

SN54SC245-SEP Radiation Tolerant, 1.2-V to 5.5-V, Octal Bus Transceivers TID Report



ABSTRACT

This report covers the radiation characterization results of the SN54SC245-SEP octal bus transceivers. The study was done to determine Total Ionizing Dose (TID) effects under high dose rate (HDR) up to 50 krad(Si) as a one time characterization. The results show that all samples passed within the specified limits up to 50 krad(Si). However, Radiation Lot Acceptance Testing (RLAT) will be performed using 22 units at a dose level of 30 krad(Si) for future wafer lots. Furthermore, the SN54SC245-SEP is packaged in a space enhanced plastic for low outgassing characteristics and is Single Event Latch-Up (SEL) immune up to 43 MeV-cm²/mg, which makes the device an option for low Earth orbit space applications. The device can be used to drive signals over relatively long traces or transmission lines.

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1 Device Information

The SN74SC245-SEP is an octal bus transceiver with 3-state outputs. All eight channels are controlled by the direction (DIR) pin and output enable (\overline{OE}) pin. Each transceiver includes one buffer oriented from Ax to Bx and one from Bx to Ax, with at least one output disabled at all times. The direction (DIR) pin controls which buffer is active. The buffer that is not active has the output placed into the high-impedance state. The output enable (\overline{OE}) controls all outputs in the device. When the \overline{OE} pin is in the low state, the appropriate outputs as determined by the direction (DIR) pin are enabled. When the OE pin is in the high state, all outputs of the device are disabled. All disabled outputs are placed into the high-impedance state.

1.1 Device Details

Table 1-1 lists the device information used for TID HDR characterization and qualification.

Table 1-1. Device and Exposure Details

TID HDR Details: up to 50 krad(Si)	
TI Device Number	SN54SC245-SEP
Package	20-pin PW (TSSOP)
Technology	LBC9
Die Lot Number	2113830RFB
A/T Lot Number and Date Code	2CAH61K / 2249
Quantity Tested	40 irradiated devices + 4control
Lot Accept or Reject	Devices passed 30 krad(Si)
HDR Radiation Facility	Texas Instruments SLAB in Dallas, Texas
HDR Dose Level	10 krad(Si), 20 krad(Si), 30 krad(Si), 50 krad(Si)
HDR Dose Rate	264.5 -rad(Si)/s ionizing radiation
HDR Radiation Source	Gammacell 220 Excel (GC-220E) Co-60
Irradiation Temperature	Ambient, room temperature

2 Total Dose Test Setup

2.1 Test Overview

The SN54SC245-SEP samples were irradiated at a high dose rate of 264.5 rad(Si)/s up to 50 krad(Si) and then put through full electrical parametric testing on the production Automated Test Equipment (ATE). The samples were functional and passed all electrical parametric tests with readings within data sheet electrical specification limits.

2.2 Test Description and Facilities

The SN54SC245-SEP HDR exposure was performed on biased and unbiased devices in a Co-60 gamma cell at TI facility in Dallas, Texas. The un-attenuated dose rate of this cell is 264.5 rads(Si)/s. After exposure, the devices were packed in dry ice (per MIL-STD-883 Method 1019.9 section 3.10) and full post radiation electrical evaluation using Texas Instruments ATE was conducted. ATE test limits are set per data sheet electrical limits based on qualification and characterization data. Post radiation measurements were taken 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 were tested in biased conditions as described in the following sections.

2.3.1 Biased

Figure 2-1 shows the bias conditions for each pin during irradiation.

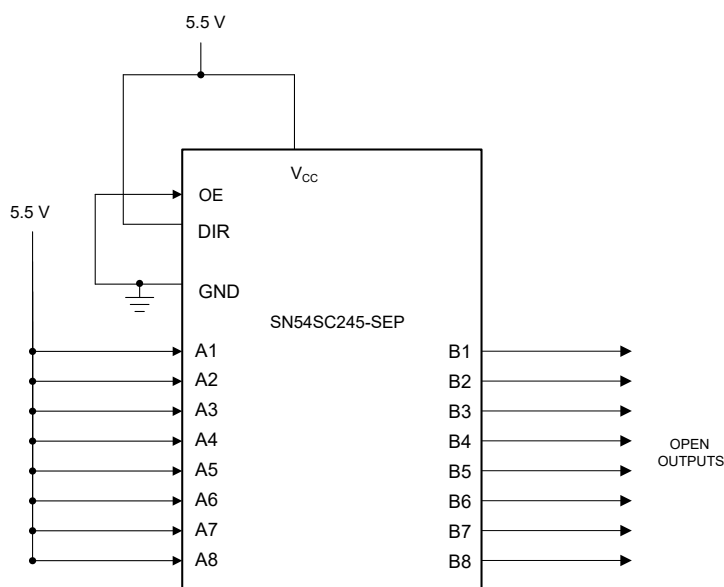


Figure 2-1. SN54SC245-SEP Biased Diagram

2.4 Test Configuration and Condition

A step-stress (10k, 20k, 30k and 50k) test method was used to determine the TID hardness level. That is, after a predetermined TID level was reached, an electrical test was performed on a given sample of parts to verify that the units are within specified data sheet electrical test limits. From initial feasibility studies the difference between pre- and post irradiation was greater for samples that were biased. For example, for RLAT 22 sample units were used at the 209-264 rad(Si)/s dose level with biased setup conditions and this will be repeated for each wafer lot. The RLAT units were parametrically tested on ATE and then put through 25°C anneal for 50 hours. The units were then put through parametric testing on the ATE and passed all tests to the specified SMD test limits.

[Table 2-1](#) lists the serialized samples used for TID characterization.

Table 2-1. HDR Device Information

Control Group	HDR = 264.5 rad(Si)/s				
Total Samples: 4	Total Samples: 40				
	Exposure Levels				
0 krad (Si)	10 krad (Si)	20 krad(Si)	30 krad(Si)		50 krad (Si)
Biased	Biased	Biased	Biased	Biased + 50 hour anneal	Biased
1 - 4	5 - 8	9 - 12	13 - 16	17 - 40	41 - 44

3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the SN54SC245-SEP passes up to 30 krad(Si) HDR TID irradiation. The drifts of the electrical parameters through HDR were within the data sheet limits.

Overall, the SN54SC245-SEP showed a strong degree of hardness to HDR TID irradiation up to 30 krad(Si). The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level. The parameters that did show a greater degree of change between pre- and post-irradiation were still within the electrical performance characteristics specified in the data sheet electrical parameters. For the data sheet electrical parameters and associated tests, see [SN74SC245-SEP Radiation-Tolerant, 1.2-V to 5.5-V, Octal Bus Transceivers With 3-State Outputs](#).

See [Section 5](#) for HDR report up to 50 krad(Si).

3.2 Specification Compliance Matrix

Table 3-1. SN54SC245-SEP Electrical Parameters Table

PARAMETER	TEST CONDITIONS	V _{CC}	T _A = -55°C to +125°C			UNIT	TEST NAME
			MIN	TYP	MAX		
V _{IH}	High-level input voltage	1.2 V to 1.3 V	0.78			V	VIH_1P2V
		1.65 V to 2 V	1.1				VIH_1P65V
		2.25 V to 2.75 V	1.28				VIH_2P25V
		3 V to 3.6 V	1.45				VIH_3V
		4.5 V to 5.5 V	2				VIH_4P5V
V _{IL}	Low-Level input voltage	1.2 V to 1.3 V	0.36			V	VIL_1P2V
		1.65 V to 2 V	0.51				VIL_1P65V
		2.25 V to 2.75 V	0.65				VIL_2P25V
		3 V to 3.6 V	0.75				VIL_3V
		4.5 V to 5.5 V	0.80				VIL_4P5V
V _{OH}	I _{OH} = -50 μA	1.2 V to 5.5 V	V _{CC} -0.1			V	VOH_N50UA_1P2V, VOH_N50UA_1P65V, VOH_N50UA_5P5V
	I _{OH} = -1 mA	1.2 V	0.8				VOH_N1MA_1P2V
	I _{OH} = -2 mA	1.65 V	1.21				VOH_N2MA_1P65V
	I _{OH} = -3 mA	2.25 V	1.93				VOH_N3MA_2P25V
	I _{OH} = -5.5 mA	3.0 V	2.49				VOH_N5P5MA_3V
	I _{OH} = -8 mA	4.5 V	3.95				VOH_N8MA_4P5V
V _{OL}	I _{OL} = 50 μA	1.2 V to 5.5 V	0.1			V	VOL_50UA_1P2V, VOL_50UA_1P65V, VOL_50UA_5P5V
	I _{OL} = 1 mA	1.2 V	0.2				VOL_1MA_1P2V
	I _{OL} = 2 mA	1.65 V	0.25				VOL_2MA_1P65V
	I _{OL} = 3 mA	2.25 V	0.2				VOL_3MA_2P25V
	I _{OL} = 5.5 mA	3.0 V	0.25				VOL_5P5MA_3V
	I _{OL} = 8 mA	4.5 V	0.35				VOL_8MA_4P5V
I _{CC}	V _I = V _{CC} or GND, I _O = 0	1.2 V to 1.3 V	2	750	μA	ICC_1P2V	
		1.65 V to 2.0 V	10	850	μA	ICC_1P65V	
		4.5 V to 5.5 V	20	1,100	μA	ICC_4P5V	
Δ _{ICC}	One input at 0.3 V or 3.4 V, other inputs at V _{CC} or GND	5.5 V	1.5			mA	ICCT_5P5V
	One input at 0.3 V or 1.1 V, other inputs at V _{CC} or GND	1.8 V	10			μA	ICC_1P8V

Table 3-1. SN54SC245-SEP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITIONS	V _{CC}	T _A = -55°C to +125°C			UNIT	TEST NAME
			MIN	TYP	MAX		
I _I	V _I = 0 V to V _{CC}	V _I = 0 V to V _{CC}			±1	μA	II
I _{OZ}	V _O = V _{CC} or GND	5.5 V			±2.5	μA	IOZ

4 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.

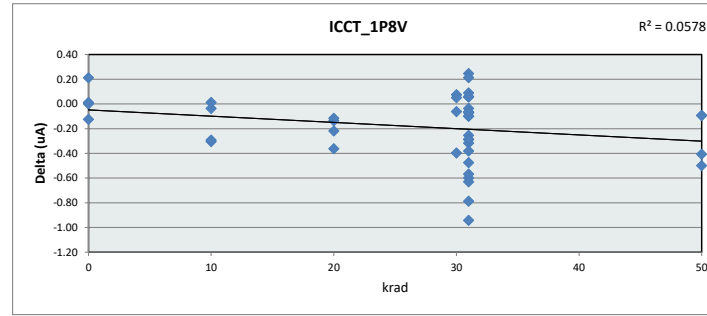
5 Appendix: HDR TID Report Data

This appendix provides the SN54SC245-SEP TID HDR report. The report shows the variation for each parameter up to 50 krad(Si).

TID Report SN54SC245-SEP

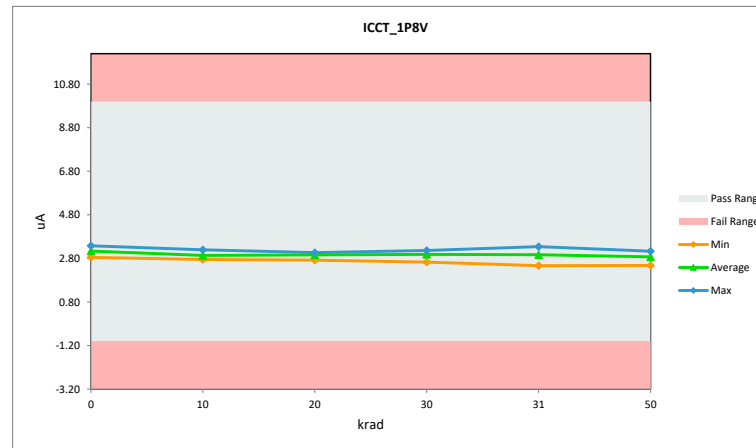
ICCT_1P8V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	uA	uA
Max Limit	10	10
Min Limit	-1	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	3.169	3.380	0.21	6.66%	1.92%
0	2	3.212	3.224	0.01	0.37%	0.11%
0	3	2.973	2.848	-0.13	-4.20%	1.14%
0	4	3.098	3.098	0.00	0.00%	0.00%
10	5	3.059	2.754	-0.31	-9.97%	2.77%
10	6	3.073	3.036	-0.04	-1.20%	0.34%
10	7	3.047	2.754	-0.29	-9.62%	2.66%
10	8	3.181	3.192	0.01	0.35%	0.10%
20	9	3.086	2.723	-0.36	-11.76%	3.30%
20	10	3.204	3.067	-0.14	-4.28%	1.25%
20	11	3.121	3.005	-0.12	-3.72%	1.05%
20	12	3.255	3.036	-0.22	-6.73%	1.99%
30	13	3.087	3.161	0.07	2.40%	0.67%
30	14	3.067	3.005	-0.06	-2.02%	0.56%
30	15	3.111	3.161	0.05	1.61%	0.45%
30	16	3.026	2.629	-0.40	-13.12%	3.61%
31	17	3.098	2.780	-0.32	-10.26%	2.89%
31	18	3.224	2.624	-0.60	-18.61%	5.45%
31	19	3.067	2.499	-0.57	-18.52%	5.16%
31	20	3.286	3.343	0.06	1.73%	0.52%
31	21	3.161	3.093	-0.07	-2.15%	0.62%
31	22	3.255	3.218	-0.04	-1.14%	0.34%
31	23	3.568	2.937	-0.63	-17.68%	5.74%
31	24	3.537	3.062	-0.48	-13.43%	4.32%
31	25	3.098	2.999	-0.10	-3.20%	0.90%
31	26	3.411	2.624	-0.79	-23.07%	7.15%
31	27	3.411	2.468	-0.94	-27.65%	8.57%
31	28	3.192	2.937	-0.26	-7.99%	2.32%
31	29	3.067	3.312	0.25	7.99%	2.23%
31	30	3.036	2.749	-0.29	-9.45%	2.61%
31	31	3.005	3.218	0.21	7.09%	1.94%
31	32	3.255	3.312	0.06	1.75%	0.52%
31	33	3.130	2.843	-0.29	-9.17%	2.61%
31	34	3.255	3.187	-0.07	-2.09%	0.62%
31	35	3.161	3.093	-0.07	-2.15%	0.62%
31	36	3.036	2.937	-0.10	-3.26%	0.90%
31	37	3.255	2.874	-0.38	-11.71%	3.46%
31	38	2.817	2.905	0.09	3.12%	0.80%
31	39	3.255	3.312	0.06	1.75%	0.52%
31	40	2.973	2.905	-0.07	-2.29%	0.62%
50	41	2.973	2.473	-0.50	-16.82%	4.55%
50	42	3.255	2.848	-0.41	-12.50%	3.70%
50	43	3.130	3.036	-0.09	-3.00%	0.85%
50	44	3.224	3.130	-0.09	-2.92%	0.85%
	Max	3.568	3.380	-0.19	7.99%	8.57%
	Average	3.157	2.973	-0.18	-5.70%	2.12%
	Min	2.817	2.468	-0.35	-27.65%	0.00%
	Std Dev	0.145	0.241	0.10	8.09%	2.02%



ICCT_1P8V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	10	uA
Min Limit	-1	uA

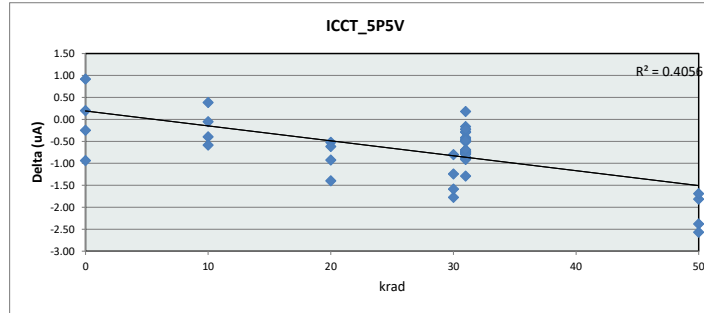
krad	0	10	20	30	31	50
LL	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Min	2.85	2.75	2.72	2.63	2.47	2.47
Average	3.14	2.93	2.96	2.99	2.97	2.87
Max	3.38	3.19	3.07	3.16	3.34	3.13
UL	10.00	10.00	10.00	10.00	10.00	10.00



TID Report SN54SC245-SEP

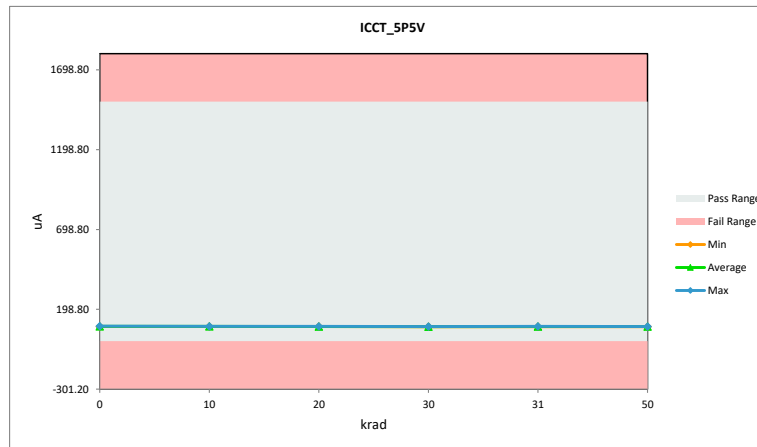
ICCT_5P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	uA	uA
Max Limit	1500	1500
Min Limit	-1	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	92.443	93.361	0.92	0.99%	0.06%
0	2	92.942	93.142	0.20	0.22%	0.01%
0	3	92.172	91.233	-0.94	-1.02%	0.06%
0	4	91.233	90.983	-0.25	-0.27%	0.02%
10	5	91.412	91.797	0.38	0.42%	0.03%
10	6	91.755	91.703	-0.05	-0.06%	0.00%
10	7	91.287	90.889	-0.40	-0.44%	0.03%
10	8	92.099	91.515	-0.58	-0.63%	0.04%
20	9	91.630	91.108	-0.52	-0.57%	0.03%
20	10	92.380	90.983	-1.40	-1.51%	0.09%
20	11	91.724	91.108	-0.62	-0.67%	0.04%
20	12	92.661	91.734	-0.93	-1.00%	0.06%
30	13	91.630	90.388	-1.24	-1.36%	0.08%
30	14	91.380	90.576	-0.80	-0.88%	0.05%
30	15	91.849	90.075	-1.77	-1.93%	0.12%
30	16	91.005	89.418	-1.59	-1.74%	0.11%
31	17	90.983	90.568	-0.42	-0.46%	0.03%
31	18	91.202	90.349	-0.85	-0.94%	0.06%
31	19	92.203	91.505	-0.70	-0.76%	0.05%
31	20	92.047	91.537	-0.51	-0.55%	0.03%
31	21	91.859	91.630	-0.23	-0.25%	0.02%
31	22	91.390	90.099	-1.29	-1.41%	0.09%
31	23	91.577	91.287	-0.29	-0.32%	0.02%
31	24	91.108	90.631	-0.48	-0.52%	0.03%
31	25	91.421	90.693	-0.73	-0.80%	0.05%
31	26	91.452	90.568	-0.88	-0.97%	0.06%
31	27	91.327	91.505	0.18	0.19%	0.01%
31	28	91.108	90.631	-0.48	-0.52%	0.03%
31	29	92.078	91.287	-0.79	-0.86%	0.05%
31	30	91.390	91.099	-0.29	-0.32%	0.02%
31	31	92.047	91.287	-0.76	-0.83%	0.05%
31	32	91.264	90.506	-0.76	-0.83%	0.05%
31	33	91.640	91.474	-0.17	-0.18%	0.01%
31	34	91.202	90.756	-0.45	-0.49%	0.03%
31	35	91.671	90.756	-0.92	-1.00%	0.06%
31	36	91.045	90.568	-0.48	-0.52%	0.03%
31	37	90.732	90.506	-0.23	-0.25%	0.02%
31	38	91.077	90.349	-0.73	-0.80%	0.05%
31	39	91.609	90.818	-0.79	-0.86%	0.05%
31	40	90.670	89.975	-0.70	-0.77%	0.05%
50	41	91.984	90.169	-1.82	-1.97%	0.12%
50	42	92.923	91.233	-1.69	-1.82%	0.11%
50	43	93.205	90.826	-2.38	-2.55%	0.16%
50	44	92.141	89.574	-2.57	-2.79%	0.17%
	Max	93.205	93.361	0.16	0.99%	0.17%
	Average	91.681	90.959	-0.72	-0.79%	0.05%
	Min	90.670	89.418	-1.25	-2.79%	0.00%
	Std Dev	0.588	0.759	0.17	0.73%	0.04%



ICCT_5P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1500	uA
Min Limit	-1	uA

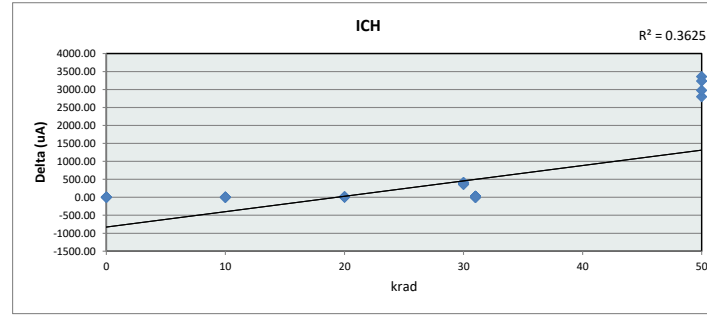
krad	0	10	20	30	31	50
LL	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Min	90.98	90.89	90.98	89.42	89.98	89.57
Average	92.18	91.48	91.23	90.11	90.85	90.45
Max	93.36	91.80	91.73	90.58	91.63	91.23
UL	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00



