Radiation Report

SN54SC8T165-SEP Total Ionizing Dose (TID) Report

ABSTRACT

This report covers the radiation characterization results of the SN54SC8T165-SEP, radiation tolerant parallel-load 8-bit shift registers. 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 30 krad(Si) (with 72 hour room temperature anneal). Radiation Lot Acceptance Testing (RLAT) will be performed using 5 units at a dose level of 30 krad(Si) for future wafer lots per MIL-STD-883 TM 1019. All future wafer lots will be tested under the same conditions. The device is manufactured in pure CMOS process. HDR TID response is the worst case. TID HDR characterization was performed per TM 1019.

The SN54SC8T165-SEP is packaged in a space enhanced plastic package for low outgassing characteristics and is Single Event Latch-Up (SEL) immune up to 50MeV-cm^2/mg, which makes the device an option for low Earth orbit space applications. Single Event Transient (SET) data is also provided in the Single Event Effects Radiation Report.

Table of Contents

1 Device Information 2
1.1 Device Details 2
2 Total Dose Test Setup 3
2.1 Test Overview 3
2.2 Test Description and Facilities 3
2.3 Test Setup Details 3
2.4 Test Configuration and Condition 4
3 TID Characterization Test Results 5
3.1 TID Characterization Summary Results 5
3.2 Specification Compliance Matrix 6
4 Reference Documents 7
5 Appendix: HDR TID Report Data 7

List of Figures

Figure 2-1. SN54SC8T165-SEP Bias Diagram 3

List of Tables

Table 1-1. Device and Exposure Details 2
Table 2-1. HDR Device Information 4
Table 3-1. Electrical Parameters Table 6

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1 Device Information

The SN54SC8T165-SEP device is a parallel- or serial-in, serial-out 8-bit shift register. This device has two modes of operation: load data, and shift data which are controlled by the SH/$\overline{LD}$ input. The output level is referenced to the supply voltage (V_{CC}) and supports 1.8V, 2.5V, 3.3V, and 5V CMOS levels.

The input is designed with a lower threshold circuit to support up translation for lower voltage CMOS inputs (for example 1.2V input to 1.8V output or 1.8V input to 3.3V output). In addition, the 5V tolerant input pins enable down translation (for example 3.3V to 2.5V output).

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 50krad(Si)	
TI Device Number	SN54SC8T165-SEP
VID Number	V62/25625
Package	16-pin PW (TSSOP)
Technology	LBC9
Die Lot Number	3251994RFB
A/T Lot Number and Date Code	4089218ML4 / 41C8X1K
Quantity Tested	21 irradiated devices + 4 control
Lot Accept or Reject	Devices passed 30krad(Si)
HDR Radiation Facility	Texas Instruments CLAB in Dallas, Texas
HDR Dose Level	10krad(Si), 20krad(Si), 30krad(Si), 50krad(Si)
HDR Dose Rate	183.09rad(Si)/s ionizing radiation
Effective Dose Rate 30krad(Si) with 72 hour Anneal	115.74mrad(Si)/s ionizing radiation
HDR Radiation Source	Gammacell 220 Excel (GC-220E) Co-60
Irradiation Temperature	Ambient, room temperature

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2 Total Dose Test Setup

2.1 Test Overview

The SN54SC8T165-SEP samples were irradiated at a high dose rate of 183.09rad(Si)/s up to 50krad(Si) (115.74mrad(Si)/s effective does rate for 30krad(Si) with 72 hour anneal) 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 SN54SC8T165-SEP HDR exposure was performed on biased devices in a Co-60 gamma cell at TI facility in Dallas, Texas. The un-attenuated dose rate of this cell is 183.09rads(Si)/s (115.74mrad(Si)/s effective does rate of 30krad(Si) with 72 hour anneal). 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 Bias Diagram

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

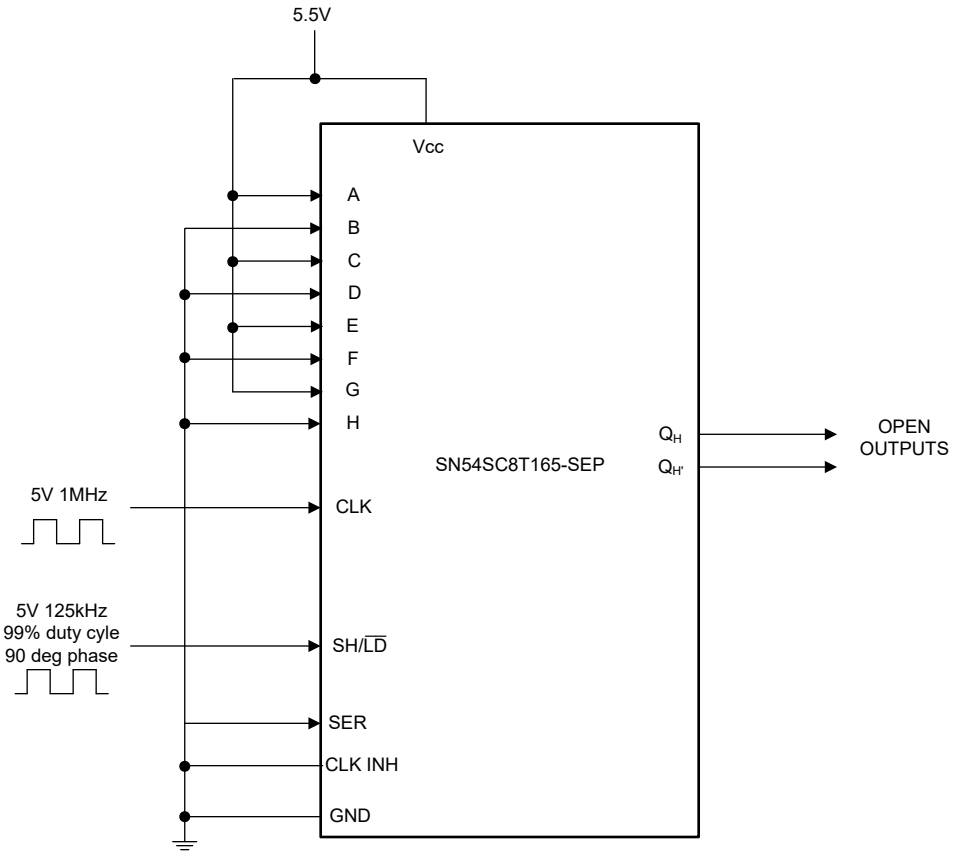

Figure 2-1. SN54SC8T165-SEP Bias Diagram

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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. The HDR RLAT units were irradiated to 30krad(Si), parametrically tested on ATE, and then were annealed at 25ºC for 72 hours. The units that were irradiated to 30krad(Si) and were annealed for 72 hours are denoted as 31krad(Si) in Section 5. ATE parametric testing was completed before and after the anneal.

Table 2-1 lists the serialized samples used for TID characterization.

Table 2-1. HDR Device Information

Control Group	**HDR Dose Rate = 183.09rad(Si)/s Effective Dose Rate (30krad + Anneal 72 hours) = 115.74mrad(Si)/s**				
Total Samples: 4	**Total Samples: 21 Biased**				
	Exposure Levels				
0krad (Si)	10krad (Si)	20krad(Si)	30krad(Si)		50krad (Si)
Biased	Biased	Biased	Biased	Biased + 72 hour anneal	Biased
1 - 4	5 - 9	10 - 14	15 - 20	15a - 20a	21 - 25

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3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the SN54SC8T165-SEP passes up to 30krad(Si) (with 72 hour room temperature anneal) HDR TID irradiation. The drifts of the electrical parameters through HDR were within the data sheet limits.

Overall, the SN54SC8T165-SEP showed a strong degree of hardness to HDR TID irradiation up to 30krad(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 *SN54SC8T165-SEP Radiation-Tolerant, Parallel-Load 8-Bit Shift Registers*.

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

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3.2 Specification Compliance Matrix

Table 3-1. Electrical Parameters Table

Parameter	Test Conditions	V_{CC}	T_A = -55°C to +125°C			Unit	Test Name
			MIN	TYP	MAX		
V_{T+} 1	Positive-going input threshold voltage	1.2V to 1.3V	0.31	0.655	1.1	V	VTP_1P2V
		1.65V to 2V	0.39	0.915	1.32		VTP_1P65V
		2.25V to 2.75V	0.51	1.09	1.51		VTP_2P25V
		3V to 3.6V	0.65	1.2	1.7		VTP_3V
		4.5V to 5.5V	0.87	1.51	2.16		VTP_4P5V, VTP_5P5V
V_{T-} 1	Negative-going input threshold voltage	1.2V to 1.3V	0.11	0.349	0.60	V	VTN_1P2V
		1.65V to 2V	0.18	0.455	0.63		VTN_1P65V
		2.25V to 2.75V	0.25	0.545	0.74		VTN_2P25V
		3V to 3.6V	0.33	0.635	0.85		VTN_3V
		4.5V to 5.5V	0.45	0.755	1.14		VTN_4P5V, VTN_5P5V
ΔV_T 1	Hysteresis (VT+ − VT−)	1.2V to 1.3V	0.2	0.29	0.77	V	DELTAVT_1P2V
		1.65V to 2V	0.21	0.43	0.88		DELTAVT_1P65V
		2.25V to 2.75V	0.25	0.54	0.91		DELTAVT_2P25V
		3V to 3.6V	0.31	0.63	0.91		DELTAVT_3V
		4.5V to 5.5V	0.43	0.75	1.05		DELTAVT_4P5V, DELTAVT_5P5V
V_{IH}	High-level input voltage	1.2V to 1.3V	0.78			V	VIH_1P2V
		1.65V to 2V	1.1				VIH_1P65V
		2.25V to 2.75V	1.28				VIH_2P25V
		3V to 3.6V	1.45				VIH_3V
		4.5V to 5.5V	2				VIH_4P5V, VIH_5P5V
V_{IL}	Low-Level input voltage	1.2V to 1.3V			0.18	V	VIL_1P2V
		1.65V to 2V			0.5		VIL_1P65V
		2.25V to 2.75V			0.65		VIL_2P25V
		3V to 3.6V			0.75		VIL_3V
		4.5V to 5.5V			0.85		VIL_4P5V, VIL_5P5V
V_{OH} 2	I_{OH} = -50µA	1.2V to 5.5V	V_{CC}-0.2			V	VOH_N50UA_1P2V, VOH_N50UA_5P5V
	I_{OH} = -1mA	1.2V	0.8				VOH_N1MA_1P2V
	I_{OH} = -2mA	1.65V to 2V	1.21				VOH_N2MA_1P65V
	I_{OH} = -3mA	2.25V to 2.75V	1.93				VOH_N3MA_2P25V
	I_{OH} = -5.5mA	3V to 3.6V	2.49				VOH_N5P5MA_3V
	I_{OH} = -8mA	4.5V to 5.5V	3.95				VOH_N8MA_4P5V
	I_{OH}= –24mA	4.5V to 5.5V	3.15				VOH_N24MA_5P5V
V_{OL}	I_{OL}= 50µA	1.2V to 5.5V			0.1	V	VOL_50UA_1P2V, VOL_50UA_5P5V
	I_{OL} = 1mA	1.2V			0.2		VOL_1MA_1P2V
	I_{OL} = 2mA	1.65V to 2V			0.25		VOL_2MA_1P65V
	I_{OL} = 3mA	2.25V to 2.75V			0.2		VOL_3MA_2P25V
	I_{OL} = 5.5mA	3V to 3.6V			0.25		VOL_5P5MA_3V
	I_{OL}= 8mA	4.5V to 5.5V			0.35		VOL_8MA_4P5V
	I_{OL}= 24mA	4.5V to 5.5V			0.75		VOL_24MA_5P5V
I_{CC}	V_I = V_{CC} or GND, I_O = 0	1.2V to 5.5V		2	220	µA	ICC_5P5V
Δ_{ICC}	One input at 0.3V or 3.4V, other inputs at V_{CC} or GND	5.5V			1.5	mA	DELTAICC_5P5V
	One input at 0.3V or 1.1V, other inputs at V_{CC} or GND	1.8V			68	µA	DELTAICC_1P8V
I_{OZ} 3	V_O = V_{CC} or GND	5.5V			±26	µA	IOZ_5P5V
I_I	V_I = 0V to V_{CC}	V_I = 0V to V_{CC}			±1	µA	II_5P5V

1. Schmitt-trigger input devices only.
2. Push-pull output devices only.
3. 3-State output devices only.

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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 SN54SC8T165-SEP TID HDR report. The report shows the variation for each parameter up to 50krad(Si).

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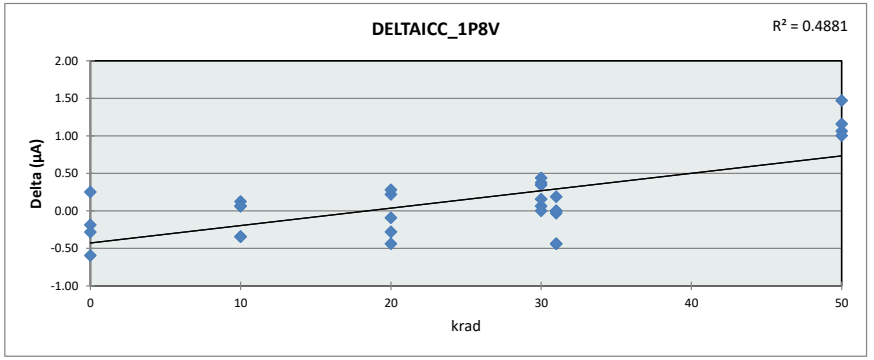
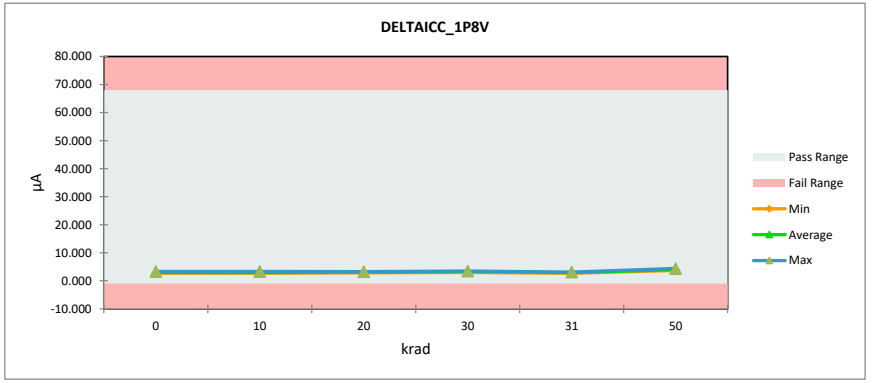
TID Report
SN54SC8T165-SEP

	DELTAICC_1P8V
Units	µA
Max Limit	68
Min Limit	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	3.255	3.067	-0.19	-5.78%	0.27%
0	2	3.130	2.848	-0.28	-9.01%	0.41%
0	3	3.067	3.317	0.25	8.15%	0.36%
0	4	3.317	2.723	-0.59	-17.91%	0.86%
10	5	3.192	3.317	0.13	3.92%	0.18%
10	6	3.067	2.723	-0.34	-11.22%	0.50%
10	7	2.691	2.754	0.06	2.34%	0.09%
10	8	3.161	2.817	-0.34	-10.88%	0.50%
10	9	2.848	2.911	0.06	2.21%	0.09%
20	10	3.411	3.130	-0.28	-8.24%	0.41%
20	11	2.942	3.161	0.22	7.44%	0.32%
20	12	3.286	2.848	-0.44	-13.33%	0.63%
20	13	2.723	3.004	0.28	10.32%	0.41%
20	14	3.349	3.255	-0.09	-2.81%	0.14%
30	15	2.911	2.973	0.06	2.13%	0.09%
30	16	2.942	3.098	0.16	5.30%	0.23%
30	17	3.130	3.505	0.38	11.98%	0.54%
30	18	2.942	3.380	0.44	14.89%	0.63%
30	19	3.224	3.224	0.00	0.00%	0.00%
30	20	2.911	3.255	0.34	11.82%	0.50%
31	15a	2.911	3.098	0.19	6.42%	0.27%
31	16a	2.942	2.911	-0.03	-1.05%	0.04%
31	17a	3.130	2.691	-0.44	-14.03%	0.64%
31	18a	2.942	2.942	0.00	0.00%	0.00%
31	19a	3.224	2.785	-0.44	-13.62%	0.64%
31	20a	2.911	2.911	0.00	0.00%	0.00%
50	21	2.942	4.413	1.47	50.00%	2.13%
50	22	2.911	3.975	1.06	36.55%	1.54%
50	23	2.817	3.975	1.16	41.11%	1.68%
50	24	3.004	4.006	1.00	33.36%	1.45%
50	25	3.474	3.693	0.22	6.30%	0.32%
	Max	3.411	4.413	1.00	50.00%	2.13%
	Average	3.041	3.167	0.13	4.67%	0.52%
	Min	2.691	2.691	0.00	-17.91%	0.00%
	Std Dev	0.186	0.431	0.25	16.75%	0.53%



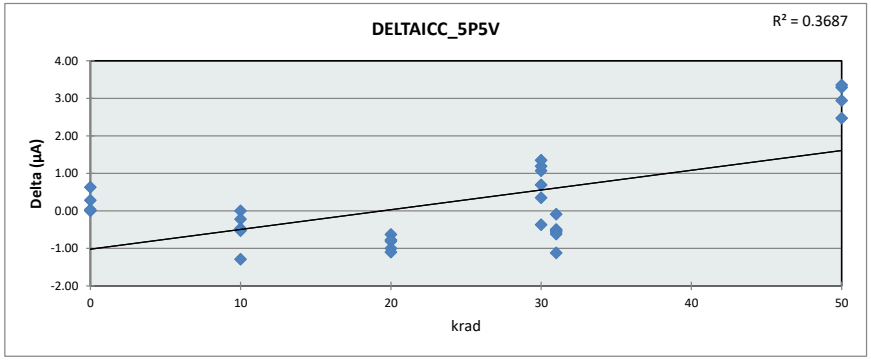
	DELTAICC_1P8V					
Units	µA					
Max Limit	68					
Min Limit	-1					
krad	0	10	20	30	31	50
LL	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000
Min	2.723	2.723	2.848	2.973	2.691	3.693
Average	2.989	2.904	3.080	3.239	2.890	4.012
Max	3.317	3.317	3.255	3.505	3.098	4.413
UL	68.000	68.000	68.000	68.000	68.000	68.000



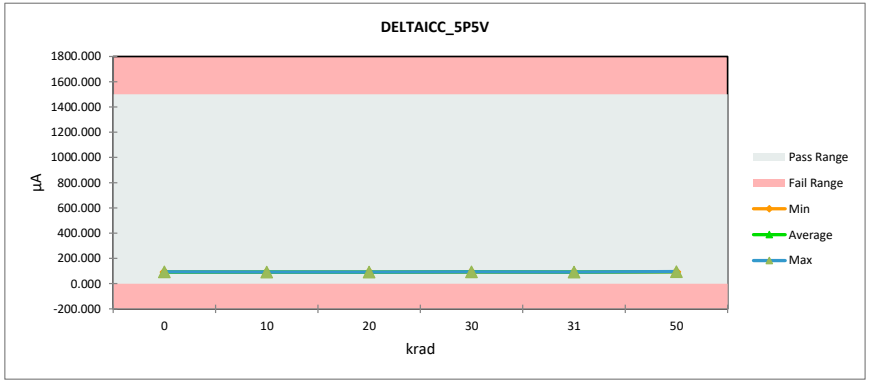
TID Report
SN54SC8T165-SEP

	DELTAICC_5P5V
Units	µA
Max Limit	1500
Min Limit	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	92.290	92.570	0.28	0.30%	0.02%
0	2	91.640	91.640	0.00	0.00%	0.00%
0	3	92.790	93.420	0.63	0.68%	0.04%
0	4	92.140	92.170	0.03	0.03%	0.00%
10	5	92.360	92.360	0.00	0.00%	0.00%
10	6	91.200	90.980	-0.22	-0.24%	0.01%
10	7	91.350	90.880	-0.47	-0.51%	0.03%
10	8	92.700	92.170	-0.53	-0.57%	0.04%
10	9	92.140	90.850	-1.29	-1.40%	0.09%
20	10	91.570	90.570	-1.00	-1.09%	0.07%
20	11	92.700	91.600	-1.10	-1.19%	0.07%
20	12	91.980	91.170	-0.81	-0.88%	0.05%
20	13	91.950	91.320	-0.63	-0.69%	0.04%
20	14	92.260	91.480	-0.78	-0.85%	0.05%
30	15	91.380	91.730	0.35	0.38%	0.02%
30	16	91.290	91.980	0.69	0.76%	0.05%
30	17	92.260	93.330	1.07	1.16%	0.07%
30	18	91.260	92.450	1.19	1.30%	0.08%
30	19	92.510	93.860	1.35	1.46%	0.09%
30	20	93.040	92.670	-0.37	-0.40%	0.02%
31	15a	91.380	90.820	-0.56	-0.61%	0.04%
31	16a	91.290	90.790	-0.50	-0.55%	0.03%
31	17a	92.260	92.170	-0.09	-0.10%	0.01%
31	18a	91.260	90.730	-0.53	-0.58%	0.04%
31	19a	92.510	91.890	-0.62	-0.67%	0.04%
31	20a	93.040	91.920	-1.12	-1.20%	0.07%
50	21	91.450	94.390	2.94	3.21%	0.20%
50	22	92.260	95.550	3.29	3.57%	0.22%
50	23	91.320	93.790	2.47	2.70%	0.16%
50	24	92.200	95.550	3.35	3.63%	0.22%
50	25	91.200	93.700	2.50	2.74%	0.17%
	Max	93.040	95.550	2.51	3.63%	0.22%
	Average	91.993	92.227	0.23	0.26%	0.06%
	Min	91.200	90.570	-0.63	-1.40%	0.00%
	Std Dev	0.583	1.351	0.77	1.42%	0.06%



