
1e+12	0	0	0	0	0	0	0	0	0	0	0	0
5e+12	0	0	0	0	0	0	0	0	0	0	0	0
1e+13	0	0	0	0	0	0	0	0	0	0	0	0

Device Test: 24.64 SYNC_OUT_LOW(LEVELS|VOL/SYNC1/5//511k//@SYNC_OUT_LOW)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

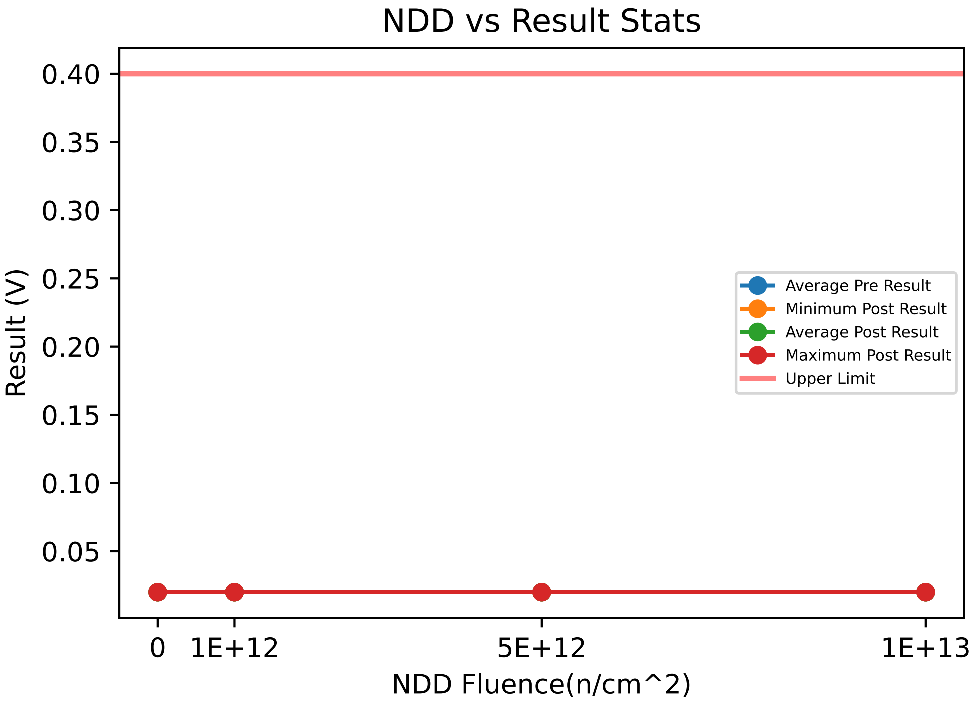
Test Results (Upper Limit = 0.4 (V))

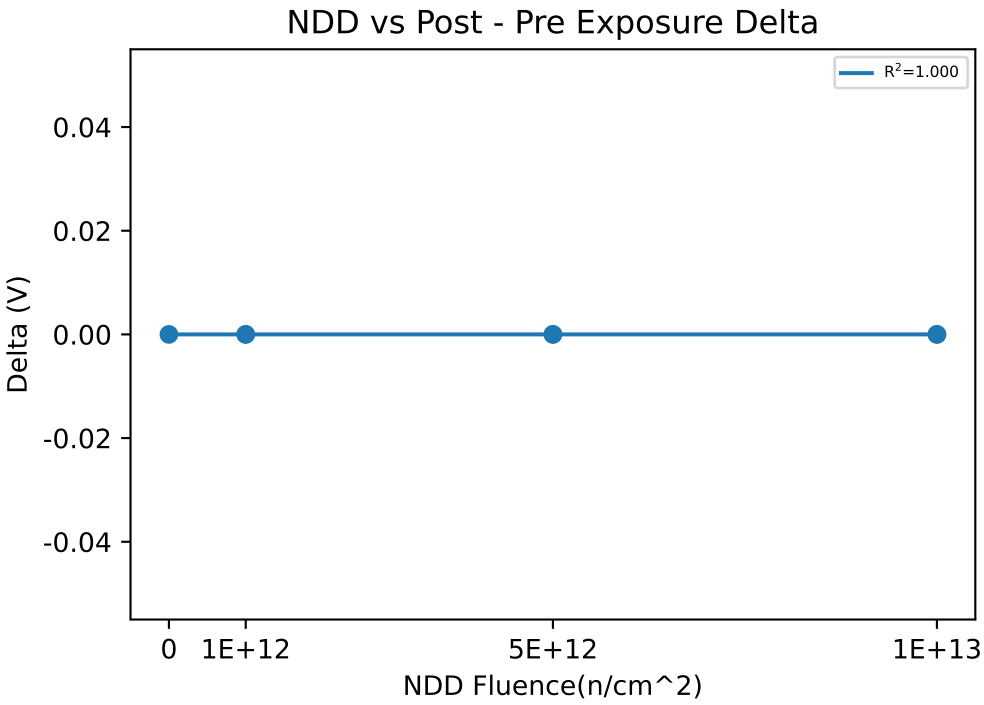
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.65 SYNC_OUT_LOW(LEVELS|VOL/SYNC2/5//511k//@SYNC_OUT_LOW)





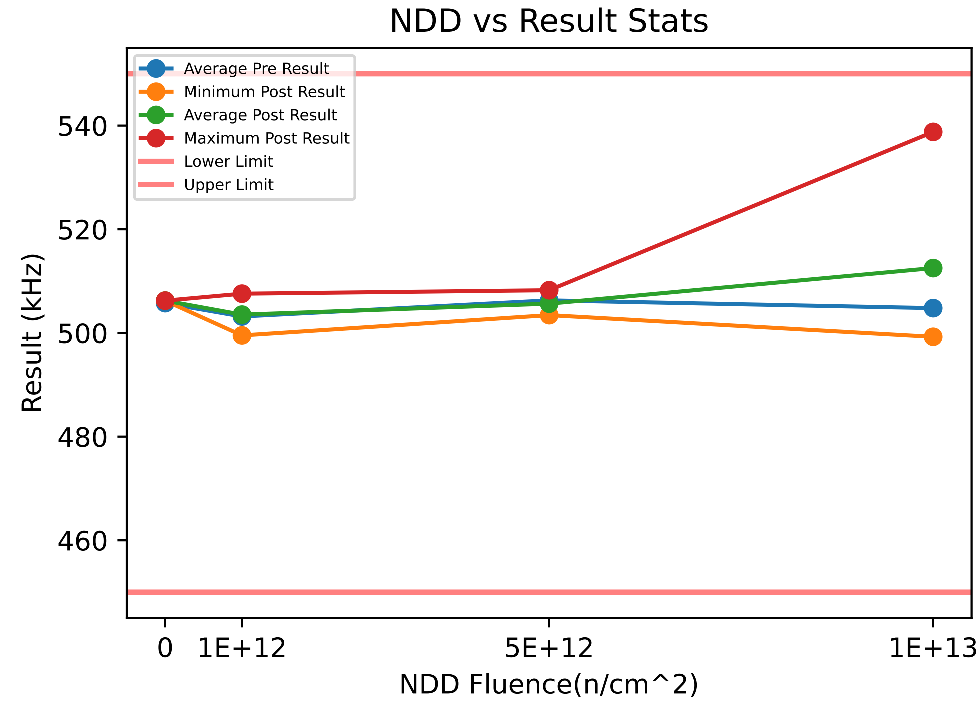
Test Results (Upper Limit = 0.4 (V))

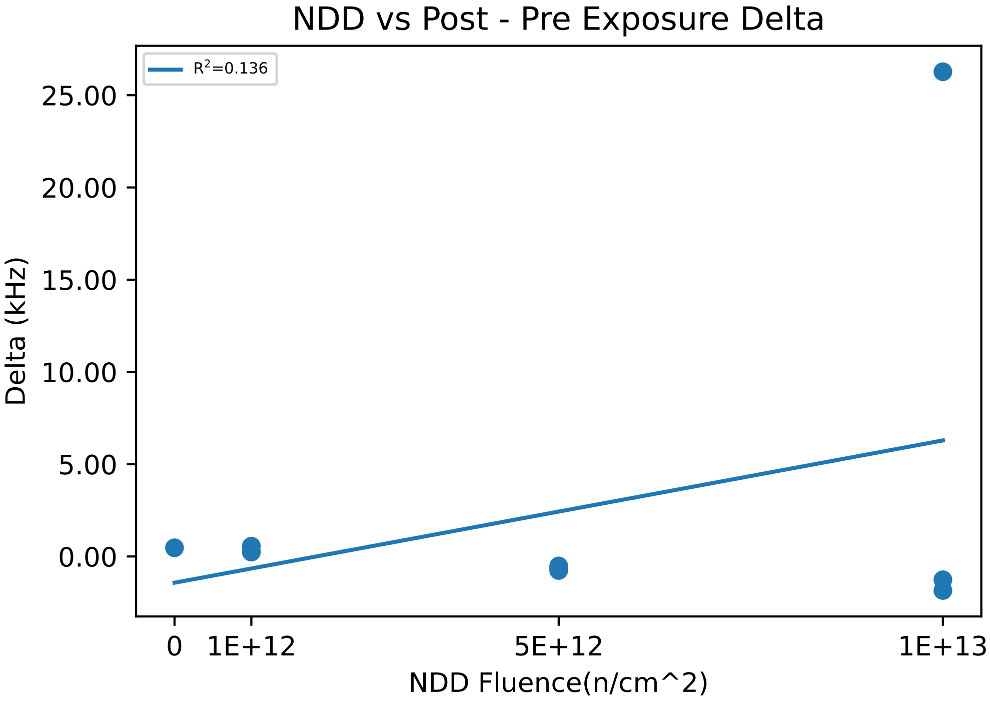
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.02	0.02	0
504	1e+12	NDD	0.02	0.02	0
505	1e+12	NDD	0.02	0.02	0
506	5e+12	NDD	0.02	0.02	0
507	5e+12	NDD	0.02	0.02	0
508	5e+12	NDD	0.02	0.02	0
509	1e+13	NDD	0.02	0.02	0
510	1e+13	NDD	0.02	0.02	0
511	1e+13	NDD	0.02	0.02	0
512	0	Correlation	0.02	0.02	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.02	0.02	0.02		0.02	0.02	0.02		0	0	0	
1e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
5e+12	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0
1e+13	0.02	0.02	0.02	0	0.02	0.02	0.02	0	0	0	0	0

Device Test: 24.66 EXT_SET_FREQ_500KHZ_5V(FREQ|500kHz/SYNC1/5//90.9k//@EXT_SET_FREQ_500KHZ_5V)





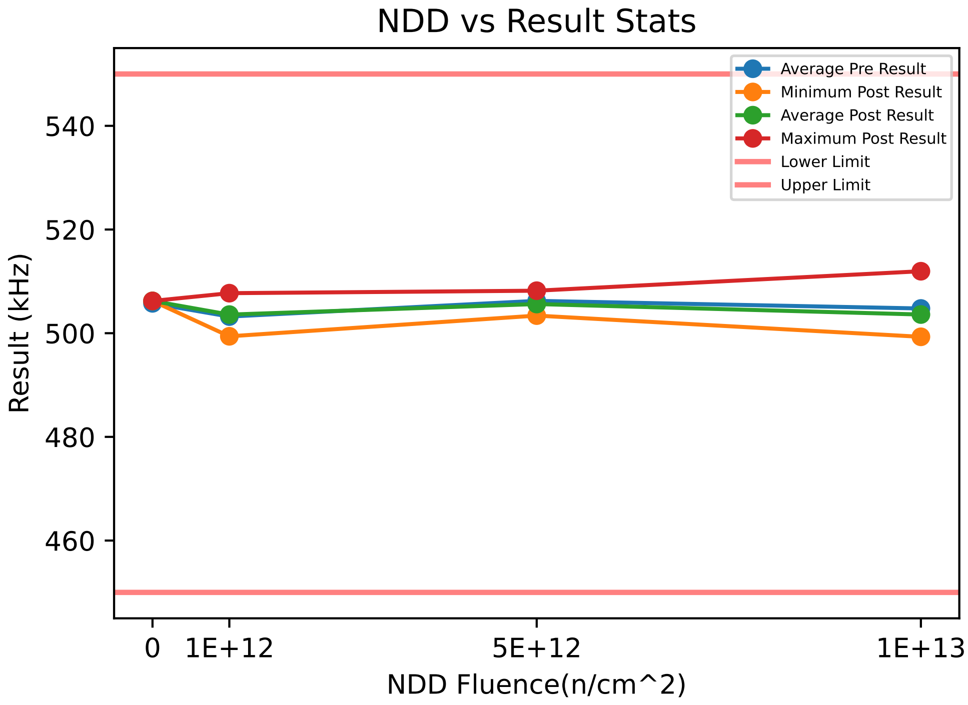
Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

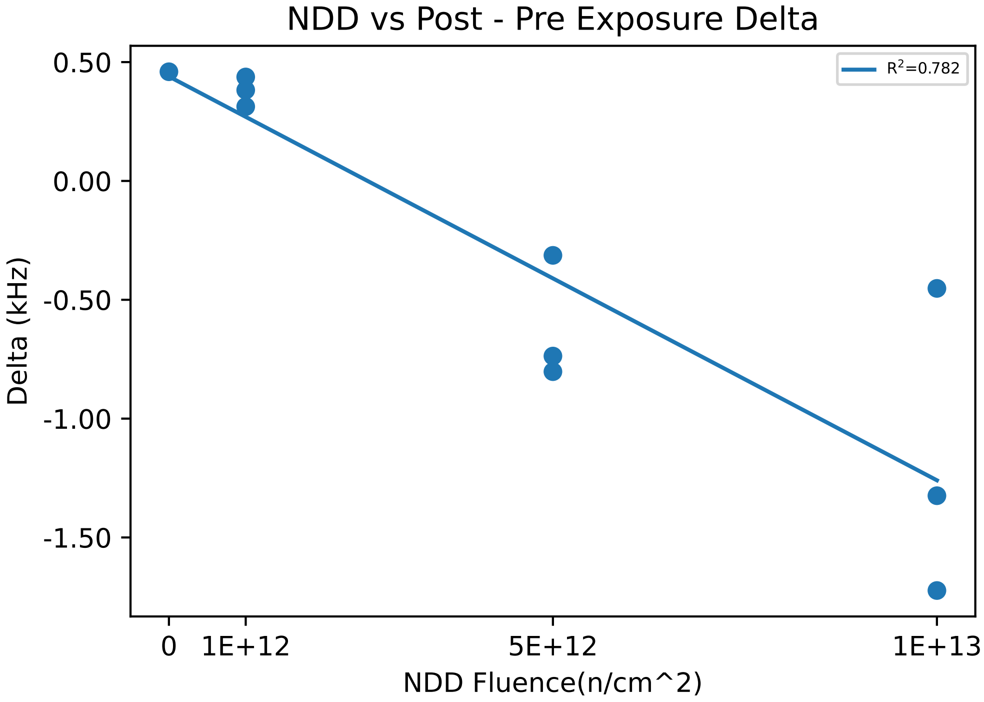
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	507.32	507.58	0.2568
504	1e+12	NDD	503.27	503.5	0.2371
505	1e+12	NDD	498.97	499.53	0.5579
506	5e+12	NDD	504.07	503.44	-0.625
507	5e+12	NDD	505.79	505.28	-0.5145
508	5e+12	NDD	509.01	508.25	-0.7589
509	1e+13	NDD	512.51	538.78	26.27
510	1e+13	NDD	501.11	499.26	-1.8447
511	1e+13	NDD	500.77	499.51	-1.2614
512	0	Correlation	505.76	506.23	0.4704

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	505.76	505.76	505.76		506.23	506.23	506.23		0.4704	0.4704	0.4704	
1e+12	498.97	503.19	507.32	4.1745	499.53	503.54	507.58	4.0235	0.2371	0.3506	0.5579	0.1798
5e+12	504.07	506.29	509.01	2.5061	503.44	505.66	508.25	2.4242	-0.7589	-0.6328	-0.5145	0.12239
1e+13	500.77	504.8	512.51	6.6854	499.26	512.52	538.78	22.747	-1.8447	7.7214	26.27	16.067

Device Test: 24.67 EXT_SET_FREQ_500KHZ_5V(FREQ|500kHz/SYNC2/5//90.9k//@EXT_SET_FREQ_500KHZ_5V)





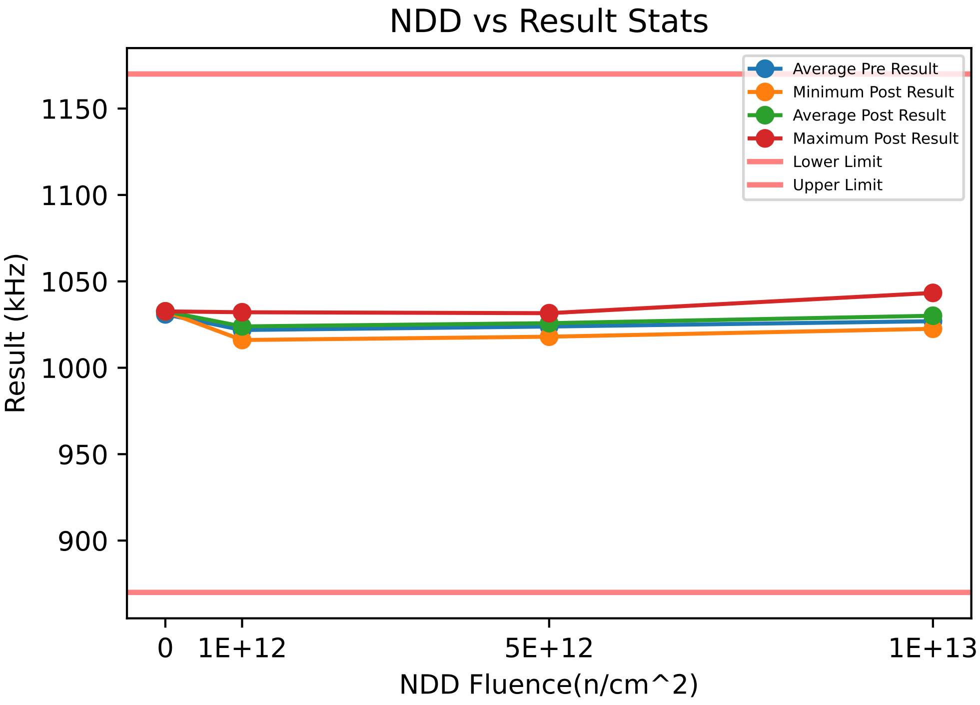
Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

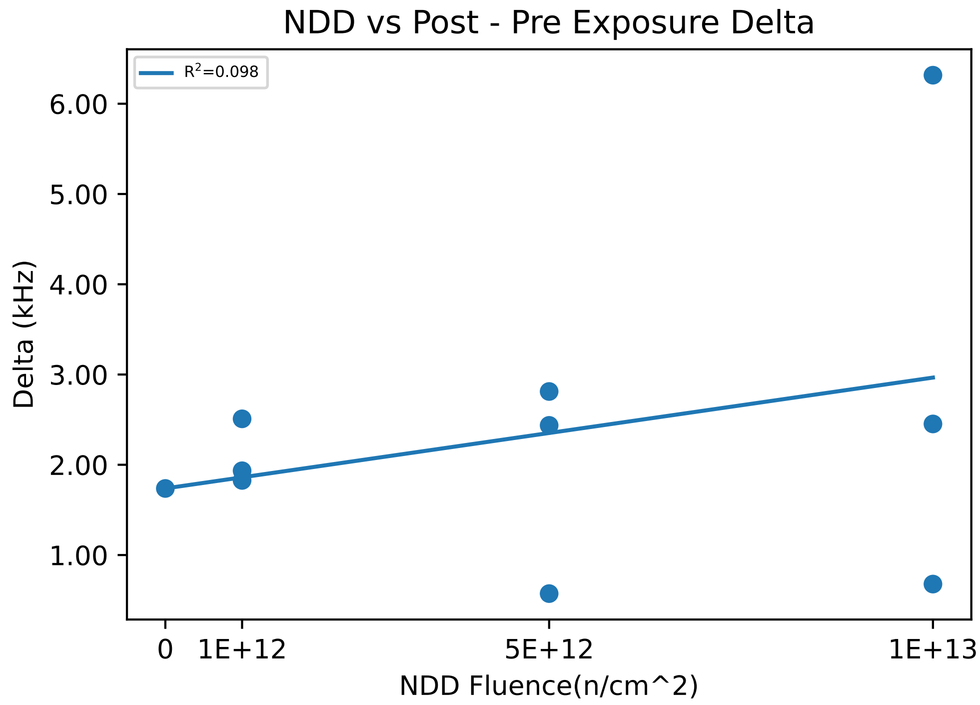
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	507.41	507.72	0.3128
504	1e+12	NDD	503.26	503.64	0.3821
505	1e+12	NDD	498.96	499.4	0.4374
506	5e+12	NDD	504.2	503.39	-0.8024
507	5e+12	NDD	505.59	505.27	-0.3131
508	5e+12	NDD	508.93	508.2	-0.7368
509	1e+13	NDD	512.4	511.95	-0.4521
510	1e+13	NDD	501.03	499.3	-1.7232
511	1e+13	NDD	500.88	499.55	-1.3243
512	0	Correlation	505.76	506.22	0.4594

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	505.76	505.76	505.76		506.22	506.22	506.22		0.4594	0.4594	0.4594	
1e+12	498.96	503.21	507.41	4.2229	499.4	503.59	507.72	4.1606	0.3128	0.37743	0.4374	0.062431
5e+12	504.2	506.24	508.93	2.435	503.39	505.62	508.2	2.4202	-0.8024	-0.61743	-0.3131	0.26559
1e+13	500.88	504.77	512.4	6.6128	499.3	503.6	511.95	7.2321	-1.7232	-1.1665	-0.4521	0.65007

Device Test: 24.68 EXT_SET_FREQ_1000KHZ_5V(FREQ|1MHz/SYNC1/5//34.8k//@EXT_SET_FREQ_1000KHZ_5V)





