

# TPS7H1121-SEP Total Ionizing Dose (TID) Radiation Report



## ABSTRACT

This report discusses the total ionizing dose (TID) parametric results for TPS7H1121-SEP, Texas Instruments, 2.25V to 14V input, radiation-tolerant 2A low-dropout (LDO) regulator. The study was done to determine the TID effects under high dose rate (HDR) up to 50krad(Si). The results show that all samples passed within the specified limits up to 50krad(Si).

## Table of Contents

<b>1 Device Information</b> .....	2
1.1 Product Description.....	2
1.2 Device Details.....	2
<b>2 Total Dose Test Setup</b> .....	3
2.1 Test Overview.....	3
2.2 Test Description and Facilities.....	3
2.3 Test Setup Details.....	3
2.4 Test Configuration and Conditions.....	4
<b>3 TID Characterization Test Results</b> .....	5
3.1 TID Characterization Summary Results.....	5
3.2 TPS7H1121-SP and TPS7H1121-SEP Data Sheet Electrical Parameters.....	5
<b>4 Applicable and Reference Documents</b> .....	8
4.1 Applicable Documents.....	8
4.2 Reference Documents.....	8
<b>A Appendix: HDR TID Report Data</b> .....	9

## List of Figures

Figure 1-1. Device Used in Exposure.....	2
Figure 2-1. Bias Diagram Used in TID Exposure.....	3

## List of Tables

Table 1-1. Device and Exposure Details.....	2
Table 2-1. Biased Source Configuration.....	3
Table 2-2. HDR Biased Device Information.....	4
Table 2-3. HDR Unbiased Device Information.....	4
Table 3-1. TPS7H1121-SP and TPS7H1121-SEP Data Sheet Electrical Parameters.....	5

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## 1 Device Information

### 1.1 Product Description

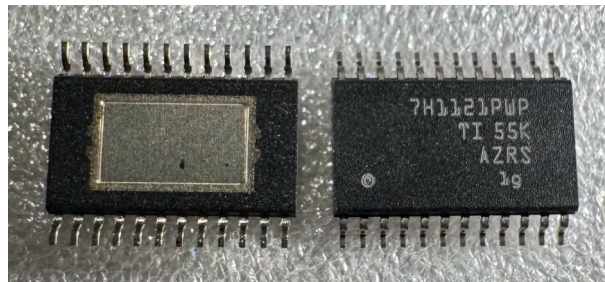
The TPS7H1121-SEP is a radiation-tolerant low dropout linear regulator (LDO) which operates over a wide range of input voltages optimized for powering devices in a space environment. The device is capable of sourcing up to 2A over a 2.25V to 14V input. The device offers excellent stability and features a programmable current limit with a wide adjustment range. To support the complex power requirements of FPGAs, DSPs, and microcontrollers, the TPS7H1121-SEP provides enable on and off functionality, programmable soft start, and a power good open-drain output.

### 1.2 Device Details

Table 1-2 lists the device information used in the TID HDR characterization.

**Table 1-1. Device and Exposure Details**

TID HDR Details: Up to 50krad(Si)	
TI Device Number	TPS7H1121-SEP
Package	24 PIN PWP
Technology	Linear BiCMOS 7 (LBC7)
Die Lot Number	3171639
A/T Lot Number / Date Code	5312373MLA / 55AZRSK
Quantity Tested	HDR: 36 Devices <ul style="list-style-type: none"> <li>• Five biased and five unbiased units at 20krad (Si) levels</li> <li>• Five biased and five unbiased units at 30krad (Si) levels</li> <li>• Five biased and five unbiased units at 50krad (Si) levels</li> <li>• Six control/correlation units with no exposure</li> </ul>
HDR Radiation Facility	DCLAB - Texas Instruments, Dallas, TX
HDR Dose Level	50krad (Si)
HDR Dose Rate	158.265 rad (Si)/ s ionizing radiation dose rate
HDR Radiation Source	Gammacell 220 Excel (GC-220E) Co-60
Irradiation Temperature	Ambient, room temperature



**Figure 1-1. Device Used in Exposure**

## 2 Total Dose Test Setup

### 2.1 Test Overview

The TPS7H1121-SEP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, Condition A was used. For Condition A, the product was irradiated up to target radiation level and then put through full electrical parametric testing on the production Automated Test Equipment (ATE). All devices were fully functional, and passed all electrical parametric tests with the readings within the data sheet electrical specification limits.

### 2.2 Test Description and Facilities

The TPS7H1121-SEP HDR exposure was performed on biased and unbiased devices in a Co-60 gamma cell at the Dallas CLAB (DCLAB) at Texas Instruments in Dallas, Texas. The unattenuated dose rate of this cell is 158.265 rads (Si)/s. After exposure, the devices were brought to Junkins Laboratory at Texas Instruments in Dallas for full post-radiation electrical evaluation using Texas Instruments ATE. ATE test limits are set per data sheet electrical limits based on preliminary qualification and characterization data.

### 2.3 Test Setup Details

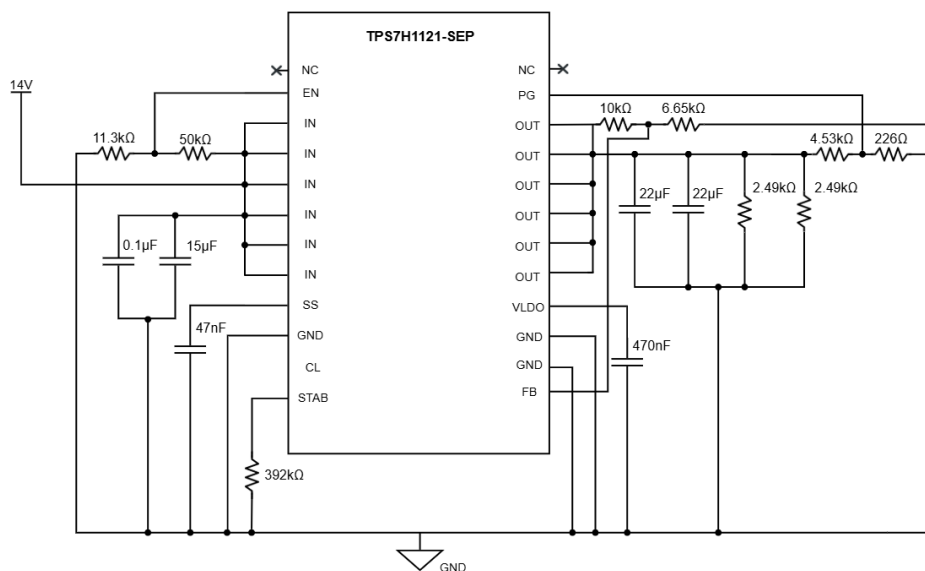
The devices under HDR exposure were tested in both biased and unbiased conditions shown in [Section 2.4](#).

#### 2.3.1 Unbiased

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

#### 2.3.2 Biased

The TPS7H1121-SEP biased exposure was performed with a 14V bias on the Vin pins and 2.58V bias on the ENABLE pin. [Figure 2-1](#) shows the biased diagram that was used for HDR exposure.



**Figure 2-1. Bias Diagram Used in TID Exposure**

**Table 2-1. Biased Source Configuration**

VIN (V)	VIN (mA / device)
14	50

## 2.4 Test Configuration and Conditions

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

**Table 2-2. HDR Biased Device Information**

Total Samples: 15		
Exposure Levels		
20 krad(Si)	30 krad(Si)	50 krad(Si)
25, 26, 27, 28, 29	35, 36, 37, 38, 39	78, 79, 80, 81, 82

**Table 2-3. HDR Unbiased Device Information**

Total Samples: 15		
Exposure Levels		
20 krad(Si)	30 krad(Si)	50 krad(Si)
1, 2, 3, 23, 24	30, 31, 32, 33, 34	40, 41, 42, 43, 44

### 3 TID Characterization Test Results

#### 3.1 TID Characterization Summary Results

The parametric data for the TPS7H1121-SEP passes up to 50krad(Si) HDR TID irradiation. The drifts of the electrical parameters through HDR were within the data sheet limits.

Overall, the TPS7H1121-SEP showed a strong degree of hardness to HDR TID irradiation up to 50krad(Si) for both biased and unbiased exposure conditions. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level for both biased and unbiased. The parameters that did show a greater degree of change between pre- and post-irradiation were still within the electrical performance characteristics specified in the data sheet electrical parameters. See [Section 3.2](#) for parameters and associated tests.

See [Appendix A](#) for the HDR report up to 50krad(Si).

#### 3.2 TPS7H1121-SP and TPS7H1121-SEP Data Sheet Electrical Parameters

Over  $2.25V \leq V_{IN} \leq 14V$ ,  $V_{OUT(set)} \leq V_{IN} - 0.5V$ ,  $I_{OUT} = 10mA$ ,  $C_{OUT} = 47\mu F$ , typical values are at  $T_A = 25^\circ C$ , unless otherwise noted.

**Table 3-1. TPS7H1121-SP and TPS7H1121-SEP Data Sheet Electrical Parameters**

Parameter	Test Conditions	MIN	TYP	MAX	UNIT	Test Number	
<b>POWER SUPPLIES AND CURRENTS</b>							
$V_{DO}$	$V_{OUT(set)} = 2.25V, V_{OUT(measured)} = 98\% \times V_{OUT(NOM)}$	$I_{OUT} = 100mA$	28	60	mV	17.3	
		$I_{OUT} = 250mA$	70	141		17.6	
		$I_{OUT} = 500mA$	150	280		17.9	
		$I_{OUT} = 1A$	300	570		17.12	
	$V_{OUT(set)} = 2.5V, V_{OUT(measured)} = 98\% \times V_{OUT(NOM)}$	$I_{OUT} = 1.5A$	525	750	mV	17.15	
		$I_{OUT} = 2A$	570	900		17.18	
	Dropout voltage $V_{DO} = V_{IN(forced)} - V_{OUT(set)}$  $3 \leq V_{OUT(set)} \leq 13.3V$ , $V_{OUT(measured)} = 98\% \times V_{OUT(NOM)}$	$I_{OUT} = 100mA$	20	50	mV	17.21, 17.24	
		$I_{OUT} = 250mA$	70	100		17.27, 17.30	
		$I_{OUT} = 500mA$	125	180		17.33, 17.36	
		$I_{OUT} = 1A$	300	340		17.39, 17.42	
		$I_{OUT} = 1.5A$	325	490		17.45, 17.48	
		$I_{OUT} = 2A$	500	700		17.51, 17.54	
$I_{PCL}$	Programmed current limit  $V_{IN} = 3.3V, V_{OUT(short)} = 0.1V$	$RCL = 442k\Omega$	0.165	0.35	A	16.1	
		$RCL = 174k\Omega$	0.51	0.835		1.1	16.2
		$RCL = 82.5k\Omega$	1.16	1.66		2.16	16.3
		$RCL = 41.2k\Omega$	2.4	3.15		3.85	16.4
$I_Q$	Quiescent current  $V_{EN} = 7V, I_{OUT} = 0A$		8.75	15	mA	11.7, 11.9, 11.12	
$I_{GND}$	Ground current  $V_{EN} = 7V$	$I_{OUT} = 1A$	10	18	mA	11.13, 11.14	
		$I_{OUT} = 2A$	13	20	mA	11.15, 11.16, 11.17	
$V_{LDO}$	Internal linear regulator output voltage	$V_{IN} = 2.25V$	2.05	2.2	V	15.7	
		$3V \leq V_{IN} \leq 14V$	2.3	2.55		2.78	15.64

**Table 3-1. TPS7H1121-SP and TPS7H1121-SEP Data Sheet Electrical Parameters (continued)**

Parameter		Test Conditions	MIN	TYP	MAX	UNIT	Test Number
$I_{SHDN}$	Shutdown current	$V_{EN} = 0V, I_{OUT} = 0A, V_{OUT} = 0V$		380	775	$\mu A$	11.1, 11.2, 11.3, 11.4, 11.5, 11.6
$I_{FB}$	Feedback leakage current	$V_{FB} = 0.7V$		1	15	nA	15.80
<b>ACCURACY</b>							
$V_{ACC}$	Output voltage accuracy	$10mA \leq I_{OUT} \leq 2A, 0.6V \leq V_{OUT} \leq V_{IN} - V_{DO}, P_D \leq 3W$	$3V \leq V_{IN} \leq 14V$	-1.5%	1.5%	V	15.44, 15.57, 15.62, 15.68, 15.73, 15.78
			$3V \leq V_{IN} \leq 14V, T_A = 25^\circ C$	-1.1%	1.1%		
			$2.25V \leq V_{IN} \leq 3V$	-1.8%	1.8%		
$V_{FB}$	Feedback voltage	$3V \leq V_{IN} \leq 14V$	$T_A = 25^\circ C$	0.588	0.596	0.606	V
				0.591	0.596	0.603	
				0.586	0.596	0.608	
$\frac{\Delta V_{OUT}}{\Delta V_{IN}}$	Line regulation	$3V \leq V_{IN} \leq 14V$ $2.25V \leq V_{IN} \leq 3V$		100	650	$\mu V/V$	18.5
				285	1800		18.4
$\frac{\Delta V_{OUT}}{\Delta I_{OUT}}$	Load regulation	$10mA \leq I_{OUT} \leq 2A, V_{IN} = 4.5V, V_{OUT} = 3.3V$		4	16	mV/A	19.5
<b>ENABLE</b>							
$V_{EN(rising)}$	Enable rising threshold (turn-on)		0.565	0.605	0.625	V	13.1, 13.4, 13.7, 13.10, 13.13, 13.16, 13.19
$V_{EN(falling)}$	Enable falling threshold (turn-off)		0.465	0.5	0.52	V	13.2, 13.5, 13.8, 13.11, 13.14, 13.17, 13.20

**Table 3-1. TPS7H1121-SP and TPS7H1121-SEP Data Sheet Electrical Parameters (continued)**

Parameter		Test Conditions		MIN	TYP	MAX	UNIT	Test Number
$t_{EN(\text{delay})}$	EN propagation delay	EN high to $V_{OUT} = 10\text{mV}$			50	150	$\mu\text{s}$	13.24, 13.25, 13.26, 13.27, 13.28, 13.29, 13.30, 13.31, 13.32, 13.33
$I_{EN(\text{LKG})}$	Enable leakage current	$V_{EN} = 7\text{V}$			1	30	nA	13.22, 13.23
<b>POWER GOOD</b>								
$V_{PG\_RISE}$	Power good rising as percent of $V_{OUT}$			93%	95%	97%		14.1, 14.4, 14.7, 14.10, 14.13, 14.16
$V_{PG\_FALL}$	Power good falling as percent of $V_{OUT}$			88.5%	91.5%	94%		14.2, 14.5, 14.8, 14.11, 14.14, 14.17
$V_{PG(\text{OL})}$	Power good output low	$I_{PG(\text{SINK})} = 2\text{mA}$			90	190	mV	14.19, 14.20
$V_{IN(\text{MIN\_PG})}$	Minimum $V_{IN}$ for valid PG ( $V_{PG} < 0.5\text{V}$ )	$I_{PG(\text{SINK})} = 0.5\text{mA}$			0.6	0.8	V	14.21
$I_{PG(\text{LKG})}$	Power good leakage	$V_{PG} = 7\text{V}$ , $V_{FB} = 0.7\text{V}$			0.05	2	$\mu\text{A}$	14.22, 14.23
<b>SOFT START</b>								
$I_{SS}$	Soft-start current			1.4	2	2.7	$\mu\text{A}$	20.1, 20.2
$t_{SS}$	Soft-start time	$V_{IN} = 5\text{V}$ , $V_{OUT} = 3.3\text{V}$ , measured from $V_{OUT} = 10\text{mV}$ to PG assert	$C_{SS} = 1\text{nF}$	0.22	0.35	0.48	ms	20.3
			$C_{SS} = 33\text{nF}$	5.5	10	14.5		20.4
<b>STABILITY</b>								
GM	Gain Margin	$V_{IN} = 5\text{V}$ , $V_{OUT} = 3.3\text{V}$ , $I_{OUT} = 1\text{A}$ , $C_{OUT} = 47\mu\text{F}$ , $T_A = 25^\circ\text{C}$			24		dB	
PM	Phase Margin	$V_{IN} = 5\text{V}$ , $V_{OUT} = 3.3\text{V}$ , $I_{OUT} = 1\text{A}$ , $C_{OUT} = 47\mu\text{F}$ , $T_A = 25^\circ\text{C}$			60°			
<b>NOISE AND PSRR</b>								
PSRR	Power-supply rejection ratio	$V_{IN} = 5\text{V}$ , $V_{OUT} = 3.3\text{V}$ , $I_{OUT} = 1\text{A}$ , $C_{SS} = 5.6\text{nF}$	$f_{\text{ripple}} = 100\text{Hz}$		68		dB	
			$f_{\text{ripple}} = 1\text{kHz}$		72			
			$f_{\text{ripple}} = 10\text{kHz}$		51			
			$f_{\text{ripple}} = 100\text{kHz}$		40			
			$f_{\text{ripple}} = 1\text{MHz}$		34			
$V_N$	Output noise voltage (Bandwidth from 10Hz to 100kHz)	$V_{IN} = 5\text{V}$ , $V_{OUT} = 3.3\text{V}$ , $I_{OUT} = 1\text{A}$ , $C_{SS} = 5.6\text{nF}$			35		$\mu\text{V}_{\text{RMS}}$	

## 4 Applicable and Reference Documents

### 4.1 Applicable Documents

- Texas Instruments, [TPS7H1121-SEP 2.25 V to 14-V Input, 2-A, Radiation Hardened LDO Regulator](#), data sheet.
- Texas Instruments, [TPS7H1121EVM-CVAL Evaluation Module \(EVM\)](#), EVM user's guide.

### 4.2 Reference Documents

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

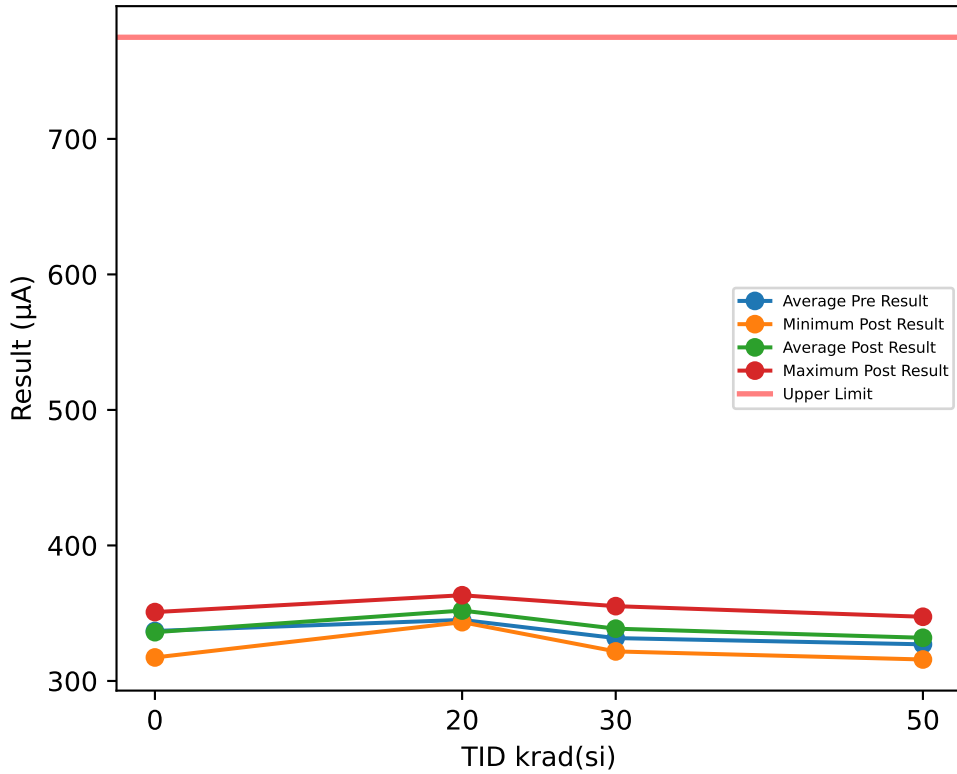


## A Appendix: HDR TID Report Data

This appendix contains the HDR TID report data.

# Device Test: 11.1 ISHDN|SUPPLY/IN/2.25//0/0//@I\_SHDN

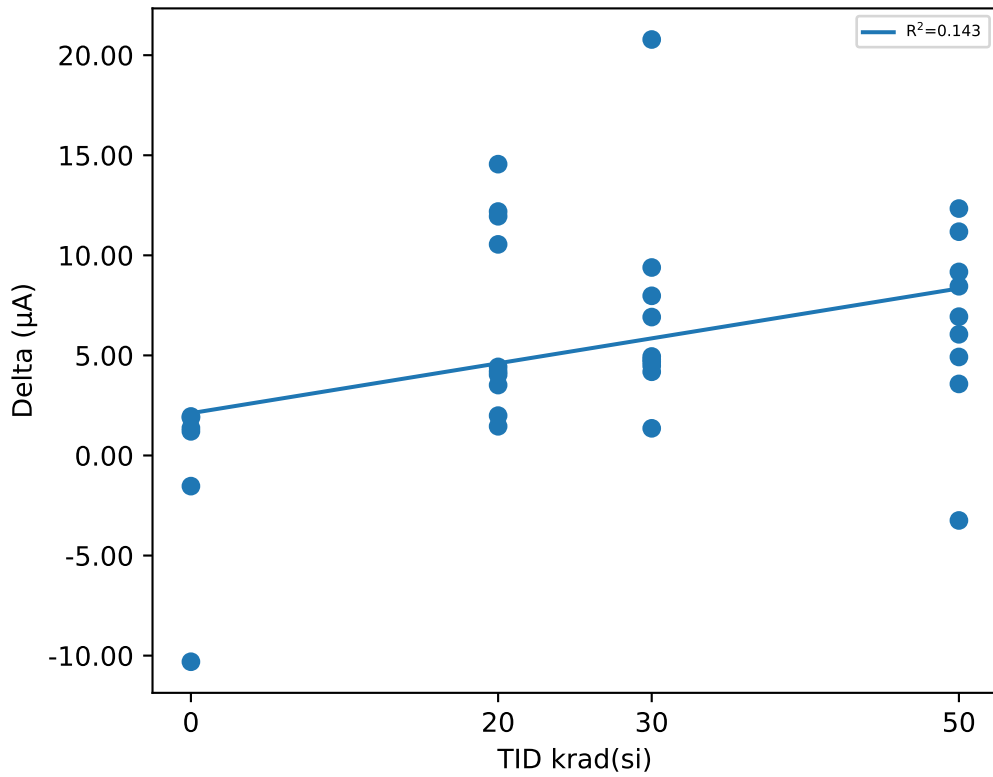
## TID vs Result Stats



## Test Results (Upper Limit = 775.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	333.25	345.44	12.189
2	20	HDR Unbiased	346.44	350.64	4.1974
3	20	HDR Unbiased	352.57	354.56	1.9915
23	20	HDR Unbiased	348.7	363.25	14.555
24	20	HDR Unbiased	344.68	349.11	4.4264
25	20	HDR Biased	344.5	345.95	1.4577
26	20	HDR Biased	346.21	349.73	3.5176
27	20	HDR Biased	346.5	357.05	10.547
28	20	HDR Biased	331.43	343.38	11.951
29	20	HDR Biased	356.37	360.4	4.0335
30	30	HDR Unbiased	325.89	346.67	20.783
31	30	HDR Unbiased	334.84	339.02	4.1824
32	30	HDR Unbiased	319.24	328.63	9.3921
33	30	HDR Unbiased	330.65	337.56	6.9156
34	30	HDR Unbiased	333.98	338.46	4.4821
35	30	HDR Biased	331.2	339.18	7.9775
36	30	HDR Biased	327.09	328.44	1.3569
37	30	HDR Biased	345.94	350.89	4.9459
38	30	HDR Biased	350.52	355.2	4.6796
39	30	HDR Biased	317	321.8	4.7968
40	50	HDR Unbiased	335.11	346.29	11.181
41	50	HDR Unbiased	336.6	333.36	-3.2466
42	50	HDR Unbiased	337.08	344.01	6.9362
43	50	HDR Unbiased	338.92	347.37	8.4547
44	50	HDR Unbiased		315.85	
50	0	CORRELATION	315.45	317.34	1.8906
51	0	CORRELATION	333.49	335.44	1.9497
52	0	CORRELATION	349.62	350.82	1.2052
53	0	CORRELATION	338.32	339.69	1.3736
54	0	CORRELATION	349.65	339.34	-10.305
78	50	HDR Biased	328.49	334.54	6.0547
79	50	HDR Biased	324.2	329.12	4.9219
80	50	HDR Biased	314.46	318.03	3.5749
81	50	HDR Biased	316.45	328.79	12.337
82	50	HDR Biased	312.1	321.27	9.1716
83	0	CORRELATION	334.86	333.33	-1.5316

## TID vs Post - Pre Exposure Delta

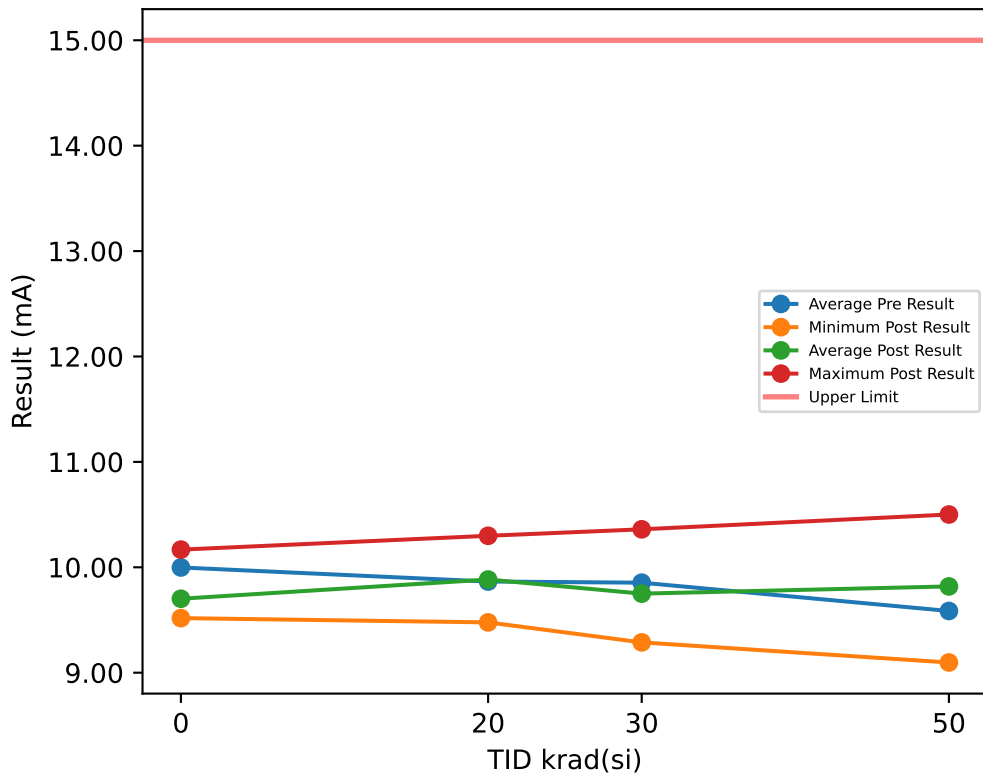


## Test Statistics (µA)

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	315.45	336.9	349.65	12.665	317.34	335.99	350.82	10.955	-10.305	-0.90297	1.9497	4.7826
20	331.43	345.06	356.37	7.6641	343.38	351.95	363.25	6.6554	1.4577	6.8866	14.555	4.8554
30	317	331.64	350.52	10.54	321.8	338.59	355.2	10.426	1.3569	6.9512	20.783	5.346
50	312.1	327.04	338.92	10.62	315.85	331.86	347.37	11.464	-3.2466	6.5984	12.337	4.6541

# Device Test: 11.12 IQ|SUPPLY/IN/5/3.3/7/0//@I\_Q

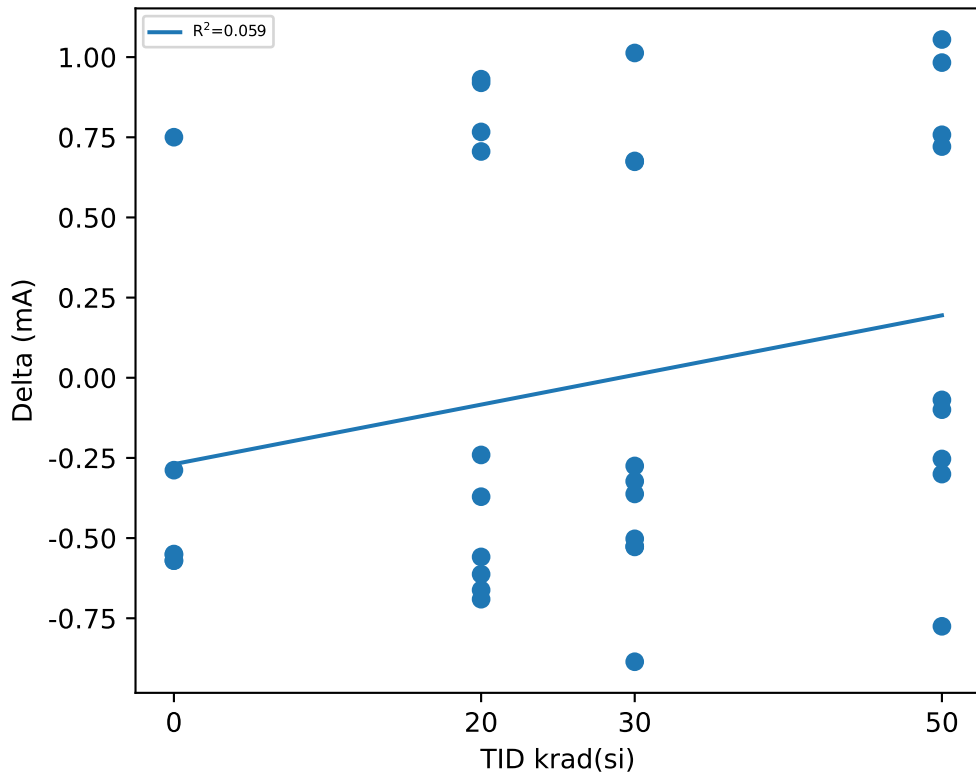
## TID vs Result Stats



## Test Results (Upper Limit = 15.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	10.133	9.892	-0.2407
2	20	HDR Unbiased	9.3676	10.299	0.9312
3	20	HDR Unbiased	10.742	10.081	-0.6619
23	20	HDR Unbiased	9.0137	9.9336	0.9199
24	20	HDR Unbiased	10.454	9.763	-0.6906
25	20	HDR Biased	10.052	9.6814	-0.3709
26	20	HDR Biased	9.0004	9.7061	0.7057
27	20	HDR Biased	10.61	9.9968	-0.6127
28	20	HDR Biased	8.7106	9.4773	0.7667
29	20	HDR Biased	10.568	10.009	-0.5587
30	30	HDR Unbiased	10.492	9.6066	-0.8856
31	30	HDR Unbiased	8.7601	9.4363	0.6762
32	30	HDR Unbiased	10.888	10.36	-0.5275
33	30	HDR Unbiased	10.178	9.8157	-0.3623
34	30	HDR Unbiased	8.923	9.9359	1.0129
35	30	HDR Biased	10.283	9.7576	-0.5256
36	30	HDR Biased	9.5626	9.2876	-0.275
37	30	HDR Biased	8.844	9.5176	0.6736
38	30	HDR Biased	10.656	10.153	-0.5023
39	30	HDR Biased	9.9532	9.6304	-0.3228
40	50	HDR Unbiased	9.4459	10.501	1.0549
41	50	HDR Unbiased	10.198	10.129	-0.069
42	50	HDR Unbiased	9.5351	9.2819	-0.2532
43	50	HDR Unbiased	9.3306	10.313	0.9829
44	50	HDR Unbiased		9.8957	
50	0	CORRELATION	10.129	9.5793	-0.5498
51	0	CORRELATION	9.9344	9.6462	-0.2882
52	0	CORRELATION	8.7676	9.5178	0.7502
53	0	CORRELATION	10.218	9.6663	-0.5516
54	0	CORRELATION	10.203	9.6332	-0.5701
78	50	HDR Biased	10.3	10.201	-0.0995
79	50	HDR Biased	8.9944	9.7154	0.721
80	50	HDR Biased	10.283	9.5075	-0.7751
81	50	HDR Biased	9.3973	9.0969	-0.3004
82	50	HDR Biased	8.7856	9.5434	0.7578
83	0	CORRELATION	10.738	10.168	-0.5703

## TID vs Post - Pre Exposure Delta

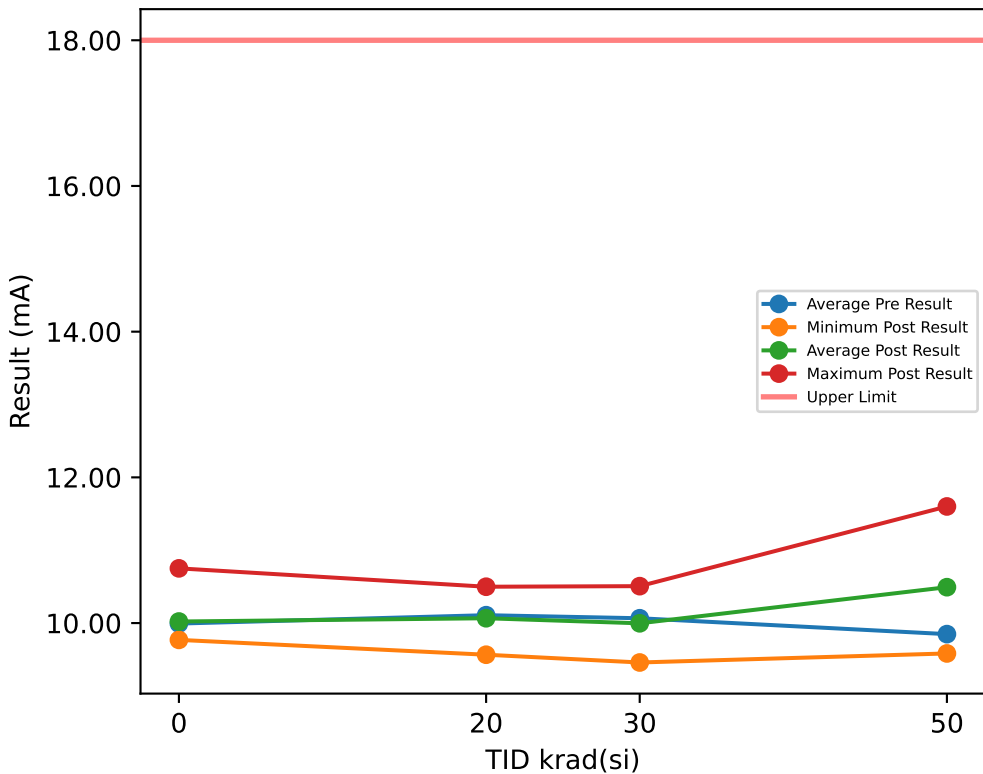


## Test Statistics (mA)

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	8.7676	9.9984	10.738	0.65925	9.5178	9.7017	10.168	0.23447	-0.5703	-0.29663	0.7502	0.52435
20	8.7106	9.8651	10.742	0.76909	9.4773	9.8839	10.299	0.23436	-0.6906	0.0188	0.9312	0.71443
30	8.7601	9.854	10.888	0.78785	9.2876	9.7501	10.36	0.32919	-0.8856	-0.10384	1.0129	0.64389
50	8.7856	9.5856	10.3	0.55727	9.0969	9.8185	10.501	0.46561	-0.7751	0.22438	1.0549	0.66046