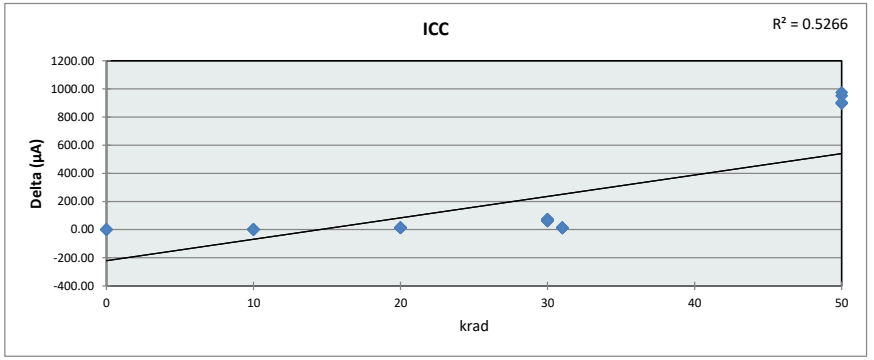
	DELTAICC_5P5V					
Units	µA					
Max Limit	1500					
Min Limit	-1					
krad	0	10	20	30	31	50
LL	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000
Min	91.640	90.850	90.570	91.730	90.730	93.700
Average	92.450	91.448	91.228	92.670	91.387	94.596
Max	93.420	92.360	91.600	93.860	92.170	95.550
UL	1500.000	1500.000	1500.000	1500.000	1500.000	1500.000



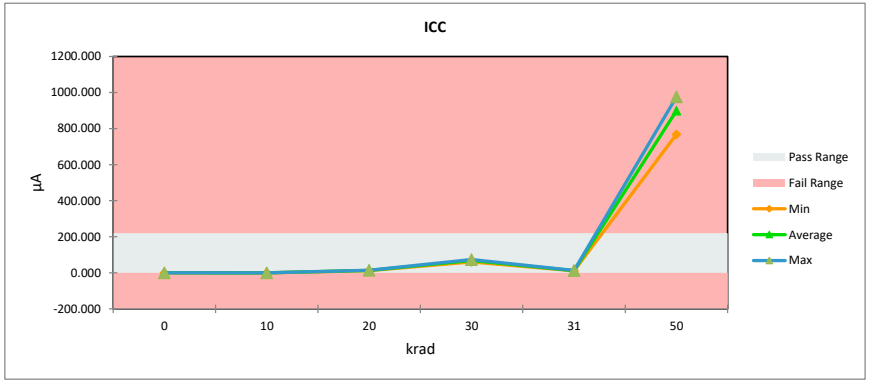
TID Report
SN54SC8T165-SEP

	ICC
Units	µA
Max Limit	220
Min Limit	-0.1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.008	0.010	0.00	32.73%	0.00%
0	2	0.013	0.007	-0.01	-42.07%	0.00%
0	3	0.007	0.011	0.00	42.74%	0.00%
0	4	0.006	0.010	0.00	58.72%	0.00%
10	5	0.011	0.047	0.04	319.14%	0.02%
10	6	0.012	0.055	0.04	371.60%	0.02%
10	7	0.009	0.082	0.07	788.42%	0.03%
10	8	0.010	0.049	0.04	417.41%	0.02%
10	9	0.008	0.040	0.03	425.86%	0.01%
20	10	0.011	12.440	12.43	114872.27%	5.65%
20	11	0.009	13.070	13.06	141212.57%	5.93%
20	12	0.011	14.020	14.01	129474.86%	6.36%
20	13	0.008	14.620	14.61	182855.83%	6.64%
20	14	0.005	13.250	13.24	256583.46%	6.02%
30	15	0.006	74.030	74.02	1153015.26%	33.63%
30	16	0.009	67.410	67.40	754433.24%	30.62%
30	17	0.011	72.130	72.12	686198.76%	32.77%
30	18	0.009	72.560	72.55	812078.20%	32.96%
30	19	0.009	60.270	60.26	674513.83%	27.38%
30	20	0.009	61.550	61.54	688841.12%	27.96%
31	15a	0.006	13.540	13.53	210803.43%	6.15%
31	16a	0.009	13.100	13.09	146530.85%	5.95%
31	17a	0.011	12.720	12.71	120927.59%	5.77%
31	18a	0.009	12.890	12.88	144180.28%	5.85%
31	19a	0.009	10.890	10.88	121793.89%	4.94%
31	20a	0.009	11.550	11.54	129181.40%	5.24%
50	21	0.012	951.200	951.19	7874072.19%	432.16%
50	22	0.006	975.800	975.79	15199276.95%	443.34%
50	23	0.016	895.600	895.58	5763091.76%	406.90%
50	24	0.010	903.000	902.99	9442543.52%	410.26%
50	25	0.008	768.100	768.09	9247431.90%	348.97%
Max		0.016	975.800	975.78	15199276.95%	443.34%
Average		0.009	142.532	142.52	1491629.86%	64.75%
Min		0.005	0.007	0.00	-42.07%	0.00%
Std Dev		0.002	315.943	315.94	3488332.96%	143.54%



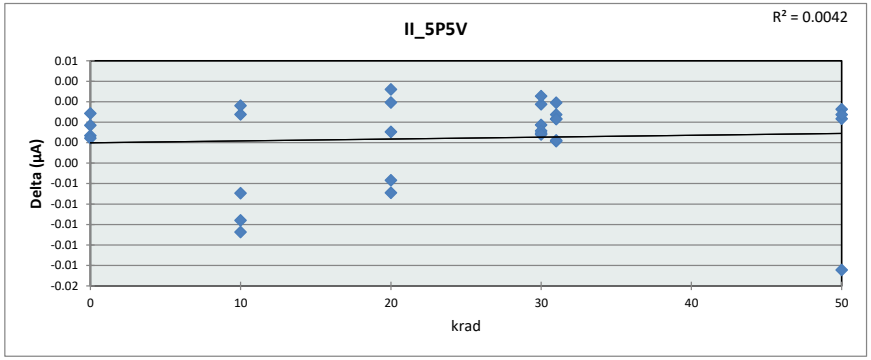
	ICC					
Units	µA					
Max Limit	220					
Min Limit	-0.1					
krad	0	10	20	30	31	50
LL	-0.100	-0.100	-0.100	-0.100	-0.100	-0.100
Min	0.007	0.040	12.440	60.270	10.890	768.100
Average	0.010	0.055	13.480	67.992	12.448	898.740
Max	0.011	0.082	14.620	74.030	13.540	975.800
UL	220.000	220.000	220.000	220.000	220.000	220.000



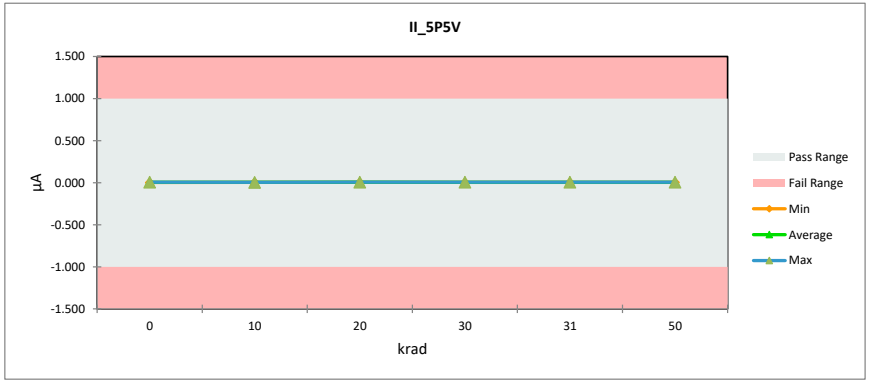
TID Report
SN54SC8T165-SEP

	II_5P5V
Units	µA
Max Limit	1
Min Limit	-1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.004	0.002	0.00	-35.65%	0.07%
0	2	0.006	0.004	0.00	-28.33%	0.08%
0	3	0.006	0.005	0.00	-5.48%	0.02%
0	4	0.004	0.005	0.00	19.75%	0.04%
10	5	0.013	0.003	-0.01	-79.78%	0.54%
10	6	0.004	0.005	0.00	19.56%	0.04%
10	7	0.012	0.005	-0.01	-59.94%	0.35%
10	8	0.002	0.004	0.00	66.71%	0.08%
10	9	0.013	0.004	-0.01	-71.28%	0.48%
20	10	0.012	0.005	-0.01	-58.13%	0.35%
20	11	0.005	0.007	0.00	41.57%	0.10%
20	12	0.010	0.005	-0.01	-55.05%	0.28%
20	13	0.008	0.007	0.00	-12.37%	0.05%
20	14	0.001	0.004	0.00	278.57%	0.16%
30	15	0.006	0.006	0.00	-4.52%	0.01%
30	16	0.005	0.004	0.00	-21.23%	0.05%
30	17	0.004	0.005	0.00	48.90%	0.09%
30	18	0.003	0.005	0.00	93.50%	0.13%
30	19	0.004	0.003	0.00	-23.79%	0.04%
30	20	0.005	0.004	0.00	-24.43%	0.06%
31	15a	0.006	0.004	0.00	-31.65%	0.09%
31	16a	0.005	0.003	0.00	-34.89%	0.09%
31	17a	0.004	0.004	0.00	20.89%	0.04%
31	18a	0.003	0.005	0.00	70.26%	0.10%
31	19a	0.004	0.004	0.00	8.84%	0.02%
31	20a	0.005	0.005	0.00	6.38%	0.02%
50	21	0.004	0.004	0.00	9.04%	0.02%
50	22	0.003	0.004	0.00	40.51%	0.06%
50	23	0.018	0.003	-0.01	-80.92%	0.72%
50	24	0.004	0.005	0.00	17.77%	0.04%
50	25	0.013	0.004	-0.01	-72.36%	0.49%
	Max	0.018	0.007	-0.01	278.57%	0.72%
	Average	0.006	0.004	0.00	3.83%	0.14%
	Min	0.001	0.002	0.00	-80.92%	0.01%
	Std Dev	0.004	0.001	0.00	68.70%	0.18%



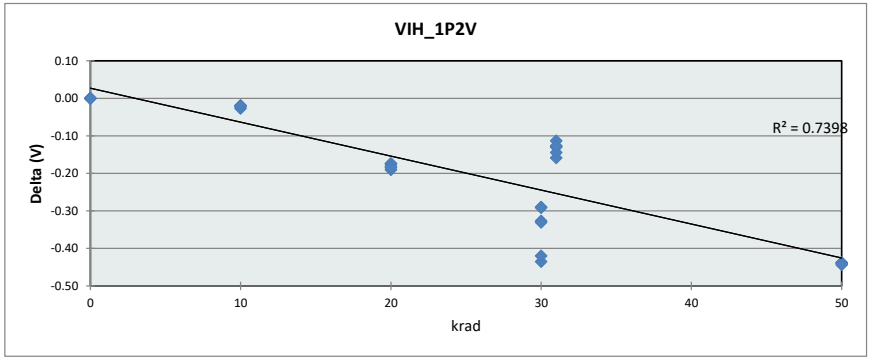
	II_5P5V					
Units	µA					
Max Limit	1					
Min Limit	-1					
krad	0	10	20	30	31	50
LL	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000
Min	0.002	0.003	0.004	0.003	0.003	0.003
Average	0.004	0.004	0.005	0.004	0.004	0.004
Max	0.005	0.005	0.007	0.006	0.005	0.005
UL	1.000	1.000	1.000	1.000	1.000	1.000



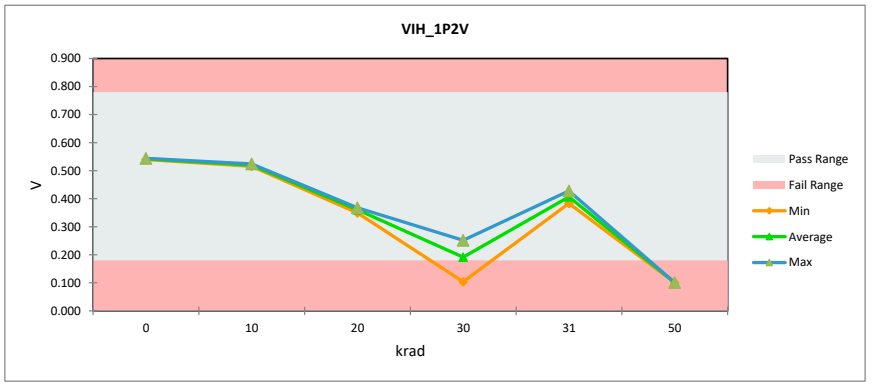
TID Report
SN54SC8T165-SEP

	VIH_1P2V
Units	V
Max Limit	0.78
Min Limit	0.18

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.542	0.542	0.00	0.00%	0.00%
0	2	0.540	0.540	0.00	0.00%	0.00%
0	3	0.544	0.544	0.00	0.00%	0.00%
0	4	0.543	0.543	0.00	0.00%	0.00%
10	5	0.543	0.515	-0.03	-5.03%	4.55%
10	6	0.540	0.520	-0.02	-3.82%	3.44%
10	7	0.541	0.519	-0.02	-4.14%	3.74%
10	8	0.543	0.524	-0.02	-3.57%	3.23%
10	9	0.539	0.519	-0.02	-3.71%	3.34%
20	10	0.540	0.349	-0.19	-35.28%	31.74%
20	11	0.541	0.367	-0.17	-32.07%	28.91%
20	12	0.543	0.361	-0.18	-33.41%	30.22%
20	13	0.541	0.365	-0.18	-32.51%	29.31%
20	14	0.543	0.358	-0.18	-34.04%	30.83%
30	15	0.539	0.104	-0.44	-80.77%	72.57%
30	16	0.541	0.214	-0.33	-60.43%	54.48%
30	17	0.542	0.122	-0.42	-77.53%	70.04%
30	18	0.538	0.207	-0.33	-61.45%	55.08%
30	19	0.541	0.249	-0.29	-53.93%	48.62%
30	20	0.541	0.252	-0.29	-53.53%	48.31%
31	15a	0.539	0.409	-0.13	-24.07%	21.63%
31	16a	0.541	0.412	-0.13	-23.88%	21.53%
31	17a	0.542	0.383	-0.16	-29.31%	26.48%
31	18a	0.538	0.394	-0.14	-26.84%	24.05%
31	19a	0.541	0.427	-0.11	-20.97%	18.90%
31	20a	0.541	0.415	-0.13	-23.41%	21.12%
50	21	0.538	0.101	-0.44	-81.32%	72.97%
50	22	0.540	0.101	-0.44	-81.38%	73.28%
50	23	0.539	0.101	-0.44	-81.34%	73.07%
50	24	0.545	0.101	-0.44	-81.52%	73.98%
50	25	0.538	0.101	-0.44	-81.29%	72.87%
	Max	0.545	0.544	0.00	0.00%	73.98%
	Average	0.541	0.352	-0.19	-34.98%	31.51%
	Min	0.538	0.101	-0.44	-81.52%	0.00%
	Std Dev	0.002	0.159	0.16	29.33%	26.41%



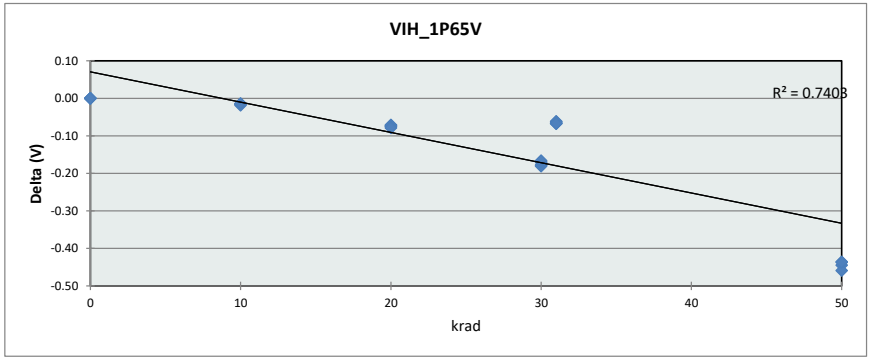
	VIH_1P2V					
Units	V					
Max Limit	0.78					
Min Limit	0.18					
krad	0	10	20	30	31	50
LL	0.180	0.180	0.180	0.180	0.180	0.180
Min	0.540	0.515	0.349	0.104	0.383	0.101
Average	0.542	0.519	0.360	0.191	0.407	0.101
Max	0.544	0.524	0.367	0.252	0.427	0.101
UL	0.780	0.780	0.780	0.780	0.780	0.780



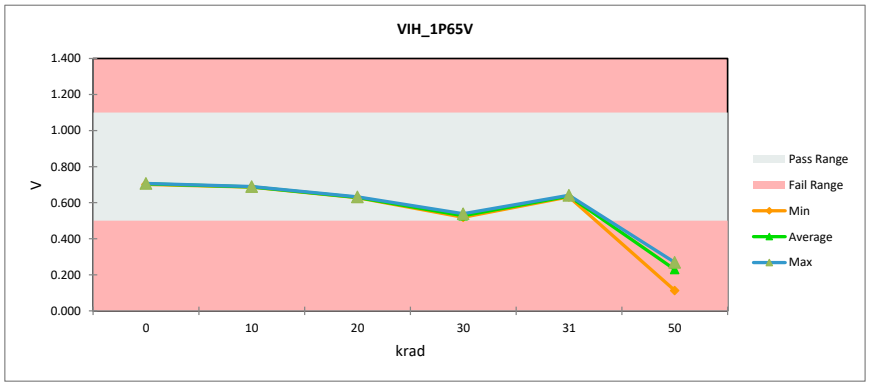
TID Report
SN54SC8T165-SEP

	VIH_1P65V
Units	V
Max Limit	1.1
Min Limit	0.5

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.705	0.705	0.00	0.00%	0.00%
0	2	0.701	0.701	0.00	0.00%	0.00%
0	3	0.707	0.707	0.00	0.00%	0.00%
0	4	0.706	0.706	0.00	0.00%	0.00%
10	5	0.705	0.687	-0.02	-2.62%	3.08%
10	6	0.702	0.687	-0.02	-2.25%	2.64%
10	7	0.703	0.688	-0.01	-2.13%	2.49%
10	8	0.706	0.690	-0.02	-2.24%	2.64%
10	9	0.701	0.687	-0.01	-2.01%	2.34%
20	10	0.702	0.628	-0.07	-10.52%	12.31%
20	11	0.703	0.632	-0.07	-10.13%	11.87%
20	12	0.705	0.631	-0.07	-10.48%	12.31%
20	13	0.704	0.628	-0.08	-10.74%	12.60%
20	14	0.707	0.628	-0.08	-11.20%	13.19%
30	15	0.701	0.532	-0.17	-24.19%	28.28%
30	16	0.701	0.519	-0.18	-25.86%	30.19%
30	17	0.704	0.526	-0.18	-25.35%	29.75%
30	18	0.700	0.522	-0.18	-25.39%	29.60%
30	19	0.703	0.533	-0.17	-24.26%	28.43%
30	20	0.705	0.539	-0.17	-23.57%	27.70%
31	15a	0.701	0.635	-0.07	-9.53%	11.14%
31	16a	0.701	0.633	-0.07	-9.66%	11.28%
31	17a	0.704	0.639	-0.07	-9.24%	10.84%
31	18a	0.700	0.637	-0.06	-8.92%	10.41%
31	19a	0.703	0.642	-0.06	-8.75%	10.26%
31	20a	0.705	0.638	-0.07	-9.48%	11.14%
50	21	0.701	0.256	-0.44	-63.51%	74.16%
50	22	0.703	0.267	-0.44	-62.02%	72.69%
50	23	0.702	0.243	-0.46	-65.35%	76.50%
50	24	0.706	0.269	-0.44	-61.91%	72.84%
50	25	0.701	0.113	-0.59	-83.84%	97.90%
	Max	0.707	0.707	0.00	0.00%	76.50%
	Average	0.703	0.581	-0.12	-17.38%	20.36%
	Min	0.700	0.243	-0.46	-65.35%	0.00%
	Std Dev	0.002	0.142	0.14	20.10%	23.54%



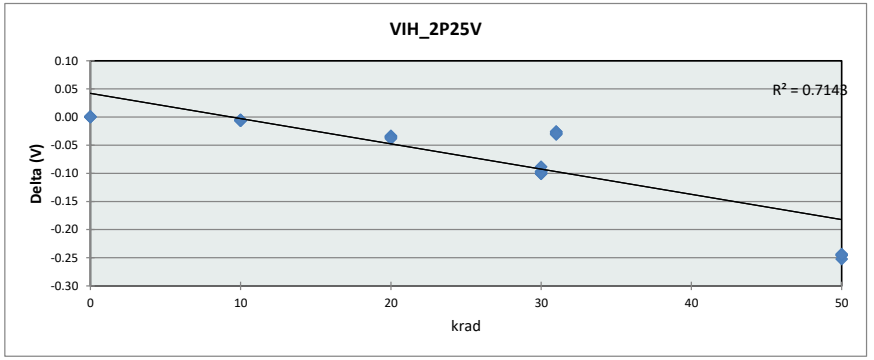
	VIH_1P65V					
Units	V					
Max Limit	1.1					
Min Limit	0.5					
krad	0	10	20	30	31	50
LL	0.500	0.500	0.500	0.500	0.500	0.500
Min	0.701	0.687	0.628	0.519	0.633	0.113
Average	0.705	0.688	0.630	0.528	0.637	0.230
Max	0.707	0.690	0.632	0.539	0.642	0.269
UL	1.100	1.100	1.100	1.100	1.100	1.100



