



ABSTRACT

This report discusses the total ionizing dose (TID) parametric results for the Texas Instruments TPS71301-SP, 3V to 6.3V input, 400mA, -6V to -0.6V radiation hardened switched capacitor voltage inverter with integrated low dropout regulator. The study was done to determine the TID effects under high dose rate (HDR) up to 100krad(Si). The results show that all samples passed within the specified limits up to 100krad(Si).

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1 Device Information

1.1 Product Description

The TPS7H1301-SP is a charge pump positive-to-negative voltage inverters with an integrated negative low dropout regulator (LDO). Both devices accept a positive input supply voltage range of 3V to 6.3V and deliver up to 400mA of output current, with integrated enable and power-good functionality.

The TPS7H1301 features a 500kHz (typical) charge pump switching frequency and provides adjustable output voltage regulation. Its STAB pin enables direct access to the negative LDO error amplifier for external compensation, offering design flexibility for optimized transient response.

The TPS7H1301-SP is packaged in a 14-pin HBL ceramic flat package. A standard microcircuit drawing (SMD) is 5962R2421501VXC.

1.2 Device Details

[Table 1-1](#) lists the device information used in this TID HDR characterization.

Table 1-1. Device and Exposure Details

TID Exposure Details	
TI Device	TPS7H1301-SP
TI Part Name	5962R2421501VXC
Package	14-pin HBL (CFP)
Technology	LBC7
Quantity Tested	30
Lot Accept/Reject	Passed up to 100krad(Si)
HDR Radiation Facility	Texas Instruments, Dallas, TX
HDR Dose Level	30krad(Si), 50krad(Si), and 100krad(Si)
HDR Dose Rate	153.2rads(Si)/s
HDR Radiation Source	Gammacell® (Hopewell, GR420) Co-60
Irradiation Temperature	Ambient room temperature

2 Total Dose Test Setup

2.1 Test Overview

The TPS7H1301-SP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, condition A was used. The product was irradiated up to the target radiation level, and then put through full electrical parametric testing on the production automated test equipment (ATE). All devices remained functional passing all parametric test limits.

2.2 Test Description and Facilities

The TPS7H1301-SP HDR exposure was performed on biased and unbiased devices in a Co-60 gamma cell at the TI facility in Dallas, Texas. The unattenuated dose rate of this cell is 153.2rads(Si)/s. After exposure, the devices were packed in dry ice (per MIL-STD-883 Method 1019.9 section 3.10) and full post-radiation electrical evaluation using Texas Instruments ATE was conducted. ATE test limits are set per datasheet 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 under HDR exposure were tested in two conditions (biased and unbiased) as described in the following sections.

2.3.1 Unbiased

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

2.3.2 Biased

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

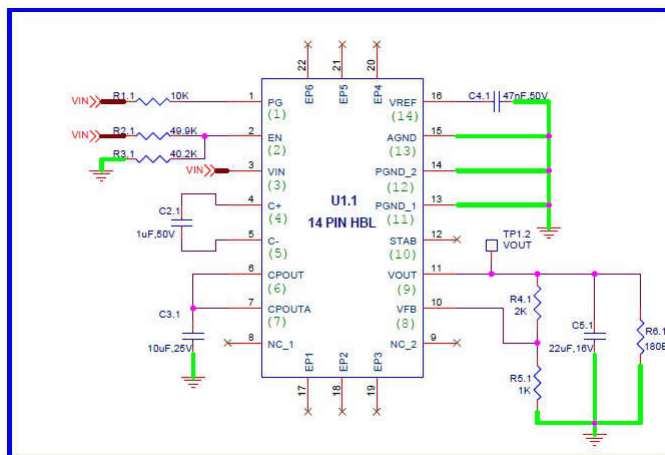


Figure 2-1. Bias Diagram Used in TID Exposure

2.4 Test Configuration and Condition

HDR devices were stressed at 30krad(Si), 50krad(Si) and 100krad(Si) for biased and unbiased conditions.

Table 2-1. HDR: 30krad(Si), 50krad (Si) and 100krad (Si) Biased Device Information

Total Samples: 15		
Exposure Levels		
30krad(Si)	50krad(Si)	100krad(Si)
30, 31, 32, 33, 34	45, 46, 47, 48, 49	55, 56, 57, 58, 59

Table 2-2. HDR: 30krad(Si), 50krad (Si) and 100krad (Si) Unbiased Device Information

Total Samples: 15		
Exposure Levels		
30krad(Si)	50krad(Si)	50krad(Si)
25,26, 27, 28, 29	40, 41, 42, 43, 44	50, 51, 52, 53, 54

3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the TPS7H1301-SP passes up to 100krad(Si) HDR TID irradiation. The drifts of the electrical parameters through HDR were within the datasheet limits.

Overall, the TPS7H1301-SP showed a strong degree of hardness to HDR TID irradiation up to 100krad(Si) for both biased and unbiased exposure conditions. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level for both biased and unbiased. The parameters that showed a greater degree of change between pre- and post-irradiation were still within the electrical performance characteristics specified in the datasheet electrical parameters. See [TPS7H130X-SP 3V to 6.3V Input, 400mA, -6V to -0.6V Radiation Hardened Switched Capacitor Voltage Inverter with Integrated Low Dropout Regulator](#) for the datasheet electrical parameters and associated tests.

See [Appendix A](#) for the HDR report up to 100krad(Si).

3.2 Specification Compliance Matrix

Over $3V \leq V_{IN} \leq 6.3V$, $V_{OUT(set)} = -1.8V$ (set via $R_{FB(TOP)} = 2k\Omega$, $R_{FB(BOT)} = 1k\Omega$), $I_{OUT} = 10mA$, $C_{REF} = 47nF$, over operating temperature range ($T_A = -55^\circ C$ to $125^\circ C$); unless otherwise specified in the Test Conditions column. Typical values are at $T_A = 25^\circ C$, unless otherwise noted; includes RLAT at $T_A = 25^\circ C$

PARAMETER		TEST CONDITIONS		MIN	TYP	MAX	UNIT	Test No
POWER SUPPLIES and CURRENTS								
V _{UVLOR}	Input supply UVLO rising			2.7			V	60.2
V _{UVLOF}	Input supply UVLO falling			2.53			V	60.3
V _{UVLO(HYS)}	Input supply UVLO Hysteresis			220			mV	60.4
I _Q	Quiescent Current	I = 0A, V _{EN} = 7V		15	45		mA	31.3, 31.5, 205.2, 205.4
I _{SHDN}	Shutdown Current	V _{EN} = 0V, I _{OUT} = 0A		0.8	1.5		mA	31.2, 31.4, 205.1, 205.3
I _{FB}	Feedback leakage current	V _{FB} = -0.6V		25	100		nA	31.1
ENABLE								
V _{EN(rising)}	Enable rising threshold (turn-on)			0.57	0.6	0.625	V	65.2, 65.6
V _{EN(falling)}	Enable falling threshold (turn-off)			0.445	0.5	0.555	V	65.3, 65.7
t _{EN(delay)}	EN propagation delay,	EN high to PG high at V _{IN} = 5V, V _{IN} = -1.8V		14	18		ms	65.4, 65.8
I _{EN(LKG)}	Enable leakage current	V _{EN} = 7V		25	330		nA	65.1, 65.5
POWER GOOD								
V _{PG(rise)}	Power good rising threshold as a percent of V _{OUT}	SR V _{OUT} = 10V/s		91.8%	94.8%	98.05%		71.3, 71.6
V _{PG(fall)}	Power good falling threshold as a percent of V _{OUT}	SR V _{OUT} = 10V/s		86.25%	90%	94.1%		71.4, 71.7
V _{PG(OL)}	Power good output low	I _{PG(SINK)} = 2mA		90	190		mV	70.3, 70.4
V _{IN(MIN_PG)}	Minimum V _{IN} for valid PG (V _{PG} < 0.5V)	I _{PG(sink)} = 0.5mA		0.8	1		V	71.1, 71.2,
I _{PG(LKG)}	Power good leakage	V _{PG} = 7V, V _{FB} = -0.6V		0.05	2		μA	70.1, 70.2
CHARGE PUMP								
R _{DISCHARGE}	C _{POUT} discharge resistance	C _{CPOUT} = 10μF	V _{CPOUT} = -0.3V	75			Ω	75.2, 75.4
t _{DISCHARGE}	C _{POUT} discharge time (C _{POUT} > -0.3V) to GND			6.5			ms	75.1, 75.3
f _{SW}	Switching frequency			400	500	600	kHz	35.1 to 35.6
R _{DS(ON1)}	Switch array MOSFET1 drain source resistance	I _{RDSON} = 100mA		300	480		mΩ	40.2

3.2 Specification Compliance Matrix (continued)

Over $3V \leq V_{IN} \leq 6.3V$, $V_{OUT(set)} = -1.8V$ (set via $R_{FB(TOP)} = 2k\Omega$, $R_{FB(BOT)} = 1k\Omega$), $I_{OUT} = 10mA$, $C_{REF} = 47nF$, over operating temperature range ($T_A = -55^\circ C$ to $125^\circ C$); unless otherwise specified in the Test Conditions column. Typical values are at $T_A = 25^\circ C$, unless otherwise noted; includes RLAT at $T_A = 25^\circ C$

PARAMETER		TEST CONDITIONS		MIN	TYP	MAX	UNIT	Test No
R _{DS(ON2)}	Switch array MOSFET2 drain source resistance	I _{RDS(ON)} = 100mA		175	345		mΩ	40.5
R _{DS(ON3)}	Switch array MOSFET3 drain source resistance	I _{RDS(ON)} = 100mA		235	300		mΩ	40.3
R _{DS(ON4)}	Switch array MOSFET4 drain source resistance	I _{RDS(ON)} = 100mA		220	370		mΩ	40.6
R _{CP(OUT)}	Output resistance to C _{P(OUT)}	I _L = 150mA	V _{IN} = 3V	4.5			Ω	80.1
		I _L = 250mA	V _{IN} = 5V	3.5		80.2		
			V _{IN} = 6.3V	3.1		80.3		
DROPOUT								
I _{DO}	Dropout current	V _{OUT(set)} = -1.8V I _{OUT(meas.)} = 98% × V _{OUT(NOM)}	V _{IN} = 3	75	125		mA	44.1
			V _{IN} = 3.3	100	150			44.2
			V _{IN} = 4	200	300			44.3
			V _{IN} = 5	400				44.4
			V _{IN} = 6	400				44.5
		V _{OUT(set)} = -5V I _{OUT(meas.)} = 98% × V _{OUT(NOM)}	V _{IN} = 5.5	40	50			44.6
			V _{IN} = 6	250	300			44.7
ACCURACY								
V _{ACC}	Output voltage accuracy	-5V ≤ V _{OUT} ≤ V _{CP(OUT)} - V _{DO} 1mA ≤ I _{OUT} ≤ 400mA		-1.5%		1.5%		50.1 to 50.7 50.10 to 50.13
ΔV _{OUT} /ΔV _{IN}	Line regulation	3.3V ≤ V _{IN} ≤ 6.3V	ΔV = 3V I _{OUT} = 150mA		100	1300	μV/V	55.1, 55.2
ΔV _{OUT} /ΔI _{OUT}	Load regulation	10mA ≤ I _{OUT} ≤ 400mA V _{IN} = 5V, V _{OUT} = -1.8V			8	35	mV/A	55.3
V _{REF}				-0.609	-0.6	-0.591	V	30.1, 30.2, 30.3

4 Applicable and Reference Documents

4.1 Applicable Documents

- Texas Instruments, [TPS7H130X-SP 3V to 6.3V Input, 400mA, -6V to -0.6V Radiation Hardend Switched Capacitor Voltage Inverter with Integrated Low Dropout Regulator](#) datasheet

4.2 Reference Documents

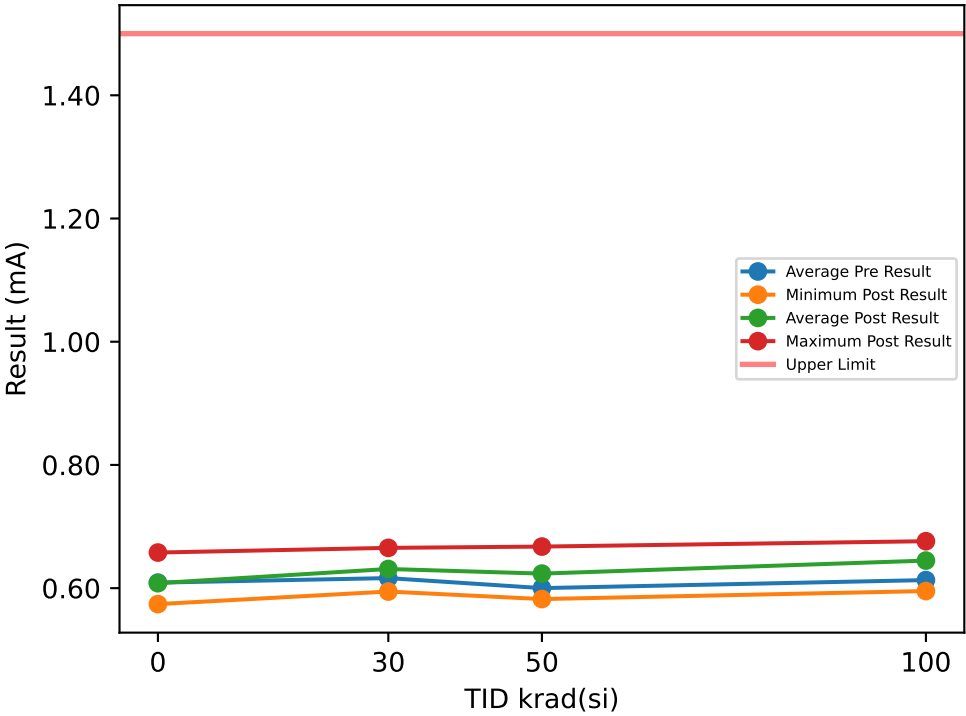
Texas Instruments' total ionizing dose radiation (total dose) test procedure follows the standards put forth in MIL-STD-883 TM 1019. The document can be found at the DLA website.

A Appendix: HDR TID Report Data

This appendix contains the HDR TID report data.

Device Test: 205.1 SUPPLY_CURRENT|POST/VIN/SHUTDOWN///3/@I_SHDN

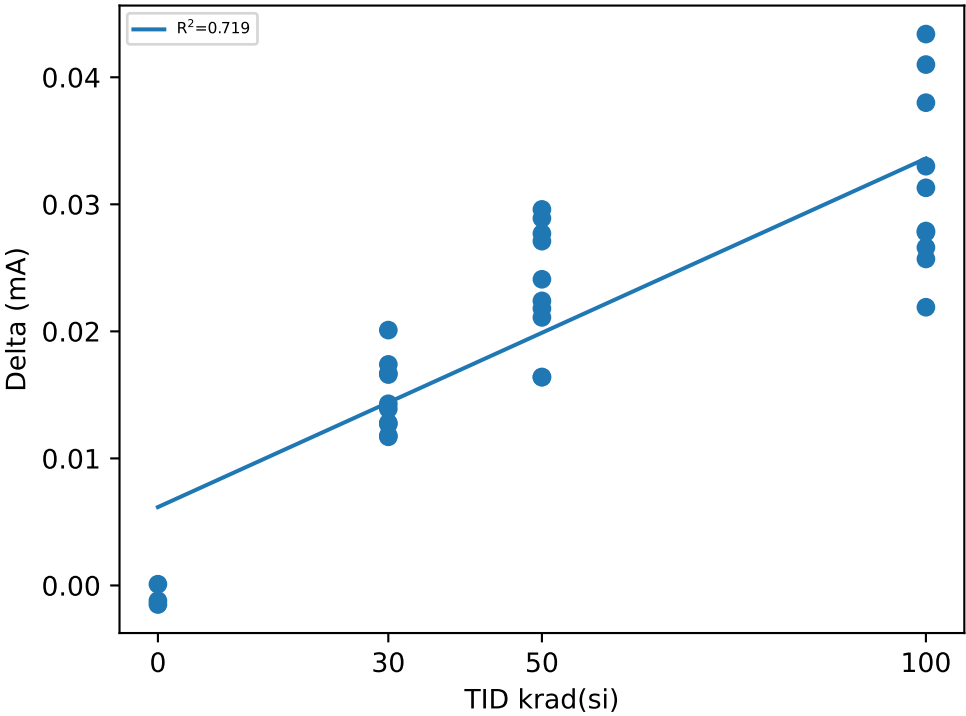
TID vs Result Stats



Test Results (Upper Limit = 1.5 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.659	0.6578	-0.0012
2	0	CU2	0.5923	0.5924	0.0001
3	0	CU3	0.5756	0.5741	-0.0015
25	30	30krad Unbiased	0.5941	0.6115	0.0174
26	30	30krad Unbiased	0.6313	0.648	0.0167
27	30	30krad Unbiased	0.6186	0.6304	0.0118
28	30	30krad Unbiased	0.6271	0.6399	0.0128
29	30	30krad Unbiased	0.64	0.6527	0.0127
30	30	30krad Biased	0.5779	0.5945	0.0166
31	30	30krad Biased	0.6537	0.6654	0.0117
32	30	30krad Biased	0.5899	0.6042	0.0143
33	30	30krad Biased	0.6396	0.6597	0.0201
34	30	30krad Biased	0.5911	0.605	0.0139
40	50	50krad Unbiased	0.5798	0.6009	0.0211
41	50	50krad Unbiased	0.5659	0.5823	0.0164
42	50	50krad Unbiased	0.5677	0.5895	0.0218
43	50	50krad Unbiased	0.6112	0.6408	0.0296
44	50	50krad Unbiased	0.5884	0.6048	0.0164
45	50	50krad Biased	0.6434	0.6675	0.0241
46	50	50krad Biased	0.5911	0.6182	0.0271
47	50	50krad Biased	0.607	0.6347	0.0277
48	50	50krad Biased	0.6076	0.6365	0.0289
49	50	50krad Biased	0.6386	0.661	0.0224
50	100	100krad Unbiased	0.6432	0.6762	0.033
51	100	100krad Unbiased	0.626	0.6694	0.0434
52	100	100krad Unbiased	0.5734	0.5953	0.0219
53	100	100krad Unbiased	0.6153	0.6432	0.0279
54	100	100krad Unbiased	0.6142	0.6399	0.0257
55	100	100krad Biased	0.6191	0.6469	0.0278
56	100	100krad Biased	0.5896	0.6209	0.0313
57	100	100krad Biased	0.6494	0.676	0.0266
58	100	100krad Biased	0.5998	0.6408	0.041
59	100	100krad Biased	0.601	0.639	0.038

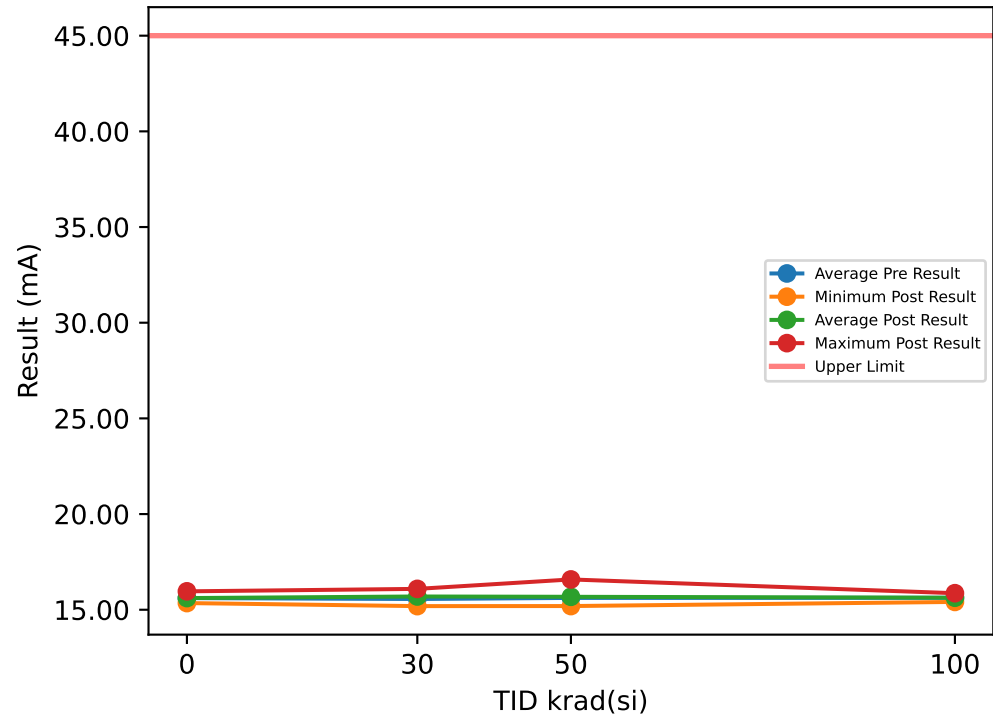
TID vs Post - Pre Exposure Delta



Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5756	0.60897	0.659	0.044127	0.5741	0.6081	0.6578	0.044003	-0.0015	-0.00086667	0.0001	0.00085049
30	0.5779	0.61633	0.6537	0.02614	0.5945	0.63113	0.6654	0.025719	0.0117	0.0148	0.0201	0.0027845
50	0.5659	0.60007	0.6434	0.026737	0.5823	0.62362	0.6675	0.029208	0.0164	0.02355	0.0296	0.0048072
100	0.5734	0.6131	0.6494	0.023295	0.5953	0.64476	0.6762	0.025092	0.0219	0.03166	0.0434	0.0070915

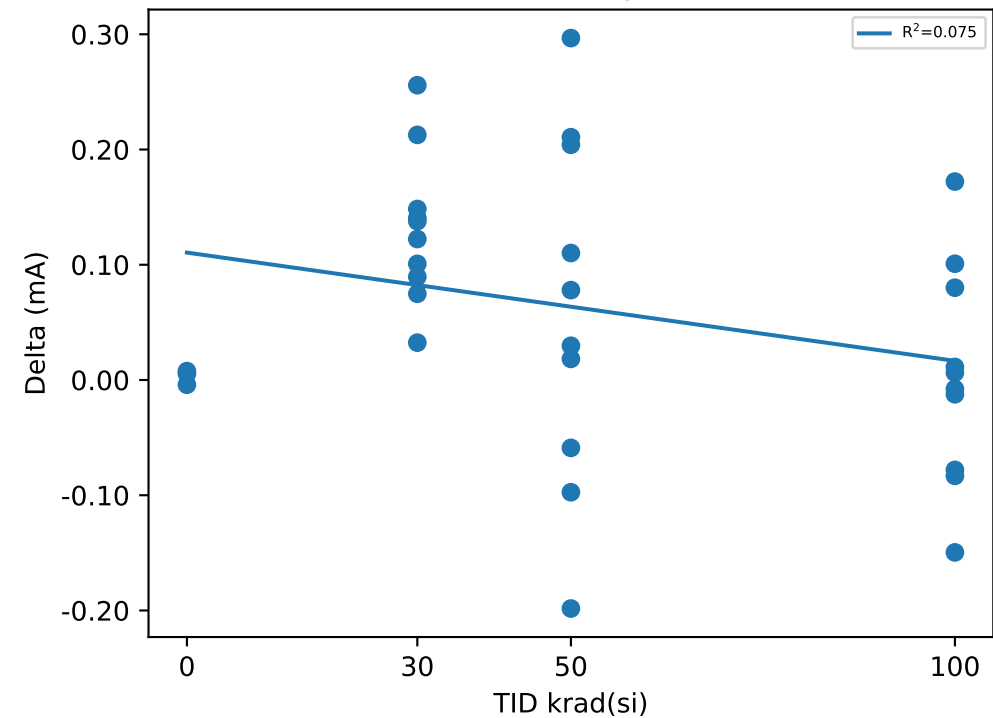
TID vs Result Stats



Test Results (Upper Limit = 45.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	15.353	15.349	-0.0041
2	0	CU2	15.954	15.962	0.0077
3	0	CU3	15.516	15.521	0.0054
25	30	30krad Unbiased	15.835	16.09	0.2558
26	30	30krad Unbiased	15.719	15.794	0.0748
27	30	30krad Unbiased	15.315	15.416	0.1008
28	30	30krad Unbiased	15.196	15.319	0.1223
29	30	30krad Unbiased	15.644	15.782	0.1378
30	30	30krad Biased	15.815	15.956	0.1406
31	30	30krad Biased	15.819	15.967	0.1484
32	30	30krad Biased	15.157	15.19	0.0324
33	30	30krad Biased	15.362	15.451	0.0896
34	30	30krad Biased	15.755	15.968	0.2127
40	50	50krad Unbiased	15.698	15.776	0.078
41	50	50krad Unbiased	15.816	15.757	-0.0589
42	50	50krad Unbiased	15.407	15.309	-0.0974
43	50	50krad Unbiased	15.761	15.78	0.0183
44	50	50krad Unbiased	15.502	15.531	0.0297
45	50	50krad Biased	15.308	15.518	0.2107
46	50	50krad Biased	16.287	16.584	0.2967
47	50	50krad Biased	15.491	15.292	-0.1983
48	50	50krad Biased	14.989	15.193	0.2041
49	50	50krad Biased	15.917	16.027	0.1102
50	100	100krad Unbiased	15.463	15.564	0.1009
51	100	100krad Unbiased	15.642	15.722	0.0801
52	100	100krad Unbiased	15.843	15.765	-0.078
53	100	100krad Unbiased	15.449	15.461	0.0113
54	100	100krad Unbiased	15.583	15.589	0.0064
55	100	100krad Biased	15.578	15.495	-0.0832
56	100	100krad Biased	15.997	15.848	-0.1496
57	100	100krad Biased	15.577	15.569	-0.0078
58	100	100krad Biased	15.692	15.864	0.1722
59	100	100krad Biased	15.421	15.409	-0.0124

TID vs Post - Pre Exposure Delta

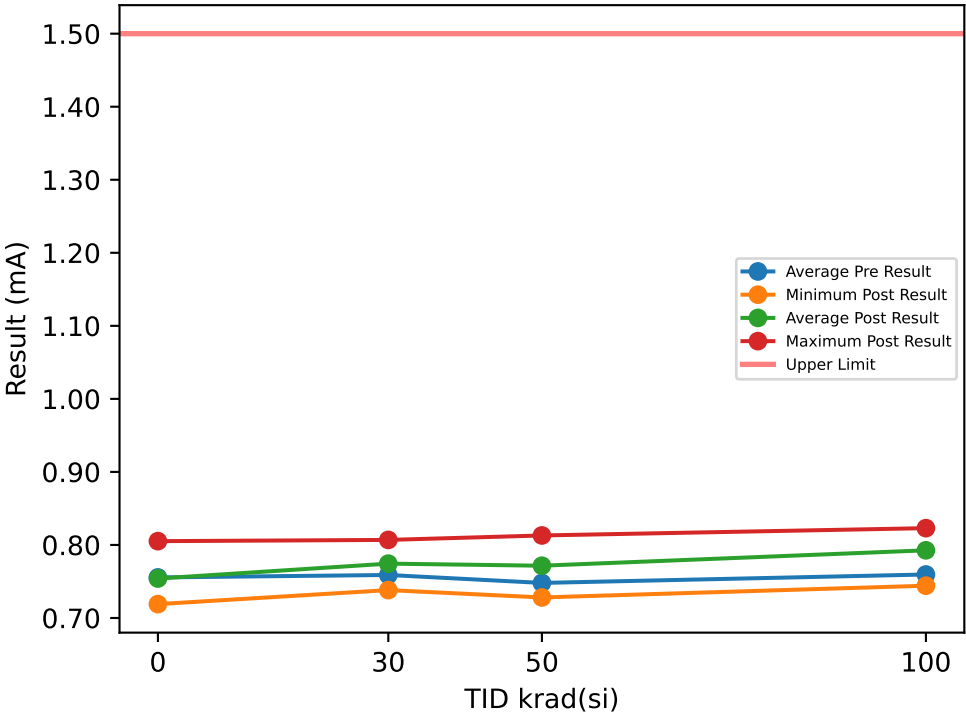


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	15.353	15.608	15.954	0.31101	15.349	15.611	15.962	0.3162	-0.0041	0.003	0.0077	0.0062554
30	15.157	15.562	15.835	0.27325	15.19	15.693	16.09	0.32055	0.0324	0.13152	0.2558	0.065209
50	14.989	15.618	16.287	0.36051	15.193	15.677	16.584	0.41304	-0.1983	0.05931	0.2967	0.15298
100	15.421	15.625	15.997	0.18122	15.409	15.629	15.864	0.16141	-0.1496	0.00399	0.1722	0.095371

Device Test: 205.3 SUPPLY_CURRENT|POST/VIN/SHUTDOWN///6.3/@I_SHDN

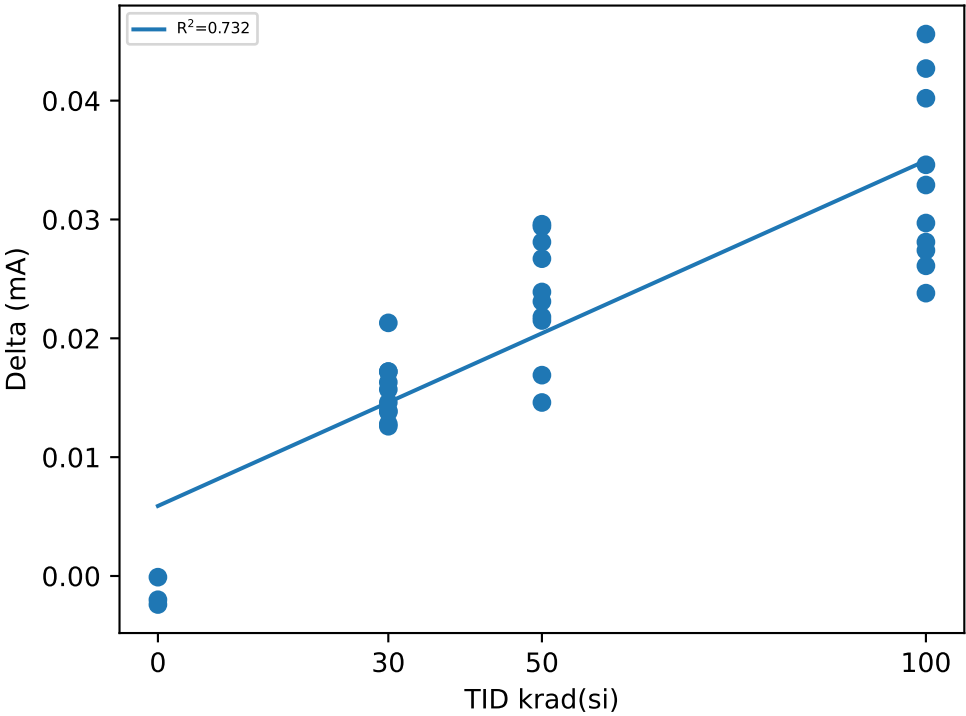
TID vs Result Stats



Test Results (Upper Limit = 1.5 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.8072	0.8052	-0.002
2	0	CU2	0.738	0.7379	-0.0001
3	0	CU3	0.7214	0.719	-0.0024
25	30	30krad Unbiased	0.7366	0.7538	0.0172
26	30	30krad Unbiased	0.7751	0.7923	0.0172
27	30	30krad Unbiased	0.7622	0.7748	0.0126
28	30	30krad Unbiased	0.7684	0.7823	0.0139
29	30	30krad Unbiased	0.7802	0.794	0.0138
30	30	30krad Biased	0.7219	0.7382	0.0163
31	30	30krad Biased	0.7941	0.8069	0.0128
32	30	30krad Biased	0.7337	0.7494	0.0157
33	30	30krad Biased	0.783	0.8043	0.0213
34	30	30krad Biased	0.7336	0.7482	0.0146
40	50	50krad Unbiased	0.7253	0.7468	0.0215
41	50	50krad Unbiased	0.7112	0.7281	0.0169
42	50	50krad Unbiased	0.7154	0.7385	0.0231
43	50	50krad Unbiased	0.7582	0.7878	0.0296
44	50	50krad Unbiased	0.7498	0.7644	0.0146
45	50	50krad Biased	0.7891	0.813	0.0239
46	50	50krad Biased	0.7394	0.7661	0.0267
47	50	50krad Biased	0.7539	0.782	0.0281
48	50	50krad Biased	0.7515	0.7809	0.0294
49	50	50krad Biased	0.7864	0.8082	0.0218
50	100	100krad Unbiased	0.7884	0.823	0.0346
51	100	100krad Unbiased	0.7737	0.8193	0.0456
52	100	100krad Unbiased	0.7204	0.7442	0.0238
53	100	100krad Unbiased	0.7614	0.7888	0.0274
54	100	100krad Unbiased	0.7598	0.7859	0.0261
55	100	100krad Biased	0.7661	0.7958	0.0297
56	100	100krad Biased	0.7368	0.7697	0.0329
57	100	100krad Biased	0.7935	0.8216	0.0281
58	100	100krad Biased	0.7477	0.7904	0.0427
59	100	100krad Biased	0.7477	0.7879	0.0402

TID vs Post - Pre Exposure Delta

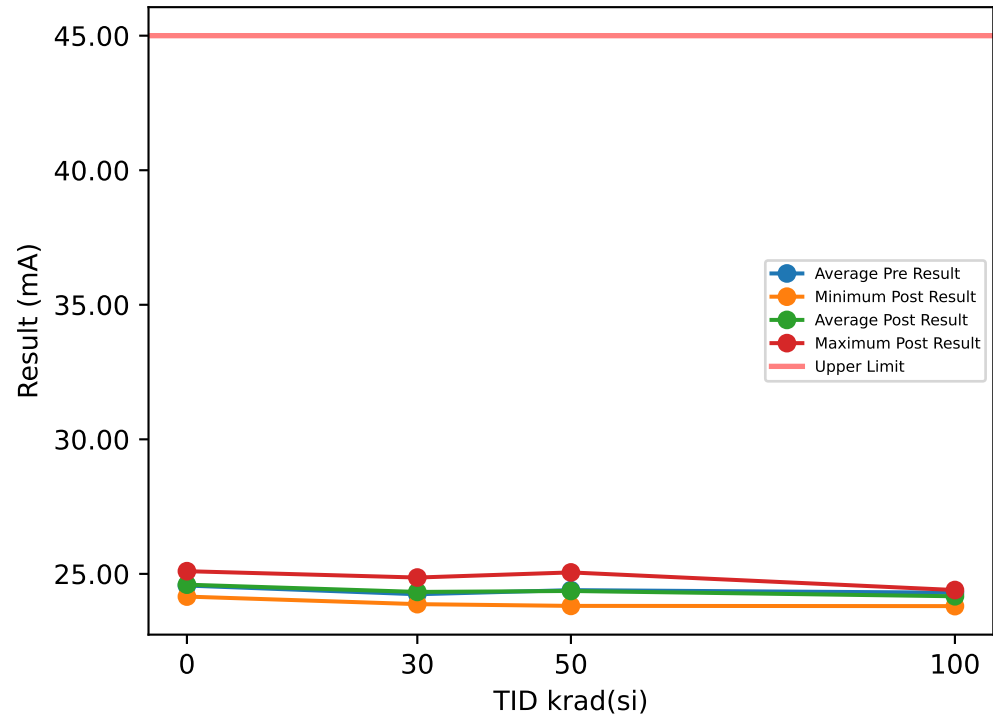


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.7214	0.75553	0.8072	0.045508	0.719	0.75403	0.8052	0.045308	-0.0024	-0.0015	-0.0001	0.0012288
30	0.7219	0.75888	0.7941	0.025339	0.7382	0.77442	0.8069	0.025306	0.0126	0.01554	0.0213	0.0026256
50	0.7112	0.74802	0.7891	0.026509	0.7281	0.77158	0.813	0.028276	0.0146	0.02356	0.0296	0.0050921
100	0.7204	0.75955	0.7935	0.022516	0.7442	0.79266	0.823	0.024589	0.0238	0.03311	0.0456	0.0074955

Device Test: 205.4 SUPPLY_CURRENT|POST/VIN/QUIESCENT///6.3/@IQ_VIN

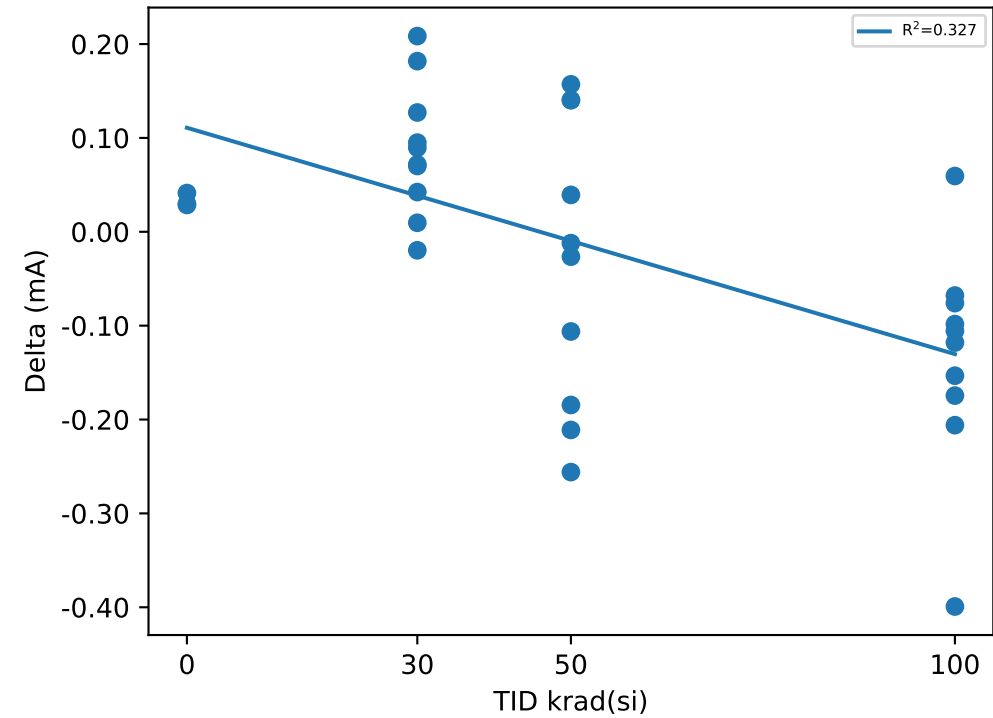
TID vs Result Stats



Test Results (Upper Limit = 45.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	24.115	24.157	0.0413
2	0	CU2	25.07	25.1	0.03
3	0	CU3	24.513	24.542	0.0286
25	30	30krad Unbiased	24.683	24.864	0.1818
26	30	30krad Unbiased	24.434	24.476	0.0423
27	30	30krad Unbiased	23.859	23.949	0.0896
28	30	30krad Unbiased	23.893	23.903	0.0096
29	30	30krad Unbiased	24.255	24.325	0.0701
30	30	30krad Biased	24.483	24.61	0.1271
31	30	30krad Biased	24.524	24.619	0.095
32	30	30krad Biased	23.895	23.876	-0.0197
33	30	30krad Biased	24.036	24.108	0.0718
34	30	30krad Biased	24.362	24.571	0.2085
40	50	50krad Unbiased	24.49	24.529	0.0393
41	50	50krad Unbiased	24.869	24.658	-0.2111
42	50	50krad Unbiased	23.995	23.81	-0.1845
43	50	50krad Unbiased	24.411	24.305	-0.1062
44	50	50krad Unbiased	23.935	23.909	-0.0265
45	50	50krad Biased	24.488	24.645	0.1571
46	50	50krad Biased	24.914	25.054	0.1403
47	50	50krad Biased	24.184	23.928	-0.256
48	50	50krad Biased	24.152	24.292	0.1403
49	50	50krad Biased	24.522	24.51	-0.0121
50	100	100krad Unbiased	24.112	24.172	0.0594
51	100	100krad Unbiased	24.476	24.4	-0.076
52	100	100krad Unbiased	24.415	24.209	-0.206
53	100	100krad Unbiased	23.977	23.802	-0.1745
54	100	100krad Unbiased	24.223	24.125	-0.0983
55	100	100krad Biased	24.185	24.067	-0.118
56	100	100krad Biased	24.648	24.249	-0.3992
57	100	100krad Biased	24.498	24.392	-0.1056
58	100	100krad Biased	24.152	24.084	-0.0679
59	100	100krad Biased	24.331	24.177	-0.1533

TID vs Post - Pre Exposure Delta

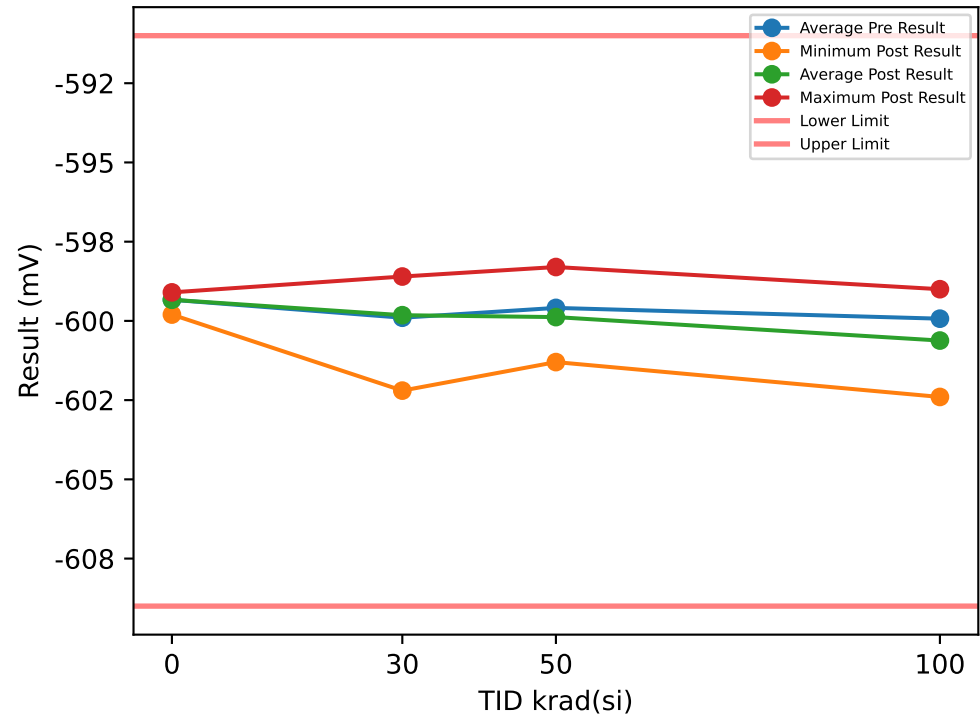


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	24.115	24.566	25.07	0.47949	24.157	24.6	25.1	0.47428	0.0286	0.0333	0.0413	0.0069635
30	23.859	24.242	24.683	0.30067	23.876	24.33	24.864	0.35122	-0.0197	0.08761	0.2085	0.070958
50	23.935	24.396	24.914	0.33391	23.81	24.364	25.054	0.39489	-0.256	-0.03194	0.1571	0.15335
100	23.977	24.302	24.648	0.207	23.802	24.168	24.4	0.17161	-0.3992	-0.13394	0.0594	0.11785

Device Test: 30.1 VREF|/VREF//0N6V//3/@VREF

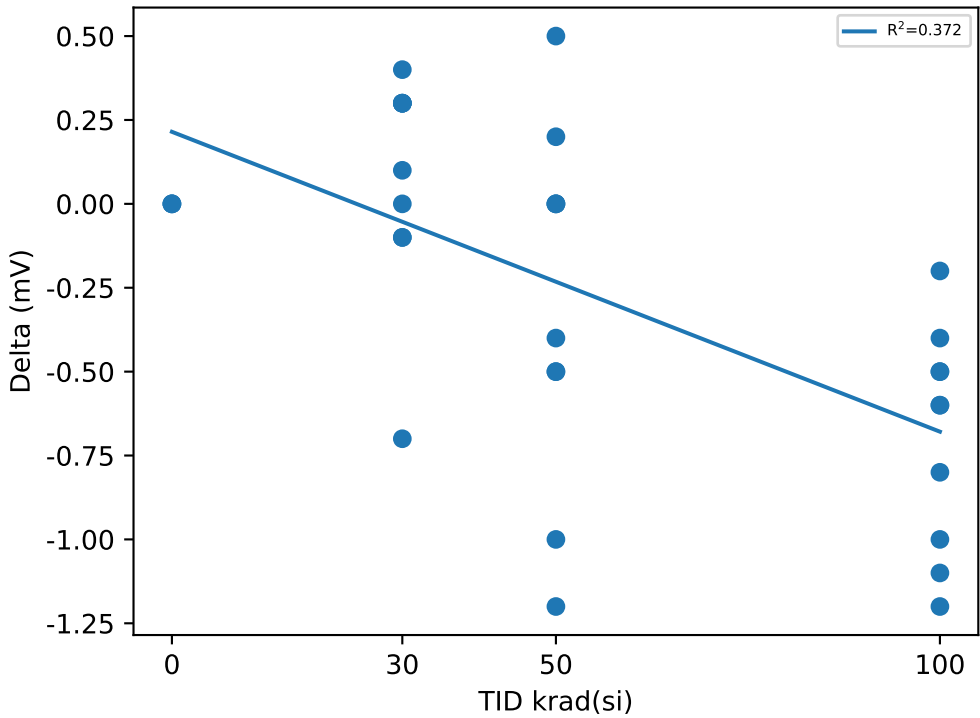
TID vs Result Stats



Test Results (Lower Limit = -609.0, Upper Limit = -591.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	-599.1	-599.1	0
2	0	CU2	-599.1	-599.1	0
3	0	CU3	-599.8	-599.8	0
25	30	30krad Unbiased	-599.6	-599.6	0
26	30	30krad Unbiased	-599	-598.7	0.3
27	30	30krad Unbiased	-599.5	-599.1	0.4
28	30	30krad Unbiased	-600.7	-600.4	0.3
29	30	30krad Unbiased	-600.6	-600.5	0.1
30	30	30krad Biased	-599.6	-599.3	0.3
31	30	30krad Biased	-602.5	-602.2	0.3
32	30	30krad Biased	-599.4	-600.1	-0.7
33	30	30krad Biased	-598.5	-598.6	-0.1
34	30	30krad Biased	-599.6	-599.7	-0.1
40	50	50krad Unbiased	-599.3	-599.3	0
41	50	50krad Unbiased	-598.8	-598.3	0.5
42	50	50krad Unbiased	-599.2	-599.6	-0.4
43	50	50krad Unbiased	-600.5	-600.5	0
44	50	50krad Unbiased	-599.6	-600.6	-1
45	50	50krad Biased	-599.6	-599.6	0
46	50	50krad Biased	-599.9	-601.1	-1.2
47	50	50krad Biased	-599.2	-599.7	-0.5
48	50	50krad Biased	-600.8	-601.3	-0.5
49	50	50krad Biased	-599	-598.8	0.2
50	100	100krad Unbiased	-601.8	-602.4	-0.6
51	100	100krad Unbiased	-599.5	-600.3	-0.8
52	100	100krad Unbiased	-597.8	-599	-1.2
53	100	100krad Unbiased	-601.2	-602.3	-1.1
54	100	100krad Unbiased	-600	-600.2	-0.2
55	100	100krad Biased	-599.8	-600.2	-0.4
56	100	100krad Biased	-600.1	-600.6	-0.5
57	100	100krad Biased	-601.7	-602.2	-0.5
58	100	100krad Biased	-598.6	-599.6	-1
59	100	100krad Biased	-598.8	-599.4	-0.6

TID vs Post - Pre Exposure Delta

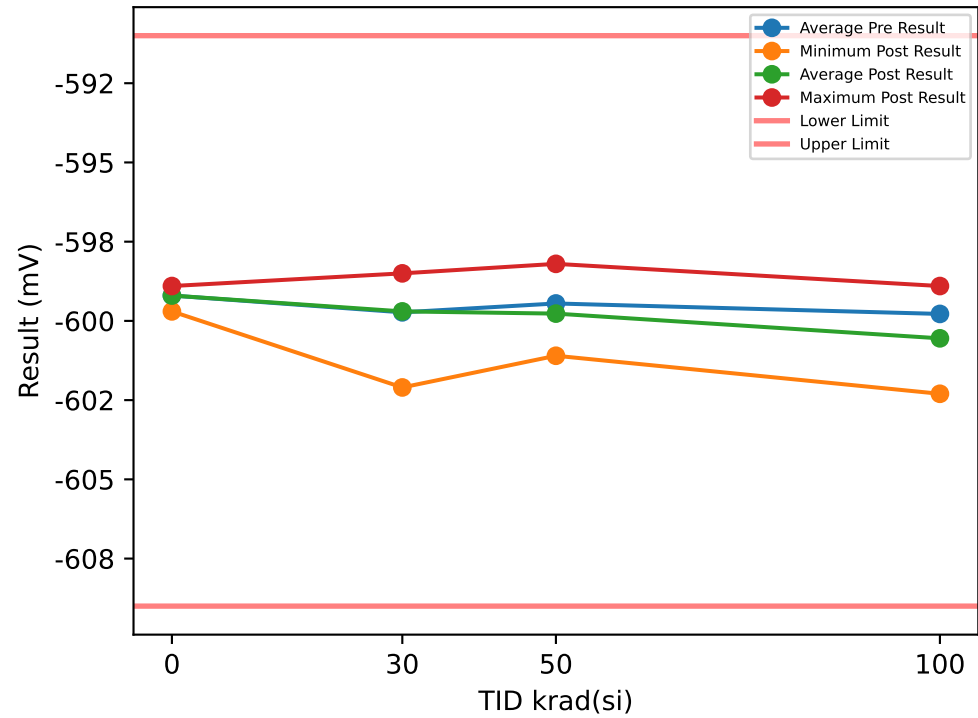


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-599.8	-599.33	-599.1	0.40415	-599.8	-599.33	-599.1	0.40415	0	0	0	0
30	-602.5	-599.9	-598.5	1.1225	-602.2	-599.82	-598.6	1.0612	-0.7	0.08	0.4	0.32931
50	-600.8	-599.59	-598.8	0.64541	-601.3	-599.88	-598.3	0.9773	-1.2	-0.29	0.5	0.53219
100	-601.8	-599.93	-597.8	1.3359	-602.4	-600.62	-599	1.2515	-1.2	-0.69	-0.2	0.32472

Device Test: 30.2 VREF|/VREF//1N8V//5/@VREF

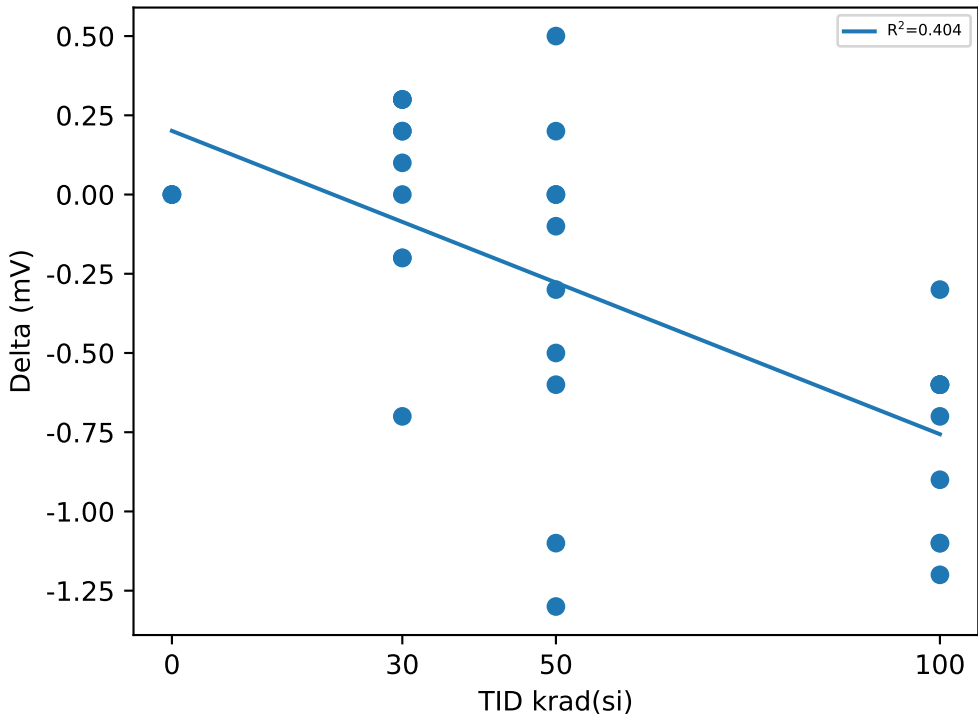
TID vs Result Stats



Test Results (Lower Limit = -609.0, Upper Limit = -591.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	-598.9	-598.9	0
2	0	CU2	-599	-599	0
3	0	CU3	-599.7	-599.7	0
25	30	30krad Unbiased	-599.5	-599.5	0
26	30	30krad Unbiased	-598.8	-598.5	0.3
27	30	30krad Unbiased	-599.3	-599	0.3
28	30	30krad Unbiased	-600.5	-600.2	0.3
29	30	30krad Unbiased	-600.4	-600.3	0.1
30	30	30krad Biased	-599.5	-599.3	0.2
31	30	30krad Biased	-602.3	-602.1	0.2
32	30	30krad Biased	-599.2	-599.9	-0.7
33	30	30krad Biased	-598.3	-598.5	-0.2
34	30	30krad Biased	-599.5	-599.7	-0.2
40	50	50krad Unbiased	-599.2	-599.2	0
41	50	50krad Unbiased	-598.7	-598.2	0.5
42	50	50krad Unbiased	-599.2	-599.5	-0.3
43	50	50krad Unbiased	-600.4	-600.4	0
44	50	50krad Unbiased	-599.4	-600.5	-1.1
45	50	50krad Biased	-599.4	-599.5	-0.1
46	50	50krad Biased	-599.8	-601.1	-1.3
47	50	50krad Biased	-599	-599.6	-0.6
48	50	50krad Biased	-600.6	-601.1	-0.5
49	50	50krad Biased	-598.8	-598.6	0.2
50	100	100krad Unbiased	-601.6	-602.3	-0.7
51	100	100krad Unbiased	-599.3	-600.2	-0.9
52	100	100krad Unbiased	-597.7	-598.9	-1.2
53	100	100krad Unbiased	-601.1	-602.2	-1.1
54	100	100krad Unbiased	-599.8	-600.1	-0.3
55	100	100krad Biased	-599.6	-600.2	-0.6
56	100	100krad Biased	-600	-600.6	-0.6
57	100	100krad Biased	-601.5	-602.1	-0.6
58	100	100krad Biased	-598.5	-599.6	-1.1
59	100	100krad Biased	-598.7	-599.3	-0.6