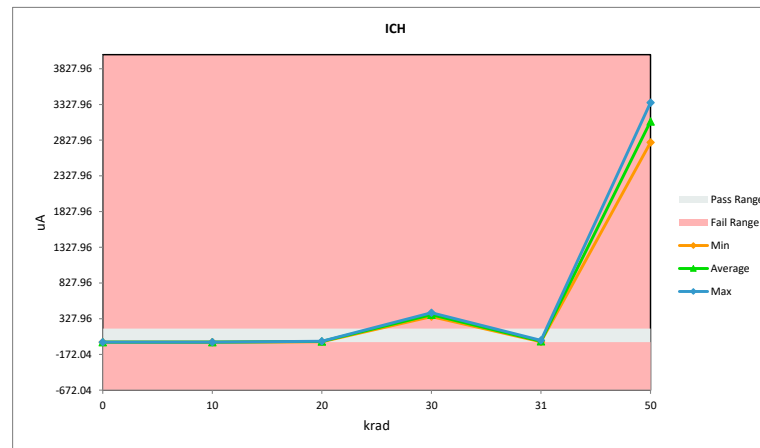
TID Report SN54SC245-SEP

ICH		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	uA	uA
Max Limit	190	190
Min Limit	-1	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.058	0.040	-0.02	-31.03%	0.01%
0	2	0.074	0.034	-0.04	-54.05%	0.02%
0	3	0.024	0.012	-0.01	-50.00%	0.01%
0	4	0.024	0.002	-0.02	-91.67%	0.01%
10	5	0.064	0.024	-0.04	-62.50%	0.02%
10	6	0.136	0.122	-0.01	-10.29%	0.01%
10	7	0.064	0.043	-0.02	-32.81%	0.01%
10	8	0.078	0.053	-0.03	-32.05%	0.01%
20	9	0.056	13.037	12.98	23180.36%	6.80%
20	10	0.062	5.629	5.57	8979.03%	2.91%
20	11	0.070	7.996	7.93	11322.86%	4.15%
20	12	0.065	9.272	9.21	14164.62%	4.82%
30	13	0.068	363.635	363.57	534657.35%	190.35%
30	14	0.070	410.300	410.23	586042.86%	214.78%
30	15	0.069	408.829	408.76	592405.80%	214.01%
30	16	0.057	357.939	357.88	627863.16%	187.37%
31	17	0.002	25.406	25.40	1270200.00%	13.30%
31	18	0.028	18.248	18.22	65071.43%	9.54%
31	19	0.034	8.796	8.76	25770.59%	4.59%
31	20	0.024	19.232	19.21	80033.33%	10.06%
31	21	0.021	12.532	12.51	59576.19%	6.55%
31	22	0.018	5.538	5.52	30666.67%	2.89%
31	23	0.009	4.507	4.50	49977.78%	2.35%
31	24	0.024	5.667	5.64	23512.50%	2.95%
31	25	0.031	24.885	24.85	80174.19%	13.01%
31	26	0.015	19.090	19.08	127166.67%	9.99%
31	27	0.024	19.125	19.10	79587.50%	10.00%
31	28	0.015	12.067	12.05	80346.67%	6.31%
31	29	0.034	9.293	9.26	27232.35%	4.85%
31	30	0.050	6.518	6.47	12936.00%	3.39%
31	31	0.002	5.305	5.30	265150.00%	2.78%
31	32	0.037	4.055	4.02	10859.46%	2.10%
31	33	0.021	23.936	23.92	113880.95%	12.52%
31	34	0.056	19.562	19.51	34832.14%	10.21%
31	35	0.021	15.414	15.39	73300.00%	8.06%
31	36	0.006	21.362	21.36	355933.33%	11.18%
31	37	0.009	8.787	8.78	97533.33%	4.60%
31	38	0.012	7.747	7.74	64458.33%	4.05%
31	39	0.015	4.488	4.47	29820.00%	2.34%
31	40	0.050	3.941	3.89	7782.00%	2.04%
50	41	0.023	2796.844	2796.82	12160091.30%	1464.30%
50	42	0.020	3354.223	3354.20	16771015.00%	1756.13%
50	43	0.022	2975.084	2975.06	13523009.09%	1557.62%
50	44	0.026	3233.821	3233.80	12437673.08%	1693.09%
	Max	0.136	3354.223	3354.09	16771015.00%	1756.13%
	Average	0.038	323.692	323.65	1371723.67%	169.46%
	Min	0.002	0.002	0.00	-91.67%	0.01%
	Std Dev	0.027	894.077	894.05	3997632.89%	468.10%



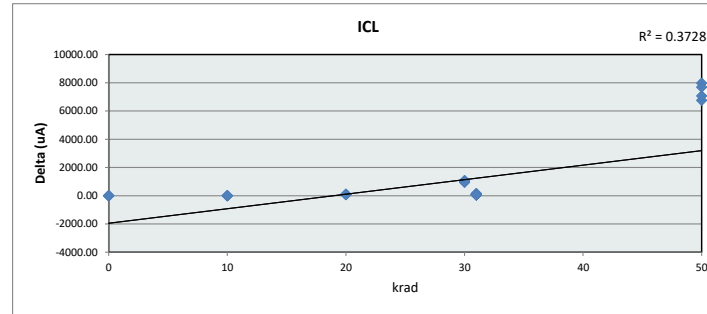
ICH						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	190	uA				
Min Limit	-1	uA				
krad	0	10	20	30	31	50
LL	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Min	0.00	0.02	5.63	357.94	3.94	2796.84
Average	0.02	0.06	8.98	385.18	12.73	3089.99
Max	0.04	0.12	13.04	410.30	25.41	3354.22
UL	190.00	190.00	190.00	190.00	190.00	190.00



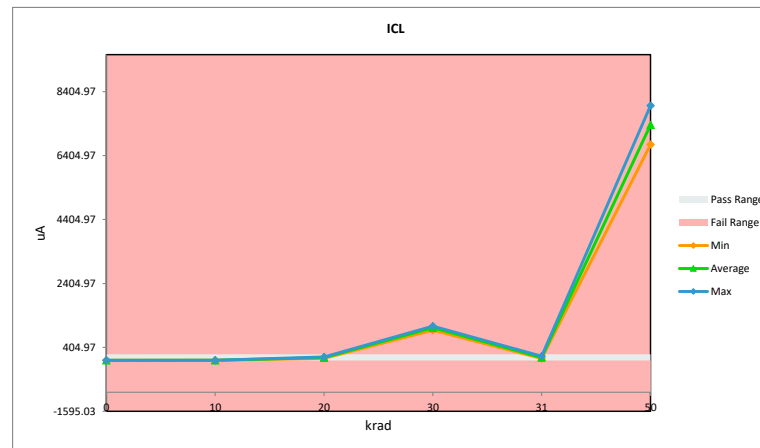
TID Report SN54SC245-SEP

ICL		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	uA	
Max Limit	190	190
Min Limit	-1	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.013	0.015	0.00	15.38%	0.00%
0	2	0.016	0.012	0.00	-25.00%	0.00%
0	3	0.021	0.018	0.00	-14.29%	0.00%
0	4	0.012	0.012	0.00	0.00%	0.00%
10	5	0.016	0.122	0.11	662.50%	0.06%
10	6	0.015	0.755	0.74	4933.33%	0.39%
10	7	0.015	0.594	0.58	3860.00%	0.30%
10	8	0.014	0.034	0.02	142.86%	0.01%
20	9	0.013	103.878	103.87	798961.54%	54.38%
20	10	0.015	64.928	64.91	432753.33%	33.99%
20	11	0.012	82.704	82.69	689100.00%	43.29%
20	12	0.018	79.105	79.09	439372.22%	41.41%
30	13	0.015	1004.864	1004.85	6698993.33%	526.10%
30	14	0.011	1054.095	1054.08	9582581.82%	551.88%
30	15	0.015	1069.431	1069.42	7129440.00%	559.90%
30	16	0.018	943.113	943.10	5239416.67%	493.77%
31	17	0.012	128.290	128.28	1068983.33%	67.16%
31	18	0.009	113.785	113.78	1264177.78%	59.57%
31	19	-0.001	71.176	71.18	-7117700.00%	37.27%
31	20	0.024	110.772	110.75	461450.00%	57.98%
31	21	0.018	100.314	100.30	557200.00%	52.51%
31	22	0.009	62.183	62.17	690822.22%	32.55%
31	23	0.018	61.806	61.79	343266.67%	32.35%
31	24	0.018	70.849	70.83	393505.56%	37.08%
31	25	0.015	126.150	126.14	840900.00%	66.04%
31	26	0.031	115.224	115.19	371590.32%	60.31%
31	27	-0.007	117.496	117.50	-1678614.29%	61.52%
31	28	-0.010	86.579	86.59	-865890.00%	45.33%
31	29	0.018	81.014	81.00	449977.78%	42.41%
31	30	-0.004	69.174	69.18	-1729450.00%	36.22%
31	31	0.002	63.047	63.05	3152250.00%	33.01%
31	32	0.002	60.087	60.09	3004250.00%	31.46%
31	33	0.002	118.690	118.69	5934400.00%	62.14%
31	34	0.037	112.010	111.97	302629.73%	58.62%
31	35	0.006	95.604	95.60	1593300.00%	50.05%
31	36	0.009	124.066	124.06	1378411.11%	64.95%
31	37	0.012	79.252	79.24	660333.33%	41.49%
31	38	-0.001	72.109	72.11	-7211000.00%	37.75%
31	39	0.031	56.106	56.08	180887.10%	29.36%
31	40	0.012	57.023	57.01	475091.67%	29.85%
50	41	0.017	6749.808	6749.79	39704652.94%	3533.92%
50	42	0.008	7969.149	7969.14	99614262.50%	4172.33%
50	43	0.079	7065.378	7065.30	8943416.46%	3699.11%
50	44	0.205	7686.473	7686.27	3749399.02%	4024.22%
	Max	0.205	7969.149	7968.94	99614262.50%	4172.33%
	Average	0.018	818.802	818.78	4262561.29%	428.68%
	Min	-0.010	0.012	0.02	-7211000.00%	0.00%
	Std Dev	0.032	2118.356	2118.32	16127550.79%	1109.08%



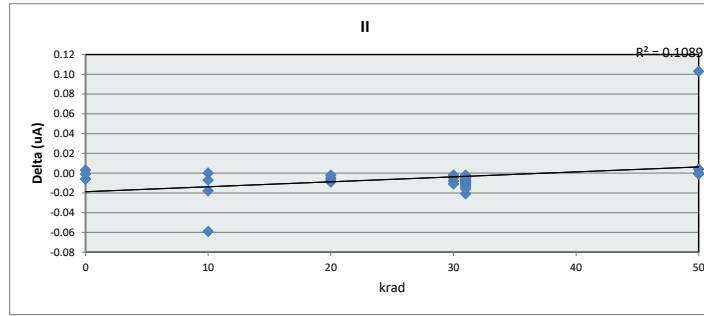
ICL						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	190	uA				
Min Limit	-1	uA				
krad	0	10	20	30	31	50
LL	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Min	0.01	0.03	64.93	943.11	56.11	6749.81
Average	0.01	0.38	82.65	1017.88	89.70	7367.70
Max	0.02	0.76	103.88	1069.43	128.29	7969.15
UL	190.00	190.00	190.00	190.00	190.00	190.00



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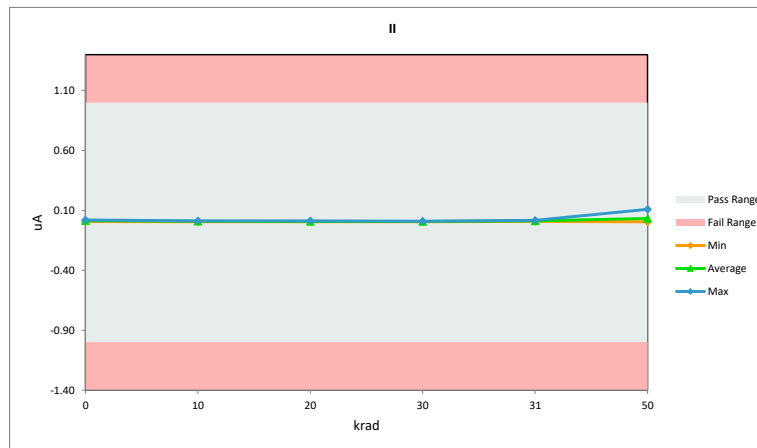
II		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	uA	uA
Max Limit	1	1
Min Limit	-1	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.014	0.008	-0.01	-42.86%	0.30%
0	2	0.013	0.007	-0.01	-46.15%	0.30%
0	3	0.017	0.020	0.00	17.65%	0.15%
0	4	0.021	0.020	0.00	-4.76%	0.05%
10	5	0.013	0.013	0.00	0.00%	0.00%
10	6	0.069	0.010	-0.06	-85.51%	2.95%
10	7	0.016	0.009	-0.01	-43.75%	0.35%
10	8	0.024	0.006	-0.02	-75.00%	0.90%
20	9	0.011	0.006	-0.01	-45.45%	0.25%
20	10	0.013	0.006	-0.01	-53.85%	0.35%
20	11	0.014	0.012	0.00	-14.29%	0.10%
20	12	0.016	0.007	-0.01	-56.25%	0.45%
30	13	0.012	0.010	0.00	-16.67%	0.10%
30	14	0.015	0.007	-0.01	-53.33%	0.40%
30	15	0.013	0.008	-0.01	-38.46%	0.25%
30	16	0.017	0.006	-0.01	-64.71%	0.55%
31	17	0.020	0.011	-0.01	-45.00%	0.45%
31	18	0.020	0.011	-0.01	-45.00%	0.45%
31	19	0.020	0.015	-0.01	-25.00%	0.25%
31	20	0.020	0.013	-0.01	-35.00%	0.35%
31	21	0.020	0.012	-0.01	-40.00%	0.40%
31	22	0.021	0.013	-0.01	-38.10%	0.40%
31	23	0.021	0.012	-0.01	-42.86%	0.45%
31	24	0.020	0.015	-0.01	-25.00%	0.25%
31	25	0.021	0.016	-0.01	-23.81%	0.25%
31	26	0.021	0.011	-0.01	-47.62%	0.50%
31	27	0.021	0.010	-0.01	-52.38%	0.55%
31	28	0.021	0.016	-0.01	-23.81%	0.25%
31	29	0.022	0.010	-0.01	-54.55%	0.60%
31	30	0.037	0.016	-0.02	-56.76%	1.05%
31	31	0.022	0.008	-0.01	-63.64%	0.70%
31	32	0.020	0.016	0.00	-20.00%	0.20%
31	33	0.019	0.014	-0.01	-26.32%	0.25%
31	34	0.026	0.010	-0.02	-61.54%	0.80%
31	35	0.021	0.016	-0.01	-23.81%	0.25%
31	36	0.021	0.013	-0.01	-38.10%	0.40%
31	37	0.021	0.015	-0.01	-28.57%	0.30%
31	38	0.019	0.017	0.00	-10.53%	0.10%
31	39	0.020	0.013	-0.01	-35.00%	0.35%
31	40	0.022	0.017	-0.01	-22.73%	0.25%
50	41	0.005	0.005	0.00	0.00%	0.00%
50	42	0.006	0.109	0.10	1716.67%	5.15%
50	43	0.007	0.011	0.00	57.14%	0.20%
50	44	0.007	0.006	0.00	-14.29%	0.05%
	Max	0.069	0.109	0.04	1716.67%	5.15%
	Average	0.019	0.014	-0.01	5.71%	0.51%
	Min	0.005	0.005	0.00	-85.51%	0.00%
	Std Dev	0.010	0.015	0.01	265.13%	0.85%



II		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1	uA
Min Limit	-1	uA

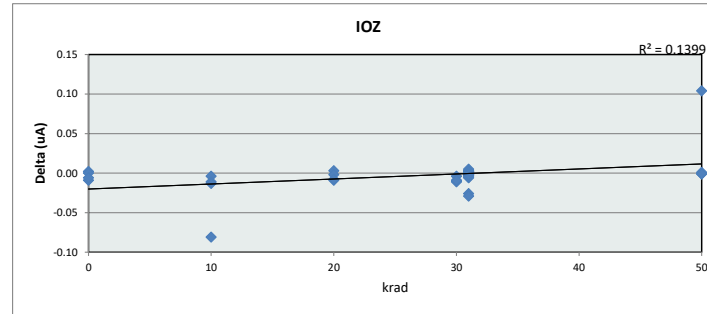
krad	0	10	20	30	31	50
LL	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
Min	0.01	0.01	0.01	0.01	0.01	0.01
Average	0.01	0.01	0.01	0.01	0.01	0.03
Max	0.02	0.01	0.01	0.01	0.02	0.11
UL	1.00	1.00	1.00	1.00	1.00	1.00



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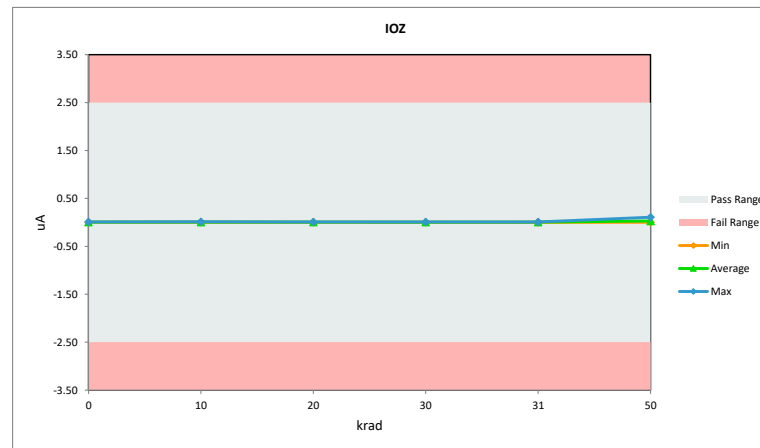
IOZ		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	uA	uA
Max Limit	2.5	2.5
Min Limit	-2.5	-2.5

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.009	0.011	0.00	22.22%	0.04%
0	2	0.014	0.005	-0.01	-64.29%	0.18%
0	3	0.005	0.005	0.00	0.00%	0.00%
0	4	0.010	0.004	-0.01	-60.00%	0.12%
10	5	0.008	0.004	0.00	-50.00%	0.08%
10	6	0.090	0.009	-0.08	-90.00%	1.62%
10	7	0.013	0.002	-0.01	-84.62%	0.22%
10	8	0.025	0.012	-0.01	-52.00%	0.26%
20	9	0.006	0.009	0.00	50.00%	0.06%
20	10	0.011	0.002	-0.01	-81.82%	0.18%
20	11	0.010	0.008	0.00	-20.00%	0.04%
20	12	0.015	0.007	-0.01	-53.33%	0.16%
30	13	0.012	0.002	-0.01	-83.33%	0.20%
30	14	0.014	0.010	0.00	-28.57%	0.08%
30	15	0.016	0.005	-0.01	-68.75%	0.22%
30	16	0.011	0.002	-0.01	-81.82%	0.18%
31	17	0.004	0.004	0.00	0.00%	0.00%
31	18	0.005	0.004	0.00	-20.00%	0.02%
31	19	0.007	0.001	-0.01	-85.71%	0.12%
31	20	0.005	0.008	0.00	60.00%	0.06%
31	21	0.005	0.006	0.00	20.00%	0.02%
31	22	0.004	0.006	0.00	50.00%	0.04%
31	23	0.004	0.009	0.01	125.00%	0.10%
31	24	0.007	0.006	0.00	-14.29%	0.02%
31	25	0.004	0.006	0.00	50.00%	0.04%
31	26	0.005	0.003	0.00	-40.00%	0.04%
31	27	0.004	0.005	0.00	25.00%	0.02%
31	28	0.004	0.006	0.00	50.00%	0.04%
31	29	0.004	0.007	0.00	75.00%	0.06%
31	30	0.031	0.005	-0.03	-83.87%	0.52%
31	31	0.007	0.004	0.00	-42.86%	0.06%
31	32	0.005	0.003	0.00	-40.00%	0.04%
31	33	0.011	0.006	-0.01	-45.45%	0.10%
31	34	0.035	0.006	-0.03	-82.86%	0.58%
31	35	0.005	0.006	0.00	20.00%	0.02%
31	36	0.004	0.001	0.00	-75.00%	0.06%
31	37	0.007	0.003	0.00	-57.14%	0.08%
31	38	0.004	0.005	0.00	25.00%	0.02%
31	39	0.004	0.003	0.00	-25.00%	0.02%
31	40	0.005	0.003	0.00	-40.00%	0.04%
50	41	0.003	0.002	0.00	-33.33%	0.02%
50	42	0.004	0.108	0.10	2600.00%	2.08%
50	43	0.002	0.003	0.00	50.00%	0.02%
50	44	0.005	0.004	0.00	-20.00%	0.02%
	Max	0.090	0.108	0.02	2600.00%	2.08%
	Average	0.011	0.008	0.00	38.60%	0.18%
	Min	0.002	0.001	0.00	-90.00%	0.00%
	Std Dev	0.014	0.016	0.00	398.64%	0.39%



IOZ		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	2.5	uA
Min Limit	-2.5	uA

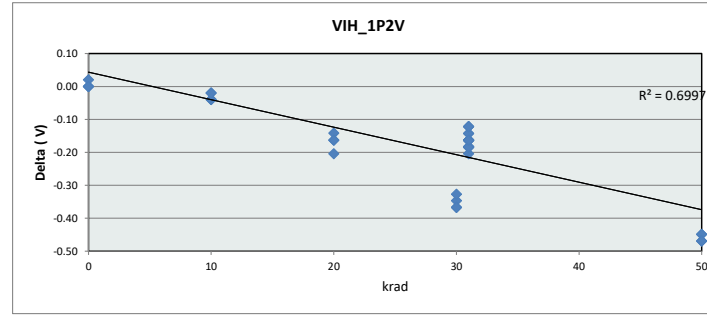
krad	0	10	20	30	31	50
LL	-2.50	-2.50	-2.50	-2.50	-2.50	-2.50
Min	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.01	0.01	0.01	0.00	0.00	0.03
Max	0.01	0.01	0.01	0.01	0.01	0.11
UL	2.50	2.50	2.50	2.50	2.50	2.50



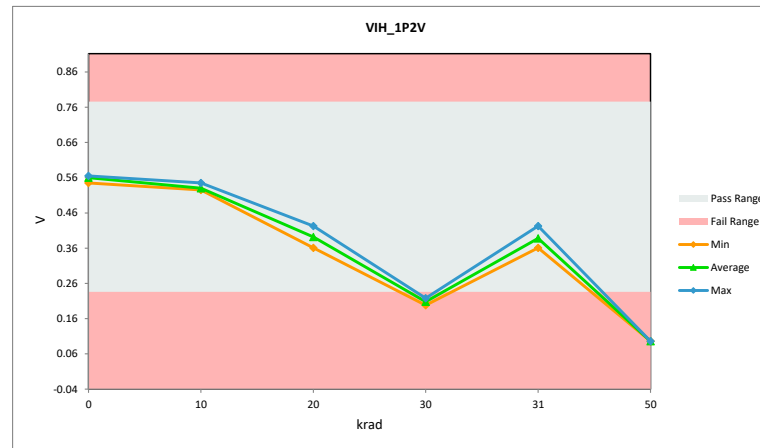
TID Report SN54SC245-SEP

VIH_1P2V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.78	0.78
Min Limit	0.24	0.24

