Radiation Report

TPS7H1210-SEP Total Ionizing Dose (TID)

ABSTRACT

This report discusses the results of the Total Ionizing Dose (TID) testing for the Texas Instruments –16.5-V, 1-A, negative voltage linear regulator in SEP (Space Enhanced Plastic) with an ultra-low noise, high PSRR regulator capable of sourcing a maximum load of 1 A, TPS7H1210-SEP. The study was done to determine TID effects under low dose rate (LDR) and high dose rate (HDR) up to 30 krad(Si). The results show that all samples passed within the specified limits up to 30 krad(Si).

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1 Device Information

1.1 Product Description

The TPS7H1210-SEP negative voltage linear regulator is an ultra-low noise, high PSRR regulator capable of sourcing a maximum load of 1 A. The TPS7H1210-SEP provides exceptional efficiency and output accuracy in a very small solution size.

1.2 Device Details

Table 1-1 lists the device information used in the TID HDR and LDR characterization.

Table 1-1. Device and Exposure Details

TID HDR and LDR Details: 20 and 30 krad(Si)	
Package	20-pin VQFN (RGW)
Quantity Tested	HDR and LDR: 22 bias and 5 unbiased units @ 20 krad(Si) levels; 5 bias and 5 unbiased units @ 30 krad(Si) levels
HDR and LDR Radiation Facility	Radiation Test Solutions, Colorado Springs, Colorado
HDR and LDR Dose Level	20 krad(Si), 30 krad(Si)
HDR Dose Rate	64.46-rad(Si)/s ionizing radiation with increments
LDR Dose Rate	10-mrad(Si)/s ionizing radiation with increments
HDR Radiation Source	Gamma rays provided by JLSA 81-24 Co60 source. Dosimetry performed by Air Ionization Chamber (AIC) traceable to NIST.
LDR Radiation Source	Gamma rays provided by JLSA 81-22 or JLSA 81-23 Co60 LDR source. Dosimetry performed by AIC traceable to NIST.
Irradiation and Test Temperature	Ambient, room temperature controlled to 24°C (±6°C) per MIL-STD-883 and MIL-STD-750.

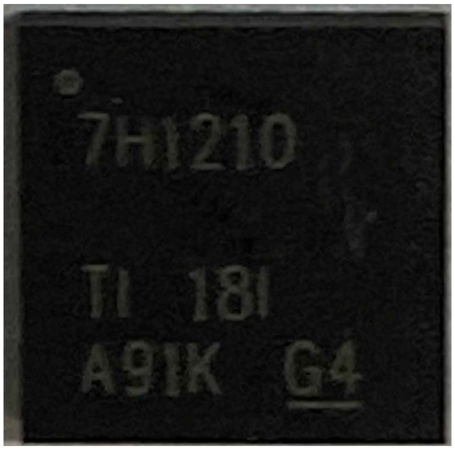


Figure 1-1. TPS7H1210-SEP Devices Used in Exposure

2 Total Dose Test Setup

2.1 Test Overview

The TPS7H1210-SEP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, Conditions A and D were used. For this test, the product was irradiated up to the target radiation level, and then put through full electrical parametric testing on the production Automated Test Equipment (ATE). All devices remained functional passing all parametric test limits.

2.2 Test Description and Facilities

The TPS7H1210-SEP HDR and LDR exposures were performed on biased and unbiased devices in gamma rays provided by JLSA 81-24 Co60 source and by JLSA 81-22 or JLSA 81-23 Co60 LDR source, respectively, at *Radiation Test Solutions, Inc.* facility in Colorado Springs, Colorado. Dosimetry performed by AIC traceable to NIST. Radiation Test Solutions dosimetry has been audited by DLA. After exposure, the devices were packed in dry ice (per MIL-STD-883 Method 1019.9 section 3.10) and returned to TI Dallas for a full post-radiation electrical evaluation using Texas Instruments ATE. ATE guard band test limits are set within VID electrical limits to ensure robust Cpk and test error margin based on qualification and characterization data. Post-radiation measurements were taken on the same test setup where initial, pre-exposure testing done, within 30 minutes of removing the devices from the dry ice container. The devices were allowed to reach room temperature prior to electrical post-radiation measurements.

2.3 Test Setup Details

The devices under HDR and LDR exposure were tested in two conditions, biased and unbiased, as described in the following sections.

2.3.1 Unbiased

For the unbiased HDR and LDR conditions, the exposure was performed with all pins grounded.

2.3.2 Biased

Figure 2-1 shows the diagram for HDR and LDR exposure with biased condition.

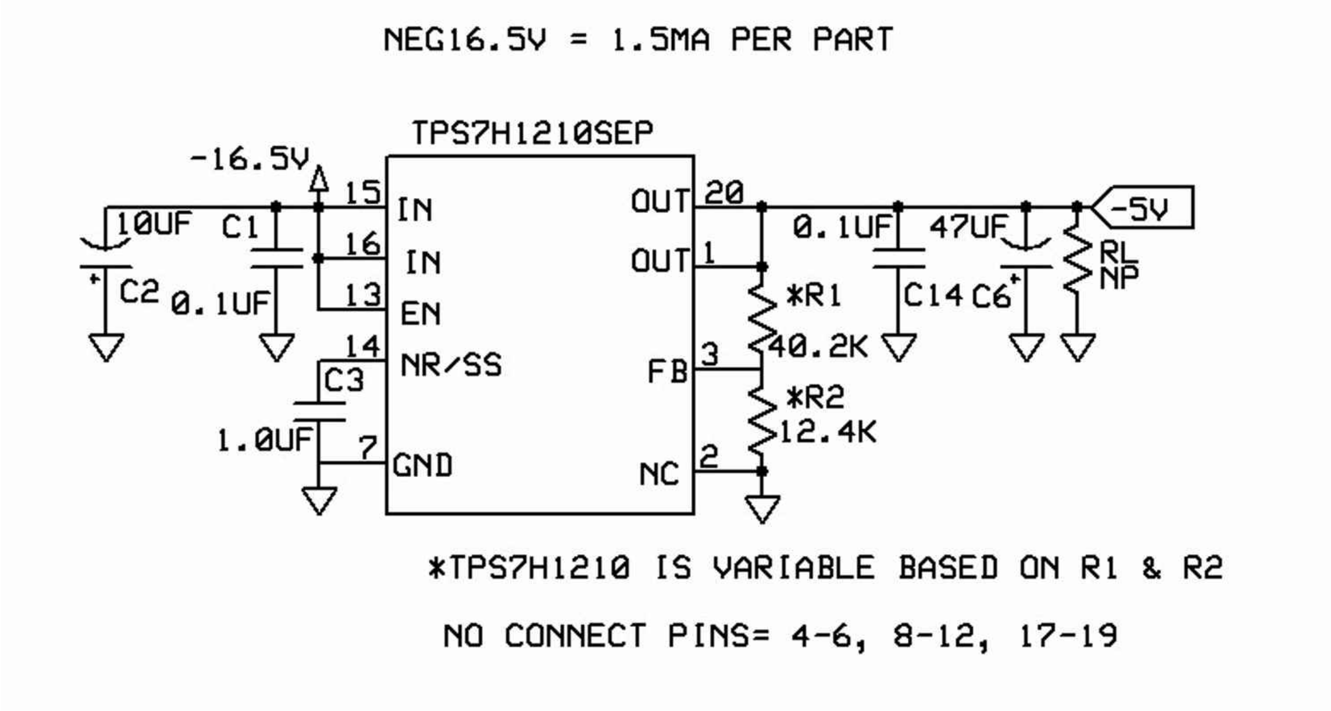


Figure 2-1. Bias Diagram Used in TID Exposure

2.4 Test Configuration and Condition

HDR and LDR devices were stressed at 20 krad(Si) and 30 krad(Si) for biased and unbiased conditions.

Table 2-1. HDR ≥ 50–300 rad(Si)/s Biased Device Information (HDR)

Total Samples: 27	
Exposure Levels:	
20 krad(Si) (22 samples)	30 krad(Si) (5 samples)
06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27	36, 37, 38, 39, 40

Table 2-2. HDR ≥ 50–300 rad(Si)/s Unbiased Device Information (HDR)

Total Samples: 10	
Exposure Levels:	
20 krad(Si) (5 samples)	30 krad(Si) (5 samples)
01, 02, 03, 04, 05	31, 32, 33, 34, 35

Table 2-3. LDR ≤ 10 mrad(Si)/s Biased Device Information (LDR)

Total Samples: 27	
Exposure Levels:	
20 krad(Si) (22 samples)	30 krad(Si) (5 samples)
56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77	86, 87, 88, 89, 90

Table 2-4. LDR ≤ 10 mrad(Si)/s Unbiased Device Information (LDR)

Total Samples: 10	
Exposure Levels:	
20 krad(Si) (5 samples)	30 krad(Si) (5 samples)
51, 52, 53, 54, 55	81, 82, 83, 84, 85

3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the TPS7H1210-SEP passes up to 30-krad(Si) HDR and LDR TID. The drift of VID electrical parameters through HDR and LDR were within the pre-radiation limits.

Overall, the TPS7H1210-SEP showed a strong degree of hardness to HDR and LDR TID irradiation up to 30 krad(Si) for both biased and unbiased exposure conditions. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level for both biased and unbiased. The parameters that did show a greater degree of change between pre- and post-irradiation were still within the data sheet electrical specifications (see Section 3.2 for Specification Compliance Matrix).

Please see Appendix A for HDR report up to 30 krad(Si).

Please see Appendix B for LDR report up to 30 krad(Si).

3.2 Specification Compliance Matrix

The TPS7H1210-SEP Specification Compliance Matrix is electrical characteristics listed as shown in the following table.

Table 3-1. TPS7H1210-SEP Specification Compliance Matrix

Over $|V_{IN}|$ = 3 V, I_{OUT} = 1 mA, C_{IN} = 20 µF, C_{OUT} = 20 µF, C_{NR_SS} = 0 nF, FB tied to OUT, EN tied to IN, over operating temperature range (T_J = –55°C to 125°C), unless otherwise noted.(1)

PARAMETER		TEST CONDITIONS		MIN	TYP	MAX	UNIT	TEST#
POWER SUPPLIES AND CURRENTS								
V_{UVLO}	Undervoltage lockout threshold				-2		V	5.1
$\|V_{DO}\|$	Dropout voltage	V_{IN} = -4.6 V, $V_{OUT(set)}$ = -5 V, $\|V_{DO}\|$ = $\|V_{IN}$ - $V_{OUT(measured)}\|$, C_{IN}= 30 µF	I_{OUT} = 0.5 A		224	325	mV	2.17
			I_{OUT} = 1 A		363	500		2.16
			I_{OUT} = 1 A, T_J = 25°C		363	450		
I_{CL}	Current limit	V_{IN} = -6 V, $V_{OUT(SET)}$ = -5 V,$V_{OUT(forced)}$ = -4.5 V			2.9		A	
I_Q	Quiescent current	V_{EN} = 3 V, I_{OUT} = 0 A			210	350	µA	6.3
I_{GND}	Ground current(2)	V_{EN} = 3 V, I_{OUT} = 0.5 A			5	10	mA	6.4
$\|I_{SHDN}\|$	Shutdown current	V_{EN} = 0.4 V			1	3	µA	6.1
		V_{EN} = -0.4 V			1	3		6.2
$I_{FB(LKG)}$	Feedback leakage current(3)				14	75	nA	7.3
ACCURACY								
V_{REF}	Reference voltage	V_{FB} = V_{REF}		-1.199	-1.182	-1.164	V	2.1
V_{ACC}	Output voltage accuracy	$\|V_{IN}\|$ = 3 V, 1 mA ≤ I_{OUT} ≤ 1 A		-2%	±1%	2%		2.2, 2.4, 2.7, 2.8
		$\|V_{IN}\|$ = 16.5 V, 1 mA ≤ I_{OUT} ≤ 100 mA		-2%	±1%	2%		2.3, 2.5, 2.x, 2.10
		$\|V_{IN}\|$ = 16.5 V, $\|V_{OUT}\|$ = 15.5 V, I_{OUT} = 1 A		-2%	±1%	2%		
$\Delta V_{OUT}/\Delta V_{IN}$	Line regulation	3 V ≤ $\|V_{IN}\|$ ≤ 16.5 V			-.007 %		V_{OUT}/V	2.11
$\Delta V_{OUT}/\Delta I_{OUT}$	Load regulation	1 mA ≤ I_{OUT} ≤ 1 A			-0.5%		V_{OUT}/A	2.12
ENABLE								
$V_{EN(+HI)}$	Enable turn-on (positive logic)			2		10	V	4.6
$V_{EN(-HI)}$	Enable turn-on (negative logic)	V_{IN} = -16.5 V		V_{IN}		-2		4.4
$V_{EN(+LO)}$	Enable turn-off (positive logic)			0		0.4		4.7
$V_{EN(-LO)}$	Enable turn-off (negative logic)			-0.4		0		4.5
$\|I_{EN}\|$	Enable current	V_{IN} = V_{EN} = -3 V			0.48	1	µA	4.2
		V_{IN} = V_{EN} = -16.5 V			0.51	1		4.3
		V_{IN} = -16.5 V, V_{EN} = 10 V			0.5	1		4.1

Table 3-1. TPS7H1210-SEP Specification Compliance Matrix (continued)

Over $|V_{IN}|$ = 3 V, I_{OUT} = 1 mA, C_{IN} = 20 µF, C_{OUT} = 20 µF, C_{NR_SS} = 0 nF, FB tied to OUT, EN tied to IN, over operating temperature range (T_J = –55°C to 125°C), unless otherwise noted.(1)

PARAMETER		TEST CONDITIONS		MIN	TYP	MAX	UNIT	TEST#
$T_{SD(enter)}$	Thermal shutdown enter temperature				178		°C	
$T_{SD(exit)}$	Thermal shutdown exit temperature				152			
NOISE AND PSRR								
PSRR	Power-supply rejection ratio	V_{IN} = -6 V, V_{OUT} = -5 V,C_{OUT} = 50.11 µF, I_{OUT} = 1 A, C_{NR_SS} = 100 nF(4)	f = 100 Hz		61		dB	
			f = 100 kHz		61			
			f = 1 MHz		41			
V_N	Output noise rms voltage (Bandwidth from 10 Hz to 100 kHz)	V_{IN} = -3 V, V_{OUT}(nom) = V_{REF}, C_{IN} = 11.1 µF, C_{OUT} = 50.11 µF, C_{NR_SS} = 100 nF, I_{OUT} = 1 A			13.7		μV_{RMS}	

(1) At operating conditions, $V_{IN} \leq 0$ V, $V_{OUT(nom)} \leq V_{REF} \leq 0$ V; at regulation, $V_{IN} \leq V_{OUT(nom)} - |V_{DO}|$; $I_{OUT} > 0$ flows from OUT to IN.
(2) $I_{GND} = I_{IN} - I_{OUT}$
(3) $I_{FB} > 0$ flows into the device.
(4) C_{IN} is removed as part of PSRR testing. During normal operation, follow the recommended operating condition of $C_{IN} \geq 10$ µF.

4 Applicable and Reference Documents

4.1 Applicable Documents

- *TPS7H1210-SEP Radiation Hardened –16.5-V, 1-A, Negative Voltage Linear Regulator in Space Enhanced Plastic* data sheet
- *TPS7H1210-SEP Production Flow and Reliability Report*
- *TPS7H1210-SEP EVM User's Guide*

4.2 Reference Documents

Texas Instruments total ionizing dose radiation (total dose) test procedure follows the standards put forth in MIL-STD-883 TM 1019. The document can be found at the DLA website.

A Appendix: HDR TID Report

This appendix contains the HDR TID report data.

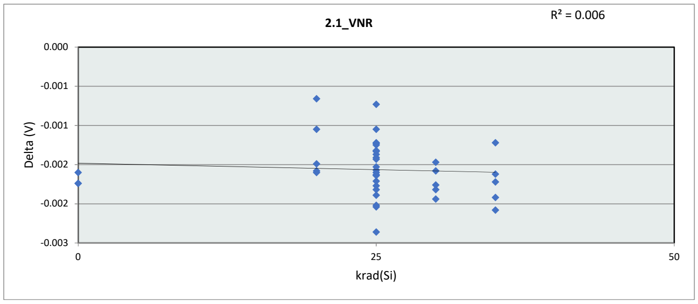
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

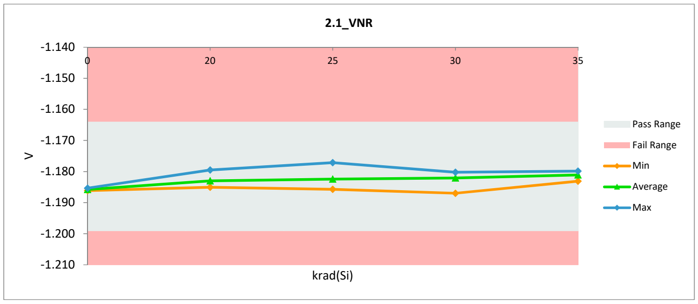
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.1_VNR		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	-1.16661	-1.164	
	Min Limit	-1.19729	-1.199	
krad(Si)	**Serial #**	**Pre_HDR**	**Post_HDR**	**Delta**
0	CU1	-1.184	-1.186	-0.002
0	CU2	-1.184	-1.185	-0.002
0	CU3	-1.184	-1.186	-0.002
20	1	-1.184	-1.185	-0.001
20	2	-1.181	-1.182	-0.002
20	3	-1.178	-1.179	-0.001
20	4	-1.184	-1.185	-0.001
20	5	-1.182	-1.183	-0.002
25	6	-1.180	-1.181	-0.002
25	7	-1.180	-1.182	-0.002
25	8	-1.185	-1.186	-0.001
25	9	-1.183	-1.184	-0.001
25	10	-1.184	-1.186	-0.001
25	11	-1.182	-1.184	-0.002
25	12	-1.178	-1.180	-0.002
25	13	-1.181	-1.182	-0.001
25	14	-1.178	-1.180	-0.002
25	15	-1.181	-1.182	-0.002
25	16	-1.181	-1.183	-0.002
25	17	-1.180	-1.183	-0.002
25	18	-1.179	-1.180	-0.001
25	19	-1.181	-1.182	-0.001
25	20	-1.180	-1.181	-0.002
25	21	-1.181	-1.183	-0.001
25	22	-1.183	-1.184	-0.001
25	23	-1.181	-1.183	-0.002
25	24	-1.184	-1.186	-0.001
25	25	-1.176	-1.177	-0.001
25	26	-1.181	-1.183	-0.002
25	27	-1.180	-1.182	-0.002
30	31	-1.178	-1.180	-0.002
30	32	-1.186	-1.187	-0.001
30	33	-1.178	-1.180	-0.002
30	34	-1.180	-1.181	-0.002
30	35	-1.180	-1.182	-0.002
35	36	-1.180	-1.182	-0.002
35	37	-1.182	-1.183	-0.001
35	38	-1.178	-1.180	-0.002
35	39	-1.178	-1.180	-0.002
35	40	-1.178	-1.180	-0.002
	Max	-1.176	-1.177	-0.001
	Average	-1.181	-1.183	-0.002
	Min	-1.186	-1.187	-0.002
	Std Dev	0.002	0.002	0.000



	2.1_VNR				
Test Site					
Tester					
Test Number					
Max Limit	-1.164	V			
Min Limit	-1.199	V			
krad(Si)	**0**	**20**	**25**	**30**	**35**
LL	-1.199	-1.199	-1.199	-1.199	-1.199
Min	-1.186	-1.185	-1.186	-1.187	-1.183
Average	-1.186	-1.183	-1.182	-1.182	-1.181
Max	-1.185	-1.179	-1.177	-1.180	-1.180
UL	-1.164	-1.164	-1.164	-1.164	-1.164

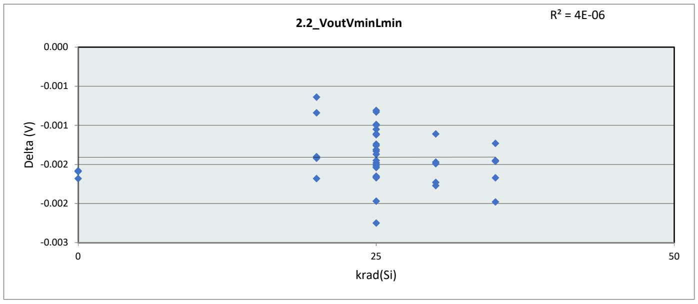


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

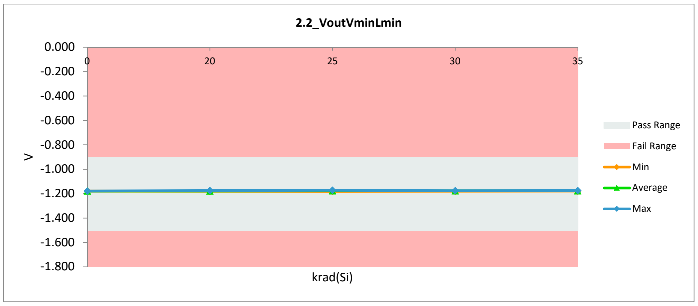
	2.2_VoutVminLmin	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.9069	-0.9
Min Limit	-1.4949	-1.5

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-1.178	-1.179	-0.002
0	CU2	-1.178	-1.179	-0.002
0	CU3	-1.178	-1.179	-0.002
20	1	-1.180	-1.180	-0.001
20	2	-1.176	-1.177	-0.001
20	3	-1.174	-1.175	-0.001
20	4	-1.179	-1.180	-0.001
20	5	-1.178	-1.180	-0.002
25	6	-1.175	-1.176	-0.001
25	7	-1.175	-1.176	-0.001
25	8	-1.181	-1.182	-0.001
25	9	-1.178	-1.179	-0.001
25	10	-1.179	-1.180	-0.001
25	11	-1.178	-1.180	-0.002
25	12	-1.174	-1.176	-0.001
25	13	-1.176	-1.177	-0.001
25	14	-1.175	-1.177	-0.002
25	15	-1.176	-1.177	-0.001
25	16	-1.176	-1.178	-0.002
25	17	-1.177	-1.179	-0.002
25	18	-1.175	-1.176	-0.001
25	19	-1.176	-1.177	-0.001
25	20	-1.175	-1.176	-0.002
25	21	-1.178	-1.179	-0.001
25	22	-1.179	-1.180	-0.001
25	23	-1.178	-1.179	-0.002
25	24	-1.180	-1.181	-0.001
25	25	-1.171	-1.172	-0.001
25	26	-1.176	-1.178	-0.002
25	27	-1.176	-1.177	-0.002
30	31	-1.174	-1.176	-0.001
30	32	-1.179	-1.181	-0.001
30	33	-1.174	-1.176	-0.002
30	34	-1.175	-1.177	-0.001
30	35	-1.175	-1.177	-0.002
35	36	-1.176	-1.177	-0.001
35	37	-1.177	-1.178	-0.001
35	38	-1.174	-1.176	-0.002
35	39	-1.177	-1.179	-0.001
35	40	-1.175	-1.177	-0.002
	Max	-1.171	-1.172	-0.001
	Average	-1.176	-1.178	-0.001
	Min	-1.181	-1.182	-0.002
	Std Dev	0.002	0.002	0.000



	2.2_VoutVminLmin	
Test Site		
Tester		
Test Number		
Max Limit	-0.9	V
Min Limit	-1.5	V

krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.180	-1.182	-1.181	-1.179
Average	-1.179	-1.179	-1.178	-1.177	-1.177
Max	-1.179	-1.175	-1.172	-1.176	-1.176
UL	-0.900	-0.900	-0.900	-0.900	-0.900

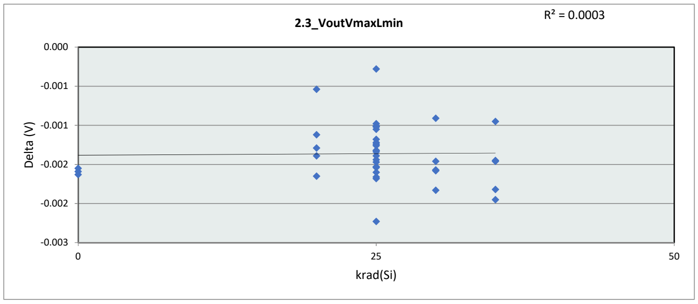


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

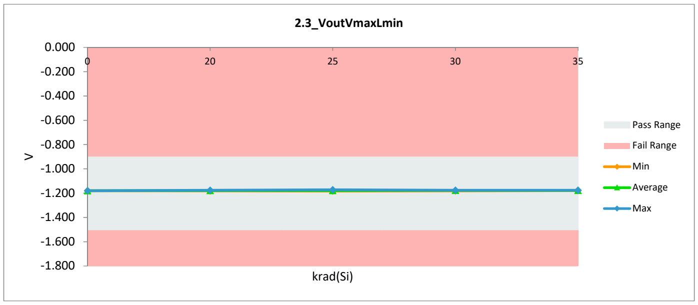
	2.3_VoutVmaxLmin	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.9077	-0.9
Min Limit	-1.4945	-1.5

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-1.178	-1.180	-0.002
0	CU2	-1.179	-1.180	-0.002
0	CU3	-1.179	-1.180	-0.002
20	1	-1.181	-1.181	-0.001
20	2	-1.177	-1.178	-0.001
20	3	-1.175	-1.176	-0.001
20	4	-1.179	-1.181	-0.001
20	5	-1.179	-1.181	-0.002
25	6	-1.176	-1.177	-0.001
25	7	-1.176	-1.177	-0.001
25	8	-1.182	-1.183	-0.001
25	9	-1.178	-1.179	-0.001
25	10	-1.180	-1.181	-0.001
25	11	-1.179	-1.180	-0.001
25	12	-1.175	-1.176	-0.001
25	13	-1.177	-1.178	-0.001
25	14	-1.176	-1.178	-0.002
25	15	-1.177	-1.178	-0.001
25	16	-1.176	-1.178	-0.002
25	17	-1.178	-1.180	-0.002
25	18	-1.176	-1.176	0.000
25	19	-1.177	-1.178	-0.001
25	20	-1.175	-1.177	-0.002
25	21	-1.178	-1.179	-0.001
25	22	-1.180	-1.181	-0.001
25	23	-1.178	-1.180	-0.002
25	24	-1.181	-1.182	-0.001
25	25	-1.172	-1.173	-0.001
25	26	-1.177	-1.178	-0.001
25	27	-1.176	-1.178	-0.002
30	31	-1.175	-1.176	-0.002
30	32	-1.180	-1.181	-0.001
30	33	-1.175	-1.177	-0.002
30	34	-1.176	-1.178	-0.001
30	35	-1.176	-1.177	-0.002
35	36	-1.177	-1.178	-0.001
35	37	-1.178	-1.179	-0.001
35	38	-1.174	-1.176	-0.002
35	39	-1.178	-1.179	-0.001
35	40	-1.176	-1.177	-0.002
	Max	-1.172	-1.173	0.000
	Average	-1.177	-1.179	-0.001
	Min	-1.182	-1.183	-0.002
	Std Dev	0.002	0.002	0.000



	2.3_VoutVmaxLmin	
Test Site		
Tester		
Test Number		
Max Limit	-0.9	V
Min Limit	-1.5	V

krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.180	-1.181	-1.183	-1.181	-1.179
Average	-1.180	-1.179	-1.179	-1.178	-1.178
Max	-1.180	-1.176	-1.173	-1.177	-1.176
UL	-0.900	-0.900	-0.900	-0.900	-0.900

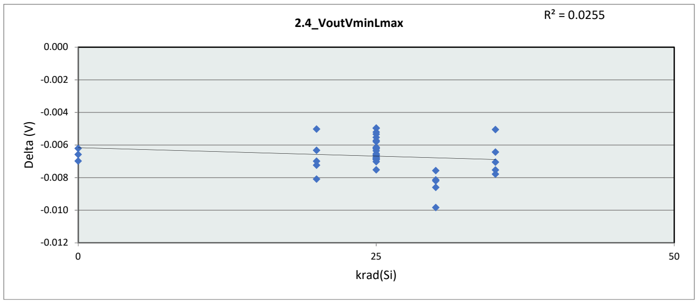


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

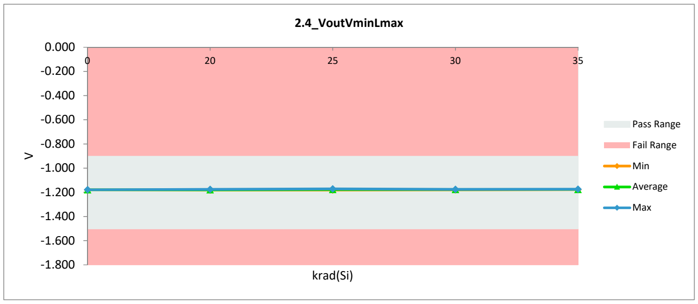
	2.4_VoutVminLmax	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.9055	-0.9
Min Limit	-1.4958	-1.5

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-1.173	-1.179	-0.006
0	CU2	-1.172	-1.179	-0.007
0	CU3	-1.172	-1.179	-0.007
20	1	-1.176	-1.181	-0.005
20	2	-1.171	-1.178	-0.006
20	3	-1.167	-1.175	-0.008
20	4	-1.173	-1.180	-0.007
20	5	-1.174	-1.181	-0.007
25	6	-1.168	-1.175	-0.007
25	7	-1.169	-1.176	-0.006
25	8	-1.176	-1.181	-0.005
25	9	-1.173	-1.178	-0.005
25	10	-1.173	-1.179	-0.006
25	11	-1.172	-1.178	-0.007
25	12	-1.168	-1.175	-0.007
25	13	-1.171	-1.176	-0.005
25	14	-1.170	-1.176	-0.006
25	15	-1.171	-1.177	-0.006
25	16	-1.170	-1.177	-0.007
25	17	-1.172	-1.179	-0.006
25	18	-1.169	-1.175	-0.006
25	19	-1.171	-1.177	-0.006
25	20	-1.168	-1.176	-0.008
25	21	-1.173	-1.178	-0.005
25	22	-1.173	-1.179	-0.006
25	23	-1.171	-1.178	-0.007
25	24	-1.173	-1.180	-0.007
25	25	-1.164	-1.171	-0.007
25	26	-1.170	-1.177	-0.007
25	27	-1.170	-1.177	-0.007
30	31	-1.168	-1.176	-0.008
30	32	-1.172	-1.180	-0.008
30	33	-1.167	-1.176	-0.009
30	34	-1.168	-1.176	-0.008
30	35	-1.167	-1.176	-0.010
35	36	-1.169	-1.176	-0.008
35	37	-1.171	-1.177	-0.006
35	38	-1.167	-1.175	-0.008
35	39	-1.170	-1.178	-0.007
35	40	-1.171	-1.176	-0.005
	Max	-1.164	-1.171	-0.005
	Average	-1.171	-1.177	-0.007
	Min	-1.176	-1.181	-0.010
	Std Dev	0.003	0.002	0.001