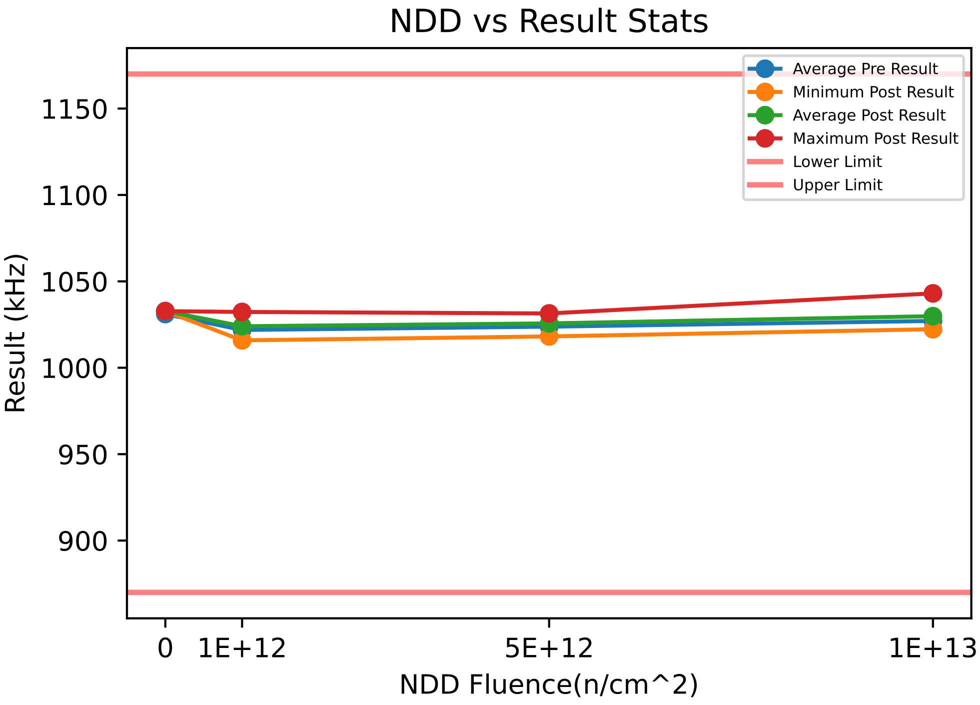
Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

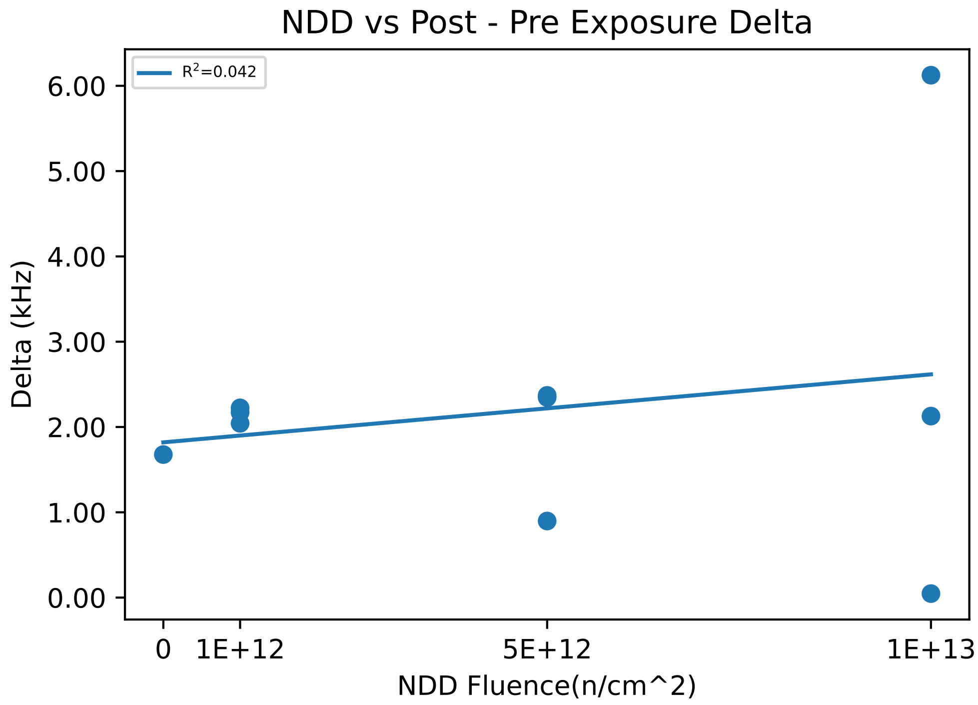
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1021.8	1023.6	1.8268
504	1e+12	NDD	1030.2	1032.1	1.9338
505	1e+12	NDD	1013.5	1016.1	2.5091
506	5e+12	NDD	1017.4	1018	0.5728
507	5e+12	NDD	1025	1027.9	2.812
508	5e+12	NDD	1029.1	1031.6	2.4366
509	1e+13	NDD	1037	1043.3	6.3162
510	1e+13	NDD	1022	1024.4	2.4524
511	1e+13	NDD	1021.9	1022.5	0.6783
512	0	Correlation	1030.9	1032.6	1.7376

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1030.9	1030.9	1030.9		1032.6	1032.6	1032.6		1.7376	1.7376	1.7376	
1e+12	1013.5	1021.8	1030.2	8.3209	1016.1	1023.9	1032.1	8.0377	1.8268	2.0899	2.5091	0.36696
5e+12	1017.4	1023.9	1029.1	5.9615	1018	1025.8	1031.6	7.0336	0.5728	1.9405	2.812	1.1992
1e+13	1021.9	1027	1037	8.6973	1022.5	1030.1	1043.3	11.479	0.6783	3.149	6.3162	2.8828

Device Test: 24.69 EXT_SET_FREQ_1000KHZ_5V(FREQ|1MHz/SYNC2/5//34.8k//@EXT_SET_FREQ_1000KHZ_5V)





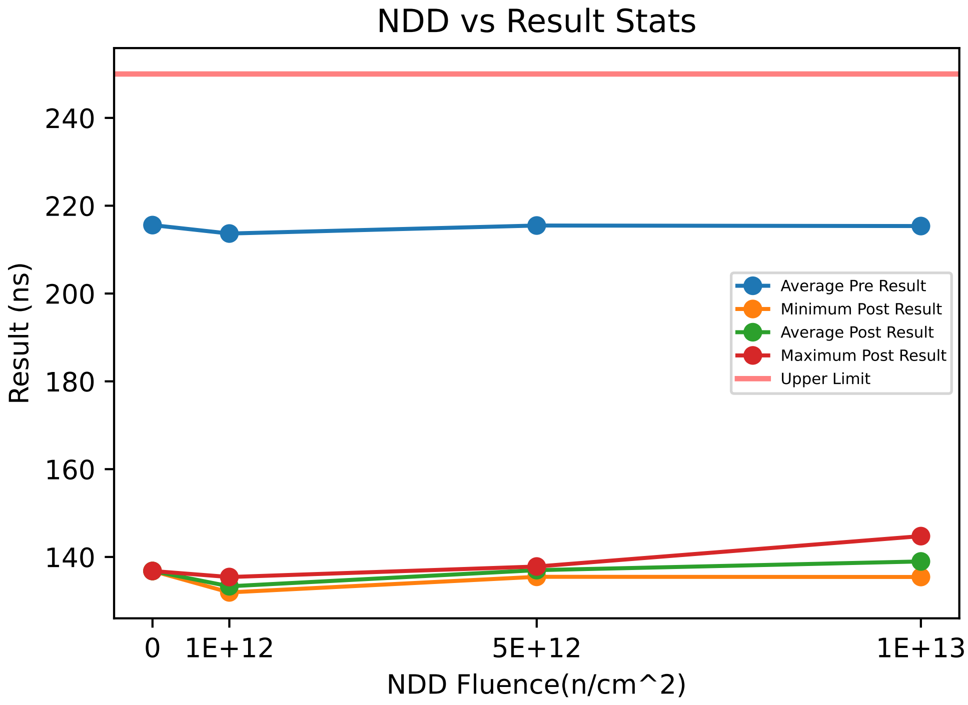
Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

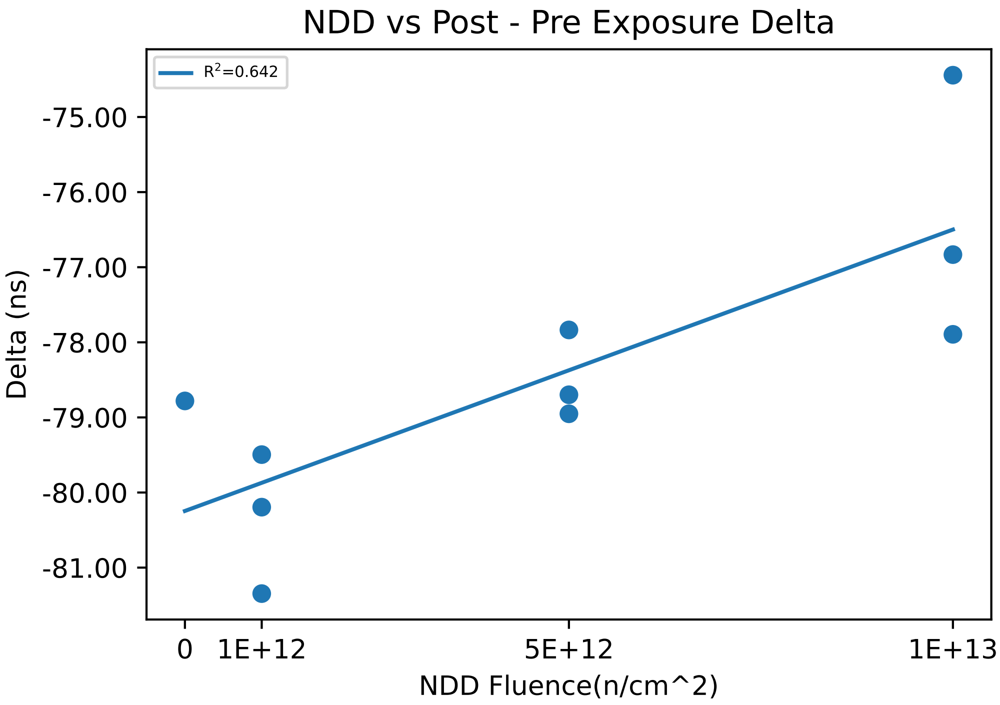
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1021.7	1023.9	2.1704
504	1e+12	NDD	1030.3	1032.3	2.043
505	1e+12	NDD	1013.6	1015.9	2.2243
506	5e+12	NDD	1017.2	1018.1	0.8978
507	5e+12	NDD	1025.1	1027.4	2.3705
508	5e+12	NDD	1029.1	1031.4	2.3459
509	1e+13	NDD	1036.9	1043	6.1244
510	1e+13	NDD	1022.1	1024.2	2.1279
511	1e+13	NDD	1022.3	1022.3	0.0468
512	0	Correlation	1031.1	1032.8	1.6767

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1031.1	1031.1	1031.1		1032.8	1032.8	1032.8		1.6767	1.6767	1.6767	
1e+12	1013.6	1021.9	1030.3	8.3161	1015.9	1024	1032.3	8.2252	2.043	2.1459	2.2243	0.0931
5e+12	1017.2	1023.8	1029.1	6.0317	1018.1	1025.7	1031.4	6.8286	0.8978	1.8714	2.3705	0.84325
1e+13	1022.1	1027.1	1036.9	8.5087	1022.3	1029.9	1043	11.457	0.0468	2.7664	6.1244	3.0887

Device Test: 24.71 ON_TIME_MIN_5V(TIMING|MINON/SW/5//511k//@ON_TIME_MIN_5V)





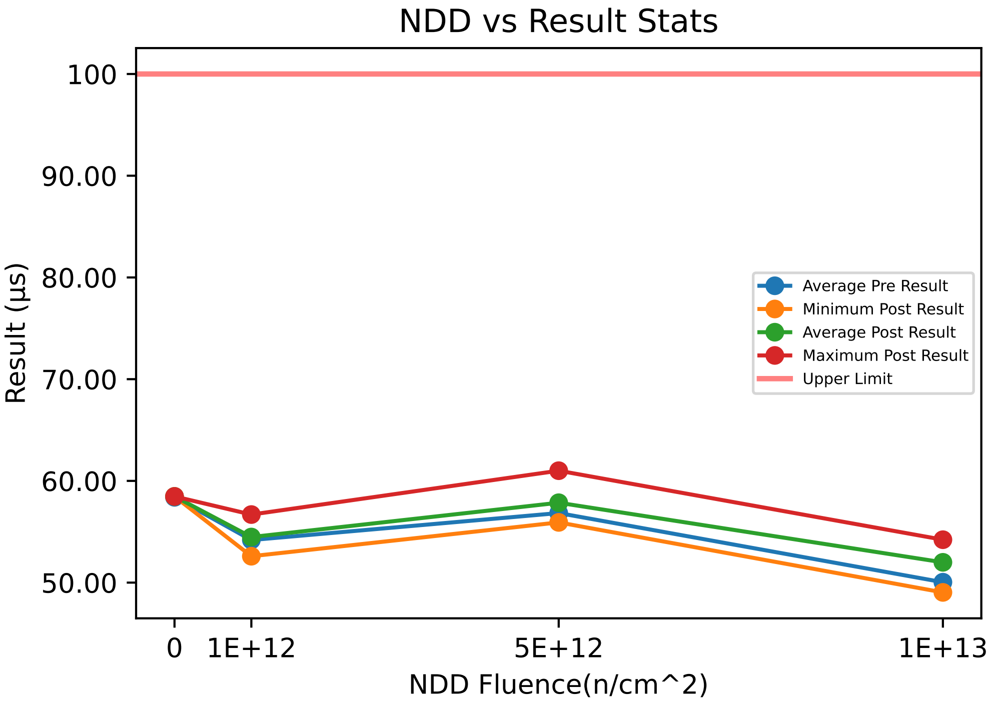
Test Results (Upper Limit = 250.0 (ns))

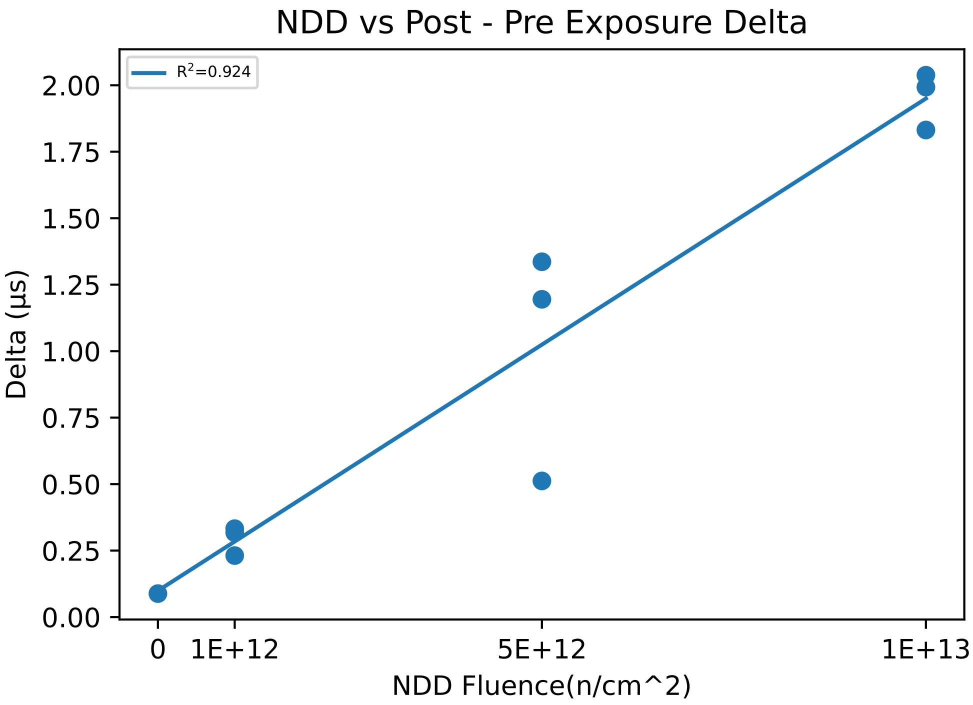
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	215.63	135.43	-80.195
504	1e+12	NDD	211.42	131.93	-79.495
505	1e+12	NDD	213.95	132.6	-81.346
506	5e+12	NDD	214.18	135.48	-78.698
507	5e+12	NDD	216.78	137.82	-78.952
508	5e+12	NDD	215.52	137.68	-77.835
509	1e+13	NDD	219.19	144.75	-74.443
510	1e+13	NDD	213.33	135.44	-77.894
511	1e+13	NDD	213.59	136.75	-76.832
512	0	Correlation	215.59	136.8	-78.78

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	215.59	215.59	215.59		136.8	136.8	136.8		-78.78	-78.78	-78.78	
1e+12	211.42	213.67	215.63	2.1146	131.93	133.32	135.43	1.8583	-81.346	-80.345	-79.495	0.93443
5e+12	214.18	215.49	216.78	1.2993	135.48	136.99	137.82	1.3144	-78.952	-78.495	-77.835	0.5853
1e+13	213.33	215.37	219.19	3.3107	135.44	138.98	144.75	5.037	-77.894	-76.39	-74.443	1.7672

Device Test: 24.72 T_EN_DELAY(TIMING|DELAY/EN/5//511k//@T_EN_DELAY)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

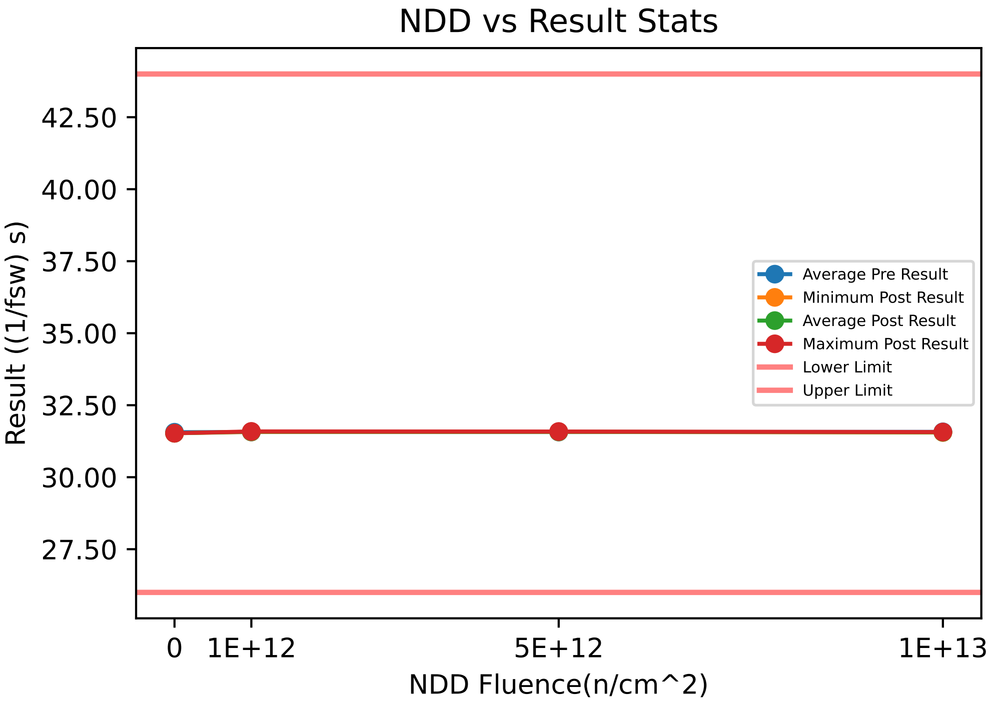
Test Results (Upper Limit = 100.0 (µs))

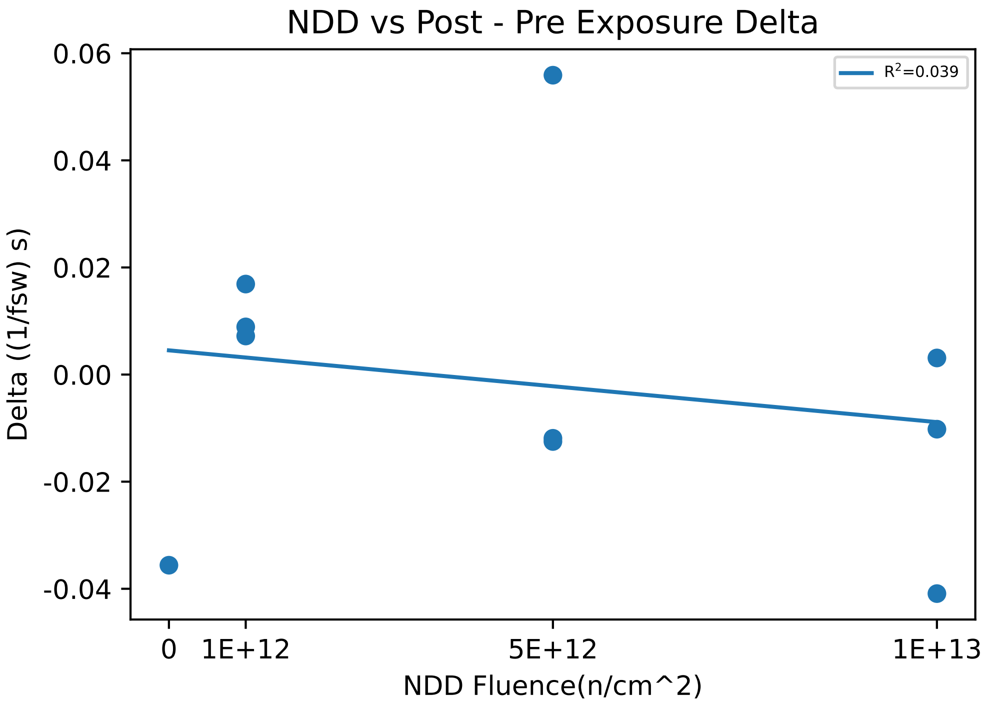
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	53.825	54.157	0.3325
504	1e+12	NDD	56.373	56.691	0.3175
505	1e+12	NDD	52.364	52.595	0.2313
506	5e+12	NDD	54.725	55.92	1.195
507	5e+12	NDD	55.3	56.636	1.3362
508	5e+12	NDD	60.491	61.003	0.512
509	1e+13	NDD	50.69	52.728	2.0378
510	1e+13	NDD	47.207	49.038	1.8317
511	1e+13	NDD	52.225	54.218	1.993
512	0	Correlation	58.386	58.474	0.0883

