



ABSTRACT

This report covers the radiation characterization results of the SN54SC8T9541-SEP, radiation tolerant octal buffers/drivers with 3-state outputs and schmitt-trigger inputs. The study was done to determine Total Ionizing Dose (TID) effects under high dose rate (HDR) to 30krad(Si). Radiation Lot Acceptance Testing (RLAT) will be performed using five units at a dose level of 30krad(Si) 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 SN54SC8T9541-SEP is packaged in a space enhanced plastic package for low outgassing characteristics and is Single Event Latch-Up (SEL) immune up to 50MeV-cm²/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.

For full total ionizing dose characterization results, see [SN54SC8T541-SEP Total Ionizing Dose \(TID\) Report](#).

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1 Device Information

The SN54SC8T9541-SEP contains eight buffers with 3-state outputs and Schmitt-Trigger inputs. The active low output enable pins ($\overline{OE1}$ and $\overline{OE2}$) control all eight channels, and are configured so that both must be low for the outputs to be active. When the outputs are enabled, the outputs are actively driven low or high. When the outputs are disabled, the outputs are set into the high-impedance state. 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 30krad(Si)	
TI Device Number	SN54SC8T9541-SEP
VID Number	V62/25633
Package	20-pin PW (TSSOP)
Technology	LBC9
Die Lot Number	3259380RFB
A/T Lot Number and Date Code	4167457ML4 / 43A05CK
Quantity Tested	6 irradiated devices + 4 control
Lot Accept or Reject	Devices passed 30krad(Si)
HDR Radiation Facility	Texas Instruments CLAB in Dallas, Texas
HDR Dose Level	30krad(Si)
HDR Dose Rate	174.53rad(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

2 Total Dose Test Setup

2.1 Test Overview

The SN54SC8T9541-SEP samples were irradiated at a high dose rate of 174.53rad(Si)/s up to 30krad(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 SN54SC8T9541-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 174.53rads(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.

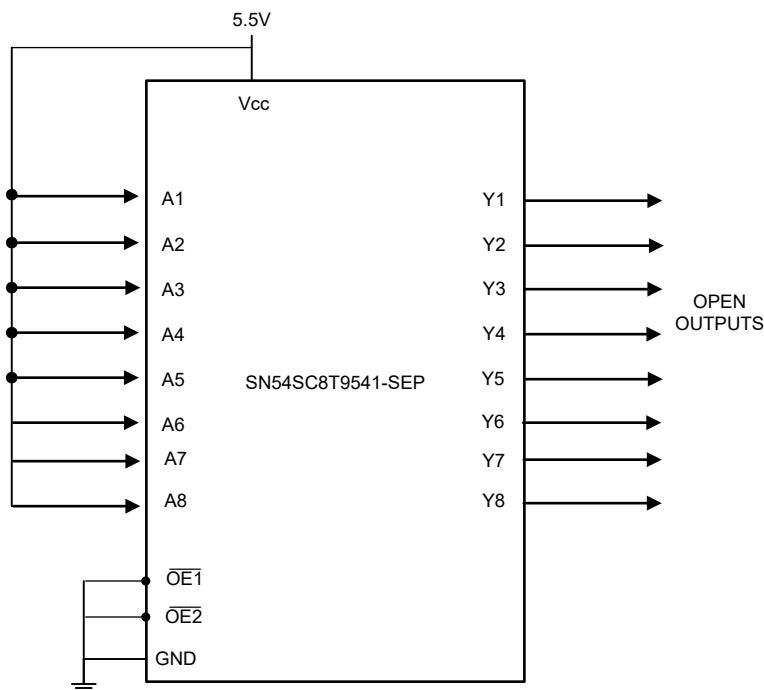


Figure 2-1. SN54SC8T9541-SEP Bias Diagram

2.4 Test Configuration and Condition

The HDR RLAT units were irradiated to 30krad(Si), parametrically tested on ATE, and then were annealed at 25°C 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 = 174.53rad(Si)/s Effective Dose Rate (30krad + Anneal 72 hours) = 115.74mrad(Si)/s	
Total Samples: 4	Total Samples: 6 Biased	
	Exposure Levels	
0krad (Si)	30krad(Si)	
Biased	Biased	Biased + 72 hour anneal
1 - 4	5 - 10	5a - 10a

3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the SN54SC8T9541-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 SN54SC8T9541-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 [SN54SC8T9541-SEP Radiation-Tolerant, Octal Buffers/Drivers with 3-State Outputs and Schmitt-Trigger Inputs](#).

See [Section 5](#) for HDR report up to 30 krad(Si).

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 (V _{T+} – V _{T-})	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
ΔI _{CC}	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

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

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.

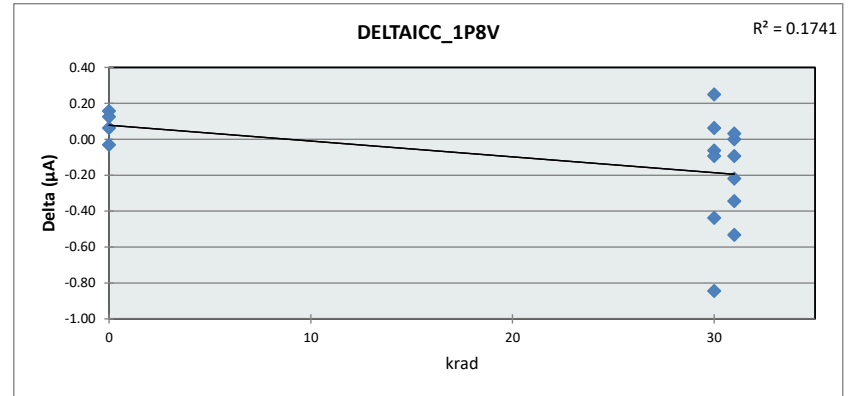
5 Appendix: HDR TID Report Data

This appendix provides the SN54SC8T9541-SEP TID HDR report. The report shows the variation for each parameter up to 30krad(Si).

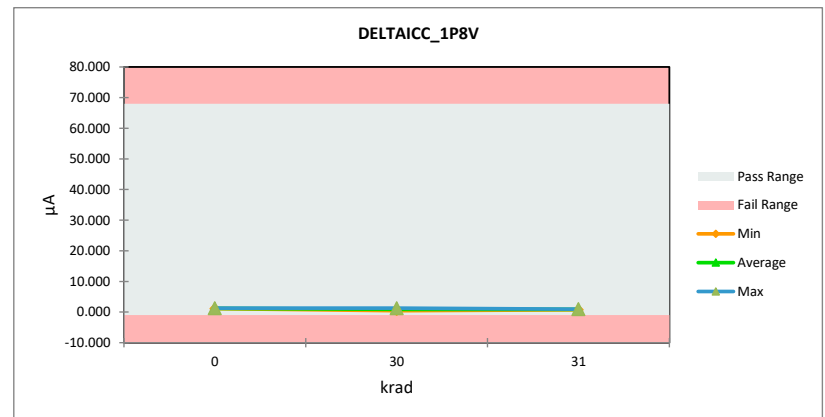
TID Report

SN54SC8T9541-SEP

DELTAICC_1P8V						
Units	μA					
Max Limit	68					
Min Limit	-1					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.064	1.127	0.06	5.92%	0.09%
0	2	1.158	1.127	-0.03	-2.68%	0.04%
0	3	1.095	1.252	0.16	14.34%	0.23%
0	4	1.158	1.283	0.13	10.79%	0.18%
30	5	1.283	0.438	-0.84	-65.85%	1.22%
30	6	0.970	0.908	-0.06	-6.45%	0.09%
30	7	1.033	1.283	0.25	24.20%	0.36%
30	8	0.845	0.908	0.06	7.41%	0.09%
30	9	1.283	0.845	-0.44	-34.14%	0.63%
30	10	0.908	0.814	-0.09	-10.35%	0.14%
31	5a	1.283	0.751	-0.53	-41.46%	0.77%
31	6a	0.970	0.751	-0.22	-22.58%	0.32%
31	7a	1.033	0.939	-0.09	-9.11%	0.14%
31	8a	0.845	0.845	0.00	0.00%	0.00%
31	9a	1.283	0.939	-0.34	-26.82%	0.50%
31	10a	0.908	0.939	0.03	3.45%	0.05%
Max		1.283	1.283	0.00	24.20%	1.22%
Average		1.070	0.947	-0.12	-9.58%	0.30%
Min		0.845	0.438	-0.41	-65.85%	0.00%
Std Dev		0.158	0.225	0.07	23.42%	0.33%



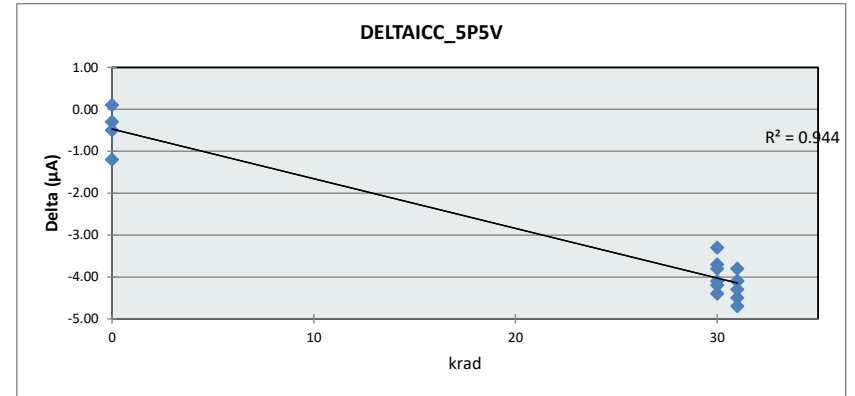
DELTAICC_1P8V			
Units	μA		
Max Limit	68		
Min Limit	-1		
krad	0	30	31
LL	-1.000	-1.000	-1.000
Min	1.127	0.438	0.751
Average	1.197	0.866	0.861
Max	1.283	1.283	0.939
UL	68.000	68.000	68.000



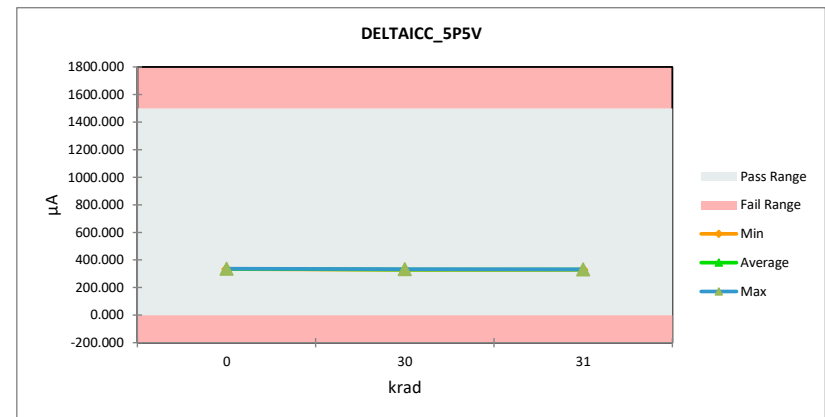
TID Report

SN54SC8T9541-SEP

DELTAICC_5P5V						
Units	μA					
Max Limit	1500					
Min Limit	-1					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	336.600	336.700	0.10	0.03%	0.01%
0	2	336.600	336.300	-0.30	-0.09%	0.02%
0	3	335.000	333.800	-1.20	-0.36%	0.08%
0	4	335.700	335.200	-0.50	-0.15%	0.03%
30	5	336.400	332.700	-3.70	-1.10%	0.25%
30	6	333.800	329.700	-4.10	-1.23%	0.27%
30	7	334.100	330.300	-3.80	-1.14%	0.25%
30	8	336.000	331.800	-4.20	-1.25%	0.28%
30	9	333.800	329.400	-4.40	-1.32%	0.29%
30	10	334.900	331.600	-3.30	-0.99%	0.22%
31	5a	336.400	331.900	-4.50	-1.34%	0.30%
31	6a	333.800	329.100	-4.70	-1.41%	0.31%
31	7a	334.100	330.000	-4.10	-1.23%	0.27%
31	8a	336.000	331.900	-4.10	-1.22%	0.27%
31	9a	333.800	329.500	-4.30	-1.29%	0.29%
31	10a	334.900	331.100	-3.80	-1.13%	0.25%
Max	336.600	336.700	0.10	0.03%	0.31%	
Average	335.119	331.938	-3.18	-0.95%	0.21%	
Min	333.800	329.100	-4.70	-1.41%	0.01%	
Std Dev	1.117	2.437	1.32	0.50%	0.11%	



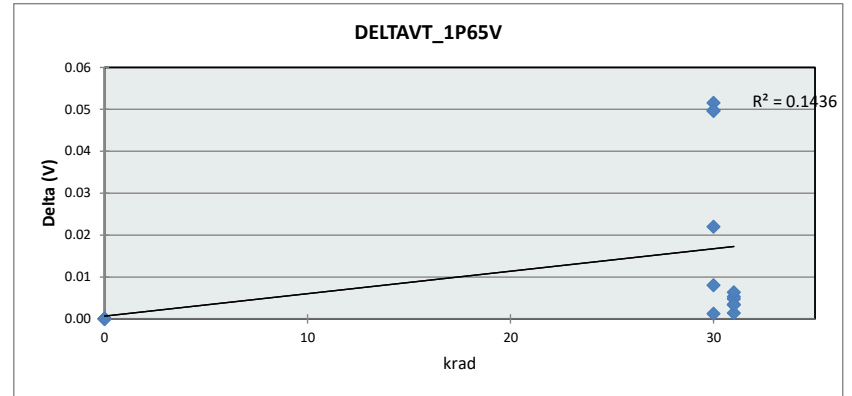
DELTAICC_5P5V			
Units	μA		
Max Limit	1500		
Min Limit	-1		
krad	0	30	31
LL	-1.000	-1.000	-1.000
Min	333.800	329.400	329.100
Average	335.500	330.917	330.583
Max	336.700	332.700	331.900
UL	1500.000	1500.000	1500.000



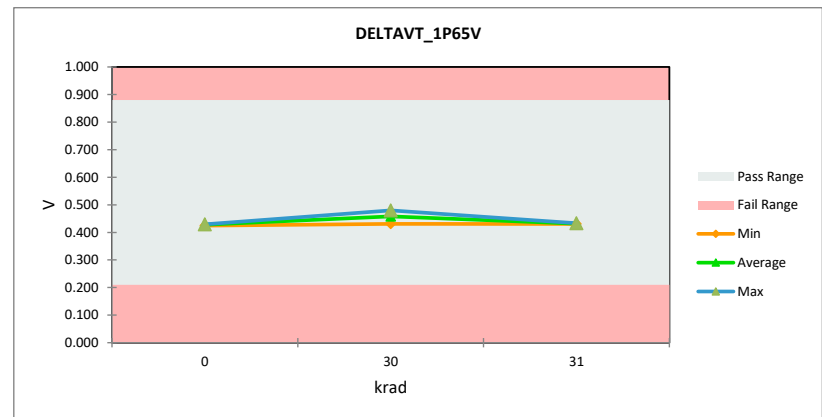
TID Report

SN54SC8T9541-SEP

DELTAVT_1P65V						
Units	V					
Max Limit	0.88					
Min Limit	0.21					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.429	0.429	0.00	0.00%	0.00%
0	2	0.425	0.425	0.00	0.00%	0.00%
0	3	0.428	0.428	0.00	0.00%	0.00%
0	4	0.429	0.429	0.00	0.00%	0.00%
30	5	0.426	0.476	0.05	11.69%	7.43%
30	6	0.427	0.449	0.02	5.15%	3.28%
30	7	0.429	0.437	0.01	1.87%	1.19%
30	8	0.424	0.476	0.05	12.15%	7.69%
30	9	0.429	0.431	0.00	0.29%	0.18%
30	10	0.430	0.480	0.05	11.53%	7.40%
31	5a	0.426	0.431	0.01	1.24%	0.79%
31	6a	0.427	0.432	0.00	1.11%	0.71%
31	7a	0.429	0.432	0.00	0.80%	0.51%
31	8a	0.424	0.431	0.01	1.49%	0.95%
31	9a	0.429	0.431	0.00	0.33%	0.21%
31	10a	0.430	0.433	0.00	0.78%	0.50%
Max		0.430	0.480	0.05	12.15%	7.69%
Average		0.428	0.441	0.01	3.03%	1.93%
Min		0.424	0.425	0.00	0.00%	0.00%
Std Dev		0.002	0.019	0.02	4.52%	2.88%



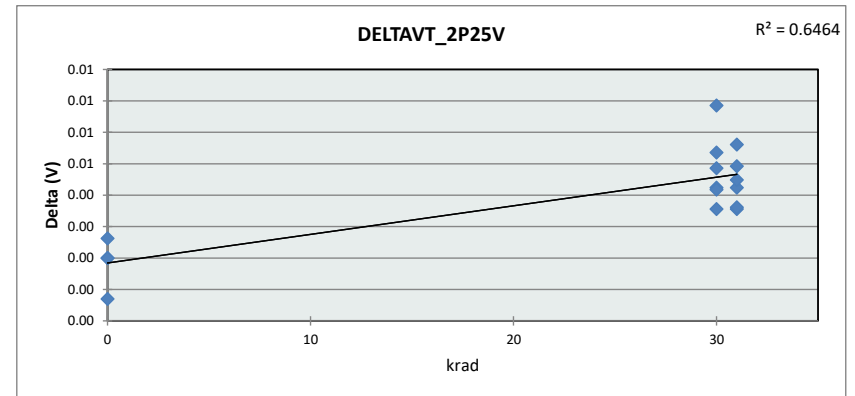
DELTAVT_1P65V			
Units	V		
Max Limit	0.88		
Min Limit	0.21		
krad	0	30	31
LL	0.210	0.210	0.210
Min	0.425	0.431	0.431
Average	0.428	0.458	0.432
Max	0.429	0.480	0.433
UL	0.880	0.880	0.880



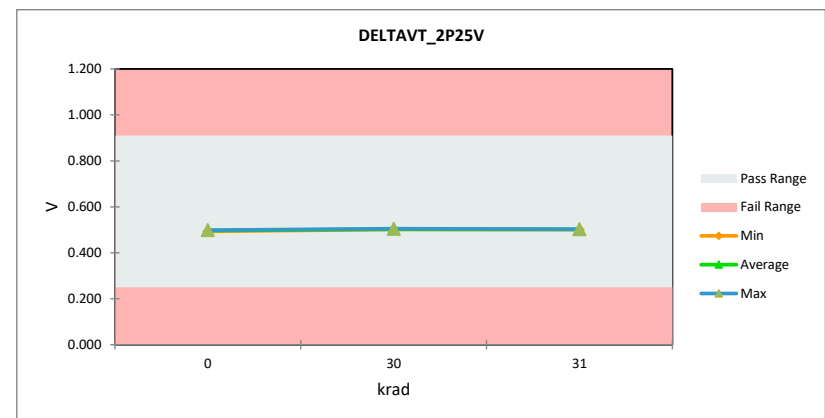
TID Report

SN54SC8T9541-SEP

DELTAVT_2P25V						
Units	V					
Max Limit	0.91					
Min Limit	0.25					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.498	0.498	0.00	0.00%	0.00%
0	2	0.492	0.493	0.00	0.25%	0.19%
0	3	0.498	0.498	0.00	0.00%	0.00%
0	4	0.500	0.497	0.00	-0.52%	0.40%
30	5	0.496	0.503	0.01	1.35%	1.02%
30	6	0.497	0.501	0.00	0.90%	0.68%
30	7	0.497	0.503	0.01	1.15%	0.87%
30	8	0.495	0.505	0.01	1.96%	1.47%
30	9	0.497	0.502	0.00	0.87%	0.66%
30	10	0.498	0.502	0.00	0.62%	0.47%
31	5a	0.496	0.501	0.00	0.90%	0.68%
31	6a	0.497	0.502	0.00	1.00%	0.75%
31	7a	0.497	0.503	0.01	1.18%	0.89%
31	8a	0.495	0.502	0.01	1.46%	1.09%
31	9a	0.497	0.500	0.00	0.62%	0.47%
31	10a	0.498	0.502	0.00	0.65%	0.49%
Max	0.500	0.505	0.00	1.96%	1.47%	
Average	0.497	0.501	0.00	0.78%	0.63%	
Min	0.492	0.493	0.00	-0.52%	0.00%	
Std Dev	0.002	0.003	0.00	0.62%	0.39%	