	2.4_VoutVminLmax	
Test Site		
Tester		
Test Number		
Max Limit	-0.9	V
Min Limit	-1.5	V

krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.181	-1.181	-1.180	-1.178
Average	-1.179	-1.179	-1.177	-1.177	-1.176
Max	-1.179	-1.175	-1.171	-1.176	-1.175
UL	-0.900	-0.900	-0.900	-0.900	-0.900

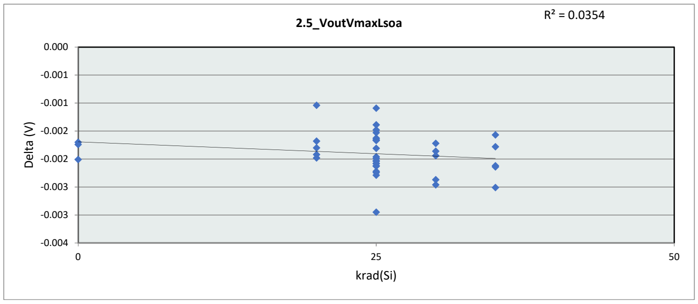


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

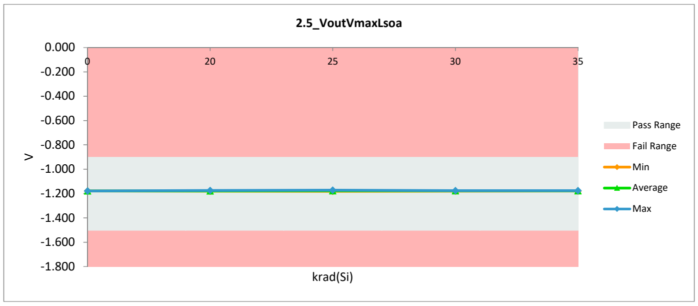
	2.5_VoutVmaxLsoa	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.9067	-0.9
Min Limit	-1.4952	-1.5

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-1.177	-1.179	-0.002
0	CU2	-1.177	-1.179	-0.002
0	CU3	-1.177	-1.179	-0.002
20	1	-1.179	-1.180	-0.001
20	2	-1.176	-1.178	-0.002
20	3	-1.174	-1.175	-0.002
20	4	-1.178	-1.180	-0.002
20	5	-1.178	-1.180	-0.002
25	6	-1.174	-1.176	-0.002
25	7	-1.175	-1.177	-0.002
25	8	-1.181	-1.182	-0.001
25	9	-1.177	-1.179	-0.002
25	10	-1.179	-1.180	-0.002
25	11	-1.177	-1.180	-0.002
25	12	-1.174	-1.176	-0.002
25	13	-1.176	-1.177	-0.001
25	14	-1.175	-1.177	-0.002
25	15	-1.176	-1.178	-0.002
25	16	-1.175	-1.178	-0.002
25	17	-1.177	-1.180	-0.003
25	18	-1.175	-1.176	-0.001
25	19	-1.176	-1.178	-0.002
25	20	-1.174	-1.176	-0.002
25	21	-1.177	-1.179	-0.002
25	22	-1.179	-1.180	-0.002
25	23	-1.177	-1.179	-0.002
25	24	-1.179	-1.181	-0.002
25	25	-1.171	-1.172	-0.002
25	26	-1.176	-1.178	-0.002
25	27	-1.176	-1.178	-0.002
30	31	-1.174	-1.176	-0.002
30	32	-1.179	-1.181	-0.002
30	33	-1.174	-1.176	-0.002
30	34	-1.175	-1.177	-0.002
30	35	-1.174	-1.177	-0.002
35	36	-1.175	-1.177	-0.002
35	37	-1.177	-1.178	-0.002
35	38	-1.173	-1.176	-0.003
35	39	-1.177	-1.179	-0.002
35	40	-1.175	-1.177	-0.002
	Max	-1.171	-1.172	-0.001
	Average	-1.176	-1.178	-0.002
	Min	-1.181	-1.182	-0.003
	Std Dev	0.002	0.002	0.000



	2.5_VoutVmaxLsoa	
Test Site		
Tester		
Test Number		
Max Limit	-0.9	V
Min Limit	-1.5	V

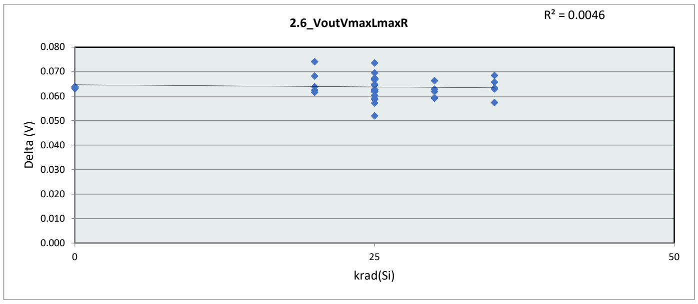
krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.180	-1.182	-1.181	-1.179
Average	-1.179	-1.179	-1.178	-1.177	-1.177
Max	-1.179	-1.175	-1.172	-1.176	-1.176
UL	-0.900	-0.900	-0.900	-0.900	-0.900



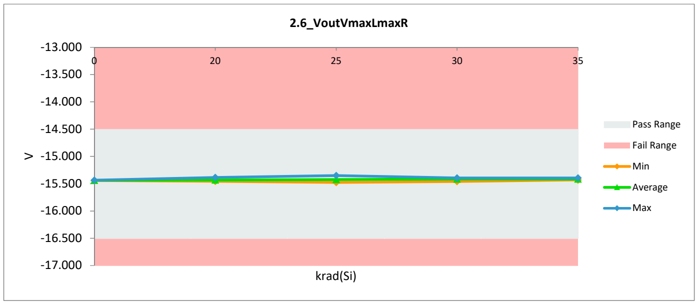
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.6_VoutVmaxLmaxR		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	-14.5	-14.5	
	Min Limit	-16.5	-16.5	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-15.500	-15.436	0.063
0	CU2	-15.502	-15.438	0.064
0	CU3	-15.505	-15.441	0.064
20	1	-15.529	-15.455	0.074
20	2	-15.480	-15.418	0.062
20	3	-15.454	-15.386	0.068
20	4	-15.514	-15.450	0.064
20	5	-15.513	-15.450	0.062
25	6	-15.466	-15.401	0.065
25	7	-15.469	-15.406	0.063
25	8	-15.545	-15.476	0.070
25	9	-15.503	-15.436	0.067
25	10	-15.521	-15.454	0.067
25	11	-15.503	-15.444	0.059
25	12	-15.460	-15.398	0.063
25	13	-15.480	-15.413	0.067
25	14	-15.471	-15.413	0.059
25	15	-15.484	-15.422	0.062
25	16	-15.477	-15.420	0.057
25	17	-15.499	-15.447	0.052
25	18	-15.474	-15.400	0.074
25	19	-15.487	-15.420	0.067
25	20	-15.467	-15.406	0.060
25	21	-15.502	-15.435	0.067
25	22	-15.521	-15.454	0.067
25	23	-15.500	-15.437	0.063
25	24	-15.530	-15.465	0.065
25	25	-15.417	-15.350	0.067
25	26	-15.483	-15.421	0.062
25	27	-15.481	-15.420	0.062
30	31	-15.457	-15.395	0.062
30	32	-15.525	-15.459	0.066
30	33	-15.463	-15.404	0.059
30	34	-15.471	-15.408	0.063
30	35	-15.468	-15.409	0.059
35	36	-15.479	-15.416	0.063
35	37	-15.497	-15.428	0.068
35	38	-15.452	-15.394	0.057
35	39	-15.495	-15.432	0.063
35	40	-15.474	-15.408	0.066
	Max	-15.417	-15.350	0.074
	Average	-15.488	-15.424	0.064
	Min	-15.545	-15.476	0.052
	Std Dev	0.026	0.025	0.004



	2.6_VoutVmaxLmaxR				
Test Site					
Tester					
Test Number					
Max Limit	-14.5	V			
Min Limit	-16.5	V			
krad(Si)	0	20	25	30	35
LL	-16.500	-16.500	-16.500	-16.500	-16.500
Min	-15.441	-15.455	-15.476	-15.459	-15.432
Average	-15.438	-15.432	-15.424	-15.415	-15.416
Max	-15.437	-15.386	-15.350	-15.395	-15.394
UL	-14.500	-14.500	-14.500	-14.500	-14.500

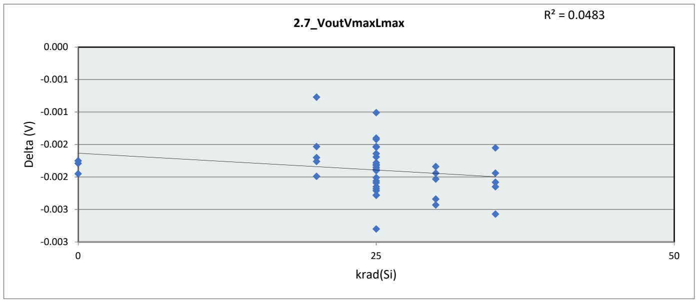


TID HDR Report
TPS7H1210-SEP

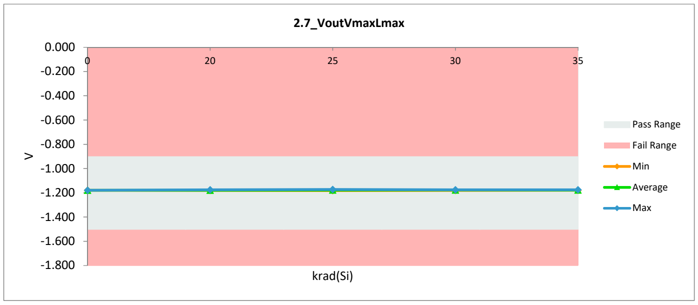
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	2.7_VoutVmaxLmax	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.9067	-0.9
Min Limit	-1.4952	-1.5

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-1.177	-1.179	-0.002
0	CU2	-1.177	-1.179	-0.002
0	CU3	-1.177	-1.179	-0.002
20	1	-1.180	-1.180	-0.001
20	2	-1.176	-1.177	-0.002
20	3	-1.174	-1.175	-0.002
20	4	-1.178	-1.180	-0.002
20	5	-1.178	-1.180	-0.002
25	6	-1.174	-1.176	-0.002
25	7	-1.175	-1.176	-0.002
25	8	-1.181	-1.182	-0.001
25	9	-1.177	-1.179	-0.002
25	10	-1.179	-1.180	-0.002
25	11	-1.177	-1.180	-0.002
25	12	-1.174	-1.176	-0.002
25	13	-1.176	-1.177	-0.001
25	14	-1.175	-1.177	-0.002
25	15	-1.176	-1.178	-0.002
25	16	-1.175	-1.178	-0.002
25	17	-1.177	-1.180	-0.003
25	18	-1.175	-1.176	-0.001
25	19	-1.176	-1.178	-0.002
25	20	-1.174	-1.177	-0.002
25	21	-1.177	-1.179	-0.002
25	22	-1.179	-1.180	-0.002
25	23	-1.177	-1.179	-0.002
25	24	-1.179	-1.181	-0.002
25	25	-1.171	-1.172	-0.002
25	26	-1.176	-1.178	-0.002
25	27	-1.175	-1.178	-0.002
30	31	-1.174	-1.176	-0.002
30	32	-1.179	-1.181	-0.002
30	33	-1.174	-1.177	-0.002
30	34	-1.175	-1.177	-0.002
30	35	-1.174	-1.177	-0.002
35	36	-1.175	-1.177	-0.002
35	37	-1.177	-1.178	-0.002
35	38	-1.173	-1.176	-0.003
35	39	-1.177	-1.179	-0.002
35	40	-1.175	-1.177	-0.002
	Max	-1.171	-1.172	-0.001
	Average	-1.176	-1.178	-0.002
	Min	-1.181	-1.182	-0.003
	Std Dev	0.002	0.002	0.000



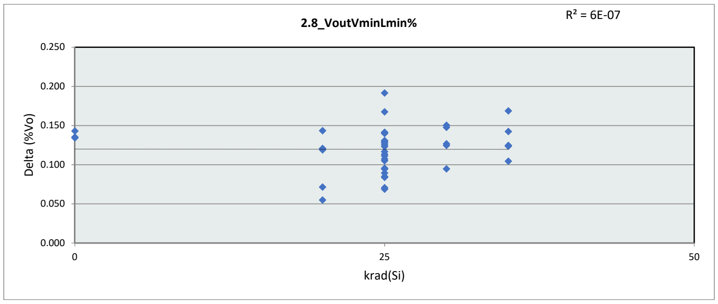
	2.7_VoutVmaxLmax				
Test Site					
Tester					
Test Number					
Max Limit	-0.9	V			
Min Limit	-1.5	V			
krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.180	-1.182	-1.181	-1.179
Average	-1.179	-1.179	-1.178	-1.177	-1.177
Max	-1.179	-1.175	-1.172	-1.176	-1.176
UL	-0.900	-0.900	-0.900	-0.900	-0.900



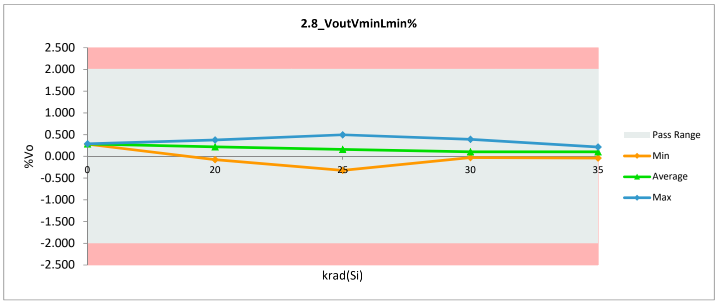
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.8_VoutVminLmin%		
	Test Site			
	Tester			
	Test Number			
	Unit	%Vo	%Vo	
	Max Limit	1.95	2	
	Min Limit	-1.95	-2	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	0.144	0.279	0.135
0	CU2	0.145	0.288	0.143
0	CU3	0.151	0.285	0.134
20	1	0.324	0.379	0.055
20	2	-0.007	0.111	0.119
20	3	-0.149	-0.077	0.071
20	4	0.215	0.335	0.121
20	5	0.204	0.347	0.144
25	6	-0.099	0.018	0.117
25	7	-0.093	0.018	0.111
25	8	0.426	0.496	0.071
25	9	0.146	0.236	0.089
25	10	0.245	0.350	0.105
25	11	0.162	0.301	0.140
25	12	-0.144	-0.030	0.113
25	13	-0.011	0.084	0.095
25	14	-0.054	0.075	0.129
25	15	0.003	0.127	0.123
25	16	-0.032	0.136	0.168
25	17	0.106	0.298	0.192
25	18	-0.061	0.007	0.069
25	19	0.033	0.118	0.085
25	20	-0.104	0.037	0.141
25	21	0.133	0.217	0.084
25	22	0.262	0.357	0.094
25	23	0.132	0.273	0.141
25	24	0.315	0.440	0.125
25	25	-0.430	-0.323	0.107
25	26	0.009	0.137	0.128
25	27	-0.017	0.114	0.131
30	31	-0.156	-0.029	0.127
30	32	0.297	0.392	0.095
30	33	-0.129	0.021	0.150
30	34	-0.053	0.071	0.125
30	35	-0.084	0.064	0.148
35	36	-0.019	0.105	0.124
35	37	0.092	0.197	0.105
35	38	-0.210	-0.041	0.169
35	39	0.090	0.215	0.125
35	40	-0.099	0.044	0.142
	Max	0.426	0.496	0.192
	Average	0.042	0.162	0.120
	Min	-0.430	-0.323	0.055
	Std Dev	0.173	0.168	0.029



	2.8_VoutVminLmin%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo			
Min Limit	-2	%Vo			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.279	-0.077	-0.323	-0.029	-0.041
Average	0.284	0.219	0.158	0.104	0.104
Max	0.288	0.379	0.496	0.392	0.215
UL	2.000	2.000	2.000	2.000	2.000

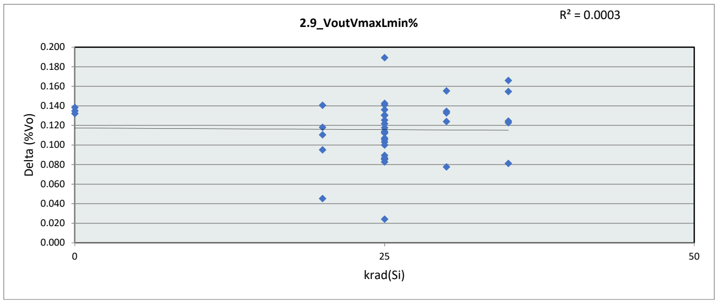


TID HDR Report
TPS7H1210-SEP

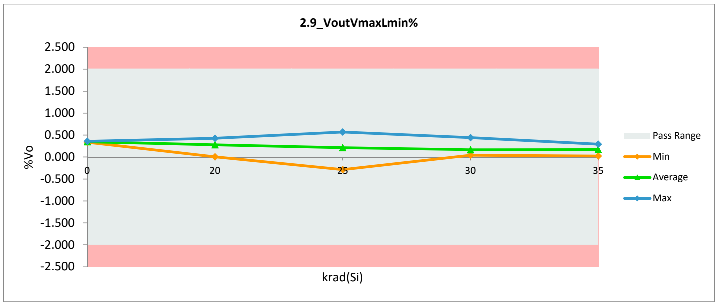
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	2.9_VoutVmaxLmin%	
Test Site		
Tester		
Test Number		
Unit	%Vo	%Vo
Max Limit	1.95	2
Min Limit	-1.98	-2

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	0.204	0.336	0.132
0	CU2	0.220	0.359	0.138
0	CU3	0.214	0.349	0.135
20	1	0.383	0.428	0.045
20	2	0.051	0.169	0.118
20	3	-0.091	0.004	0.095
20	4	0.275	0.386	0.110
20	5	0.266	0.406	0.141
25	6	-0.039	0.073	0.113
25	7	-0.029	0.089	0.118
25	8	0.483	0.569	0.085
25	9	0.197	0.284	0.087
25	10	0.299	0.406	0.107
25	11	0.234	0.359	0.125
25	12	-0.088	0.018	0.106
25	13	0.045	0.134	0.089
25	14	0.008	0.138	0.130
25	15	0.072	0.186	0.114
25	16	0.038	0.179	0.141
25	17	0.166	0.355	0.189
25	18	0.009	0.033	0.024
25	19	0.085	0.189	0.103
25	20	-0.048	0.088	0.136
25	21	0.181	0.281	0.100
25	22	0.333	0.419	0.086
25	23	0.187	0.330	0.143
25	24	0.387	0.499	0.112
25	25	-0.369	-0.286	0.083
25	26	0.083	0.205	0.122
25	27	0.042	0.172	0.131
30	31	-0.092	0.042	0.134
30	32	0.364	0.441	0.078
30	33	-0.065	0.090	0.155
30	34	0.024	0.148	0.124
30	35	-0.019	0.114	0.133
35	36	0.044	0.168	0.124
35	37	0.161	0.242	0.081
35	38	-0.141	0.025	0.166
35	39	0.170	0.293	0.123
35	40	-0.040	0.115	0.155
	Max	0.483	0.569	0.189
	Average	0.105	0.221	0.116
	Min	-0.369	-0.286	0.024
	Std Dev	0.173	0.169	0.031



	2.9_VoutVmaxLmin%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo			
Min Limit	-2	%Vo			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.336	0.004	-0.286	0.042	0.025
Average	0.348	0.279	0.215	0.167	0.169
Max	0.359	0.428	0.569	0.441	0.293
UL	2.000	2.000	2.000	2.000	2.000

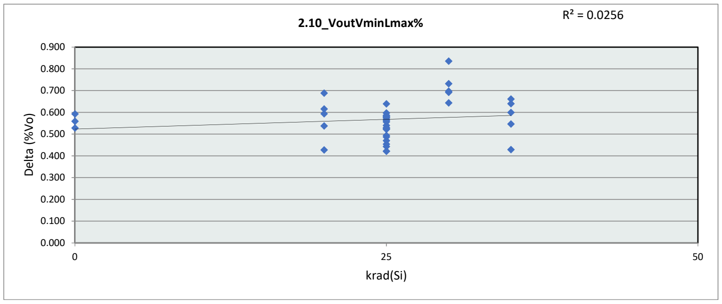


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

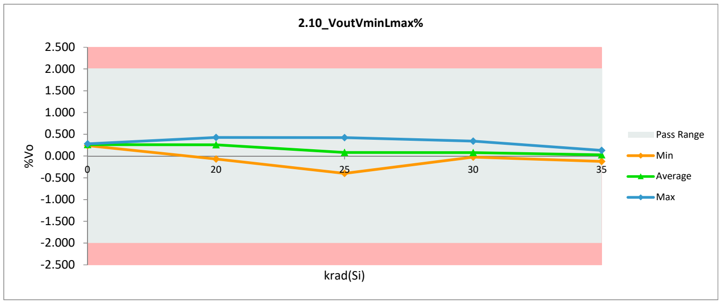
	2.10_VoutVminLmax%	
Test Site		
Tester		
Test Number		
Unit	%Vo	%Vo
Max Limit	1.98	2
Min Limit	-1.98	-2

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-0.260	0.268	0.528
0	CU2	-0.319	0.240	0.559
0	CU3	-0.313	0.280	0.593
20	1	-0.013	0.414	0.427
20	2	-0.396	0.141	0.537
20	3	-0.756	-0.068	0.688
20	4	-0.236	0.380	0.616
20	5	-0.166	0.427	0.594
25	6	-0.652	-0.077	0.575
25	7	-0.556	-0.028	0.527
25	8	0.003	0.424	0.421
25	9	-0.258	0.163	0.421
25	10	-0.253	0.270	0.523
25	11	-0.347	0.209	0.556
25	12	-0.646	-0.085	0.562
25	13	-0.458	-0.004	0.454
25	14	-0.483	0.004	0.487
25	15	-0.464	0.059	0.523
25	16	-0.532	0.047	0.580
25	17	-0.322	0.219	0.540
25	18	-0.555	-0.085	0.470
25	19	-0.468	0.062	0.530
25	20	-0.667	-0.028	0.639
25	21	-0.298	0.145	0.443
25	22	-0.221	0.272	0.493
25	23	-0.409	0.175	0.583
25	24	-0.234	0.352	0.586
25	25	-0.995	-0.398	0.597
25	26	-0.507	0.060	0.567
25	27	-0.526	0.049	0.575
30	31	-0.669	-0.025	0.644
30	32	-0.356	0.341	0.698
30	33	-0.726	0.005	0.732
30	34	-0.655	0.038	0.692
30	35	-0.795	0.041	0.836
35	36	-0.603	0.037	0.640
35	37	-0.424	0.122	0.546
35	38	-0.784	-0.122	0.661
35	39	-0.470	0.130	0.599
35	40	-0.457	-0.028	0.429
	Max	0.003	0.427	0.836
	Average	-0.456	0.111	0.567
	Min	-0.995	-0.398	0.421
	Std Dev	0.215	0.177	0.091



	2.10_VoutVminLmax%	
Test Site		
Tester		
Test Number		
Max Limit	2	%Vo
Min Limit	-2	%Vo

krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.240	-0.068	-0.398	-0.025	-0.122
Average	0.263	0.259	0.082	0.080	0.028
Max	0.280	0.427	0.424	0.341	0.130
UL	2.000	2.000	2.000	2.000	2.000

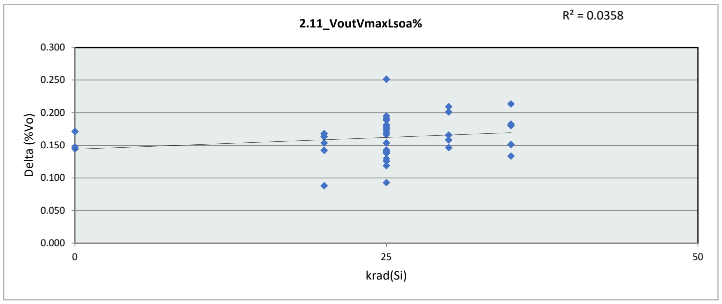


TID HDR Report
TPS7H1210-SEP

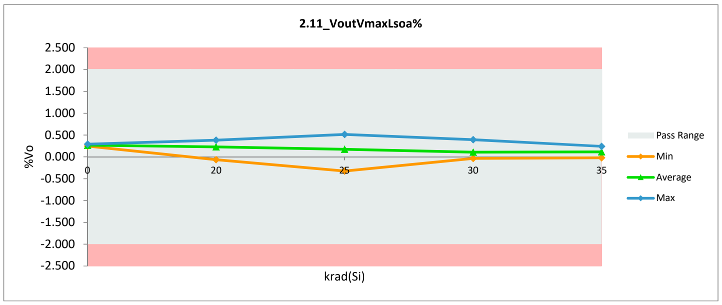
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	2.11_VoutVmaxLsoa%	
Test Site		
Tester		
Test Number		
Unit	%Vo	%Vo
Max Limit	1.98	2
Min Limit	-1.98	-2

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	0.103	0.248	0.145
0	CU2	0.113	0.261	0.147
0	CU3	0.121	0.292	0.171
20	1	0.293	0.381	0.088
20	2	-0.033	0.135	0.168
20	3	-0.208	-0.065	0.142
20	4	0.188	0.341	0.154
20	5	0.192	0.355	0.163
25	6	-0.146	0.031	0.177
25	7	-0.113	0.057	0.169
25	8	0.388	0.514	0.126
25	9	0.116	0.246	0.130
25	10	0.224	0.366	0.141
25	11	0.127	0.316	0.189
25	12	-0.184	-0.011	0.173
25	13	-0.034	0.085	0.119
25	14	-0.085	0.091	0.176
25	15	-0.020	0.160	0.180
25	16	-0.053	0.141	0.195
25	17	0.079	0.330	0.251
25	18	-0.085	0.008	0.093
25	19	0.005	0.145	0.141
25	20	-0.143	0.038	0.181
25	21	0.100	0.243	0.143
25	22	0.230	0.369	0.139
25	23	0.076	0.267	0.191
25	24	0.282	0.448	0.166
25	25	-0.463	-0.325	0.138
25	26	-0.007	0.147	0.154
25	27	-0.038	0.135	0.173
30	31	-0.193	-0.034	0.158
30	32	0.246	0.393	0.147
30	33	-0.168	0.033	0.201
30	34	-0.091	0.074	0.166
30	35	-0.139	0.070	0.209
35	36	-0.050	0.101	0.151
35	37	0.062	0.196	0.134
35	38	-0.236	-0.022	0.214
35	39	0.058	0.241	0.183
35	40	-0.122	0.058	0.180
	Max	0.388	0.514	0.251
	Average	0.010	0.171	0.162
	Min	-0.463	-0.325	0.088
	Std Dev	0.174	0.168	0.031



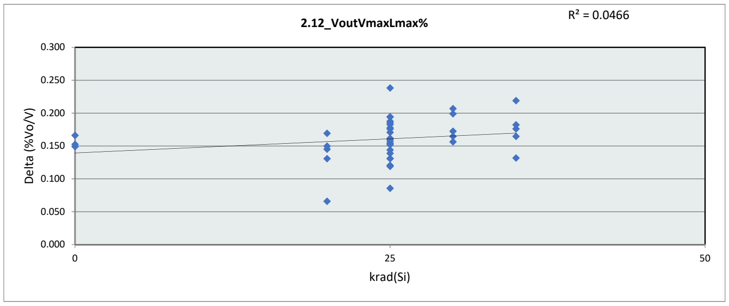
	2.11_VoutVmaxLsoa%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo			
Min Limit	-2	%Vo			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.248	-0.065	-0.325	-0.035	-0.022
Average	0.267	0.229	0.173	0.107	0.115
Max	0.292	0.381	0.514	0.393	0.241
UL	2.000	2.000	2.000	2.000	2.000



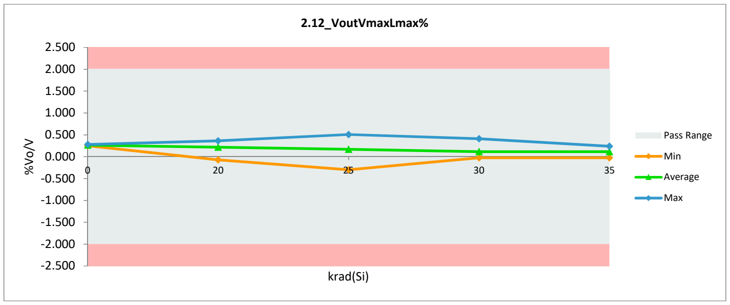
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.12_VoutVmaxLmax%		
	Test Site			
	Tester			
	Test Number			
	Unit	%Vo/V	%Vo/V	
	Max Limit	2	2	
	Min Limit	-2	-2	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	0.098	0.250	0.152
0	CU2	0.111	0.260	0.149
0	CU3	0.113	0.279	0.166
20	1	0.298	0.364	0.066
20	2	-0.030	0.120	0.150
20	3	-0.202	-0.071	0.131
20	4	0.180	0.325	0.145
20	5	0.172	0.341	0.169
25	6	-0.141	0.017	0.157
25	7	-0.117	0.037	0.154
25	8	0.387	0.507	0.120
25	9	0.110	0.241	0.131
25	10	0.214	0.358	0.144
25	11	0.124	0.309	0.185
25	12	-0.171	-0.017	0.154
25	13	-0.034	0.085	0.119
25	14	-0.102	0.093	0.194
25	15	-0.019	0.158	0.177
25	16	-0.059	0.135	0.194
25	17	0.078	0.316	0.238
25	18	-0.086	-0.001	0.086
25	19	-0.001	0.138	0.139
25	20	-0.137	0.051	0.187
25	21	0.104	0.235	0.131
25	22	0.221	0.381	0.160
25	23	0.081	0.252	0.171
25	24	0.288	0.440	0.152
25	25	-0.461	-0.299	0.162
25	26	-0.022	0.154	0.176
25	27	-0.049	0.134	0.183
30	31	-0.197	-0.025	0.172
30	32	0.253	0.410	0.156
30	33	-0.160	0.047	0.207
30	34	-0.091	0.074	0.165
30	35	-0.135	0.064	0.199
35	36	-0.052	0.112	0.165
35	37	0.061	0.193	0.132
35	38	-0.244	-0.025	0.219
35	39	0.063	0.239	0.176
35	40	-0.125	0.057	0.182
	Max	0.387	0.507	0.238
	Average	0.008	0.168	0.160
	Min	-0.461	-0.299	0.066
	Std Dev	0.173	0.164	0.033



	2.12_VoutVmaxLmax%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo/V			
Min Limit	-2	%Vo/V			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.250	-0.071	-0.299	-0.025	-0.025
Average	0.263	0.216	0.169	0.114	0.115
Max	0.279	0.364	0.507	0.410	0.239
UL	2.000	2.000	2.000	2.000	2.000