Test Statistics (µs)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	58.386	58.386	58.386		58.474	58.474	58.474		0.0883	0.0883	0.0883	
1e+12	52.364	54.187	56.373	2.0292	52.595	54.481	56.691	2.067	0.2313	0.29377	0.3325	0.054615
5e+12	54.725	56.839	60.491	3.1758	55.92	57.853	61.003	2.7511	0.512	1.0144	1.3362	0.44078
1e+13	47.207	50.041	52.225	2.5713	49.038	51.995	54.218	2.6664	1.8317	1.9542	2.0378	0.1084

Device Test: 24.74 T_FAULT_DELAY(TIMING|DELAY/FAULT/5//511k//@T_FAULT_DELAY)





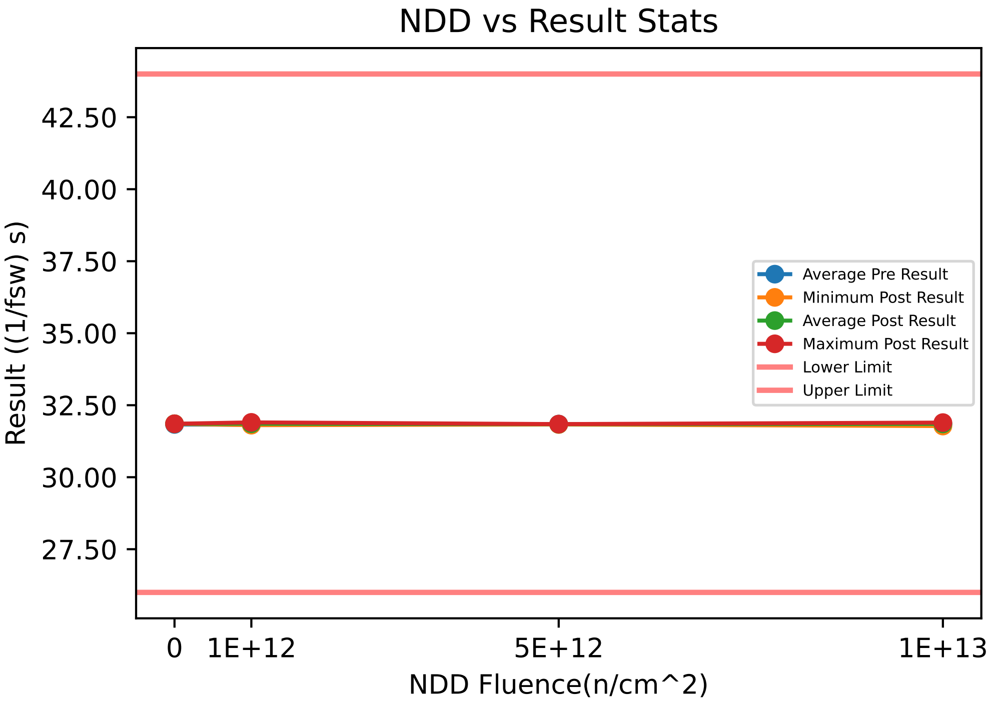
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

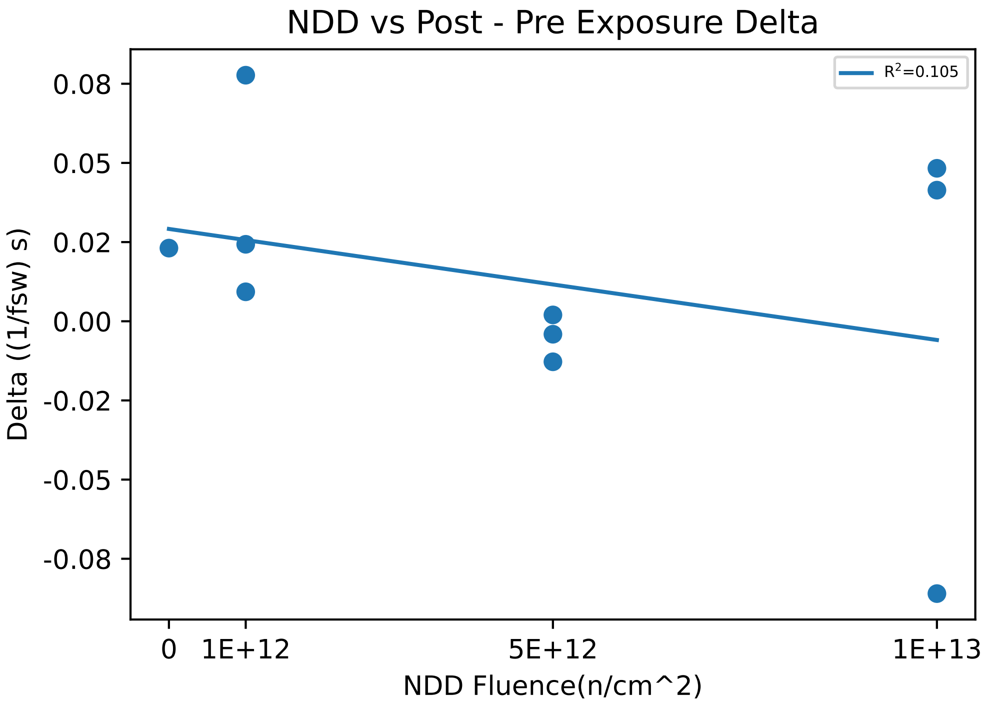
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.573	31.59	0.0169
504	1e+12	NDD	31.563	31.572	0.0089
505	1e+12	NDD	31.57	31.577	0.0072
506	5e+12	NDD	31.586	31.574	-0.0119
507	5e+12	NDD	31.531	31.587	0.0559
508	5e+12	NDD	31.586	31.573	-0.0125
509	1e+13	NDD	31.553	31.556	0.0031
510	1e+13	NDD	31.593	31.552	-0.0409
511	1e+13	NDD	31.579	31.569	-0.0102
512	0	Correlation	31.561	31.526	-0.0356

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.561	31.561	31.561		31.526	31.526	31.526		-0.0356	-0.0356	-0.0356	
1e+12	31.563	31.569	31.573	0.0052421	31.572	31.58	31.59	0.0093343	0.0072	0.011	0.0169	0.0051798
5e+12	31.531	31.567	31.586	0.031813	31.573	31.578	31.587	0.0075222	-0.0125	0.0105	0.0559	0.039319
1e+13	31.553	31.575	31.593	0.020476	31.552	31.559	31.569	0.0085629	-0.0409	-0.016	0.0031	0.022566

Device Test: 24.76 T_FAULT_DELAY(TIMING|DELAY/FAULT/5//90.9k//@T_FAULT_DELAY)





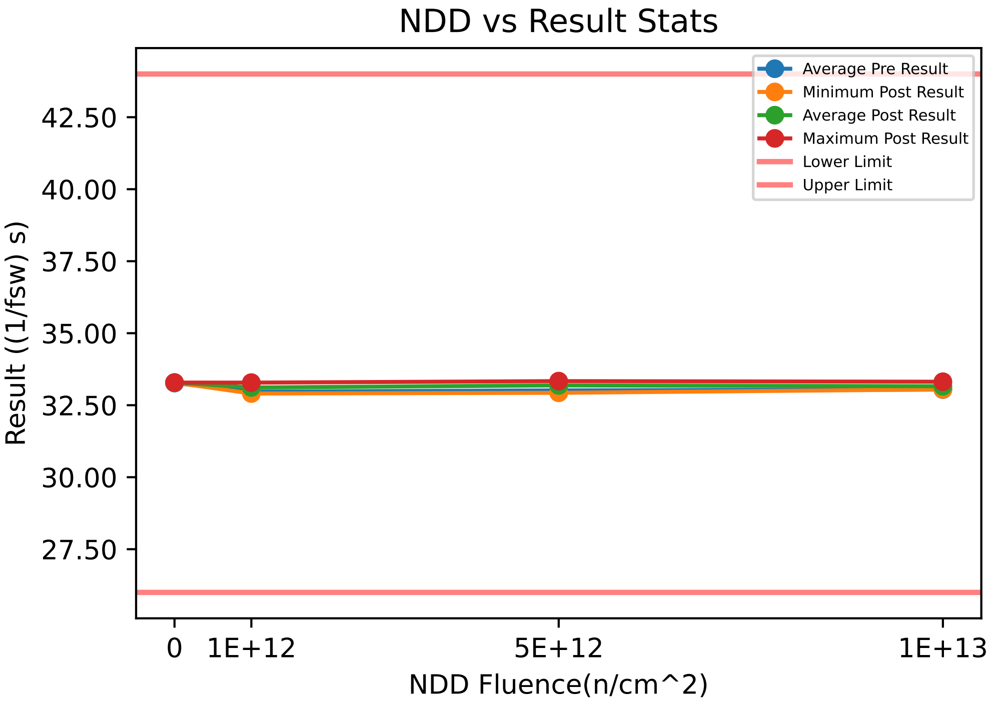
Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

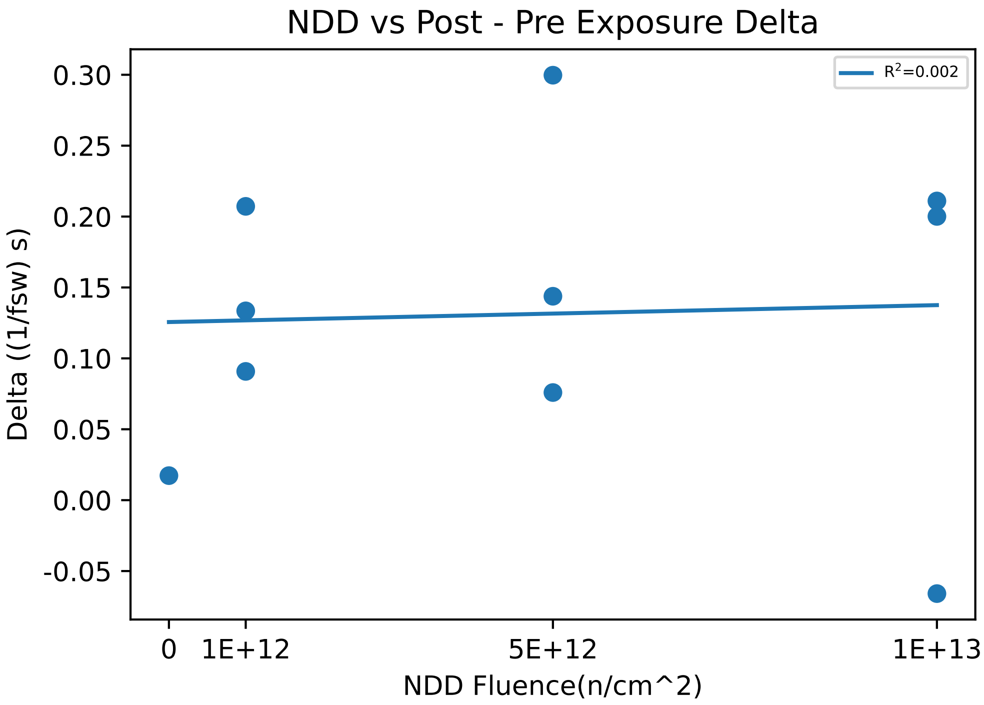
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	31.826	31.903	0.0777
504	1e+12	NDD	31.847	31.856	0.0093
505	1e+12	NDD	31.783	31.807	0.0243
506	5e+12	NDD	31.835	31.831	-0.0041
507	5e+12	NDD	31.854	31.841	-0.0128
508	5e+12	NDD	31.842	31.844	0.002
509	1e+13	NDD	31.854	31.896	0.0414
510	1e+13	NDD	31.862	31.776	-0.086
511	1e+13	NDD	31.832	31.88	0.0483
512	0	Correlation	31.832	31.855	0.0231

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	31.832	31.832	31.832		31.855	31.855	31.855		0.0231	0.0231	0.0231	
1e+12	31.783	31.818	31.847	0.032679	31.807	31.855	31.903	0.048252	0.0093	0.0371	0.0777	0.035952
5e+12	31.835	31.844	31.854	0.0097352	31.831	31.839	31.844	0.0068608	-0.0128	-0.0049667	0.002	0.007438
1e+13	31.832	31.849	31.862	0.015718	31.776	31.851	31.896	0.064983	-0.086	0.0012333	0.0483	0.075625

Device Test: 24.78 T_FAULT_DELAY(TIMING|DELAY/FAULT/5//34.8k//@T_FAULT_DELAY)





Test Results (Lower Limit = 26.0, Upper Limit = 44.0 ((1/fsw) s))

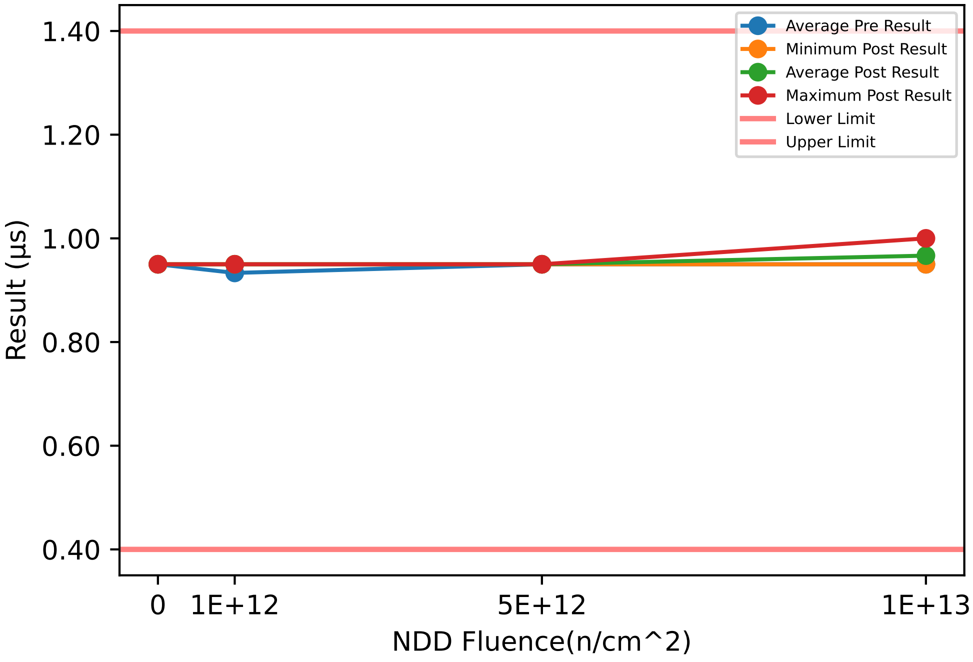
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	33.021	33.154	0.1335
504	1e+12	NDD	33.193	33.284	0.0908
505	1e+12	NDD	32.699	32.906	0.2072
506	5e+12	NDD	32.854	32.93	0.0759
507	5e+12	NDD	33.192	33.336	0.1438
508	5e+12	NDD	32.998	33.297	0.2997
509	1e+13	NDD	33.381	33.315	-0.0659
510	1e+13	NDD	32.838	33.049	0.211
511	1e+13	NDD	32.906	33.106	0.2001
512	0	Correlation	33.268	33.286	0.0173

Test Statistics ((1/fsw) s)

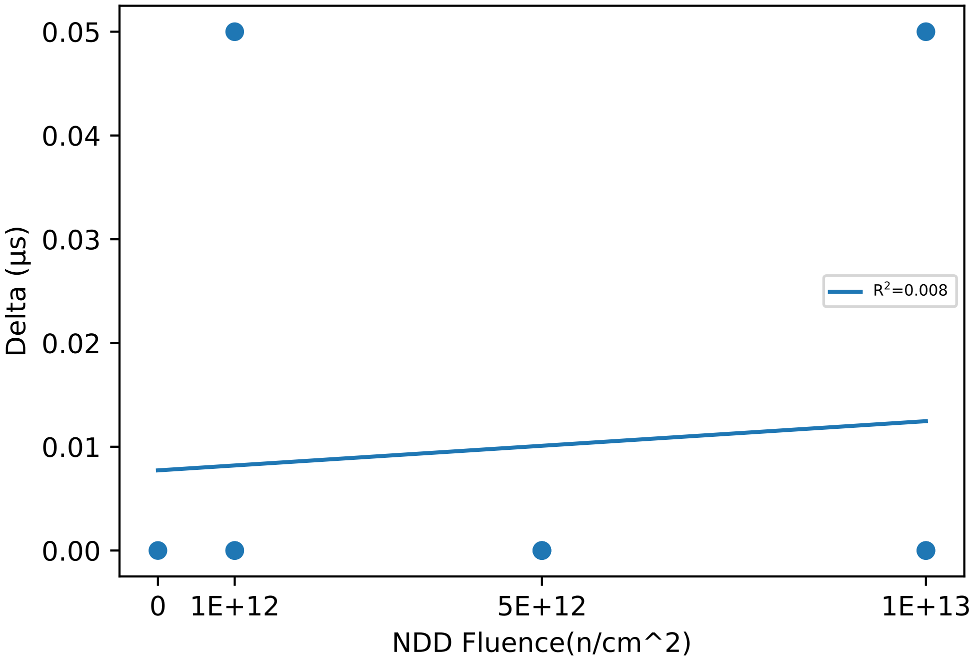
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	33.268	33.268	33.268		33.286	33.286	33.286		0.0173	0.0173	0.0173	
1e+12	32.699	32.971	33.193	0.25094	32.906	33.115	33.284	0.19208	0.0908	0.14383	0.2072	0.058884
5e+12	32.854	33.015	33.192	0.16935	32.93	33.188	33.336	0.22374	0.0759	0.17313	0.2997	0.11475
1e+13	32.838	33.041	33.381	0.29561	33.049	33.157	33.315	0.13986	-0.0659	0.11507	0.211	0.15682

Device Test: 24.79 T_FAULT_MIN(TIMING|MINON/FAULT/5//511k//@T_FAULT_MIN)

NDD vs Result Stats



NDD vs Post - Pre Exposure Delta



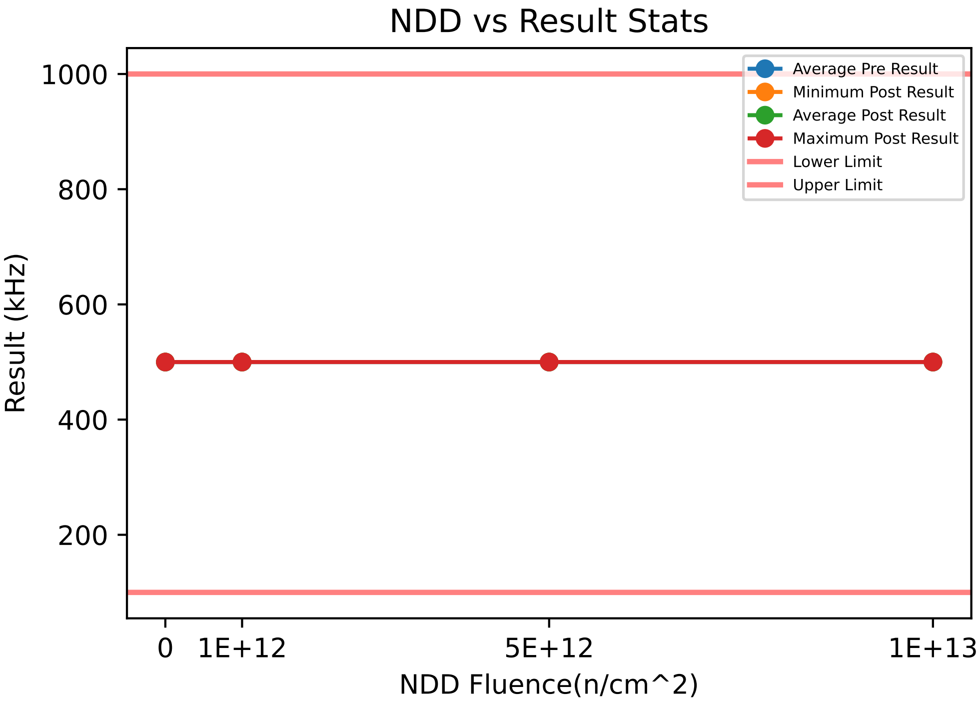
Test Results (Lower Limit = 0.4, Upper Limit = 1.4 (µs))

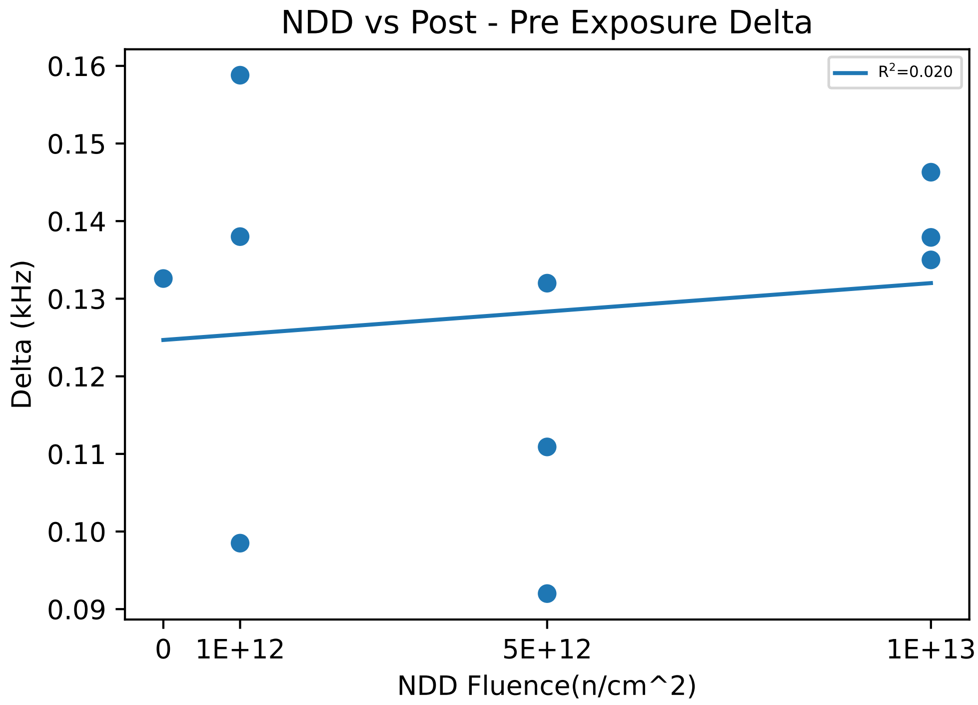
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.95	0.95	0
504	1e+12	NDD	0.95	0.95	0
505	1e+12	NDD	0.9	0.95	0.05
506	5e+12	NDD	0.95	0.95	0
507	5e+12	NDD	0.95	0.95	0
508	5e+12	NDD	0.95	0.95	0
509	1e+13	NDD	0.95	1	0.05
510	1e+13	NDD	0.95	0.95	0
511	1e+13	NDD	0.95	0.95	0
512	0	Correlation	0.95	0.95	0