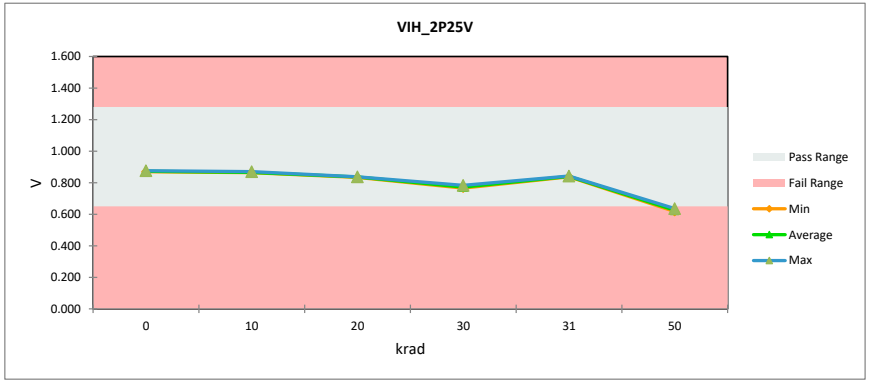
TID Report
SN54SC8T165-SEP

	VIH_2P25V
Units	V
Max Limit	1.28
Min Limit	0.65

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.870	0.871	0.00	0.14%	0.20%
0	2	0.870	0.870	0.00	0.00%	0.00%
0	3	0.873	0.873	0.00	0.00%	0.00%
0	4	0.876	0.876	0.00	0.00%	0.00%
10	5	0.872	0.866	-0.01	-0.71%	0.99%
10	6	0.870	0.863	-0.01	-0.71%	0.99%
10	7	0.870	0.863	-0.01	-0.71%	0.99%
10	8	0.874	0.870	0.00	-0.57%	0.79%
10	9	0.870	0.863	-0.01	-0.71%	0.99%
20	10	0.870	0.836	-0.03	-3.86%	5.33%
20	11	0.871	0.836	-0.03	-4.00%	5.53%
20	12	0.873	0.837	-0.04	-4.13%	5.72%
20	13	0.873	0.837	-0.04	-4.13%	5.72%
20	14	0.872	0.833	-0.04	-4.42%	6.12%
30	15	0.868	0.768	-0.10	-11.60%	15.98%
30	16	0.866	0.765	-0.10	-11.63%	15.98%
30	17	0.868	0.771	-0.10	-11.17%	15.39%
30	18	0.868	0.771	-0.10	-11.17%	15.39%
30	19	0.868	0.769	-0.10	-11.45%	15.79%
30	20	0.872	0.784	-0.09	-10.12%	14.01%
31	15a	0.868	0.840	-0.03	-3.29%	4.54%
31	16a	0.866	0.837	-0.03	-3.30%	4.54%
31	17a	0.868	0.842	-0.03	-3.01%	4.14%
31	18a	0.868	0.837	-0.03	-3.58%	4.93%
31	19a	0.868	0.842	-0.03	-3.01%	4.14%
31	20a	0.872	0.842	-0.03	-3.42%	4.74%
50	21	0.865	0.621	-0.24	-28.18%	38.68%
50	22	0.872	0.626	-0.25	-28.23%	39.07%
50	23	0.870	0.617	-0.25	-29.02%	40.06%
50	24	0.871	0.626	-0.24	-28.13%	38.87%
50	25	0.868	0.636	-0.23	-26.77%	36.90%
	Max	0.876	0.876	0.00	0.14%	40.06%
	Average	0.870	0.805	-0.06	-7.47%	10.32%
	Min	0.865	0.617	-0.25	-29.02%	0.00%
	Std Dev	0.003	0.081	0.08	9.20%	12.68%



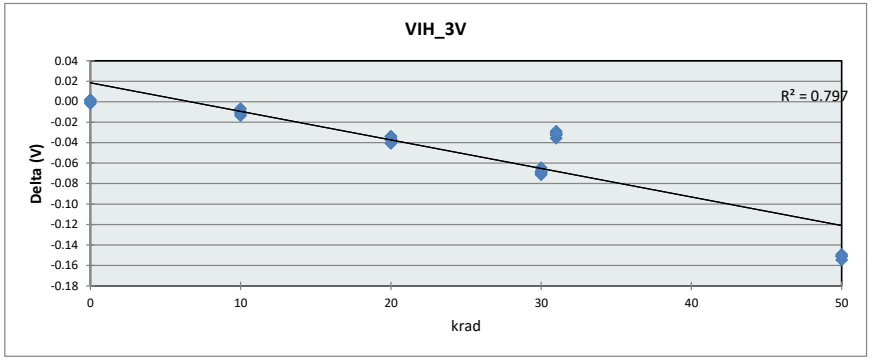
	VIH_2P25V					
Units	V					
Max Limit	1.28					
Min Limit	0.65					
krad	0	10	20	30	31	50
LL	0.650	0.650	0.650	0.650	0.650	0.650
Min	0.870	0.863	0.833	0.765	0.837	0.617
Average	0.872	0.865	0.836	0.771	0.840	0.625
Max	0.876	0.870	0.837	0.784	0.842	0.636
UL	1.280	1.280	1.280	1.280	1.280	1.280



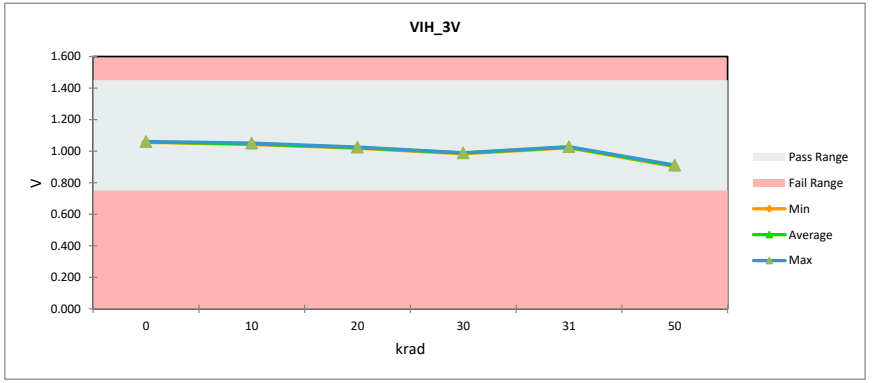
TID Report
SN54SC8T165-SEP

	VIH_3V
Units	V
Max Limit	1.45
Min Limit	0.75

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.059	1.058	0.00	-0.16%	0.24%
0	2	1.056	1.056	0.00	0.00%	0.00%
0	3	1.058	1.059	0.00	0.16%	0.24%
0	4	1.059	1.061	0.00	0.16%	0.24%
10	5	1.058	1.051	-0.01	-0.64%	0.97%
10	6	1.058	1.047	-0.01	-0.96%	1.46%
10	7	1.056	1.046	-0.01	-0.96%	1.46%
10	8	1.059	1.046	-0.01	-1.28%	1.94%
10	9	1.054	1.042	-0.01	-1.13%	1.70%
20	10	1.056	1.022	-0.03	-3.22%	4.85%
20	11	1.058	1.022	-0.04	-3.37%	5.09%
20	12	1.059	1.025	-0.03	-3.21%	4.85%
20	13	1.061	1.024	-0.04	-3.52%	5.34%
20	14	1.059	1.019	-0.04	-3.85%	5.82%
30	15	1.054	0.990	-0.06	-6.12%	9.22%
30	16	1.056	0.986	-0.07	-6.59%	9.95%
30	17	1.061	0.990	-0.07	-6.72%	10.19%
30	18	1.053	0.983	-0.07	-6.61%	9.95%
30	19	1.058	0.988	-0.07	-6.58%	9.95%
30	20	1.058	0.990	-0.07	-6.42%	9.70%
31	15a	1.054	1.025	-0.03	-2.74%	4.12%
31	16a	1.056	1.020	-0.04	-3.38%	5.09%
31	17a	1.061	1.029	-0.03	-3.04%	4.61%
31	18a	1.053	1.020	-0.03	-3.07%	4.61%
31	19a	1.058	1.025	-0.03	-3.05%	4.61%
31	20a	1.058	1.027	-0.03	-2.89%	4.37%
50	21	1.056	0.907	-0.15	-14.15%	21.35%
50	22	1.059	0.908	-0.15	-14.27%	21.59%
50	23	1.056	0.901	-0.15	-14.63%	22.07%
50	24	1.056	0.905	-0.15	-14.31%	21.59%
50	25	1.047	0.912	-0.14	-12.97%	19.41%
	Max	1.061	1.061	0.00	0.16%	22.07%
	Average	1.057	1.009	-0.05	-4.55%	6.91%
	Min	1.053	0.901	-0.15	-14.63%	0.00%
	Std Dev	0.002	0.047	0.05	4.45%	6.69%



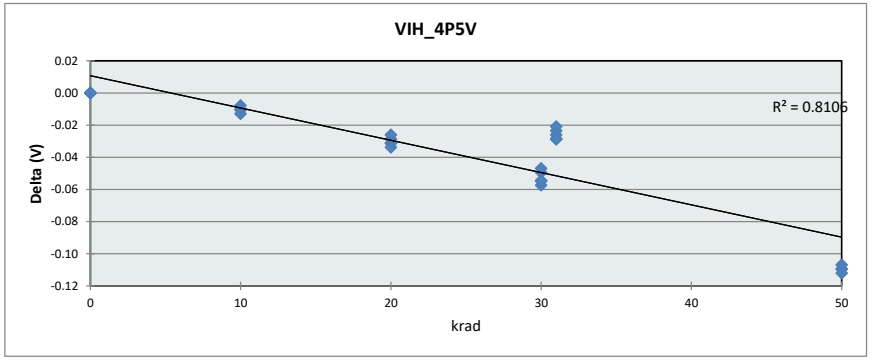
	VIH_3V					
Units	V					
Max Limit	1.45					
Min Limit	0.75					
krad	0	10	20	30	31	50
LL	0.750	0.750	0.750	0.750	0.750	0.750
Min	1.056	1.042	1.019	0.983	1.020	0.901
Average	1.059	1.046	1.022	0.988	1.025	0.907
Max	1.061	1.051	1.025	0.990	1.029	0.912
UL	1.450	1.450	1.450	1.450	1.450	1.450



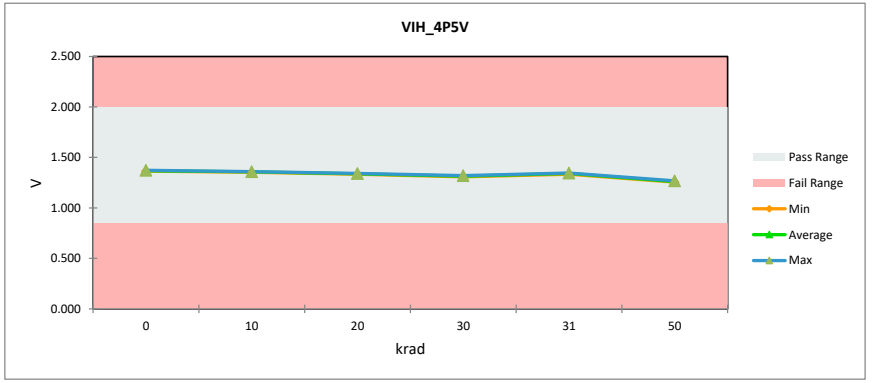
TID Report
SN54SC8T165-SEP

	VIH_4P5V
Units	V
Max Limit	2
Min Limit	0.85

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.367	1.367	0.00	0.00%	0.00%
0	2	1.365	1.365	0.00	0.00%	0.00%
0	3	1.367	1.367	0.00	0.00%	0.00%
0	4	1.373	1.373	0.00	0.00%	0.00%
10	5	1.370	1.359	-0.01	-0.76%	0.91%
10	6	1.367	1.359	-0.01	-0.57%	0.68%
10	7	1.367	1.357	-0.01	-0.76%	0.91%
10	8	1.367	1.357	-0.01	-0.76%	0.91%
10	9	1.367	1.354	-0.01	-0.95%	1.13%
20	10	1.367	1.336	-0.03	-2.29%	2.72%
20	11	1.367	1.339	-0.03	-2.10%	2.49%
20	12	1.373	1.341	-0.03	-2.28%	2.72%
20	13	1.367	1.341	-0.03	-1.91%	2.27%
20	14	1.367	1.333	-0.03	-2.48%	2.95%
30	15	1.365	1.315	-0.05	-3.63%	4.31%
30	16	1.367	1.310	-0.06	-4.20%	4.99%
30	17	1.370	1.315	-0.05	-4.00%	4.76%
30	18	1.362	1.307	-0.05	-4.02%	4.76%
30	19	1.370	1.315	-0.05	-4.00%	4.76%
30	20	1.367	1.320	-0.05	-3.43%	4.08%
31	15a	1.365	1.341	-0.02	-1.72%	2.04%
31	16a	1.367	1.339	-0.03	-2.10%	2.49%
31	17a	1.370	1.344	-0.03	-1.90%	2.27%
31	18a	1.362	1.333	-0.03	-2.11%	2.49%
31	19a	1.370	1.341	-0.03	-2.09%	2.49%
31	20a	1.367	1.346	-0.02	-1.53%	1.81%
50	21	1.367	1.258	-0.11	-8.01%	9.52%
50	22	1.370	1.260	-0.11	-7.99%	9.52%
50	23	1.367	1.260	-0.11	-7.82%	9.30%
50	24	1.367	1.255	-0.11	-8.20%	9.75%
50	25	1.362	1.268	-0.09	-6.89%	8.16%
Max		1.373	1.373	0.00	0.00%	9.75%
Average		1.368	1.330	-0.04	-2.72%	3.24%
Min		1.362	1.255	-0.11	-8.20%	0.00%
Std Dev		0.002	0.034	0.03	2.46%	2.92%



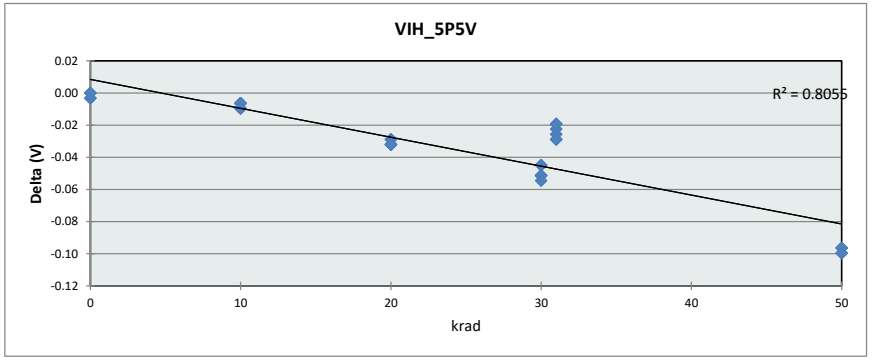
	VIH_4P5V					
Units	V					
Max Limit	2					
Min Limit	0.85					
krad	0	10	20	30	31	50
LL	0.850	0.850	0.850	0.850	0.850	0.850
Min	1.365	1.354	1.333	1.307	1.333	1.255
Average	1.368	1.357	1.338	1.314	1.341	1.260
Max	1.373	1.359	1.341	1.320	1.346	1.268
UL	2.000	2.000	2.000	2.000	2.000	2.000



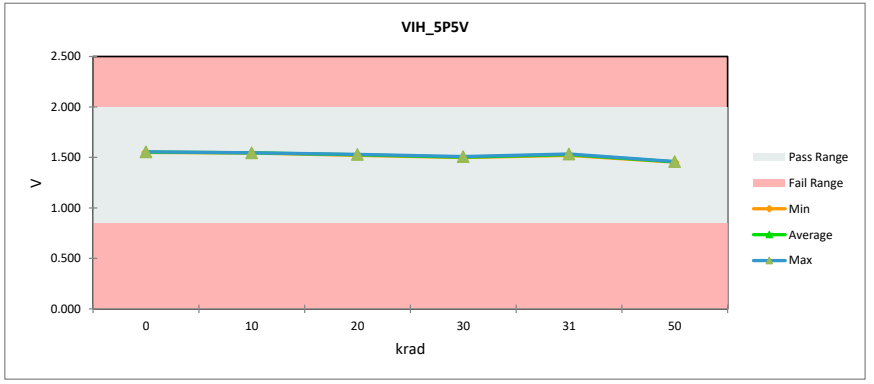
TID Report
SN54SC8T165-SEP

	VIH_5P5V
Units	V
Max Limit	2
Min Limit	0.85

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.553	1.553	0.00	0.00%	0.00%
0	2	1.553	1.550	0.00	-0.21%	0.28%
0	3	1.556	1.553	0.00	-0.21%	0.28%
0	4	1.556	1.556	0.00	0.00%	0.00%
10	5	1.553	1.546	-0.01	-0.41%	0.56%
10	6	1.553	1.546	-0.01	-0.41%	0.56%
10	7	1.550	1.543	-0.01	-0.41%	0.56%
10	8	1.556	1.546	-0.01	-0.62%	0.84%
10	9	1.553	1.543	-0.01	-0.62%	0.84%
20	10	1.553	1.521	-0.03	-2.07%	2.79%
20	11	1.556	1.527	-0.03	-1.86%	2.52%
20	12	1.559	1.530	-0.03	-1.86%	2.52%
20	13	1.559	1.527	-0.03	-2.06%	2.79%
20	14	1.556	1.524	-0.03	-2.07%	2.79%
30	15	1.550	1.505	-0.04	-2.90%	3.91%
30	16	1.553	1.501	-0.05	-3.31%	4.47%
30	17	1.556	1.505	-0.05	-3.31%	4.47%
30	18	1.550	1.498	-0.05	-3.32%	4.47%
30	19	1.556	1.501	-0.05	-3.51%	4.75%
30	20	1.553	1.508	-0.04	-2.90%	3.91%
31	15a	1.550	1.530	-0.02	-1.24%	1.68%
31	16a	1.553	1.527	-0.03	-1.66%	2.24%
31	17a	1.556	1.533	-0.02	-1.45%	1.96%
31	18a	1.550	1.521	-0.03	-1.87%	2.52%
31	19a	1.556	1.527	-0.03	-1.86%	2.52%
31	20a	1.553	1.533	-0.02	-1.24%	1.68%
50	21	1.553	1.453	-0.10	-6.42%	8.66%
50	22	1.556	1.460	-0.10	-6.20%	8.38%
50	23	1.553	1.456	-0.10	-6.21%	8.38%
50	24	1.553	1.453	-0.10	-6.42%	8.66%
50	25	1.546	1.460	-0.09	-5.61%	7.55%
	Max	1.559	1.556	0.00	0.00%	8.66%
	Average	1.554	1.519	-0.03	-2.22%	3.00%
	Min	1.550	1.453	-0.10	-6.42%	0.00%
	Std Dev	0.003	0.030	0.03	1.94%	2.62%



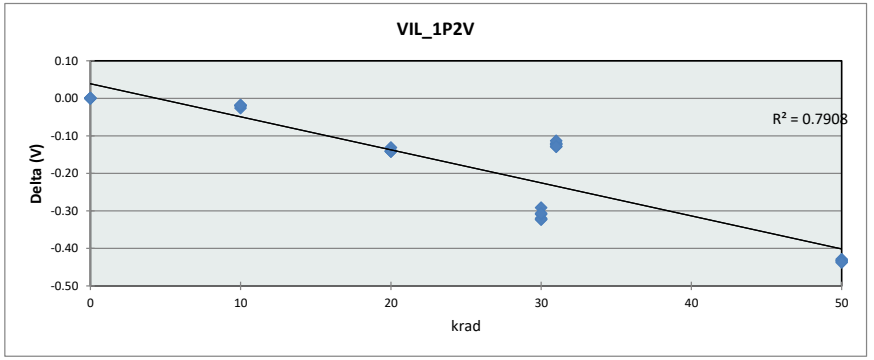
	VIH_5P5V					
Units	V					
Max Limit	2					
Min Limit	0.85					
krad	0	10	20	30	31	50
LL	0.850	0.850	0.850	0.850	0.850	0.850
Min	1.550	1.543	1.521	1.498	1.521	1.453
Average	1.553	1.545	1.526	1.503	1.529	1.456
Max	1.556	1.546	1.530	1.508	1.533	1.460
UL	2.000	2.000	2.000	2.000	2.000	2.000