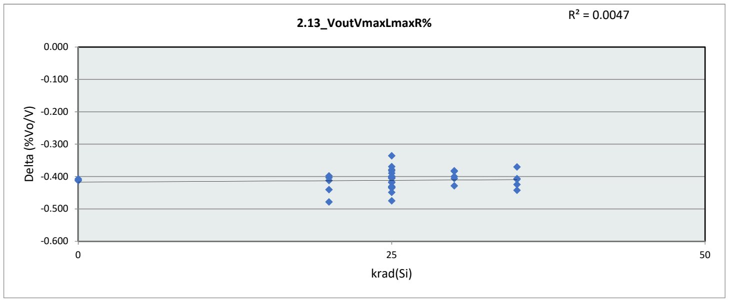


TID HDR Report
TPS7H1210-SEP

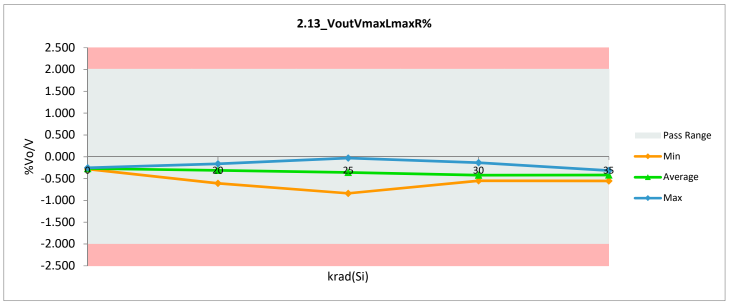
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	2.13_VoutVmaxLmaxR%	
Test Site		
Tester		
Test Number		
Unit	%Vo/V	%Vo/V
Max Limit	1.95	2
Min Limit	-1.98	-2

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	0.124	-0.284	-0.407
0	CU2	0.138	-0.275	-0.413
0	CU3	0.157	-0.254	-0.411
20	1	0.317	-0.162	-0.479
20	2	-0.002	-0.400	-0.398
20	3	-0.169	-0.609	-0.440
20	4	0.215	-0.197	-0.412
20	5	0.208	-0.196	-0.403
25	6	-0.095	-0.511	-0.417
25	7	-0.076	-0.481	-0.405
25	8	0.420	-0.029	-0.449
25	9	0.145	-0.289	-0.433
25	10	0.264	-0.171	-0.435
25	11	0.147	-0.235	-0.382
25	12	-0.129	-0.534	-0.405
25	13	-0.003	-0.438	-0.434
25	14	-0.059	-0.438	-0.379
25	15	0.021	-0.378	-0.400
25	16	-0.022	-0.391	-0.369
25	17	0.119	-0.216	-0.336
25	18	-0.045	-0.520	-0.475
25	19	0.045	-0.387	-0.433
25	20	-0.089	-0.478	-0.390
25	21	0.141	-0.293	-0.434
25	22	0.263	-0.168	-0.431
25	23	0.125	-0.279	-0.404
25	24	0.318	-0.101	-0.419
25	25	-0.408	-0.839	-0.431
25	26	0.018	-0.384	-0.401
25	27	0.006	-0.393	-0.399
30	31	-0.150	-0.550	-0.400
30	32	0.291	-0.138	-0.429
30	33	-0.111	-0.493	-0.382
30	34	-0.061	-0.467	-0.406
30	35	-0.078	-0.461	-0.384
35	36	-0.008	-0.417	-0.409
35	37	0.105	-0.337	-0.442
35	38	-0.185	-0.556	-0.371
35	39	0.091	-0.315	-0.406
35	40	-0.042	-0.467	-0.425
	Max	0.420	-0.029	-0.336
	Average	0.049	-0.363	-0.412
	Min	-0.408	-0.839	-0.479
	Std Dev	0.167	0.161	0.028



	2.13_VoutVmaxLmaxR%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo/V			
Min Limit	-2	%Vo/V			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-0.284	-0.609	-0.839	-0.550	-0.556
Average	-0.271	-0.313	-0.362	-0.422	-0.419
Max	-0.254	-0.162	-0.029	-0.138	-0.315
UL	2.000	2.000	2.000	2.000	2.000

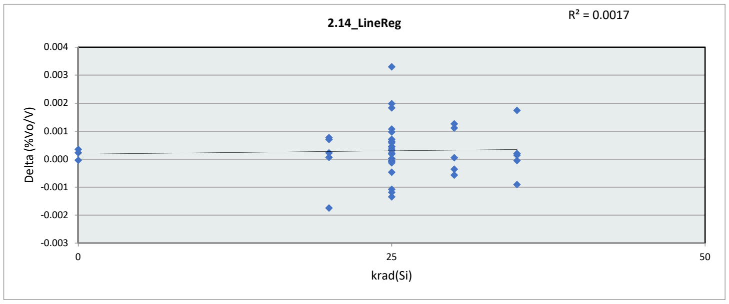


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

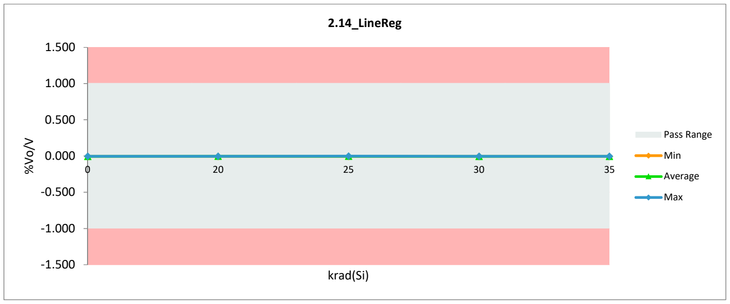
	2.14_LineReg	
Test Site		
Tester		
Test Number		
Unit	%Vo/V	%Vo/V
Max Limit	0.023	1
Min Limit	-0.031	-1

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-0.004	-0.004	0.000
0	CU2	-0.006	-0.005	0.000
0	CU3	-0.005	-0.005	0.000
20	1	-0.004	-0.004	0.001
20	2	-0.004	-0.004	0.000
20	3	-0.004	-0.006	-0.002
20	4	-0.004	-0.004	0.001
20	5	-0.005	-0.004	0.000
25	6	-0.004	-0.004	0.000
25	7	-0.005	-0.005	0.000
25	8	-0.004	-0.005	-0.001
25	9	-0.004	-0.004	0.000
25	10	-0.004	-0.004	0.000
25	11	-0.005	-0.004	0.001
25	12	-0.004	-0.004	0.001
25	13	-0.004	-0.004	0.000
25	14	-0.005	-0.005	0.000
25	15	-0.005	-0.004	0.001
25	16	-0.005	-0.003	0.002
25	17	-0.004	-0.004	0.000
25	18	-0.005	-0.002	0.003
25	19	-0.004	-0.005	-0.001
25	20	-0.004	-0.004	0.000
25	21	-0.004	-0.005	-0.001
25	22	-0.005	-0.005	0.001
25	23	-0.004	-0.004	0.000
25	24	-0.005	-0.004	0.001
25	25	-0.005	-0.003	0.002
25	26	-0.005	-0.005	0.000
25	27	-0.004	-0.004	0.000
30	31	-0.005	-0.005	-0.001
30	32	-0.005	-0.004	0.001
30	33	-0.005	-0.005	0.000
30	34	-0.006	-0.006	0.000
30	35	-0.005	-0.004	0.001
35	36	-0.005	-0.005	0.000
35	37	-0.005	-0.003	0.002
35	38	-0.005	-0.005	0.000
35	39	-0.006	-0.006	0.000
35	40	-0.004	-0.005	-0.001
	Max	-0.004	-0.002	0.003
	Average	-0.005	-0.004	0.000
	Min	-0.006	-0.006	-0.002
	Std Dev	0.001	0.001	0.001



	2.14_LineReg	
Test Site		
Tester		
Test Number		
Max Limit	1	%Vo/V
Min Limit	-1	%Vo/V

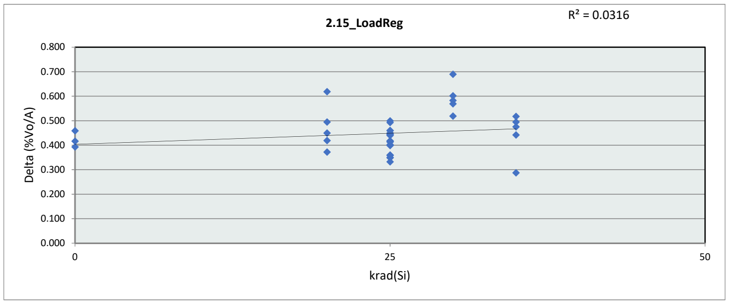
krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.005	-0.006	-0.005	-0.006	-0.006
Average	-0.005	-0.004	-0.004	-0.005	-0.005
Max	-0.004	-0.004	-0.002	-0.004	-0.003
UL	1.000	1.000	1.000	1.000	1.000



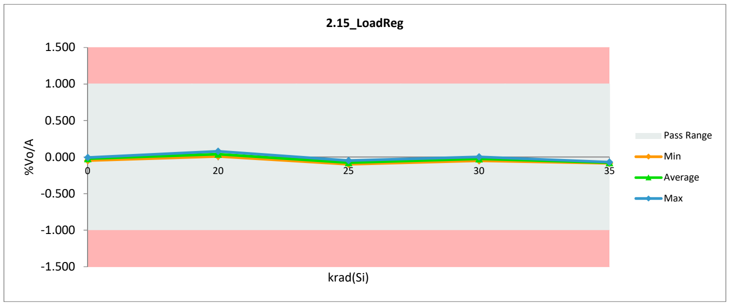
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.15_LoadReg		
	Test Site			
	Tester			
	Test Number			
	Unit	%Vo/A	%Vo/A	
	Max Limit	0.9	1	
	Min Limit	-0.9	-1	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-0.404	-0.011	0.393
0	CU2	-0.464	-0.048	0.416
0	CU3	-0.464	-0.005	0.459
20	1	-0.336	0.036	0.372
20	2	-0.389	0.030	0.419
20	3	-0.609	0.009	0.618
20	4	-0.450	0.044	0.494
20	5	-0.370	0.080	0.450
25	6	-0.554	-0.095	0.459
25	7	-0.463	-0.046	0.417
25	8	-0.421	-0.072	0.350
25	9	-0.404	-0.072	0.332
25	10	-0.498	-0.081	0.417
25	11	-0.508	-0.092	0.416
25	12	-0.504	-0.054	0.450
25	13	-0.447	-0.088	0.359
25	14	-0.430	-0.071	0.359
25	15	-0.467	-0.068	0.400
25	16	-0.501	-0.088	0.413
25	17	-0.428	-0.079	0.349
25	18	-0.494	-0.093	0.402
25	19	-0.502	-0.056	0.445
25	20	-0.564	-0.065	0.499
25	21	-0.431	-0.072	0.359
25	22	-0.483	-0.084	0.398
25	23	-0.541	-0.098	0.442
25	24	-0.548	-0.088	0.460
25	25	-0.568	-0.075	0.492
25	26	-0.517	-0.077	0.440
25	27	-0.510	-0.065	0.445
30	31	-0.515	0.004	0.518
30	32	-0.652	-0.051	0.602
30	33	-0.599	-0.016	0.583
30	34	-0.602	-0.034	0.569
30	35	-0.713	-0.023	0.690
35	36	-0.585	-0.068	0.517
35	37	-0.516	-0.074	0.442
35	38	-0.576	-0.082	0.494
35	39	-0.560	-0.085	0.475
35	40	-0.359	-0.071	0.287
	Max	-0.336	0.080	0.690
	Average	-0.499	-0.051	0.448
	Min	-0.713	-0.098	0.287
	Std Dev	0.082	0.044	0.083



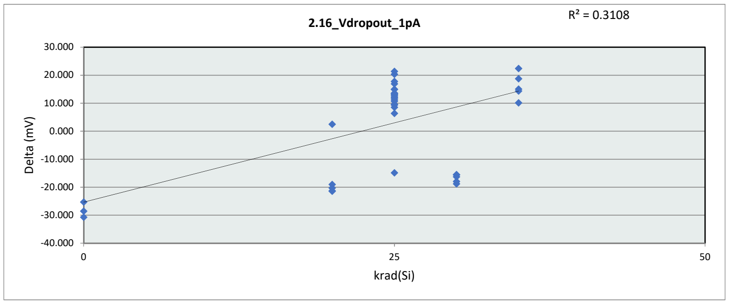
	2.15_LoadReg				
Test Site					
Tester					
Test Number					
Max Limit	1	%Vo/A			
Min Limit	-1	%Vo/A			
krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.048	0.009	-0.098	-0.051	-0.085
Average	-0.021	0.040	-0.076	-0.024	-0.076
Max	-0.005	0.080	-0.046	0.004	-0.068
UL	1.000	1.000	1.000	1.000	1.000



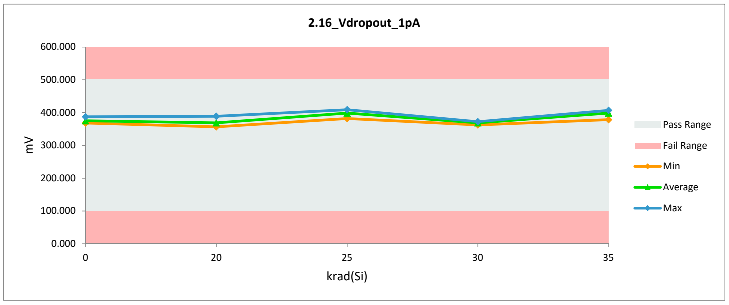
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.16_Vdropout_1pA		
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		475	500	
Min Limit		100	100	
krad(Si)	**Serial #**	**Pre_HDR**	**Post_HDR**	**Delta**
0	CU1	396.860	368.290	-28.570
0	CU2	400.390	369.670	-30.720
0	CU3	412.780	387.450	-25.330
20	1	386.450	388.940	2.490
20	2	388.030	369.010	-19.020
20	3	377.960	356.510	-21.450
20	4	384.560	363.260	-21.300
20	5	386.320	366.030	-20.290
25	6	388.360	408.690	20.330
25	7	391.330	408.220	16.890
25	8	382.630	395.930	13.300
25	9	388.270	403.230	14.960
25	10	394.040	402.550	8.510
25	11	372.480	382.080	9.600
25	12	385.390	394.800	9.410
25	13	384.790	402.570	17.780
25	14	379.950	390.660	10.710
25	15	384.940	398.510	13.570
25	16	385.200	406.560	21.360
25	17	382.690	394.530	11.840
25	18	382.770	397.700	14.930
25	19	390.790	400.150	9.360
25	20	394.990	407.250	12.260
25	21	388.240	401.190	12.950
25	22	383.930	390.280	6.350
25	23	381.720	392.910	11.190
25	24	376.610	389.430	12.820
25	25	390.710	402.520	11.810
25	26	387.070	400.470	13.400
25	27	411.400	396.500	-14.900
30	31	386.520	368.560	-17.960
30	32	391.250	372.420	-18.830
30	33	377.920	362.400	-15.520
30	34	387.030	371.430	-15.600
30	35	385.670	369.380	-16.290
35	36	385.570	404.300	18.730
35	37	388.840	403.870	15.030
35	38	384.380	406.770	22.390
35	39	368.220	378.330	10.110
35	40	385.050	399.390	14.340
	Max	412.780	408.690	22.390
	Average	387.053	389.319	2.266
	Min	368.220	356.510	-30.720
	Std Dev	8.380	15.600	16.614



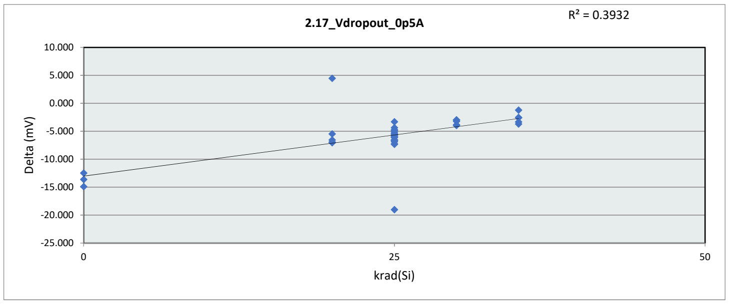
	2.16_Vdropout_1pA				
Test Site					
Tester					
Test Number					
Max Limit	500	mV			
Min Limit	100	mV			
krad(Si)	**0**	**20**	**25**	**30**	**35**
LL	100.000	100.000	100.000	100.000	100.000
Min	368.290	356.510	382.080	362.400	378.330
Average	375.137	368.750	398.488	368.838	398.532
Max	387.450	388.940	408.690	372.420	406.770
UL	500.000	500.000	500.000	500.000	500.000



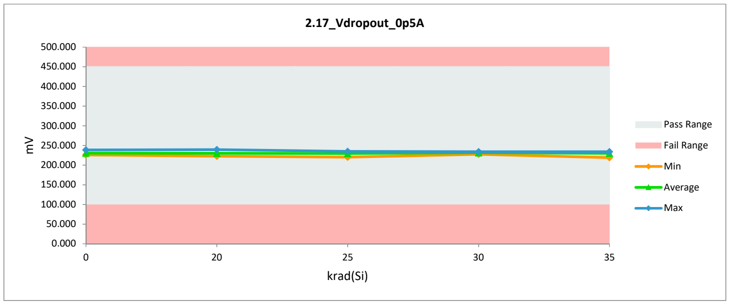
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.17_Vdropout_0p5A		
	Test Site			
	Tester			
	Test Number			
	Unit	mV	mV	
	Max Limit	303	450	
	Min Limit	100	100	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	239.620	226.010	-13.610
0	CU2	242.060	227.170	-14.890
0	CU3	251.000	238.530	-12.470
20	1	234.770	239.240	4.470
20	2	237.050	231.580	-5.470
20	3	229.730	222.680	-7.050
20	4	233.670	226.750	-6.920
20	5	235.510	228.950	-6.560
25	6	236.560	233.260	-3.300
25	7	239.140	234.770	-4.370
25	8	233.190	226.630	-6.560
25	9	236.490	230.760	-5.730
25	10	239.920	232.590	-7.330
25	11	226.140	220.160	-5.980
25	12	235.350	228.670	-6.680
25	13	234.530	229.090	-5.440
25	14	232.180	226.630	-5.550
25	15	234.940	228.990	-5.950
25	16	235.620	230.780	-4.840
25	17	233.830	227.720	-6.110
25	18	234.300	229.160	-5.140
25	19	238.730	231.880	-6.850
25	20	241.310	234.680	-6.630
25	21	236.730	230.190	-6.540
25	22	234.170	226.930	-7.240
25	23	233.440	227.370	-6.070
25	24	228.500	223.760	-4.740
25	25	239.270	233.580	-5.690
25	26	235.800	230.390	-5.410
25	27	246.880	227.850	-19.030
30	31	235.550	231.700	-3.850
30	32	238.170	234.220	-3.950
30	33	230.500	227.550	-2.950
30	34	234.660	231.440	-3.220
30	35	235.000	232.000	-3.000
35	36	234.880	232.290	-2.590
35	37	237.370	234.050	-3.320
35	38	234.160	232.950	-1.210
35	39	222.710	219.010	-3.700
35	40	234.390	231.870	-2.520
	Max	251.000	239.240	4.470
	Average	235.696	229.846	-5.850
	Min	222.710	219.010	-19.030
	Std Dev	4.885	4.252	3.836



	2.17_Vdropout_0p5A				
Test Site					
Tester					
Test Number					
Max Limit	450	mV			
Min Limit	100	mV			
krad(Si)	0	20	25	30	35
LL	100.000	100.000	100.000	100.000	100.000
Min	226.010	222.680	220.160	227.550	219.010
Average	230.570	229.840	229.356	231.382	230.034
Max	238.530	239.240	234.770	234.220	234.050
UL	450.000	450.000	450.000	450.000	450.000

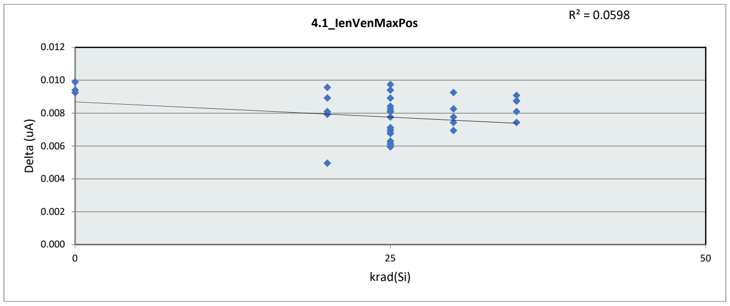


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

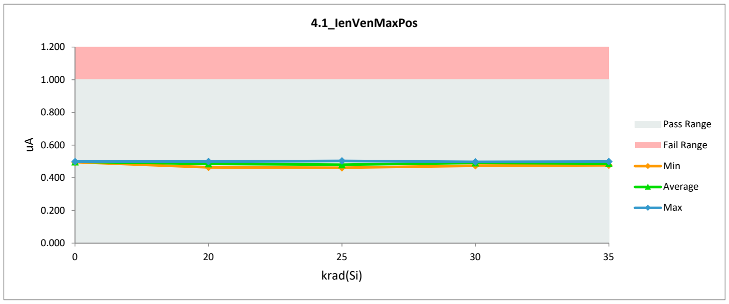
	4.1_IenVenMaxPos	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	0.98	1
Min Limit	0	0

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	0.486	0.496	0.010
0	CU2	0.490	0.499	0.009
0	CU3	0.489	0.499	0.009
20	1	0.484	0.493	0.009
20	2	0.456	0.464	0.008
20	3	0.476	0.481	0.005
20	4	0.489	0.499	0.010
20	5	0.483	0.491	0.008
25	6	0.485	0.491	0.006
25	7	0.462	0.468	0.007
25	8	0.472	0.481	0.008
25	9	0.462	0.470	0.008
25	10	0.455	0.461	0.006
25	11	0.484	0.491	0.007
25	12	0.457	0.465	0.008
25	13	0.487	0.495	0.008
25	14	0.490	0.496	0.006
25	15	0.468	0.476	0.008
25	16	0.475	0.484	0.009
25	17	0.476	0.486	0.010
25	18	0.474	0.480	0.007
25	19	0.464	0.470	0.006
25	20	0.461	0.467	0.006
25	21	0.465	0.473	0.007
25	22	0.461	0.469	0.008
25	23	0.480	0.486	0.006
25	24	0.485	0.492	0.007
25	25	0.456	0.463	0.007
25	26	0.489	0.495	0.006
25	27	0.494	0.503	0.009
30	31	0.484	0.492	0.008
30	32	0.466	0.474	0.008
30	33	0.489	0.496	0.007
30	34	0.488	0.498	0.009
30	35	0.489	0.496	0.007
35	36	0.478	0.487	0.009
35	37	0.468	0.476	0.008
35	38	0.492	0.499	0.007
35	39	0.473	0.482	0.009
35	40	0.483	0.492	0.009
	Max	0.494	0.503	0.010
	Average	0.477	0.484	0.008
	Min	0.455	0.461	0.005
	Std Dev	0.012	0.012	0.001



	4.1_IenVenMaxPos	
Test Site		
Tester		
Test Number		
Max Limit	1	uA
Min Limit	0	uA

krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	0.496	0.464	0.461	0.474	0.476
Average	0.498	0.486	0.480	0.491	0.487
Max	0.499	0.499	0.503	0.498	0.499
UL	1.000	1.000	1.000	1.000	1.000

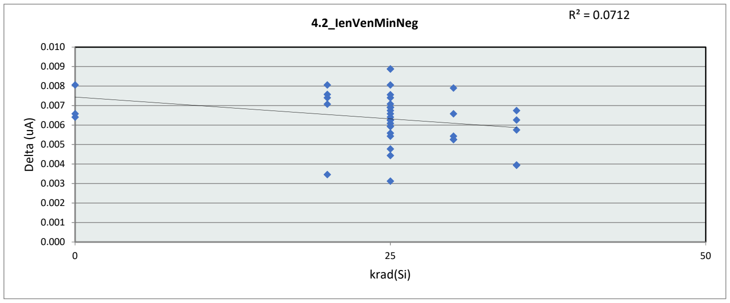


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

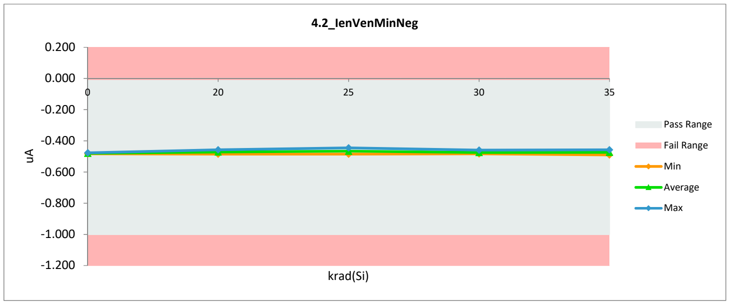
	4.2_IenVenMinNeg	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	0	-0.01
Min Limit	-0.98	-1

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-0.485	-0.477	0.008
0	CU2	-0.490	-0.483	0.007
0	CU3	-0.487	-0.481	0.006
20	1	-0.492	-0.485	0.008
20	2	-0.464	-0.457	0.007
20	3	-0.471	-0.468	0.003
20	4	-0.486	-0.478	0.008
20	5	-0.480	-0.473	0.007
25	6	-0.485	-0.479	0.006
25	7	-0.466	-0.457	0.009
25	8	-0.473	-0.464	0.009
25	9	-0.464	-0.458	0.006
25	10	-0.456	-0.449	0.007
25	11	-0.483	-0.477	0.006
25	12	-0.458	-0.454	0.004
25	13	-0.489	-0.482	0.007
25	14	-0.486	-0.478	0.008
25	15	-0.473	-0.466	0.007
25	16	-0.476	-0.468	0.008
25	17	-0.478	-0.475	0.003
25	18	-0.478	-0.473	0.006
25	19	-0.463	-0.457	0.006
25	20	-0.458	-0.453	0.005
25	21	-0.464	-0.458	0.006
25	22	-0.463	-0.457	0.005
25	23	-0.481	-0.474	0.007
25	24	-0.478	-0.472	0.006
25	25	-0.452	-0.445	0.007
25	26	-0.486	-0.479	0.007
25	27	-0.492	-0.485	0.007
30	31	-0.485	-0.478	0.007
30	32	-0.467	-0.459	0.008
30	33	-0.488	-0.483	0.005
30	34	-0.481	-0.476	0.005
30	35	-0.486	-0.481	0.005
35	36	-0.480	-0.476	0.004
35	37	-0.463	-0.458	0.006
35	38	-0.495	-0.491	0.004
35	39	-0.476	-0.469	0.007
35	40	-0.481	-0.475	0.006
	Max	-0.452	-0.445	0.009
	Average	-0.477	-0.470	0.006
	Min	-0.495	-0.491	0.003
	Std Dev	0.011	0.011	0.001



	4.2_IenVenMinNeg	
Test Site		
Tester		
Test Number		
Max Limit	-0.01	uA
Min Limit	-1	uA

krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.483	-0.485	-0.485	-0.483	-0.491
Average	-0.480	-0.472	-0.466	-0.475	-0.474
Max	-0.477	-0.457	-0.445	-0.459	-0.458
UL	-0.010	-0.010	-0.010	-0.010	-0.010

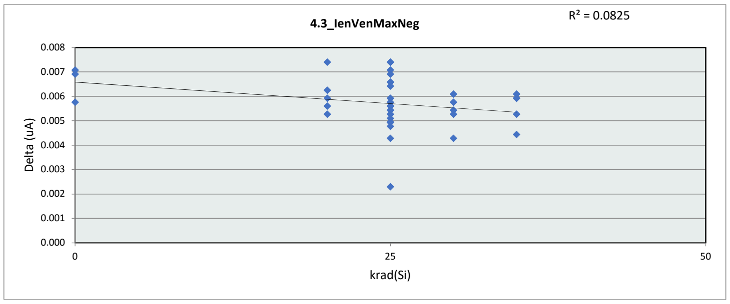


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

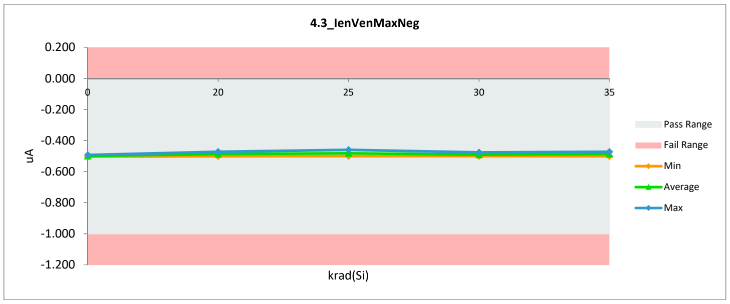
	4.3_IenVenMaxNeg	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	0	-0.01
Min Limit	-0.98	-1

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-0.499	-0.492	0.007
0	CU2	-0.509	-0.503	0.006
0	CU3	-0.507	-0.500	0.007
20	1	-0.507	-0.501	0.006
20	2	-0.477	-0.472	0.005
20	3	-0.484	-0.478	0.006
20	4	-0.501	-0.494	0.007
20	5	-0.493	-0.488	0.006
25	6	-0.500	-0.496	0.004
25	7	-0.479	-0.473	0.006
25	8	-0.487	-0.481	0.006
25	9	-0.477	-0.470	0.007
25	10	-0.468	-0.463	0.005
25	11	-0.500	-0.494	0.006
25	12	-0.474	-0.467	0.007
25	13	-0.503	-0.497	0.007
25	14	-0.499	-0.494	0.005
25	15	-0.488	-0.483	0.005
25	16	-0.491	-0.486	0.005
25	17	-0.491	-0.484	0.007
25	18	-0.492	-0.487	0.005
25	19	-0.477	-0.471	0.006
25	20	-0.473	-0.467	0.005
25	21	-0.478	-0.472	0.006
25	22	-0.480	-0.473	0.007
25	23	-0.497	-0.491	0.006
25	24	-0.494	-0.492	0.002
25	25	-0.465	-0.460	0.005
25	26	-0.500	-0.493	0.007
25	27	-0.505	-0.500	0.005
30	31	-0.495	-0.490	0.005
30	32	-0.481	-0.476	0.005
30	33	-0.506	-0.500	0.006
30	34	-0.498	-0.493	0.006
30	35	-0.499	-0.494	0.004
35	36	-0.494	-0.489	0.004
35	37	-0.477	-0.472	0.005
35	38	-0.507	-0.501	0.006
35	39	-0.487	-0.480	0.006
35	40	-0.496	-0.490	0.006
	Max	-0.465	-0.460	0.007
	Average	-0.491	-0.485	0.006
	Min	-0.509	-0.503	0.002
	Std Dev	0.012	0.012	0.001



	4.3_IenVenMaxNeg	
Test Site		
Tester		
Test Number		
Max Limit	-0.01	uA
Min Limit	-1	uA

krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.503	-0.501	-0.500	-0.500	-0.501
Average	-0.499	-0.486	-0.482	-0.491	-0.487
Max	-0.492	-0.472	-0.460	-0.476	-0.472
UL	-0.010	-0.010	-0.010	-0.010	-0.010