Test Statistics (µs)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.95	0.95	0.95		0.95	0.95	0.95		0	0	0	
1e+12	0.9	0.93333	0.95	0.028868	0.95	0.95	0.95	0	0	0.016667	0.05	0.028868
5e+12	0.95	0.95	0.95	0	0.95	0.95	0.95	0	0	0	0	0
1e+13	0.95	0.95	0.95	0	0.95	0.96667	1	0.028868	0	0.016667	0.05	0.028868

Device Test: 24.8 SYNC_FREQ_RANGE(FREQ|500kHz/SYNC1/4.5//OPEN//@SYNC_FREQ_RANGE)





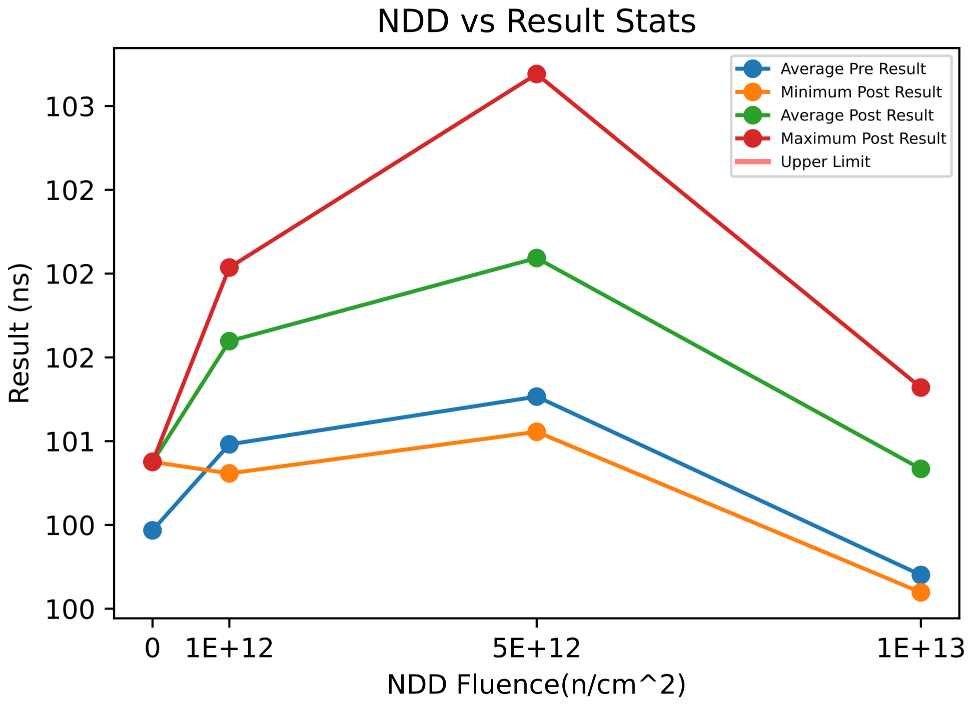
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

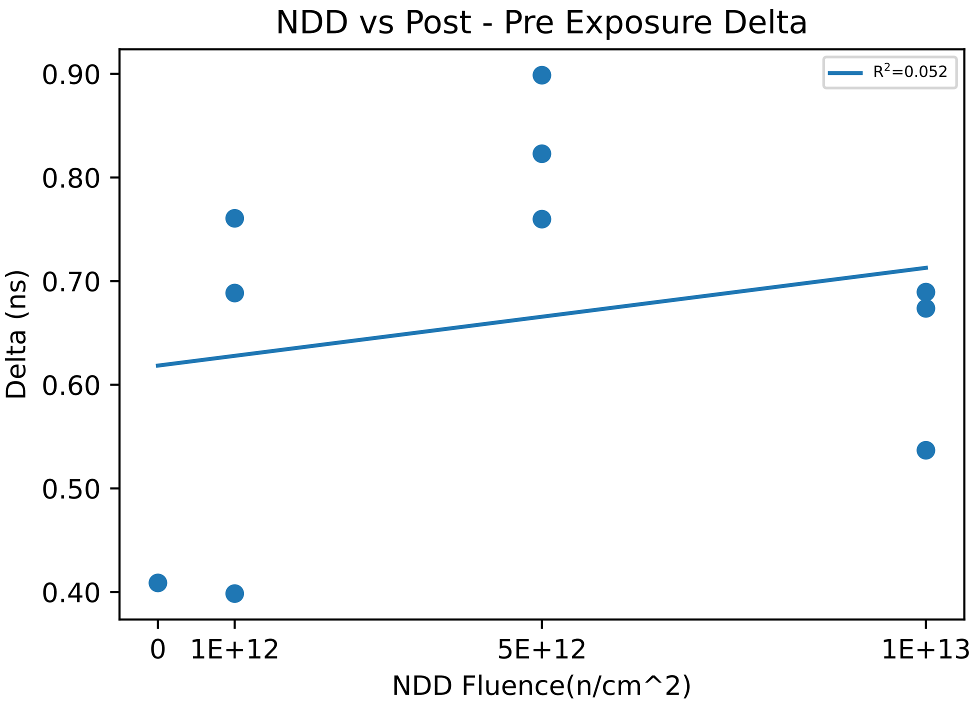
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	499.81	499.97	0.1588
504	1e+12	NDD	499.83	499.92	0.0985
505	1e+12	NDD	499.83	499.97	0.138
506	5e+12	NDD	499.82	499.93	0.1109
507	5e+12	NDD	499.84	499.93	0.092
508	5e+12	NDD	499.83	499.96	0.132
509	1e+13	NDD	499.8	499.94	0.1379
510	1e+13	NDD	499.82	499.97	0.1463
511	1e+13	NDD	499.82	499.95	0.135
512	0	Correlation	499.82	499.95	0.1326

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.82	499.82	499.82		499.95	499.95	499.95		0.1326	0.1326	0.1326	
1e+12	499.81	499.82	499.83	0.012357	499.92	499.95	499.97	0.024185	0.0985	0.13177	0.1588	0.030629
5e+12	499.82	499.83	499.84	0.0088161	499.93	499.94	499.96	0.015955	0.092	0.11163	0.132	0.02001
1e+13	499.8	499.81	499.82	0.008631	499.94	499.95	499.97	0.012619	0.135	0.13973	0.1463	0.0058688

Device Test: 24.80 T_DEAD(TIMING|DELAY/SW/5//511k//@T_DEAD)





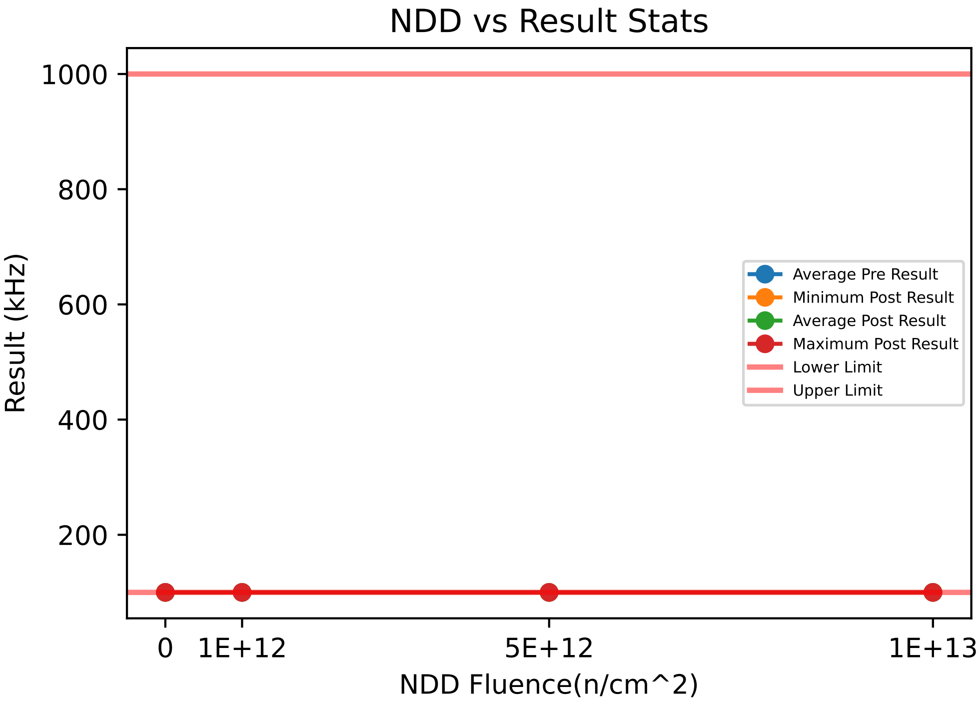
Test Results (No Limits Specified (ns))

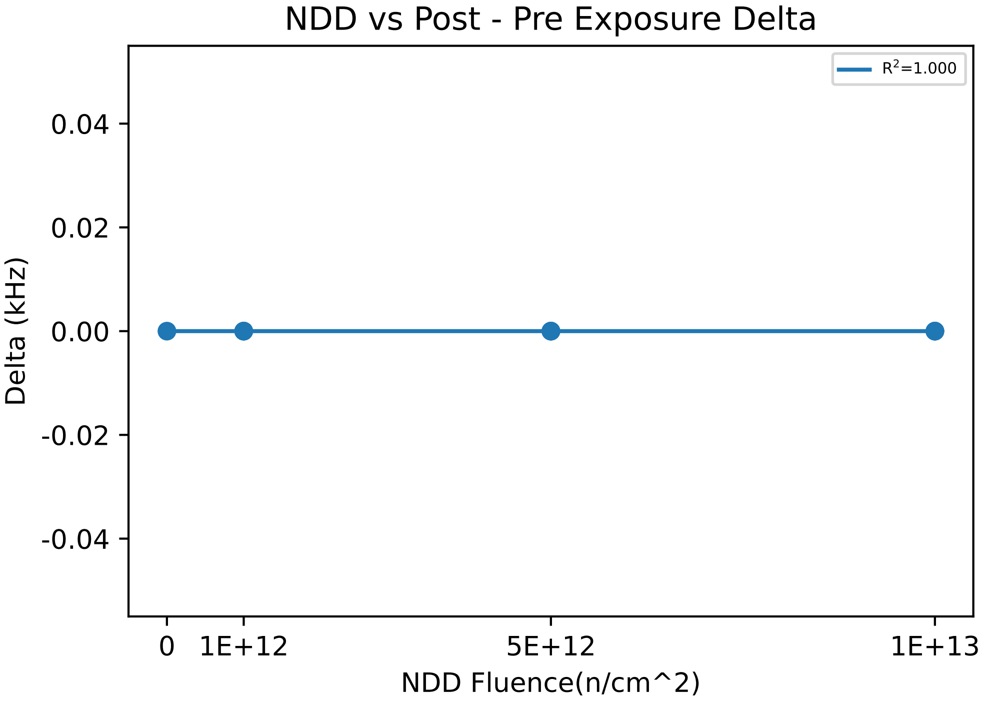
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	101.19	101.95	0.7606
504	1e+12	NDD	100.41	100.81	0.3985
505	1e+12	NDD	101.35	102.04	0.6885
506	5e+12	NDD	102.29	103.19	0.8987
507	5e+12	NDD	100.3	101.06	0.7598
508	5e+12	NDD	101.21	102.03	0.8229
509	1e+13	NDD	99.561	100.1	0.5368
510	1e+13	NDD	100.4	101.09	0.6894
511	1e+13	NDD	100.65	101.32	0.6737
512	0	Correlation	100.47	100.88	0.4088

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100.47	100.47	100.47		100.88	100.88	100.88		0.4088	0.4088	0.4088	
1e+12	100.41	100.98	101.35	0.50191	100.81	101.6	102.04	0.68507	0.3985	0.61587	0.7606	0.19167
5e+12	100.3	101.27	102.29	0.99947	101.06	102.09	103.19	1.069	0.7598	0.82713	0.8987	0.069547
1e+13	99.561	100.2	100.65	0.5687	100.1	100.83	101.32	0.64903	0.5368	0.6333	0.6894	0.083939

Device Test: 24.81 SYNC_FREQ_RANGE(FREQ|100kHz/SYNC1/12//OPEN//@SYNC_FREQ_RANGE)





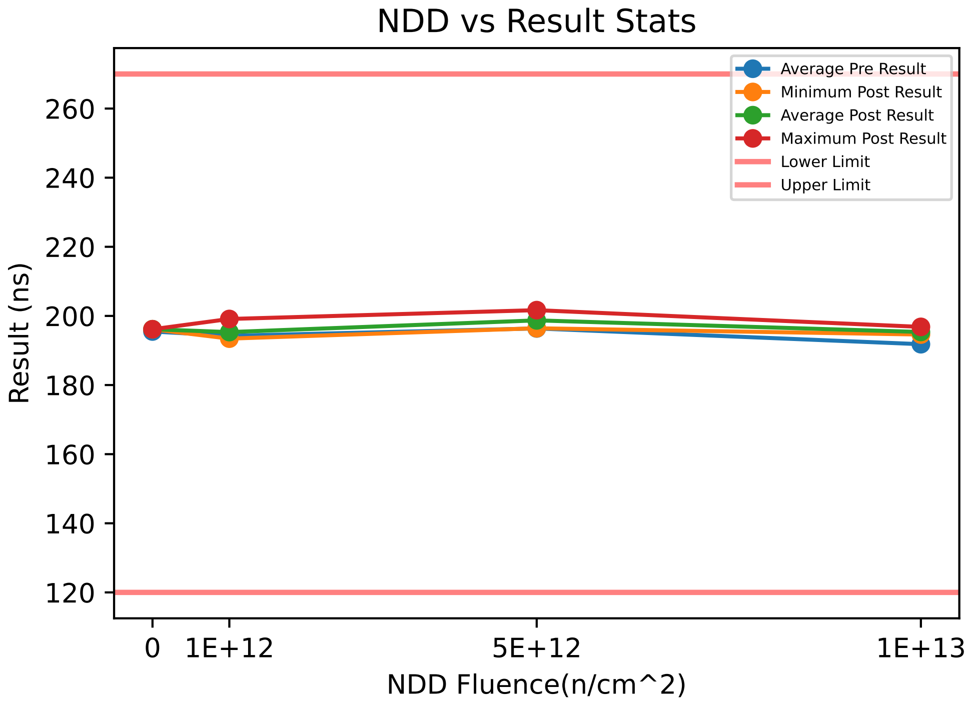
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

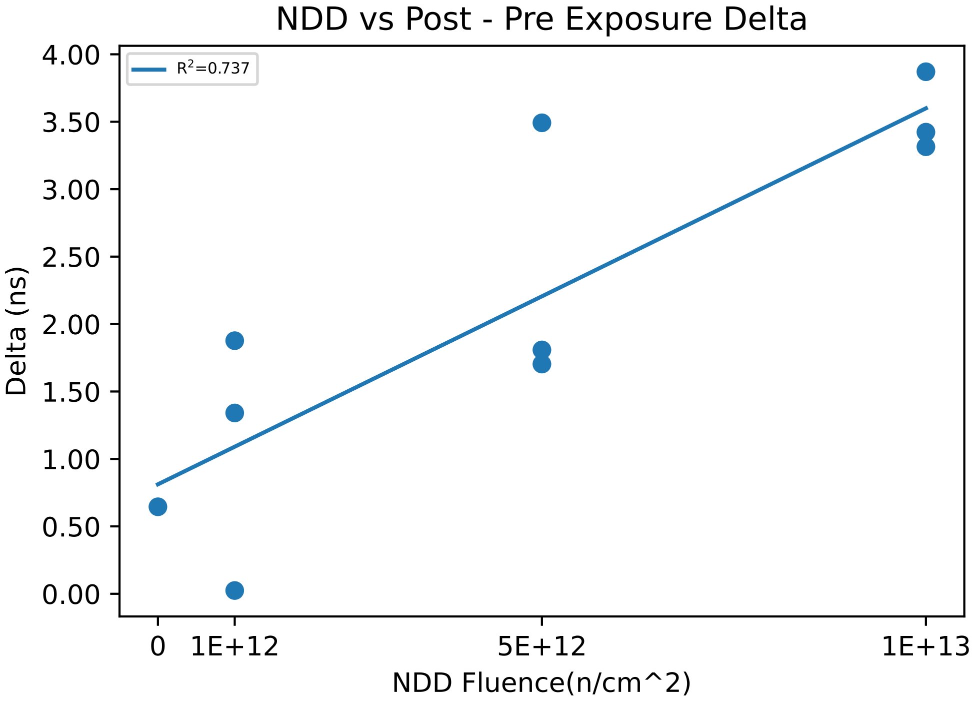
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	100	100	0
504	1e+12	NDD	100	100	0
505	1e+12	NDD	100	100	0
506	5e+12	NDD	100	100	0
507	5e+12	NDD	100	100	0
508	5e+12	NDD	100	100	0
509	1e+13	NDD	100	100	0
510	1e+13	NDD	100	100	0
511	1e+13	NDD	100	100	0
512	0	Correlation	100	100	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100		100	100	100		0	0	0	
1e+12	100	100	100	0	100	100	100	0	0	0	0	0
5e+12	100	100	100	0	100	100	100	0	0	0	0	0
1e+13	100	100	100	0	100	100	100	0	0	0	0	0

Device Test: 24.82 SYNC1_SW_DELAY(TIMING|DELAY/SYNC1/12//OPEN//@SYNC1_SW_DELAY)





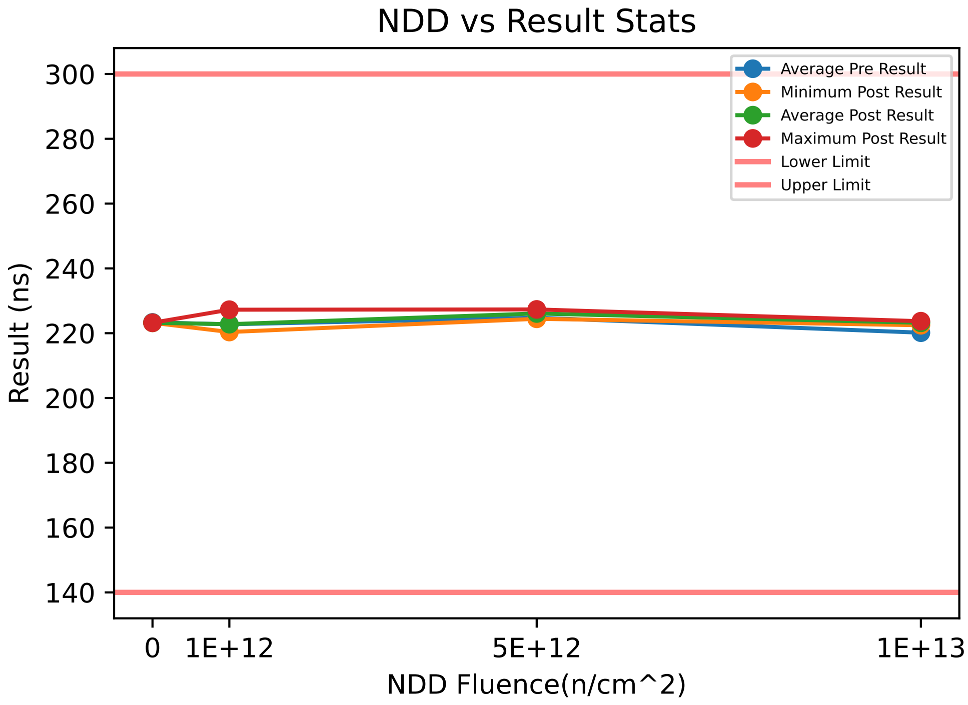
Test Results (Lower Limit = 120.0, Upper Limit = 270.0 (ns))