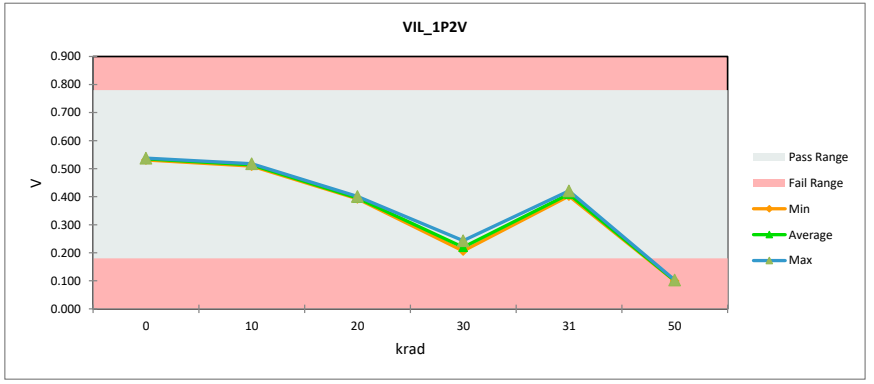
TID Report
SN54SC8T165-SEP

	VIL_1P2V
Units	V
Max Limit	0.78
Min Limit	0.18

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.534	0.534	0.00	0.00%	0.00%
0	2	0.531	0.531	0.00	0.00%	0.00%
0	3	0.537	0.538	0.00	0.12%	0.11%
0	4	0.537	0.537	0.00	0.00%	0.00%
10	5	0.535	0.509	-0.03	-4.86%	4.34%
10	6	0.533	0.514	-0.02	-3.63%	3.22%
10	7	0.533	0.513	-0.02	-3.76%	3.34%
10	8	0.538	0.518	-0.02	-3.72%	3.34%
10	9	0.532	0.514	-0.02	-3.39%	3.00%
20	10	0.532	0.392	-0.14	-26.32%	23.35%
20	11	0.532	0.401	-0.13	-24.69%	21.90%
20	12	0.537	0.396	-0.14	-26.21%	23.46%
20	13	0.535	0.394	-0.14	-26.44%	23.57%
20	14	0.536	0.394	-0.14	-26.53%	23.68%
30	15	0.532	0.211	-0.32	-60.23%	53.37%
30	16	0.528	0.206	-0.32	-60.99%	53.70%
30	17	0.533	0.209	-0.32	-60.71%	53.92%
30	18	0.531	0.222	-0.31	-58.17%	51.48%
30	19	0.534	0.243	-0.29	-54.56%	48.59%
30	20	0.536	0.229	-0.31	-57.29%	51.15%
31	15a	0.532	0.402	-0.13	-24.34%	21.57%
31	16a	0.528	0.405	-0.12	-23.36%	20.57%
31	17a	0.533	0.413	-0.12	-22.53%	20.01%
31	18a	0.531	0.409	-0.12	-22.99%	20.35%
31	19a	0.534	0.421	-0.11	-21.23%	18.90%
31	20a	0.536	0.408	-0.13	-23.91%	21.35%
50	21	0.532	0.103	-0.43	-80.69%	71.49%
50	22	0.533	0.100	-0.43	-81.24%	72.16%
50	23	0.533	0.099	-0.43	-81.36%	72.27%
50	24	0.537	0.099	-0.44	-81.50%	72.94%
50	25	0.532	0.101	-0.43	-80.94%	71.71%
Max		0.538	0.538	0.00	0.12%	72.94%
Average		0.533	0.362	-0.17	-32.15%	28.57%
Min		0.528	0.099	-0.43	-81.50%	0.00%
Std Dev		0.002	0.150	0.15	27.98%	24.85%



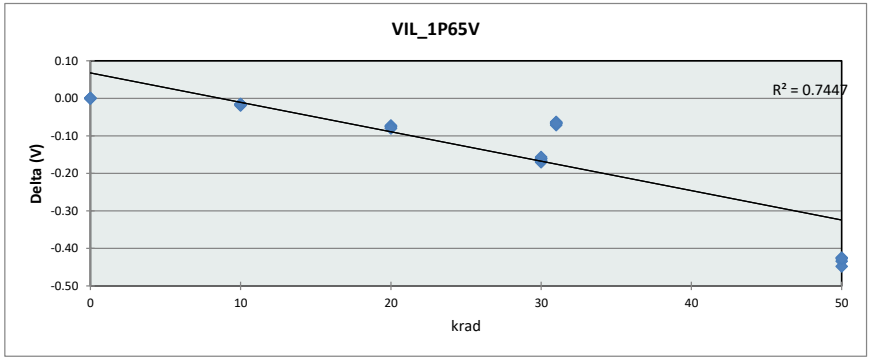
	VIL_1P2V					
Units	V					
Max Limit	0.78					
Min Limit	0.18					
krad	0	10	20	30	31	50
LL	0.180	0.180	0.180	0.180	0.180	0.180
Min	0.531	0.509	0.392	0.206	0.402	0.099
Average	0.535	0.513	0.395	0.220	0.410	0.101
Max	0.538	0.518	0.401	0.243	0.421	0.103
UL	0.780	0.780	0.780	0.780	0.780	0.780



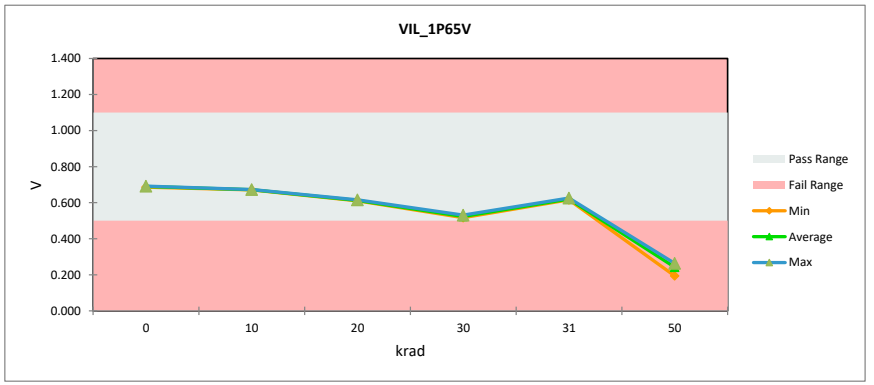
TID Report
SN54SC8T165-SEP

	VIL_1P65V
Units	V
Max Limit	1.1
Min Limit	0.5

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.691	0.691	0.00	0.00%	0.00%
0	2	0.687	0.686	0.00	-0.14%	0.16%
0	3	0.691	0.692	0.00	0.14%	0.16%
0	4	0.691	0.691	0.00	0.00%	0.00%
10	5	0.690	0.671	-0.02	-2.80%	3.22%
10	6	0.687	0.672	-0.02	-2.25%	2.58%
10	7	0.688	0.673	-0.02	-2.25%	2.58%
10	8	0.690	0.674	-0.02	-2.38%	2.74%
10	9	0.687	0.671	-0.02	-2.39%	2.74%
20	10	0.687	0.612	-0.08	-10.98%	12.58%
20	11	0.688	0.616	-0.07	-10.54%	12.09%
20	12	0.690	0.615	-0.08	-10.93%	12.58%
20	13	0.690	0.611	-0.08	-11.49%	13.22%
20	14	0.691	0.611	-0.08	-11.62%	13.38%
30	15	0.686	0.526	-0.16	-23.40%	26.76%
30	16	0.687	0.517	-0.17	-24.78%	28.37%
30	17	0.689	0.521	-0.17	-24.43%	28.05%
30	18	0.685	0.519	-0.17	-24.28%	27.73%
30	19	0.688	0.527	-0.16	-23.48%	26.92%
30	20	0.688	0.531	-0.16	-22.77%	26.12%
31	15a	0.686	0.618	-0.07	-9.87%	11.29%
31	16a	0.687	0.616	-0.07	-10.42%	11.93%
31	17a	0.689	0.623	-0.07	-9.55%	10.96%
31	18a	0.685	0.620	-0.06	-9.46%	10.80%
31	19a	0.688	0.625	-0.06	-9.14%	10.48%
31	20a	0.688	0.621	-0.07	-9.70%	11.12%
50	21	0.686	0.252	-0.43	-63.29%	72.39%
50	22	0.687	0.263	-0.42	-61.80%	70.77%
50	23	0.687	0.239	-0.45	-65.18%	74.64%
50	24	0.691	0.263	-0.43	-61.87%	71.26%
50	25	0.686	0.194	-0.49	-71.75%	82.06%
Max		0.691	0.692	0.00	0.14%	74.64%
Average		0.688	0.569	-0.12	-17.37%	19.92%
Min		0.685	0.239	-0.45	-65.18%	0.00%
Std Dev		0.002	0.137	0.14	19.90%	22.80%



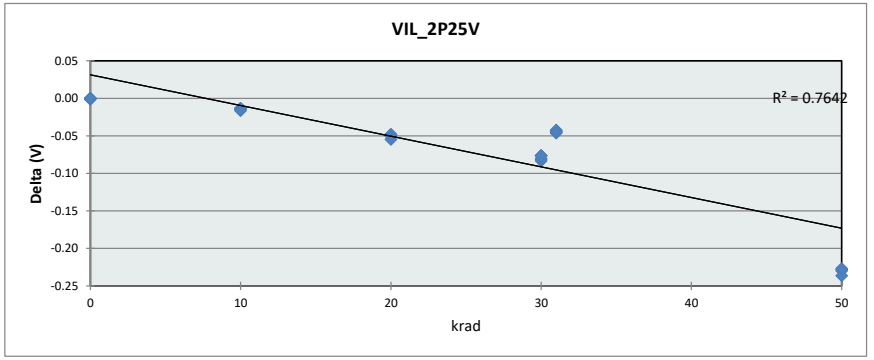
	VIL_1P65V					
Units	V					
Max Limit	1.1					
Min Limit	0.5					
krad	0	10	20	30	31	50
LL	0.500	0.500	0.500	0.500	0.500	0.500
Min	0.686	0.671	0.611	0.517	0.616	0.194
Average	0.690	0.672	0.613	0.523	0.621	0.242
Max	0.692	0.674	0.616	0.531	0.625	0.263
UL	1.100	1.100	1.100	1.100	1.100	1.100



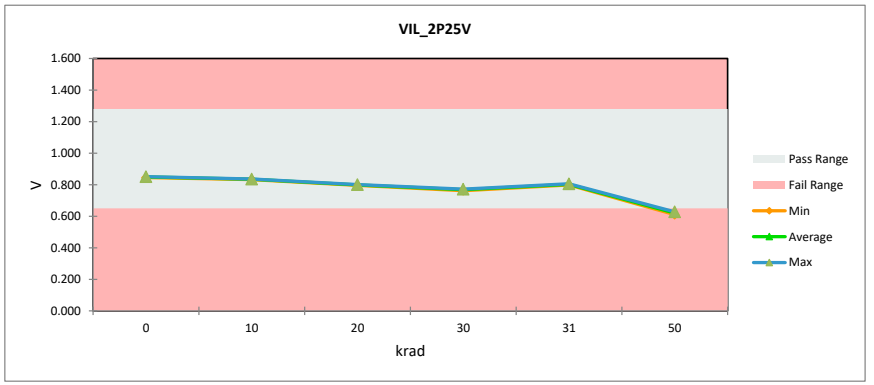
TID Report
SN54SC8T165-SEP

	VIL_2P25V
Units	V
Max Limit	1.28
Min Limit	0.65

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.851	0.851	0.00	0.00%	0.00%
0	2	0.847	0.845	0.00	-0.16%	0.22%
0	3	0.851	0.851	0.00	0.00%	0.00%
0	4	0.849	0.849	0.00	0.00%	0.00%
10	5	0.849	0.836	-0.01	-1.61%	2.17%
10	6	0.848	0.834	-0.01	-1.61%	2.17%
10	7	0.848	0.834	-0.01	-1.61%	2.17%
10	8	0.852	0.836	-0.02	-1.93%	2.60%
10	9	0.847	0.832	-0.02	-1.78%	2.39%
20	10	0.847	0.797	-0.05	-5.81%	7.81%
20	11	0.847	0.799	-0.05	-5.65%	7.60%
20	12	0.849	0.800	-0.05	-5.80%	7.81%
20	13	0.851	0.800	-0.05	-5.95%	8.03%
20	14	0.851	0.796	-0.05	-6.43%	8.68%
30	15	0.845	0.769	-0.08	-9.06%	12.16%
30	16	0.845	0.762	-0.08	-9.87%	13.24%
30	17	0.851	0.770	-0.08	-9.48%	12.81%
30	18	0.844	0.767	-0.08	-9.07%	12.16%
30	19	0.848	0.767	-0.08	-9.51%	12.81%
30	20	0.848	0.771	-0.08	-9.03%	12.16%
31	15a	0.845	0.803	-0.04	-5.02%	6.73%
31	16a	0.845	0.799	-0.05	-5.50%	7.38%
31	17a	0.851	0.806	-0.05	-5.30%	7.16%
31	18a	0.844	0.800	-0.04	-5.19%	6.95%
31	19a	0.848	0.804	-0.04	-5.16%	6.95%
31	20a	0.848	0.803	-0.05	-5.32%	7.16%
50	21	0.848	0.618	-0.23	-27.09%	36.47%
50	22	0.849	0.621	-0.23	-26.89%	36.25%
50	23	0.847	0.610	-0.24	-27.94%	37.55%
50	24	0.849	0.622	-0.23	-26.73%	36.03%
50	25	0.845	0.628	-0.22	-25.72%	34.52%
	Max	0.852	0.851	0.00	0.00%	37.55%
	Average	0.848	0.782	-0.07	-7.82%	10.52%
	Min	0.844	0.610	-0.23	-27.94%	0.00%
	Std Dev	0.002	0.071	0.07	8.30%	11.18%



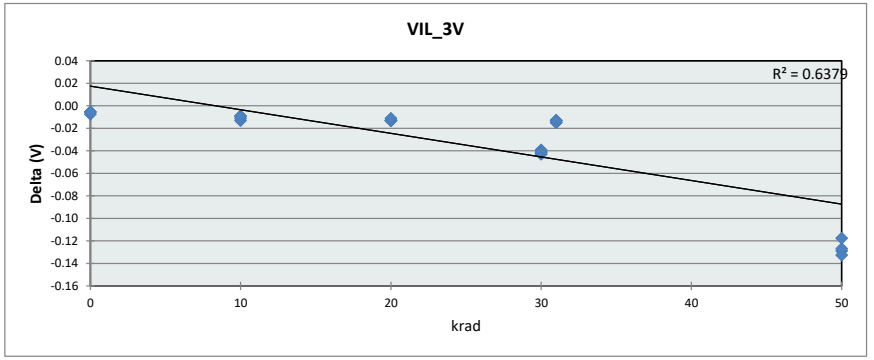
	VIL_2P25V					
Units	V					
Max Limit	1.28					
Min Limit	0.65					
krad	0	10	20	30	31	50
LL	0.650	0.650	0.650	0.650	0.650	0.650
Min	0.845	0.832	0.796	0.762	0.799	0.610
Average	0.849	0.834	0.799	0.768	0.802	0.620
Max	0.851	0.836	0.800	0.771	0.806	0.628
UL	1.280	1.280	1.280	1.280	1.280	1.280



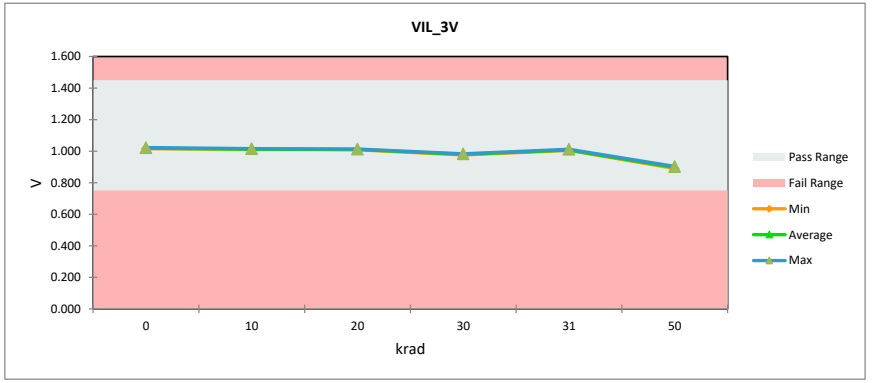
TID Report
SN54SC8T165-SEP

	VIL_3V
Units	V
Max Limit	1.45
Min Limit	0.75

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.023	1.015	-0.01	-0.73%	1.07%
0	2	1.021	1.015	-0.01	-0.55%	0.80%
0	3	1.026	1.021	-0.01	-0.55%	0.80%
0	4	1.028	1.023	-0.01	-0.54%	0.80%
10	5	1.025	1.012	-0.01	-1.28%	1.87%
10	6	1.023	1.013	-0.01	-0.91%	1.33%
10	7	1.021	1.012	-0.01	-0.91%	1.33%
10	8	1.026	1.015	-0.01	-1.09%	1.60%
10	9	1.021	1.012	-0.01	-0.91%	1.33%
20	10	1.021	1.008	-0.01	-1.28%	1.87%
20	11	1.025	1.012	-0.01	-1.28%	1.87%
20	12	1.026	1.013	-0.01	-1.27%	1.87%
20	13	1.025	1.012	-0.01	-1.28%	1.87%
20	14	1.023	1.012	-0.01	-1.10%	1.60%
30	15	1.021	0.980	-0.04	-4.03%	5.87%
30	16	1.019	0.976	-0.04	-4.22%	6.14%
30	17	1.021	0.982	-0.04	-3.84%	5.60%
30	18	1.019	0.976	-0.04	-4.22%	6.14%
30	19	1.021	0.980	-0.04	-4.03%	5.87%
30	20	1.025	0.984	-0.04	-4.01%	5.87%
31	15a	1.021	1.008	-0.01	-1.28%	1.87%
31	16a	1.019	1.004	-0.01	-1.47%	2.13%
31	17a	1.021	1.008	-0.01	-1.28%	1.87%
31	18a	1.019	1.006	-0.01	-1.28%	1.87%
31	19a	1.021	1.006	-0.01	-1.46%	2.13%
31	20a	1.025	1.012	-0.01	-1.28%	1.87%
50	21	1.015	0.898	-0.12	-11.59%	16.81%
50	22	1.025	0.896	-0.13	-12.58%	18.41%
50	23	1.023	0.890	-0.13	-12.97%	18.95%
50	24	1.023	0.896	-0.13	-12.42%	18.15%
50	25	1.021	0.903	-0.12	-11.53%	16.81%
	Max	1.028	1.023	-0.01	-0.54%	18.95%
	Average	1.022	0.990	-0.03	-3.19%	4.65%
	Min	1.015	0.890	-0.13	-12.97%	0.80%
	Std Dev	0.003	0.040	0.04	3.87%	5.65%



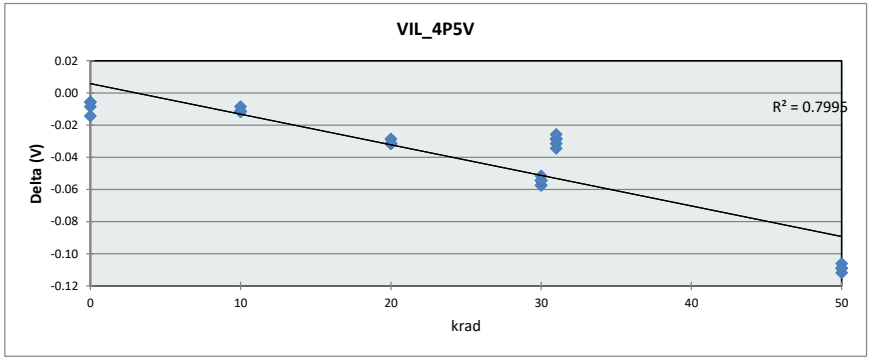
	VIL_3V					
Units	V					
Max Limit	1.45					
Min Limit	0.75					
krad	0	10	20	30	31	50
LL	0.750	0.750	0.750	0.750	0.750	0.750
Min	1.015	1.012	1.008	0.976	1.004	0.890
Average	1.019	1.013	1.011	0.979	1.007	0.896
Max	1.023	1.015	1.013	0.984	1.012	0.903
UL	1.450	1.450	1.450	1.450	1.450	1.450



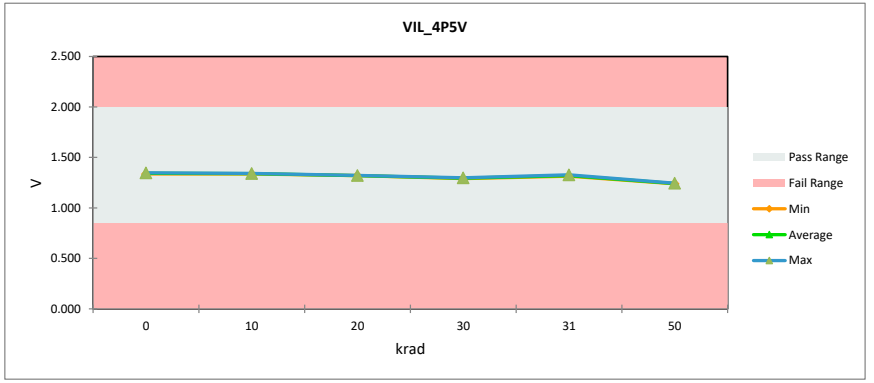
TID Report
SN54SC8T165-SEP

	VIL_4P5V
Units	V
Max Limit	2
Min Limit	0.85

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.351	1.336	-0.01	-1.06%	1.25%
0	2	1.348	1.339	-0.01	-0.64%	0.75%
0	3	1.354	1.348	-0.01	-0.42%	0.50%
0	4	1.354	1.348	-0.01	-0.42%	0.50%
10	5	1.351	1.339	-0.01	-0.85%	1.00%
10	6	1.351	1.342	-0.01	-0.64%	0.75%
10	7	1.354	1.342	-0.01	-0.85%	1.00%
10	8	1.351	1.339	-0.01	-0.85%	1.00%
10	9	1.348	1.336	-0.01	-0.85%	1.00%
20	10	1.351	1.319	-0.03	-2.34%	2.74%
20	11	1.351	1.319	-0.03	-2.34%	2.74%
20	12	1.354	1.322	-0.03	-2.33%	2.74%
20	13	1.348	1.319	-0.03	-2.13%	2.49%
20	14	1.351	1.319	-0.03	-2.34%	2.74%
30	15	1.354	1.296	-0.06	-4.24%	4.99%
30	16	1.348	1.293	-0.05	-4.04%	4.74%
30	17	1.351	1.299	-0.05	-3.82%	4.49%
30	18	1.345	1.290	-0.05	-4.05%	4.74%
30	19	1.351	1.293	-0.06	-4.25%	4.99%
30	20	1.354	1.299	-0.05	-4.03%	4.74%
31	15a	1.354	1.325	-0.03	-2.12%	2.49%
31	16a	1.348	1.319	-0.03	-2.13%	2.49%
31	17a	1.351	1.322	-0.03	-2.12%	2.49%
31	18a	1.345	1.313	-0.03	-2.35%	2.74%
31	19a	1.351	1.316	-0.03	-2.55%	2.99%
31	20a	1.354	1.328	-0.03	-1.91%	2.24%
50	21	1.345	1.239	-0.11	-7.89%	9.23%
50	22	1.354	1.242	-0.11	-8.27%	9.73%
50	23	1.351	1.242	-0.11	-8.07%	9.48%
50	24	1.348	1.239	-0.11	-8.09%	9.48%
50	25	1.348	1.245	-0.10	-7.66%	8.98%
Max		1.354	1.348	-0.01	-0.42%	9.73%
Average		1.350	1.311	-0.04	-2.93%	3.44%
Min		1.345	1.239	-0.11	-8.27%	0.50%
Std Dev		0.003	0.033	0.03	2.37%	2.79%