TID vs Post - Pre Exposure Delta

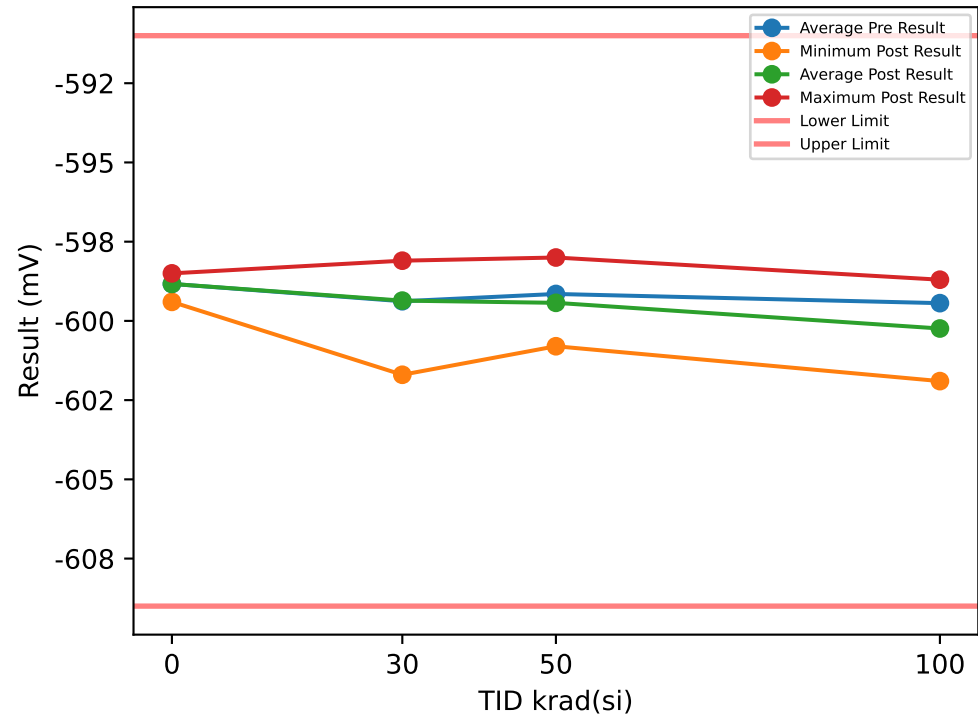


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-599.7	-599.2	-598.9	0.43589	-599.7	-599.2	-598.9	0.43589	0	0	0	0
30	-602.3	-599.73	-598.3	1.1146	-602.1	-599.7	-598.5	1.053	-0.7	0.03	0.3	0.3199
50	-600.6	-599.45	-598.7	0.63814	-601.1	-599.77	-598.2	0.98888	-1.3	-0.32	0.5	0.56529
100	-601.6	-599.78	-597.7	1.3105	-602.3	-600.55	-598.9	1.2394	-1.2	-0.77	-0.3	0.29078

Device Test: 30.3 VREF|/VREF//6N0V//6.3/@VREF

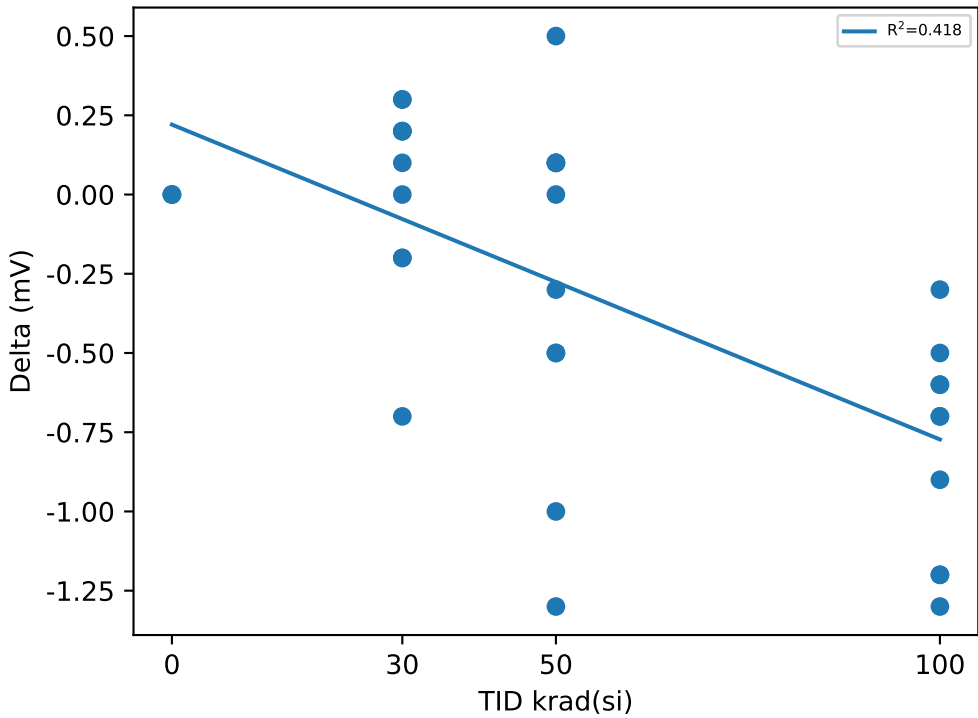
TID vs Result Stats



Test Results (Lower Limit = -609.0, Upper Limit = -591.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	-598.5	-598.5	0
2	0	CU2	-598.6	-598.6	0
3	0	CU3	-599.4	-599.4	0
25	30	30krad Unbiased	-599.2	-599.2	1.1369e-13
26	30	30krad Unbiased	-598.4	-598.1	0.3
27	30	30krad Unbiased	-598.9	-598.7	0.2
28	30	30krad Unbiased	-600.1	-599.8	0.3
29	30	30krad Unbiased	-600.1	-600	0.1
30	30	30krad Biased	-599.2	-599	0.2
31	30	30krad Biased	-601.9	-601.7	0.2
32	30	30krad Biased	-598.9	-599.6	-0.7
33	30	30krad Biased	-597.9	-598.1	-0.2
34	30	30krad Biased	-599.2	-599.4	-0.2
40	50	50krad Unbiased	-599	-598.9	0.1
41	50	50krad Unbiased	-598.5	-598	0.5
42	50	50krad Unbiased	-598.9	-599.2	-0.3
43	50	50krad Unbiased	-600	-599.9	0.1
44	50	50krad Unbiased	-599.2	-600.2	-1
45	50	50krad Biased	-599	-599	0
46	50	50krad Biased	-599.5	-600.8	-1.3
47	50	50krad Biased	-598.7	-599.2	-0.5
48	50	50krad Biased	-600.3	-600.8	-0.5
49	50	50krad Biased	-598.4	-598.3	0.1
50	100	100krad Unbiased	-601.2	-601.9	-0.7
51	100	100krad Unbiased	-598.9	-599.8	-0.9
52	100	100krad Unbiased	-597.4	-598.7	-1.3
53	100	100krad Unbiased	-600.7	-601.9	-1.2
54	100	100krad Unbiased	-599.5	-599.8	-0.3
55	100	100krad Biased	-599.3	-599.8	-0.5
56	100	100krad Biased	-599.7	-600.3	-0.6
57	100	100krad Biased	-601.1	-601.8	-0.7
58	100	100krad Biased	-598.2	-599.4	-1.2
59	100	100krad Biased	-598.4	-599	-0.6

TID vs Post - Pre Exposure Delta

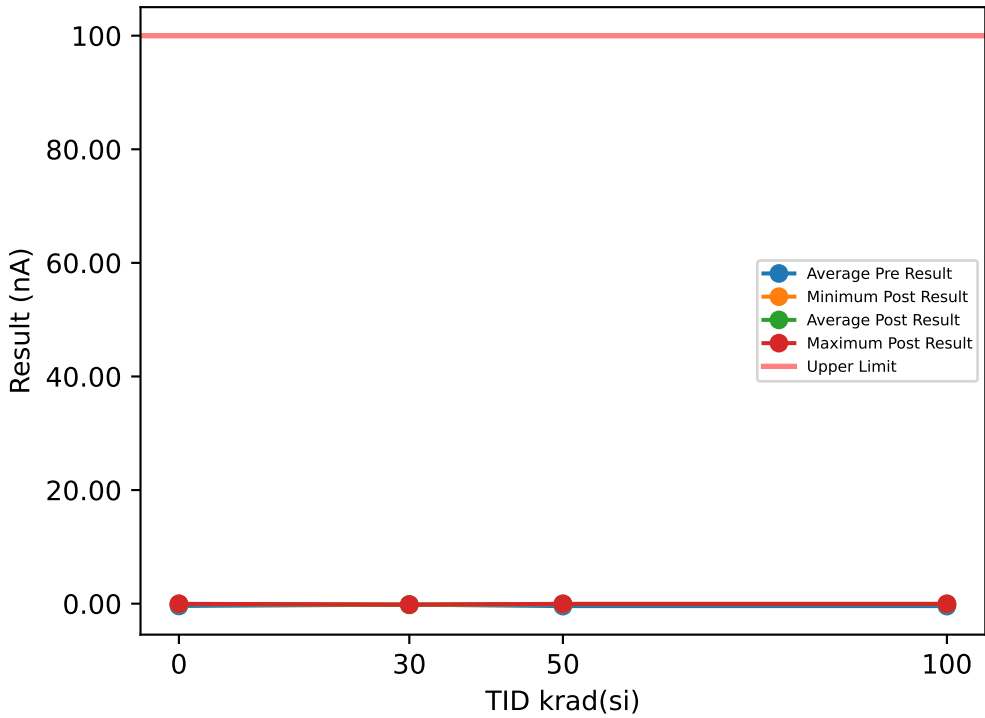


Test Statistics (mV)

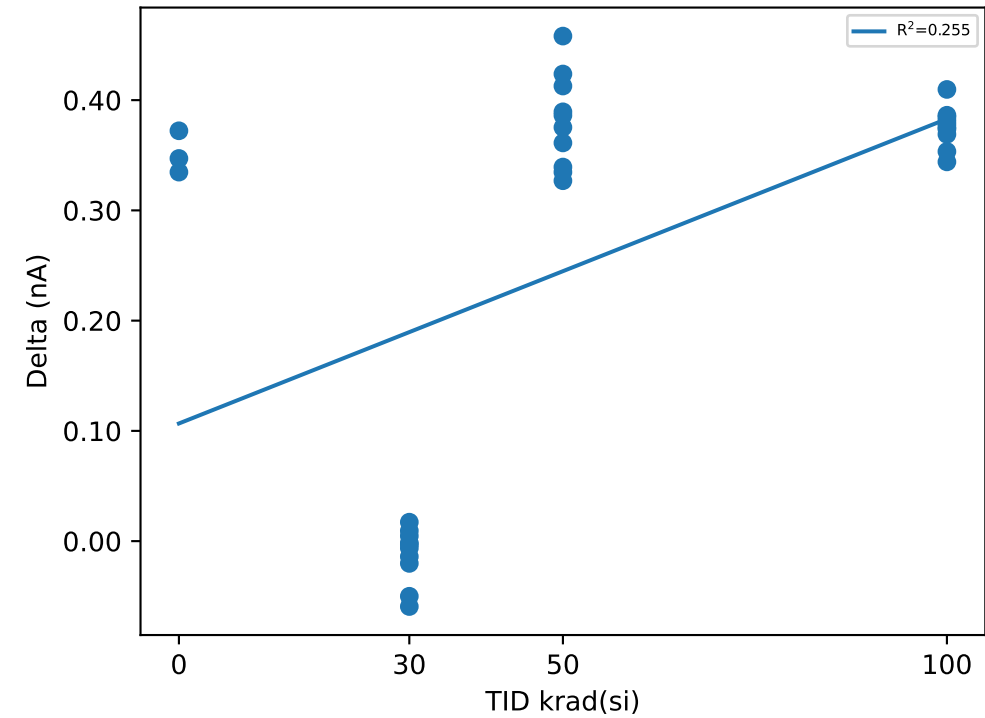
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-599.4	-598.83	-598.5	0.49329	-599.4	-598.83	-598.5	0.49329	0	0	0	0
30	-601.9	-599.38	-597.9	1.1104	-601.7	-599.36	-598.1	1.049	-0.7	0.02	0.3	0.31198
50	-600.3	-599.15	-598.4	0.62048	-600.8	-599.43	-598	0.96959	-1.3	-0.28	0.5	0.55538
100	-601.2	-599.44	-597.4	1.2738	-601.9	-600.24	-598.7	1.2085	-1.3	-0.8	-0.3	0.33665

Device Test: 31.1 LEAK|/FB/CURRENT////@I_FB

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Upper Limit = 100.0 (nA))

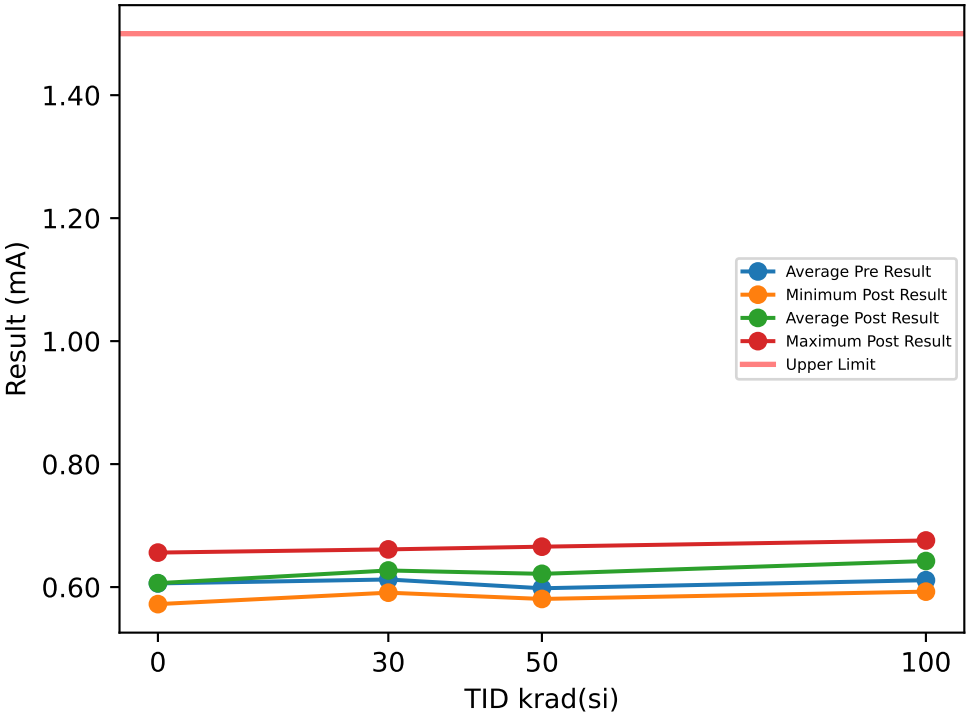
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	-0.3981	-0.0259	0.3722
2	0	CU2	-0.4152	-0.0681	0.3471
3	0	CU3	-0.3996	-0.0649	0.3347
25	30	30krad Unbiased	-0.1547	-0.214	-0.0593
26	30	30krad Unbiased	-0.1719	-0.1547	0.0172
27	30	30krad Unbiased	-0.1797	-0.1937	-0.014
28	30	30krad Unbiased	-0.1828	-0.1844	-0.0016
29	30	30krad Unbiased	-0.1688	-0.1641	0.0047
30	30	30krad Biased	-0.1657	-0.1859	-0.0202
31	30	30krad Biased	-0.1781	-0.1844	-0.0063
32	30	30krad Biased	-0.1719	-0.1625	0.0094
33	30	30krad Biased	-0.1469	-0.1969	-0.05
34	30	30krad Biased	-0.1922	-0.1953	-0.0031
40	50	50krad Unbiased	-0.3809	-0.054	0.3269
41	50	50krad Unbiased	-0.4168	-0.0415	0.3753
42	50	50krad Unbiased	-0.4543	-0.0649	0.3894
43	50	50krad Unbiased	-0.4277	-0.0415	0.3862
44	50	50krad Unbiased	-0.409	-0.0478	0.3612
45	50	50krad Biased	-0.4152	-0.0805	0.3347
46	50	50krad Biased	-0.4027	-0.0634	0.3393
47	50	50krad Biased	-0.4543	-0.0306	0.4237
48	50	50krad Biased	-0.4965	-0.0384	0.4581
49	50	50krad Biased	-0.4481	-0.0353	0.4128
50	100	100krad Unbiased	-0.4059	-0.0322	0.3737
51	100	100krad Unbiased	-0.434	-0.0556	0.3784
52	100	100krad Unbiased	-0.3996	-0.0462	0.3534
53	100	100krad Unbiased	-0.4637	-0.054	0.4097
54	100	100krad Unbiased	-0.4668	-0.0805	0.3863
55	100	100krad Biased	-0.4465	-0.0618	0.3847
56	100	100krad Biased	-0.4121	-0.0431	0.369
57	100	100krad Biased	-0.3793	-0.0353	0.344
58	100	100krad Biased	-0.4293	-0.054	0.3753
59	100	100krad Biased	-0.4246	-0.0431	0.3815

Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.4152	-0.4043	-0.3981	0.0094694	-0.0681	-0.052967	-0.0259	0.023495	0.3347	0.35133	0.3722	0.019105
30	-0.1922	-0.17127	-0.1469	0.013313	-0.214	-0.18359	-0.1547	0.018279	-0.0593	-0.01232	0.0172	0.024857
50	-0.4965	-0.43055	-0.3809	0.033206	-0.0805	-0.04979	-0.0306	0.015719	0.3269	0.38076	0.4581	0.042308
100	-0.4668	-0.42618	-0.3793	0.028004	-0.0805	-0.05058	-0.0322	0.014032	0.344	0.3756	0.4097	0.018078

Device Test: 31.2 SUPPLY_CURRENT|PRE/VIN/SHUTDOWN///3/@I_SHDN

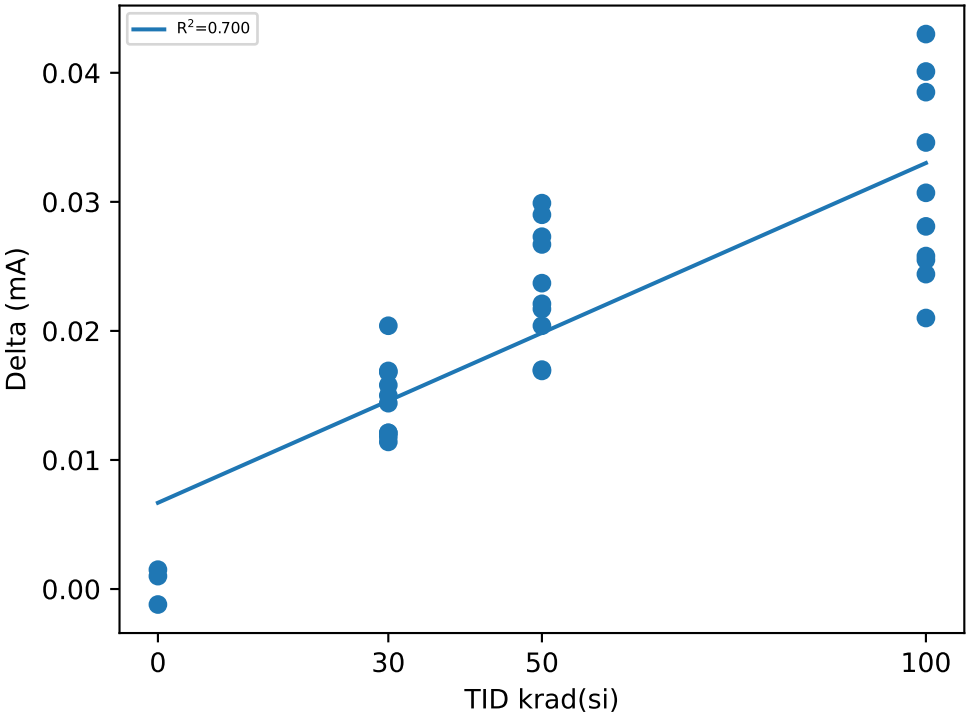
TID vs Result Stats



Test Results (Upper Limit = 1.5 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.6546	0.6561	0.0015
2	0	CU2	0.5897	0.5907	0.001
3	0	CU3	0.5735	0.5723	-0.0012
25	30	30krad Unbiased	0.5896	0.6064	0.0168
26	30	30krad Unbiased	0.6278	0.6436	0.0158
27	30	30krad Unbiased	0.6147	0.6261	0.0114
28	30	30krad Unbiased	0.6234	0.6355	0.0121
29	30	30krad Unbiased	0.6361	0.6482	0.0121
30	30	30krad Biased	0.574	0.5909	0.0169
31	30	30krad Biased	0.6495	0.6613	0.0118
32	30	30krad Biased	0.5857	0.6007	0.015
33	30	30krad Biased	0.6356	0.656	0.0204
34	30	30krad Biased	0.5871	0.6015	0.0144
40	50	50krad Unbiased	0.5773	0.5977	0.0204
41	50	50krad Unbiased	0.5637	0.5807	0.017
42	50	50krad Unbiased	0.5655	0.5872	0.0217
43	50	50krad Unbiased	0.6094	0.6393	0.0299
44	50	50krad Unbiased	0.5868	0.6037	0.0169
45	50	50krad Biased	0.642	0.6657	0.0237
46	50	50krad Biased	0.5899	0.6166	0.0267
47	50	50krad Biased	0.6054	0.6327	0.0273
48	50	50krad Biased	0.6049	0.6339	0.029
49	50	50krad Biased	0.6358	0.6579	0.0221
50	100	100krad Unbiased	0.6412	0.6758	0.0346
51	100	100krad Unbiased	0.6243	0.6673	0.043
52	100	100krad Unbiased	0.5716	0.5926	0.021
53	100	100krad Unbiased	0.6139	0.6394	0.0255
54	100	100krad Unbiased	0.6128	0.6372	0.0244
55	100	100krad Biased	0.6165	0.6446	0.0281
56	100	100krad Biased	0.5877	0.6184	0.0307
57	100	100krad Biased	0.6471	0.6729	0.0258
58	100	100krad Biased	0.5979	0.638	0.0401
59	100	100krad Biased	0.599	0.6375	0.0385

TID vs Post - Pre Exposure Delta

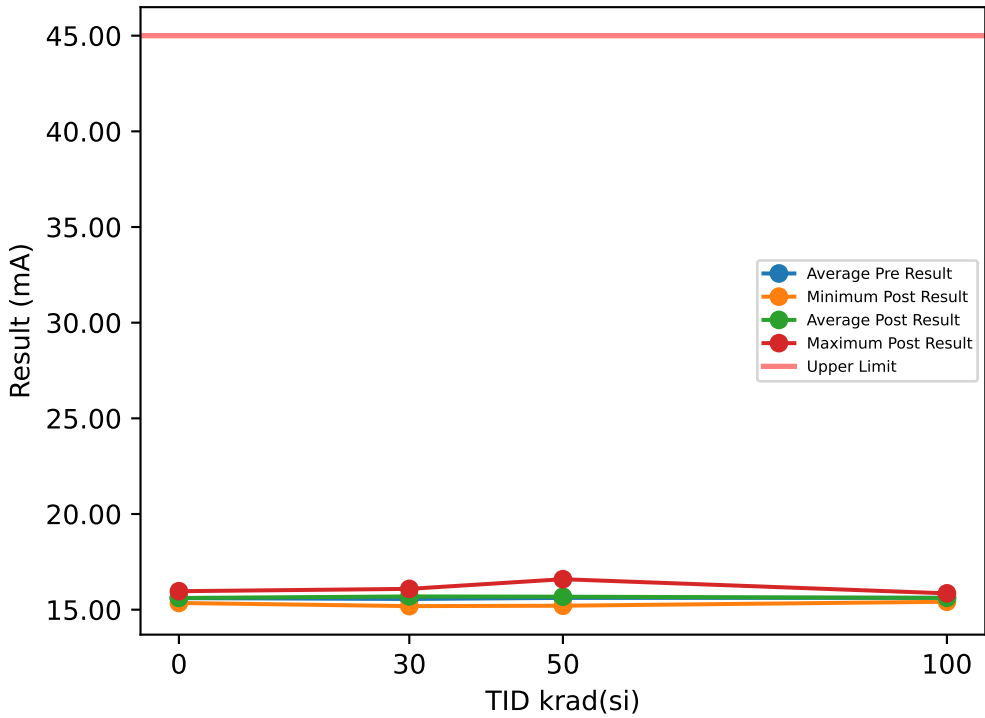


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5735	0.60593	0.6546	0.042918	0.5723	0.60637	0.6561	0.044042	-0.0012	0.00043333	0.0015	0.0014364
30	0.574	0.61235	0.6495	0.026219	0.5909	0.62702	0.6613	0.025571	0.0114	0.01467	0.0204	0.0029048
50	0.5637	0.59807	0.642	0.026769	0.5807	0.62154	0.6657	0.029103	0.0169	0.02347	0.0299	0.0046731
100	0.5716	0.6112	0.6471	0.023201	0.5926	0.64237	0.6758	0.025399	0.021	0.03117	0.043	0.0074913

Device Test: 31.3 SUPPLY_CURRENT|PRE/VIN/QUIESCENT///3/@IQ_VIN

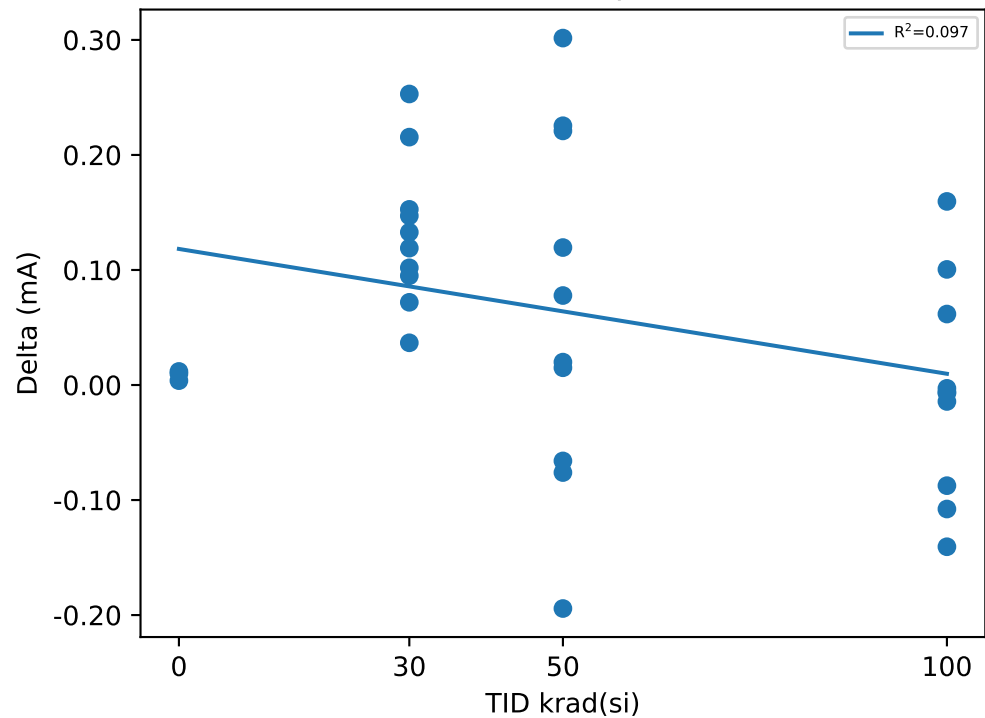
TID vs Result Stats



Test Results (Upper Limit = 45.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	15.339	15.351	0.0118
2	0	CU2	15.956	15.966	0.0098
3	0	CU3	15.519	15.523	0.0038
25	30	30krad Unbiased	15.835	16.088	0.253
26	30	30krad Unbiased	15.719	15.79	0.0719
27	30	30krad Unbiased	15.309	15.411	0.1019
28	30	30krad Unbiased	15.189	15.308	0.119
29	30	30krad Unbiased	15.639	15.771	0.1328
30	30	30krad Biased	15.819	15.972	0.1527
31	30	30krad Biased	15.82	15.967	0.1471
32	30	30krad Biased	15.15	15.187	0.0367
33	30	30krad Biased	15.359	15.454	0.095
34	30	30krad Biased	15.76	15.975	0.2155
40	50	50krad Unbiased	15.692	15.77	0.0778
41	50	50krad Unbiased	15.82	15.754	-0.066
42	50	50krad Unbiased	15.403	15.326	-0.0761
43	50	50krad Unbiased	15.758	15.773	0.015
44	50	50krad Unbiased	15.502	15.521	0.0199
45	50	50krad Biased	15.301	15.522	0.2209
46	50	50krad Biased	16.292	16.594	0.3016
47	50	50krad Biased	15.486	15.292	-0.1943
48	50	50krad Biased	14.982	15.207	0.2254
49	50	50krad Biased	15.918	16.038	0.1195
50	100	100krad Unbiased	15.459	15.559	0.1005
51	100	100krad Unbiased	15.639	15.7	0.0617
52	100	100krad Unbiased	15.842	15.754	-0.0875
53	100	100krad Unbiased	15.444	15.438	-0.0062
54	100	100krad Unbiased	15.578	15.571	-0.007
55	100	100krad Biased	15.576	15.468	-0.1078
56	100	100krad Biased	15.994	15.853	-0.1406
57	100	100krad Biased	15.575	15.56	-0.0143
58	100	100krad Biased	15.689	15.849	0.1596
59	100	100krad Biased	15.417	15.414	-0.0029

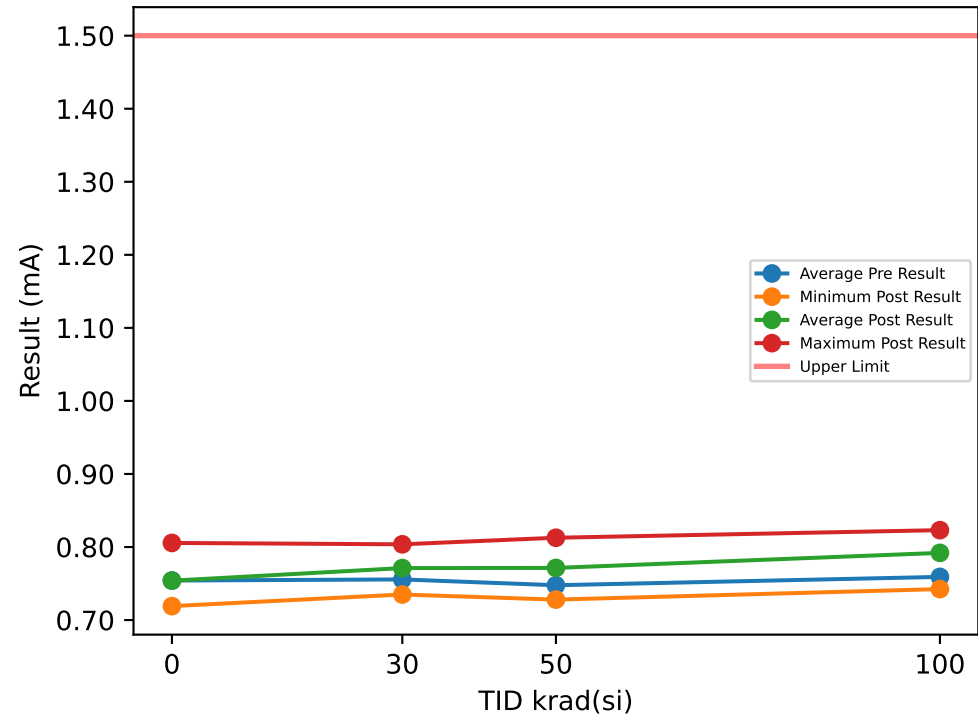
TID vs Post - Pre Exposure Delta



Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	15.339	15.604	15.956	0.31725	15.351	15.613	15.966	0.31725	0.0038	0.0084667	0.0118	0.0041633
30	15.15	15.56	15.835	0.27689	15.187	15.692	16.088	0.32397	0.0367	0.13256	0.253	0.064468
50	14.982	15.615	16.292	0.36405	15.207	15.68	16.594	0.41285	-0.1943	0.06437	0.3016	0.15563
100	15.417	15.621	15.994	0.18179	15.414	15.617	15.853	0.16293	-0.1406	-0.00445	0.1596	0.093409

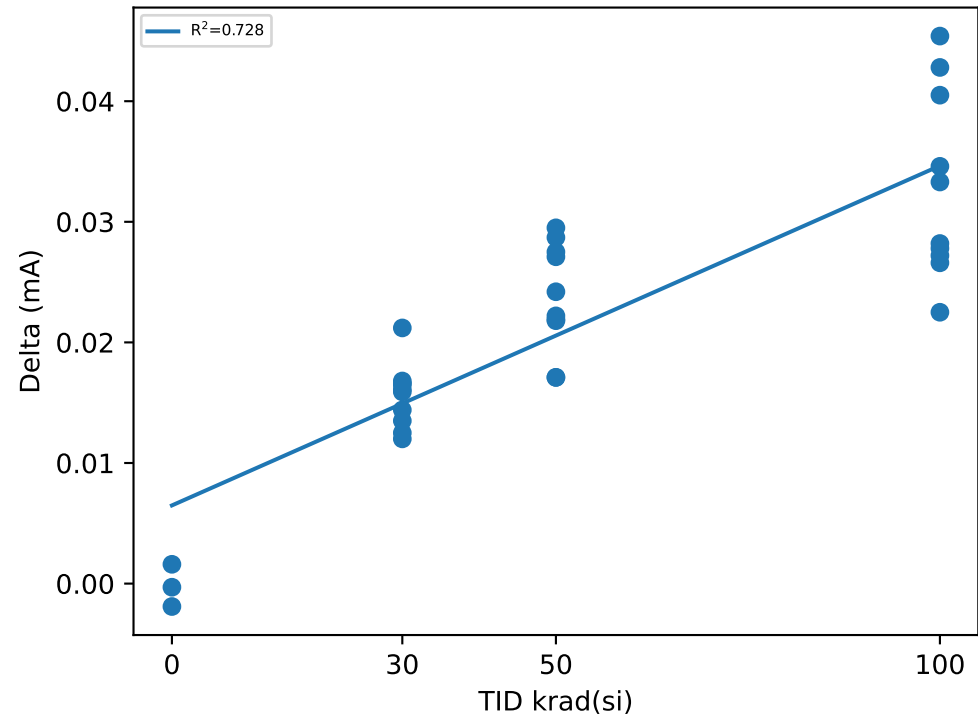
TID vs Result Stats



Test Results (Upper Limit = 1.5 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.804	0.8056	0.0016
2	0	CU2	0.7374	0.7371	-0.0003
3	0	CU3	0.721	0.7191	-0.0019
25	30	30krad Unbiased	0.7334	0.75	0.0166
26	30	30krad Unbiased	0.7726	0.7887	0.0161
27	30	30krad Unbiased	0.7592	0.7712	0.012
28	30	30krad Unbiased	0.7651	0.7786	0.0135
29	30	30krad Unbiased	0.7767	0.7911	0.0144
30	30	30krad Biased	0.7182	0.735	0.0168
31	30	30krad Biased	0.7912	0.8037	0.0125
32	30	30krad Biased	0.7299	0.7464	0.0165
33	30	30krad Biased	0.7798	0.801	0.0212
34	30	30krad Biased	0.7303	0.7462	0.0159
40	50	50krad Unbiased	0.7254	0.7472	0.0218
41	50	50krad Unbiased	0.7109	0.728	0.0171
42	50	50krad Unbiased	0.7158	0.738	0.0222
43	50	50krad Unbiased	0.7578	0.7865	0.0287
44	50	50krad Unbiased	0.7487	0.7658	0.0171
45	50	50krad Biased	0.7885	0.8127	0.0242
46	50	50krad Biased	0.7391	0.7662	0.0271
47	50	50krad Biased	0.7538	0.7813	0.0275
48	50	50krad Biased	0.7508	0.7803	0.0295
49	50	50krad Biased	0.786	0.8079	0.0219
50	100	100krad Unbiased	0.7885	0.8231	0.0346
51	100	100krad Unbiased	0.7731	0.8185	0.0454
52	100	100krad Unbiased	0.7199	0.7424	0.0225
53	100	100krad Unbiased	0.7603	0.7875	0.0272
54	100	100krad Unbiased	0.7593	0.7859	0.0266
55	100	100krad Biased	0.7665	0.7943	0.0278
56	100	100krad Biased	0.7361	0.7694	0.0333
57	100	100krad Biased	0.7931	0.8213	0.0282
58	100	100krad Biased	0.7469	0.7897	0.0428
59	100	100krad Biased	0.7472	0.7877	0.0405

TID vs Post - Pre Exposure Delta

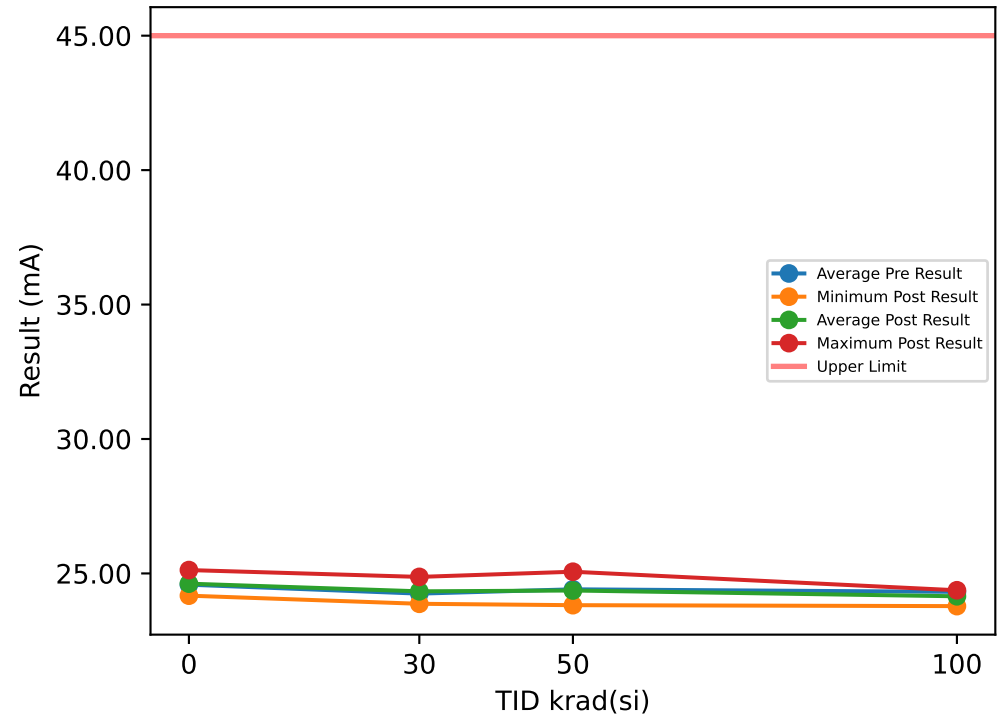


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.721	0.75413	0.804	0.043957	0.7191	0.75393	0.8056	0.045641	-0.0019	-0.0002	0.0016	0.0017521
30	0.7182	0.75564	0.7912	0.025566	0.735	0.77119	0.8037	0.025169	0.012	0.01555	0.0212	0.002653
50	0.7109	0.74768	0.7885	0.026298	0.728	0.77139	0.8127	0.02806	0.0171	0.02371	0.0295	0.0044859
100	0.7199	0.75909	0.7931	0.022678	0.7424	0.79198	0.8231	0.024912	0.0225	0.03289	0.0454	0.0077711

Device Test: 31.5 SUPPLY_CURRENT|PRE/VIN/QUIESCENT|6.3/@IQ_VIN

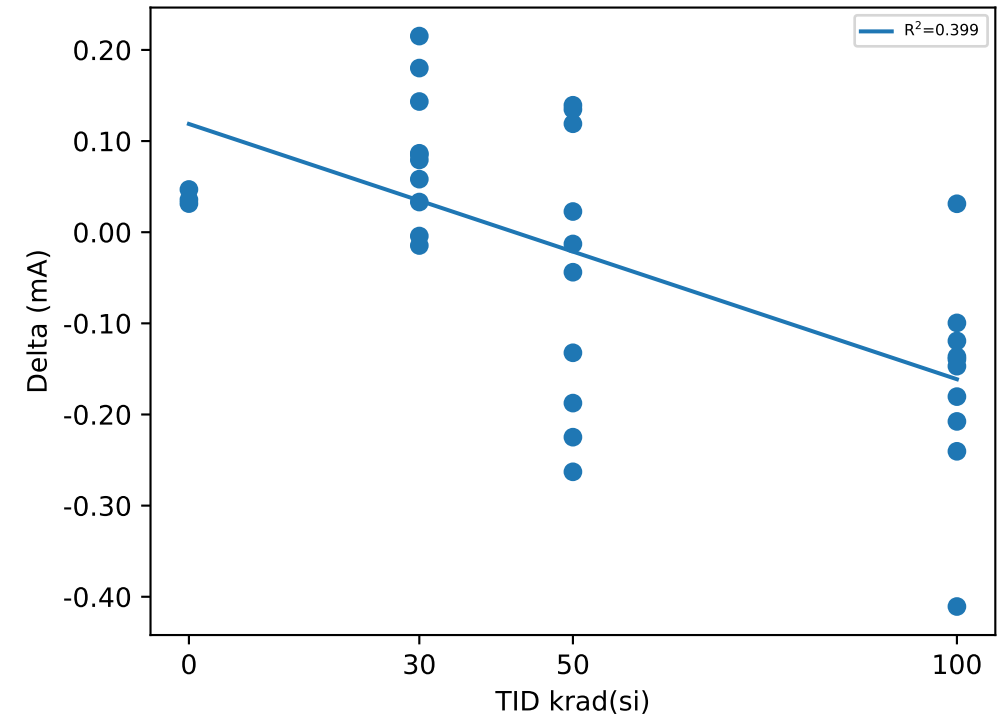
TID vs Result Stats



Test Results (Upper Limit = 45.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	24.126	24.173	0.0469
2	0	CU2	25.09	25.125	0.0357
3	0	CU3	24.53	24.561	0.0314
25	30	30krad Unbiased	24.691	24.871	0.1801
26	30	30krad Unbiased	24.446	24.479	0.0331
27	30	30krad Unbiased	23.862	23.949	0.0866
28	30	30krad Unbiased	23.898	23.894	-0.0042
29	30	30krad Unbiased	24.26	24.319	0.0582
30	30	30krad Biased	24.495	24.639	0.1434
31	30	30krad Biased	24.539	24.624	0.0849
32	30	30krad Biased	23.886	23.871	-0.0146
33	30	30krad Biased	24.036	24.115	0.0793
34	30	30krad Biased	24.371	24.586	0.2152
40	50	50krad Unbiased	24.494	24.516	0.0227
41	50	50krad Unbiased	24.888	24.663	-0.2249
42	50	50krad Unbiased	24.007	23.82	-0.1875
43	50	50krad Unbiased	24.429	24.297	-0.1323
44	50	50krad Unbiased	23.941	23.897	-0.0439
45	50	50krad Biased	24.507	24.646	0.1393
46	50	50krad Biased	24.944	25.063	0.119
47	50	50krad Biased	24.189	23.926	-0.2629
48	50	50krad Biased	24.166	24.301	0.1348
49	50	50krad Biased	24.531	24.518	-0.0129
50	100	100krad Unbiased	24.119	24.15	0.0312
51	100	100krad Unbiased	24.492	24.373	-0.1193
52	100	100krad Unbiased	24.435	24.195	-0.2404
53	100	100krad Unbiased	23.992	23.785	-0.2076
54	100	100krad Unbiased	24.237	24.098	-0.1394
55	100	100krad Biased	24.184	24.037	-0.147
56	100	100krad Biased	24.662	24.251	-0.4107
57	100	100krad Biased	24.511	24.374	-0.1366
58	100	100krad Biased	24.168	24.069	-0.0995
59	100	100krad Biased	24.352	24.171	-0.1804

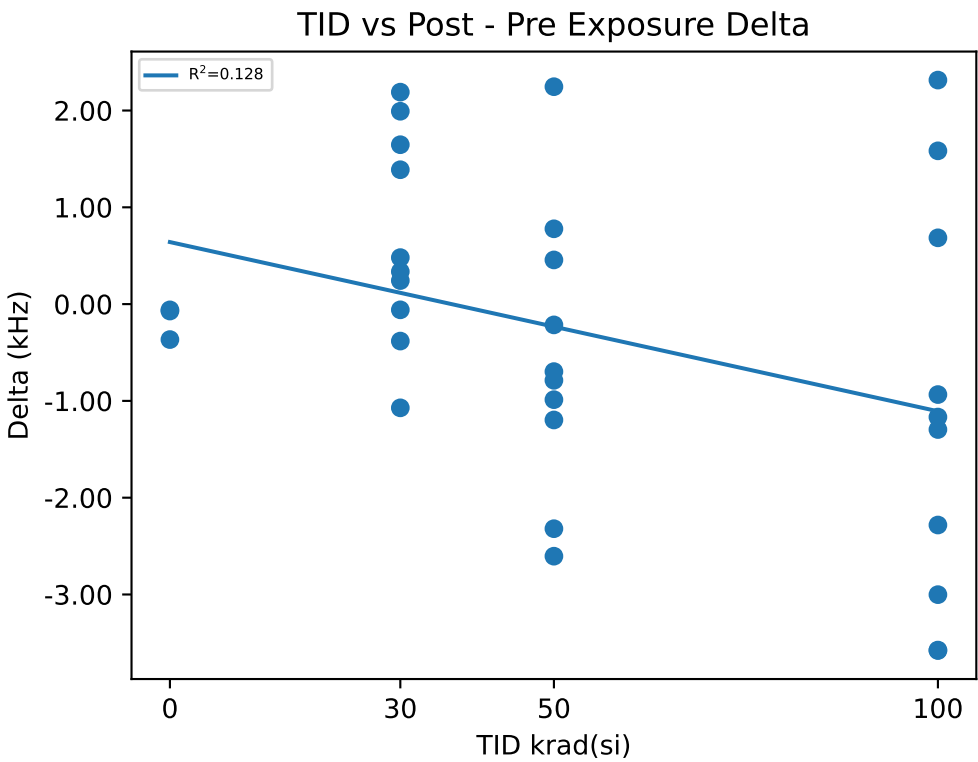
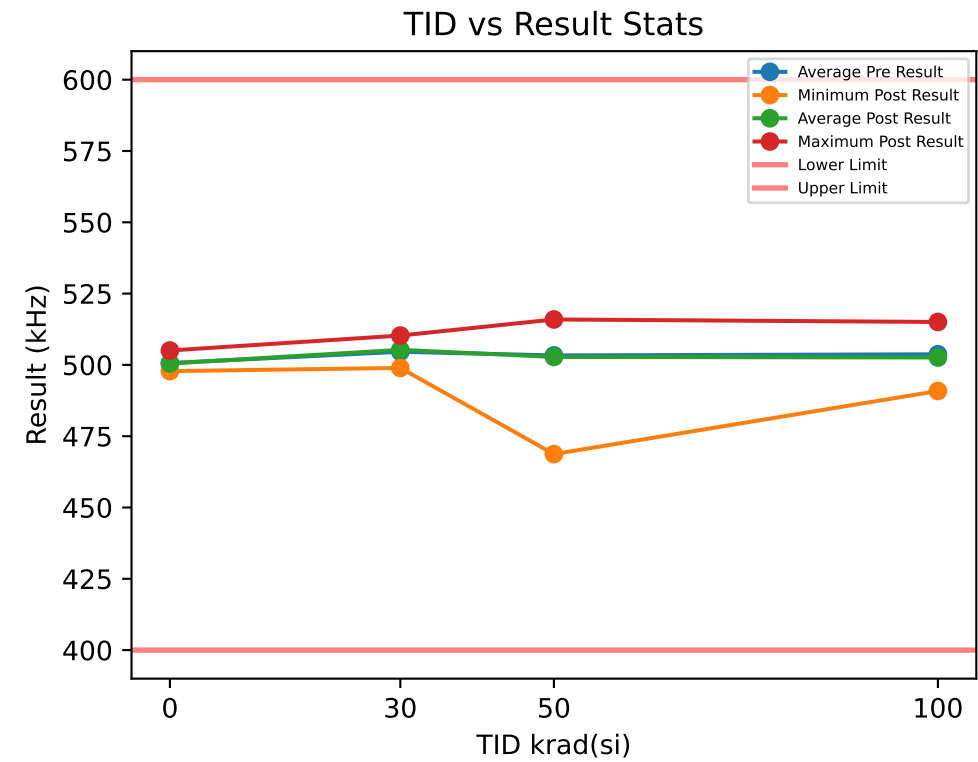
TID vs Post - Pre Exposure Delta



Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	24.126	24.582	25.09	0.48371	24.173	24.62	25.125	0.4787	0.0314	0.038	0.0469	0.0080019
30	23.862	24.249	24.691	0.30619	23.871	24.335	24.871	0.3581	-0.0146	0.0862	0.2152	0.075067
50	23.941	24.41	24.944	0.33924	23.82	24.365	25.063	0.39712	-0.2629	-0.04486	0.1393	0.1515
100	23.992	24.315	24.662	0.20909	23.785	24.15	24.374	0.17266	-0.4107	-0.16497	0.0312	0.11292

Device Test: 35.1 SWITCHING_FREQ|/CFLYP///0mA/3/@F_SW



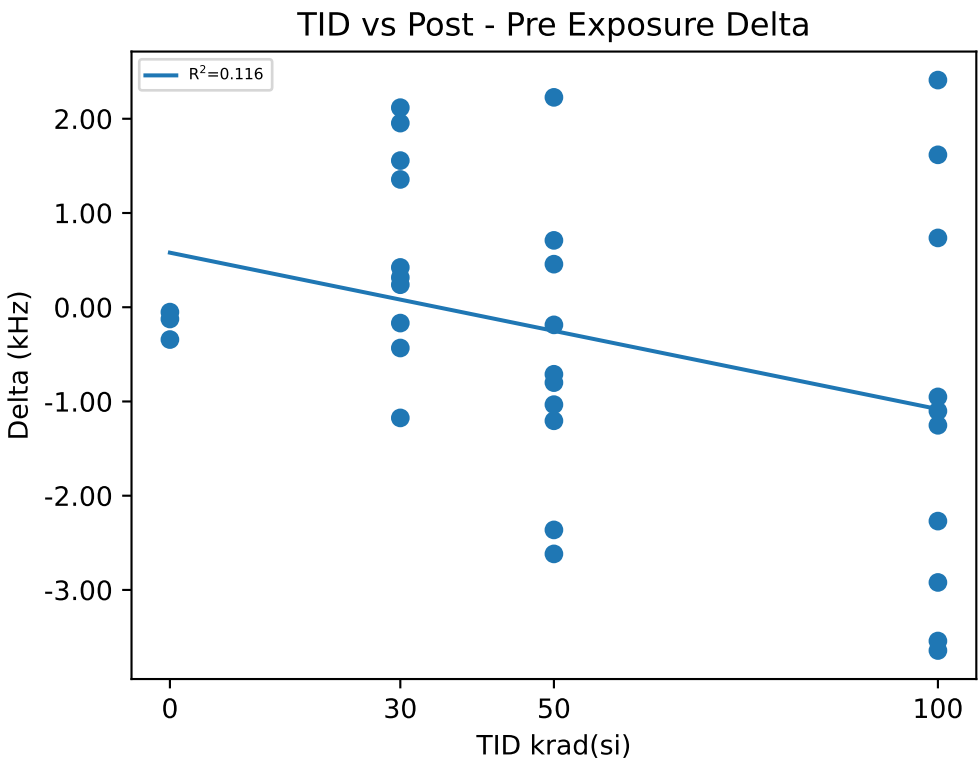
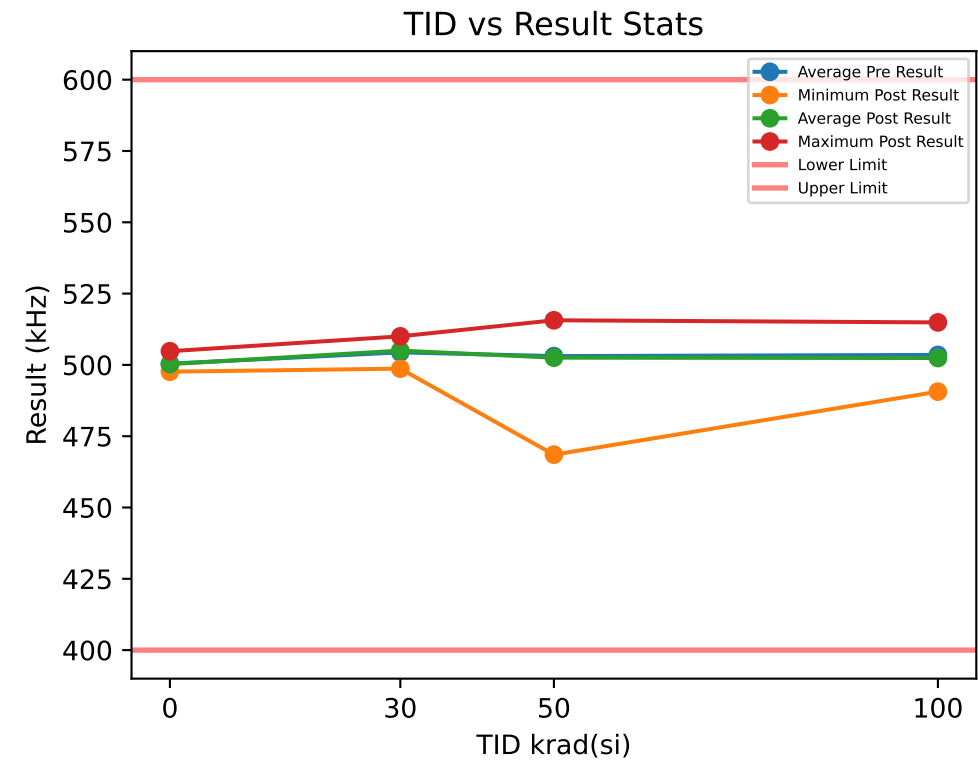
Test Results (Lower Limit = 400.0, Upper Limit = 600.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	498.66	498.6	-0.0595
2	0	CU2	505.12	505.04	-0.0717
3	0	CU3	498.18	497.82	-0.3663
25	30	30krad Unbiased	508.34	508.68	0.336
26	30	30krad Unbiased	504.66	506.66	1.9924
27	30	30krad Unbiased	498.46	498.94	0.4805
28	30	30krad Unbiased	505.57	505.51	-0.0591
29	30	30krad Unbiased	500.89	502.54	1.6468
30	30	30krad Biased	509.74	509.98	0.2432
31	30	30krad Biased	508.1	510.29	2.1899
32	30	30krad Biased	508.3	507.23	-1.0717
33	30	30krad Biased	499.61	499.23	-0.3819
34	30	30krad Biased	502.33	503.72	1.3883
40	50	50krad Unbiased	507.2	506.5	-0.6973
41	50	50krad Unbiased	516.92	515.93	-0.9873
42	50	50krad Unbiased	498.4	497.2	-1.197
43	50	50krad Unbiased	511.6	509.28	-2.3204
44	50	50krad Unbiased	468.28	468.73	0.4564
45	50	50krad Biased	510.12	512.37	2.2461
46	50	50krad Biased	503.86	503.07	-0.7872
47	50	50krad Biased	508.41	508.2	-0.2148
48	50	50krad Biased	504.87	505.65	0.778
49	50	50krad Biased	503.58	500.98	-2.6044
50	100	100krad Unbiased	496.76	495.47	-1.2957
51	100	100krad Unbiased	504.35	500.77	-3.5789
52	100	100krad Unbiased	508.08	509.67	1.5835
53	100	100krad Unbiased	499.21	496.21	-3.0017
54	100	100krad Unbiased	502.51	501.34	-1.1669
55	100	100krad Biased	509.58	510.27	0.6848
56	100	100krad Biased	507.72	504.15	-3.5745
57	100	100krad Biased	504.46	502.18	-2.2823
58	100	100krad Biased	491.78	490.84	-0.9345
59	100	100krad Biased	512.74	515.05	2.3145

Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	498.18	500.65	505.12	3.8734	497.82	500.49	505.04	3.9669	-0.3663	-0.16583	-0.0595	0.17372
30	498.46	504.6	509.74	4.0655	498.94	505.28	510.29	4.0989	-1.0717	0.67644	2.1899	1.0817
50	468.28	503.32	516.92	13.315	468.73	502.79	515.93	13.132	-2.6044	-0.53279	2.2461	1.4432
100	491.78	503.72	512.74	6.3643	490.84	502.59	515.05	7.4628	-3.5789	-1.1252	2.3145	2.0921

Device Test: 35.2 SWITCHING_FREQ|/CFLYP///10mA/3/@F_SW



Test Results (Lower Limit = 400.0, Upper Limit = 600.0 (kHz))

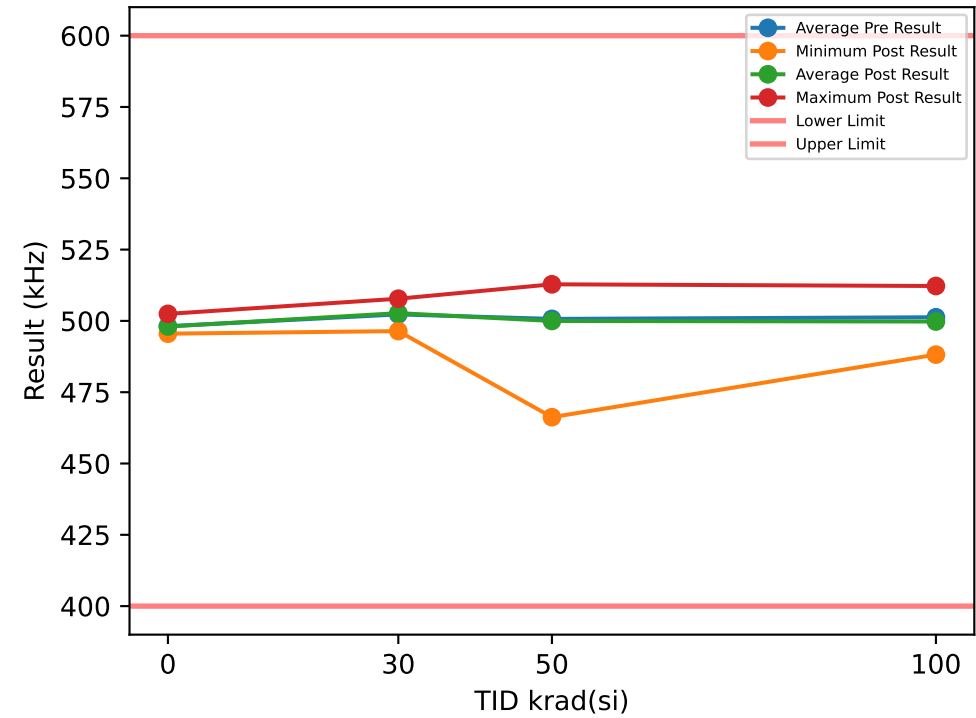
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	498.43	498.38	-0.0517
2	0	CU2	504.92	504.79	-0.1249
3	0	CU3	497.96	497.62	-0.3429
25	30	30krad Unbiased	508.13	508.45	0.3155
26	30	30krad Unbiased	504.44	506.39	1.9539
27	30	30krad Unbiased	498.27	498.69	0.4224
28	30	30krad Unbiased	505.38	505.21	-0.1681
29	30	30krad Unbiased	500.69	502.25	1.5562
30	30	30krad Biased	509.49	509.73	0.2389
31	30	30krad Biased	507.89	510.01	2.1179
32	30	30krad Biased	508.1	506.93	-1.1745
33	30	30krad Biased	499.4	498.97	-0.4326
34	30	30krad Biased	502.12	503.48	1.3561
40	50	50krad Unbiased	506.96	506.24	-0.7113
41	50	50krad Unbiased	516.68	515.64	-1.0336
42	50	50krad Unbiased	498.15	496.95	-1.205
43	50	50krad Unbiased	511.35	508.99	-2.363
44	50	50krad Unbiased	468.08	468.53	0.457
45	50	50krad Biased	509.88	512.11	2.2271
46	50	50krad Biased	503.61	502.81	-0.8
47	50	50krad Biased	508.16	507.97	-0.1871
48	50	50krad Biased	504.65	505.36	0.7095
49	50	50krad Biased	503.33	500.71	-2.6176
50	100	100krad Unbiased	496.55	495.3	-1.253
51	100	100krad Unbiased	504.15	500.51	-3.6428
52	100	100krad Unbiased	507.84	509.45	1.6173
53	100	100krad Unbiased	498.98	496.06	-2.9204
54	100	100krad Unbiased	502.29	501.19	-1.1016
55	100	100krad Biased	509.35	510.09	0.7355
56	100	100krad Biased	507.51	503.97	-3.542
57	100	100krad Biased	504.24	501.97	-2.2695
58	100	100krad Biased	491.58	490.62	-0.9514
59	100	100krad Biased	512.49	514.9	2.4105

Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	497.96	500.44	504.92	3.8896	497.62	500.26	504.79	3.9427	-0.3429	-0.17317	-0.0517	0.15148
30	498.27	504.39	509.49	4.0585	498.69	505.01	510.01	4.0981	-1.1745	0.61857	2.1179	1.0887
50	468.08	503.08	516.68	13.303	468.53	502.53	515.64	13.112	-2.6176	-0.5524	2.2271	1.4437
100	491.58	503.5	512.49	6.3528	490.62	502.41	514.9	7.4685	-3.6428	-1.0917	2.4105	2.1143

Device Test: 35.3 SWITCHING_FREQ|/CFLYP|///150mA/3/@F_SW

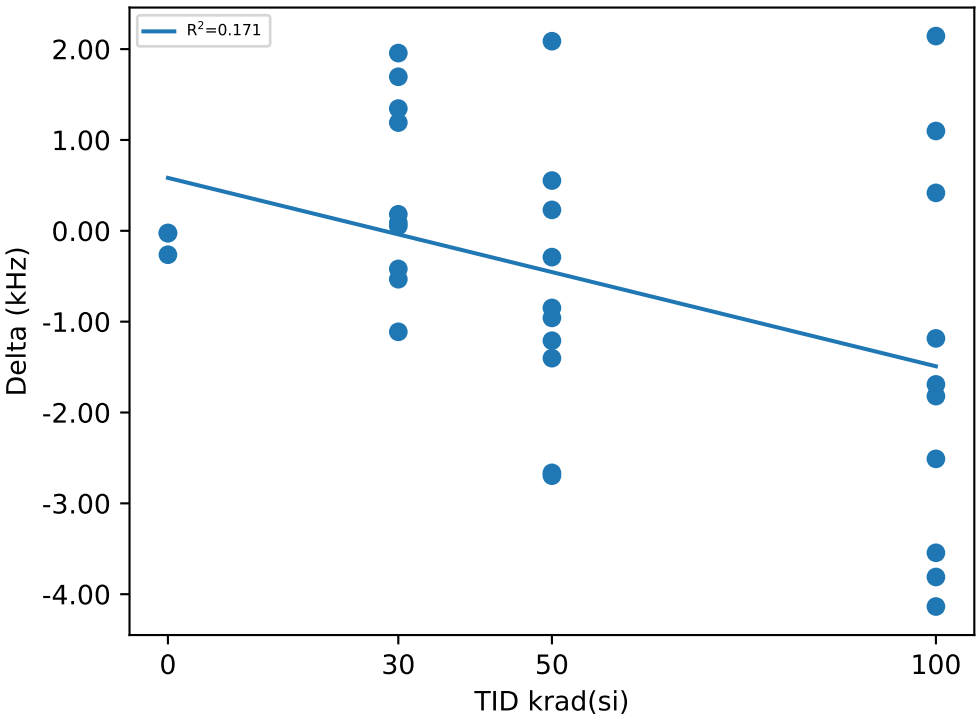
TID vs Result Stats



Test Results (Lower Limit = 400.0, Upper Limit = 600.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	496.12	496.09	-0.0262
2	0	CU2	502.49	502.46	-0.0238
3	0	CU3	495.79	495.52	-0.2633
25	30	30krad Unbiased	506.25	506.3	0.0529
26	30	30krad Unbiased	502.3	504	1.6954
27	30	30krad Unbiased	496.24	496.42	0.1817
28	30	30krad Unbiased	503.28	502.86	-0.4195
29	30	30krad Unbiased	498.4	499.75	1.3456
30	30	30krad Biased	507.27	507.36	0.0888
31	30	30krad Biased	505.82	507.77	1.9564
32	30	30krad Biased	505.85	504.74	-1.112
33	30	30krad Biased	497.4	496.86	-0.5328
34	30	30krad Biased	499.93	501.12	1.1913
40	50	50krad Unbiased	504.39	503.43	-0.9586
41	50	50krad Unbiased	514.04	512.83	-1.2096
42	50	50krad Unbiased	495.61	494.21	-1.4019
43	50	50krad Unbiased	509.09	506.39	-2.6953
44	50	50krad Unbiased	466.02	466.25	0.2302
45	50	50krad Biased	507.64	509.73	2.0871
46	50	50krad Biased	501.13	500.28	-0.8488
47	50	50krad Biased	505.54	505.25	-0.2896
48	50	50krad Biased	502.53	503.08	0.5531
49	50	50krad Biased	501.04	498.38	-2.6644
50	100	100krad Unbiased	494.54	492.72	-1.8194
51	100	100krad Unbiased	501.89	497.76	-4.1356
52	100	100krad Unbiased	505.49	506.59	1.0987
53	100	100krad Unbiased	496.88	493.34	-3.5443
54	100	100krad Unbiased	500.26	498.57	-1.6907
55	100	100krad Biased	507.2	507.61	0.4175
56	100	100krad Biased	505.13	501.32	-3.8105
57	100	100krad Biased	501.93	499.42	-2.5103
58	100	100krad Biased	489.36	488.18	-1.1843
59	100	100krad Biased	510.09	512.24	2.1435

TID vs Post - Pre Exposure Delta

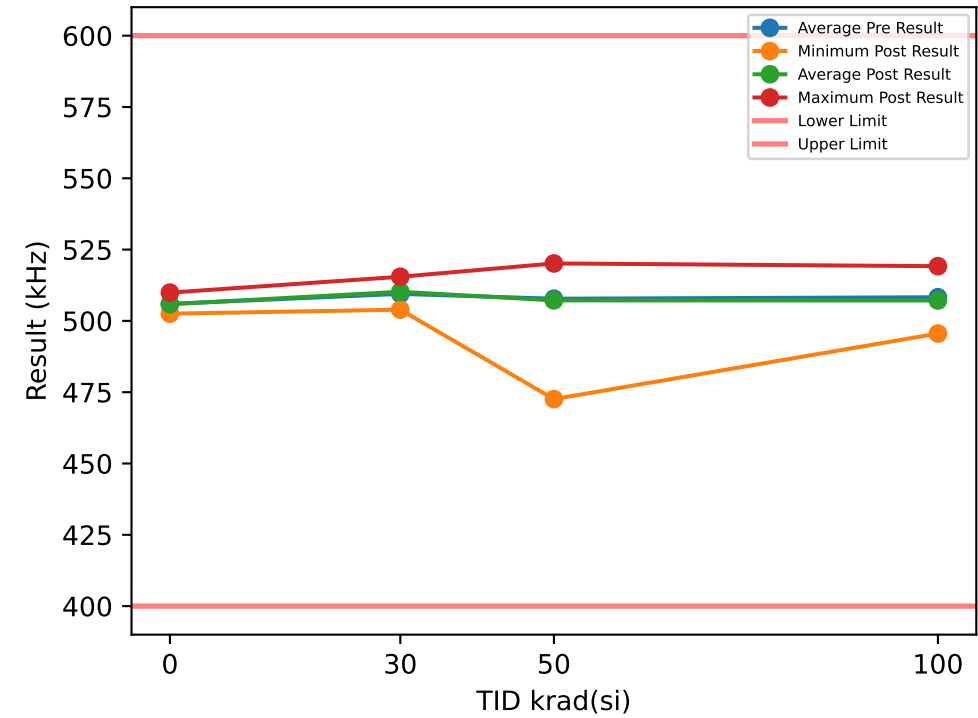


Test Statistics (kHz)

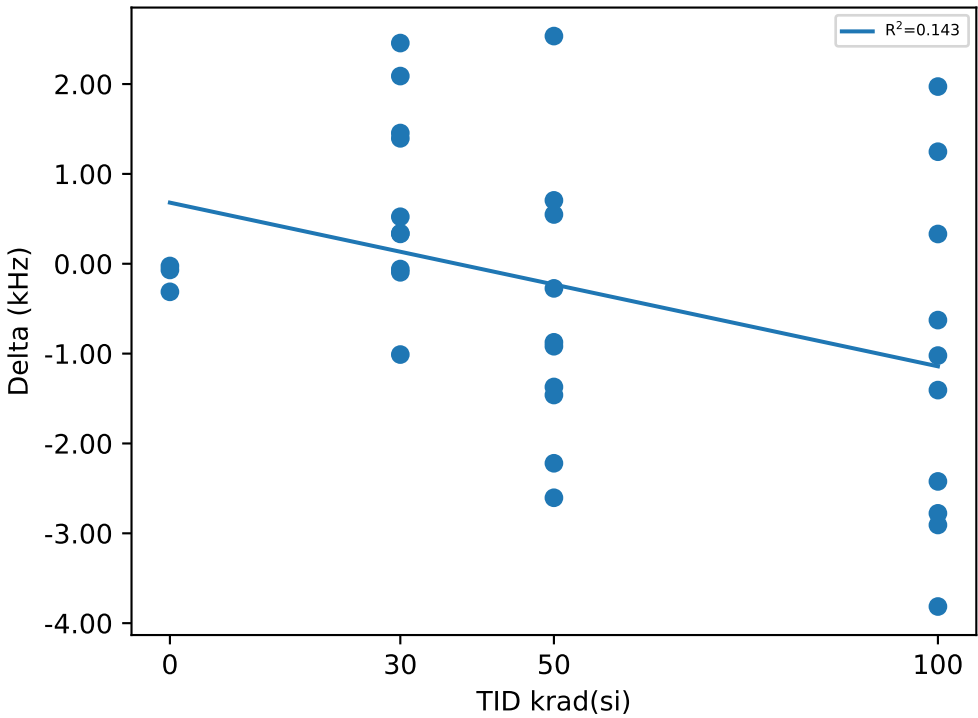
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	495.79	498.13	502.49	3.775	495.52	498.03	502.46	3.8518	-0.2633	-0.10443	-0.0238	0.13759
30	496.24	502.27	507.27	4.0526	496.42	502.72	507.77	4.0958	-1.112	0.44478	1.9564	1.0378
50	466.02	500.7	514.04	13.191	466.25	499.98	512.83	13.015	-2.6953	-0.71978	2.0871	1.4549
100	489.36	501.28	510.09	6.2708	488.18	499.77	512.24	7.4308	-4.1356	-1.5035	2.1435	2.1455

Device Test: 35.4 SWITCHING_FREQ|/CFLYP|/0mA/6.3/@F_SW

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Lower Limit = 400.0, Upper Limit = 600.0 (kHz))

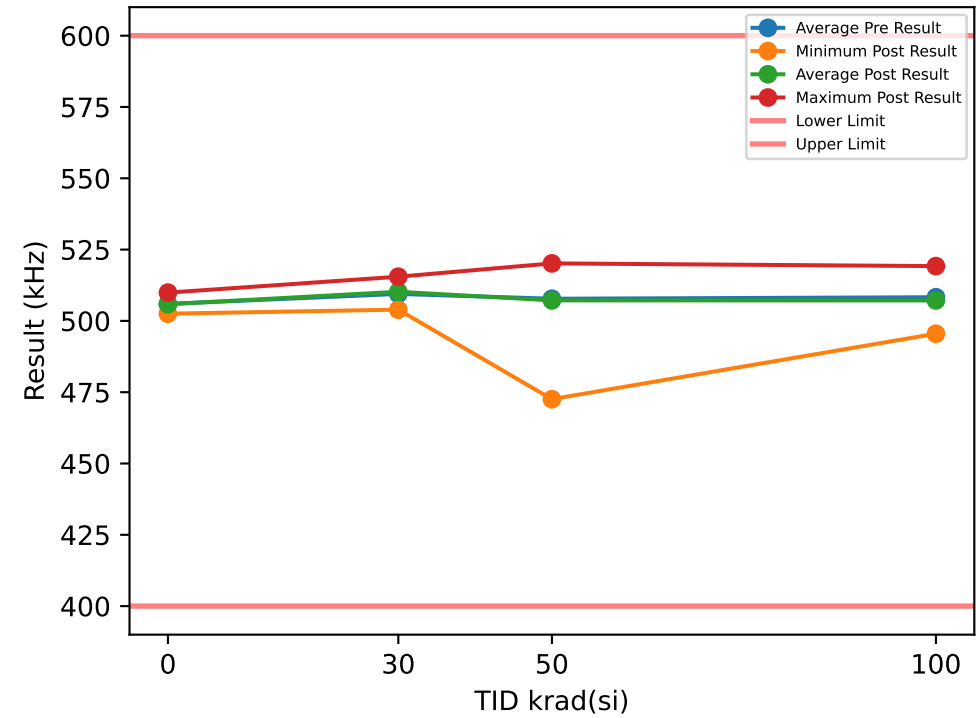
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	505.1	505.08	-0.0249
2	0	CU2	509.98	509.91	-0.0687
3	0	CU3	502.85	502.53	-0.3124
25	30	30krad Unbiased	512.8	513.14	0.3392
26	30	30krad Unbiased	509.73	512.19	2.4562
27	30	30krad Unbiased	503.41	503.94	0.5231
28	30	30krad Unbiased	511.11	511.01	-0.0953
29	30	30krad Unbiased	506.29	507.75	1.4549
30	30	30krad Biased	514.14	514.47	0.3325
31	30	30krad Biased	513.38	515.47	2.0889
32	30	30krad Biased	512.45	511.44	-1.0105
33	30	30krad Biased	504.85	504.79	-0.0589
34	30	30krad Biased	506.56	507.96	1.3958
40	50	50krad Unbiased	511.19	510.27	-0.918
41	50	50krad Unbiased	521.52	520.15	-1.3712
42	50	50krad Unbiased	502.69	501.23	-1.4608
43	50	50krad Unbiased	516.08	513.86	-2.2205
44	50	50krad Unbiased	472.04	472.59	0.5483
45	50	50krad Biased	515.39	517.93	2.5339
46	50	50krad Biased	508.42	507.55	-0.8743
47	50	50krad Biased	512.77	512.49	-0.274
48	50	50krad Biased	509.61	510.32	0.7054
49	50	50krad Biased	508.05	505.44	-2.6044
50	100	100krad Unbiased	501.68	500.27	-1.4061
51	100	100krad Unbiased	509.31	506.4	-2.9072
52	100	100krad Unbiased	512.22	513.47	1.247
53	100	100krad Unbiased	503.63	500.85	-2.7777
54	100	100krad Unbiased	507.04	506.01	-1.0218
55	100	100krad Biased	513.64	513.97	0.3313
56	100	100krad Biased	512.01	508.19	-3.8147
57	100	100krad Biased	510.03	507.61	-2.4224
58	100	100krad Biased	496.19	495.56	-0.627
59	100	100krad Biased	517.21	519.19	1.972

Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	502.85	505.98	509.98	3.6488	502.53	505.84	509.91	3.75	-0.3124	-0.13533	-0.0249	0.1549
30	503.41	509.47	514.14	3.8938	503.94	510.21	515.47	3.9498	-1.0105	0.74259	2.4562	1.0791
50	472.04	507.78	521.52	13.579	472.59	507.18	520.15	13.38	-2.6044	-0.59356	2.5339	1.5314
100	496.19	508.3	517.21	6.28	495.56	507.15	519.19	7.1149	-3.8147	-1.1427	1.972	1.9002

Device Test: 35.5 SWITCHING_FREQ|/CFLYP|///10mA/6.3/@F_SW

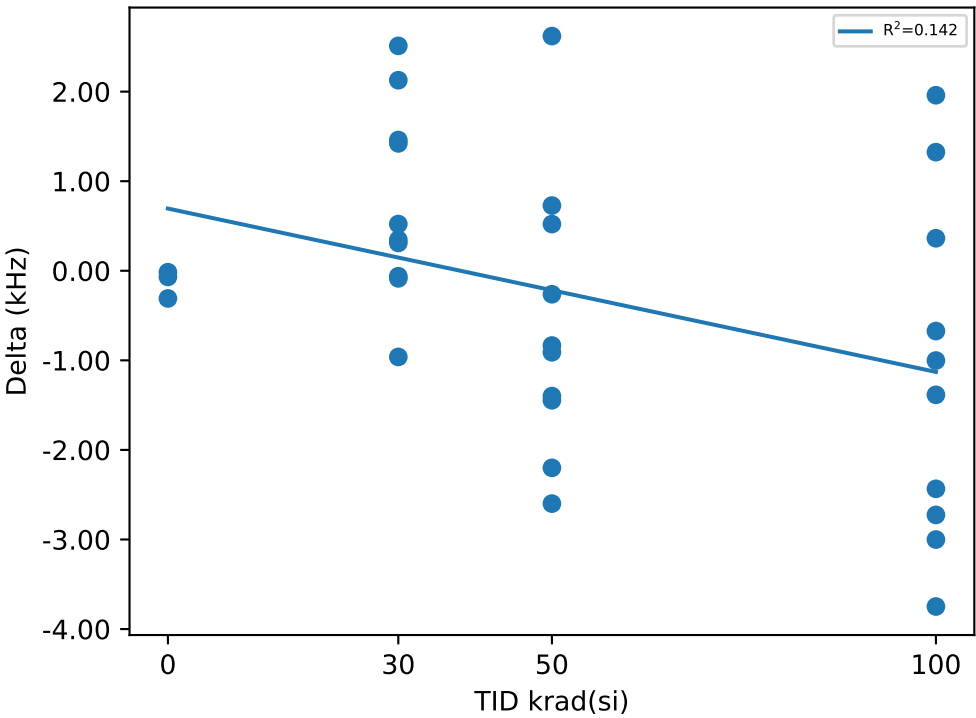
TID vs Result Stats



Test Results (Lower Limit = 400.0, Upper Limit = 600.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	505.08	505.07	-0.0162
2	0	CU2	509.98	509.91	-0.0686
3	0	CU3	502.84	502.53	-0.3092
25	30	30krad Unbiased	512.79	513.14	0.3463
26	30	30krad Unbiased	509.69	512.2	2.5107
27	30	30krad Unbiased	503.42	503.94	0.5215
28	30	30krad Unbiased	511.08	510.99	-0.0847
29	30	30krad Unbiased	506.3	507.76	1.4596
30	30	30krad Biased	514.14	514.45	0.3109
31	30	30krad Biased	513.37	515.49	2.1273
32	30	30krad Biased	512.43	511.47	-0.9619
33	30	30krad Biased	504.83	504.77	-0.0609
34	30	30krad Biased	506.54	507.97	1.4222
40	50	50krad Unbiased	511.19	510.28	-0.9099
41	50	50krad Unbiased	521.56	520.16	-1.3992
42	50	50krad Unbiased	502.7	501.26	-1.4456
43	50	50krad Unbiased	516.08	513.88	-2.2001
44	50	50krad Unbiased	472.04	472.56	0.5212
45	50	50krad Biased	515.34	517.96	2.62
46	50	50krad Biased	508.41	507.58	-0.8345
47	50	50krad Biased	512.75	512.49	-0.2623
48	50	50krad Biased	509.59	510.32	0.7283
49	50	50krad Biased	508.04	505.44	-2.5994
50	100	100krad Unbiased	501.66	500.27	-1.385
51	100	100krad Unbiased	509.36	506.36	-3.0006
52	100	100krad Unbiased	512.22	513.54	1.324
53	100	100krad Unbiased	503.63	500.9	-2.7257
54	100	100krad Unbiased	507.03	506.03	-1.0023
55	100	100krad Biased	513.64	514	0.3627
56	100	100krad Biased	512	508.25	-3.7483
57	100	100krad Biased	510.01	507.58	-2.4344
58	100	100krad Biased	496.18	495.51	-0.673
59	100	100krad Biased	517.25	519.21	1.9595

TID vs Post - Pre Exposure Delta

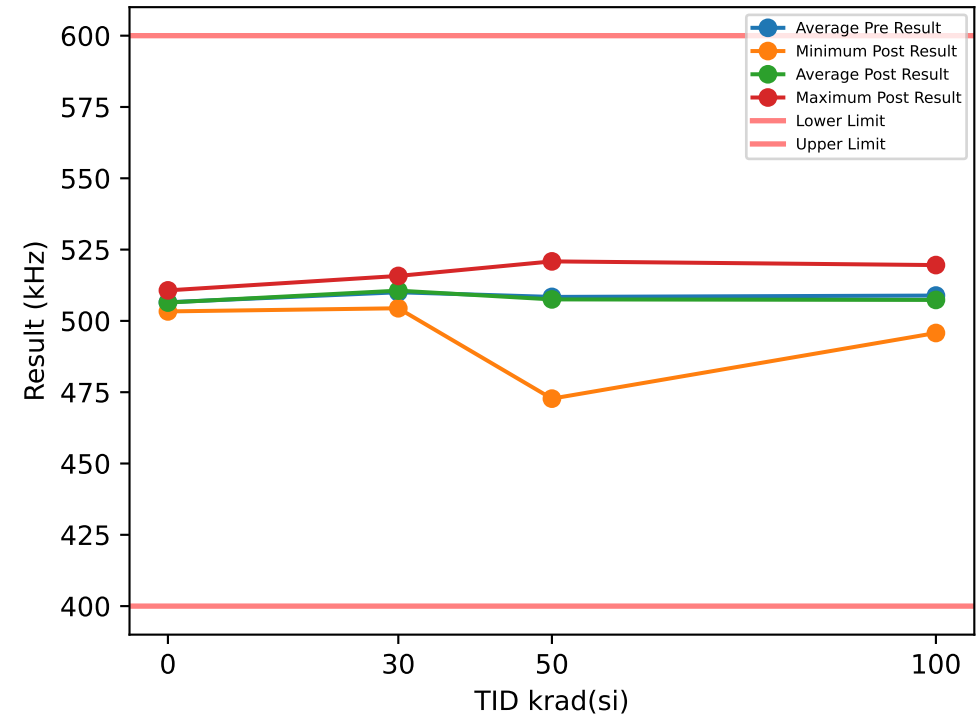


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	502.84	505.97	509.98	3.6487	502.53	505.84	509.91	3.7474	-0.3092	-0.13133	-0.0162	0.15625
30	503.42	509.46	514.14	3.8884	503.94	510.22	515.49	3.9505	-0.9619	0.7591	2.5107	1.0875
50	472.04	507.77	521.56	13.578	472.56	507.19	520.16	13.392	-2.5994	-0.57815	2.62	1.5478
100	496.18	508.3	517.25	6.291	495.51	507.16	519.21	7.1373	-3.7483	-1.1323	1.9595	1.9058

Device Test: 35.6 SWITCHING_FREQ|/CFLYP|/400mA/6.3/@F_SW

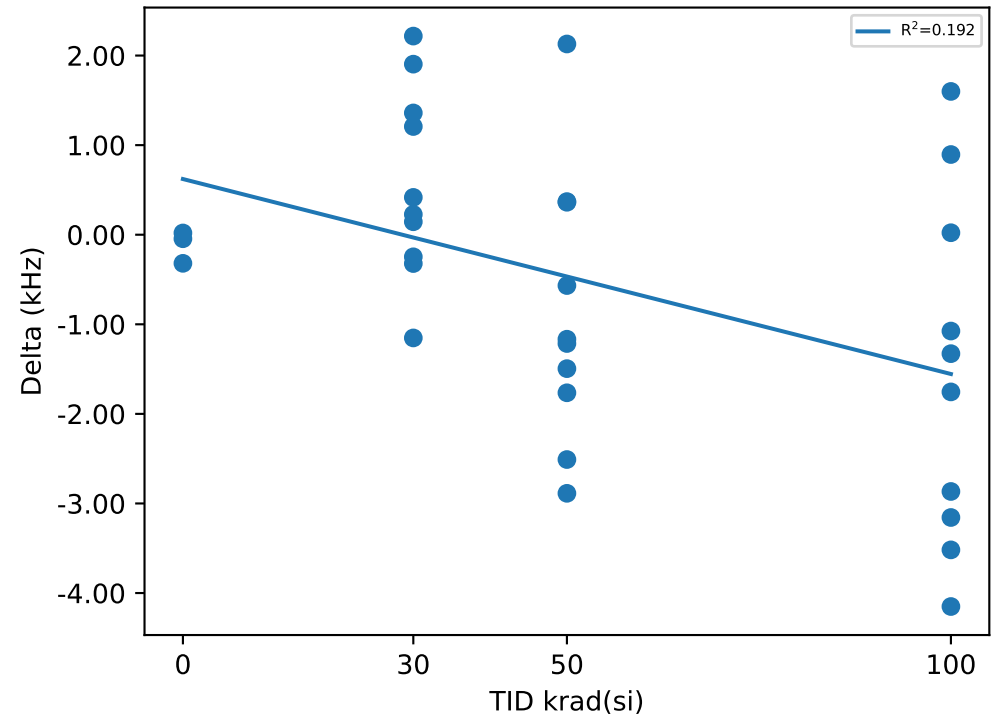
TID vs Result Stats



Test Results (Lower Limit = 400.0, Upper Limit = 600.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	505.24	505.26	0.0195
2	0	CU2	510.74	510.7	-0.0449
3	0	CU3	503.64	503.32	-0.3194
25	30	30krad Unbiased	513.44	513.66	0.2267
26	30	30krad Unbiased	510.19	512.41	2.2174
27	30	30krad Unbiased	504.01	504.43	0.4167
28	30	30krad Unbiased	511.52	511.27	-0.2467
29	30	30krad Unbiased	506.76	508.12	1.3594
30	30	30krad Biased	514.92	515.06	0.1447
31	30	30krad Biased	513.86	515.76	1.904
32	30	30krad Biased	513.05	511.9	-1.1522
33	30	30krad Biased	505.41	505.09	-0.3218
34	30	30krad Biased	507.19	508.4	1.2079
40	50	50krad Unbiased	512.11	510.95	-1.1665
41	50	50krad Unbiased	522.36	520.87	-1.495
42	50	50krad Unbiased	503.48	501.72	-1.7645
43	50	50krad Unbiased	516.63	514.12	-2.5096
44	50	50krad Unbiased	472.38	472.74	0.3623
45	50	50krad Biased	515.87	518	2.1292
46	50	50krad Biased	509.17	507.96	-1.2144
47	50	50krad Biased	513.33	512.76	-0.5673
48	50	50krad Biased	510.21	510.58	0.3698
49	50	50krad Biased	508.54	505.66	-2.8868
50	100	100krad Unbiased	502.18	500.43	-1.7547
51	100	100krad Unbiased	509.93	506.41	-3.5181
52	100	100krad Unbiased	512.96	513.86	0.8953
53	100	100krad Unbiased	504.18	501.03	-3.1566
54	100	100krad Unbiased	507.6	506.28	-1.3277
55	100	100krad Biased	514.13	514.15	0.0222
56	100	100krad Biased	512.62	508.47	-4.1504
57	100	100krad Biased	510.43	507.56	-2.8661
58	100	100krad Biased	496.83	495.76	-1.0753
59	100	100krad Biased	517.97	519.57	1.5996

TID vs Post - Pre Exposure Delta

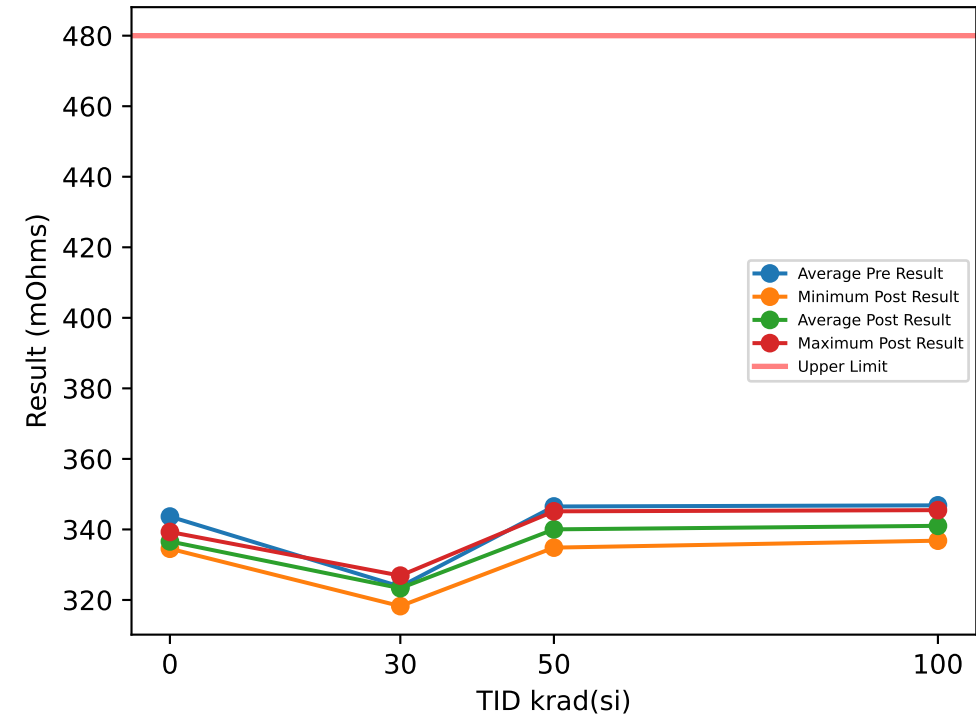


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	503.64	506.54	510.74	3.7234	503.32	506.43	510.7	3.8221	-0.3194	-0.11493	0.0195	0.17998
30	504.01	510.03	514.92	3.9142	504.43	510.61	515.76	3.9563	-1.1522	0.57561	2.2174	1.0684
50	472.38	508.41	522.36	13.671	472.74	507.54	520.87	13.445	-2.8868	-0.87428	2.1292	1.5017
100	496.83	508.88	517.97	6.3077	495.76	507.35	519.57	7.1776	-4.1504	-1.5332	1.5996	1.9332

Device Test: 40.2 RDSON|//SW1////@SW1_RDSON

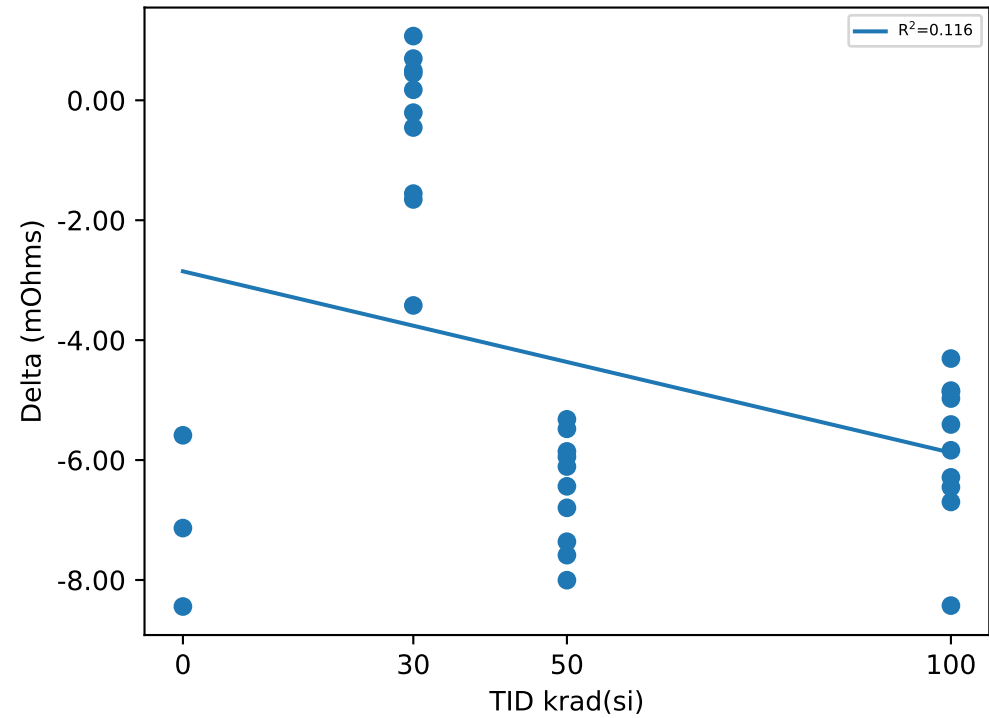
TID vs Result Stats



Test Results (Upper Limit = 480.0 (mOhms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	344.88	339.29	-5.5867
2	0	CU2	343.11	335.98	-7.1341
3	0	CU3	342.98	334.53	-8.4423
25	30	30krad Unbiased	326.07	325.62	-0.4539
26	30	30krad Unbiased	323.81	322.26	-1.556
27	30	30krad Unbiased	326.72	326.9	0.1757
28	30	30krad Unbiased	323.09	319.67	-3.4211
29	30	30krad Unbiased	317.81	318.26	0.4497
30	30	30krad Biased	324.5	324.29	-0.206
31	30	30krad Biased	323.4	321.75	-1.6534
32	30	30krad Biased	325.53	326.22	0.696
33	30	30krad Biased	322.79	323.28	0.4961
34	30	30krad Biased	324.06	325.13	1.071
40	50	50krad Unbiased	346.1	339.99	-6.1079
41	50	50krad Unbiased	343.43	337.58	-5.8553
42	50	50krad Unbiased	350.66	344.23	-6.4376
43	50	50krad Unbiased	348.25	340.89	-7.3614
44	50	50krad Unbiased	340.16	334.84	-5.3202
45	50	50krad Biased	343.75	338.27	-5.4791
46	50	50krad Biased	347.96	341.16	-6.7964
47	50	50krad Biased	353.14	345.14	-8.0033
48	50	50krad Biased	343.61	336.03	-7.5858
49	50	50krad Biased	348.05	342.1	-5.9457
50	100	100krad Unbiased	346.68	341.84	-4.8416
51	100	100krad Unbiased	349.33	344.47	-4.8608
52	100	100krad Unbiased	351.92	345.47	-6.4524
53	100	100krad Unbiased	344.61	340.31	-4.3068
54	100	100krad Unbiased	345.72	339.02	-6.6986
55	100	100krad Biased	343.1	336.81	-6.2884
56	100	100krad Biased	346.23	341.26	-4.9741
57	100	100krad Biased	345.56	339.72	-5.8366
58	100	100krad Biased	346.72	341.32	-5.4066
59	100	100krad Biased	348.44	340.01	-8.4271

TID vs Post - Pre Exposure Delta

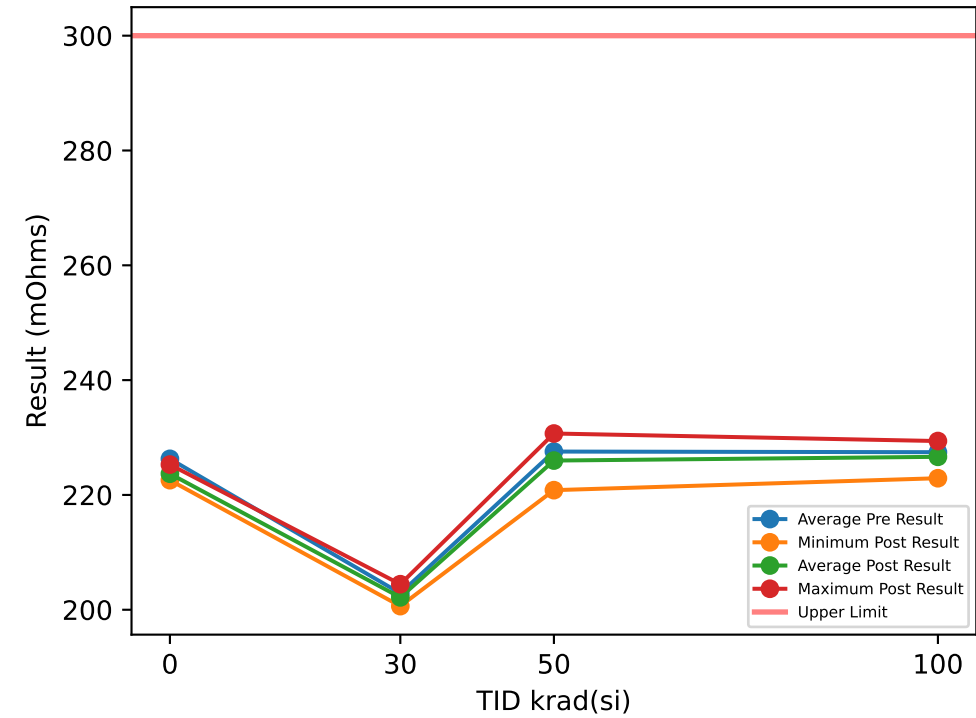


Test Statistics (mOhms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	342.98	343.65	344.88	1.06	334.53	336.6	339.29	2.4379	-8.4423	-7.0544	-5.5867	1.4295
30	317.81	323.78	326.72	2.4681	318.26	323.34	326.9	2.8539	-3.4211	-0.44019	1.071	1.3857
50	340.16	346.51	353.14	3.8672	334.84	340.02	345.14	3.3667	-8.0033	-6.4893	-5.3202	0.91786
100	343.1	346.83	351.92	2.5126	336.81	341.02	345.47	2.5253	-8.4271	-5.8093	-4.3068	1.2129

Device Test: 40.3 RDSON|//SW3////@SW3_RDSON

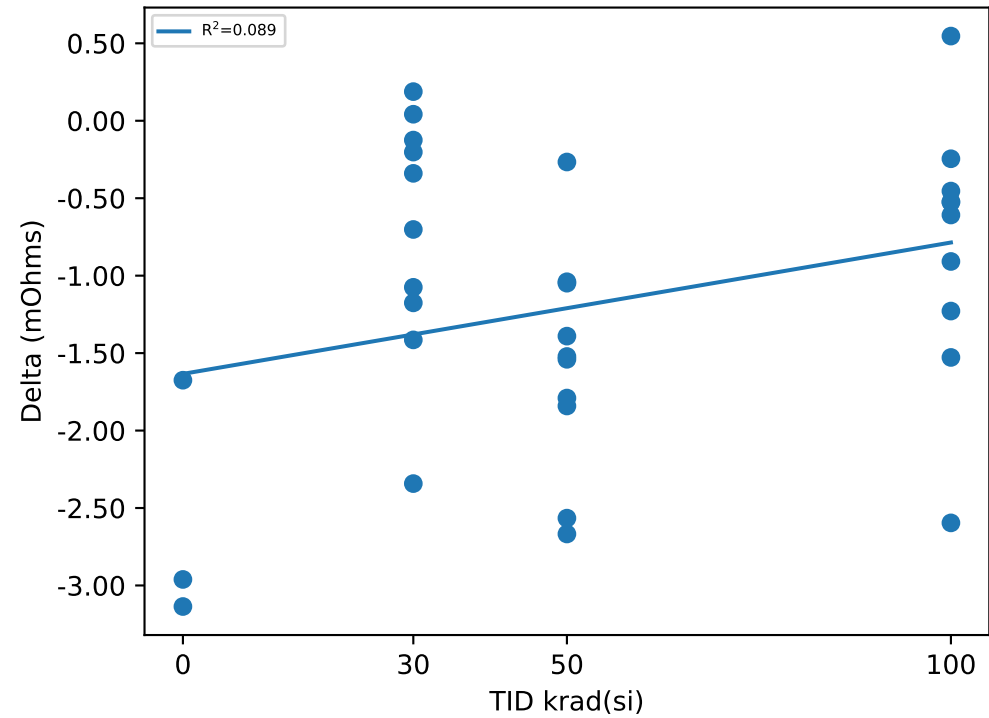
TID vs Result Stats



Test Results (Upper Limit = 300.0 (mOhms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	228.25	225.29	-2.9611
2	0	CU2	224.91	223.23	-1.6749
3	0	CU3	225.71	222.57	-3.1359
25	30	30krad Unbiased	204.41	204.45	0.0421
26	30	30krad Unbiased	202.24	201.16	-1.0752
27	30	30krad Unbiased	202.53	201.82	-0.7018
28	30	30krad Unbiased	203.49	201.15	-2.3423
29	30	30krad Unbiased	200.97	200.63	-0.3395
30	30	30krad Biased	202.39	202.57	0.1882
31	30	30krad Biased	202.68	201.27	-1.4146
32	30	30krad Biased	204.04	203.91	-0.1247
33	30	30krad Biased	202.88	202.68	-0.2022
34	30	30krad Biased	203.07	201.9	-1.1756
40	50	50krad Unbiased	227.3	225.76	-1.54
41	50	50krad Unbiased	223.79	223.52	-0.2662
42	50	50krad Unbiased	231.12	228.55	-2.5654
43	50	50krad Unbiased	229.86	227.19	-2.6676
44	50	50krad Unbiased	221.87	220.83	-1.0393
45	50	50krad Biased	226.42	225.03	-1.3904
46	50	50krad Biased	227.06	225.27	-1.7901
47	50	50krad Biased	232.22	230.7	-1.5218
48	50	50krad Biased	226.15	224.3	-1.8413
49	50	50krad Biased	229.78	228.73	-1.0486
50	100	100krad Unbiased	228.52	229.07	0.5467
51	100	100krad Unbiased	229.91	229.39	-0.5223
52	100	100krad Unbiased	230.78	228.18	-2.596
53	100	100krad Unbiased	226.13	225.67	-0.4539
54	100	100krad Unbiased	225.03	224.42	-0.6083
55	100	100krad Biased	223.82	222.91	-0.9083
56	100	100krad Biased	227.11	225.88	-1.2285
57	100	100krad Biased	227.83	227.58	-0.2453
58	100	100krad Biased	227.83	227.3	-0.5259
59	100	100krad Biased	227.52	225.99	-1.5279

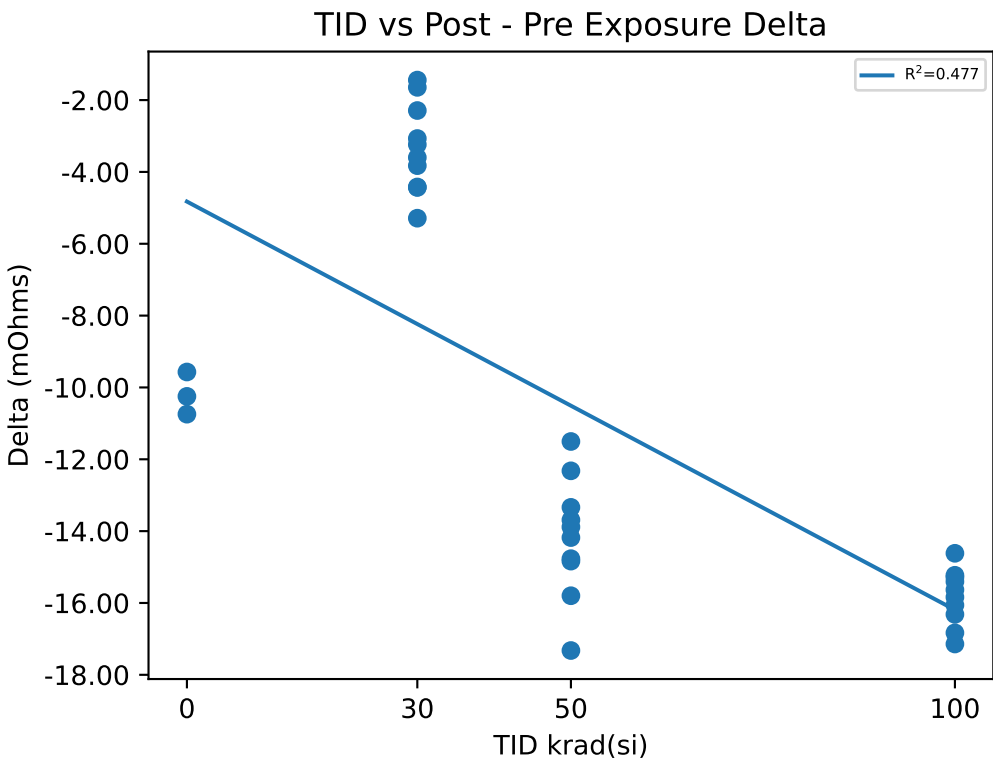
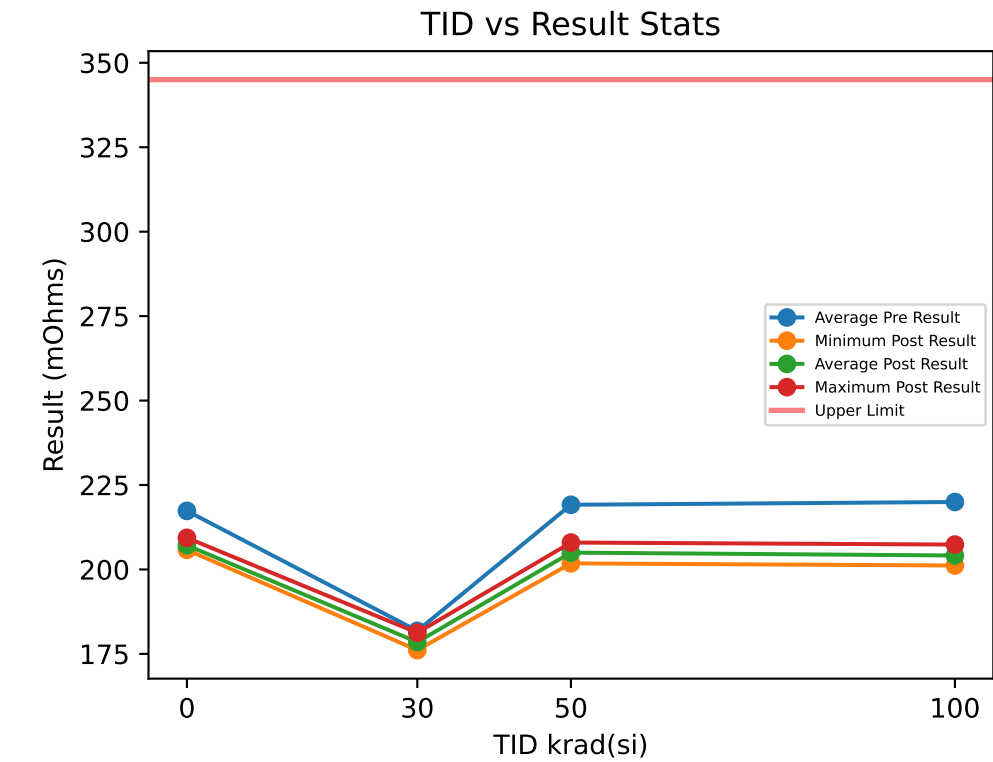
TID vs Post - Pre Exposure Delta



Test Statistics (mOhms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	224.91	226.29	228.25	1.7456	222.57	223.7	225.29	1.4172	-3.1359	-2.5906	-1.6749	0.79785
30	200.97	202.87	204.41	0.9742	200.63	202.16	204.45	1.2506	-2.3423	-0.71456	0.1882	0.79029
50	221.87	227.56	232.22	3.2454	220.83	225.99	230.7	2.8815	-2.6676	-1.5671	-0.2662	0.71542
100	223.82	227.45	230.78	2.0945	222.91	226.64	229.39	2.0528	-2.596	-0.80697	0.5467	0.84198

Device Test: 40.5 RDSON|//SW2////@SW2_RDSON



Test Results (Upper Limit = 345.0 (mOhms))

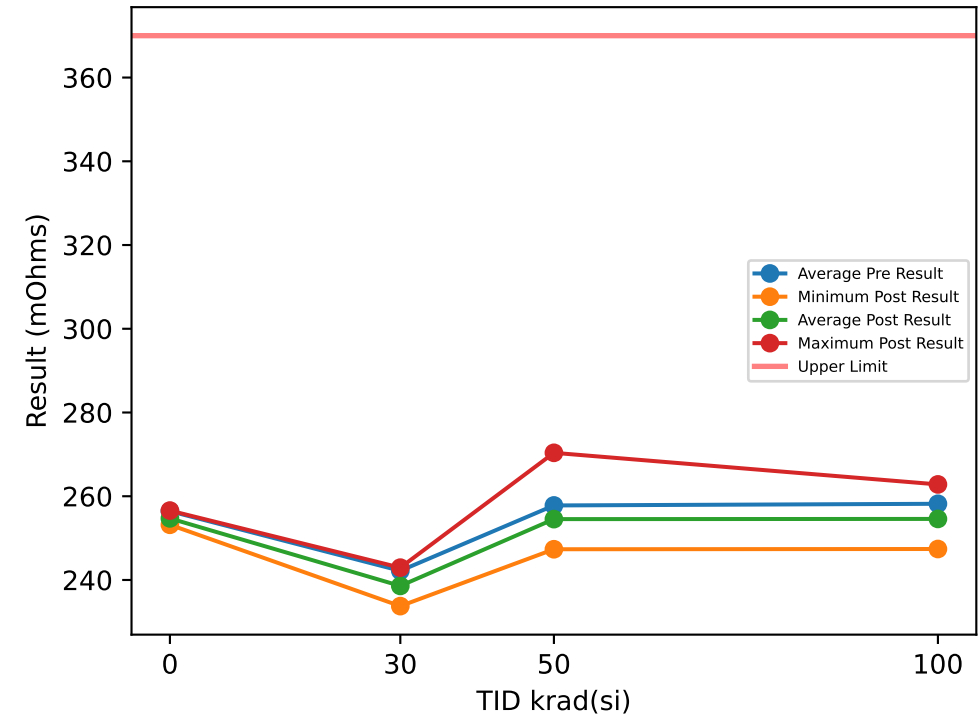
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	220.11	209.37	-10.744
2	0	CU2	215.38	205.81	-9.5698
3	0	CU3	216.54	206.29	-10.249
25	30	30krad Unbiased	182.71	181.27	-1.4431
26	30	30krad Unbiased	180.43	177.36	-3.0702
27	30	30krad Unbiased	181.67	178.44	-3.2387
28	30	30krad Unbiased	182.61	180.96	-1.6455
29	30	30krad Unbiased	181.45	179.16	-2.2906
30	30	30krad Biased	181.41	176.12	-5.288
31	30	30krad Biased	182.69	178.87	-3.8252
32	30	30krad Biased	182.21	178.61	-3.5993
33	30	30krad Biased	181.28	176.85	-4.4324
34	30	30krad Biased	181.81	177.39	-4.4194
40	50	50krad Unbiased	218.3	204.96	-13.338
41	50	50krad Unbiased	216.94	203.06	-13.885
42	50	50krad Unbiased	218.59	207.08	-11.504
43	50	50krad Unbiased	220.29	207.97	-12.321
44	50	50krad Unbiased	215.98	201.8	-14.179
45	50	50krad Biased	219.27	204.43	-14.835
46	50	50krad Biased	218.54	202.74	-15.798
47	50	50krad Biased	221.08	207.39	-13.688
48	50	50krad Biased	221.84	204.52	-17.324
49	50	50krad Biased	220.68	205.91	-14.767
50	100	100krad Unbiased	222.78	207.37	-15.404
51	100	100krad Unbiased	222.44	207.15	-15.286
52	100	100krad Unbiased	220.92	205.28	-15.634
53	100	100krad Unbiased	220.95	205.11	-15.839
54	100	100krad Unbiased	217.39	202.77	-14.617
55	100	100krad Biased	217.49	201.17	-16.317
56	100	100krad Biased	217.84	201.78	-16.061
57	100	100krad Biased	220.79	205.56	-15.229
58	100	100krad Biased	220.27	203.13	-17.142
59	100	100krad Biased	218.89	202.06	-16.832