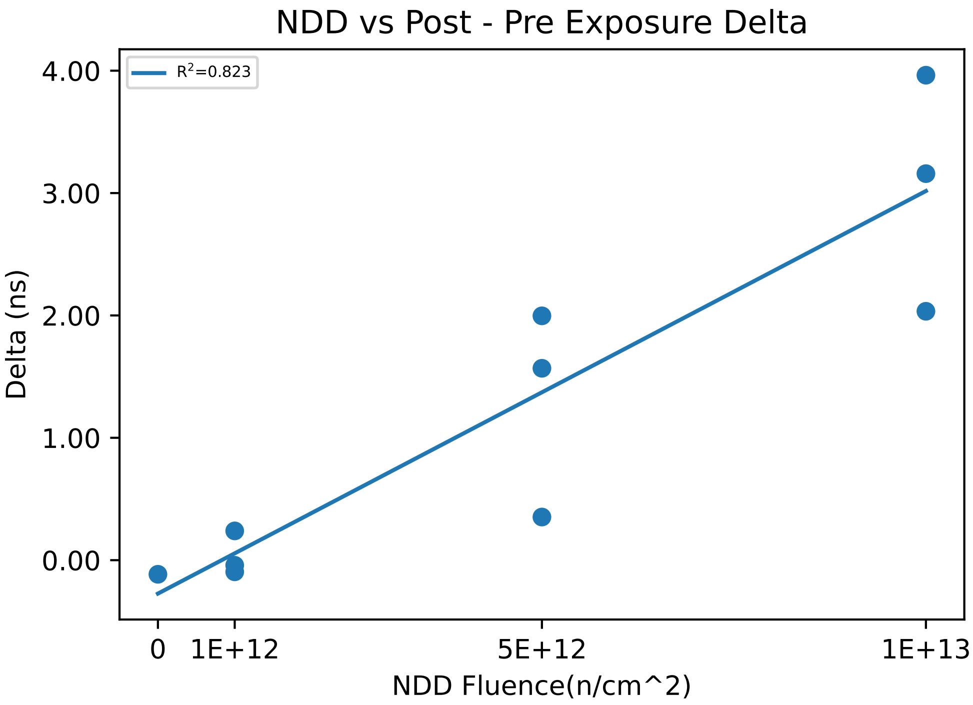
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	199.09	199.12	0.0244
504	1e+12	NDD	191.55	193.43	1.8767
505	1e+12	NDD	192.09	193.43	1.3407
506	5e+12	NDD	198.18	201.67	3.492
507	5e+12	NDD	196.23	198.03	1.8082
508	5e+12	NDD	194.73	196.43	1.7035
509	1e+13	NDD	192.96	196.83	3.8706
510	1e+13	NDD	191.19	194.61	3.4227
511	1e+13	NDD	191.3	194.62	3.3146
512	0	Correlation	195.49	196.14	0.6452

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	195.49	195.49	195.49		196.14	196.14	196.14		0.6452	0.6452	0.6452	
1e+12	191.55	194.24	199.09	4.2082	193.43	195.32	199.12	3.285	0.0244	1.0806	1.8767	0.95315
5e+12	194.73	196.38	198.18	1.7294	196.43	198.71	201.67	2.6836	1.7035	2.3346	3.492	1.0037
1e+13	191.19	191.82	192.96	0.98778	194.61	195.35	196.83	1.276	3.3146	3.536	3.8706	0.2948

Device Test: 24.83 SYNC1_SW_DELAY_INV(TIMING|DELAY/SYNC1/12//OPEN//@SYNC1_SW_DELAY_INV)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

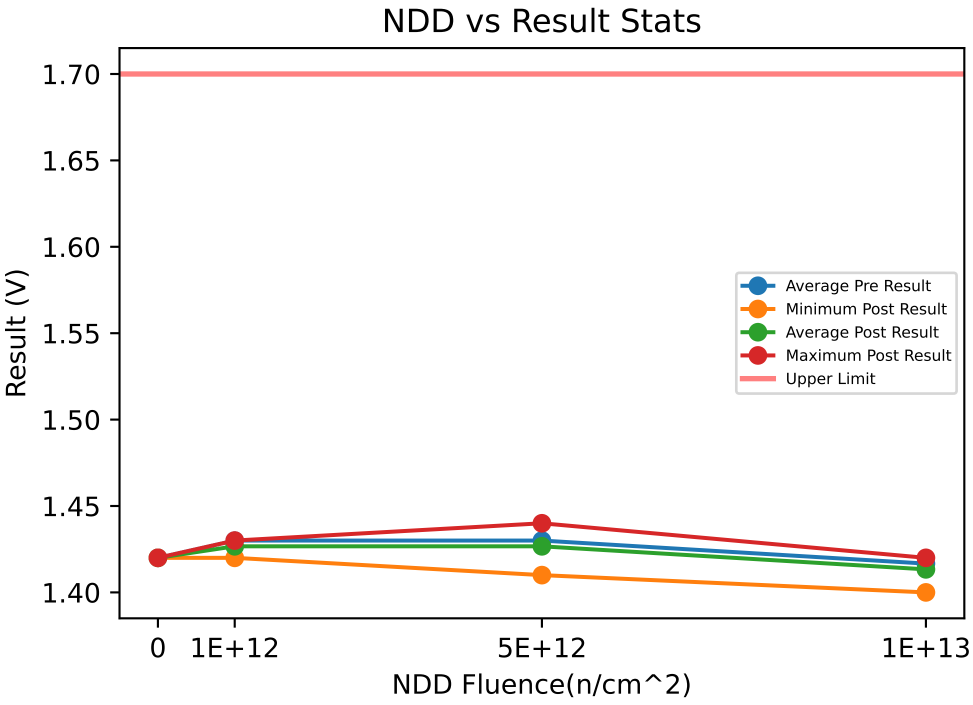
Test Results (Lower Limit = 140.0, Upper Limit = 300.0 (ns))

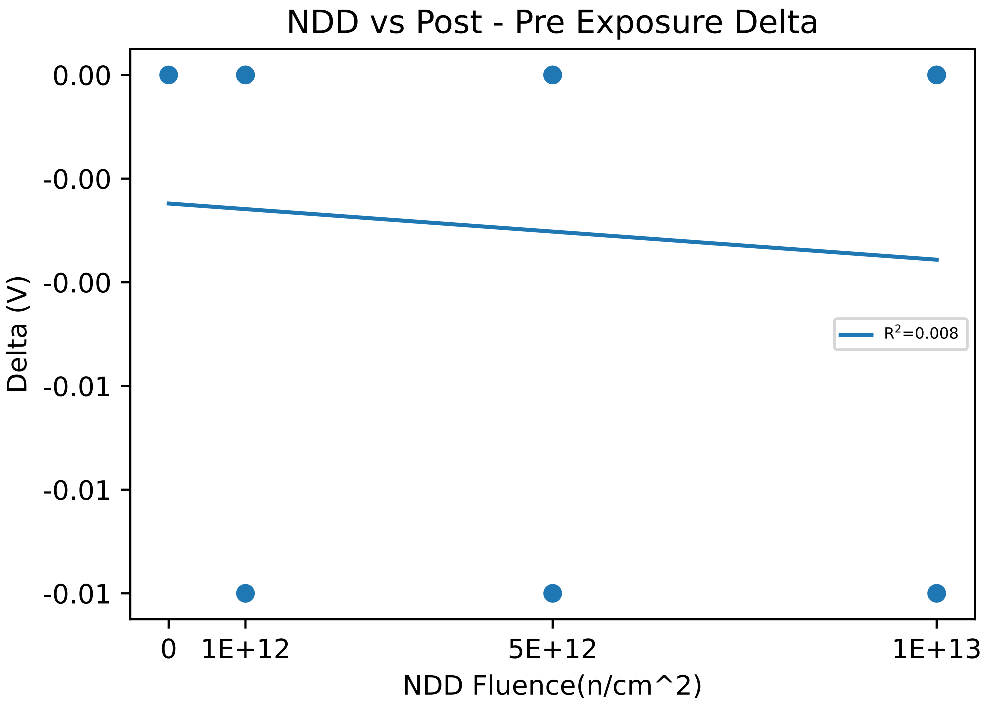
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	227.01	227.25	0.2392
504	1e+12	NDD	220.41	220.37	-0.0419
505	1e+12	NDD	220.81	220.72	-0.0951
506	5e+12	NDD	226.98	227.34	0.3526
507	5e+12	NDD	224.48	226.47	1.9967
508	5e+12	NDD	222.87	224.44	1.5682
509	1e+13	NDD	221.67	223.7	2.0339
510	1e+13	NDD	219.3	222.46	3.1587
511	1e+13	NDD	219.51	223.47	3.9632
512	0	Correlation	223.33	223.22	-0.1153

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	223.33	223.33	223.33		223.22	223.22	223.22		-0.1153	-0.1153	-0.1153	
1e+12	220.41	222.74	227.01	3.704	220.37	222.78	227.25	3.8801	-0.0951	0.034067	0.2392	0.17963
5e+12	222.87	224.78	226.98	2.0732	224.44	226.08	227.34	1.4877	0.3526	1.3058	1.9967	0.85287
1e+13	219.3	220.16	221.67	1.3121	222.46	223.21	223.7	0.66309	2.0339	3.0519	3.9632	0.96907

Device Test: 24.84 SYNC1_VIH(THRESHOLD|RISE/SYNC1/12//OPEN//@SYNC1_VIH)


NDD vs Result Stats


NDD vs Post - Pre Exposure Delta

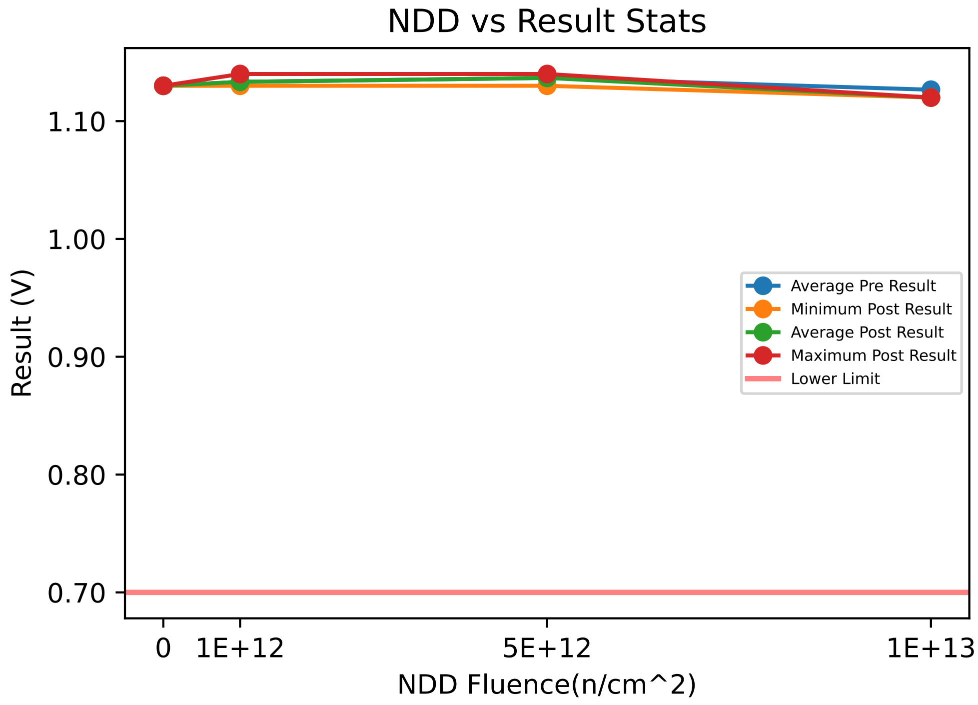
Test Results (Upper Limit = 1.7 (V))

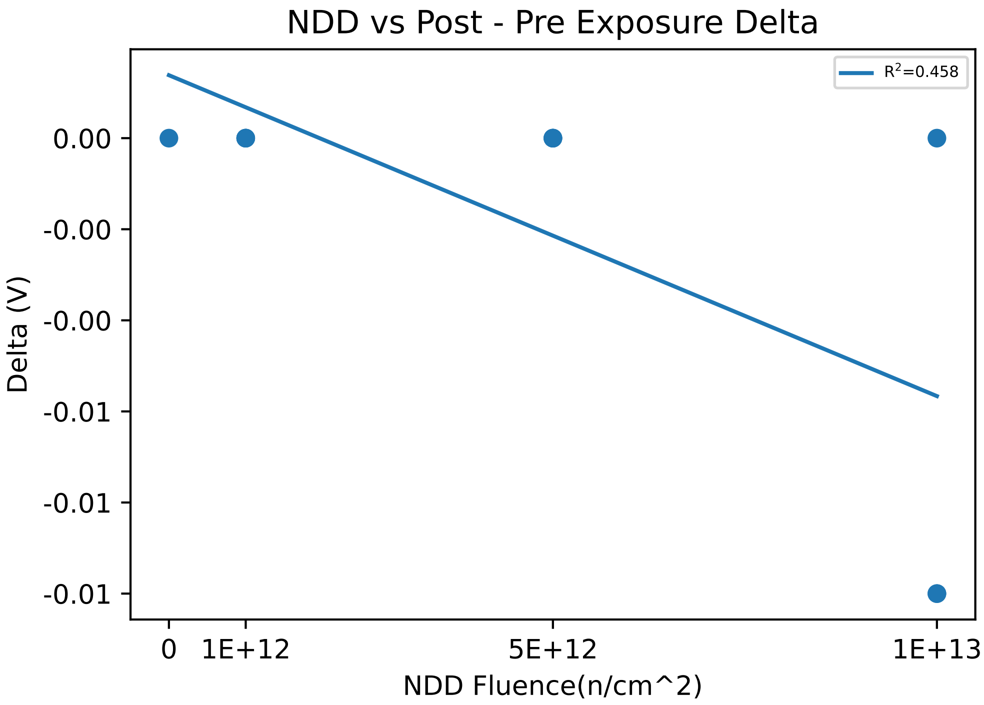
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.43	1.43	0
504	1e+12	NDD	1.43	1.42	-0.01
505	1e+12	NDD	1.43	1.43	0
506	5e+12	NDD	1.44	1.44	0
507	5e+12	NDD	1.42	1.41	-0.01
508	5e+12	NDD	1.43	1.43	0
509	1e+13	NDD	1.41	1.4	-0.01
510	1e+13	NDD	1.42	1.42	0
511	1e+13	NDD	1.42	1.42	0
512	0	Correlation	1.42	1.42	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.42	1.42	1.42		1.42	1.42	1.42		0	0	0	
1e+12	1.43	1.43	1.43	0	1.42	1.4267	1.43	0.0057735	-0.01	-0.0033333	0	0.0057735
5e+12	1.42	1.43	1.44	0.01	1.41	1.4267	1.44	0.015275	-0.01	-0.0033333	0	0.0057735
1e+13	1.41	1.4167	1.42	0.0057735	1.4	1.4133	1.42	0.011547	-0.01	-0.0033333	0	0.0057735

Device Test: 24.85 SYNC1_VIL(THRESHOLD|FALL/SYNC1/12//OPEN//@SYNC1_VIL)





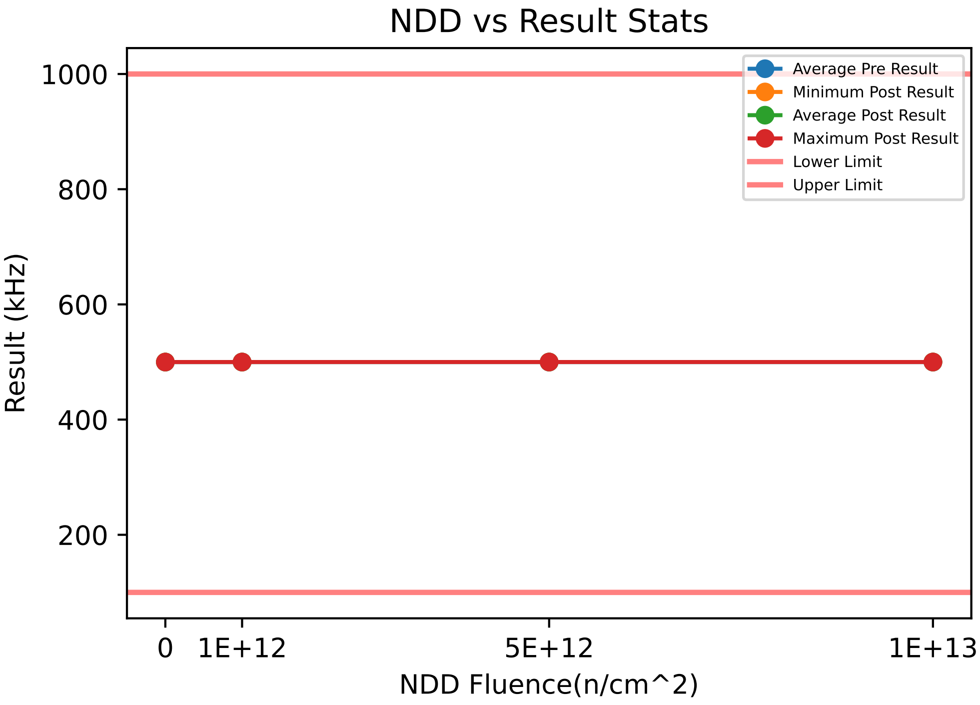
Test Results (Lower Limit = 0.7 (V))

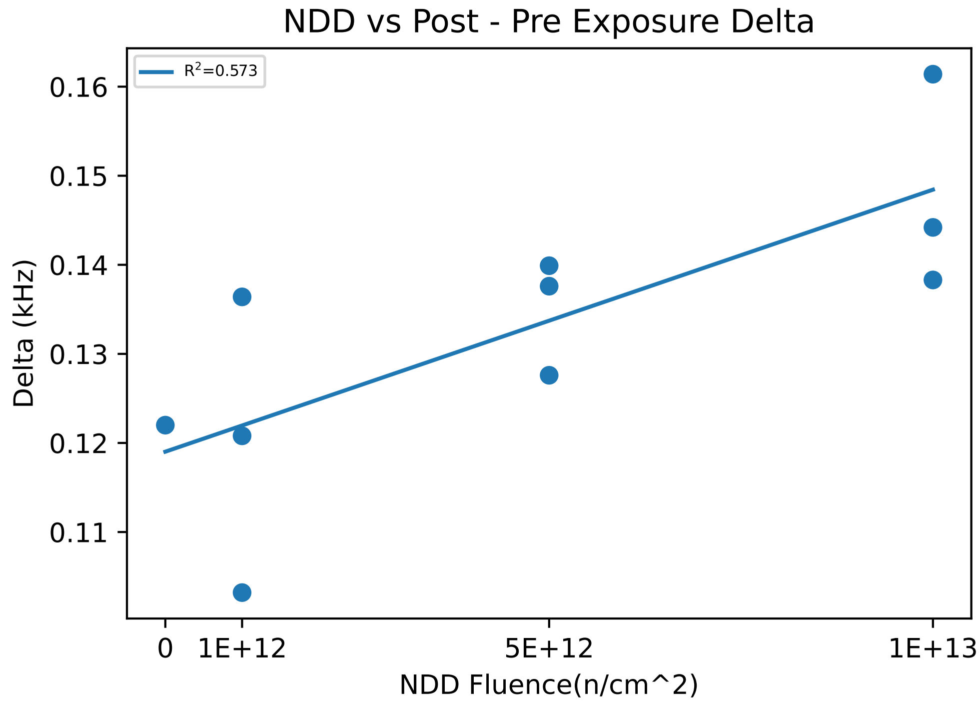
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1.14	1.14	0
504	1e+12	NDD	1.13	1.13	0
505	1e+12	NDD	1.13	1.13	0
506	5e+12	NDD	1.14	1.14	0
507	5e+12	NDD	1.13	1.13	0
508	5e+12	NDD	1.14	1.14	0
509	1e+13	NDD	1.12	1.12	0
510	1e+13	NDD	1.13	1.12	-0.01
511	1e+13	NDD	1.13	1.12	-0.01
512	0	Correlation	1.13	1.13	0

Test Statistics (V)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.13	1.13	1.13		1.13	1.13	1.13		0	0	0	
1e+12	1.13	1.1333	1.14	0.0057735	1.13	1.1333	1.14	0.0057735	0	0	0	0
5e+12	1.13	1.1367	1.14	0.0057735	1.13	1.1367	1.14	0.0057735	0	0	0	0
1e+13	1.12	1.1267	1.13	0.0057735	1.12	1.12	1.12	0	-0.01	-0.0066667	0	0.0057735

Device Test: 24.88 SYNC_FREQ_RANGE(FREQ|500kHz/SYNC1/12//OPEN//@SYNC_FREQ_RANGE)





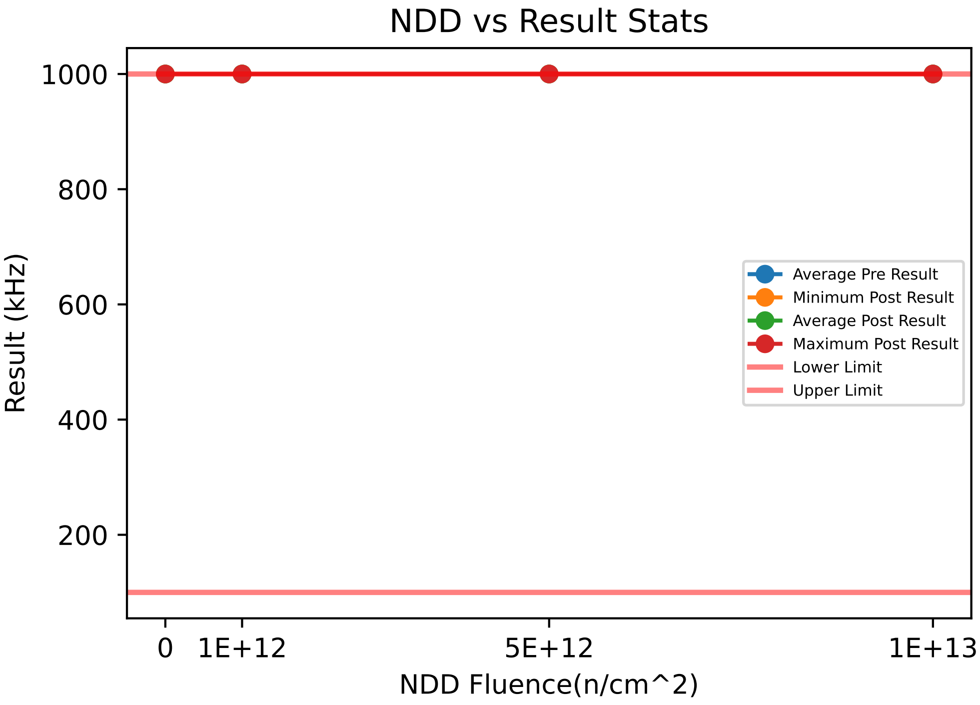
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