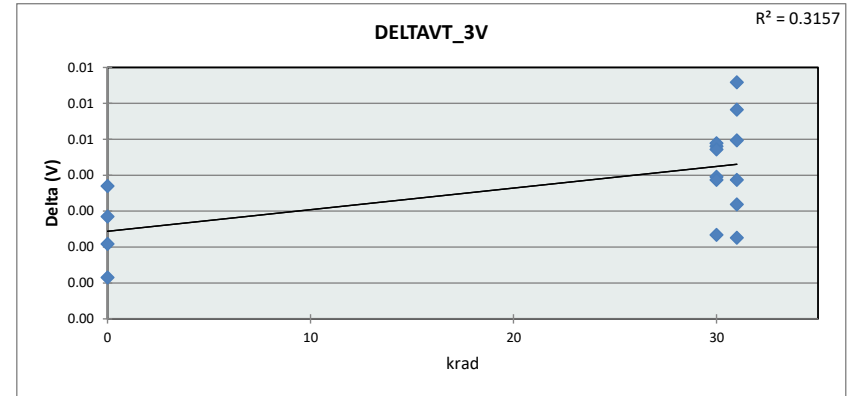
DELTAVT_2P25V			
Units	V		
Max Limit	0.91		
Min Limit	0.25		
krad	0	30	31
LL	0.250	0.250	0.250
Min	0.493	0.501	0.500
Average	0.497	0.503	0.502
Max	0.498	0.505	0.503
UL	0.910	0.910	0.910



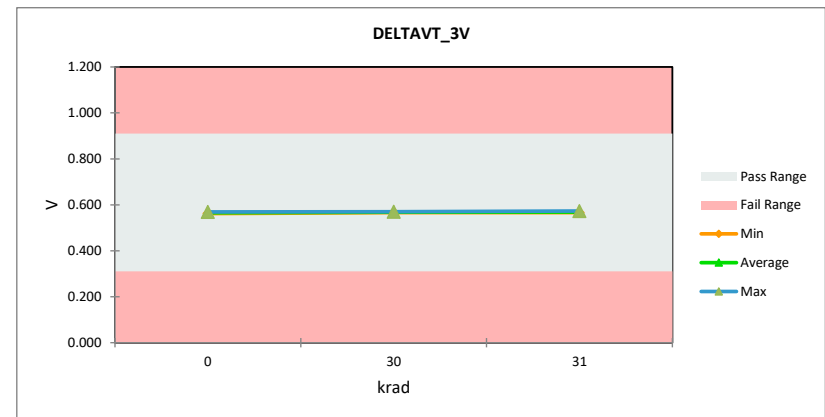
TID Report

SN54SC8T9541-SEP

DELTA_VT_3V						
Units	V					
Max Limit	0.91					
Min Limit	0.31					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.565	0.564	0.00	-0.30%	0.28%
0	2	0.560	0.562	0.00	0.30%	0.28%
0	3	0.567	0.567	0.00	0.03%	0.03%
0	4	0.566	0.569	0.00	0.60%	0.57%
30	5	0.566	0.569	0.00	0.69%	0.65%
30	6	0.564	0.568	0.00	0.66%	0.62%
30	7	0.562	0.567	0.01	1.00%	0.93%
30	8	0.562	0.568	0.01	1.03%	0.96%
30	9	0.562	0.568	0.01	0.97%	0.91%
30	10	0.565	0.566	0.00	0.12%	0.11%
31	5a	0.566	0.566	0.00	0.09%	0.08%
31	6a	0.564	0.566	0.00	0.42%	0.40%
31	7a	0.562	0.571	0.01	1.63%	1.53%
31	8a	0.562	0.568	0.01	1.06%	0.99%
31	9a	0.562	0.566	0.00	0.66%	0.62%
31	10a	0.565	0.573	0.01	1.35%	1.27%
Max		0.567	0.573	0.01	1.63%	1.53%
Average		0.564	0.567	0.00	0.64%	0.64%
Min		0.560	0.562	0.00	-0.30%	0.03%
Std Dev		0.002	0.003	0.00	0.52%	0.44%



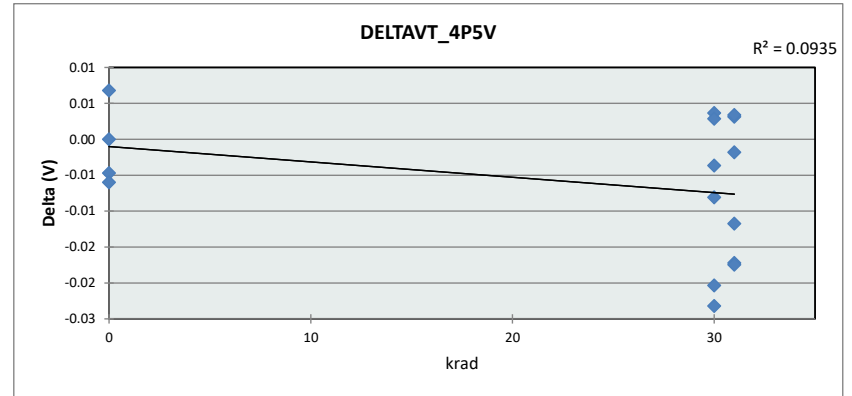
DELTA_VT_3V			
Units	V		
Max Limit	0.91		
Min Limit	0.31		
krad	0	30	31
LL	0.310	0.310	0.310
Min	0.562	0.566	0.566
Average	0.565	0.568	0.568
Max	0.569	0.569	0.573
UL	0.910	0.910	0.910



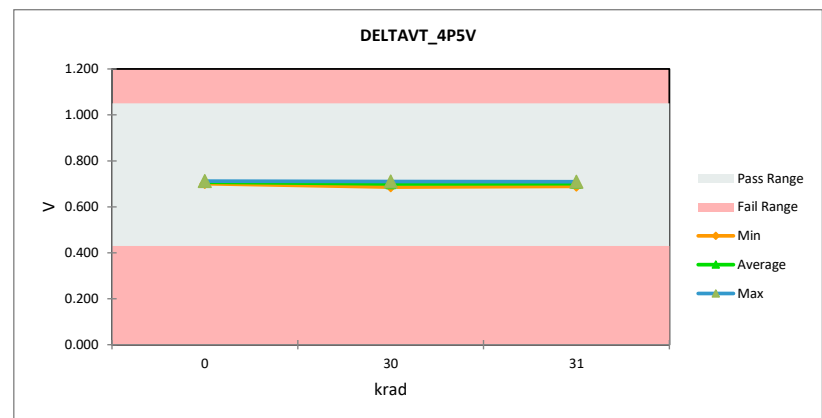
TID Report

SN54SC8T9541-SEP

DELTA_VT_4P5V						
Units	V					
Max Limit	1.05					
Min Limit	0.43					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.702	0.709	0.01	0.97%	1.09%
0	2	0.712	0.712	0.00	0.00%	0.00%
0	3	0.712	0.707	0.00	-0.66%	0.76%
0	4	0.707	0.701	-0.01	-0.85%	0.97%
30	5	0.706	0.686	-0.02	-2.88%	3.28%
30	6	0.713	0.689	-0.02	-3.26%	3.74%
30	7	0.706	0.710	0.00	0.52%	0.59%
30	8	0.706	0.703	0.00	-0.52%	0.59%
30	9	0.700	0.703	0.00	0.41%	0.46%
30	10	0.715	0.707	-0.01	-1.13%	1.30%
31	5a	0.706	0.704	0.00	-0.26%	0.29%
31	6a	0.713	0.701	-0.01	-1.65%	1.89%
31	7a	0.706	0.709	0.00	0.44%	0.50%
31	8a	0.706	0.689	-0.02	-2.44%	2.78%
31	9a	0.700	0.703	0.00	0.48%	0.55%
31	10a	0.715	0.698	-0.02	-2.44%	2.82%
Max	0.715	0.712	0.00	0.97%	3.74%	
Average	0.708	0.702	-0.01	-0.83%	1.35%	
Min	0.700	0.686	-0.01	-3.26%	0.00%	
Std Dev	0.005	0.008	0.00	1.34%	1.18%	



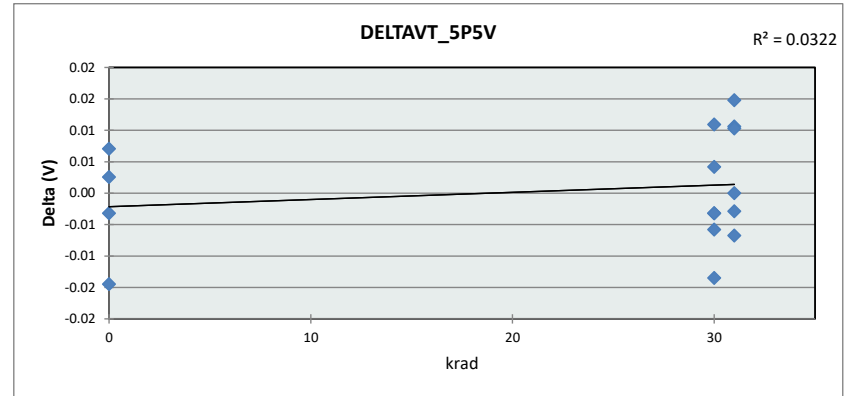
DELTA_VT_4P5V			
Units	V		
Max Limit	1.05		
Min Limit	0.43		
krad	0	30	31
LL	0.430	0.430	0.430
Min	0.701	0.686	0.689
Average	0.707	0.700	0.701
Max	0.712	0.710	0.709
UL	1.050	1.050	1.050



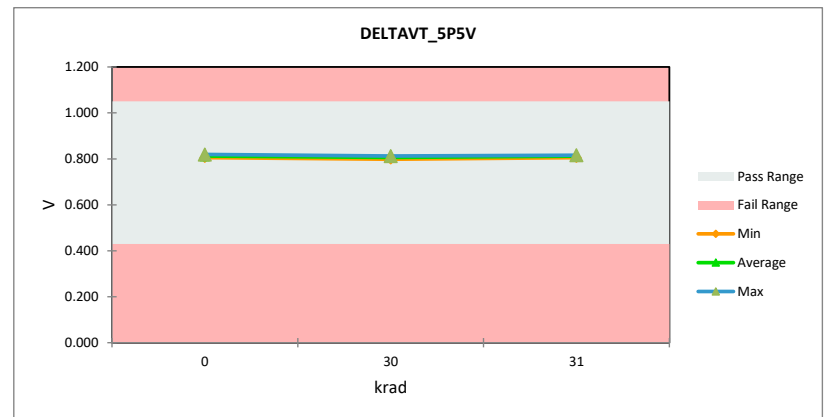
TID Report

SN54SC8T9541-SEP

DELTAVT_5P5V						
Units	V					
Max Limit	1.05					
Min Limit	0.43					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.816	0.812	0.00	-0.39%	0.52%
0	2	0.810	0.812	0.00	0.32%	0.41%
0	3	0.820	0.805	-0.01	-1.76%	2.33%
0	4	0.812	0.819	0.01	0.87%	1.14%
30	5	0.812	0.809	0.00	-0.40%	0.52%
30	6	0.802	0.806	0.00	0.52%	0.67%
30	7	0.812	0.798	-0.01	-1.66%	2.18%
30	8	0.805	0.802	0.00	-0.40%	0.52%
30	9	0.815	0.809	-0.01	-0.71%	0.93%
30	10	0.802	0.812	0.01	1.36%	1.76%
31	5a	0.812	0.805	-0.01	-0.83%	1.09%
31	6a	0.802	0.816	0.01	1.84%	2.38%
31	7a	0.812	0.809	0.00	-0.36%	0.47%
31	8a	0.805	0.816	0.01	1.32%	1.71%
31	9a	0.815	0.815	0.00	0.00%	0.00%
31	10a	0.802	0.812	0.01	1.28%	1.66%
Max		0.820	0.819	0.00	1.84%	2.38%
Average		0.809	0.810	0.00	0.06%	1.14%
Min		0.802	0.798	0.00	-1.76%	0.00%
Std Dev		0.006	0.006	0.00	1.08%	0.76%



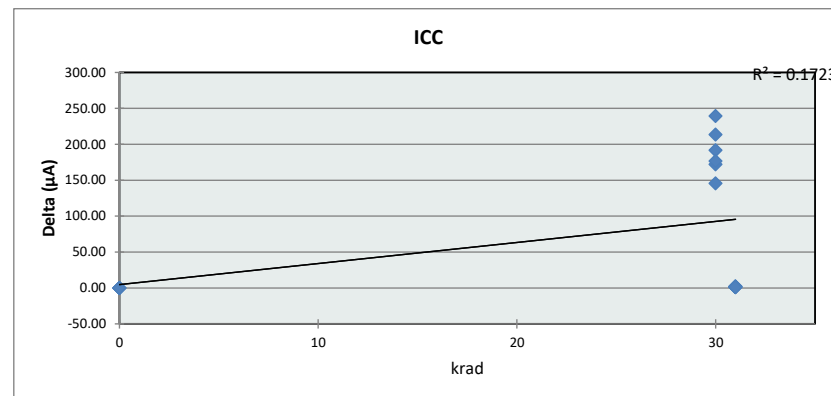
DELTAVT_5P5V			
Units	V		
Max Limit	1.05		
Min Limit	0.43		
krad	0	30	31
LL	0.430	0.430	0.430
Min	0.805	0.798	0.805
Average	0.812	0.806	0.812
Max	0.819	0.812	0.816
UL	1.050	1.050	1.050



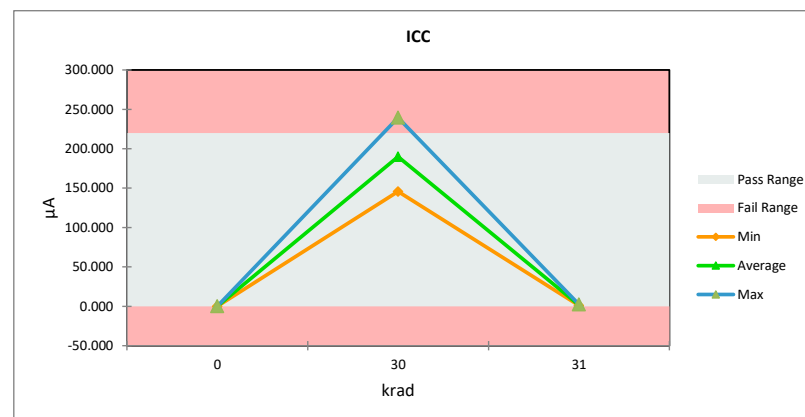
TID Report

SN54SC8T9541-SEP

ICC						
Units	μA					
Max Limit	220					
Min Limit	-0.1					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.054	0.044	-0.01	-18.19%	0.00%
0	2	0.042	0.031	-0.01	-26.24%	0.00%
0	3	0.080	0.072	-0.01	-9.83%	0.00%
0	4	0.034	0.057	0.02	66.75%	0.01%
30	5	0.078	213.500	213.42	272256.17%	96.97%
30	6	0.041	239.400	239.36	579561.02%	108.75%
30	7	0.038	172.200	172.16	458855.22%	78.22%
30	8	0.015	191.600	191.59	1286669.64%	87.04%
30	9	0.080	145.700	145.62	182848.27%	66.16%
30	10	0.100	176.800	176.70	177125.34%	80.28%
31	5a	0.078	1.948	1.87	2385.01%	0.85%
31	6a	0.041	2.376	2.33	5653.03%	1.06%
31	7a	0.038	1.359	1.32	3522.07%	0.60%
31	8a	0.015	1.150	1.14	7623.30%	0.52%
31	9a	0.080	1.134	1.05	1323.91%	0.48%
31	10a	0.100	1.348	1.25	1251.24%	0.57%
Max		0.100	239.400	239.30	1286669.64%	108.75%
Average		0.057	71.795	71.74	186192.92%	32.59%
Min		0.015	0.031	0.02	-26.24%	0.00%
Std Dev		0.028	96.363	96.34	345090.79%	43.78%



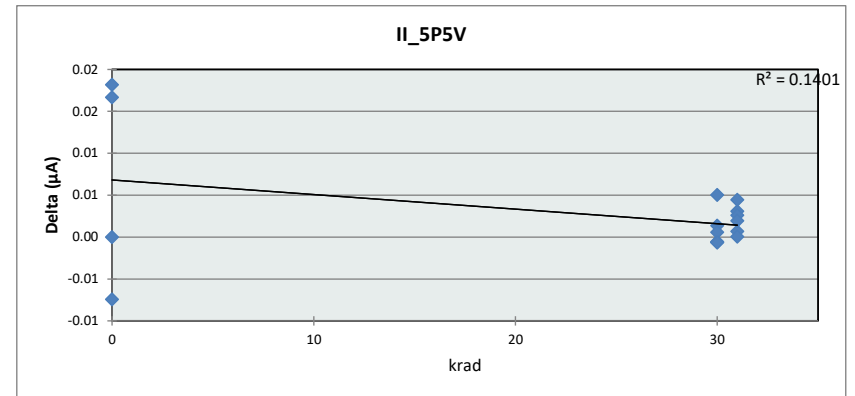
ICC			
Units	μA		
Max Limit	220		
Min Limit	-0.1		
krad	0	30	31
LL	-0.100	-0.100	-0.100
Min	0.031	145.700	1.134
Average	0.051	189.867	1.553
Max	0.072	239.400	2.376
UL	220.000	220.000	220.000