# Device Test: 11.13 IGND|SUPPLY/IN/2.25/1.1/7/1000//@I\_GND\_1A

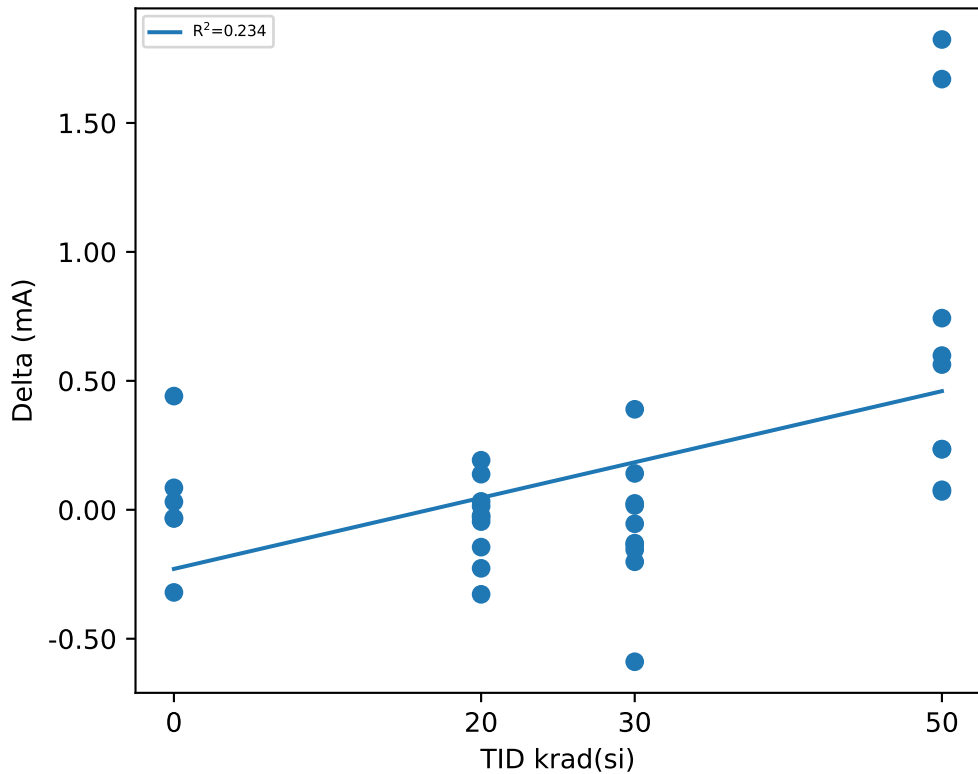
## TID vs Result Stats



## Test Results (Upper Limit = 18.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	10.172	10.143	-0.0299
2	20	HDR Unbiased	10.361	10.499	0.1381
3	20	HDR Unbiased	10.358	10.131	-0.227
23	20	HDR Unbiased	10.012	10.205	0.1922
24	20	HDR Unbiased	10.072	10.026	-0.0458
25	20	HDR Biased	10.072	9.7438	-0.3278
26	20	HDR Biased	9.9349	9.949	0.0141
27	20	HDR Biased	10.172	10.15	-0.0223
28	20	HDR Biased	9.7104	9.5656	-0.1448
29	20	HDR Biased	10.219	10.251	0.0326
30	30	HDR Unbiased	10.428	9.8392	-0.5892
31	30	HDR Unbiased	9.7956	9.6586	-0.137
32	30	HDR Unbiased	10.366	10.507	0.141
33	30	HDR Unbiased	10.242	10.087	-0.1548
34	30	HDR Unbiased	9.966	10.356	0.3897
35	30	HDR Biased	10.048	10.065	0.0169
36	30	HDR Biased	9.6606	9.459	-0.2016
37	30	HDR Biased	9.9118	9.7825	-0.1293
38	30	HDR Biased	10.281	10.305	0.0248
39	30	HDR Biased	9.9631	9.9089	-0.0542
40	50	HDR Unbiased	10.492	10.728	0.2351
41	50	HDR Unbiased	9.7694	10.367	0.598
42	50	HDR Unbiased	9.5055	9.583	0.0775
43	50	HDR Unbiased	10.299	10.534	0.235
44	50	HDR Unbiased		10.274	
50	0	CORRELATION	9.6842	9.7693	0.0851
51	0	CORRELATION	10.025	9.9916	-0.0335
52	0	CORRELATION	9.8265	9.794	-0.0325
53	0	CORRELATION	9.8779	9.9088	0.0309
54	0	CORRELATION	10.235	9.9141	-0.3204
78	50	HDR Biased	9.8715	10.615	0.7432
79	50	HDR Biased	10.009	10.081	0.0712
80	50	HDR Biased	9.7603	11.43	1.67
81	50	HDR Biased	9.1501	9.7132	0.5631
82	50	HDR Biased	9.7772	11.601	1.8236
83	0	CORRELATION	10.31	10.751	0.4409

## TID vs Post - Pre Exposure Delta

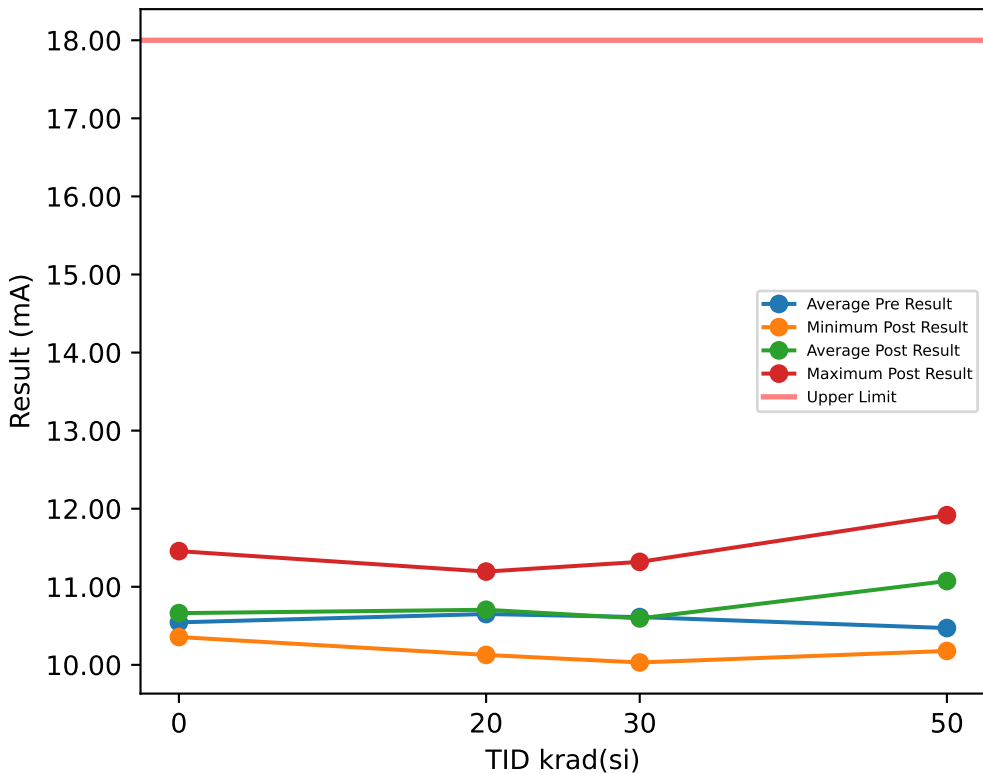


## Test Statistics (mA)

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	9.6842	9.9931	10.31	0.24343	9.7693	10.021	10.751	0.36683	-0.3204	0.028417	0.4409	0.246
20	9.7104	10.108	10.361	0.1963	9.5656	10.066	10.499	0.26407	-0.3278	-0.04206	0.1922	0.15742
30	9.6606	10.066	10.428	0.25396	9.459	9.9969	10.507	0.32984	-0.5892	-0.06937	0.3897	0.2527
50	9.1501	9.8483	10.492	0.39821	9.583	10.493	11.601	0.6538	0.0712	0.66852	1.8236	0.65581

# Device Test: 11.14 IGND|SUPPLY|IN/3/2.25/7/1000//@I\_GND\_1A

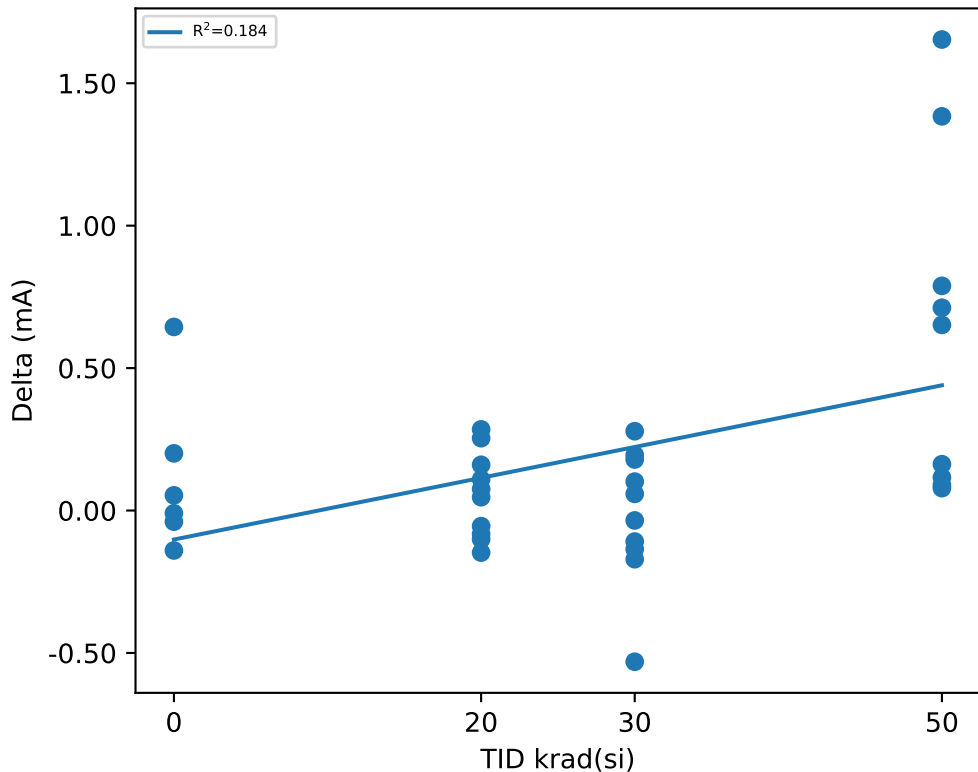
## TID vs Result Stats



## Test Results (Upper Limit = 18.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	10.709	10.87	0.1605
2	20	HDR Unbiased	10.91	11.195	0.2848
3	20	HDR Unbiased	10.923	10.84	-0.0826
23	20	HDR Unbiased	10.592	10.846	0.2539
24	20	HDR Unbiased	10.683	10.582	-0.1009
25	20	HDR Biased	10.523	10.375	-0.1477
26	20	HDR Biased	10.546	10.622	0.0757
27	20	HDR Biased	10.745	10.791	0.0467
28	20	HDR Biased	10.182	10.127	-0.0548
29	20	HDR Biased	10.698	10.808	0.1095
30	30	HDR Unbiased	10.996	10.465	-0.5308
31	30	HDR Unbiased	10.252	10.143	-0.1089
32	30	HDR Unbiased	11.124	11.319	0.1948
33	30	HDR Unbiased	10.763	10.628	-0.1352
34	30	HDR Unbiased	10.585	10.863	0.2784
35	30	HDR Biased	10.497	10.598	0.1016
36	30	HDR Biased	10.065	10.03	-0.0348
37	30	HDR Biased	10.523	10.352	-0.1709
38	30	HDR Biased	10.899	11.079	0.1792
39	30	HDR Biased	10.414	10.473	0.0585
40	50	HDR Unbiased	11.181	11.297	0.1162
41	50	HDR Unbiased	10.427	11.079	0.6516
42	50	HDR Unbiased	10.088	10.178	0.0895
43	50	HDR Unbiased	11.049	11.212	0.1626
44	50	HDR Unbiased		10.854	
50	0	CORRELATION	10.303	10.357	0.0533
51	0	CORRELATION	10.53	10.491	-0.0391
52	0	CORRELATION	10.438	10.428	-0.0097
53	0	CORRELATION	10.443	10.643	0.2007
54	0	CORRELATION	10.74	10.6	-0.1402
78	50	HDR Biased	10.482	11.271	0.7887
79	50	HDR Biased	10.597	10.675	0.0786
80	50	HDR Biased	10.425	11.809	1.3838
81	50	HDR Biased	9.7301	10.442	0.7119
82	50	HDR Biased	10.264	11.917	1.6535
83	0	CORRELATION	10.812	11.457	0.6445

## TID vs Post - Pre Exposure Delta

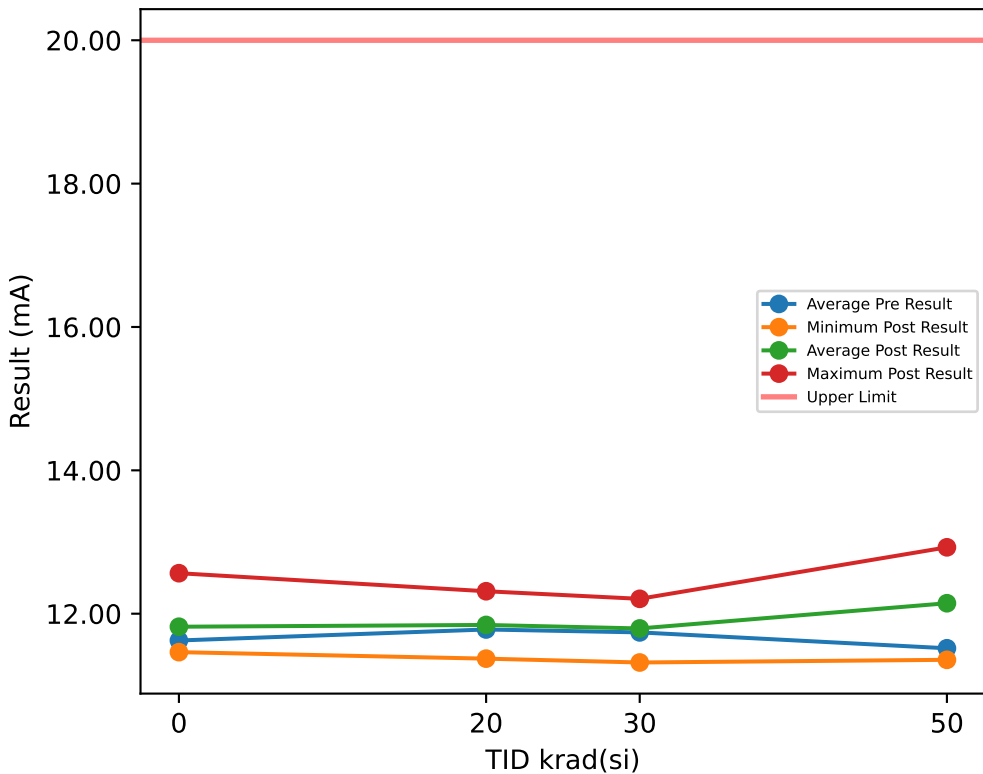


## Test Statistics (mA)

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	10.303	10.544	10.812	0.195	10.357	10.663	11.457	0.40324	-0.1402	0.11825	0.6445	0.28138
20	10.182	10.651	10.923	0.21264	10.127	10.706	11.195	0.29584	-0.1477	0.05451	0.2848	0.15031
30	10.065	10.612	11.124	0.33418	10.03	10.595	11.319	0.40072	-0.5308	-0.01681	0.2784	0.23589
50	9.7301	10.472	11.181	0.44673	10.178	11.073	11.917	0.55462	0.0786	0.62627	1.6535	0.58381

# Device Test: 11.15 IGND|SUPPLY|IN/3/2.25/7/2000//@I\_GND\_2A

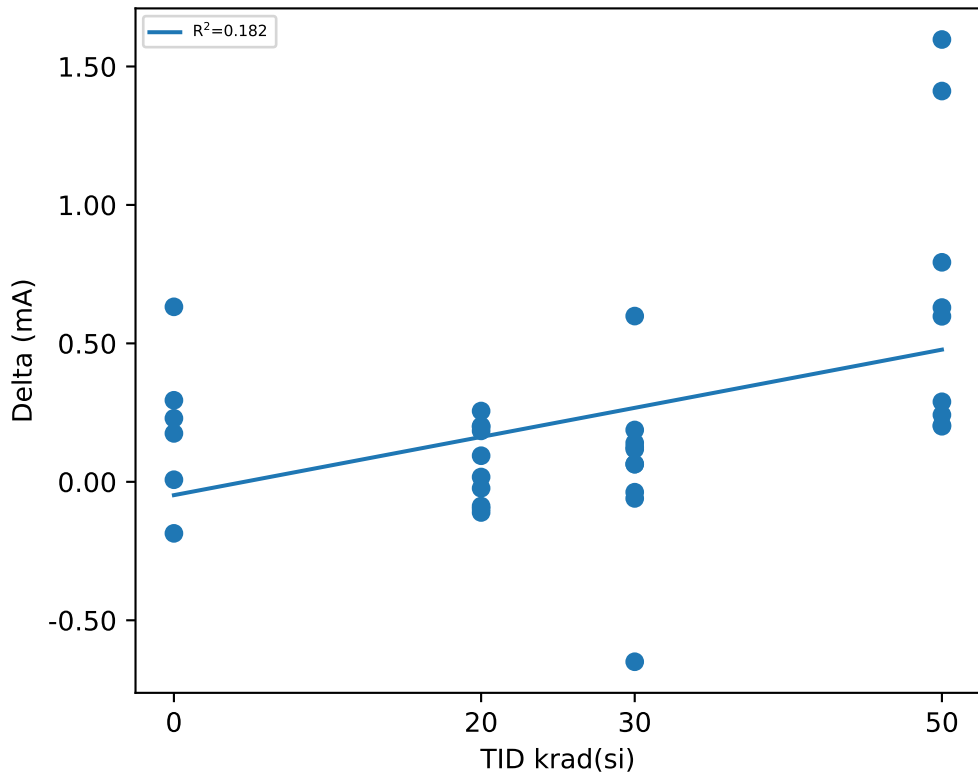
## TID vs Result Stats



## Test Results (Upper Limit = 20.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	11.853	11.743	-0.1107
2	20	HDR Unbiased	12.114	12.313	0.199
3	20	HDR Unbiased	12.012	11.915	-0.0971
23	20	HDR Unbiased	11.65	11.905	0.2557
24	20	HDR Unbiased	11.811	11.723	-0.0877
25	20	HDR Biased	11.745	11.722	-0.0231
26	20	HDR Biased	11.502	11.704	0.2014
27	20	HDR Biased	11.896	12.08	0.184
28	20	HDR Biased	11.356	11.373	0.0174
29	20	HDR Biased	11.858	11.952	0.0943
30	30	HDR Unbiased	12.195	11.545	-0.6497
31	30	HDR Unbiased	11.51	11.45	-0.0599
32	30	HDR Unbiased	12.245	12.207	-0.0374
33	30	HDR Unbiased	11.923	11.987	0.0637
34	30	HDR Unbiased	11.603	12.202	0.5986
35	30	HDR Biased	11.664	11.805	0.1407
36	30	HDR Biased	11.132	11.319	0.1873
37	30	HDR Biased	11.534	11.598	0.064
38	30	HDR Biased	11.974	12.099	0.1253
39	30	HDR Biased	11.613	11.731	0.1178
40	50	HDR Unbiased	12.292	12.496	0.204
41	50	HDR Unbiased	11.416	12.014	0.5977
42	50	HDR Unbiased	11.171	11.413	0.2417
43	50	HDR Unbiased	12.06	12.349	0.2891
44	50	HDR Unbiased		11.836	
50	0	CORRELATION	11.385	11.56	0.1749
51	0	CORRELATION	11.59	11.884	0.2945
52	0	CORRELATION	11.456	11.464	0.0076
53	0	CORRELATION	11.494	11.723	0.2294
54	0	CORRELATION	11.9	11.714	-0.1861
78	50	HDR Biased	11.604	12.396	0.7928
79	50	HDR Biased	11.693	11.893	0.2007
80	50	HDR Biased	11.368	12.779	1.4113
81	50	HDR Biased	10.727	11.357	0.6294
82	50	HDR Biased	11.329	12.926	1.5974
83	0	CORRELATION	11.933	12.565	0.632

## TID vs Post - Pre Exposure Delta

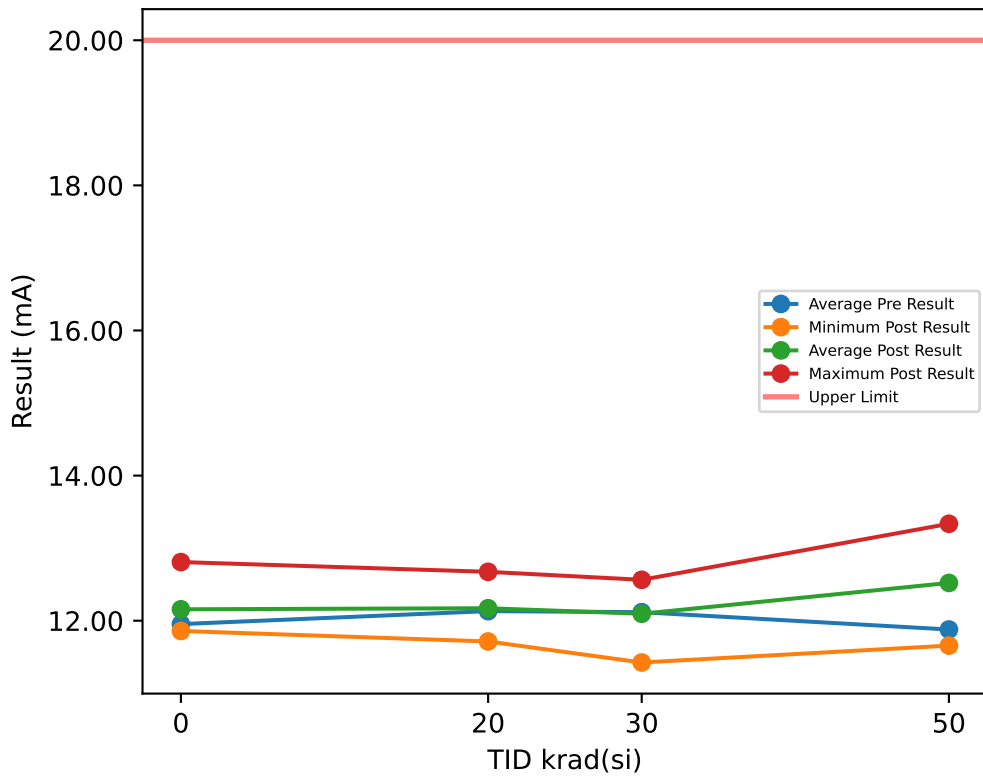


## Test Statistics (mA)

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	11.385	11.626	11.933	0.23451	11.464	11.818	12.565	0.39353	-0.1861	0.19205	0.632	0.27668
20	11.356	11.78	12.114	0.22781	11.373	11.843	12.313	0.25338	-0.1107	0.06332	0.2557	0.1408
30	11.132	11.739	12.245	0.34242	11.319	11.794	12.207	0.31896	-0.6497	0.05504	0.5986	0.30691
50	10.727	11.518	12.292	0.46718	11.357	12.146	12.926	0.53486	0.2007	0.66268	1.5974	0.52405

# Device Test: 11.16 IGND|SUPPLY/IN/5/3.3/7/2000//@I\_GND\_2A

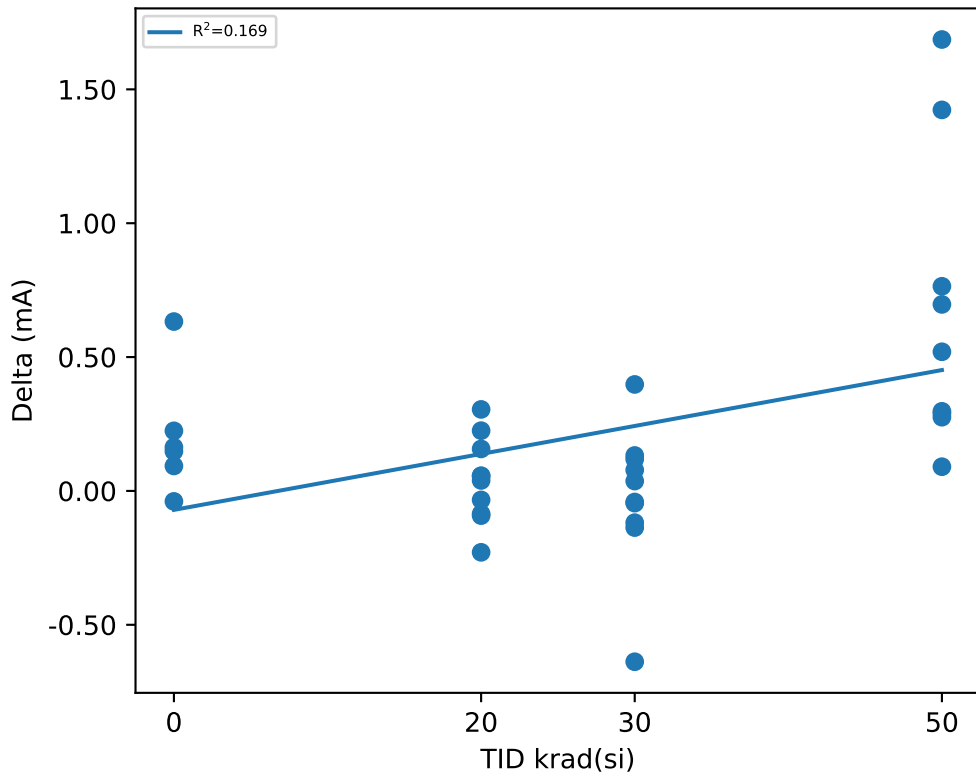
## TID vs Result Stats



## Test Results (Upper Limit = 20.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	12.171	12.138	-0.0335
2	20	HDR Unbiased	12.37	12.674	0.3045
3	20	HDR Unbiased	12.462	12.233	-0.2293
23	20	HDR Unbiased	12.052	12.277	0.2251
24	20	HDR Unbiased	12.168	12.224	0.0558
25	20	HDR Biased	12.094	12.008	-0.0854
26	20	HDR Biased	11.897	11.936	0.0392
27	20	HDR Biased	12.269	12.426	0.1569
28	20	HDR Biased	11.657	11.714	0.0567
29	20	HDR Biased	12.184	12.091	-0.0922
30	30	HDR Unbiased	12.52	11.882	-0.638
31	30	HDR Unbiased	11.889	11.753	-0.1369
32	30	HDR Unbiased	12.61	12.564	-0.0456
33	30	HDR Unbiased	12.257	12.293	0.0368
34	30	HDR Unbiased	12.083	12.481	0.3978
35	30	HDR Biased	12.083	12.161	0.0782
36	30	HDR Biased	11.466	11.424	-0.0413
37	30	HDR Biased	11.921	12.039	0.1187
38	30	HDR Biased	12.323	12.455	0.1325
39	30	HDR Biased	12.024	11.905	-0.1185
40	50	HDR Unbiased	12.602	12.899	0.2974
41	50	HDR Unbiased	11.905	12.424	0.5198
42	50	HDR Unbiased	11.566	11.657	0.0905
43	50	HDR Unbiased	12.393	12.682	0.2895
44	50	HDR Unbiased		12.254	
50	0	CORRELATION	11.695	11.859	0.1632
51	0	CORRELATION	11.977	12.202	0.2245
52	0	CORRELATION	11.773	11.867	0.0933
53	0	CORRELATION	11.943	12.091	0.148
54	0	CORRELATION	12.156	12.117	-0.0391
78	50	HDR Biased	11.927	12.691	0.7644
79	50	HDR Biased	12.014	12.289	0.2754
80	50	HDR Biased	11.719	13.142	1.4233
81	50	HDR Biased	11.136	11.832	0.6967
82	50	HDR Biased	11.65	13.336	1.6862
83	0	CORRELATION	12.176	12.809	0.6327

## TID vs Post - Pre Exposure Delta



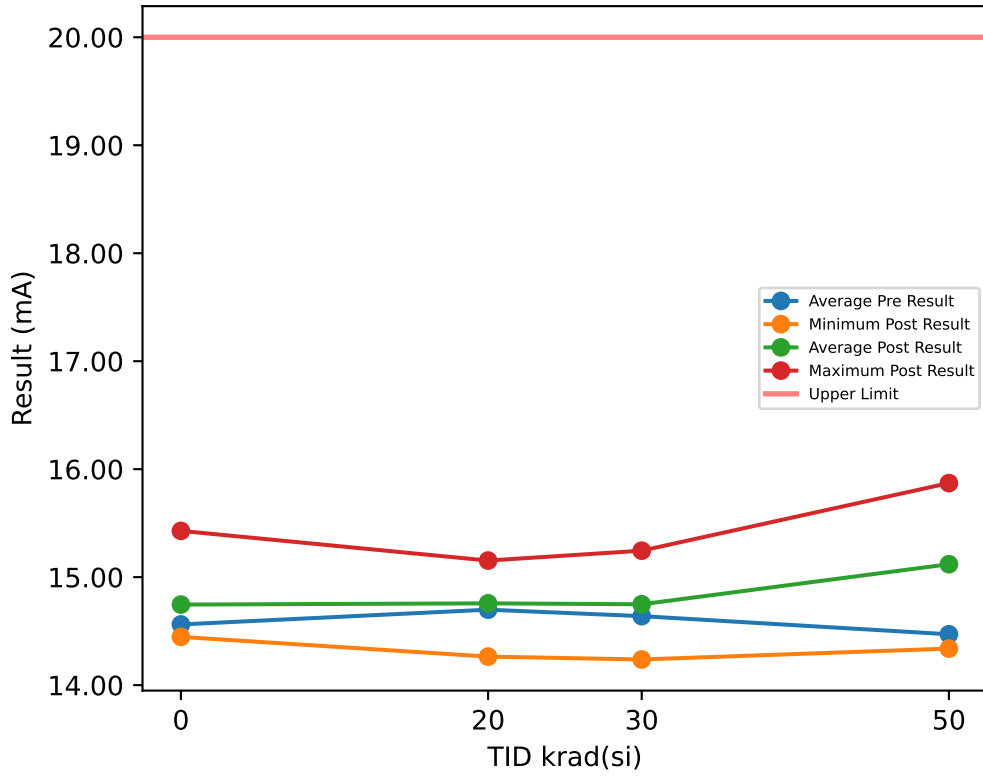
## Test Statistics (mA)

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	11.695	11.954	12.176	0.19496	11.859	12.157	12.809	0.34805	-0.0391	0.20377	0.6327	0.22819
20	11.657	12.132	12.462	0.23048	11.714	12.172	12.674	0.26534	-0.2293	0.03978	0.3045	0.1597
30	11.466	12.117	12.61	0.33212	11.424	12.096	12.564	0.36419	-0.638	-0.02163	0.3978	0.26589
50	11.136	11.879	12.602	0.43817	11.657	12.521	13.336	0.5378	0.0905	0.67147	1.6862	0.54857



# Device Test: 11.17 IGND|SUPPLY/IN/14/13.3/7/2000//@I\_GND\_2A

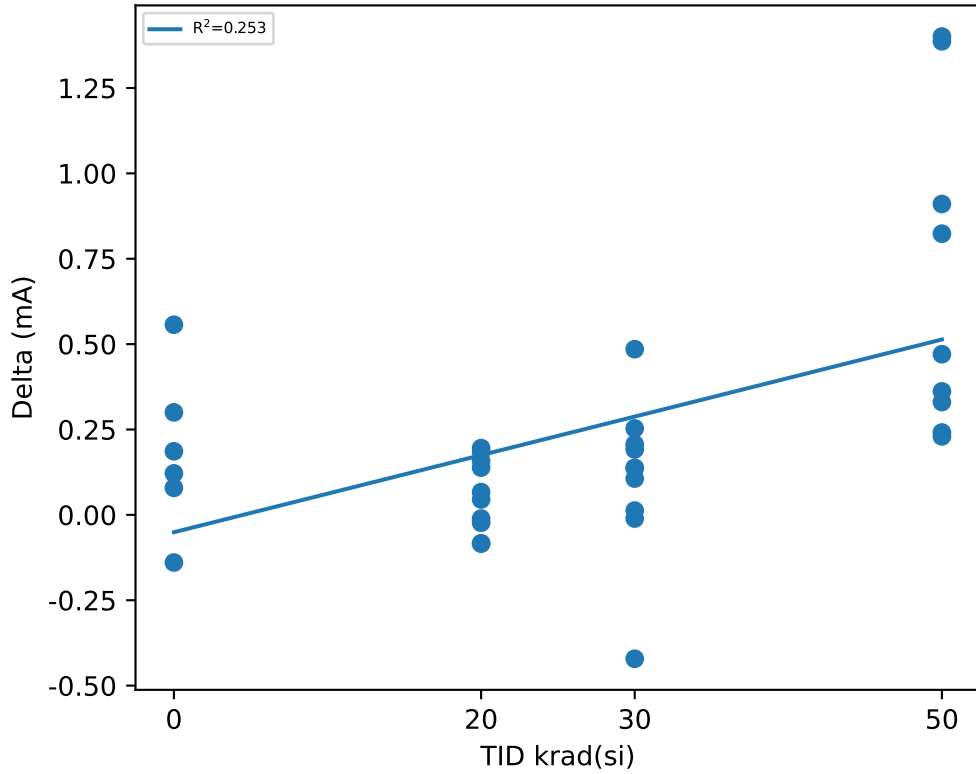
## TID vs Result Stats



## Test Results (Upper Limit = 20.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	14.729	14.718	-0.0108
2	20	HDR Unbiased	14.995	15.154	0.1584
3	20	HDR Unbiased	15.038	14.954	-0.0841
23	20	HDR Unbiased	14.585	14.78	0.1955
24	20	HDR Unbiased	14.767	14.812	0.0451
25	20	HDR Biased	14.558	14.535	-0.023
26	20	HDR Biased	14.577	14.494	-0.0834
27	20	HDR Biased	14.821	14.959	0.1383
28	20	HDR Biased	14.198	14.264	0.0667
29	20	HDR Biased	14.72	14.904	0.1838
30	30	HDR Unbiased	15.039	14.618	-0.4213
31	30	HDR Unbiased	14.438	14.427	-0.0107
32	30	HDR Unbiased	15.053	15.245	0.1917
33	30	HDR Unbiased	14.783	14.92	0.1371
34	30	HDR Unbiased	14.569	15.055	0.4852
35	30	HDR Biased	14.597	14.703	0.1063
36	30	HDR Biased	13.985	14.238	0.253
37	30	HDR Biased	14.5	14.512	0.0126
38	30	HDR Biased	14.937	15.075	0.1375
39	30	HDR Biased	14.489	14.695	0.2068
40	50	HDR Unbiased	15.204	15.566	0.3616
41	50	HDR Unbiased	14.442	14.912	0.4704
42	50	HDR Unbiased	14.109	14.338	0.2298
43	50	HDR Unbiased	15.042	15.372	0.3304
44	50	HDR Unbiased		14.803	
50	0	CORRELATION	14.325	14.447	0.1215
51	0	CORRELATION	14.504	14.69	0.1862
52	0	CORRELATION	14.407	14.486	0.0791
53	0	CORRELATION	14.465	14.765	0.3002
54	0	CORRELATION	14.799	14.659	-0.1395
78	50	HDR Biased	14.49	15.4	0.9103
79	50	HDR Biased	14.571	14.812	0.2412
80	50	HDR Biased	14.314	15.701	1.3867
81	50	HDR Biased	13.598	14.421	0.8234
82	50	HDR Biased	14.47	15.871	1.4008
83	0	CORRELATION	14.872	15.428	0.5568