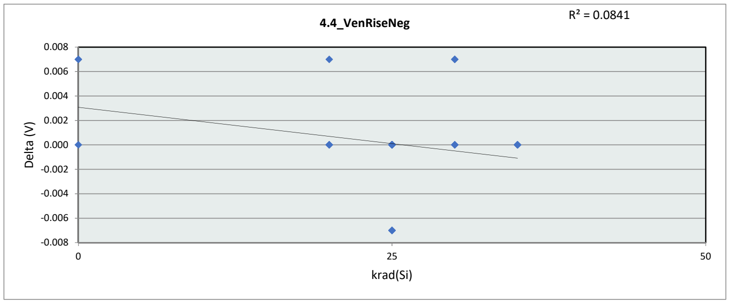


TID HDR Report
TPS7H1210-SEP

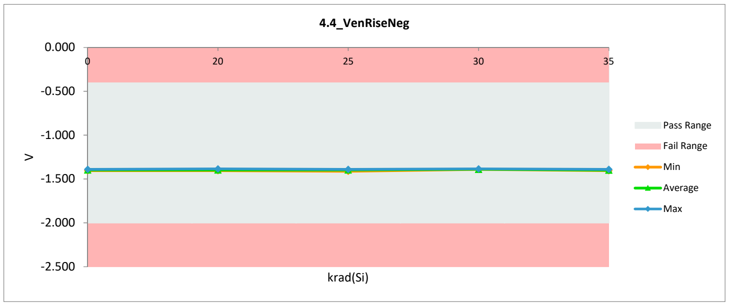
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	4.4_VenRiseNeg	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.45	-0.4
Min Limit	-1.98	-2

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-1.398	-1.390	0.007
0	CU2	-1.405	-1.405	0.000
0	CU3	-1.405	-1.398	0.007
20	1	-1.405	-1.405	0.000
20	2	-1.405	-1.405	0.000
20	3	-1.383	-1.383	0.000
20	4	-1.405	-1.405	0.000
20	5	-1.398	-1.390	0.007
25	6	-1.398	-1.398	0.000
25	7	-1.405	-1.405	0.000
25	8	-1.390	-1.390	0.000
25	9	-1.390	-1.390	0.000
25	10	-1.398	-1.398	0.000
25	11	-1.398	-1.398	0.000
25	12	-1.390	-1.398	-0.007
25	13	-1.411	-1.411	0.000
25	14	-1.405	-1.405	0.000
25	15	-1.390	-1.390	0.000
25	16	-1.390	-1.390	0.000
25	17	-1.405	-1.405	0.000
25	18	-1.390	-1.390	0.000
25	19	-1.398	-1.405	-0.007
25	20	-1.390	-1.390	0.000
25	21	-1.398	-1.398	0.000
25	22	-1.398	-1.398	0.000
25	23	-1.398	-1.398	0.000
25	24	-1.390	-1.398	-0.007
25	25	-1.398	-1.398	0.000
25	26	-1.390	-1.398	-0.007
25	27	-1.405	-1.405	0.000
30	31	-1.398	-1.390	0.007
30	32	-1.390	-1.390	0.000
30	33	-1.383	-1.383	0.000
30	34	-1.390	-1.390	0.000
30	35	-1.398	-1.390	0.007
35	36	-1.398	-1.398	0.000
35	37	-1.398	-1.398	0.000
35	38	-1.405	-1.405	0.000
35	39	-1.390	-1.390	0.000
35	40	-1.405	-1.405	0.000
	Max	-1.383	-1.383	0.007
	Average	-1.397	-1.397	0.000
	Min	-1.411	-1.411	-0.007
	Std Dev	0.007	0.007	0.003



	4.4_VenRiseNeg				
Test Site					
Tester					
Test Number					
Max Limit	-0.4	V			
Min Limit	-2	V			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-1.405	-1.405	-1.412	-1.391	-1.405
Average	-1.398	-1.398	-1.398	-1.389	-1.399
Max	-1.391	-1.384	-1.391	-1.384	-1.391
UL	-0.400	-0.400	-0.400	-0.400	-0.400



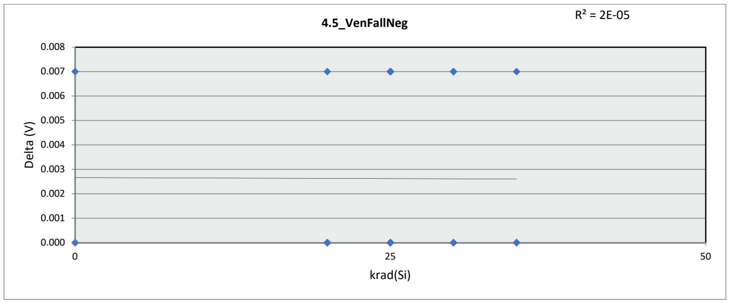
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

4.5_VenFallNeg

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.45	-0.4
Min Limit	-1.98	-2

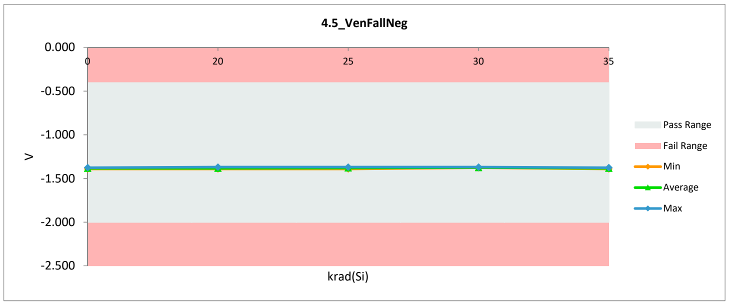
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-1.377	-1.377	0.000
0	CU2	-1.390	-1.390	0.000
0	CU3	-1.390	-1.383	0.007
20	1	-1.390	-1.390	0.000
20	2	-1.390	-1.390	0.000
20	3	-1.370	-1.370	0.000
20	4	-1.390	-1.390	0.000
20	5	-1.383	-1.377	0.007
25	6	-1.383	-1.383	0.000
25	7	-1.390	-1.383	0.007
25	8	-1.377	-1.377	0.000
25	9	-1.377	-1.377	0.000
25	10	-1.383	-1.377	0.007
25	11	-1.383	-1.383	0.000
25	12	-1.377	-1.377	0.000
25	13	-1.398	-1.390	0.007
25	14	-1.390	-1.390	0.000
25	15	-1.377	-1.370	0.007
25	16	-1.377	-1.370	0.007
25	17	-1.390	-1.383	0.007
25	18	-1.377	-1.370	0.007
25	19	-1.383	-1.383	0.000
25	20	-1.377	-1.377	0.000
25	21	-1.383	-1.377	0.007
25	22	-1.383	-1.377	0.007
25	23	-1.383	-1.383	0.000
25	24	-1.377	-1.377	0.000
25	25	-1.383	-1.383	0.000
25	26	-1.377	-1.377	0.000
25	27	-1.390	-1.383	0.007
30	31	-1.383	-1.377	0.007
30	32	-1.377	-1.377	0.000
30	33	-1.370	-1.370	0.000
30	34	-1.377	-1.377	0.000
30	35	-1.383	-1.377	0.007
35	36	-1.383	-1.383	0.000
35	37	-1.383	-1.377	0.007
35	38	-1.390	-1.390	0.000
35	39	-1.377	-1.377	0.000
35	40	-1.390	-1.390	0.000
	Max	-1.370	-1.370	0.007
	Average	-1.383	-1.380	0.003
	Min	-1.398	-1.390	0.000
	Std Dev	0.007	0.007	0.003



4.5_VenFallNeg

Test Site		
Tester		
Test Number		
Max Limit	-0.4	V
Min Limit	-2	V

krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-1.391	-1.391	-1.391	-1.377	-1.391
Average	-1.384	-1.384	-1.379	-1.375	-1.384
Max	-1.377	-1.370	-1.370	-1.370	-1.377
UL	-0.400	-0.400	-0.400	-0.400	-0.400

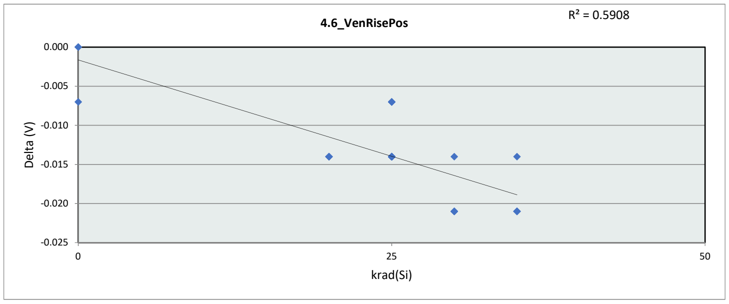


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

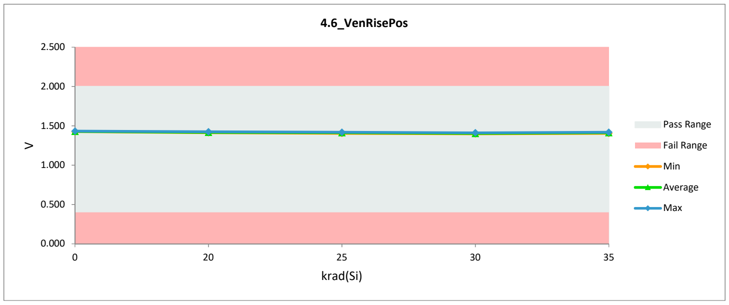
	4.6_VenRisePos	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.95	2
Min Limit	0.45	0.4

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	1.426	1.426	0.000
0	CU2	1.439	1.433	-0.007
0	CU3	1.426	1.426	0.000
20	1	1.439	1.426	-0.014
20	2	1.433	1.418	-0.014
20	3	1.426	1.411	-0.014
20	4	1.433	1.418	-0.014
20	5	1.426	1.411	-0.014
25	6	1.433	1.418	-0.014
25	7	1.426	1.418	-0.007
25	8	1.426	1.411	-0.014
25	9	1.426	1.411	-0.014
25	10	1.418	1.405	-0.014
25	11	1.433	1.418	-0.014
25	12	1.418	1.411	-0.007
25	13	1.433	1.418	-0.014
25	14	1.426	1.418	-0.007
25	15	1.418	1.405	-0.014
25	16	1.418	1.405	-0.014
25	17	1.426	1.411	-0.014
25	18	1.426	1.411	-0.014
25	19	1.418	1.405	-0.014
25	20	1.418	1.405	-0.014
25	21	1.418	1.411	-0.007
25	22	1.418	1.411	-0.007
25	23	1.426	1.411	-0.014
25	24	1.426	1.411	-0.014
25	25	1.426	1.411	-0.014
25	26	1.418	1.405	-0.014
25	27	1.433	1.418	-0.014
30	31	1.426	1.411	-0.014
30	32	1.418	1.398	-0.021
30	33	1.418	1.398	-0.021
30	34	1.426	1.405	-0.021
30	35	1.426	1.405	-0.021
35	36	1.433	1.411	-0.021
35	37	1.426	1.405	-0.021
35	38	1.433	1.418	-0.014
35	39	1.433	1.411	-0.021
35	40	1.433	1.411	-0.021
	Max	1.439	1.433	0.000
	Average	1.426	1.412	-0.014
	Min	1.418	1.398	-0.021
	Std Dev	0.006	0.008	0.005



	4.6_VenRisePos	
Test Site		
Tester		
Test Number		
Max Limit	2	V
Min Limit	0.4	V

krad(Si)	0	20	25	30	35
LL	0.400	0.400	0.400	0.400	0.400
Min	1.426	1.412	1.405	1.398	1.405
Average	1.428	1.417	1.412	1.403	1.412
Max	1.433	1.426	1.419	1.412	1.419
UL	2.000	2.000	2.000	2.000	2.000



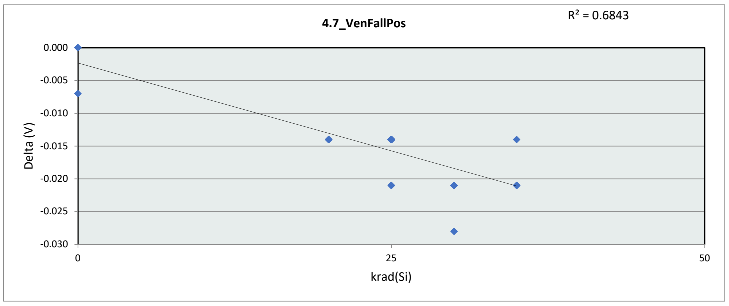
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

4.7_VenFallPos

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.95	2
Min Limit	0.45	0.4

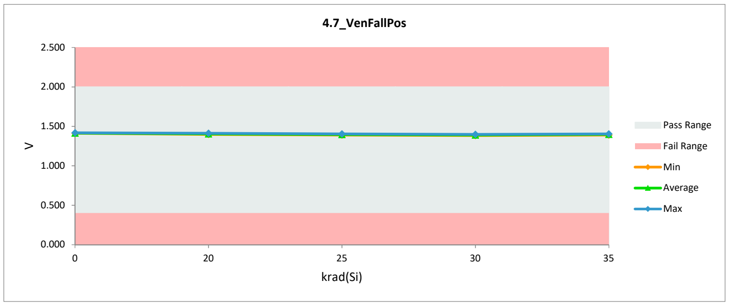
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	1.411	1.411	0.000
0	CU2	1.426	1.418	-0.007
0	CU3	1.411	1.411	0.000
20	1	1.426	1.411	-0.014
20	2	1.418	1.405	-0.014
20	3	1.411	1.398	-0.014
20	4	1.418	1.405	-0.014
20	5	1.411	1.398	-0.014
25	6	1.418	1.398	-0.021
25	7	1.411	1.398	-0.014
25	8	1.411	1.398	-0.014
25	9	1.411	1.398	-0.014
25	10	1.405	1.390	-0.014
25	11	1.418	1.398	-0.021
25	12	1.405	1.390	-0.014
25	13	1.418	1.405	-0.014
25	14	1.411	1.398	-0.014
25	15	1.405	1.390	-0.014
25	16	1.405	1.390	-0.014
25	17	1.411	1.398	-0.014
25	18	1.411	1.390	-0.021
25	19	1.405	1.390	-0.014
25	20	1.405	1.390	-0.014
25	21	1.405	1.390	-0.014
25	22	1.405	1.390	-0.014
25	23	1.411	1.398	-0.014
25	24	1.411	1.398	-0.014
25	25	1.411	1.398	-0.014
25	26	1.405	1.390	-0.014
25	27	1.418	1.405	-0.014
30	31	1.418	1.398	-0.021
30	32	1.405	1.383	-0.021
30	33	1.411	1.383	-0.028
30	34	1.411	1.390	-0.021
30	35	1.411	1.390	-0.021
35	36	1.418	1.398	-0.021
35	37	1.411	1.390	-0.021
35	38	1.418	1.405	-0.014
35	39	1.418	1.398	-0.021
35	40	1.418	1.398	-0.021
	Max	1.426	1.418	0.000
	Average	1.412	1.397	-0.015
	Min	1.405	1.383	-0.028
	Std Dev	0.006	0.008	0.005



4.7_VenFallPos

Test Site		
Tester		
Test Number		
Max Limit	2	V
Min Limit	0.4	V

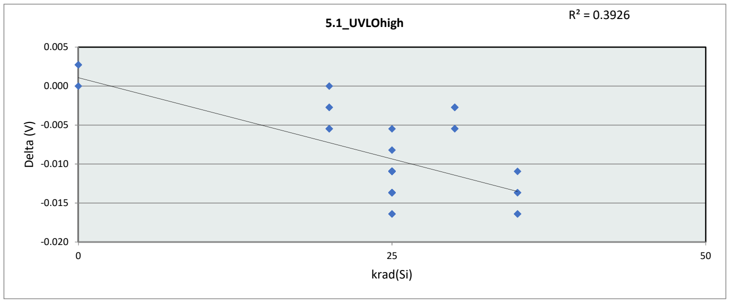
krad(Si)	0	20	25	30	35
LL	0.400	0.400	0.400	0.400	0.400
Min	1.412	1.398	1.391	1.384	1.391
Average	1.414	1.403	1.395	1.389	1.398
Max	1.419	1.412	1.405	1.398	1.405
UL	2.000	2.000	2.000	2.000	2.000



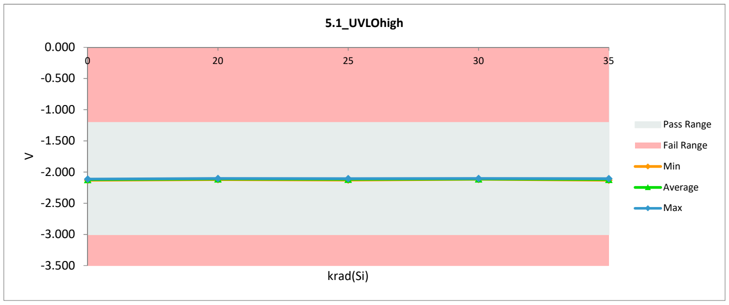
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		5.1_UVLOhigh		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	-1.3	-1.2	
	Min Limit	-2.95	-3	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-2.123	-2.120	0.003
0	CU2	-2.115	-2.112	0.003
0	CU3	-2.131	-2.131	0.000
20	1	-2.112	-2.112	0.000
20	2	-2.115	-2.120	-0.005
20	3	-2.101	-2.104	-0.003
20	4	-2.104	-2.109	-0.005
20	5	-2.104	-2.107	-0.003
25	6	-2.112	-2.126	-0.014
25	7	-2.112	-2.126	-0.014
25	8	-2.101	-2.115	-0.014
25	9	-2.101	-2.117	-0.016
25	10	-2.107	-2.117	-0.011
25	11	-2.101	-2.112	-0.011
25	12	-2.098	-2.112	-0.014
25	13	-2.117	-2.128	-0.011
25	14	-2.109	-2.123	-0.014
25	15	-2.093	-2.109	-0.016
25	16	-2.109	-2.120	-0.011
25	17	-2.098	-2.107	-0.008
25	18	-2.104	-2.115	-0.011
25	19	-2.098	-2.112	-0.014
25	20	-2.104	-2.115	-0.011
25	21	-2.107	-2.120	-0.014
25	22	-2.098	-2.109	-0.011
25	23	-2.096	-2.107	-0.011
25	24	-2.101	-2.107	-0.005
25	25	-2.109	-2.120	-0.011
25	26	-2.107	-2.117	-0.011
25	27	-2.112	-2.123	-0.011
30	31	-2.109	-2.112	-0.003
30	32	-2.101	-2.104	-0.003
30	33	-2.115	-2.117	-0.003
30	34	-2.107	-2.112	-0.005
30	35	-2.107	-2.112	-0.005
35	36	-2.101	-2.117	-0.016
35	37	-2.109	-2.123	-0.014
35	38	-2.115	-2.131	-0.016
35	39	-2.104	-2.117	-0.014
35	40	-2.096	-2.107	-0.011
	Max	-2.093	-2.104	0.003
	Average	-2.107	-2.116	-0.009
	Min	-2.131	-2.131	-0.016
	Std Dev	0.008	0.007	0.005



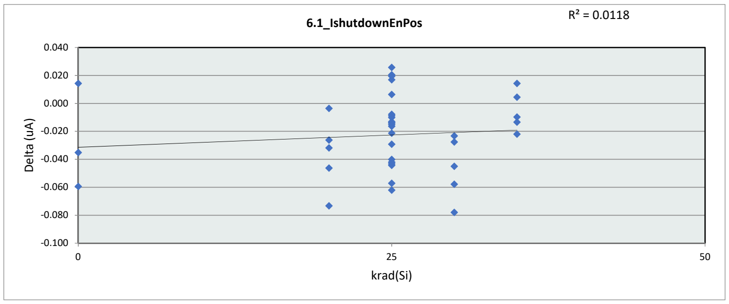
	5.1_UVLOhigh				
Test Site					
Tester					
Test Number					
Max Limit	-1.2	V			
Min Limit	-3	V			
krad(Si)	0	20	25	30	35
LL	-3.000	-3.000	-3.000	-3.000	-3.000
Min	-2.131	-2.120	-2.128	-2.117	-2.131
Average	-2.121	-2.110	-2.116	-2.111	-2.119
Max	-2.112	-2.104	-2.107	-2.104	-2.107
UL	-1.200	-1.200	-1.200	-1.200	-1.200



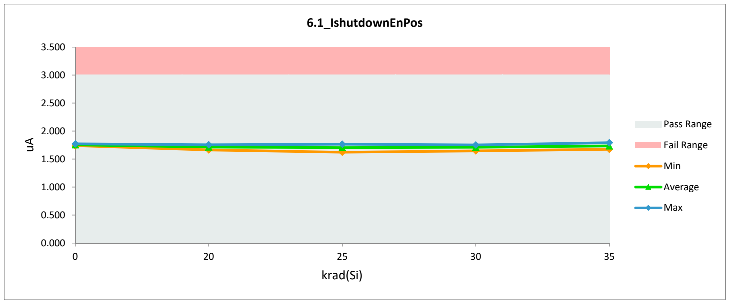
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		6.1_IshutdownEnPos		
	Test Site			
	Tester			
	Test Number			
	Unit	uA	uA	
	Max Limit	2.45	3	
	Min Limit	0	0	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	1.739	1.753	0.014
0	CU2	1.833	1.774	-0.059
0	CU3	1.774	1.739	-0.035
20	1	1.786	1.754	-0.032
20	2	1.737	1.663	-0.073
20	3	1.708	1.682	-0.026
20	4	1.798	1.752	-0.046
20	5	1.730	1.726	-0.004
25	6	1.752	1.744	-0.008
25	7	1.702	1.673	-0.029
25	8	1.752	1.712	-0.040
25	9	1.658	1.684	0.026
25	10	1.644	1.635	-0.009
25	11	1.764	1.749	-0.014
25	12	1.719	1.674	-0.044
25	13	1.777	1.763	-0.014
25	14	1.777	1.761	-0.016
25	15	1.710	1.688	-0.021
25	16	1.760	1.718	-0.042
25	17	1.785	1.723	-0.062
25	18	1.718	1.725	0.006
25	19	1.662	1.649	-0.013
25	20	1.675	1.660	-0.015
25	21	1.651	1.671	0.019
25	22	1.743	1.686	-0.057
25	23	1.719	1.736	0.017
25	24	1.718	1.739	0.020
25	25	1.665	1.623	-0.042
25	26	1.788	1.745	-0.043
25	27	1.776	1.766	-0.010
30	31	1.727	1.704	-0.023
30	32	1.726	1.648	-0.078
30	33	1.812	1.754	-0.058
30	34	1.747	1.720	-0.028
30	35	1.789	1.744	-0.045
35	36	1.751	1.741	-0.010
35	37	1.697	1.675	-0.022
35	38	1.789	1.793	0.004
35	39	1.733	1.720	-0.013
35	40	1.738	1.752	0.014
	Max	1.833	1.793	0.026
	Average	1.738	1.715	-0.023
	Min	1.644	1.623	-0.078
	Std Dev	0.046	0.042	0.027



	6.1_IshutdownEnPos				
Test Site					
Tester					
Test Number					
Max Limit	3	uA			
Min Limit	0	uA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	1.739	1.663	1.623	1.648	1.675
Average	1.756	1.716	1.706	1.714	1.736
Max	1.774	1.754	1.766	1.754	1.793
UL	3.000	3.000	3.000	3.000	3.000

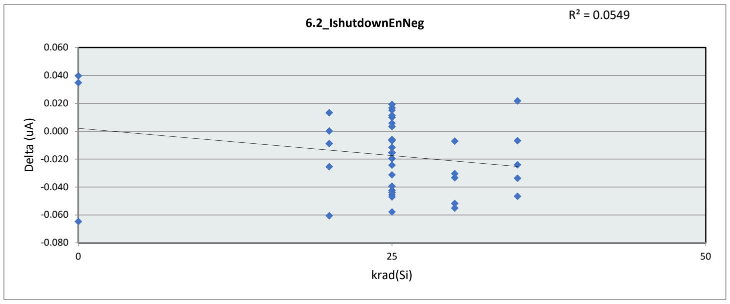


TID HDR Report
TPS7H1210-SEP

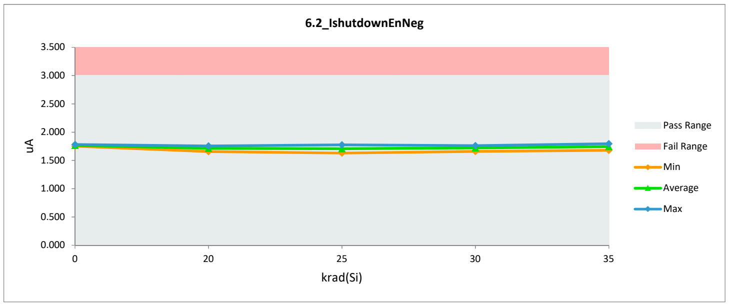
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	6.2_IshutdownEnNeg	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	2.45	3
Min Limit	0	0

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	1.816	1.751	-0.065
0	CU2	1.741	1.781	0.040
0	CU3	1.730	1.765	0.035
20	1	1.781	1.755	-0.025
20	2	1.665	1.656	-0.009
20	3	1.695	1.695	0.000
20	4	1.734	1.747	0.013
20	5	1.777	1.716	-0.061
25	6	1.779	1.748	-0.031
25	7	1.662	1.681	0.019
25	8	1.714	1.708	-0.007
25	9	1.720	1.676	-0.044
25	10	1.657	1.641	-0.016
25	11	1.762	1.747	-0.015
25	12	1.654	1.669	0.015
25	13	1.816	1.758	-0.058
25	14	1.808	1.763	-0.046
25	15	1.694	1.700	0.006
25	16	1.719	1.723	0.003
25	17	1.706	1.716	0.010
25	18	1.760	1.720	-0.039
25	19	1.712	1.669	-0.042
25	20	1.646	1.657	0.011
25	21	1.691	1.675	-0.015
25	22	1.666	1.683	0.017
25	23	1.751	1.732	-0.020
25	24	1.759	1.753	-0.006
25	25	1.677	1.630	-0.047
25	26	1.749	1.737	-0.012
25	27	1.799	1.774	-0.024
30	31	1.767	1.712	-0.055
30	32	1.689	1.659	-0.030
30	33	1.768	1.761	-0.007
30	34	1.769	1.735	-0.033
30	35	1.794	1.742	-0.052
35	36	1.729	1.750	0.022
35	37	1.726	1.679	-0.047
35	38	1.819	1.795	-0.024
35	39	1.747	1.740	-0.007
35	40	1.787	1.753	-0.034
	Max	1.819	1.795	0.040
	Average	1.736	1.719	-0.017
	Min	1.646	1.630	-0.065
	Std Dev	0.050	0.042	0.027



	6.2_IshutdownEnNeg				
Test Site					
Tester					
Test Number					
Max Limit	3	uA			
Min Limit	0	uA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	1.751	1.656	1.630	1.659	1.679
Average	1.766	1.714	1.707	1.722	1.744
Max	1.781	1.755	1.774	1.761	1.795
UL	3.000	3.000	3.000	3.000	3.000

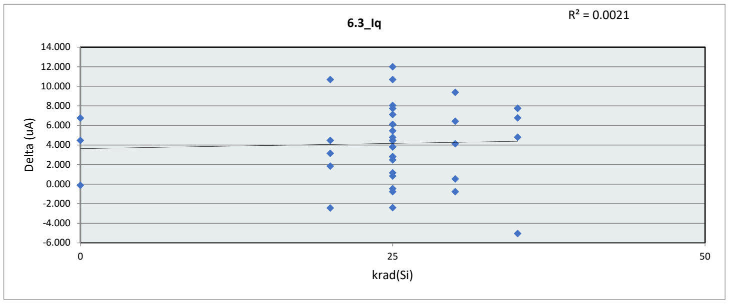


TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

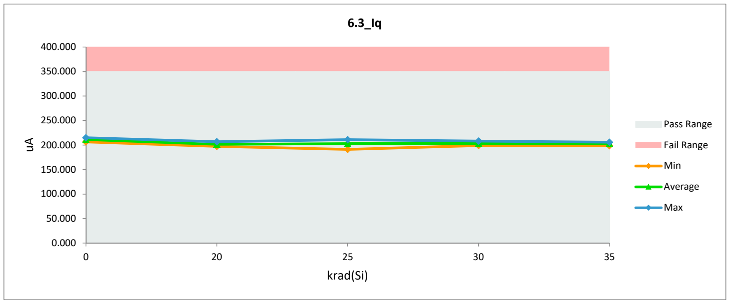
6.3_Iq

	Test Site			
	Tester			
	Test Number			
	Unit	uA	uA	
	Max Limit	340	350	
	Min Limit	0	0	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	215.198	215.081	-0.117
0	CU2	207.330	211.797	4.467
0	CU3	199.783	206.541	6.758
20	1	195.524	197.372	1.848
20	2	190.262	200.955	10.693
20	3	199.763	197.336	-2.427
20	4	203.717	206.869	3.152
20	5	199.776	204.245	4.469
25	6	199.120	209.815	10.695
25	7	197.468	200.282	2.814
25	8	201.743	206.522	4.779
25	9	200.733	207.844	7.111
25	10	190.252	197.992	7.740
25	11	204.707	204.252	-0.455
25	12	192.892	196.687	3.795
25	13	207.333	211.157	3.824
25	14	195.855	203.907	8.052
25	15	196.835	197.667	0.832
25	16	205.018	211.121	6.103
25	17	201.081	205.557	4.476
25	18	198.478	201.293	2.815
25	19	193.200	198.648	5.448
25	20	196.806	202.903	6.097
25	21	193.534	197.982	4.448
25	22	199.097	198.320	-0.777
25	23	201.091	203.566	2.475
25	24	194.862	206.863	12.001
25	25	186.636	191.087	4.451
25	26	207.969	205.570	-2.399
25	27	201.770	202.926	1.156
30	31	203.048	203.582	0.534
30	32	194.521	203.900	9.379
30	33	201.753	208.188	6.435
30	34	194.865	198.990	4.125
30	35	201.415	200.640	-0.775
35	36	197.147	203.924	6.777
35	37	203.697	198.652	-5.045
35	38	196.839	204.590	7.751
35	39	194.186	201.945	7.759
35	40	201.094	205.892	4.798
	Max	215.198	215.081	12.001
	Average	199.160	203.311	4.152
	Min	186.636	191.087	-5.045
	Std Dev	5.507	4.949	3.828



6.3_Iq

Test Site					
Tester					
Test Number					
Max Limit	350	uA			
Min Limit	0	uA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	206.541	197.336	191.087	198.990	198.652
Average	211.140	201.355	202.816	203.060	203.001
Max	215.081	206.869	211.157	208.188	205.892
UL	350.000	350.000	350.000	350.000	350.000