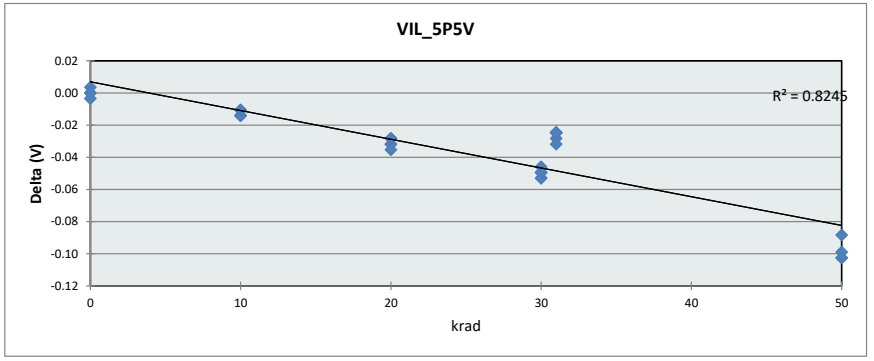
	VIL_4P5V					
Units	V					
Max Limit	2					
Min Limit	0.85					
krad	0	10	20	30	31	50
LL	0.850	0.850	0.850	0.850	0.850	0.850
Min	1.336	1.336	1.319	1.290	1.313	1.239
Average	1.343	1.340	1.320	1.295	1.321	1.241
Max	1.348	1.342	1.322	1.299	1.328	1.245
UL	2.000	2.000	2.000	2.000	2.000	2.000



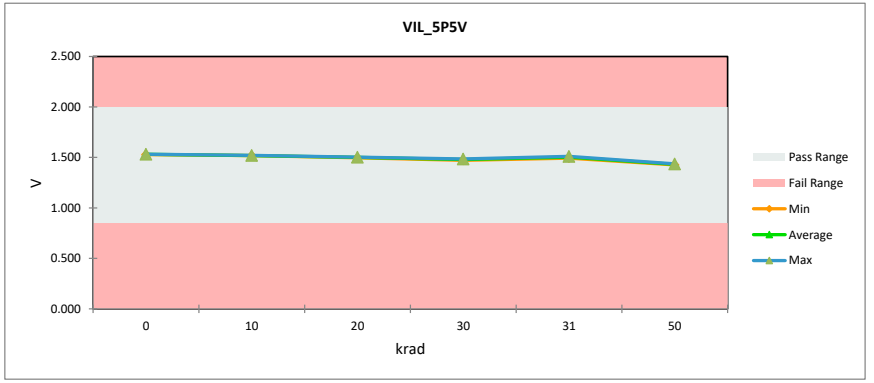
TID Report
SN54SC8T165-SEP

	VIL_5P5V
Units	V
Max Limit	2
Min Limit	0.85

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.528	1.532	0.00	0.23%	0.31%
0	2	1.528	1.528	0.00	0.00%	0.00%
0	3	1.535	1.532	0.00	-0.23%	0.31%
0	4	1.532	1.532	0.00	0.00%	0.00%
10	5	1.535	1.521	-0.01	-0.92%	1.23%
10	6	1.532	1.518	-0.01	-0.92%	1.23%
10	7	1.532	1.521	-0.01	-0.69%	0.92%
10	8	1.532	1.518	-0.01	-0.92%	1.23%
10	9	1.528	1.518	-0.01	-0.69%	0.92%
20	10	1.528	1.497	-0.03	-2.08%	2.77%
20	11	1.532	1.500	-0.03	-2.08%	2.77%
20	12	1.532	1.504	-0.03	-1.85%	2.46%
20	13	1.532	1.504	-0.03	-1.85%	2.46%
20	14	1.532	1.497	-0.04	-2.31%	3.07%
30	15	1.528	1.482	-0.05	-3.01%	4.00%
30	16	1.528	1.475	-0.05	-3.47%	4.61%
30	17	1.532	1.482	-0.05	-3.23%	4.30%
30	18	1.525	1.472	-0.05	-3.48%	4.61%
30	19	1.528	1.479	-0.05	-3.24%	4.30%
30	20	1.535	1.486	-0.05	-3.22%	4.30%
31	15a	1.528	1.504	-0.02	-1.62%	2.15%
31	16a	1.528	1.500	-0.03	-1.85%	2.46%
31	17a	1.532	1.507	-0.02	-1.62%	2.15%
31	18a	1.525	1.493	-0.03	-2.09%	2.77%
31	19a	1.528	1.504	-0.02	-1.62%	2.15%
31	20a	1.535	1.511	-0.02	-1.61%	2.15%
50	21	1.518	1.429	-0.09	-5.82%	7.69%
50	22	1.535	1.433	-0.10	-6.68%	8.92%
50	23	1.532	1.433	-0.10	-6.46%	8.61%
50	24	1.528	1.426	-0.10	-6.71%	8.92%
50	25	1.528	1.436	-0.09	-6.01%	7.99%
Max		1.535	1.532	0.00	0.23%	8.92%
Average		1.530	1.495	-0.04	-2.33%	3.13%
Min		1.518	1.426	-0.09	-6.71%	0.00%
Std Dev		0.004	0.031	0.03	1.94%	2.55%



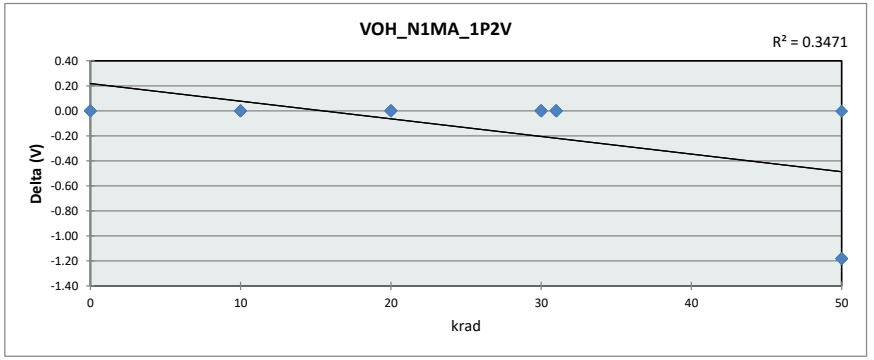
	VIL_5P5V					
Units	V					
Max Limit	2					
Min Limit	0.85					
krad	0	10	20	30	31	50
LL	0.850	0.850	0.850	0.850	0.850	0.850
Min	1.528	1.518	1.497	1.472	1.493	1.426
Average	1.531	1.519	1.500	1.480	1.503	1.432
Max	1.532	1.521	1.504	1.486	1.511	1.436
UL	2.000	2.000	2.000	2.000	2.000	2.000



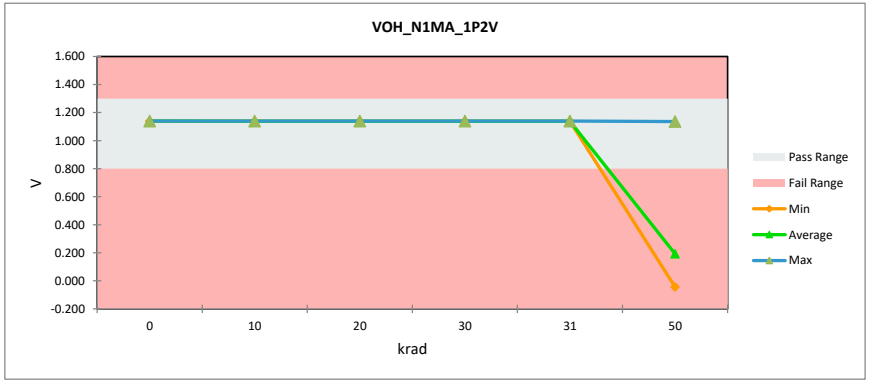
TID Report
SN54SC8T165-SEP

	VOH_N1MA_1P2V
Units	V
Max Limit	1.3
Min Limit	0.8

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.139	1.139	0.00	0.01%	0.01%
0	2	1.139	1.139	0.00	-0.01%	0.01%
0	3	1.140	1.140	0.00	0.01%	0.01%
0	4	1.139	1.140	0.00	0.02%	0.05%
10	5	1.140	1.139	0.00	-0.03%	0.06%
10	6	1.139	1.138	0.00	-0.03%	0.06%
10	7	1.138	1.138	0.00	-0.01%	0.03%
10	8	1.139	1.139	0.00	-0.01%	0.03%
10	9	1.139	1.138	0.00	-0.02%	0.05%
20	10	1.139	1.138	0.00	-0.04%	0.09%
20	11	1.139	1.139	0.00	-0.02%	0.06%
20	12	1.139	1.139	0.00	-0.04%	0.10%
20	13	1.139	1.139	0.00	-0.04%	0.09%
20	14	1.139	1.139	0.00	-0.03%	0.07%
30	15	1.138	1.138	0.00	-0.04%	0.09%
30	16	1.138	1.138	0.00	-0.05%	0.11%
30	17	1.139	1.139	0.00	-0.03%	0.08%
30	18	1.138	1.138	0.00	-0.04%	0.09%
30	19	1.139	1.139	0.00	-0.05%	0.11%
30	20	1.140	1.139	0.00	-0.06%	0.14%
31	15a	1.138	1.138	0.00	-0.02%	0.05%
31	16a	1.138	1.138	0.00	-0.04%	0.08%
31	17a	1.139	1.139	0.00	-0.04%	0.08%
31	18a	1.138	1.138	0.00	-0.02%	0.05%
31	19a	1.139	1.139	0.00	-0.03%	0.07%
31	20a	1.140	1.139	0.00	-0.05%	0.11%
50	21	1.138	-0.043	-1.18	-103.78%	236.25%
50	22	1.139	1.136	0.00	-0.27%	0.62%
50	23	1.138	-0.044	-1.18	-103.84%	236.39%
50	24	1.139	-0.043	-1.18	-103.74%	236.37%
50	25	1.138	-0.043	-1.18	-103.79%	236.26%
	Max	1.140	1.140	0.00	0.02%	236.39%
	Average	1.139	1.020	-0.12	-10.41%	23.71%
	Min	1.138	-0.044	-1.18	-103.84%	0.01%
	Std Dev	0.000	0.361	0.36	31.66%	72.09%



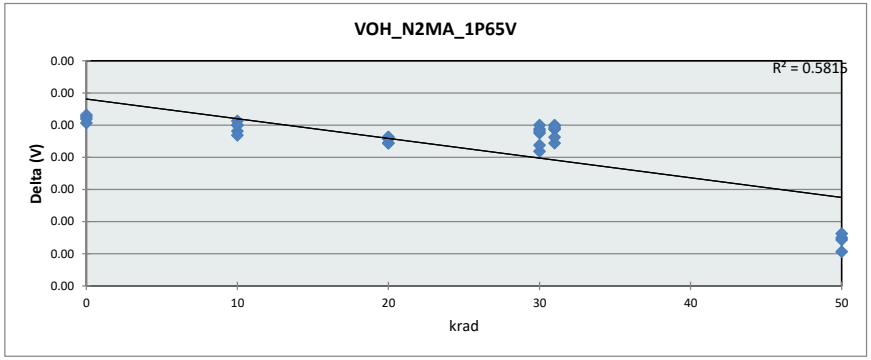
	VOH_N1MA_1P2V					
Units	V					
Max Limit	1.3					
Min Limit	0.8					
krad	0	10	20	30	31	50
LL	0.800	0.800	0.800	0.800	0.800	0.800
Min	1.139	1.138	1.138	1.138	1.138	-0.044
Average	1.139	1.139	1.139	1.138	1.138	0.193
Max	1.140	1.139	1.139	1.139	1.139	1.136
UL	1.300	1.300	1.300	1.300	1.300	1.300



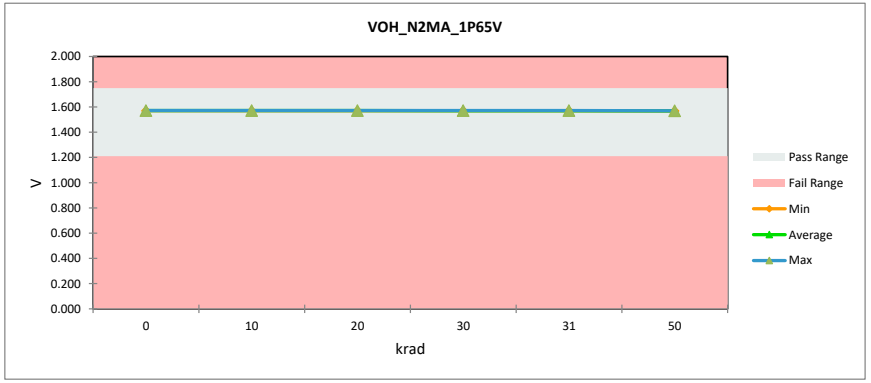
TID Report
SN54SC8T165-SEP

	VOH_N2MA_1P65V
Units	V
Max Limit	1.75
Min Limit	1.21

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.572	1.572	0.00	0.01%	0.02%
0	2	1.571	1.571	0.00	0.01%	0.03%
0	3	1.572	1.572	0.00	0.01%	0.02%
0	4	1.572	1.572	0.00	0.00%	0.01%
10	5	1.572	1.572	0.00	-0.01%	0.02%
10	6	1.570	1.570	0.00	0.00%	0.00%
10	7	1.571	1.571	0.00	0.00%	0.01%
10	8	1.571	1.571	0.00	0.00%	0.00%
10	9	1.571	1.570	0.00	-0.01%	0.03%
20	10	1.571	1.570	0.00	-0.02%	0.05%
20	11	1.571	1.571	0.00	-0.02%	0.05%
20	12	1.571	1.571	0.00	-0.01%	0.04%
20	13	1.571	1.571	0.00	-0.01%	0.03%
20	14	1.571	1.571	0.00	-0.01%	0.03%
30	15	1.570	1.570	0.00	0.00%	0.01%
30	16	1.570	1.570	0.00	0.00%	0.00%
30	17	1.572	1.571	0.00	-0.01%	0.02%
30	18	1.570	1.570	0.00	-0.01%	0.02%
30	19	1.571	1.571	0.00	-0.03%	0.08%
30	20	1.572	1.571	0.00	-0.02%	0.06%
31	15a	1.570	1.570	0.00	0.00%	0.01%
31	16a	1.570	1.570	0.00	0.00%	0.00%
31	17a	1.572	1.571	0.00	-0.02%	0.05%
31	18a	1.570	1.570	0.00	0.00%	0.01%
31	19a	1.571	1.571	0.00	0.00%	0.01%
31	20a	1.572	1.571	0.00	-0.01%	0.03%
50	21	1.570	1.569	0.00	-0.11%	0.32%
50	22	1.571	1.570	0.00	-0.11%	0.33%
50	23	1.570	1.569	0.00	-0.11%	0.31%
50	24	1.571	1.569	0.00	-0.13%	0.36%
50	25	1.570	1.569	0.00	-0.09%	0.25%
	Max	1.572	1.572	0.00	0.01%	0.36%
	Average	1.571	1.571	0.00	-0.02%	0.07%
	Min	1.570	1.569	0.00	-0.13%	0.00%
	Std Dev	0.001	0.001	0.00	0.04%	0.11%



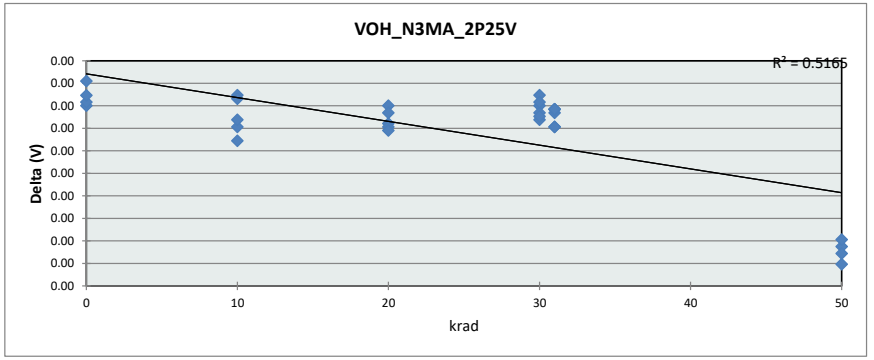
	VOH_N2MA_1P65V					
Units	V					
Max Limit	1.75					
Min Limit	1.21					
krad	0	10	20	30	31	50
LL	1.210	1.210	1.210	1.210	1.210	1.210
Min	1.571	1.570	1.570	1.570	1.570	1.569
Average	1.572	1.571	1.571	1.571	1.571	1.569
Max	1.572	1.572	1.571	1.571	1.571	1.570
UL	1.750	1.750	1.750	1.750	1.750	1.750



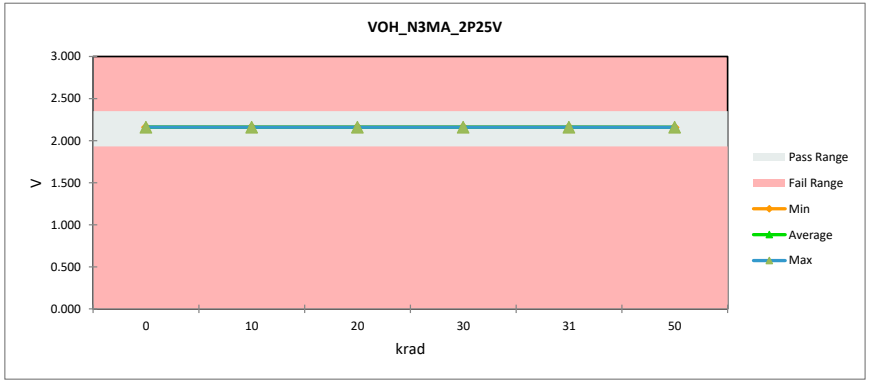
TID Report
SN54SC8T165-SEP

	VOH_N3MA_2P25V
Units	V
Max Limit	2.35
Min Limit	1.93

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	2.160	2.160	0.00	0.01%	0.05%
0	2	2.159	2.159	0.00	0.00%	0.00%
0	3	2.160	2.160	0.00	0.00%	0.01%
0	4	2.160	2.160	0.00	0.00%	0.02%
10	5	2.160	2.160	0.00	0.00%	0.02%
10	6	2.159	2.159	0.00	0.00%	0.01%
10	7	2.159	2.159	0.00	-0.01%	0.04%
10	8	2.160	2.160	0.00	-0.01%	0.07%
10	9	2.159	2.159	0.00	-0.01%	0.03%
20	10	2.159	2.159	0.00	0.00%	0.00%
20	11	2.160	2.160	0.00	-0.01%	0.04%
20	12	2.160	2.160	0.00	-0.01%	0.04%
20	13	2.160	2.160	0.00	-0.01%	0.05%
20	14	2.160	2.160	0.00	0.00%	0.01%
30	15	2.159	2.159	0.00	0.00%	0.02%
30	16	2.159	2.159	0.00	0.00%	0.00%
30	17	2.160	2.160	0.00	0.00%	0.01%
30	18	2.159	2.159	0.00	0.00%	0.01%
30	19	2.160	2.160	0.00	-0.01%	0.03%
30	20	2.160	2.160	0.00	0.00%	0.02%
31	15a	2.159	2.159	0.00	0.00%	0.01%
31	16a	2.159	2.159	0.00	0.00%	0.01%
31	17a	2.160	2.160	0.00	0.00%	0.01%
31	18a	2.159	2.159	0.00	0.00%	0.01%
31	19a	2.160	2.160	0.00	-0.01%	0.04%
31	20a	2.160	2.160	0.00	-0.01%	0.04%
50	21	2.159	2.158	0.00	-0.06%	0.30%
50	22	2.160	2.159	0.00	-0.06%	0.28%
50	23	2.159	2.158	0.00	-0.06%	0.31%
50	24	2.160	2.159	0.00	-0.07%	0.34%
50	25	2.159	2.158	0.00	-0.04%	0.19%
Max		2.160	2.160	0.00	0.01%	0.34%
Average		2.160	2.159	0.00	-0.01%	0.06%
Min		2.159	2.158	0.00	-0.07%	0.00%
Std Dev		0.001	0.001	0.00	0.02%	0.10%