## TID vs Post - Pre Exposure Delta



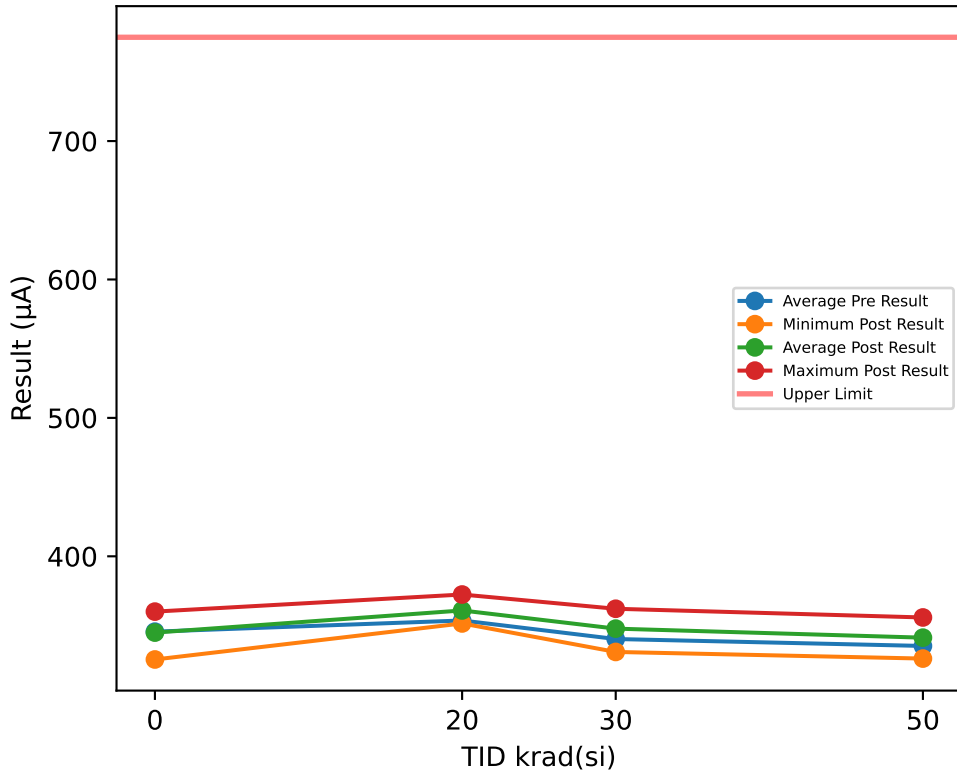
## Test Statistics (mA)

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	14.325	14.562	14.872	0.22125	14.447	14.746	15.428	0.35602	-0.1395	0.18405	0.5568	0.23326
20	14.198	14.699	15.038	0.24096	14.264	14.757	15.154	0.26351	-0.0841	0.05865	0.1955	0.10697
30	13.985	14.639	15.053	0.32648	14.238	14.749	15.245	0.31947	-0.4213	0.10982	0.4852	0.23217
50	13.598	14.471	15.204	0.47335	14.338	15.12	15.871	0.53535	0.2298	0.68384	1.4008	0.4684



# Device Test: 11.2 ISHDN|SUPPLY/IN/3.3//0/0//@I\_SHDN

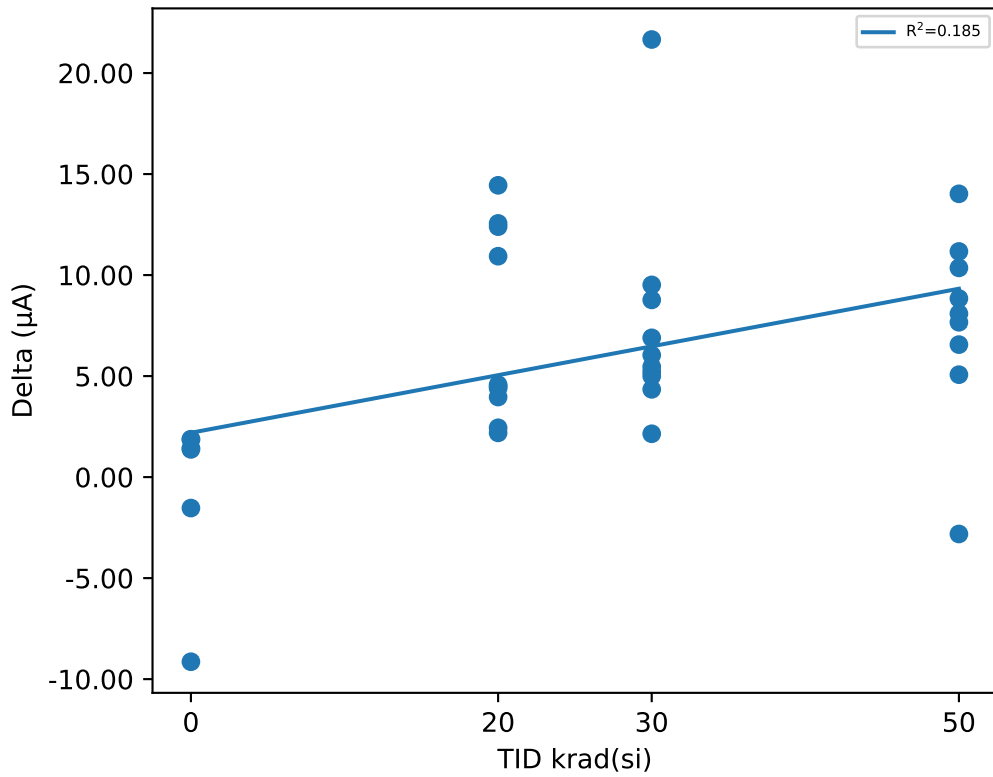
## TID vs Result Stats



## Test Results (Upper Limit = 775.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	342.51	355.07	12.558
2	20	HDR Unbiased	354.66	359.15	4.4929
3	20	HDR Unbiased	361.13	363.57	2.4414
23	20	HDR Unbiased	357.95	372.39	14.444
24	20	HDR Unbiased	353.54	358.12	4.5739
25	20	HDR Biased	352.22	354.41	2.1891
26	20	HDR Biased	353.88	357.85	3.9632
27	20	HDR Biased	355.62	366.55	10.934
28	20	HDR Biased	339.09	351.49	12.397
29	20	HDR Biased	365.72	370.12	4.3992
30	30	HDR Unbiased	334.24	355.9	21.66
31	30	HDR Unbiased	343.38	347.72	4.3439
32	30	HDR Unbiased	328.5	338.01	9.5142
33	30	HDR Unbiased	340.33	347.22	6.8939
34	30	HDR Unbiased	343.21	348.21	5.0003
35	30	HDR Biased	341.21	349.98	8.7721
36	30	HDR Biased	334.7	336.85	2.1451
37	30	HDR Biased	354.52	360.56	6.039
38	30	HDR Biased	356.88	362.1	5.2174
39	30	HDR Biased	325.44	330.9	5.4608
40	50	HDR Unbiased	344.11	355.28	11.169
41	50	HDR Unbiased	344.67	341.86	-2.8153
42	50	HDR Unbiased	345.72	353.81	8.0914
43	50	HDR Unbiased	346.97	355.81	8.8409
44	50	HDR Unbiased		326.11	
50	0	CORRELATION	323.58	325.45	1.8757
51	0	CORRELATION	340.92	342.78	1.8651
52	0	CORRELATION	358.67	360.04	1.3715
53	0	CORRELATION	346.99	348.42	1.4338
54	0	CORRELATION	358.43	349.29	-9.1391
78	50	HDR Biased	336.54	344.2	7.664
79	50	HDR Biased	333.05	339.61	6.5583
80	50	HDR Biased	321.76	326.83	5.0698
81	50	HDR Biased	323.95	337.97	14.022
82	50	HDR Biased	320.32	330.68	10.356
83	0	CORRELATION	344.8	343.27	-1.5319

## TID vs Post - Pre Exposure Delta

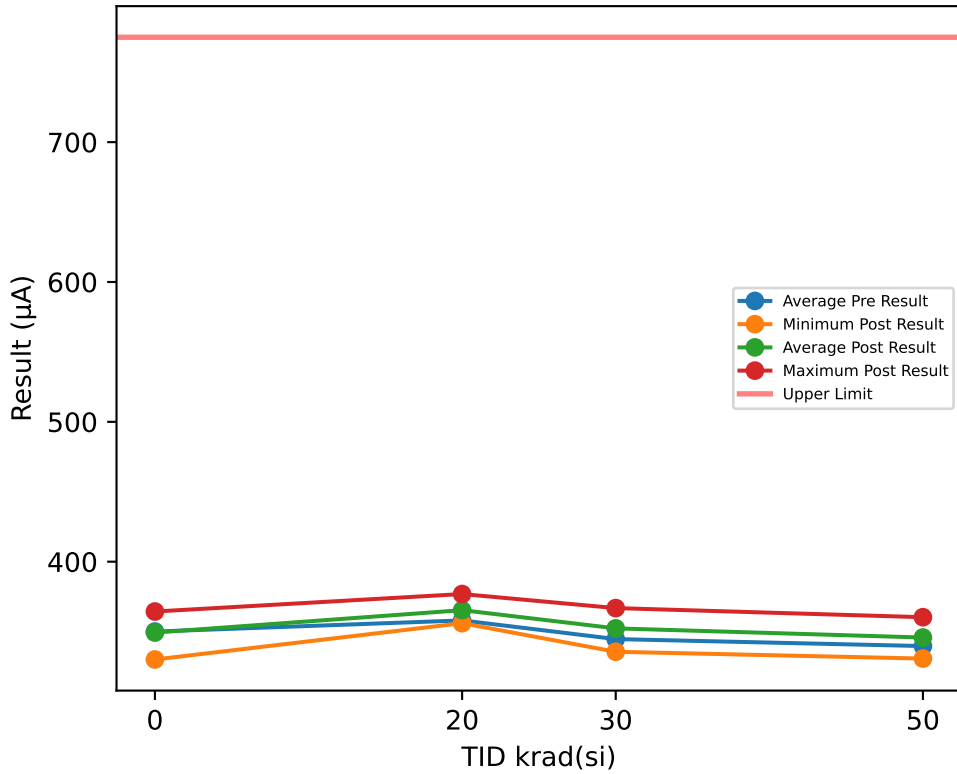


## Test Statistics (µA)

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	323.58	345.56	358.67	12.999	325.45	344.88	360.04	11.368	-9.1391	-0.68748	1.8757	4.3352
20	339.09	353.63	365.72	7.9117	351.49	360.87	372.39	7.001	2.1891	7.2391	14.444	4.7423
30	325.44	340.24	356.88	10.132	330.9	347.75	362.1	10.216	2.1451	7.5047	21.66	5.4052
50	320.32	335.23	346.97	10.917	326.11	341.22	355.81	11.245	-2.8153	7.6619	14.022	4.7342

# Device Test: 11.3 ISHDN|SUPPLY/IN/5//0/0//@I\_SHDN

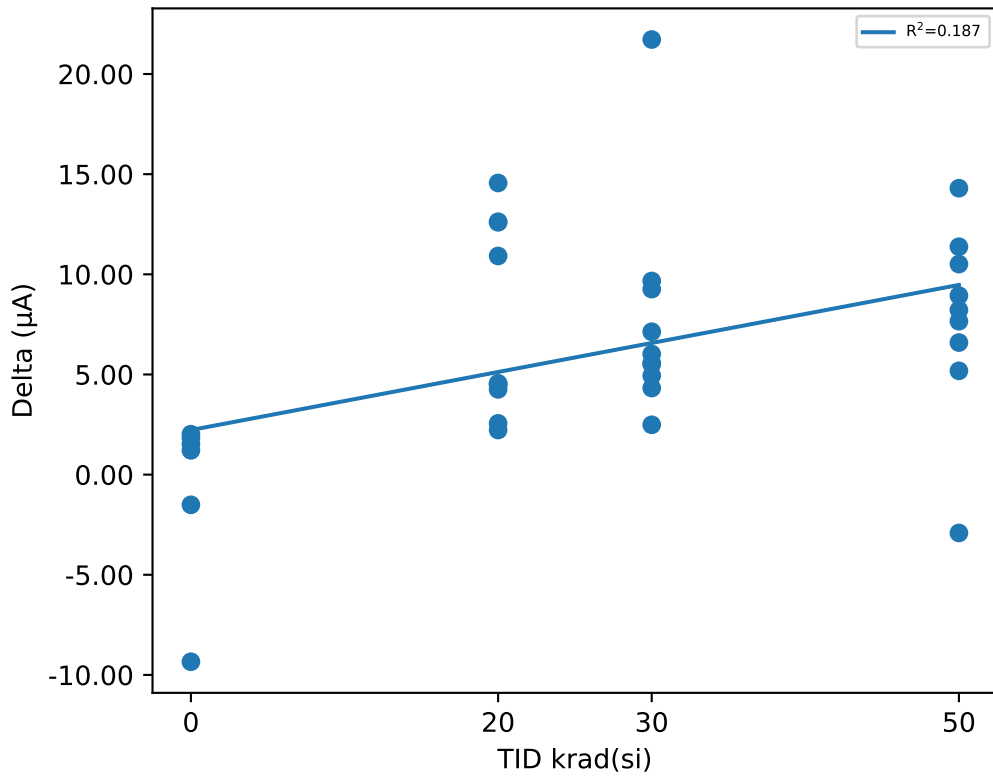
## TID vs Result Stats



## Test Results (Upper Limit = 775.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	346.91	359.5	12.596
2	20	HDR Unbiased	359.11	363.66	4.5521
3	20	HDR Unbiased	365.49	368.05	2.5591
23	20	HDR Unbiased	362.3	376.86	14.561
24	20	HDR Unbiased	357.94	362.42	4.4775
25	20	HDR Biased	356.64	358.87	2.2274
26	20	HDR Biased	358.2	362.46	4.2554
27	20	HDR Biased	360.07	370.99	10.916
28	20	HDR Biased	343.38	356.01	12.625
29	20	HDR Biased	369.98	374.52	4.5385
30	30	HDR Unbiased	338.8	360.52	21.723
31	30	HDR Unbiased	347.77	352.09	4.3224
32	30	HDR Unbiased	332.95	342.62	9.6683
33	30	HDR Unbiased	344.77	351.9	7.1332
34	30	HDR Unbiased	347.66	352.6	4.9409
35	30	HDR Biased	345.39	354.65	9.2601
36	30	HDR Biased	338.91	341.4	2.4885
37	30	HDR Biased	358.99	365.02	6.0206
38	30	HDR Biased	361.3	366.81	5.5079
39	30	HDR Biased	330.01	335.58	5.577
40	50	HDR Unbiased	348.46	359.83	11.377
41	50	HDR Unbiased	349.11	346.19	-2.9123
42	50	HDR Unbiased	350.12	358.34	8.2182
43	50	HDR Unbiased	351.36	360.3	8.9381
44	50	HDR Unbiased		330.72	
50	0	CORRELATION	328.04	330.06	2.0191
51	0	CORRELATION	345.46	347.29	1.838
52	0	CORRELATION	363.15	364.36	1.2121
53	0	CORRELATION	351.43	352.95	1.5193
54	0	CORRELATION	362.86	353.51	-9.3416
78	50	HDR Biased	340.99	348.65	7.6584
79	50	HDR Biased	337.54	344.13	6.5931
80	50	HDR Biased	326.11	331.29	5.1817
81	50	HDR Biased	328.53	342.83	14.299
82	50	HDR Biased	324.76	335.27	10.511
83	0	CORRELATION	349.24	347.74	-1.5068

## TID vs Post - Pre Exposure Delta

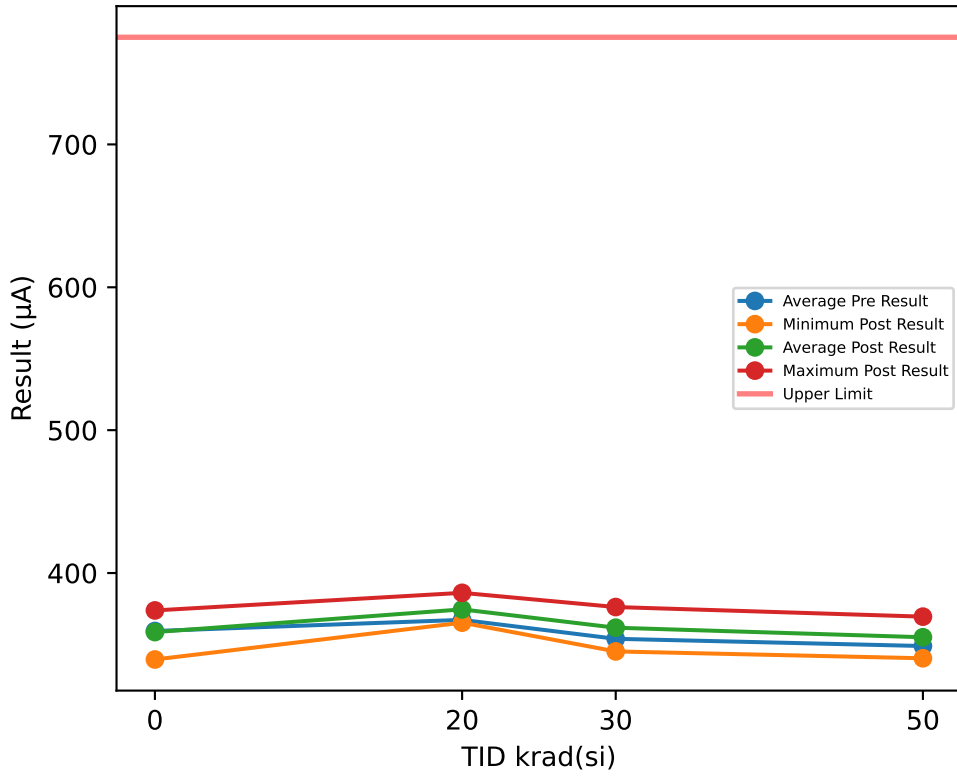


## Test Statistics (µA)

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	328.04	350.03	363.15	12.988	330.06	349.32	364.36	11.264	-9.3416	-0.70998	2.0191	4.4214
20	343.38	358	369.98	7.905	356.01	365.33	376.86	6.9848	2.2274	7.3309	14.561	4.7472
30	330.01	344.66	361.3	10.115	335.58	352.32	366.81	10.206	2.4885	7.6642	21.723	5.3911
50	324.76	339.66	351.36	10.89	330.72	345.76	360.3	11.22	-2.9123	7.7627	14.299	4.8338

# Device Test: 11.4 ISHDN|SUPPLY/IN/7//0/0//@I\_SHDN

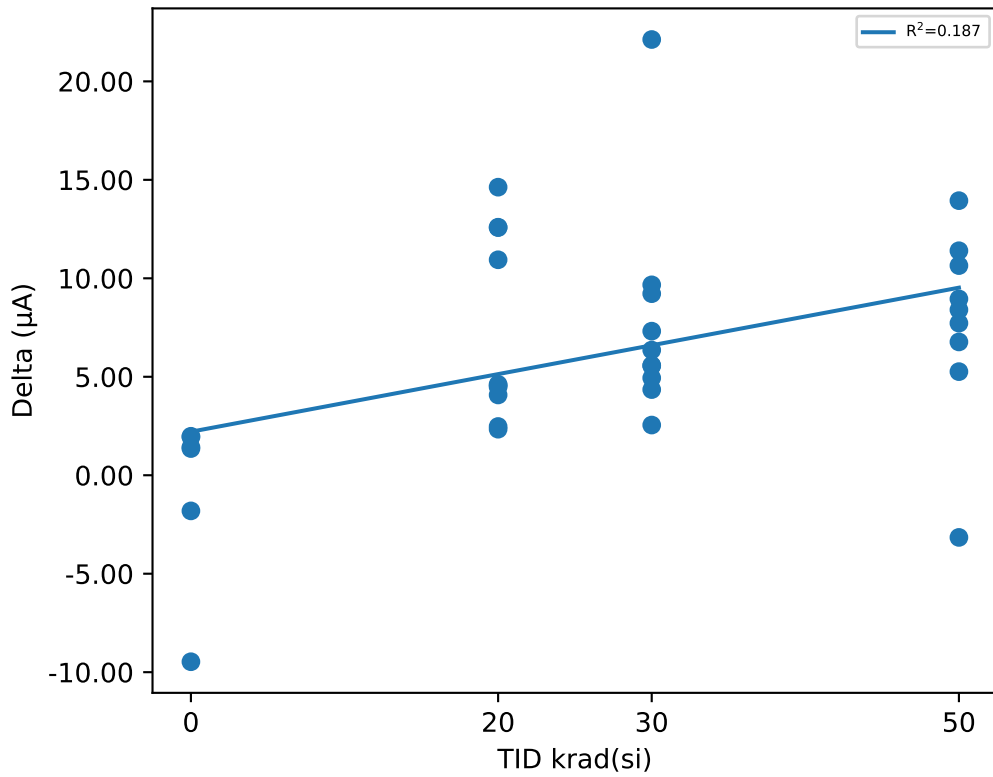
## TID vs Result Stats



## Test Results (Upper Limit = 775.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	356.24	368.81	12.576
2	20	HDR Unbiased	368.22	372.83	4.6157
3	20	HDR Unbiased	374.85	377.33	2.4754
23	20	HDR Unbiased	371.51	386.14	14.628
24	20	HDR Unbiased	367.04	371.52	4.4842
25	20	HDR Biased	365.82	368.16	2.3383
26	20	HDR Biased	367.4	371.48	4.077
27	20	HDR Biased	369.33	380.27	10.941
28	20	HDR Biased	352.67	365.26	12.594
29	20	HDR Biased	379.15	383.71	4.5636
30	30	HDR Unbiased	347.9	370.02	22.126
31	30	HDR Unbiased	357.02	361.37	4.3499
32	30	HDR Unbiased	342.28	351.95	9.6684
33	30	HDR Unbiased	354.12	361.43	7.3168
34	30	HDR Unbiased	357.03	361.98	4.9413
35	30	HDR Biased	354.89	364.11	9.2198
36	30	HDR Biased	347.95	350.5	2.5491
37	30	HDR Biased	368.26	374.61	6.3569
38	30	HDR Biased	370.62	376.2	5.5803
39	30	HDR Biased	339.58	345.13	5.5548
40	50	HDR Unbiased	357.78	369.18	11.4
41	50	HDR Unbiased	358.53	355.37	-3.1563
42	50	HDR Unbiased	359.55	367.96	8.4029
43	50	HDR Unbiased	360.52	369.47	8.9531
44	50	HDR Unbiased		340.34	
50	0	CORRELATION	337.51	339.49	1.9791
51	0	CORRELATION	354.74	356.68	1.9402
52	0	CORRELATION	372.46	373.82	1.3555
53	0	CORRELATION	360.85	362.27	1.4274
54	0	CORRELATION	372.2	362.73	-9.4695
78	50	HDR Biased	350.02	357.74	7.7228
79	50	HDR Biased	346.9	353.67	6.7693
80	50	HDR Biased	335.14	340.4	5.2613
81	50	HDR Biased	337.91	351.85	13.943
82	50	HDR Biased	333.84	344.49	10.646
83	0	CORRELATION	358.79	356.98	-1.8101

## TID vs Post - Pre Exposure Delta

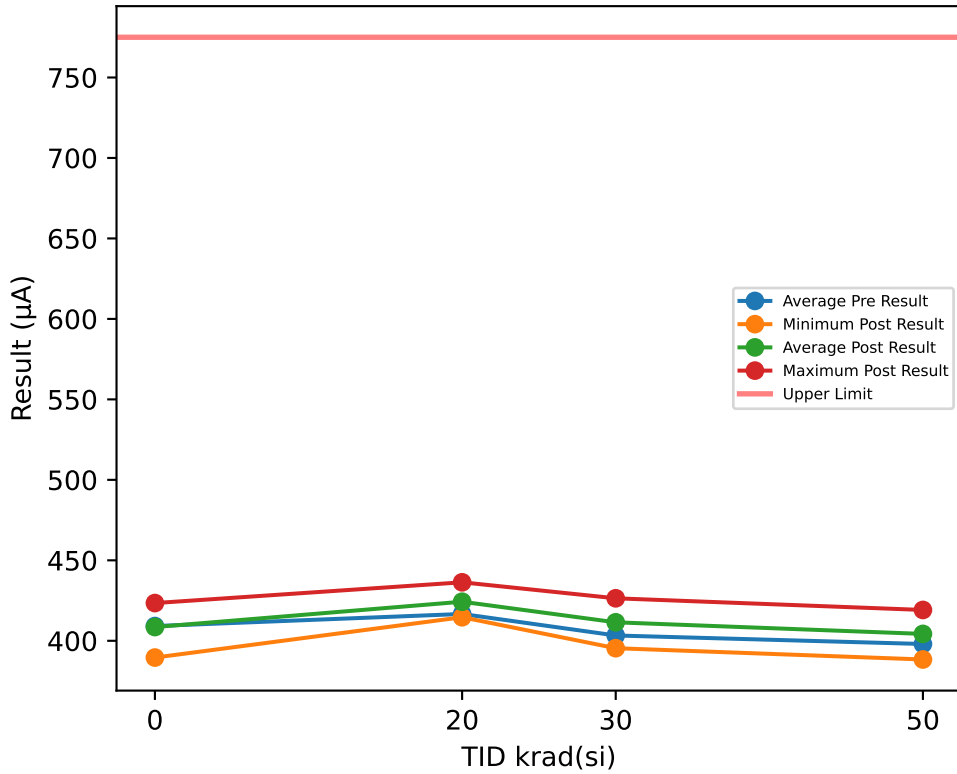


## Test Statistics (µA)

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	337.51	359.42	372.46	12.945	339.49	358.66	373.82	11.258	-9.4695	-0.7629	1.9791	4.4947
20	352.67	367.22	379.15	7.8799	365.26	374.55	386.14	6.9948	2.3383	7.3293	14.628	4.7576
30	339.58	353.96	370.62	10.099	345.13	361.73	376.2	10.26	2.5491	7.7663	22.126	5.4838
50	333.84	348.91	360.52	10.966	340.34	355.05	369.47	11.236	-3.1563	7.7713	13.943	4.8482

# Device Test: 11.5 ISHDN|SUPPLY/IN/12//0/0//@I\_SHDN

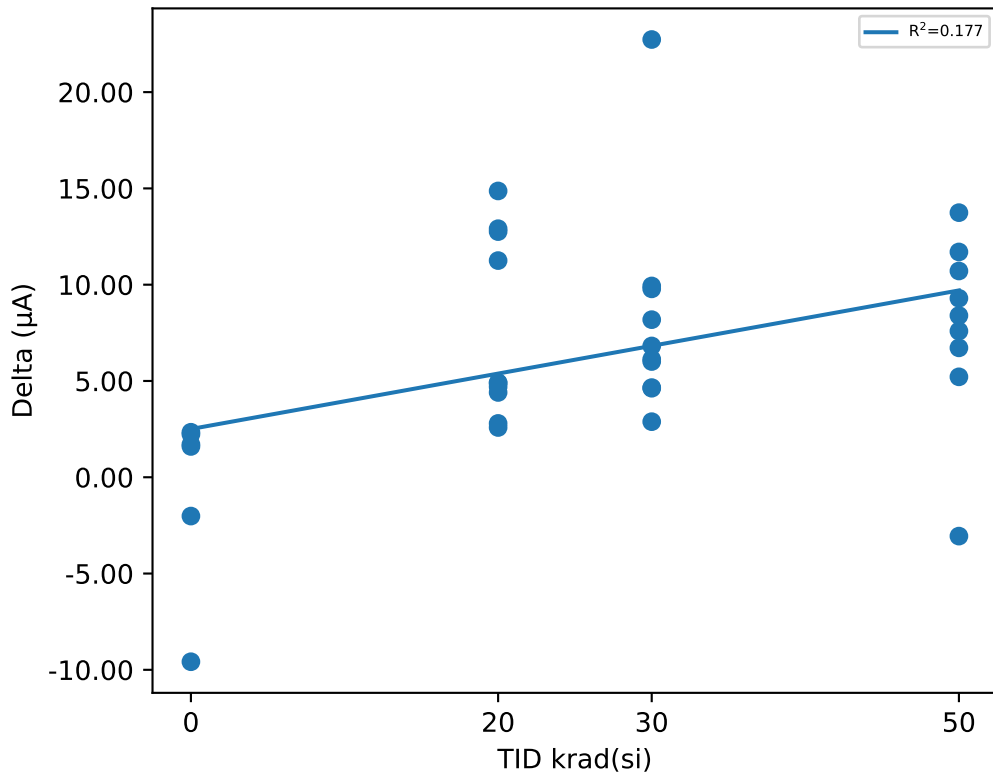
## TID vs Result Stats



## Test Results (Upper Limit = 775.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	405.7	418.45	12.757
2	20	HDR Unbiased	417.74	422.63	4.8932
3	20	HDR Unbiased	424.55	427.14	2.5841
23	20	HDR Unbiased	421.47	436.34	14.868
24	20	HDR Unbiased	415.85	420.55	4.7003
25	20	HDR Biased	415.22	418.02	2.7956
26	20	HDR Biased	416.83	421.23	4.4036
27	20	HDR Biased	418.9	430.15	11.252
28	20	HDR Biased	401.73	414.64	12.907
29	20	HDR Biased	428.69	433.6	4.912
30	30	HDR Unbiased	397.41	420.14	22.732
31	30	HDR Unbiased	405.84	410.46	4.623
32	30	HDR Unbiased	391.88	401.81	9.9344
33	30	HDR Unbiased	403.13	411.31	8.184
34	30	HDR Unbiased	406.72	411.38	4.6561
35	30	HDR Biased	404.59	414.38	9.7834
36	30	HDR Biased	395.68	398.56	2.8864
37	30	HDR Biased	418.15	424.97	6.8185
38	30	HDR Biased	420.28	426.41	6.1309
39	30	HDR Biased	389.39	395.4	6.01
40	50	HDR Unbiased	407.46	419.16	11.7
41	50	HDR Unbiased	408.23	405.17	-3.0568
42	50	HDR Unbiased	409.41	417.81	8.3973
43	50	HDR Unbiased	409.74	419.03	9.2949
44	50	HDR Unbiased		390.37	
50	0	CORRELATION	387.25	389.58	2.3375
51	0	CORRELATION	404.48	406.72	2.231
52	0	CORRELATION	421.84	423.44	1.5999
53	0	CORRELATION	410.73	412.43	1.707
54	0	CORRELATION	422.06	412.48	-9.5803
78	50	HDR Biased	398.25	405.84	7.5913
79	50	HDR Biased	396.85	403.57	6.7199
80	50	HDR Biased	383.17	388.39	5.215
81	50	HDR Biased	387.07	400.81	13.741
82	50	HDR Biased	381.94	392.65	10.712
83	0	CORRELATION	408.61	406.6	-2.0156

## TID vs Post - Pre Exposure Delta

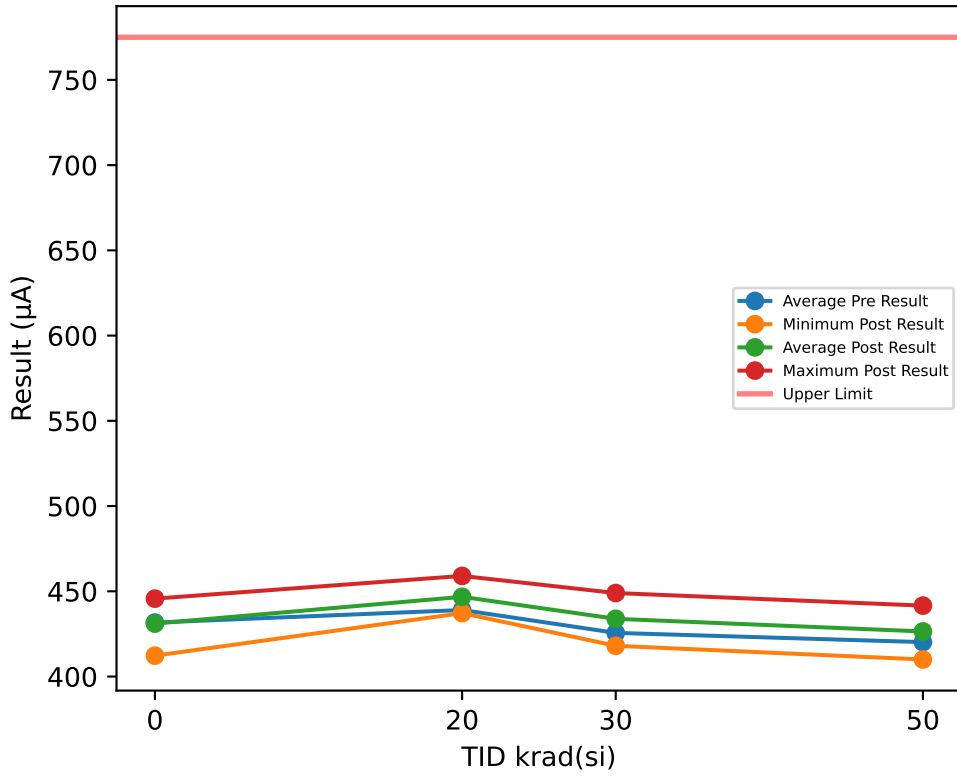


## Test Statistics (µA)

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	387.25	409.16	422.06	12.901	389.58	408.54	423.44	11.129	-9.5803	-0.62008	2.3375	4.6787
20	401.73	416.67	428.69	8.0413	414.64	424.28	436.34	7.2025	2.5841	7.6073	14.868	4.7416
30	389.39	403.31	420.28	10.249	395.4	411.48	426.41	10.584	2.8864	8.1759	22.732	5.5904
50	381.94	398.01	409.74	11.515	388.39	404.28	419.16	11.639	-3.0568	7.8128	13.741	4.8392