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.569	0.569	0.00	0.00%	0.00%
0	2	0.569	0.569	0.00	0.00%	0.00%
0	3	0.549	0.569	0.02	3.64%	3.70%
0	4	0.549	0.549	0.00	0.00%	0.00%
10	5	0.569	0.529	-0.04	-7.03%	7.41%
10	6	0.569	0.529	-0.04	-7.03%	7.41%
10	7	0.549	0.529	-0.02	-3.64%	3.70%
10	8	0.569	0.549	-0.02	-3.51%	3.70%
20	9	0.549	0.386	-0.16	-29.69%	30.19%
20	10	0.569	0.427	-0.14	-24.96%	26.30%
20	11	0.569	0.406	-0.16	-28.65%	30.19%
20	12	0.569	0.365	-0.20	-35.85%	37.78%
30	13	0.569	0.222	-0.35	-60.98%	64.26%
30	14	0.569	0.202	-0.37	-64.50%	67.96%
30	15	0.569	0.202	-0.37	-64.50%	67.96%
30	16	0.549	0.222	-0.33	-59.56%	60.56%
31	17	0.549	0.365	-0.18	-33.52%	34.07%
31	18	0.549	0.386	-0.16	-29.69%	30.19%
31	19	0.569	0.406	-0.16	-28.65%	30.19%
31	20	0.549	0.365	-0.18	-33.52%	34.07%
31	21	0.549	0.386	-0.16	-29.69%	30.19%
31	22	0.569	0.406	-0.16	-28.65%	30.19%
31	23	0.549	0.427	-0.12	-22.22%	22.59%
31	24	0.549	0.406	-0.14	-26.05%	26.48%
31	25	0.549	0.365	-0.18	-33.52%	34.07%
31	26	0.549	0.365	-0.18	-33.52%	34.07%
31	27	0.549	0.365	-0.18	-33.52%	34.07%
31	28	0.549	0.386	-0.16	-29.69%	30.19%
31	29	0.569	0.406	-0.16	-28.65%	30.19%
31	30	0.569	0.406	-0.16	-28.65%	30.19%
31	31	0.569	0.406	-0.16	-28.65%	30.19%
31	32	0.569	0.406	-0.16	-28.65%	30.19%
31	33	0.569	0.386	-0.18	-32.16%	33.89%
31	34	0.549	0.365	-0.18	-33.52%	34.07%
31	35	0.569	0.365	-0.20	-35.85%	37.78%
31	36	0.549	0.365	-0.18	-33.52%	34.07%
31	37	0.549	0.406	-0.14	-26.05%	26.48%
31	38	0.569	0.406	-0.16	-28.65%	30.19%
31	39	0.549	0.427	-0.12	-22.22%	22.59%
31	40	0.549	0.427	-0.12	-22.22%	22.59%
50	41	0.549	0.100	-0.45	-81.79%	83.15%
50	42	0.549	0.100	-0.45	-81.79%	83.15%
50	43	0.569	0.100	-0.47	-82.43%	86.85%
50	44	0.569	0.100	-0.47	-82.43%	86.85%
Max		0.569	0.569	0.00	3.64%	86.85%
Average		0.559	0.378	-0.18	-32.40%	33.72%
Min		0.549	0.100	-0.45	-82.43%	0.00%
Std Dev		0.010	0.125	0.12	22.37%	23.00%



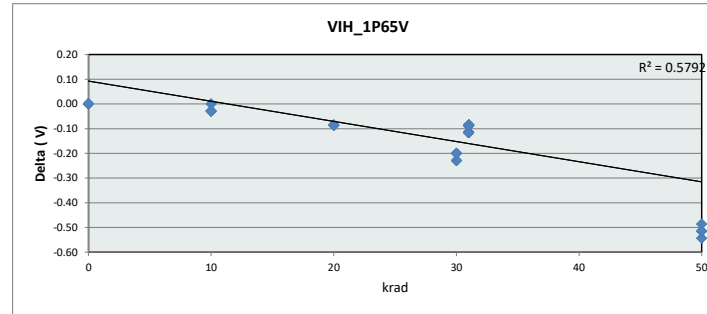
VIH_1P2V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	0.78	V				
Min Limit	0.24	V				
krad	0	10	20	30	31	50
LL	0.24	0.24	0.24	0.24	0.24	0.24
Min	0.55	0.53	0.37	0.20	0.37	0.10
Average	0.56	0.53	0.40	0.21	0.39	0.10
Max	0.57	0.55	0.43	0.22	0.43	0.10
UL	0.78	0.78	0.78	0.78	0.78	0.78



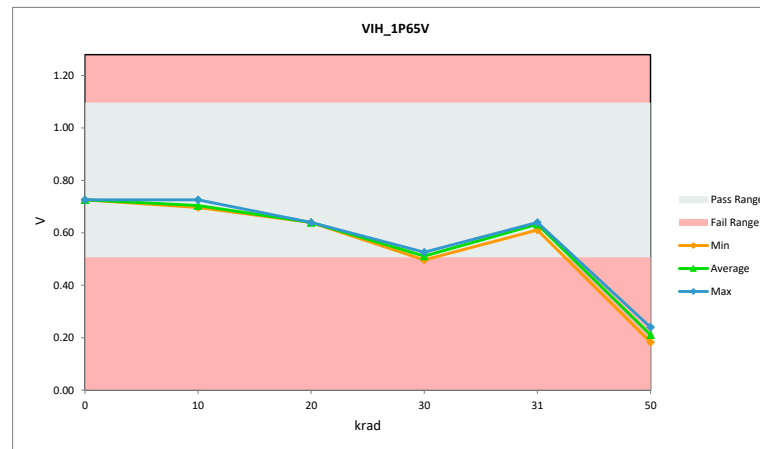
TID Report SN54SC245-SEP

VIH_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.1	1.1
Min Limit	0.51	0.51

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.729	0.729	0.00	0.00%	0.00%
0	2	0.729	0.729	0.00	0.00%	0.00%
0	3	0.729	0.729	0.00	0.00%	0.00%
0	4	0.729	0.729	0.00	0.00%	0.00%
10	5	0.729	0.700	-0.03	-3.98%	4.92%
10	6	0.729	0.700	-0.03	-3.98%	4.92%
10	7	0.729	0.700	-0.03	-3.98%	4.92%
10	8	0.729	0.729	0.00	0.00%	0.00%
20	9	0.729	0.643	-0.09	-11.80%	14.58%
20	10	0.729	0.643	-0.09	-11.80%	14.58%
20	11	0.729	0.643	-0.09	-11.80%	14.58%
20	12	0.729	0.643	-0.09	-11.80%	14.58%
30	13	0.729	0.529	-0.20	-27.43%	33.90%
30	14	0.729	0.500	-0.23	-31.41%	38.81%
30	15	0.729	0.500	-0.23	-31.41%	38.81%
30	16	0.729	0.529	-0.20	-27.43%	33.90%
31	17	0.729	0.614	-0.12	-15.78%	19.49%
31	18	0.729	0.643	-0.09	-11.80%	14.58%
31	19	0.729	0.643	-0.09	-11.80%	14.58%
31	20	0.729	0.614	-0.12	-15.78%	19.49%
31	21	0.729	0.643	-0.09	-11.80%	14.58%
31	22	0.729	0.643	-0.09	-11.80%	14.58%
31	23	0.729	0.643	-0.09	-11.80%	14.58%
31	24	0.729	0.643	-0.09	-11.80%	14.58%
31	25	0.729	0.614	-0.12	-15.78%	19.49%
31	26	0.729	0.643	-0.09	-11.80%	14.58%
31	27	0.729	0.614	-0.12	-15.78%	19.49%
31	28	0.729	0.643	-0.09	-11.80%	14.58%
31	29	0.729	0.643	-0.09	-11.80%	14.58%
31	30	0.729	0.643	-0.09	-11.80%	14.58%
31	31	0.729	0.643	-0.09	-11.80%	14.58%
31	32	0.729	0.643	-0.09	-11.80%	14.58%
31	33	0.729	0.643	-0.09	-11.80%	14.58%
31	34	0.729	0.614	-0.12	-15.78%	19.49%
31	35	0.729	0.643	-0.09	-11.80%	14.58%
31	36	0.729	0.614	-0.12	-15.78%	19.49%
31	37	0.729	0.643	-0.09	-11.80%	14.58%
31	38	0.729	0.643	-0.09	-11.80%	14.58%
31	39	0.729	0.643	-0.09	-11.80%	14.58%
31	40	0.729	0.643	-0.09	-11.80%	14.58%
50	41	0.729	0.243	-0.49	-66.67%	82.37%
50	42	0.729	0.186	-0.54	-74.49%	92.03%
50	43	0.729	0.214	-0.52	-70.64%	87.29%
50	44	0.729	0.214	-0.52	-70.64%	87.29%
	Max	0.729	0.729	0.00	0.00%	92.03%
	Average	0.729	0.602	-0.13	-17.41%	21.52%
	Min	0.729	0.186	-0.54	-74.49%	0.00%
	Std Dev	0.000	0.135	0.13	18.50%	22.85%

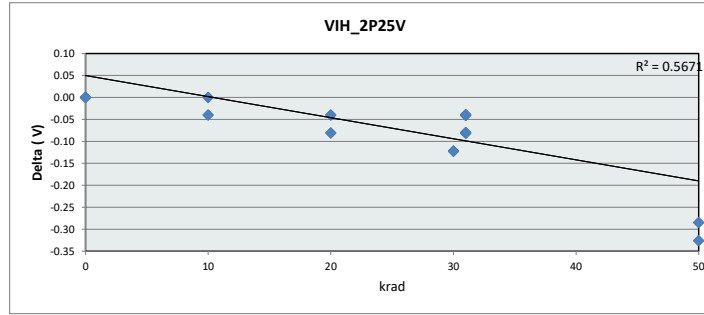


VIH_1P65V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	1.1	V				
Min Limit	0.51	V				
krad	0	10	20	30	31	50
LL	0.51	0.51	0.51	0.51	0.51	0.51
Min	0.73	0.70	0.64	0.50	0.61	0.19
Average	0.73	0.71	0.64	0.51	0.64	0.21
Max	0.73	0.73	0.64	0.53	0.64	0.24
UL	1.10	1.10	1.10	1.10	1.10	1.10



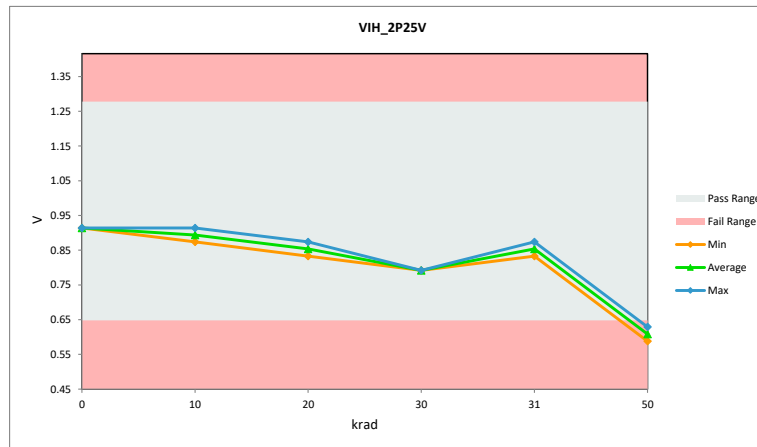
TID Report SN54SC245-SEP

VIH_2P25V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.28	1.28
Min Limit	0.65	0.65



VIH_2P25V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1.28	V
Min Limit	0.65	V

krad	0	10	20	30	31	50
LL	0.65	0.65	0.65	0.65	0.65	0.65
Min	0.92	0.88	0.84	0.79	0.84	0.59
Average	0.92	0.90	0.86	0.79	0.86	0.61
Max	0.92	0.92	0.88	0.79	0.88	0.63
UL	1.28	1.28	1.28	1.28	1.28	1.28

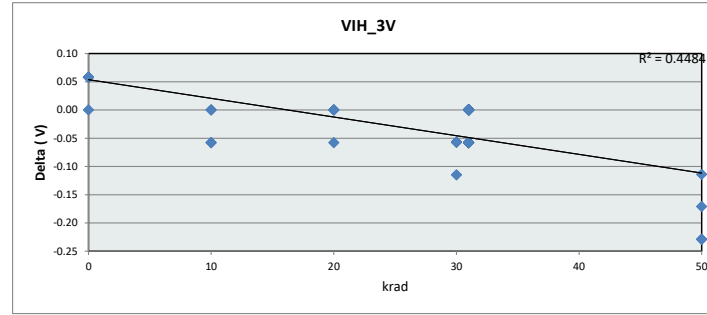


krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.916	0.916	0.00	0.00%	0.00%
0	2	0.916	0.916	0.00	0.00%	0.00%
0	3	0.916	0.916	0.00	0.00%	0.00%
0	4	0.916	0.916	0.00	0.00%	0.00%
10	5	0.916	0.916	0.00	0.00%	0.00%
10	6	0.916	0.876	-0.04	-4.37%	6.35%
10	7	0.916	0.876	-0.04	-4.37%	6.35%
10	8	0.916	0.916	0.00	0.00%	0.00%
20	9	0.916	0.835	-0.08	-8.84%	12.86%
20	10	0.916	0.876	-0.04	-4.37%	6.35%
20	11	0.916	0.876	-0.04	-4.37%	6.35%
20	12	0.916	0.835	-0.08	-8.84%	12.86%
30	13	0.916	0.794	-0.12	-13.32%	19.37%
30	14	0.916	0.794	-0.12	-13.32%	19.37%
30	15	0.916	0.794	-0.12	-13.32%	19.37%
30	16	0.916	0.794	-0.12	-13.32%	19.37%
31	17	0.916	0.835	-0.08	-8.84%	12.86%
31	18	0.916	0.835	-0.08	-8.84%	12.86%
31	19	0.916	0.876	-0.04	-4.37%	6.35%
31	20	0.916	0.835	-0.08	-8.84%	12.86%
31	21	0.916	0.835	-0.08	-8.84%	12.86%
31	22	0.916	0.876	-0.04	-4.37%	6.35%
31	23	0.916	0.876	-0.04	-4.37%	6.35%
31	24	0.916	0.835	-0.08	-8.84%	12.86%
31	25	0.916	0.835	-0.08	-8.84%	12.86%
31	26	0.916	0.835	-0.08	-8.84%	12.86%
31	27	0.916	0.835	-0.08	-8.84%	12.86%
31	28	0.916	0.876	-0.04	-4.37%	6.35%
31	29	0.916	0.876	-0.04	-4.37%	6.35%
31	30	0.916	0.876	-0.04	-4.37%	6.35%
31	31	0.916	0.876	-0.04	-4.37%	6.35%
31	32	0.916	0.876	-0.04	-4.37%	6.35%
31	33	0.916	0.835	-0.08	-8.84%	12.86%
31	34	0.916	0.835	-0.08	-8.84%	12.86%
31	35	0.916	0.835	-0.08	-8.84%	12.86%
31	36	0.916	0.835	-0.08	-8.84%	12.86%
31	37	0.916	0.876	-0.04	-4.37%	6.35%
31	38	0.916	0.876	-0.04	-4.37%	6.35%
31	39	0.916	0.876	-0.04	-4.37%	6.35%
31	40	0.916	0.876	-0.04	-4.37%	6.35%
50	41	0.916	0.631	-0.29	-31.11%	45.24%
50	42	0.916	0.590	-0.33	-35.59%	51.75%
50	43	0.916	0.631	-0.29	-31.11%	45.24%
50	44	0.916	0.590	-0.33	-35.59%	51.75%
Max		0.916	0.916	0.00	0.00%	
Average		0.916	0.837	-0.08	-8.64%	12.57%
Min		0.916	0.590	-0.33	-35.59%	0.00%
Std Dev		0.000	0.080	0.08	8.75%	12.72%

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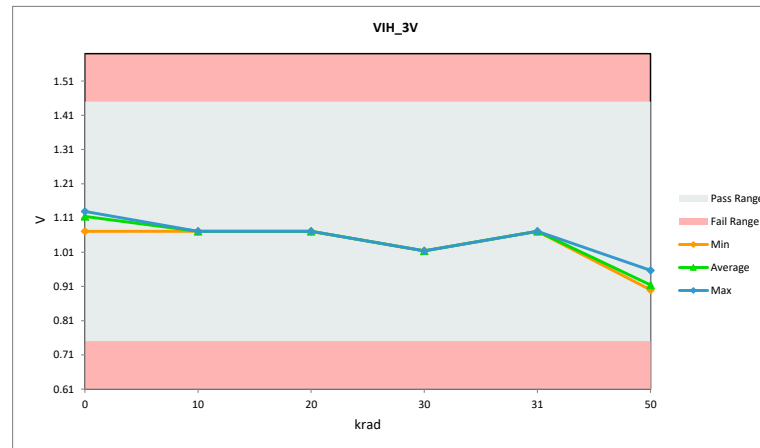
VIH_3V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.45	1.45
Min Limit	0.75	0.75

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.071	1.129	0.06	5.42%	8.29%
0	2	1.071	1.129	0.06	5.42%	8.29%
0	3	1.071	1.129	0.06	5.42%	8.29%
0	4	1.071	1.071	0.00	0.00%	0.00%
10	5	1.129	1.071	-0.06	-5.14%	8.29%
10	6	1.071	1.071	0.00	0.00%	0.00%
10	7	1.129	1.071	-0.06	-5.14%	8.29%
10	8	1.071	1.071	0.00	0.00%	0.00%
20	9	1.071	1.071	0.00	0.00%	0.00%
20	10	1.071	1.071	0.00	0.00%	0.00%
20	11	1.129	1.071	-0.06	-5.14%	8.29%
20	12	1.071	1.071	0.00	0.00%	0.00%
30	13	1.071	1.014	-0.06	-5.32%	8.14%
30	14	1.129	1.014	-0.12	-10.19%	16.43%
30	15	1.071	1.014	-0.06	-5.32%	8.14%
30	16	1.071	1.014	-0.06	-5.32%	8.14%
31	17	1.071	1.071	0.00	0.00%	0.00%
31	18	1.071	1.071	0.00	0.00%	0.00%
31	19	1.129	1.071	-0.06	-5.14%	8.29%
31	20	1.071	1.071	0.00	0.00%	0.00%
31	21	1.071	1.071	0.00	0.00%	0.00%
31	22	1.129	1.071	-0.06	-5.14%	8.29%
31	23	1.071	1.071	0.00	0.00%	0.00%
31	24	1.071	1.071	0.00	0.00%	0.00%
31	25	1.071	1.071	0.00	0.00%	0.00%
31	26	1.071	1.071	0.00	0.00%	0.00%
31	27	1.071	1.071	0.00	0.00%	0.00%
31	28	1.071	1.071	0.00	0.00%	0.00%
31	29	1.129	1.071	-0.06	-5.14%	8.29%
31	30	1.129	1.071	-0.06	-5.14%	8.29%
31	31	1.071	1.071	0.00	0.00%	0.00%
31	32	1.129	1.071	-0.06	-5.14%	8.29%
31	33	1.129	1.071	-0.06	-5.14%	8.29%
31	34	1.129	1.071	-0.06	-5.14%	8.29%
31	35	1.129	1.071	-0.06	-5.14%	8.29%
31	36	1.071	1.071	0.00	0.00%	0.00%
31	37	1.071	1.071	0.00	0.00%	0.00%
31	38	1.071	1.071	0.00	0.00%	0.00%
31	39	1.129	1.071	-0.06	-5.14%	8.29%
31	40	1.071	1.071	0.00	0.00%	0.00%
50	41	1.071	0.957	-0.11	-10.64%	16.29%
50	42	1.129	0.900	-0.23	-20.28%	32.71%
50	43	1.129	0.900	-0.23	-20.28%	32.71%
50	44	1.071	0.900	-0.17	-15.97%	24.43%
Max	1.129	1.129	0.00	5.42%	32.71%	
Average	1.091	1.056	-0.04	-3.15%	6.17%	
Min	1.071	0.900	-0.17	-20.28%	0.00%	
Std Dev	0.028	0.051	0.02	5.60%	8.11%	



VIH_3V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1.45	V
Min Limit	0.75	V

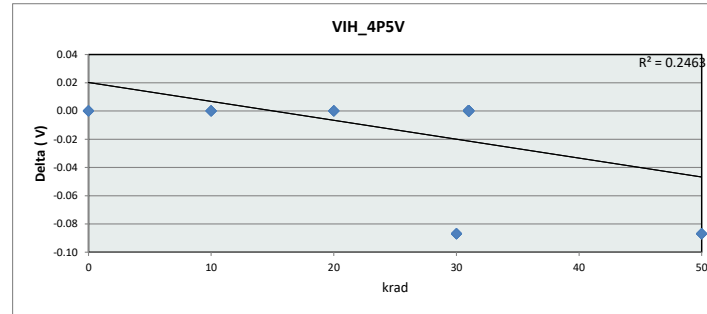
krad	0	10	20	30	31	50
LL	0.75	0.75	0.75	0.75	0.75	0.75
Min	1.07	1.07	1.07	1.01	1.07	0.90
Average	1.11	1.07	1.07	1.01	1.07	0.91
Max	1.13	1.07	1.07	1.01	1.07	0.96
UL	1.45	1.45	1.45	1.45	1.45	1.45



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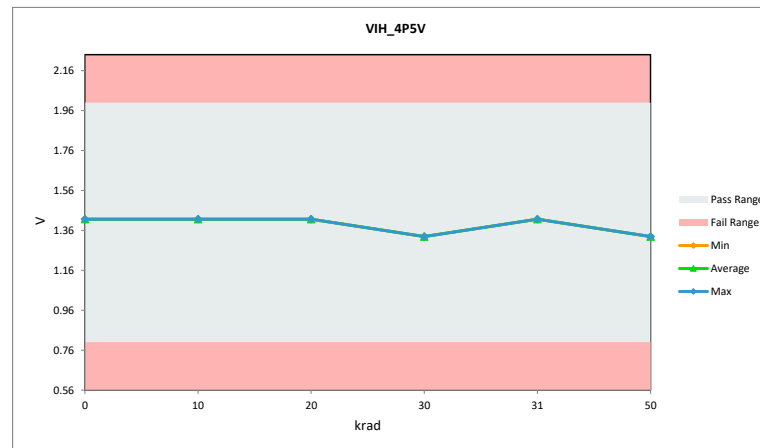
VIH_4P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	2	2
Min Limit	0.8	0.8

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.416	1.416	0.00	0.00%	0.00%
0	2	1.416	1.416	0.00	0.00%	0.00%
0	3	1.416	1.416	0.00	0.00%	0.00%
0	4	1.416	1.416	0.00	0.00%	0.00%
10	5	1.416	1.416	0.00	0.00%	0.00%
10	6	1.416	1.416	0.00	0.00%	0.00%
10	7	1.416	1.416	0.00	0.00%	0.00%
10	8	1.416	1.416	0.00	0.00%	0.00%
20	9	1.416	1.416	0.00	0.00%	0.00%
20	10	1.416	1.416	0.00	0.00%	0.00%
20	11	1.416	1.416	0.00	0.00%	0.00%
20	12	1.416	1.416	0.00	0.00%	0.00%
30	13	1.416	1.329	-0.09	-6.14%	7.25%
30	14	1.416	1.329	-0.09	-6.14%	7.25%
30	15	1.416	1.329	-0.09	-6.14%	7.25%
30	16	1.416	1.329	-0.09	-6.14%	7.25%
31	17	1.416	1.416	0.00	0.00%	0.00%
31	18	1.416	1.416	0.00	0.00%	0.00%
31	19	1.416	1.416	0.00	0.00%	0.00%
31	20	1.416	1.416	0.00	0.00%	0.00%
31	21	1.416	1.416	0.00	0.00%	0.00%
31	22	1.416	1.416	0.00	0.00%	0.00%
31	23	1.416	1.416	0.00	0.00%	0.00%
31	24	1.416	1.416	0.00	0.00%	0.00%
31	25	1.416	1.416	0.00	0.00%	0.00%
31	26	1.416	1.416	0.00	0.00%	0.00%
31	27	1.416	1.416	0.00	0.00%	0.00%
31	28	1.416	1.416	0.00	0.00%	0.00%
31	29	1.416	1.416	0.00	0.00%	0.00%
31	30	1.416	1.416	0.00	0.00%	0.00%
31	31	1.416	1.416	0.00	0.00%	0.00%
31	32	1.416	1.416	0.00	0.00%	0.00%
31	33	1.416	1.416	0.00	0.00%	0.00%
31	34	1.416	1.416	0.00	0.00%	0.00%
31	35	1.416	1.416	0.00	0.00%	0.00%
31	36	1.416	1.416	0.00	0.00%	0.00%
31	37	1.416	1.416	0.00	0.00%	0.00%
31	38	1.416	1.416	0.00	0.00%	0.00%
31	39	1.416	1.416	0.00	0.00%	0.00%
31	40	1.416	1.416	0.00	0.00%	0.00%
50	41	1.416	1.329	-0.09	-6.14%	7.25%
50	42	1.416	1.329	-0.09	-6.14%	7.25%
50	43	1.416	1.329	-0.09	-6.14%	7.25%
50	44	1.416	1.329	-0.09	-6.14%	7.25%
Max		1.416	1.416	0.00	0.00%	7.25%
Average		1.416	1.400	-0.02	-1.12%	1.32%
Min		1.416	1.329	-0.09	-6.14%	0.00%
Std Dev		0.000	0.034	0.03	2.40%	2.83%