Test Statistics (mOhms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	215.38	217.34	220.11	2.469	205.81	207.15	209.37	1.9331	-10.744	-10.187	-9.5698	0.58948
30	180.43	181.83	182.71	0.73454	176.12	178.5	181.27	1.6732	-5.288	-3.3252	-1.4431	1.252
50	215.98	219.15	221.84	1.8547	201.8	204.99	207.97	2.0916	-17.324	-14.164	-11.504	1.6642
100	217.39	219.97	222.78	1.9751	201.17	204.14	207.37	2.246	-17.142	-15.836	-14.617	0.77201

Device Test: 40.6 RDSON|//SW4////@SW4_RDSON

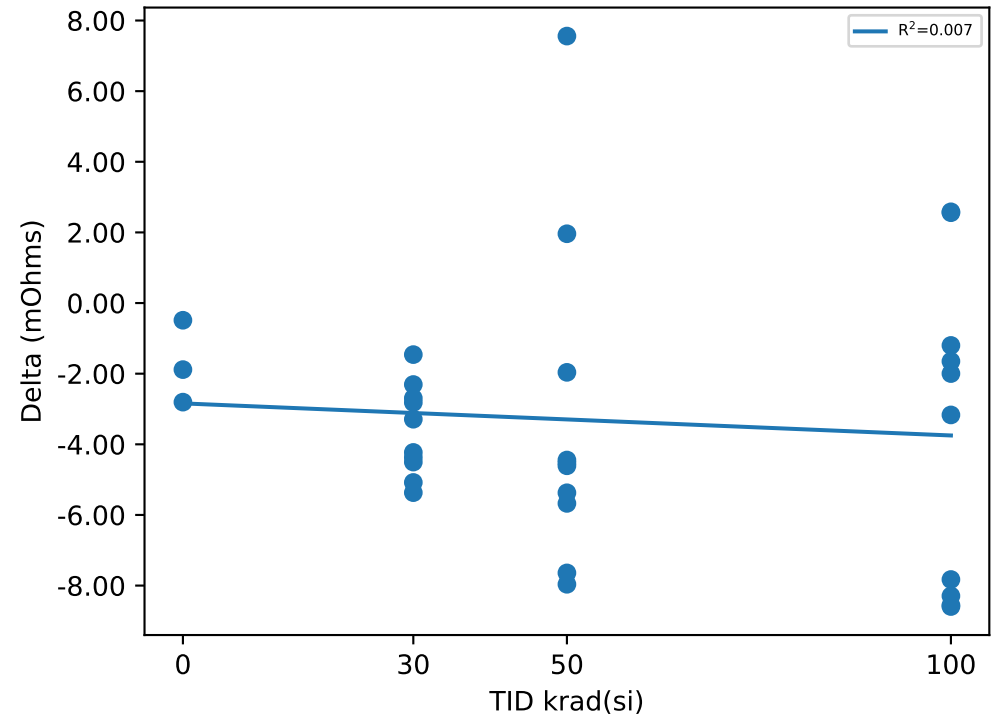
TID vs Result Stats



Test Results (Upper Limit = 370.0 (mOhms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	257.06	256.58	-0.487
2	0	CU2	255.07	253.19	-1.8846
3	0	CU3	257.18	254.37	-2.8057
25	30	30krad Unbiased	244.4	242.94	-1.4597
26	30	30krad Unbiased	240.62	237.8	-2.8161
27	30	30krad Unbiased	241.7	238.41	-3.2896
28	30	30krad Unbiased	243.77	241.47	-2.3067
29	30	30krad Unbiased	241.65	238.95	-2.694
30	30	30krad Biased	238.84	233.76	-5.0799
31	30	30krad Biased	245.01	240.64	-4.3703
32	30	30krad Biased	242.57	238.34	-4.2296
33	30	30krad Biased	242.01	236.64	-5.3684
34	30	30krad Biased	241.35	236.85	-4.5029
40	50	50krad Unbiased	257.26	251.89	-5.372
41	50	50krad Unbiased	255.84	250.16	-5.6729
42	50	50krad Unbiased	261.16	256.64	-4.5274
43	50	50krad Unbiased	258.68	254.24	-4.4449
44	50	50krad Unbiased	251.95	247.34	-4.6077
45	50	50krad Biased	255.11	253.15	-1.9621
46	50	50krad Biased	256.37	258.34	1.962
47	50	50krad Biased	262.81	270.37	7.5593
48	50	50krad Biased	258.22	250.57	-7.6414
49	50	50krad Biased	260.62	252.66	-7.9631
50	100	100krad Unbiased	260.27	262.82	2.5582
51	100	100krad Unbiased	260.15	256.98	-3.168
52	100	100krad Unbiased	262.93	260.93	-1.9966
53	100	100krad Unbiased	258.3	256.66	-1.6491
54	100	100krad Unbiased	255.51	258.1	2.5833
55	100	100krad Biased	253.1	251.9	-1.1999
56	100	100krad Biased	256.21	247.92	-8.2934
57	100	100krad Biased	260.79	252.2	-8.5927
58	100	100krad Biased	258.76	250.93	-7.8279
59	100	100krad Biased	255.95	247.4	-8.5552

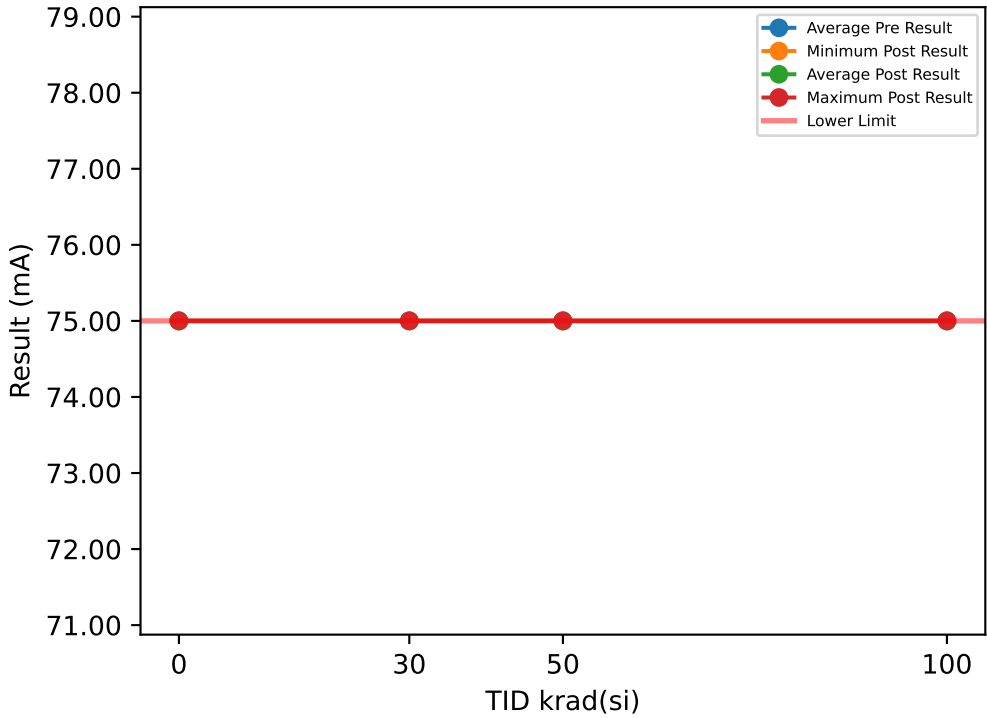
TID vs Post - Pre Exposure Delta



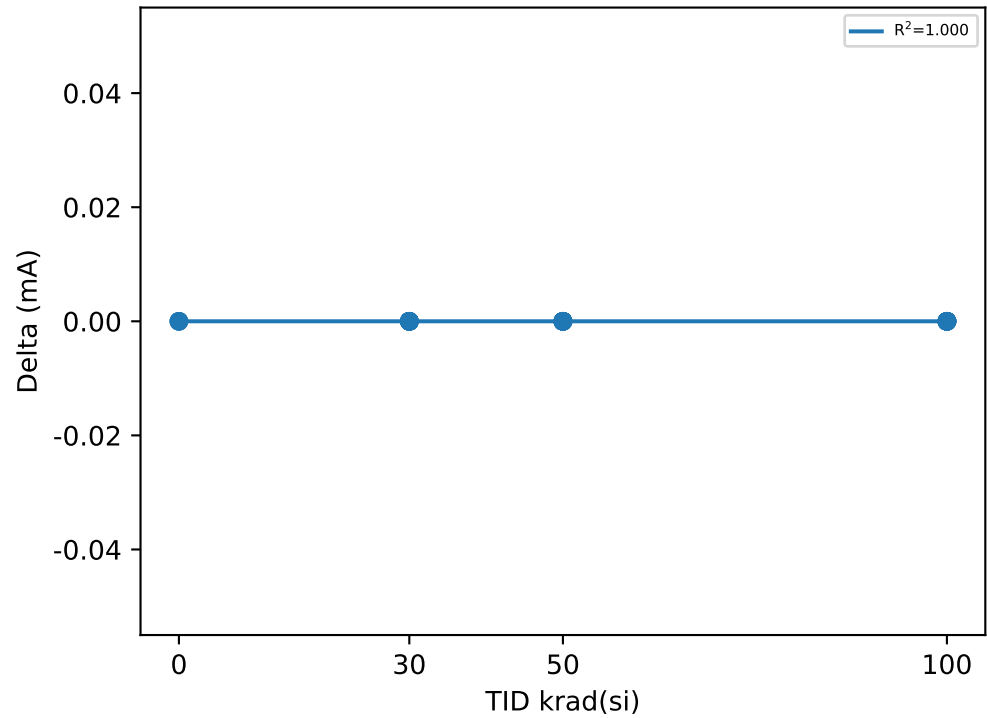
Test Statistics (mOhms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	255.07	256.44	257.18	1.1859	253.19	254.71	256.58	1.7209	-2.8057	-1.7258	-0.487	1.1675
30	238.84	242.19	245.01	1.841	233.76	238.58	242.94	2.6346	-5.3684	-3.6117	-1.4597	1.2869
50	251.95	257.8	262.81	3.2145	247.34	254.53	270.37	6.4004	-7.9631	-3.267	7.5593	4.7427
100	253.1	258.2	262.93	2.976	247.4	254.58	262.82	5.3016	-8.5927	-3.6141	2.5833	4.4455

TID vs Result Stats



TID vs Post - Pre Exposure Delta



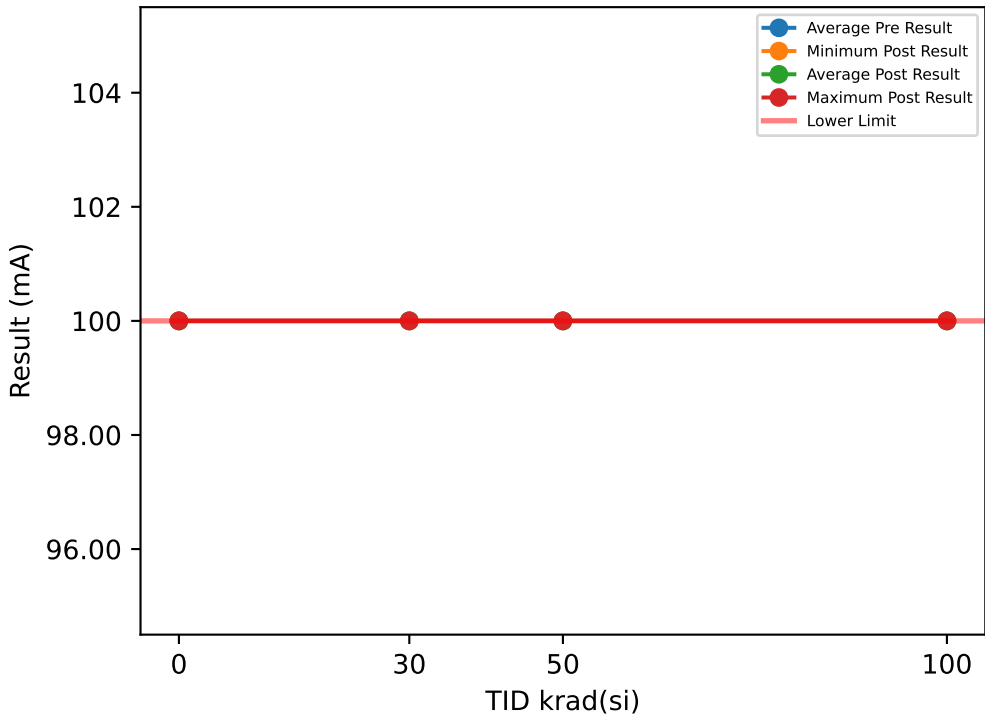
Test Results (Lower Limit = 75.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	75	75	0
2	0	CU2	75	75	0
3	0	CU3	75	75	0
25	30	30krad Unbiased	75	75	0
26	30	30krad Unbiased	75	75	0
27	30	30krad Unbiased	75	75	0
28	30	30krad Unbiased	75	75	0
29	30	30krad Unbiased	75	75	0
30	30	30krad Biased	75	75	0
31	30	30krad Biased	75	75	0
32	30	30krad Biased	75	75	0
33	30	30krad Biased	75	75	0
34	30	30krad Biased	75	75	0
40	50	50krad Unbiased	75	75	0
41	50	50krad Unbiased	75	75	0
42	50	50krad Unbiased	75	75	0
43	50	50krad Unbiased	75	75	0
44	50	50krad Unbiased	75	75	0
45	50	50krad Biased	75	75	0
46	50	50krad Biased	75	75	0
47	50	50krad Biased	75	75	0
48	50	50krad Biased	75	75	0
49	50	50krad Biased	75	75	0
50	100	100krad Unbiased	75	75	0
51	100	100krad Unbiased	75	75	0
52	100	100krad Unbiased	75	75	0
53	100	100krad Unbiased	75	75	0
54	100	100krad Unbiased	75	75	0
55	100	100krad Biased	75	75	0
56	100	100krad Biased	75	75	0
57	100	100krad Biased	75	75	0
58	100	100krad Biased	75	75	0
59	100	100krad Biased	75	75	0

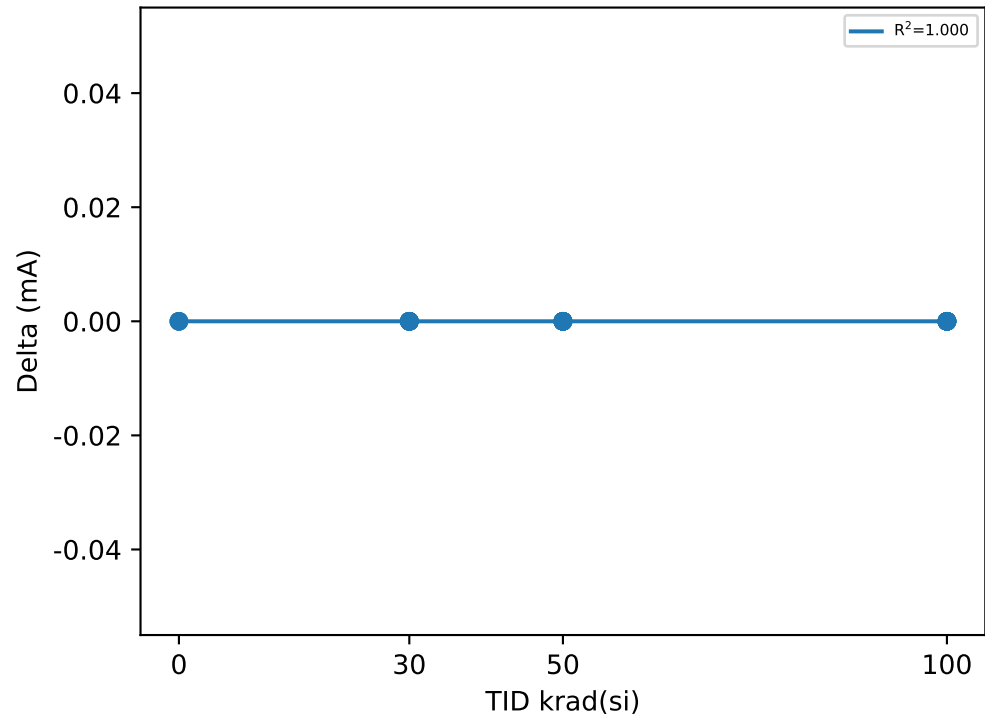
Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	75	75	75	0	75	75	75	0	0	0	0	0
30	75	75	75	0	75	75	75	0	0	0	0	0
50	75	75	75	0	75	75	75	0	0	0	0	0
100	75	75	75	0	75	75	75	0	0	0	0	0

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Lower Limit = 100.0 (mA))

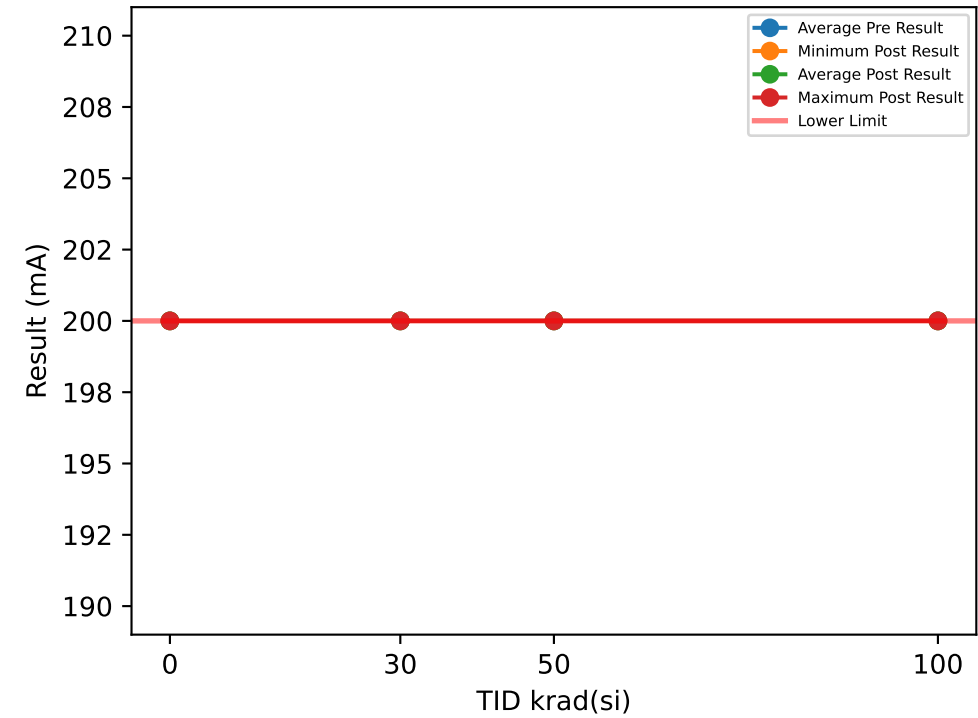
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	100	100	0
2	0	CU2	100	100	0
3	0	CU3	100	100	0
25	30	30krad Unbiased	100	100	0
26	30	30krad Unbiased	100	100	0
27	30	30krad Unbiased	100	100	0
28	30	30krad Unbiased	100	100	0
29	30	30krad Unbiased	100	100	0
30	30	30krad Biased	100	100	0
31	30	30krad Biased	100	100	0
32	30	30krad Biased	100	100	0
33	30	30krad Biased	100	100	0
34	30	30krad Biased	100	100	0
40	50	50krad Unbiased	100	100	0
41	50	50krad Unbiased	100	100	0
42	50	50krad Unbiased	100	100	0
43	50	50krad Unbiased	100	100	0
44	50	50krad Unbiased	100	100	0
45	50	50krad Biased	100	100	0
46	50	50krad Biased	100	100	0
47	50	50krad Biased	100	100	0
48	50	50krad Biased	100	100	0
49	50	50krad Biased	100	100	0
50	100	100krad Unbiased	100	100	0
51	100	100krad Unbiased	100	100	0
52	100	100krad Unbiased	100	100	0
53	100	100krad Unbiased	100	100	0
54	100	100krad Unbiased	100	100	0
55	100	100krad Biased	100	100	0
56	100	100krad Biased	100	100	0
57	100	100krad Biased	100	100	0
58	100	100krad Biased	100	100	0
59	100	100krad Biased	100	100	0

Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100	0	100	100	100	0	0	0	0	0
30	100	100	100	0	100	100	100	0	0	0	0	0
50	100	100	100	0	100	100	100	0	0	0	0	0
100	100	100	100	0	100	100	100	0	0	0	0	0

Device Test: 44.3 DROPOUT_CURRENT|//GO_NOGO/1N8V/200mA/4/@I_DO_VIN_4V_VOUT_1N8

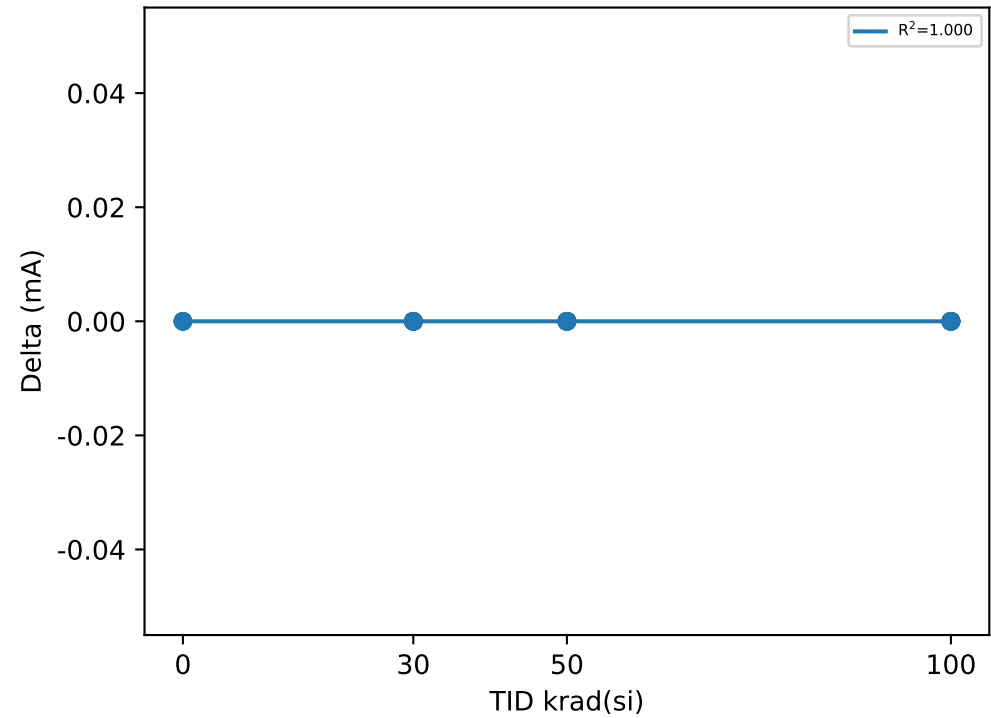
TID vs Result Stats



Test Results (Lower Limit = 200.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	200	200	0
2	0	CU2	200	200	0
3	0	CU3	200	200	0
25	30	30krad Unbiased	200	200	0
26	30	30krad Unbiased	200	200	0
27	30	30krad Unbiased	200	200	0
28	30	30krad Unbiased	200	200	0
29	30	30krad Unbiased	200	200	0
30	30	30krad Biased	200	200	0
31	30	30krad Biased	200	200	0
32	30	30krad Biased	200	200	0
33	30	30krad Biased	200	200	0
34	30	30krad Biased	200	200	0
40	50	50krad Unbiased	200	200	0
41	50	50krad Unbiased	200	200	0
42	50	50krad Unbiased	200	200	0
43	50	50krad Unbiased	200	200	0
44	50	50krad Unbiased	200	200	0
45	50	50krad Biased	200	200	0
46	50	50krad Biased	200	200	0
47	50	50krad Biased	200	200	0
48	50	50krad Biased	200	200	0
49	50	50krad Biased	200	200	0
50	100	100krad Unbiased	200	200	0
51	100	100krad Unbiased	200	200	0
52	100	100krad Unbiased	200	200	0
53	100	100krad Unbiased	200	200	0
54	100	100krad Unbiased	200	200	0
55	100	100krad Biased	200	200	0
56	100	100krad Biased	200	200	0
57	100	100krad Biased	200	200	0
58	100	100krad Biased	200	200	0
59	100	100krad Biased	200	200	0

TID vs Post - Pre Exposure Delta

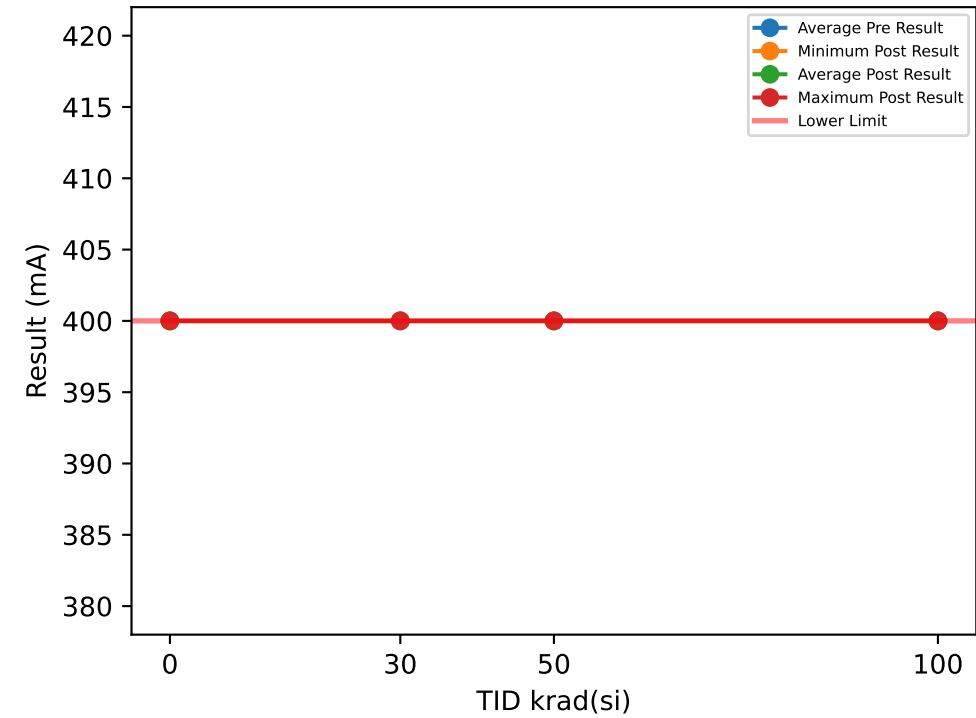


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	200	200	200	0	200	200	200	0	0	0	0	0
30	200	200	200	0	200	200	200	0	0	0	0	0
50	200	200	200	0	200	200	200	0	0	0	0	0
100	200	200	200	0	200	200	200	0	0	0	0	0

Device Test: 44.4 DROPOUT_CURRENT|//GO_NOGO/1N8V/400mA/5/@I_DO_VIN_5V_VOUT_1N8

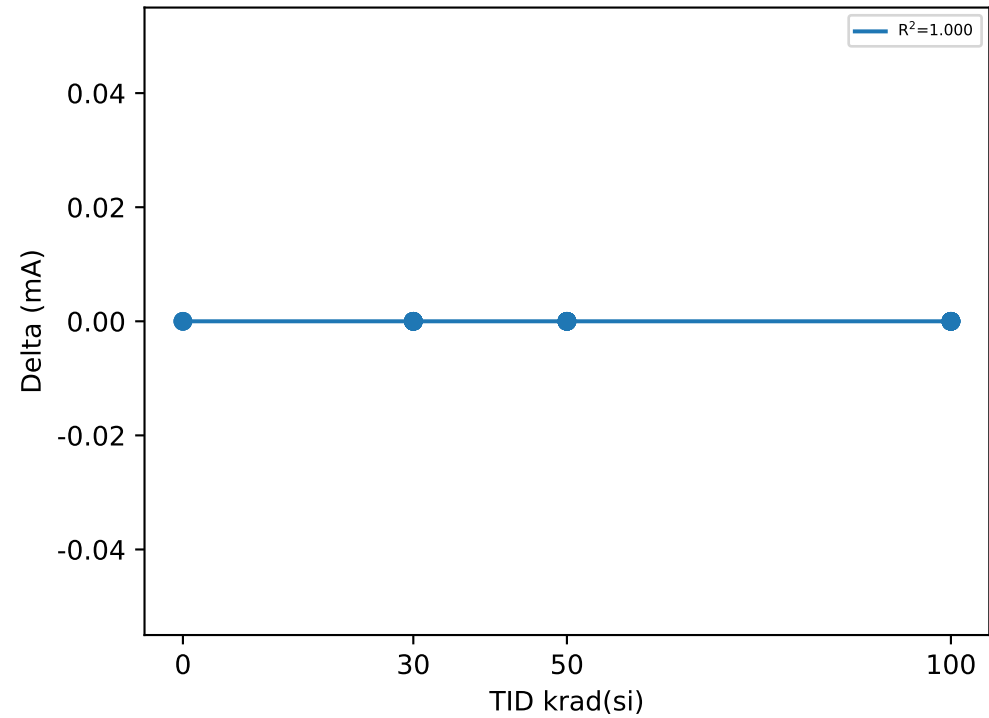
TID vs Result Stats



Test Results (Lower Limit = 400.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	400	400	0
2	0	CU2	400	400	0
3	0	CU3	400	400	0
25	30	30krad Unbiased	400	400	0
26	30	30krad Unbiased	400	400	0
27	30	30krad Unbiased	400	400	0
28	30	30krad Unbiased	400	400	0
29	30	30krad Unbiased	400	400	0
30	30	30krad Biased	400	400	0
31	30	30krad Biased	400	400	0
32	30	30krad Biased	400	400	0
33	30	30krad Biased	400	400	0
34	30	30krad Biased	400	400	0
40	50	50krad Unbiased	400	400	0
41	50	50krad Unbiased	400	400	0
42	50	50krad Unbiased	400	400	0
43	50	50krad Unbiased	400	400	0
44	50	50krad Unbiased	400	400	0
45	50	50krad Biased	400	400	0
46	50	50krad Biased	400	400	0
47	50	50krad Biased	400	400	0
48	50	50krad Biased	400	400	0
49	50	50krad Biased	400	400	0
50	100	100krad Unbiased	400	400	0
51	100	100krad Unbiased	400	400	0
52	100	100krad Unbiased	400	400	0
53	100	100krad Unbiased	400	400	0
54	100	100krad Unbiased	400	400	0
55	100	100krad Biased	400	400	0
56	100	100krad Biased	400	400	0
57	100	100krad Biased	400	400	0
58	100	100krad Biased	400	400	0
59	100	100krad Biased	400	400	0

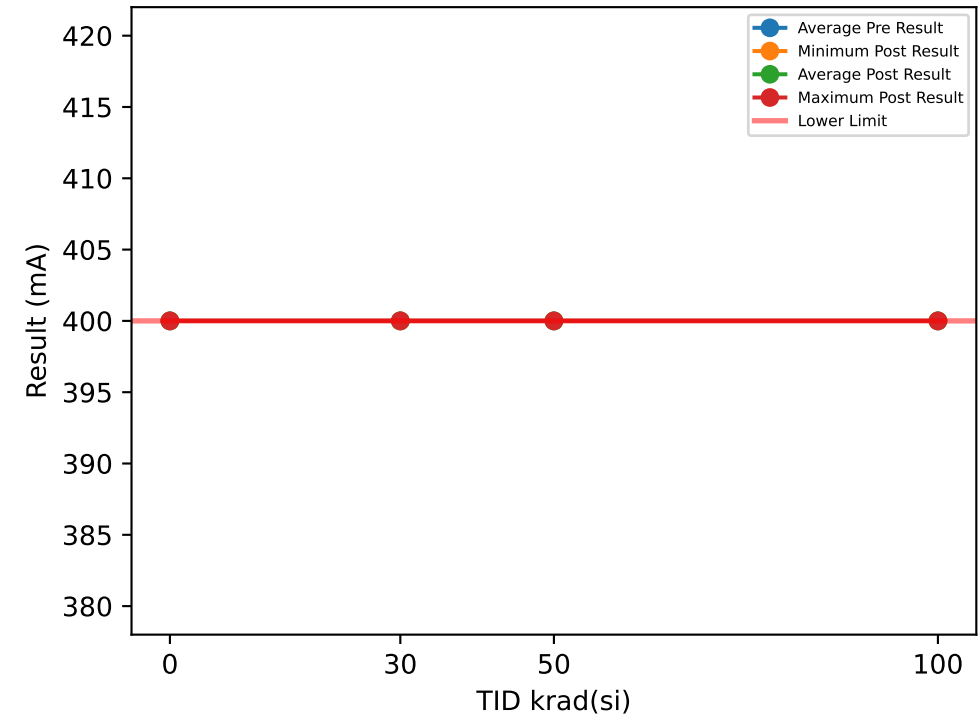
TID vs Post - Pre Exposure Delta



Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	400	400	400	0	400	400	400	0	0	0	0	0
30	400	400	400	0	400	400	400	0	0	0	0	0
50	400	400	400	0	400	400	400	0	0	0	0	0
100	400	400	400	0	400	400	400	0	0	0	0	0

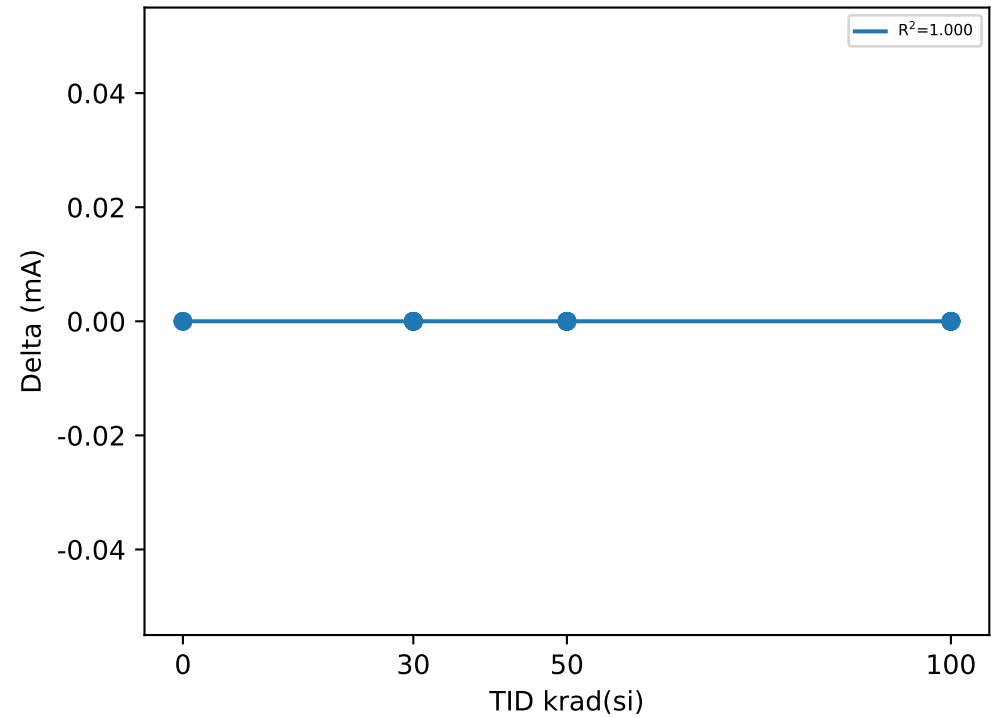
TID vs Result Stats



Test Results (Lower Limit = 400.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	400	400	0
2	0	CU2	400	400	0
3	0	CU3	400	400	0
25	30	30krad Unbiased	400	400	0
26	30	30krad Unbiased	400	400	0
27	30	30krad Unbiased	400	400	0
28	30	30krad Unbiased	400	400	0
29	30	30krad Unbiased	400	400	0
30	30	30krad Biased	400	400	0
31	30	30krad Biased	400	400	0
32	30	30krad Biased	400	400	0
33	30	30krad Biased	400	400	0
34	30	30krad Biased	400	400	0
40	50	50krad Unbiased	400	400	0
41	50	50krad Unbiased	400	400	0
42	50	50krad Unbiased	400	400	0
43	50	50krad Unbiased	400	400	0
44	50	50krad Unbiased	400	400	0
45	50	50krad Biased	400	400	0
46	50	50krad Biased	400	400	0
47	50	50krad Biased	400	400	0
48	50	50krad Biased	400	400	0
49	50	50krad Biased	400	400	0
50	100	100krad Unbiased	400	400	0
51	100	100krad Unbiased	400	400	0
52	100	100krad Unbiased	400	400	0
53	100	100krad Unbiased	400	400	0
54	100	100krad Unbiased	400	400	0
55	100	100krad Biased	400	400	0
56	100	100krad Biased	400	400	0
57	100	100krad Biased	400	400	0
58	100	100krad Biased	400	400	0
59	100	100krad Biased	400	400	0

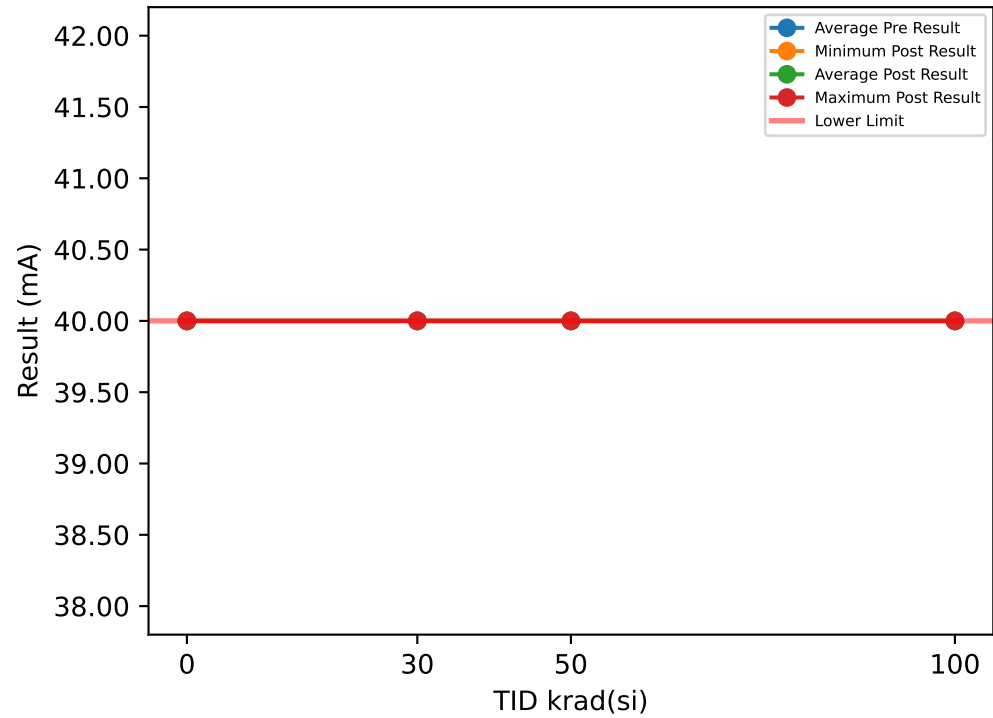
TID vs Post - Pre Exposure Delta



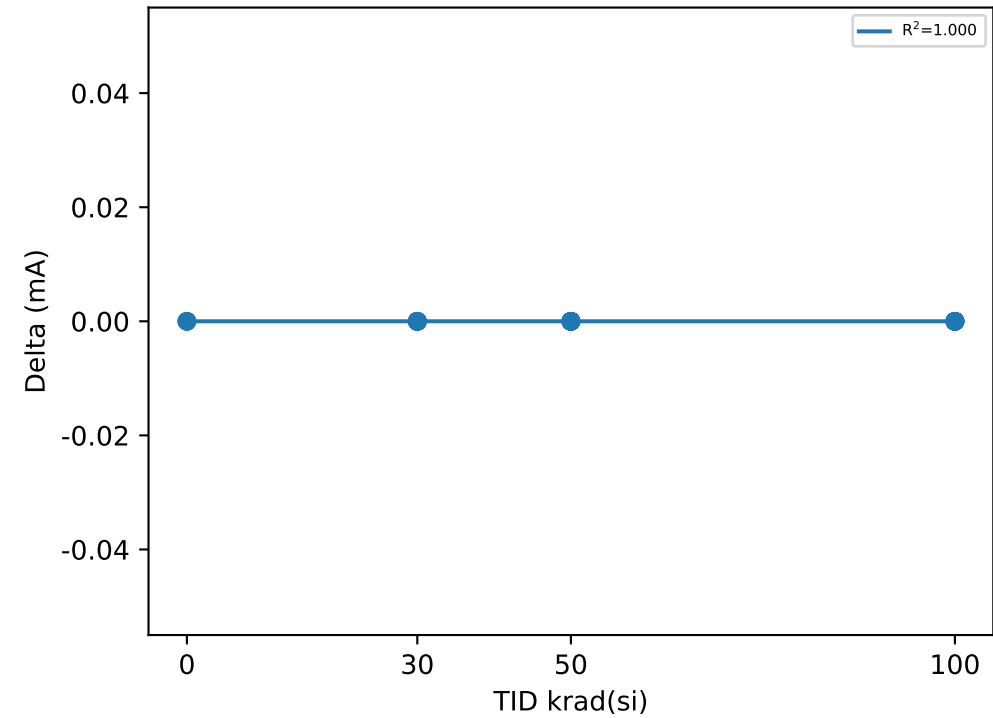
Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	400	400	400	0	400	400	400	0	0	0	0	0
30	400	400	400	0	400	400	400	0	0	0	0	0
50	400	400	400	0	400	400	400	0	0	0	0	0
100	400	400	400	0	400	400	400	0	0	0	0	0

TID vs Result Stats



TID vs Post - Pre Exposure Delta



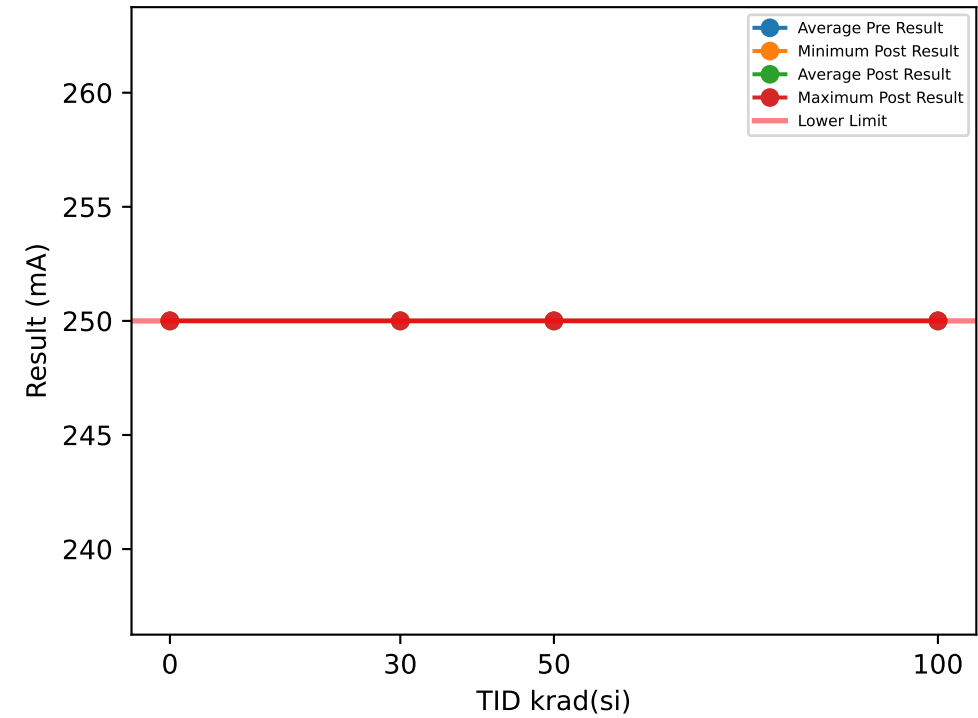
Test Results (Lower Limit = 40.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	40	40	0
2	0	CU2	40	40	0
3	0	CU3	40	40	0
25	30	30krad Unbiased	40	40	0
26	30	30krad Unbiased	40	40	0
27	30	30krad Unbiased	40	40	0
28	30	30krad Unbiased	40	40	0
29	30	30krad Unbiased	40	40	0
30	30	30krad Biased	40	40	0
31	30	30krad Biased	40	40	0
32	30	30krad Biased	40	40	0
33	30	30krad Biased	40	40	0
34	30	30krad Biased	40	40	0
40	50	50krad Unbiased	40	40	0
41	50	50krad Unbiased	40	40	0
42	50	50krad Unbiased	40	40	0
43	50	50krad Unbiased	40	40	0
44	50	50krad Unbiased	40	40	0
45	50	50krad Biased	40	40	0
46	50	50krad Biased	40	40	0
47	50	50krad Biased	40	40	0
48	50	50krad Biased	40	40	0
49	50	50krad Biased	40	40	0
50	100	100krad Unbiased	40	40	0
51	100	100krad Unbiased	40	40	0
52	100	100krad Unbiased	40	40	0
53	100	100krad Unbiased	40	40	0
54	100	100krad Unbiased	40	40	0
55	100	100krad Biased	40	40	0
56	100	100krad Biased	40	40	0
57	100	100krad Biased	40	40	0
58	100	100krad Biased	40	40	0
59	100	100krad Biased	40	40	0

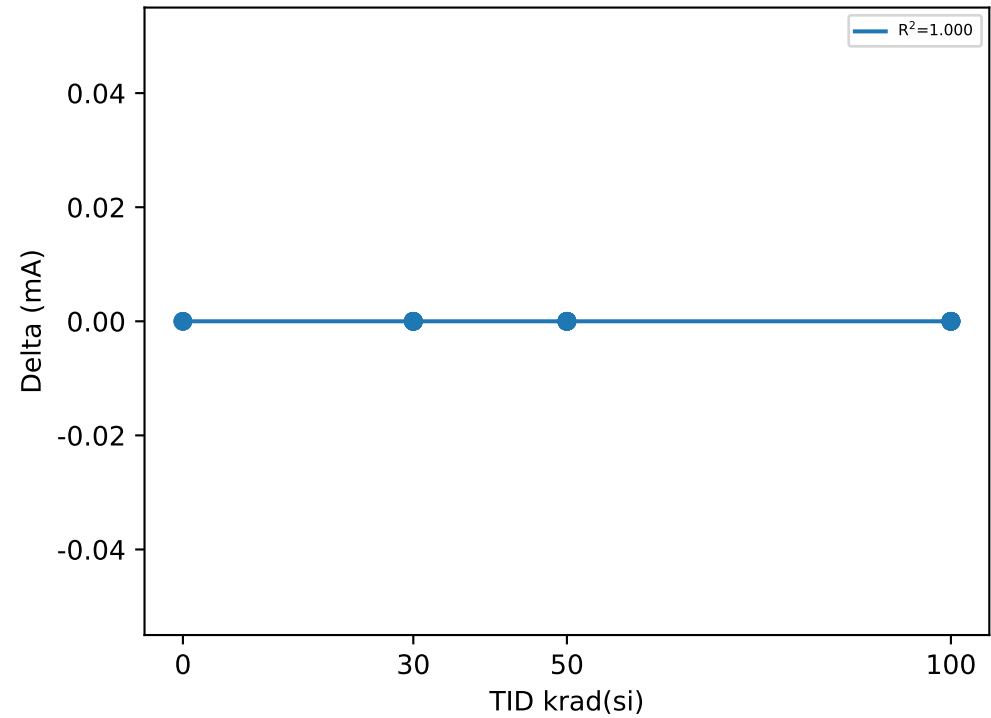
Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	40	40	40	0	40	40	40	0	0	0	0	0
30	40	40	40	0	40	40	40	0	0	0	0	0
50	40	40	40	0	40	40	40	0	0	0	0	0
100	40	40	40	0	40	40	40	0	0	0	0	0

TID vs Result Stats



TID vs Post - Pre Exposure Delta



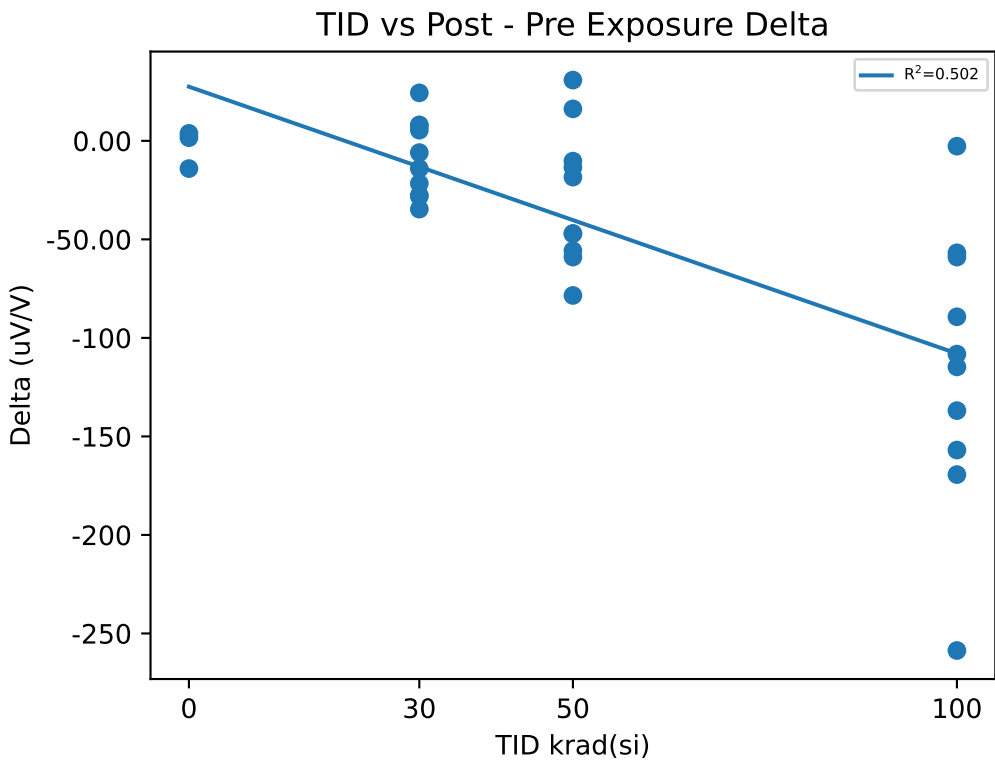
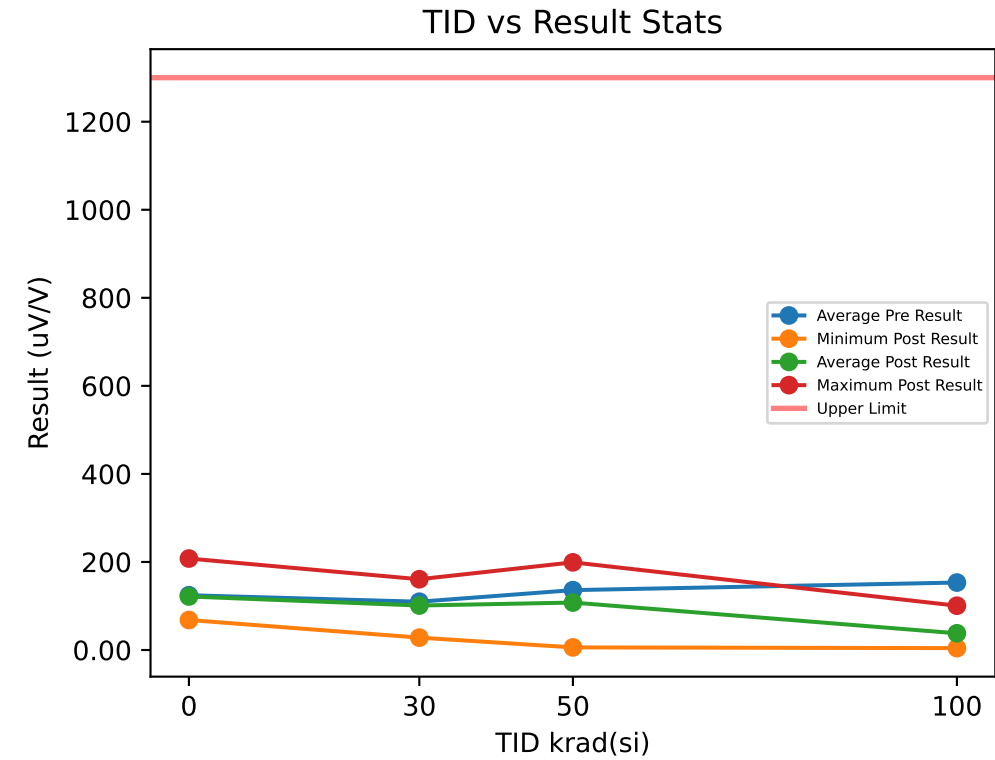
Test Results (Lower Limit = 250.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	250	250	0
2	0	CU2	250	250	0
3	0	CU3	250	250	0
25	30	30krad Unbiased	250	250	0
26	30	30krad Unbiased	250	250	0
27	30	30krad Unbiased	250	250	0
28	30	30krad Unbiased	250	250	0
29	30	30krad Unbiased	250	250	0
30	30	30krad Biased	250	250	0
31	30	30krad Biased	250	250	0
32	30	30krad Biased	250	250	0
33	30	30krad Biased	250	250	0
34	30	30krad Biased	250	250	0
40	50	50krad Unbiased	250	250	0
41	50	50krad Unbiased	250	250	0
42	50	50krad Unbiased	250	250	0
43	50	50krad Unbiased	250	250	0
44	50	50krad Unbiased	250	250	0
45	50	50krad Biased	250	250	0
46	50	50krad Biased	250	250	0
47	50	50krad Biased	250	250	0
48	50	50krad Biased	250	250	0
49	50	50krad Biased	250	250	0
50	100	100krad Unbiased	250	250	0
51	100	100krad Unbiased	250	250	0
52	100	100krad Unbiased	250	250	0
53	100	100krad Unbiased	250	250	0
54	100	100krad Unbiased	250	250	0
55	100	100krad Biased	250	250	0
56	100	100krad Biased	250	250	0
57	100	100krad Biased	250	250	0
58	100	100krad Biased	250	250	0
59	100	100krad Biased	250	250	0

Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	250	250	250	0	250	250	250	0	0	0	0	0
30	250	250	250	0	250	250	250	0	0	0	0	0
50	250	250	250	0	250	250	250	0	0	0	0	0
100	250	250	250	0	250	250	250	0	0	0	0	0