# Device Test: 11.6 ISHDN|SUPPLY/IN/14//0/0//@I\_SHDN

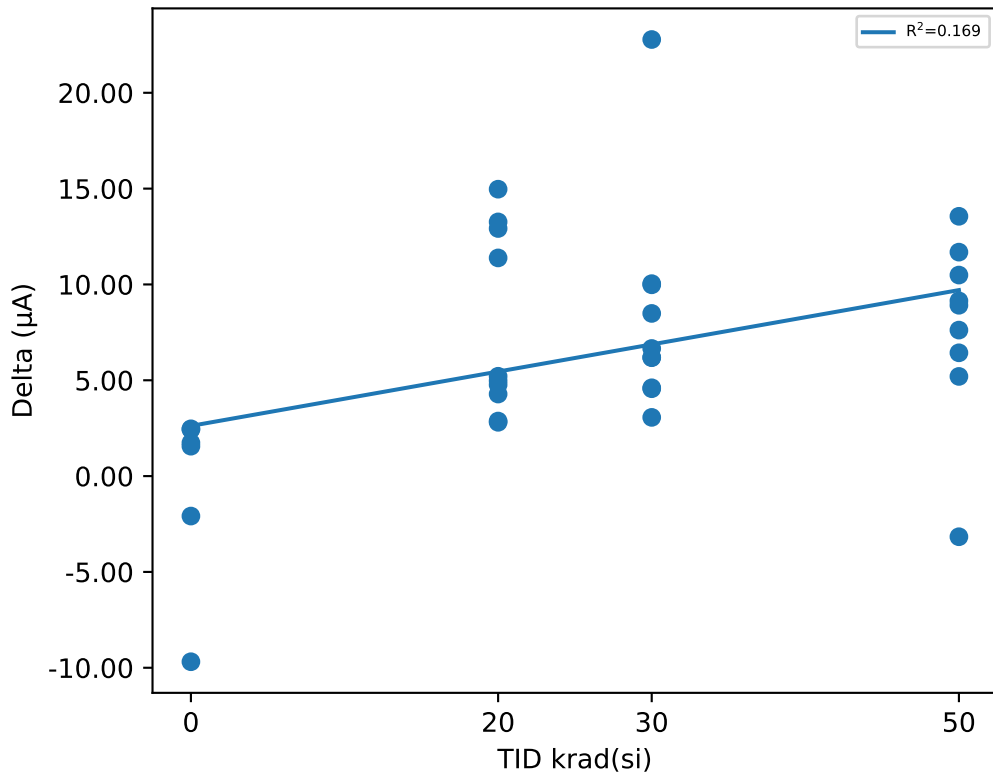
## TID vs Result Stats



## Test Results (Upper Limit = 775.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	428.08	441	12.92
2	20	HDR Unbiased	440.07	445.04	4.9716
3	20	HDR Unbiased	447.09	449.9	2.8071
23	20	HDR Unbiased	444.05	459.02	14.97
24	20	HDR Unbiased	437.95	442.71	4.7653
25	20	HDR Biased	437.54	440.41	2.8722
26	20	HDR Biased	439.29	443.57	4.2814
27	20	HDR Biased	441.21	452.59	11.384
28	20	HDR Biased	423.94	437.21	13.263
29	20	HDR Biased	451.07	456.28	5.2094
30	30	HDR Unbiased	419.87	442.65	22.78
31	30	HDR Unbiased	428.02	432.58	4.5595
32	30	HDR Unbiased	414.24	424.28	10.042
33	30	HDR Unbiased	425.3	433.79	8.4881
34	30	HDR Unbiased	429.13	433.74	4.6081
35	30	HDR Biased	427.05	437.03	9.9812
36	30	HDR Biased	417.1	420.17	3.064
37	30	HDR Biased	440.76	447.42	6.6588
38	30	HDR Biased	442.79	448.99	6.1988
39	30	HDR Biased	411.86	418.04	6.1779
40	50	HDR Unbiased	429.92	441.61	11.686
41	50	HDR Unbiased	430.8	427.63	-3.1639
42	50	HDR Unbiased	431.8	440.72	8.9138
43	50	HDR Unbiased	432.01	441.16	9.1424
44	50	HDR Unbiased		412.87	
50	0	CORRELATION	409.79	412.25	2.4667
51	0	CORRELATION	427.01	429.44	2.4358
52	0	CORRELATION	444.15	445.71	1.5609
53	0	CORRELATION	433.23	434.96	1.7382
54	0	CORRELATION	444.64	434.95	-9.6859
78	50	HDR Biased	420.08	427.7	7.618
79	50	HDR Biased	419.23	425.66	6.4329
80	50	HDR Biased	404.81	410.01	5.201
81	50	HDR Biased	409.29	422.85	13.556
82	50	HDR Biased	403.82	414.3	10.49
83	0	CORRELATION	431.14	429.06	-2.085

## TID vs Post - Pre Exposure Delta

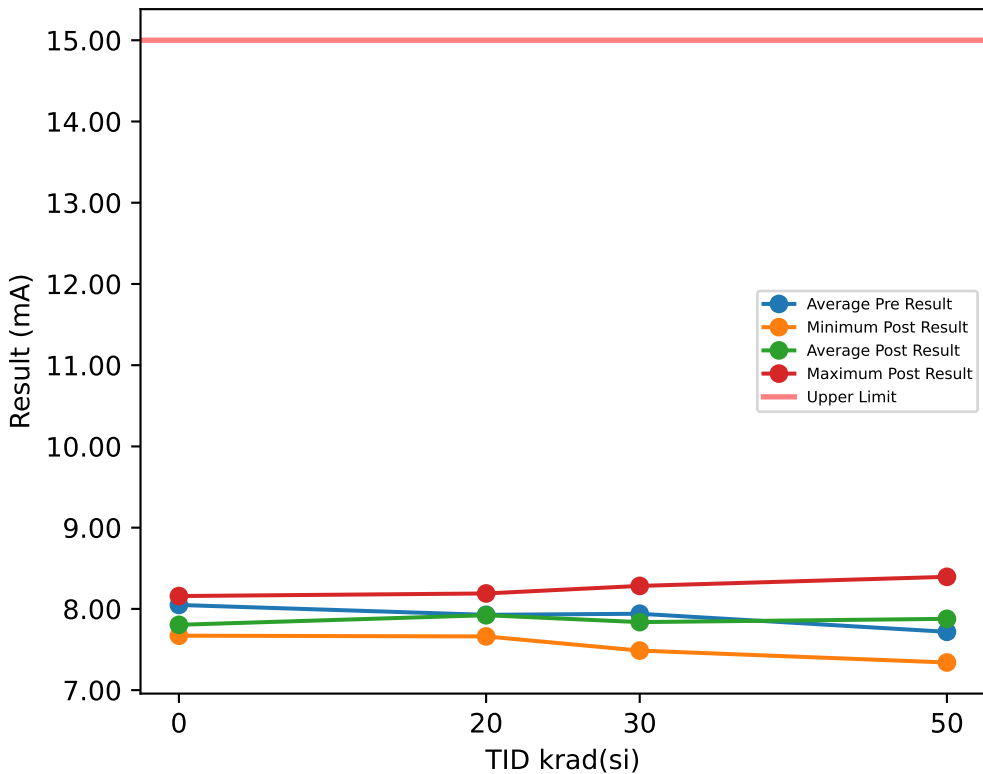


## Test Statistics (µA)

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	409.79	431.66	444.64	12.861	412.25	431.06	445.71	11.002	-9.6859	-0.59488	2.4667	4.7648
20	423.94	439.03	451.07	8.1094	437.21	446.77	459.02	7.2959	2.8071	7.7444	14.97	4.7819
30	411.86	425.61	442.79	10.374	418.04	433.87	448.99	10.704	3.064	8.2558	22.78	5.5996
50	403.82	420.2	432.01	11.76	410.01	426.45	441.61	11.872	-3.1639	7.7639	13.556	4.8394

# Device Test: 11.7 IQ|SUPPLY/IN/2.25/0.6/7/0//@I\_Q

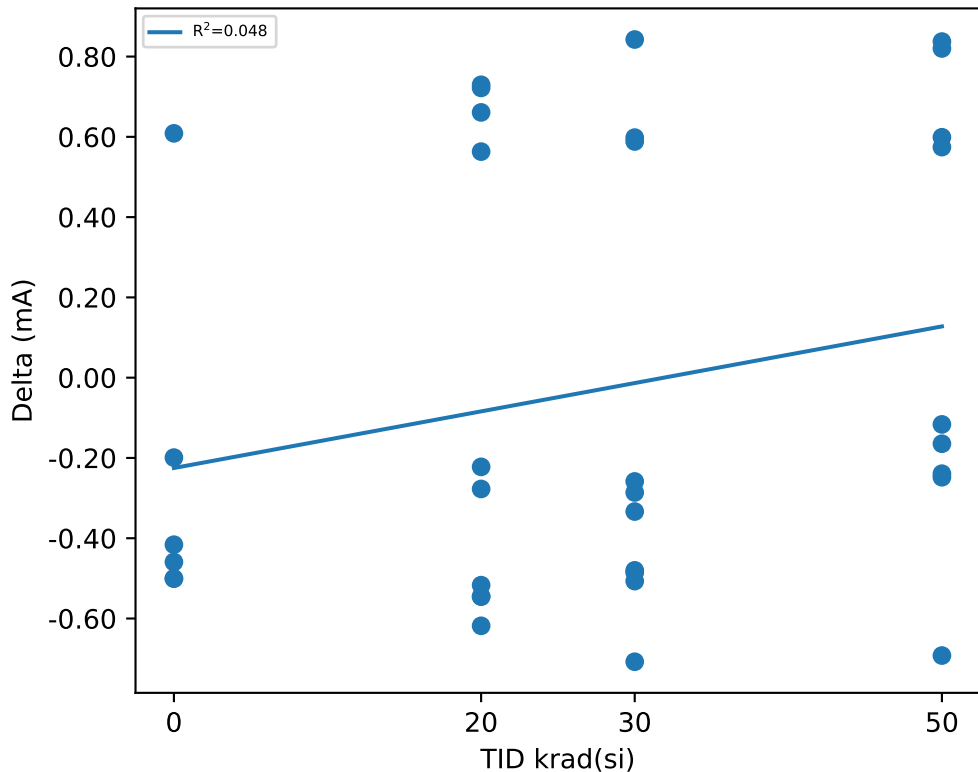
## TID vs Result Stats



## Test Results (Upper Limit = 15.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	8.1591	7.9369	-0.2222
2	20	HDR Unbiased	7.4603	8.19	0.7297
3	20	HDR Unbiased	8.6628	8.1175	-0.5453
23	20	HDR Unbiased	7.2029	7.9248	0.7219
24	20	HDR Unbiased	8.4233	7.8051	-0.6182
25	20	HDR Biased	8.1046	7.8274	-0.2772
26	20	HDR Biased	7.2477	7.8109	0.5632
27	20	HDR Biased	8.5121	7.9669	-0.5452
28	20	HDR Biased	7.0003	7.6612	0.6609
29	20	HDR Biased	8.4966	7.9797	-0.5169
30	30	HDR Unbiased	8.3874	7.6797	-0.7077
31	30	HDR Unbiased	7.0712	7.6693	0.5981
32	30	HDR Unbiased	8.7898	8.283	-0.5068
33	30	HDR Unbiased	8.1911	7.8576	-0.3335
34	30	HDR Unbiased	7.1629	8.0054	0.8425
35	30	HDR Biased	8.3443	7.8586	-0.4857
36	30	HDR Biased	7.7454	7.4869	-0.2585
37	30	HDR Biased	7.1497	7.7381	0.5884
38	30	HDR Biased	8.5877	8.1077	-0.48
39	30	HDR Biased	7.9729	7.6869	-0.286
40	50	HDR Unbiased	7.5574	8.3948	0.8374
41	50	HDR Unbiased	8.2318	8.0672	-0.1646
42	50	HDR Unbiased	7.6966	7.4485	-0.2481
43	50	HDR Unbiased	7.4802	8.3004	0.8202
44	50	HDR Unbiased		7.9456	
50	0	CORRELATION	8.2216	7.7212	-0.5004
51	0	CORRELATION	7.9704	7.7713	-0.1991
52	0	CORRELATION	7.0614	7.6701	0.6087
53	0	CORRELATION	8.2441	7.7436	-0.5005
54	0	CORRELATION	8.1762	7.7601	-0.4161
78	50	HDR Biased	8.2572	8.1408	-0.1164
79	50	HDR Biased	7.2119	7.7863	0.5744
80	50	HDR Biased	8.3887	7.6964	-0.6923
81	50	HDR Biased	7.5795	7.3403	-0.2392
82	50	HDR Biased	7.057	7.656	0.599
83	0	CORRELATION	8.6173	8.1581	-0.4592

## TID vs Post - Pre Exposure Delta



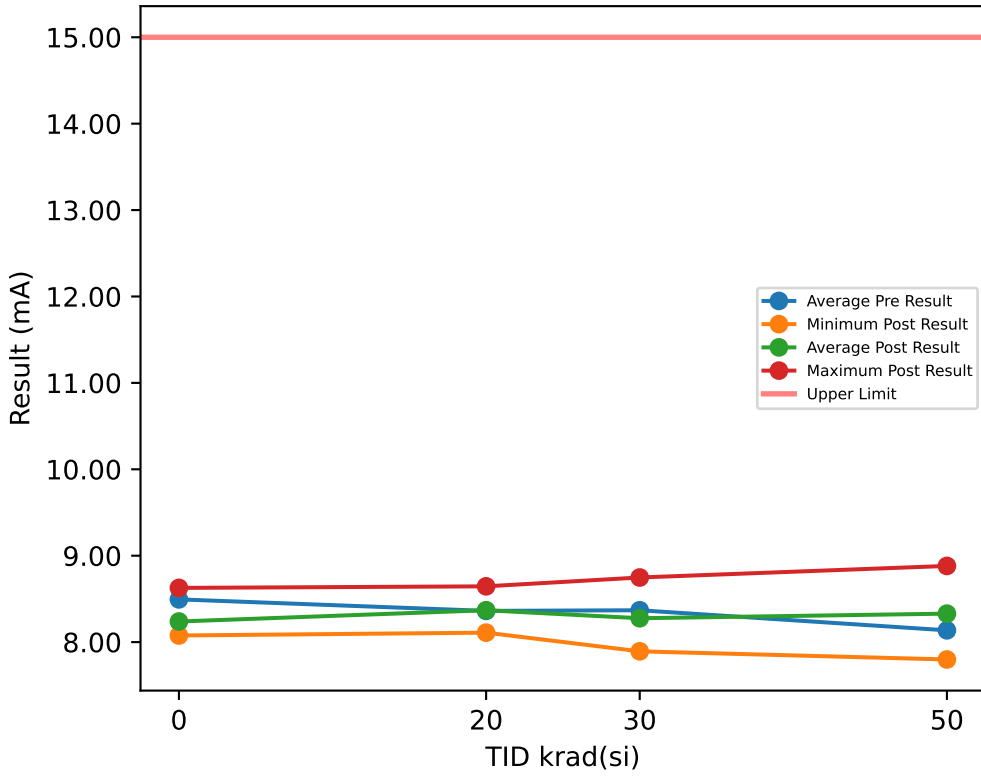
## Test Statistics (mA)

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	7.0614	8.0485	8.6173	0.52698	7.6701	7.8041	8.1581	0.1771	-0.5005	-0.24443	0.6087	0.4328
20	7.0003	7.927	8.6628	0.63265	7.6612	7.922	8.19	0.15585	-0.6182	-0.00493	0.7297	0.59419
30	7.0712	7.9402	8.7898	0.63163	7.4869	7.8373	8.283	0.23786	-0.7077	-0.10292	0.8425	0.55694
50	7.057	7.7178	8.3887	0.47429	7.3403	7.8776	8.3948	0.35264	-0.6923	0.15227	0.8374	0.5582



# Device Test: 11.9 IQ|SUPPLY/IN/14/0.6/7/0//@I\_Q

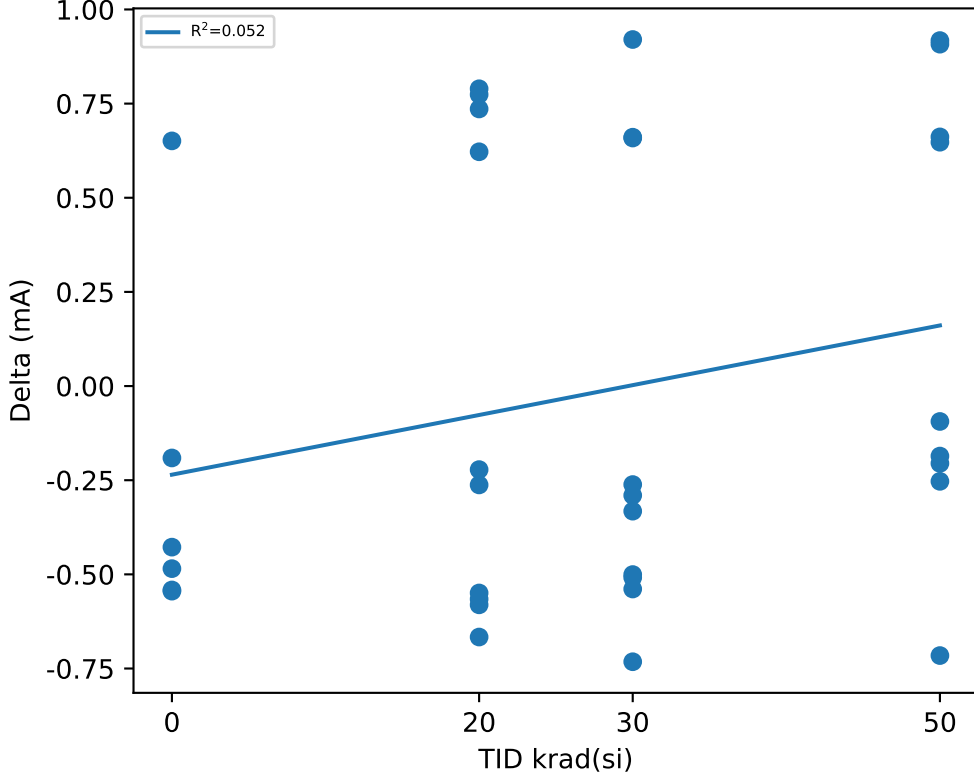
## TID vs Result Stats



## Test Results (Upper Limit = 15.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	8.5975	8.3757	-0.2218
2	20	HDR Unbiased	7.8561	8.6455	0.7894
3	20	HDR Unbiased	9.1545	8.5888	-0.5657
23	20	HDR Unbiased	7.5928	8.3669	0.7741
24	20	HDR Unbiased	8.8986	8.2322	-0.6664
25	20	HDR Biased	8.5328	8.2703	-0.2625
26	20	HDR Biased	7.6292	8.2513	0.6221
27	20	HDR Biased	9.0018	8.4209	-0.5809
28	20	HDR Biased	7.3736	8.1094	0.7358
29	20	HDR Biased	8.9771	8.4277	-0.5494
30	30	HDR Unbiased	8.843	8.111	-0.732
31	30	HDR Unbiased	7.4336	8.0944	0.6608
32	30	HDR Unbiased	9.2867	8.7478	-0.5389
33	30	HDR Unbiased	8.6213	8.2891	-0.3322
34	30	HDR Unbiased	7.5376	8.4578	0.9202
35	30	HDR Biased	8.7993	8.2909	-0.5084
36	30	HDR Biased	8.1548	7.8933	-0.2615
37	30	HDR Biased	7.5204	8.179	0.6586
38	30	HDR Biased	9.0734	8.5729	-0.5005
39	30	HDR Biased	8.4173	8.1271	-0.2902
40	50	HDR Unbiased	7.9642	8.8816	0.9174
41	50	HDR Unbiased	8.7024	8.5165	-0.1859
42	50	HDR Unbiased	8.1204	7.8674	-0.253
43	50	HDR Unbiased	7.8676	8.7754	0.9078
44	50	HDR Unbiased		8.3858	
50	0	CORRELATION	8.6784	8.1338	-0.5446
51	0	CORRELATION	8.4062	8.2153	-0.1909
52	0	CORRELATION	7.4257	8.0767	0.651
53	0	CORRELATION	8.7126	8.1712	-0.5414
54	0	CORRELATION	8.6326	8.2049	-0.4277
78	50	HDR Biased	8.7057	8.6117	-0.094
79	50	HDR Biased	7.6001	8.2476	0.6475
80	50	HDR Biased	8.8323	8.1167	-0.7156
81	50	HDR Biased	8.0042	7.7989	-0.2053
82	50	HDR Biased	7.4312	8.0928	0.6616
83	0	CORRELATION	9.1123	8.6275	-0.4848

## TID vs Post - Pre Exposure Delta

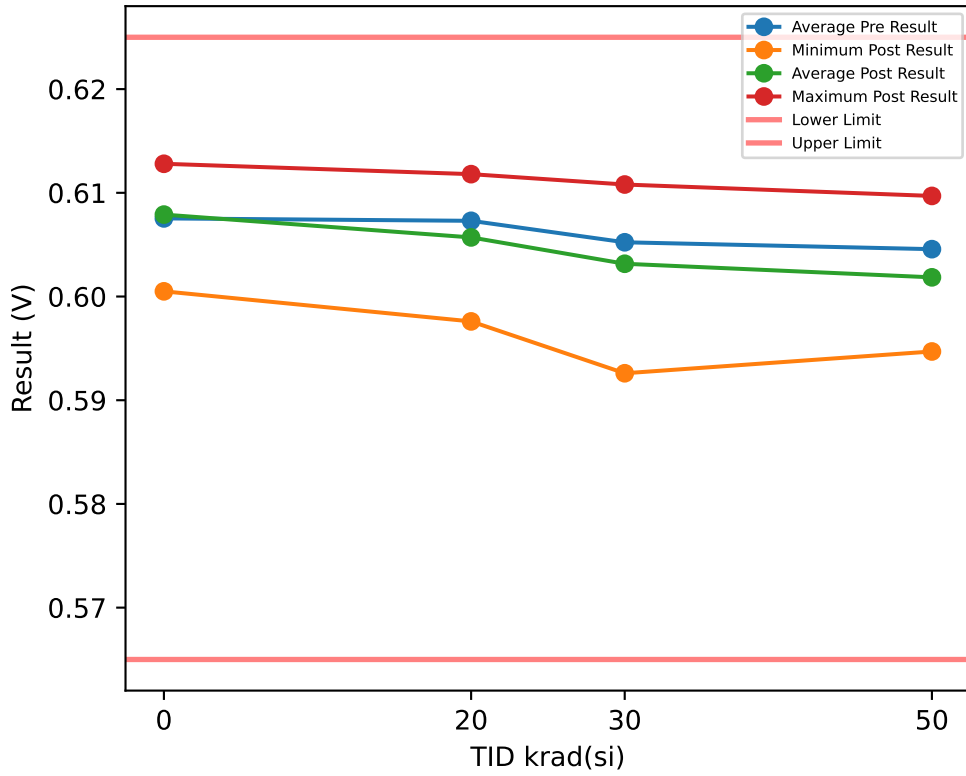


## Test Statistics (mA)

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	7.4257	8.4946	9.1123	0.57136	8.0767	8.2382	8.6275	0.19731	-0.5446	-0.2564	0.651	0.46335
20	7.3736	8.3614	9.1545	0.67904	8.1094	8.3689	8.6455	0.16352	-0.6664	0.00747	0.7894	0.63873
30	7.4336	8.3687	9.2867	0.67876	7.8933	8.2763	8.7478	0.25439	-0.732	-0.09241	0.9202	0.59907
50	7.4312	8.1365	8.8323	0.50415	7.7989	8.3294	8.8816	0.36886	-0.7156	0.18672	0.9174	0.59901

# Device Test: 13.1 THRESHOLD|RISE/EN/2.25/0.6//10//@VIH\_EN

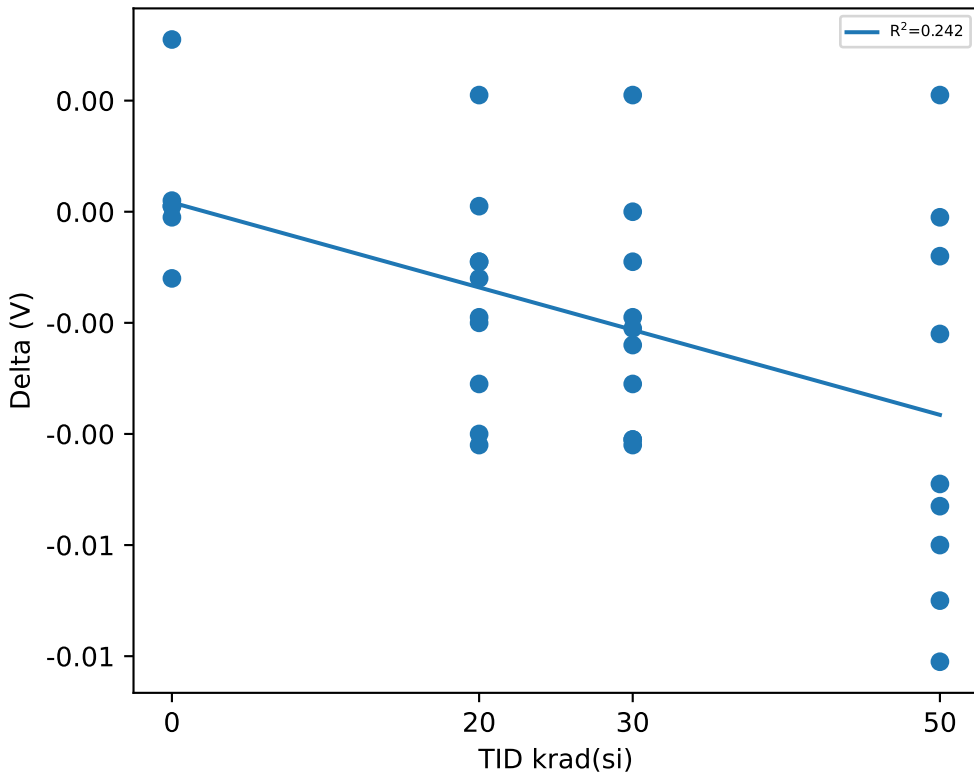
## TID vs Result Stats



## Test Results (Lower Limit = 0.565, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6127	0.6118	-0.0009
2	20	HDR Unbiased	0.6087	0.6075	-0.0012
3	20	HDR Unbiased	0.6077	0.6098	0.0021
23	20	HDR Unbiased	0.6076	0.6067	-0.0009
24	20	HDR Unbiased	0.6096	0.6097	0.0001
25	20	HDR Biased	0.6067	0.6027	-0.004
26	20	HDR Biased	0.6018	0.5976	-0.0042
27	20	HDR Biased	0.6048	0.6017	-0.0031
28	20	HDR Biased	0.6067	0.6047	-0.002
29	20	HDR Biased	0.6067	0.6048	-0.0019
30	30	HDR Unbiased	0.6007	0.5988	-0.0019
31	30	HDR Unbiased	0.6057	0.6057	0
32	30	HDR Unbiased	0.6087	0.6108	0.0021
33	30	HDR Unbiased	0.6057	0.6048	-0.0009
34	30	HDR Unbiased	0.6056	0.6035	-0.0021
35	30	HDR Biased	0.6087	0.6045	-0.0042
36	30	HDR Biased	0.6068	0.6037	-0.0031
37	30	HDR Biased	0.6059	0.6035	-0.0024
38	30	HDR Biased	0.5967	0.5926	-0.0041
39	30	HDR Biased	0.6078	0.6037	-0.0041
40	50	HDR Unbiased	0.6079	0.6057	-0.0022
41	50	HDR Unbiased	0.5986	0.6007	0.0021
42	50	HDR Unbiased	0.6036	0.6028	-0.0008
43	50	HDR Unbiased	0.6059	0.6058	-0.0001
44	50	HDR Unbiased		0.6097	
50	0	CORRELATION	0.6057	0.6059	0.0002
51	0	CORRELATION	0.6017	0.6005	-0.0012
52	0	CORRELATION	0.6087	0.6086	-0.0001
53	0	CORRELATION	0.6097	0.6098	0.0001
54	0	CORRELATION	0.6067	0.6098	0.0031
78	50	HDR Biased	0.6077	0.6028	-0.0049
79	50	HDR Biased	0.607	0.6017	-0.0053
80	50	HDR Biased	0.6038	0.5978	-0.006
81	50	HDR Biased	0.6017	0.5947	-0.007
82	50	HDR Biased	0.6049	0.5968	-0.0081
83	0	CORRELATION	0.6127	0.6128	0.0001

## TID vs Post - Pre Exposure Delta



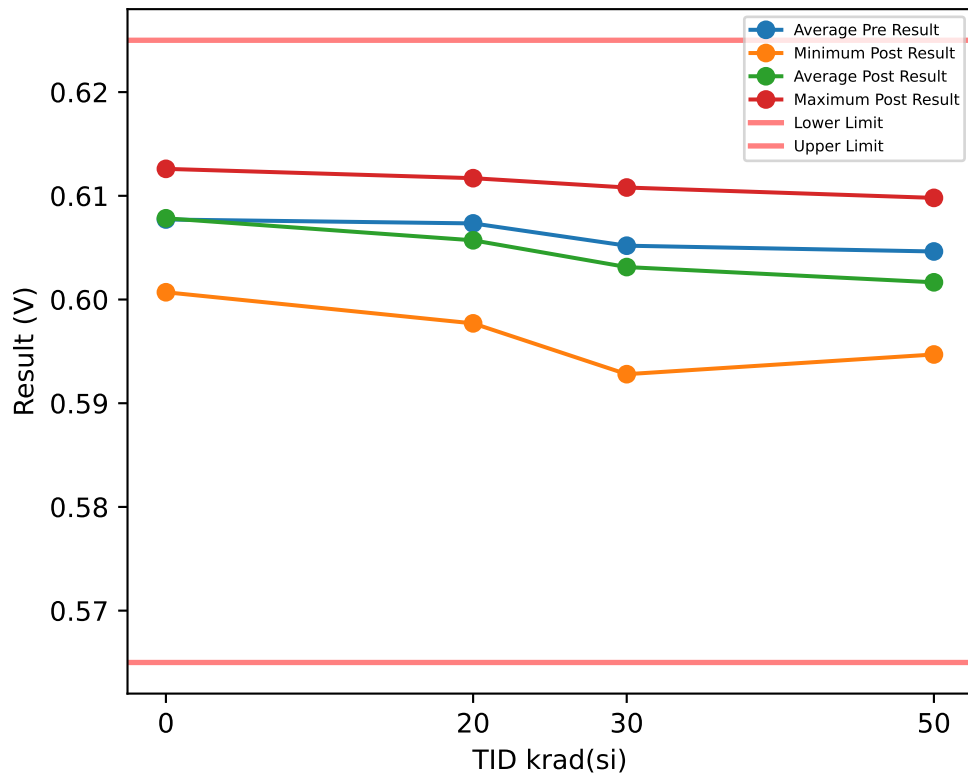
## Test Statistics (V)

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	0.6017	0.60753	0.6127	0.0037639	0.6005	0.6079	0.6128	0.0042539	-0.0012	0.00036667	0.0031	0.0014362
20	0.6018	0.6073	0.6127	0.0028721	0.5976	0.6057	0.6118	0.0043035	-0.0042	-0.0016	0.0021	0.0019073
30	0.5967	0.60523	0.6087	0.0037633	0.5926	0.60316	0.6108	0.0047216	-0.0042	-0.00207	0.0021	0.0020282
50	0.5986	0.60457	0.6079	0.003043	0.5947	0.60185	0.6097	0.0045732	-0.0081	-0.0035889	0.0021	0.0034765



# Device Test: 13.10 THRESHOLD|RISE/EN/7/0.6//10//@VIH\_EN

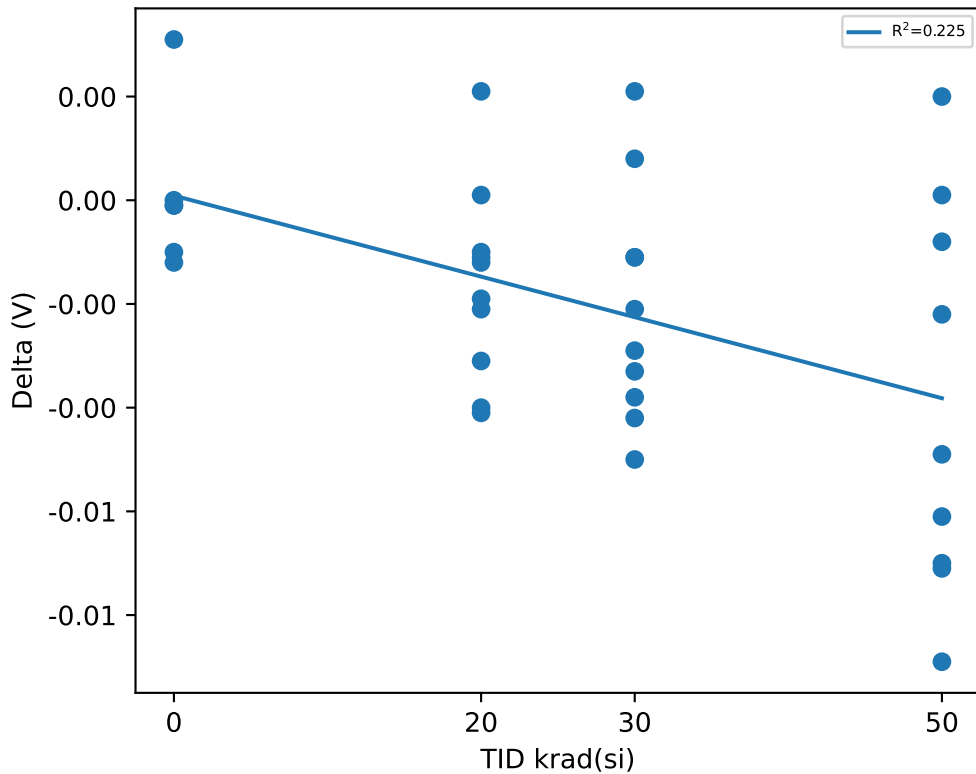
### TID vs Result Stats



### Test Results (Lower Limit = 0.565, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6128	0.6117	-0.0011
2	20	HDR Unbiased	0.6089	0.6077	-0.0012
3	20	HDR Unbiased	0.6077	0.6098	0.0021
23	20	HDR Unbiased	0.6077	0.6067	-0.001
24	20	HDR Unbiased	0.6096	0.6097	0.0001
25	20	HDR Biased	0.6068	0.6027	-0.0041
26	20	HDR Biased	0.6017	0.5977	-0.004
27	20	HDR Biased	0.6048	0.6017	-0.0031
28	20	HDR Biased	0.6067	0.6048	-0.0019
29	20	HDR Biased	0.6067	0.6046	-0.0021
30	30	HDR Unbiased	0.6016	0.5987	-0.0029
31	30	HDR Unbiased	0.6049	0.6057	0.0008
32	30	HDR Unbiased	0.6087	0.6108	0.0021
33	30	HDR Unbiased	0.6058	0.6047	-0.0011
34	30	HDR Unbiased	0.6059	0.6038	-0.0021
35	30	HDR Biased	0.6087	0.6037	-0.005
36	30	HDR Biased	0.6068	0.6035	-0.0033
37	30	HDR Biased	0.6049	0.6038	-0.0011
38	30	HDR Biased	0.5966	0.5928	-0.0038
39	30	HDR Biased	0.608	0.6038	-0.0042
40	50	HDR Unbiased	0.6079	0.6057	-0.0022
41	50	HDR Unbiased	0.5987	0.6007	0.002
42	50	HDR Unbiased	0.6036	0.6028	-0.0008
43	50	HDR Unbiased	0.6057	0.6058	0.0001
44	50	HDR Unbiased		0.6098	
50	0	CORRELATION	0.6057	0.6057	0
51	0	CORRELATION	0.6017	0.6007	-0.001
52	0	CORRELATION	0.6099	0.6087	-0.0012
53	0	CORRELATION	0.6096	0.6095	-0.0001
54	0	CORRELATION	0.6067	0.6098	0.0031
78	50	HDR Biased	0.6076	0.6027	-0.0049
79	50	HDR Biased	0.6069	0.6008	-0.0061
80	50	HDR Biased	0.6037	0.5966	-0.0071
81	50	HDR Biased	0.6017	0.5947	-0.007
82	50	HDR Biased	0.6059	0.597	-0.0089
83	0	CORRELATION	0.6127	0.6126	-0.0001