VIH_4P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	2	V
Min Limit	0.8	V

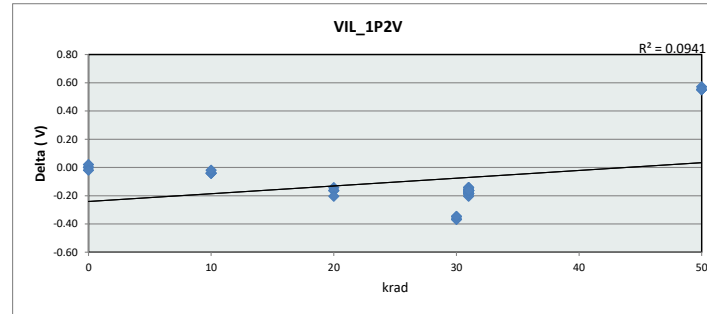
krad	0	10	20	30	31	50
LL	0.80	0.80	0.80	0.80	0.80	0.80
Min	1.42	1.42	1.42	1.33	1.42	1.33
Average	1.42	1.42	1.42	1.33	1.42	1.33
Max	1.42	1.42	1.42	1.33	1.42	1.33
UL	2.00	2.00	2.00	2.00	2.00	2.00



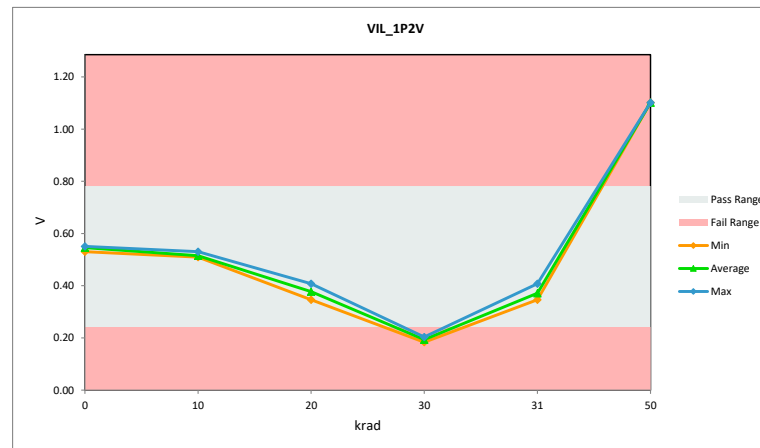
TID Report SN54SC245-SEP

VIL_1P2V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.78	0.78
Min Limit	0.24	0.24

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.549	0.549	0.00	0.00%	0.00%
0	2	0.549	0.549	0.00	0.00%	0.00%
0	3	0.529	0.549	0.02	3.78%	3.70%
0	4	0.549	0.529	-0.02	-3.64%	3.70%
10	5	0.549	0.508	-0.04	-7.47%	7.59%
10	6	0.549	0.508	-0.04	-7.47%	7.59%
10	7	0.549	0.508	-0.04	-7.47%	7.59%
10	8	0.549	0.529	-0.02	-3.64%	3.70%
20	9	0.529	0.365	-0.16	-31.00%	30.37%
20	10	0.549	0.406	-0.14	-26.05%	26.48%
20	11	0.549	0.386	-0.16	-29.69%	30.19%
20	12	0.549	0.345	-0.20	-37.16%	37.78%
30	13	0.549	0.202	-0.35	-63.21%	64.26%
30	14	0.549	0.182	-0.37	-66.85%	67.96%
30	15	0.549	0.182	-0.37	-66.85%	67.96%
30	16	0.549	0.202	-0.35	-63.21%	64.26%
31	17	0.529	0.345	-0.18	-34.78%	34.07%
31	18	0.529	0.365	-0.16	-31.00%	30.37%
31	19	0.549	0.386	-0.16	-29.69%	30.19%
31	20	0.529	0.345	-0.18	-34.78%	34.07%
31	21	0.529	0.365	-0.16	-31.00%	30.37%
31	22	0.549	0.386	-0.16	-29.69%	30.19%
31	23	0.549	0.406	-0.14	-26.05%	26.48%
31	24	0.529	0.386	-0.14	-27.03%	26.48%
31	25	0.529	0.345	-0.18	-34.78%	34.07%
31	26	0.529	0.345	-0.18	-34.78%	34.07%
31	27	0.529	0.345	-0.18	-34.78%	34.07%
31	28	0.529	0.365	-0.16	-31.00%	30.37%
31	29	0.549	0.386	-0.16	-29.69%	30.19%
31	30	0.549	0.386	-0.16	-29.69%	30.19%
31	31	0.549	0.386	-0.16	-29.69%	30.19%
31	32	0.549	0.386	-0.16	-29.69%	30.19%
31	33	0.549	0.365	-0.18	-33.52%	34.07%
31	34	0.529	0.345	-0.18	-34.78%	34.07%
31	35	0.549	0.345	-0.20	-37.16%	37.78%
31	36	0.529	0.345	-0.18	-34.78%	34.07%
31	37	0.529	0.365	-0.16	-31.00%	30.37%
31	38	0.549	0.386	-0.16	-29.69%	30.19%
31	39	0.549	0.406	-0.14	-26.05%	26.48%
31	40	0.549	0.386	-0.16	-29.69%	30.19%
50	41	0.529	1.100	0.57	107.94%	105.74%
50	42	0.549	1.100	0.55	100.36%	102.04%
50	43	0.549	1.100	0.55	100.36%	102.04%
50	44	0.549	1.100	0.55	100.36%	102.04%
	Max	0.549	1.100	0.55	107.94%	105.74%
	Average	0.542	0.449	-0.09	-17.17%	36.09%
	Min	0.529	0.182	-0.35	-66.85%	0.00%
	Std Dev	0.010	0.226	0.22	41.45%	26.67%



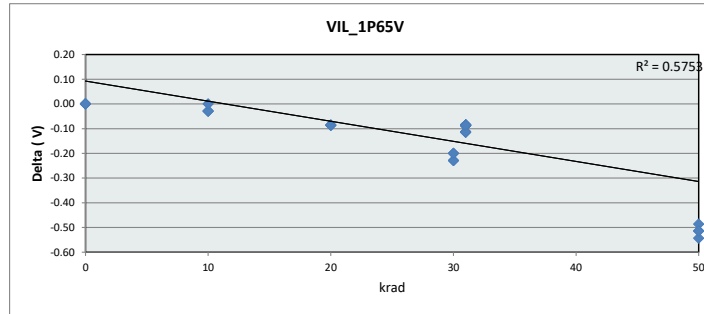
VIL_1P2V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	0.78	V				
Min Limit	0.24	V				
krad	0	10	20	30	31	50
LL	0.24	0.24	0.24	0.24	0.24	0.24
Min	0.53	0.51	0.35	0.18	0.35	1.10
Average	0.54	0.51	0.38	0.19	0.37	1.10
Max	0.55	0.53	0.41	0.20	0.41	1.10
UL	0.78	0.78	0.78	0.78	0.78	0.78



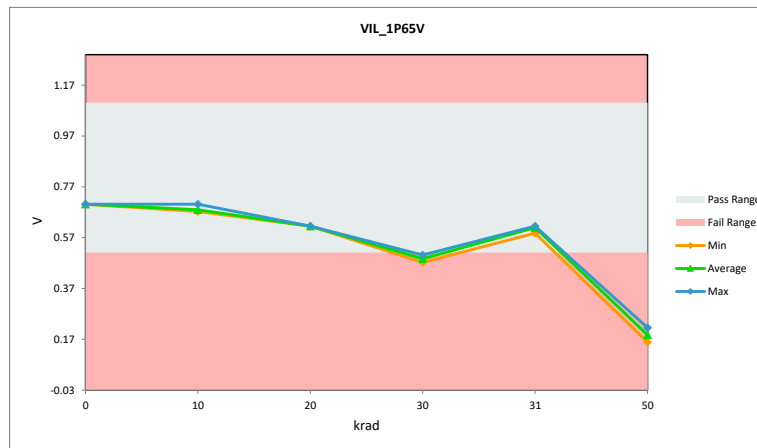
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VIL_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.1	1.1
Min Limit	0.51	0.51

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.700	0.700	0.00	0.00%	0.00%
0	2	0.700	0.700	0.00	0.00%	0.00%
0	3	0.700	0.700	0.00	0.00%	0.00%
0	4	0.700	0.700	0.00	0.00%	0.00%
10	5	0.700	0.671	-0.03	-4.14%	4.92%
10	6	0.700	0.671	-0.03	-4.14%	4.92%
10	7	0.700	0.671	-0.03	-4.14%	4.92%
10	8	0.700	0.700	0.00	0.00%	0.00%
20	9	0.700	0.614	-0.09	-12.29%	14.58%
20	10	0.700	0.614	-0.09	-12.29%	14.58%
20	11	0.700	0.614	-0.09	-12.29%	14.58%
20	12	0.700	0.614	-0.09	-12.29%	14.58%
30	13	0.700	0.500	-0.20	-28.57%	33.90%
30	14	0.700	0.471	-0.23	-32.71%	38.81%
30	15	0.700	0.471	-0.23	-32.71%	38.81%
30	16	0.700	0.500	-0.20	-28.57%	33.90%
31	17	0.700	0.586	-0.11	-16.29%	19.32%
31	18	0.700	0.614	-0.09	-12.29%	14.58%
31	19	0.700	0.614	-0.09	-12.29%	14.58%
31	20	0.700	0.586	-0.11	-16.29%	19.32%
31	21	0.700	0.614	-0.09	-12.29%	14.58%
31	22	0.700	0.614	-0.09	-12.29%	14.58%
31	23	0.700	0.614	-0.09	-12.29%	14.58%
31	24	0.700	0.614	-0.09	-12.29%	14.58%
31	25	0.700	0.586	-0.11	-16.29%	19.32%
31	26	0.700	0.614	-0.09	-12.29%	14.58%
31	27	0.700	0.586	-0.11	-16.29%	19.32%
31	28	0.700	0.614	-0.09	-12.29%	14.58%
31	29	0.700	0.614	-0.09	-12.29%	14.58%
31	30	0.700	0.614	-0.09	-12.29%	14.58%
31	31	0.700	0.614	-0.09	-12.29%	14.58%
31	32	0.700	0.614	-0.09	-12.29%	14.58%
31	33	0.700	0.614	-0.09	-12.29%	14.58%
31	34	0.700	0.614	-0.09	-12.29%	14.58%
31	35	0.700	0.614	-0.09	-12.29%	14.58%
31	36	0.700	0.586	-0.11	-16.29%	19.32%
31	37	0.700	0.614	-0.09	-12.29%	14.58%
31	38	0.700	0.614	-0.09	-12.29%	14.58%
31	39	0.700	0.614	-0.09	-12.29%	14.58%
31	40	0.700	0.614	-0.09	-12.29%	14.58%
50	41	0.700	0.214	-0.49	-69.43%	82.37%
50	42	0.700	0.157	-0.54	-77.57%	92.03%
50	43	0.700	0.186	-0.51	-73.43%	87.12%
50	44	0.700	0.186	-0.51	-73.43%	87.12%
	Max	0.700	0.700	0.00	0.00%	92.03%
	Average	0.700	0.574	-0.13	-18.02%	21.38%
	Min	0.700	0.157	-0.54	-77.57%	0.00%
	Std Dev	0.000	0.135	0.13	19.26%	22.86%



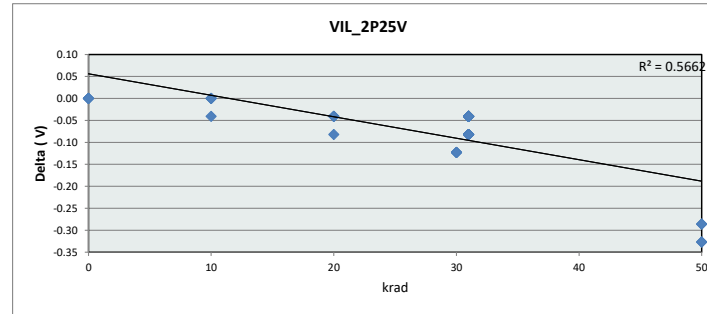
VIL_1P65V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	1.1	V				
Min Limit	0.51	V				
krad	0	10	20	30	31	50
LL	0.51	0.51	0.51	0.51	0.51	0.51
Min	0.70	0.67	0.61	0.47	0.59	0.16
Average	0.70	0.68	0.61	0.49	0.61	0.19
Max	0.70	0.70	0.61	0.50	0.61	0.21
UL	1.10	1.10	1.10	1.10	1.10	1.10



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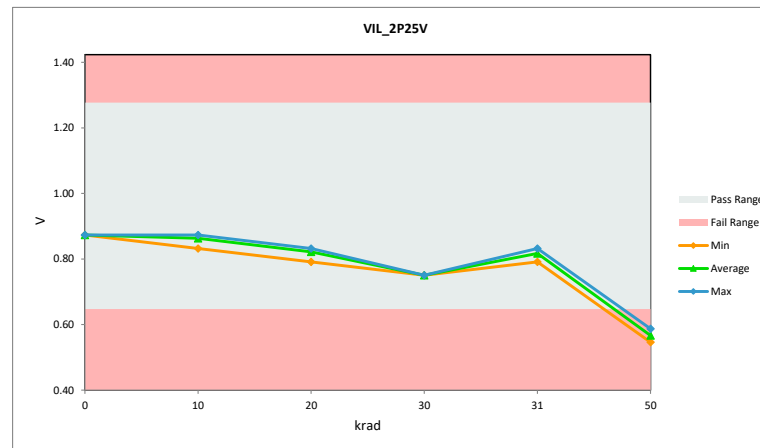
VIL_2P25V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.28	1.28
Min Limit	0.65	0.65

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.876	0.876	0.00	0.00%	0.00%
0	2	0.876	0.876	0.00	0.00%	0.00%
0	3	0.876	0.876	0.00	0.00%	0.00%
0	4	0.876	0.876	0.00	0.00%	0.00%
10	5	0.876	0.876	0.00	0.00%	0.00%
10	6	0.876	0.835	-0.04	-4.68%	6.51%
10	7	0.876	0.876	0.00	0.00%	0.00%
10	8	0.876	0.876	0.00	0.00%	0.00%
20	9	0.876	0.794	-0.08	-9.36%	13.02%
20	10	0.876	0.835	-0.04	-4.68%	6.51%
20	11	0.876	0.835	-0.04	-4.68%	6.51%
20	12	0.876	0.835	-0.04	-4.68%	6.51%
30	13	0.876	0.753	-0.12	-14.04%	19.52%
30	14	0.876	0.753	-0.12	-14.04%	19.52%
30	15	0.876	0.753	-0.12	-14.04%	19.52%
30	16	0.876	0.753	-0.12	-14.04%	19.52%
31	17	0.876	0.794	-0.08	-9.36%	13.02%
31	18	0.876	0.794	-0.08	-9.36%	13.02%
31	19	0.876	0.835	-0.04	-4.68%	6.51%
31	20	0.876	0.794	-0.08	-9.36%	13.02%
31	21	0.876	0.794	-0.08	-9.36%	13.02%
31	22	0.876	0.835	-0.04	-4.68%	6.51%
31	23	0.876	0.835	-0.04	-4.68%	6.51%
31	24	0.876	0.835	-0.04	-4.68%	6.51%
31	25	0.876	0.794	-0.08	-9.36%	13.02%
31	26	0.876	0.794	-0.08	-9.36%	13.02%
31	27	0.876	0.794	-0.08	-9.36%	13.02%
31	28	0.876	0.835	-0.04	-4.68%	6.51%
31	29	0.876	0.835	-0.04	-4.68%	6.51%
31	30	0.876	0.835	-0.04	-4.68%	6.51%
31	31	0.876	0.835	-0.04	-4.68%	6.51%
31	32	0.876	0.835	-0.04	-4.68%	6.51%
31	33	0.876	0.835	-0.04	-4.68%	6.51%
31	34	0.876	0.794	-0.08	-9.36%	13.02%
31	35	0.876	0.835	-0.04	-4.68%	6.51%
31	36	0.876	0.794	-0.08	-9.36%	13.02%
31	37	0.876	0.835	-0.04	-4.68%	6.51%
31	38	0.876	0.835	-0.04	-4.68%	6.51%
31	39	0.876	0.835	-0.04	-4.68%	6.51%
31	40	0.876	0.835	-0.04	-4.68%	6.51%
50	41	0.876	0.590	-0.29	-32.65%	45.40%
50	42	0.876	0.549	-0.33	-37.33%	51.90%
50	43	0.876	0.590	-0.29	-32.65%	45.40%
50	44	0.876	0.549	-0.33	-37.33%	51.90%
	Max	0.876	0.876	0.00	0.00%	
	Average	0.876	0.801	-0.08	-8.61%	11.97%
	Min	0.876	0.549	-0.33	-37.33%	0.00%
	Std Dev	0.000	0.082	0.08	9.33%	12.97%



VIL_2P25V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1.28	V
Min Limit	0.65	V

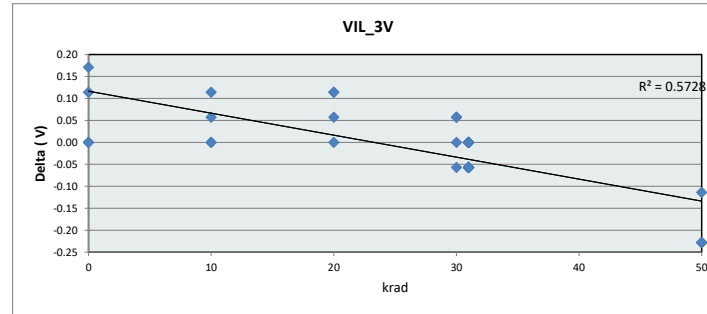
krad	0	10	20	30	31	50
LL	0.65	0.65	0.65	0.65	0.65	0.65
Min	0.88	0.84	0.79	0.75	0.79	0.55
Average	0.88	0.87	0.82	0.75	0.82	0.57
Max	0.88	0.88	0.84	0.75	0.84	0.59
UL	1.28	1.28	1.28	1.28	1.28	1.28



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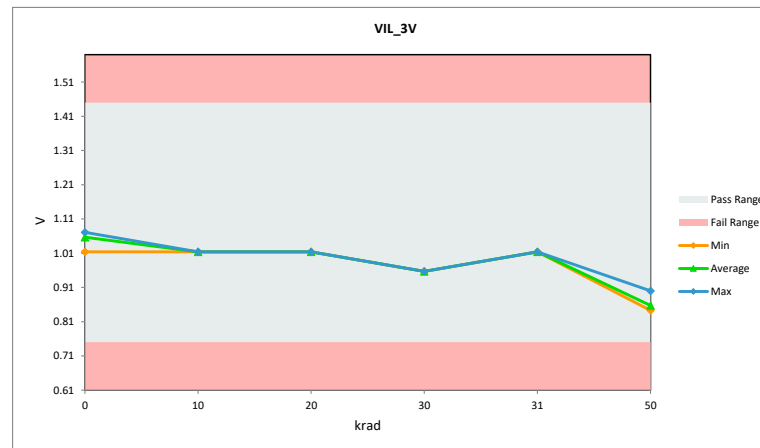
VIL_3V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.45	1.45
Min Limit	0.75	0.75

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.957	1.071	0.11	11.91%	16.29%
0	2	0.900	1.071	0.17	19.00%	24.43%
0	3	1.071	1.071	0.00	0.00%	0.00%
0	4	1.014	1.014	0.00	0.00%	0.00%
10	5	0.957	1.014	0.06	5.96%	8.14%
10	6	0.900	1.014	0.11	12.67%	16.29%
10	7	1.014	1.014	0.00	0.00%	0.00%
10	8	1.014	1.014	0.00	0.00%	0.00%
20	9	0.900	1.014	0.11	12.67%	16.29%
20	10	0.900	1.014	0.11	12.67%	16.29%
20	11	0.957	1.014	0.06	5.96%	8.14%
20	12	1.014	1.014	0.00	0.00%	0.00%
30	13	1.014	0.957	-0.06	-5.62%	8.14%
30	14	0.900	0.957	0.06	6.33%	8.14%
30	15	0.900	0.957	0.06	6.33%	8.14%
30	16	0.957	0.957	0.00	0.00%	0.00%
31	17	1.014	1.014	0.00	0.00%	0.00%
31	18	1.014	1.014	0.00	0.00%	0.00%
31	19	1.071	1.014	-0.06	-5.32%	8.14%
31	20	1.014	1.014	0.00	0.00%	0.00%
31	21	1.014	1.014	0.00	0.00%	0.00%
31	22	1.071	1.014	-0.06	-5.32%	8.14%
31	23	1.014	1.014	0.00	0.00%	0.00%
31	24	1.071	1.014	-0.06	-5.32%	8.14%
31	25	1.014	1.014	0.00	0.00%	0.00%
31	26	1.014	1.014	0.00	0.00%	0.00%
31	27	1.014	1.014	0.00	0.00%	0.00%
31	28	1.071	1.014	-0.06	-5.32%	8.14%
31	29	1.071	1.014	-0.06	-5.32%	8.14%
31	30	1.071	1.014	-0.06	-5.32%	8.14%
31	31	1.071	1.014	-0.06	-5.32%	8.14%
31	32	1.071	1.014	-0.06	-5.32%	8.14%
31	33	1.071	1.014	-0.06	-5.32%	8.14%
31	34	1.071	1.014	-0.06	-5.32%	8.14%
31	35	1.071	1.014	-0.06	-5.32%	8.14%
31	36	1.014	1.014	0.00	0.00%	0.00%
31	37	1.014	1.014	0.00	0.00%	0.00%
31	38	1.071	1.014	-0.06	-5.32%	8.14%
31	39	1.071	1.014	-0.06	-5.32%	8.14%
31	40	1.071	1.014	-0.06	-5.32%	8.14%
50	41	1.014	0.900	-0.11	-11.24%	16.29%
50	42	1.071	0.843	-0.23	-21.29%	32.57%
50	43	1.071	0.843	-0.23	-21.29%	32.57%
50	44	1.071	0.843	-0.23	-21.29%	32.57%
Max	1.071	1.071	0.20	19.00%	32.57%	
Average	1.017	0.998	-0.02	-1.40%	8.14%	
Min	0.900	0.843	-0.06	-21.29%	0.00%	
Std Dev	0.059	0.051	-0.01	8.30%	8.95%	



VIL_3V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1.45	V
Min Limit	0.75	V