Device Test: 55.1 ACCURACY|//LINE_REGULATION_DN/1N8V/150mA//@LINE_REG

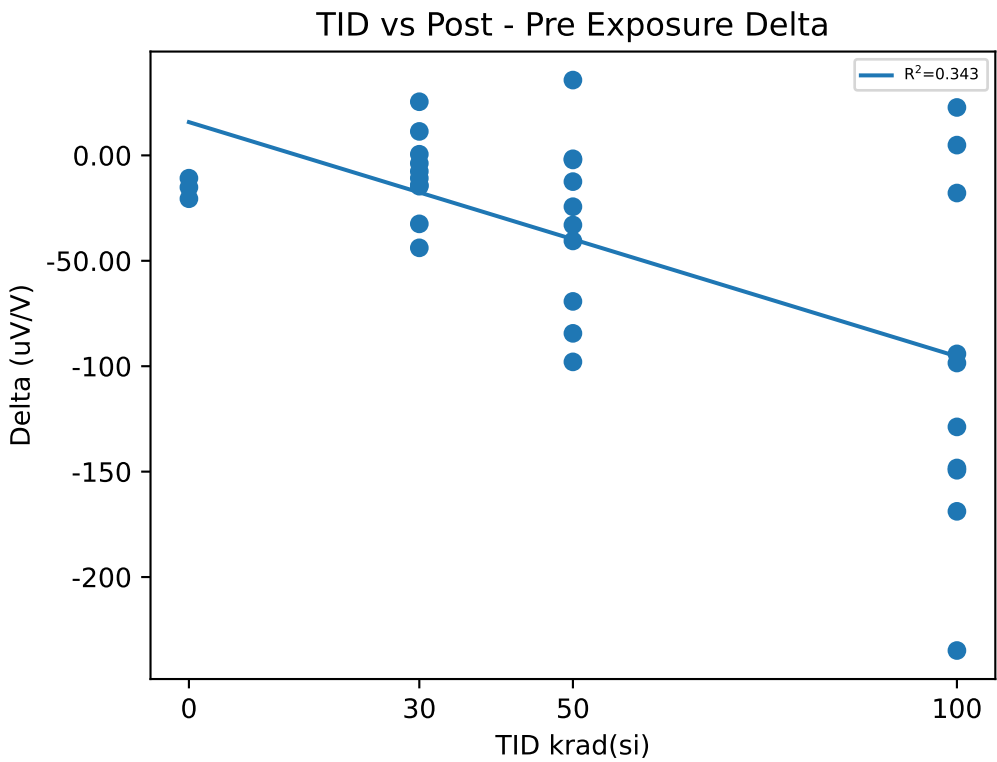
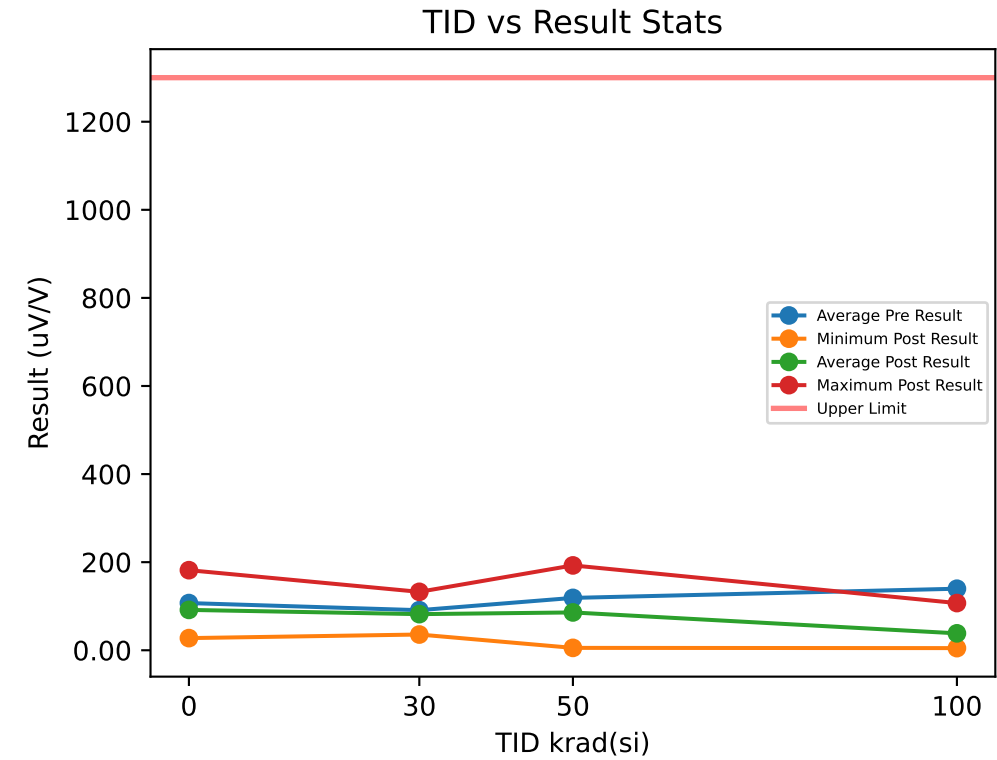


Test Results (Upper Limit = 1300.0 (uV/V))					
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	204	207.79	3.7927
2	0	CU2	102.81	88.745	-14.067
3	0	CU3	66.557	68.182	1.6249
25	30	30krad Unbiased	3.7894	28.15	24.36
26	30	30krad Unbiased	148.87	142.91	-5.9548
27	30	30krad Unbiased	106.1	114.22	8.1201
28	30	30krad Unbiased	161.32	139.67	-21.654
29	30	30krad Unbiased	131.55	139.13	7.5788
30	30	30krad Biased	54.134	59.548	5.4135
31	30	30krad Biased	188.93	160.78	-28.15
32	30	30krad Biased	82.826	48.18	-34.646
33	30	30krad Biased	157.53	129.92	-27.608
34	30	30krad Biased	62.255	48.18	-14.075
40	50	50krad Unbiased	76.297	92.533	16.236
41	50	50krad Unbiased	75.215	16.234	-58.981
42	50	50krad Unbiased	58.441	89.286	30.846
43	50	50krad Unbiased	193.72	175.33	-18.394
44	50	50krad Unbiased	136.36	57.901	-78.461
45	50	50krad Biased	246.21	199.14	-47.073
46	50	50krad Biased	16.233	5.9524	-10.281
47	50	50krad Biased	125.54	78.464	-47.075
48	50	50krad Biased	220.23	164.5	-55.731
49	50	50krad Biased	212.12	198.59	-13.523
50	100	100krad Unbiased	208.87	100.65	-108.22
51	100	100krad Unbiased	176.4	7.0347	-169.37
52	100	100krad Unbiased	72.51	15.693	-56.817
53	100	100krad Unbiased	152.59	15.693	-136.9
54	100	100krad Unbiased	127.7	12.987	-114.72
55	100	100krad Biased	204	47.078	-156.92
56	100	100krad Biased	128.24	38.961	-89.283
57	100	100krad Biased	262.98	4.329	-258.65
58	100	100krad Biased	95.237	92.533	-2.7034
59	100	100krad Biased	103.89	44.914	-58.981

Test Statistics (uV/V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	66.557	124.46	204	71.232	68.182	121.57	207.79	75.373	-14.067	-2.8831	3.7927	9.746
30	3.7894	109.73	188.93	58.245	28.15	101.07	160.78	49.324	-34.646	-8.6615	24.36	19.588
50	16.233	136.04	246.21	78.948	5.9524	107.79	199.14	72.299	-78.461	-28.244	30.846	35.02
100	72.51	153.24	262.98	59.484	4.329	37.987	100.65	34.55	-258.65	-115.26	-2.7034	71.235

Device Test: 55.2 ACCURACY|//LINE_REGULATION_UP/1N8V/150mA//@LINE_REG

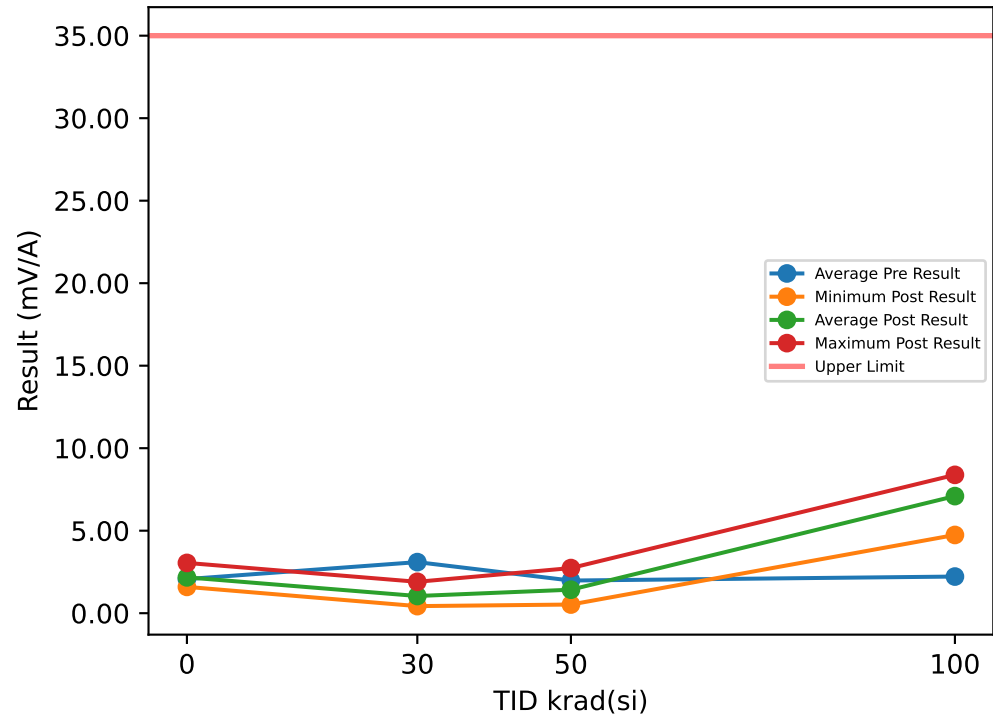


Test Results (Upper Limit = 1300.0 (uV/V))					
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	192.64	181.82	-10.818
2	0	CU2	80.626	65.477	-15.15
3	0	CU3	48.159	27.598	-20.562
25	30	30krad Unbiased	22.736	48.18	25.443
26	30	30krad Unbiased	122.34	118.55	-3.7894
27	30	30krad Unbiased	97.983	54.134	-43.849
28	30	30krad Unbiased	118.55	104.48	-14.075
29	30	30krad Unbiased	106.64	107.19	0.5414
30	30	30krad Biased	30.315	41.683	11.368
31	30	30krad Biased	165.11	132.63	-32.481
32	30	30krad Biased	59.548	51.969	-7.5788
33	30	30krad Biased	136.42	125.59	-10.827
34	30	30krad Biased	50.345	35.729	-14.616
40	50	50krad Unbiased	70.886	58.442	-12.444
41	50	50krad Unbiased	38.419	5.4113	-33.008
42	50	50krad Unbiased	33.008	30.844	-2.1637
43	50	50krad Unbiased	163.42	161.8	-1.6196
44	50	50krad Unbiased	121.21	23.269	-97.942
45	50	50krad Biased	233.22	192.64	-40.579
46	50	50krad Biased	10.822	46.537	35.715
47	50	50krad Biased	108.76	39.502	-69.262
48	50	50krad Biased	209.95	125.54	-84.411
49	50	50krad Biased	199.13	174.78	-24.346
50	100	100krad Unbiased	189.39	41.126	-148.27
51	100	100krad Unbiased	147.72	18.939	-128.79
52	100	100krad Unbiased	64.393	46.537	-17.856
53	100	100krad Unbiased	154.22	4.8702	-149.35
54	100	100krad Unbiased	108.22	9.7403	-98.483
55	100	100krad Biased	195.34	26.515	-168.83
56	100	100krad Biased	129.33	35.173	-94.154
57	100	100krad Biased	246.21	11.364	-234.84
58	100	100krad Biased	84.414	107.14	22.729
59	100	100krad Biased	77.921	82.793	4.872

Test Statistics (uV/V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	48.159	107.14	192.64	75.801	27.598	91.631	181.82	80.369	-20.562	-15.51	-10.818	4.8818
30	22.736	91	165.11	47.813	35.729	82.014	132.63	38.77	-43.849	-8.9863	25.443	19.855
50	10.822	118.88	233.22	80.089	5.4113	85.877	192.64	70.328	-97.942	-33.006	35.715	41.349
100	64.393	139.72	246.21	58.526	4.8702	38.42	107.14	33.295	-234.84	-101.3	22.729	82.557

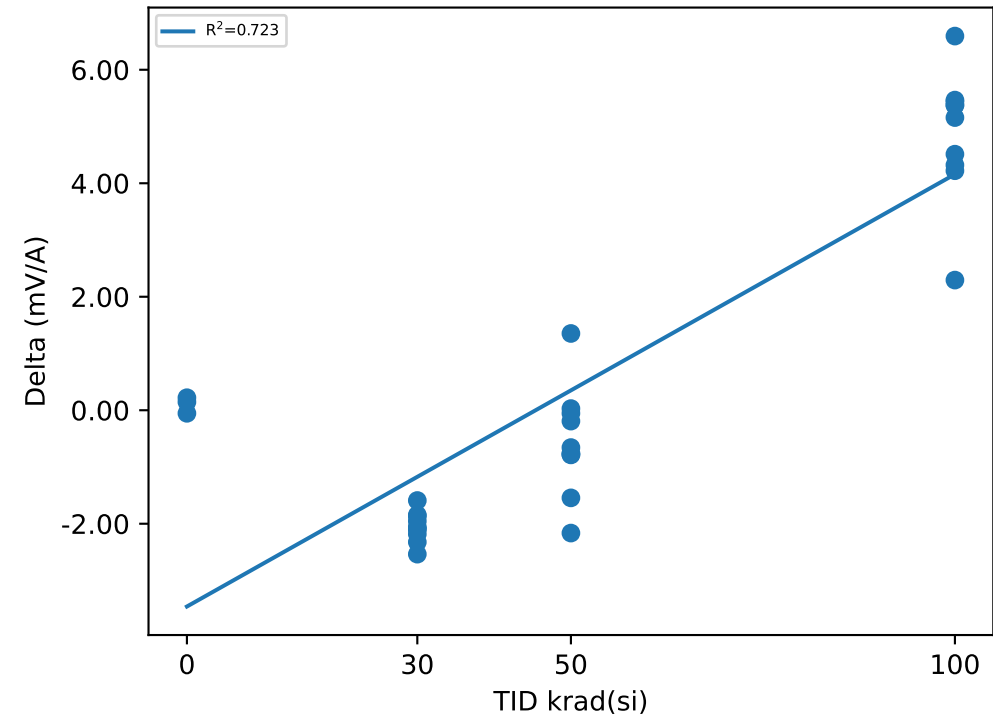
TID vs Result Stats



Test Results (Upper Limit = 35.0 (mV/A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	2.9012	3.047	0.1458
2	0	CU2	1.6483	1.5943	-0.054
3	0	CU3	1.6525	1.8731	0.2206
25	30	30krad Unbiased	2.2736	0.4289	-1.8447
26	30	30krad Unbiased	3.0232	0.6996	-2.3236
27	30	30krad Unbiased	3.4438	1.3908	-2.053
28	30	30krad Unbiased	3.7686	1.903	-1.8656
29	30	30krad Unbiased	3.2231	1.6324	-1.5907
30	30	30krad Biased	2.5818	0.483	-2.0988
31	30	30krad Biased	3.4521	0.9161	-2.536
32	30	30krad Biased	3.1231	1.0327	-2.0904
33	30	30krad Biased	3.1606	0.9786	-2.182
34	30	30krad Biased	2.9024	0.9494	-1.953
40	50	50krad Unbiased	1.615	1.6442	0.0292
41	50	50krad Unbiased	1.9106	1.1239	-0.7867
42	50	50krad Unbiased	1.5151	1.461	-0.0541
43	50	50krad Unbiased	2.102	1.4444	-0.6576
44	50	50krad Unbiased	1.8897	1.1114	-0.7783
45	50	50krad Biased	2.6681	1.1239	-1.5442
46	50	50krad Biased	1.3819	2.7348	1.3529
47	50	50krad Biased	1.8773	1.6858	-0.1915
48	50	50krad Biased	2.6889	0.5245	-2.1644
49	50	50krad Biased	2.1437	1.3861	-0.7576
50	100	100krad Unbiased	2.5474	6.7683	4.2209
51	100	100krad Unbiased	2.0271	7.1845	5.1574
52	100	100krad Unbiased	1.4027	6.8432	5.4405
53	100	100krad Unbiased	1.9938	7.3677	5.3739
54	100	100krad Unbiased	2.4475	4.7411	2.2936
55	100	100krad Biased	3.1676	7.4884	4.3208
56	100	100krad Biased	2.3102	7.6882	5.378
57	100	100krad Biased	2.8013	7.3136	4.5123
58	100	100krad Biased	1.7898	8.3833	6.5935
59	100	100krad Biased	1.7149	7.1804	5.4655

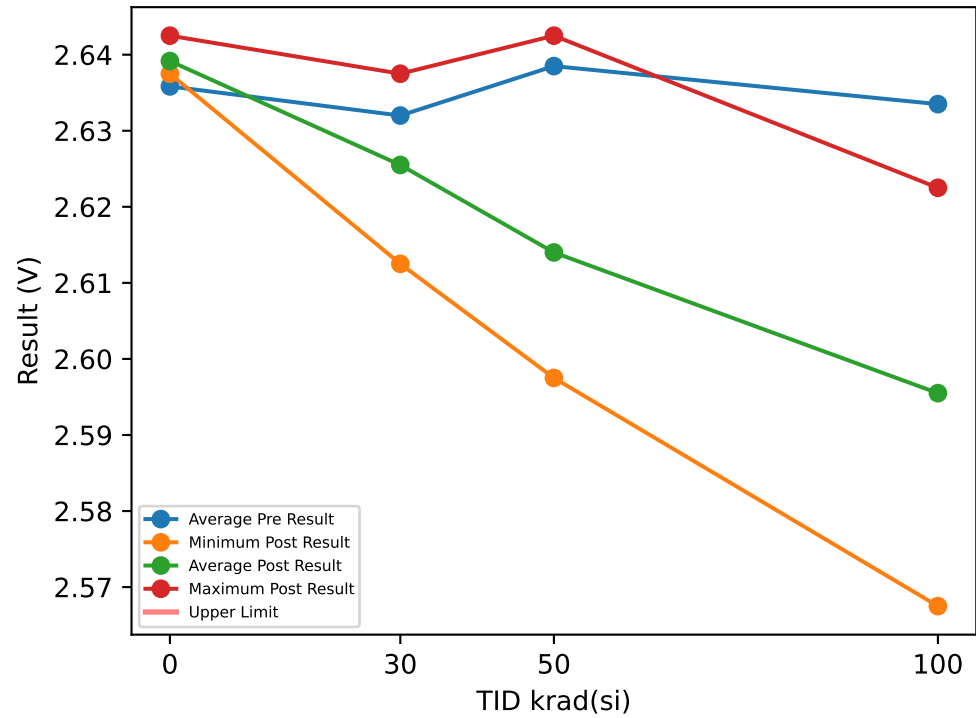
TID vs Post - Pre Exposure Delta



Test Statistics (mV/A)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.6483	2.0673	2.9012	0.72215	1.5943	2.1715	3.047	0.77094	-0.054	0.10413	0.2206	0.14196
30	2.2736	3.0952	3.7686	0.43522	0.4289	1.0414	1.903	0.47676	-2.536	-2.0538	-1.5907	0.26434
50	1.3819	1.9792	2.6889	0.44074	0.5245	1.424	2.7348	0.57013	-2.1644	-0.55523	1.3529	0.94799
100	1.4027	2.2202	3.1676	0.53743	4.7411	7.0959	8.3833	0.94368	2.2936	4.8756	6.5935	1.1418

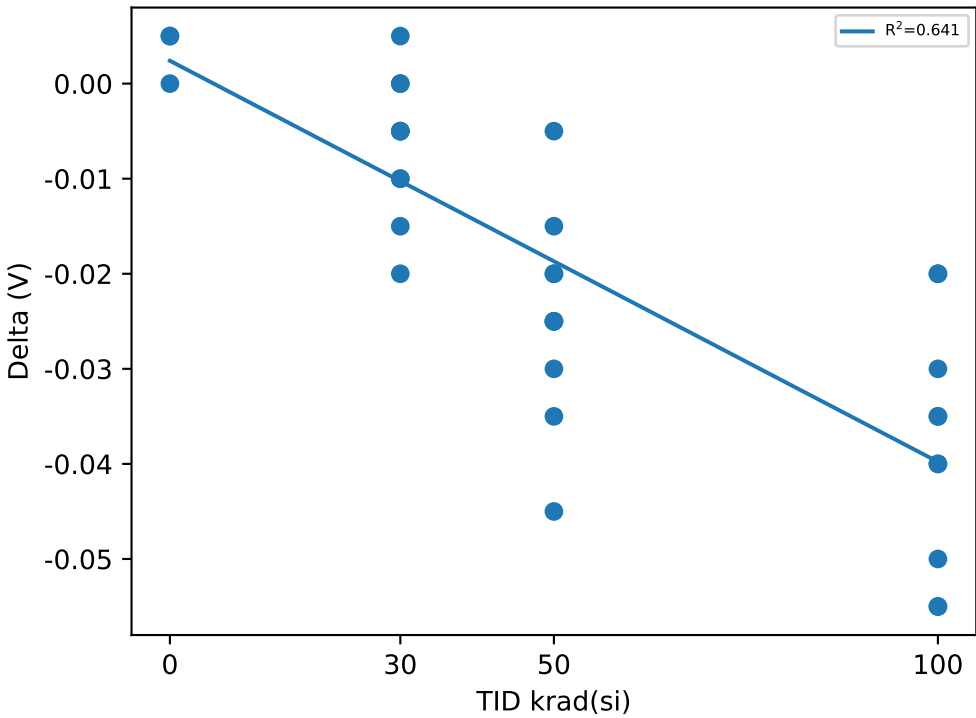
TID vs Result Stats



Test Results (No Limits Specified (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	2.6375	2.6375	0
2	0	CU2	2.6325	2.6375	0.005
3	0	CU3	2.6375	2.6425	0.005
25	30	30krad Unbiased	2.6175	2.6175	0
26	30	30krad Unbiased	2.6425	2.6375	-0.005
27	30	30krad Unbiased	2.6275	2.6325	0.005
28	30	30krad Unbiased	2.6275	2.6225	-0.005
29	30	30krad Unbiased	2.6275	2.6225	-0.005
30	30	30krad Biased	2.6475	2.6375	-0.01
31	30	30krad Biased	2.6325	2.6175	-0.015
32	30	30krad Biased	2.6325	2.6125	-0.02
33	30	30krad Biased	2.6425	2.6325	-0.01
34	30	30krad Biased	2.6225	2.6225	0
40	50	50krad Unbiased	2.6375	2.6175	-0.02
41	50	50krad Unbiased	2.6275	2.6075	-0.02
42	50	50krad Unbiased	2.6475	2.6225	-0.025
43	50	50krad Unbiased	2.6275	2.6125	-0.015
44	50	50krad Unbiased	2.6325	2.6075	-0.025
45	50	50krad Biased	2.6375	2.6125	-0.025
46	50	50krad Biased	2.6475	2.6125	-0.035
47	50	50krad Biased	2.6375	2.6075	-0.03
48	50	50krad Biased	2.6475	2.6425	-0.005
49	50	50krad Biased	2.6425	2.5975	-0.045
50	100	100krad Unbiased	2.6275	2.5925	-0.035
51	100	100krad Unbiased	2.6375	2.6175	-0.02
52	100	100krad Unbiased	2.6425	2.6225	-0.02
53	100	100krad Unbiased	2.6275	2.5875	-0.04
54	100	100krad Unbiased	2.6325	2.5975	-0.035
55	100	100krad Biased	2.6225	2.5675	-0.055
56	100	100krad Biased	2.6375	2.5825	-0.055
57	100	100krad Biased	2.6325	2.6025	-0.03
58	100	100krad Biased	2.6225	2.5825	-0.04
59	100	100krad Biased	2.6525	2.6025	-0.05

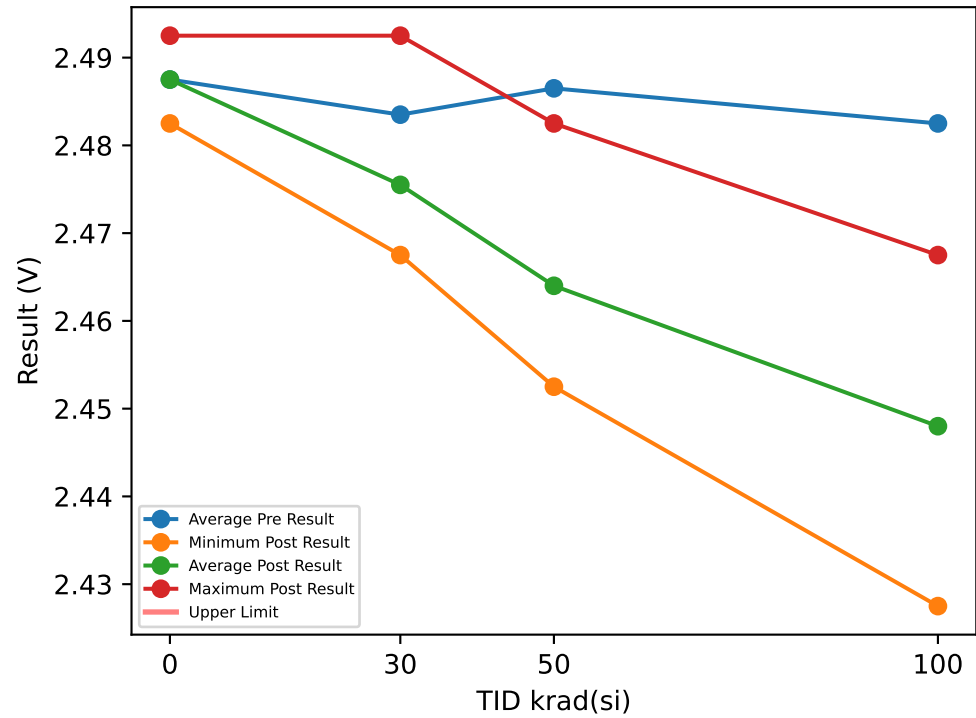
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.6325	2.6358	2.6375	0.0028868	2.6375	2.6392	2.6425	0.0028868	0	0.0033333	0.005	0.0028868
30	2.6175	2.632	2.6475	0.0095598	2.6125	2.6255	2.6375	0.0088819	-0.02	-0.0065	0.005	0.0074722
50	2.6275	2.6385	2.6475	0.007746	2.5975	2.614	2.6425	0.01203	-0.045	-0.0245	-0.005	0.010916
100	2.6225	2.6335	2.6525	0.009369	2.5675	2.5955	2.6225	0.0167	-0.055	-0.038	-0.02	0.012737

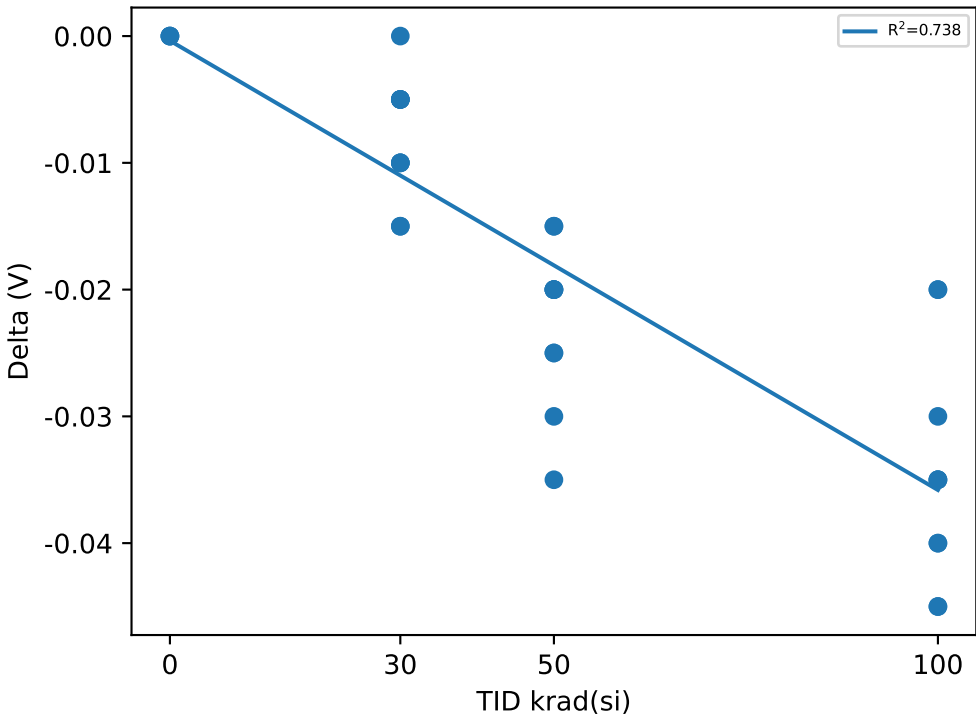
TID vs Result Stats



Test Results (No Limits Specified (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	2.4925	2.4925	0
2	0	CU2	2.4875	2.4875	0
3	0	CU3	2.4825	2.4825	0
25	30	30krad Unbiased	2.4675	2.4675	0
26	30	30krad Unbiased	2.4925	2.4875	-0.005
27	30	30krad Unbiased	2.4775	2.4725	-0.005
28	30	30krad Unbiased	2.4775	2.4725	-0.005
29	30	30krad Unbiased	2.4875	2.4775	-0.01
30	30	30krad Biased	2.4925	2.4825	-0.01
31	30	30krad Biased	2.4825	2.4675	-0.015
32	30	30krad Biased	2.4825	2.4675	-0.015
33	30	30krad Biased	2.5025	2.4925	-0.01
34	30	30krad Biased	2.4725	2.4675	-0.005
40	50	50krad Unbiased	2.4825	2.4675	-0.015
41	50	50krad Unbiased	2.4775	2.4575	-0.02
42	50	50krad Unbiased	2.4975	2.4775	-0.02
43	50	50krad Unbiased	2.4825	2.4625	-0.02
44	50	50krad Unbiased	2.4775	2.4575	-0.02
45	50	50krad Biased	2.4875	2.4625	-0.025
46	50	50krad Biased	2.4975	2.4625	-0.035
47	50	50krad Biased	2.4825	2.4575	-0.025
48	50	50krad Biased	2.4975	2.4825	-0.015
49	50	50krad Biased	2.4825	2.4525	-0.03
50	100	100krad Unbiased	2.4825	2.4475	-0.035
51	100	100krad Unbiased	2.4875	2.4575	-0.03
52	100	100krad Unbiased	2.4875	2.4675	-0.02
53	100	100krad Unbiased	2.4725	2.4375	-0.035
54	100	100krad Unbiased	2.4825	2.4625	-0.02
55	100	100krad Biased	2.4725	2.4275	-0.045
56	100	100krad Biased	2.4875	2.4425	-0.045
57	100	100krad Biased	2.4875	2.4525	-0.035
58	100	100krad Biased	2.4675	2.4275	-0.04
59	100	100krad Biased	2.4975	2.4575	-0.04

TID vs Post - Pre Exposure Delta

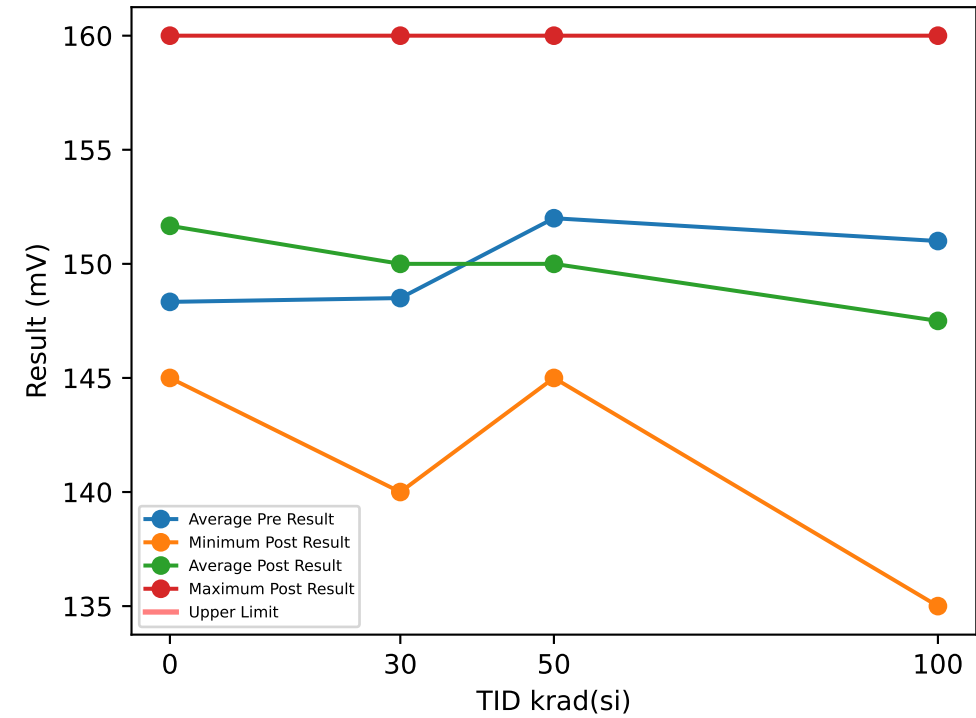


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.4825	2.4875	2.4925	0.005	2.4825	2.4875	2.4925	0.005	0	0	0	0
30	2.4675	2.4835	2.5025	0.010488	2.4675	2.4755	2.4925	0.0091894	-0.015	-0.008	0	0.0048305
50	2.4775	2.4865	2.4975	0.0080966	2.4525	2.464	2.4825	0.0094428	-0.035	-0.0225	-0.015	0.0063465
100	2.4675	2.4825	2.4975	0.0091287	2.4275	2.448	2.4675	0.014034	-0.045	-0.0345	-0.02	0.0089598

Device Test: 60.4 UVLO|//HYSTERESIS|///@VUVLO_HYS

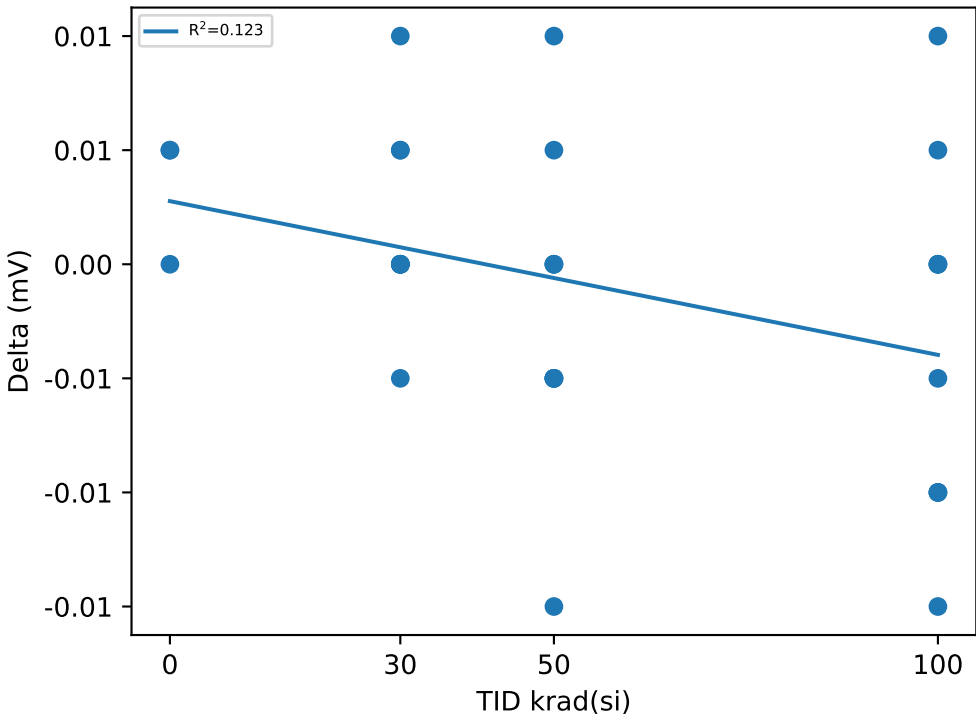
TID vs Result Stats



Test Results (No Limits Specified (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	145	145	0
2	0	CU2	145	150	0.005
3	0	CU3	155	160	0.005
25	30	30krad Unbiased	150	150	0
26	30	30krad Unbiased	150	150	0
27	30	30krad Unbiased	150	160	0.01
28	30	30krad Unbiased	150	150	0
29	30	30krad Unbiased	140	145	0.005
30	30	30krad Biased	155	155	0
31	30	30krad Biased	150	150	0
32	30	30krad Biased	150	145	-0.005
33	30	30krad Biased	140	140	0
34	30	30krad Biased	150	155	0.005
40	50	50krad Unbiased	155	150	-0.005
41	50	50krad Unbiased	150	150	0
42	50	50krad Unbiased	150	145	-0.005
43	50	50krad Unbiased	145	150	0.005
44	50	50krad Unbiased	155	150	-0.005
45	50	50krad Biased	150	150	0
46	50	50krad Biased	150	150	0
47	50	50krad Biased	155	150	-0.005
48	50	50krad Biased	150	160	0.01
49	50	50krad Biased	160	145	-0.015
50	100	100krad Unbiased	145	145	0
51	100	100krad Unbiased	150	160	0.01
52	100	100krad Unbiased	155	155	0
53	100	100krad Unbiased	155	150	-0.005
54	100	100krad Unbiased	150	135	-0.015
55	100	100krad Biased	150	140	-0.01
56	100	100krad Biased	150	140	-0.01
57	100	100krad Biased	145	150	0.005
58	100	100krad Biased	155	155	0
59	100	100krad Biased	155	145	-0.01

TID vs Post - Pre Exposure Delta

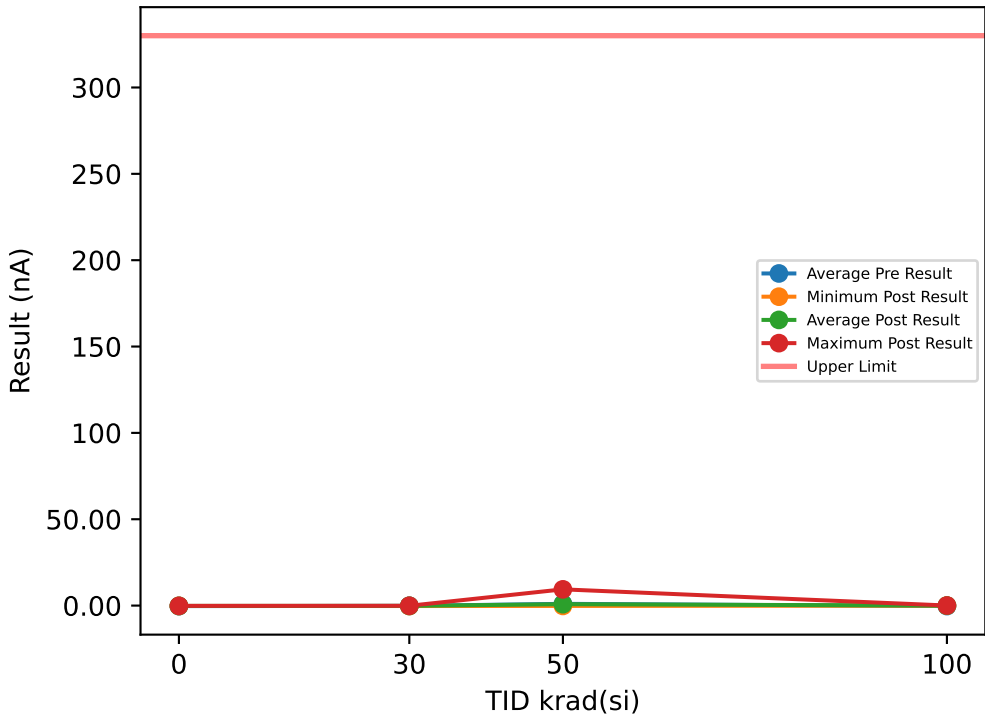


Test Statistics (mV)

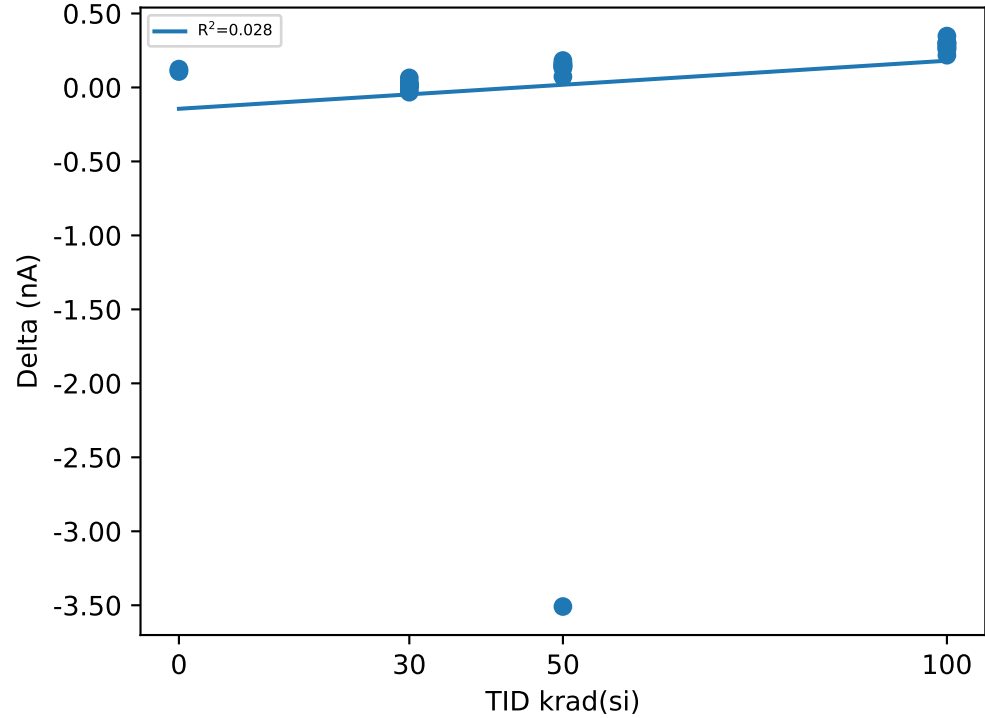
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	145	148.33	155	5.7735	145	151.67	160	7.6376	0	0.0033333	0.005	0.0028868
30	140	148.5	155	4.7434	140	150	160	5.7735	-0.005	0.0015	0.01	0.0041164
50	145	152	160	4.2164	145	150	160	4.0825	-0.015	-0.002	0.01	0.0067495
100	145	151	155	3.9441	135	147.5	160	7.9057	-0.015	-0.0035	0.01	0.0078351

Device Test: 65.1 LEAK|/EN/CURRENT///3/@I_EN_LKG

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Upper Limit = 330.0 (nA))

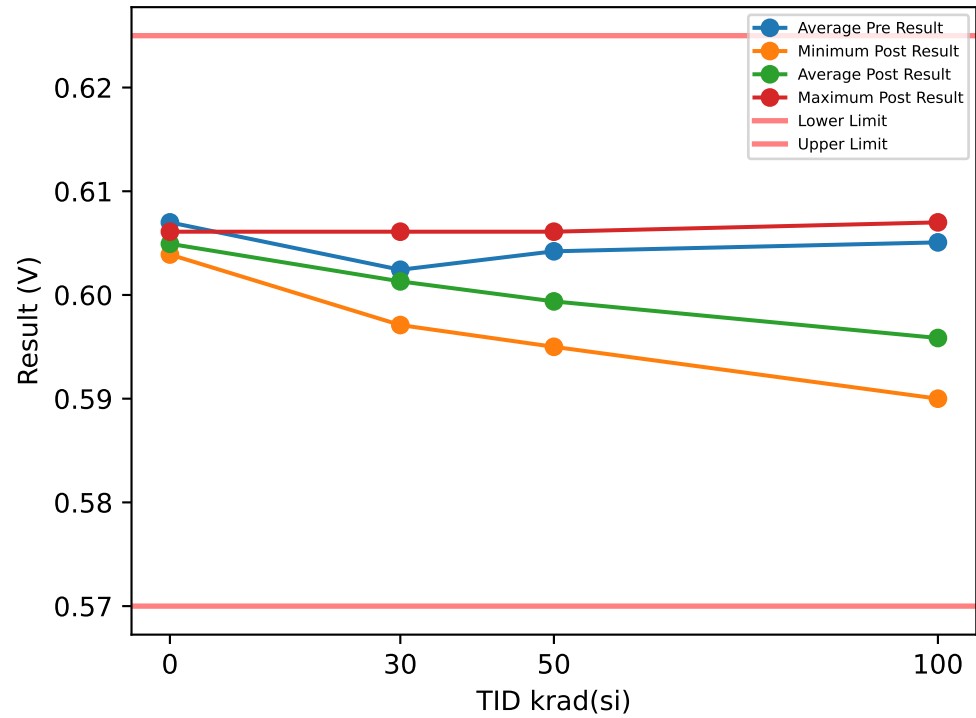
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	-0.2777	-0.1647	0.113
2	0	CU2	-0.2965	-0.1889	0.1076
3	0	CU3	-0.3425	-0.2184	0.1241
25	30	30krad Unbiased	-0.1522	-0.1405	0.0117
26	30	30krad Unbiased	-0.1413	-0.135	0.0063
27	30	30krad Unbiased	-0.277	-0.2622	0.0148
28	30	30krad Unbiased	-0.1327	-0.1436	-0.0109
29	30	30krad Unbiased	-0.1631	-0.1951	-0.032
30	30	30krad Biased	-0.1428	-0.121	0.0218
31	30	30krad Biased	-0.2505	-0.1858	0.0647
32	30	30krad Biased	-0.2279	-0.1928	0.0351
33	30	30krad Biased	-0.1272	-0.1085	0.0187
34	30	30krad Biased	-0.128	-0.1187	0.0093
40	50	50krad Unbiased	-0.3441	-0.2029	0.1412
41	50	50krad Unbiased	-0.3308	-0.1795	0.1513
42	50	50krad Unbiased	-0.3019	-0.1359	0.166
43	50	50krad Unbiased	-0.2972	-0.1476	0.1496
44	50	50krad Unbiased	12.91	9.4014	-3.5085
45	50	50krad Biased	-0.3035	-0.1476	0.1559
46	50	50krad Biased	-0.2832	-0.1476	0.1356
47	50	50krad Biased	-0.2559	-0.1826	0.0733
48	50	50krad Biased	-0.259	-0.1274	0.1316
49	50	50krad Biased	-0.2988	-0.1165	0.1823
50	100	100krad Unbiased	-0.3074	-0.0029	0.3045
51	100	100krad Unbiased	-0.2785	0.0228	0.3013
52	100	100krad Unbiased	-0.2925	-0.0044	0.2881
53	100	100krad Unbiased	-0.3097	-0.0387	0.271
54	100	100krad Unbiased	-0.2644	-0.0021	0.2623
55	100	100krad Biased	-0.3043	0.043	0.3473
56	100	100krad Biased	-0.2699	0.0314	0.3013
57	100	100krad Biased	-0.2863	-0.0075	0.2788
58	100	100krad Biased	-0.2442	0.0111	0.2553
59	100	100krad Biased	-0.2629	-0.0449	0.218

Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.3425	-0.30557	-0.2777	0.033338	-0.2184	-0.19067	-0.1647	0.026894	0.1076	0.1149	0.1241	0.0084125
30	-0.277	-0.17427	-0.1272	0.055792	-0.2622	-0.16032	-0.1085	0.047808	-0.032	0.01395	0.0647	0.025651
50	-0.3441	1.0235	12.91	4.1765	-0.2029	0.80138	9.4014	3.0219	-3.5085	-0.22217	0.1823	1.1551
100	-0.3097	-0.28201	-0.2442	0.02186	-0.0449	0.00078	0.043	0.028036	0.218	0.28279	0.3473	0.03476

Device Test: 65.2 ENABLE|/EN/RISE///3/@V_EN_RISING

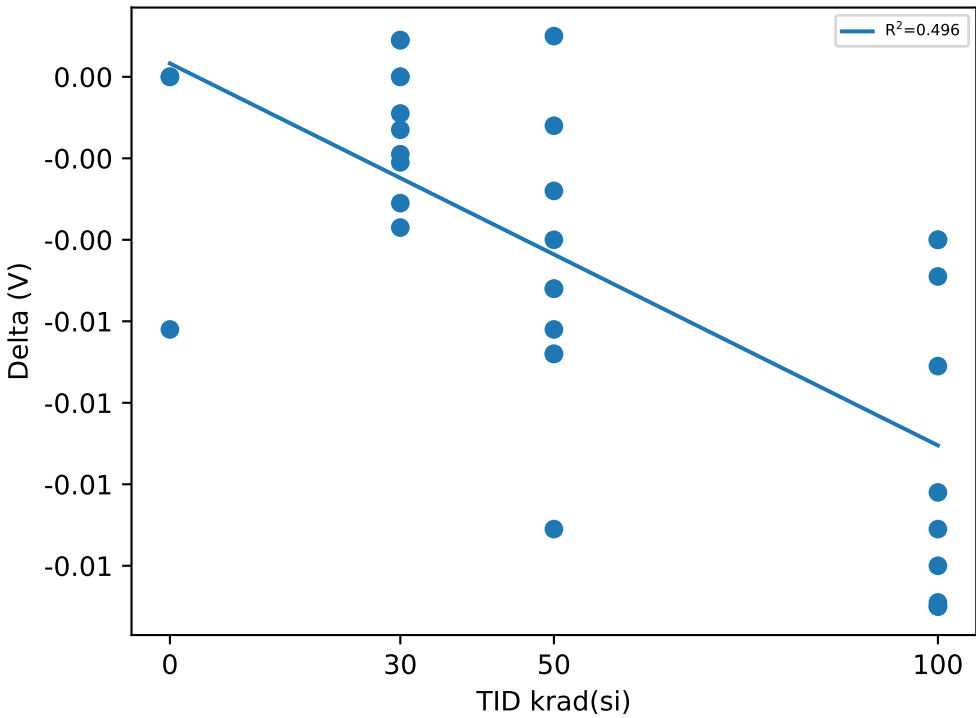
TID vs Result Stats



Test Results (Lower Limit = 0.57, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.6101	0.6039	-0.0062
2	0	CU2	0.6061	0.6061	0
3	0	CU3	0.6048	0.6048	0
25	30	30krad Unbiased	0.598	0.5971	-0.0009
26	30	30krad Unbiased	0.603	0.6039	0.0009
27	30	30krad Unbiased	0.603	0.6011	-0.0019
28	30	30krad Unbiased	0.6061	0.6061	0
29	30	30krad Unbiased	0.6011	0.599	-0.0021
30	30	30krad Biased	0.6021	0.6021	0
31	30	30krad Biased	0.6061	0.6048	-0.0013
32	30	30krad Biased	0.6011	0.598	-0.0031
33	30	30krad Biased	0.6048	0.6011	-0.0037
34	30	30krad Biased	0.599	0.5999	0.0009
40	50	50krad Unbiased	0.6011	0.5959	-0.0052
41	50	50krad Unbiased	0.603	0.599	-0.004
42	50	50krad Unbiased	0.6011	0.5999	-0.0012
43	50	50krad Unbiased	0.6089	0.6061	-0.0028
44	50	50krad Unbiased	0.598	0.599	0.001
45	50	50krad Biased	0.6011	0.5959	-0.0052
46	50	50krad Biased	0.6101	0.6039	-0.0062
47	50	50krad Biased	0.6079	0.6011	-0.0068
48	50	50krad Biased	0.6061	0.595	-0.0111
49	50	50krad Biased	0.6048	0.598	-0.0068
50	100	100krad Unbiased	0.6079	0.5959	-0.012
51	100	100krad Unbiased	0.6039	0.599	-0.0049
52	100	100krad Unbiased	0.6101	0.603	-0.0071
53	100	100krad Unbiased	0.598	0.594	-0.004
54	100	100krad Unbiased	0.611	0.607	-0.004
55	100	100krad Biased	0.6011	0.59	-0.0111
56	100	100krad Biased	0.6011	0.5909	-0.0102
57	100	100krad Biased	0.6048	0.5919	-0.0129
58	100	100krad Biased	0.6039	0.5909	-0.013
59	100	100krad Biased	0.6089	0.5959	-0.013

TID vs Post - Pre Exposure Delta

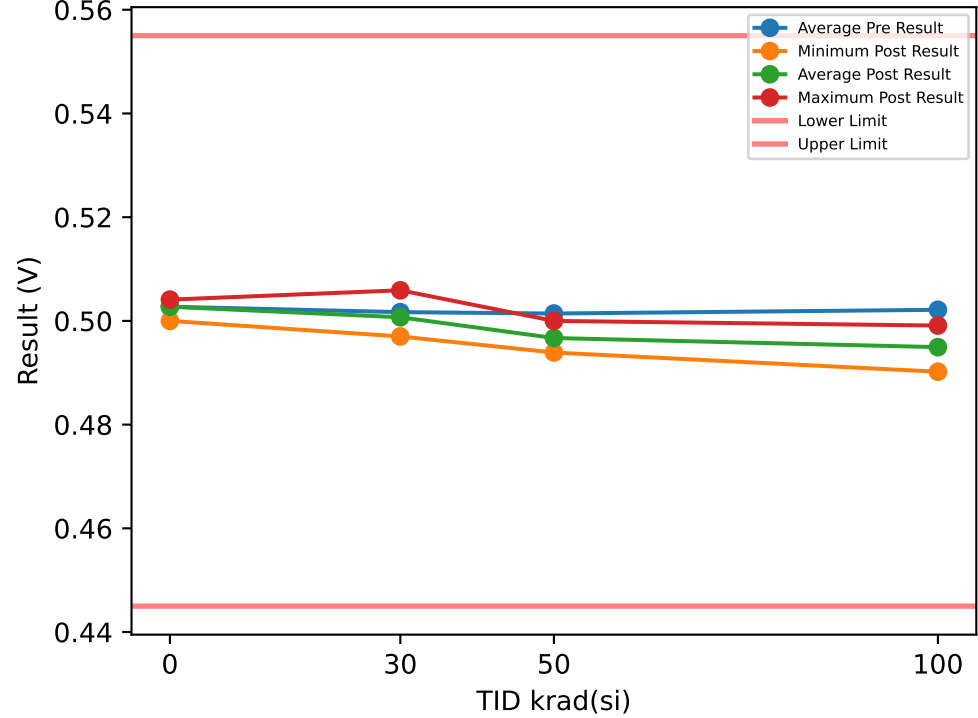


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6048	0.607	0.6101	0.0027622	0.6039	0.60493	0.6061	0.001106	-0.0062	-0.0020667	0	0.0035796
30	0.598	0.60243	0.6061	0.0027536	0.5971	0.60131	0.6061	0.0029543	-0.0037	-0.00112	0.0009	0.001595
50	0.598	0.60421	0.6101	0.0039898	0.595	0.59938	0.6061	0.0035655	-0.0111	-0.00483	0.001	0.0033533
100	0.598	0.60507	0.611	0.0043136	0.59	0.59585	0.607	0.0056532	-0.013	-0.00922	-0.004	0.0038297