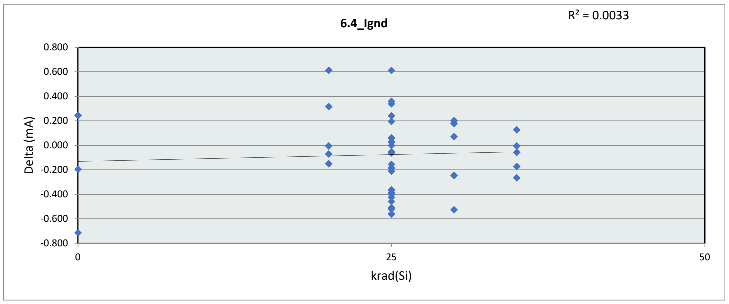


TID HDR Report
TPS7H1210-SEP

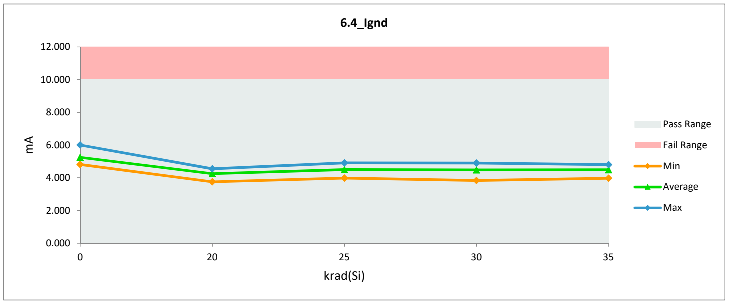
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	6.4_Ignd	
Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	9	10
Min Limit	0	0

krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	4.569	4.813	0.244
0	CU2	5.652	4.938	-0.714
0	CU3	6.200	6.005	-0.195
20	1	3.827	3.756	-0.071
20	2	3.860	4.472	0.612
20	3	4.234	4.229	-0.005
20	4	3.949	4.265	0.316
20	5	4.700	4.550	-0.150
25	6	4.572	4.912	0.340
25	7	4.526	4.587	0.061
25	8	4.523	4.337	-0.186
25	9	4.264	4.505	0.241
25	10	4.411	3.986	-0.425
25	11	4.549	4.337	-0.212
25	12	4.592	4.590	-0.002
25	13	4.664	4.610	-0.054
25	14	3.936	4.547	0.611
25	15	4.372	4.429	0.057
25	16	4.592	4.787	0.195
25	17	4.169	4.528	0.359
25	18	4.494	4.521	0.027
25	19	4.999	4.491	-0.508
25	20	4.927	4.367	-0.560
25	21	4.585	4.199	-0.386
25	22	4.654	4.498	-0.156
25	23	4.864	4.465	-0.399
25	24	4.730	4.212	-0.518
25	25	5.117	4.659	-0.458
25	26	4.894	4.833	-0.061
25	27	4.943	4.580	-0.363
30	31	4.087	3.841	-0.246
30	32	4.313	4.514	0.201
30	33	4.848	4.321	-0.527
30	34	4.769	4.839	0.070
30	35	4.727	4.905	0.178
35	36	4.513	4.455	-0.058
35	37	4.605	4.600	-0.005
35	38	4.677	4.803	0.126
35	39	4.244	3.979	-0.265
35	40	4.815	4.642	-0.173
	Max	6.200	6.005	0.612
	Average	4.599	4.523	-0.076
	Min	3.827	3.756	-0.714
	Std Dev	0.444	0.369	0.317



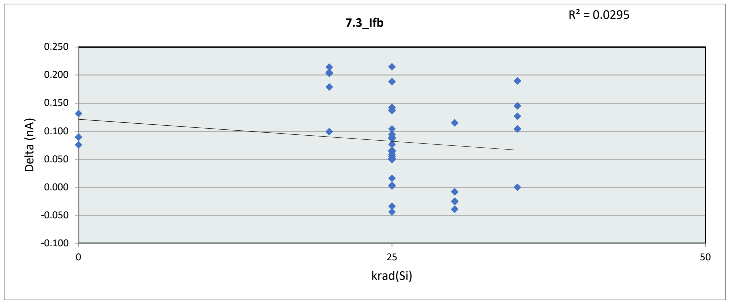
	6.4_Ignd				
Test Site					
Tester					
Test Number					
Max Limit	10	mA			
Min Limit	0	mA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	4.813	3.756	3.986	3.841	3.979
Average	5.252	4.254	4.499	4.484	4.496
Max	6.005	4.550	4.912	4.905	4.803
UL	10.000	10.000	10.000	10.000	10.000



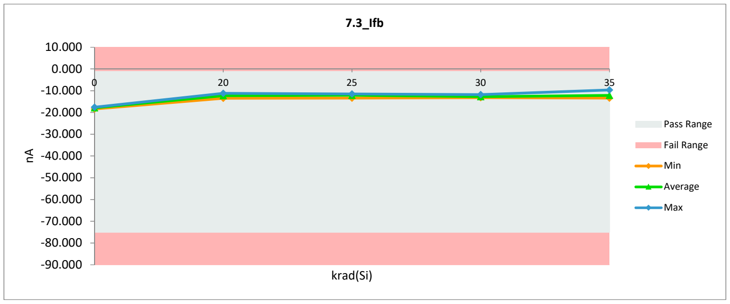
TID HDR Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		7.3_Ifb		
	Test Site			
	Tester			
	Test Number			
	Unit	nA	nA	
	Max Limit	0	-1	
	Min Limit	-40	-75	
krad(Si)	Serial #	Pre_HDR	Post_HDR	Delta
0	CU1	-18.458	-18.382	0.076
0	CU2	-17.721	-17.589	0.131
0	CU3	-17.725	-17.636	0.089
20	1	-12.396	-12.193	0.203
20	2	-11.883	-11.678	0.205
20	3	-11.439	-11.225	0.214
20	4	-13.640	-13.462	0.179
20	5	-13.171	-13.072	0.099
25	6	-13.344	-13.388	-0.044
25	7	-12.227	-12.133	0.094
25	8	-11.796	-11.608	0.188
25	9	-12.469	-12.392	0.076
25	10	-12.604	-12.539	0.065
25	11	-12.339	-12.273	0.066
25	12	-11.546	-11.530	0.016
25	13	-13.341	-13.237	0.104
25	14	-11.544	-11.485	0.058
25	15	-11.910	-11.860	0.051
25	16	-13.017	-12.953	0.064
25	17	-12.041	-11.898	0.142
25	18	-12.064	-12.015	0.049
25	19	-11.771	-11.684	0.087
25	20	-12.471	-12.334	0.137
25	21	-11.589	-11.623	-0.034
25	22	-11.918	-11.915	0.003
25	23	-11.570	-11.568	0.002
25	24	-11.572	-11.517	0.055
25	25	-11.690	-11.639	0.051
25	26	-13.004	-12.790	0.215
25	27	-12.432	-12.343	0.088
30	31	-13.155	-13.180	-0.026
30	32	-12.624	-12.663	-0.039
30	33	-11.906	-11.791	0.115
30	34	-12.854	-12.862	-0.008
30	35	-13.105	-13.130	-0.025
35	36	-12.378	-12.378	0.000
35	37	-12.306	-12.202	0.104
35	38	-13.234	-13.089	0.145
35	39	-9.807	-9.681	0.127
35	40	-13.571	-13.382	0.189
	Max	-9.807	-9.681	0.215
	Average	-12.741	-12.658	0.083
	Min	-18.458	-18.382	-0.044
	Std Dev	1.683	1.681	0.075



	7.3_Ifb				
Test Site					
Tester					
Test Number					
Max Limit	-1	nA			
Min Limit	-75	nA			
krad(Si)	0	20	25	30	35
LL	-75.000	-75.000	-75.000	-75.000	-75.000
Min	-18.382	-13.462	-13.388	-13.180	-13.382
Average	-17.869	-12.326	-12.124	-12.725	-12.146
Max	-17.589	-11.225	-11.485	-11.791	-9.681
UL	-1.000	-1.000	-1.000	-1.000	-1.000



B Appendix: LDR TID Report

This appendix contains the LDR TID report data.

LDR TID Report
TPS7H1210-SEP

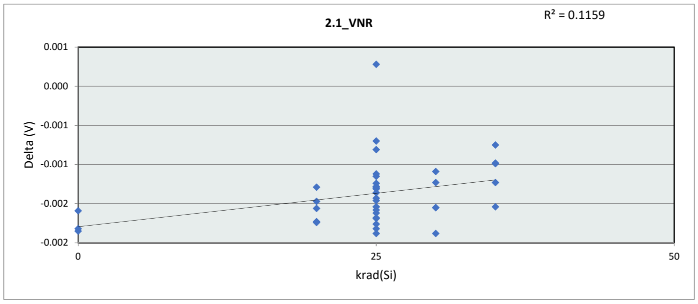
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

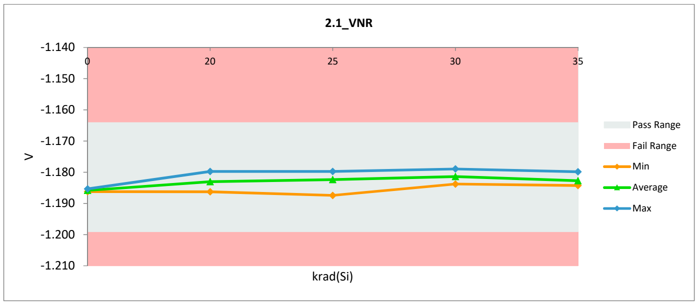
	2.1_VNR	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-1.16661	-1.164
Min Limit	-1.19729	-1.199

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.184	-1.186	-0.002
0	CU2	-1.184	-1.185	-0.002
0	CU3	-1.184	-1.186	-0.002
20	51	-1.179	-1.181	-0.001
20	52	-1.184	-1.186	-0.002
20	53	-1.185	-1.186	-0.002
20	54	-1.181	-1.183	-0.002
20	55	-1.178	-1.180	-0.001
25	56	-1.178	-1.180	-0.001
25	57	-1.181	-1.182	-0.001
25	58	-1.180	-1.182	-0.002
25	59	-1.182	-1.183	-0.001
25	60	-1.180	-1.182	-0.002
25	61	-1.179	-1.181	-0.002
25	62	-1.180	-1.181	-0.001
25	63	-1.179	-1.181	-0.002
25	64	-1.180	-1.182	-0.002
25	65	-1.178	-1.180	-0.002
25	66	-1.178	-1.180	-0.001
25	67	-1.182	-1.183	-0.001
25	68	-1.181	-1.183	-0.002
25	69	-1.180	-1.181	-0.001
25	70	-1.180	-1.182	-0.001
25	71	-1.184	-1.185	-0.001
25	72	-1.185	-1.186	-0.001
25	73	-1.186	-1.187	-0.001
25	74	-1.183	-1.185	-0.002
25	75	-1.184	-1.183	0.000
25	76	-1.182	-1.183	-0.001
25	77	-1.179	-1.181	-0.002
30	81	-1.179	-1.181	-0.002
30	82	-1.177	-1.179	-0.002
30	83	-1.180	-1.182	-0.001
30	84	-1.183	-1.184	-0.001
30	85	-1.180	-1.182	-0.002
35	86	-1.183	-1.184	-0.001
35	87	-1.183	-1.184	-0.002
35	88	-1.181	-1.182	-0.001
35	89	-1.179	-1.180	-0.001
35	90	-1.183	-1.184	-0.001
	Max	-1.177	-1.179	0.000
	Average	-1.181	-1.183	-0.001
	Min	-1.186	-1.187	-0.002
	Std Dev	0.002	0.002	0.000



	2.1_VNR	
Test Site		
Tester		
Test Number		
Max Limit	-1.164	V
Min Limit	-1.199	V

krad(Si)	0	20	25	30	35
LL	-1.199	-1.199	-1.199	-1.199	-1.199
Min	-1.186	-1.186	-1.187	-1.184	-1.184
Average	-1.186	-1.183	-1.182	-1.181	-1.183
Max	-1.185	-1.180	-1.180	-1.179	-1.180
UL	-1.164	-1.164	-1.164	-1.164	-1.164

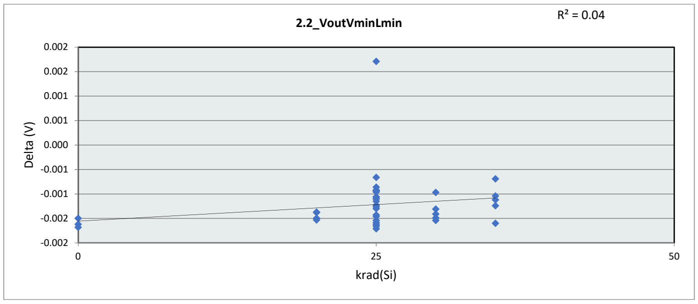


LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

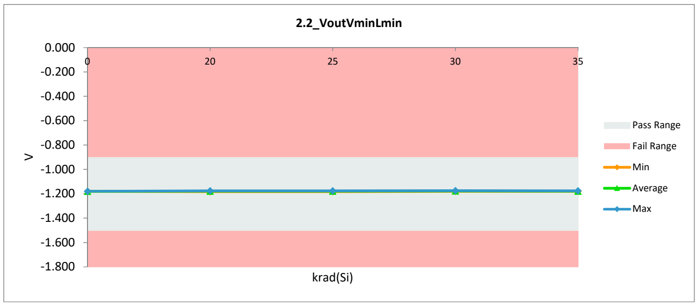
	2.2_VoutVminLmin	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.9069	-0.9
Min Limit	-1.4949	-1.5

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.178	-1.179	-0.002
0	CU2	-1.178	-1.179	-0.002
0	CU3	-1.178	-1.179	-0.002
20	51	-1.175	-1.177	-0.001
20	52	-1.179	-1.181	-0.001
20	53	-1.182	-1.183	-0.002
20	54	-1.177	-1.178	-0.002
20	55	-1.174	-1.175	-0.002
25	56	-1.175	-1.177	-0.002
25	57	-1.176	-1.178	-0.001
25	58	-1.176	-1.178	-0.002
25	59	-1.178	-1.178	-0.001
25	60	-1.176	-1.178	-0.001
25	61	-1.176	-1.177	-0.002
25	62	-1.175	-1.176	-0.001
25	63	-1.174	-1.175	-0.002
25	64	-1.176	-1.178	-0.001
25	65	-1.175	-1.177	-0.001
25	66	-1.175	-1.176	-0.001
25	67	-1.179	-1.179	-0.001
25	68	-1.176	-1.177	-0.001
25	69	-1.175	-1.176	-0.001
25	70	-1.176	-1.177	-0.001
25	71	-1.180	-1.181	-0.001
25	72	-1.180	-1.181	-0.001
25	73	-1.181	-1.182	-0.001
25	74	-1.178	-1.180	-0.002
25	75	-1.179	-1.177	0.002
25	76	-1.179	-1.180	-0.001
25	77	-1.175	-1.177	-0.002
30	81	-1.174	-1.176	-0.001
30	82	-1.173	-1.175	-0.002
30	83	-1.176	-1.177	-0.001
30	84	-1.179	-1.180	-0.001
30	85	-1.175	-1.176	-0.001
35	86	-1.178	-1.179	-0.001
35	87	-1.178	-1.180	-0.002
35	88	-1.177	-1.178	-0.001
35	89	-1.174	-1.175	-0.001
35	90	-1.179	-1.180	-0.001
	Max	-1.173	-1.175	0.002
	Average	-1.177	-1.178	-0.001
	Min	-1.182	-1.183	-0.002
	Std Dev	0.002	0.002	0.001



	2.2_VoutVminLmin	
Test Site		
Tester		
Test Number		
Max Limit	-0.9	V
Min Limit	-1.5	V

krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.183	-1.182	-1.180	-1.180
Average	-1.179	-1.179	-1.178	-1.177	-1.178
Max	-1.179	-1.175	-1.175	-1.175	-1.175
UL	-0.900	-0.900	-0.900	-0.900	-0.900

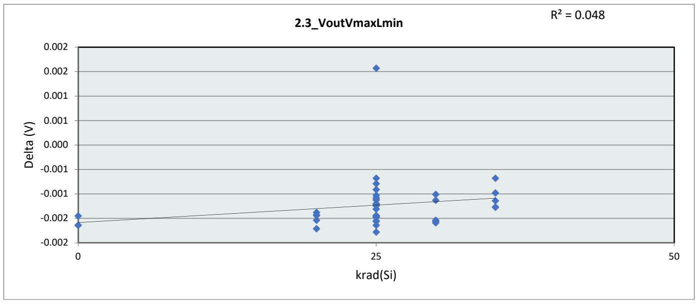


LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

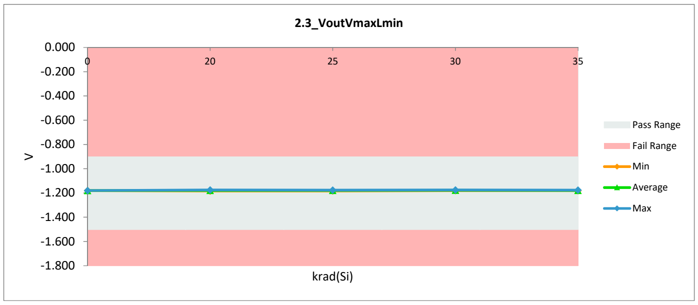
	2.3_VoutVmaxLmin	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.9077	-0.9
Min Limit	-1.4945	-1.5

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.178	-1.180	-0.002
0	CU2	-1.179	-1.180	-0.001
0	CU3	-1.179	-1.180	-0.002
20	51	-1.176	-1.177	-0.001
20	52	-1.180	-1.181	-0.001
20	53	-1.182	-1.184	-0.002
20	54	-1.178	-1.179	-0.002
20	55	-1.174	-1.176	-0.001
25	56	-1.176	-1.178	-0.001
25	57	-1.177	-1.178	-0.001
25	58	-1.177	-1.179	-0.002
25	59	-1.178	-1.179	-0.001
25	60	-1.177	-1.178	-0.001
25	61	-1.176	-1.178	-0.002
25	62	-1.176	-1.177	-0.001
25	63	-1.175	-1.176	-0.001
25	64	-1.177	-1.178	-0.001
25	65	-1.176	-1.177	-0.002
25	66	-1.176	-1.176	-0.001
25	67	-1.179	-1.180	-0.001
25	68	-1.176	-1.178	-0.002
25	69	-1.176	-1.177	-0.001
25	70	-1.177	-1.178	-0.001
25	71	-1.181	-1.182	-0.001
25	72	-1.181	-1.182	-0.001
25	73	-1.182	-1.183	-0.001
25	74	-1.179	-1.180	-0.001
25	75	-1.179	-1.178	0.002
25	76	-1.179	-1.181	-0.001
25	77	-1.176	-1.178	-0.001
30	81	-1.175	-1.177	-0.002
30	82	-1.174	-1.175	-0.002
30	83	-1.176	-1.178	-0.001
30	84	-1.179	-1.180	-0.001
30	85	-1.176	-1.177	-0.002
35	86	-1.179	-1.180	-0.001
35	87	-1.179	-1.180	-0.001
35	88	-1.177	-1.179	-0.001
35	89	-1.175	-1.176	-0.001
35	90	-1.179	-1.180	-0.001
	Max	-1.174	-1.175	0.002
	Average	-1.178	-1.179	-0.001
	Min	-1.182	-1.184	-0.002
	Std Dev	0.002	0.002	0.001



	2.3_VoutVmaxLmin	
Test Site		
Tester		
Test Number		
Max Limit	-0.9	V
Min Limit	-1.5	V

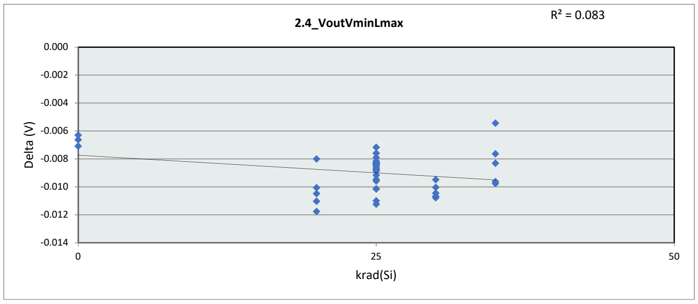
krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.180	-1.184	-1.183	-1.180	-1.180
Average	-1.180	-1.179	-1.179	-1.177	-1.179
Max	-1.180	-1.176	-1.176	-1.175	-1.176
UL	-0.900	-0.900	-0.900	-0.900	-0.900



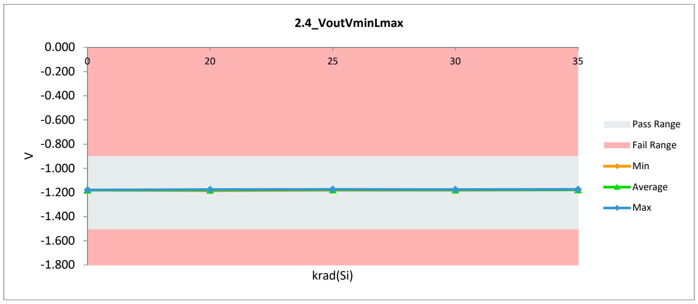
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.4_VoutVminLmax		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	-0.9055	-0.9	
	Min Limit	-1.4958	-1.5	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.173	-1.179	-0.006
0	CU2	-1.172	-1.179	-0.007
0	CU3	-1.172	-1.179	-0.007
20	51	-1.167	-1.177	-0.010
20	52	-1.173	-1.181	-0.008
20	53	-1.173	-1.185	-0.012
20	54	-1.170	-1.180	-0.010
20	55	-1.165	-1.176	-0.011
25	56	-1.167	-1.176	-0.009
25	57	-1.167	-1.177	-0.010
25	58	-1.168	-1.177	-0.009
25	59	-1.169	-1.178	-0.008
25	60	-1.168	-1.177	-0.008
25	61	-1.168	-1.176	-0.008
25	62	-1.167	-1.176	-0.009
25	63	-1.165	-1.175	-0.010
25	64	-1.167	-1.177	-0.010
25	65	-1.165	-1.176	-0.011
25	66	-1.166	-1.175	-0.008
25	67	-1.171	-1.178	-0.008
25	68	-1.165	-1.176	-0.011
25	69	-1.168	-1.175	-0.007
25	70	-1.167	-1.176	-0.009
25	71	-1.172	-1.180	-0.008
25	72	-1.170	-1.180	-0.009
25	73	-1.172	-1.182	-0.009
25	74	-1.171	-1.179	-0.008
25	75	-1.169	-1.177	-0.008
25	76	-1.170	-1.179	-0.009
25	77	-1.167	-1.176	-0.008
30	81	-1.167	-1.177	-0.011
30	82	-1.165	-1.176	-0.011
30	83	-1.168	-1.178	-0.009
30	84	-1.171	-1.181	-0.010
30	85	-1.166	-1.177	-0.010
35	86	-1.171	-1.178	-0.008
35	87	-1.169	-1.179	-0.010
35	88	-1.167	-1.177	-0.010
35	89	-1.169	-1.174	-0.005
35	90	-1.171	-1.179	-0.008
	Max	-1.165	-1.174	-0.005
	Average	-1.169	-1.178	-0.009
	Min	-1.173	-1.185	-0.012
	Std Dev	0.002	0.002	0.001



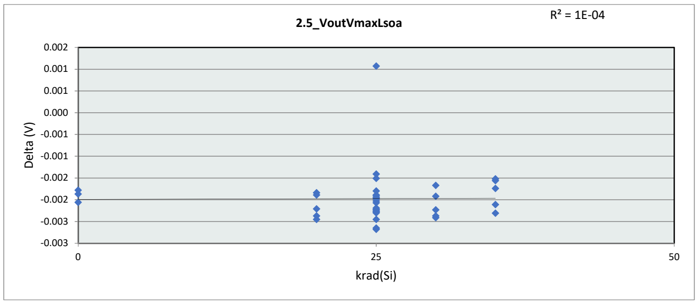
	2.4_VoutVminLmax				
Test Site					
Tester					
Test Number					
Max Limit	-0.9	V			
Min Limit	-1.5	V			
krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.185	-1.182	-1.181	-1.179
Average	-1.179	-1.180	-1.177	-1.178	-1.177
Max	-1.179	-1.176	-1.175	-1.176	-1.174
UL	-0.900	-0.900	-0.900	-0.900	-0.900



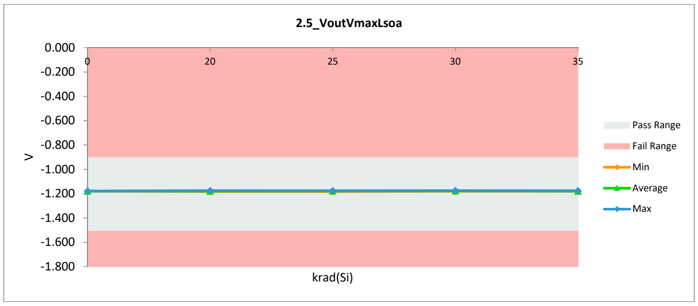
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.5_VoutVmaxLsoa		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	-0.9067	-0.9	
	Min Limit	-1.4952	-1.5	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.177	-1.179	-0.002
0	CU2	-1.177	-1.179	-0.002
0	CU3	-1.177	-1.179	-0.002
20	51	-1.175	-1.176	-0.002
20	52	-1.179	-1.181	-0.002
20	53	-1.181	-1.183	-0.002
20	54	-1.176	-1.178	-0.002
20	55	-1.173	-1.175	-0.002
25	56	-1.175	-1.177	-0.002
25	57	-1.176	-1.178	-0.002
25	58	-1.176	-1.178	-0.002
25	59	-1.177	-1.178	-0.002
25	60	-1.176	-1.178	-0.002
25	61	-1.175	-1.177	-0.002
25	62	-1.175	-1.176	-0.002
25	63	-1.173	-1.176	-0.002
25	64	-1.176	-1.178	-0.002
25	65	-1.174	-1.177	-0.003
25	66	-1.174	-1.176	-0.002
25	67	-1.178	-1.179	-0.001
25	68	-1.175	-1.178	-0.003
25	69	-1.175	-1.177	-0.002
25	70	-1.175	-1.177	-0.002
25	71	-1.179	-1.181	-0.002
25	72	-1.179	-1.181	-0.002
25	73	-1.180	-1.182	-0.002
25	74	-1.178	-1.180	-0.002
25	75	-1.178	-1.177	0.001
25	76	-1.178	-1.180	-0.002
25	77	-1.175	-1.177	-0.002
30	81	-1.174	-1.176	-0.002
30	82	-1.172	-1.175	-0.002
30	83	-1.175	-1.177	-0.002
30	84	-1.178	-1.180	-0.002
30	85	-1.174	-1.177	-0.002
35	86	-1.178	-1.179	-0.002
35	87	-1.177	-1.180	-0.002
35	88	-1.176	-1.178	-0.002
35	89	-1.174	-1.176	-0.002
35	90	-1.178	-1.180	-0.002
	Max	-1.172	-1.175	0.001
	Average	-1.176	-1.178	-0.002
	Min	-1.181	-1.183	-0.003
	Std Dev	0.002	0.002	0.001



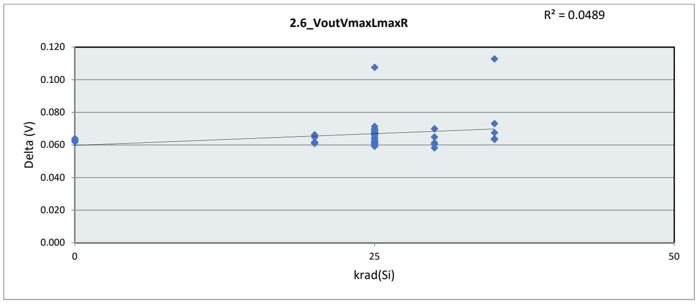
	2.5_VoutVmaxLsoa				
Test Site					
Tester					
Test Number					
Max Limit	-0.9	V			
Min Limit	-1.5	V			
krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.183	-1.182	-1.180	-1.180
Average	-1.179	-1.179	-1.178	-1.177	-1.178
Max	-1.179	-1.175	-1.176	-1.175	-1.176
UL	-0.900	-0.900	-0.900	-0.900	-0.900



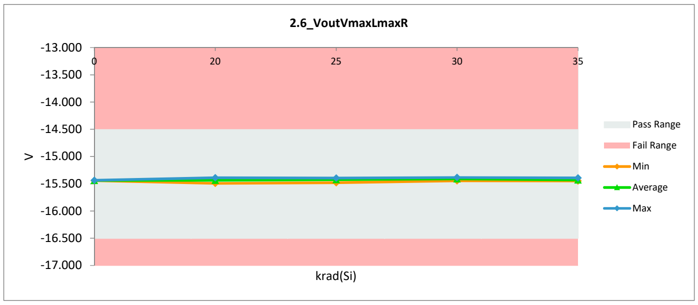
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.6_VoutVmaxLmaxR		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	-14.5	-14.5	
	Min Limit	-16.5	-16.5	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-15.500	-15.437	0.063
0	CU2	-15.502	-15.438	0.064
0	CU3	-15.505	-15.443	0.062
20	51	-15.470	-15.404	0.066
20	52	-15.523	-15.458	0.065
20	53	-15.555	-15.493	0.062
20	54	-15.495	-15.433	0.061
20	55	-15.451	-15.390	0.061
25	56	-15.470	-15.409	0.061
25	57	-15.488	-15.424	0.065
25	58	-15.482	-15.422	0.060
25	59	-15.502	-15.432	0.070
25	60	-15.486	-15.422	0.064
25	61	-15.474	-15.415	0.059
25	62	-15.472	-15.406	0.066
25	63	-15.455	-15.394	0.060
25	64	-15.488	-15.425	0.062
25	65	-15.471	-15.410	0.061
25	66	-15.462	-15.395	0.067
25	67	-15.513	-15.442	0.071
25	68	-15.478	-15.416	0.061
25	69	-15.476	-15.406	0.069
25	70	-15.479	-15.412	0.067
25	71	-15.533	-15.466	0.067
25	72	-15.527	-15.461	0.066
25	73	-15.548	-15.481	0.068
25	74	-15.508	-15.445	0.063
25	75	-15.517	-15.409	0.108
25	76	-15.517	-15.448	0.068
25	77	-15.474	-15.406	0.068
30	81	-15.463	-15.401	0.061
30	82	-15.443	-15.385	0.058
30	83	-15.478	-15.413	0.065
30	84	-15.516	-15.446	0.070
30	85	-15.467	-15.406	0.061
35	86	-15.515	-15.442	0.073
35	87	-15.510	-15.447	0.063
35	88	-15.488	-15.425	0.064
35	89	-15.505	-15.392	0.113
35	90	-15.515	-15.448	0.068
	Max	-15.443	-15.385	0.113
	Average	-15.493	-15.426	0.067
	Min	-15.555	-15.493	0.058
	Std Dev	0.026	0.025	0.011