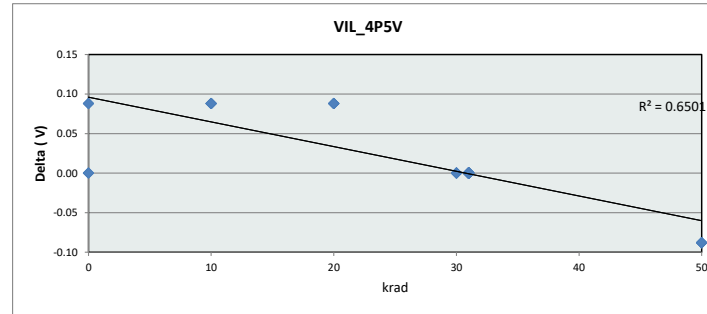
krad	0	10	20	30	31	50
LL	0.75	0.75	0.75	0.75	0.75	0.75
Min	1.01	1.01	1.01	0.96	1.01	0.84
Average	1.06	1.01	1.01	0.96	1.01	0.86
Max	1.07	1.01	1.01	0.96	1.01	0.90
UL	1.45	1.45	1.45	1.45	1.45	1.45



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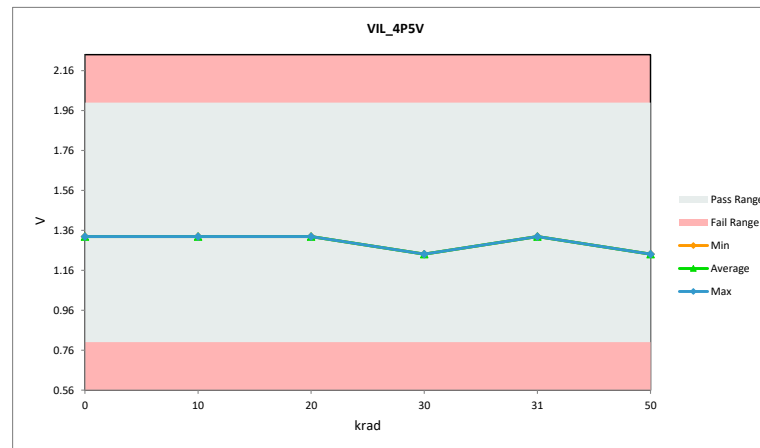
VIL_4P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	2	2
Min Limit	0.8	0.8

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.241	1.329	0.09	7.09%	7.33%
0	2	1.241	1.329	0.09	7.09%	7.33%
0	3	1.329	1.329	0.00	0.00%	0.00%
0	4	1.329	1.329	0.00	0.00%	0.00%
10	5	1.241	1.329	0.09	7.09%	7.33%
10	6	1.241	1.329	0.09	7.09%	7.33%
10	7	1.241	1.329	0.09	7.09%	7.33%
10	8	1.241	1.329	0.09	7.09%	7.33%
20	9	1.241	1.329	0.09	7.09%	7.33%
20	10	1.241	1.329	0.09	7.09%	7.33%
20	11	1.241	1.329	0.09	7.09%	7.33%
20	12	1.241	1.329	0.09	7.09%	7.33%
30	13	1.241	1.241	0.00	0.00%	0.00%
30	14	1.241	1.241	0.00	0.00%	0.00%
30	15	1.241	1.241	0.00	0.00%	0.00%
30	16	1.241	1.241	0.00	0.00%	0.00%
31	17	1.329	1.329	0.00	0.00%	0.00%
31	18	1.329	1.329	0.00	0.00%	0.00%
31	19	1.329	1.329	0.00	0.00%	0.00%
31	20	1.329	1.329	0.00	0.00%	0.00%
31	21	1.329	1.329	0.00	0.00%	0.00%
31	22	1.329	1.329	0.00	0.00%	0.00%
31	23	1.329	1.329	0.00	0.00%	0.00%
31	24	1.329	1.329	0.00	0.00%	0.00%
31	25	1.329	1.329	0.00	0.00%	0.00%
31	26	1.329	1.329	0.00	0.00%	0.00%
31	27	1.329	1.329	0.00	0.00%	0.00%
31	28	1.329	1.329	0.00	0.00%	0.00%
31	29	1.329	1.329	0.00	0.00%	0.00%
31	30	1.329	1.329	0.00	0.00%	0.00%
31	31	1.329	1.329	0.00	0.00%	0.00%
31	32	1.329	1.329	0.00	0.00%	0.00%
31	33	1.329	1.329	0.00	0.00%	0.00%
31	34	1.329	1.329	0.00	0.00%	0.00%
31	35	1.329	1.329	0.00	0.00%	0.00%
31	36	1.329	1.329	0.00	0.00%	0.00%
31	37	1.329	1.329	0.00	0.00%	0.00%
31	38	1.329	1.329	0.00	0.00%	0.00%
31	39	1.329	1.329	0.00	0.00%	0.00%
31	40	1.329	1.329	0.00	0.00%	0.00%
50	41	1.329	1.241	-0.09	-6.62%	7.33%
50	42	1.329	1.241	-0.09	-6.62%	7.33%
50	43	1.329	1.241	-0.09	-6.62%	7.33%
50	44	1.329	1.241	-0.09	-6.62%	7.33%
Max		1.329	1.329	0.00	7.09%	7.33%
Average		1.301	1.313	0.01	1.01%	2.33%
Min		1.241	1.241	0.00	-6.62%	0.00%
Std Dev		0.041	0.034	-0.01	3.84%	3.46%



VIL_4P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	2	V
Min Limit	0.8	V

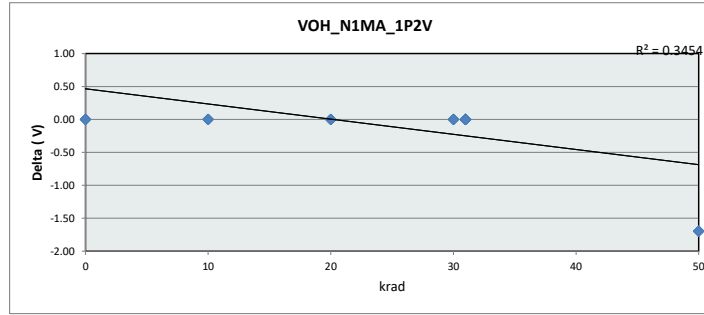
krad	0	10	20	30	31	50
LL	0.80	0.80	0.80	0.80	0.80	0.80
Min	1.33	1.33	1.33	1.24	1.33	1.24
Average	1.33	1.33	1.33	1.24	1.33	1.24
Max	1.33	1.33	1.33	1.24	1.33	1.24
UL	2.00	2.00	2.00	2.00	2.00	2.00



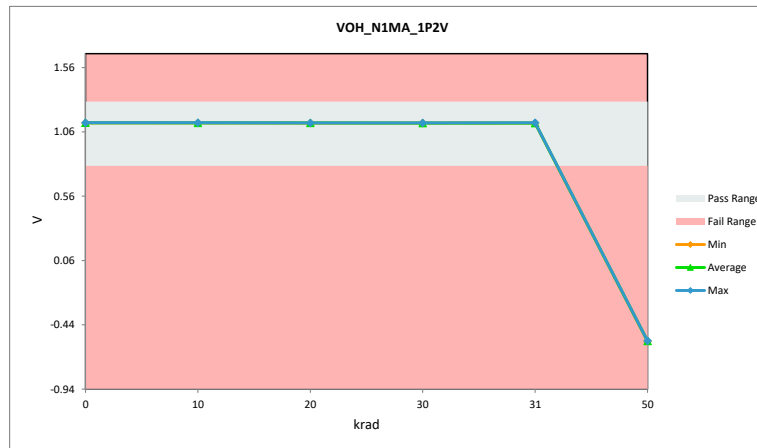
TID Report SN54SC245-SEP

VOH_N1MA_1P2V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.3	1.3
Min Limit	0.8	0.8

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.136	1.136	0.00	0.00%	0.00%
0	2	1.136	1.136	0.00	0.00%	0.00%
0	3	1.134	1.134	0.00	0.00%	0.00%
0	4	1.134	1.134	0.00	0.00%	0.00%
10	5	1.135	1.135	0.00	0.00%	0.00%
10	6	1.134	1.134	0.00	0.00%	0.00%
10	7	1.134	1.134	0.00	0.00%	0.00%
10	8	1.136	1.136	0.00	0.00%	0.00%
20	9	1.134	1.134	0.00	0.00%	0.00%
20	10	1.135	1.133	0.00	-0.18%	0.40%
20	11	1.135	1.134	0.00	-0.09%	0.20%
20	12	1.135	1.134	0.00	-0.09%	0.20%
30	13	1.134	1.134	0.00	0.00%	0.00%
30	14	1.134	1.133	0.00	-0.09%	0.20%
30	15	1.134	1.133	0.00	-0.09%	0.20%
30	16	1.134	1.133	0.00	-0.09%	0.20%
31	17	1.134	1.133	0.00	-0.09%	0.20%
31	18	1.134	1.133	0.00	-0.09%	0.20%
31	19	1.135	1.135	0.00	0.00%	0.00%
31	20	1.134	1.134	0.00	0.00%	0.00%
31	21	1.134	1.133	0.00	-0.09%	0.20%
31	22	1.135	1.134	0.00	-0.09%	0.20%
31	23	1.134	1.133	0.00	-0.09%	0.20%
31	24	1.134	1.133	0.00	-0.09%	0.20%
31	25	1.134	1.133	0.00	-0.09%	0.20%
31	26	1.134	1.133	0.00	-0.09%	0.20%
31	27	1.134	1.133	0.00	-0.09%	0.20%
31	28	1.134	1.133	0.00	-0.09%	0.20%
31	29	1.134	1.133	0.00	-0.09%	0.20%
31	30	1.134	1.133	0.00	-0.09%	0.20%
31	31	1.134	1.133	0.00	-0.09%	0.20%
31	32	1.134	1.133	0.00	-0.09%	0.20%
31	33	1.134	1.133	0.00	-0.09%	0.20%
31	34	1.134	1.133	0.00	-0.09%	0.20%
31	35	1.134	1.133	0.00	-0.09%	0.20%
31	36	1.134	1.133	0.00	-0.09%	0.20%
31	37	1.134	1.133	0.00	-0.09%	0.20%
31	38	1.135	1.134	0.00	-0.09%	0.20%
31	39	1.134	1.133	0.00	-0.09%	0.20%
31	40	1.134	1.133	0.00	-0.09%	0.20%
50	41	1.135	-0.561	-1.70	-149.43%	339.20%
50	42	1.135	-0.563	-1.70	-149.60%	339.60%
50	43	1.135	-0.561	-1.70	-149.43%	339.20%
50	44	1.135	-0.560	-1.70	-149.34%	339.00%
Max	1.136	1.136	0.00	0.00%	339.60%	
Average	1.134	0.980	-0.15	-13.64%	30.97%	
Min	1.134	-0.563	-1.70	-149.60%	0.00%	
Std Dev	0.001	0.493	0.49	43.44%	98.61%	



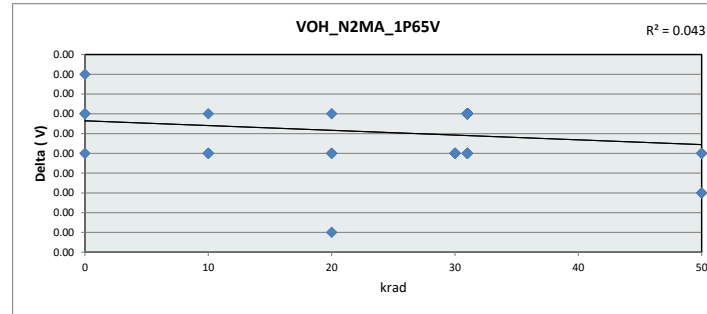
VOH_N1MA_1P2V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	1.3	V				
Min Limit	0.8	V				
krad	0	10	20	30	31	50
LL	0.80	0.80	0.80	0.80	0.80	0.80
Min	1.13	1.13	1.13	1.13	1.13	-0.56
Average	1.14	1.13	1.13	1.13	1.13	-0.56
Max	1.14	1.14	1.13	1.13	1.14	-0.56
UL	1.30	1.30	1.30	1.30	1.30	1.30



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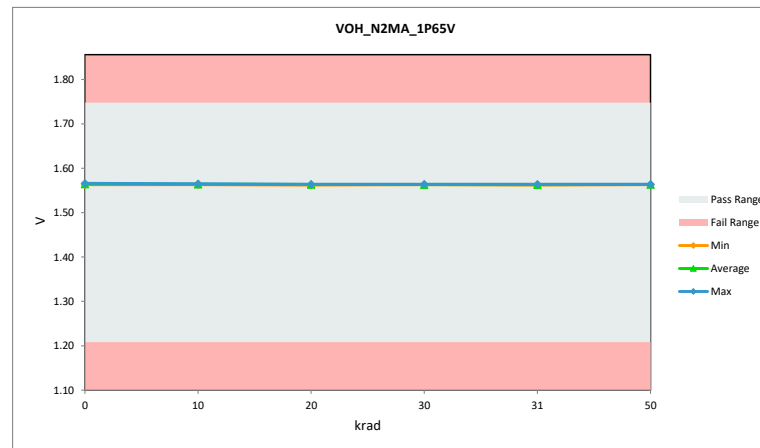
VOH_N2MA_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.75	1.75
Min Limit	1.21	1.21

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.567	1.568	0.00	0.06%	0.19%
0	2	1.568	1.567	0.00	-0.06%	0.19%
0	3	1.565	1.565	0.00	0.00%	0.00%
0	4	1.565	1.565	0.00	0.00%	0.00%
10	5	1.567	1.567	0.00	0.00%	0.00%
10	6	1.566	1.565	0.00	-0.06%	0.19%
10	7	1.566	1.565	0.00	-0.06%	0.19%
10	8	1.568	1.567	0.00	-0.06%	0.19%
20	9	1.566	1.566	0.00	0.00%	0.00%
20	10	1.567	1.564	0.00	-0.19%	0.56%
20	11	1.567	1.566	0.00	-0.06%	0.19%
20	12	1.567	1.566	0.00	-0.06%	0.19%
30	13	1.567	1.566	0.00	-0.06%	0.19%
30	14	1.566	1.565	0.00	-0.06%	0.19%
30	15	1.566	1.565	0.00	-0.06%	0.19%
30	16	1.566	1.565	0.00	-0.06%	0.19%
31	17	1.565	1.565	0.00	0.00%	0.00%
31	18	1.565	1.565	0.00	0.00%	0.00%
31	19	1.566	1.566	0.00	0.00%	0.00%
31	20	1.566	1.566	0.00	0.00%	0.00%
31	21	1.566	1.565	0.00	-0.06%	0.19%
31	22	1.566	1.566	0.00	0.00%	0.00%
31	23	1.565	1.565	0.00	0.00%	0.00%
31	24	1.565	1.565	0.00	0.00%	0.00%
31	25	1.565	1.565	0.00	0.00%	0.00%
31	26	1.565	1.565	0.00	0.00%	0.00%
31	27	1.566	1.565	0.00	-0.06%	0.19%
31	28	1.565	1.564	0.00	-0.06%	0.19%
31	29	1.565	1.565	0.00	0.00%	0.00%
31	30	1.565	1.565	0.00	0.00%	0.00%
31	31	1.565	1.565	0.00	0.00%	0.00%
31	32	1.565	1.565	0.00	0.00%	0.00%
31	33	1.565	1.565	0.00	0.00%	0.00%
31	34	1.565	1.565	0.00	0.00%	0.00%
31	35	1.565	1.565	0.00	0.00%	0.00%
31	36	1.565	1.565	0.00	0.00%	0.00%
31	37	1.565	1.565	0.00	0.00%	0.00%
31	38	1.566	1.565	0.00	-0.06%	0.19%
31	39	1.565	1.565	0.00	0.00%	0.00%
31	40	1.565	1.565	0.00	0.00%	0.00%
50	41	1.567	1.566	0.00	-0.06%	0.19%
50	42	1.567	1.566	0.00	-0.06%	0.19%
50	43	1.567	1.565	0.00	-0.13%	0.37%
50	44	1.567	1.565	0.00	-0.13%	0.37%
Max		1.568	1.568	0.00	0.06%	0.56%
Average		1.566	1.565	0.00	-0.03%	0.10%
Min		1.565	1.564	0.00	-0.19%	0.00%
Std Dev		0.001	0.001	0.00	0.05%	0.13%



VOH_N2MA_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1.75	V
Min Limit	1.21	V

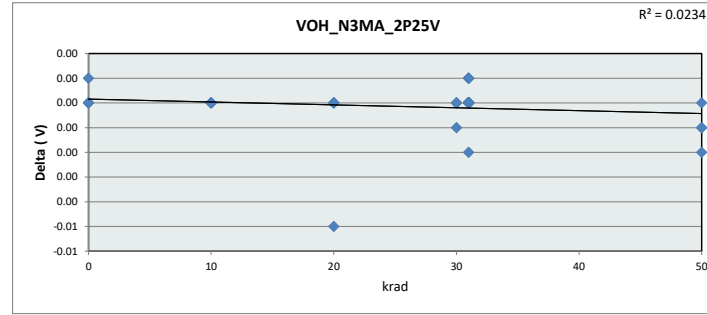
krad	0	10	20	30	31	50
LL	1.21	1.21	1.21	1.21	1.21	1.21
Min	1.57	1.57	1.56	1.57	1.56	1.57
Average	1.57	1.57	1.57	1.57	1.57	1.57
Max	1.57	1.57	1.57	1.57	1.57	1.57
UL	1.75	1.75	1.75	1.75	1.75	1.75



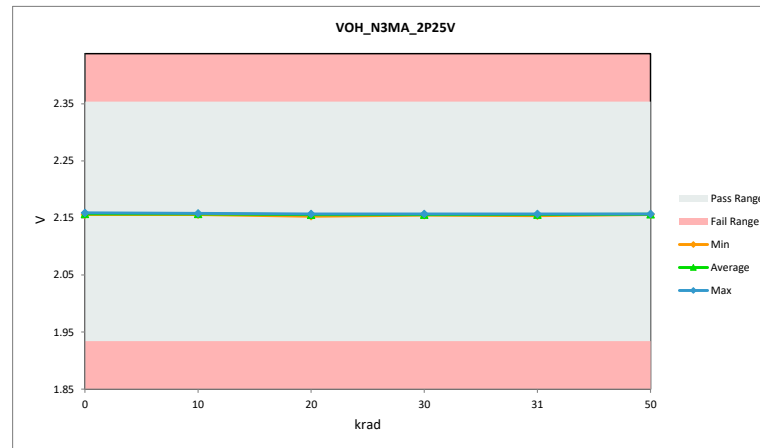
TID Report SN54SC245-SEP

VOH_N3MA_2P25V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	2.35	2.35
Min Limit	1.93	1.93

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	2.154	2.155	0.00	0.05%	0.24%
0	2	2.154	2.154	0.00	0.00%	0.00%
0	3	2.152	2.152	0.00	0.00%	0.00%
0	4	2.152	2.152	0.00	0.00%	0.00%
10	5	2.154	2.154	0.00	0.00%	0.00%
10	6	2.152	2.152	0.00	0.00%	0.00%
10	7	2.152	2.152	0.00	0.00%	0.00%
10	8	2.154	2.154	0.00	0.00%	0.00%
20	9	2.152	2.152	0.00	0.00%	0.00%
20	10	2.154	2.149	0.00	-0.23%	1.19%
20	11	2.153	2.153	0.00	0.00%	0.00%
20	12	2.153	2.153	0.00	0.00%	0.00%
30	13	2.153	2.153	0.00	0.00%	0.00%
30	14	2.152	2.152	0.00	0.00%	0.00%
30	15	2.152	2.151	0.00	-0.05%	0.24%
30	16	2.152	2.152	0.00	0.00%	0.00%
31	17	2.152	2.152	0.00	0.00%	0.00%
31	18	2.152	2.152	0.00	0.00%	0.00%
31	19	2.153	2.153	0.00	0.00%	0.00%
31	20	2.152	2.153	0.00	0.05%	0.24%
31	21	2.152	2.152	0.00	0.00%	0.00%
31	22	2.152	2.153	0.00	0.05%	0.24%
31	23	2.151	2.152	0.00	0.05%	0.24%
31	24	2.152	2.152	0.00	0.00%	0.00%
31	25	2.152	2.152	0.00	0.00%	0.00%
31	26	2.152	2.152	0.00	0.00%	0.00%
31	27	2.152	2.152	0.00	0.00%	0.00%
31	28	2.152	2.150	0.00	-0.09%	0.48%
31	29	2.152	2.152	0.00	0.00%	0.00%
31	30	2.152	2.152	0.00	0.00%	0.00%
31	31	2.151	2.152	0.00	0.05%	0.24%
31	32	2.152	2.152	0.00	0.00%	0.00%
31	33	2.152	2.152	0.00	0.00%	0.00%
31	34	2.152	2.152	0.00	0.00%	0.00%
31	35	2.152	2.152	0.00	0.00%	0.00%
31	36	2.152	2.152	0.00	0.00%	0.00%
31	37	2.152	2.152	0.00	0.00%	0.00%
31	38	2.152	2.152	0.00	0.00%	0.00%
31	39	2.152	2.152	0.00	0.00%	0.00%
31	40	2.151	2.151	0.00	0.00%	0.00%
50	41	2.153	2.153	0.00	0.00%	0.00%
50	42	2.154	2.153	0.00	-0.05%	0.24%
50	43	2.154	2.152	0.00	-0.09%	0.48%
50	44	2.153	2.152	0.00	-0.05%	0.24%
	Max	2.154	2.155	0.00	0.05%	1.19%
	Average	2.152	2.152	0.00	-0.01%	0.09%
	Min	2.151	2.149	0.00	-0.23%	0.00%
	Std Dev	0.001	0.001	0.00	0.04%	0.21%



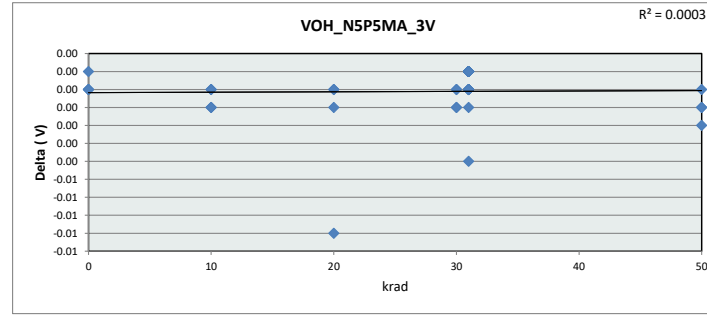
VOH_N3MA_2P25V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	2.35	V				
Min Limit	1.93	V				
krad	0	10	20	30	31	50
LL	1.93	1.93	1.93	1.93	1.93	1.93
Min	2.15	2.15	2.15	2.15	2.15	2.15
Average	2.15	2.15	2.15	2.15	2.15	2.15
Max	2.16	2.15	2.15	2.15	2.15	2.15
UL	2.35	2.35	2.35	2.35	2.35	2.35



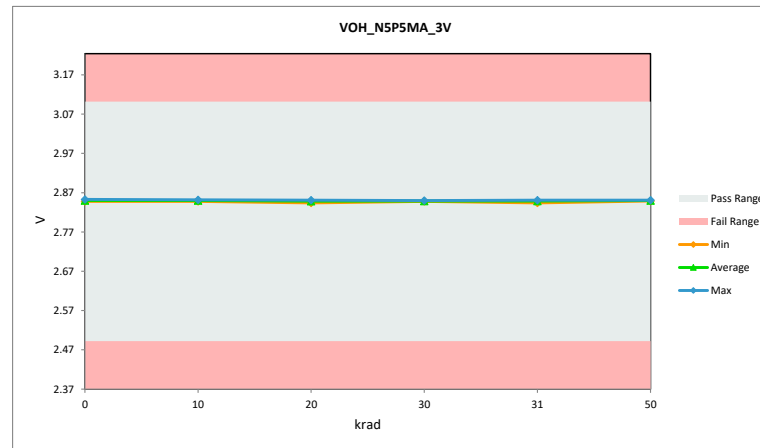
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VOH_N5P5MA_3V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	3.1	3.1
Min Limit	2.49	2.49