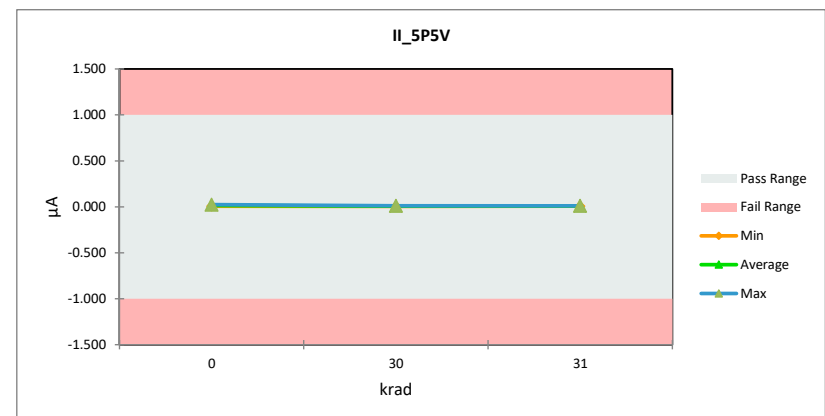
TID Report

SN54SC8T9541-SEP

II_5P5V						
Units	μA					
Max Limit	1					
Min Limit	-1					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.006	0.024	0.02	306.45%	0.91%
0	2	0.006	0.023	0.02	270.12%	0.83%
0	3	0.005	0.005	0.00	0.00%	0.00%
0	4	0.013	0.006	-0.01	-55.64%	0.37%
30	5	0.006	0.005	0.00	-10.61%	0.03%
30	6	0.006	0.012	0.01	77.64%	0.25%
30	7	0.007	0.007	0.00	-7.52%	0.03%
30	8	0.006	0.007	0.00	22.46%	0.07%
30	9	0.007	0.008	0.00	7.78%	0.03%
30	10	0.005	0.005	0.00	-12.03%	0.03%
31	5a	0.006	0.009	0.00	51.86%	0.15%
31	6a	0.006	0.009	0.00	40.14%	0.13%
31	7a	0.007	0.008	0.00	9.17%	0.03%
31	8a	0.006	0.011	0.00	72.63%	0.22%
31	9a	0.007	0.007	0.00	0.71%	0.00%
31	10a	0.005	0.007	0.00	37.09%	0.10%
Max		0.013	0.024	0.01	306.45%	0.91%
Average		0.007	0.010	0.00	50.64%	0.20%
Min		0.005	0.005	0.00	-55.64%	0.00%
Std Dev		0.002	0.006	0.00	98.95%	0.28%



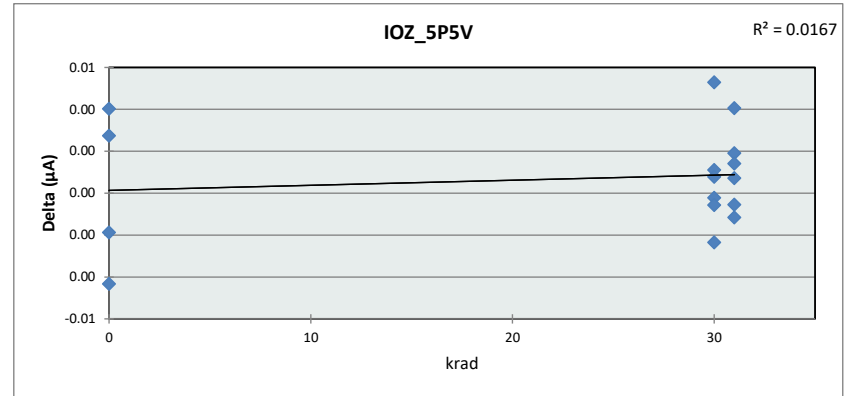
II_5P5V			
Units	μA		
Max Limit	1		
Min Limit	-1		
krad	0	30	31
LL	-1.000	-1.000	-1.000
Min	0.005	0.005	0.007
Average	0.015	0.007	0.009
Max	0.024	0.012	0.011
UL	1.000	1.000	1.000



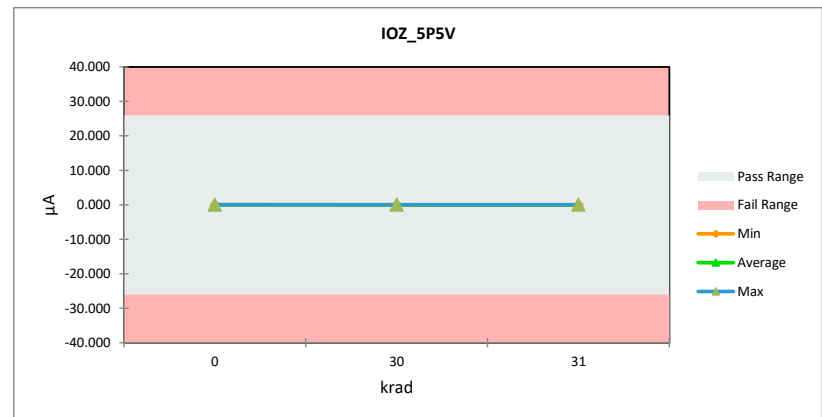
TID Report

SN54SC8T9541-SEP

IOZ_5P5V						
Units	μA					
Max Limit	26					
Min Limit	-26					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.008	0.012	0.00	51.73%	0.01%
0	2	0.009	0.012	0.00	29.82%	0.01%
0	3	0.007	0.005	0.00	-25.50%	0.00%
0	4	0.014	0.010	0.00	-29.92%	0.01%
30	5	0.007	0.008	0.00	16.56%	0.00%
30	6	0.008	0.013	0.01	70.16%	0.01%
30	7	0.007	0.007	0.00	-3.13%	0.00%
30	8	0.009	0.007	0.00	-25.29%	0.00%
30	9	0.007	0.008	0.00	11.50%	0.00%
30	10	0.007	0.007	0.00	-7.89%	0.00%
31	5a	0.007	0.009	0.00	28.48%	0.00%
31	6a	0.008	0.012	0.00	53.85%	0.01%
31	7a	0.007	0.008	0.00	10.03%	0.00%
31	8a	0.009	0.008	0.00	-12.44%	0.00%
31	9a	0.007	0.008	0.00	20.72%	0.00%
31	10a	0.007	0.007	0.00	-7.59%	0.00%
Max	0.014	0.013	0.00	70.16%	0.01%	
Average	0.008	0.009	0.00	11.32%	0.00%	
Min	0.007	0.005	0.00	-29.92%	0.00%	
Std Dev	0.002	0.002	0.00	30.06%	0.00%	



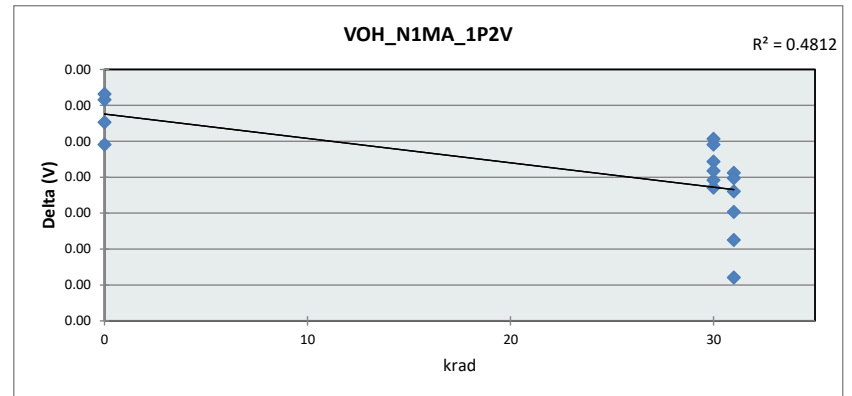
IOZ_5P5V			
Units	μA		
Max Limit	26		
Min Limit	-26		
krad	0	30	31
LL	-26.000	-26.000	-26.000
Min	0.005	0.007	0.007
Average	0.010	0.008	0.009
Max	0.012	0.013	0.012
UL	26.000	26.000	26.000



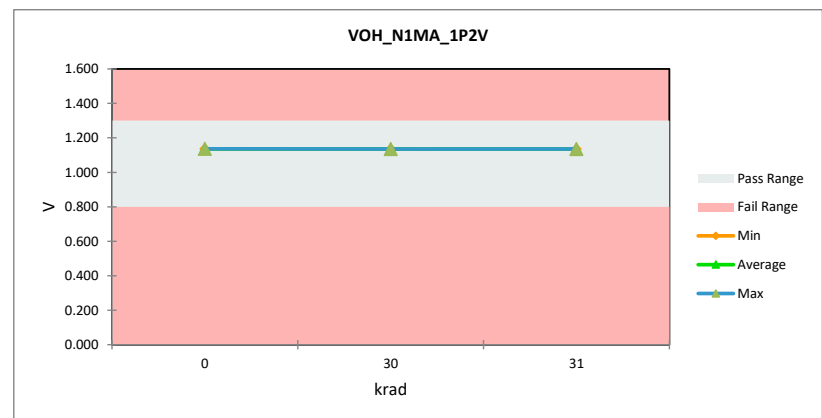
TID Report

SN54SC8T9541-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	1.136	1.137	0.00	0.00%	0.01%
0	2	1.136	1.136	0.00	-0.01%	0.02%
0	3	1.136	1.136	0.00	0.01%	0.01%
0	4	1.136	1.136	0.00	-0.02%	0.04%
30	5	1.136	1.136	0.00	-0.03%	0.06%
30	6	1.136	1.136	0.00	-0.04%	0.09%
30	7	1.136	1.136	0.00	-0.04%	0.08%
30	8	1.136	1.136	0.00	-0.02%	0.04%
30	9	1.136	1.136	0.00	-0.03%	0.07%
30	10	1.136	1.136	0.00	-0.02%	0.04%
31	5a	1.136	1.135	0.00	-0.07%	0.15%
31	6a	1.136	1.135	0.00	-0.08%	0.19%
31	7a	1.136	1.136	0.00	-0.04%	0.10%
31	8a	1.136	1.135	0.00	-0.03%	0.08%
31	9a	1.136	1.135	0.00	-0.05%	0.12%
31	10a	1.136	1.135	0.00	-0.04%	0.08%
Max	1.136	1.137	0.00	0.01%	0.19%	
Average	1.136	1.136	0.00	-0.03%	0.07%	
Min	1.136	1.135	0.00	-0.08%	0.01%	
Std Dev	0.000	0.000	0.00	0.02%	0.05%	



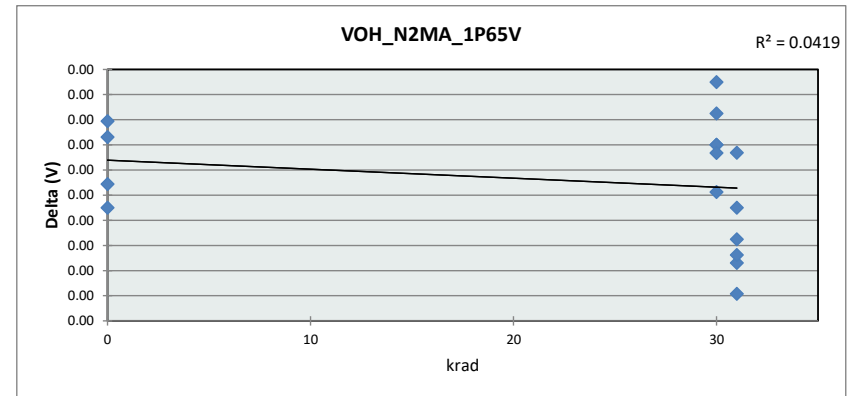
VOH_N1MA_1P2V			
Units	V		
Max Limit	1.3		
Min Limit	0.8		
krad	0	30	31
LL	0.800	0.800	0.800
Min	1.136	1.136	1.135
Average	1.136	1.136	1.135
Max	1.137	1.136	1.136
UL	1.300	1.300	1.300



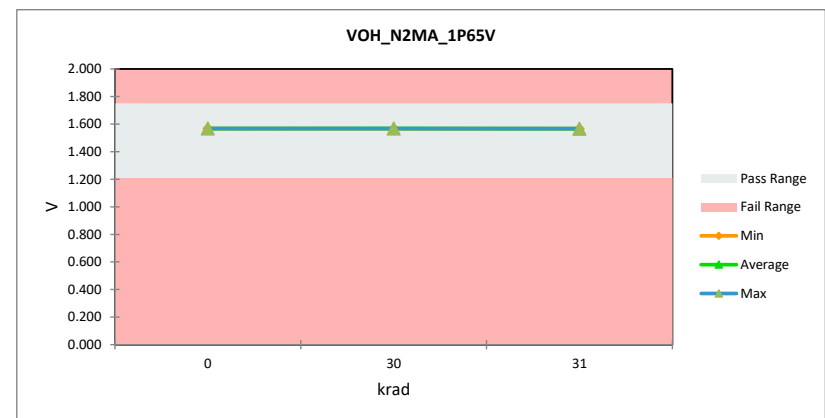
TID Report

SN54SC8T9541-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	1.568	1.568	0.00	0.01%	0.02%
0	2	1.568	1.567	0.00	-0.01%	0.03%
0	3	1.567	1.567	0.00	0.00%	0.01%
0	4	1.568	1.567	0.00	-0.02%	0.05%
30	5	1.567	1.567	0.00	0.00%	0.00%
30	6	1.567	1.567	0.00	-0.01%	0.03%
30	7	1.567	1.567	0.00	0.00%	0.00%
30	8	1.567	1.567	0.00	0.02%	0.05%
30	9	1.567	1.567	0.00	0.00%	0.01%
30	10	1.567	1.567	0.00	0.01%	0.02%
31	5a	1.567	1.567	0.00	-0.02%	0.07%
31	6a	1.567	1.567	0.00	-0.04%	0.11%
31	7a	1.567	1.567	0.00	-0.02%	0.05%
31	8a	1.567	1.567	0.00	0.00%	0.01%
31	9a	1.567	1.567	0.00	-0.03%	0.09%
31	10a	1.567	1.567	0.00	-0.03%	0.08%
Max		1.568	1.568	0.00	0.02%	0.11%
Average		1.567	1.567	0.00	-0.01%	0.04%
Min		1.567	1.567	0.00	-0.04%	0.00%
Std Dev		0.000	0.000	0.00	0.02%	0.03%



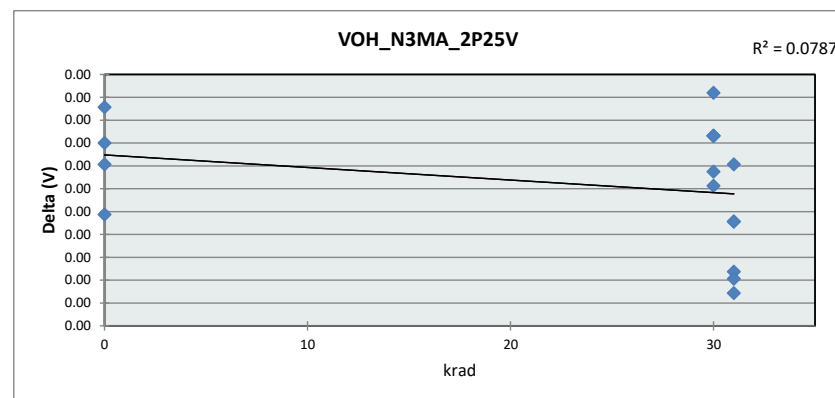
VOH_N2MA_1P65V			
Units		V	
Max Limit		1.75	
Min Limit		1.21	
krad	0	30	31
LL	1.210	1.210	1.210
Min	1.567	1.567	1.567
Average	1.567	1.567	1.567
Max	1.568	1.567	1.567
UL	1.750	1.750	1.750



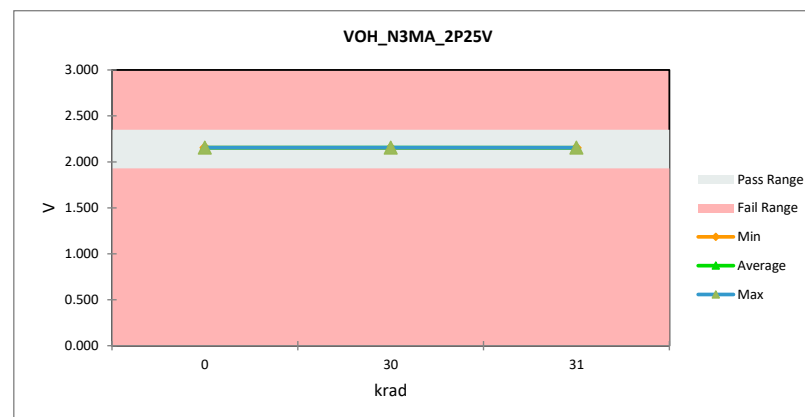
TID Report

SN54SC8T9541-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	2.155	2.155	0.00	0.01%	0.04%
0	2	2.155	2.154	0.00	-0.01%	0.07%
0	3	2.154	2.154	0.00	0.00%	0.00%
0	4	2.155	2.154	0.00	0.00%	0.02%
30	5	2.154	2.154	0.00	0.00%	0.01%
30	6	2.155	2.155	0.00	0.00%	0.01%
30	7	2.154	2.154	0.00	0.01%	0.05%
30	8	2.154	2.154	0.00	0.00%	0.01%
30	9	2.154	2.154	0.00	-0.01%	0.04%
30	10	2.154	2.154	0.00	-0.01%	0.03%
31	5a	2.154	2.154	0.00	-0.03%	0.13%
31	6a	2.155	2.154	0.00	-0.03%	0.14%
31	7a	2.154	2.154	0.00	0.00%	0.02%
31	8a	2.154	2.153	0.00	-0.02%	0.08%
31	9a	2.154	2.154	0.00	-0.02%	0.08%
31	10a	2.154	2.154	0.00	-0.03%	0.16%
Max	2.155	2.155	0.00	0.01%	0.16%	
Average	2.154	2.154	0.00	-0.01%	0.06%	
Min	2.154	2.153	0.00	-0.03%	0.00%	
Std Dev	0.000	0.000	0.00	0.01%	0.05%	



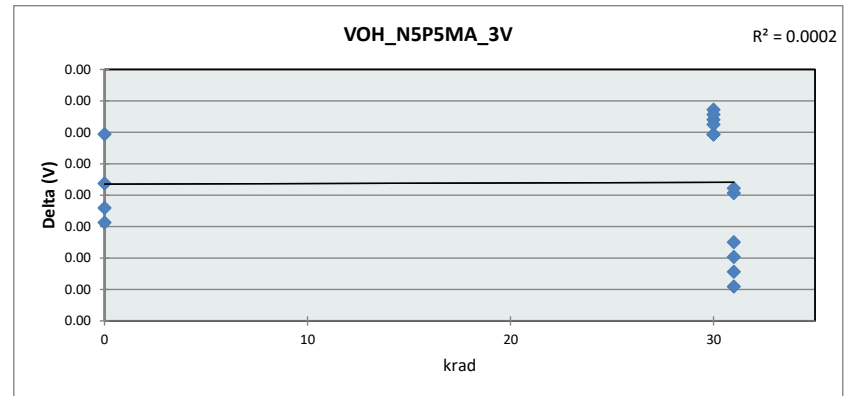
VOH_N3MA_2P25V			
Units	V		
Max Limit	2.35		
Min Limit	1.93		
krad	0	30	31
LL	1.930	1.930	1.930
Min	2.154	2.154	2.153
Average	2.154	2.154	2.154
Max	2.155	2.155	2.154
UL	2.350	2.350	2.350