### TID vs Post - Pre Exposure Delta

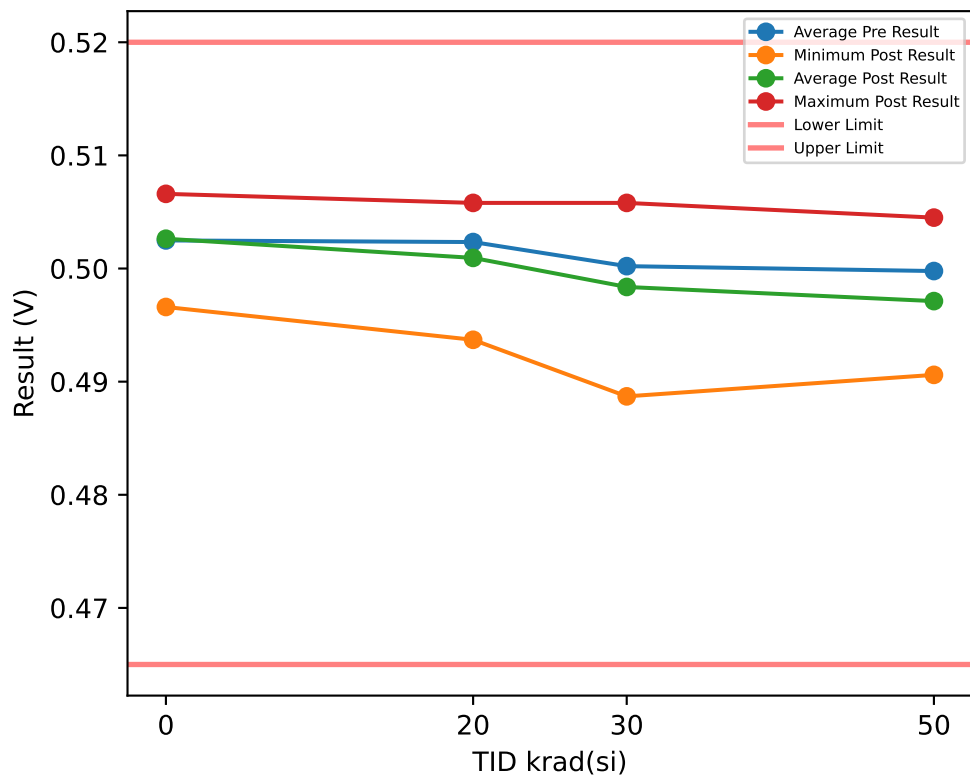


### Test Statistics (V)

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	0.6017	0.60772	0.6127	0.0038587	0.6007	0.60783	0.6126	0.0041365	-0.0012	0.00011667	0.0031	0.0015484
20	0.6017	0.60734	0.6128	0.0029247	0.5977	0.60571	0.6117	0.0042795	-0.0041	-0.00163	0.0021	0.0018839
30	0.5966	0.60519	0.6087	0.0036946	0.5928	0.60313	0.6108	0.0046672	-0.005	-0.00206	0.0021	0.0022564
50	0.5987	0.60463	0.6079	0.0030228	0.5947	0.60166	0.6098	0.0047084	-0.0089	-0.0038778	0.002	0.0037748

# Device Test: 13.11 THRESHOLD|FALL/EN/7/0.6//10//@VIL\_EN

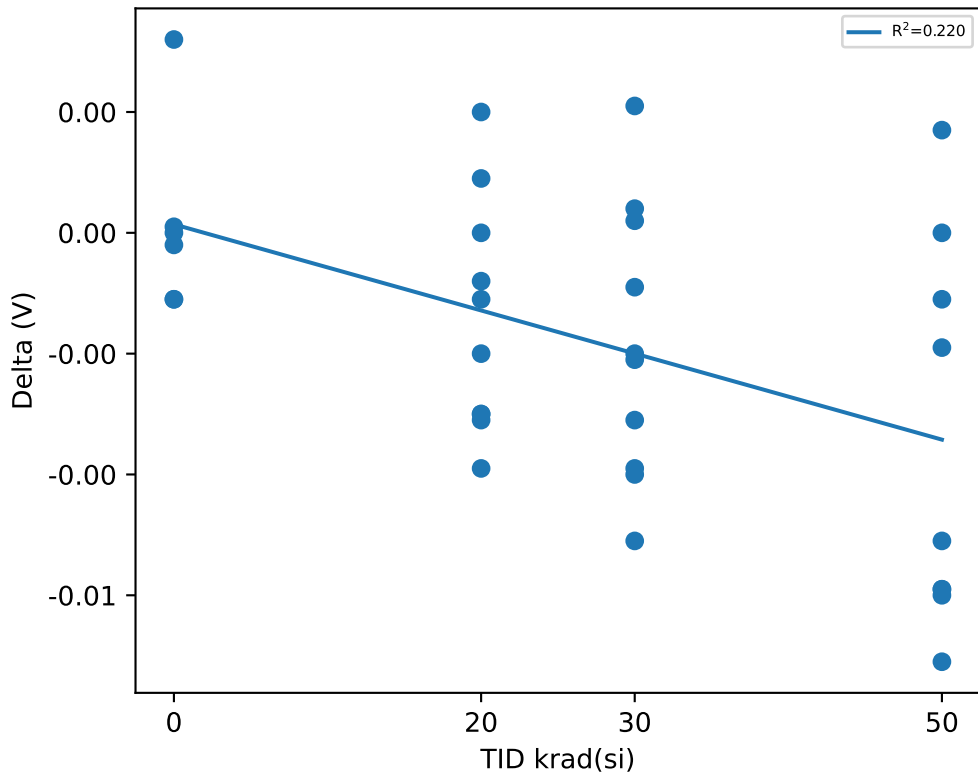
### TID vs Result Stats



### Test Results (Lower Limit = 0.465, Upper Limit = 0.52 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5066	0.5058	-0.0008
2	20	HDR Unbiased	0.5036	0.5036	0
3	20	HDR Unbiased	0.5026	0.5046	0.002
23	20	HDR Unbiased	0.5026	0.5015	-0.0011
24	20	HDR Unbiased	0.5047	0.5056	0.0009
25	20	HDR Biased	0.5015	0.4976	-0.0039
26	20	HDR Biased	0.4967	0.4937	-0.003
27	20	HDR Biased	0.5007	0.4976	-0.0031
28	20	HDR Biased	0.5026	0.4996	-0.003
29	20	HDR Biased	0.5018	0.4998	-0.002
30	30	HDR Unbiased	0.4967	0.4946	-0.0021
31	30	HDR Unbiased	0.5003	0.5007	0.0004
32	30	HDR Unbiased	0.5037	0.5058	0.0021
33	30	HDR Unbiased	0.5005	0.4996	-0.0009
34	30	HDR Unbiased	0.5007	0.4987	-0.002
35	30	HDR Biased	0.5038	0.4987	-0.0051
36	30	HDR Biased	0.5026	0.4986	-0.004
37	30	HDR Biased	0.4994	0.4996	0.0002
38	30	HDR Biased	0.4926	0.4887	-0.0039
39	30	HDR Biased	0.5018	0.4987	-0.0031
40	50	HDR Unbiased	0.5036	0.5017	-0.0019
41	50	HDR Unbiased	0.4948	0.4965	0.0017
42	50	HDR Unbiased	0.4986	0.4975	-0.0011
43	50	HDR Unbiased	0.5016	0.5016	0
44	50	HDR Unbiased		0.5045	
50	0	CORRELATION	0.5006	0.5007	0.0001
51	0	CORRELATION	0.4977	0.4966	-0.0011
52	0	CORRELATION	0.5037	0.5035	-0.0002
53	0	CORRELATION	0.5036	0.5036	0
54	0	CORRELATION	0.5016	0.5048	0.0032
78	50	HDR Biased	0.5028	0.4977	-0.0051
79	50	HDR Biased	0.5016	0.4957	-0.0059
80	50	HDR Biased	0.4987	0.4928	-0.0059
81	50	HDR Biased	0.4966	0.4906	-0.006
82	50	HDR Biased	0.4997	0.4926	-0.0071
83	0	CORRELATION	0.5077	0.5066	-0.0011

### TID vs Post - Pre Exposure Delta

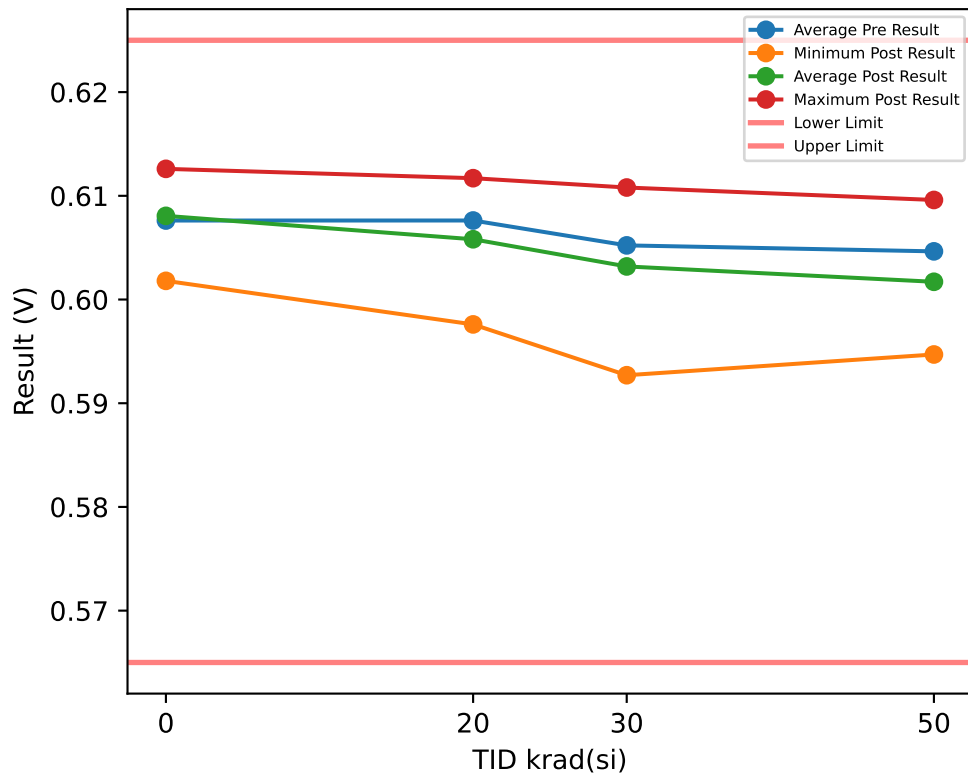


### Test Statistics (V)

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	0.4977	0.50248	0.5077	0.0033808	0.4966	0.50263	0.5066	0.0035286	-0.0011	0.00015	0.0032	0.0015859
20	0.4967	0.50234	0.5066	0.0026035	0.4937	0.50094	0.5058	0.0039992	-0.0039	-0.0014	0.002	0.0019402
30	0.4926	0.50021	0.5038	0.003408	0.4887	0.49837	0.5058	0.0043686	-0.0051	-0.00184	0.0021	0.0022804
50	0.4948	0.49978	0.5036	0.0029115	0.4906	0.49712	0.5045	0.0044721	-0.0071	-0.0034778	0.0017	0.0031799

# Device Test: 13.13 THRESHOLD|RISE/EN/12/0.6//10//@VIH\_EN

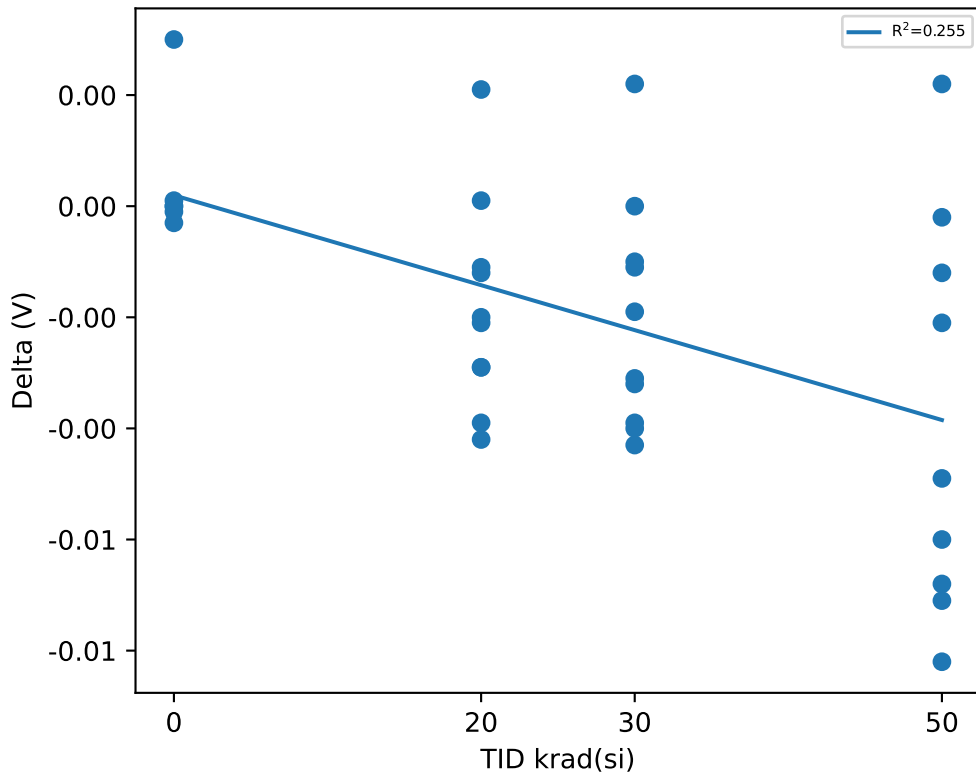
### TID vs Result Stats



### Test Results (Lower Limit = 0.565, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6128	0.6117	-0.0011
2	20	HDR Unbiased	0.6089	0.6077	-0.0012
3	20	HDR Unbiased	0.6076	0.6097	0.0021
23	20	HDR Unbiased	0.6087	0.6066	-0.0021
24	20	HDR Unbiased	0.6096	0.6097	0.0001
25	20	HDR Biased	0.6078	0.6039	-0.0039
26	20	HDR Biased	0.6018	0.5976	-0.0042
27	20	HDR Biased	0.6047	0.6018	-0.0029
28	20	HDR Biased	0.6077	0.6048	-0.0029
29	20	HDR Biased	0.6066	0.6046	-0.002
30	30	HDR Unbiased	0.6018	0.5987	-0.0031
31	30	HDR Unbiased	0.6057	0.6057	0
32	30	HDR Unbiased	0.6086	0.6108	0.0022
33	30	HDR Unbiased	0.6058	0.6048	-0.001
34	30	HDR Unbiased	0.6056	0.6037	-0.0019
35	30	HDR Biased	0.6086	0.6047	-0.0039
36	30	HDR Biased	0.6067	0.6035	-0.0032
37	30	HDR Biased	0.6049	0.6038	-0.0011
38	30	HDR Biased	0.5967	0.5927	-0.004
39	30	HDR Biased	0.6078	0.6035	-0.0043
40	50	HDR Unbiased	0.6079	0.6058	-0.0021
41	50	HDR Unbiased	0.5986	0.6008	0.0022
42	50	HDR Unbiased	0.6037	0.6025	-0.0012
43	50	HDR Unbiased	0.6059	0.6057	-0.0002
44	50	HDR Unbiased		0.6096	
50	0	CORRELATION	0.6058	0.6058	0
51	0	CORRELATION	0.6017	0.6018	0.0001
52	0	CORRELATION	0.609	0.6087	-0.0003
53	0	CORRELATION	0.6097	0.6097	0
54	0	CORRELATION	0.6068	0.6098	0.003
78	50	HDR Biased	0.6077	0.6028	-0.0049
79	50	HDR Biased	0.6076	0.6008	-0.0068
80	50	HDR Biased	0.6036	0.5976	-0.006
81	50	HDR Biased	0.6018	0.5947	-0.0071
82	50	HDR Biased	0.605	0.5968	-0.0082
83	0	CORRELATION	0.6127	0.6126	-0.0001

### TID vs Post - Pre Exposure Delta

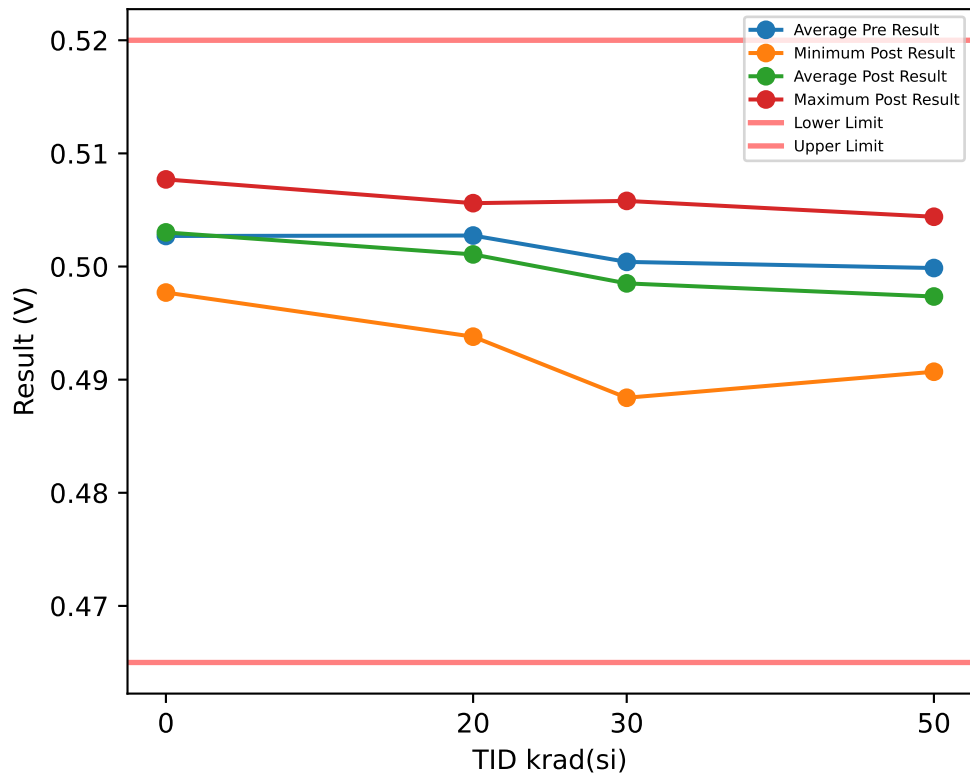


### Test Statistics (V)

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	0.6017	0.60762	0.6127	0.0037701	0.6018	0.60807	0.6126	0.0037692	-0.0003	0.00045	0.003	0.0012566
20	0.6018	0.60762	0.6128	0.0029257	0.5976	0.60581	0.6117	0.0042001	-0.0042	-0.00181	0.0021	0.001897
30	0.5967	0.60522	0.6086	0.0036024	0.5927	0.60319	0.6108	0.0047153	-0.0043	-0.00203	0.0022	0.0020817
50	0.5986	0.60464	0.6079	0.0031021	0.5947	0.60171	0.6096	0.0045766	-0.0082	-0.0038111	0.0022	0.003604

# Device Test: 13.14 THRESHOLD|FALL/EN/12/0.6//10//@VIL\_EN

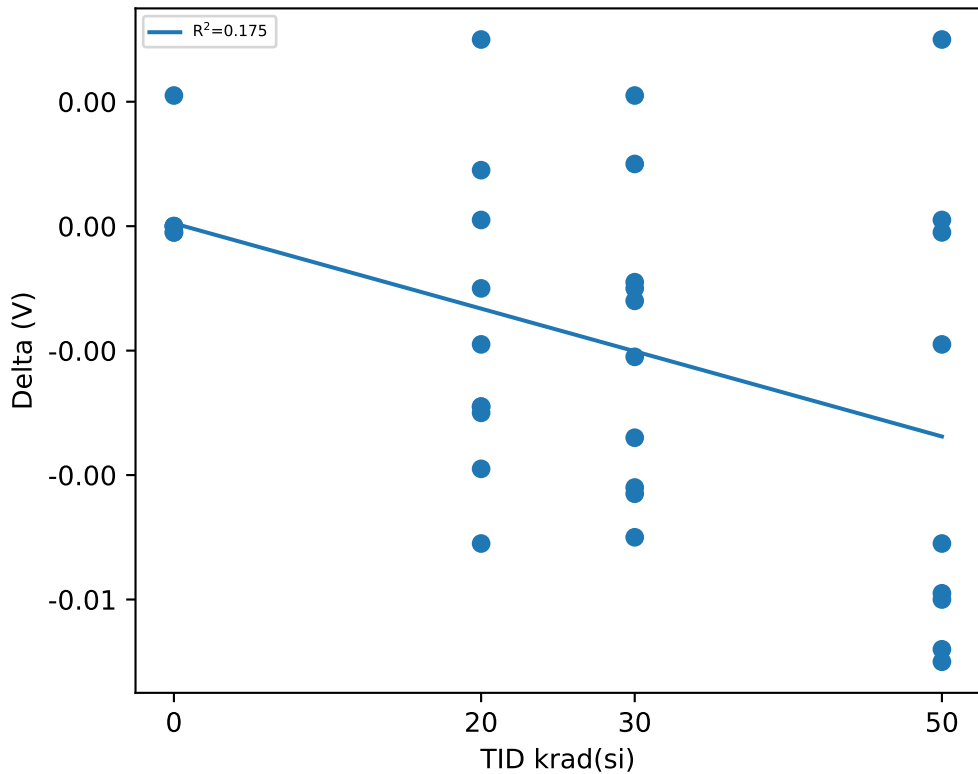
### TID vs Result Stats



### Test Results (Lower Limit = 0.465, Upper Limit = 0.52 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5065	0.5055	-0.001
2	20	HDR Unbiased	0.5036	0.5037	0.0001
3	20	HDR Unbiased	0.5026	0.5056	0.003
23	20	HDR Unbiased	0.5036	0.5017	-0.0019
24	20	HDR Unbiased	0.5047	0.5056	0.0009
25	20	HDR Biased	0.5028	0.4977	-0.0051
26	20	HDR Biased	0.4977	0.4938	-0.0039
27	20	HDR Biased	0.5006	0.4977	-0.0029
28	20	HDR Biased	0.5026	0.4996	-0.003
29	20	HDR Biased	0.5027	0.4998	-0.0029
30	30	HDR Unbiased	0.4966	0.4956	-0.001
31	30	HDR Unbiased	0.5007	0.5017	0.001
32	30	HDR Unbiased	0.5037	0.5058	0.0021
33	30	HDR Unbiased	0.5008	0.4996	-0.0012
34	30	HDR Unbiased	0.5007	0.4986	-0.0021
35	30	HDR Biased	0.5037	0.4987	-0.005
36	30	HDR Biased	0.5028	0.4985	-0.0043
37	30	HDR Biased	0.5006	0.4997	-0.0009
38	30	HDR Biased	0.4926	0.4884	-0.0042
39	30	HDR Biased	0.5019	0.4985	-0.0034
40	50	HDR Unbiased	0.5036	0.5017	-0.0019
41	50	HDR Unbiased	0.4948	0.4978	0.003
42	50	HDR Unbiased	0.4986	0.4985	-0.0001
43	50	HDR Unbiased	0.5015	0.5016	0.0001
44	50	HDR Unbiased		0.5044	
50	0	CORRELATION	0.5006	0.5006	0
51	0	CORRELATION	0.4977	0.4977	0
52	0	CORRELATION	0.5037	0.5037	0
53	0	CORRELATION	0.5038	0.5037	-0.0001
54	0	CORRELATION	0.5026	0.5047	0.0021
78	50	HDR Biased	0.5028	0.4977	-0.0051
79	50	HDR Biased	0.5016	0.4957	-0.0059
80	50	HDR Biased	0.4996	0.4928	-0.0068
81	50	HDR Biased	0.4967	0.4907	-0.006
82	50	HDR Biased	0.4996	0.4926	-0.007
83	0	CORRELATION	0.5078	0.5077	-0.0001

### TID vs Post - Pre Exposure Delta

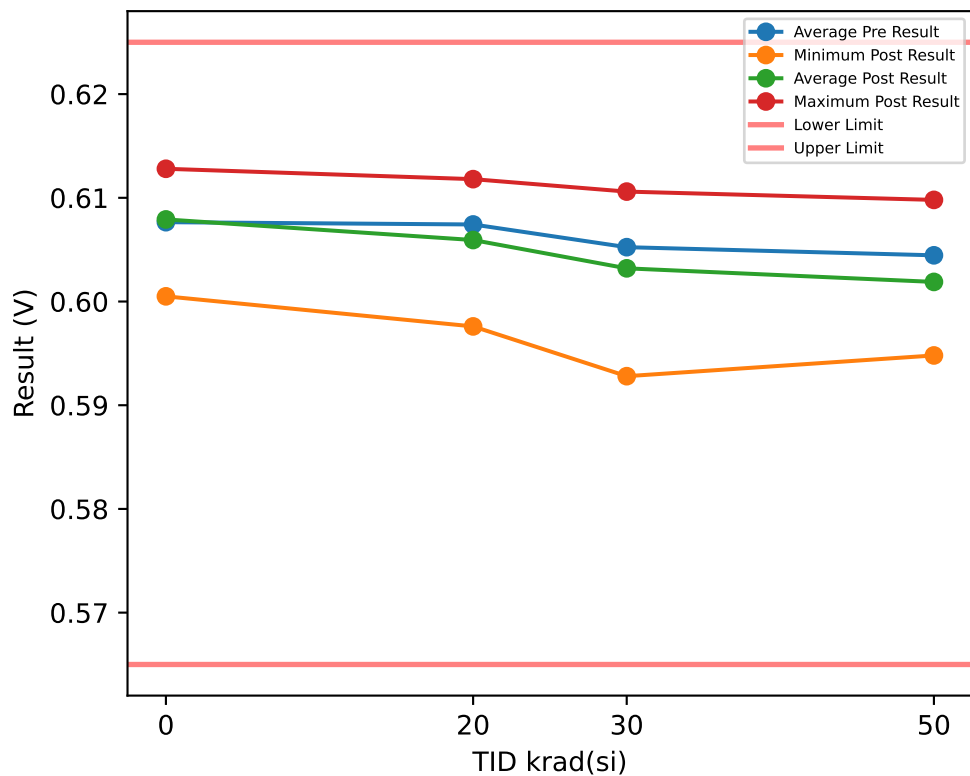


### Test Statistics (V)

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	0.4977	0.5027	0.5078	0.0033953	0.4977	0.50302	0.5077	0.0034586	-0.0001	0.00031667	0.0021	0.00087502
20	0.4977	0.50274	0.5065	0.0023448	0.4938	0.50107	0.5056	0.0040459	-0.0051	-0.00167	0.003	0.00244
30	0.4926	0.50041	0.5037	0.0034229	0.4884	0.49851	0.5058	0.0044303	-0.005	-0.0019	0.0021	0.002349
50	0.4948	0.49987	0.5036	0.0028649	0.4907	0.49735	0.5044	0.004454	-0.007	-0.0033	0.003	0.0036517

# Device Test: 13.16 THRESHOLD|RISE/EN/14/0.6//10//@VIH\_EN

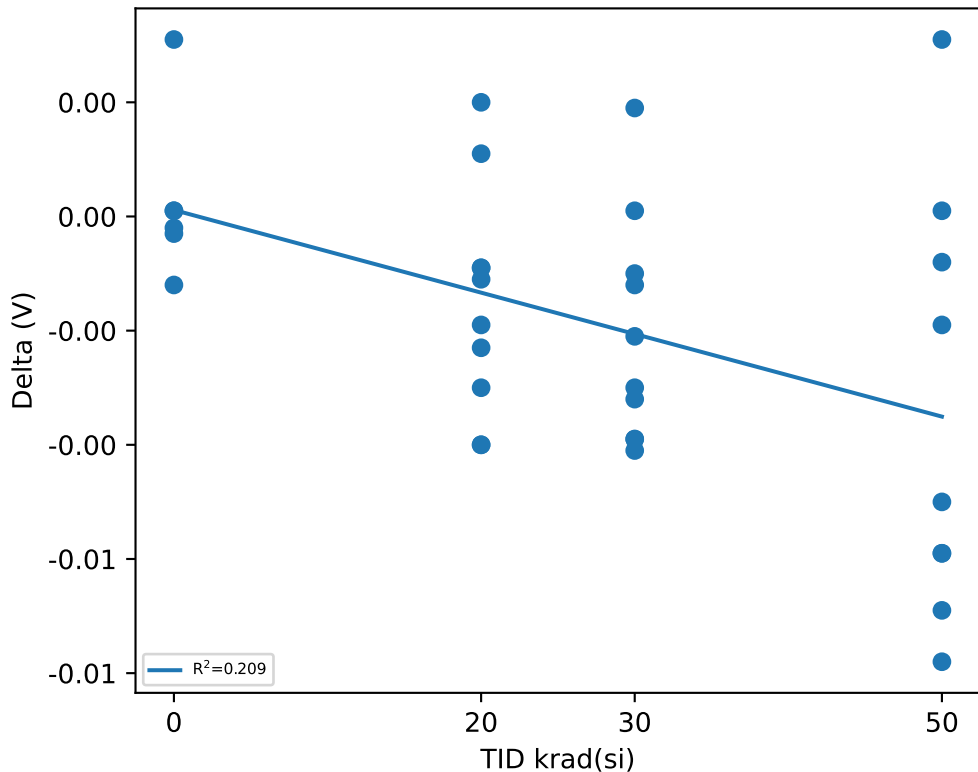
## TID vs Result Stats



## Test Results (Lower Limit = 0.565, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6127	0.6118	-0.0009
2	20	HDR Unbiased	0.6087	0.6078	-0.0009
3	20	HDR Unbiased	0.6078	0.6098	0.002
23	20	HDR Unbiased	0.6077	0.6066	-0.0011
24	20	HDR Unbiased	0.6096	0.6107	0.0011
25	20	HDR Biased	0.6077	0.6037	-0.004
26	20	HDR Biased	0.6016	0.5976	-0.004
27	20	HDR Biased	0.6048	0.6018	-0.003
28	20	HDR Biased	0.6067	0.6048	-0.0019
29	20	HDR Biased	0.607	0.6047	-0.0023
30	30	HDR Unbiased	0.6017	0.5987	-0.003
31	30	HDR Unbiased	0.6056	0.6057	0.0001
32	30	HDR Unbiased	0.6087	0.6106	0.0019
33	30	HDR Unbiased	0.606	0.6048	-0.0012
34	30	HDR Unbiased	0.6059	0.6038	-0.0021
35	30	HDR Biased	0.6088	0.6047	-0.0041
36	30	HDR Biased	0.6067	0.6035	-0.0032
37	30	HDR Biased	0.6047	0.6037	-0.001
38	30	HDR Biased	0.5967	0.5928	-0.0039
39	30	HDR Biased	0.6076	0.6037	-0.0039
40	50	HDR Unbiased	0.6076	0.6057	-0.0019
41	50	HDR Unbiased	0.5986	0.6017	0.0031
42	50	HDR Unbiased	0.6036	0.6028	-0.0008
43	50	HDR Unbiased	0.6057	0.6058	0.0001
44	50	HDR Unbiased		0.6098	
50	0	CORRELATION	0.6056	0.6057	0.0001
51	0	CORRELATION	0.6017	0.6005	-0.0012
52	0	CORRELATION	0.6089	0.609	0.0001
53	0	CORRELATION	0.61	0.6097	-0.0003
54	0	CORRELATION	0.6067	0.6098	0.0031
78	50	HDR Biased	0.6077	0.6027	-0.005
79	50	HDR Biased	0.6067	0.6008	-0.0059
80	50	HDR Biased	0.6038	0.5979	-0.0059
81	50	HDR Biased	0.6017	0.5948	-0.0069
82	50	HDR Biased	0.6047	0.5969	-0.0078
83	0	CORRELATION	0.613	0.6128	-0.0002