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	2.850	2.851	0.00	0.04%	0.16%
0	2	2.850	2.850	0.00	0.00%	0.00%
0	3	2.846	2.846	0.00	0.00%	0.00%
0	4	2.846	2.846	0.00	0.00%	0.00%
10	5	2.850	2.850	0.00	0.00%	0.00%
10	6	2.847	2.846	0.00	-0.04%	0.16%
10	7	2.847	2.846	0.00	-0.04%	0.16%
10	8	2.850	2.850	0.00	0.00%	0.00%
20	9	2.847	2.847	0.00	0.00%	0.00%
20	10	2.850	2.842	-0.01	-0.28%	1.31%
20	11	2.849	2.849	0.00	0.00%	0.00%
20	12	2.849	2.848	0.00	-0.04%	0.16%
30	13	2.848	2.848	0.00	0.00%	0.00%
30	14	2.847	2.847	0.00	0.00%	0.00%
30	15	2.847	2.846	0.00	-0.04%	0.16%
30	16	2.847	2.846	0.00	-0.04%	0.16%
31	17	2.846	2.847	0.00	0.04%	0.16%
31	18	2.846	2.847	0.00	0.04%	0.16%
31	19	2.848	2.849	0.00	0.04%	0.16%
31	20	2.847	2.848	0.00	0.04%	0.16%
31	21	2.847	2.848	0.00	0.04%	0.16%
31	22	2.847	2.848	0.00	0.04%	0.16%
31	23	2.845	2.846	0.00	0.04%	0.16%
31	24	2.846	2.847	0.00	0.04%	0.16%
31	25	2.846	2.847	0.00	0.04%	0.16%
31	26	2.846	2.847	0.00	0.04%	0.16%
31	27	2.847	2.848	0.00	0.04%	0.16%
31	28	2.846	2.842	0.00	-0.14%	0.66%
31	29	2.846	2.846	0.00	0.00%	0.00%
31	30	2.846	2.847	0.00	0.04%	0.16%
31	31	2.846	2.847	0.00	0.04%	0.16%
31	32	2.847	2.846	0.00	-0.04%	0.16%
31	33	2.846	2.846	0.00	0.00%	0.00%
31	34	2.846	2.846	0.00	0.00%	0.00%
31	35	2.846	2.847	0.00	0.04%	0.16%
31	36	2.846	2.846	0.00	0.00%	0.00%
31	37	2.847	2.847	0.00	0.00%	0.00%
31	38	2.847	2.847	0.00	0.00%	0.00%
31	39	2.846	2.847	0.00	0.04%	0.16%
31	40	2.845	2.846	0.00	0.04%	0.16%
50	41	2.849	2.848	0.00	-0.04%	0.16%
50	42	2.849	2.849	0.00	0.00%	0.00%
50	43	2.849	2.848	0.00	-0.04%	0.16%
50	44	2.849	2.847	0.00	-0.07%	0.33%
	Max	2.850	2.851	0.00	0.04%	1.31%
	Average	2.847	2.847	0.00	0.00%	0.15%
	Min	2.845	2.842	0.00	-0.28%	0.00%
	Std Dev	0.001	0.002	0.00	0.06%	0.22%



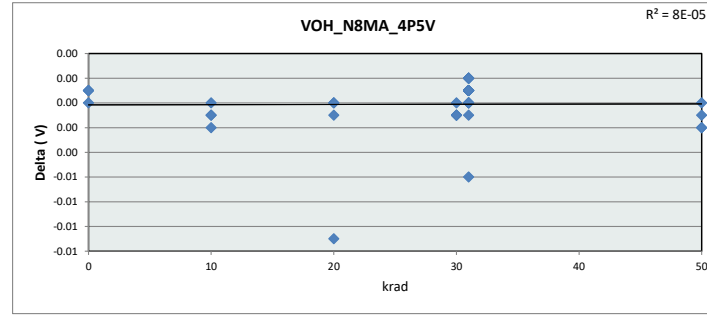
VOH_N5P5MA_3V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	3.1	V				
Min Limit	2.49	V				
krad	0	10	20	30	31	50
LL	2.49	2.49	2.49	2.49	2.49	2.49
Min	2.85	2.85	2.84	2.85	2.84	2.85
Average	2.85	2.85	2.85	2.85	2.85	2.85
Max	2.85	2.85	2.85	2.85	2.85	2.85
UL	3.10	3.10	3.10	3.10	3.10	3.10



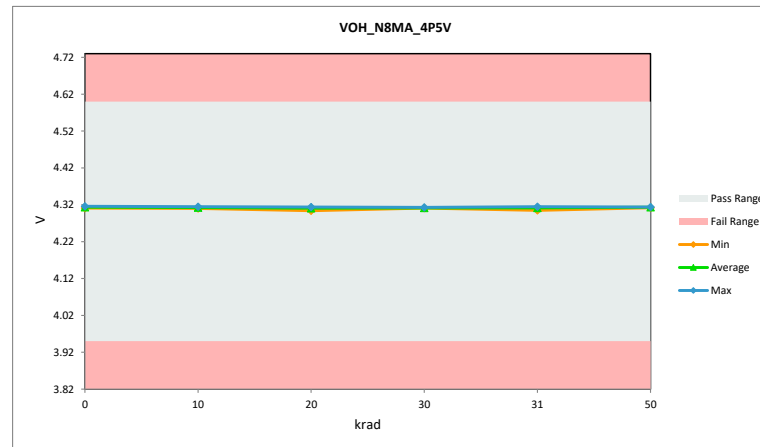
TID Report SN54SC245-SEP

VOH_N8MA_4P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	4.6	4.6
Min Limit	3.95	3.95

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	4.316	4.316	0.00	0.00%	0.00%
0	2	4.315	4.316	0.00	0.02%	0.15%
0	3	4.310	4.311	0.00	0.02%	0.15%
0	4	4.310	4.311	0.00	0.02%	0.15%
10	5	4.316	4.315	0.00	-0.02%	0.15%
10	6	4.312	4.311	0.00	-0.02%	0.15%
10	7	4.312	4.310	0.00	-0.05%	0.31%
10	8	4.315	4.315	0.00	0.00%	0.00%
20	9	4.312	4.312	0.00	0.00%	0.00%
20	10	4.315	4.304	-0.01	-0.25%	1.69%
20	11	4.314	4.314	0.00	0.00%	0.00%
20	12	4.314	4.313	0.00	-0.02%	0.15%
30	13	4.314	4.313	0.00	-0.02%	0.15%
30	14	4.312	4.312	0.00	0.00%	0.00%
30	15	4.312	4.311	0.00	-0.02%	0.15%
30	16	4.312	4.311	0.00	-0.02%	0.15%
31	17	4.311	4.312	0.00	0.02%	0.15%
31	18	4.311	4.311	0.00	0.00%	0.00%
31	19	4.313	4.315	0.00	0.05%	0.31%
31	20	4.312	4.313	0.00	0.02%	0.15%
31	21	4.312	4.313	0.00	0.02%	0.15%
31	22	4.312	4.313	0.00	0.02%	0.15%
31	23	4.309	4.311	0.00	0.05%	0.31%
31	24	4.311	4.312	0.00	0.02%	0.15%
31	25	4.311	4.311	0.00	0.00%	0.00%
31	26	4.310	4.311	0.00	0.02%	0.15%
31	27	4.312	4.313	0.00	0.02%	0.15%
31	28	4.311	4.305	-0.01	-0.14%	0.92%
31	29	4.311	4.311	0.00	0.00%	0.00%
31	30	4.310	4.312	0.00	0.05%	0.31%
31	31	4.310	4.312	0.00	0.05%	0.31%
31	32	4.311	4.310	0.00	-0.02%	0.15%
31	33	4.310	4.311	0.00	0.02%	0.15%
31	34	4.310	4.311	0.00	0.02%	0.15%
31	35	4.310	4.312	0.00	0.05%	0.31%
31	36	4.311	4.311	0.00	0.00%	0.00%
31	37	4.311	4.312	0.00	0.02%	0.15%
31	38	4.311	4.312	0.00	0.02%	0.15%
31	39	4.311	4.312	0.00	0.02%	0.15%
31	40	4.309	4.310	0.00	0.02%	0.15%
50	41	4.314	4.314	0.00	0.00%	0.00%
50	42	4.315	4.314	0.00	-0.02%	0.15%
50	43	4.315	4.313	0.00	-0.05%	0.31%
50	44	4.314	4.312	0.00	-0.05%	0.31%
	Max	4.316	4.316	0.00	0.05%	1.69%
	Average	4.312	4.312	0.00	0.00%	0.20%
	Min	4.309	4.304	0.00	-0.25%	0.00%
	Std Dev	0.002	0.002	0.00	0.05%	0.28%



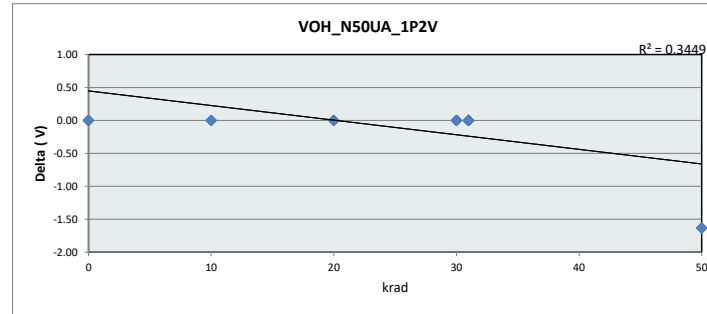
VOH_N8MA_4P5V						
Test Site	SLAB	SLAB	SLAB	SLAB	SLAB	SLAB
Tester	ETS88B	ETS88B	ETS88B	ETS88B	ETS88B	ETS88B
Test Number	EQ708301	EQ708301	EQ708301	EQ708301	EQ708301	EQ708301
Max Limit	4.6	V	4.6	V	4.6	V
Min Limit	3.95	V	3.95	V	3.95	V
krad	0	10	20	30	31	50
LL	3.95	3.95	3.95	3.95	3.95	3.95
Min	4.31	4.31	4.30	4.31	4.31	4.31
Average	4.31	4.31	4.31	4.31	4.31	4.31
Max	4.32	4.32	4.31	4.31	4.32	4.31
UL	4.60	4.60	4.60	4.60	4.60	4.60



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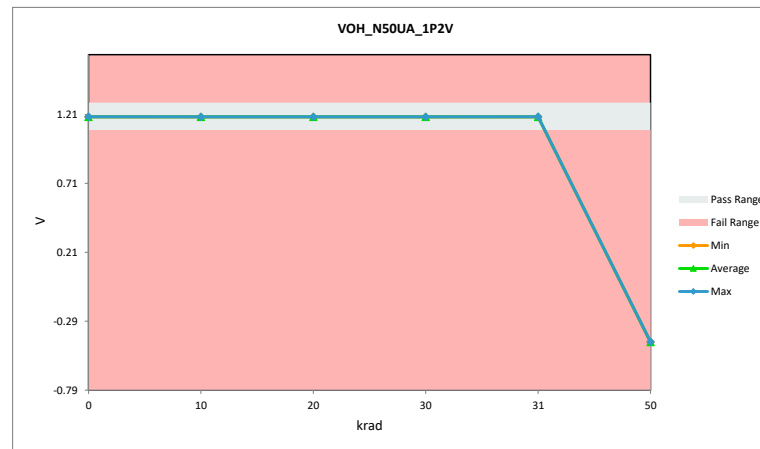
VOH_N50UA_1P2V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.3	1.3
Min Limit	1.1	1.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.197	1.197	0.00	0.00%	0.00%
0	2	1.197	1.197	0.00	0.00%	0.00%
0	3	1.197	1.197	0.00	0.00%	0.00%
0	4	1.197	1.196	0.00	-0.08%	0.50%
10	5	1.197	1.196	0.00	-0.08%	0.50%
10	6	1.197	1.196	0.00	-0.08%	0.50%
10	7	1.197	1.196	0.00	-0.08%	0.50%
10	8	1.196	1.196	0.00	0.00%	0.00%
20	9	1.196	1.196	0.00	0.00%	0.00%
20	10	1.197	1.196	0.00	-0.08%	0.50%
20	11	1.197	1.196	0.00	-0.08%	0.50%
20	12	1.196	1.196	0.00	0.00%	0.00%
30	13	1.197	1.196	0.00	-0.08%	0.50%
30	14	1.196	1.196	0.00	0.00%	0.00%
30	15	1.196	1.196	0.00	0.00%	0.00%
30	16	1.197	1.196	0.00	-0.08%	0.50%
31	17	1.196	1.196	0.00	0.00%	0.00%
31	18	1.197	1.196	0.00	-0.08%	0.50%
31	19	1.197	1.196	0.00	-0.08%	0.50%
31	20	1.196	1.196	0.00	0.00%	0.00%
31	21	1.196	1.196	0.00	0.00%	0.00%
31	22	1.197	1.196	0.00	-0.08%	0.50%
31	23	1.196	1.196	0.00	0.00%	0.00%
31	24	1.197	1.196	0.00	-0.08%	0.50%
31	25	1.196	1.196	0.00	0.00%	0.00%
31	26	1.196	1.196	0.00	0.00%	0.00%
31	27	1.196	1.196	0.00	0.00%	0.00%
31	28	1.197	1.196	0.00	-0.08%	0.50%
31	29	1.197	1.196	0.00	-0.08%	0.50%
31	30	1.197	1.196	0.00	-0.08%	0.50%
31	31	1.196	1.196	0.00	0.00%	0.00%
31	32	1.197	1.196	0.00	-0.08%	0.50%
31	33	1.197	1.196	0.00	-0.08%	0.50%
31	34	1.197	1.196	0.00	-0.08%	0.50%
31	35	1.196	1.196	0.00	0.00%	0.00%
31	36	1.197	1.196	0.00	-0.08%	0.50%
31	37	1.196	1.197	0.00	0.08%	0.50%
31	38	1.196	1.196	0.00	0.00%	0.00%
31	39	1.197	1.196	0.00	-0.08%	0.50%
31	40	1.197	1.196	0.00	-0.08%	0.50%
50	41	1.196	-0.437	-1.63	-136.54%	816.50%
50	42	1.196	-0.439	-1.64	-136.71%	817.50%
50	43	1.196	-0.437	-1.63	-136.54%	816.50%
50	44	1.196	-0.436	-1.63	-136.45%	816.00%
Max		1.197	1.197	0.00	0.08%	817.50%
Average		1.197	1.048	-0.15	-12.45%	74.49%
Min		1.196	-0.439	-1.64	-136.71%	0.00%
Std Dev		0.001	0.475	0.47	39.70%	237.40%



VOH_N50UA_1P2V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	1.3	V
Min Limit	1.1	V

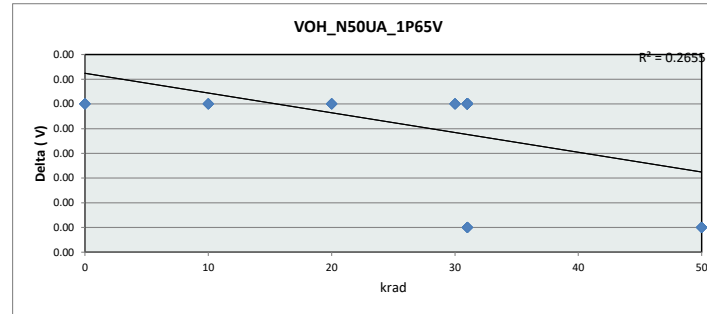
krad	0	10	20	30	31	50
LL	1.10	1.10	1.10	1.10	1.10	1.10
Min	1.20	1.20	1.20	1.20	1.20	-0.44
Average	1.20	1.20	1.20	1.20	1.20	-0.44
Max	1.20	1.20	1.20	1.20	1.20	-0.44
UL	1.30	1.30	1.30	1.30	1.30	1.30



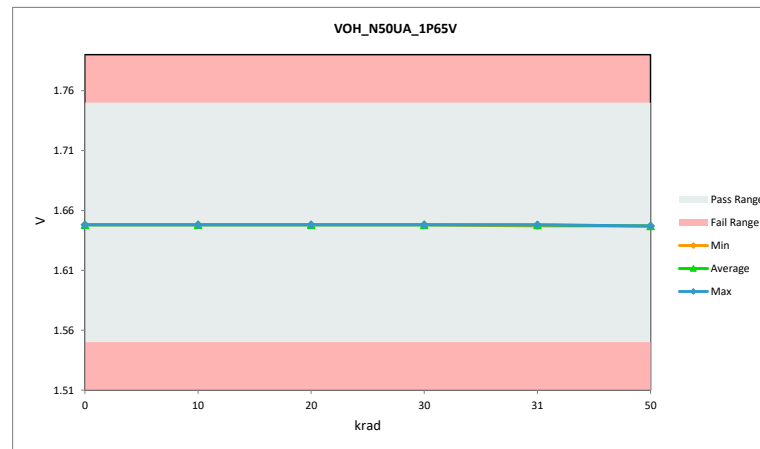
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VOH_N50UA_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	1.75	1.75
Min Limit	1.55	1.55

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.648	1.648	0.00	0.00%	0.00%
0	2	1.648	1.648	0.00	0.00%	0.00%
0	3	1.648	1.648	0.00	0.00%	0.00%
0	4	1.648	1.648	0.00	0.00%	0.00%
10	5	1.648	1.648	0.00	0.00%	0.00%
10	6	1.648	1.648	0.00	0.00%	0.00%
10	7	1.648	1.648	0.00	0.00%	0.00%
10	8	1.648	1.648	0.00	0.00%	0.00%
20	9	1.648	1.648	0.00	0.00%	0.00%
20	10	1.648	1.648	0.00	0.00%	0.00%
20	11	1.648	1.648	0.00	0.00%	0.00%
20	12	1.648	1.648	0.00	0.00%	0.00%
30	13	1.648	1.648	0.00	0.00%	0.00%
30	14	1.648	1.648	0.00	0.00%	0.00%
30	15	1.648	1.648	0.00	0.00%	0.00%
30	16	1.648	1.648	0.00	0.00%	0.00%
31	17	1.648	1.648	0.00	0.00%	0.00%
31	18	1.648	1.648	0.00	0.00%	0.00%
31	19	1.648	1.648	0.00	0.00%	0.00%
31	20	1.648	1.648	0.00	0.00%	0.00%
31	21	1.648	1.648	0.00	0.00%	0.00%
31	22	1.648	1.648	0.00	0.00%	0.00%
31	23	1.648	1.648	0.00	0.00%	0.00%
31	24	1.648	1.648	0.00	0.00%	0.00%
31	25	1.648	1.648	0.00	0.00%	0.00%
31	26	1.648	1.648	0.00	0.00%	0.00%
31	27	1.648	1.648	0.00	0.00%	0.00%
31	28	1.648	1.648	0.00	0.00%	0.00%
31	29	1.648	1.647	0.00	-0.06%	0.50%
31	30	1.648	1.648	0.00	0.00%	0.00%
31	31	1.648	1.648	0.00	0.00%	0.00%
31	32	1.648	1.648	0.00	0.00%	0.00%
31	33	1.648	1.648	0.00	0.00%	0.00%
31	34	1.648	1.647	0.00	-0.06%	0.50%
31	35	1.648	1.647	0.00	-0.06%	0.50%
31	36	1.648	1.648	0.00	0.00%	0.00%
31	37	1.648	1.648	0.00	0.00%	0.00%
31	38	1.648	1.648	0.00	0.00%	0.00%
31	39	1.648	1.648	0.00	0.00%	0.00%
31	40	1.648	1.647	0.00	-0.06%	0.50%
50	41	1.648	1.647	0.00	-0.06%	0.50%
50	42	1.648	1.647	0.00	-0.06%	0.50%
50	43	1.648	1.647	0.00	-0.06%	0.50%
50	44	1.648	1.647	0.00	-0.06%	0.50%
Max	1.648	1.648	0.00	0.00%	0.50%	
Average	1.648	1.648	0.00	-0.01%	0.09%	
Min	1.648	1.647	0.00	-0.06%	0.00%	
Std Dev	0.000	0.000	0.00	0.02%	0.20%	



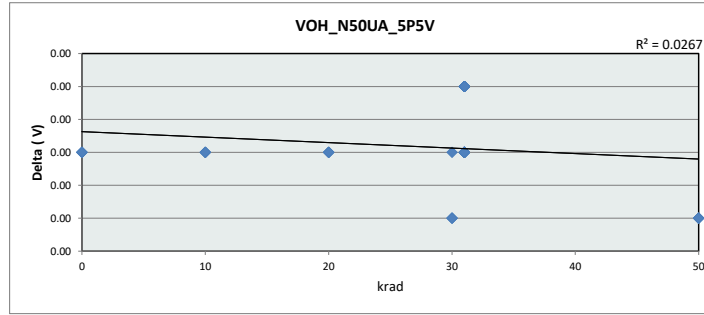
VOH_N50UA_1P65V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	1.75	V				
Min Limit	1.55	V				
krad	0	10	20	30	31	50
LL	1.55	1.55	1.55	1.55	1.55	1.55
Min	1.65	1.65	1.65	1.65	1.65	1.65
Average	1.65	1.65	1.65	1.65	1.65	1.65
Max	1.65	1.65	1.65	1.65	1.65	1.65
UL	1.75	1.75	1.75	1.75	1.75	1.75



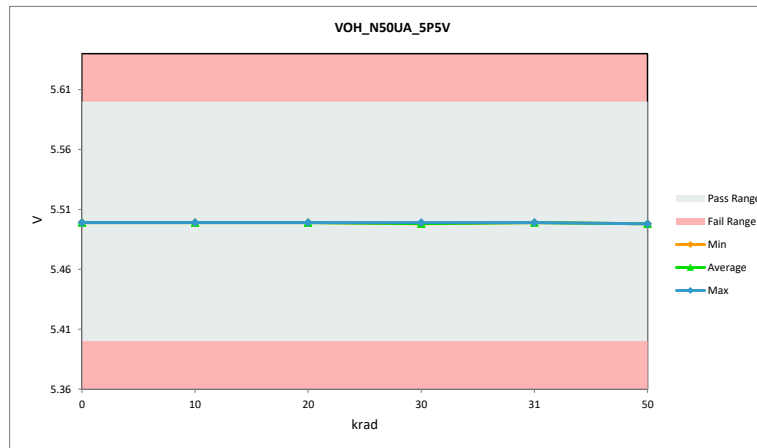
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VOH_N50UA_5P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	5.6	5.6
Min Limit	5.4	5.4