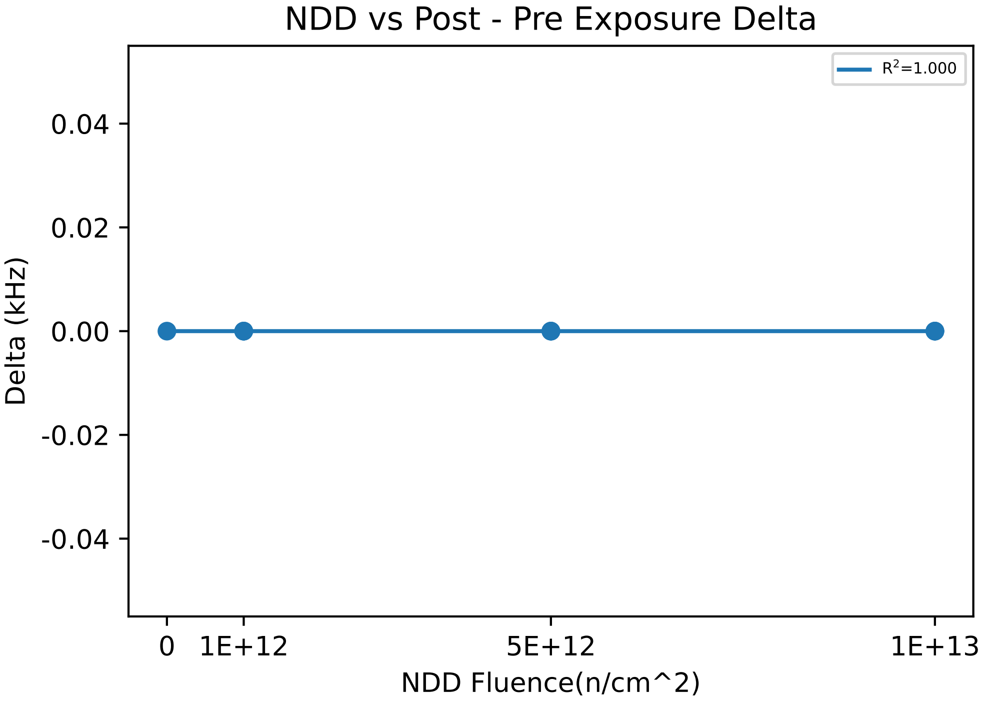
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	499.84	499.96	0.1208
504	1e+12	NDD	499.82	499.96	0.1364
505	1e+12	NDD	499.82	499.92	0.1032
506	5e+12	NDD	499.84	499.97	0.1276
507	5e+12	NDD	499.82	499.96	0.1399
508	5e+12	NDD	499.81	499.95	0.1376
509	1e+13	NDD	499.82	499.96	0.1383
510	1e+13	NDD	499.8	499.97	0.1614
511	1e+13	NDD	499.81	499.96	0.1442
512	0	Correlation	499.81	499.94	0.122

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.81	499.81	499.81		499.94	499.94	499.94		0.122	0.122	0.122	
1e+12	499.82	499.83	499.84	0.0096317	499.92	499.95	499.96	0.02135	0.1032	0.12013	0.1364	0.01661
5e+12	499.81	499.82	499.84	0.014654	499.95	499.96	499.97	0.0090007	0.1276	0.13503	0.1399	0.0065394
1e+13	499.8	499.81	499.82	0.0071842	499.96	499.96	499.97	0.0049487	0.1383	0.14797	0.1614	0.012002

Device Test: 24.89 SYNC_FREQ_RANGE(FREQ|1000kHz/SYNC1/12//OPEN//@SYNC_FREQ_RANGE)





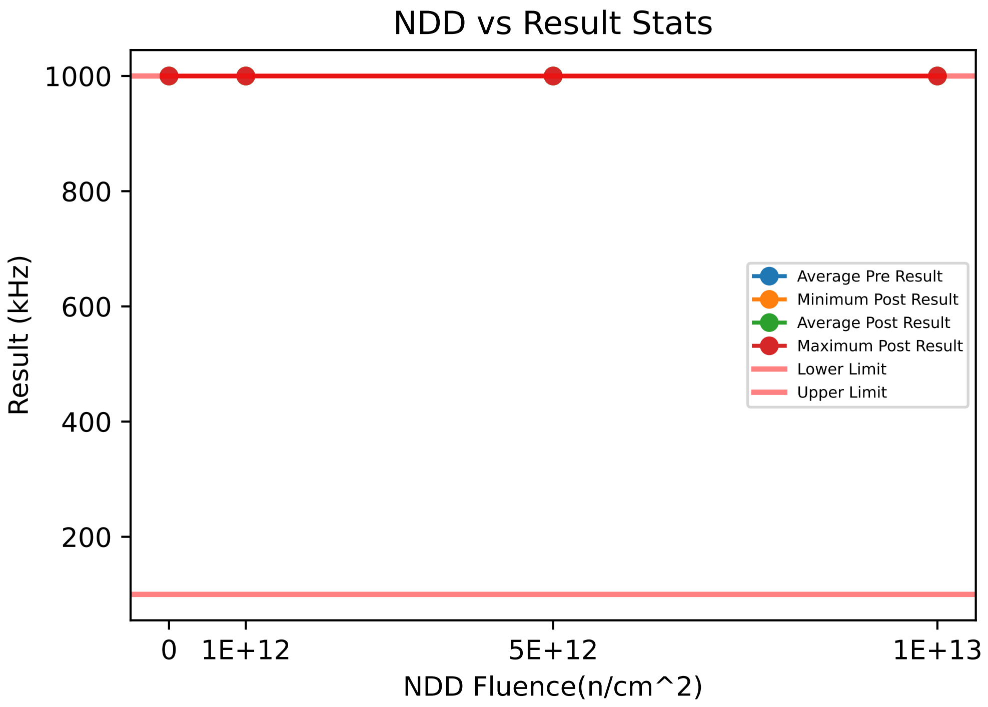
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

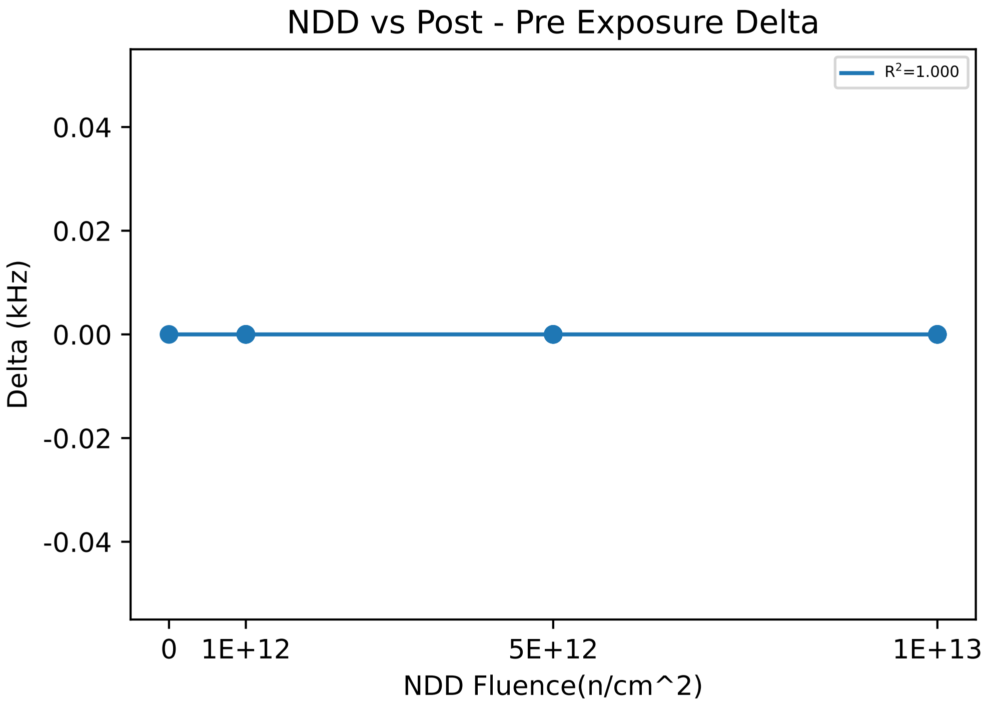
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1000	1000	0
504	1e+12	NDD	1000	1000	0
505	1e+12	NDD	1000	1000	0
506	5e+12	NDD	1000	1000	0
507	5e+12	NDD	1000	1000	0
508	5e+12	NDD	1000	1000	0
509	1e+13	NDD	1000	1000	0
510	1e+13	NDD	1000	1000	0
511	1e+13	NDD	1000	1000	0
512	0	Correlation	1000	1000	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000		1000	1000	1000		0	0	0	
1e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
5e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
1e+13	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

Device Test: 24.9 SYNC_FREQ_RANGE(FREQ|1000kHz/SYNC1/4.5//OPEN//@SYNC_FREQ_RANGE)





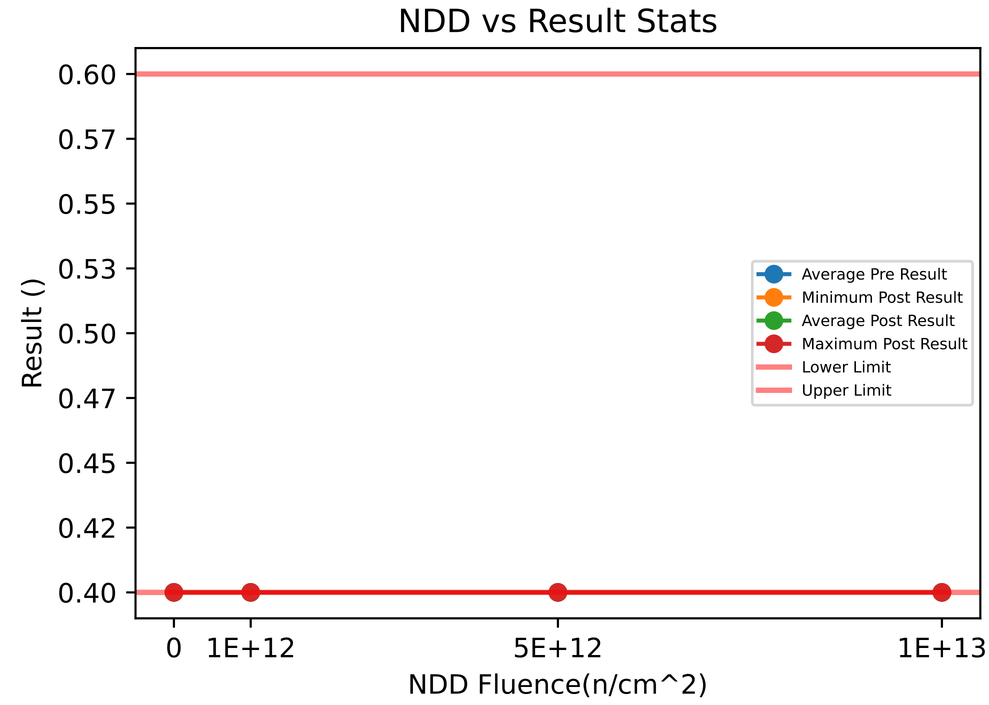
Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

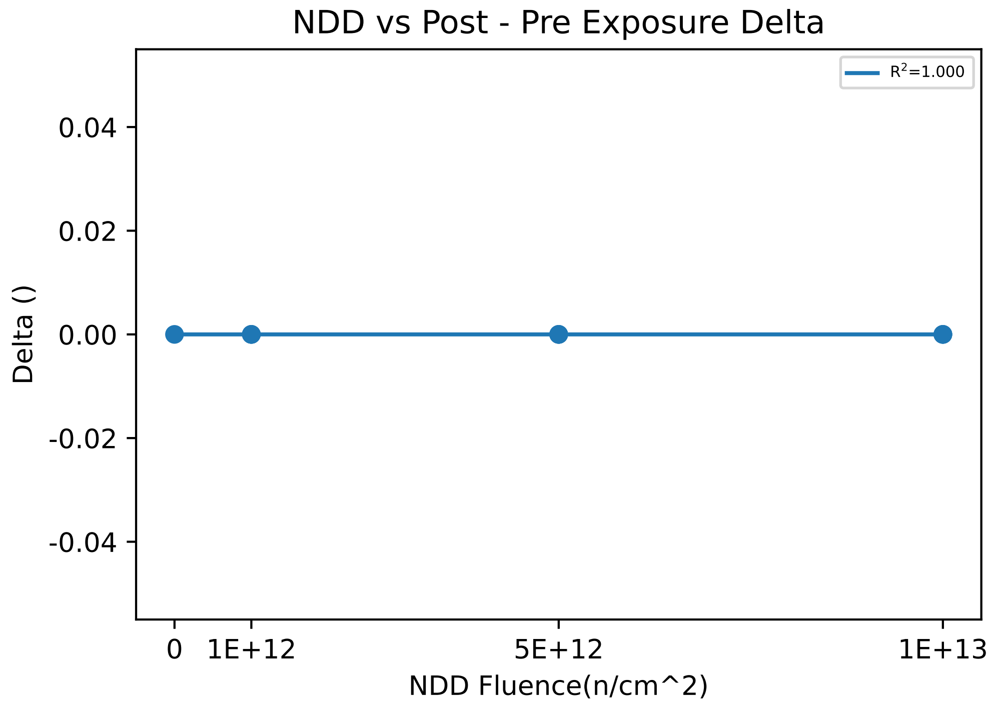
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1000	1000	0
504	1e+12	NDD	1000	1000	0
505	1e+12	NDD	1000	1000	0
506	5e+12	NDD	1000	1000	0
507	5e+12	NDD	1000	1000	0
508	5e+12	NDD	1000	1000	0
509	1e+13	NDD	1000	1000	0
510	1e+13	NDD	1000	1000	0
511	1e+13	NDD	1000	1000	0
512	0	Correlation	1000	1000	0

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000		1000	1000	1000		0	0	0	
1e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
5e+12	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
1e+13	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

ce Test: 24.90 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_40%/SYNC1/12//OPEN//@SYNC_IN_DUTY_CYCLE_RA





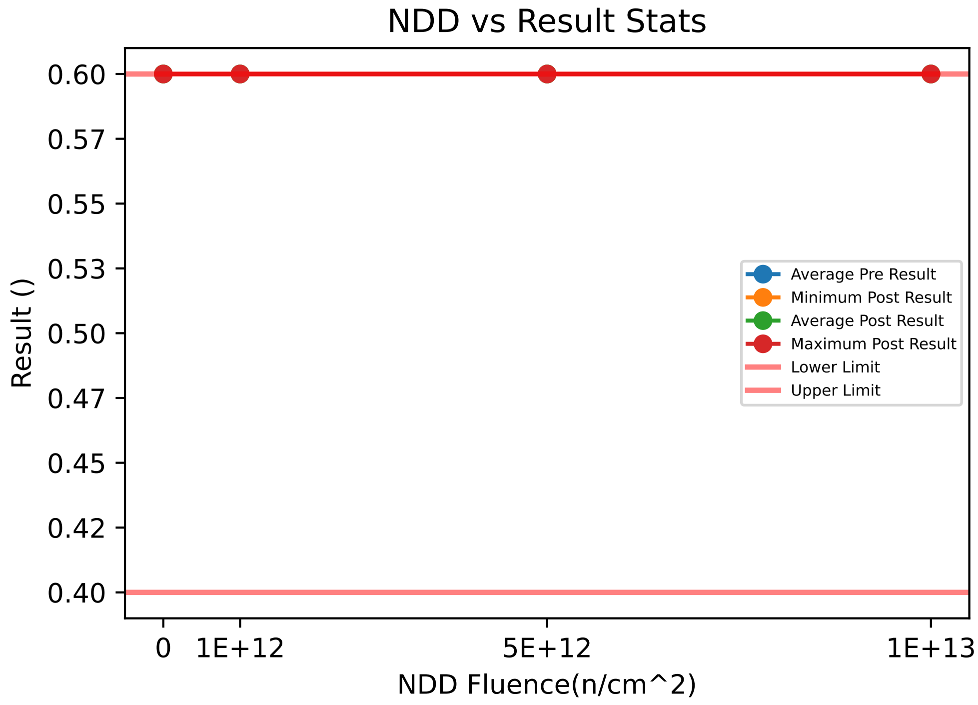
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 ())

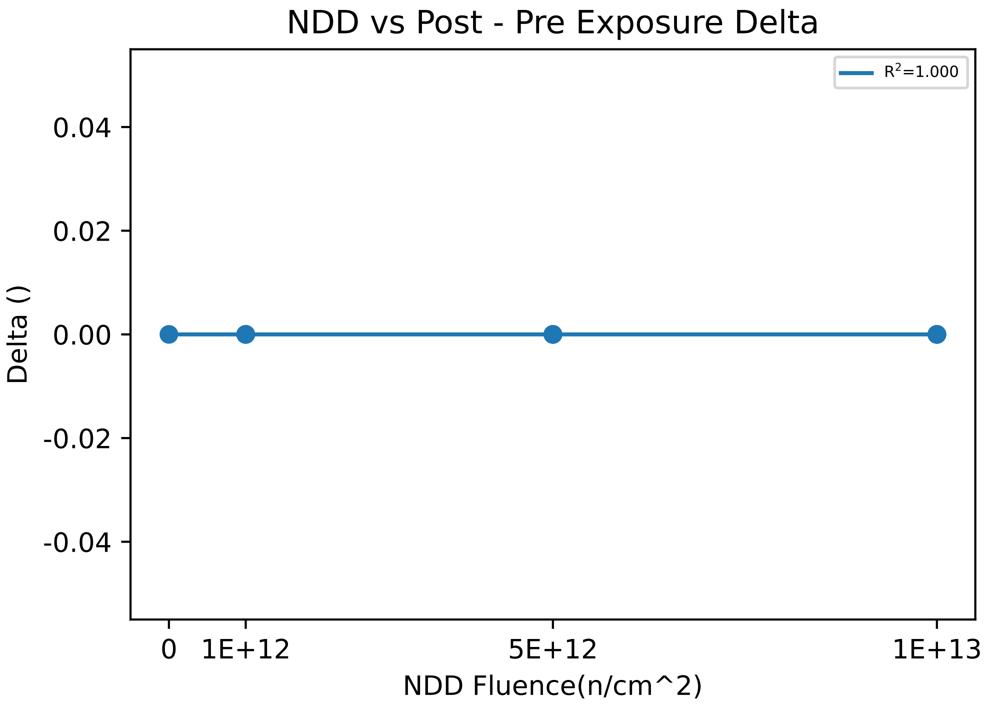
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.4	0.4	0
504	1e+12	NDD	0.4	0.4	0
505	1e+12	NDD	0.4	0.4	0
506	5e+12	NDD	0.4	0.4	0
507	5e+12	NDD	0.4	0.4	0
508	5e+12	NDD	0.4	0.4	0
509	1e+13	NDD	0.4	0.4	0
510	1e+13	NDD	0.4	0.4	0
511	1e+13	NDD	0.4	0.4	0
512	0	Correlation	0.4	0.4	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4		0.4	0.4	0.4		0	0	0	
1e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
5e+12	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
1e+13	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

e Test: 24.91 SYNC_IN_DUTY_CYCLE_RANGE(DUTYCYCLE|GNG_60%/SYNC1/12//OPEN//@SYNC_IN_DUTY_CYCLE_RA





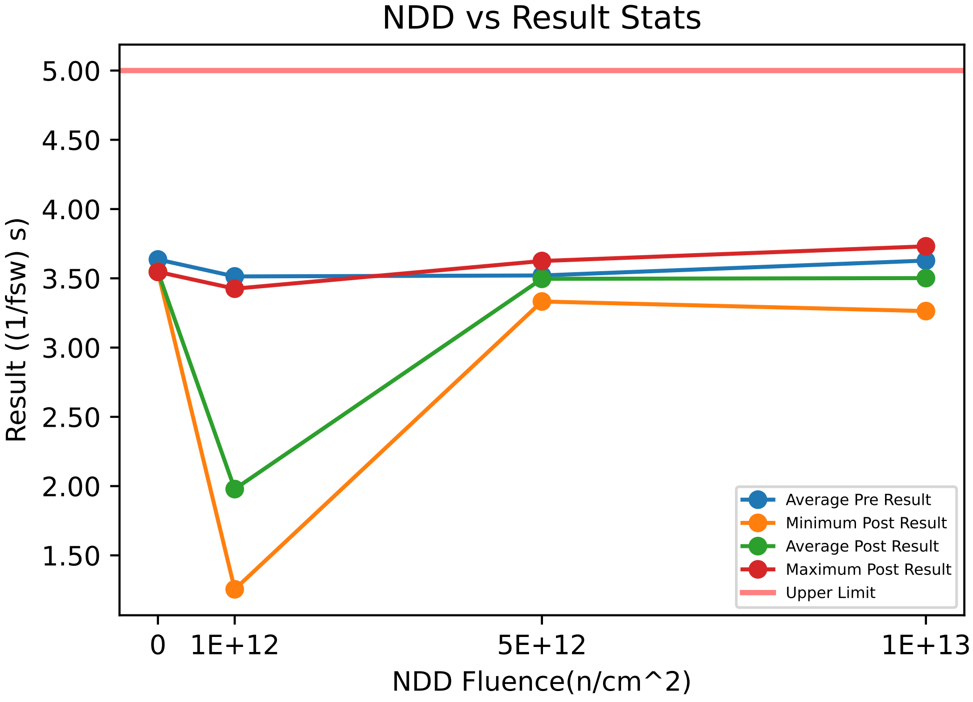
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 ())