Device Test: 65.3 ENABLE|/EN/FALL///3/@V_EN_FALLING

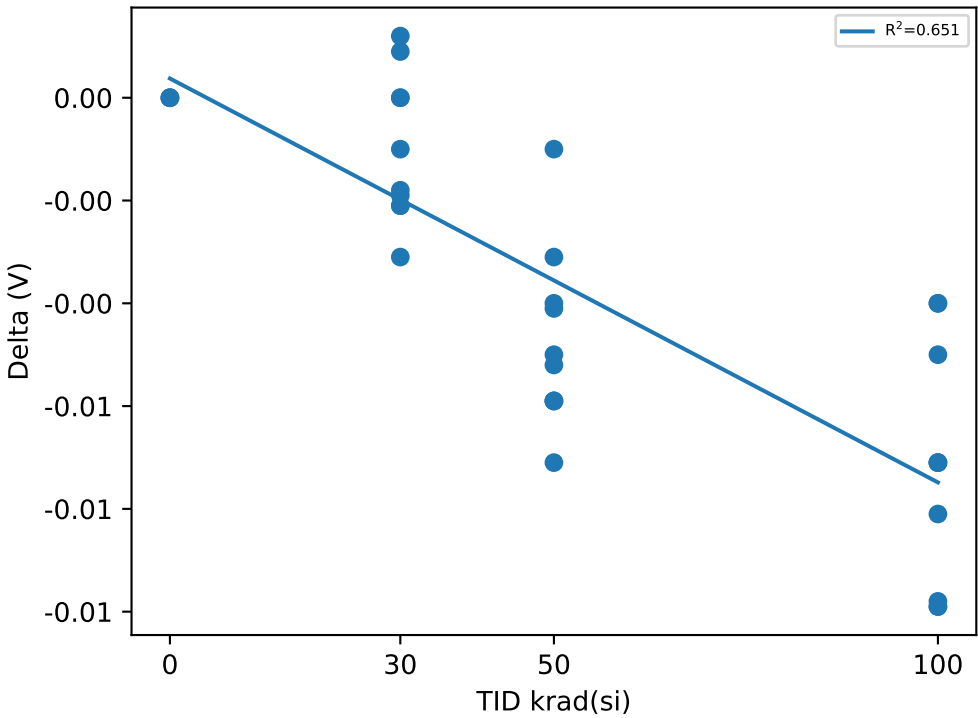
TID vs Result Stats



Test Results (Lower Limit = 0.445, Upper Limit = 0.555 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.5041	0.5041	0
2	0	CU2	0.5	0.5	0
3	0	CU3	0.5041	0.5041	0
25	30	30krad Unbiased	0.497	0.497	0
26	30	30krad Unbiased	0.5019	0.5019	0
27	30	30krad Unbiased	0.5031	0.501	-0.0021
28	30	30krad Unbiased	0.505	0.5059	0.0009
29	30	30krad Unbiased	0.501	0.4991	-0.0019
30	30	30krad Biased	0.501	0.5	-0.001
31	30	30krad Biased	0.5059	0.5041	-0.0018
32	30	30krad Biased	0.5	0.4979	-0.0021
33	30	30krad Biased	0.5041	0.501	-0.0031
34	30	30krad Biased	0.4979	0.4991	0.0012
40	50	50krad Unbiased	0.501	0.496	-0.005
41	50	50krad Unbiased	0.501	0.4979	-0.0031
42	50	50krad Unbiased	0.4991	0.4939	-0.0052
43	50	50krad Unbiased	0.5041	0.5	-0.0041
44	50	50krad Unbiased	0.497	0.496	-0.001
45	50	50krad Biased	0.501	0.4939	-0.0071
46	50	50krad Biased	0.505	0.4991	-0.0059
47	50	50krad Biased	0.5019	0.496	-0.0059
48	50	50krad Biased	0.4991	0.4951	-0.004
49	50	50krad Biased	0.505	0.4991	-0.0059
50	100	100krad Unbiased	0.5041	0.496	-0.0081
51	100	100krad Unbiased	0.5041	0.4991	-0.005
52	100	100krad Unbiased	0.5031	0.4991	-0.004
53	100	100krad Unbiased	0.4991	0.4951	-0.004
54	100	100krad Unbiased	0.505	0.4979	-0.0071
55	100	100krad Biased	0.501	0.4911	-0.0099
56	100	100krad Biased	0.5	0.4902	-0.0098
57	100	100krad Biased	0.5	0.4929	-0.0071
58	100	100krad Biased	0.5019	0.492	-0.0099
59	100	100krad Biased	0.5031	0.496	-0.0071

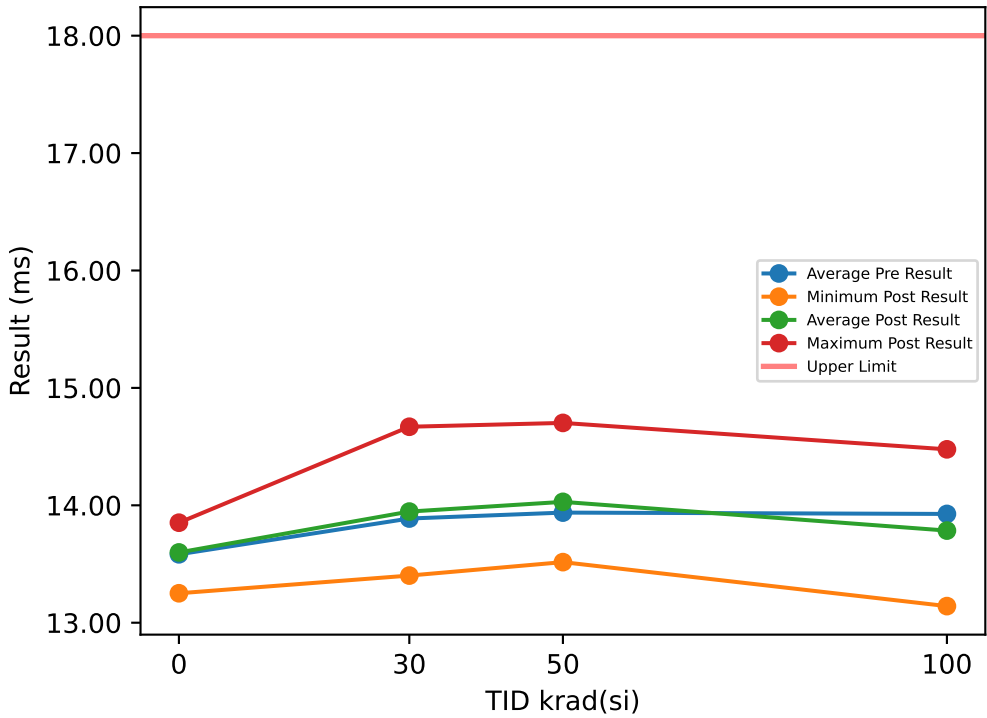
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5	0.50273	0.5041	0.0023671	0.5	0.50273	0.5041	0.0023671	0	0	0	0
30	0.497	0.50169	0.5059	0.0029191	0.497	0.5007	0.5059	0.0027358	-0.0031	-0.00099	0.0012	0.0014426
50	0.497	0.50142	0.505	0.0026641	0.4939	0.4967	0.5	0.0022	-0.0071	-0.00472	-0.001	0.0017485
100	0.4991	0.50214	0.505	0.0020403	0.4902	0.49494	0.4991	0.0032603	-0.0099	-0.0072	-0.004	0.0022973

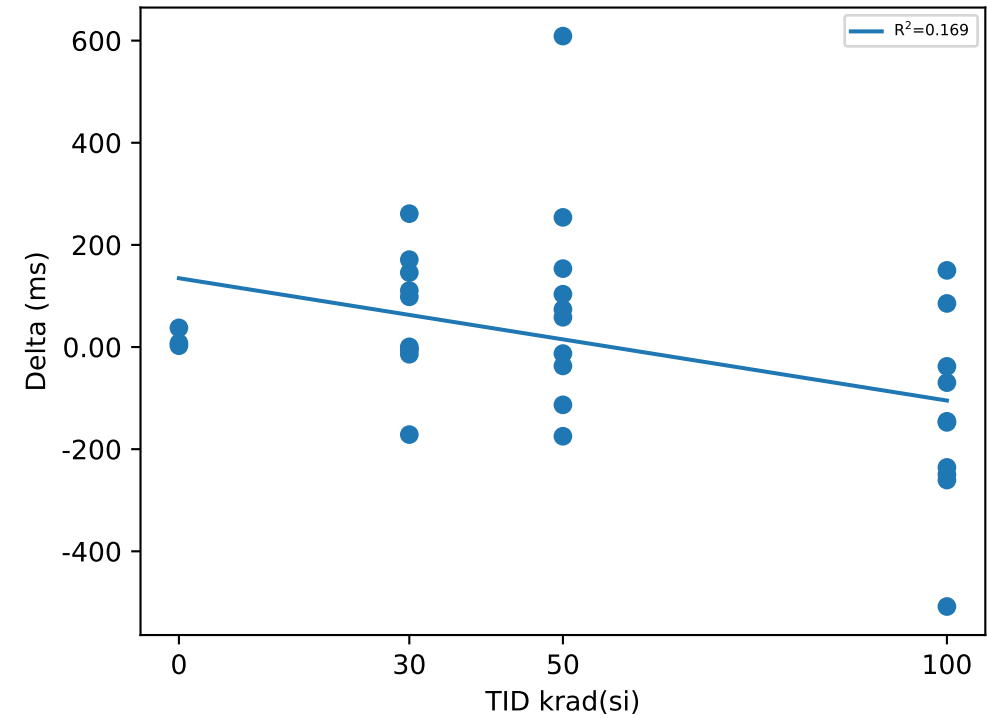
TID vs Result Stats



Test Results (Upper Limit = 18.0 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	13.213	13.251	37.546
2	0	CU2	13.686	13.693	7.7765
3	0	CU3	13.849	13.852	2.603
25	30	30krad Unbiased	14.009	14.155	145.75
26	30	30krad Unbiased	13.669	13.84	171.1
27	30	30krad Unbiased	13.517	13.514	-3.6032
28	30	30krad Unbiased	14.341	14.451	110.56
29	30	30krad Unbiased	13.595	13.856	261.18
30	30	30krad Biased	14.683	14.669	-14.131
31	30	30krad Biased	14.305	14.133	-171.44
32	30	30krad Biased	13.605	13.599	-5.9273
33	30	30krad Biased	13.401	13.402	0.4088
34	30	30krad Biased	13.75	13.848	98.308
40	50	50krad Unbiased	14.093	14.702	608.89
41	50	50krad Unbiased	14.51	14.614	103.44
42	50	50krad Unbiased	13.893	14.046	153.56
43	50	50krad Unbiased	13.85	13.837	-12.837
44	50	50krad Unbiased	14.119	14.177	58.253
45	50	50krad Biased	13.814	13.777	-36.987
46	50	50krad Biased	13.969	14.043	73.864
47	50	50krad Biased	13.691	13.516	-174.68
48	50	50krad Biased	13.559	13.813	253.88
49	50	50krad Biased	13.882	13.769	-113.2
50	100	100krad Unbiased	14.015	13.977	-37.877
51	100	100krad Unbiased	14.292	14.145	-147.5
52	100	100krad Unbiased	13.526	13.456	-69.673
53	100	100krad Unbiased	14.327	14.477	150.09
54	100	100krad Unbiased	13.933	14.018	85.382
55	100	100krad Biased	13.717	13.209	-508.09
56	100	100krad Biased	14.098	13.838	-260.51
57	100	100krad Biased	14.069	13.833	-235.74
58	100	100krad Biased	13.898	13.753	-145.43
59	100	100krad Biased	13.391	13.141	-249.49

TID vs Post - Pre Exposure Delta

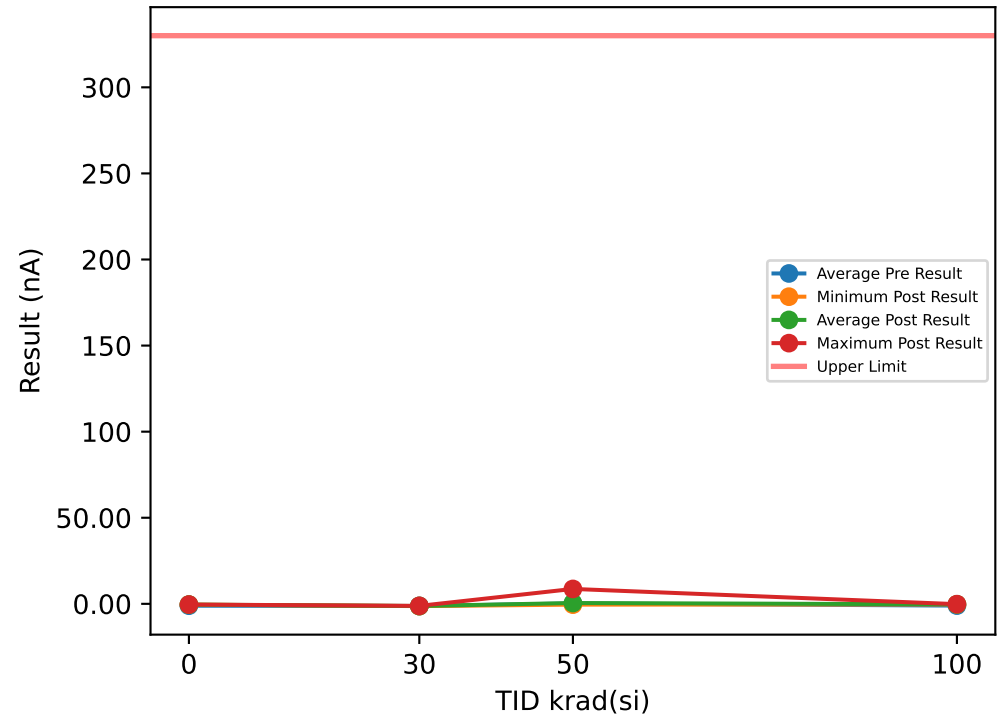


Test Statistics (ms)

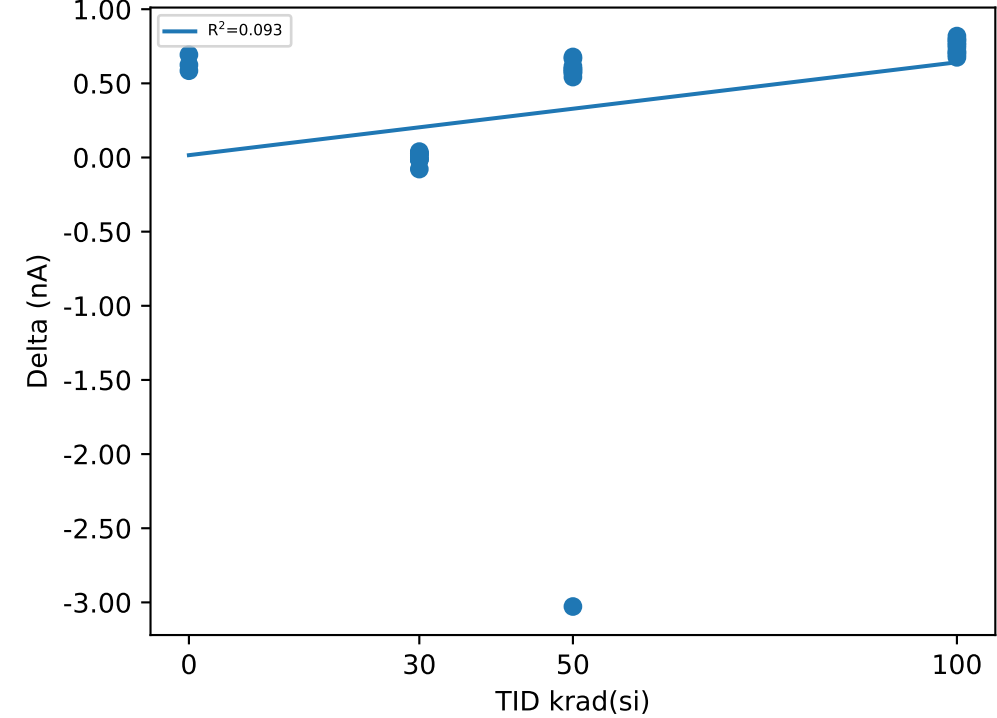
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	13.213	13.583	13.849	0.33025	13.251	13.599	13.852	0.31152	2.603	15.975	37.546	18.859
30	13.401	13.887	14.683	0.42602	13.402	13.947	14.669	0.40685	-171.44	59.221	261.18	122.56
50	13.559	13.938	14.51	0.26199	13.516	14.029	14.702	0.37925	-174.68	91.418	608.89	221.01
100	13.391	13.927	14.327	0.30619	13.141	13.785	14.477	0.4163	-508.09	-141.88	150.09	189.02

Device Test: 65.5 LEAK|/EN/CURRENT///6.3/@I_EN_LKG

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Upper Limit = 330.0 (nA))

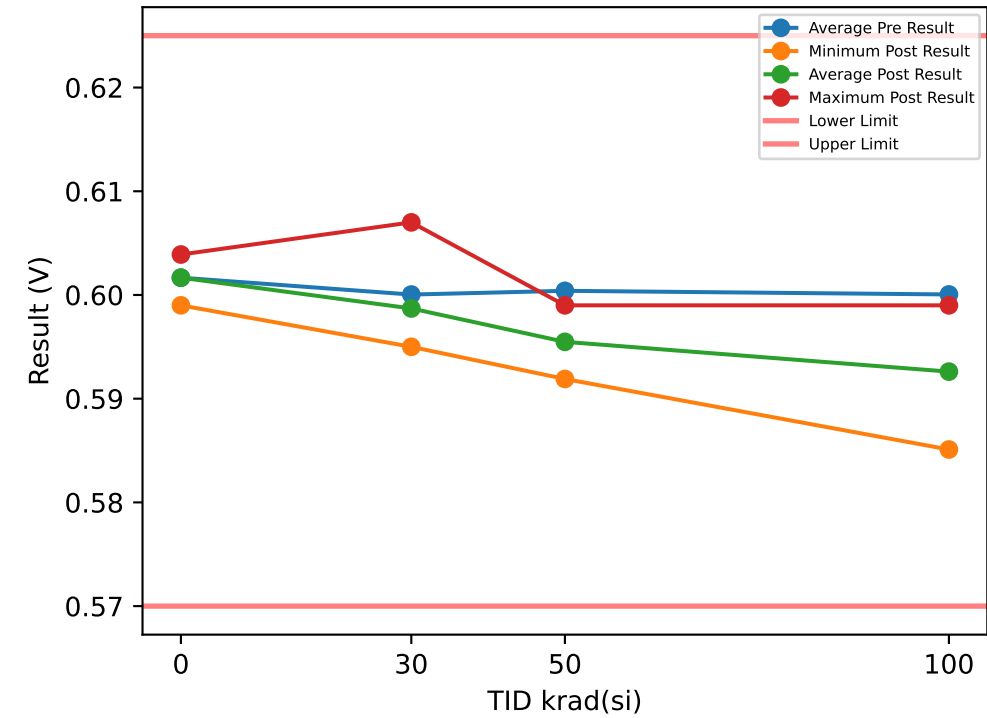
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	-1.0067	-0.4215	0.5852
2	0	CU2	-1.1339	-0.441	0.6929
3	0	CU3	-1.109	-0.4846	0.6244
25	30	30krad Unbiased	-1.2726	-1.2882	-0.0156
26	30	30krad Unbiased	-1.2937	-1.2679	0.0258
27	30	30krad Unbiased	-1.3537	-1.3249	0.0288
28	30	30krad Unbiased	-1.2328	-1.232	0.0008
29	30	30krad Unbiased	-1.1883	-1.2664	-0.0781
30	30	30krad Biased	-1.2898	-1.2765	0.0133
31	30	30krad Biased	-1.2905	-1.2617	0.0288
32	30	30krad Biased	-1.3467	-1.3069	0.0398
33	30	30krad Biased	-1.1727	-1.186	-0.0133
34	30	30krad Biased	-1.2024	-1.2125	-0.0101
40	50	50krad Unbiased	-1.0145	-0.4721	0.5424
41	50	50krad Unbiased	-1.0715	-0.4565	0.615
42	50	50krad Unbiased	-1.0582	-0.4597	0.5985
43	50	50krad Unbiased	-0.9997	-0.4137	0.586
44	50	50krad Unbiased	11.681	8.6528	-3.0278
45	50	50krad Biased	-1.1129	-0.4348	0.6781
46	50	50krad Biased	-0.9724	-0.3997	0.5727
47	50	50krad Biased	-1.0192	-0.4223	0.5969
48	50	50krad Biased	-1.0871	-0.42	0.6671
49	50	50krad Biased	-1.0239	-0.4519	0.572
50	100	100krad Unbiased	-1.0512	-0.255	0.7962
51	100	100krad Unbiased	-1.0426	-0.2706	0.772
52	100	100krad Unbiased	-0.9989	-0.2908	0.7081
53	100	100krad Unbiased	-0.9794	-0.304	0.6754
54	100	100krad Unbiased	-1.0411	-0.3484	0.6927
55	100	100krad Biased	-1.0411	-0.2496	0.7915
56	100	100krad Biased	-1.0473	-0.2285	0.8188
57	100	100krad Biased	-1.0543	-0.3126	0.7417
58	100	100krad Biased	-0.9474	-0.1881	0.7593
59	100	100krad Biased	-1.0223	-0.3079	0.7144

Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-1.1339	-1.0832	-1.0067	0.067411	-0.4846	-0.44903	-0.4215	0.032308	0.5852	0.63417	0.6929	0.05451
30	-1.3537	-1.2643	-1.1727	0.063283	-1.3249	-1.2623	-1.186	0.042228	-0.0781	0.00202	0.0398	0.034427
50	-1.1129	0.23212	11.681	4.0228	-0.4721	0.47221	8.6528	2.8745	-3.0278	0.24009	0.6781	1.149
100	-1.0543	-1.0226	-0.9474	0.035902	-0.3484	-0.27555	-0.1881	0.046845	0.6754	0.74701	0.8188	0.048318

Device Test: 65.6 ENABLE|/EN/RISE///6.3/@V_EN_RISING

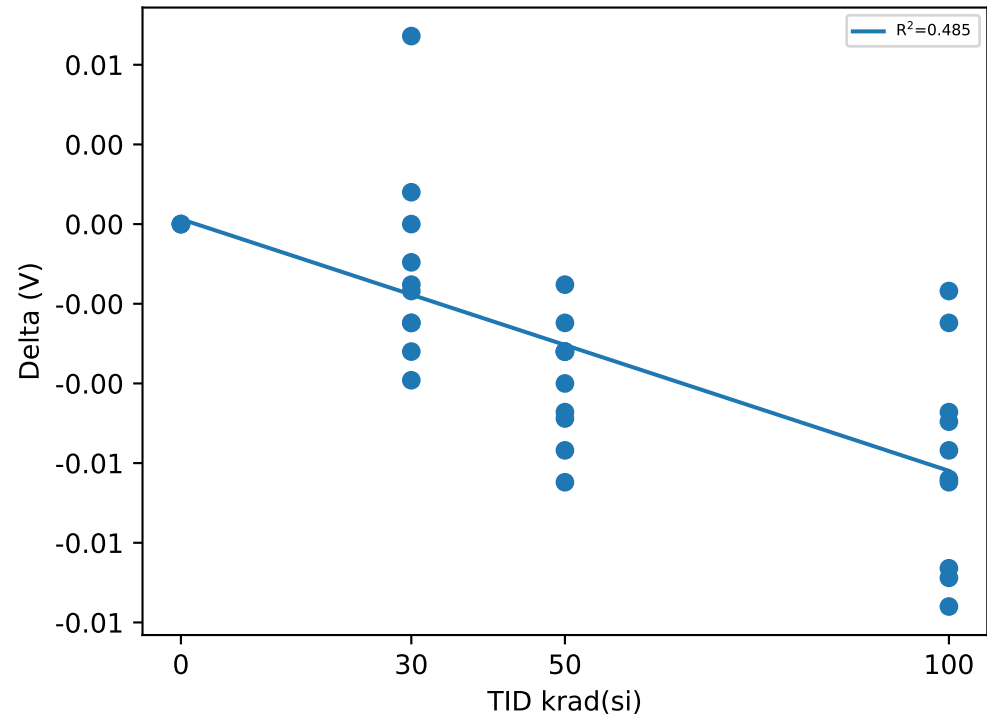
TID vs Result Stats



Test Results (Lower Limit = 0.57, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.6039	0.6039	0
2	0	CU2	0.599	0.599	0
3	0	CU3	0.6021	0.6021	0
25	30	30krad Unbiased	0.5971	0.5971	0
26	30	30krad Unbiased	0.603	0.6011	-0.0019
27	30	30krad Unbiased	0.5971	0.5959	-0.0012
28	30	30krad Unbiased	0.6011	0.607	0.0059
29	30	30krad Unbiased	0.598	0.5959	-0.0021
30	30	30krad Biased	0.6021	0.599	-0.0031
31	30	30krad Biased	0.6011	0.598	-0.0031
32	30	30krad Biased	0.599	0.595	-0.004
33	30	30krad Biased	0.6039	0.599	-0.0049
34	30	30krad Biased	0.598	0.599	0.001
40	50	50krad Unbiased	0.599	0.595	-0.004
41	50	50krad Unbiased	0.6011	0.598	-0.0031
42	50	50krad Unbiased	0.599	0.595	-0.004
43	50	50krad Unbiased	0.603	0.599	-0.004
44	50	50krad Unbiased	0.5959	0.594	-0.0019
45	50	50krad Biased	0.598	0.5919	-0.0061
46	50	50krad Biased	0.6021	0.594	-0.0081
47	50	50krad Biased	0.603	0.5959	-0.0071
48	50	50krad Biased	0.5999	0.594	-0.0059
49	50	50krad Biased	0.603	0.598	-0.005
50	100	100krad Unbiased	0.6021	0.594	-0.0081
51	100	100krad Unbiased	0.6011	0.599	-0.0021
52	100	100krad Unbiased	0.6021	0.599	-0.0031
53	100	100krad Unbiased	0.598	0.59	-0.008
54	100	100krad Unbiased	0.6021	0.5959	-0.0062
55	100	100krad Biased	0.6011	0.5891	-0.012
56	100	100krad Biased	0.6011	0.59	-0.0111
57	100	100krad Biased	0.5959	0.59	-0.0059
58	100	100krad Biased	0.5959	0.5851	-0.0108
59	100	100krad Biased	0.6011	0.594	-0.0071

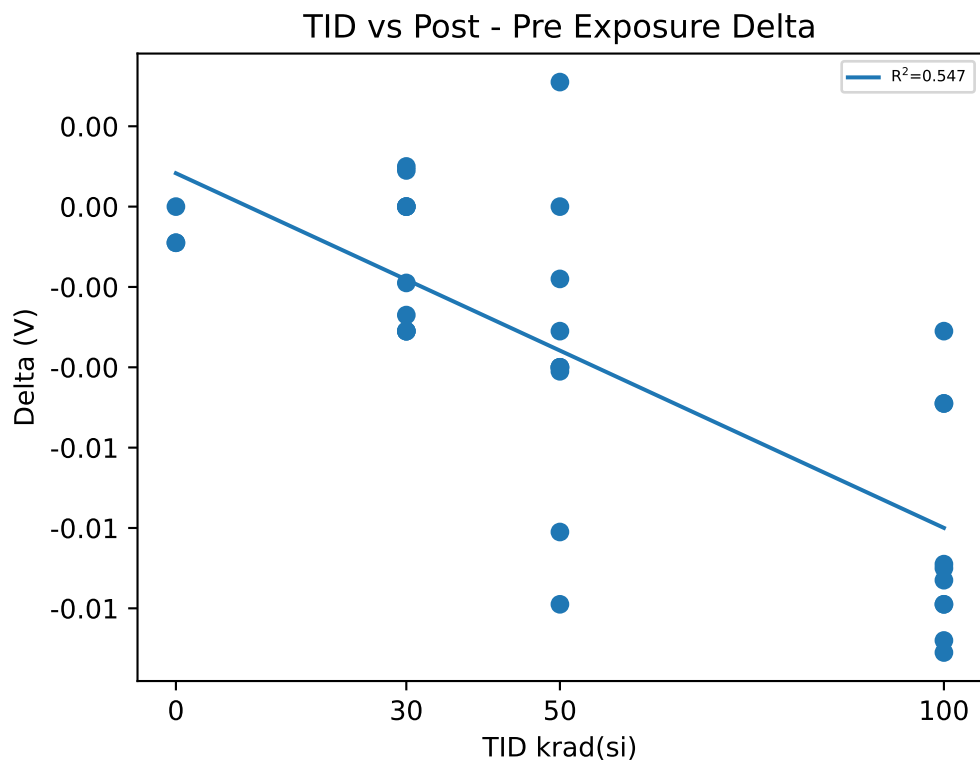
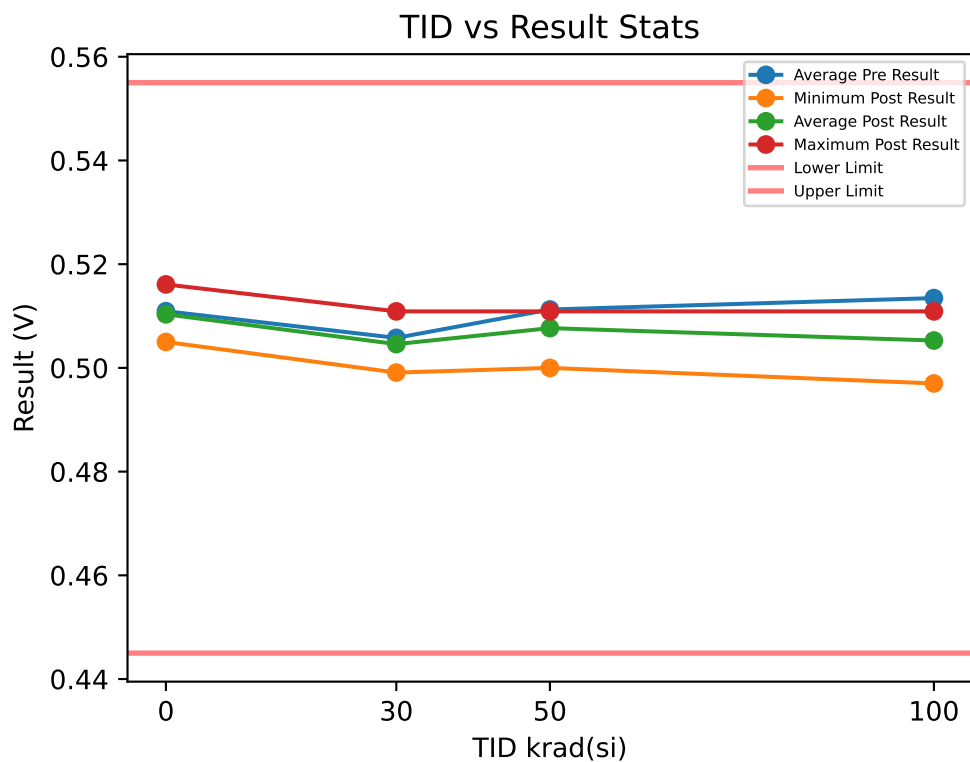
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.599	0.60167	0.6039	0.0024786	0.599	0.60167	0.6039	0.0024786	0	0	0	0
30	0.5971	0.60004	0.6039	0.0025132	0.595	0.5987	0.607	0.0034535	-0.0049	-0.00134	0.0059	0.003101
50	0.5959	0.6004	0.603	0.0024459	0.5919	0.59548	0.599	0.0022389	-0.0081	-0.00492	-0.0019	0.0018914
100	0.5959	0.60005	0.6021	0.002487	0.5851	0.59261	0.599	0.0045401	-0.012	-0.00744	-0.0021	0.0032932

Device Test: 65.7 ENABLE|/EN/FALL///6.3/@V_EN_FALLING

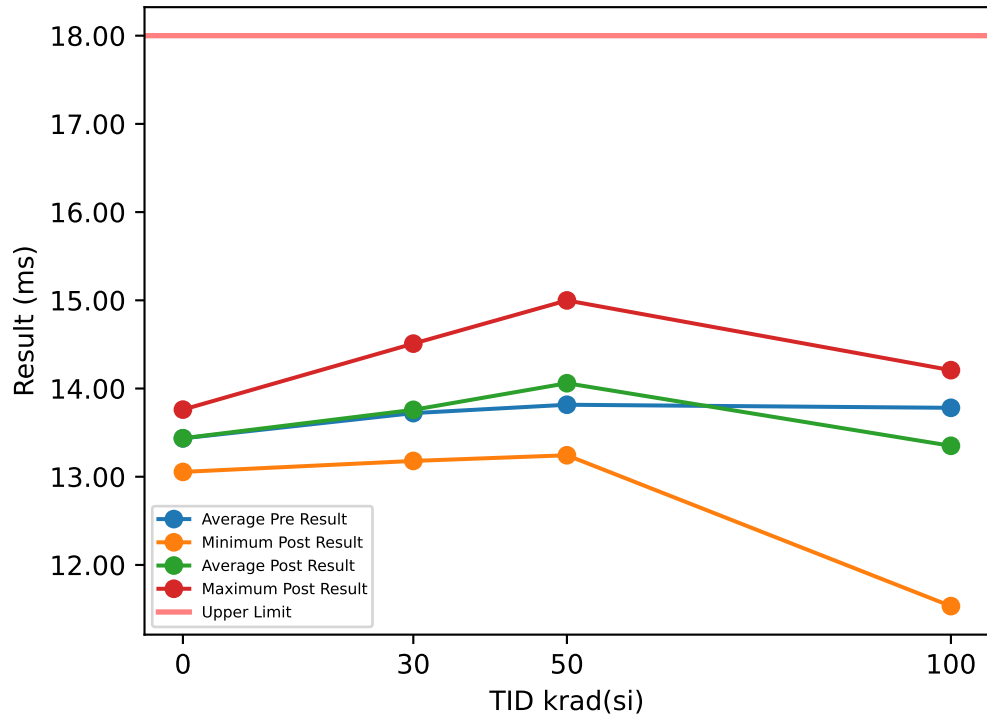


Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.517	0.5161	-0.0009
2	0	CU2	0.5059	0.505	-0.0009
3	0	CU3	0.5099	0.5099	0
25	30	30krad Unbiased	0.501	0.501	0
26	30	30krad Unbiased	0.5059	0.5059	0
27	30	30krad Unbiased	0.5081	0.505	-0.0031
28	30	30krad Unbiased	0.5099	0.5109	0.001
29	30	30krad Unbiased	0.5068	0.5041	-0.0027
30	30	30krad Biased	0.5031	0.5031	0
31	30	30krad Biased	0.513	0.5099	-0.0031
32	30	30krad Biased	0.501	0.4991	-0.0019
33	30	30krad Biased	0.5081	0.505	-0.0031
34	30	30krad Biased	0.501	0.5019	0.0009
40	50	50krad Unbiased	0.5121	0.5081	-0.004
41	50	50krad Unbiased	0.5068	0.5068	0
42	50	50krad Unbiased	0.5031	0.5	-0.0031
43	50	50krad Unbiased	0.5149	0.5109	-0.004
44	50	50krad Unbiased	0.5059	0.509	0.0031
45	50	50krad Biased	0.5189	0.509	-0.0099
46	50	50krad Biased	0.514	0.5099	-0.0041
47	50	50krad Biased	0.509	0.505	-0.004
48	50	50krad Biased	0.5099	0.5081	-0.0018
49	50	50krad Biased	0.518	0.5099	-0.0081
50	100	100krad Unbiased	0.5189	0.5081	-0.0108
51	100	100krad Unbiased	0.5161	0.5068	-0.0093
52	100	100krad Unbiased	0.5099	0.505	-0.0049
53	100	100krad Unbiased	0.513	0.5081	-0.0049
54	100	100krad Unbiased	0.5189	0.5099	-0.009
55	100	100krad Biased	0.5099	0.501	-0.0089
56	100	100krad Biased	0.5081	0.497	-0.0111
57	100	100krad Biased	0.5149	0.505	-0.0099
58	100	100krad Biased	0.5109	0.501	-0.0099
59	100	100krad Biased	0.514	0.5109	-0.0031

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5059	0.51093	0.517	0.0056217	0.505	0.51033	0.5161	0.0055627	-0.0009	-0.0006	0	0.00051962
30	0.501	0.50579	0.513	0.004172	0.4991	0.50459	0.5109	0.0036937	-0.0031	-0.0012	0.001	0.0017365
50	0.5031	0.51126	0.5189	0.0052432	0.5	0.50767	0.5109	0.0031798	-0.0099	-0.00359	0.0031	0.0036819
100	0.5081	0.51346	0.5189	0.0037913	0.497	0.50528	0.5109	0.0044284	-0.0111	-0.00818	-0.0031	0.0028102

Device Test: 65.8 ENABLE|/EN/DELAY///6.3/@T_EN_DELAY

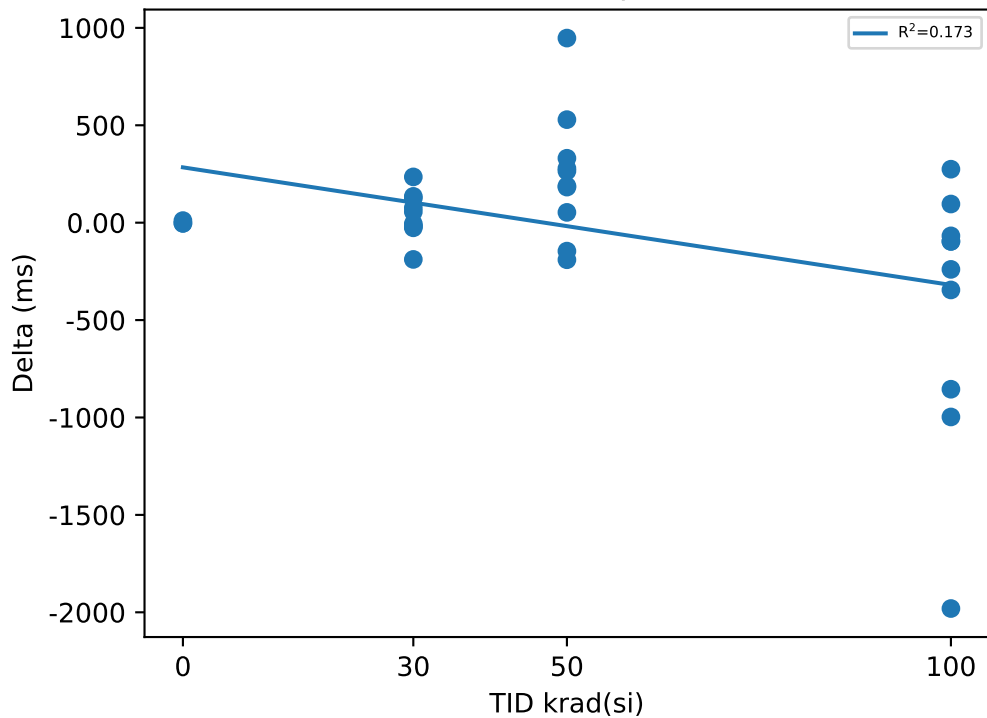
TID vs Result Stats



Test Results (Upper Limit = 18.0 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	13.044	13.055	10.76
2	0	CU2	13.498	13.494	-3.7197
3	0	CU3	13.764	13.761	-2.7151
25	30	30krad Unbiased	13.81	13.935	125.39
26	30	30krad Unbiased	13.525	13.66	135.08
27	30	30krad Unbiased	13.34	13.335	-5.3553
28	30	30krad Unbiased	14.213	14.289	76.342
29	30	30krad Unbiased	13.409	13.644	234.94
30	30	30krad Biased	14.526	14.509	-16.767
31	30	30krad Biased	14.162	13.974	-188.57
32	30	30krad Biased	13.463	13.437	-26.31
33	30	30krad Biased	13.198	13.179	-19.179
34	30	30krad Biased	13.567	13.622	55.822
40	50	50krad Unbiased	14.051	14.999	947.59
41	50	50krad Unbiased	14.38	14.645	265.28
42	50	50krad Unbiased	13.656	13.986	330.72
43	50	50krad Unbiased	13.643	13.696	52.922
44	50	50krad Unbiased	14.095	14.373	278.82
45	50	50krad Biased	13.845	14.033	188.11
46	50	50krad Biased	13.815	13.998	182.65
47	50	50krad Biased	13.434	13.243	-190.24
48	50	50krad Biased	13.566	14.095	528.97
49	50	50krad Biased	13.677	13.531	-145.97
50	100	100krad Unbiased	13.925	13.829	-96.012
51	100	100krad Unbiased	14.228	14.16	-67.684
52	100	100krad Unbiased	13.368	13.023	-345.27
53	100	100krad Unbiased	14.112	14.208	95.832
54	100	100krad Unbiased	13.736	14.011	274.53
55	100	100krad Biased	13.514	11.533	-1980.6
56	100	100krad Biased	13.931	12.934	-997.26
57	100	100krad Biased	14.138	14.042	-95.779
58	100	100krad Biased	13.684	12.829	-854.93
59	100	100krad Biased	13.175	12.936	-239.72

TID vs Post - Pre Exposure Delta

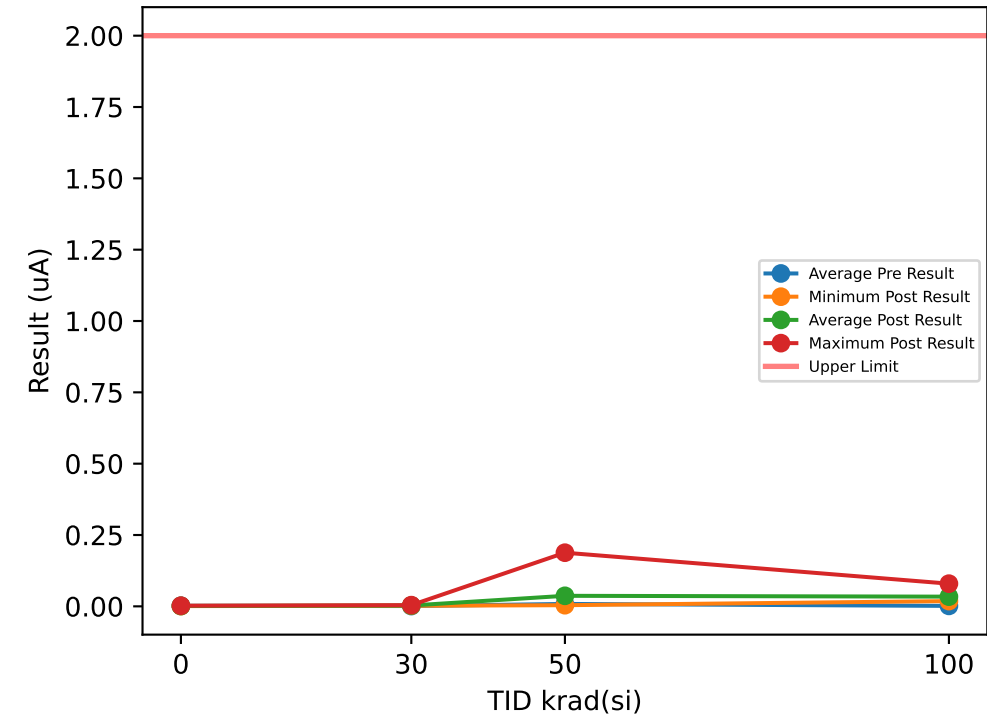


Test Statistics (ms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	13.044	13.435	13.764	0.36391	13.055	13.437	13.761	0.35659	-3.7197	1.4417	10.76	8.0854
30	13.198	13.721	14.526	0.4393	13.179	13.758	14.509	0.41934	-188.57	37.139	234.94	116.07
50	13.434	13.816	14.38	0.28583	13.243	14.06	14.999	0.51769	-190.24	243.89	947.59	328.21
100	13.175	13.781	14.228	0.34969	11.533	13.351	14.208	0.85387	-1980.6	-430.69	274.53	673.08

Device Test: 70.1 LEAK|/PG/CURRENT/0N6V//3/@PWRGD_OUTPUT_HIGH_LEAK

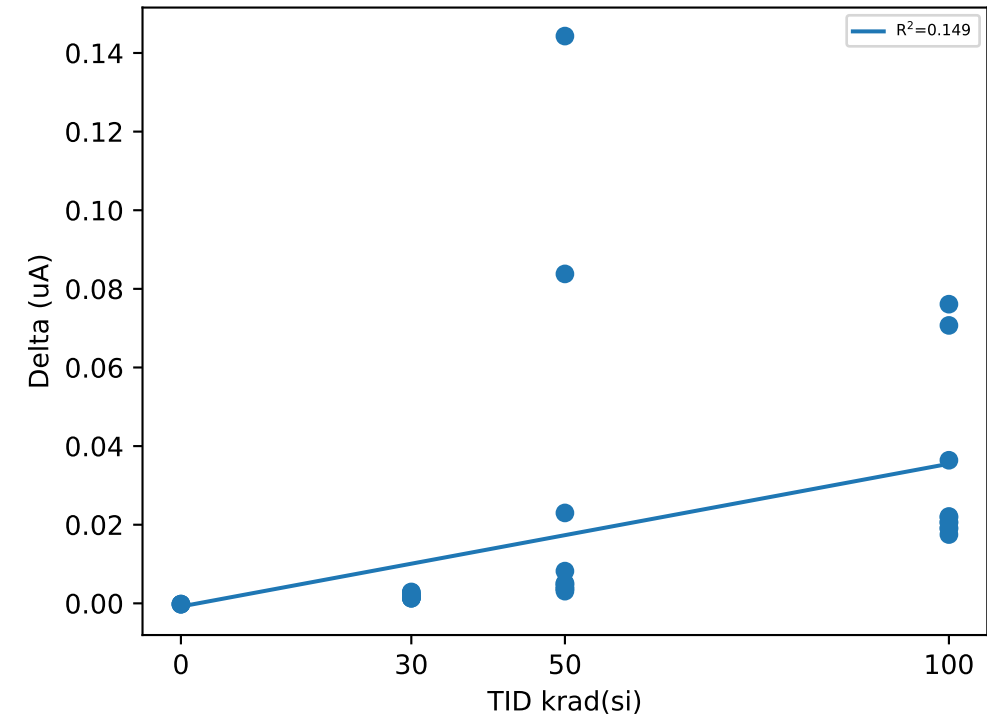
TID vs Result Stats



Test Results (Upper Limit = 2.0 (uA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.001	0.0008	-0.0002
2	0	CU2	0.0025	0.0023	-0.0002
3	0	CU3	0.0016	0.0014	-0.0002
25	30	30krad Unbiased	0.0012	0.0036	0.0024
26	30	30krad Unbiased	0.0008	0.0021	0.0013
27	30	30krad Unbiased	0.0011	0.0032	0.0021
28	30	30krad Unbiased	0.0008	0.0022	0.0014
29	30	30krad Unbiased	0.0009	0.0024	0.0015
30	30	30krad Biased	0.0008	0.0021	0.0013
31	30	30krad Biased	0.0008	0.0023	0.0015
32	30	30krad Biased	0.0013	0.0041	0.0028
33	30	30krad Biased	0.0013	0.0042	0.0029
34	30	30krad Biased	0.0012	0.0031	0.0019
40	50	50krad Unbiased	0.0018	0.01	0.0082
41	50	50krad Unbiased	0.0012	0.0062	0.005
42	50	50krad Unbiased	0.0011	0.0055	0.0044
43	50	50krad Unbiased	0.001	0.0047	0.0037
44	50	50krad Unbiased	0.0063	0.0293	0.023
45	50	50krad Biased	0.0437	0.188	0.1443
46	50	50krad Biased	0.001	0.0047	0.0037
47	50	50krad Biased	0.0013	0.0064	0.0051
48	50	50krad Biased	0.0266	0.1104	0.0838
49	50	50krad Biased	0.0009	0.004	0.0031
50	100	100krad Unbiased	0.0034	0.0795	0.0761
51	100	100krad Unbiased	0.0014	0.0378	0.0364
52	100	100krad Unbiased	0.0009	0.0199	0.019
53	100	100krad Unbiased	0.0009	0.0184	0.0175
54	100	100krad Unbiased	0.001	0.0202	0.0192
55	100	100krad Biased	0.0009	0.023	0.0221
56	100	100krad Biased	0.001	0.0216	0.0206
57	100	100krad Biased	0.0042	0.0749	0.0707
58	100	100krad Biased	0.001	0.0216	0.0206
59	100	100krad Biased	0.0011	0.023	0.0219

TID vs Post - Pre Exposure Delta

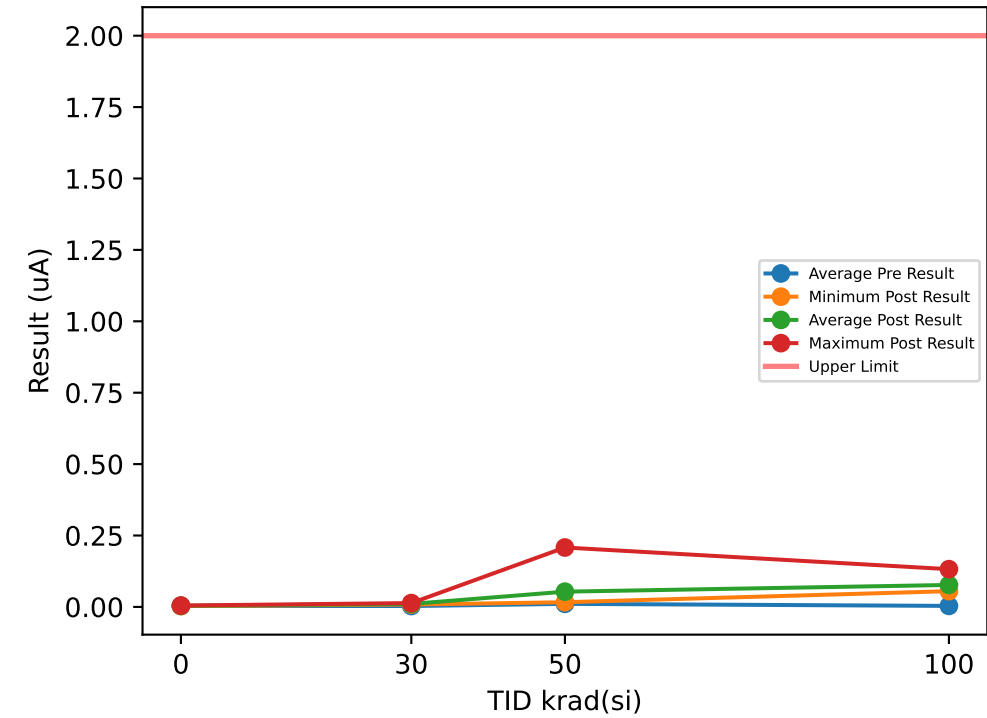


Test Statistics (uA)

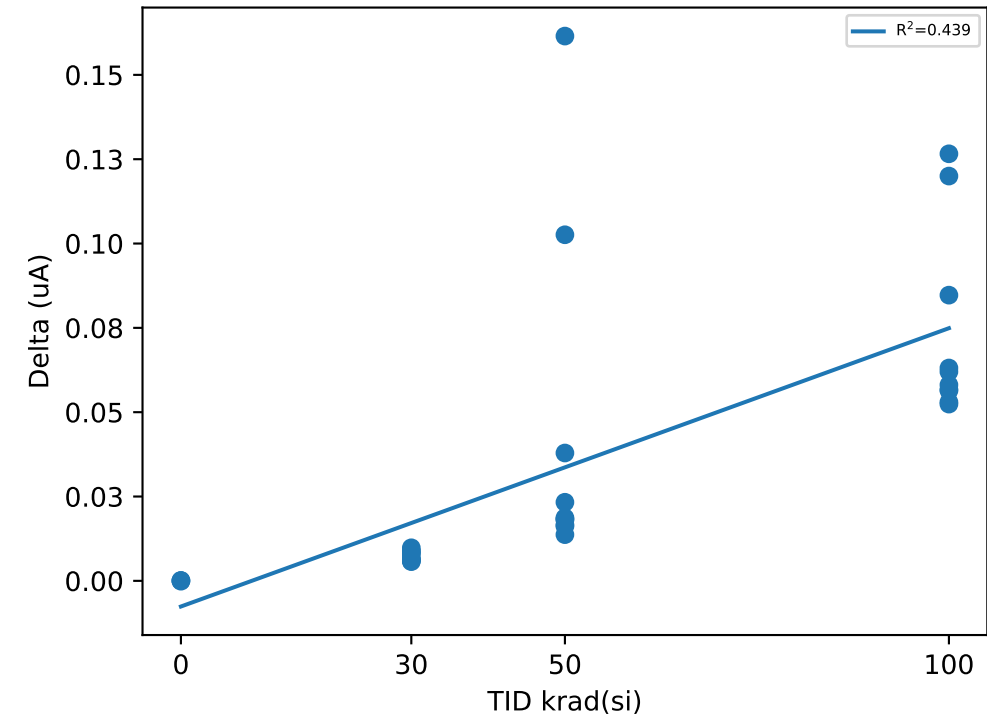
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.001	0.0017	0.0025	0.00075498	0.0008	0.0015	0.0023	0.00075498	-0.0002	-0.0002	-0.0002	6.0609e-20
30	0.0008	0.00102	0.0013	0.0002201	0.0021	0.00293	0.0042	0.00082469	0.0013	0.00191	0.0029	0.00061364
50	0.0009	0.00849	0.0437	0.014706	0.004	0.03692	0.188	0.062387	0.0031	0.02843	0.1443	0.047686
100	0.0009	0.00158	0.0042	0.0011942	0.0184	0.03399	0.0795	0.023427	0.0175	0.03241	0.0761	0.022269