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	5.499	5.499	0.00	0.00%	0.00%
0	2	5.499	5.499	0.00	0.00%	0.00%
0	3	5.499	5.499	0.00	0.00%	0.00%
0	4	5.499	5.499	0.00	0.00%	0.00%
10	5	5.499	5.499	0.00	0.00%	0.00%
10	6	5.499	5.499	0.00	0.00%	0.00%
10	7	5.499	5.499	0.00	0.00%	0.00%
10	8	5.499	5.499	0.00	0.00%	0.00%
20	9	5.499	5.499	0.00	0.00%	0.00%
20	10	5.499	5.499	0.00	0.00%	0.00%
20	11	5.499	5.499	0.00	0.00%	0.00%
20	12	5.499	5.499	0.00	0.00%	0.00%
30	13	5.499	5.498	0.00	-0.02%	0.50%
30	14	5.499	5.498	0.00	-0.02%	0.50%
30	15	5.499	5.498	0.00	-0.02%	0.50%
30	16	5.499	5.499	0.00	0.00%	0.00%
31	17	5.499	5.499	0.00	0.00%	0.00%
31	18	5.499	5.499	0.00	0.00%	0.00%
31	19	5.499	5.499	0.00	0.00%	0.00%
31	20	5.498	5.499	0.00	0.02%	0.50%
31	21	5.498	5.499	0.00	0.02%	0.50%
31	22	5.499	5.499	0.00	0.00%	0.00%
31	23	5.498	5.499	0.00	0.02%	0.50%
31	24	5.498	5.499	0.00	0.02%	0.50%
31	25	5.499	5.499	0.00	0.00%	0.00%
31	26	5.499	5.499	0.00	0.00%	0.00%
31	27	5.498	5.499	0.00	0.02%	0.50%
31	28	5.499	5.499	0.00	0.00%	0.00%
31	29	5.498	5.499	0.00	0.02%	0.50%
31	30	5.499	5.499	0.00	0.00%	0.00%
31	31	5.499	5.499	0.00	0.00%	0.00%
31	32	5.499	5.499	0.00	0.00%	0.00%
31	33	5.498	5.499	0.00	0.02%	0.50%
31	34	5.498	5.499	0.00	0.02%	0.50%
31	35	5.498	5.499	0.00	0.02%	0.50%
31	36	5.498	5.499	0.00	0.02%	0.50%
31	37	5.498	5.499	0.00	0.02%	0.50%
31	38	5.499	5.499	0.00	0.00%	0.00%
31	39	5.499	5.499	0.00	0.00%	0.00%
31	40	5.499	5.499	0.00	0.00%	0.00%
50	41	5.499	5.498	0.00	-0.02%	0.50%
50	42	5.499	5.498	0.00	-0.02%	0.50%
50	43	5.499	5.498	0.00	-0.02%	0.50%
50	44	5.499	5.498	0.00	-0.02%	0.50%
Max	5.499	5.499	0.00	0.02%	0.50%	
Average	5.499	5.499	0.00	0.00%	0.20%	
Min	5.498	5.498	0.00	-0.02%	0.00%	
Std Dev	0.000	0.000	0.00	0.01%	0.25%	



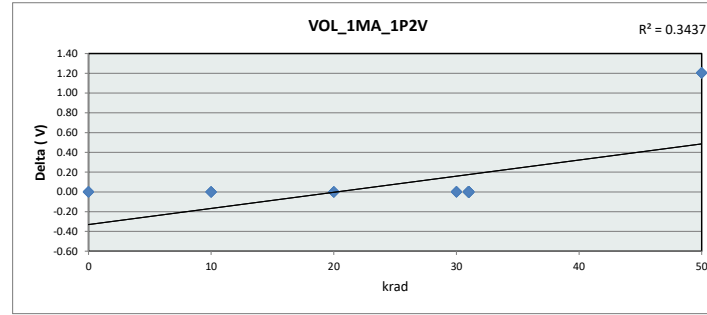
VOH_N50UA_5P5V							
Test Site	SLAB	SLAB					
Tester	ETS88B	ETS88B					
Test Number	EQ708301	EQ708301					
Max Limit	5.6	V					
Min Limit	5.4	V					
krad	0	10	20	30	31	50	
LL	5.40	5.40	5.40	5.40	5.40	5.40	
Min	5.50	5.50	5.50	5.50	5.50	5.50	
Average	5.50	5.50	5.50	5.50	5.50	5.50	
Max	5.50	5.50	5.50	5.50	5.50	5.50	
UL	5.60	5.60	5.60	5.60	5.60	5.60	



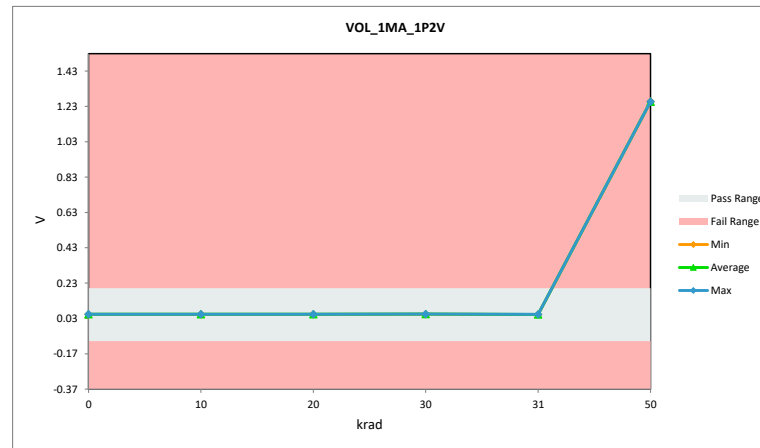
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VOL_1MA_1P2V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.2	0.2
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.052	0.053	0.00	1.92%	0.33%
0	2	0.053	0.053	0.00	0.00%	0.00%
0	3	0.053	0.053	0.00	0.00%	0.00%
0	4	0.052	0.052	0.00	0.00%	0.00%
10	5	0.053	0.053	0.00	0.00%	0.00%
10	6	0.053	0.053	0.00	0.00%	0.00%
10	7	0.053	0.052	0.00	-1.89%	0.33%
10	8	0.052	0.052	0.00	0.00%	0.00%
20	9	0.052	0.052	0.00	0.00%	0.00%
20	10	0.053	0.052	0.00	-1.89%	0.33%
20	11	0.053	0.053	0.00	0.00%	0.00%
20	12	0.053	0.053	0.00	0.00%	0.00%
30	13	0.053	0.054	0.00	1.89%	0.33%
30	14	0.052	0.054	0.00	3.85%	0.67%
30	15	0.053	0.053	0.00	0.00%	0.00%
30	16	0.053	0.053	0.00	0.00%	0.00%
31	17	0.052	0.051	0.00	-1.92%	0.33%
31	18	0.052	0.051	0.00	-1.92%	0.33%
31	19	0.053	0.052	0.00	-1.89%	0.33%
31	20	0.052	0.051	0.00	-1.92%	0.33%
31	21	0.052	0.051	0.00	-1.92%	0.33%
31	22	0.053	0.052	0.00	-1.89%	0.33%
31	23	0.052	0.051	0.00	-1.92%	0.33%
31	24	0.052	0.051	0.00	-1.92%	0.33%
31	25	0.053	0.052	0.00	-1.89%	0.33%
31	26	0.053	0.051	0.00	-3.77%	0.67%
31	27	0.052	0.051	0.00	-1.92%	0.33%
31	28	0.052	0.051	0.00	-1.92%	0.33%
31	29	0.053	0.052	0.00	-1.89%	0.33%
31	30	0.053	0.052	0.00	-1.89%	0.33%
31	31	0.053	0.052	0.00	-1.89%	0.33%
31	32	0.054	0.052	0.00	-3.70%	0.67%
31	33	0.053	0.052	0.00	-1.89%	0.33%
31	34	0.053	0.051	0.00	-3.77%	0.67%
31	35	0.053	0.051	0.00	-3.77%	0.67%
31	36	0.052	0.051	0.00	-1.92%	0.33%
31	37	0.052	0.051	0.00	-1.92%	0.33%
31	38	0.052	0.051	0.00	-1.92%	0.33%
31	39	0.053	0.051	0.00	-3.77%	0.67%
31	40	0.052	0.051	0.00	-1.92%	0.33%
50	41	0.052	1.256	1.20	2315.38%	401.33%
50	42	0.052	1.256	1.20	2315.38%	401.33%
50	43	0.053	1.256	1.20	2269.81%	401.00%
50	44	0.053	1.256	1.20	2269.81%	401.00%
	Max	0.054	1.256	1.20	2315.38%	401.33%
	Average	0.053	0.161	0.11	207.25%	36.73%
	Min	0.052	0.051	0.00	-3.77%	0.00%
	Std Dev	0.001	0.350	0.35	667.11%	116.58%



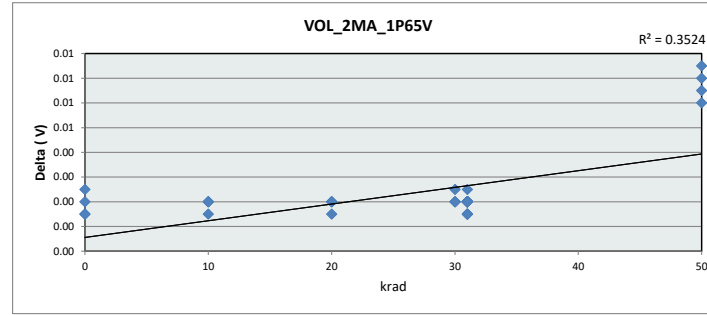
VOL_1MA_1P2V						
Test Site	SLAB	SLAB	SLAB	SLAB	SLAB	SLAB
Tester	ETS88B	ETS88B	ETS88B	ETS88B	ETS88B	ETS88B
Test Number	EQ708301	EQ708301	EQ708301	EQ708301	EQ708301	EQ708301
Max Limit	0.2	0.2	0.2	0.2	0.2	0.2
Min Limit	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.05	0.05	0.05	0.05	0.05	1.26
Average	0.05	0.05	0.05	0.05	0.05	1.26
Max	0.05	0.05	0.05	0.05	0.05	1.26
UL	0.20	0.20	0.20	0.20	0.20	0.20



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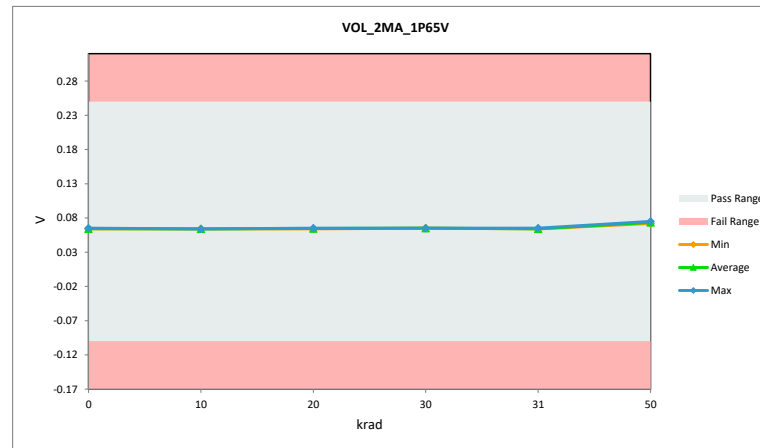
VOL_2MA_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.25	0.25
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.065	0.064	0.00	-1.54%	0.29%
0	2	0.065	0.064	0.00	-1.54%	0.29%
0	3	0.064	0.065	0.00	1.56%	0.29%
0	4	0.064	0.064	0.00	0.00%	0.00%
10	5	0.064	0.064	0.00	0.00%	0.00%
10	6	0.065	0.064	0.00	-1.54%	0.29%
10	7	0.064	0.064	0.00	0.00%	0.00%
10	8	0.064	0.064	0.00	0.00%	0.00%
20	9	0.064	0.064	0.00	0.00%	0.00%
20	10	0.065	0.064	0.00	-1.54%	0.29%
20	11	0.065	0.065	0.00	0.00%	0.00%
20	12	0.065	0.065	0.00	0.00%	0.00%
30	13	0.065	0.065	0.00	0.00%	0.00%
30	14	0.065	0.065	0.00	0.00%	0.00%
30	15	0.065	0.065	0.00	0.00%	0.00%
30	16	0.064	0.065	0.00	1.56%	0.29%
31	17	0.064	0.064	0.00	0.00%	0.00%
31	18	0.064	0.064	0.00	0.00%	0.00%
31	19	0.064	0.064	0.00	0.00%	0.00%
31	20	0.064	0.064	0.00	0.00%	0.00%
31	21	0.064	0.064	0.00	0.00%	0.00%
31	22	0.065	0.065	0.00	0.00%	0.00%
31	23	0.064	0.065	0.00	1.56%	0.29%
31	24	0.064	0.064	0.00	0.00%	0.00%
31	25	0.064	0.064	0.00	0.00%	0.00%
31	26	0.064	0.064	0.00	0.00%	0.00%
31	27	0.064	0.064	0.00	0.00%	0.00%
31	28	0.064	0.064	0.00	0.00%	0.00%
31	29	0.065	0.064	0.00	-1.54%	0.29%
31	30	0.065	0.065	0.00	0.00%	0.00%
31	31	0.065	0.064	0.00	-1.54%	0.29%
31	32	0.064	0.064	0.00	0.00%	0.00%
31	33	0.064	0.064	0.00	0.00%	0.00%
31	34	0.065	0.064	0.00	-1.54%	0.29%
31	35	0.065	0.064	0.00	-1.54%	0.29%
31	36	0.064	0.064	0.00	0.00%	0.00%
31	37	0.064	0.064	0.00	0.00%	0.00%
31	38	0.064	0.064	0.00	0.00%	0.00%
31	39	0.065	0.065	0.00	0.00%	0.00%
31	40	0.064	0.064	0.00	0.00%	0.00%
50	41	0.064	0.072	0.01	12.50%	2.29%
50	42	0.064	0.074	0.01	15.63%	2.86%
50	43	0.064	0.073	0.01	14.06%	2.57%
50	44	0.064	0.075	0.01	17.19%	3.14%
	Max	0.065	0.075	0.01	17.19%	3.14%
	Average	0.064	0.065	0.00	1.18%	0.32%
	Min	0.064	0.064	0.00	-1.54%	0.00%
	Std Dev	0.000	0.003	0.00	4.47%	0.78%



VOL_2MA_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	0.25	V
Min Limit	-0.1	V

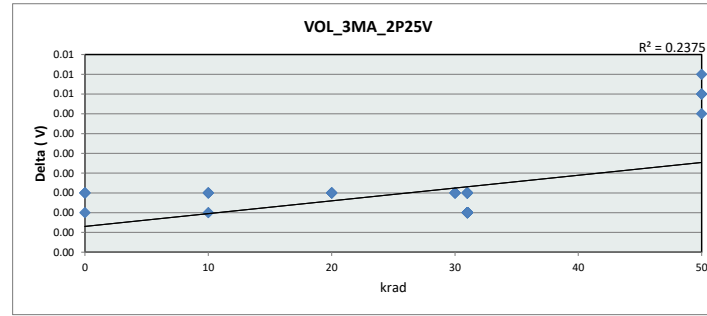
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.06	0.06	0.06	0.07	0.06	0.07
Average	0.06	0.06	0.06	0.07	0.06	0.07
Max	0.07	0.06	0.07	0.07	0.07	0.08
UL	0.25	0.25	0.25	0.25	0.25	0.25



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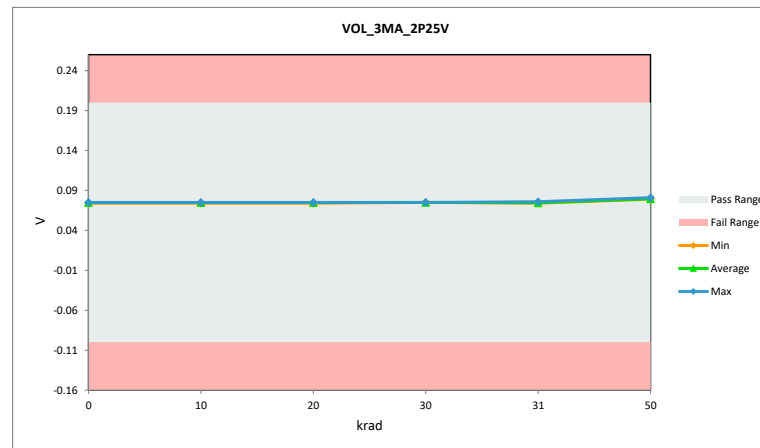
VOL_3MA_2P25V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.2	0.2
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.075	0.074	0.00	-1.33%	0.33%
0	2	0.075	0.075	0.00	0.00%	0.00%
0	3	0.075	0.075	0.00	0.00%	0.00%
0	4	0.075	0.075	0.00	0.00%	0.00%
10	5	0.075	0.075	0.00	0.00%	0.00%
10	6	0.075	0.075	0.00	0.00%	0.00%
10	7	0.075	0.074	0.00	-1.33%	0.33%
10	8	0.075	0.075	0.00	0.00%	0.00%
20	9	0.074	0.074	0.00	0.00%	0.00%
20	10	0.075	0.075	0.00	0.00%	0.00%
20	11	0.075	0.075	0.00	0.00%	0.00%
20	12	0.075	0.075	0.00	0.00%	0.00%
30	13	0.075	0.075	0.00	0.00%	0.00%
30	14	0.075	0.075	0.00	0.00%	0.00%
30	15	0.075	0.075	0.00	0.00%	0.00%
30	16	0.075	0.075	0.00	0.00%	0.00%
31	17	0.075	0.074	0.00	-1.33%	0.33%
31	18	0.075	0.074	0.00	-1.33%	0.33%
31	19	0.075	0.074	0.00	-1.33%	0.33%
31	20	0.075	0.074	0.00	-1.33%	0.33%
31	21	0.074	0.074	0.00	0.00%	0.00%
31	22	0.076	0.076	0.00	0.00%	0.00%
31	23	0.075	0.075	0.00	0.00%	0.00%
31	24	0.075	0.075	0.00	0.00%	0.00%
31	25	0.075	0.075	0.00	0.00%	0.00%
31	26	0.075	0.075	0.00	0.00%	0.00%
31	27	0.075	0.074	0.00	-1.33%	0.33%
31	28	0.075	0.075	0.00	0.00%	0.00%
31	29	0.075	0.074	0.00	-1.33%	0.33%
31	30	0.076	0.075	0.00	-1.32%	0.33%
31	31	0.075	0.074	0.00	-1.33%	0.33%
31	32	0.075	0.074	0.00	-1.33%	0.33%
31	33	0.075	0.074	0.00	-1.33%	0.33%
31	34	0.075	0.074	0.00	-1.33%	0.33%
31	35	0.076	0.075	0.00	-1.32%	0.33%
31	36	0.075	0.074	0.00	-1.33%	0.33%
31	37	0.075	0.074	0.00	-1.33%	0.33%
31	38	0.075	0.075	0.00	0.00%	0.00%
31	39	0.076	0.075	0.00	-1.32%	0.33%
31	40	0.075	0.074	0.00	-1.33%	0.33%
50	41	0.074	0.079	0.01	6.76%	1.67%
50	42	0.074	0.079	0.01	6.76%	1.67%
50	43	0.075	0.079	0.00	5.33%	1.33%
50	44	0.075	0.081	0.01	8.00%	2.00%
	Max	0.076	0.081	0.01	8.00%	2.00%
	Average	0.075	0.075	0.00	0.07%	0.29%
	Min	0.074	0.074	0.00	-1.33%	0.00%
	Std Dev	0.000	0.002	0.00	2.24%	0.47%



VOL_3MA_2P25V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	0.2	V
Min Limit	-0.1	V

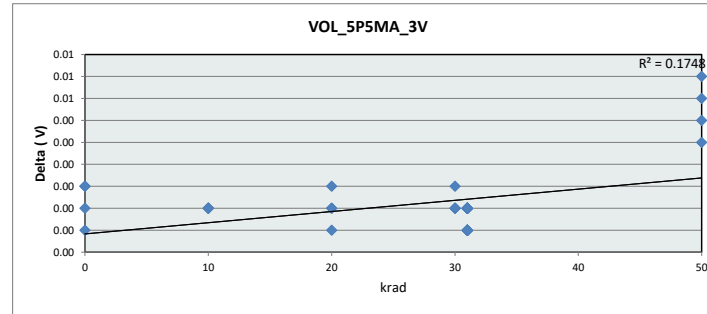
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.07	0.07	0.07	0.08	0.07	0.08
Average	0.07	0.07	0.07	0.08	0.07	0.08
Max	0.08	0.08	0.08	0.08	0.08	0.08
UL	0.20	0.20	0.20	0.20	0.20	0.20



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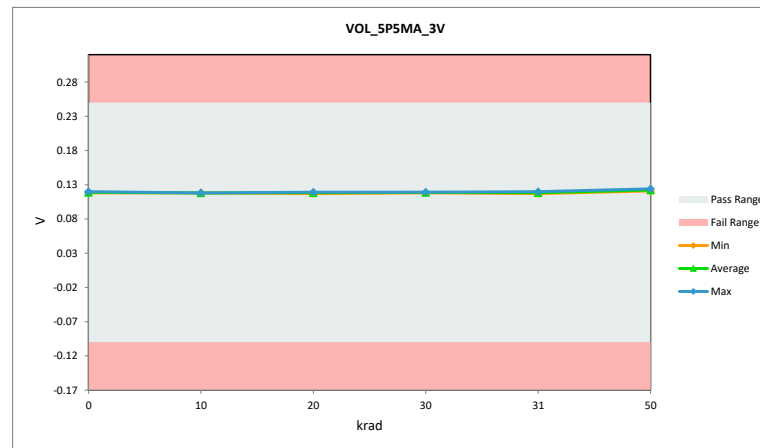
VOL_5P5MA_3V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.25	0.25
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.118	0.118	0.00	0.00%	0.00%
0	2	0.118	0.119	0.00	0.85%	0.29%
0	3	0.119	0.120	0.00	0.84%	0.29%
0	4	0.119	0.118	0.00	-0.84%	0.29%
10	5	0.118	0.118	0.00	0.00%	0.00%
10	6	0.118	0.118	0.00	0.00%	0.00%
10	7	0.118	0.118	0.00	0.00%	0.00%
10	8	0.118	0.118	0.00	0.00%	0.00%
20	9	0.118	0.117	0.00	-0.85%	0.29%
20	10	0.118	0.118	0.00	0.00%	0.00%
20	11	0.118	0.119	0.00	0.85%	0.29%
20	12	0.119	0.119	0.00	0.00%	0.00%
30	13	0.119	0.119	0.00	0.00%	0.00%
30	14	0.118	0.118	0.00	0.00%	0.00%
30	15	0.118	0.119	0.00	0.85%	0.29%
30	16	0.119	0.119	0.00	0.00%	0.00%
31	17	0.118	0.118	0.00	0.00%	0.00%
31	18	0.119	0.118	0.00	-0.84%	0.29%
31	19	0.118	0.118	0.00	0.00%	0.00%
31	20	0.118	0.118	0.00	0.00%	0.00%
31	21	0.118	0.117	0.00	-0.85%	0.29%
31	22	0.120	0.120	0.00	0.00%	0.00%
31	23	0.119	0.119	0.00	0.00%	0.00%
31	24	0.119	0.119	0.00	0.00%	0.00%
31	25	0.118	0.118	0.00	0.00%	0.00%
31	26	0.119	0.119	0.00	0.00%	0.00%
31	27	0.118	0.118	0.00	0.00%	0.00%
31	28	0.119	0.119	0.00	0.00%	0.00%
31	29	0.119	0.118	0.00	-0.84%	0.29%
31	30	0.120	0.119	0.00	-0.83%	0.29%
31	31	0.119	0.118	0.00	-0.84%	0.29%
31	32	0.118	0.118	0.00	0.00%	0.00%
31	33	0.118	0.118	0.00	0.00%	0.00%
31	34	0.119	0.118	0.00	-0.84%	0.29%
31	35	0.120	0.119	0.00	-0.83%	0.29%
31	36	0.119	0.118	0.00	-0.84%	0.29%
31	37	0.119	0.118	0.00	-0.84%	0.29%
31	38	0.119	0.119	0.00	0.00%	0.00%
31	39	0.120	0.119	0.00	-0.83%	0.29%
31	40	0.119	0.118	0.00	-0.84%	0.29%
50	41	0.118	0.121	0.00	2.54%	0.86%
50	42	0.117	0.122	0.00	4.27%	1.43%
50	43	0.118	0.122	0.00	3.39%	1.14%
50	44	0.118	0.124	0.01	5.08%	1.71%
	Max	0.120	0.124	0.00	5.08%	1.71%
	Average	0.119	0.119	0.00	0.18%	0.23%
	Min	0.117	0.117	0.00	-0.85%	0.00%
	Std Dev	0.001	0.001	0.00	1.30%	0.38%