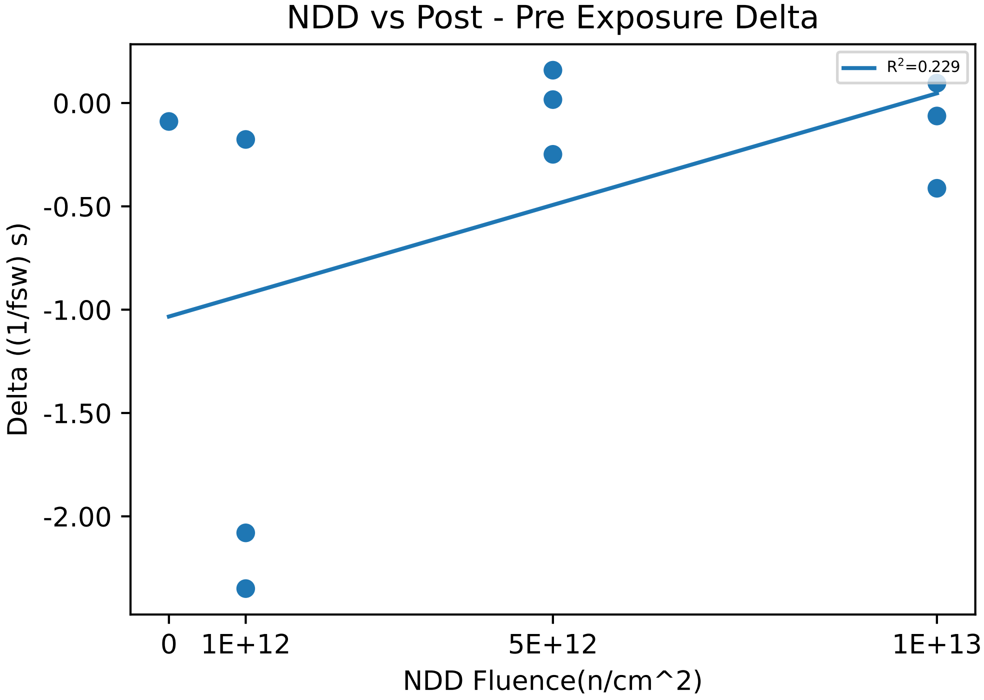
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	0.6	0.6	0
504	1e+12	NDD	0.6	0.6	0
505	1e+12	NDD	0.6	0.6	0
506	5e+12	NDD	0.6	0.6	0
507	5e+12	NDD	0.6	0.6	0
508	5e+12	NDD	0.6	0.6	0
509	1e+13	NDD	0.6	0.6	0
510	1e+13	NDD	0.6	0.6	0
511	1e+13	NDD	0.6	0.6	0
512	0	Correlation	0.6	0.6	0

Test Statistics ()

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6		0.6	0.6	0.6		0	0	0	
1e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
5e+12	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
1e+13	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

Device Test: 24.92 T_CLOCK_DET(TIMING|CLKDETECT/SYNC1/12//511k//@T_CLOCK_DET)





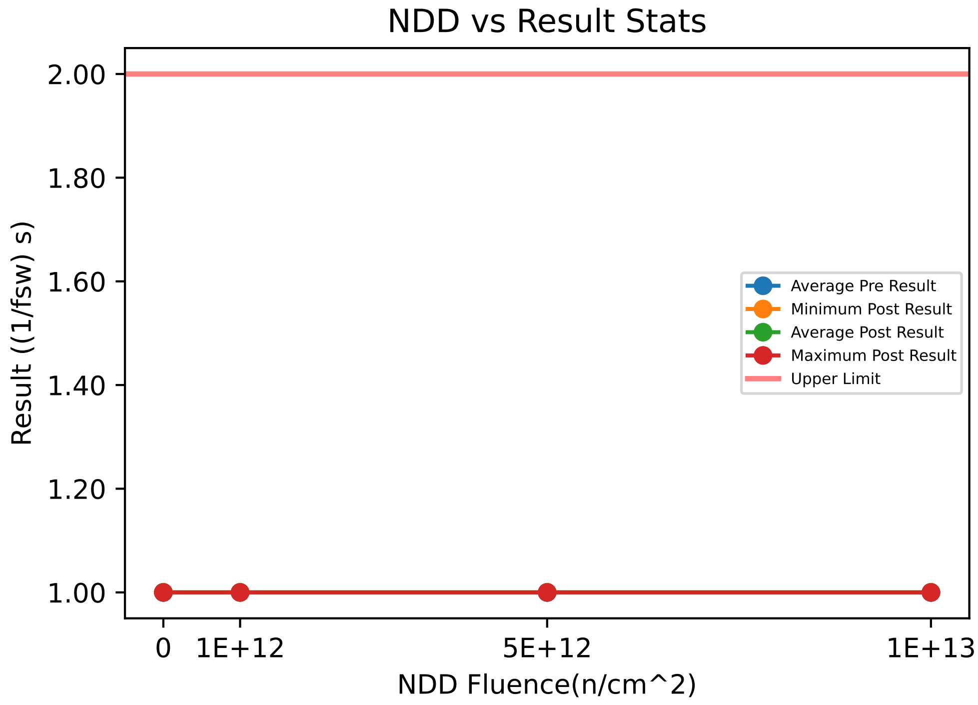
Test Results (Upper Limit = 5.0 ((1/fsw) s))

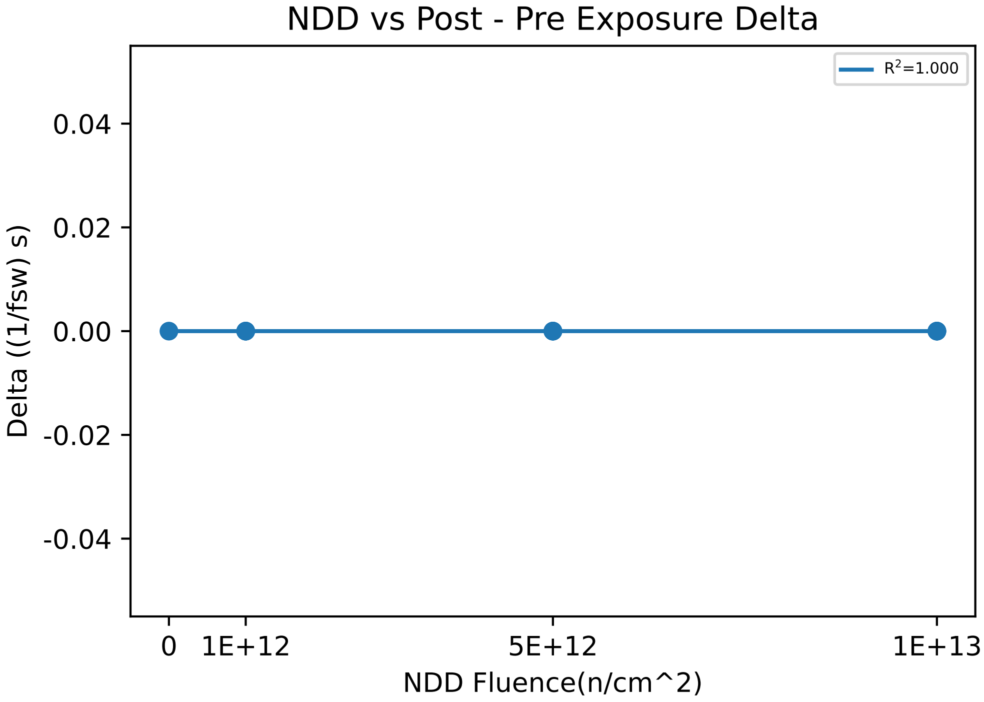
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	3.6014	3.4251	-0.1763
504	1e+12	NDD	3.6045	1.2548	-2.3497
505	1e+12	NDD	3.3352	1.2552	-2.08
506	5e+12	NDD	3.5811	3.3328	-0.2483
507	5e+12	NDD	3.3724	3.5312	0.1588
508	5e+12	NDD	3.6085	3.625	0.0165
509	1e+13	NDD	3.6761	3.2635	-0.4126
510	1e+13	NDD	3.6349	3.7309	0.096
511	1e+13	NDD	3.5732	3.5104	-0.0628
512	0	Correlation	3.6361	3.5468	-0.0893

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.6361	3.6361	3.6361		3.5468	3.5468	3.5468		-0.0893	-0.0893	-0.0893	
1e+12	3.3352	3.5137	3.6045	0.15459	1.2548	1.9784	3.4251	1.2529	-2.3497	-1.5353	-0.1763	1.1847
5e+12	3.3724	3.5207	3.6085	0.12913	3.3328	3.4963	3.625	0.14919	-0.2483	-0.024333	0.1588	0.2066
1e+13	3.5732	3.6281	3.6761	0.051789	3.2635	3.5016	3.7309	0.23382	-0.4126	-0.12647	0.096	0.26021

Device Test: 24.93 T_CLOCK_DET_EXT(TIMING|CLKDETECT/SYNC1/12//511k//@T_CLOCK_DET_EXT)





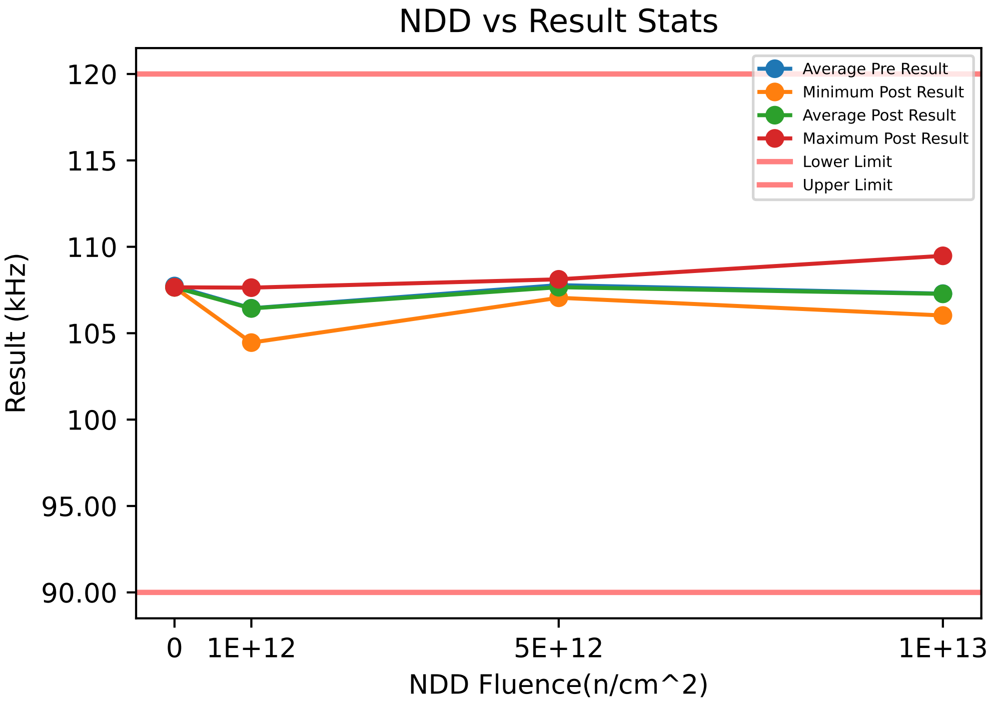
Test Results (Upper Limit = 2.0 ((1/fsw) s))

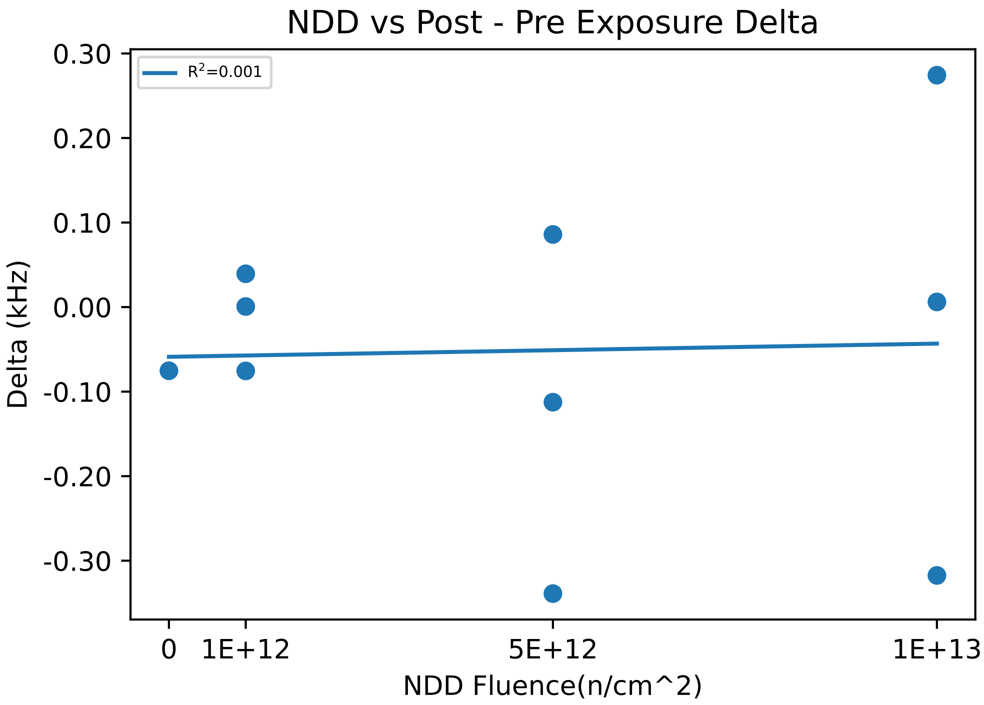
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	1	1	0
504	1e+12	NDD	1	1	0
505	1e+12	NDD	1	1	0
506	5e+12	NDD	1	1	0
507	5e+12	NDD	1	1	0
508	5e+12	NDD	1	1	0
509	1e+13	NDD	1	1	0
510	1e+13	NDD	1	1	0
511	1e+13	NDD	1	1	0
512	0	Correlation	1	1	0

Test Statistics ((1/fsw) s)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1		1	1	1		0	0	0	
1e+12	1	1	1	0	1	1	1	0	0	0	0	0
5e+12	1	1	1	0	1	1	1	0	0	0	0	0
1e+13	1	1	1	0	1	1	1	0	0	0	0	0

Device Test: 24.94 EXT_SET_FREQ_100KHZ_12V(FREQ|100kHz/SYNC1/12//511k//@EXT_SET_FREQ_100KHZ_12V)





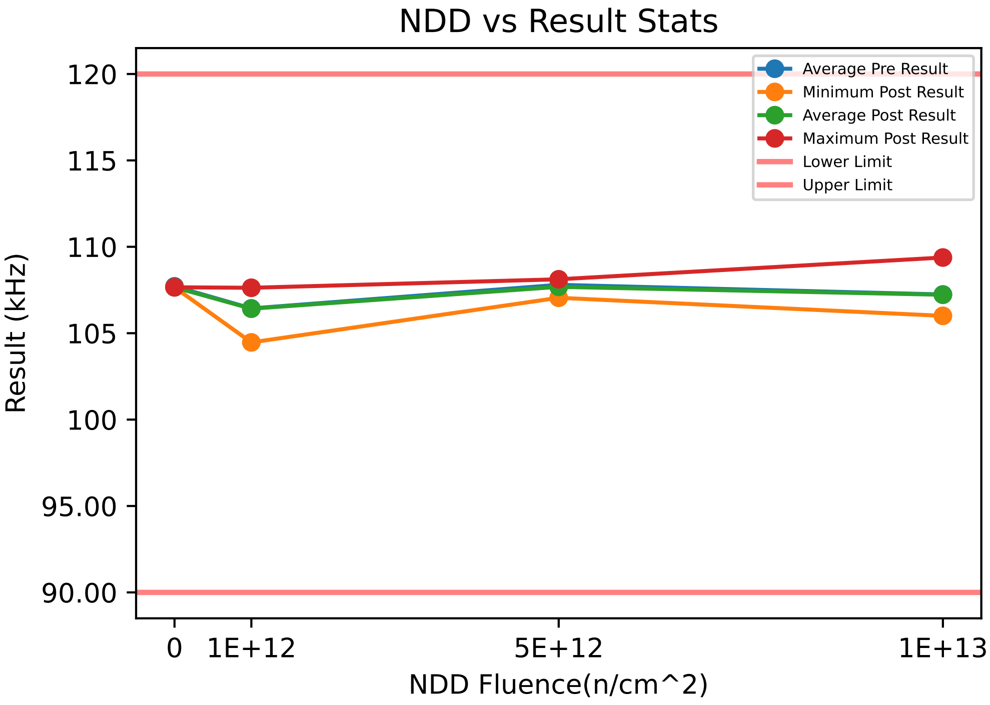
Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	107.63	107.64	0.0007
504	1e+12	NDD	107.16	107.2	0.0394
505	1e+12	NDD	104.53	104.46	-0.0755
506	5e+12	NDD	107.16	107.05	-0.1125
507	5e+12	NDD	107.73	107.81	0.0859
508	5e+12	NDD	108.46	108.12	-0.3389
509	1e+13	NDD	109.2	109.48	0.2743
510	1e+13	NDD	106.34	106.03	-0.3174
511	1e+13	NDD	106.32	106.33	0.0061
512	0	Correlation	107.73	107.66	-0.0753

Test Statistics (kHz)

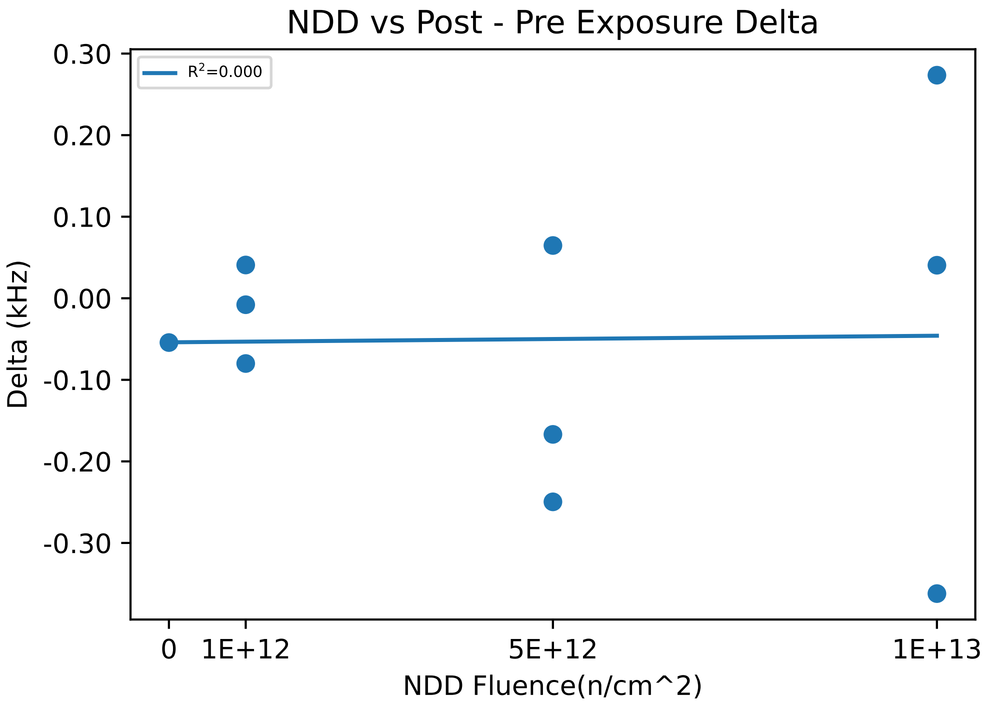
Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.73	107.73	107.73		107.66	107.66	107.66		-0.0753	-0.0753	-0.0753	
1e+12	104.53	106.44	107.63	1.6729	104.46	106.43	107.64	1.725	-0.0755	-0.0118	0.0394	0.058461
5e+12	107.16	107.78	108.46	0.64857	107.05	107.66	108.12	0.54992	-0.3389	-0.12183	0.0859	0.21255
1e+13	106.32	107.29	109.2	1.6582	106.03	107.28	109.48	1.9123	-0.3174	-0.012333	0.2743	0.29628

Device Test: 24.95 EXT_SET_FREQ_100KHZ_12V(FREQ|100kHz/SYNC2/12//511k//@EXT_SET_FREQ_100KHZ_12V)


NDD vs Result Stats

Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

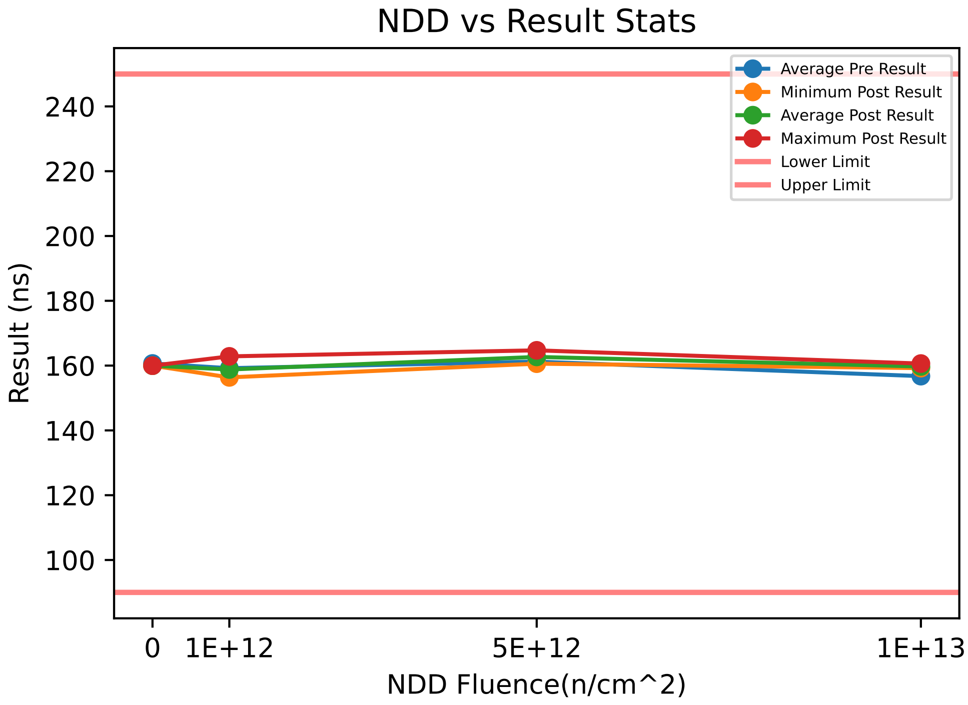
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	107.59	107.63	0.0408
504	1e+12	NDD	107.24	107.16	-0.08
505	1e+12	NDD	104.48	104.47	-0.0079
506	5e+12	NDD	107.22	107.05	-0.1669
507	5e+12	NDD	107.81	107.88	0.0647
508	5e+12	NDD	108.37	108.12	-0.2496
509	1e+13	NDD	109.11	109.38	0.2735
510	1e+13	NDD	106.37	106	-0.3621
511	1e+13	NDD	106.25	106.29	0.0405
512	0	Correlation	107.71	107.66	-0.0543