## TID vs Post - Pre Exposure Delta

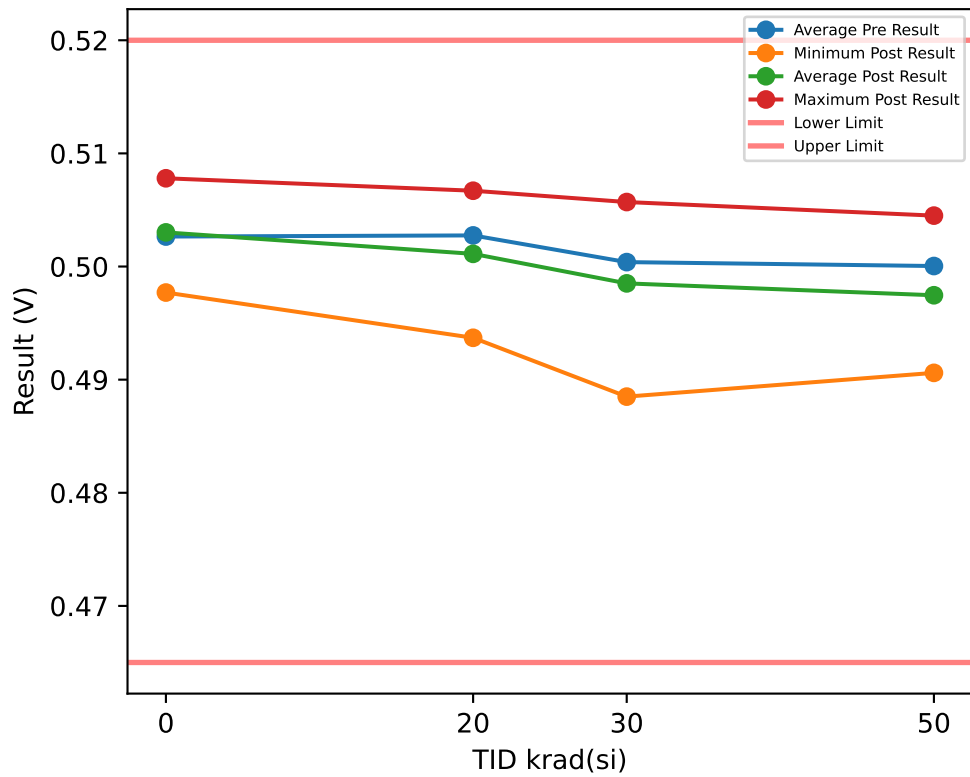


## Test Statistics (V)

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	0.6017	0.60765	0.613	0.0039042	0.6005	0.60792	0.6128	0.0042818	-0.0012	0.00026667	0.0031	0.0014679
20	0.6016	0.60743	0.6127	0.002906	0.5976	0.60593	0.6118	0.0043505	-0.004	-0.0015	0.002	0.0019844
30	0.5967	0.60524	0.6088	0.00364	0.5928	0.6032	0.6106	0.0046569	-0.0041	-0.00204	0.0019	0.0019811
50	0.5986	0.60446	0.6077	0.0029602	0.5948	0.60189	0.6098	0.0045481	-0.0078	-0.0034444	0.0031	0.0037108

# Device Test: 13.17 THRESHOLD|FALL/EN/14/0.6//10//@VIL\_EN

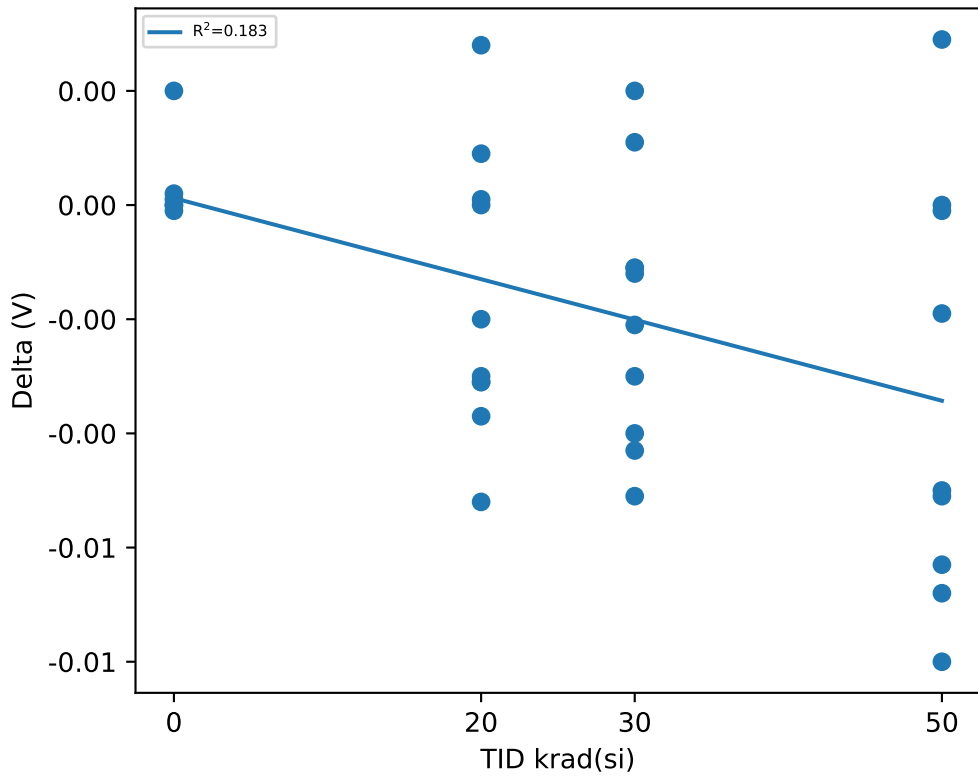
### TID vs Result Stats



### Test Results (Lower Limit = 0.465, Upper Limit = 0.52 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5066	0.5067	0.0001
2	20	HDR Unbiased	0.5036	0.5036	0
3	20	HDR Unbiased	0.5028	0.5056	0.0028
23	20	HDR Unbiased	0.5035	0.5015	-0.002
24	20	HDR Unbiased	0.5047	0.5056	0.0009
25	20	HDR Biased	0.5028	0.4976	-0.0052
26	20	HDR Biased	0.4974	0.4937	-0.0037
27	20	HDR Biased	0.5006	0.4976	-0.003
28	20	HDR Biased	0.5027	0.4996	-0.0031
29	20	HDR Biased	0.5028	0.4997	-0.0031
30	30	HDR Unbiased	0.4967	0.4956	-0.0011
31	30	HDR Unbiased	0.5005	0.5016	0.0011
32	30	HDR Unbiased	0.5037	0.5057	0.002
33	30	HDR Unbiased	0.5008	0.4996	-0.0012
34	30	HDR Unbiased	0.5008	0.4987	-0.0021
35	30	HDR Biased	0.5038	0.4987	-0.0051
36	30	HDR Biased	0.5026	0.4986	-0.004
37	30	HDR Biased	0.5007	0.4996	-0.0011
38	30	HDR Biased	0.4928	0.4885	-0.0043
39	30	HDR Biased	0.5015	0.4985	-0.003
40	50	HDR Unbiased	0.5036	0.5017	-0.0019
41	50	HDR Unbiased	0.4948	0.4977	0.0029
42	50	HDR Unbiased	0.4986	0.4986	0
43	50	HDR Unbiased	0.5017	0.5016	-0.0001
44	50	HDR Unbiased		0.5045	
50	0	CORRELATION	0.5006	0.5006	0
51	0	CORRELATION	0.4976	0.4977	0.0001
52	0	CORRELATION	0.5037	0.5037	0
53	0	CORRELATION	0.5038	0.5037	-0.0001
54	0	CORRELATION	0.5026	0.5046	0.002
78	50	HDR Biased	0.5028	0.4977	-0.0051
79	50	HDR Biased	0.5016	0.4966	-0.005
80	50	HDR Biased	0.4996	0.4928	-0.0068
81	50	HDR Biased	0.4969	0.4906	-0.0063
82	50	HDR Biased	0.5008	0.4928	-0.008
83	0	CORRELATION	0.5076	0.5078	0.0002

### TID vs Post - Pre Exposure Delta



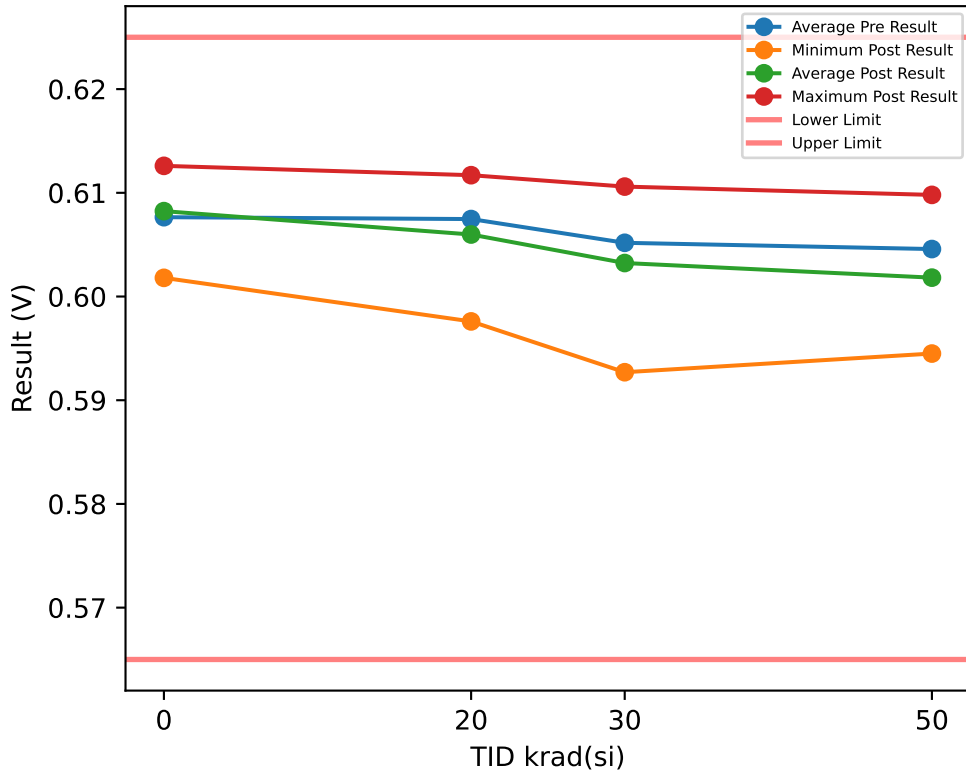
### Test Statistics (V)

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	0.4976	0.50265	0.5076	0.0033656	0.4977	0.50302	0.5078	0.0034764	-0.0001	0.00036667	0.002	0.00080664
20	0.4974	0.50275	0.5066	0.0024305	0.4937	0.50112	0.5067	0.0042392	-0.0052	-0.00163	0.0028	0.002473
30	0.4928	0.50039	0.5038	0.0033395	0.4885	0.49851	0.5057	0.0043763	-0.0051	-0.00188	0.002	0.0023006
50	0.4948	0.50004	0.5036	0.0028645	0.4906	0.49746	0.5045	0.0044388	-0.008	-0.0033667	0.0029	0.0037242



# Device Test: 13.19 THRESHOLD|RISE/EN/14/13.9//10//@VIH\_EN

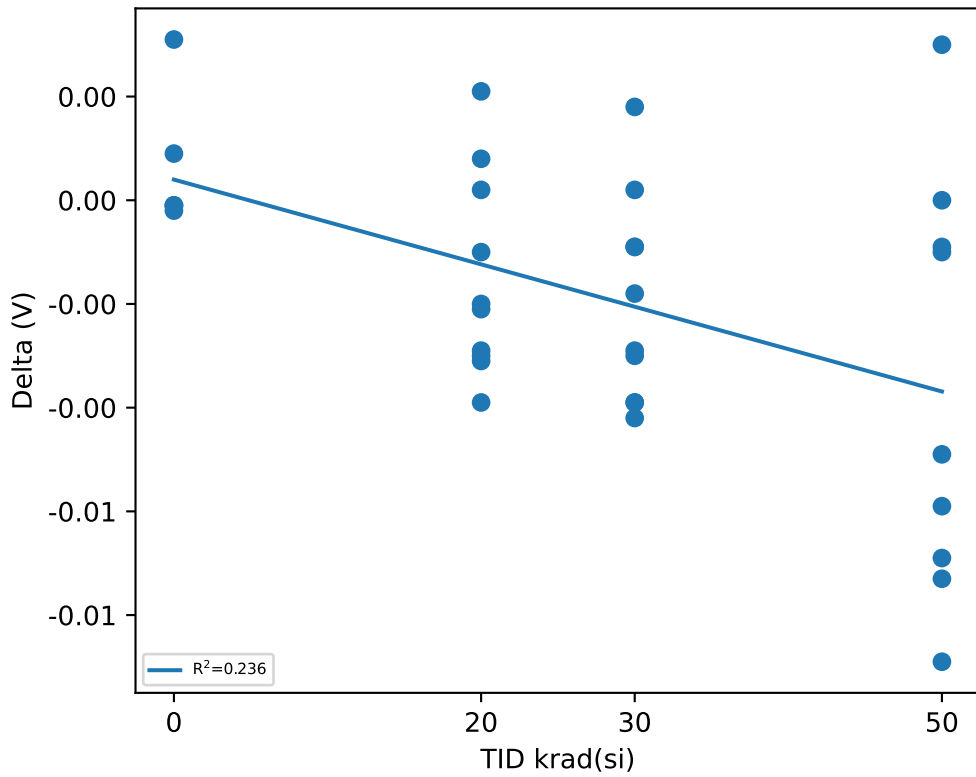
### TID vs Result Stats



### Test Results (Lower Limit = 0.565, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6127	0.6117	-0.001
2	20	HDR Unbiased	0.6086	0.6088	0.0002
3	20	HDR Unbiased	0.6077	0.6098	0.0021
23	20	HDR Unbiased	0.6087	0.6066	-0.0021
24	20	HDR Unbiased	0.6097	0.6105	0.0008
25	20	HDR Biased	0.6067	0.6037	-0.003
26	20	HDR Biased	0.6015	0.5976	-0.0039
27	20	HDR Biased	0.6048	0.6017	-0.0031
28	20	HDR Biased	0.6076	0.6047	-0.0029
29	20	HDR Biased	0.6067	0.6047	-0.002
30	30	HDR Unbiased	0.6017	0.5988	-0.0029
31	30	HDR Unbiased	0.6057	0.6059	0.0002
32	30	HDR Unbiased	0.6088	0.6106	0.0018
33	30	HDR Unbiased	0.6057	0.6048	-0.0009
34	30	HDR Unbiased	0.6056	0.6038	-0.0018
35	30	HDR Biased	0.6086	0.6047	-0.0039
36	30	HDR Biased	0.6067	0.6037	-0.003
37	30	HDR Biased	0.6047	0.6038	-0.0009
38	30	HDR Biased	0.5966	0.5927	-0.0039
39	30	HDR Biased	0.6077	0.6035	-0.0042
40	50	HDR Unbiased	0.6076	0.6067	-0.0009
41	50	HDR Unbiased	0.5986	0.6016	0.003
42	50	HDR Unbiased	0.6037	0.6027	-0.001
43	50	HDR Unbiased	0.6057	0.6057	0
44	50	HDR Unbiased		0.6098	
50	0	CORRELATION	0.6058	0.6057	-0.0001
51	0	CORRELATION	0.602	0.6018	-0.0002
52	0	CORRELATION	0.6089	0.6098	0.0009
53	0	CORRELATION	0.6098	0.6097	-0.0001
54	0	CORRELATION	0.6067	0.6098	0.0031
78	50	HDR Biased	0.6077	0.6028	-0.0049
79	50	HDR Biased	0.6067	0.6008	-0.0059
80	50	HDR Biased	0.6037	0.5968	-0.0069
81	50	HDR Biased	0.6018	0.5945	-0.0073
82	50	HDR Biased	0.6057	0.5968	-0.0089
83	0	CORRELATION	0.6127	0.6126	-0.0001

### TID vs Post - Pre Exposure Delta

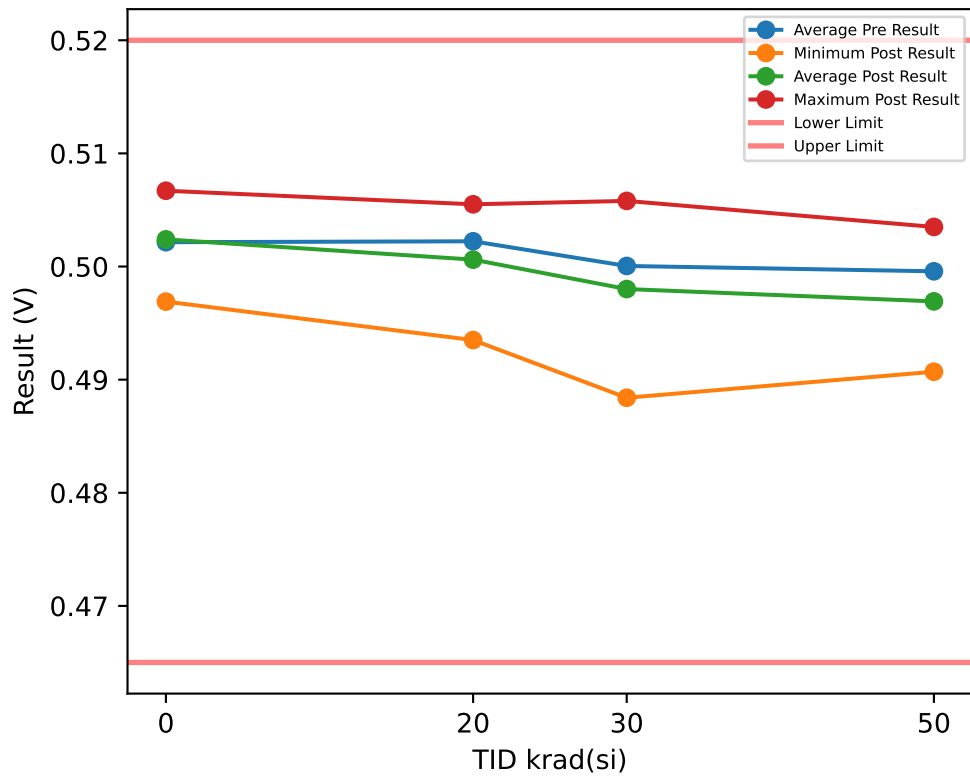


### Test Statistics (V)

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	0.602	0.60765	0.6127	0.0036861	0.6018	0.60823	0.6126	0.0038453	-0.0002	0.00058333	0.0031	0.0012999
20	0.6015	0.60747	0.6127	0.0029654	0.5976	0.60598	0.6117	0.0043855	-0.0039	-0.00149	0.0021	0.0019587
30	0.5966	0.60518	0.6088	0.0036536	0.5927	0.60323	0.6106	0.0046847	-0.0042	-0.00195	0.0018	0.0019884
50	0.5986	0.60458	0.6077	0.0029769	0.5945	0.60182	0.6098	0.004823	-0.0089	-0.0036444	0.003	0.0040343

# Device Test: 13.2 THRESHOLD|FALL/EN/2.25/0.6//10//@VIL\_EN

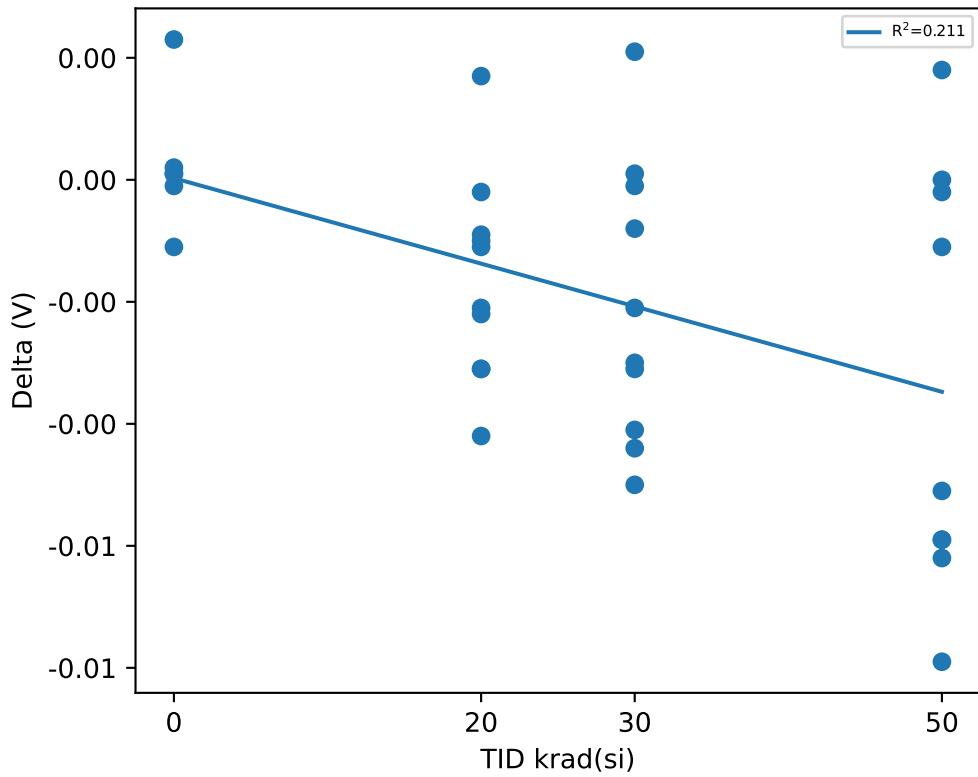
### TID vs Result Stats



### Test Results (Lower Limit = 0.465, Upper Limit = 0.52 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5066	0.5055	-0.0011
2	20	HDR Unbiased	0.5036	0.5026	-0.001
3	20	HDR Unbiased	0.5029	0.5046	0.0017
23	20	HDR Unbiased	0.5026	0.5017	-0.0009
24	20	HDR Unbiased	0.5048	0.5046	-0.0002
25	20	HDR Biased	0.5019	0.4977	-0.0042
26	20	HDR Biased	0.4966	0.4935	-0.0031
27	20	HDR Biased	0.4997	0.4966	-0.0031
28	20	HDR Biased	0.5017	0.4996	-0.0021
29	20	HDR Biased	0.5019	0.4997	-0.0022
30	30	HDR Unbiased	0.4967	0.4946	-0.0021
31	30	HDR Unbiased	0.5006	0.5007	0.0001
32	30	HDR Unbiased	0.5037	0.5058	0.0021
33	30	HDR Unbiased	0.4997	0.4996	-0.0001
34	30	HDR Unbiased	0.5007	0.4976	-0.0031
35	30	HDR Biased	0.5037	0.4987	-0.005
36	30	HDR Biased	0.5016	0.4986	-0.003
37	30	HDR Biased	0.4994	0.4986	-0.0008
38	30	HDR Biased	0.4928	0.4884	-0.0044
39	30	HDR Biased	0.5016	0.4975	-0.0041
40	50	HDR Unbiased	0.5027	0.5016	-0.0011
41	50	HDR Unbiased	0.4947	0.4965	0.0018
42	50	HDR Unbiased	0.4977	0.4975	-0.0002
43	50	HDR Unbiased	0.5016	0.5016	0
44	50	HDR Unbiased		0.5035	
50	0	CORRELATION	0.5007	0.4996	-0.0011
51	0	CORRELATION	0.4967	0.4969	0.0002
52	0	CORRELATION	0.5036	0.5037	0.0001
53	0	CORRELATION	0.5037	0.5036	-0.0001
54	0	CORRELATION	0.5016	0.5039	0.0023
78	50	HDR Biased	0.5028	0.4977	-0.0051
79	50	HDR Biased	0.5016	0.4957	-0.0059
80	50	HDR Biased	0.4988	0.4926	-0.0062
81	50	HDR Biased	0.4966	0.4907	-0.0059
82	50	HDR Biased	0.4997	0.4918	-0.0079
83	0	CORRELATION	0.5066	0.5067	0.0001

### TID vs Post - Pre Exposure Delta



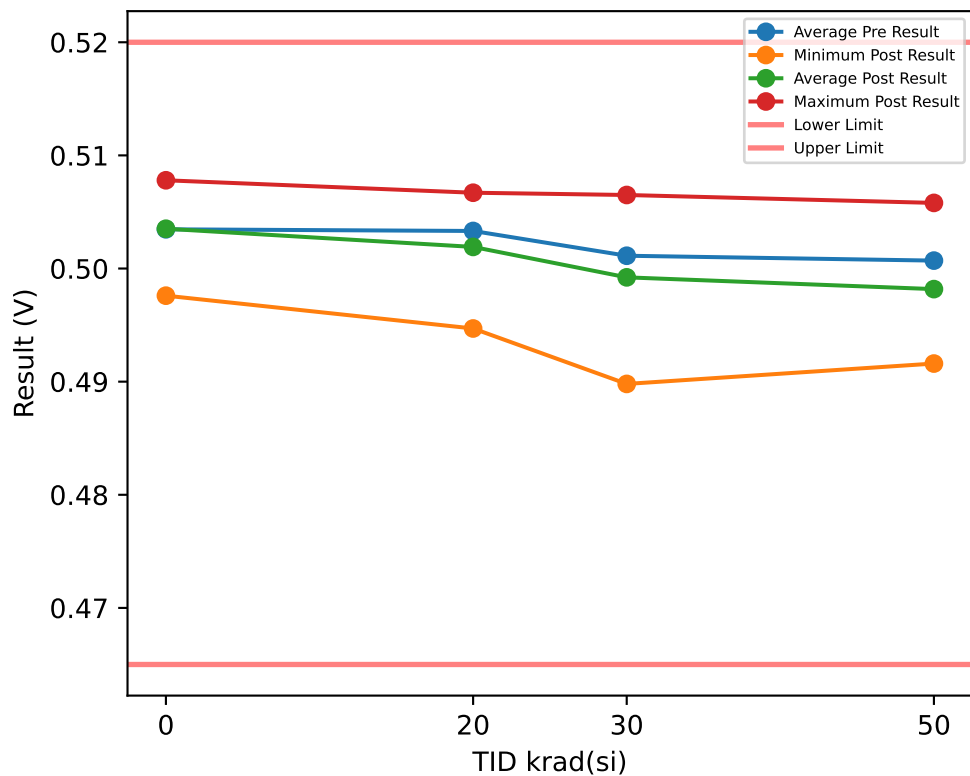
### Test Statistics (V)

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	0.4967	0.50215	0.5066	0.003359	0.4969	0.5024	0.5067	0.0035202	-0.0011	0.00025	0.0023	0.0011131
20	0.4966	0.50223	0.5066	0.0027236	0.4935	0.50061	0.5055	0.0039136	-0.0042	-0.00162	0.0017	0.0016936
30	0.4928	0.50005	0.5037	0.0032746	0.4884	0.49801	0.5058	0.0044225	-0.005	-0.00204	0.0021	0.0023008
50	0.4947	0.49958	0.5028	0.002853	0.4907	0.49692	0.5035	0.0043878	-0.0079	-0.0033889	0.0018	0.003493



# Device Test: 13.20 THRESHOLD|FALL/EN/14/13.9//10//@VIL\_EN

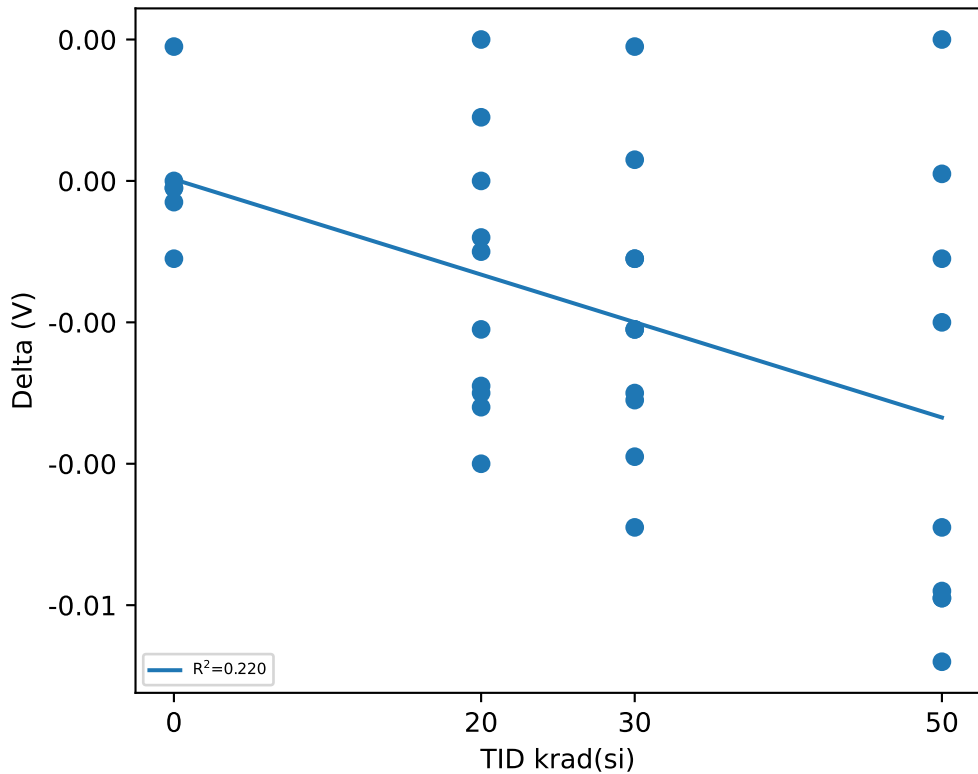
## TID vs Result Stats



## Test Results (Lower Limit = 0.465, Upper Limit = 0.52 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5075	0.5067	-0.0008
2	20	HDR Unbiased	0.5047	0.5047	0
3	20	HDR Unbiased	0.5037	0.5057	0.002
23	20	HDR Unbiased	0.5035	0.5025	-0.001
24	20	HDR Unbiased	0.5057	0.5066	0.0009
25	20	HDR Biased	0.5026	0.4986	-0.004
26	20	HDR Biased	0.4976	0.4947	-0.0029
27	20	HDR Biased	0.5018	0.4986	-0.0032
28	20	HDR Biased	0.5035	0.5005	-0.003
29	20	HDR Biased	0.5026	0.5005	-0.0021
30	30	HDR Unbiased	0.4976	0.4955	-0.0021
31	30	HDR Unbiased	0.5013	0.5016	0.0003
32	30	HDR Unbiased	0.5046	0.5065	0.0019
33	30	HDR Unbiased	0.5018	0.5007	-0.0011
34	30	HDR Unbiased	0.5017	0.4996	-0.0021
35	30	HDR Biased	0.5047	0.4998	-0.0049
36	30	HDR Biased	0.5026	0.4996	-0.003
37	30	HDR Biased	0.5007	0.4996	-0.0011
38	30	HDR Biased	0.4937	0.4898	-0.0039
39	30	HDR Biased	0.5026	0.4995	-0.0031
40	50	HDR Unbiased	0.5046	0.5026	-0.002
41	50	HDR Unbiased	0.4957	0.4977	0.002
42	50	HDR Unbiased	0.4997	0.4986	-0.0011
43	50	HDR Unbiased	0.5025	0.5026	0.0001
44	50	HDR Unbiased		0.5058	
50	0	CORRELATION	0.5017	0.5016	-0.0001
51	0	CORRELATION	0.4977	0.4976	-0.0001
52	0	CORRELATION	0.505	0.5047	-0.0003
53	0	CORRELATION	0.5047	0.5047	0
54	0	CORRELATION	0.5028	0.5047	0.0019
78	50	HDR Biased	0.5036	0.4987	-0.0049
79	50	HDR Biased	0.5025	0.4966	-0.0059
80	50	HDR Biased	0.4996	0.4938	-0.0058
81	50	HDR Biased	0.4975	0.4916	-0.0059
82	50	HDR Biased	0.5006	0.4938	-0.0068
83	0	CORRELATION	0.5089	0.5078	-0.0011

## TID vs Post - Pre Exposure Delta

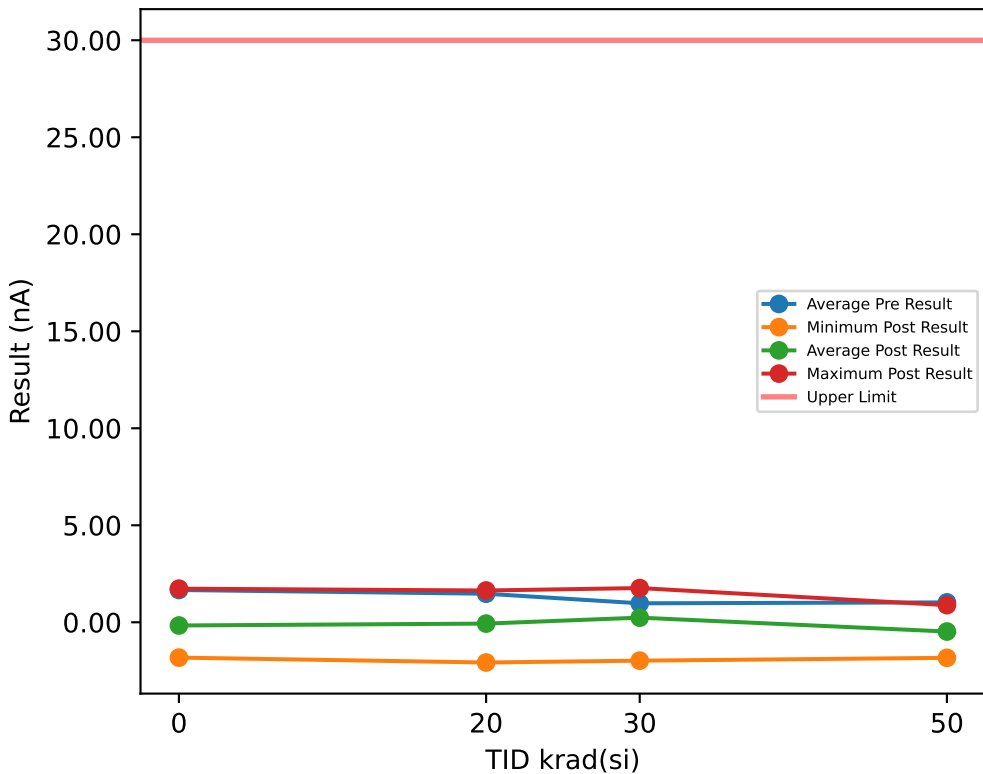


## Test Statistics (V)

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	0.4977	0.50347	0.5089	0.0037474	0.4976	0.50352	0.5078	0.0034994	-0.0011	5e-05	0.0019	0.00099146
20	0.4976	0.50332	0.5075	0.0026102	0.4947	0.50191	0.5067	0.0040181	-0.004	-0.00141	0.002	0.0019615
30	0.4937	0.50113	0.5047	0.0032958	0.4898	0.49922	0.5065	0.0042723	-0.0049	-0.00191	0.0019	0.002008
50	0.4957	0.5007	0.5046	0.002906	0.4916	0.49818	0.5058	0.0044966	-0.0068	-0.0033667	0.002	0.0031765