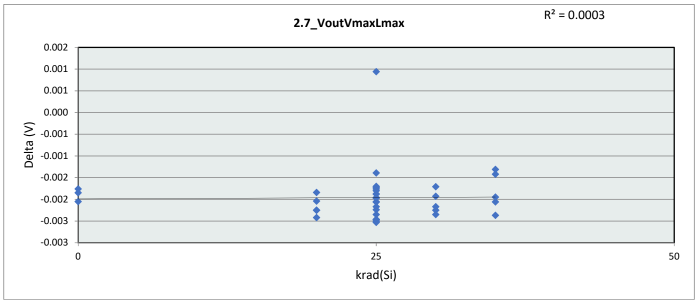
	2.6_VoutVmaxLmaxR				
Test Site					
Tester					
Test Number					
Max Limit	-14.5	V			
Min Limit	-16.5	V			
krad(Si)	0	20	25	30	35
LL	-16.500	-16.500	-16.500	-16.500	-16.500
Min	-15.443	-15.493	-15.481	-15.446	-15.448
Average	-15.439	-15.436	-15.425	-15.410	-15.431
Max	-15.437	-15.390	-15.394	-15.385	-15.392
UL	-14.500	-14.500	-14.500	-14.500	-14.500



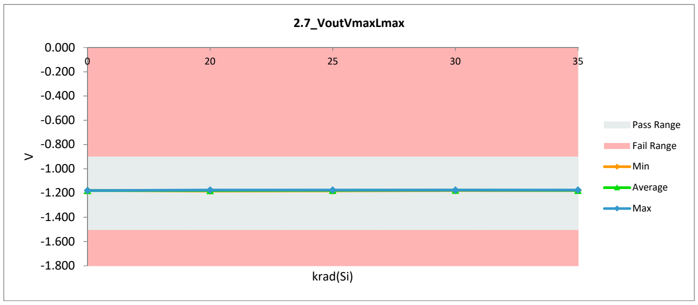
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.7_VoutVmaxLmax		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	-0.9067	-0.9	
	Min Limit	-1.4952	-1.5	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.177	-1.179	-0.002
0	CU2	-1.177	-1.179	-0.002
0	CU3	-1.177	-1.179	-0.002
20	51	-1.175	-1.177	-0.002
20	52	-1.179	-1.181	-0.002
20	53	-1.181	-1.183	-0.002
20	54	-1.176	-1.179	-0.002
20	55	-1.173	-1.175	-0.002
25	56	-1.175	-1.177	-0.002
25	57	-1.176	-1.178	-0.002
25	58	-1.175	-1.178	-0.002
25	59	-1.177	-1.179	-0.002
25	60	-1.176	-1.178	-0.002
25	61	-1.175	-1.177	-0.002
25	62	-1.175	-1.177	-0.002
25	63	-1.173	-1.176	-0.003
25	64	-1.176	-1.178	-0.002
25	65	-1.174	-1.177	-0.003
25	66	-1.174	-1.176	-0.002
25	67	-1.178	-1.179	-0.001
25	68	-1.175	-1.177	-0.002
25	69	-1.175	-1.176	-0.002
25	70	-1.175	-1.177	-0.002
25	71	-1.179	-1.181	-0.002
25	72	-1.179	-1.181	-0.002
25	73	-1.180	-1.182	-0.002
25	74	-1.177	-1.180	-0.002
25	75	-1.178	-1.177	0.001
25	76	-1.178	-1.180	-0.002
25	77	-1.175	-1.177	-0.002
30	81	-1.174	-1.176	-0.002
30	82	-1.173	-1.175	-0.002
30	83	-1.175	-1.177	-0.002
30	84	-1.178	-1.180	-0.002
30	85	-1.174	-1.176	-0.002
35	86	-1.178	-1.179	-0.001
35	87	-1.177	-1.180	-0.002
35	88	-1.176	-1.178	-0.002
35	89	-1.174	-1.176	-0.001
35	90	-1.178	-1.180	-0.002
	Max	-1.173	-1.175	0.001
	Average	-1.176	-1.178	-0.002
	Min	-1.181	-1.183	-0.003
	Std Dev	0.002	0.002	0.001



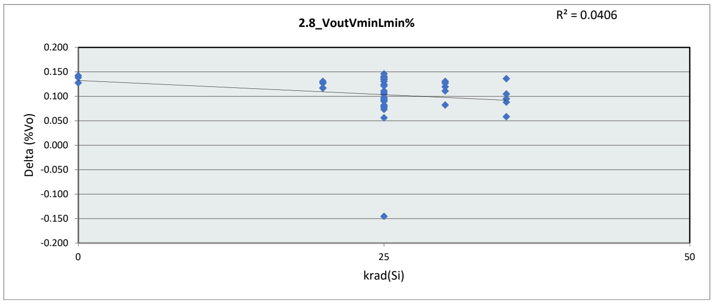
	2.7_VoutVmaxLmax				
Test Site					
Tester					
Test Number					
Max Limit	-0.9	V			
Min Limit	-1.5	V			
krad(Si)	0	20	25	30	35
LL	-1.500	-1.500	-1.500	-1.500	-1.500
Min	-1.179	-1.183	-1.182	-1.180	-1.180
Average	-1.179	-1.179	-1.178	-1.177	-1.178
Max	-1.179	-1.175	-1.176	-1.175	-1.176
UL	-0.900	-0.900	-0.900	-0.900	-0.900



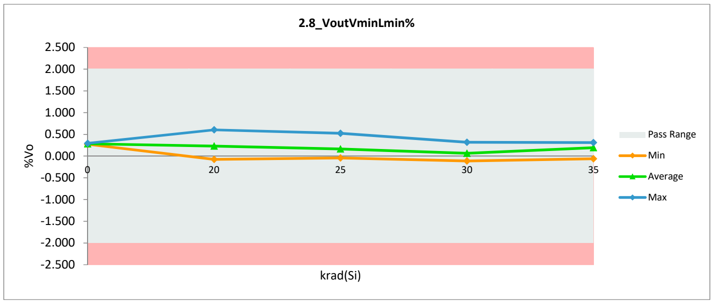
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.8_VoutVminLmin%		
	Test Site			
	Tester			
	Test Number			
	Unit	%Vo	%Vo	
	Max Limit	1.95	2	
	Min Limit	-1.95	-2	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	0.144	0.271	0.128
0	CU2	0.145	0.283	0.138
0	CU3	0.151	0.293	0.142
20	51	-0.065	0.052	0.117
20	52	0.269	0.386	0.117
20	53	0.473	0.603	0.130
20	54	0.062	0.189	0.127
20	55	-0.204	-0.076	0.128
25	56	-0.063	0.068	0.131
25	57	0.024	0.135	0.111
25	58	0.014	0.159	0.146
25	59	0.135	0.208	0.073
25	60	0.025	0.146	0.121
25	61	-0.038	0.103	0.141
25	62	-0.062	0.020	0.082
25	63	-0.180	-0.045	0.135
25	64	0.037	0.142	0.104
25	65	-0.070	0.054	0.124
25	66	-0.105	-0.025	0.080
25	67	0.225	0.282	0.056
25	68	-0.022	0.086	0.107
25	69	-0.070	0.024	0.094
25	70	-0.010	0.080	0.090
25	71	0.334	0.411	0.078
25	72	0.323	0.416	0.093
25	73	0.428	0.525	0.097
25	74	0.175	0.314	0.138
25	75	0.225	0.080	-0.145
25	76	0.231	0.321	0.090
25	77	-0.052	0.083	0.134
30	81	-0.129	-0.002	0.127
30	82	-0.244	-0.113	0.131
30	83	-0.042	0.078	0.119
30	84	0.234	0.316	0.082
30	85	-0.075	0.036	0.111
35	86	0.204	0.263	0.058
35	87	0.171	0.307	0.136
35	88	0.049	0.154	0.105
35	89	-0.151	-0.063	0.088
35	90	0.216	0.311	0.095
	Max	0.473	0.603	0.146
	Average	0.068	0.172	0.104
	Min	-0.244	-0.113	-0.145
	Std Dev	0.174	0.168	0.047



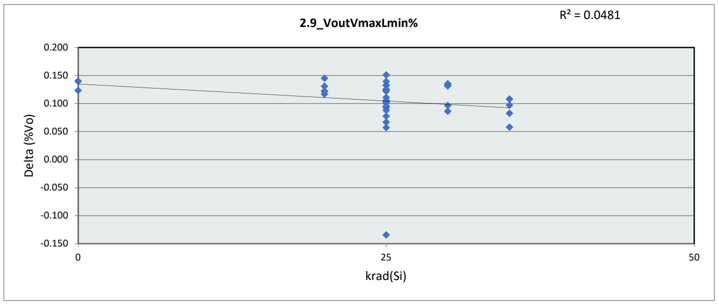
	2.8_VoutVminLmin%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo			
Min Limit	-2	%Vo			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.271	-0.076	-0.045	-0.113	-0.063
Average	0.283	0.231	0.163	0.063	0.194
Max	0.293	0.603	0.525	0.316	0.311
UL	2.000	2.000	2.000	2.000	2.000



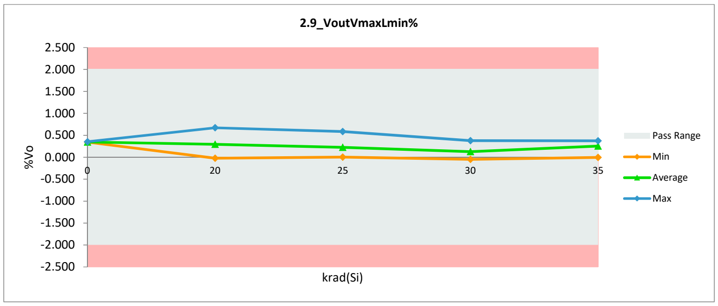
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.9_VoutVmaxLmin%		
	Test Site			
	Tester			
	Test Number			
	Unit	%Vo	%Vo	
	Max Limit	1.95	2	
	Min Limit	-1.98	-2	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	0.204	0.344	0.140
0	CU2	0.220	0.344	0.123
0	CU3	0.214	0.354	0.140
20	51	0.002	0.119	0.117
20	52	0.326	0.448	0.122
20	53	0.526	0.672	0.145
20	54	0.130	0.261	0.131
20	55	-0.144	-0.022	0.122
25	56	0.005	0.127	0.122
25	57	0.084	0.189	0.105
25	58	0.068	0.219	0.151
25	59	0.189	0.267	0.077
25	60	0.096	0.207	0.111
25	61	0.034	0.167	0.133
25	62	-0.002	0.093	0.095
25	63	-0.123	0.002	0.124
25	64	0.086	0.209	0.123
25	65	-0.016	0.116	0.132
25	66	-0.041	0.026	0.067
25	67	0.294	0.352	0.057
25	68	0.032	0.171	0.139
25	69	-0.004	0.089	0.093
25	70	0.058	0.146	0.088
25	71	0.390	0.493	0.103
25	72	0.388	0.492	0.103
25	73	0.492	0.587	0.095
25	74	0.240	0.364	0.124
25	75	0.284	0.149	-0.134
25	76	0.282	0.383	0.102
25	77	0.021	0.146	0.125
30	81	-0.068	0.065	0.133
30	82	-0.182	-0.047	0.135
30	83	0.035	0.131	0.097
30	84	0.293	0.380	0.086
30	85	-0.022	0.109	0.131
35	86	0.271	0.329	0.058
35	87	0.250	0.358	0.108
35	88	0.107	0.215	0.108
35	89	-0.088	-0.005	0.083
35	90	0.276	0.373	0.097
	Max	0.526	0.672	0.151
	Average	0.130	0.236	0.105
	Min	-0.182	-0.047	-0.134
	Std Dev	0.173	0.170	0.045



	2.9_VoutVmaxLmin%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo			
Min Limit	-2	%Vo			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.344	-0.022	0.002	-0.047	-0.005
Average	0.347	0.295	0.227	0.128	0.254
Max	0.354	0.672	0.587	0.380	0.373
UL	2.000	2.000	2.000	2.000	2.000

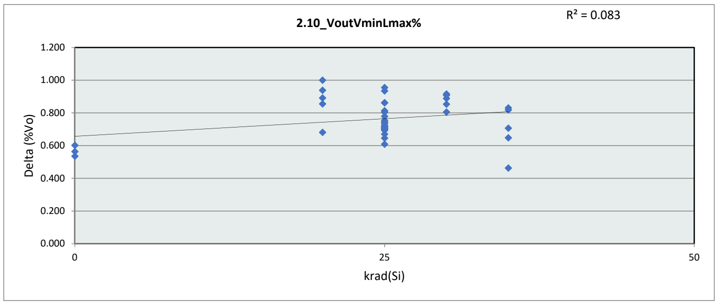


LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

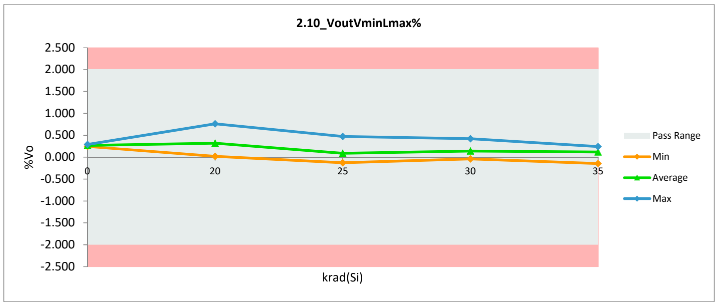
	2.10_VoutVminLmax%	
Test Site		
Tester		
Test Number		
Unit	%Vo	%Vo
Max Limit	1.98	2
Min Limit	-1.98	-2

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-0.260	0.275	0.535
0	CU2	-0.319	0.245	0.564
0	CU3	-0.313	0.289	0.602
20	51	-0.807	0.048	0.855
20	52	-0.268	0.413	0.681
20	53	-0.238	0.762	1.000
20	54	-0.541	0.350	0.891
20	55	-0.917	0.021	0.938
25	56	-0.752	-0.028	0.724
25	57	-0.798	0.064	0.862
25	58	-0.675	0.069	0.744
25	59	-0.583	0.128	0.710
25	60	-0.652	0.065	0.717
25	61	-0.655	0.016	0.671
25	62	-0.782	-0.038	0.744
25	63	-0.970	-0.108	0.862
25	64	-0.734	0.079	0.813
25	65	-0.957	-0.022	0.935
25	66	-0.833	-0.126	0.707
25	67	-0.452	0.193	0.645
25	68	-0.912	0.043	0.955
25	69	-0.652	-0.043	0.609
25	70	-0.746	-0.010	0.736
25	71	-0.355	0.348	0.703
25	72	-0.474	0.331	0.805
25	73	-0.307	0.472	0.779
25	74	-0.466	0.228	0.694
25	75	-0.592	0.109	0.701
25	76	-0.507	0.246	0.753
25	77	-0.757	-0.042	0.715
30	81	-0.789	0.118	0.908
30	82	-0.955	-0.039	0.915
30	83	-0.668	0.137	0.806
30	84	-0.431	0.422	0.853
30	85	-0.818	0.070	0.888
35	86	-0.443	0.206	0.648
35	87	-0.601	0.218	0.818
35	88	-0.759	0.071	0.830
35	89	-0.609	-0.146	0.463
35	90	-0.464	0.243	0.706
	Max	-0.238	0.762	1.000
	Average	-0.620	0.142	0.762
	Min	-0.970	-0.146	0.463
	Std Dev	0.212	0.187	0.122



	2.10_VoutVminLmax%	
Test Site		
Tester		
Test Number		
Max Limit	2	%Vo
Min Limit	-2	%Vo

krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.245	0.021	-0.126	-0.039	-0.146
Average	0.269	0.319	0.090	0.142	0.118
Max	0.289	0.762	0.472	0.422	0.243
UL	2.000	2.000	2.000	2.000	2.000

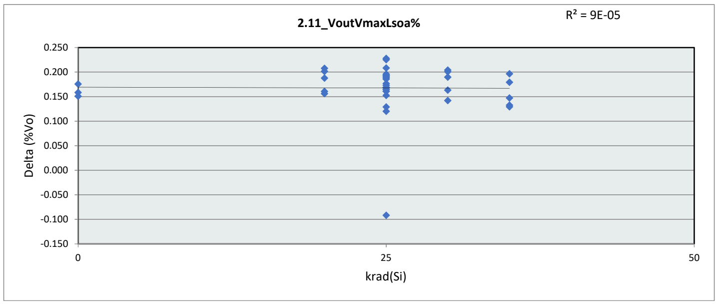


LDR TID Report
TPS7H1210-SEP

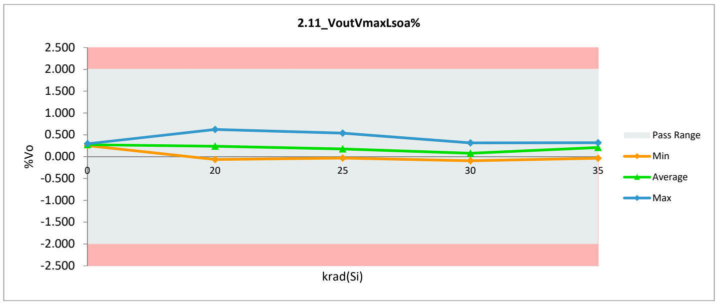
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	2.11_VoutVmaxLsoa%	
Test Site		
Tester		
Test Number		
Unit	%Vo	%Vo
Max Limit	1.98	2
Min Limit	-1.98	-2

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	0.103	0.254	0.151
0	CU2	0.113	0.272	0.159
0	CU3	0.121	0.296	0.176
20	51	-0.122	0.039	0.161
20	52	0.230	0.387	0.156
20	53	0.415	0.623	0.208
20	54	0.023	0.211	0.188
20	55	-0.266	-0.064	0.201
25	56	-0.108	0.068	0.177
25	57	-0.037	0.156	0.193
25	58	-0.040	0.146	0.186
25	59	0.076	0.205	0.129
25	60	-0.029	0.164	0.193
25	61	-0.087	0.103	0.191
25	62	-0.122	0.039	0.161
25	63	-0.241	-0.033	0.208
25	64	-0.028	0.168	0.196
25	65	-0.148	0.080	0.228
25	66	-0.170	-0.017	0.153
25	67	0.177	0.298	0.120
25	68	-0.094	0.131	0.225
25	69	-0.112	0.057	0.169
25	70	-0.067	0.098	0.165
25	71	0.280	0.448	0.169
25	72	0.257	0.426	0.168
25	73	0.377	0.538	0.161
25	74	0.129	0.317	0.189
25	75	0.168	0.076	-0.092
25	76	0.167	0.340	0.173
25	77	-0.114	0.051	0.165
30	81	-0.172	0.018	0.190
30	82	-0.298	-0.094	0.204
30	83	-0.073	0.090	0.163
30	84	0.174	0.316	0.142
30	85	-0.144	0.057	0.201
35	86	0.152	0.285	0.133
35	87	0.123	0.320	0.197
35	88	-0.016	0.163	0.179
35	89	-0.166	-0.036	0.129
35	90	0.162	0.309	0.147
	Max	0.415	0.623	0.228
	Average	0.015	0.183	0.168
	Min	-0.298	-0.094	-0.092
	Std Dev	0.175	0.167	0.049



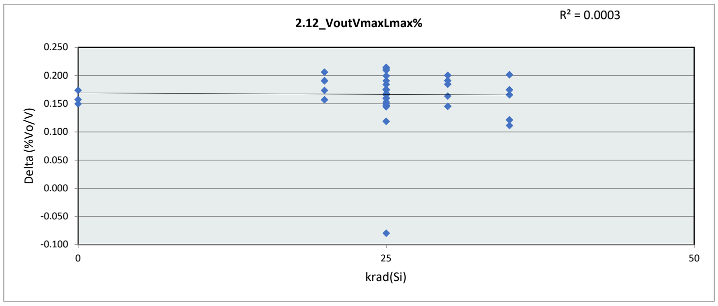
	2.11_VoutVmaxLsoa%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo			
Min Limit	-2	%Vo			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.254	-0.064	-0.033	-0.094	-0.036
Average	0.274	0.239	0.175	0.077	0.208
Max	0.296	0.623	0.538	0.316	0.320
UL	2.000	2.000	2.000	2.000	2.000



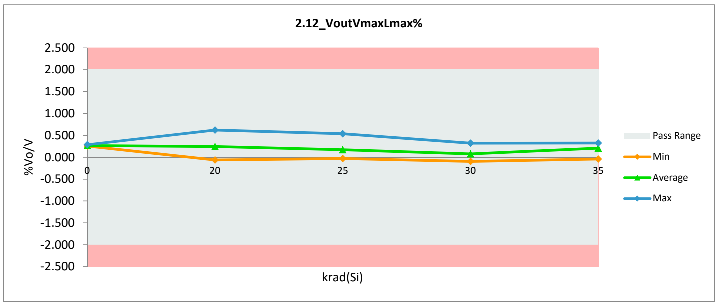
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.12_VoutVmaxLmax%		
	Test Site			
	Tester			
	Test Number			
	Unit	%Vo/V	%Vo/V	
	Max Limit	2	2	
	Min Limit	-2	-2	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	0.098	0.255	0.157
0	CU2	0.111	0.261	0.150
0	CU3	0.113	0.287	0.174
20	51	-0.125	0.048	0.174
20	52	0.239	0.396	0.157
20	53	0.415	0.621	0.206
20	54	0.029	0.220	0.191
20	55	-0.254	-0.063	0.191
25	56	-0.122	0.087	0.210
25	57	-0.038	0.137	0.175
25	58	-0.045	0.155	0.199
25	59	0.068	0.218	0.150
25	60	-0.019	0.141	0.159
25	61	-0.088	0.121	0.210
25	62	-0.123	0.045	0.168
25	63	-0.244	-0.031	0.213
25	64	-0.028	0.163	0.191
25	65	-0.148	0.067	0.215
25	66	-0.173	-0.026	0.147
25	67	0.171	0.289	0.119
25	68	-0.094	0.116	0.210
25	69	-0.102	0.042	0.145
25	70	-0.076	0.099	0.175
25	71	0.273	0.440	0.167
25	72	0.243	0.409	0.166
25	73	0.377	0.537	0.160
25	74	0.127	0.301	0.175
25	75	0.157	0.078	-0.080
25	76	0.170	0.323	0.153
25	77	-0.103	0.081	0.184
30	81	-0.166	0.018	0.185
30	82	-0.295	-0.095	0.200
30	83	-0.071	0.092	0.164
30	84	0.177	0.323	0.145
30	85	-0.150	0.041	0.191
35	86	0.168	0.279	0.111
35	87	0.120	0.322	0.202
35	88	-0.017	0.158	0.175
35	89	-0.163	-0.041	0.121
35	90	0.160	0.326	0.166
	Max	0.415	0.621	0.215
	Average	0.014	0.181	0.167
	Min	-0.295	-0.095	-0.080
	Std Dev	0.174	0.166	0.048



	2.12_VoutVmaxLmax%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo/V			
Min Limit	-2	%Vo/V			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	0.255	-0.063	-0.031	-0.095	-0.041
Average	0.268	0.244	0.172	0.076	0.209
Max	0.287	0.621	0.537	0.323	0.326
UL	2.000	2.000	2.000	2.000	2.000

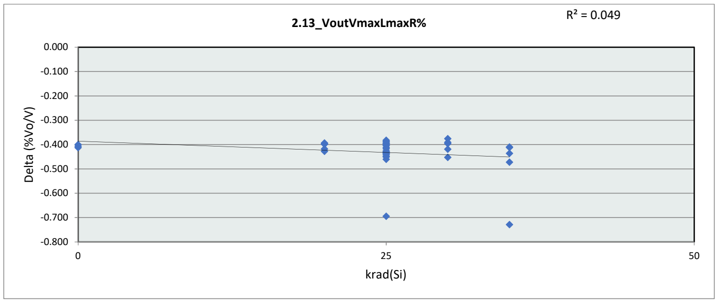


LDR TID Report
TPS7H1210-SEP

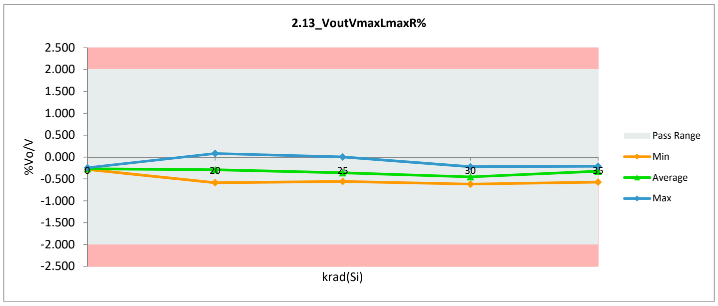
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	2.13_VoutVmaxLmaxR%	
Test Site		
Tester		
Test Number		
Unit	%Vo/V	%Vo/V
Max Limit	1.95	2
Min Limit	-1.98	-2

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	0.124	-0.283	-0.407
0	CU2	0.138	-0.275	-0.413
0	CU3	0.157	-0.244	-0.400
20	51	-0.065	-0.493	-0.428
20	52	0.275	-0.143	-0.418
20	53	0.481	0.082	-0.399
20	54	0.092	-0.304	-0.397
20	55	-0.192	-0.586	-0.394
25	56	-0.067	-0.462	-0.395
25	57	0.051	-0.367	-0.417
25	58	0.008	-0.378	-0.387
25	59	0.137	-0.314	-0.451
25	60	0.038	-0.374	-0.412
25	61	-0.040	-0.422	-0.382
25	62	-0.056	-0.483	-0.427
25	63	-0.166	-0.556	-0.390
25	64	0.047	-0.355	-0.402
25	65	-0.061	-0.458	-0.397
25	66	-0.121	-0.552	-0.432
25	67	0.213	-0.248	-0.461
25	68	-0.016	-0.413	-0.397
25	69	-0.031	-0.479	-0.448
25	70	-0.012	-0.444	-0.432
25	71	0.339	-0.095	-0.434
25	72	0.303	-0.124	-0.426
25	73	0.438	0.002	-0.437
25	74	0.178	-0.226	-0.404
25	75	0.234	-0.461	-0.695
25	76	0.234	-0.206	-0.441
25	77	-0.041	-0.478	-0.437
30	81	-0.114	-0.510	-0.396
30	82	-0.242	-0.618	-0.376
30	83	-0.015	-0.434	-0.419
30	84	0.233	-0.220	-0.452
30	85	-0.088	-0.479	-0.391
35	86	0.221	-0.251	-0.472
35	87	0.191	-0.218	-0.410
35	88	0.052	-0.360	-0.412
35	89	0.159	-0.570	-0.729
35	90	0.225	-0.211	-0.436
	Max	0.481	0.082	-0.376
	Average	0.081	-0.350	-0.431
	Min	-0.242	-0.618	-0.729
	Std Dev	0.169	0.163	0.069



	2.13_VoutVmaxLmaxR%				
Test Site					
Tester					
Test Number					
Max Limit	2	%Vo/V			
Min Limit	-2	%Vo/V			
krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-0.283	-0.586	-0.556	-0.618	-0.570
Average	-0.267	-0.289	-0.359	-0.452	-0.322
Max	-0.244	0.082	0.002	-0.220	-0.211
UL	2.000	2.000	2.000	2.000	2.000

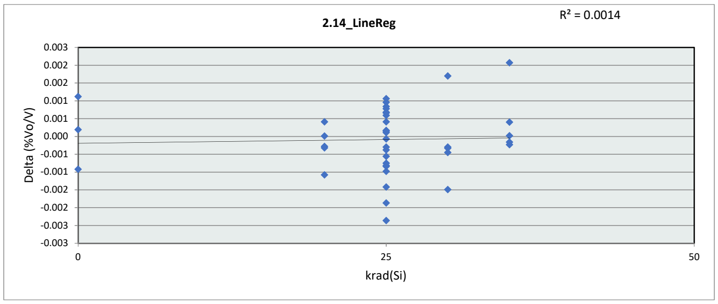


LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

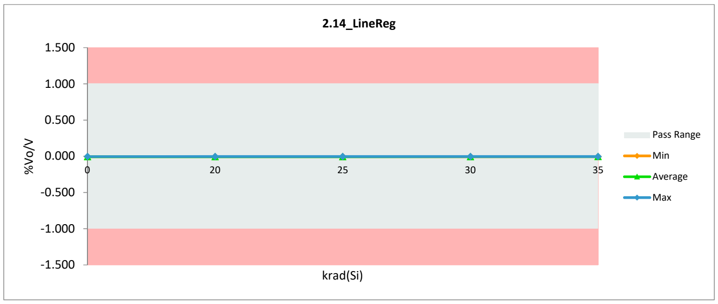
	2.14_LineReg	
Test Site		
Tester		
Test Number		
Unit	%Vo/V	%Vo/V
Max Limit	0.023	1
Min Limit	-0.031	-1

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-0.004	-0.005	-0.001
0	CU2	-0.006	-0.004	0.001
0	CU3	-0.005	-0.004	0.000
20	51	-0.005	-0.005	0.000
20	52	-0.004	-0.005	0.000
20	53	-0.004	-0.005	-0.001
20	54	-0.005	-0.005	0.000
20	55	-0.004	-0.004	0.000
25	56	-0.005	-0.004	0.001
25	57	-0.004	-0.004	0.000
25	58	-0.004	-0.004	0.000
25	59	-0.004	-0.004	0.000
25	60	-0.005	-0.005	0.001
25	61	-0.005	-0.005	0.001
25	62	-0.004	-0.005	-0.001
25	63	-0.004	-0.003	0.001
25	64	-0.004	-0.005	-0.001
25	65	-0.004	-0.005	-0.001
25	66	-0.005	-0.004	0.001
25	67	-0.005	-0.005	0.000
25	68	-0.004	-0.006	-0.002
25	69	-0.005	-0.005	0.000
25	70	-0.005	-0.005	0.000
25	71	-0.004	-0.006	-0.002
25	72	-0.005	-0.006	-0.001
25	73	-0.005	-0.005	0.000
25	74	-0.005	-0.004	0.001
25	75	-0.004	-0.005	-0.001
25	76	-0.004	-0.005	-0.001
25	77	-0.005	-0.005	0.001
30	81	-0.005	-0.005	0.000
30	82	-0.005	-0.005	0.000
30	83	-0.006	-0.004	0.002
30	84	-0.004	-0.005	0.000
30	85	-0.004	-0.005	-0.001
35	86	-0.005	-0.005	0.000
35	87	-0.006	-0.004	0.002
35	88	-0.004	-0.005	0.000
35	89	-0.005	-0.004	0.000
35	90	-0.004	-0.005	0.000
	Max	-0.004	-0.003	0.002
	Average	-0.005	-0.005	0.000
	Min	-0.006	-0.006	-0.002
	Std Dev	0.001	0.001	0.001



	2.14_LineReg	
Test Site		
Tester		
Test Number		
Max Limit	1	%Vo/V
Min Limit	-1	%Vo/V

krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.005	-0.005	-0.006	-0.005	-0.005
Average	-0.005	-0.005	-0.005	-0.005	-0.004
Max	-0.004	-0.004	-0.003	-0.004	-0.004
UL	1.000	1.000	1.000	1.000	1.000