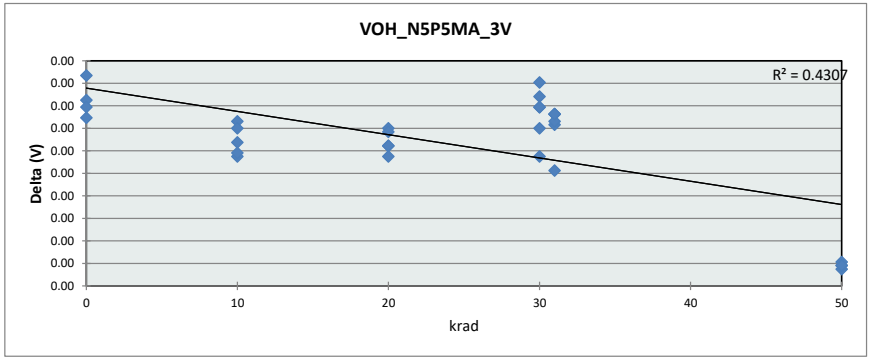
	VOH_N3MA_2P25V					
Units	V					
Max Limit	2.35					
Min Limit	1.93					
krad	0	10	20	30	31	50
LL	1.930	1.930	1.930	1.930	1.930	1.930
Min	2.159	2.159	2.159	2.159	2.159	2.158
Average	2.160	2.159	2.160	2.159	2.159	2.158
Max	2.160	2.160	2.160	2.160	2.160	2.159
UL	2.350	2.350	2.350	2.350	2.350	2.350



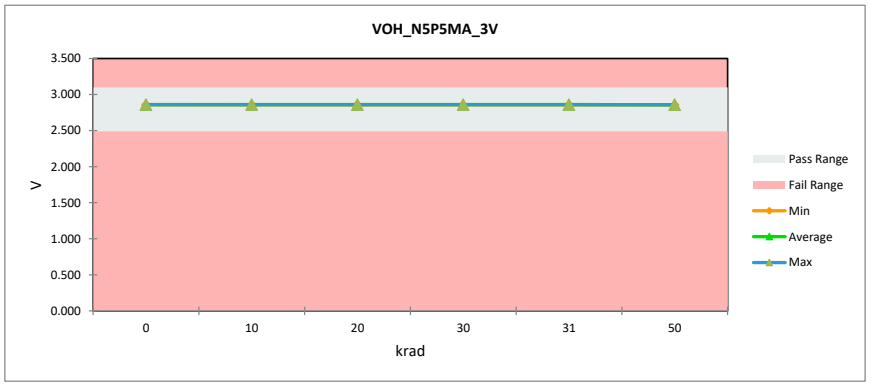
TID Report
SN54SC8T165-SEP

	VOH_N5P5MA_3V
Units	V
Max Limit	3.1
Min Limit	2.49

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	2.860	2.861	0.00	0.02%	0.08%
0	2	2.859	2.859	0.00	0.00%	0.02%
0	3	2.861	2.861	0.00	0.01%	0.04%
0	4	2.861	2.861	0.00	0.01%	0.03%
10	5	2.861	2.860	0.00	-0.01%	0.04%
10	6	2.859	2.859	0.00	0.00%	0.01%
10	7	2.859	2.859	0.00	0.00%	0.02%
10	8	2.860	2.860	0.00	0.00%	0.00%
10	9	2.859	2.859	0.00	-0.01%	0.04%
20	10	2.859	2.859	0.00	-0.01%	0.03%
20	11	2.860	2.860	0.00	-0.01%	0.03%
20	12	2.860	2.860	0.00	0.00%	0.00%
20	13	2.860	2.860	0.00	0.00%	0.01%
20	14	2.860	2.860	0.00	-0.01%	0.04%
30	15	2.859	2.859	0.00	0.01%	0.05%
30	16	2.859	2.859	0.00	0.01%	0.07%
30	17	2.860	2.860	0.00	0.00%	0.00%
30	18	2.859	2.859	0.00	0.01%	0.03%
30	19	2.860	2.860	0.00	0.01%	0.03%
30	20	2.860	2.860	0.00	-0.01%	0.04%
31	15a	2.859	2.859	0.00	0.00%	0.01%
31	16a	2.859	2.859	0.00	0.00%	0.02%
31	17a	2.860	2.861	0.00	0.00%	0.02%
31	18a	2.859	2.859	0.00	0.00%	0.01%
31	19a	2.860	2.860	0.00	0.00%	0.02%
31	20a	2.860	2.860	0.00	-0.01%	0.06%
50	21	2.859	2.857	0.00	-0.04%	0.21%
50	22	2.861	2.859	0.00	-0.04%	0.20%
50	23	2.859	2.858	0.00	-0.04%	0.19%
50	24	2.860	2.859	0.00	-0.04%	0.20%
50	25	2.859	2.858	0.00	-0.02%	0.10%
Max		2.861	2.861	0.00	0.02%	0.21%
Average		2.860	2.860	0.00	0.00%	0.05%
Min		2.859	2.857	0.00	-0.04%	0.00%
Std Dev		0.001	0.001	0.00	0.02%	0.06%



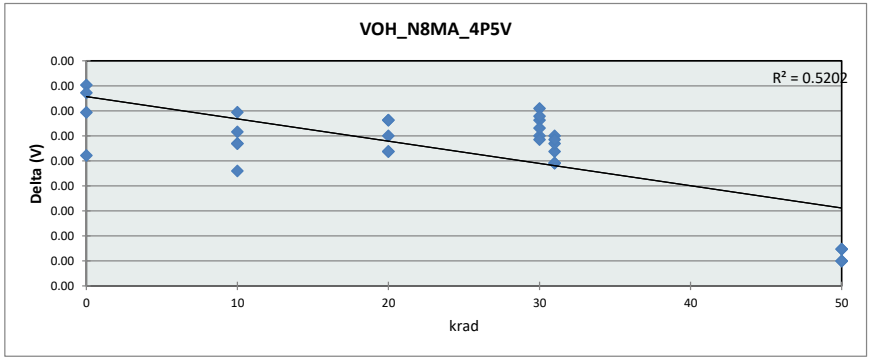
	VOH_N5P5MA_3V					
Units	V					
Max Limit	3.1					
Min Limit	2.49					
krad	0	10	20	30	31	50
LL	2.490	2.490	2.490	2.490	2.490	2.490
Min	2.859	2.859	2.859	2.859	2.859	2.857
Average	2.860	2.860	2.860	2.860	2.860	2.858
Max	2.861	2.860	2.860	2.860	2.861	2.859
UL	3.100	3.100	3.100	3.100	3.100	3.100



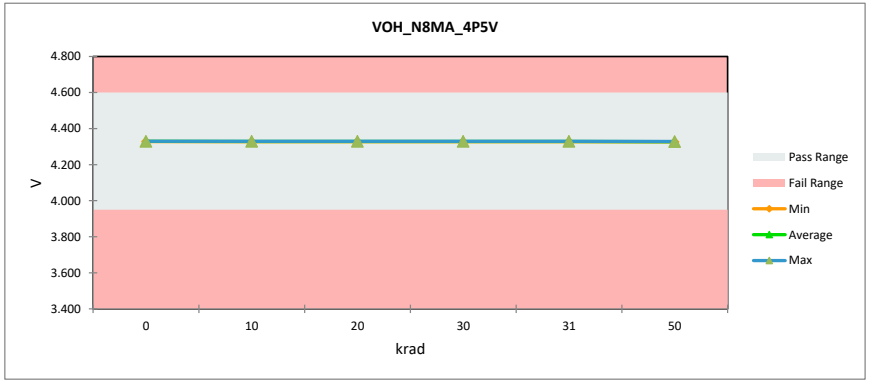
TID Report
SN54SC8T165-SEP

	VOH_N8MA_4P5V
Units	V
Max Limit	4.6
Min Limit	3.95

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	4.329	4.330	0.00	0.01%	0.06%
0	2	4.328	4.328	0.00	0.01%	0.05%
0	3	4.330	4.329	0.00	0.00%	0.02%
0	4	4.329	4.330	0.00	0.00%	0.03%
10	5	4.329	4.330	0.00	0.00%	0.00%
10	6	4.328	4.328	0.00	0.00%	0.03%
10	7	4.328	4.328	0.00	0.00%	0.01%
10	8	4.330	4.329	0.00	0.00%	0.01%
10	9	4.328	4.328	0.00	-0.01%	0.04%
20	10	4.328	4.328	0.00	0.00%	0.02%
20	11	4.329	4.329	0.00	0.00%	0.02%
20	12	4.329	4.329	0.00	0.00%	0.02%
20	13	4.329	4.329	0.00	0.00%	0.02%
20	14	4.329	4.329	0.00	0.00%	0.00%
30	15	4.328	4.328	0.00	0.00%	0.00%
30	16	4.328	4.328	0.00	0.01%	0.03%
30	17	4.330	4.330	0.00	0.00%	0.02%
30	18	4.328	4.328	0.00	0.00%	0.01%
30	19	4.329	4.329	0.00	0.00%	0.00%
30	20	4.329	4.329	0.00	0.00%	0.02%
31	15a	4.328	4.328	0.00	0.00%	0.00%
31	16a	4.328	4.327	0.00	-0.01%	0.03%
31	17a	4.330	4.329	0.00	-0.01%	0.03%
31	18a	4.328	4.327	0.00	0.00%	0.02%
31	19a	4.329	4.329	0.00	0.00%	0.01%
31	20a	4.329	4.329	0.00	0.00%	0.00%
50	21	4.327	4.326	0.00	-0.02%	0.15%
50	22	4.330	4.329	0.00	-0.02%	0.14%
50	23	4.328	4.327	0.00	-0.02%	0.15%
50	24	4.329	4.328	0.00	-0.02%	0.14%
50	25	4.327	4.327	0.00	-0.01%	0.08%
	Max	4.330	4.330	0.00	0.01%	0.15%
	Average	4.329	4.329	0.00	0.00%	0.04%
	Min	4.327	4.326	0.00	-0.02%	0.00%
	Std Dev	0.001	0.001	0.00	0.01%	0.05%



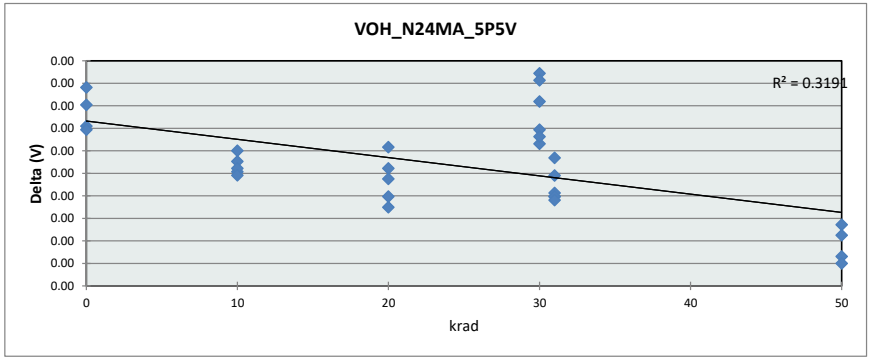
	VOH_N8MA_4P5V					
Units	V					
Max Limit	4.6					
Min Limit	3.95					
krad	0	10	20	30	31	50
LL	3.950	3.950	3.950	3.950	3.950	3.950
Min	4.328	4.328	4.328	4.328	4.327	4.326
Average	4.329	4.328	4.329	4.329	4.328	4.327
Max	4.330	4.330	4.329	4.330	4.329	4.329
UL	4.600	4.600	4.600	4.600	4.600	4.600



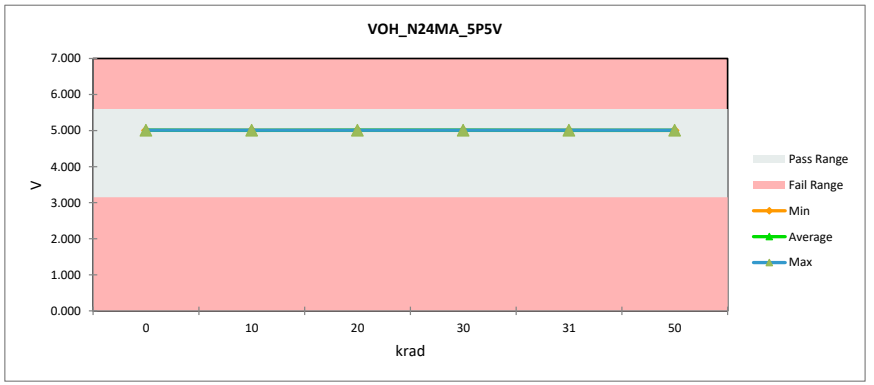
TID Report
SN54SC8T165-SEP

	VOH_N24MA_5P5V
Units	V
Max Limit	5.6
Min Limit	3.15

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	5.012	5.012	0.00	0.01%	0.02%
0	2	5.006	5.007	0.00	0.00%	0.01%
0	3	5.011	5.011	0.00	0.01%	0.02%
0	4	5.011	5.012	0.00	0.00%	0.01%
10	5	5.011	5.011	0.00	0.00%	0.00%
10	6	5.006	5.006	0.00	0.00%	0.00%
10	7	5.006	5.006	0.00	0.00%	0.01%
10	8	5.011	5.011	0.00	0.00%	0.01%
10	9	5.006	5.006	0.00	0.00%	0.01%
20	10	5.006	5.006	0.00	-0.01%	0.02%
20	11	5.011	5.010	0.00	0.00%	0.01%
20	12	5.010	5.010	0.00	0.00%	0.00%
20	13	5.011	5.010	0.00	0.00%	0.01%
20	14	5.011	5.011	0.00	-0.01%	0.02%
30	15	5.006	5.006	0.00	0.01%	0.03%
30	16	5.005	5.006	0.00	0.01%	0.03%
30	17	5.011	5.012	0.00	0.01%	0.02%
30	18	5.006	5.006	0.00	0.00%	0.01%
30	19	5.011	5.011	0.00	0.00%	0.00%
30	20	5.010	5.010	0.00	0.00%	0.01%
31	15a	5.006	5.006	0.00	0.00%	0.00%
31	16a	5.005	5.005	0.00	-0.01%	0.02%
31	17a	5.011	5.011	0.00	-0.01%	0.02%
31	18a	5.006	5.005	0.00	-0.01%	0.02%
31	19a	5.011	5.011	0.00	0.00%	0.01%
31	20a	5.010	5.010	0.00	-0.01%	0.02%
50	21	5.005	5.004	0.00	-0.02%	0.04%
50	22	5.011	5.011	0.00	-0.01%	0.03%
50	23	5.005	5.004	0.00	-0.02%	0.04%
50	24	5.010	5.009	0.00	-0.01%	0.03%
50	25	5.005	5.005	0.00	0.00%	0.00%
Max		5.012	5.012	0.00	0.01%	0.04%
Average		5.009	5.009	0.00	0.00%	0.01%
Min		5.005	5.004	0.00	-0.02%	0.00%
Std Dev		0.003	0.003	0.00	0.01%	0.01%



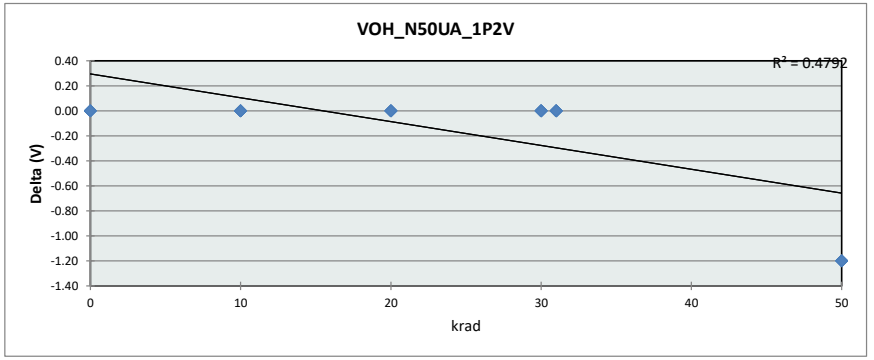
	VOH_N24MA_5P5V					
Units	V					
Max Limit	5.6					
Min Limit	3.15					
krad	0	10	20	30	31	50
LL	3.150	3.150	3.150	3.150	3.150	3.150
Min	5.007	5.006	5.006	5.006	5.005	5.004
Average	5.010	5.008	5.009	5.009	5.008	5.007
Max	5.012	5.011	5.011	5.012	5.011	5.011
UL	5.600	5.600	5.600	5.600	5.600	5.600



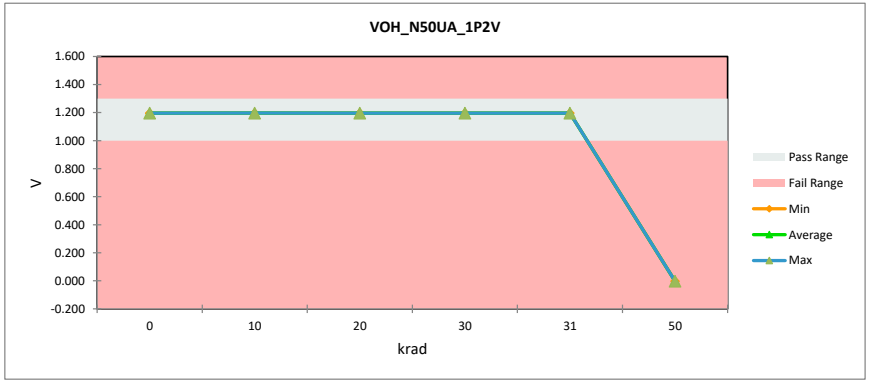
TID Report
SN54SC8T165-SEP

	VOH_N50UA_1P2V
Units	V
Max Limit	1.3
Min Limit	1

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.197	1.197	0.00	0.02%	0.06%
0	2	1.197	1.196	0.00	-0.02%	0.06%
0	3	1.197	1.197	0.00	-0.01%	0.04%
0	4	1.197	1.197	0.00	0.01%	0.02%
10	5	1.197	1.197	0.00	0.01%	0.04%
10	6	1.197	1.197	0.00	-0.02%	0.06%
10	7	1.197	1.197	0.00	0.01%	0.02%
10	8	1.197	1.197	0.00	0.01%	0.03%
10	9	1.197	1.197	0.00	-0.01%	0.03%
20	10	1.197	1.197	0.00	0.00%	0.01%
20	11	1.197	1.197	0.00	0.00%	0.00%
20	12	1.197	1.196	0.00	-0.01%	0.03%
20	13	1.197	1.197	0.00	0.00%	0.01%
20	14	1.197	1.197	0.00	-0.01%	0.05%
30	15	1.197	1.197	0.00	0.00%	0.00%
30	16	1.197	1.196	0.00	-0.01%	0.04%
30	17	1.196	1.197	0.00	0.01%	0.02%
30	18	1.197	1.197	0.00	-0.01%	0.02%
30	19	1.197	1.197	0.00	-0.02%	0.06%
30	20	1.197	1.197	0.00	0.01%	0.02%
31	15a	1.197	1.197	0.00	0.01%	0.02%
31	16a	1.197	1.197	0.00	0.00%	0.01%
31	17a	1.196	1.197	0.00	0.02%	0.06%
31	18a	1.197	1.197	0.00	-0.01%	0.02%
31	19a	1.197	1.197	0.00	-0.01%	0.04%
31	20a	1.197	1.197	0.00	0.00%	0.00%
50	21	1.197	-0.003	-1.20	-100.21%	399.75%
50	22	1.197	-0.003	-1.20	-100.21%	399.70%
50	23	1.197	-0.003	-1.20	-100.22%	399.74%
50	24	1.197	-0.003	-1.20	-100.23%	399.78%
50	25	1.197	-0.003	-1.20	-100.22%	399.79%
	Max	1.197	1.197	0.00	0.02%	399.78%
	Average	1.197	1.037	-0.16	-13.36%	53.33%
	Min	1.196	-0.003	-1.20	-100.23%	0.00%
	Std Dev	0.000	0.415	0.41	34.65%	138.20%



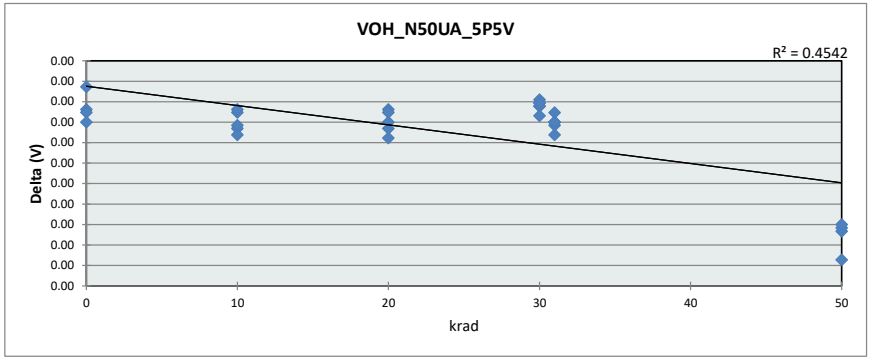
	VOH_N50UA_1P2V					
Units	V					
Max Limit	1.3					
Min Limit	1					
krad	0	10	20	30	31	50
LL	1.000	1.000	1.000	1.000	1.000	1.000
Min	1.196	1.197	1.196	1.196	1.197	-0.003
Average	1.197	1.197	1.197	1.197	1.197	-0.003
Max	1.197	1.197	1.197	1.197	1.197	-0.003
UL	1.300	1.300	1.300	1.300	1.300	1.300