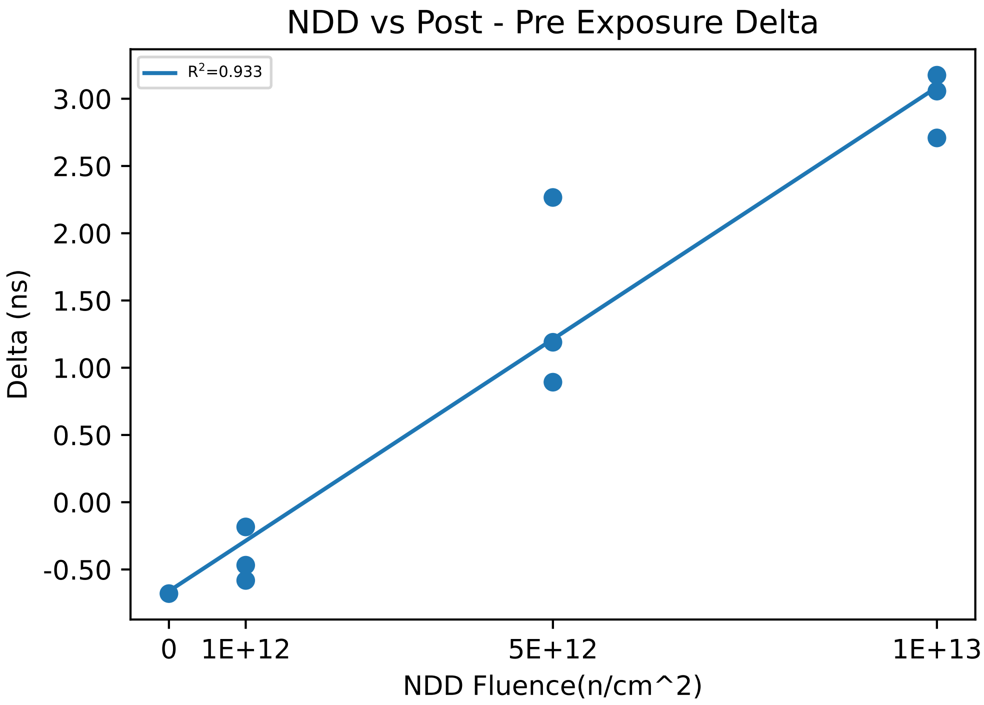

NDD vs Post - Pre Exposure Delta

Test Statistics (kHz)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.71	107.71	107.71		107.66	107.66	107.66		-0.0543	-0.0543	-0.0543	
1e+12	104.48	106.43	107.59	1.7049	104.47	106.42	107.63	1.7055	-0.08	-0.0157	0.0408	0.060777
5e+12	107.22	107.8	108.37	0.57616	107.05	107.68	108.12	0.56073	-0.2496	-0.11727	0.0647	0.16292
1e+13	106.25	107.24	109.11	1.616	106	107.23	109.38	1.8713	-0.3621	-0.016033	0.2735	0.32155

Device Test: 24.96 SYNC1_SW_DELAY_OUTPUT(TIMING|DELAY/SYNC1/12//511k//@SYNC1_SW_DELAY_OUTPUT)





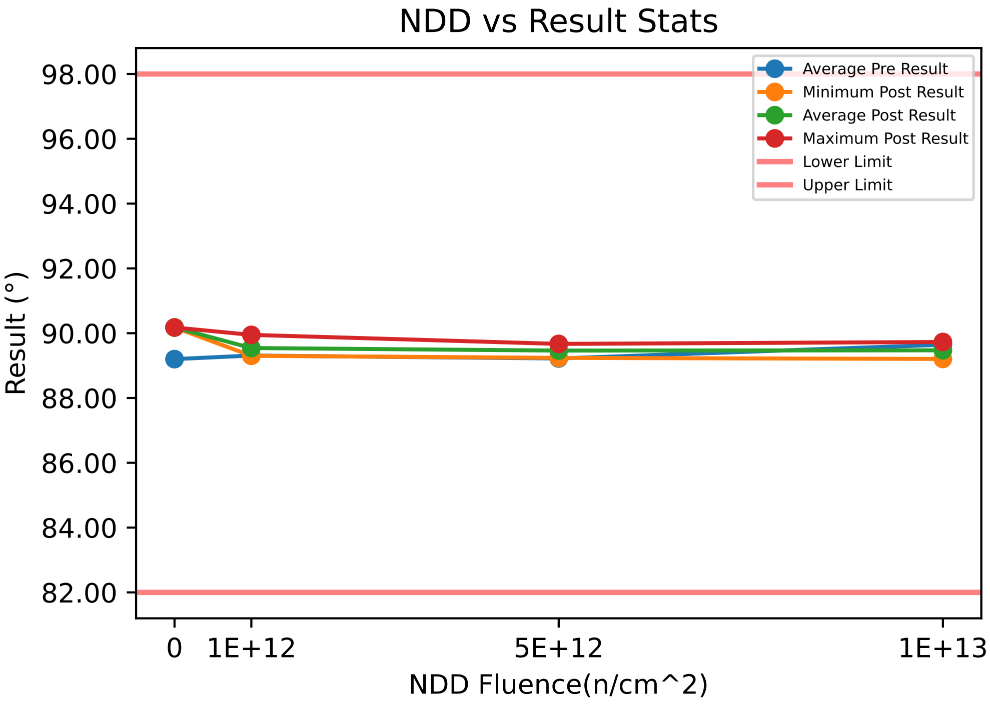
Test Results (Lower Limit = 90.0, Upper Limit = 250.0 (ns))

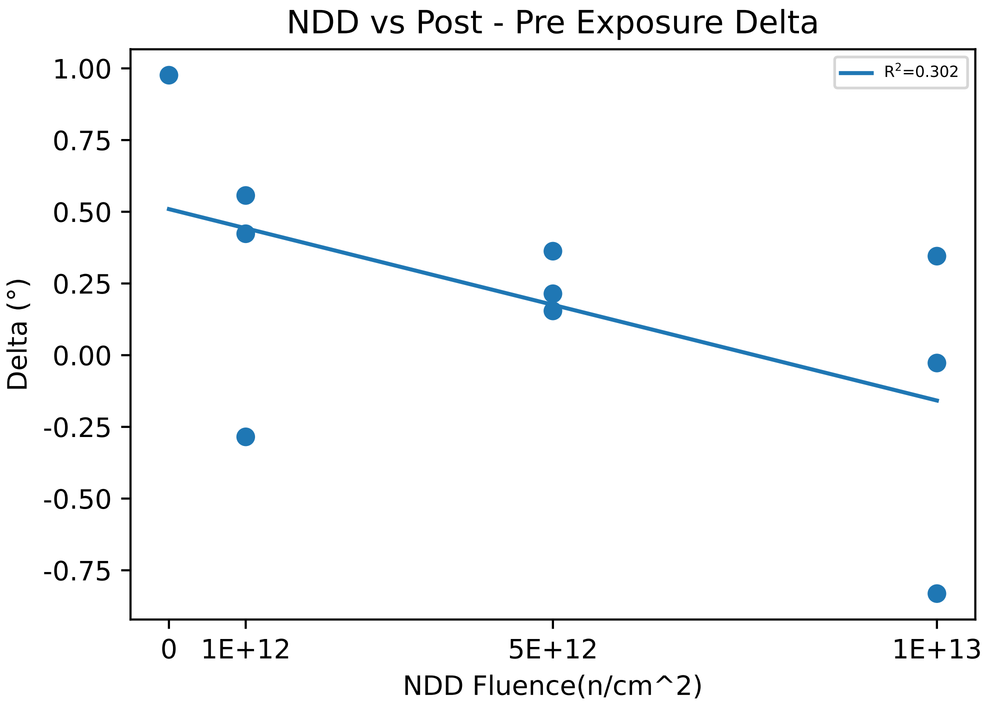
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	163.32	162.85	-0.4682
504	1e+12	NDD	156.54	156.36	-0.1837
505	1e+12	NDD	157.76	157.18	-0.5817
506	5e+12	NDD	163.82	164.71	0.8925
507	5e+12	NDD	160.47	162.73	2.266
508	5e+12	NDD	159.4	160.59	1.1894
509	1e+13	NDD	157.46	160.63	3.1751
510	1e+13	NDD	156.16	159.22	3.0567
511	1e+13	NDD	156.62	159.33	2.7087
512	0	Correlation	160.66	159.98	-0.6794

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	160.66	160.66	160.66		159.98	159.98	159.98		-0.6794	-0.6794	-0.6794	
1e+12	156.54	159.21	163.32	3.6122	156.36	158.8	162.85	3.5351	-0.5817	-0.4112	-0.1837	0.20503
5e+12	159.4	161.23	163.82	2.3052	160.59	162.68	164.71	2.0606	0.8925	1.4493	2.266	0.72269
1e+13	156.16	156.75	157.46	0.65642	159.22	159.73	160.63	0.78629	2.7087	2.9802	3.1751	0.24244

Device Test: 24.97 SYNC_PH_SHIFT(TIMING|PHASESHIFT/SYNC1/12//511k//@SYNC_PH_SHIFT)





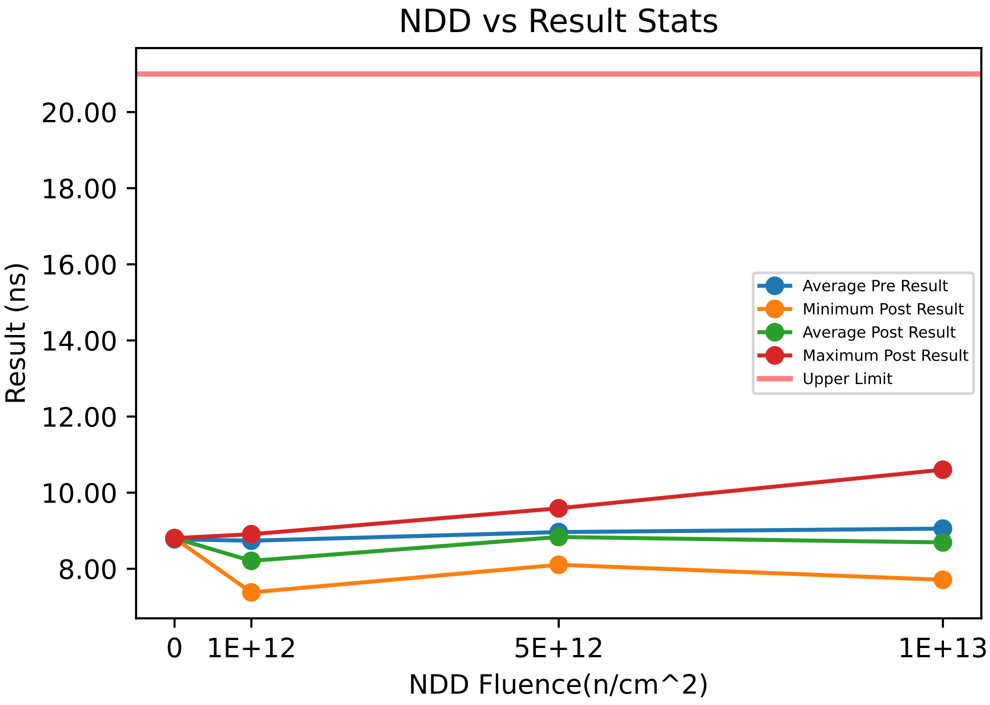
Test Results (Lower Limit = 82.0, Upper Limit = 98.0 (°))

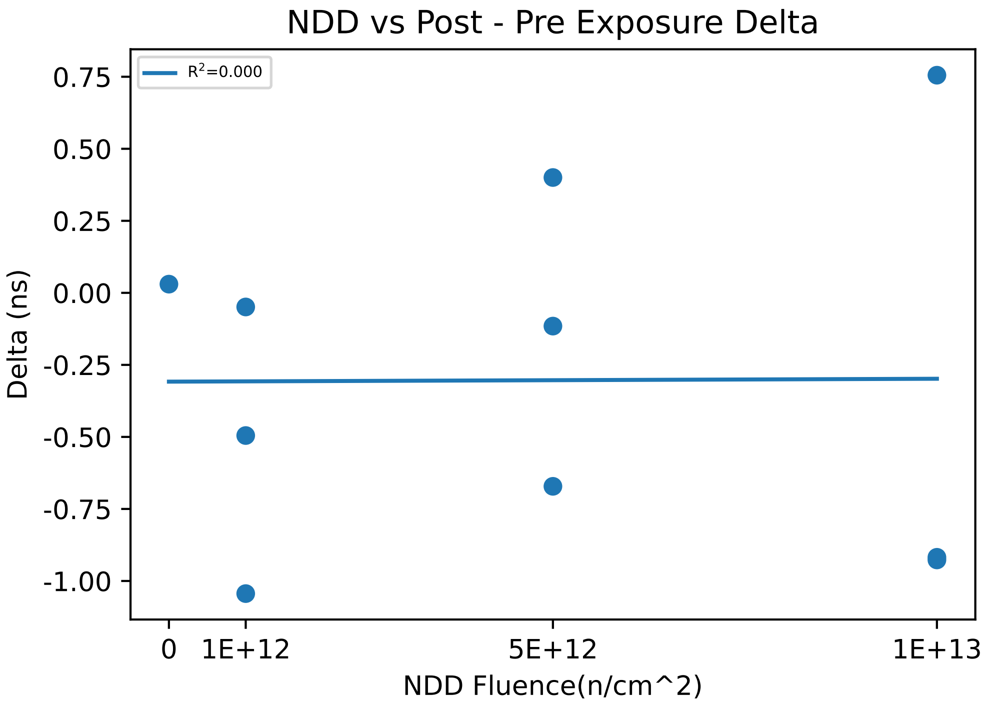
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	89.391	89.948	0.5568
504	1e+12	NDD	88.953	89.376	0.4234
505	1e+12	NDD	89.587	89.302	-0.2848
506	5e+12	NDD	89.307	89.67	0.3626
507	5e+12	NDD	89.329	89.484	0.1543
508	5e+12	NDD	89.023	89.238	0.2142
509	1e+13	NDD	89.509	89.482	-0.0273
510	1e+13	NDD	89.383	89.729	0.3453
511	1e+13	NDD	90.037	89.205	-0.8313
512	0	Correlation	89.2	90.177	0.9762

Test Statistics (°)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	89.2	89.2	89.2		90.177	90.177	90.177		0.9762	0.9762	0.9762	
1e+12	88.953	89.31	89.587	0.32493	89.302	89.542	89.948	0.35362	-0.2848	0.2318	0.5568	0.45233
5e+12	89.023	89.22	89.329	0.17051	89.238	89.464	89.67	0.21669	0.1543	0.2437	0.3626	0.10724
1e+13	89.383	89.643	90.037	0.34656	89.205	89.472	89.729	0.2618	-0.8313	-0.1711	0.3453	0.60134

Device Test: 24.98 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC1/12//511k//@SYNC_LH_RISE_TIME)





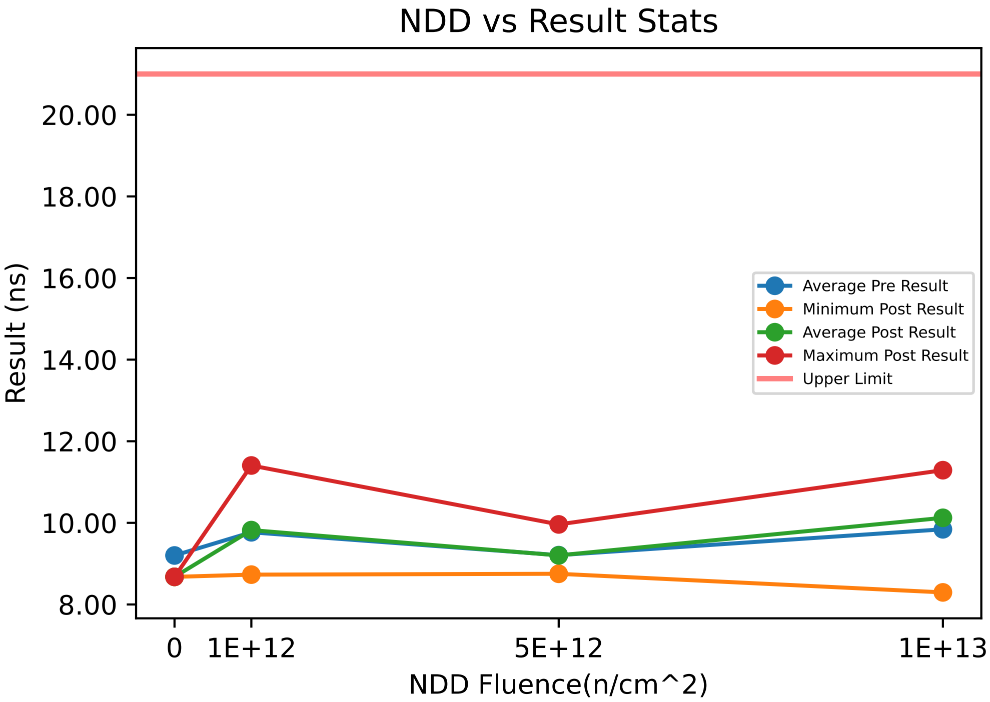
Test Results (Upper Limit = 21.0 (ns))

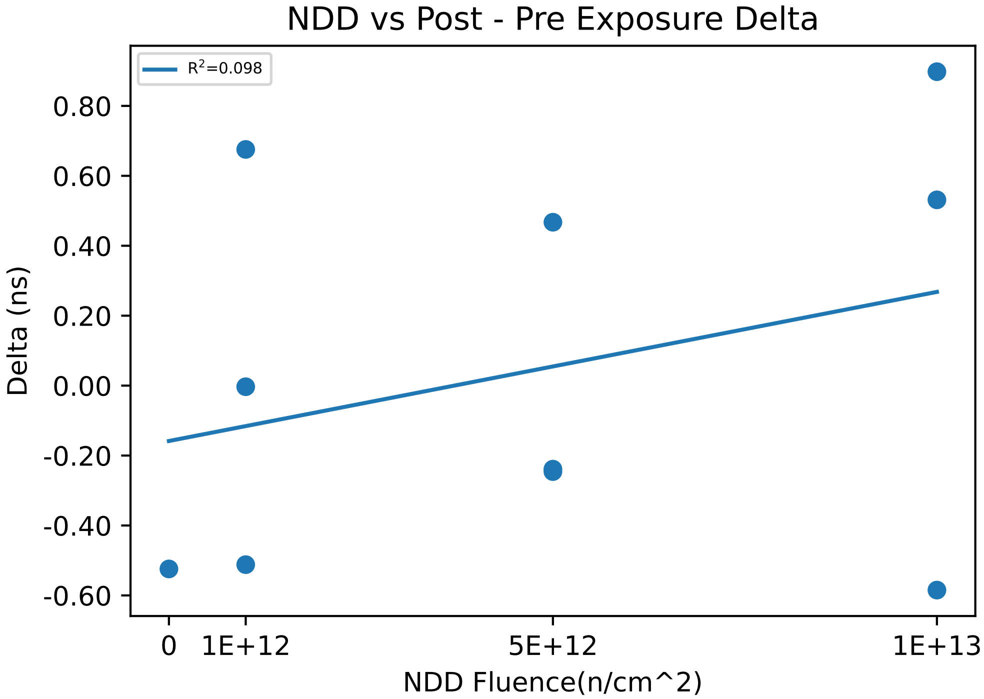
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	8.9574	8.9084	-0.049
504	1e+12	NDD	8.8323	8.3371	-0.4952
505	1e+12	NDD	8.4234	7.3796	-1.0438
506	5e+12	NDD	8.7771	8.1056	-0.6715
507	5e+12	NDD	8.9266	8.8112	-0.1154
508	5e+12	NDD	9.1889	9.5892	0.4003
509	1e+13	NDD	9.8475	10.603	0.7554
510	1e+13	NDD	8.6814	7.7636	-0.9178
511	1e+13	NDD	8.6378	7.7109	-0.9269
512	0	Correlation	8.7752	8.8054	0.0302

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.7752	8.7752	8.7752		8.8054	8.8054	8.8054		0.0302	0.0302	0.0302	
1e+12	8.4234	8.7377	8.9574	0.27929	7.3796	8.2084	8.9084	0.77249	-1.0438	-0.52933	-0.049	0.49828
5e+12	8.7771	8.9642	9.1889	0.20846	8.1056	8.8353	9.5892	0.74209	-0.6715	-0.12887	0.4003	0.53603
1e+13	8.6378	9.0556	9.8475	0.68618	7.7109	8.6925	10.603	1.6547	-0.9269	-0.3631	0.7554	0.96866

Device Test: 24.99 SYNC_LH_RISE_TIME(TIMING|RISE/SYNC2/12//511k//@SYNC_LH_RISE_TIME)





Test Results (Upper Limit = 21.0 (ns))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
503	1e+12	NDD	9.2432	8.7312	-0.512
504	1e+12	NDD	9.3327	9.3295	-0.0032
505	1e+12	NDD	10.731	11.406	0.6755
506	5e+12	NDD	9.4944	9.9617	0.4673
507	5e+12	NDD	9.1333	8.8944	-0.2389
508	5e+12	NDD	8.9977	8.7518	-0.2459
509	1e+13	NDD	8.8805	8.2957	-0.5848
510	1e+13	NDD	10.393	11.291	0.8978
511	1e+13	NDD	10.252	10.783	0.5313
512	0	Correlation	9.2006	8.6763	-0.5243

Test Statistics (ns)

Fluence(n/cm^2)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.2006	9.2006	9.2006		8.6763	8.6763	8.6763		-0.5243	-0.5243	-0.5243	
1e+12	9.2432	9.7688	10.731	0.83412	8.7312	9.8223	11.406	1.4039	-0.512	0.053433	0.6755	0.59577
5e+12	8.9977	9.2085	9.4944	0.25674	8.7518	9.2026	9.9617	0.66123	-0.2459	-0.0058333	0.4673	0.40976
1e+13	8.8805	9.8418	10.393	0.83552	8.2957	10.123	11.291	1.6029	-0.5848	0.28143	0.8978	0.77224

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