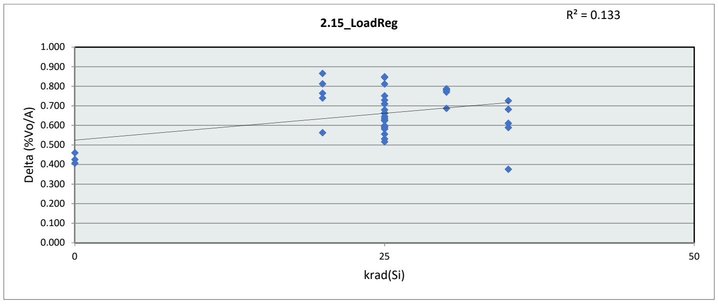


LDR TID Report
TPS7H1210-SEP

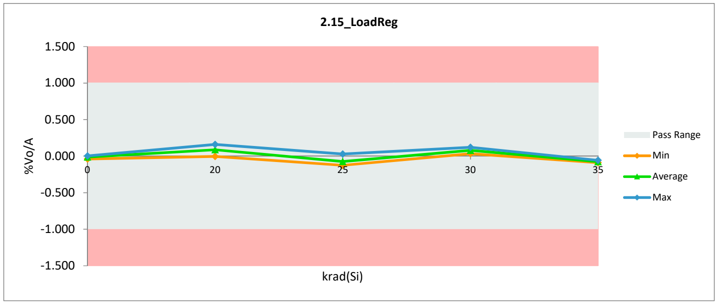
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	2.15_LoadReg	
Test Site		
Tester		
Test Number		
Unit	%Vo/A	%Vo/A
Max Limit	0.9	1
Min Limit	-0.9	-1

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-0.404	0.003	0.407
0	CU2	-0.464	-0.038	0.425
0	CU3	-0.464	-0.004	0.460
20	51	-0.744	-0.004	0.740
20	52	-0.536	0.026	0.562
20	53	-0.708	0.158	0.866
20	54	-0.604	0.160	0.764
20	55	-0.715	0.098	0.813
25	56	-0.690	-0.095	0.594
25	57	-0.822	-0.071	0.751
25	58	-0.689	-0.091	0.598
25	59	-0.717	-0.081	0.637
25	60	-0.678	-0.081	0.597
25	61	-0.617	-0.087	0.531
25	62	-0.721	-0.057	0.663
25	63	-0.792	-0.063	0.729
25	64	-0.772	-0.063	0.710
25	65	-0.888	-0.076	0.812
25	66	-0.730	-0.101	0.629
25	67	-0.677	-0.088	0.588
25	68	-0.891	-0.043	0.848
25	69	-0.583	-0.067	0.516
25	70	-0.737	-0.090	0.646
25	71	-0.687	-0.063	0.624
25	72	-0.795	-0.085	0.710
25	73	-0.733	-0.053	0.679
25	74	-0.641	-0.086	0.555
25	75	-0.816	0.029	0.845
25	76	-0.737	-0.075	0.663
25	77	-0.707	-0.125	0.582
30	81	-0.661	0.121	0.782
30	82	-0.713	0.074	0.787
30	83	-0.627	0.060	0.687
30	84	-0.664	0.105	0.770
30	85	-0.744	0.034	0.778
35	86	-0.646	-0.057	0.589
35	87	-0.771	-0.089	0.682
35	88	-0.809	-0.083	0.726
35	89	-0.459	-0.083	0.376
35	90	-0.678	-0.068	0.611
	Max	-0.404	0.160	0.866
	Average	-0.688	-0.030	0.658
	Min	-0.891	-0.125	0.376
	Std Dev	0.110	0.076	0.123



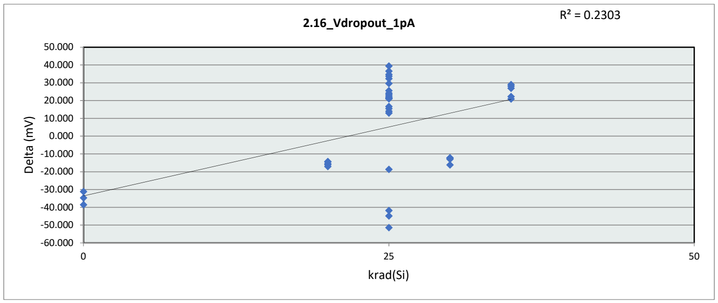
	2.15_LoadReg				
Test Site					
Tester					
Test Number					
Max Limit	1	%Vo/A			
Min Limit	-1	%Vo/A			
krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.038	-0.004	-0.125	0.034	-0.089
Average	-0.013	0.088	-0.073	0.079	-0.076
Max	0.003	0.160	0.029	0.121	-0.057
UL	1.000	1.000	1.000	1.000	1.000



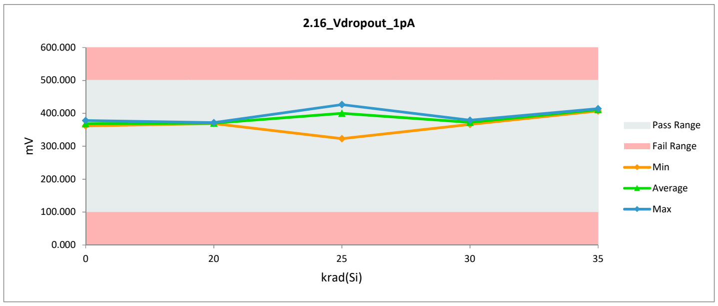
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		2.16_Vdropout_1pA		
	Test Site			
	Tester			
	Test Number			
	Unit	mV	mV	
	Max Limit	475	500	
	Min Limit	100	100	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	396.860	365.710	-31.150
0	CU2	400.390	361.870	-38.520
0	CU3	412.780	378.110	-34.670
20	51	388.700	371.660	-17.040
20	52	384.820	369.290	-15.530
20	53	384.700	368.700	-16.000
20	54	384.140	369.890	-14.250
20	55	386.230	371.740	-14.490
25	56	367.880	323.010	-44.870
25	57	395.750	416.740	20.990
25	58	386.480	335.040	-51.440
25	59	383.040	419.580	36.540
25	60	388.040	417.620	29.580
25	61	386.160	408.690	22.530
25	62	392.790	414.320	21.530
25	63	393.010	405.990	12.980
25	64	389.960	413.380	23.420
25	65	385.310	399.300	13.990
25	66	385.260	406.990	21.730
25	67	375.550	333.750	-41.800
25	68	384.760	417.090	32.330
25	69	384.320	423.710	39.390
25	70	383.520	409.080	25.560
25	71	390.940	412.150	21.210
25	72	387.130	411.290	24.160
25	73	391.920	426.600	34.680
25	74	390.920	424.540	33.620
25	75	388.300	369.600	-18.700
25	76	386.900	403.590	16.690
25	77	388.770	404.300	15.530
30	81	386.850	370.700	-16.150
30	82	379.430	366.540	-12.890
30	83	391.560	379.310	-12.250
30	84	385.820	373.640	-12.180
30	85	386.530	374.190	-12.340
35	86	391.760	414.010	22.250
35	87	382.840	411.810	28.970
35	88	386.260	407.170	20.910
35	89	385.070	413.140	28.070
35	90	382.820	409.770	26.950
	Max	412.780	426.600	39.390
	Average	387.607	391.840	4.233
	Min	367.880	323.010	-51.440
	Std Dev	6.886	27.190	26.410



	2.16_Vdropout_1pA				
Test Site					
Tester					
Test Number					
Max Limit	500	mV			
Min Limit	100	mV			
krad(Si)	0	20	25	30	35
LL	100.000	100.000	100.000	100.000	100.000
Min	361.870	368.700	323.010	366.540	407.170
Average	368.563	370.256	399.835	372.876	411.180
Max	378.110	371.740	426.600	379.310	414.010
UL	500.000	500.000	500.000	500.000	500.000

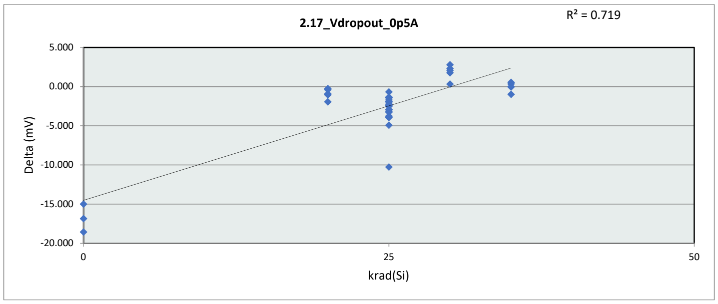


LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

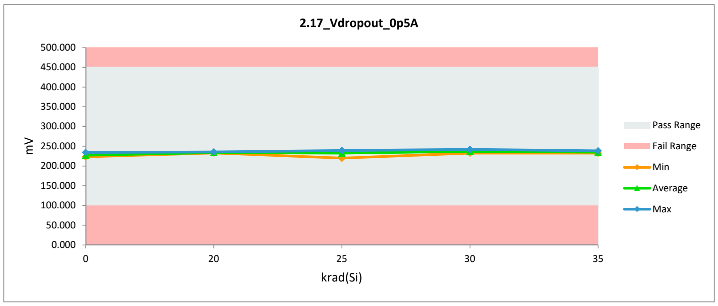
	2.17_Vdropout_0p5A	
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	303	450
Min Limit	100	100

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	239.620	224.620	-15.000
0	CU2	242.060	223.490	-18.570
0	CU3	251.000	234.150	-16.850
20	51	235.540	233.590	-1.950
20	52	234.680	233.750	-0.930
20	53	234.040	233.000	-1.040
20	54	234.470	234.210	-0.260
20	55	235.980	235.590	-0.390
25	56	223.170	219.890	-3.280
25	57	241.770	239.360	-2.410
25	58	234.420	229.490	-4.930
25	59	232.850	229.910	-2.940
25	60	237.200	235.800	-1.400
25	61	235.010	231.240	-3.770
25	62	240.050	238.210	-1.840
25	63	239.700	236.570	-3.130
25	64	238.180	236.770	-1.410
25	65	235.290	232.350	-2.940
25	66	234.120	231.190	-2.930
25	67	228.000	225.480	-2.520
25	68	234.380	231.150	-3.230
25	69	234.000	231.910	-2.090
25	70	234.230	231.910	-2.320
25	71	238.230	236.630	-1.600
25	72	235.190	231.250	-3.940
25	73	238.970	237.630	-1.340
25	74	238.570	237.880	-0.690
25	75	236.470	226.210	-10.260
25	76	236.000	234.090	-1.910
25	77	235.420	231.550	-3.870
30	81	235.900	236.220	0.320
30	82	231.080	232.840	1.760
30	83	239.360	242.150	2.790
30	84	235.210	237.530	2.320
30	85	235.420	237.490	2.070
35	86	238.520	238.460	-0.060
35	87	232.660	232.640	-0.020
35	88	235.840	234.860	-0.980
35	89	234.780	235.330	0.550
35	90	233.560	233.890	0.330
	Max	251.000	242.150	2.790
	Average	236.023	233.257	-2.766
	Min	223.170	219.890	-18.570
	Std Dev	4.210	4.583	4.653



	2.17_Vdropout_0p5A	
Test Site		
Tester		
Test Number		
Max Limit	450	mV
Min Limit	100	mV

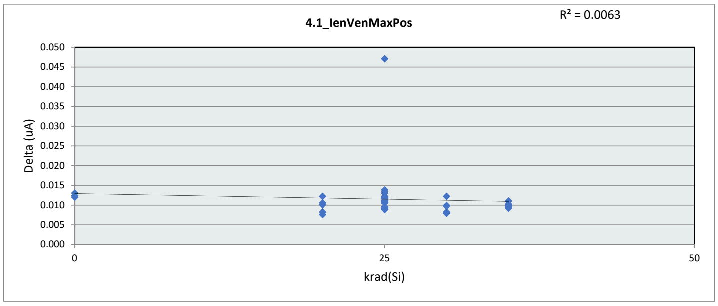
krad(Si)	0	20	25	30	35
LL	100.000	100.000	100.000	100.000	100.000
Min	223.490	233.000	219.890	232.840	232.640
Average	227.420	234.028	232.567	237.246	235.036
Max	234.150	235.590	239.360	242.150	238.460
UL	450.000	450.000	450.000	450.000	450.000



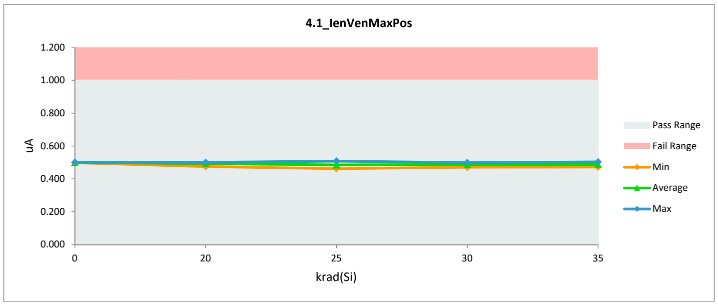
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		4.1_IenVenMaxPos		
	Test Site			
	Tester			
	Test Number			
	Unit	uA	uA	
	Max Limit	0.98	1	
	Min Limit	0	0	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	0.486	0.499	0.013
0	CU2	0.490	0.502	0.012
0	CU3	0.489	0.502	0.012
20	51	0.483	0.493	0.011
20	52	0.493	0.501	0.008
20	53	0.465	0.475	0.010
20	54	0.489	0.497	0.008
20	55	0.484	0.497	0.012
25	56	0.466	0.480	0.014
25	57	0.451	0.462	0.012
25	58	0.489	0.498	0.009
25	59	0.498	0.508	0.011
25	60	0.458	0.467	0.009
25	61	0.489	0.497	0.009
25	62	0.463	0.474	0.011
25	63	0.463	0.474	0.011
25	64	0.467	0.477	0.010
25	65	0.462	0.475	0.013
25	66	0.490	0.502	0.012
25	67	0.482	0.493	0.011
25	68	0.486	0.498	0.012
25	69	0.491	0.503	0.011
25	70	0.482	0.492	0.011
25	71	0.463	0.474	0.011
25	72	0.491	0.501	0.009
25	73	0.454	0.463	0.009
25	74	0.465	0.477	0.012
25	75	0.457	0.504	0.047
25	76	0.452	0.465	0.013
25	77	0.485	0.495	0.011
30	81	0.484	0.497	0.012
30	82	0.486	0.494	0.008
30	83	0.461	0.471	0.010
30	84	0.471	0.479	0.008
30	85	0.490	0.499	0.010
35	86	0.462	0.473	0.011
35	87	0.494	0.504	0.010
35	88	0.463	0.473	0.010
35	89	0.489	0.499	0.010
35	90	0.482	0.491	0.009
	Max	0.498	0.508	0.047
	Average	0.477	0.488	0.012
	Min	0.451	0.462	0.008
	Std Dev	0.014	0.014	0.006



	4.1_IenVenMaxPos				
Test Site					
Tester					
Test Number					
Max Limit	1	uA			
Min Limit	0	uA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	0.499	0.475	0.462	0.471	0.473
Average	0.501	0.493	0.486	0.488	0.488
Max	0.502	0.501	0.508	0.499	0.504
UL	1.000	1.000	1.000	1.000	1.000

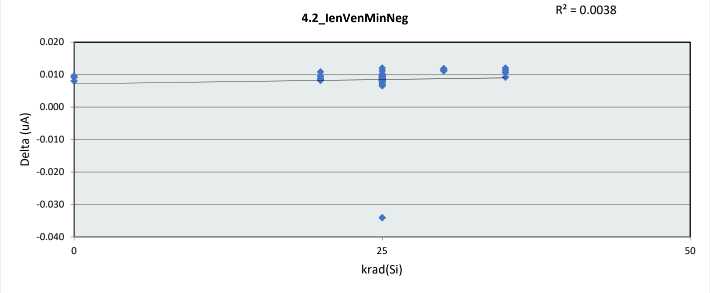


LDR TID Report
TPS7H1210-SEP

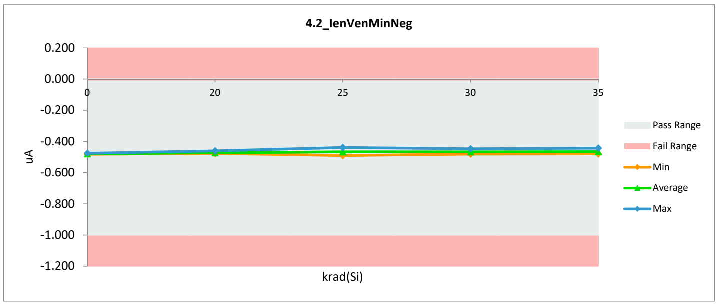
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

	4.2_IenVenMinNeg	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	0	-0.01
Min Limit	-0.98	-1

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-0.485	-0.476	0.010
0	CU2	-0.490	-0.482	0.008
0	CU3	-0.487	-0.478	0.009
20	51	-0.482	-0.473	0.008
20	52	-0.487	-0.476	0.011
20	53	-0.470	-0.461	0.010
20	54	-0.483	-0.474	0.009
20	55	-0.485	-0.477	0.009
25	56	-0.473	-0.464	0.009
25	57	-0.454	-0.442	0.012
25	58	-0.483	-0.474	0.009
25	59	-0.495	-0.488	0.007
25	60	-0.458	-0.451	0.007
25	61	-0.491	-0.481	0.009
25	62	-0.464	-0.456	0.008
25	63	-0.466	-0.456	0.010
25	64	-0.464	-0.454	0.010
25	65	-0.466	-0.458	0.008
25	66	-0.491	-0.483	0.009
25	67	-0.476	-0.467	0.010
25	68	-0.489	-0.479	0.010
25	69	-0.494	-0.485	0.009
25	70	-0.477	-0.468	0.010
25	71	-0.467	-0.458	0.009
25	72	-0.490	-0.482	0.008
25	73	-0.458	-0.447	0.011
25	74	-0.461	-0.454	0.007
25	75	-0.456	-0.490	-0.034
25	76	-0.447	-0.439	0.008
25	77	-0.482	-0.474	0.008
30	81	-0.483	-0.471	0.012
30	82	-0.492	-0.480	0.012
30	83	-0.458	-0.447	0.011
30	84	-0.465	-0.454	0.011
30	85	-0.492	-0.481	0.011
35	86	-0.462	-0.451	0.011
35	87	-0.492	-0.480	0.012
35	88	-0.454	-0.443	0.011
35	89	-0.488	-0.477	0.011
35	90	-0.484	-0.475	0.009
	Max	-0.447	-0.439	0.012
	Average	-0.476	-0.468	0.008
	Min	-0.495	-0.490	-0.034
	Std Dev	0.014	0.014	0.007



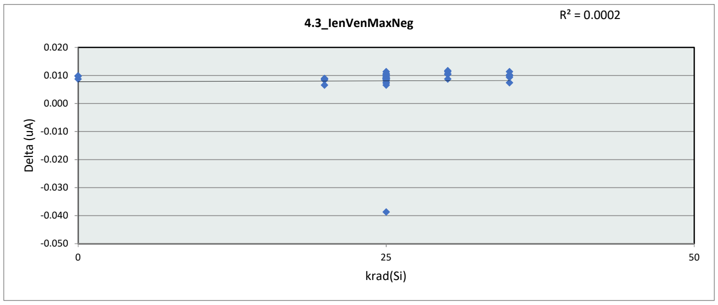
	4.2_IenVenMinNeg				
Test Site					
Tester					
Test Number					
Max Limit	-0.01	uA			
Min Limit	-1	uA			
krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.482	-0.477	-0.490	-0.481	-0.480
Average	-0.479	-0.472	-0.466	-0.467	-0.465
Max	-0.476	-0.461	-0.439	-0.447	-0.443
UL	-0.010	-0.010	-0.010	-0.010	-0.010



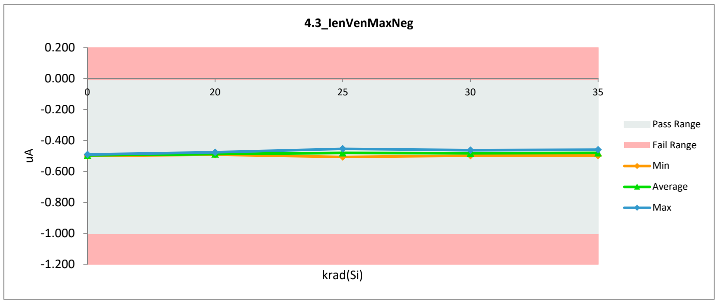
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		4.3_IenVenMaxNeg		
	Test Site			
	Tester			
	Test Number			
	Unit	uA	uA	
	Max Limit	0	-0.01	
	Min Limit	-0.98	-1	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-0.499	-0.491	0.009
0	CU2	-0.509	-0.499	0.010
0	CU3	-0.507	-0.497	0.010
20	51	-0.497	-0.488	0.009
20	52	-0.498	-0.490	0.009
20	53	-0.485	-0.476	0.008
20	54	-0.498	-0.491	0.007
20	55	-0.500	-0.491	0.009
25	56	-0.488	-0.479	0.009
25	57	-0.465	-0.456	0.009
25	58	-0.500	-0.489	0.010
25	59	-0.510	-0.502	0.009
25	60	-0.472	-0.463	0.009
25	61	-0.508	-0.498	0.010
25	62	-0.478	-0.468	0.010
25	63	-0.479	-0.470	0.009
25	64	-0.478	-0.466	0.011
25	65	-0.479	-0.470	0.009
25	66	-0.508	-0.499	0.009
25	67	-0.492	-0.483	0.009
25	68	-0.503	-0.494	0.009
25	69	-0.508	-0.499	0.009
25	70	-0.491	-0.483	0.008
25	71	-0.479	-0.470	0.009
25	72	-0.505	-0.497	0.008
25	73	-0.475	-0.464	0.010
25	74	-0.474	-0.467	0.007
25	75	-0.467	-0.506	-0.039
25	76	-0.460	-0.454	0.007
25	77	-0.500	-0.489	0.011
30	81	-0.497	-0.486	0.011
30	82	-0.505	-0.495	0.011
30	83	-0.473	-0.463	0.010
30	84	-0.477	-0.468	0.009
30	85	-0.509	-0.498	0.012
35	86	-0.474	-0.464	0.009
35	87	-0.505	-0.498	0.007
35	88	-0.470	-0.460	0.010
35	89	-0.502	-0.490	0.011
35	90	-0.497	-0.487	0.010
	Max	-0.460	-0.454	0.012
	Average	-0.491	-0.482	0.008
	Min	-0.510	-0.506	-0.039
	Std Dev	0.015	0.015	0.008



	4.3_IenVenMaxNeg				
Test Site					
Tester					
Test Number					
Max Limit	-0.01	uA			
Min Limit	-1	uA			
krad(Si)	0	20	25	30	35
LL	-1.000	-1.000	-1.000	-1.000	-1.000
Min	-0.499	-0.491	-0.506	-0.498	-0.498
Average	-0.496	-0.487	-0.480	-0.482	-0.480
Max	-0.491	-0.476	-0.454	-0.463	-0.460
UL	-0.010	-0.010	-0.010	-0.010	-0.010

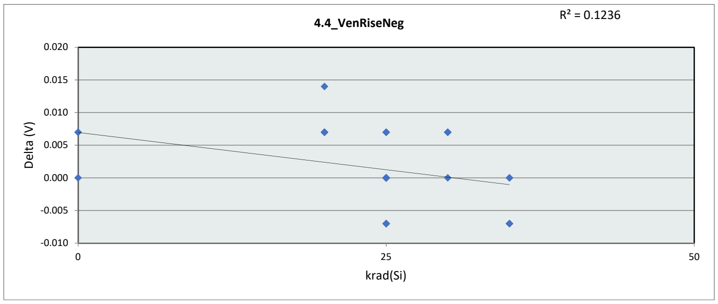


LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

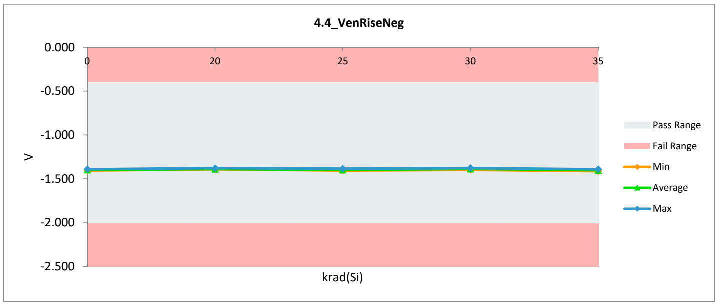
	4.4_VenRiseNeg	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.45	-0.4
Min Limit	-1.98	-2

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.398	-1.390	0.007
0	CU2	-1.405	-1.405	0.000
0	CU3	-1.405	-1.398	0.007
20	51	-1.398	-1.390	0.007
20	52	-1.398	-1.390	0.007
20	53	-1.383	-1.377	0.007
20	54	-1.398	-1.390	0.007
20	55	-1.405	-1.390	0.014
25	56	-1.383	-1.383	0.000
25	57	-1.398	-1.398	0.000
25	58	-1.390	-1.398	-0.007
25	59	-1.398	-1.405	-0.007
25	60	-1.390	-1.398	-0.007
25	61	-1.398	-1.398	0.000
25	62	-1.398	-1.398	0.000
25	63	-1.405	-1.405	0.000
25	64	-1.398	-1.398	0.000
25	65	-1.390	-1.390	0.000
25	66	-1.405	-1.405	0.000
25	67	-1.398	-1.398	0.000
25	68	-1.405	-1.405	0.000
25	69	-1.405	-1.405	0.000
25	70	-1.398	-1.390	0.007
25	71	-1.398	-1.398	0.000
25	72	-1.398	-1.398	0.000
25	73	-1.398	-1.390	0.007
25	74	-1.398	-1.390	0.007
25	75	-1.390	-1.398	-0.007
25	76	-1.398	-1.398	0.000
25	77	-1.390	-1.390	0.000
30	81	-1.383	-1.377	0.007
30	82	-1.398	-1.390	0.007
30	83	-1.390	-1.383	0.007
30	84	-1.383	-1.383	0.000
30	85	-1.405	-1.398	0.007
35	86	-1.398	-1.405	-0.007
35	87	-1.411	-1.411	0.000
35	88	-1.383	-1.390	-0.007
35	89	-1.405	-1.405	0.000
35	90	-1.390	-1.398	-0.007
	Max	-1.383	-1.377	0.014
	Average	-1.396	-1.395	0.001
	Min	-1.411	-1.411	-0.007
	Std Dev	0.007	0.008	0.005



	4.4_VenRiseNeg	
Test Site		
Tester		
Test Number		
Max Limit	-0.4	V
Min Limit	-2	V

krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-1.405	-1.391	-1.405	-1.398	-1.412
Average	-1.398	-1.388	-1.397	-1.386	-1.402
Max	-1.391	-1.377	-1.384	-1.377	-1.391
UL	-0.400	-0.400	-0.400	-0.400	-0.400

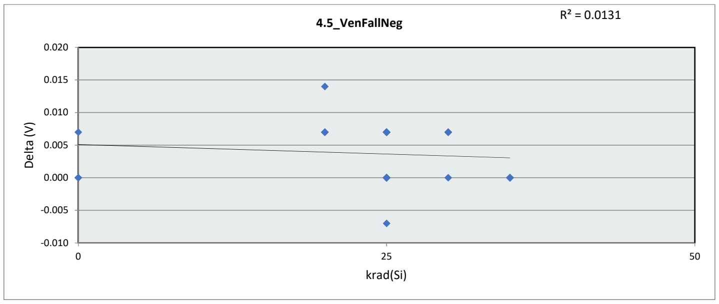


LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

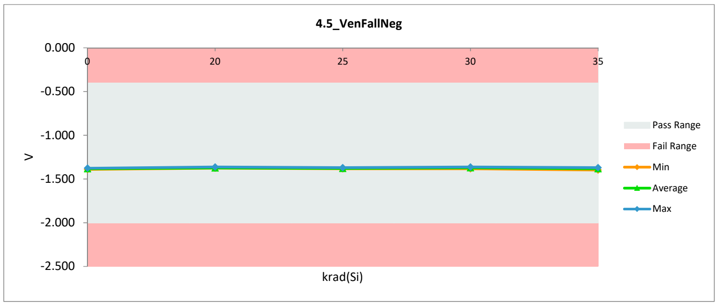
	4.5_VenFallNeg	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.45	-0.4
Min Limit	-1.98	-2

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-1.377	-1.377	0.000
0	CU2	-1.390	-1.390	0.000
0	CU3	-1.390	-1.383	0.007
20	51	-1.383	-1.377	0.007
20	52	-1.383	-1.377	0.007
20	53	-1.370	-1.362	0.007
20	54	-1.383	-1.377	0.007
20	55	-1.390	-1.377	0.014
25	56	-1.370	-1.370	0.000
25	57	-1.383	-1.383	0.000
25	58	-1.377	-1.377	0.000
25	59	-1.383	-1.383	0.000
25	60	-1.377	-1.377	0.000
25	61	-1.383	-1.383	0.000
25	62	-1.383	-1.383	0.000
25	63	-1.390	-1.383	0.007
25	64	-1.383	-1.377	0.007
25	65	-1.377	-1.377	0.000
25	66	-1.390	-1.383	0.007
25	67	-1.383	-1.377	0.007
25	68	-1.390	-1.383	0.007
25	69	-1.390	-1.383	0.007
25	70	-1.383	-1.377	0.007
25	71	-1.383	-1.377	0.007
25	72	-1.383	-1.383	0.000
25	73	-1.383	-1.377	0.007
25	74	-1.383	-1.377	0.007
25	75	-1.377	-1.383	-0.007
25	76	-1.383	-1.377	0.007
25	77	-1.370	-1.370	0.000
30	81	-1.370	-1.362	0.007
30	82	-1.383	-1.377	0.007
30	83	-1.377	-1.370	0.007
30	84	-1.370	-1.370	0.000
30	85	-1.390	-1.383	0.007
35	86	-1.383	-1.383	0.000
35	87	-1.398	-1.398	0.000
35	88	-1.370	-1.370	0.000
35	89	-1.390	-1.390	0.000
35	90	-1.377	-1.377	0.000
	Max	-1.370	-1.362	0.014
	Average	-1.382	-1.378	0.004
	Min	-1.398	-1.398	-0.007
	Std Dev	0.007	0.007	0.004



	4.5_VenFallNeg	
Test Site		
Tester		
Test Number		
Max Limit	-0.4	V
Min Limit	-2	V

krad(Si)	0	20	25	30	35
LL	-2.000	-2.000	-2.000	-2.000	-2.000
Min	-1.391	-1.377	-1.384	-1.384	-1.398
Average	-1.384	-1.374	-1.379	-1.372	-1.384
Max	-1.377	-1.363	-1.370	-1.363	-1.370
UL	-0.400	-0.400	-0.400	-0.400	-0.400