# Device Test: 13.22 THRESHOLD|LEAK/EN/2.25/0.6/7/10//@I\_EN

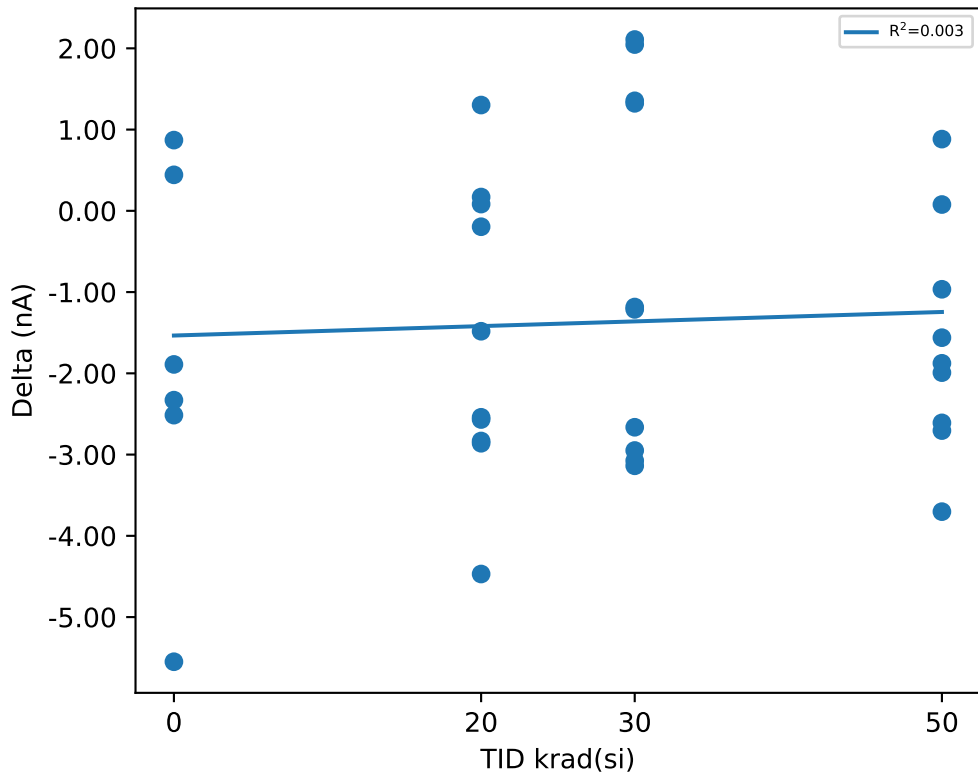
## TID vs Result Stats



## Test Results (Upper Limit = 30.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.1589	0.3288	0.1699
2	20	HDR Unbiased	-0.3549	0.9472	1.3021
3	20	HDR Unbiased	3.0263	-1.4435	-4.4698
23	20	HDR Unbiased	-0.0081	-0.2037	-0.1956
24	20	HDR Unbiased	3.7172	0.8844	-2.8328
25	20	HDR Biased	1.0085	-1.8521	-2.8606
26	20	HDR Biased	0.4962	0.5794	0.0832
27	20	HDR Biased	3.1205	1.6385	-1.482
28	20	HDR Biased	0.4962	-2.0721	-2.5683
29	20	HDR Biased	3.0577	0.5167	-2.541
30	30	HDR Unbiased	-0.7221	1.3243	2.0464
31	30	HDR Unbiased	-0.7647	-1.9778	-1.2131
32	30	HDR Unbiased	3.5288	0.4541	-3.0747
33	30	HDR Unbiased	-0.2187	1.1043	1.323
34	30	HDR Unbiased	0.0234	-1.1606	-1.184
35	30	HDR Biased	3.623	0.6733	-2.9497
36	30	HDR Biased	0.0645	1.4185	1.354
37	30	HDR Biased	0.843	-1.8207	-2.6637
38	30	HDR Biased	3.7486	0.6107	-3.1379
39	30	HDR Biased	-0.3445	1.7641	2.1086
40	50	HDR Unbiased	0.3701	-1.5064	-1.8765
41	50	HDR Unbiased	3.9684	0.2661	-3.7023
42	50	HDR Unbiased	0.0016	0.8844	0.8828
43	50	HDR Unbiased	-0.0081	-1.5692	-1.5611
44	50	HDR Unbiased		0.4541	
50	0	CORRELATION	3.623	1.7327	-1.8903
51	0	CORRELATION	0.6938	-1.8207	-2.5145
52	0	CORRELATION	-0.1658	0.7047	0.8705
53	0	CORRELATION	3.6858	1.3557	-2.3301
54	0	CORRELATION	-2.0751	-1.6321	0.443
78	50	HDR Biased	1.1344	-1.5702	-2.7046
79	50	HDR Biased	0.0864	-0.8791	-0.9655
80	50	HDR Biased	3.2775	0.6678	-2.6097
81	50	HDR Biased	0.1589	-1.8325	-1.9914
82	50	HDR Biased	0.2441	0.3218	0.0777
83	0	CORRELATION	4.2197	-1.3298	-5.5495

## TID vs Post - Pre Exposure Delta

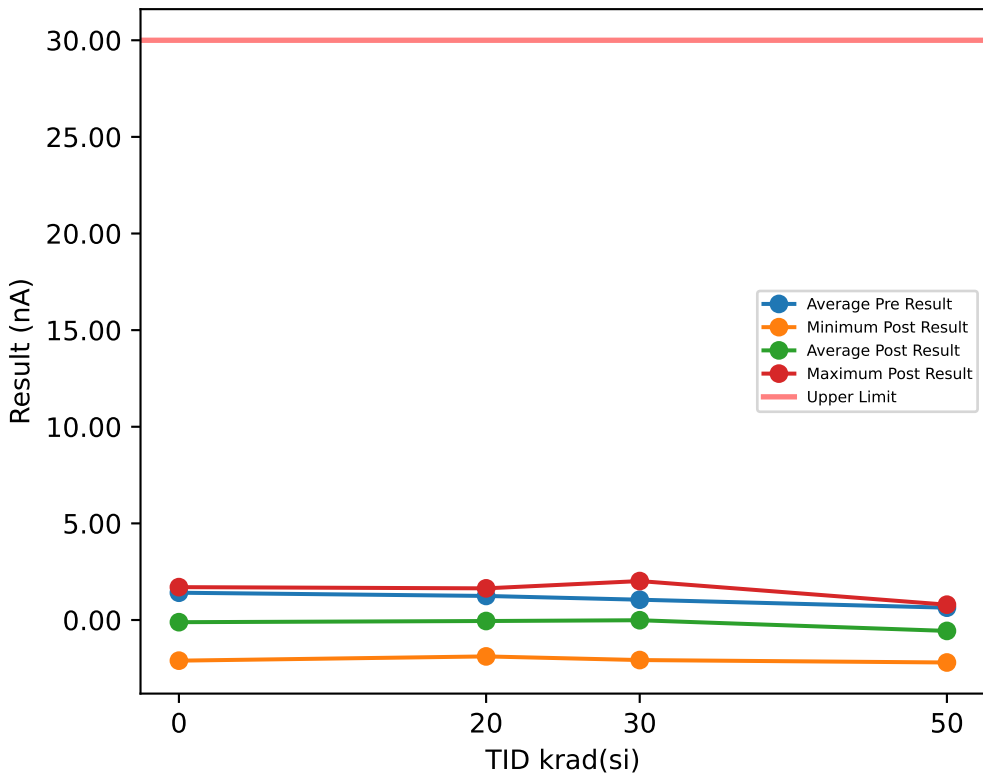


## Test Statistics (nA)

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	-2.0751	1.6636	4.2197	2.5584	-1.8207	-0.16492	1.7327	1.6075	-5.5495	-1.8285	0.8705	2.3245
20	-0.3549	1.4718	3.7172	1.5656	-2.0721	-0.06764	1.6385	1.2857	-4.4698	-1.5395	1.3021	1.8106
30	-0.7647	0.97813	3.7486	1.8871	-1.9778	0.23902	1.7641	1.3797	-3.1379	-0.73911	2.1086	2.2292
50	-0.0081	1.0259	3.9684	1.5221	-1.8325	-0.47632	0.8844	1.0887	-3.7023	-1.6056	0.8828	1.4262

# Device Test: 13.23 THRESHOLD|LEAK/EN/14/0.6/7/10//@I\_EN

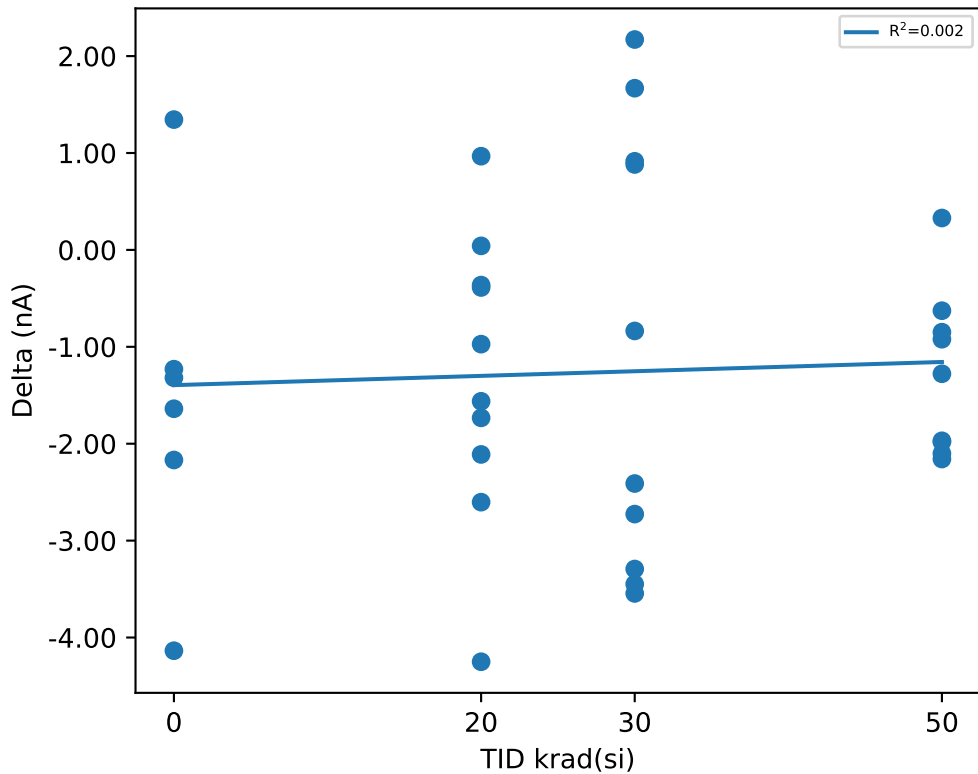
## TID vs Result Stats



## Test Results (Upper Limit = 30.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.2219	-0.1411	-0.363
2	20	HDR Unbiased	0.7484	0.7901	0.0417
3	20	HDR Unbiased	2.8693	-1.3806	-4.2499
23	20	HDR Unbiased	-0.5756	0.3914	0.967
24	20	HDR Unbiased	2.8379	0.7273	-2.1106
25	20	HDR Biased	-0.9109	-1.8835	-0.9726
26	20	HDR Biased	0.6539	0.2661	-0.3878
27	20	HDR Biased	3.3717	1.6385	-1.7332
28	20	HDR Biased	0.4017	-1.1606	-1.5623
29	20	HDR Biased	2.8379	0.2348	-2.6031
30	30	HDR Unbiased	-0.0613	0.853	0.9143
31	30	HDR Unbiased	0.3386	-2.0721	-2.4107
32	30	HDR Unbiased	2.9007	-0.5483	-3.449
33	30	HDR Unbiased	-0.2816	1.3871	1.6687
34	30	HDR Unbiased	-0.6701	-1.5064	-0.8363
35	30	HDR Biased	3.1519	-0.1411	-3.293
36	30	HDR Biased	-0.1557	2.0155	2.1712
37	30	HDR Biased	0.7484	-1.9778	-2.7262
38	30	HDR Biased	3.6544	0.1095	-3.5449
39	30	HDR Biased	0.8826	1.7641	0.8815
40	50	HDR Unbiased	0.0549	-1.915	-1.9699
41	50	HDR Unbiased	2.618	0.5167	-2.1013
42	50	HDR Unbiased	1.3861	0.7587	-0.6274
43	50	HDR Unbiased	-0.0397	-2.1978	-2.1581
44	50	HDR Unbiased		0.1722	
50	0	CORRELATION	3.1833	1.5442	-1.6391
51	0	CORRELATION	0.1275	-1.1921	-1.3196
52	0	CORRELATION	-0.8908	0.4541	1.3449
53	0	CORRELATION	2.9321	1.7013	-1.2308
54	0	CORRELATION	0.0645	-2.1035	-2.168
78	50	HDR Biased	-0.2187	-1.0676	-0.8489
79	50	HDR Biased	-0.3549	-1.633	-1.2781
80	50	HDR Biased	2.7751	0.7936	-1.9815
81	50	HDR Biased	-0.8165	-1.7382	-0.9217
82	50	HDR Biased	0.3386	0.6678	0.3292
83	0	CORRELATION	3.0577	-1.0784	-4.1361

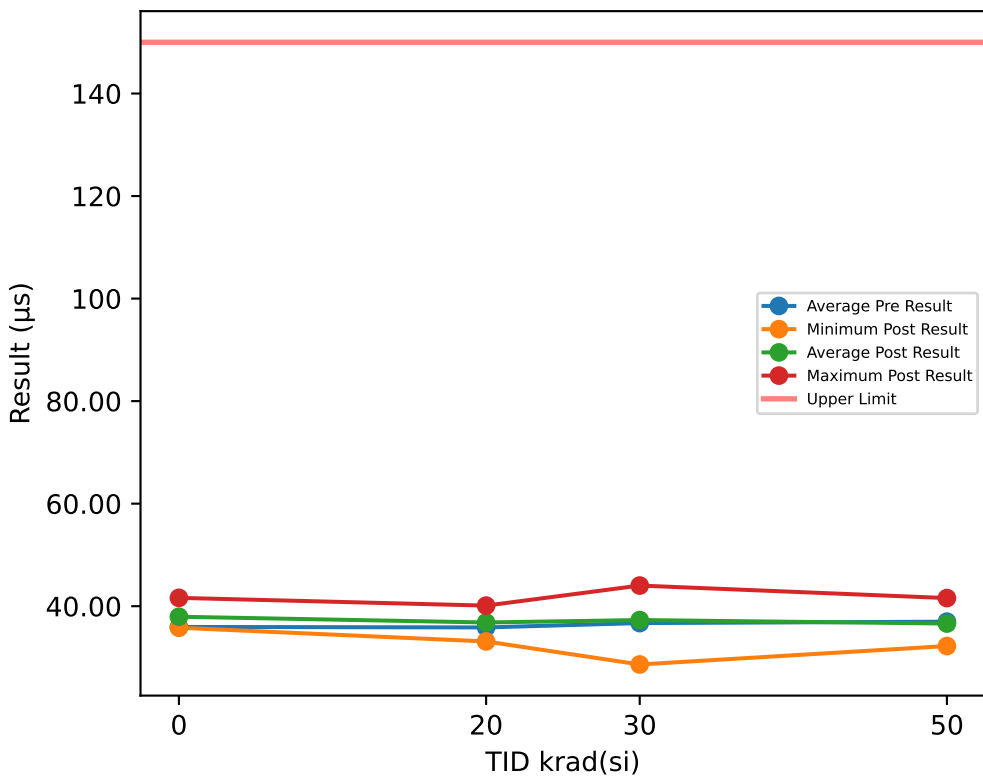
## TID vs Post - Pre Exposure Delta



## 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	-0.8908	1.4124	3.1833	1.8398	-2.1035	-0.1124	1.7013	1.576	-4.1361	-1.5248	1.3449	1.7669
20	-0.9109	1.2456	3.3717	1.583	-1.8835	-0.05176	1.6385	1.101	-4.2499	-1.2974	0.967	1.4933
30	-0.6701	1.0508	3.6544	1.5872	-2.0721	-0.01165	2.0155	1.5141	-3.5449	-1.0624	2.1712	2.287
50	-0.8165	0.6381	2.7751	1.312	-2.1978	-0.56426	0.7936	1.2512	-2.1581	-1.2842	0.3292	0.84729

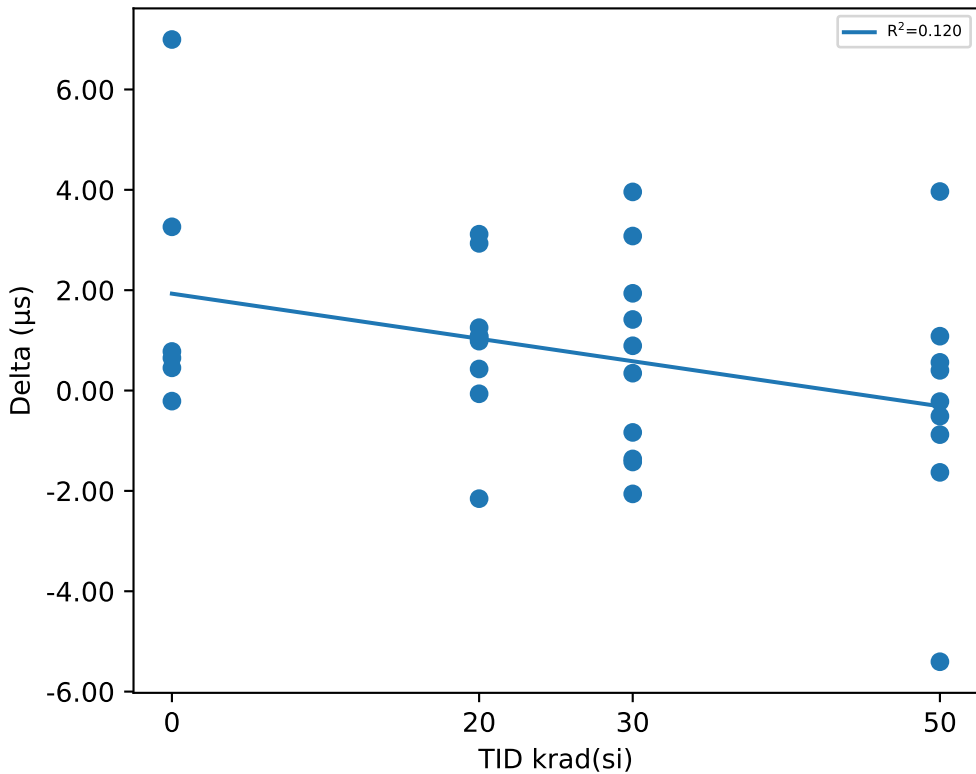
TID vs Result Stats



Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	37.737	38.823	1.0855
2	20	HDR Unbiased	36.65	34.495	-2.1549
3	20	HDR Unbiased	31.869	33.122	1.2532
23	20	HDR Unbiased	35.828	36.907	1.0784
24	20	HDR Unbiased	39.484	39.914	0.4297
25	20	HDR Biased	34.888	38.004	3.1159
26	20	HDR Biased	33.299	36.231	2.9327
27	20	HDR Biased	34.818	35.844	1.026
28	20	HDR Biased	39.13	40.115	0.9842
29	20	HDR Biased	34.85	34.786	-0.0645
30	30	HDR Unbiased	35.944	39.902	3.9586
31	30	HDR Unbiased	36.371	37.787	1.4162
32	30	HDR Unbiased	30.689	28.629	-2.0597
33	30	HDR Unbiased	33.936	35.874	1.9376
34	30	HDR Unbiased	36.783	35.42	-1.3628
35	30	HDR Biased	36.461	35.037	-1.424
36	30	HDR Biased	44.859	44.025	-0.8346
37	30	HDR Biased	40.464	41.356	0.8922
38	30	HDR Biased	33.217	36.296	3.0793
39	30	HDR Biased	38.311	38.657	0.3458
40	50	HDR Unbiased	32.985	33.547	0.5618
41	50	HDR Unbiased	41.307	35.903	-5.4048
42	50	HDR Unbiased	40.357	39.846	-0.5105
43	50	HDR Unbiased	32.447	32.227	-0.22
44	50	HDR Unbiased		35.95	
50	0	CORRELATION	36.07	35.859	-0.211
51	0	CORRELATION	35.41	38.673	3.263
52	0	CORRELATION	39.029	39.679	0.6495
53	0	CORRELATION	35.249	36.028	0.7788
54	0	CORRELATION	34.63	41.626	6.9958
78	50	HDR Biased	37.023	36.145	-0.8786
79	50	HDR Biased	35.263	36.346	1.0831
80	50	HDR Biased	37.617	41.583	3.9663
81	50	HDR Biased	39.499	39.901	0.4021
82	50	HDR Biased	36.336	34.705	-1.6308
83	0	CORRELATION	35.344	35.797	0.4524

TID vs Post - Pre Exposure Delta

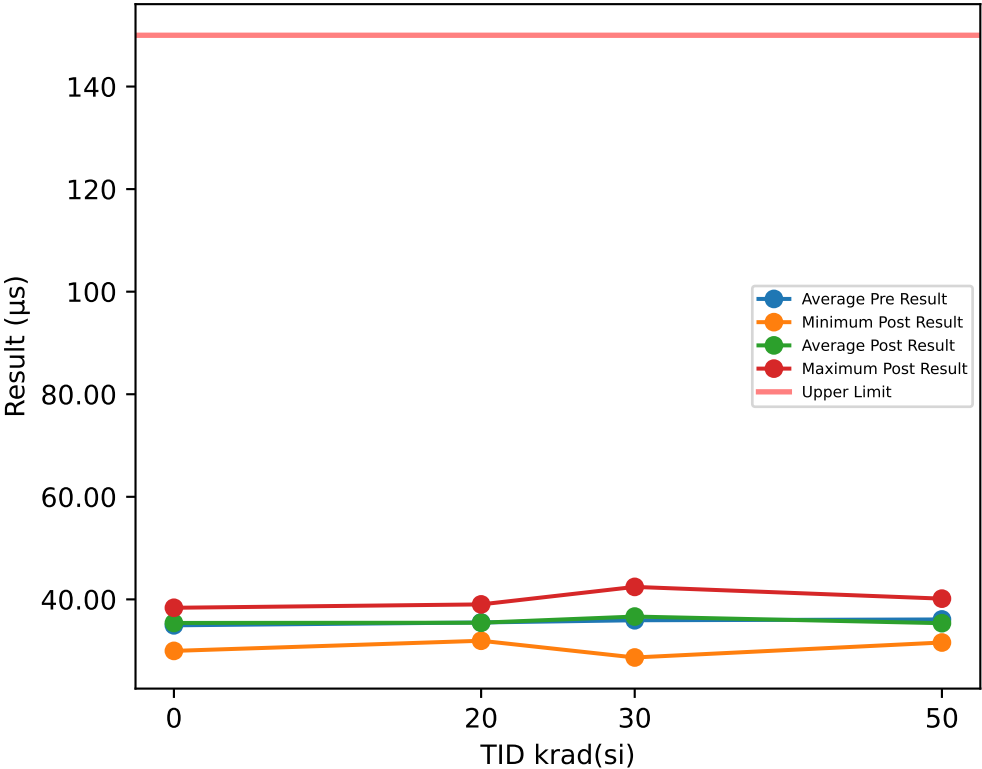


Test Statistics (µs)

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	34.63	35.955	39.029	1.5741	35.797	37.944	41.626	2.438	-0.211	1.9881	6.9958	2.7258
20	31.869	35.855	39.484	2.4386	33.122	36.824	40.115	2.3656	-2.1549	0.96862	3.1159	1.4792
30	30.689	36.703	44.859	3.9438	28.629	37.298	44.025	4.1821	-2.0597	0.59486	3.9586	2.0307
50	32.447	36.982	41.307	3.0974	32.227	36.615	41.583	2.9717	-5.4048	-0.29238	3.9663	2.4891

Device Test: 13.25 THRESHOLD|DELAY/EN/3.3/0.6//10//@T\_EN\_DELAY

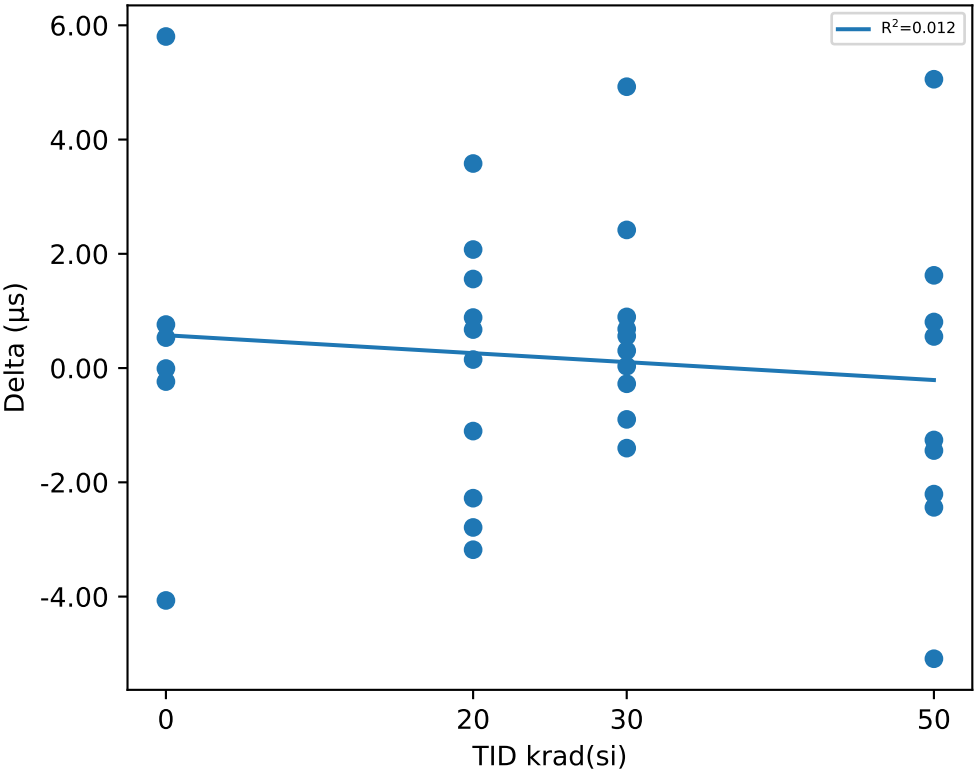
TID vs Result Stats



Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	38.87	39.019	0.1491
2	20	HDR Unbiased	38.029	34.849	-3.1796
3	20	HDR Unbiased	30.372	31.931	1.5589
23	20	HDR Unbiased	37.434	35.156	-2.2776
24	20	HDR Unbiased	35.874	37.949	2.0749
25	20	HDR Biased	33.28	36.86	3.5807
26	20	HDR Biased	34.562	35.236	0.6738
27	20	HDR Biased	32.932	33.816	0.8845
28	20	HDR Biased	39.473	36.683	-2.79
29	20	HDR Biased	34.103	33.001	-1.103
30	30	HDR Unbiased	33.706	38.631	4.9252
31	30	HDR Unbiased	35.17	37.589	2.4183
32	30	HDR Unbiased	28.364	28.668	0.3043
33	30	HDR Unbiased	33.867	34.427	0.5604
34	30	HDR Unbiased	36.135	36.819	0.6835
35	30	HDR Biased	35.115	34.841	-0.2747
36	30	HDR Biased	43.332	42.434	-0.8984
37	30	HDR Biased	41.235	41.268	0.0328
38	30	HDR Biased	33.148	34.044	0.8958
39	30	HDR Biased	39.18	37.778	-1.4016
40	50	HDR Unbiased	32.848	31.59	-1.2586
41	50	HDR Unbiased	39.666	34.578	-5.088
42	50	HDR Unbiased	37.783	38.589	0.8066
43	50	HDR Unbiased	34.293	32.849	-1.444
44	50	HDR Unbiased		33.16	
50	0	CORRELATION	34.995	34.759	-0.2365
51	0	CORRELATION	36	36.533	0.5331
52	0	CORRELATION	37.718	37.71	-0.0081
53	0	CORRELATION	34.346	35.108	0.762
54	0	CORRELATION	32.557	38.361	5.8039
78	50	HDR Biased	37.324	35.118	-2.2064
79	50	HDR Biased	34.024	35.648	1.6233
80	50	HDR Biased	35.087	40.142	5.0558
81	50	HDR Biased	37.928	38.481	0.5531
82	50	HDR Biased	35.826	33.388	-2.4382
83	0	CORRELATION	34.02	29.952	-4.0677

TID vs Post - Pre Exposure Delta

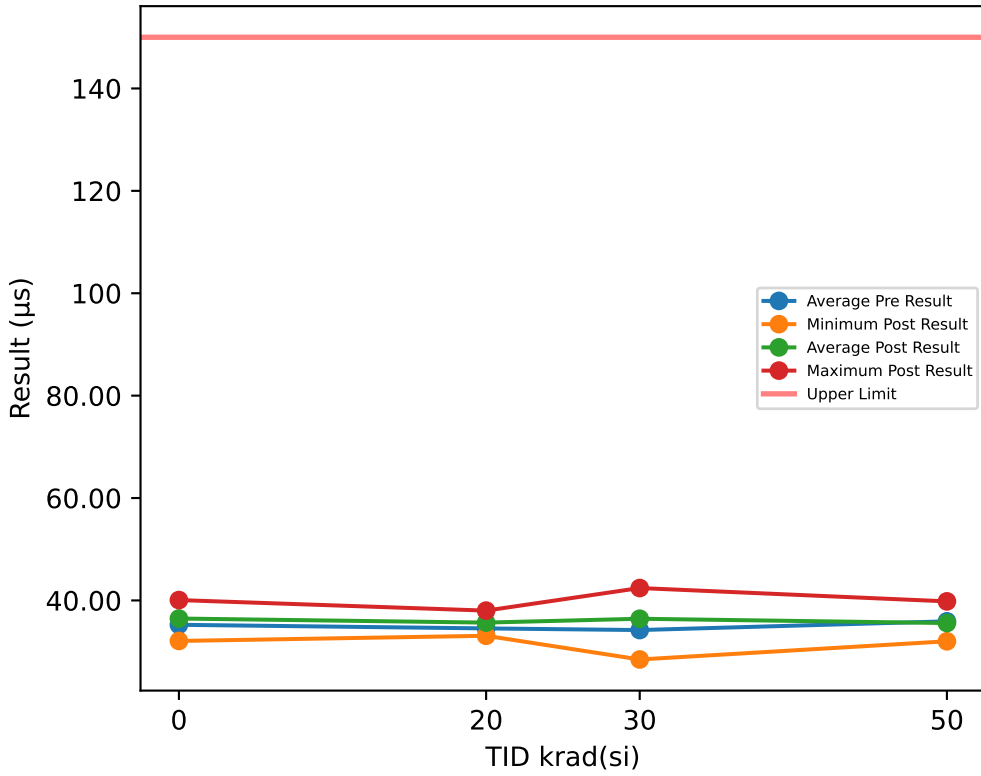


Test Statistics (µs)

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	32.557	34.939	37.718	1.7734	29.952	35.404	38.361	3.0188	-4.0677	0.46445	5.8039	3.1578
20	30.372	35.493	39.473	2.9452	31.931	35.45	39.019	2.2121	-3.1796	-0.04283	3.5807	2.2384
30	28.364	35.925	43.332	4.333	28.668	36.65	42.434	3.9384	-1.4016	0.72456	4.9252	1.8068
50	32.848	36.087	39.666	2.2259	31.59	35.354	40.142	2.8489	-5.088	-0.48849	5.0558	2.902

# Device Test: 13.26 THRESHOLD|DELAY/EN/5/0.6//10//@T\_EN\_DELAY

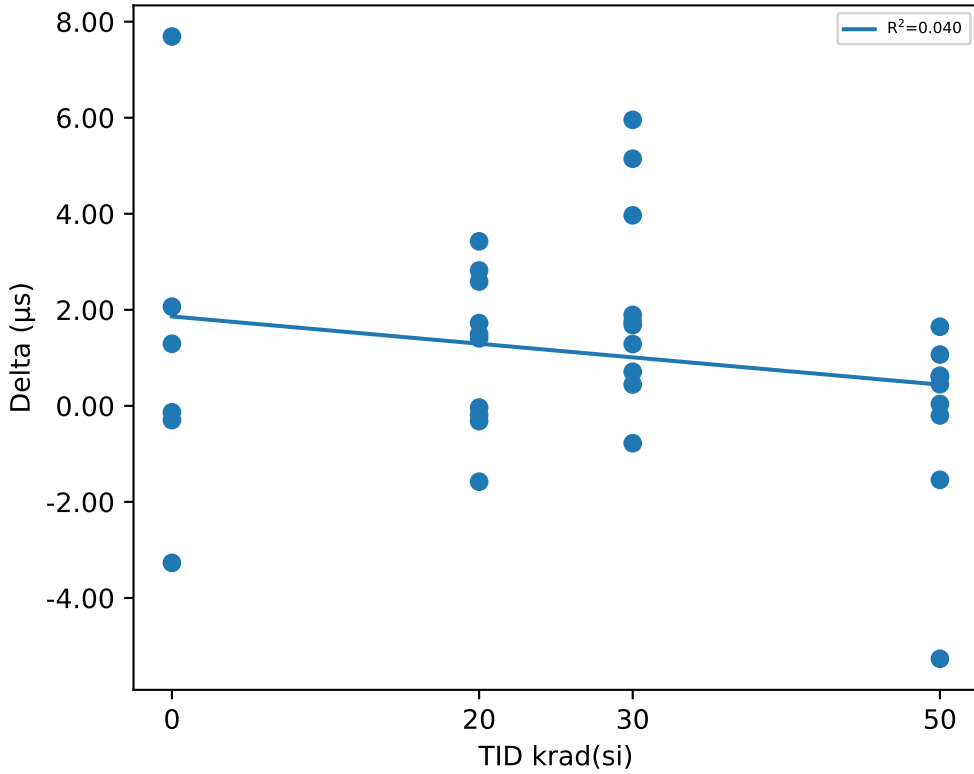
### TID vs Result Stats



### Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	35.423	38.011	2.5879
2	20	HDR Unbiased	35.318	33.739	-1.5792
3	20	HDR Unbiased	30.277	33.097	2.8198
23	20	HDR Unbiased	35.444	35.41	-0.0349
24	20	HDR Unbiased	37.978	37.789	-0.1897
25	20	HDR Biased	33.211	36.637	3.4258
26	20	HDR Biased	34.186	35.91	1.7243
27	20	HDR Biased	34.277	33.958	-0.3191
28	20	HDR Biased	36.136	37.625	1.4896
29	20	HDR Biased	33.11	34.516	1.4062
30	30	HDR Unbiased	33.677	38.823	5.1458
31	30	HDR Unbiased	35.435	37.118	1.683
32	30	HDR Unbiased	27.755	28.466	0.7103
33	30	HDR Unbiased	27.746	33.702	5.9558
34	30	HDR Unbiased	34.033	35.927	1.8935
35	30	HDR Biased	34.349	33.571	-0.7784
36	30	HDR Biased	38.454	42.422	3.9677
37	30	HDR Biased	40.337	41.625	1.2878
38	30	HDR Biased	33.412	35.172	1.7601
39	30	HDR Biased	36.951	37.395	0.4441
40	50	HDR Unbiased	31.662	32.288	0.6267
41	50	HDR Unbiased	39.519	34.254	-5.2655
42	50	HDR Unbiased	38.819	39.425	0.6064
43	50	HDR Unbiased	33.56	32.02	-1.5399
44	50	HDR Unbiased		35.126	
50	0	CORRELATION	34.909	34.776	-0.1338
51	0	CORRELATION	36.883	38.176	1.2925
52	0	CORRELATION	36.811	38.877	2.0655
53	0	CORRELATION	35.106	34.809	-0.2972
54	0	CORRELATION	32.38	40.071	7.6912
78	50	HDR Biased	34.126	34.577	0.4515
79	50	HDR Biased	34.32	35.389	1.0682
80	50	HDR Biased	36.051	37.699	1.6472
81	50	HDR Biased	39.776	39.814	0.0382
82	50	HDR Biased	35.432	35.233	-0.1994
83	0	CORRELATION	35.355	32.085	-3.2691