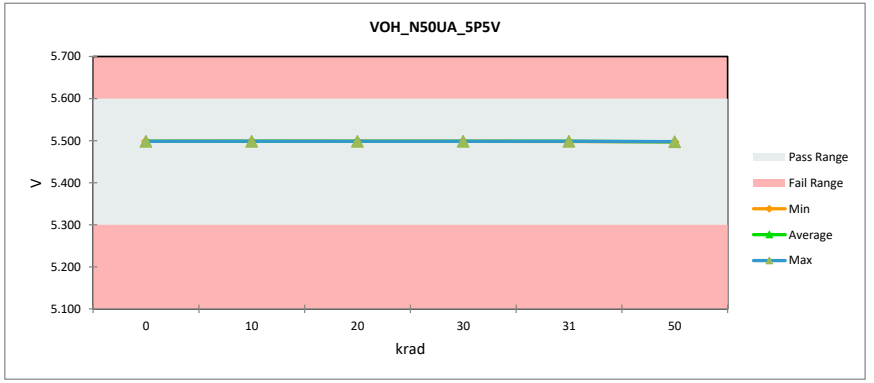
TID Report
SN54SC8T165-SEP

	VOH_N50UA_5P5V
Units	V
Max Limit	5.6
Min Limit	5.3

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	5.498	5.498	0.00	0.00%	0.04%
0	2	5.498	5.498	0.00	0.01%	0.11%
0	3	5.498	5.498	0.00	0.00%	0.03%
0	4	5.498	5.498	0.00	0.00%	0.00%
10	5	5.498	5.498	0.00	0.00%	0.02%
10	6	5.498	5.499	0.00	0.00%	0.03%
10	7	5.498	5.498	0.00	0.00%	0.04%
10	8	5.498	5.498	0.00	0.00%	0.01%
10	9	5.498	5.498	0.00	0.00%	0.04%
20	10	5.498	5.498	0.00	0.00%	0.00%
20	11	5.498	5.498	0.00	0.00%	0.05%
20	12	5.498	5.498	0.00	0.00%	0.02%
20	13	5.498	5.498	0.00	0.00%	0.04%
20	14	5.498	5.498	0.00	0.00%	0.03%
30	15	5.498	5.498	0.00	0.00%	0.06%
30	16	5.498	5.498	0.00	0.00%	0.05%
30	17	5.498	5.498	0.00	0.00%	0.07%
30	18	5.498	5.498	0.00	0.00%	0.05%
30	19	5.498	5.498	0.00	0.00%	0.02%
30	20	5.498	5.498	0.00	0.00%	0.06%
31	15a	5.498	5.498	0.00	0.00%	0.04%
31	16a	5.498	5.498	0.00	0.00%	0.01%
31	17a	5.498	5.498	0.00	0.00%	0.00%
31	18a	5.498	5.498	0.00	0.00%	0.00%
31	19a	5.498	5.498	0.00	0.00%	0.03%
31	20a	5.498	5.498	0.00	0.00%	0.00%
50	21	5.498	5.497	0.00	-0.02%	0.36%
50	22	5.498	5.497	0.00	-0.02%	0.34%
50	23	5.498	5.497	0.00	-0.02%	0.33%
50	24	5.498	5.497	0.00	-0.02%	0.45%
50	25	5.498	5.498	0.00	-0.01%	0.24%
	Max	5.498	5.499	0.00	0.01%	0.45%
	Average	5.498	5.498	0.00	0.00%	0.08%
	Min	5.498	5.497	0.00	-0.02%	0.00%
	Std Dev	0.000	0.000	0.00	0.01%	0.12%



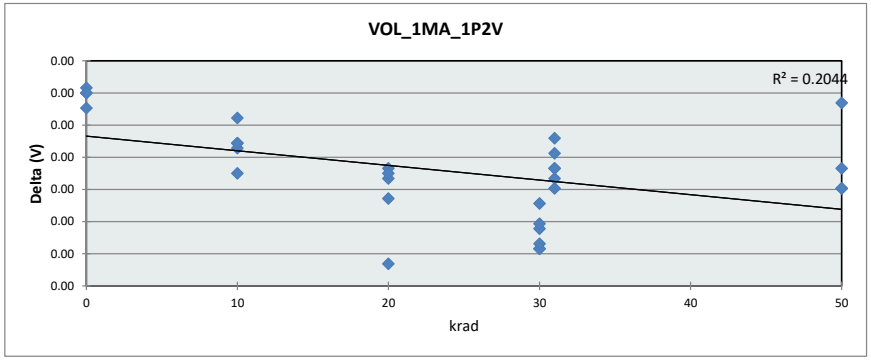
	VOH_N50UA_5P5V					
Units	V					
Max Limit	5.6					
Min Limit	5.3					
krad	0	10	20	30	31	50
LL	5.300	5.300	5.300	5.300	5.300	5.300
Min	5.498	5.498	5.498	5.498	5.498	5.497
Average	5.498	5.498	5.498	5.498	5.498	5.497
Max	5.498	5.499	5.498	5.498	5.498	5.498
UL	5.600	5.600	5.600	5.600	5.600	5.600



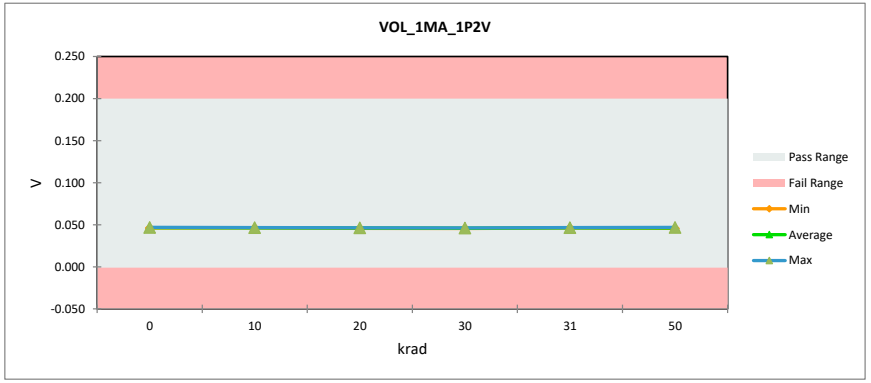
TID Report
SN54SC8T165-SEP

	VOL_1MA_1P2V
Units	V
Max Limit	0.2
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.047	0.047	0.00	0.07%	0.02%
0	2	0.047	0.047	0.00	-0.20%	0.05%
0	3	0.046	0.046	0.00	0.00%	0.00%
0	4	0.046	0.046	0.00	0.00%	0.00%
10	5	0.047	0.046	0.00	-1.08%	0.25%
10	6	0.047	0.046	0.00	-0.67%	0.16%
10	7	0.047	0.046	0.00	-0.74%	0.17%
10	8	0.047	0.046	0.00	-0.34%	0.08%
10	9	0.046	0.046	0.00	-0.68%	0.16%
20	10	0.046	0.046	0.00	-1.01%	0.23%
20	11	0.047	0.046	0.00	-1.14%	0.26%
20	12	0.047	0.046	0.00	-2.26%	0.53%
20	13	0.047	0.046	0.00	-1.07%	0.25%
20	14	0.046	0.046	0.00	-1.41%	0.33%
30	15	0.047	0.046	0.00	-1.81%	0.42%
30	16	0.047	0.046	0.00	-2.07%	0.48%
30	17	0.047	0.046	0.00	-1.73%	0.40%
30	18	0.047	0.046	0.00	-1.48%	0.34%
30	19	0.047	0.046	0.00	-2.06%	0.48%
30	20	0.046	0.046	0.00	-2.02%	0.47%
31	15a	0.047	0.046	0.00	-1.27%	0.30%
31	16a	0.047	0.047	0.00	-0.60%	0.14%
31	17a	0.047	0.046	0.00	-1.13%	0.26%
31	18a	0.047	0.046	0.00	-0.80%	0.19%
31	19a	0.047	0.047	0.00	-1.00%	0.23%
31	20a	0.046	0.046	0.00	-1.01%	0.23%
50	21	0.047	0.046	0.00	-1.27%	0.30%
50	22	0.047	0.046	0.00	-1.00%	0.23%
50	23	0.047	0.047	0.00	-0.13%	0.03%
50	24	0.046	0.046	0.00	-1.28%	0.30%
50	25	0.047	0.046	0.00	-1.41%	0.33%
	Max	0.047	0.047	0.00	0.07%	0.53%
	Average	0.047	0.046	0.00	-1.04%	0.24%
	Min	0.046	0.046	0.00	-2.26%	0.00%
	Std Dev	0.000	0.000	0.00	0.65%	0.15%



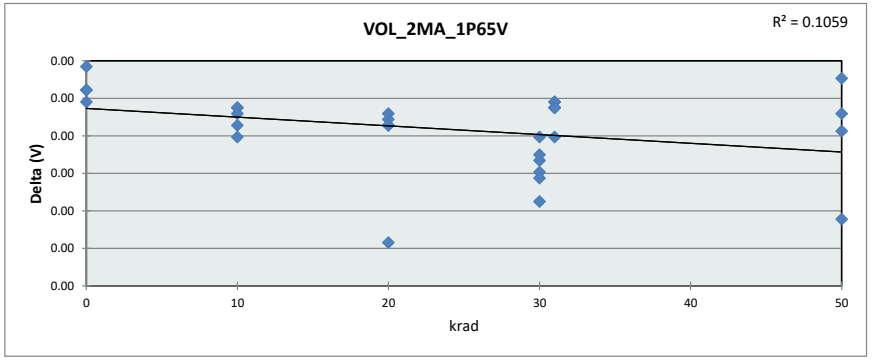
	VOL_1MA_1P2V					
Units	V					
Max Limit	0.2					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.046	0.046	0.046	0.046	0.046	0.046
Average	0.047	0.046	0.046	0.046	0.046	0.046
Max	0.047	0.046	0.046	0.046	0.047	0.047
UL	0.200	0.200	0.200	0.200	0.200	0.200



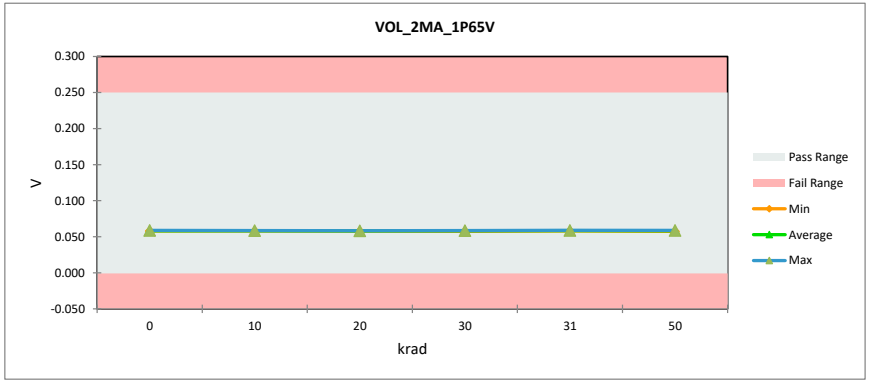
TID Report
SN54SC8T165-SEP

	VOL_2MA_1P65V
Units	V
Max Limit	0.25
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.059	0.058	0.00	-0.27%	0.06%
0	2	0.059	0.059	0.00	-0.37%	0.09%
0	3	0.058	0.058	0.00	-0.27%	0.06%
0	4	0.058	0.058	0.00	-0.05%	0.01%
10	5	0.058	0.058	0.00	-0.43%	0.10%
10	6	0.059	0.059	0.00	-0.69%	0.16%
10	7	0.059	0.058	0.00	-0.43%	0.10%
10	8	0.059	0.058	0.00	-0.48%	0.11%
10	9	0.059	0.058	0.00	-0.59%	0.14%
20	10	0.059	0.058	0.00	-0.53%	0.12%
20	11	0.058	0.058	0.00	-0.59%	0.14%
20	12	0.059	0.058	0.00	-1.64%	0.39%
20	13	0.059	0.058	0.00	-0.59%	0.14%
20	14	0.058	0.058	0.00	-0.48%	0.11%
30	15	0.059	0.058	0.00	-1.01%	0.24%
30	16	0.059	0.059	0.00	-1.06%	0.25%
30	17	0.059	0.058	0.00	-0.69%	0.16%
30	18	0.059	0.059	0.00	-0.85%	0.20%
30	19	0.059	0.058	0.00	-0.91%	0.21%
30	20	0.058	0.058	0.00	-1.29%	0.30%
31	15a	0.059	0.059	0.00	-0.43%	0.10%
31	16a	0.059	0.059	0.00	-0.37%	0.09%
31	17a	0.059	0.058	0.00	-0.37%	0.09%
31	18a	0.059	0.059	0.00	-0.42%	0.10%
31	19a	0.059	0.058	0.00	-0.69%	0.16%
31	20a	0.058	0.058	0.00	-0.43%	0.10%
50	21	0.059	0.059	0.00	-0.48%	0.11%
50	22	0.058	0.058	0.00	-0.64%	0.15%
50	23	0.059	0.059	0.00	-0.16%	0.04%
50	24	0.058	0.057	0.00	-1.45%	0.34%
50	25	0.059	0.058	0.00	-0.32%	0.07%
	Max	0.059	0.059	0.00	-0.05%	0.39%
	Average	0.059	0.058	0.00	-0.62%	0.15%
	Min	0.058	0.057	0.00	-1.64%	0.01%
	Std Dev	0.000	0.000	0.00	0.37%	0.09%



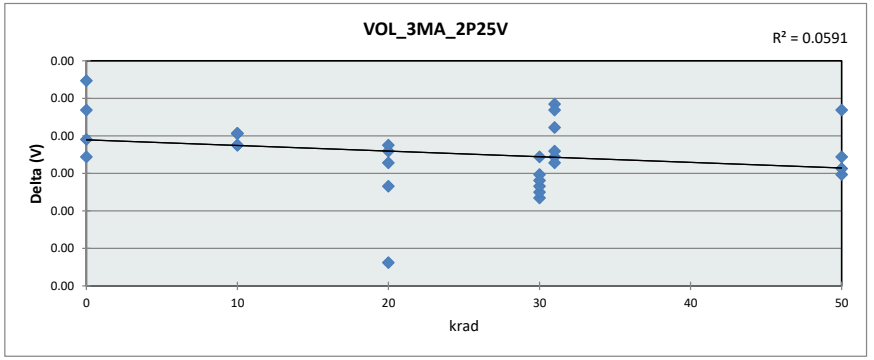
	VOL_2MA_1P65V					
Units	V					
Max Limit	0.25					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.058	0.058	0.058	0.058	0.058	0.057
Average	0.058	0.058	0.058	0.058	0.058	0.058
Max	0.059	0.059	0.058	0.059	0.059	0.059
UL	0.250	0.250	0.250	0.250	0.250	0.250



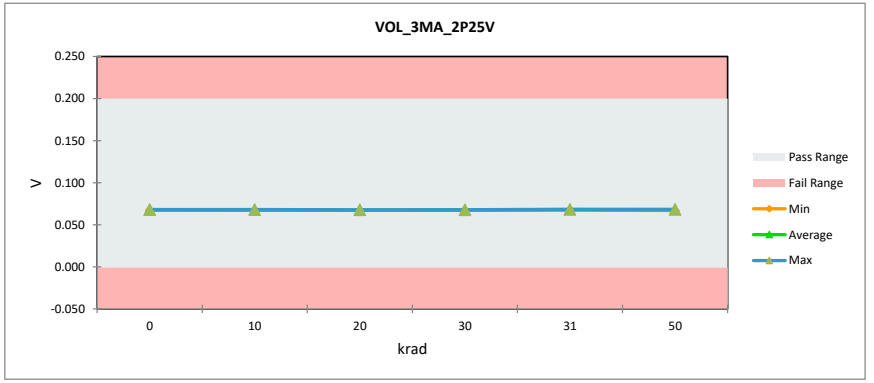
TID Report
SN54SC8T165-SEP

	VOL_3MA_2P25V
Units	V
Max Limit	0.2
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.068	0.067	0.00	-0.32%	0.11%
0	2	0.068	0.068	0.00	-0.46%	0.16%
0	3	0.067	0.067	0.00	0.14%	0.05%
0	4	0.068	0.068	0.00	-0.09%	0.03%
10	5	0.067	0.067	0.00	-0.37%	0.12%
10	6	0.068	0.068	0.00	-0.27%	0.09%
10	7	0.068	0.068	0.00	-0.28%	0.09%
10	8	0.068	0.067	0.00	-0.28%	0.09%
10	9	0.068	0.068	0.00	-0.37%	0.12%
20	10	0.068	0.068	0.00	-0.69%	0.23%
20	11	0.067	0.067	0.00	-0.42%	0.14%
20	12	0.068	0.067	0.00	-1.28%	0.44%
20	13	0.068	0.068	0.00	-0.51%	0.17%
20	14	0.067	0.067	0.00	-0.37%	0.12%
30	15	0.068	0.068	0.00	-0.78%	0.26%
30	16	0.068	0.068	0.00	-0.73%	0.25%
30	17	0.068	0.067	0.00	-0.60%	0.20%
30	18	0.068	0.068	0.00	-0.69%	0.23%
30	19	0.068	0.067	0.00	-0.46%	0.16%
30	20	0.068	0.067	0.00	-0.65%	0.22%
31	15a	0.068	0.068	0.00	-0.05%	0.02%
31	16a	0.068	0.068	0.00	-0.09%	0.03%
31	17a	0.068	0.068	0.00	-0.46%	0.16%
31	18a	0.068	0.068	0.00	-0.50%	0.17%
31	19a	0.068	0.068	0.00	-0.23%	0.08%
31	20a	0.068	0.067	0.00	-0.42%	0.14%
50	21	0.068	0.068	0.00	-0.60%	0.20%
50	22	0.068	0.067	0.00	-0.46%	0.16%
50	23	0.068	0.068	0.00	-0.09%	0.03%
50	24	0.067	0.067	0.00	-0.56%	0.19%
50	25	0.068	0.068	0.00	-0.64%	0.22%
	Max	0.068	0.068	0.00	0.14%	0.44%
	Average	0.068	0.068	0.00	-0.43%	0.15%
	Min	0.067	0.067	0.00	-1.28%	0.02%
	Std Dev	0.000	0.000	0.00	0.27%	0.09%



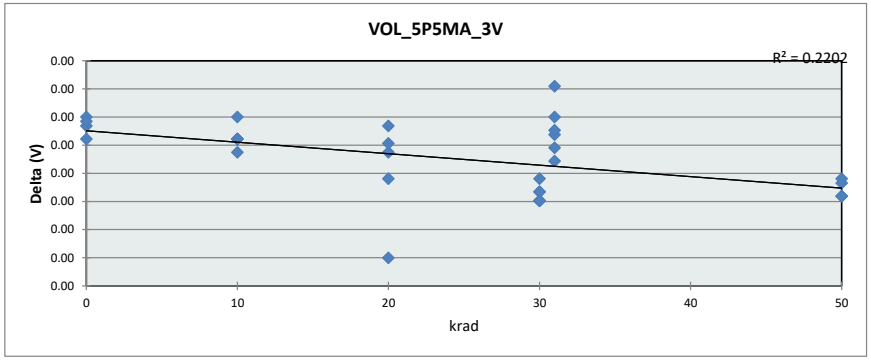
	VOL_3MA_2P25V					
Units	V					
Max Limit	0.2					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.067	0.067	0.067	0.067	0.067	0.067
Average	0.068	0.068	0.067	0.068	0.068	0.068
Max	0.068	0.068	0.068	0.068	0.068	0.068
UL	0.200	0.200	0.200	0.200	0.200	0.200



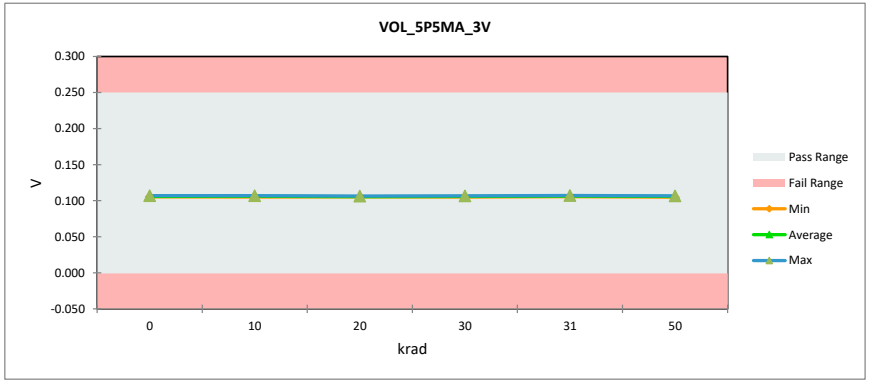
TID Report
SN54SC8T165-SEP

	VOL_5P5MA_3V
Units	V
Max Limit	0.25
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.106	0.106	0.00	-0.15%	0.06%
0	2	0.107	0.107	0.00	0.00%	0.00%
0	3	0.106	0.105	0.00	-0.06%	0.02%
0	4	0.106	0.106	0.00	-0.03%	0.01%
10	5	0.105	0.105	0.00	-0.24%	0.10%
10	6	0.107	0.107	0.00	0.00%	0.00%
10	7	0.107	0.107	0.00	-0.15%	0.06%
10	8	0.106	0.105	0.00	-0.15%	0.06%
10	9	0.107	0.107	0.00	-0.15%	0.06%
20	10	0.107	0.106	0.00	-0.23%	0.10%
20	11	0.105	0.105	0.00	-0.18%	0.07%
20	12	0.106	0.105	0.00	-0.94%	0.40%
20	13	0.106	0.106	0.00	-0.41%	0.17%
20	14	0.105	0.105	0.00	-0.06%	0.02%
30	15	0.107	0.106	0.00	-0.56%	0.24%
30	16	0.107	0.107	0.00	-0.50%	0.21%
30	17	0.106	0.105	0.00	-0.50%	0.21%
30	18	0.107	0.106	0.00	-0.56%	0.24%
30	19	0.106	0.105	0.00	-0.41%	0.17%
30	20	0.106	0.105	0.00	-0.56%	0.24%
31	15a	0.107	0.107	0.00	0.20%	0.09%
31	16a	0.107	0.107	0.00	0.00%	0.00%
31	17a	0.106	0.106	0.00	-0.30%	0.12%
31	18a	0.107	0.107	0.00	-0.20%	0.09%
31	19a	0.106	0.106	0.00	-0.12%	0.05%
31	20a	0.106	0.106	0.00	-0.09%	0.04%
50	21	0.107	0.107	0.00	-0.41%	0.17%
50	22	0.106	0.105	0.00	-0.53%	0.22%
50	23	0.107	0.107	0.00	-0.44%	0.19%
50	24	0.105	0.105	0.00	-0.53%	0.22%
50	25	0.107	0.106	0.00	-0.67%	0.29%
	Max	0.107	0.107	0.00	0.20%	0.40%
	Average	0.106	0.106	0.00	-0.27%	0.12%
	Min	0.105	0.105	0.00	-0.94%	0.00%
	Std Dev	0.001	0.001	0.00	0.25%	0.10%