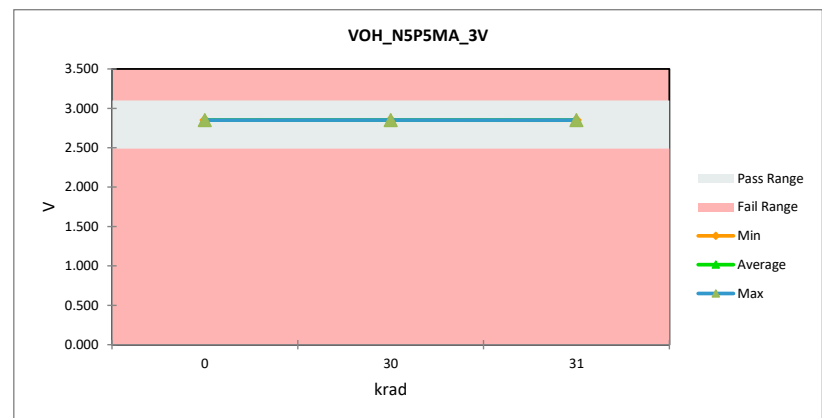
TID Report

SN54SC8T9541-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	2.851	2.851	0.00	0.01%	0.03%
0	2	2.851	2.851	0.00	-0.01%	0.06%
0	3	2.851	2.850	0.00	0.00%	0.02%
0	4	2.851	2.851	0.00	-0.01%	0.05%
30	5	2.851	2.851	0.00	0.01%	0.06%
30	6	2.851	2.851	0.00	0.01%	0.05%
30	7	2.851	2.851	0.00	0.01%	0.03%
30	8	2.849	2.850	0.00	0.01%	0.05%
30	9	2.851	2.851	0.00	0.01%	0.03%
30	10	2.851	2.851	0.00	0.01%	0.04%
31	5a	2.851	2.850	0.00	-0.02%	0.08%
31	6a	2.851	2.850	0.00	-0.02%	0.11%
31	7a	2.851	2.850	0.00	-0.02%	0.10%
31	8a	2.849	2.849	0.00	-0.01%	0.03%
31	9a	2.851	2.851	0.00	-0.01%	0.03%
31	10a	2.851	2.850	0.00	-0.03%	0.13%
Max	2.851	2.851	0.00	0.01%	0.13%	
Average	2.851	2.850	0.00	0.00%	0.06%	
Min	2.849	2.849	0.00	-0.03%	0.02%	
Std Dev	0.000	0.001	0.00	0.01%	0.03%	



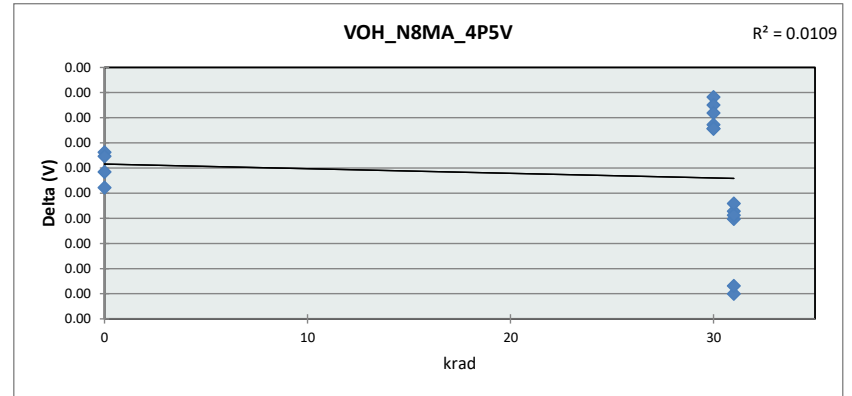
VOH_N5P5MA_3V			
Units	V		
Max Limit	3.1		
Min Limit	2.49		
krad	0	30	31
LL	2.490	2.490	2.490
Min	2.850	2.850	2.849
Average	2.851	2.851	2.850
Max	2.851	2.851	2.851
UL	3.100	3.100	3.100



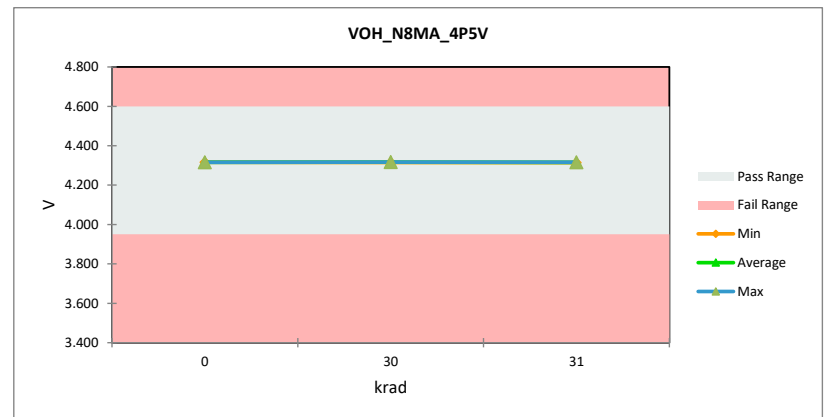
TID Report

SN54SC8T9541-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	4.316	4.316	0.00	0.00%	0.02%
0	2	4.316	4.316	0.00	0.00%	0.01%
0	3	4.316	4.316	0.00	0.00%	0.00%
0	4	4.316	4.316	0.00	0.00%	0.02%
30	5	4.316	4.316	0.00	0.01%	0.09%
30	6	4.317	4.317	0.00	0.01%	0.05%
30	7	4.316	4.317	0.00	0.01%	0.08%
30	8	4.315	4.315	0.00	0.01%	0.07%
30	9	4.316	4.317	0.00	0.01%	0.05%
30	10	4.316	4.317	0.00	0.01%	0.05%
31	5a	4.316	4.315	0.00	-0.01%	0.06%
31	6a	4.317	4.316	0.00	-0.02%	0.15%
31	7a	4.316	4.316	0.00	-0.01%	0.05%
31	8a	4.315	4.314	0.00	-0.01%	0.06%
31	9a	4.316	4.316	0.00	-0.01%	0.04%
31	10a	4.316	4.315	0.00	-0.02%	0.14%
Max	4.317	4.317	0.00	0.01%	0.15%	
Average	4.316	4.316	0.00	0.00%	0.06%	
Min	4.315	4.314	0.00	-0.02%	0.00%	
Std Dev	0.001	0.001	0.00	0.01%	0.04%	



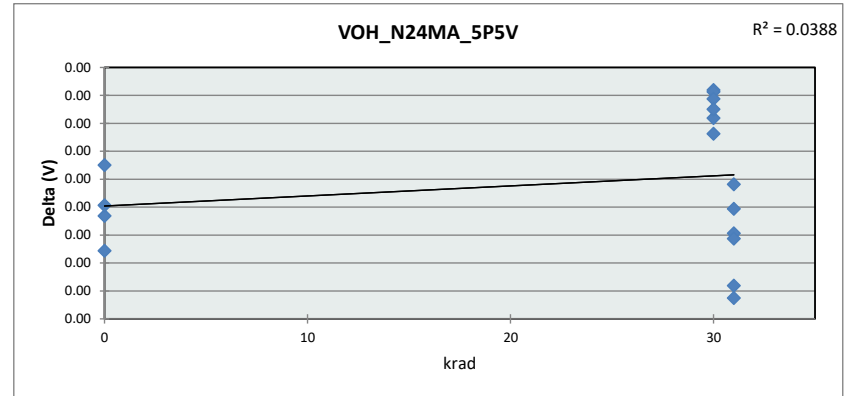
VOH_N8MA_4P5V			
Units	V		
Max Limit	4.6		
Min Limit	3.95		
krad	0	30	31
LL	3.950	3.950	3.950
Min	4.316	4.315	4.314
Average	4.316	4.316	4.315
Max	4.316	4.317	4.316
UL	4.600	4.600	4.600



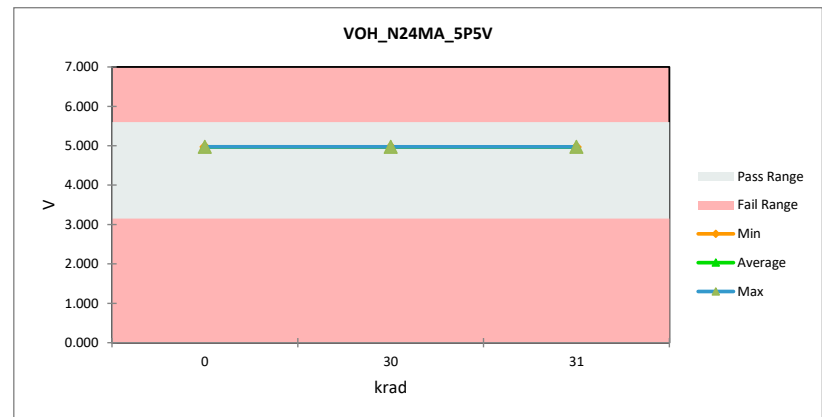
TID Report

SN54SC8T9541-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	4.971	4.971	0.00	0.01%	0.01%
0	2	4.972	4.971	0.00	-0.01%	0.03%
0	3	4.971	4.970	0.00	-0.01%	0.02%
0	4	4.972	4.971	0.00	-0.03%	0.05%
30	5	4.970	4.972	0.00	0.03%	0.07%
30	6	4.971	4.973	0.00	0.03%	0.06%
30	7	4.971	4.972	0.00	0.02%	0.04%
30	8	4.966	4.967	0.00	0.03%	0.06%
30	9	4.972	4.972	0.00	0.02%	0.03%
30	10	4.971	4.972	0.00	0.03%	0.05%
31	5a	4.970	4.969	0.00	-0.02%	0.04%
31	6a	4.971	4.969	0.00	-0.04%	0.09%
31	7a	4.971	4.970	0.00	-0.02%	0.04%
31	8a	4.966	4.966	0.00	0.00%	0.00%
31	9a	4.972	4.971	0.00	-0.01%	0.02%
31	10a	4.971	4.969	0.00	-0.04%	0.08%
Max	4.972	4.973	0.00	0.03%	0.09%	
Average	4.970	4.970	0.00	0.00%	0.04%	
Min	4.966	4.966	0.00	-0.04%	0.00%	
Std Dev	0.002	0.002	0.00	0.03%	0.02%	



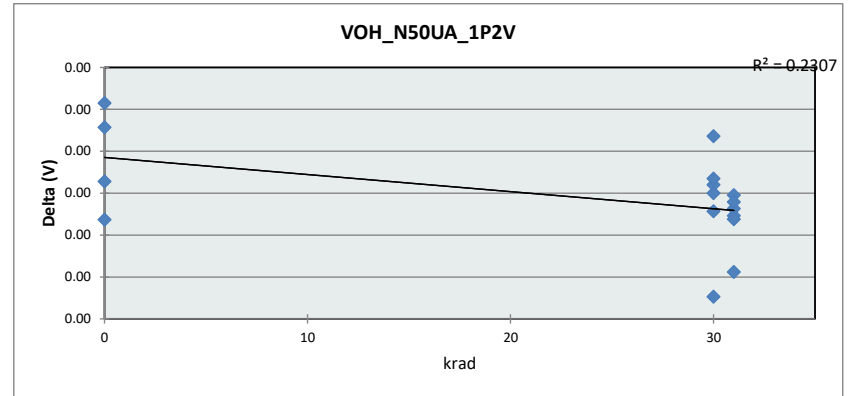
VOH_N24MA_5P5V			
Units	V		
Max Limit	5.6		
Min Limit	3.15		
krad	0	30	31
LL	3.150	3.150	3.150
Min	4.970	4.967	4.966
Average	4.971	4.971	4.969
Max	4.971	4.973	4.971
UL	5.600	5.600	5.600



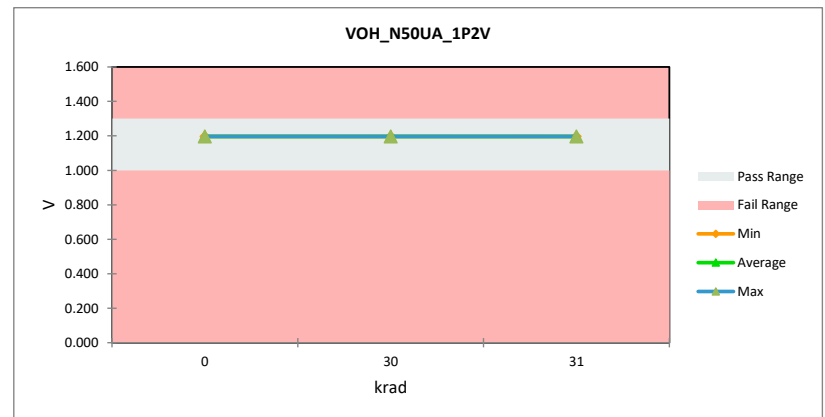
TID Report

SN54SC8T9541-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	0.01%	0.05%
0	2	1.197	1.197	0.00	-0.01%	0.02%
0	3	1.197	1.197	0.00	0.00%	0.01%
0	4	1.197	1.197	0.00	0.02%	0.07%
30	5	1.197	1.197	0.00	0.00%	0.01%
30	6	1.197	1.197	0.00	-0.02%	0.08%
30	7	1.197	1.197	0.00	0.00%	0.01%
30	8	1.197	1.197	0.00	0.00%	0.01%
30	9	1.197	1.197	0.00	0.00%	0.00%
30	10	1.197	1.197	0.00	0.01%	0.05%
31	5a	1.197	1.197	0.00	0.00%	0.01%
31	6a	1.197	1.197	0.00	-0.02%	0.06%
31	7a	1.197	1.197	0.00	0.00%	0.00%
31	8a	1.197	1.197	0.00	0.00%	0.02%
31	9a	1.197	1.197	0.00	-0.01%	0.02%
31	10a	1.197	1.197	0.00	0.00%	0.01%
Max	1.197	1.197	0.00	0.02%	0.08%	
Average	1.197	1.197	0.00	0.00%	0.03%	
Min	1.197	1.197	0.00	-0.02%	0.00%	
Std Dev	0.000	0.000	0.00	0.01%	0.03%	



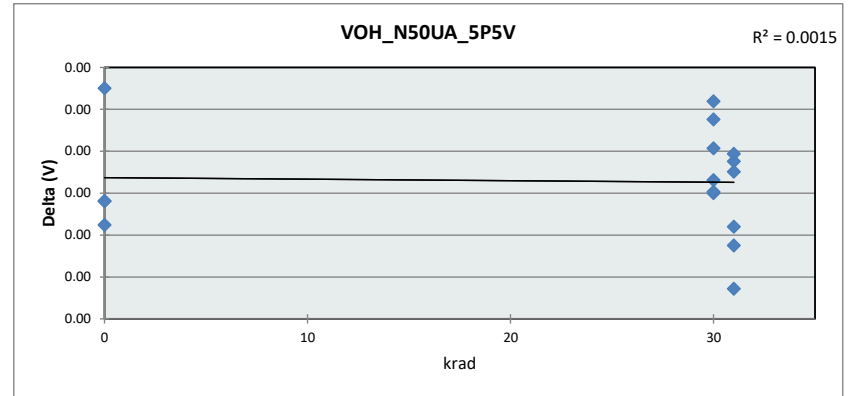
VOH_N50UA_1P2V			
Units	V		
Max Limit	1.3		
Min Limit	1		
krad	0	30	31
LL	1.000	1.000	1.000
Min	1.197	1.197	1.197
Average	1.197	1.197	1.197
Max	1.197	1.197	1.197
UL	1.300	1.300	1.300



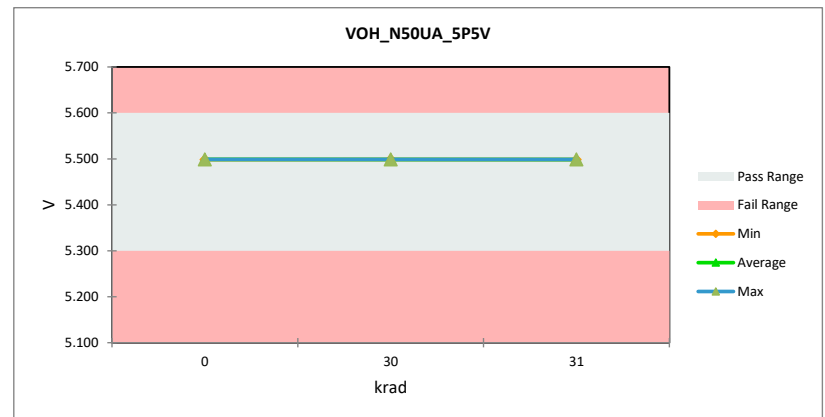
TID Report

SN54SC8T9541-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	5.499	5.499	0.00	0.00%	0.01%
0	2	5.499	5.499	0.00	0.00%	0.03%
0	3	5.499	5.499	0.00	0.00%	0.01%
0	4	5.498	5.499	0.00	0.00%	0.08%
30	5	5.499	5.499	0.00	0.00%	0.00%
30	6	5.499	5.499	0.00	0.00%	0.00%
30	7	5.499	5.499	0.00	0.00%	0.01%
30	8	5.499	5.499	0.00	0.00%	0.04%
30	9	5.498	5.499	0.00	0.00%	0.06%
30	10	5.498	5.499	0.00	0.00%	0.07%
31	5a	5.499	5.498	0.00	0.00%	0.03%
31	6a	5.499	5.499	0.00	0.00%	0.08%
31	7a	5.499	5.498	0.00	0.00%	0.04%
31	8a	5.499	5.499	0.00	0.00%	0.03%
31	9a	5.498	5.498	0.00	0.00%	0.02%
31	10a	5.498	5.498	0.00	0.00%	0.03%
Max		5.499	5.499	0.00	0.00%	0.08%
Average		5.499	5.499	0.00	0.00%	0.03%
Min		5.498	5.498	0.00	0.00%	0.00%
Std Dev		0.000	0.000	0.00	0.00%	0.03%



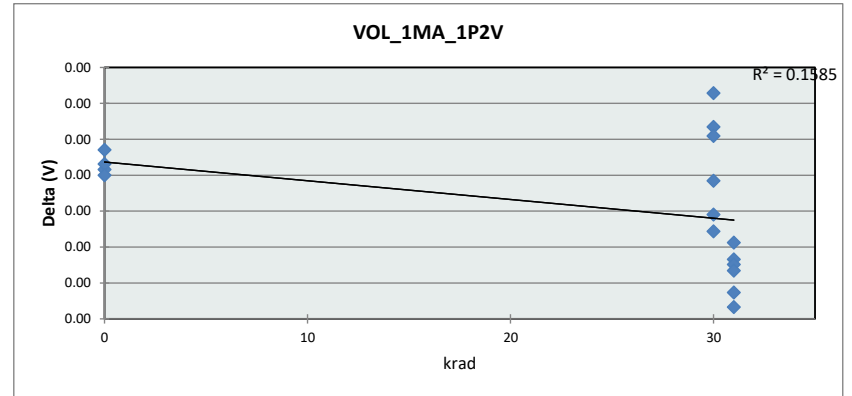
VOH_N50UA_5P5V			
Units		V	
Max Limit		5.6	
Min Limit		5.3	
krad	0	30	31
LL	5.300	5.300	5.300
Min	5.499	5.499	5.498
Average	5.499	5.499	5.499
Max	5.499	5.499	5.499
UL	5.600	5.600	5.600