VOL_5P5MA_3V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	0.25	V
Min Limit	-0.1	V

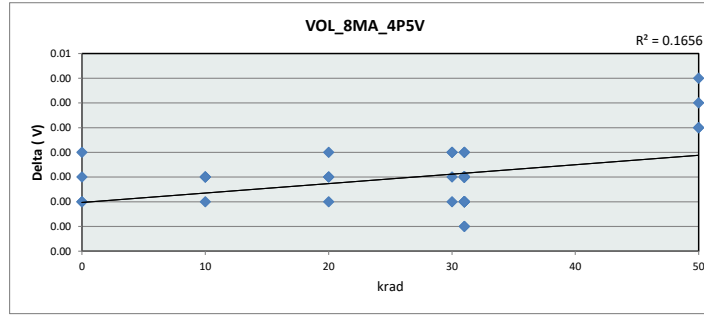
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.12	0.12	0.12	0.12	0.12	0.12
Average	0.12	0.12	0.12	0.12	0.12	0.12
Max	0.12	0.12	0.12	0.12	0.12	0.12
UL	0.25	0.25	0.25	0.25	0.25	0.25



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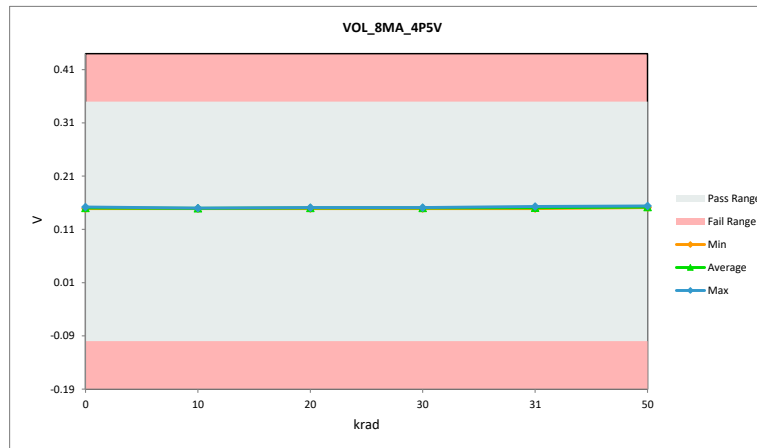
VOL_8MA_4P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.35	0.35
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.150	0.149	0.00	-0.67%	0.22%
0	2	0.150	0.150	0.00	0.00%	0.00%
0	3	0.151	0.152	0.00	0.66%	0.22%
0	4	0.151	0.150	0.00	-0.66%	0.22%
10	5	0.150	0.150	0.00	0.00%	0.00%
10	6	0.150	0.149	0.00	-0.67%	0.22%
10	7	0.149	0.149	0.00	0.00%	0.00%
10	8	0.150	0.150	0.00	0.00%	0.00%
20	9	0.150	0.149	0.00	-0.67%	0.22%
20	10	0.150	0.150	0.00	0.00%	0.00%
20	11	0.150	0.151	0.00	0.67%	0.22%
20	12	0.151	0.151	0.00	0.00%	0.00%
30	13	0.150	0.151	0.00	0.67%	0.22%
30	14	0.150	0.149	0.00	-0.67%	0.22%
30	15	0.150	0.150	0.00	0.00%	0.00%
30	16	0.150	0.151	0.00	0.67%	0.22%
31	17	0.150	0.150	0.00	0.00%	0.00%
31	18	0.151	0.150	0.00	-0.66%	0.22%
31	19	0.150	0.150	0.00	0.00%	0.00%
31	20	0.150	0.150	0.00	0.00%	0.00%
31	21	0.150	0.149	0.00	-0.67%	0.22%
31	22	0.153	0.153	0.00	0.00%	0.00%
31	23	0.151	0.152	0.00	0.66%	0.22%
31	24	0.151	0.151	0.00	0.00%	0.00%
31	25	0.150	0.150	0.00	0.00%	0.00%
31	26	0.151	0.151	0.00	0.00%	0.00%
31	27	0.150	0.150	0.00	0.00%	0.00%
31	28	0.151	0.151	0.00	0.00%	0.00%
31	29	0.151	0.150	0.00	-0.66%	0.22%
31	30	0.153	0.151	0.00	-1.31%	0.44%
31	31	0.150	0.150	0.00	0.00%	0.00%
31	32	0.149	0.150	0.00	0.67%	0.22%
31	33	0.150	0.150	0.00	0.00%	0.00%
31	34	0.151	0.150	0.00	-0.66%	0.22%
31	35	0.153	0.152	0.00	-0.65%	0.22%
31	36	0.152	0.150	0.00	-1.32%	0.44%
31	37	0.151	0.150	0.00	-0.66%	0.22%
31	38	0.152	0.152	0.00	0.00%	0.00%
31	39	0.152	0.151	0.00	-0.66%	0.22%
31	40	0.151	0.150	0.00	-0.66%	0.22%
50	41	0.149	0.151	0.00	1.34%	0.44%
50	42	0.149	0.151	0.00	1.34%	0.44%
50	43	0.149	0.152	0.00	2.01%	0.67%
50	44	0.150	0.154	0.00	2.67%	0.89%
	Max	0.153	0.154	0.00	2.67%	0.89%
	Average	0.151	0.151	0.00	0.00%	0.17%
	Min	0.149	0.149	0.00	-1.32%	0.00%
	Std Dev	0.001	0.001	0.00	0.79%	0.20%



VOL_8MA_4P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Max Limit	0.35	V
Min Limit	-0.1	V

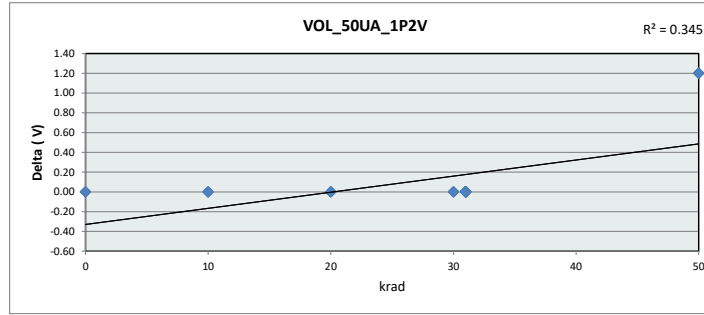
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.15	0.15	0.15	0.15	0.15	0.15
Average	0.15	0.15	0.15	0.15	0.15	0.15
Max	0.15	0.15	0.15	0.15	0.15	0.15
UL	0.35	0.35	0.35	0.35	0.35	0.35



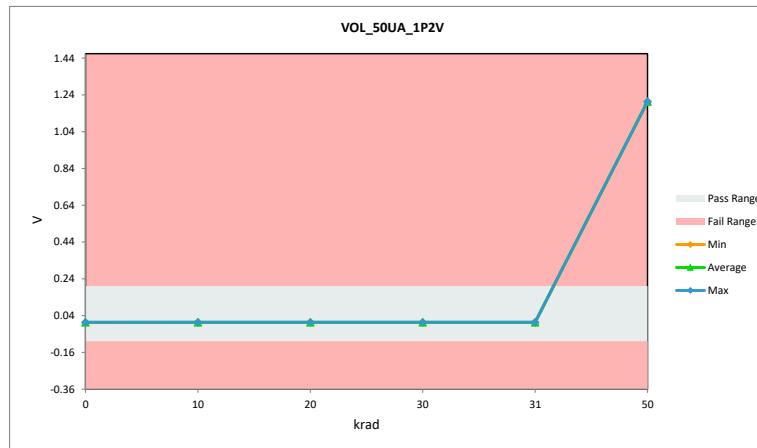
TID Report SN54SC245-SEP

VOL_50UA_1P2V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.2	0.2
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.003	0.002	0.00	-33.33%	0.33%
0	2	0.002	0.003	0.00	50.00%	0.33%
0	3	0.002	0.002	0.00	0.00%	0.00%
0	4	0.002	0.002	0.00	0.00%	0.00%
10	5	0.003	0.003	0.00	0.00%	0.00%
10	6	0.002	0.003	0.00	50.00%	0.33%
10	7	0.003	0.003	0.00	0.00%	0.00%
10	8	0.002	0.002	0.00	0.00%	0.00%
20	9	0.002	0.003	0.00	50.00%	0.33%
20	10	0.003	0.003	0.00	0.00%	0.00%
20	11	0.003	0.002	0.00	-33.33%	0.33%
20	12	0.002	0.003	0.00	50.00%	0.33%
30	13	0.002	0.003	0.00	50.00%	0.33%
30	14	0.002	0.003	0.00	50.00%	0.33%
30	15	0.003	0.003	0.00	0.00%	0.00%
30	16	0.002	0.002	0.00	0.00%	0.00%
31	17	0.002	0.002	0.00	0.00%	0.00%
31	18	0.003	0.002	0.00	-33.33%	0.33%
31	19	0.002	0.003	0.00	50.00%	0.33%
31	20	0.002	0.002	0.00	0.00%	0.00%
31	21	0.002	0.002	0.00	0.00%	0.00%
31	22	0.002	0.003	0.00	50.00%	0.33%
31	23	0.002	0.002	0.00	0.00%	0.00%
31	24	0.002	0.002	0.00	0.00%	0.00%
31	25	0.002	0.003	0.00	50.00%	0.33%
31	26	0.002	0.002	0.00	0.00%	0.00%
31	27	0.002	0.003	0.00	50.00%	0.33%
31	28	0.002	0.002	0.00	0.00%	0.00%
31	29	0.002	0.002	0.00	0.00%	0.00%
31	30	0.002	0.003	0.00	50.00%	0.33%
31	31	0.002	0.002	0.00	0.00%	0.00%
31	32	0.002	0.002	0.00	0.00%	0.00%
31	33	0.002	0.003	0.00	50.00%	0.33%
31	34	0.002	0.002	0.00	0.00%	0.00%
31	35	0.002	0.003	0.00	50.00%	0.33%
31	36	0.002	0.003	0.00	50.00%	0.33%
31	37	0.002	0.002	0.00	0.00%	0.00%
31	38	0.002	0.002	0.00	0.00%	0.00%
31	39	0.003	0.002	0.00	-33.33%	0.33%
31	40	0.002	0.002	0.00	0.00%	0.00%
50	41	0.002	1.203	1.20	60050.00%	400.33%
50	42	0.003	1.203	1.20	40000.00%	400.00%
50	43	0.002	1.203	1.20	60050.00%	400.33%
50	44	0.002	1.203	1.20	60050.00%	400.33%
Max		0.003	1.203	1.20	60050.00%	400.33%
Average		0.002	0.112	0.11	5016.29%	36.52%
Min		0.002	0.002	0.00	-33.33%	0.00%
Std Dev		0.000	0.349	0.35	16218.61%	116.35%



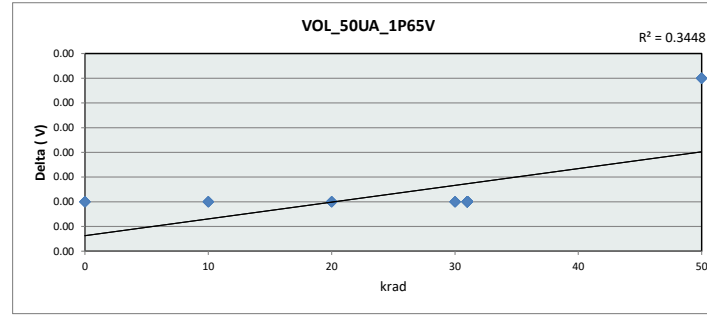
VOL_50UA_1P2V						
Test Site	SLAB	SLAB	SLAB	SLAB	SLAB	SLAB
Tester	ETS88B	ETS88B	ETS88B	ETS88B	ETS88B	ETS88B
Test Number	EQ708301	EQ708301	EQ708301	EQ708301	EQ708301	EQ708301
Max Limit	0.2	0.2	0.2	0.2	0.2	0.2
Min Limit	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.00	0.00	0.00	0.00	0.00	1.20
Average	0.00	0.00	0.00	0.00	0.00	1.20
Max	0.00	0.00	0.00	0.00	0.00	1.20
UL	0.20	0.20	0.20	0.20	0.20	0.20



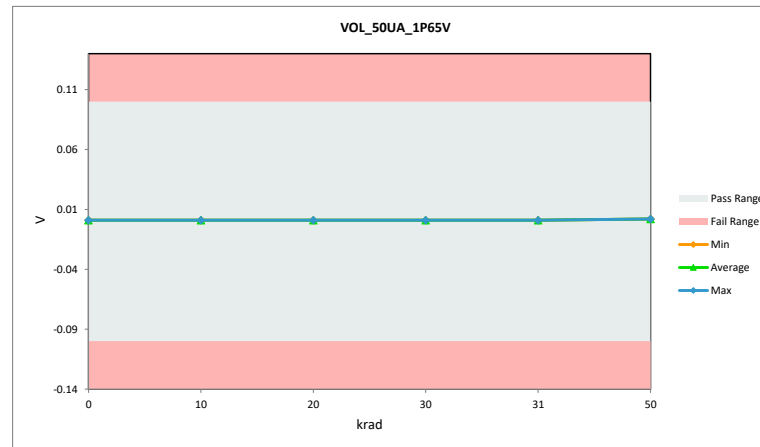
TID Report SN54SC245-SEP

VOL_50UA_1P65V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.1	0.1
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.001	0.001	0.00	0.00%	0.00%
0	2	0.001	0.001	0.00	0.00%	0.00%
0	3	0.001	0.001	0.00	0.00%	0.00%
0	4	0.001	0.001	0.00	0.00%	0.00%
10	5	0.001	0.001	0.00	0.00%	0.00%
10	6	0.001	0.001	0.00	0.00%	0.00%
10	7	0.001	0.001	0.00	0.00%	0.00%
10	8	0.001	0.001	0.00	0.00%	0.00%
20	9	0.001	0.001	0.00	0.00%	0.00%
20	10	0.001	0.001	0.00	0.00%	0.00%
20	11	0.001	0.001	0.00	0.00%	0.00%
20	12	0.001	0.001	0.00	0.00%	0.00%
30	13	0.001	0.001	0.00	0.00%	0.00%
30	14	0.001	0.001	0.00	0.00%	0.00%
30	15	0.001	0.001	0.00	0.00%	0.00%
30	16	0.001	0.001	0.00	0.00%	0.00%
31	17	0.001	0.001	0.00	0.00%	0.00%
31	18	0.001	0.001	0.00	0.00%	0.00%
31	19	0.001	0.001	0.00	0.00%	0.00%
31	20	0.001	0.001	0.00	0.00%	0.00%
31	21	0.001	0.001	0.00	0.00%	0.00%
31	22	0.001	0.001	0.00	0.00%	0.00%
31	23	0.001	0.001	0.00	0.00%	0.00%
31	24	0.001	0.001	0.00	0.00%	0.00%
31	25	0.001	0.001	0.00	0.00%	0.00%
31	26	0.001	0.001	0.00	0.00%	0.00%
31	27	0.001	0.001	0.00	0.00%	0.00%
31	28	0.001	0.001	0.00	0.00%	0.00%
31	29	0.001	0.001	0.00	0.00%	0.00%
31	30	0.001	0.001	0.00	0.00%	0.00%
31	31	0.001	0.001	0.00	0.00%	0.00%
31	32	0.001	0.001	0.00	0.00%	0.00%
31	33	0.001	0.001	0.00	0.00%	0.00%
31	34	0.001	0.001	0.00	0.00%	0.00%
31	35	0.001	0.001	0.00	0.00%	0.00%
31	36	0.001	0.001	0.00	0.00%	0.00%
31	37	0.001	0.001	0.00	0.00%	0.00%
31	38	0.001	0.001	0.00	0.00%	0.00%
31	39	0.001	0.001	0.00	0.00%	0.00%
31	40	0.001	0.001	0.00	0.00%	0.00%
50	41	0.001	0.002	0.00	100.00%	0.50%
50	42	0.001	0.002	0.00	100.00%	0.50%
50	43	0.001	0.002	0.00	100.00%	0.50%
50	44	0.001	0.002	0.00	100.00%	0.50%
Max	0.001	0.002	0.00	100.00%	0.50%	
Average	0.001	0.001	0.00	9.09%	0.05%	
Min	0.001	0.001	0.00	0.00%	0.00%	
Std Dev	0.000	0.000	0.00	29.08%	0.15%	



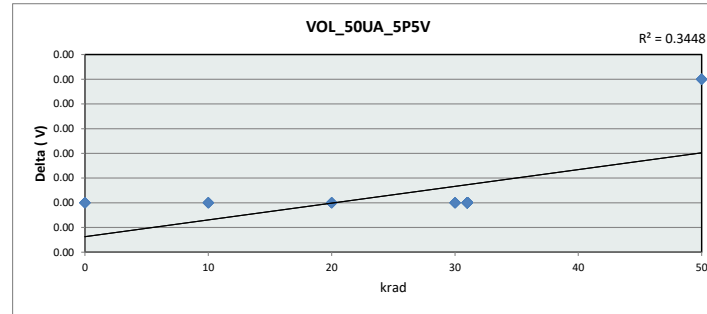
VOL_50UA_1P65V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	0.1	V				
Min Limit	-0.1	V				
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.00	0.00	0.00	0.00	0.00	0.00
Max	0.00	0.00	0.00	0.00	0.00	0.00
UL	0.10	0.10	0.10	0.10	0.10	0.10



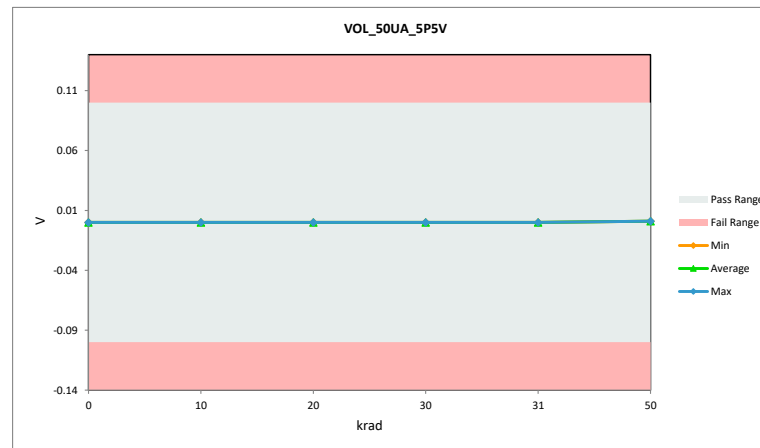
TID Report SN54SC245-SEP

VOL_50UA_5P5V		
Test Site	SLAB	SLAB
Tester	ETS88B	ETS88B
Test Number	EQ708301	EQ708301
Unit	V	V
Max Limit	0.1	0.1
Min Limit	-0.1	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.000	0.000	0.00	#DIV/0!	0.00%
0	2	0.000	0.000	0.00	#DIV/0!	0.00%
0	3	0.000	0.000	0.00	#DIV/0!	0.00%
0	4	0.000	0.000	0.00	#DIV/0!	0.00%
10	5	0.000	0.000	0.00	#DIV/0!	0.00%
10	6	0.000	0.000	0.00	#DIV/0!	0.00%
10	7	0.000	0.000	0.00	#DIV/0!	0.00%
10	8	0.000	0.000	0.00	#DIV/0!	0.00%
20	9	0.000	0.000	0.00	#DIV/0!	0.00%
20	10	0.000	0.000	0.00	#DIV/0!	0.00%
20	11	0.000	0.000	0.00	#DIV/0!	0.00%
20	12	0.000	0.000	0.00	#DIV/0!	0.00%
30	13	0.000	0.000	0.00	#DIV/0!	0.00%
30	14	0.000	0.000	0.00	#DIV/0!	0.00%
30	15	0.000	0.000	0.00	#DIV/0!	0.00%
30	16	0.000	0.000	0.00	#DIV/0!	0.00%
31	17	0.000	0.000	0.00	#DIV/0!	0.00%
31	18	0.000	0.000	0.00	#DIV/0!	0.00%
31	19	0.000	0.000	0.00	#DIV/0!	0.00%
31	20	0.000	0.000	0.00	#DIV/0!	0.00%
31	21	0.000	0.000	0.00	#DIV/0!	0.00%
31	22	0.000	0.000	0.00	#DIV/0!	0.00%
31	23	0.000	0.000	0.00	#DIV/0!	0.00%
31	24	0.000	0.000	0.00	#DIV/0!	0.00%
31	25	0.000	0.000	0.00	#DIV/0!	0.00%
31	26	0.000	0.000	0.00	#DIV/0!	0.00%
31	27	0.000	0.000	0.00	#DIV/0!	0.00%
31	28	0.000	0.000	0.00	#DIV/0!	0.00%
31	29	0.000	0.000	0.00	#DIV/0!	0.00%
31	30	0.000	0.000	0.00	#DIV/0!	0.00%
31	31	0.000	0.000	0.00	#DIV/0!	0.00%
31	32	0.000	0.000	0.00	#DIV/0!	0.00%
31	33	0.000	0.000	0.00	#DIV/0!	0.00%
31	34	0.000	0.000	0.00	#DIV/0!	0.00%
31	35	0.000	0.000	0.00	#DIV/0!	0.00%
31	36	0.000	0.000	0.00	#DIV/0!	0.00%
31	37	0.000	0.000	0.00	#DIV/0!	0.00%
31	38	0.000	0.000	0.00	#DIV/0!	0.00%
31	39	0.000	0.000	0.00	#DIV/0!	0.00%
31	40	0.000	0.000	0.00	#DIV/0!	0.00%
50	41	0.000	0.001	0.00	#DIV/0!	0.50%
50	42	0.000	0.001	0.00	#DIV/0!	0.50%
50	43	0.000	0.001	0.00	#DIV/0!	0.50%
50	44	0.000	0.001	0.00	#DIV/0!	0.50%
Max	0.000	0.001	0.00	#DIV/0!	0.50%	
Average	0.000	0.000	0.00	#DIV/0!	0.05%	
Min	0.000	0.000	0.00	#DIV/0!	0.00%	
Std Dev	0.000	0.000	0.00	#DIV/0!	0.15%	



VOL_50UA_5P5V						
Test Site	SLAB	SLAB				
Tester	ETS88B	ETS88B				
Test Number	EQ708301	EQ708301				
Max Limit	0.1	V				
Min Limit	-0.1	V				
krad	0	10	20	30	31	50
LL	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Min	0.00	0.00	0.00	0.00	0.00	0.00
Average	0.00	0.00	0.00	0.00	0.00	0.00
Max	0.00	0.00	0.00	0.00	0.00	0.00
UL	0.10	0.10	0.10	0.10	0.10	0.10



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