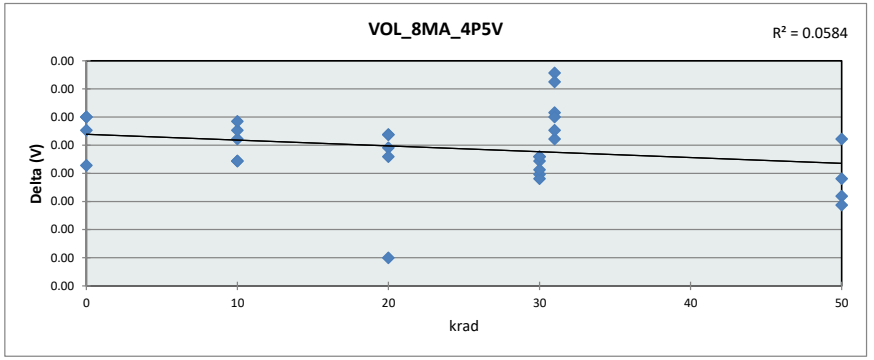
	VOL_5P5MA_3V					
Units	V					
Max Limit	0.25					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.105	0.105	0.105	0.105	0.106	0.105
Average	0.106	0.106	0.106	0.106	0.106	0.106
Max	0.107	0.107	0.106	0.107	0.107	0.107
UL	0.250	0.250	0.250	0.250	0.250	0.250



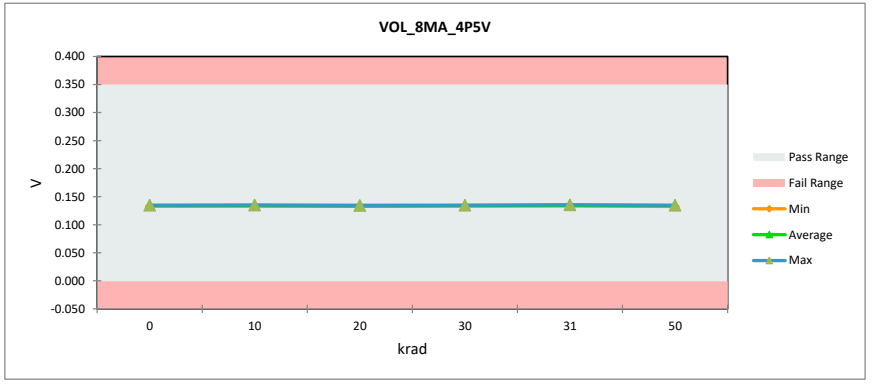
TID Report
SN54SC8T165-SEP

	VOL_8MA_4P5V
Units	V
Max Limit	0.35
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.133	0.133	0.00	-0.07%	0.03%
0	2	0.135	0.135	0.00	-0.25%	0.10%
0	3	0.133	0.133	0.00	0.00%	0.00%
0	4	0.133	0.133	0.00	0.00%	0.00%
10	5	0.133	0.133	0.00	-0.12%	0.04%
10	6	0.135	0.135	0.00	-0.07%	0.03%
10	7	0.135	0.135	0.00	-0.23%	0.09%
10	8	0.133	0.133	0.00	-0.23%	0.09%
10	9	0.135	0.135	0.00	-0.02%	0.01%
20	10	0.135	0.135	0.00	-0.16%	0.06%
20	11	0.133	0.133	0.00	-0.21%	0.08%
20	12	0.134	0.133	0.00	-0.75%	0.29%
20	13	0.134	0.134	0.00	-0.09%	0.04%
20	14	0.133	0.133	0.00	-0.09%	0.04%
30	15	0.135	0.135	0.00	-0.21%	0.08%
30	16	0.135	0.135	0.00	-0.30%	0.12%
30	17	0.134	0.133	0.00	-0.23%	0.09%
30	18	0.135	0.135	0.00	-0.32%	0.12%
30	19	0.134	0.133	0.00	-0.21%	0.08%
30	20	0.133	0.133	0.00	-0.28%	0.11%
31	15a	0.135	0.135	0.00	0.23%	0.09%
31	16a	0.135	0.136	0.00	0.18%	0.07%
31	17a	0.134	0.134	0.00	0.02%	0.01%
31	18a	0.135	0.135	0.00	-0.12%	0.04%
31	19a	0.134	0.134	0.00	-0.07%	0.03%
31	20a	0.133	0.133	0.00	0.00%	0.00%
50	21	0.135	0.135	0.00	-0.42%	0.16%
50	22	0.133	0.133	0.00	-0.33%	0.12%
50	23	0.135	0.135	0.00	-0.12%	0.04%
50	24	0.133	0.133	0.00	-0.47%	0.18%
50	25	0.135	0.135	0.00	-0.37%	0.14%
	Max	0.135	0.136	0.00	0.23%	0.29%
	Average	0.134	0.134	0.00	-0.16%	0.07%
	Min	0.133	0.133	0.00	-0.75%	0.00%
	Std Dev	0.001	0.001	0.00	0.19%	0.06%



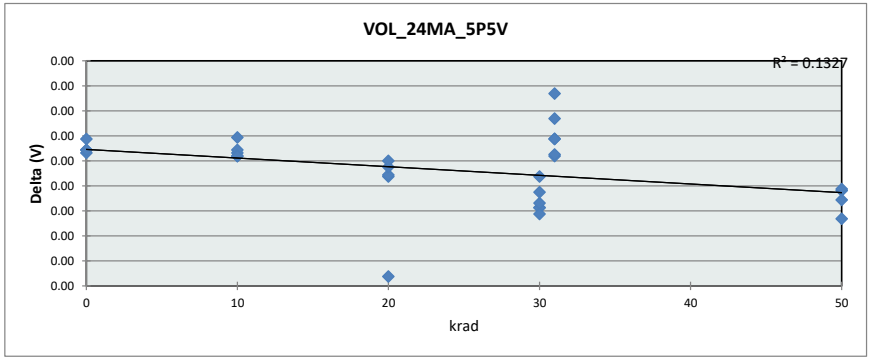
	VOL_8MA_4P5V					
Units	V					
Max Limit	0.35					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.133	0.133	0.133	0.133	0.133	0.133
Average	0.134	0.134	0.133	0.134	0.134	0.134
Max	0.135	0.135	0.135	0.135	0.136	0.135
UL	0.350	0.350	0.350	0.350	0.350	0.350



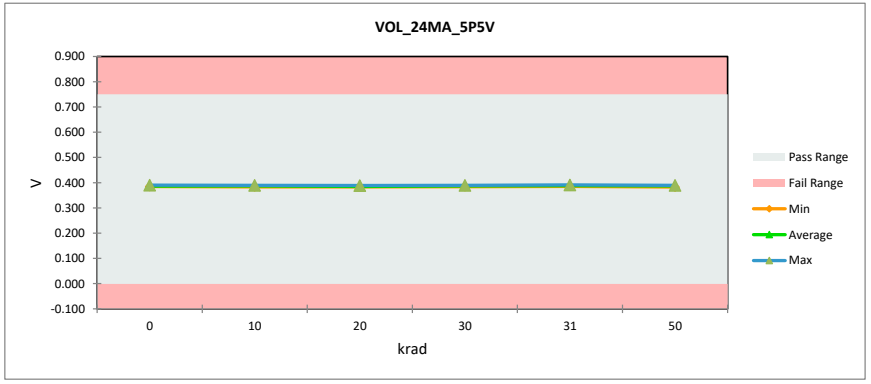
TID Report
SN54SC8T165-SEP

	VOL_24MA_5P5V
Units	V
Max Limit	0.75
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.385	0.384	0.00	-0.09%	0.05%
0	2	0.390	0.390	0.00	-0.02%	0.01%
0	3	0.385	0.385	0.00	-0.07%	0.04%
0	4	0.385	0.385	0.00	-0.07%	0.04%
10	5	0.384	0.383	0.00	-0.09%	0.05%
10	6	0.390	0.390	0.00	-0.07%	0.04%
10	7	0.390	0.389	0.00	-0.10%	0.05%
10	8	0.385	0.384	0.00	-0.11%	0.05%
10	9	0.390	0.390	0.00	-0.01%	0.00%
20	10	0.390	0.389	0.00	-0.21%	0.11%
20	11	0.384	0.384	0.00	-0.20%	0.10%
20	12	0.387	0.384	0.00	-0.73%	0.37%
20	13	0.386	0.385	0.00	-0.16%	0.08%
20	14	0.384	0.383	0.00	-0.13%	0.07%
30	15	0.390	0.389	0.00	-0.37%	0.19%
30	16	0.391	0.389	0.00	-0.37%	0.19%
30	17	0.386	0.385	0.00	-0.35%	0.18%
30	18	0.390	0.389	0.00	-0.29%	0.15%
30	19	0.386	0.385	0.00	-0.21%	0.11%
30	20	0.385	0.384	0.00	-0.41%	0.21%
31	15a	0.390	0.391	0.00	0.22%	0.11%
31	16a	0.391	0.391	0.00	0.09%	0.05%
31	17a	0.386	0.386	0.00	-0.11%	0.05%
31	18a	0.390	0.390	0.00	-0.10%	0.05%
31	19a	0.386	0.386	0.00	-0.02%	0.01%
31	20a	0.385	0.385	0.00	-0.02%	0.01%
50	21	0.391	0.389	0.00	-0.28%	0.15%
50	22	0.385	0.383	0.00	-0.33%	0.17%
50	23	0.390	0.389	0.00	-0.27%	0.14%
50	24	0.384	0.383	0.00	-0.43%	0.22%
50	25	0.391	0.389	0.00	-0.42%	0.22%
	Max	0.391	0.391	0.00	0.22%	0.37%
	Average	0.387	0.387	0.00	-0.18%	0.10%
	Min	0.384	0.383	0.00	-0.73%	0.00%
	Std Dev	0.003	0.003	0.00	0.18%	0.08%



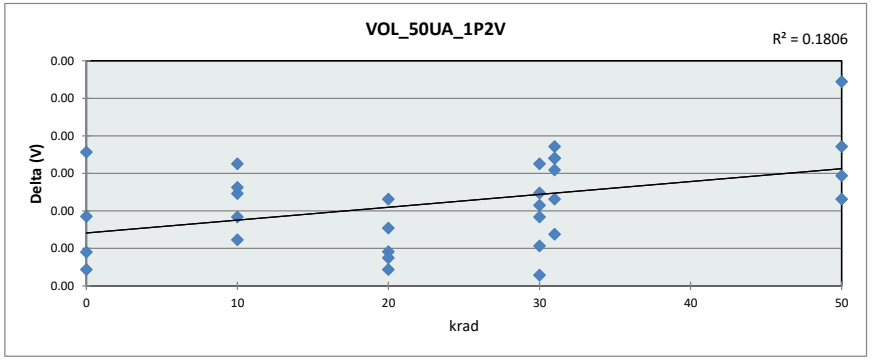
	VOL_24MA_5P5V					
Units	V					
Max Limit	0.75					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.384	0.383	0.383	0.384	0.385	0.383
Average	0.386	0.387	0.385	0.387	0.388	0.387
Max	0.390	0.390	0.389	0.389	0.391	0.389
UL	0.750	0.750	0.750	0.750	0.750	0.750



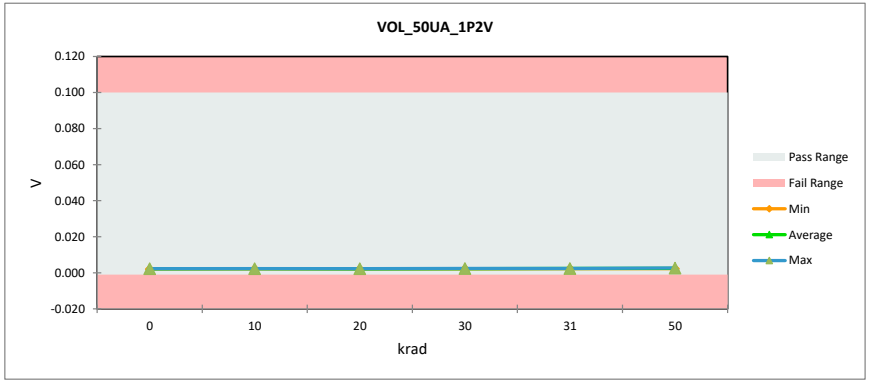
TID Report
SN54SC8T165-SEP

	VOL_50UA_1P2V
Units	V
Max Limit	0.1
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.002	0.002	0.00	-6.87%	0.15%
0	2	0.002	0.002	0.00	7.16%	0.15%
0	3	0.002	0.002	0.00	-4.91%	0.11%
0	4	0.002	0.002	0.00	-0.66%	0.01%
10	5	0.002	0.002	0.00	-0.70%	0.02%
10	6	0.002	0.002	0.00	2.09%	0.05%
10	7	0.002	0.002	0.00	5.73%	0.12%
10	8	0.002	0.002	0.00	2.91%	0.06%
10	9	0.002	0.002	0.00	-3.25%	0.08%
20	10	0.002	0.002	0.00	-4.88%	0.11%
20	11	0.002	0.002	0.00	1.39%	0.03%
20	12	0.002	0.002	0.00	-6.60%	0.15%
20	13	0.002	0.002	0.00	-1.94%	0.05%
20	14	0.002	0.002	0.00	-5.39%	0.12%
30	15	0.002	0.002	0.00	-7.28%	0.17%
30	16	0.002	0.002	0.00	5.81%	0.12%
30	17	0.002	0.002	0.00	0.67%	0.01%
30	18	0.002	0.002	0.00	-0.71%	0.02%
30	19	0.002	0.002	0.00	-4.18%	0.09%
30	20	0.002	0.002	0.00	2.05%	0.05%
31	15a	0.002	0.002	0.00	-2.66%	0.06%
31	16a	0.002	0.002	0.00	6.51%	0.14%
31	17a	0.002	0.002	0.00	7.74%	0.17%
31	18a	0.002	0.002	0.00	6.07%	0.14%
31	19a	0.002	0.002	0.00	4.84%	0.11%
31	20a	0.002	0.002	0.00	1.35%	0.03%
50	21	0.002	0.003	0.00	14.81%	0.34%
50	22	0.002	0.002	0.00	7.63%	0.17%
50	23	0.002	0.002	0.00	4.09%	0.09%
50	24	0.002	0.002	0.00	1.36%	0.03%
50	25	0.002	0.002	0.00	5.39%	0.12%
Max		0.002	0.003	0.00	14.81%	0.34%
Average		0.002	0.002	0.00	1.07%	0.10%
Min		0.002	0.002	0.00	-7.28%	0.01%
Std Dev		0.000	0.000	0.00	5.33%	0.07%



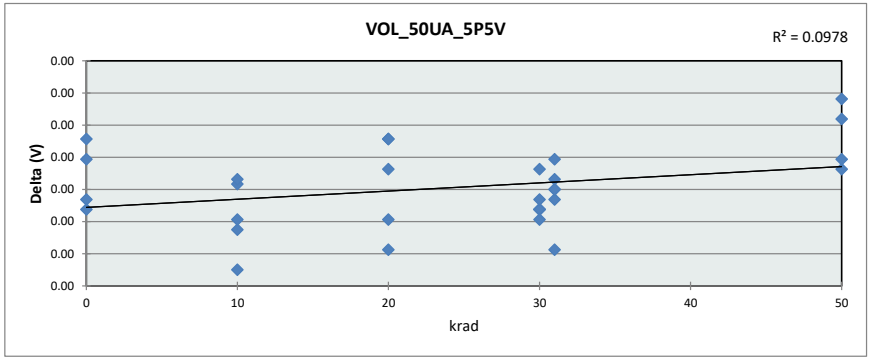
	VOL_50UA_1P2V					
Units	V					
Max Limit	0.1					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.002	0.002	0.002	0.002	0.002	0.002
Average	0.002	0.002	0.002	0.002	0.002	0.002
Max	0.002	0.002	0.002	0.002	0.002	0.003
UL	0.100	0.100	0.100	0.100	0.100	0.100



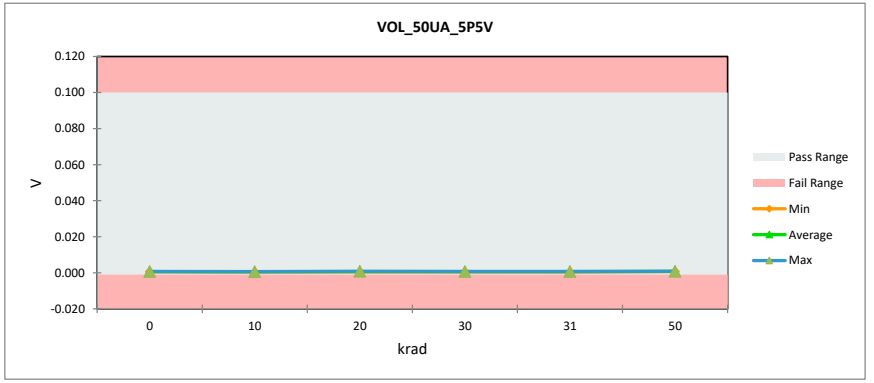
TID Report
SN54SC8T165-SEP

	VOL_50UA_5P5V
Units	V
Max Limit	0.1
Min Limit	-0.001

krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.001	0.001	0.00	14.10%	0.09%
0	2	0.001	0.001	0.00	-4.70%	0.03%
0	3	0.001	0.001	0.00	-8.59%	0.06%
0	4	0.001	0.001	0.00	28.94%	0.15%
10	5	0.001	0.000	0.00	-20.75%	0.12%
10	6	0.001	0.001	0.00	-14.10%	0.09%
10	7	0.001	0.001	0.00	-31.65%	0.25%
10	8	0.001	0.001	0.00	2.62%	0.02%
10	9	0.001	0.001	0.00	4.93%	0.03%
20	10	0.001	0.001	0.00	8.98%	0.06%
20	11	0.001	0.001	0.00	-14.80%	0.09%
20	12	0.001	0.001	0.00	22.45%	0.15%
20	13	0.001	0.001	0.00	-24.72%	0.19%
20	14	0.001	0.001	0.00	28.94%	0.15%
30	15	0.001	0.001	0.00	-8.98%	0.06%
30	16	0.001	0.001	0.00	-8.24%	0.06%
30	17	0.001	0.001	0.00	9.40%	0.06%
30	18	0.001	0.001	0.00	-9.40%	0.06%
30	19	0.001	0.001	0.00	-14.10%	0.09%
30	20	0.001	0.001	0.00	-4.49%	0.03%
31	15a	0.001	0.001	0.00	13.47%	0.09%
31	16a	0.001	0.001	0.00	-4.12%	0.03%
31	17a	0.001	0.000	0.00	-28.20%	0.19%
31	18a	0.001	0.001	0.00	0.00%	0.00%
31	19a	0.001	0.001	0.00	4.70%	0.03%
31	20a	0.001	0.001	0.00	0.00%	0.00%
50	21	0.001	0.001	0.00	9.40%	0.06%
50	22	0.001	0.001	0.00	40.52%	0.22%
50	23	0.001	0.001	0.00	14.10%	0.09%
50	24	0.001	0.001	0.00	49.25%	0.28%
50	25	0.001	0.001	0.00	18.31%	0.11%
Max		0.001	0.001	0.00	49.25%	0.28%
Average		0.001	0.001	0.00	1.83%	0.10%
Min		0.001	0.000	0.00	-31.65%	0.00%
Std Dev		0.000	0.000	0.00	19.35%	0.07%



	VOL_50UA_5P5V					
Units	V					
Max Limit	0.1					
Min Limit	-0.001					
krad	0	10	20	30	31	50
LL	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
Min	0.001	0.000	0.001	0.001	0.000	0.001
Average	0.001	0.001	0.001	0.001	0.001	0.001
Max	0.001	0.001	0.001	0.001	0.001	0.001
UL	0.100	0.100	0.100	0.100	0.100	0.100



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