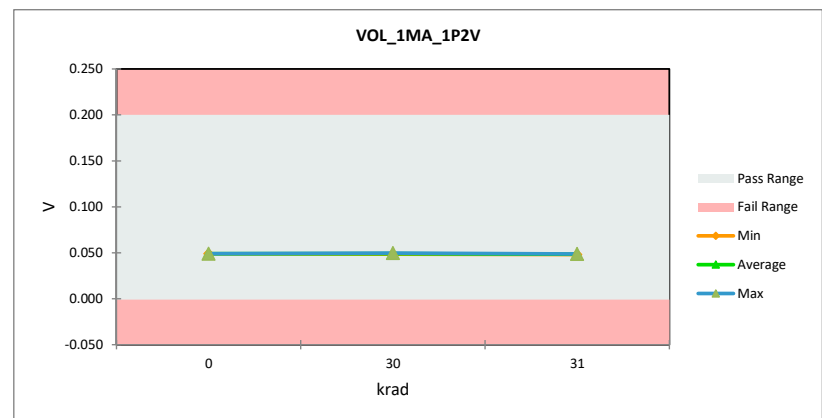
TID Report

SN54SC8T9541-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	0.049	0.049	0.00	0.29%	0.07%
0	2	0.049	0.049	0.00	0.06%	0.02%
0	3	0.049	0.049	0.00	0.13%	0.03%
0	4	0.049	0.049	0.00	0.00%	0.00%
30	5	0.049	0.048	0.00	-0.45%	0.11%
30	6	0.049	0.049	0.00	-0.06%	0.02%
30	7	0.049	0.050	0.00	0.93%	0.23%
30	8	0.049	0.049	0.00	0.55%	0.13%
30	9	0.049	0.049	0.00	0.45%	0.11%
30	10	0.049	0.049	0.00	-0.64%	0.16%
31	5a	0.049	0.048	0.00	-0.96%	0.23%
31	6a	0.049	0.048	0.00	-1.49%	0.37%
31	7a	0.049	0.049	0.00	-1.33%	0.32%
31	8a	0.049	0.048	0.00	-1.02%	0.25%
31	9a	0.049	0.049	0.00	-0.77%	0.19%
31	10a	0.049	0.049	0.00	-1.08%	0.26%
Max	0.049	0.050	0.00	0.93%	0.37%	
Average	0.049	0.049	0.00	-0.34%	0.16%	
Min	0.049	0.048	0.00	-1.49%	0.00%	
Std Dev	0.000	0.000	0.00	0.73%	0.11%	



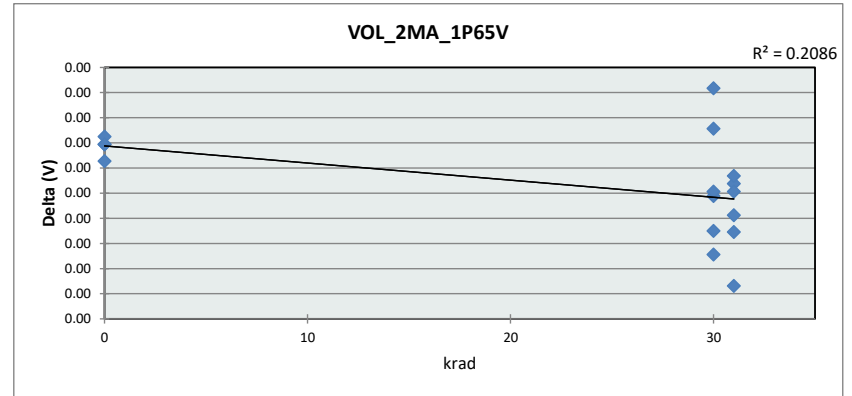
VOL_1MA_1P2V			
Units	V		
Max Limit	0.2		
Min Limit	-0.001		
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.049	0.048	0.048
Average	0.049	0.049	0.048
Max	0.049	0.050	0.049
UL	0.200	0.200	0.200



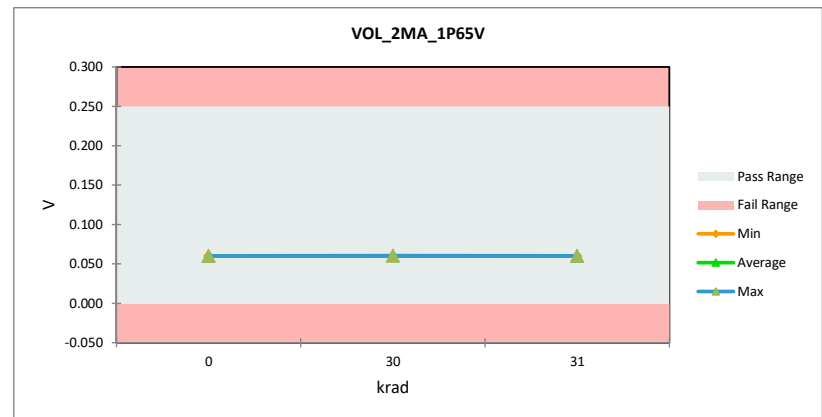
TID Report

SN54SC8T9541-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	0.060	0.060	0.00	0.16%	0.04%
0	2	0.060	0.060	0.00	0.05%	0.01%
0	3	0.060	0.060	0.00	0.21%	0.05%
0	4	0.060	0.060	0.00	0.16%	0.04%
30	5	0.060	0.060	0.00	-0.57%	0.14%
30	6	0.061	0.060	0.00	-0.18%	0.04%
30	7	0.060	0.061	0.00	0.53%	0.13%
30	8	0.060	0.060	0.00	0.26%	0.06%
30	9	0.060	0.060	0.00	-0.42%	0.10%
30	10	0.060	0.060	0.00	-0.16%	0.04%
31	5a	0.060	0.060	0.00	-0.78%	0.19%
31	6a	0.061	0.060	0.00	-0.42%	0.10%
31	7a	0.060	0.060	0.00	-0.10%	0.02%
31	8a	0.060	0.060	0.00	-0.05%	0.01%
31	9a	0.060	0.060	0.00	-0.31%	0.07%
31	10a	0.060	0.060	0.00	-0.16%	0.04%
Max	0.061	0.061	0.00	0.53%	0.19%	
Average	0.060	0.060	0.00	-0.11%	0.07%	
Min	0.060	0.060	0.00	-0.78%	0.01%	
Std Dev	0.000	0.000	0.00	0.34%	0.05%	



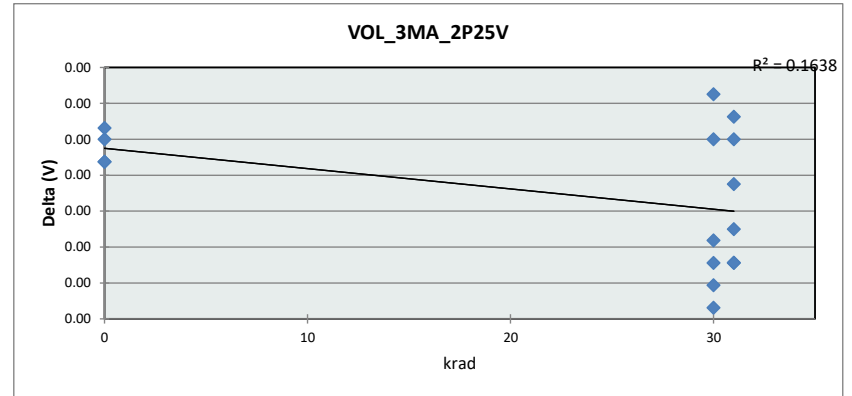
VOL_2MA_1P65V			
Units	V		
Max Limit	0.25		
Min Limit	-0.001		
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.060	0.060	0.060
Average	0.060	0.060	0.060
Max	0.060	0.061	0.060
UL	0.250	0.250	0.250



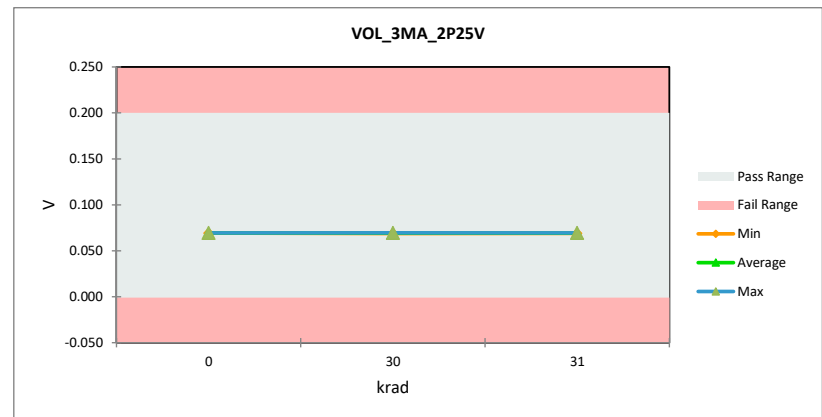
TID Report

SN54SC8T9541-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	0.069	0.069	0.00	-0.09%	0.03%
0	2	0.069	0.069	0.00	0.00%	0.00%
0	3	0.069	0.069	0.00	-0.09%	0.03%
0	4	0.069	0.069	0.00	0.05%	0.02%
30	5	0.070	0.069	0.00	-0.67%	0.23%
30	6	0.070	0.069	0.00	-0.40%	0.14%
30	7	0.069	0.070	0.00	0.18%	0.06%
30	8	0.069	0.069	0.00	0.00%	0.00%
30	9	0.069	0.069	0.00	-0.59%	0.20%
30	10	0.069	0.069	0.00	-0.50%	0.17%
31	5a	0.070	0.069	0.00	-0.49%	0.17%
31	6a	0.070	0.069	0.00	-0.36%	0.12%
31	7a	0.069	0.069	0.00	0.00%	0.00%
31	8a	0.069	0.069	0.00	0.09%	0.03%
31	9a	0.069	0.069	0.00	-0.18%	0.06%
31	10a	0.069	0.069	0.00	-0.50%	0.17%
Max	0.070	0.070	0.00	0.18%	0.23%	
Average	0.069	0.069	0.00	-0.22%	0.09%	
Min	0.069	0.069	0.00	-0.67%	0.00%	
Std Dev	0.000	0.000	0.00	0.27%	0.08%	



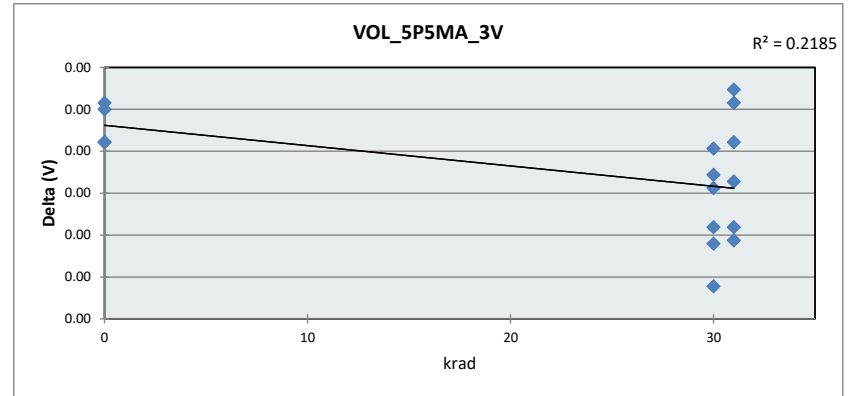
VOL_3MA_2P25V			
Units	V		
Max Limit	0.2		
Min Limit	-0.001		
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.069	0.069	0.069
Average	0.069	0.069	0.069
Max	0.069	0.070	0.069
UL	0.200	0.200	0.200



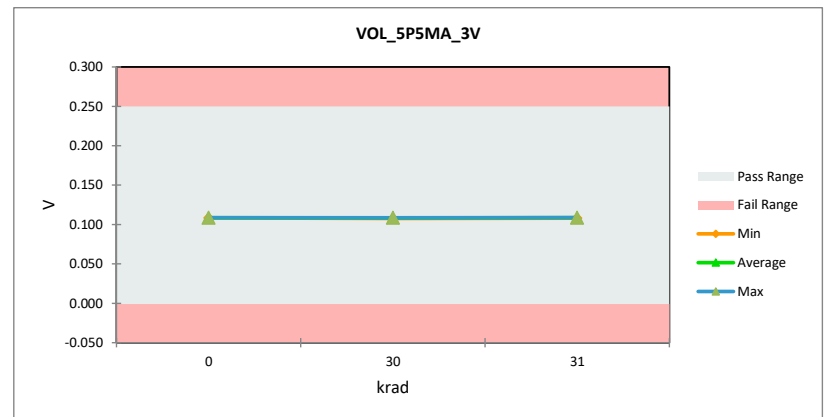
TID Report

SN54SC8T9541-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	0.109	0.109	0.00	-0.14%	0.06%
0	2	0.108	0.109	0.00	0.03%	0.01%
0	3	0.109	0.109	0.00	-0.14%	0.06%
0	4	0.109	0.109	0.00	0.00%	0.00%
30	5	0.109	0.109	0.00	-0.59%	0.26%
30	6	0.109	0.108	0.00	-0.29%	0.12%
30	7	0.109	0.109	0.00	-0.17%	0.07%
30	8	0.109	0.109	0.00	-0.52%	0.22%
30	9	0.108	0.108	0.00	-0.78%	0.34%
30	10	0.109	0.108	0.00	-0.35%	0.15%
31	5a	0.109	0.109	0.00	-0.52%	0.22%
31	6a	0.109	0.109	0.00	0.03%	0.01%
31	7a	0.109	0.109	0.00	-0.14%	0.06%
31	8a	0.109	0.108	0.00	-0.57%	0.25%
31	9a	0.108	0.108	0.00	-0.32%	0.14%
31	10a	0.109	0.109	0.00	0.09%	0.04%
Max	0.109	0.109	0.00	0.09%	0.34%	
Average	0.109	0.108	0.00	-0.27%	0.13%	
Min	0.108	0.108	0.00	-0.78%	0.00%	
Std Dev	0.000	0.000	0.00	0.26%	0.10%	



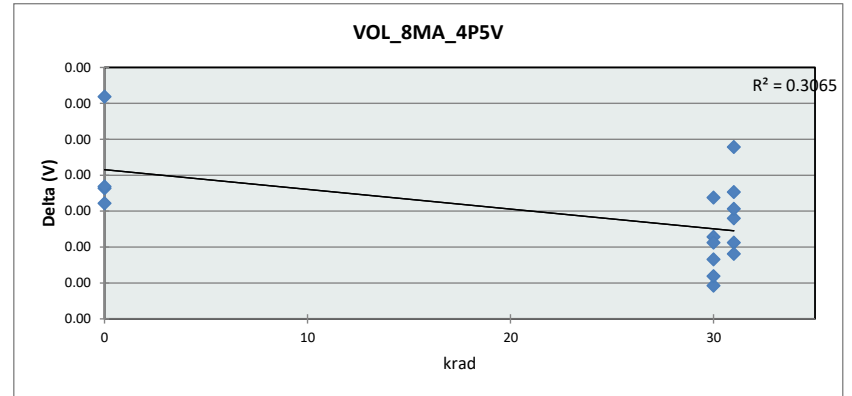
VOL_5P5MA_3V			
Units	V		
Max Limit	0.25		
Min Limit	-0.001		
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.109	0.108	0.108
Average	0.109	0.108	0.109
Max	0.109	0.109	0.109
UL	0.250	0.250	0.250



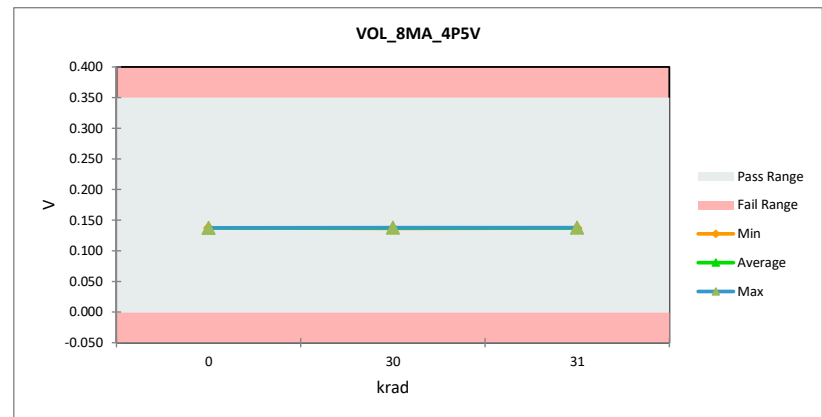
TID Report

SN54SC8T9541-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	0.137	0.137	0.00	-0.05%	0.02%
0	2	0.137	0.137	0.00	0.32%	0.12%
0	3	0.138	0.137	0.00	-0.11%	0.04%
0	4	0.137	0.137	0.00	-0.05%	0.02%
30	5	0.138	0.137	0.00	-0.45%	0.18%
30	6	0.138	0.137	0.00	-0.25%	0.10%
30	7	0.137	0.137	0.00	-0.09%	0.04%
30	8	0.138	0.138	0.00	-0.27%	0.11%
30	9	0.137	0.137	0.00	-0.41%	0.16%
30	10	0.137	0.137	0.00	-0.34%	0.13%
31	5a	0.138	0.138	0.00	-0.17%	0.07%
31	6a	0.138	0.137	0.00	-0.27%	0.11%
31	7a	0.137	0.137	0.00	0.11%	0.04%
31	8a	0.138	0.138	0.00	-0.32%	0.12%
31	9a	0.137	0.137	0.00	-0.14%	0.05%
31	10a	0.137	0.137	0.00	-0.07%	0.03%
Max	0.138	0.138	0.00	0.32%	0.18%	
Average	0.137	0.137	0.00	-0.16%	0.08%	
Min	0.137	0.137	0.00	-0.45%	0.02%	
Std Dev	0.000	0.000	0.00	0.20%	0.05%	



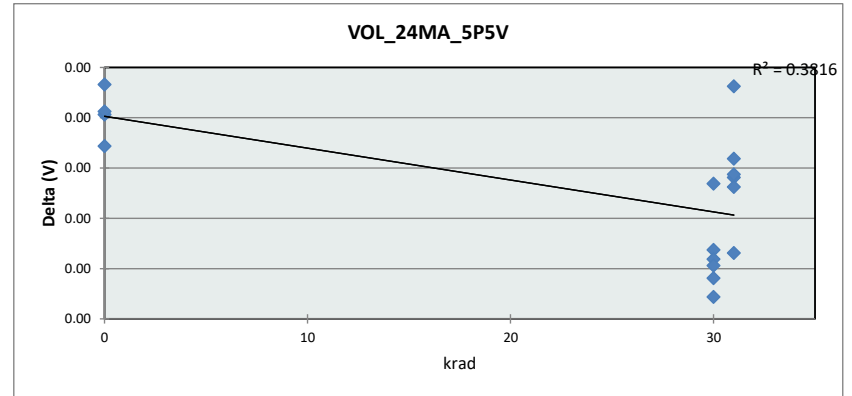
VOL_8MA_4P5V			
Units	V		
Max Limit	0.35		
Min Limit	-0.001		
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.137	0.137	0.137
Average	0.137	0.137	0.137
Max	0.137	0.138	0.138
UL	0.350	0.350	0.350