Device Test: 70.2 LEAK|/PG/CURRENT/6N0V//6.3/@PWRGD_OUTPUT_HIGH_LEAK

TID vs Result Stats



TID vs Post - Pre Exposure Delta



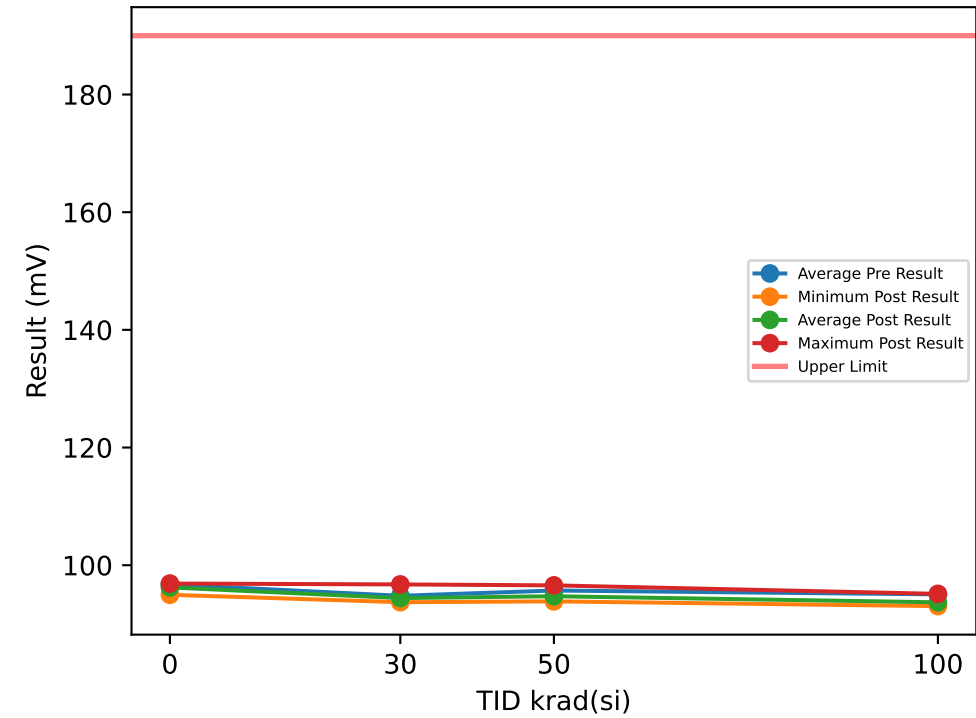
Test Results (Upper Limit = 2.0 (uA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.0027	0.0028	0.0001
2	0	CU2	0.0047	0.0048	0.0001
3	0	CU3	0.0039	0.0038	-0.0001
25	30	30krad Unbiased	0.0034	0.0116	0.0082
26	30	30krad Unbiased	0.0024	0.0089	0.0065
27	30	30krad Unbiased	0.0032	0.012	0.0088
28	30	30krad Unbiased	0.0027	0.0091	0.0064
29	30	30krad Unbiased	0.0029	0.0091	0.0062
30	30	30krad Biased	0.0028	0.0087	0.0059
31	30	30krad Biased	0.0026	0.0083	0.0057
32	30	30krad Biased	0.0036	0.0125	0.0089
33	30	30krad Biased	0.0037	0.0135	0.0098
34	30	30krad Biased	0.0035	0.0112	0.0077
40	50	50krad Unbiased	0.0039	0.0272	0.0233
41	50	50krad Unbiased	0.0031	0.0218	0.0187
42	50	50krad Unbiased	0.0032	0.0215	0.0183
43	50	50krad Unbiased	0.0029	0.0191	0.0162
44	50	50krad Unbiased	0.0087	0.0466	0.0379
45	50	50krad Biased	0.0465	0.208	0.1615
46	50	50krad Biased	0.003	0.0196	0.0166
47	50	50krad Biased	0.0033	0.0214	0.0181
48	50	50krad Biased	0.0298	0.1324	0.1026
49	50	50krad Biased	0.0027	0.0164	0.0137
50	100	100krad Unbiased	0.0056	0.1322	0.1266
51	100	100krad Unbiased	0.0033	0.088	0.0847
52	100	100krad Unbiased	0.0029	0.0596	0.0567
53	100	100krad Unbiased	0.0027	0.0551	0.0524
54	100	100krad Unbiased	0.0029	0.061	0.0581
55	100	100krad Biased	0.0029	0.066	0.0631
56	100	100krad Biased	0.0027	0.0591	0.0564
57	100	100krad Biased	0.0069	0.1269	0.12
58	100	100krad Biased	0.0027	0.0557	0.053
59	100	100krad Biased	0.0031	0.0651	0.062

Test Statistics (uA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.0027	0.0037667	0.0047	0.0010066	0.0028	0.0038	0.0048	0.001	-0.0001	3.3333e-05	0.0001	0.00011547
30	0.0024	0.00308	0.0037	0.00045898	0.0083	0.01049	0.0135	0.0018711	0.0057	0.00741	0.0098	0.0014564
50	0.0027	0.01071	0.0465	0.015091	0.0164	0.0534	0.208	0.064638	0.0137	0.04269	0.1615	0.049556
100	0.0027	0.00357	0.0069	0.0014576	0.0551	0.07687	0.1322	0.029312	0.0524	0.0733	0.1266	0.027938

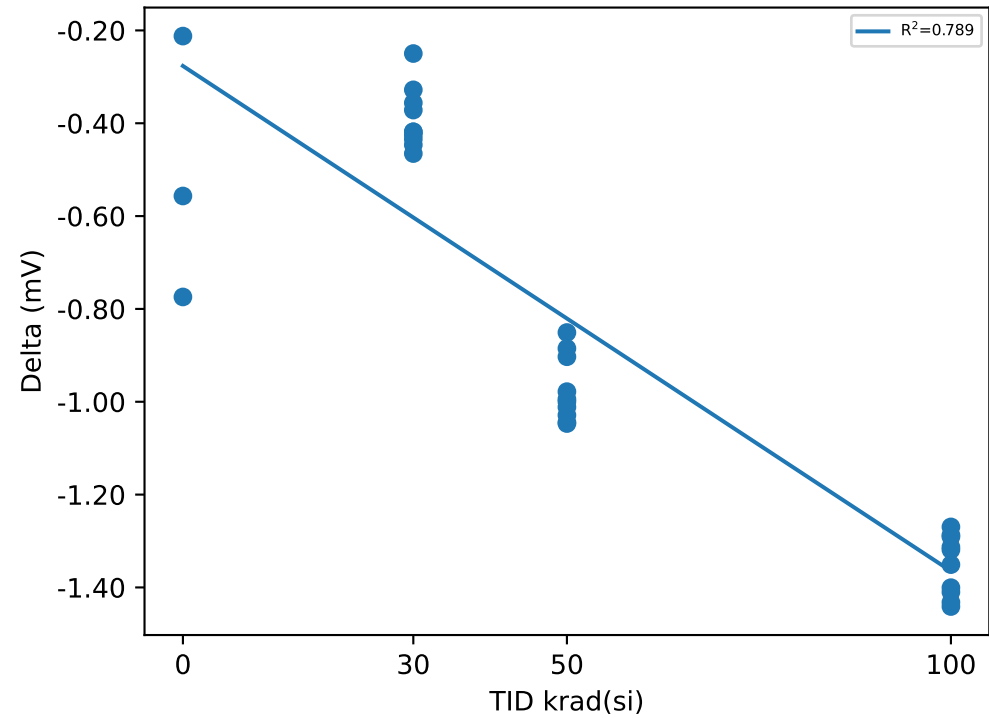
TID vs Result Stats



Test Results (Upper Limit = 190.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	95.531	94.975	-0.5567
2	0	CU2	97.095	96.883	-0.2122
3	0	CU3	97.582	96.808	-0.7742
25	30	30krad Unbiased	94.658	94.233	-0.4248
26	30	30krad Unbiased	94.171	93.724	-0.4466
27	30	30krad Unbiased	94.18	93.715	-0.4653
28	30	30krad Unbiased	96.007	95.589	-0.4185
29	30	30krad Unbiased	97.153	96.735	-0.4185
30	30	30krad Biased	94.324	93.889	-0.4341
31	30	30krad Biased	94.505	94.133	-0.3716
32	30	30krad Biased	94.483	94.155	-0.328
33	30	30krad Biased	94.43	94.074	-0.3561
34	30	30krad Biased	94.114	93.865	-0.2498
40	50	50krad Unbiased	96.324	95.325	-0.9998
41	50	50krad Unbiased	96.456	95.552	-0.903
42	50	50krad Unbiased	94.82	93.969	-0.8508
43	50	50krad Unbiased	95.141	94.147	-0.9943
44	50	50krad Unbiased	97.586	96.574	-1.0115
45	50	50krad Biased	95.99	94.943	-1.0469
46	50	50krad Biased	94.913	93.885	-1.0289
47	50	50krad Biased	94.882	93.997	-0.8851
48	50	50krad Biased	95.975	94.996	-0.9782
49	50	50krad Biased	94.898	93.853	-1.0444
50	100	100krad Unbiased	95.513	94.194	-1.3189
51	100	100krad Unbiased	95.069	93.757	-1.3129
52	100	100krad Unbiased	94.507	93.157	-1.3508
53	100	100krad Unbiased	94.882	93.441	-1.4411
54	100	100krad Unbiased	95.369	94.078	-1.2909
55	100	100krad Biased	94.582	93.313	-1.2696
56	100	100krad Biased	94.479	93.047	-1.432
57	100	100krad Biased	96.415	95.128	-1.2872
58	100	100krad Biased	94.651	93.241	-1.41
59	100	100krad Biased	94.979	93.578	-1.4005

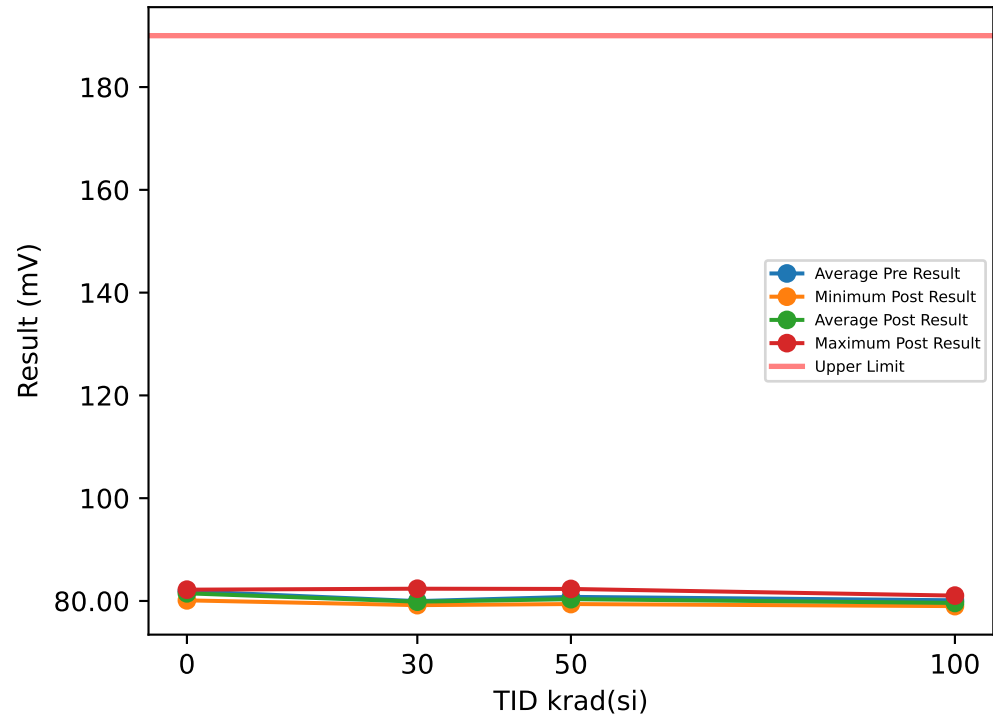
TID vs Post - Pre Exposure Delta



Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	95.531	96.736	97.582	1.0716	94.975	96.222	96.883	1.0809	-0.7742	-0.51437	-0.2122	0.28338
30	94.114	94.802	97.153	0.9898	93.715	94.411	96.735	0.97764	-0.4653	-0.39133	-0.2498	0.06551
50	94.82	95.698	97.586	0.9246	93.853	94.724	96.574	0.91205	-1.0469	-0.97429	-0.8508	0.069847
100	94.479	95.045	96.415	0.5972	93.047	93.693	95.128	0.63169	-1.4411	-1.3514	-1.2696	0.064463

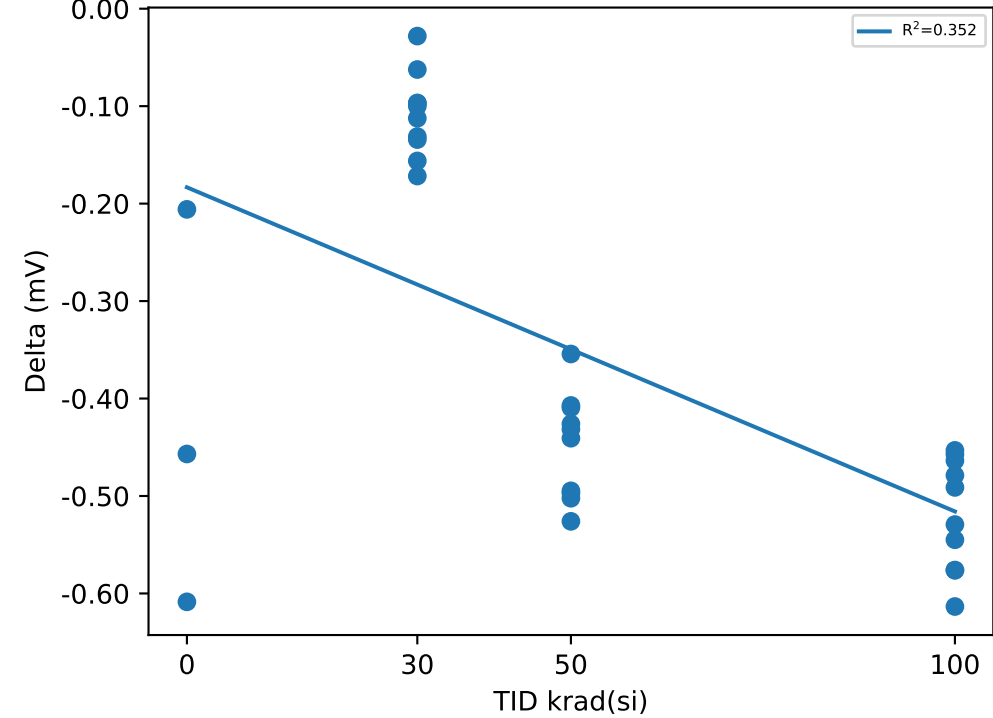
TID vs Result Stats



Test Results (Upper Limit = 190.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	80.576	80.119	-0.4569
2	0	CU2	82.346	82.14	-0.2059
3	0	CU3	82.808	82.199	-0.6086
25	30	30krad Unbiased	79.876	79.742	-0.1343
26	30	30krad Unbiased	79.289	79.192	-0.0969
27	30	30krad Unbiased	79.298	79.186	-0.1124
28	30	30krad Unbiased	81.188	81.091	-0.0968
29	30	30krad Unbiased	82.54	82.384	-0.1562
30	30	30krad Biased	79.392	79.22	-0.1717
31	30	30krad Biased	79.682	79.551	-0.1312
32	30	30krad Biased	79.654	79.554	-0.1
33	30	30krad Biased	79.529	79.467	-0.0624
34	30	30krad Biased	79.27	79.242	-0.0281
40	50	50krad Unbiased	81.412	80.972	-0.4407
41	50	50krad Unbiased	81.628	81.218	-0.4094
42	50	50krad Unbiased	79.895	79.541	-0.3543
43	50	50krad Unbiased	80.163	79.756	-0.4071
44	50	50krad Unbiased	82.842	82.34	-0.5023
45	50	50krad Biased	81.025	80.528	-0.4972
46	50	50krad Biased	80.014	79.519	-0.4947
47	50	50krad Biased	79.992	79.566	-0.426
48	50	50krad Biased	81.075	80.644	-0.4315
49	50	50krad Biased	79.926	79.4	-0.526
50	100	100krad Unbiased	80.647	80.156	-0.4912
51	100	100krad Unbiased	80.111	79.653	-0.4572
52	100	100krad Unbiased	79.617	79.088	-0.5293
53	100	100krad Unbiased	79.973	79.36	-0.6134
54	100	100krad Unbiased	80.494	80.016	-0.4788
55	100	100krad Biased	79.692	79.228	-0.4637
56	100	100krad Biased	79.574	78.997	-0.5762
57	100	100krad Biased	81.496	81.043	-0.4532
58	100	100krad Biased	79.723	79.178	-0.5449
59	100	100krad Biased	79.995	79.419	-0.576

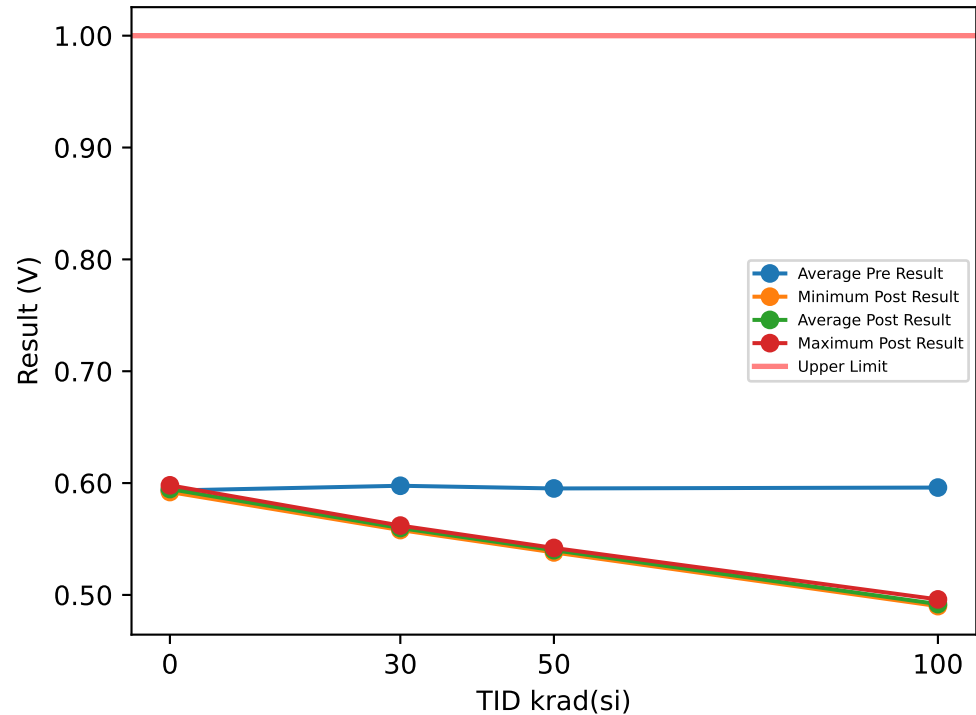
TID vs Post - Pre Exposure Delta



Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	80.576	81.91	82.808	1.1781	80.119	81.486	82.199	1.1843	-0.6086	-0.4238	-0.2059	0.20338
30	79.27	79.972	82.54	1.0653	79.186	79.863	82.384	1.0506	-0.1717	-0.109	-0.0281	0.042683
50	79.895	80.797	82.842	0.97832	79.4	80.348	82.34	0.96787	-0.526	-0.44892	-0.3543	0.054137
100	79.574	80.132	81.496	0.60006	78.997	79.614	81.043	0.63226	-0.6134	-0.51839	-0.4532	0.057543

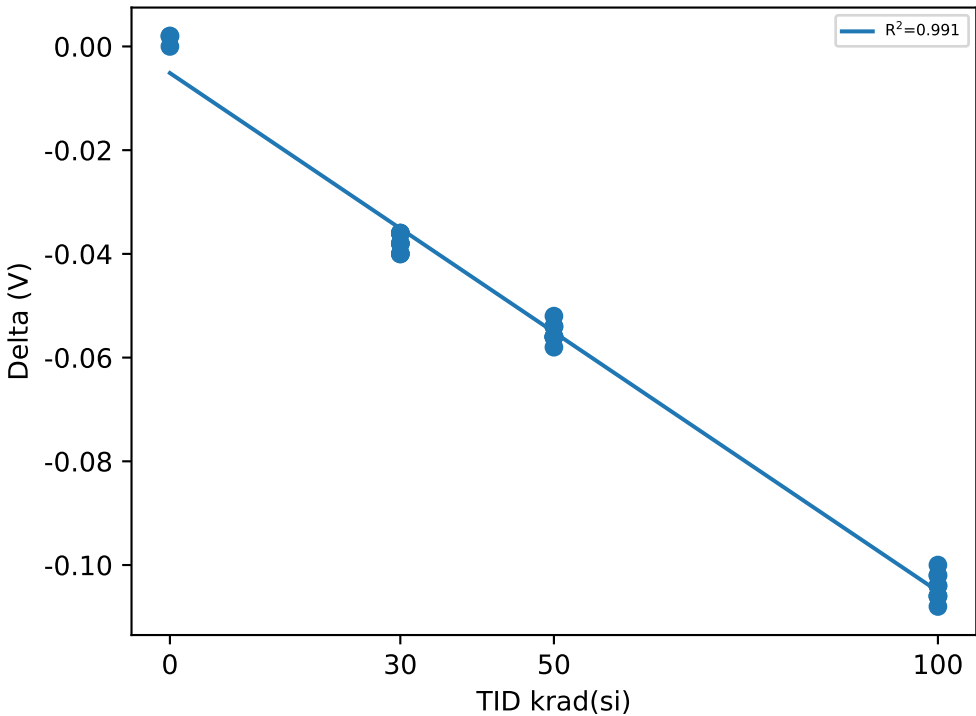
TID vs Result Stats



Test Results (Upper Limit = 1.0 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.596	0.598	0.002
2	0	CU2	0.592	0.592	0
3	0	CU3	0.592	0.594	0.002
25	30	30krad Unbiased	0.596	0.558	-0.038
26	30	30krad Unbiased	0.6	0.56	-0.04
27	30	30krad Unbiased	0.598	0.558	-0.04
28	30	30krad Unbiased	0.596	0.558	-0.038
29	30	30krad Unbiased	0.594	0.558	-0.036
30	30	30krad Biased	0.598	0.562	-0.036
31	30	30krad Biased	0.598	0.562	-0.036
32	30	30krad Biased	0.598	0.56	-0.038
33	30	30krad Biased	0.6	0.56	-0.04
34	30	30krad Biased	0.598	0.562	-0.036
40	50	50krad Unbiased	0.596	0.54	-0.056
41	50	50krad Unbiased	0.594	0.538	-0.056
42	50	50krad Unbiased	0.596	0.54	-0.056
43	50	50krad Unbiased	0.596	0.54	-0.056
44	50	50krad Unbiased	0.592	0.54	-0.052
45	50	50krad Biased	0.596	0.542	-0.054
46	50	50krad Biased	0.596	0.538	-0.058
47	50	50krad Biased	0.596	0.54	-0.056
48	50	50krad Biased	0.594	0.54	-0.054
49	50	50krad Biased	0.596	0.542	-0.054
50	100	100krad Unbiased	0.596	0.492	-0.104
51	100	100krad Unbiased	0.598	0.49	-0.108
52	100	100krad Unbiased	0.594	0.49	-0.104
53	100	100krad Unbiased	0.596	0.492	-0.104
54	100	100krad Unbiased	0.596	0.496	-0.1
55	100	100krad Biased	0.596	0.49	-0.106
56	100	100krad Biased	0.596	0.49	-0.106
57	100	100krad Biased	0.596	0.494	-0.102
58	100	100krad Biased	0.596	0.49	-0.106
59	100	100krad Biased	0.596	0.494	-0.102

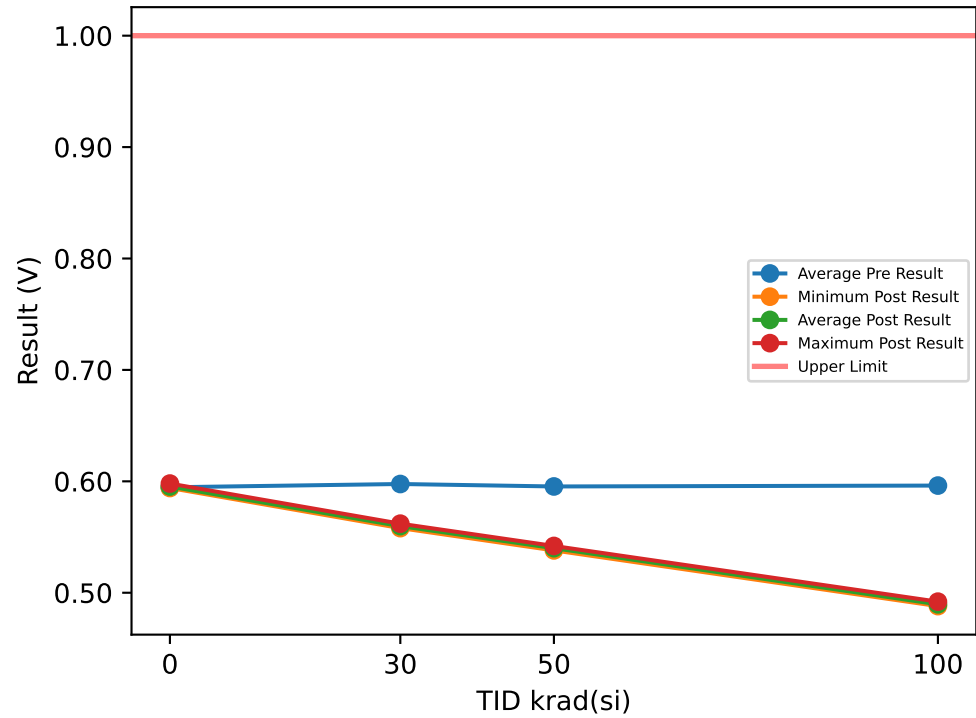
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.592	0.59333	0.596	0.0023094	0.592	0.59467	0.598	0.0030551	0	0.0013333	0.002	0.0011547
30	0.594	0.5976	0.6	0.0018379	0.558	0.5598	0.562	0.0017512	-0.04	-0.0378	-0.036	0.0017512
50	0.592	0.5952	0.596	0.0013984	0.538	0.54	0.542	0.0013333	-0.058	-0.0552	-0.052	0.0016865
100	0.594	0.596	0.598	0.00094281	0.49	0.4918	0.496	0.002201	-0.108	-0.1042	-0.1	0.0023944

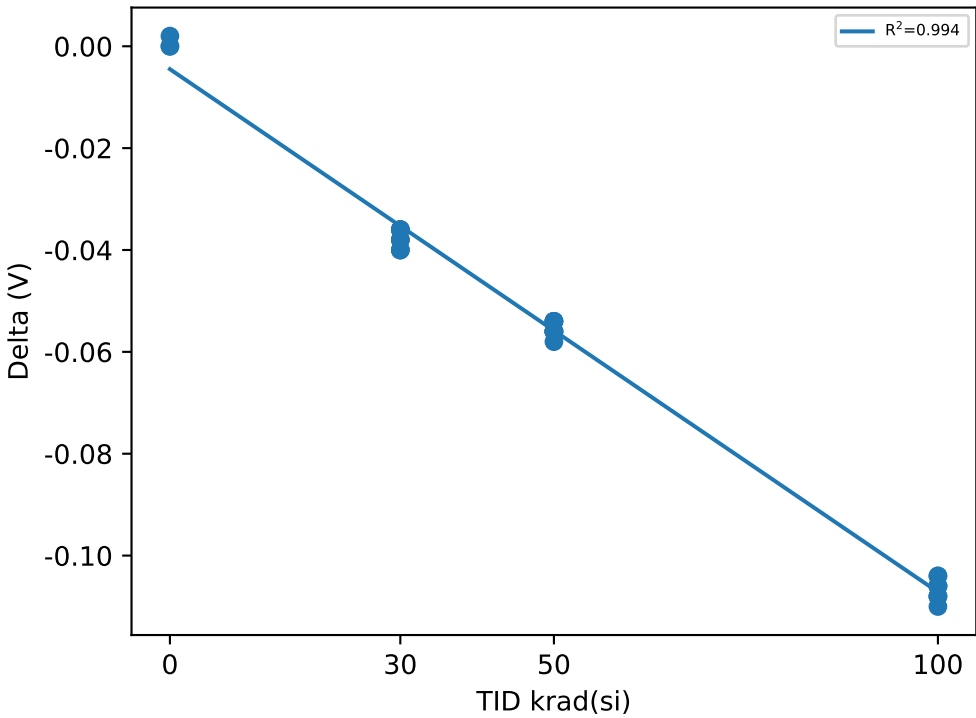
TID vs Result Stats



Test Results (Upper Limit = 1.0 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	0.598	0.598	0
2	0	CU2	0.594	0.594	0
3	0	CU3	0.592	0.594	0.002
25	30	30krad Unbiased	0.596	0.558	-0.038
26	30	30krad Unbiased	0.6	0.56	-0.04
27	30	30krad Unbiased	0.598	0.558	-0.04
28	30	30krad Unbiased	0.596	0.558	-0.038
29	30	30krad Unbiased	0.594	0.558	-0.036
30	30	30krad Biased	0.598	0.562	-0.036
31	30	30krad Biased	0.598	0.562	-0.036
32	30	30krad Biased	0.598	0.56	-0.038
33	30	30krad Biased	0.6	0.56	-0.04
34	30	30krad Biased	0.598	0.562	-0.036
40	50	50krad Unbiased	0.596	0.54	-0.056
41	50	50krad Unbiased	0.594	0.538	-0.056
42	50	50krad Unbiased	0.596	0.54	-0.056
43	50	50krad Unbiased	0.596	0.54	-0.056
44	50	50krad Unbiased	0.594	0.54	-0.054
45	50	50krad Biased	0.596	0.542	-0.054
46	50	50krad Biased	0.596	0.538	-0.058
47	50	50krad Biased	0.596	0.54	-0.056
48	50	50krad Biased	0.594	0.54	-0.054
49	50	50krad Biased	0.596	0.542	-0.054
50	100	100krad Unbiased	0.596	0.49	-0.106
51	100	100krad Unbiased	0.598	0.488	-0.11
52	100	100krad Unbiased	0.594	0.488	-0.106
53	100	100krad Unbiased	0.596	0.49	-0.106
54	100	100krad Unbiased	0.596	0.492	-0.104
55	100	100krad Biased	0.596	0.488	-0.108
56	100	100krad Biased	0.596	0.488	-0.108
57	100	100krad Biased	0.596	0.492	-0.104
58	100	100krad Biased	0.596	0.488	-0.108
59	100	100krad Biased	0.598	0.492	-0.106

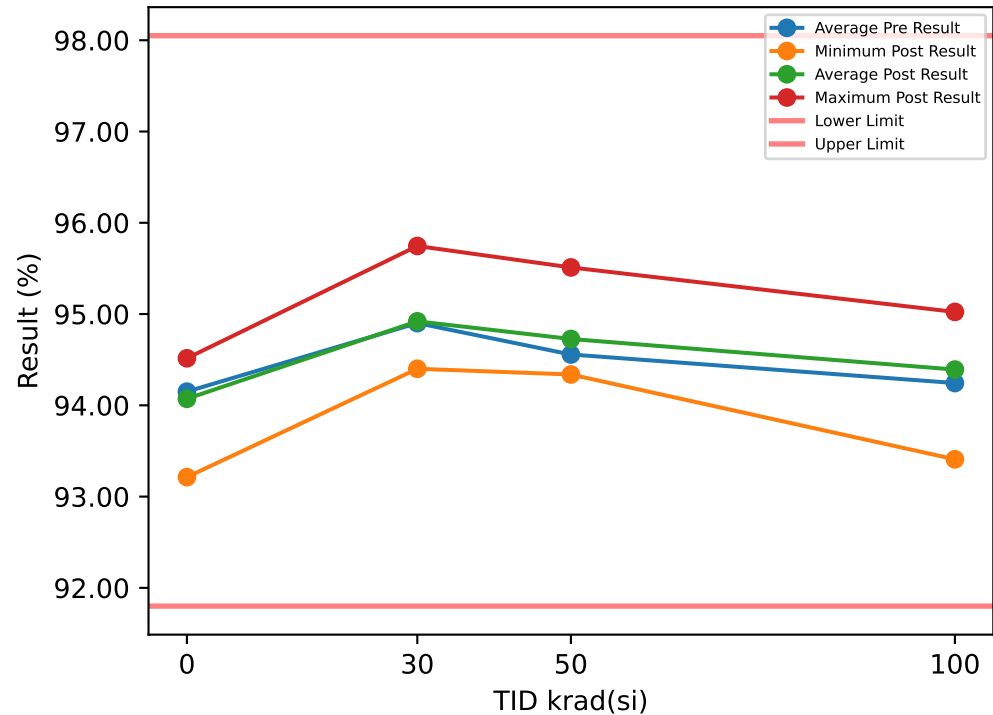
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.592	0.59467	0.598	0.0030551	0.594	0.59533	0.598	0.0023094	0	0.00066667	0.002	0.0011547
30	0.594	0.5976	0.6	0.0018379	0.558	0.5598	0.562	0.0017512	-0.04	-0.0378	-0.036	0.0017512
50	0.594	0.5954	0.596	0.00096609	0.538	0.54	0.542	0.0013333	-0.058	-0.0554	-0.054	0.0013499
100	0.594	0.5962	0.598	0.0011353	0.488	0.4896	0.492	0.0018379	-0.11	-0.1066	-0.104	0.0018974

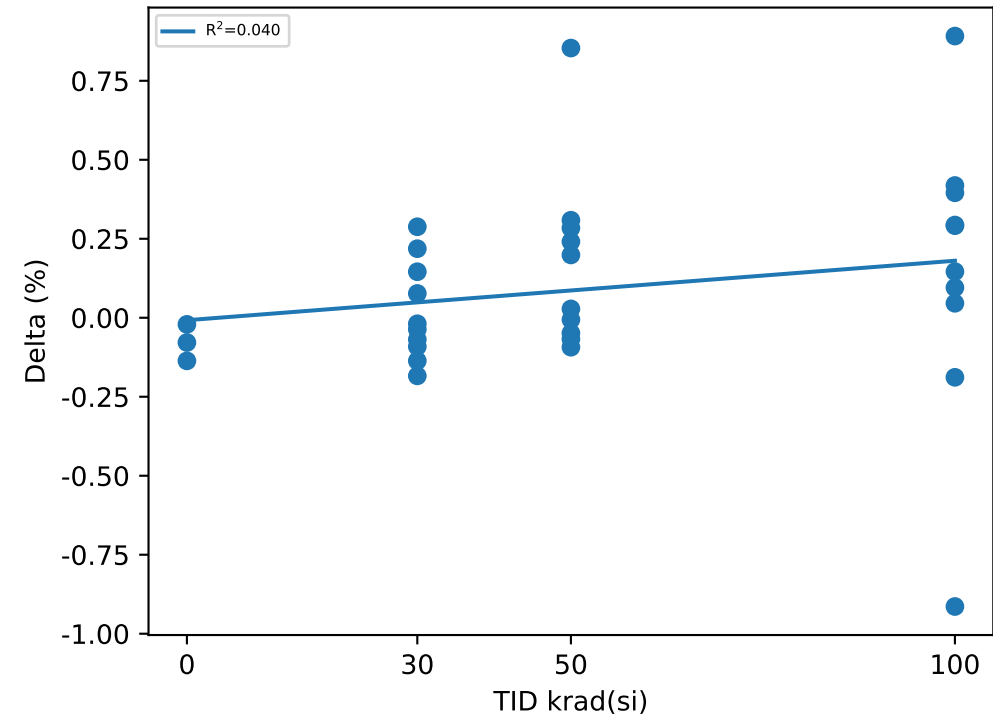
TID vs Result Stats



Test Results (Lower Limit = 91.8, Upper Limit = 98.05 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	93.35	93.213	-0.1364
2	0	CU2	94.594	94.515	-0.0783
3	0	CU3	94.507	94.486	-0.0209
25	30	30krad Unbiased	94.967	95.185	0.2186
26	30	30krad Unbiased	94.629	94.917	0.288
27	30	30krad Unbiased	94.56	94.541	-0.019
28	30	30krad Unbiased	95.402	95.365	-0.0368
29	30	30krad Unbiased	94.502	94.648	0.1457
30	30	30krad Biased	95.837	95.746	-0.0911
31	30	30krad Biased	95.253	95.069	-0.1839
32	30	30krad Biased	94.713	94.577	-0.1363
33	30	30krad Biased	94.323	94.4	0.0769
34	30	30krad Biased	94.822	94.754	-0.0687
40	50	50krad Unbiased	94.657	95.511	0.8536
41	50	50krad Unbiased	95.465	95.493	0.028
42	50	50krad Unbiased	94.462	94.661	0.1988
43	50	50krad Unbiased	94.41	94.651	0.241
44	50	50krad Unbiased	94.514	94.508	-0.0059
45	50	50krad Biased	94.405	94.338	-0.0674
46	50	50krad Biased	94.373	94.681	0.3087
47	50	50krad Biased	94.576	94.528	-0.0485
48	50	50krad Biased	94.207	94.491	0.2838
49	50	50krad Biased	94.5	94.406	-0.0932
50	100	100krad Unbiased	94.565	94.66	0.0954
51	100	100krad Unbiased	94.359	94.778	0.4186
52	100	100krad Unbiased	93.506	94.397	0.8915
53	100	100krad Unbiased	94.628	95.023	0.39552
54	100	100krad Unbiased	94.488	94.299	-0.1885
55	100	100krad Biased	94.322	93.408	-0.9139
56	100	100krad Biased	94.313	94.605	0.2914
57	100	100krad Biased	94.647	94.693	0.0458
58	100	100krad Biased	94.341	94.487	0.1461
59	100	100krad Biased	93.273	93.567	0.2935

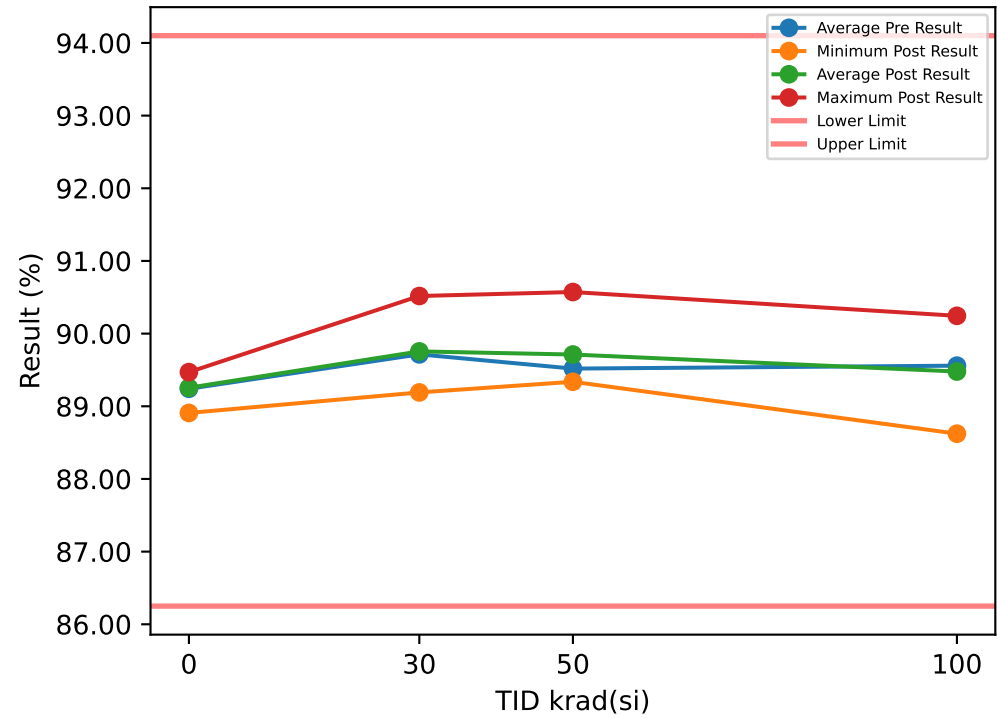
TID vs Post - Pre Exposure Delta



Test Statistics (%)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	93.35	94.15	94.594	0.69447	93.213	94.072	94.515	0.74337	-0.1364	-0.078533	-0.0209	0.05775
30	94.323	94.901	95.837	0.46888	94.4	94.92	95.746	0.42234	-0.1839	0.01934	0.288	0.1568
50	94.207	94.557	95.465	0.34154	94.338	94.727	95.511	0.42301	-0.0932	0.16989	0.8536	0.28477
100	93.273	94.244	94.647	0.47066	93.408	94.392	95.023	0.51876	-0.9139	0.14754	0.8915	0.46941

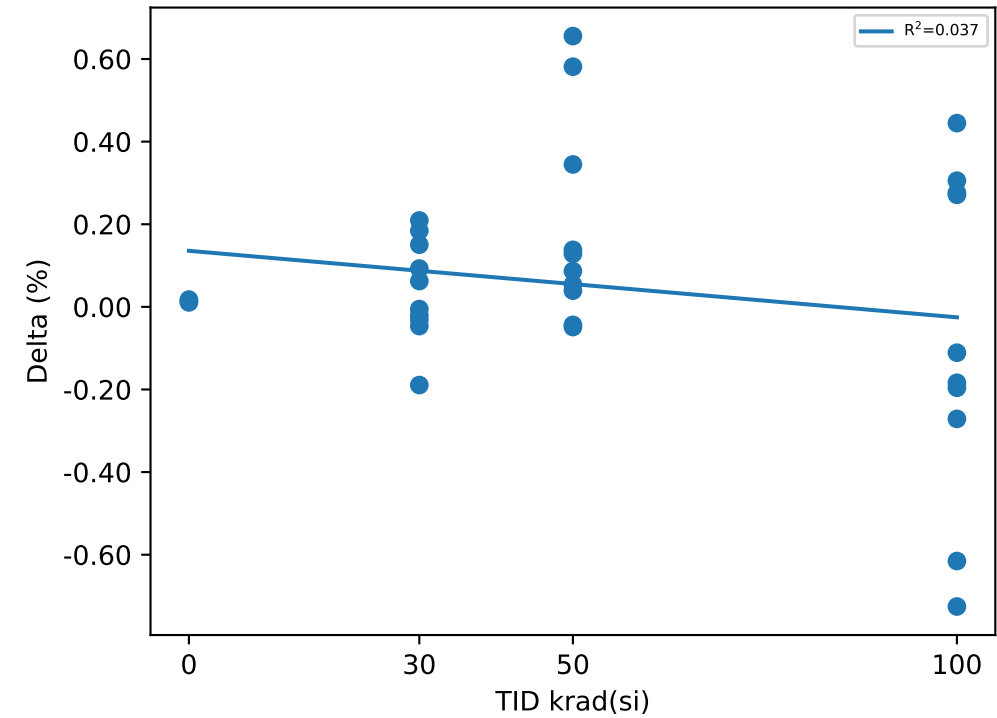
TID vs Result Stats



Test Results (Lower Limit = 86.25, Upper Limit = 94.1 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	88.891	88.908	0.0176
2	0	CU2	89.459	89.47	0.0108
3	0	CU3	89.374	89.387	0.0137
25	30	30krad Unbiased	89.853	90.003	0.1505
26	30	30krad Unbiased	89.467	89.651	0.1843
27	30	30krad Unbiased	89.37	89.35	-0.0202
28	30	30krad Unbiased	90.133	90.226	0.0928
29	30	30krad Unbiased	89.369	89.578	0.2092
30	30	30krad Biased	90.564	90.517	-0.0465
31	30	30krad Biased	90.093	89.903	-0.1893
32	30	30krad Biased	89.453	89.421	-0.0312
33	30	30krad Biased	89.196	89.191	-0.0053
34	30	30krad Biased	89.648	89.71	0.0625
40	50	50krad Unbiased	89.917	90.572	0.6555
41	50	50krad Unbiased	89.97	90.108	0.138
42	50	50krad Unbiased	89.429	89.469	0.0393
43	50	50krad Unbiased	89.43	89.517	0.0866
44	50	50krad Unbiased	89.932	89.888	-0.0436
45	50	50krad Biased	89.426	89.48	0.0539
46	50	50krad Biased	89.395	89.74	0.3448
47	50	50krad Biased	89.386	89.337	-0.0489
48	50	50krad Biased	88.836	89.417	0.5814
49	50	50krad Biased	89.465	89.594	0.1284
50	100	100krad Unbiased	89.876	89.765	-0.111
51	100	100krad Unbiased	89.993	89.721	-0.2712
52	100	100krad Unbiased	88.89	89.167	0.2762
53	100	100krad Unbiased	89.939	90.245	0.3054
54	100	100krad Unbiased	89.462	89.906	0.4448
55	100	100krad Biased	89.348	88.623	-0.7254
56	100	100krad Biased	89.893	89.697	-0.1959
57	100	100krad Biased	89.905	89.29	-0.6153
58	100	100krad Biased	89.414	89.685	0.2712
59	100	100krad Biased	88.868	88.684	-0.1838

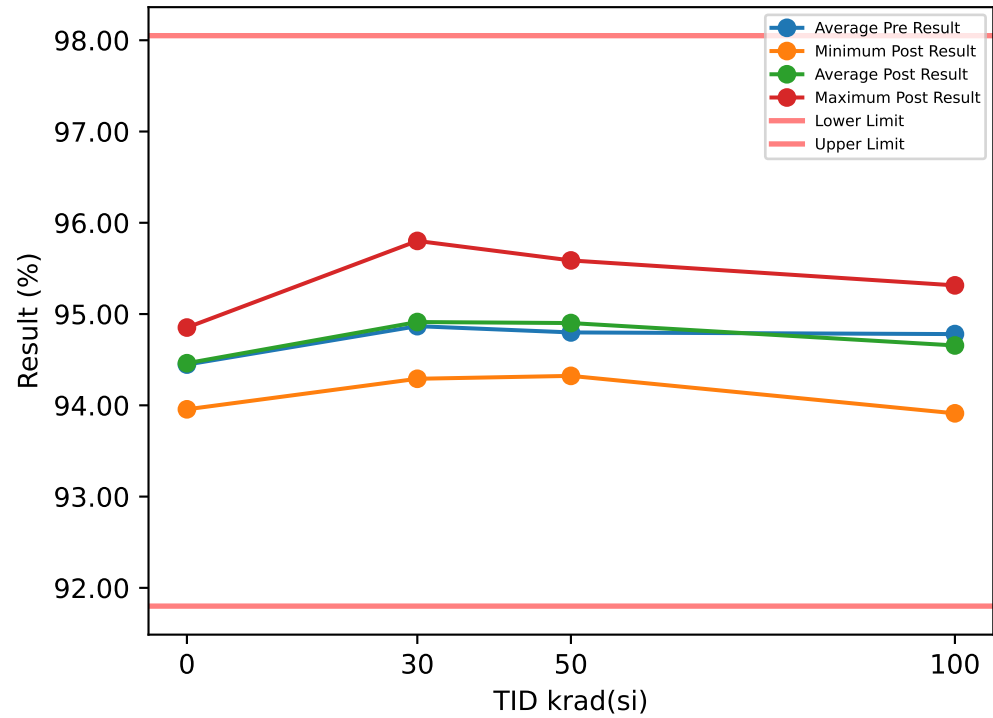
TID vs Post - Pre Exposure Delta



Test Statistics (%)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	88.891	89.241	89.459	0.30644	88.908	89.255	89.47	0.30318	0.0108	0.014033	0.0176	0.0034122
30	89.196	89.714	90.564	0.4347	89.191	89.755	90.517	0.41168	-0.1893	0.04068	0.2092	0.12282
50	88.836	89.519	89.97	0.34306	89.337	89.712	90.572	0.38313	-0.0489	0.19354	0.6555	0.25029
100	88.868	89.559	89.993	0.42992	88.623	89.478	90.245	0.52682	-0.7254	-0.0805	0.4448	0.39986

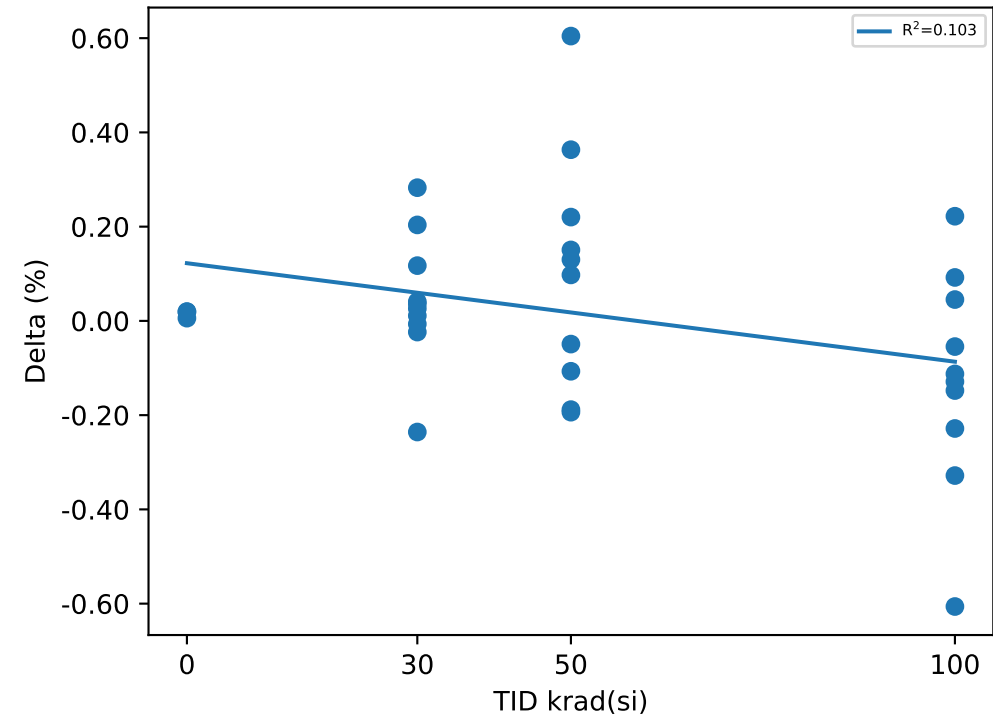
TID vs Result Stats



Test Results (Lower Limit = 91.8, Upper Limit = 98.05 (%))

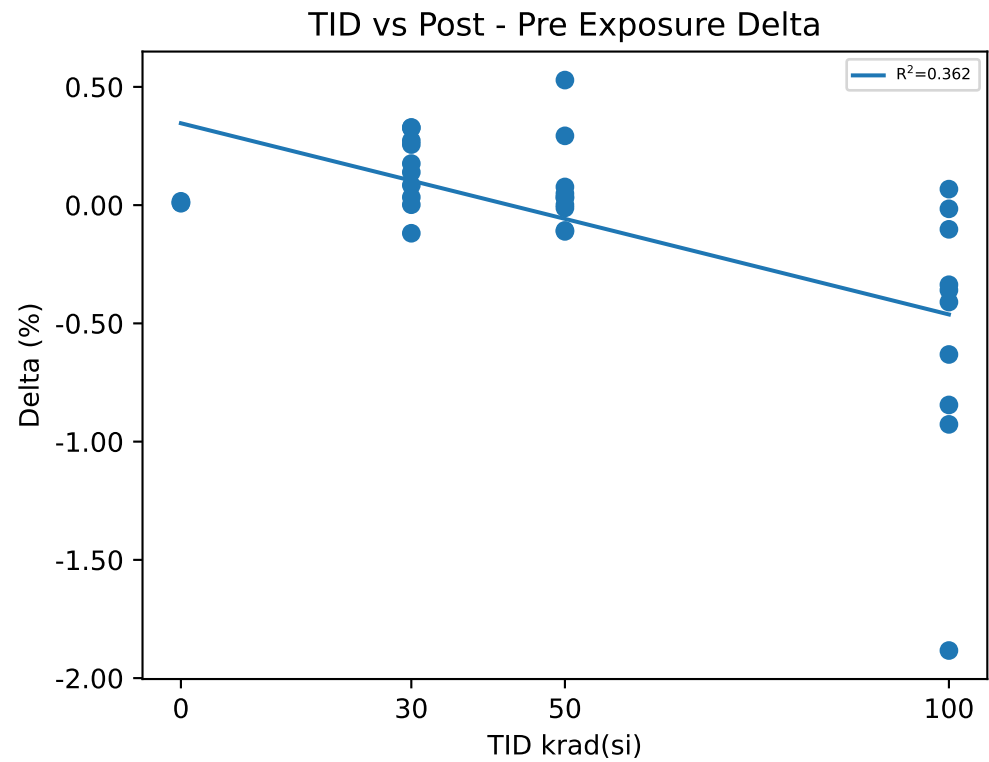
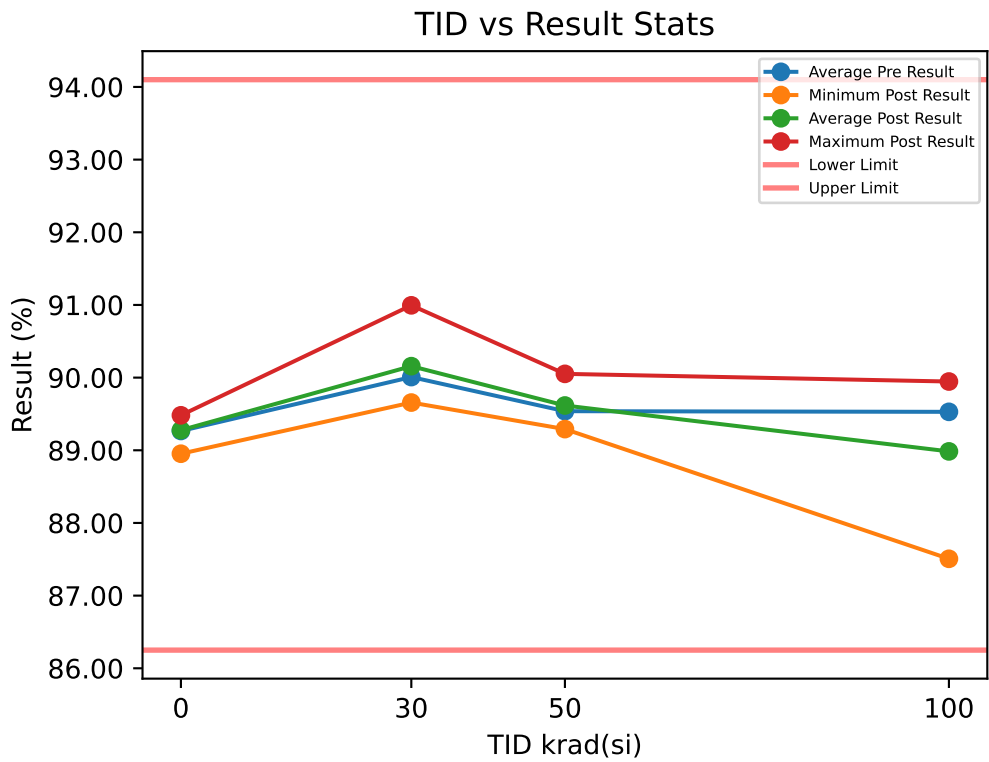
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	93.936	93.956	0.0198
2	0	CU2	94.57	94.576	0.0058
3	0	CU3	94.833	94.852	0.0191
25	30	30krad Unbiased	94.968	95.086	0.1173
26	30	30krad Unbiased	94.644	94.847	0.2037
27	30	30krad Unbiased	94.442	94.483	0.041
28	30	30krad Unbiased	95.401	95.437	0.0361
29	30	30krad Unbiased	94.434	94.717	0.2827
30	30	30krad Biased	95.808	95.801	-0.0066
31	30	30krad Biased	95.355	95.119	-0.2358
32	30	30krad Biased	94.651	94.627	-0.0237
33	30	30krad Biased	94.28	94.291	0.011
34	30	30krad Biased	94.691	94.718	0.0262
40	50	50krad Unbiased	94.983	95.588	0.6044
41	50	50krad Unbiased	95.362	95.513	0.1506
42	50	50krad Unbiased	94.726	94.946	0.2203
43	50	50krad Unbiased	94.61	94.707	0.0976
44	50	50krad Unbiased	95.172	95.123	-0.0492
45	50	50krad Biased	94.769	94.662	-0.1069
46	50	50krad Biased	94.829	94.959	0.1301
47	50	50krad Biased	94.516	94.323	-0.1937
48	50	50krad Biased	94.231	94.594	0.3633
49	50	50krad Biased	94.789	94.6	-0.1883
50	100	100krad Unbiased	94.817	94.862	0.0453
51	100	100krad Unbiased	95.237	95.125	-0.1125
52	100	100krad Unbiased	94.408	94.279	-0.1289
53	100	100krad Unbiased	95.222	95.314	0.0922
54	100	100krad Unbiased	94.784	95.006	0.2221
55	100	100krad Biased	94.557	93.951	-0.6061
56	100	100krad Biased	94.972	94.744	-0.2283
57	100	100krad Biased	94.853	94.798	-0.0545
58	100	100krad Biased	94.715	94.567	-0.1478
59	100	100krad Biased	94.24	93.912	-0.3282