LDR TID Report
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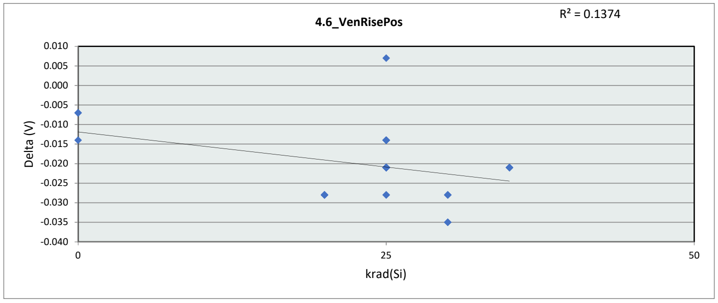
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

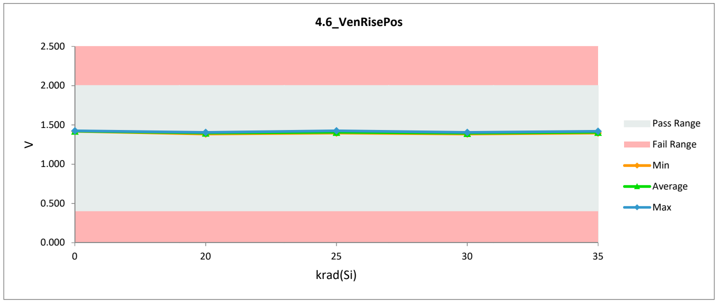
	4.6_VenRisePos	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.95	2
Min Limit	0.45	0.4

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	1.426	1.418	-0.007
0	CU2	1.439	1.426	-0.014
0	CU3	1.426	1.418	-0.007
20	51	1.426	1.398	-0.028
20	52	1.426	1.398	-0.028
20	53	1.411	1.383	-0.028
20	54	1.433	1.405	-0.028
20	55	1.433	1.405	-0.028
25	56	1.426	1.411	-0.014
25	57	1.418	1.398	-0.021
25	58	1.426	1.405	-0.021
25	59	1.426	1.411	-0.014
25	60	1.418	1.405	-0.014
25	61	1.426	1.411	-0.014
25	62	1.426	1.405	-0.021
25	63	1.433	1.411	-0.021
25	64	1.426	1.405	-0.021
25	65	1.418	1.398	-0.021
25	66	1.433	1.411	-0.021
25	67	1.433	1.405	-0.028
25	68	1.433	1.418	-0.014
25	69	1.433	1.411	-0.021
25	70	1.418	1.405	-0.014
25	71	1.426	1.405	-0.021
25	72	1.426	1.405	-0.021
25	73	1.418	1.398	-0.021
25	74	1.433	1.405	-0.028
25	75	1.418	1.426	0.007
25	76	1.426	1.405	-0.021
25	77	1.418	1.405	-0.014
30	81	1.411	1.383	-0.028
30	82	1.433	1.398	-0.035
30	83	1.426	1.390	-0.035
30	84	1.418	1.390	-0.028
30	85	1.433	1.405	-0.028
35	86	1.426	1.405	-0.021
35	87	1.439	1.418	-0.021
35	88	1.418	1.398	-0.021
35	89	1.433	1.411	-0.021
35	90	1.426	1.405	-0.021
	Max	1.439	1.426	0.007
	Average	1.426	1.405	-0.021
	Min	1.411	1.383	-0.035
	Std Dev	0.007	0.010	0.008



	4.6_VenRisePos	
Test Site		
Tester		
Test Number		
Max Limit	2	V
Min Limit	0.4	V

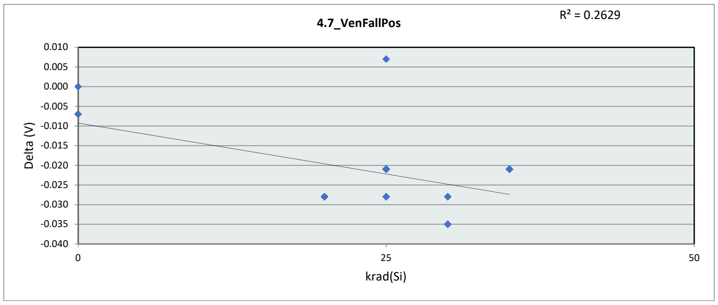
krad(Si)	0	20	25	30	35
LL	0.400	0.400	0.400	0.400	0.400
Min	1.419	1.384	1.398	1.384	1.398
Average	1.421	1.398	1.407	1.393	1.407
Max	1.426	1.405	1.426	1.405	1.419
UL	2.000	2.000	2.000	2.000	2.000



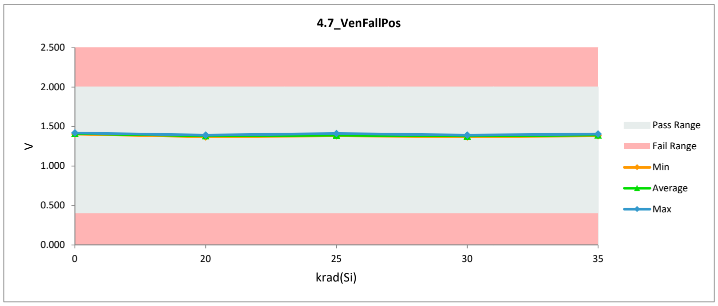
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		4.7_VenFallPos		
	Test Site			
	Tester			
	Test Number			
	Unit	V	V	
	Max Limit	1.95	2	
	Min Limit	0.45	0.4	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	1.411	1.405	-0.007
0	CU2	1.426	1.418	-0.007
0	CU3	1.411	1.411	0.000
20	51	1.411	1.383	-0.028
20	52	1.411	1.383	-0.028
20	53	1.398	1.370	-0.028
20	54	1.418	1.390	-0.028
20	55	1.418	1.390	-0.028
25	56	1.411	1.390	-0.021
25	57	1.405	1.383	-0.021
25	58	1.411	1.390	-0.021
25	59	1.411	1.390	-0.021
25	60	1.405	1.383	-0.021
25	61	1.411	1.390	-0.021
25	62	1.411	1.390	-0.021
25	63	1.418	1.390	-0.028
25	64	1.411	1.390	-0.021
25	65	1.405	1.383	-0.021
25	66	1.418	1.398	-0.021
25	67	1.418	1.390	-0.028
25	68	1.418	1.398	-0.021
25	69	1.418	1.398	-0.021
25	70	1.405	1.383	-0.021
25	71	1.411	1.390	-0.021
25	72	1.411	1.390	-0.021
25	73	1.405	1.383	-0.021
25	74	1.418	1.390	-0.028
25	75	1.405	1.411	0.007
25	76	1.411	1.390	-0.021
25	77	1.405	1.383	-0.021
30	81	1.405	1.370	-0.035
30	82	1.418	1.383	-0.035
30	83	1.411	1.377	-0.035
30	84	1.405	1.377	-0.028
30	85	1.418	1.390	-0.028
35	86	1.411	1.390	-0.021
35	87	1.426	1.405	-0.021
35	88	1.405	1.383	-0.021
35	89	1.418	1.398	-0.021
35	90	1.411	1.390	-0.021
	Max	1.426	1.418	0.007
	Average	1.412	1.390	-0.022
	Min	1.398	1.370	-0.035
	Std Dev	0.006	0.010	0.008



	4.7_VenFallPos				
Test Site					
Tester					
Test Number					
Max Limit	2	V			
Min Limit	0.4	V			
krad(Si)	0	20	25	30	35
LL	0.400	0.400	0.400	0.400	0.400
Min	1.405	1.370	1.384	1.370	1.384
Average	1.412	1.384	1.391	1.379	1.393
Max	1.419	1.391	1.412	1.391	1.405
UL	2.000	2.000	2.000	2.000	2.000



LDR TID Report
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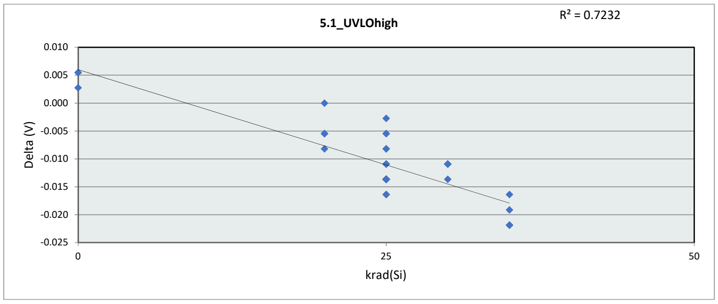
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

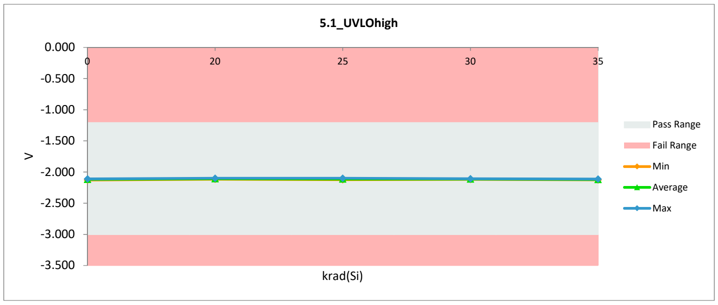
	5.1_UVLOhigh	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-1.3	-1.2
Min Limit	-2.95	-3

krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-2.123	-2.117	0.005
0	CU2	-2.115	-2.109	0.005
0	CU3	-2.131	-2.128	0.003
20	51	-2.109	-2.115	-0.005
20	52	-2.104	-2.109	-0.005
20	53	-2.098	-2.098	0.000
20	54	-2.098	-2.104	-0.005
20	55	-2.101	-2.109	-0.008
25	56	-2.093	-2.109	-0.016
25	57	-2.104	-2.117	-0.014
25	58	-2.098	-2.112	-0.014
25	59	-2.107	-2.117	-0.011
25	60	-2.090	-2.104	-0.014
25	61	-2.107	-2.120	-0.014
25	62	-2.109	-2.117	-0.008
25	63	-2.093	-2.109	-0.016
25	64	-2.107	-2.120	-0.014
25	65	-2.090	-2.104	-0.014
25	66	-2.109	-2.123	-0.014
25	67	-2.098	-2.109	-0.011
25	68	-2.107	-2.120	-0.014
25	69	-2.104	-2.117	-0.014
25	70	-2.098	-2.109	-0.011
25	71	-2.104	-2.109	-0.005
25	72	-2.107	-2.120	-0.014
25	73	-2.096	-2.098	-0.003
25	74	-2.109	-2.117	-0.008
25	75	-2.096	-2.107	-0.011
25	76	-2.096	-2.101	-0.005
25	77	-2.107	-2.120	-0.014
30	81	-2.098	-2.109	-0.011
30	82	-2.101	-2.115	-0.014
30	83	-2.096	-2.107	-0.011
30	84	-2.098	-2.109	-0.011
30	85	-2.107	-2.117	-0.011
35	86	-2.098	-2.120	-0.022
35	87	-2.104	-2.123	-0.019
35	88	-2.090	-2.112	-0.022
35	89	-2.109	-2.126	-0.016
35	90	-2.098	-2.120	-0.022
	Max	-2.090	-2.098	0.005
	Average	-2.103	-2.113	-0.011
	Min	-2.131	-2.128	-0.022
	Std Dev	0.008	0.007	0.007



	5.1_UVLOhigh	
Test Site		
Tester		
Test Number		
Max Limit	-1.2	V
Min Limit	-3	V

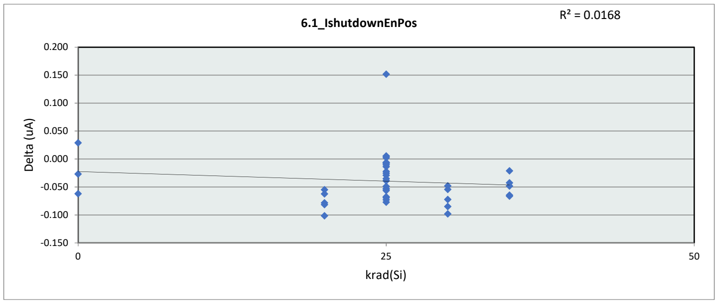
krad(Si)	0	20	25	30	35
LL	-3.000	-3.000	-3.000	-3.000	-3.000
Min	-2.128	-2.115	-2.123	-2.117	-2.126
Average	-2.118	-2.107	-2.113	-2.111	-2.120
Max	-2.109	-2.098	-2.098	-2.107	-2.112
UL	-1.200	-1.200	-1.200	-1.200	-1.200



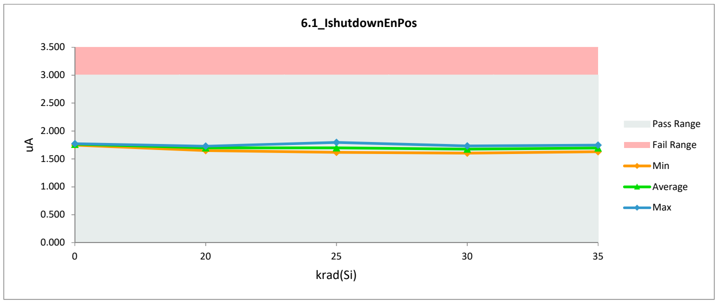
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		6.1_IshutdownEnPos		
	Test Site			
	Tester			
	Test Number			
	Unit	uA	uA	
	Max Limit	2.45	3	
	Min Limit	0	0	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	1.739	1.768	0.029
0	CU2	1.833	1.771	-0.062
0	CU3	1.774	1.748	-0.027
20	51	1.755	1.693	-0.062
20	52	1.801	1.699	-0.102
20	53	1.703	1.648	-0.055
20	54	1.807	1.728	-0.078
20	55	1.797	1.715	-0.082
25	56	1.690	1.684	-0.007
25	57	1.711	1.642	-0.069
25	58	1.749	1.735	-0.014
25	59	1.758	1.764	0.005
25	60	1.644	1.649	0.005
25	61	1.778	1.739	-0.039
25	62	1.666	1.643	-0.022
25	63	1.664	1.635	-0.029
25	64	1.722	1.666	-0.056
25	65	1.676	1.668	-0.008
25	66	1.762	1.756	-0.006
25	67	1.798	1.721	-0.077
25	68	1.751	1.741	-0.010
25	69	1.827	1.760	-0.067
25	70	1.756	1.707	-0.049
25	71	1.697	1.662	-0.035
25	72	1.802	1.749	-0.053
25	73	1.663	1.637	-0.025
25	74	1.650	1.652	0.002
25	75	1.644	1.796	0.152
25	76	1.690	1.617	-0.073
25	77	1.790	1.736	-0.054
30	81	1.774	1.676	-0.098
30	82	1.757	1.709	-0.048
30	83	1.688	1.603	-0.085
30	84	1.729	1.657	-0.072
30	85	1.786	1.732	-0.054
35	86	1.677	1.629	-0.048
35	87	1.814	1.748	-0.066
35	88	1.656	1.635	-0.021
35	89	1.777	1.734	-0.043
35	90	1.790	1.725	-0.065
	Max	1.833	1.796	0.152
	Average	1.739	1.699	-0.039
	Min	1.644	1.603	-0.102
	Std Dev	0.057	0.051	0.044



	6.1_IshutdownEnPos				
Test Site					
Tester					
Test Number					
Max Limit	3	uA			
Min Limit	0	uA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	1.748	1.648	1.617	1.603	1.629
Average	1.762	1.697	1.698	1.675	1.694
Max	1.771	1.728	1.796	1.732	1.748
UL	3.000	3.000	3.000	3.000	3.000



LDR TID Report
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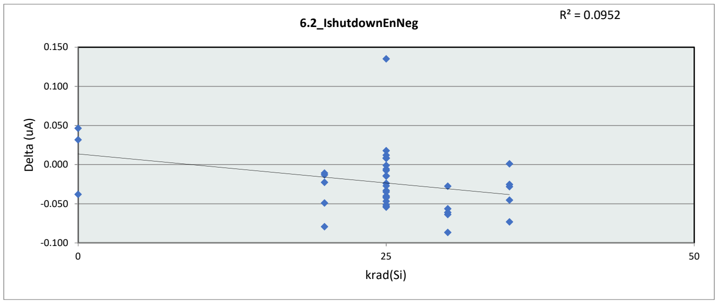
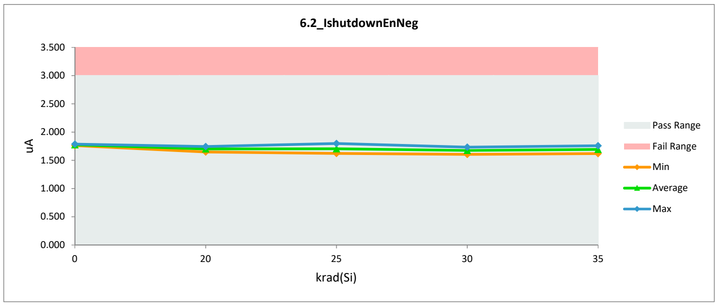
krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		6.2_IshutdownEnNeg		
	Test Site			
	Tester			
	Test Number			
	Unit	uA	uA	
	Max Limit	2.45	3	
	Min Limit	0	0	
krad(Si)	**Serial #**	**PreLDR**	**PostLDR**	**Delta**
0	CU1	1.816	1.778	-0.038
0	CU2	1.741	1.788	0.047
0	CU3	1.730	1.762	0.032
20	51	1.779	1.700	-0.079
20	52	1.727	1.704	-0.023
20	53	1.696	1.647	-0.049
20	54	1.755	1.744	-0.011
20	55	1.732	1.719	-0.013
25	56	1.736	1.693	-0.042
25	57	1.634	1.646	0.012
25	58	1.794	1.748	-0.047
25	59	1.822	1.771	-0.051
25	60	1.688	1.653	-0.035
25	61	1.760	1.753	-0.008
25	62	1.681	1.657	-0.024
25	63	1.661	1.647	-0.014
25	64	1.706	1.665	-0.041
25	65	1.720	1.666	-0.053
25	66	1.803	1.775	-0.027
25	67	1.724	1.718	-0.006
25	68	1.807	1.752	-0.054
25	69	1.739	1.756	0.018
25	70	1.742	1.708	-0.033
25	71	1.656	1.664	0.008
25	72	1.761	1.746	-0.015
25	73	1.636	1.645	0.008
25	74	1.690	1.650	-0.040
25	75	1.662	1.797	0.135
25	76	1.624	1.623	-0.001
25	77	1.737	1.746	0.008
30	81	1.741	1.684	-0.056
30	82	1.778	1.717	-0.061
30	83	1.670	1.606	-0.064
30	84	1.721	1.634	-0.087
30	85	1.759	1.732	-0.028
35	86	1.692	1.619	-0.073
35	87	1.758	1.759	0.001
35	88	1.682	1.636	-0.045
35	89	1.754	1.726	-0.028
35	90	1.758	1.732	-0.025
	Max	1.822	1.797	0.135
	Average	1.727	1.704	-0.023
	Min	1.624	1.606	-0.087
	Std Dev	0.051	0.054	0.039



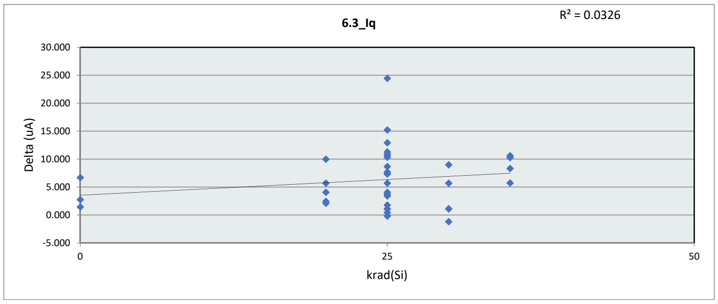
	6.2_IshutdownEnNeg				
Test Site					
Tester					
Test Number					
Max Limit	3	uA			
Min Limit	0	uA			
krad(Si)	**0**	**20**	**25**	**30**	**35**
LL	0.000	0.000	0.000	0.000	0.000
Min	1.762	1.647	1.623	1.606	1.619
Average	1.776	1.703	1.704	1.675	1.694
Max	1.788	1.744	1.797	1.732	1.759
UL	3.000	3.000	3.000	3.000	3.000



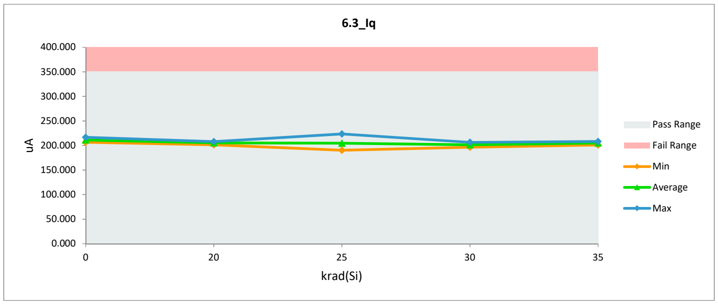
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		6.3_Iq		
	Test Site			
	Tester			
	Test Number			
	Unit	uA	uA	
	Max Limit	340	350	
	Min Limit	0	0	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	215.198	216.639	1.441
0	CU2	207.330	210.091	2.761
0	CU3	199.783	206.472	6.689
20	51	202.078	207.784	5.706
20	52	197.160	207.132	9.972
20	53	199.442	203.516	4.074
20	54	203.727	205.826	2.099
20	55	199.124	201.571	2.447
25	56	206.674	208.447	1.773
25	57	189.279	190.368	1.089
25	58	197.806	205.176	7.370
25	59	200.452	207.817	7.365
25	60	189.266	196.621	7.355
25	61	209.628	213.037	3.409
25	62	197.809	198.251	0.442
25	63	195.186	194.984	-0.202
25	64	195.498	201.194	5.696
25	65	187.295	197.611	10.316
25	66	195.527	206.164	10.637
25	67	202.074	209.759	7.685
25	68	203.064	211.744	8.680
25	69	204.392	208.129	3.737
25	70	196.835	207.781	10.946
25	71	197.793	197.621	-0.172
25	72	192.583	207.801	15.218
25	73	195.508	196.608	1.100
25	74	194.832	207.765	12.933
25	75	199.107	223.541	24.434
25	76	197.455	201.518	4.063
25	77	196.173	207.456	11.283
30	81	201.740	202.860	1.120
30	82	201.432	200.252	-1.180
30	83	195.495	196.604	1.109
30	84	191.892	200.869	8.977
30	85	200.773	206.482	5.709
35	86	190.918	201.207	10.289
35	87	197.816	208.113	10.297
35	88	197.127	205.439	8.312
35	89	195.865	206.466	10.601
35	90	198.471	204.182	5.711
	Max	215.198	223.541	24.434
	Average	198.490	204.772	6.282
	Min	187.295	190.368	-1.180
	Std Dev	5.550	6.213	5.108



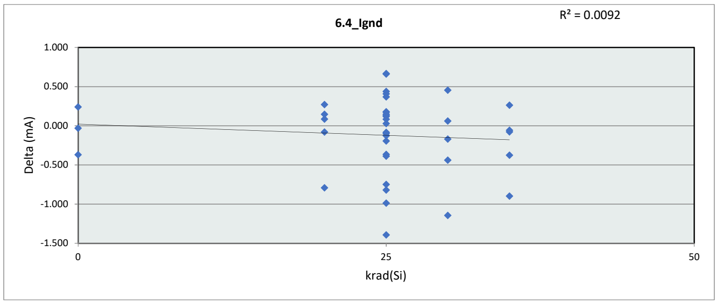
	6.3_Iq				
Test Site					
Tester					
Test Number					
Max Limit	350	uA			
Min Limit	0	uA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	206.472	201.571	190.368	196.604	201.207
Average	211.067	205.166	204.518	201.413	205.081
Max	216.639	207.784	223.541	206.482	208.113
UL	350.000	350.000	350.000	350.000	350.000



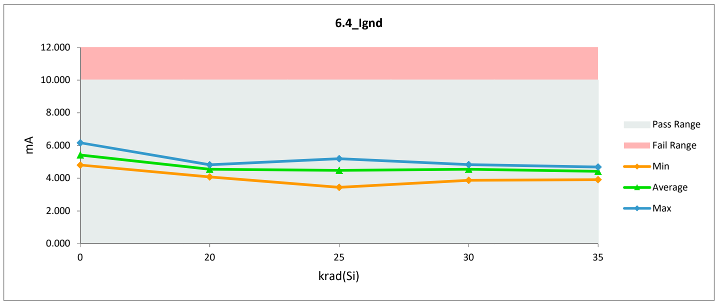
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		6.4_Ignd		
	Test Site			
	Tester			
	Test Number			
	Unit	mA	mA	
	Max Limit	9	10	
	Min Limit	0	0	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	4.569	4.810	0.241
0	CU2	5.652	5.283	-0.369
0	CU3	6.200	6.169	-0.031
20	51	4.878	4.087	-0.791
20	52	4.677	4.823	0.146
20	53	4.608	4.527	-0.081
20	54	4.612	4.698	0.086
20	55	4.359	4.629	0.270
25	56	4.566	3.818	-0.748
25	57	4.809	4.422	-0.387
25	58	4.871	4.051	-0.820
25	59	4.438	4.616	0.178
25	60	4.562	4.367	-0.195
25	61	4.946	4.580	-0.366
25	62	3.755	4.416	0.661
25	63	4.444	4.590	0.146
25	64	4.261	4.669	0.408
25	65	4.599	4.514	-0.085
25	66	4.379	5.046	0.667
25	67	4.395	4.478	0.083
25	68	4.159	4.527	0.368
25	69	4.648	4.777	0.129
25	70	4.155	4.593	0.438
25	71	4.559	4.587	0.028
25	72	4.671	4.790	0.119
25	73	4.713	4.587	-0.126
25	74	4.520	4.422	-0.098
25	75	5.022	5.194	0.172
25	76	4.841	3.447	-1.394
25	77	5.061	4.074	-0.987
30	81	5.022	3.877	-1.145
30	82	4.549	4.610	0.061
30	83	5.006	4.836	-0.170
30	84	5.078	4.639	-0.439
30	85	4.366	4.820	0.454
35	86	4.674	4.616	-0.058
35	87	4.425	4.688	0.263
35	88	4.815	3.917	-0.898
35	89	4.700	4.324	-0.376
35	90	4.645	4.567	-0.078
	Max	6.200	6.169	0.667
	Average	4.680	4.562	-0.118
	Min	3.755	3.447	-1.394
	Std Dev	0.404	0.446	0.484



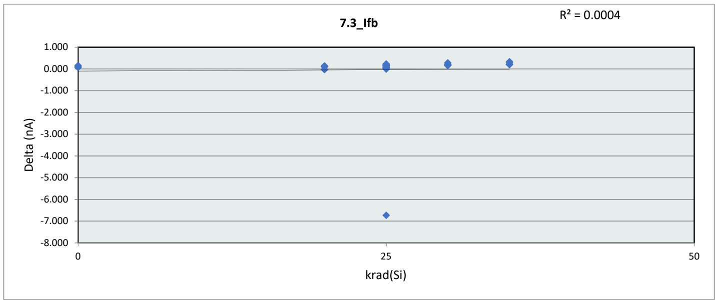
	6.4_Ignd				
Test Site					
Tester					
Test Number					
Max Limit	10	mA			
Min Limit	0	mA			
krad(Si)	0	20	25	30	35
LL	0.000	0.000	0.000	0.000	0.000
Min	4.810	4.087	3.447	3.877	3.917
Average	5.421	4.553	4.480	4.556	4.422
Max	6.169	4.823	5.194	4.836	4.688
UL	10.000	10.000	10.000	10.000	10.000



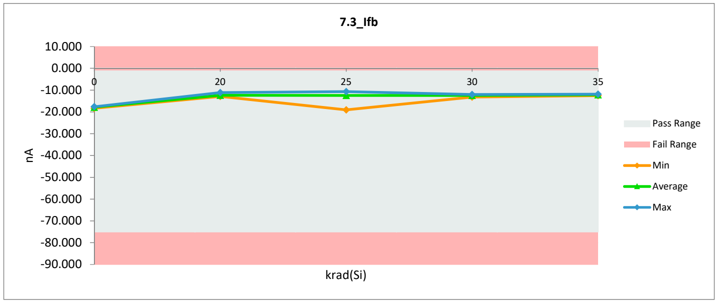
LDR TID Report
TPS7H1210-SEP

krad(Si)	Description
20	20 krad Unbiased
25	20 krad Biased
30	30 krad Unbiased
35	30 krad Biased

		7.3_Ifb		
	Test Site			
	Tester			
	Test Number			
	Unit	nA	nA	
	Max Limit	0	-1	
	Min Limit	-40	-75	
krad(Si)	Serial #	PreLDR	PostLDR	Delta
0	CU1	-18.458	-18.300	0.158
0	CU2	-17.721	-17.608	0.113
0	CU3	-17.725	-17.654	0.071
20	51	-12.945	-12.840	0.105
20	52	-12.873	-12.895	-0.022
20	53	-11.098	-11.125	-0.027
20	54	-12.330	-12.229	0.101
20	55	-12.976	-12.837	0.139
25	56	-10.733	-10.691	0.041
25	57	-12.370	-12.272	0.099
25	58	-12.419	-12.350	0.069
25	59	-12.667	-12.439	0.228
25	60	-11.343	-11.306	0.036
25	61	-12.640	-12.564	0.076
25	62	-12.268	-12.188	0.080
25	63	-12.139	-11.993	0.146
25	64	-11.885	-11.840	0.045
25	65	-11.495	-11.503	-0.009
25	66	-12.982	-12.826	0.155
25	67	-12.113	-11.962	0.151
25	68	-13.249	-13.030	0.219
25	69	-12.585	-12.538	0.047
25	70	-12.361	-12.173	0.188
25	71	-12.310	-12.123	0.187
25	72	-13.136	-13.040	0.096
25	73	-12.158	-12.006	0.152
25	74	-12.586	-12.401	0.185
25	75	-12.297	-19.032	-6.734
25	76	-11.968	-11.807	0.161
25	77	-12.254	-12.090	0.164
30	81	-13.315	-13.159	0.156
30	82	-12.148	-11.975	0.173
30	83	-12.338	-12.121	0.217
30	84	-12.462	-12.286	0.176
30	85	-13.138	-12.860	0.278
35	86	-12.313	-12.095	0.218
35	87	-12.833	-12.545	0.289
35	88	-12.205	-11.876	0.330
35	89	-12.388	-12.184	0.204
35	90	-12.358	-12.155	0.204
	Max	-10.733	-10.691	0.330
	Average	-12.790	-12.823	-0.033
	Min	-18.458	-19.032	-6.734
	Std Dev	1.591	1.878	1.090



	7.3_Ifb				
Test Site					
Tester					
Test Number					
Max Limit	-1	nA			
Min Limit	-75	nA			
krad(Si)	0	20	25	30	35
LL	-75.000	-75.000	-75.000	-75.000	-75.000
Min	-18.300	-12.895	-19.032	-13.159	-12.545
Average	-17.854	-12.385	-12.463	-12.480	-12.171
Max	-17.608	-11.125	-10.691	-11.975	-11.876
UL	-1.000	-1.000	-1.000	-1.000	-1.000



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