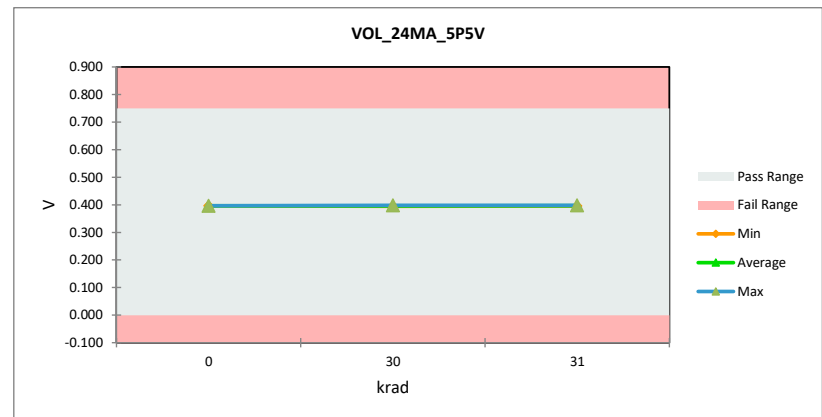
TID Report

SN54SC8T9541-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	0.396	0.396	0.00	0.01%	0.00%
0	2	0.396	0.396	0.00	0.08%	0.04%
0	3	0.397	0.397	0.00	-0.07%	0.04%
0	4	0.396	0.396	0.00	0.02%	0.01%
30	5	0.398	0.396	0.00	-0.40%	0.21%
30	6	0.397	0.396	0.00	-0.33%	0.17%
30	7	0.397	0.396	0.00	-0.17%	0.09%
30	8	0.400	0.398	0.00	-0.45%	0.24%
30	9	0.396	0.395	0.00	-0.36%	0.19%
30	10	0.397	0.395	0.00	-0.37%	0.20%
31	5a	0.398	0.397	0.00	-0.15%	0.08%
31	6a	0.397	0.397	0.00	-0.17%	0.09%
31	7a	0.397	0.397	0.00	0.08%	0.04%
31	8a	0.400	0.398	0.00	-0.34%	0.18%
31	9a	0.396	0.396	0.00	-0.10%	0.05%
31	10a	0.397	0.396	0.00	-0.14%	0.07%
Max		0.400	0.398	0.00	0.08%	0.24%
Average		0.397	0.396	0.00	-0.18%	0.11%
Min		0.396	0.395	0.00	-0.45%	0.00%
Std Dev		0.001	0.001	0.00	0.18%	0.08%



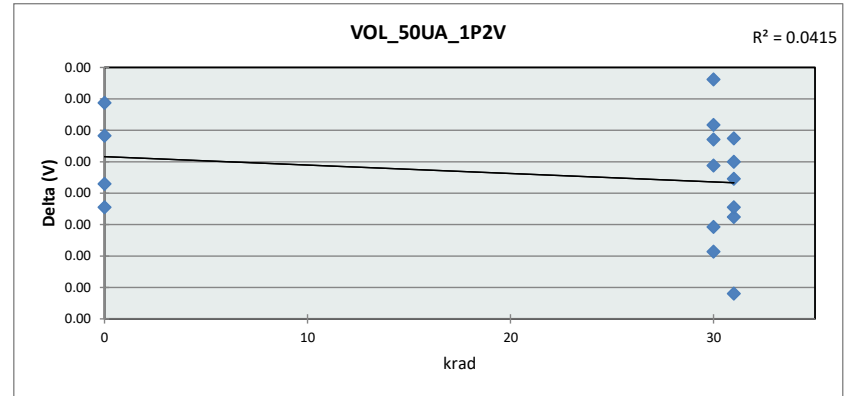
VOL_24MA_5P5V			
Units		V	
Max Limit		0.75	
Min Limit		-0.001	
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.396	0.395	0.396
Average	0.396	0.396	0.397
Max	0.397	0.398	0.398
UL	0.750	0.750	0.750



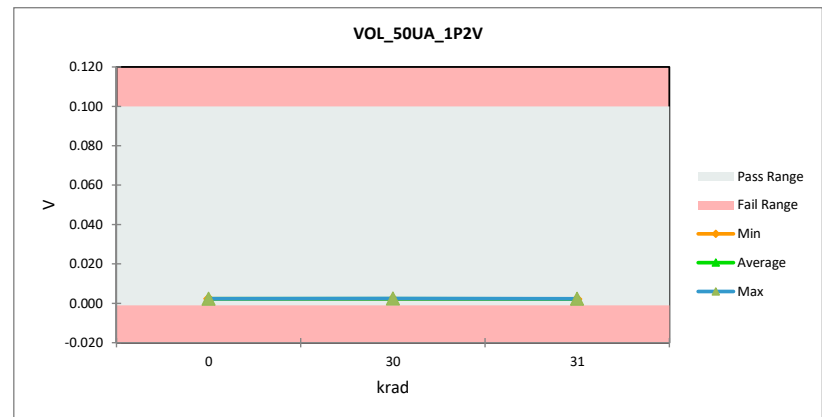
TID Report

SN54SC8T9541-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	-1.52%	0.04%
0	2	0.002	0.002	0.00	-3.02%	0.07%
0	3	0.002	0.002	0.00	1.80%	0.04%
0	4	0.002	0.002	0.00	4.25%	0.09%
30	5	0.002	0.002	0.00	2.47%	0.06%
30	6	0.002	0.002	0.00	5.85%	0.13%
30	7	0.002	0.002	0.00	-4.38%	0.10%
30	8	0.002	0.002	0.00	-6.09%	0.14%
30	9	0.002	0.002	0.00	-0.26%	0.01%
30	10	0.002	0.002	0.00	1.54%	0.04%
31	5a	0.002	0.002	0.00	-3.72%	0.09%
31	6a	0.002	0.002	0.00	1.66%	0.04%
31	7a	0.002	0.002	0.00	-3.06%	0.07%
31	8a	0.002	0.002	0.00	-8.92%	0.21%
31	9a	0.002	0.002	0.00	0.00%	0.00%
31	10a	0.002	0.002	0.00	-1.18%	0.03%
Max	0.002	0.002	0.00	5.85%	0.21%	
Average	0.002	0.002	0.00	-0.91%	0.07%	
Min	0.002	0.002	0.00	-8.92%	0.00%	
Std Dev	0.000	0.000	0.00	3.88%	0.05%	



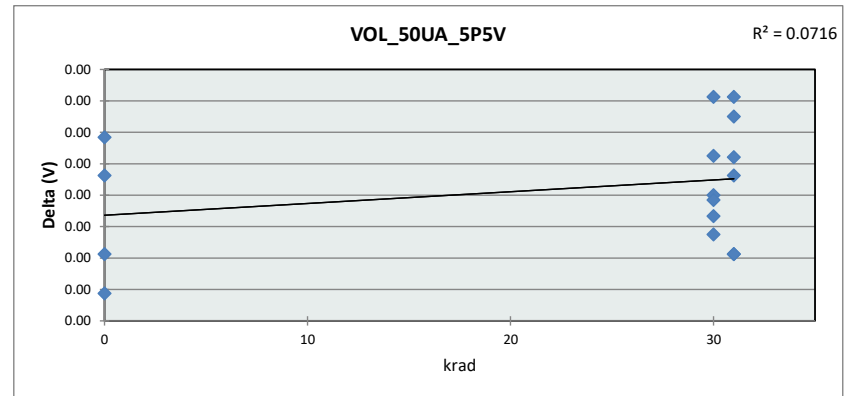
VOL_50UA_1P2V			
Units	V		
Max Limit	0.1		
Min Limit	-0.001		
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.002	0.002	0.002
Average	0.002	0.002	0.002
Max	0.002	0.002	0.002
UL	0.100	0.100	0.100



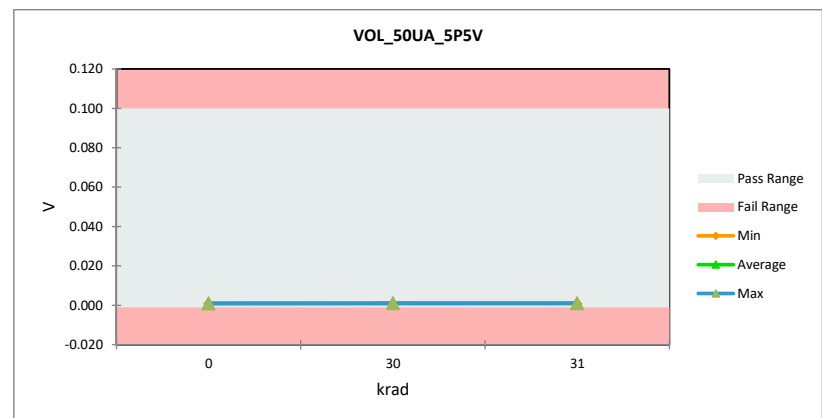
TID Report

SN54SC8T9541-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	9.85%	0.09%
0	2	0.001	0.001	0.00	3.35%	0.03%
0	3	0.001	0.001	0.00	-15.71%	0.15%
0	4	0.001	0.001	0.00	-8.87%	0.09%
30	5	0.001	0.001	0.00	0.00%	0.00%
30	6	0.001	0.001	0.00	-0.88%	0.01%
30	7	0.001	0.001	0.00	-6.29%	0.06%
30	8	0.001	0.001	0.00	6.94%	0.06%
30	9	0.001	0.001	0.00	16.77%	0.15%
30	10	0.001	0.001	0.00	-3.59%	0.03%
31	5a	0.001	0.001	0.00	-9.43%	0.09%
31	6a	0.001	0.001	0.00	13.88%	0.12%
31	7a	0.001	0.001	0.00	-9.43%	0.09%
31	8a	0.001	0.001	0.00	3.47%	0.03%
31	9a	0.001	0.001	0.00	6.47%	0.06%
31	10a	0.001	0.001	0.00	16.77%	0.15%
Max	0.001	0.001	0.00	0.00	16.77%	0.15%
Average	0.001	0.001	0.00	0.00	1.46%	0.08%
Min	0.001	0.001	0.00	0.00	-15.71%	0.00%
Std Dev	0.000	0.000	0.00	0.00	9.96%	0.05%



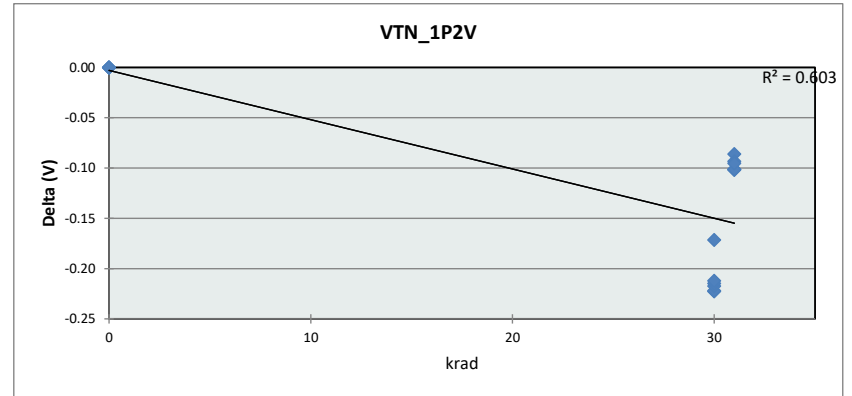
VOL_50UA_5P5V			
Units	V		
Max Limit	0.1		
Min Limit	-0.001		
krad	0	30	31
LL	-0.001	-0.001	-0.001
Min	0.001	0.001	0.001
Average	0.001	0.001	0.001
Max	0.001	0.001	0.001
UL	0.100	0.100	0.100



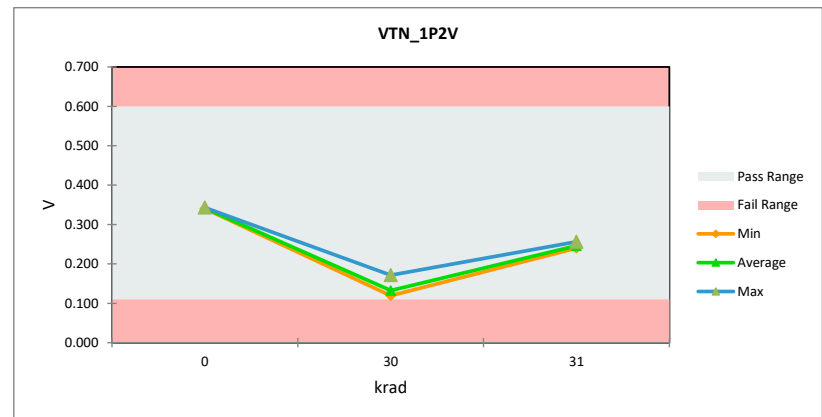
TID Report

SN54SC8T9541-SEP

VTN_1P2V						
Units	V					
Max Limit	0.6					
Min Limit	0.11					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.342	0.342	0.00	0.00%	0.00%
0	2	0.343	0.343	0.00	0.00%	0.00%
0	3	0.340	0.340	0.00	0.00%	0.00%
0	4	0.340	0.340	0.00	0.00%	0.00%
30	5	0.342	0.119	-0.22	-65.12%	45.47%
30	6	0.341	0.119	-0.22	-65.05%	45.34%
30	7	0.342	0.125	-0.22	-63.56%	44.38%
30	8	0.342	0.127	-0.21	-62.78%	43.84%
30	9	0.345	0.133	-0.21	-61.52%	43.29%
30	10	0.343	0.171	-0.17	-50.01%	34.99%
31	5a	0.342	0.256	-0.09	-25.15%	17.56%
31	6a	0.341	0.240	-0.10	-29.69%	20.69%
31	7a	0.342	0.240	-0.10	-29.83%	20.83%
31	8a	0.342	0.241	-0.10	-29.64%	20.69%
31	9a	0.345	0.251	-0.09	-27.08%	19.06%
31	10a	0.343	0.247	-0.10	-27.83%	19.47%
	Max	0.345	0.343	0.00	0.00%	45.47%
	Average	0.342	0.227	-0.12	-33.58%	23.48%
	Min	0.340	0.119	-0.22	-65.12%	0.00%
	Std Dev	0.001	0.086	0.08	25.15%	17.58%



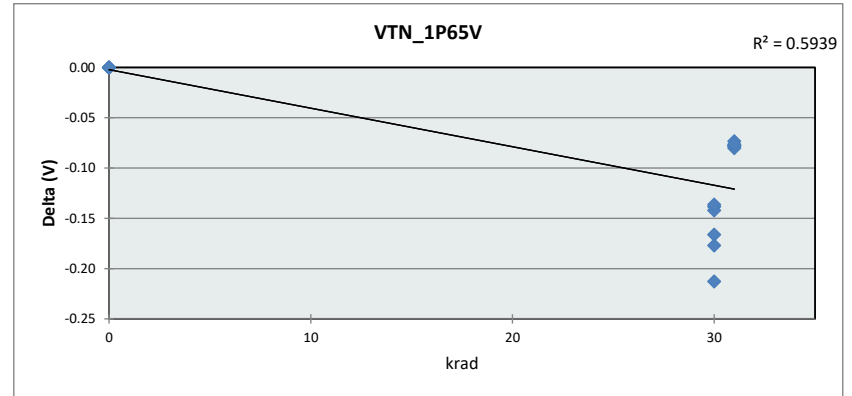
VTN_1P2V			
Units	V		
Max Limit	0.6		
Min Limit	0.11		
krad	0	30	31
LL	0.110	0.110	0.110
Min	0.340	0.119	0.240
Average	0.341	0.132	0.246
Max	0.343	0.171	0.256
UL	0.600	0.600	0.600



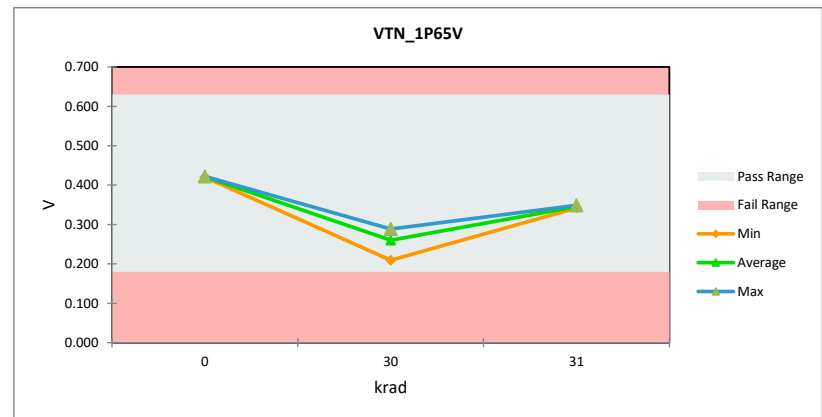
TID Report

SN54SC8T9541-SEP

VTN_1P65V						
Units	V					
Max Limit	0.63					
Min Limit	0.18					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.422	0.422	0.00	0.00%	0.00%
0	2	0.422	0.422	0.00	0.00%	0.00%
0	3	0.420	0.420	0.00	0.00%	0.00%
0	4	0.420	0.420	0.00	0.00%	0.00%
30	5	0.422	0.256	-0.17	-39.42%	36.97%
30	6	0.421	0.244	-0.18	-42.03%	39.34%
30	7	0.422	0.284	-0.14	-32.77%	30.74%
30	8	0.422	0.280	-0.14	-33.69%	31.60%
30	9	0.425	0.289	-0.14	-32.09%	30.31%
30	10	0.422	0.209	-0.21	-50.41%	47.29%
31	5a	0.422	0.349	-0.07	-17.42%	16.34%
31	6a	0.421	0.343	-0.08	-18.60%	17.41%
31	7a	0.422	0.344	-0.08	-18.56%	17.41%
31	8a	0.422	0.342	-0.08	-19.02%	17.84%
31	9a	0.425	0.348	-0.08	-18.21%	17.20%
31	10a	0.422	0.346	-0.08	-18.10%	16.98%
Max	0.425	0.422	0.00	0.00%	47.29%	
Average	0.422	0.332	-0.09	-21.27%	19.96%	
Min	0.420	0.209	-0.21	-50.41%	0.00%	
Std Dev	0.001	0.068	0.07	16.08%	15.08%	



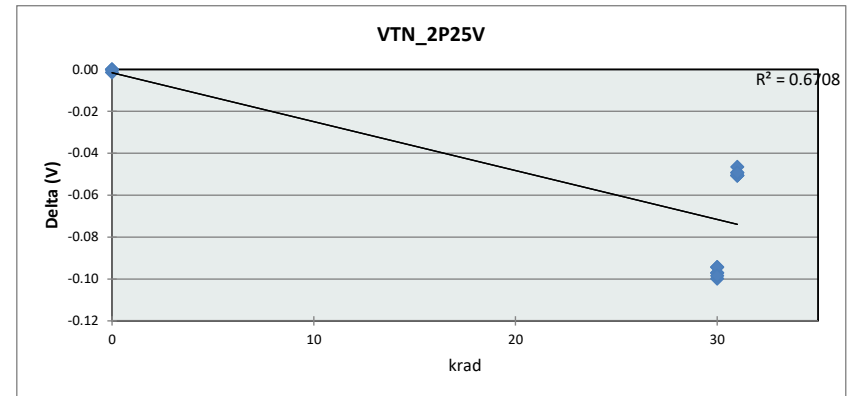
VTN_1P65V			
Units	V		
Max Limit	0.63		
Min Limit	0.18		
krad	0	30	31
LL	0.180	0.180	0.180
Min	0.420	0.209	0.342
Average	0.421	0.260	0.345
Max	0.422	0.289	0.349
UL	0.630	0.630	0.630