TID vs Post - Pre Exposure Delta



Test Statistics (%)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	93.936	94.446	94.833	0.46085	93.956	94.461	94.852	0.45874	0.0058	0.0149	0.0198	0.0078886
30	94.28	94.867	95.808	0.501	94.291	94.913	95.801	0.45595	-0.2358	0.04519	0.2827	0.13934
50	94.231	94.799	95.362	0.32249	94.323	94.901	95.588	0.41015	-0.1937	0.10282	0.6044	0.25299
100	94.24	94.781	95.237	0.32173	93.912	94.656	95.314	0.4768	-0.6061	-0.12467	0.2221	0.23232



Test Results (Lower Limit = 86.25, Upper Limit = 94.1 (%))

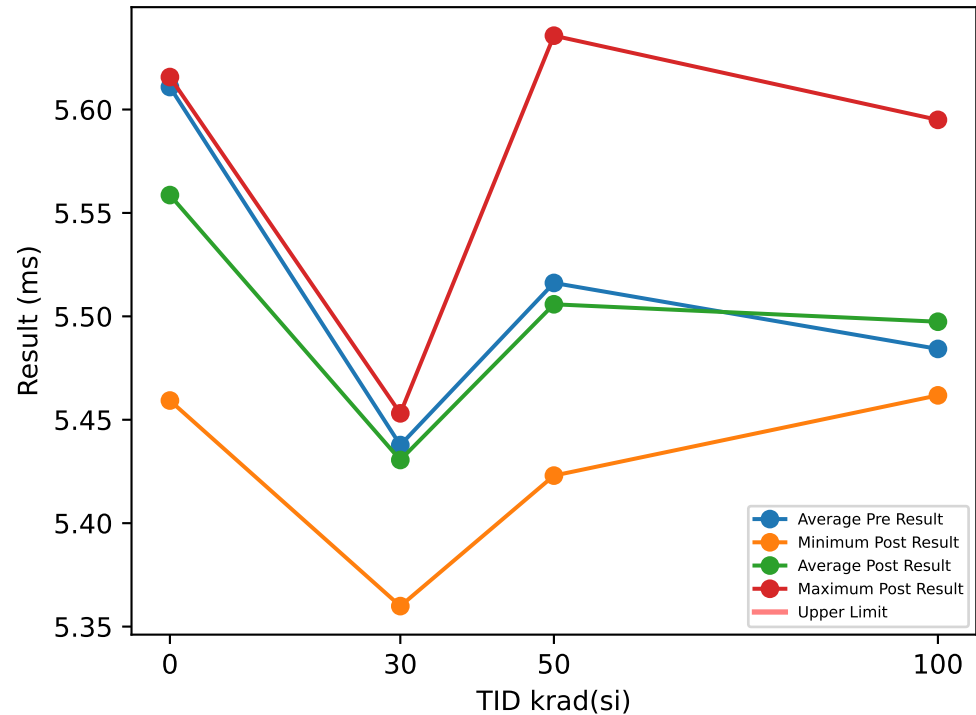
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	88.936	88.953	0.0162
2	0	CU2	89.473	89.481	0.0081
3	0	CU3	89.387	89.397	0.01
25	30	30krad Unbiased	90.083	90.339	0.2562
26	30	30krad Unbiased	89.689	90.017	0.3286
27	30	30krad Unbiased	89.578	89.662	0.0842
28	30	30krad Unbiased	90.523	90.796	0.2726
29	30	30krad Unbiased	89.655	89.981	0.3263
30	30	30krad Biased	90.961	90.995	0.0335
31	30	30krad Biased	90.419	90.3	-0.1189
32	30	30krad Biased	89.706	89.707	0.0018
33	30	30krad Biased	89.518	89.657	0.1391
34	30	30krad Biased	89.946	90.122	0.1757
40	50	50krad Unbiased	89.921	89.954	0.0332
41	50	50krad Unbiased	89.975	90.052	0.0769
42	50	50krad Unbiased	89.43	89.418	-0.0118
43	50	50krad Unbiased	89.463	89.494	0.0312
44	50	50krad Unbiased	89.947	89.84	-0.107
45	50	50krad Biased	89.47	89.471	0.001
46	50	50krad Biased	89.393	89.686	0.293
47	50	50krad Biased	89.403	89.291	-0.111
48	50	50krad Biased	88.871	89.4	0.5288
49	50	50krad Biased	89.508	89.556	0.0487
50	100	100krad Unbiased	89.36	89.428	0.0677
51	100	100krad Unbiased	90.024	89.392	-0.6315
52	100	100krad Unbiased	88.894	88.792	-0.1023
53	100	100krad Unbiased	89.962	89.946	-0.0156
54	100	100krad Unbiased	89.487	89.15	-0.3366
55	100	100krad Biased	89.39	87.507	-1.8833
56	100	100krad Biased	89.915	89.07	-0.8449
57	100	100krad Biased	89.953	89.026	-0.9271
58	100	100krad Biased	89.427	89.067	-0.3593
59	100	100krad Biased	88.879	88.47	-0.4099

Test Statistics (%)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	88.936	89.266	89.473	0.2884	88.953	89.277	89.481	0.28417	0.0081	0.011433	0.0162	0.004236
30	89.518	90.008	90.961	0.48263	89.657	90.158	90.995	0.46103	-0.1189	0.14991	0.3286	0.1499
50	88.871	89.538	89.975	0.33529	89.291	89.616	90.052	0.25604	-0.111	0.0783	0.5288	0.19392
100	88.879	89.529	90.024	0.42765	87.507	88.985	89.946	0.65128	-1.8833	-0.54428	0.0677	0.57564

Device Test: 75.1 CPOUT|///DISCHARGE_TIME///3/@I_CP_DISCHARGE

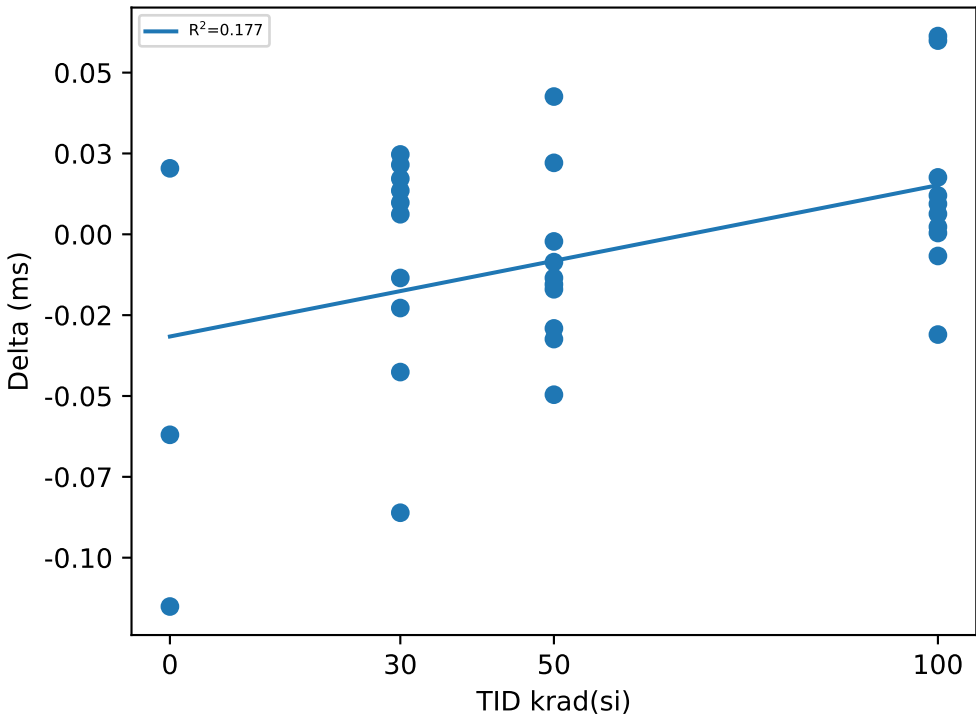
TID vs Result Stats



Test Results (No Limits Specified (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	5.5213	5.4593	-0.062
2	0	CU2	5.5805	5.6009	0.0204
3	0	CU3	5.7308	5.6157	-0.1151
25	30	30krad Unbiased	5.4349	5.4521	0.0172
26	30	30krad Unbiased	5.4223	5.4321	0.0098
27	30	30krad Unbiased	5.4273	5.4408	0.0135
28	30	30krad Unbiased	5.446	5.3599	-0.0861
29	30	30krad Unbiased	5.4284	5.4531	0.0247
30	30	30krad Biased	5.4511	5.4283	-0.0228
31	30	30krad Biased	5.4434	5.4008	-0.0426
32	30	30krad Biased	5.4304	5.4519	0.0215
33	30	30krad Biased	5.45	5.4365	-0.0135
34	30	30krad Biased	5.4438	5.45	0.0062
40	50	50krad Unbiased	5.5562	5.5476	-0.0086
41	50	50krad Unbiased	5.5871	5.5716	-0.0155
42	50	50krad Unbiased	5.4968	5.4677	-0.0291
43	50	50krad Unbiased	5.4726	5.423	-0.0496
44	50	50krad Unbiased	5.5931	5.6357	0.0426
45	50	50krad Biased	5.5425	5.5255	-0.017
46	50	50krad Biased	5.4816	5.4492	-0.0324
47	50	50krad Biased	5.4099	5.432	0.0221
48	50	50krad Biased	5.5874	5.5739	-0.0135
49	50	50krad Biased	5.4343	5.4321	-0.0022
50	100	100krad Unbiased	5.4918	5.5012	0.0094
51	100	100krad Unbiased	5.4646	5.4822	0.0176
52	100	100krad Unbiased	5.4682	5.4686	0.0004
53	100	100krad Unbiased	5.4928	5.4618	-0.031
54	100	100krad Unbiased	5.4473	5.5072	0.0599
55	100	100krad Biased	5.4908	5.5028	0.012
56	100	100krad Biased	5.4745	5.4808	0.0063
57	100	100krad Biased	5.5337	5.595	0.0613
58	100	100krad Biased	5.4952	5.4885	-0.0067
59	100	100krad Biased	5.4836	5.4859	0.0023

TID vs Post - Pre Exposure Delta

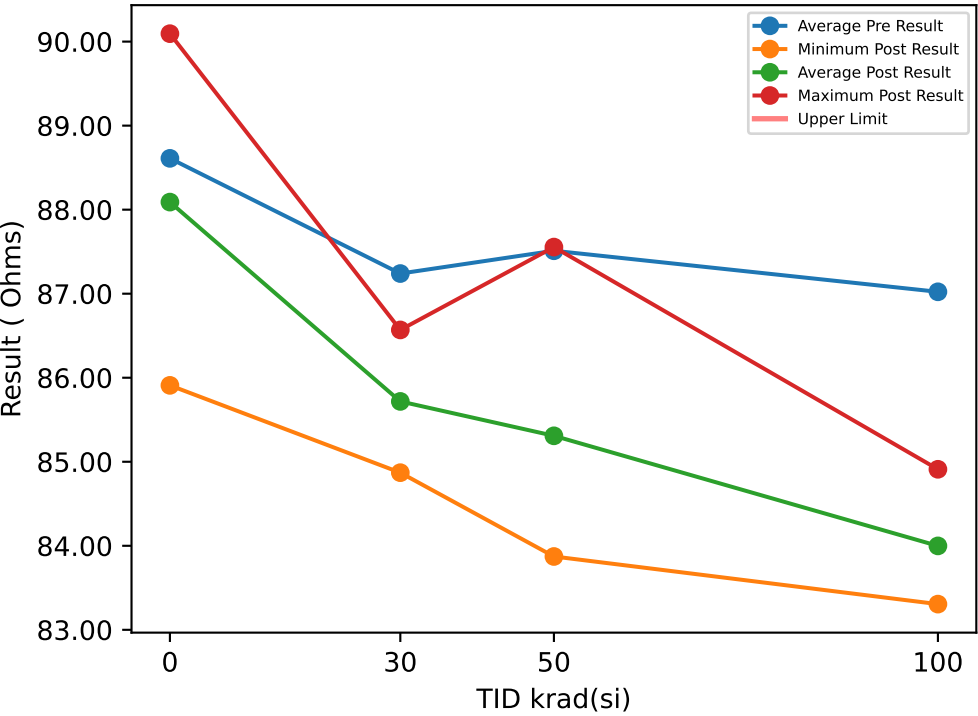


Test Statistics (ms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.5213	5.6109	5.7308	0.108	5.4593	5.5586	5.6157	0.086343	-0.1151	-0.052233	0.0204	0.068276
30	5.4223	5.4378	5.4511	0.010341	5.3599	5.4306	5.4531	0.029498	-0.0861	-0.00721	0.0247	0.035111
50	5.4099	5.5161	5.5931	0.066486	5.423	5.5058	5.6357	0.074808	-0.0496	-0.01032	0.0426	0.026636
100	5.4473	5.4843	5.5337	0.023197	5.4618	5.4974	5.595	0.037238	-0.031	0.01315	0.0613	0.028303

Device Test: 75.2 CPOUT|///DISCHARGE_RESISTANCE///3/@R_CP_DISCHARGE

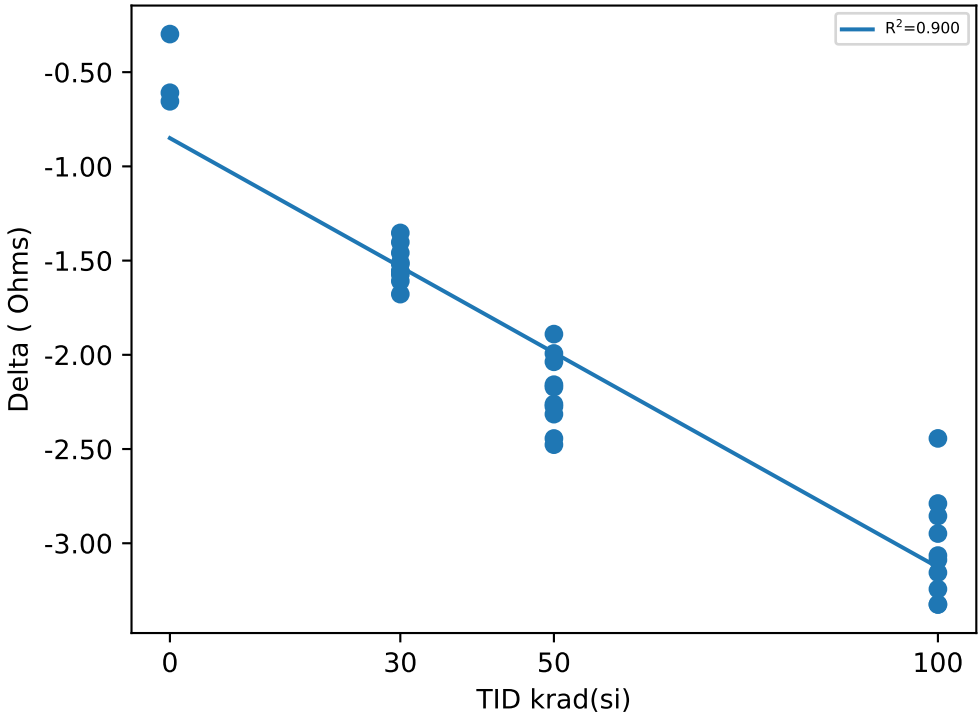
TID vs Result Stats



Test Results (No Limits Specified (Ohms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	86.518	85.909	-0.6092
2	0	CU2	88.565	88.267	-0.2979
3	0	CU3	90.749	90.094	-0.6547
25	30	30krad Unbiased	88.127	86.569	-1.558
26	30	30krad Unbiased	86.903	85.225	-1.6779
27	30	30krad Unbiased	87.244	85.67	-1.5738
28	30	30krad Unbiased	87.173	85.663	-1.5103
29	30	30krad Unbiased	87.508	86.155	-1.3531
30	30	30krad Biased	87.417	85.808	-1.6087
31	30	30krad Biased	86.329	84.87	-1.4587
32	30	30krad Biased	87.258	85.702	-1.5562
33	30	30krad Biased	86.944	85.425	-1.5186
34	30	30krad Biased	87.497	86.094	-1.4026
40	50	50krad Unbiased	88.512	86.197	-2.3149
41	50	50krad Unbiased	88.701	86.708	-1.9928
42	50	50krad Unbiased	86.932	84.658	-2.2743
43	50	50krad Unbiased	86.317	83.873	-2.444
44	50	50krad Unbiased	89.713	87.555	-2.1585
45	50	50krad Biased	87.47	85.208	-2.2617
46	50	50krad Biased	86.925	84.448	-2.4769
47	50	50krad Biased	86.207	84.317	-1.8901
48	50	50krad Biased	88.011	85.84	-2.1716
49	50	50krad Biased	86.321	84.284	-2.0371
50	100	100krad Unbiased	86.755	83.666	-3.0881
51	100	100krad Unbiased	86.631	83.306	-3.3251
52	100	100krad Unbiased	87.29	84.047	-3.2432
53	100	100krad Unbiased	86.73	83.574	-3.1559
54	100	100krad Unbiased	87.048	84.099	-2.9485
55	100	100krad Biased	86.938	84.149	-2.7891
56	100	100krad Biased	87.357	84.292	-3.0653
57	100	100krad Biased	87.354	84.91	-2.4436
58	100	100krad Biased	87.152	83.828	-3.324
59	100	100krad Biased	86.969	84.114	-2.8555

TID vs Post - Pre Exposure Delta

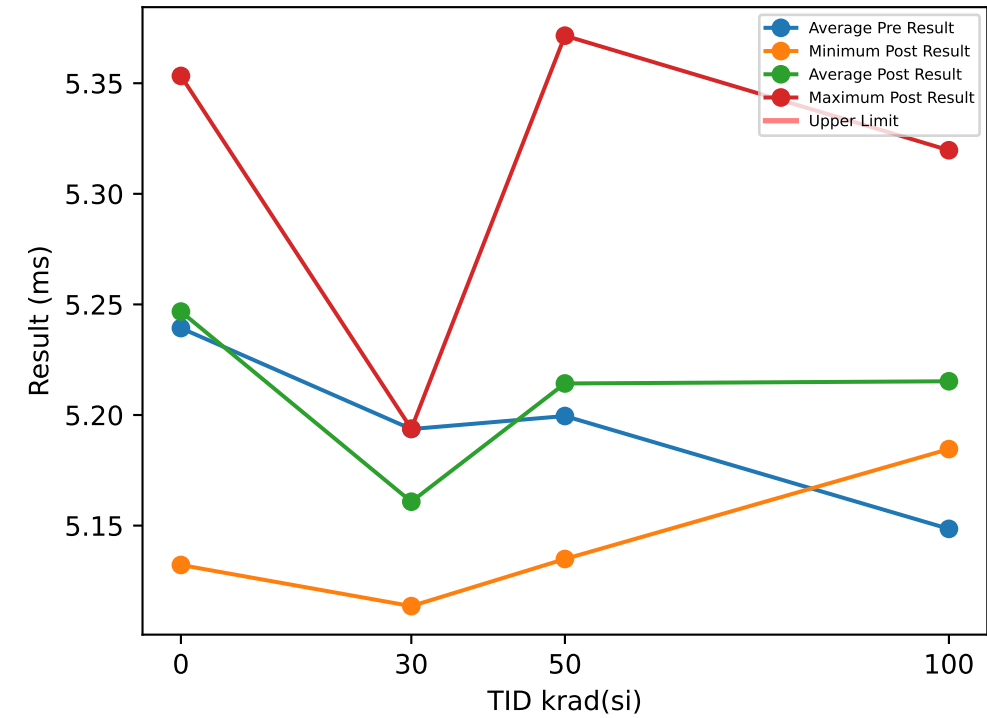


Test Statistics (Ohms)

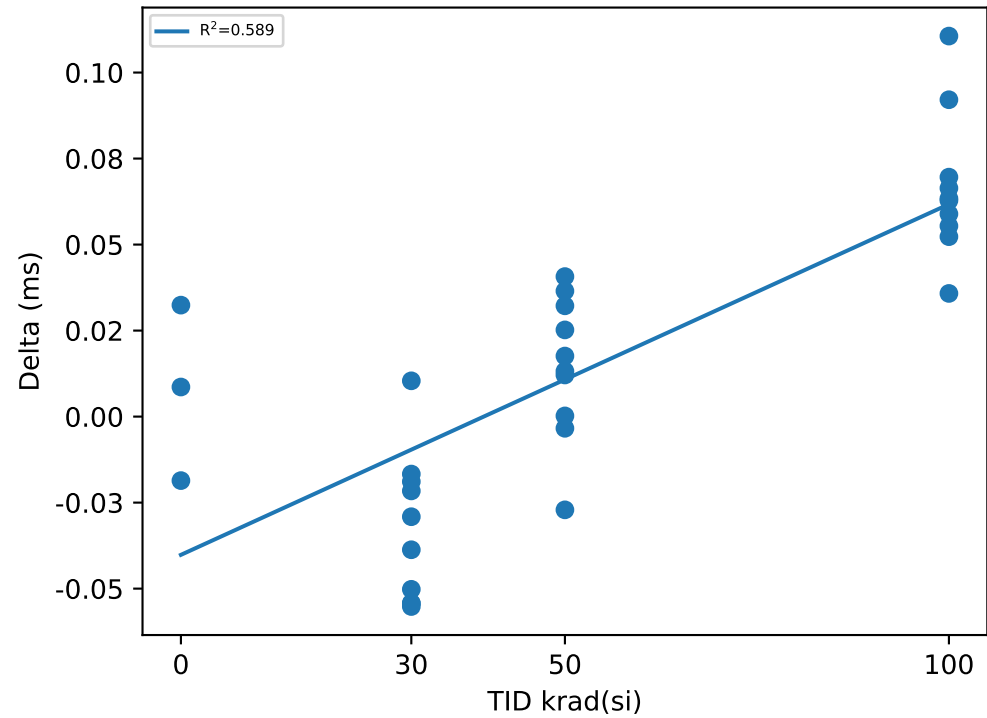
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	86.518	88.611	90.749	2.1157	85.909	88.09	90.094	2.0981	-0.6547	-0.5206	-0.2979	0.1942
30	86.329	87.24	88.127	0.47051	84.87	85.718	86.569	0.48516	-1.6779	-1.5218	-1.3531	0.096557
50	86.207	87.511	89.713	1.1899	83.873	85.309	87.555	1.2177	-2.4769	-2.2022	-1.8901	0.19053
100	86.631	87.022	87.357	0.26492	83.306	83.999	84.91	0.44286	-3.3251	-3.0238	-2.4436	0.27448

Device Test: 75.3 CPOUT|//DISCHARGE_TIME|//6.3|@I_CP_DISCHARGE

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (No Limits Specified (ms))

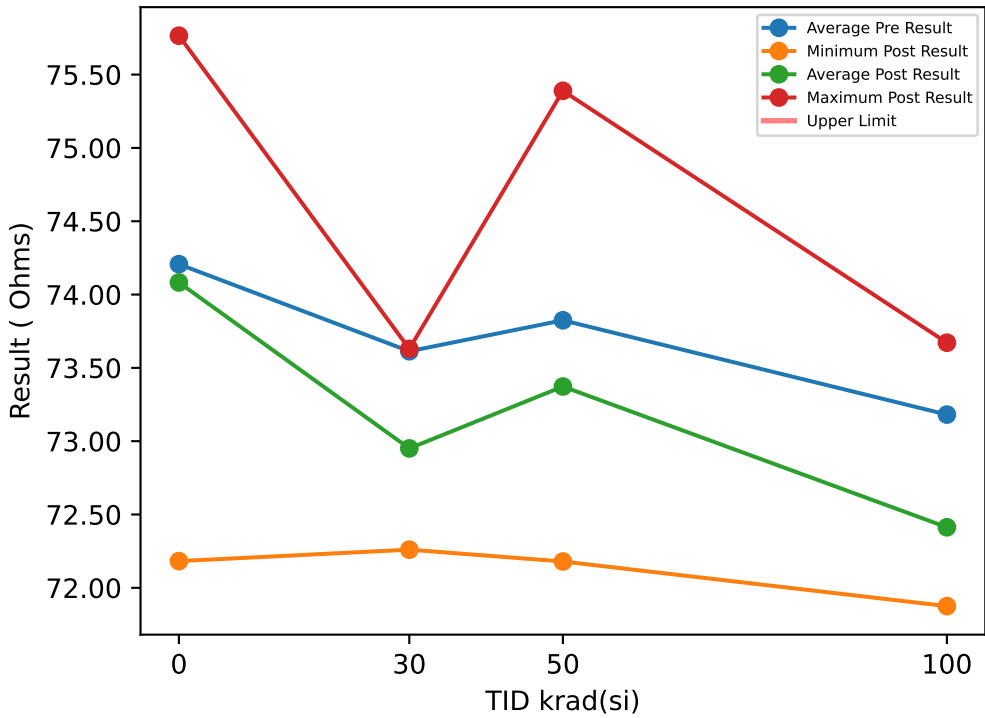
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	5.1508	5.1322	-0.0186
2	0	CU2	5.2224	5.2548	0.0324
3	0	CU3	5.3447	5.3533	0.0086
25	30	30krad Unbiased	5.2284	5.1732	-0.0552
26	30	30krad Unbiased	5.1941	5.1439	-0.0502
27	30	30krad Unbiased	5.1966	5.1423	-0.0543
28	30	30krad Unbiased	5.2032	5.1816	-0.0216
29	30	30krad Unbiased	5.2105	5.1938	-0.0167
30	30	30krad Biased	5.1678	5.1136	-0.0542
31	30	30krad Biased	5.1557	5.117	-0.0387
32	30	30krad Biased	5.1978	5.1789	-0.0189
33	30	30krad Biased	5.1741	5.1845	0.0104
34	30	30krad Biased	5.2083	5.1792	-0.0291
40	50	50krad Unbiased	5.2798	5.2527	-0.0271
41	50	50krad Unbiased	5.2381	5.2347	-0.0034
42	50	50krad Unbiased	5.1417	5.1669	0.0252
43	50	50krad Unbiased	5.12	5.1376	0.0176
44	50	50krad Unbiased	5.3583	5.3715	0.0132
45	50	50krad Biased	5.213	5.2537	0.0407
46	50	50krad Biased	5.1223	5.1588	0.0365
47	50	50krad Biased	5.1459	5.158	0.0121
48	50	50krad Biased	5.2416	5.2738	0.0322
49	50	50krad Biased	5.1347	5.1349	0.0002
50	100	100krad Unbiased	5.1878	5.2432	0.0554
51	100	100krad Unbiased	5.1349	5.1872	0.0523
52	100	100krad Unbiased	5.1188	5.1852	0.0664
53	100	100krad Unbiased	5.122	5.1848	0.0628
54	100	100krad Unbiased	5.1438	5.2027	0.0589
55	100	100krad Biased	5.1688	5.2384	0.0696
56	100	100krad Biased	5.1488	5.1846	0.0358
57	100	100krad Biased	5.2276	5.3197	0.0921
58	100	100krad Biased	5.1302	5.1936	0.0634
59	100	100krad Biased	5.1025	5.2131	0.1106

Test Statistics (ms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.1508	5.2393	5.3447	0.098049	5.1322	5.2468	5.3533	0.11077	-0.0186	0.0074667	0.0324	0.025519
30	5.1557	5.1936	5.2284	0.021894	5.1136	5.1608	5.1938	0.029207	-0.0552	-0.03285	0.0104	0.021647
50	5.12	5.1995	5.3583	0.080141	5.1349	5.2143	5.3715	0.076288	-0.0271	0.01472	0.0407	0.020737
100	5.1025	5.1485	5.2276	0.037202	5.1846	5.2153	5.3197	0.042706	0.0358	0.06673	0.1106	0.02097

Device Test: 75.4 CPOUT|//DISCHARGE_RESISTANCE///6.3/@R_CP_DISCHARGE

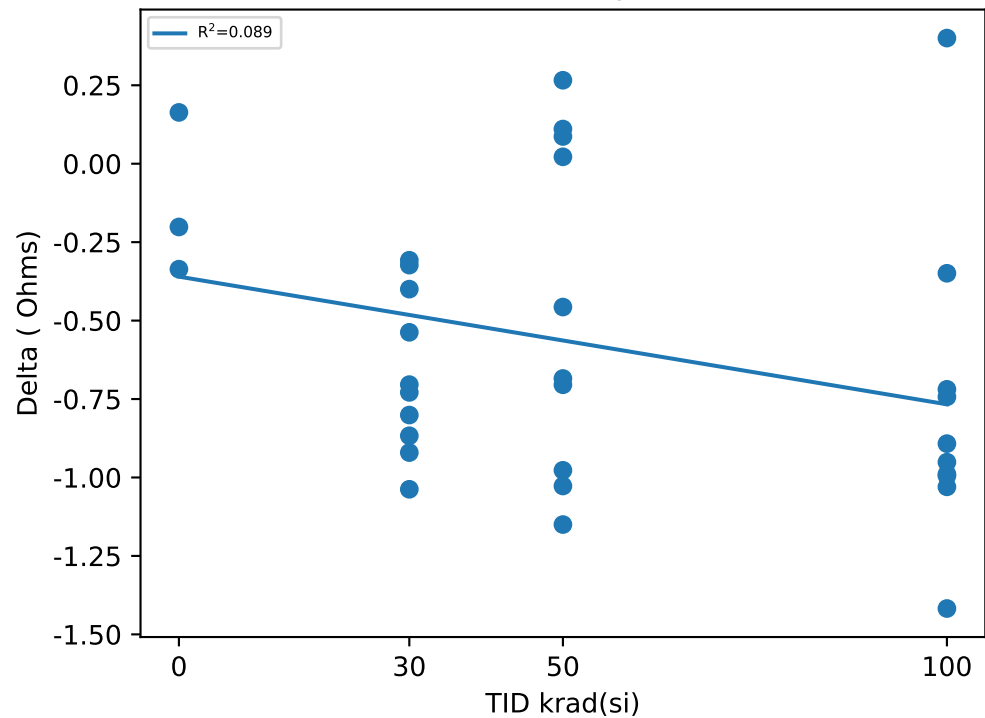
TID vs Result Stats



Test Results (No Limits Specified (Ohms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	72.518	72.182	-0.3361
2	0	CU2	74.136	74.3	0.1635
3	0	CU3	75.967	75.765	-0.2016
25	30	30krad Unbiased	73.783	73.246	-0.5373
26	30	30krad Unbiased	73.331	72.41	-0.9206
27	30	30krad Unbiased	73.464	72.663	-0.801
28	30	30krad Unbiased	73.459	73.135	-0.3232
29	30	30krad Unbiased	73.937	73.63	-0.3076
30	30	30krad Biased	73.345	72.308	-1.0376
31	30	30krad Biased	72.66	72.26	-0.3997
32	30	30krad Biased	74.278	73.412	-0.867
33	30	30krad Biased	73.64	72.936	-0.704
34	30	30krad Biased	74.236	73.507	-0.7288
40	50	50krad Unbiased	75.499	74.349	-1.15
41	50	50krad Unbiased	74.305	74.415	0.1105
42	50	50krad Unbiased	73.26	72.803	-0.4568
43	50	50krad Unbiased	72.884	72.18	-0.7045
44	50	50krad Unbiased	76.416	75.389	-1.0271
45	50	50krad Biased	73.148	73.235	0.0868
46	50	50krad Biased	72.415	72.437	0.022
47	50	50krad Biased	73.285	72.6	-0.6845
48	50	50krad Biased	73.754	74.02	0.266
49	50	50krad Biased	73.278	72.301	-0.9771
50	100	100krad Unbiased	73.549	72.519	-1.0298
51	100	100krad Unbiased	72.854	71.962	-0.8921
52	100	100krad Unbiased	73.128	72.139	-0.9893
53	100	100krad Unbiased	72.826	71.875	-0.9511
54	100	100krad Unbiased	73.217	72.498	-0.719
55	100	100krad Biased	73.959	72.541	-1.4176
56	100	100krad Biased	73.402	72.407	-0.9947
57	100	100krad Biased	74.021	73.672	-0.3492
58	100	100krad Biased	72.835	72.092	-0.743
59	100	100krad Biased	72.023	72.423	0.4004

TID vs Post - Pre Exposure Delta

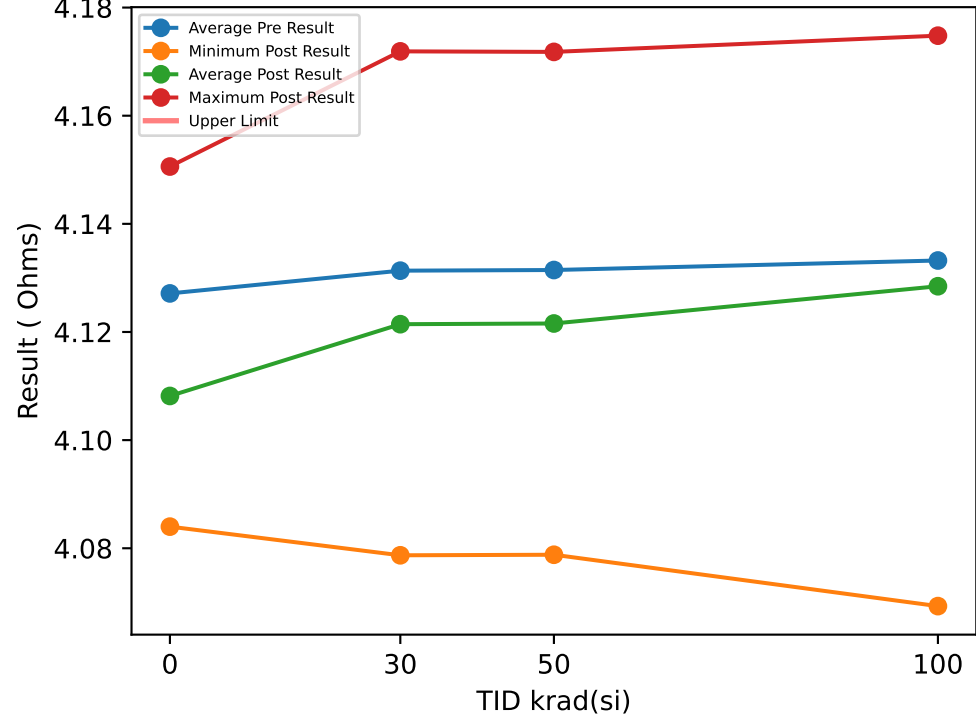


Test Statistics (Ohms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	72.518	74.207	75.967	1.7254	72.182	74.082	75.765	1.8015	-0.3361	-0.12473	0.1635	0.25852
30	72.66	73.613	74.278	0.47977	72.26	72.951	73.63	0.51312	-1.0376	-0.66268	-0.3076	0.25825
50	72.415	73.824	76.416	1.2469	72.18	73.373	75.389	1.1012	-1.15	-0.45147	0.266	0.53317
100	72.023	73.181	74.021	0.5956	71.875	72.413	73.672	0.50439	-1.4176	-0.76854	0.4004	0.49254

Device Test: 80.1 CPOUT|//OUTPUT_RESISTANCE//150mA/3/@R_CP_OUT_3V

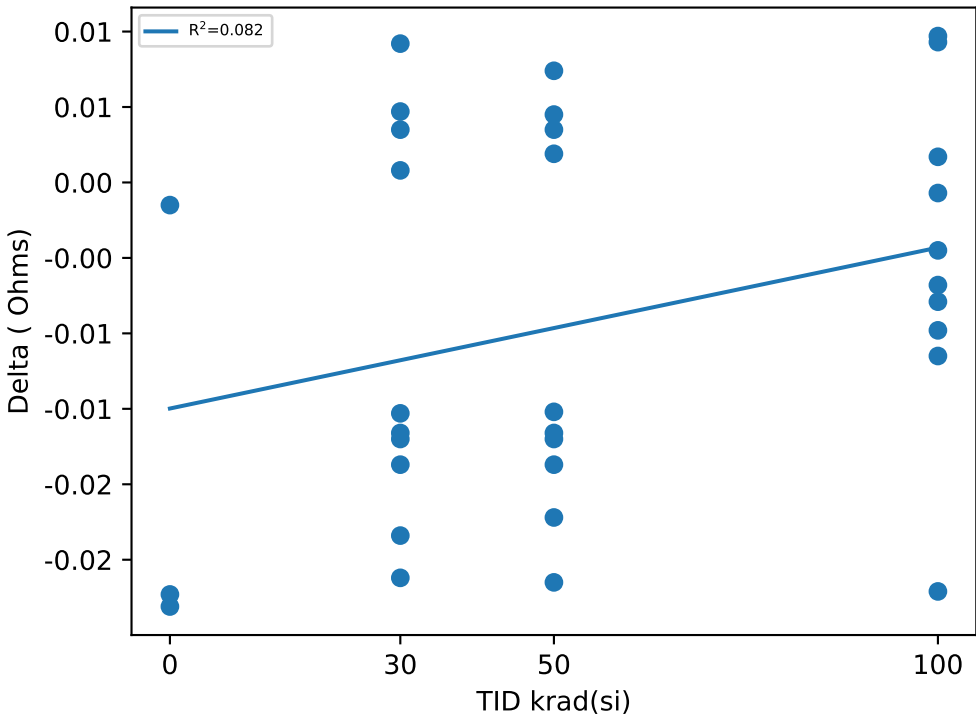
TID vs Result Stats



Test Results (No Limits Specified (Ohms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	4.1787	4.1506	-0.0281
2	0	CU2	4.0914	4.0899	-0.0015
3	0	CU3	4.1113	4.084	-0.0273
25	30	30krad Unbiased	4.126	4.1352	0.0092
26	30	30krad Unbiased	4.0997	4.0844	-0.0153
27	30	30krad Unbiased	4.1672	4.1719	0.0047
28	30	30krad Unbiased	4.129	4.1298	0.0008
29	30	30krad Unbiased	4.0927	4.0962	0.0035
30	30	30krad Biased	4.0974	4.0787	-0.0187
31	30	30krad Biased	4.1478	4.1308	-0.017
32	30	30krad Biased	4.1754	4.152	-0.0234
33	30	30krad Biased	4.1094	4.0832	-0.0262
34	30	30krad Biased	4.1688	4.1522	-0.0166
40	50	50krad Unbiased	4.128	4.1354	0.0074
41	50	50krad Unbiased	4.0998	4.0846	-0.0152
42	50	50krad Unbiased	4.1673	4.1718	0.0045
43	50	50krad Unbiased	4.128	4.1299	0.0019
44	50	50krad Unbiased	4.0928	4.0963	0.0035
45	50	50krad Biased	4.0975	4.0788	-0.0187
46	50	50krad Biased	4.1477	4.1307	-0.017
47	50	50krad Biased	4.1752	4.153	-0.0222
48	50	50krad Biased	4.1096	4.0831	-0.0265
49	50	50krad Biased	4.1687	4.1521	-0.0166
50	100	100krad Unbiased	4.1544	4.1641	0.0097
51	100	100krad Unbiased	4.1655	4.1748	0.0093
52	100	100krad Unbiased	4.1553	4.1508	-0.0045
53	100	100krad Unbiased	4.1409	4.1426	0.0017
54	100	100krad Unbiased	4.11	4.1093	-0.0007
55	100	100krad Biased	4.0761	4.0693	-0.0068
56	100	100krad Biased	4.1313	4.1198	-0.0115
57	100	100krad Biased	4.1191	4.1093	-0.0098
58	100	100krad Biased	4.1498	4.1419	-0.0079
59	100	100krad Biased	4.1298	4.1027	-0.0271

TID vs Post - Pre Exposure Delta

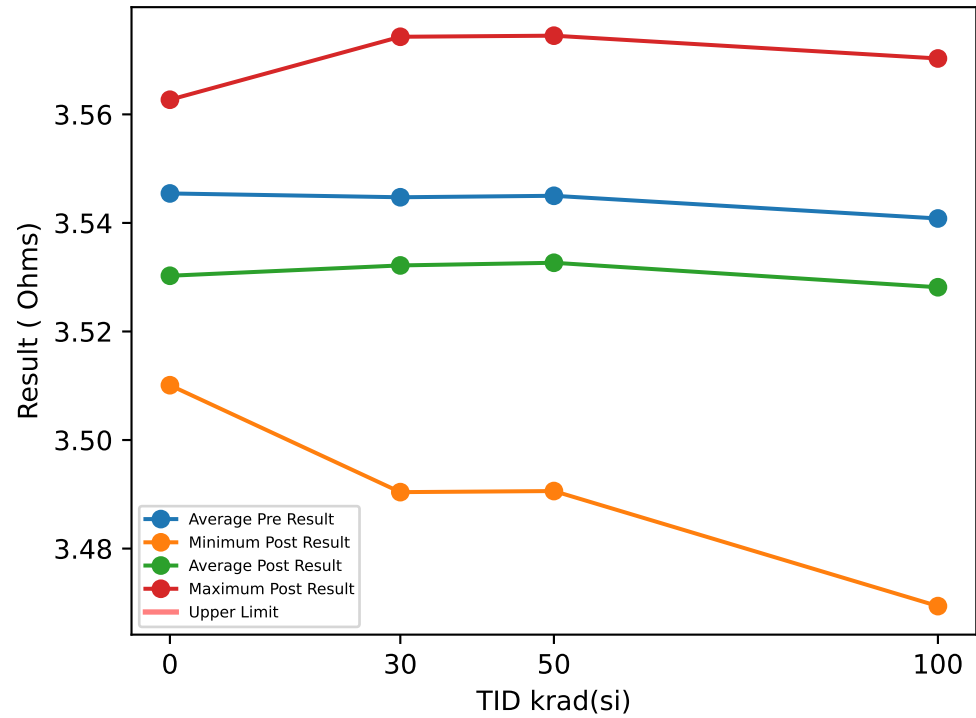


Test Statistics (Ohms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	4.0914	4.1271	4.1787	0.045753	4.084	4.1082	4.1506	0.036867	-0.0281	-0.018967	-0.0015	0.015132
30	4.0927	4.1313	4.1754	0.031733	4.0787	4.1214	4.1719	0.033452	-0.0262	-0.0099	0.0092	0.013004
50	4.0928	4.1315	4.1752	0.031623	4.0788	4.1216	4.1718	0.033502	-0.0265	-0.00989	0.0074	0.012707
100	4.0761	4.1332	4.1655	0.026518	4.0693	4.1285	4.1748	0.032094	-0.0271	-0.00476	0.0097	0.010796

Device Test: 80.2 CPOUT|//OUTPUT_RESISTANCE//250mA/5/@R_CP_OUT_5V

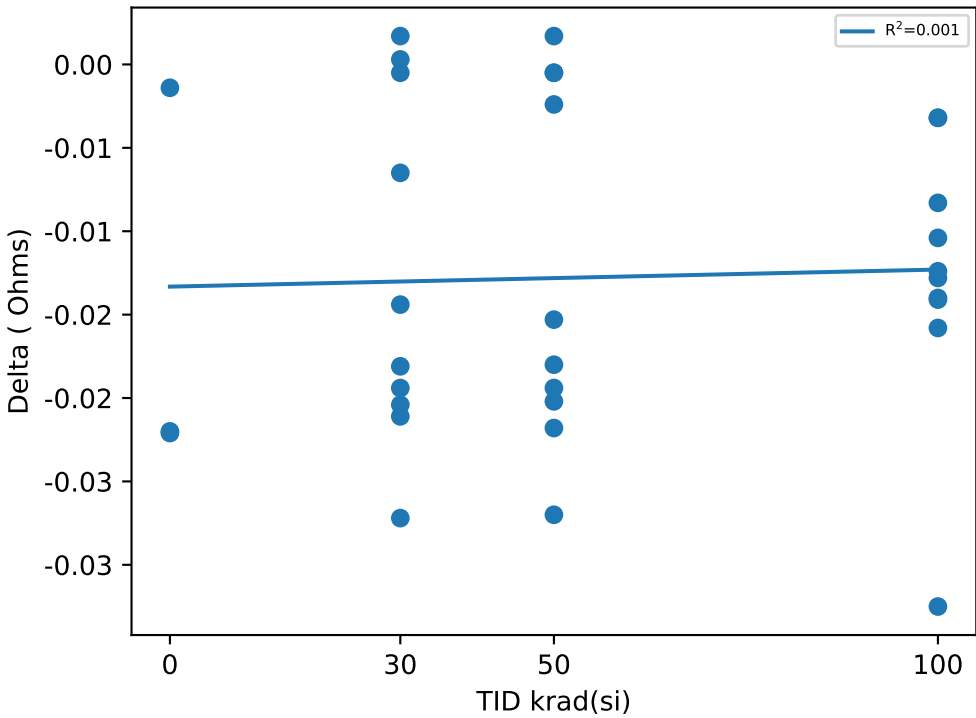
TID vs Result Stats



Test Results (No Limits Specified (Ohms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	3.5848	3.5627	-0.0221
2	0	CU2	3.5115	3.5101	-0.0014
3	0	CU3	3.54	3.518	-0.022
25	30	30krad Unbiased	3.5385	3.5402	0.0017
26	30	30krad Unbiased	3.5085	3.4904	-0.0181
27	30	30krad Unbiased	3.574	3.5743	0.0003
28	30	30krad Unbiased	3.5325	3.526	-0.0065
29	30	30krad Unbiased	3.5447	3.5442	-0.0005
30	30	30krad Biased	3.518	3.4969	-0.0211
31	30	30krad Biased	3.5486	3.5292	-0.0194
32	30	30krad Biased	3.5778	3.5574	-0.0204
33	30	30krad Biased	3.5367	3.5095	-0.0272
34	30	30krad Biased	3.568	3.5536	-0.0144
40	50	50krad Unbiased	3.5386	3.5403	0.0017
41	50	50krad Unbiased	3.5086	3.4906	-0.018
42	50	50krad Unbiased	3.575	3.5745	-0.0005
43	50	50krad Unbiased	3.5324	3.53	-0.0024
44	50	50krad Unbiased	3.5446	3.5441	-0.0005
45	50	50krad Biased	3.519	3.4972	-0.0218
46	50	50krad Biased	3.5485	3.5291	-0.0194
47	50	50krad Biased	3.5777	3.5575	-0.0202
48	50	50krad Biased	3.5366	3.5096	-0.027
49	50	50krad Biased	3.569	3.5537	-0.0153
50	100	100krad Unbiased	3.5735	3.5703	-0.0032
51	100	100krad Unbiased	3.5708	3.5676	-0.0032
52	100	100krad Unbiased	3.5501	3.5343	-0.0158
53	100	100krad Unbiased	3.55	3.5417	-0.0083
54	100	100krad Unbiased	3.5238	3.5134	-0.0104
55	100	100krad Biased	3.4818	3.4694	-0.0124
56	100	100krad Biased	3.5279	3.5151	-0.0128
57	100	100krad Biased	3.5379	3.5239	-0.014
58	100	100krad Biased	3.5578	3.5437	-0.0141
59	100	100krad Biased	3.5346	3.5021	-0.0325

TID vs Post - Pre Exposure Delta

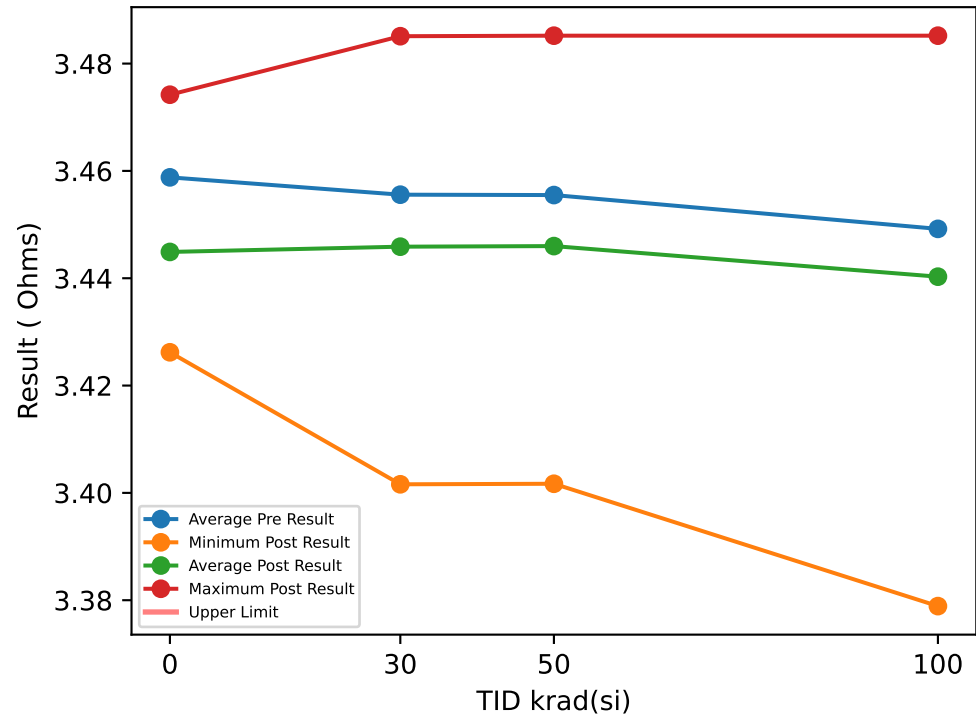


Test Statistics (Ohms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.5115	3.5454	3.5848	0.036951	3.5101	3.5303	3.5627	0.028364	-0.0221	-0.015167	-0.0014	0.011922
30	3.5085	3.5447	3.5778	0.023062	3.4904	3.5322	3.5743	0.027141	-0.0272	-0.01256	0.0017	0.010438
50	3.5086	3.545	3.5777	0.023164	3.4906	3.5327	3.5745	0.027034	-0.027	-0.01234	0.0017	0.010714
100	3.4818	3.5408	3.5735	0.026693	3.4694	3.5282	3.5703	0.030427	-0.0325	-0.01267	-0.0032	0.0082364

Device Test: 80.3 CPOUT|//OUTPUT_RESISTANCE//250mA/6.3/@R_CP_OUT_6P3V

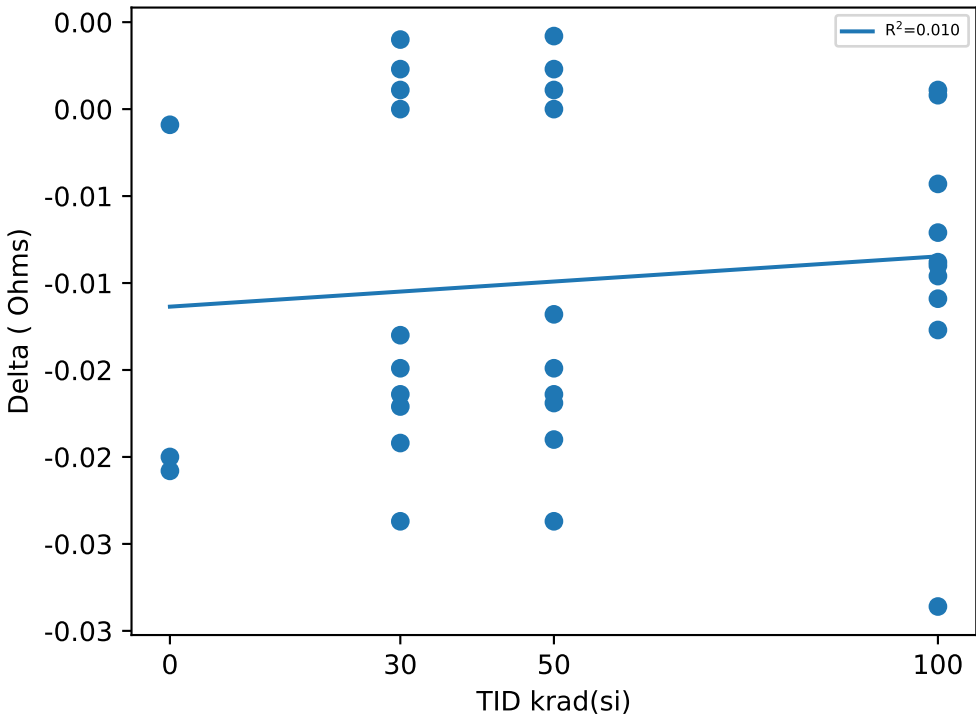
TID vs Result Stats



Test Results (No Limits Specified (Ohms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	0	CU1	3.4942	3.4742	-0.02
2	0	CU2	3.4271	3.4262	-0.0009
3	0	CU3	3.4551	3.4343	-0.0208
25	30	30krad Unbiased	3.4482	3.4522	0.004
26	30	30krad Unbiased	3.4165	3.4016	-0.0149
27	30	30krad Unbiased	3.4828	3.4851	0.0023
28	30	30krad Unbiased	3.4364	3.4364	0
29	30	30krad Unbiased	3.4745	3.4756	0.0011
30	30	30krad Biased	3.4304	3.4112	-0.0192
31	30	30krad Biased	3.4548	3.4384	-0.0164
32	30	30krad Biased	3.4848	3.4677	-0.0171
33	30	30krad Biased	3.4503	3.4266	-0.0237
34	30	30krad Biased	3.477	3.464	-0.013
40	50	50krad Unbiased	3.4481	3.4523	0.0042
41	50	50krad Unbiased	3.4166	3.4017	-0.0149
42	50	50krad Unbiased	3.4829	3.4852	0.0023
43	50	50krad Unbiased	3.4365	3.4365	0
44	50	50krad Unbiased	3.4746	3.4757	0.0011
45	50	50krad Biased	3.4303	3.4113	-0.019
46	50	50krad Biased	3.4549	3.4385	-0.0164
47	50	50krad Biased	3.4847	3.4678	-0.0169
48	50	50krad Biased	3.4504	3.4267	-0.0237
49	50	50krad Biased	3.476	3.4642	-0.0118
50	100	100krad Unbiased	3.4841	3.4852	0.0011
51	100	100krad Unbiased	3.4796	3.4804	0.0008
52	100	100krad Unbiased	3.4535	3.4408	-0.0127
53	100	100krad Unbiased	3.4569	3.4526	-0.0043
54	100	100krad Unbiased	3.4346	3.4275	-0.0071
55	100	100krad Biased	3.3885	3.3789	-0.0096
56	100	100krad Biased	3.4355	3.4267	-0.0088
57	100	100krad Biased	3.449	3.44	-0.009
58	100	100krad Biased	3.47	3.4591	-0.0109
59	100	100krad Biased	3.4403	3.4117	-0.0286

TID vs Post - Pre Exposure Delta



Test Statistics (Ohms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4271	3.4588	3.4942	0.033703	3.4262	3.4449	3.4742	0.025696	-0.0208	-0.0139	-0.0009	0.011265
30	3.4165	3.4556	3.4848	0.023626	3.4016	3.4459	3.4851	0.027783	-0.0237	-0.00969	0.004	0.010362
50	3.4166	3.4555	3.4847	0.02352	3.4017	3.446	3.4852	0.02779	-0.0237	-0.00951	0.0042	0.010319
100	3.3885	3.4492	3.4841	0.027522	3.3789	3.4403	3.4852	0.031738	-0.0286	-0.00891	0.0011	0.0083369

6 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision A (July 2026) to Revision B (August 2026) Page

- Updated test limits and associated graphs to match the latest datasheet (SNVSCS6)..... [2](#)

Changes from Revision * (March 2026) to Revision A (July 2026) Page

- Added content across the publication to include 30krad(Si) HDR Dose level information..... [2](#)

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Last updated 10/2025