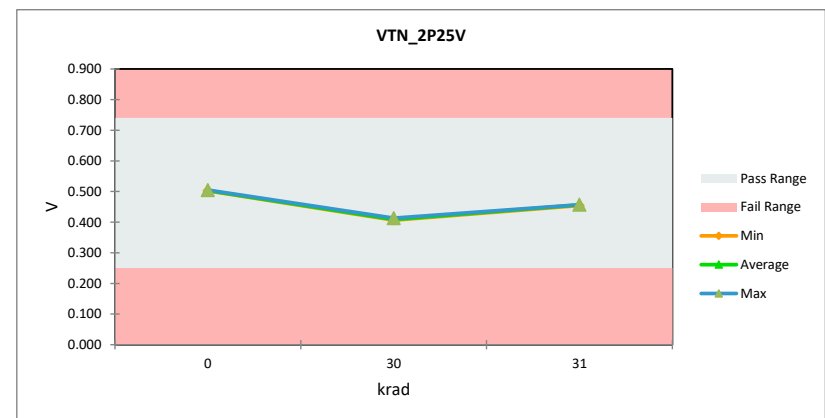
TID Report

SN54SC8T9541-SEP

VTN_2P25V						
Units	V					
Max Limit	0.74					
Min Limit	0.25					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.505	0.505	0.00	0.00%	0.00%
0	2	0.505	0.503	0.00	-0.27%	0.28%
0	3	0.502	0.502	0.00	0.00%	0.00%
0	4	0.502	0.502	0.00	0.00%	0.00%
30	5	0.505	0.408	-0.10	-19.23%	19.82%
30	6	0.503	0.409	-0.09	-18.74%	19.26%
30	7	0.505	0.408	-0.10	-19.23%	19.82%
30	8	0.506	0.406	-0.10	-19.72%	20.37%
30	9	0.508	0.413	-0.09	-18.59%	19.26%
30	10	0.506	0.408	-0.10	-19.45%	20.10%
31	5a	0.505	0.456	-0.05	-9.75%	10.05%
31	6a	0.503	0.457	-0.05	-9.24%	9.49%
31	7a	0.505	0.454	-0.05	-10.02%	10.33%
31	8a	0.506	0.456	-0.05	-10.00%	10.33%
31	9a	0.508	0.457	-0.05	-9.97%	10.33%
31	10a	0.506	0.457	-0.05	-9.73%	10.05%
Max	0.508	0.505	0.00	0.00%	20.37%	
Average	0.505	0.450	-0.05	-10.87%	11.22%	
Min	0.502	0.406	-0.10	-19.72%	0.00%	
Std Dev	0.002	0.038	0.04	7.69%	7.94%	



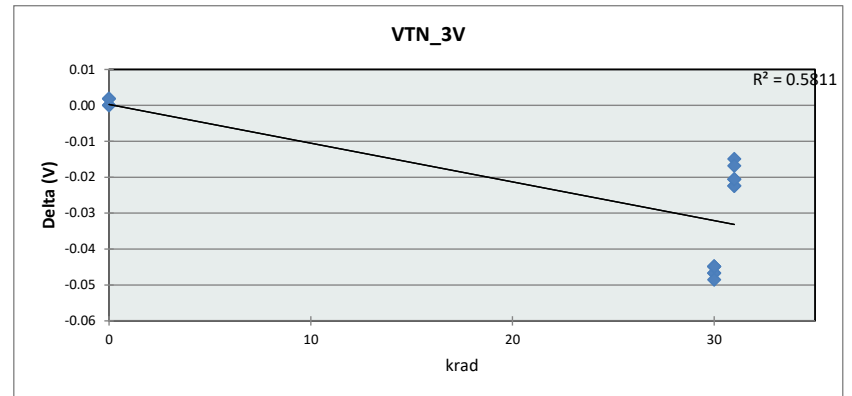
VTN_2P25V			
Units	V		
Max Limit	0.74		
Min Limit	0.25		
krad	0	30	31
LL	0.250	0.250	0.250
Min	0.502	0.406	0.454
Average	0.503	0.409	0.456
Max	0.505	0.413	0.457
UL	0.740	0.740	0.740



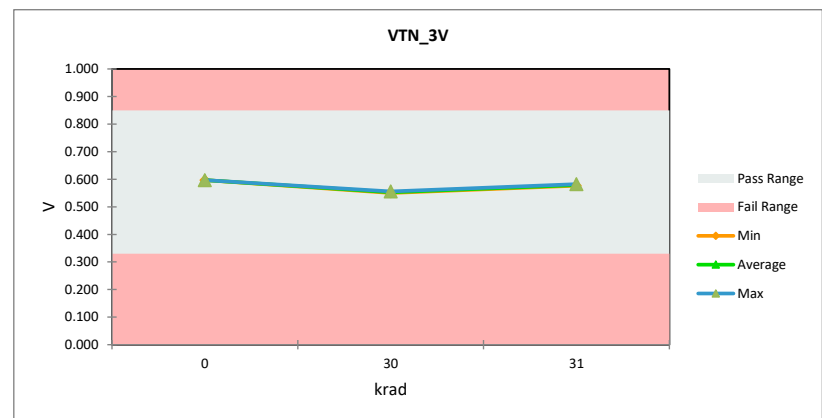
TID Report

SN54SC8T9541-SEP

		VTN_3V				
Units		V				
Max Limit		0.85				
Min Limit		0.33				
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.597	0.597	0.00	0.00%	0.00%
0	2	0.597	0.597	0.00	0.00%	0.00%
0	3	0.595	0.597	0.00	0.31%	0.36%
0	4	0.595	0.597	0.00	0.31%	0.36%
30	5	0.599	0.552	-0.05	-7.80%	8.98%
30	6	0.597	0.552	-0.04	-7.51%	8.62%
30	7	0.599	0.552	-0.05	-7.80%	8.98%
30	8	0.599	0.550	-0.05	-8.11%	9.34%
30	9	0.601	0.556	-0.04	-7.46%	8.62%
30	10	0.599	0.554	-0.04	-7.49%	8.62%
31	5a	0.599	0.578	-0.02	-3.43%	3.95%
31	6a	0.597	0.582	-0.01	-2.50%	2.87%
31	7a	0.599	0.576	-0.02	-3.74%	4.31%
31	8a	0.599	0.576	-0.02	-3.74%	4.31%
31	9a	0.601	0.580	-0.02	-3.42%	3.95%
31	10a	0.599	0.582	-0.02	-2.81%	3.23%
Max		0.601	0.597	0.00	0.31%	9.34%
Average		0.598	0.574	-0.02	-4.07%	4.78%
Min		0.595	0.550	-0.04	-8.11%	0.00%
Std Dev		0.002	0.018	0.02	3.22%	3.59%



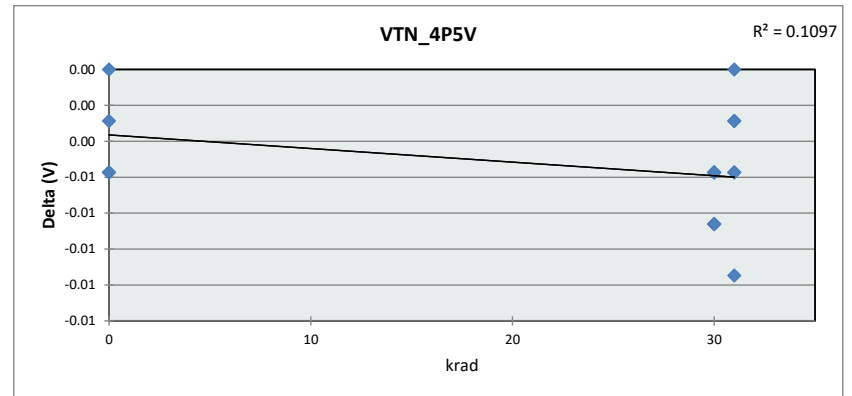
		VTN_3V		
Units		V		
Max Limit		0.85		
Min Limit		0.33		
krad		0	30	31
LL		0.330	0.330	0.330
Min		0.597	0.550	0.576
Average		0.597	0.553	0.579
Max		0.597	0.556	0.582
UL		0.850	0.850	0.850



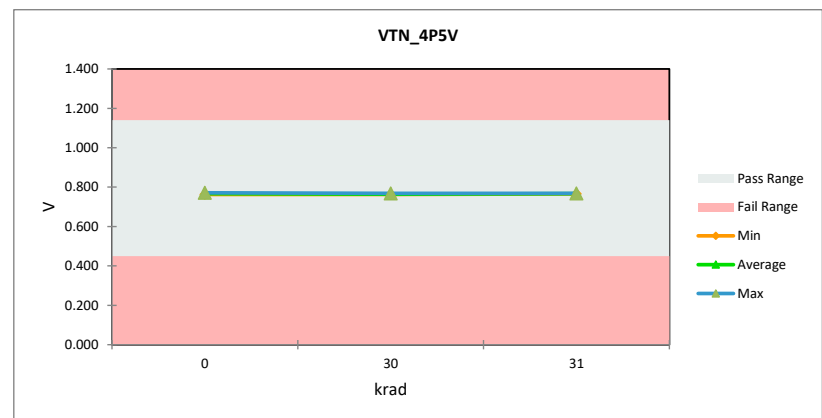
TID Report

SN54SC8T9541-SEP

VTN_4P5V						
Units	V					
Max Limit	1.14					
Min Limit	0.45					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.777	0.771	-0.01	-0.74%	0.83%
0	2	0.768	0.763	-0.01	-0.75%	0.83%
0	3	0.768	0.766	0.00	-0.37%	0.42%
0	4	0.768	0.768	0.00	0.00%	0.00%
30	5	0.768	0.763	-0.01	-0.75%	0.83%
30	6	0.777	0.768	-0.01	-1.11%	1.25%
30	7	0.771	0.763	-0.01	-1.12%	1.25%
30	8	0.771	0.766	-0.01	-0.74%	0.83%
30	9	0.771	0.763	-0.01	-1.12%	1.25%
30	10	0.768	0.763	-0.01	-0.75%	0.83%
31	5a	0.768	0.766	0.00	-0.37%	0.42%
31	6a	0.777	0.766	-0.01	-1.48%	1.66%
31	7a	0.771	0.766	-0.01	-0.74%	0.83%
31	8a	0.771	0.766	-0.01	-0.74%	0.83%
31	9a	0.771	0.768	0.00	-0.37%	0.42%
31	10a	0.768	0.768	0.00	0.00%	0.00%
Max	0.777	0.771	-0.01	0.00%	1.66%	
Average	0.771	0.766	-0.01	-0.70%	0.78%	
Min	0.768	0.763	-0.01	-1.48%	0.00%	
Std Dev	0.003	0.003	0.00	0.40%	0.45%	



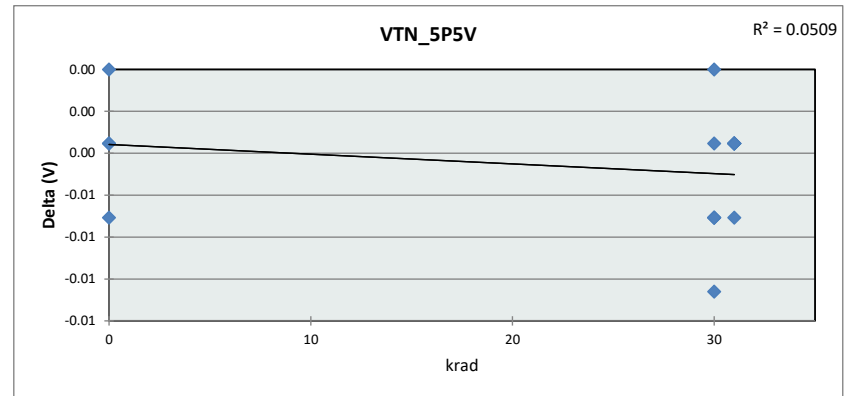
VTN_4P5V			
Units	V		
Max Limit	1.14		
Min Limit	0.45		
krad	0	30	31
LL	0.450	0.450	0.450
Min	0.763	0.763	0.766
Average	0.767	0.764	0.766
Max	0.771	0.768	0.768
UL	1.140	1.140	1.140



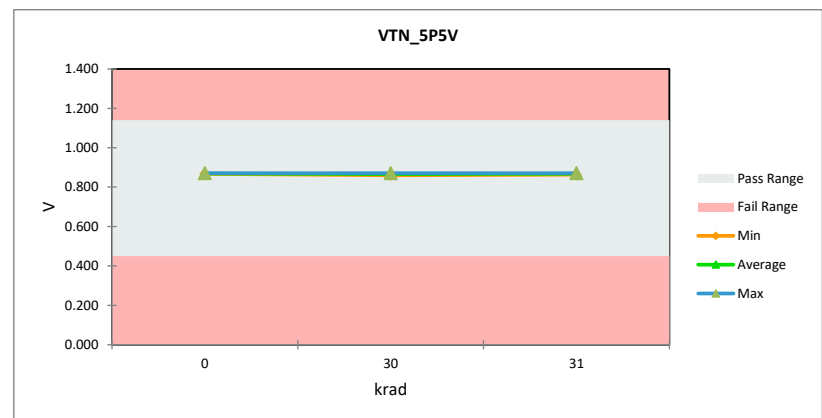
TID Report

SN54SC8T9541-SEP

VTN_5P5V						
Units		V				
Max Limit		1.14				
Min Limit		0.45				
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.871	0.867	0.00	-0.41%	0.51%
0	2	0.878	0.871	-0.01	-0.81%	1.02%
0	3	0.871	0.871	0.00	0.00%	0.00%
0	4	0.871	0.867	0.00	-0.41%	0.51%
30	5	0.871	0.864	-0.01	-0.81%	1.02%
30	6	0.871	0.864	-0.01	-0.81%	1.02%
30	7	0.871	0.871	0.00	0.00%	0.00%
30	8	0.871	0.860	-0.01	-1.22%	1.54%
30	9	0.874	0.867	-0.01	-0.81%	1.02%
30	10	0.874	0.871	0.00	-0.40%	0.51%
31	5a	0.871	0.867	0.00	-0.41%	0.51%
31	6a	0.871	0.867	0.00	-0.41%	0.51%
31	7a	0.871	0.867	0.00	-0.41%	0.51%
31	8a	0.871	0.864	-0.01	-0.81%	1.02%
31	9a	0.874	0.871	0.00	-0.40%	0.51%
31	10a	0.874	0.871	0.00	-0.40%	0.51%
Max		0.878	0.871	-0.01	0.00%	1.54%
Average		0.872	0.867	0.00	-0.53%	0.67%
Min		0.871	0.860	-0.01	-1.22%	0.00%
Std Dev		0.002	0.003	0.00	0.32%	0.41%



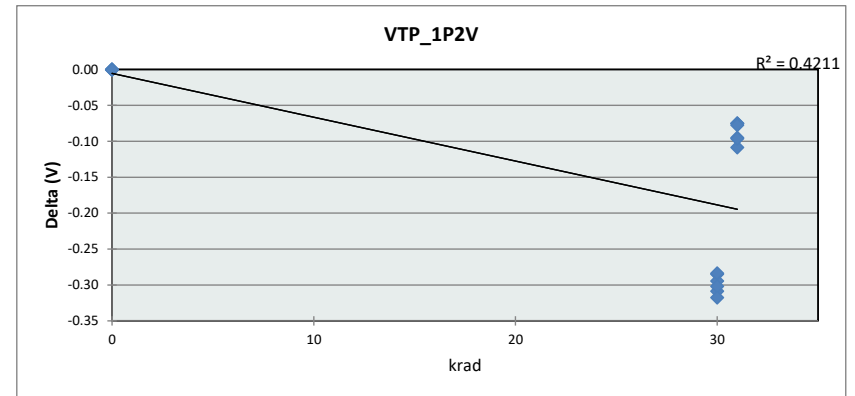
VTN_5P5V			
Units		V	
Max Limit		1.14	
Min Limit		0.45	
krad	0	30	31
LL	0.450	0.450	0.450
Min	0.867	0.860	0.864
Average	0.869	0.866	0.868
Max	0.871	0.871	0.871
UL	1.140	1.140	1.140



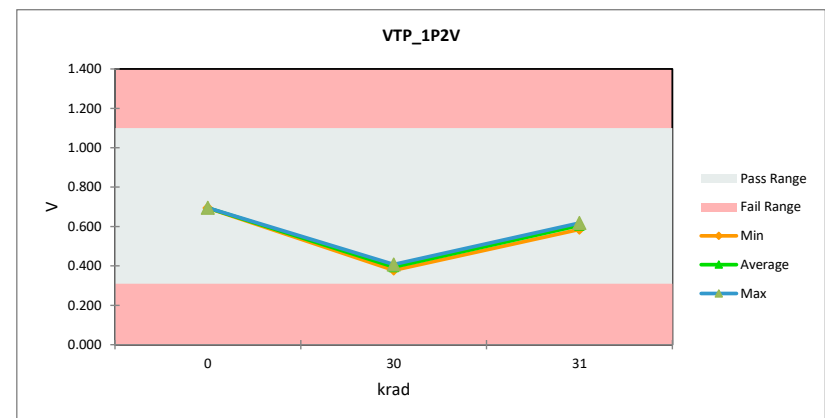
TID Report

SN54SC8T9541-SEP

VTP_1P2V						
Units	V					
Max Limit	1.1					
Min Limit	0.31					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.694	0.694	0.00	0.00%	0.00%
0	2	0.694	0.694	0.00	0.00%	0.00%
0	3	0.694	0.694	0.00	0.00%	0.00%
0	4	0.696	0.695	0.00	-0.09%	0.08%
30	5	0.692	0.407	-0.29	-41.16%	36.08%
30	6	0.694	0.385	-0.31	-44.50%	39.07%
30	7	0.694	0.399	-0.29	-42.49%	37.31%
30	8	0.689	0.405	-0.28	-41.20%	35.93%
30	9	0.694	0.392	-0.30	-43.50%	38.23%
30	10	0.696	0.378	-0.32	-45.69%	40.22%
31	5a	0.692	0.617	-0.08	-10.86%	9.52%
31	6a	0.694	0.598	-0.10	-13.72%	12.05%
31	7a	0.694	0.585	-0.11	-15.65%	13.74%
31	8a	0.689	0.614	-0.08	-10.92%	9.52%
31	9a	0.694	0.617	-0.08	-11.18%	9.83%
31	10a	0.696	0.599	-0.10	-13.86%	12.21%
Max		0.696	0.695	0.00	0.00%	40.22%
Average		0.693	0.548	-0.15	-20.93%	18.36%
Min		0.689	0.378	-0.31	-45.69%	0.00%
Std Dev		0.002	0.129	0.13	18.51%	16.24%



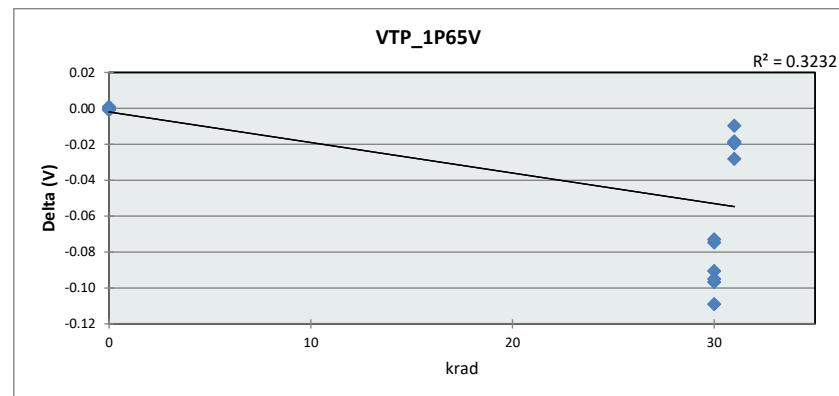
VTP_1P2V			
Units	V		
Max Limit	1.1		
Min Limit	0.31		
krad	0	30	31
LL	0.310	0.310	0.310
Min	0.694	0.378	0.585
Average	0.694	0.394	0.605
Max	0.695	0.407	0.617
UL	1.100	1.100	1.100



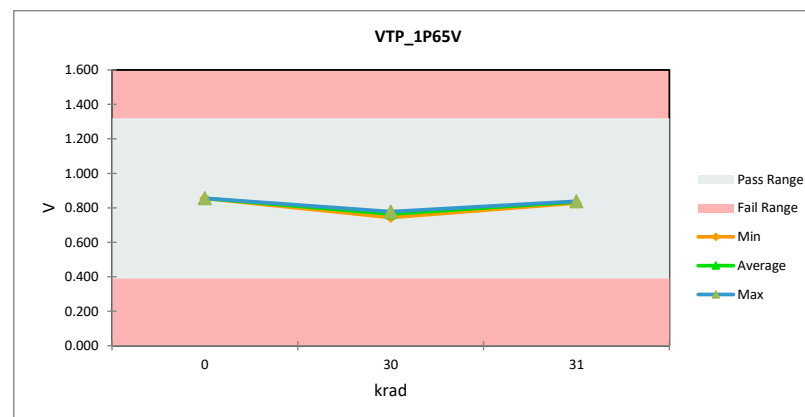
TID Report

SN54SC8T9541-SEP

VTP_1P65V						
Units	V					
Max Limit	1.32					
Min Limit	0.39					
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	0.855	0.855	0.00	0.00%	0.00%
0	2	0.854	0.854	0.00	0.10%	0.09%
0	3	0.856	0.855	0.00	-0.10%	0.09%
0	4	0.856	0.855	0.00	-0.10%	0.09%
30	5	0.853	0.778	-0.07	-8.77%	8.04%
30	6	0.853	0.744	-0.11	-12.79%	11.72%
30	7	0.855	0.759	-0.10	-11.31%	10.40%
30	8	0.848	0.775	-0.07	-8.60%	7.85%
30	9	0.855	0.765	-0.09	-10.59%	9.74%
30	10	0.857	0.762	-0.09	-11.08%	10.21%
31	5a	0.853	0.833	-0.02	-2.27%	2.08%
31	6a	0.853	0.833	-0.02	-2.27%	2.08%
31	7a	0.855	0.827	-0.03	-3.29%	3.03%
31	8a	0.848	0.839	-0.01	-1.14%	1.04%
31	9a	0.855	0.837	-0.02	-2.16%	1.99%
31	10a	0.857	0.838	-0.02	-2.26%	2.08%
Max		0.857	0.855	0.00	0.10%	11.72%
Average		0.854	0.813	-0.04	-4.79%	4.41%
Min		0.848	0.744	-0.10	-12.79%	0.00%
Std Dev		0.003	0.041	0.04	4.78%	4.38%



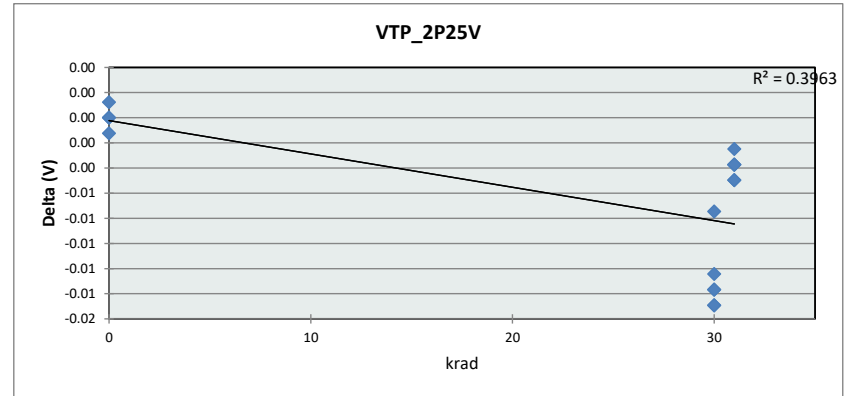
VTP_1P65V			
Units	V		
Max Limit	1.32		
Min Limit	0.39		
krad	0	30	31
LL	0.390	0.390	0.390
Min	0.854	0.744	0.827
Average	0.855	0.764	0.835
Max	0.855	0.778	0.839
UL	1.320	1.320	1.320



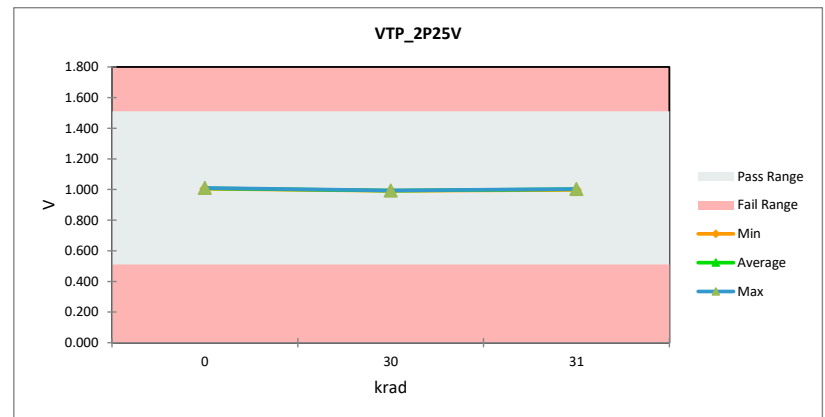
TID Report

SN54SC8T9541-SEP

VTP_2P25V						
Units		V				
Max Limit		1.51				
Min Limit		0.51				
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.009	1.009	0.00	0.00%	0.00%
0	2	1.005	1.005	0.00	0.00%	0.00%
0	3	1.009	1.010	0.00	0.12%	0.12%
0	4	1.008	1.006	0.00	-0.12%	0.12%
30	5	1.005	0.991	-0.01	-1.36%	1.37%
30	6	1.004	0.991	-0.01	-1.24%	1.24%
30	7	1.008	0.993	-0.01	-1.48%	1.49%
30	8	1.001	0.994	-0.01	-0.74%	0.75%
30	9	1.006	0.993	-0.01	-1.36%	1.37%
30	10	1.009	0.994	-0.01	-1.48%	1.49%
31	5a	1.005	1.000	0.00	-0.49%	0.50%
31	6a	1.004	1.001	0.00	-0.25%	0.25%
31	7a	1.008	1.004	0.00	-0.37%	0.37%
31	8a	1.001	0.998	0.00	-0.37%	0.37%
31	9a	1.006	1.003	0.00	-0.37%	0.37%
31	10a	1.009	1.004	0.00	-0.49%	0.50%
Max		1.009	1.010	0.00	0.12%	1.49%
Average		1.006	1.000	-0.01	-0.63%	0.64%
Min		1.001	0.991	-0.01	-1.48%	0.00%
Std Dev		0.003	0.006	0.00	0.57%	0.56%



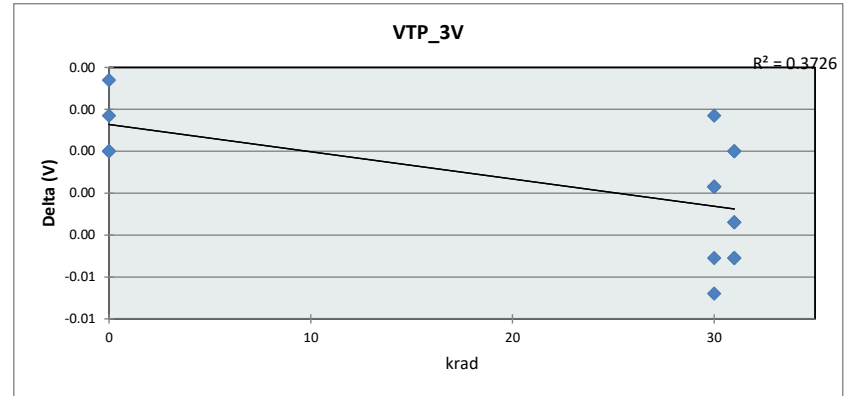
VTP_2P25V			
Units		V	
Max Limit		1.51	
Min Limit		0.51	
krad	0	30	31
LL	0.510	0.510	0.510
Min	1.005	0.991	0.998
Average	1.008	0.993	1.002
Max	1.010	0.994	1.004
UL	1.510	1.510	1.510



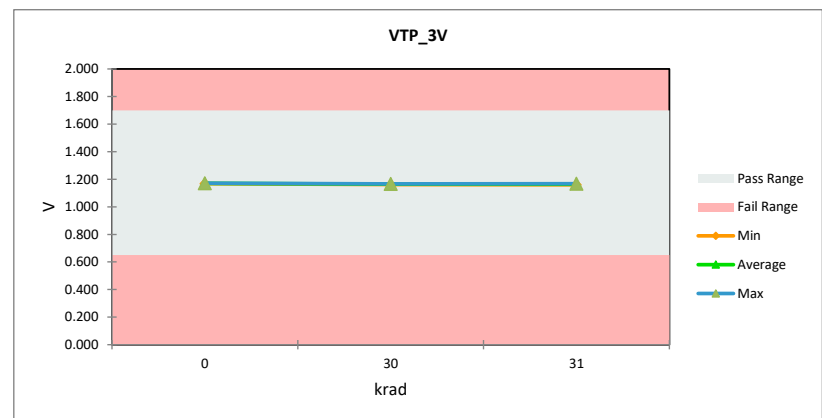
TID Report

SN54SC8T9541-SEP

		VTP_3V				
Units		V				
Max Limit		1.7				
Min Limit		0.65				
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.170	1.170	0.00	0.00%	0.00%
0	2	1.166	1.168	0.00	0.15%	0.16%
0	3	1.171	1.171	0.00	0.00%	0.00%
0	4	1.168	1.171	0.00	0.29%	0.32%
30	5	1.168	1.166	0.00	-0.15%	0.16%
30	6	1.166	1.161	-0.01	-0.44%	0.49%
30	7	1.168	1.166	0.00	-0.15%	0.16%
30	8	1.163	1.161	0.00	-0.15%	0.16%
30	9	1.165	1.166	0.00	0.15%	0.16%
30	10	1.170	1.163	-0.01	-0.58%	0.65%
31	5a	1.168	1.163	-0.01	-0.44%	0.49%
31	6a	1.166	1.161	-0.01	-0.44%	0.49%
31	7a	1.168	1.168	0.00	0.00%	0.00%
31	8a	1.163	1.160	0.00	-0.29%	0.32%
31	9a	1.165	1.165	0.00	0.00%	0.00%
31	10a	1.170	1.166	0.00	-0.29%	0.32%
Max		1.171	1.171	0.00	0.29%	0.65%
Average		1.167	1.165	0.00	-0.15%	0.24%
Min		1.163	1.160	0.00	-0.58%	0.00%
Std Dev		0.002	0.004	0.00	0.25%	0.20%



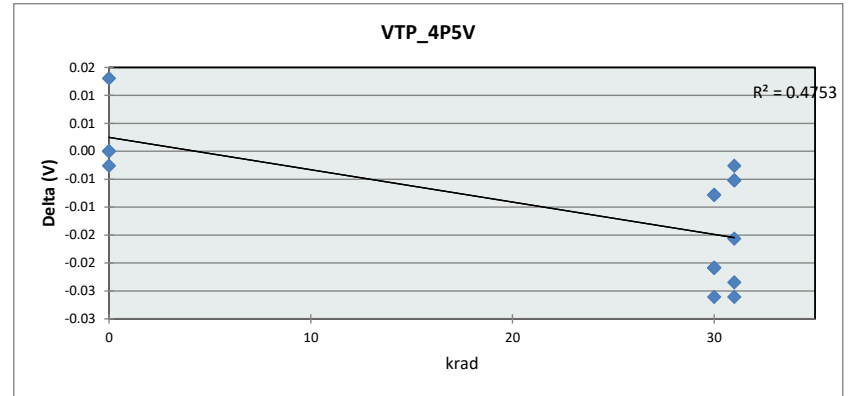
		VTP_3V		
Units		V		
Max Limit		1.7		
Min Limit		0.65		
krad		0	30	31
LL		0.650	0.650	0.650
Min		1.168	1.161	1.160
Average		1.170	1.164	1.164
Max		1.171	1.166	1.168
UL		1.700	1.700	1.700



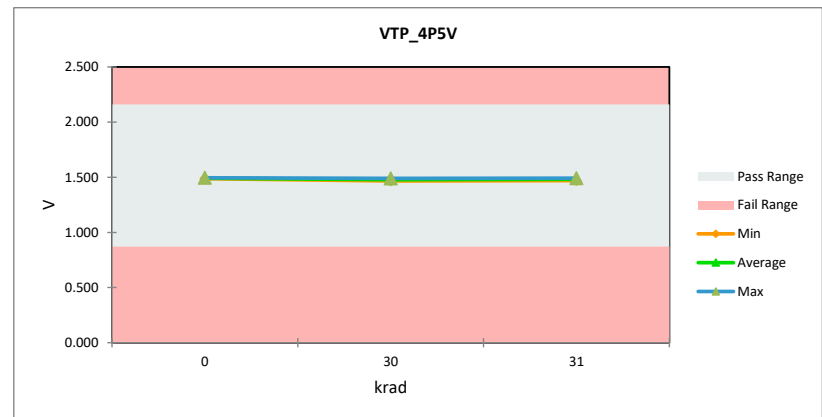
TID Report

SN54SC8T9541-SEP

VTP_4P5V						
Units		V				
Max Limit		2.16				
Min Limit		0.87				
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.482	1.495	0.01	0.88%	1.01%
0	2	1.487	1.487	0.00	0.00%	0.00%
0	3	1.490	1.490	0.00	0.00%	0.00%
0	4	1.495	1.492	0.00	-0.17%	0.20%
30	5	1.495	1.474	-0.02	-1.40%	1.62%
30	6	1.492	1.466	-0.03	-1.75%	2.02%
30	7	1.495	1.487	-0.01	-0.52%	0.61%
30	8	1.492	1.472	-0.02	-1.40%	1.62%
30	9	1.498	1.477	-0.02	-1.39%	1.62%
30	10	1.498	1.490	-0.01	-0.52%	0.61%
31	5a	1.495	1.490	-0.01	-0.35%	0.40%
31	6a	1.492	1.477	-0.02	-1.05%	1.21%
31	7a	1.495	1.492	0.00	-0.17%	0.20%
31	8a	1.492	1.469	-0.02	-1.57%	1.82%
31	9a	1.498	1.492	-0.01	-0.35%	0.40%
31	10a	1.498	1.472	-0.03	-1.74%	2.02%
Max		1.498	1.495	0.00	0.88%	2.02%
Average		1.493	1.483	-0.01	-0.72%	0.96%
Min		1.482	1.466	-0.02	-1.75%	0.00%
Std Dev		0.004	0.010	0.01	0.77%	0.74%



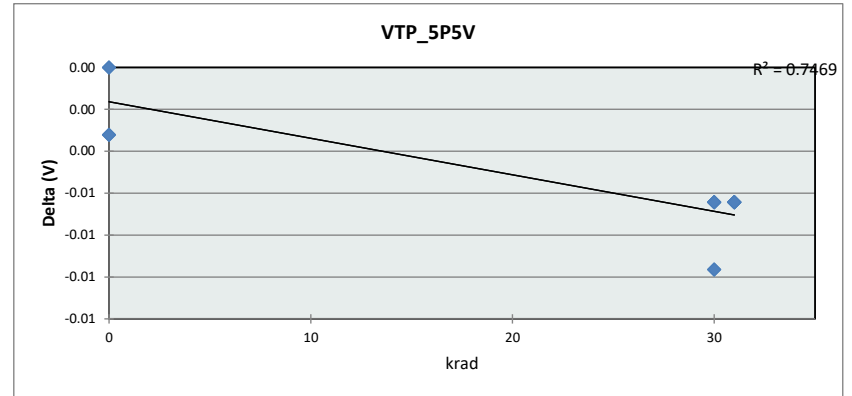
VTP_4P5V			
Units		V	
Max Limit		2.16	
Min Limit		0.87	
krad	0	30	31
LL	0.870	0.870	0.870
Min	1.487	1.466	1.469
Average	1.491	1.478	1.482
Max	1.495	1.490	1.492
UL	2.160	2.160	2.160



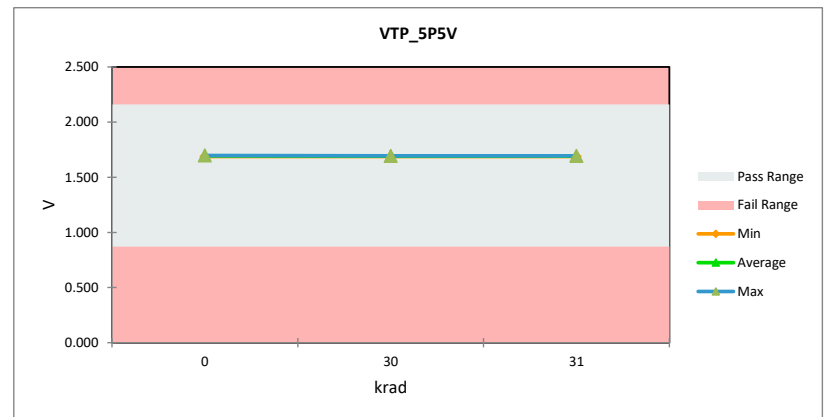
TID Report

SN54SC8T9541-SEP

VTP_5P5V						
Units		V				
Max Limit		2.16				
Min Limit		0.87				
krad	Serial #	PreTestHDR	PostTestHDR	Delta	Delta %	% of Limit Range
0	1	1.701	1.697	0.00	-0.19%	0.25%
0	2	1.688	1.688	0.00	0.00%	0.00%
0	3	1.694	1.694	0.00	0.00%	0.00%
0	4	1.701	1.697	0.00	-0.19%	0.25%
30	5	1.697	1.691	-0.01	-0.38%	0.50%
30	6	1.694	1.688	-0.01	-0.38%	0.50%
30	7	1.701	1.691	-0.01	-0.57%	0.75%
30	8	1.697	1.688	-0.01	-0.57%	0.75%
30	9	1.701	1.694	-0.01	-0.38%	0.50%
30	10	1.701	1.694	-0.01	-0.38%	0.50%
31	5a	1.697	1.691	-0.01	-0.38%	0.50%
31	6a	1.694	1.688	-0.01	-0.38%	0.50%
31	7a	1.701	1.694	-0.01	-0.38%	0.50%
31	8a	1.697	1.691	-0.01	-0.38%	0.50%
31	9a	1.701	1.694	-0.01	-0.38%	0.50%
31	10a	1.701	1.694	-0.01	-0.38%	0.50%
Max		1.701	1.697	0.00	0.00%	0.75%
Average		1.698	1.692	-0.01	-0.33%	0.44%
Min		1.688	1.688	0.00	-0.57%	0.00%
Std Dev		0.004	0.003	0.00	0.16%	0.21%



VTP_5P5V			
Units		V	
Max Limit		2.16	
Min Limit		0.87	
krad	0	30	31
LL	0.870	0.870	0.870
Min	1.688	1.688	1.688
Average	1.694	1.691	1.692
Max	1.697	1.694	1.694
UL	2.160	2.160	2.160



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