### TID vs Post - Pre Exposure Delta



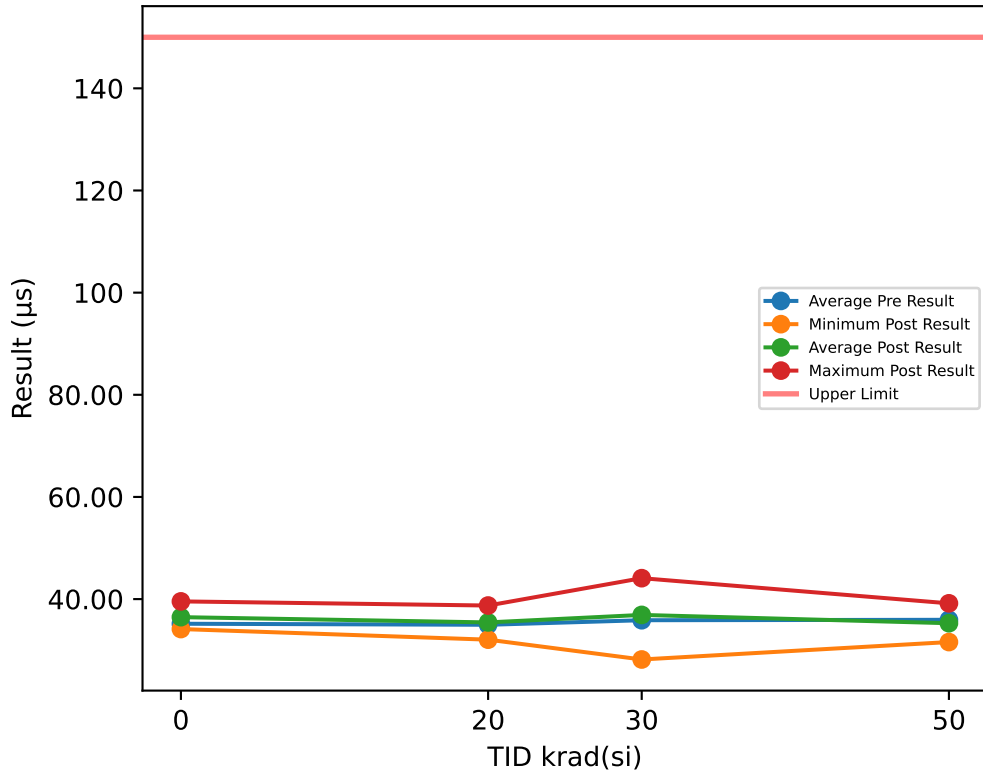
### Test Statistics (µs)

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	32.38	35.241	36.883	1.6426	32.085	36.466	40.071	3.0505	-3.2691	1.2249	7.6912	3.6574
20	30.277	34.536	37.978	2.075	33.097	35.669	38.011	1.8095	-1.5792	1.1331	3.4258	1.6107
30	27.746	34.215	40.337	4.0685	28.466	36.422	42.422	4.0947	-0.7784	2.207	5.9558	2.1465
50	31.662	35.918	39.776	2.8715	32.02	35.582	39.814	2.6633	-5.2655	-0.28518	1.6472	2.0684



# Device Test: 13.27 THRESHOLD|DELAY/EN/7/0.6//10//@T\_EN\_DELAY

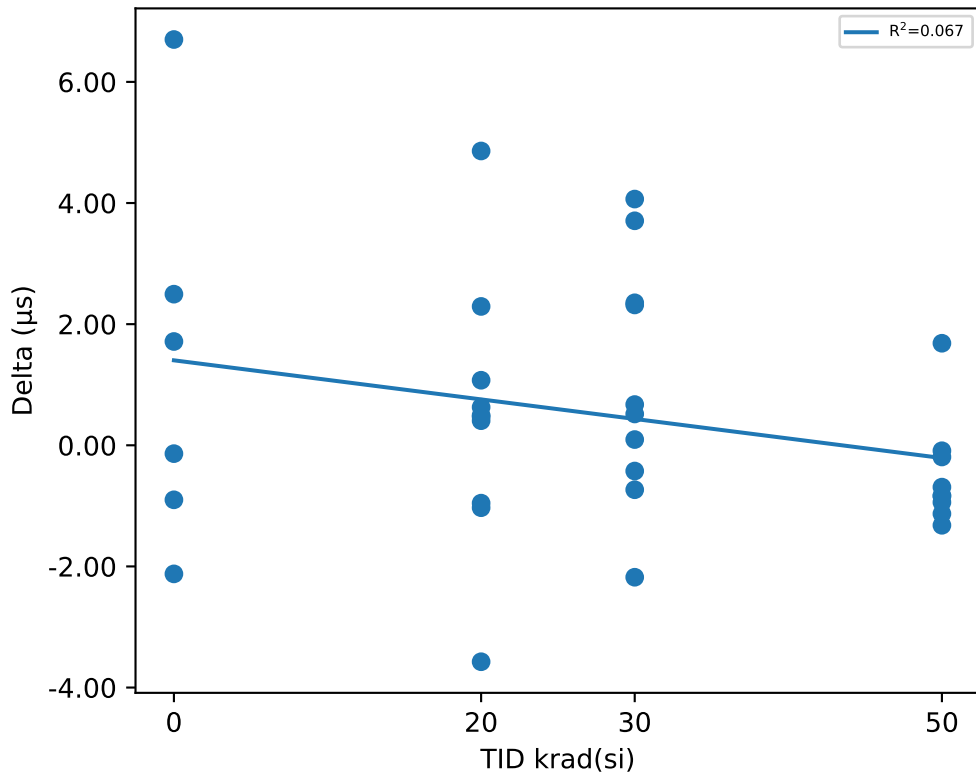
## TID vs Result Stats



## Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	38.335	38.742	0.4062
2	20	HDR Unbiased	37.081	33.507	-3.5738
3	20	HDR Unbiased	29.765	32.058	2.2927
23	20	HDR Unbiased	35.36	36.434	1.0741
24	20	HDR Unbiased	38.011	38.505	0.494
25	20	HDR Biased	32.472	37.331	4.8594
26	20	HDR Biased	35.068	34.112	-0.9553
27	20	HDR Biased	33.353	33.824	0.471
28	20	HDR Biased	36.941	37.57	0.629
29	20	HDR Biased	33.314	32.283	-1.0305
30	30	HDR Unbiased	34.568	38.633	4.0655
31	30	HDR Unbiased	34.187	37.894	3.7067
32	30	HDR Unbiased	28.602	28.177	-0.425
33	30	HDR Unbiased	35.162	34.428	-0.7338
34	30	HDR Unbiased	38.332	36.153	-2.1786
35	30	HDR Biased	33.517	35.835	2.3173
36	30	HDR Biased	43.424	44.097	0.6728
37	30	HDR Biased	38.419	40.772	2.3527
38	30	HDR Biased	34.224	34.741	0.5172
39	30	HDR Biased	38.202	38.296	0.0947
40	50	HDR Unbiased	32.719	31.589	-1.1302
41	50	HDR Unbiased	36.833	35.512	-1.3209
42	50	HDR Unbiased	40.011	39.172	-0.8386
43	50	HDR Unbiased	32.006	31.813	-0.1929
44	50	HDR Unbiased		33.598	
50	0	CORRELATION	35.543	35.405	-0.1379
51	0	CORRELATION	34.837	36.55	1.7138
52	0	CORRELATION	38.515	37.614	-0.9002
53	0	CORRELATION	33.047	35.542	2.4952
54	0	CORRELATION	32.851	39.551	6.6999
78	50	HDR Biased	36.032	35.201	-0.8317
79	50	HDR Biased	35.385	35.295	-0.0901
80	50	HDR Biased	36.583	38.268	1.6849
81	50	HDR Biased	39.251	38.56	-0.6908
82	50	HDR Biased	34.7	33.758	-0.9418
83	0	CORRELATION	36.26	34.137	-2.1233

## TID vs Post - Pre Exposure Delta

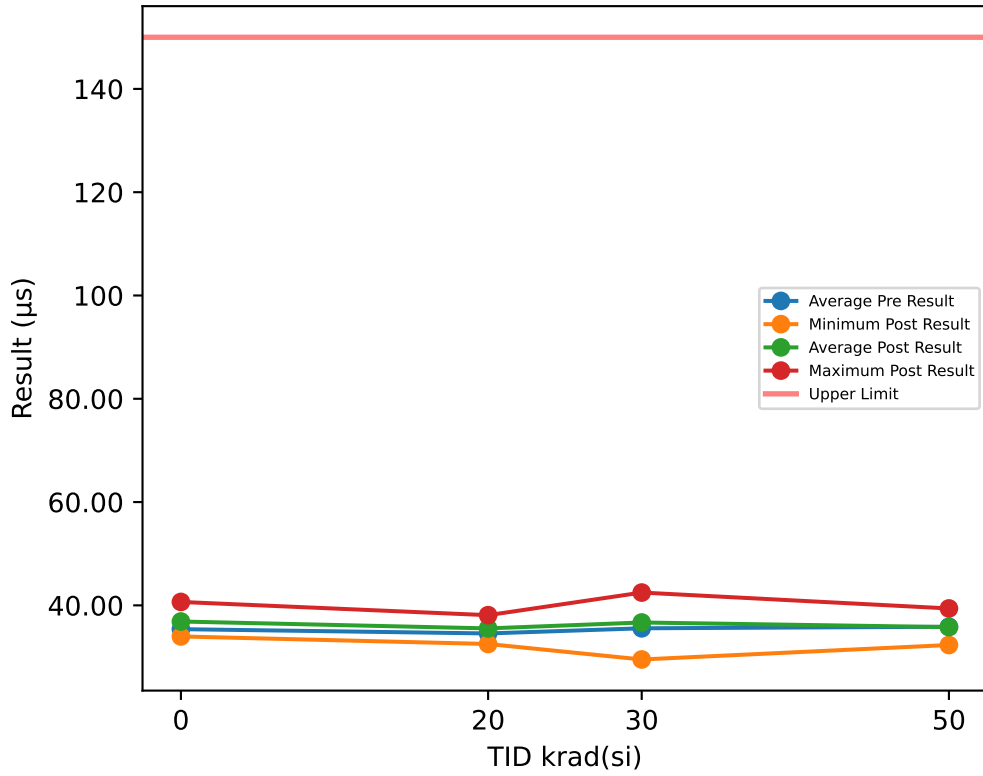


## Test Statistics (µs)

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	32.851	35.175	38.515	2.1218	34.137	36.467	39.551	1.9104	-2.1233	1.2913	6.6999	3.1428
20	29.765	34.97	38.335	2.744	32.058	35.437	38.742	2.5584	-3.5738	0.46668	4.8594	2.2015
30	28.602	35.864	43.424	3.9603	28.177	36.903	44.097	4.2333	-2.1786	1.0389	4.0655	2.0159
50	32.006	35.947	40.011	2.6563	31.589	35.277	39.172	2.7015	-1.3209	-0.48357	1.6849	0.90561

# Device Test: 13.28 THRESHOLD|DELAY/EN/12/0.6//10//@T\_EN\_DELAY

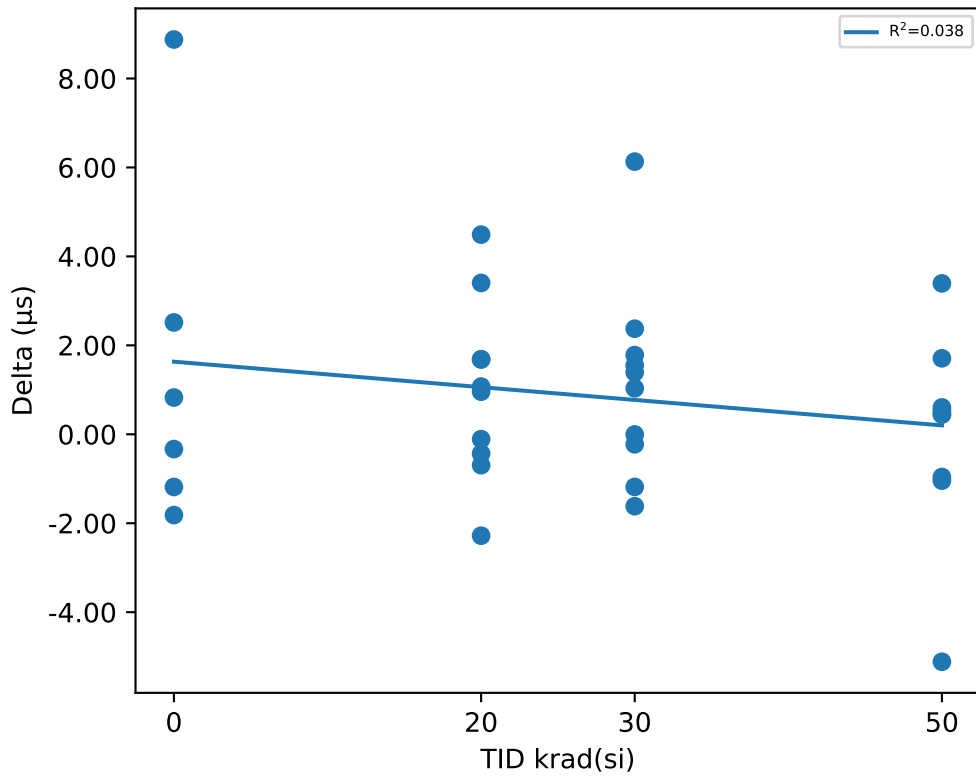
### TID vs Result Stats



### Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	36.418	38.1	1.6822
2	20	HDR Unbiased	36.204	33.924	-2.2801
3	20	HDR Unbiased	29.117	32.52	3.4032
23	20	HDR Unbiased	35.702	35.007	-0.6949
24	20	HDR Unbiased	38.274	37.84	-0.4339
25	20	HDR Biased	32.756	37.245	4.4896
26	20	HDR Biased	33.116	34.803	1.6879
27	20	HDR Biased	33.179	34.137	0.9578
28	20	HDR Biased	36.536	37.609	1.073
29	20	HDR Biased	34.312	34.203	-0.109
30	30	HDR Unbiased	32.657	38.789	6.1313
31	30	HDR Unbiased	34.916	36.309	1.3924
32	30	HDR Unbiased	28.486	29.52	1.034
33	30	HDR Unbiased	34.818	34.815	-0.0037
34	30	HDR Unbiased	37.462	35.845	-1.6168
35	30	HDR Biased	33.449	35	1.5508
36	30	HDR Biased	42.704	42.479	-0.2249
37	30	HDR Biased	39.977	41.758	1.7817
38	30	HDR Biased	32.107	34.481	2.374
39	30	HDR Biased	39.007	37.824	-1.1833
40	50	HDR Unbiased	31.719	32.323	0.6041
41	50	HDR Unbiased	38.858	33.744	-5.1141
42	50	HDR Unbiased	40.362	39.401	-0.9612
43	50	HDR Unbiased	32.049	32.495	0.4457
44	50	HDR Unbiased		35.137	
50	0	CORRELATION	35.166	33.981	-1.1845
51	0	CORRELATION	36.021	36.848	0.827
52	0	CORRELATION	37.504	40.019	2.5149
53	0	CORRELATION	36.99	35.174	-1.8161
54	0	CORRELATION	31.785	40.662	8.8767
78	50	HDR Biased	35.539	35.989	0.4498
79	50	HDR Biased	34.712	36.42	1.708
80	50	HDR Biased	35.497	38.89	3.3934
81	50	HDR Biased	38.849	39.384	0.5352
82	50	HDR Biased	35.154	34.112	-1.0421
83	0	CORRELATION	34.883	34.551	-0.3321

### TID vs Post - Pre Exposure Delta

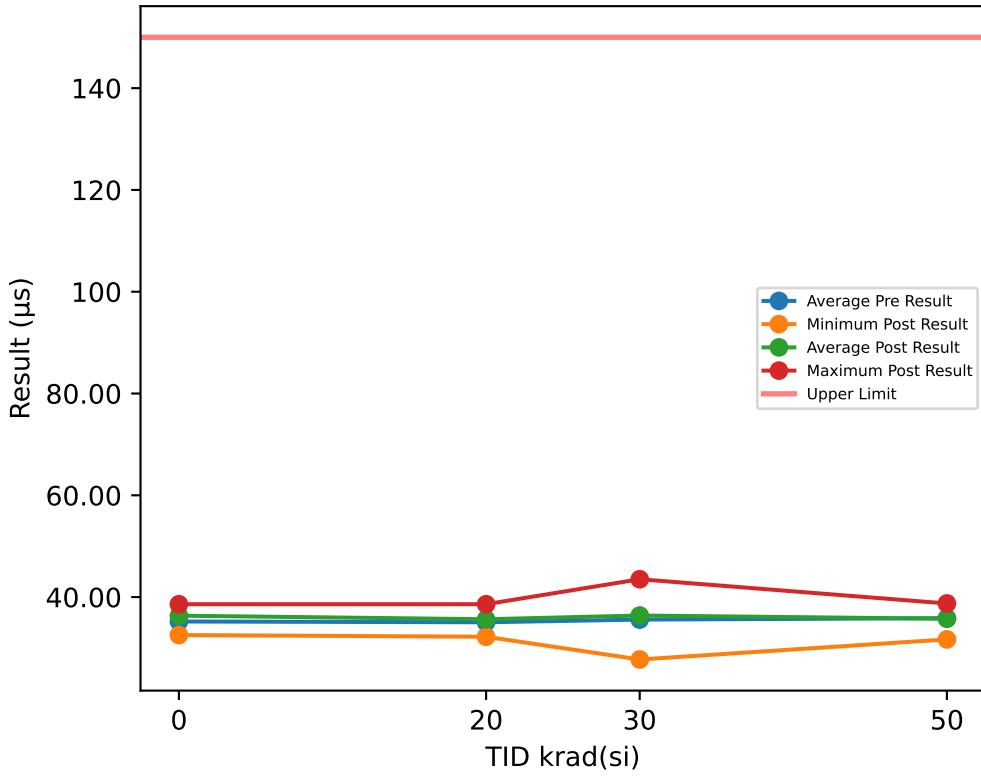


### Test Statistics (µs)

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	31.785	35.392	37.504	2.0362	33.981	36.873	40.662	2.8598	-1.8161	1.481	8.8767	3.9359
20	29.117	34.561	38.274	2.6267	32.52	35.539	38.1	1.9819	-2.2801	0.97758	4.4896	1.9947
30	28.486	35.558	42.704	4.2408	29.52	36.682	42.479	3.7774	-1.6168	1.1236	6.1313	2.1923
50	31.719	35.86	40.362	2.9982	32.323	35.789	39.401	2.7144	-5.1141	0.0020889	3.3934	2.3358



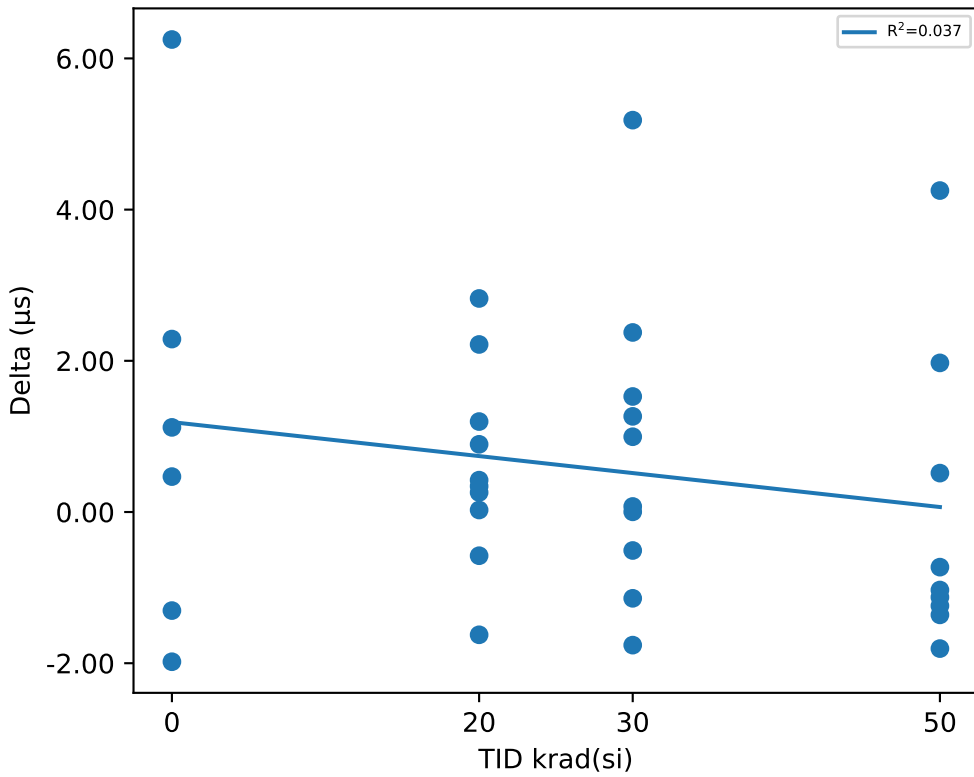
TID vs Result Stats



Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	38.572	38.599	0.0267
2	20	HDR Unbiased	35.252	33.628	-1.624
3	20	HDR Unbiased	29.382	32.207	2.8248
23	20	HDR Unbiased	35.978	36.399	0.4216
24	20	HDR Unbiased	39.148	38.57	-0.578
25	20	HDR Biased	34.587	36.803	2.2164
26	20	HDR Biased	33.833	35.029	1.1967
27	20	HDR Biased	33.913	34.172	0.2587
28	20	HDR Biased	36.505	36.846	0.3411
29	20	HDR Biased	33.323	34.219	0.8955
30	30	HDR Unbiased	33.316	38.499	5.1836
31	30	HDR Unbiased	35.665	36.661	0.9959
32	30	HDR Unbiased	28.248	27.739	-0.5089
33	30	HDR Unbiased	34.604	34.678	0.0734
34	30	HDR Unbiased	35.511	35.514	0.0024
35	30	HDR Biased	34.389	35.655	1.2653
36	30	HDR Biased	41.132	43.507	2.3752
37	30	HDR Biased	38.437	39.965	1.5282
38	30	HDR Biased	35.775	34.014	-1.7608
39	30	HDR Biased	38.699	37.558	-1.1414
40	50	HDR Unbiased	33.492	31.685	-1.8064
41	50	HDR Unbiased	37.295	36.263	-1.0317
42	50	HDR Unbiased	39.792	38.665	-1.1268
43	50	HDR Unbiased	30.967	32.939	1.9725
44	50	HDR Unbiased		35.407	
50	0	CORRELATION	34.487	34.956	0.4686
51	0	CORRELATION	36.038	38.325	2.2877
52	0	CORRELATION	39.4	38.096	-1.3037
53	0	CORRELATION	34.442	35.562	1.1195
54	0	CORRELATION	32.35	38.6	6.2501
78	50	HDR Biased	36.233	35.504	-0.7291
79	50	HDR Biased	30.885	35.137	4.2522
80	50	HDR Biased	37.368	37.882	0.5146
81	50	HDR Biased	40.108	38.747	-1.3604
82	50	HDR Biased	36.524	35.283	-1.2407
83	0	CORRELATION	34.525	32.544	-1.9804

TID vs Post - Pre Exposure Delta

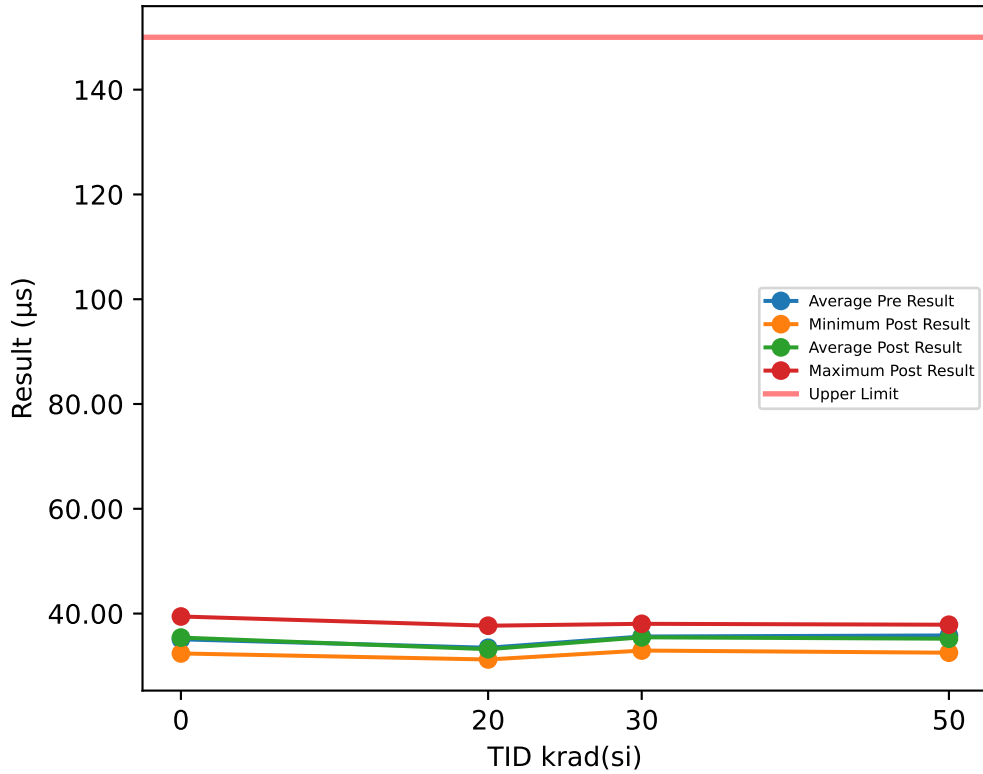


Test Statistics (µs)

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	32.35	35.207	39.4	2.3666	32.544	36.347	38.6	2.4109	-1.9804	1.1403	6.2501	2.9526
20	29.382	35.049	39.148	2.7951	32.207	35.647	38.599	2.1372	-1.624	0.59795	2.8248	1.286
30	28.248	35.578	41.132	3.4963	27.739	36.379	43.507	4.1371	-1.7608	0.80129	5.1836	1.9913
50	30.885	35.851	40.108	3.4044	31.685	35.751	38.747	2.297	-1.8064	-0.061756	4.2522	1.9913

# Device Test: 13.30 THRESHOLD|DELAY/EN/7/5//10//@T\_EN\_DELAY

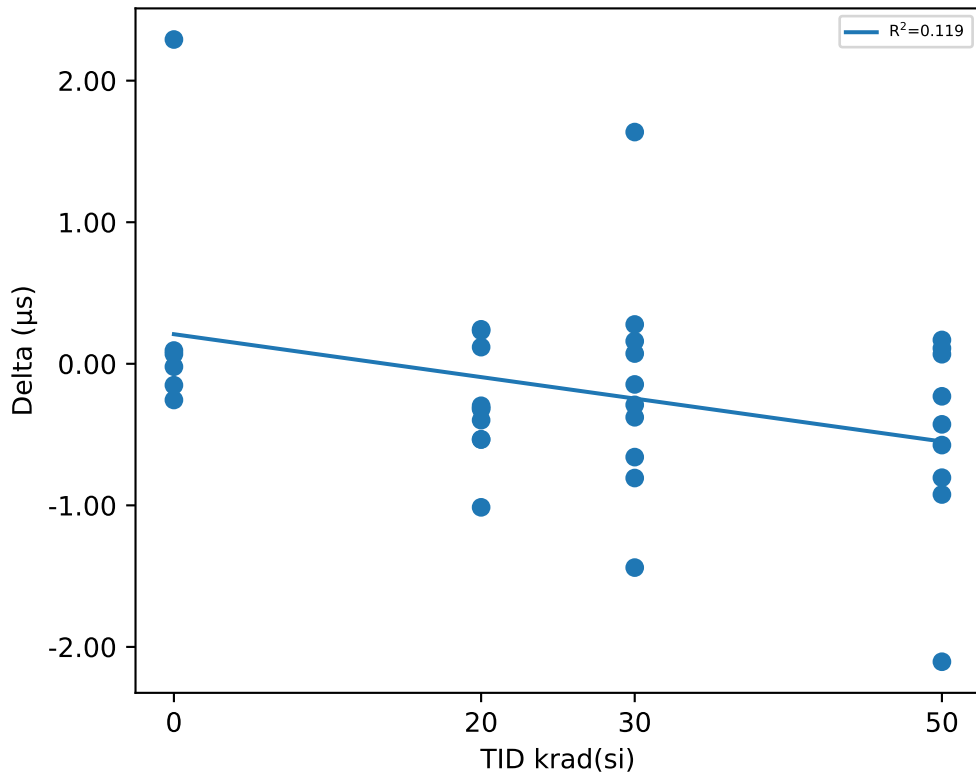
## TID vs Result Stats



## Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	33.746	33.213	-0.5335
2	20	HDR Unbiased	33.276	32.964	-0.3118
3	20	HDR Unbiased	31.119	31.236	0.1177
23	20	HDR Unbiased	34.365	33.351	-1.014
24	20	HDR Unbiased	37.441	37.684	0.2435
25	20	HDR Biased	31.903	32.137	0.2336
26	20	HDR Biased	32.207	31.91	-0.2967
27	20	HDR Biased	35.042	34.507	-0.5352
28	20	HDR Biased	32.347	32.026	-0.3201
29	20	HDR Biased	33.34	32.942	-0.3983
30	30	HDR Unbiased	32.662	34.299	1.6369
31	30	HDR Unbiased	34.128	34.406	0.2778
32	30	HDR Unbiased	32.782	32.941	0.1595
33	30	HDR Unbiased	37.12	35.68	-1.4397
34	30	HDR Unbiased	36.736	36.59	-0.1458
35	30	HDR Biased	38.705	38.046	-0.6592
36	30	HDR Biased	37.928	37.638	-0.2902
37	30	HDR Biased	36.743	36.815	0.0723
38	30	HDR Biased	34.905	34.098	-0.807
39	30	HDR Biased	34.531	34.153	-0.3779
40	50	HDR Unbiased	36.254	35.449	-0.8046
41	50	HDR Unbiased	34.635	32.53	-2.1047
42	50	HDR Unbiased	37.496	37.069	-0.4278
43	50	HDR Unbiased	33.59	33.016	-0.5743
44	50	HDR Unbiased		34.314	
50	0	CORRELATION	32.54	32.389	-0.1513
51	0	CORRELATION	35.152	35.246	0.0937
52	0	CORRELATION	39.699	39.444	-0.2557
53	0	CORRELATION	34.716	34.695	-0.0206
54	0	CORRELATION	33.278	35.568	2.2907
78	50	HDR Biased	34.709	34.877	0.1684
79	50	HDR Biased	37.763	37.872	0.1097
80	50	HDR Biased	37.707	37.775	0.0675
81	50	HDR Biased	34.845	34.616	-0.2297
82	50	HDR Biased	35.435	34.511	-0.9234
83	0	CORRELATION	35.118	35.187	0.0691

## TID vs Post - Pre Exposure Delta

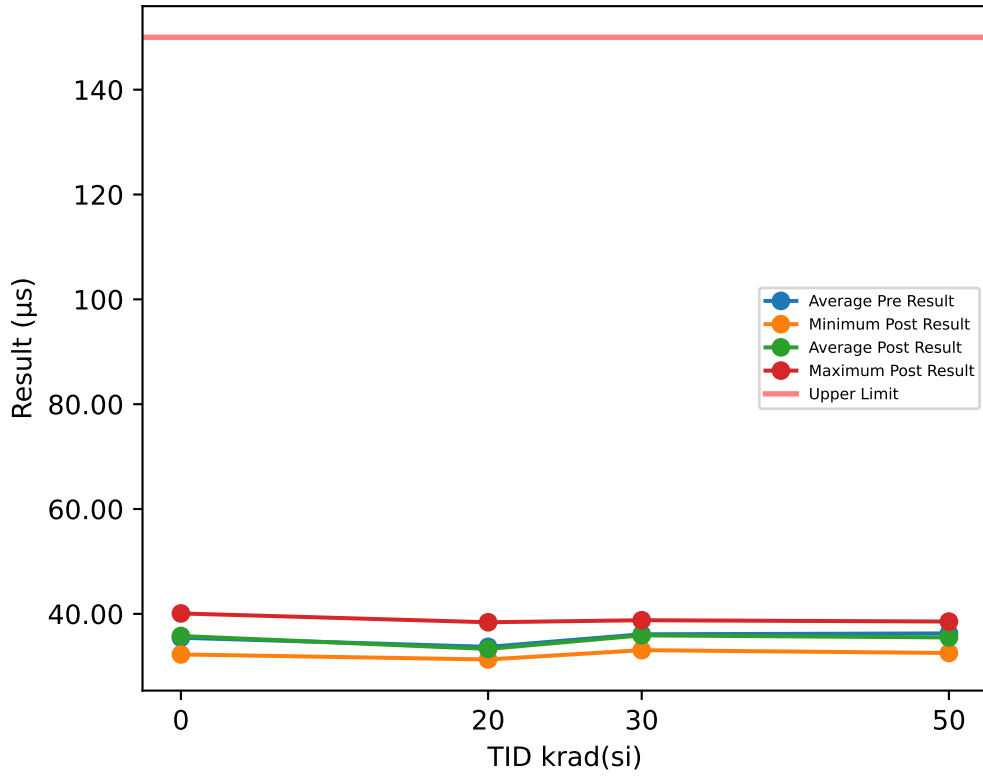


## Test Statistics (µs)

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	32.54	35.084	39.699	2.4971	32.389	35.421	39.444	2.2808	-0.2557	0.33765	2.2907	0.96597
20	31.119	33.479	37.441	1.826	31.236	33.197	37.684	1.8254	-1.014	-0.28148	0.2435	0.39172
30	32.662	35.624	38.705	2.1169	32.941	35.467	38.046	1.7307	-1.4397	-0.15733	1.6369	0.81285
50	33.59	35.826	37.763	1.5428	32.53	35.203	37.872	1.8537	-2.1047	-0.52432	0.1684	0.71293

# Device Test: 13.31 THRESHOLD|DELAY/EN/12/5//10//@T\_EN\_DELAY

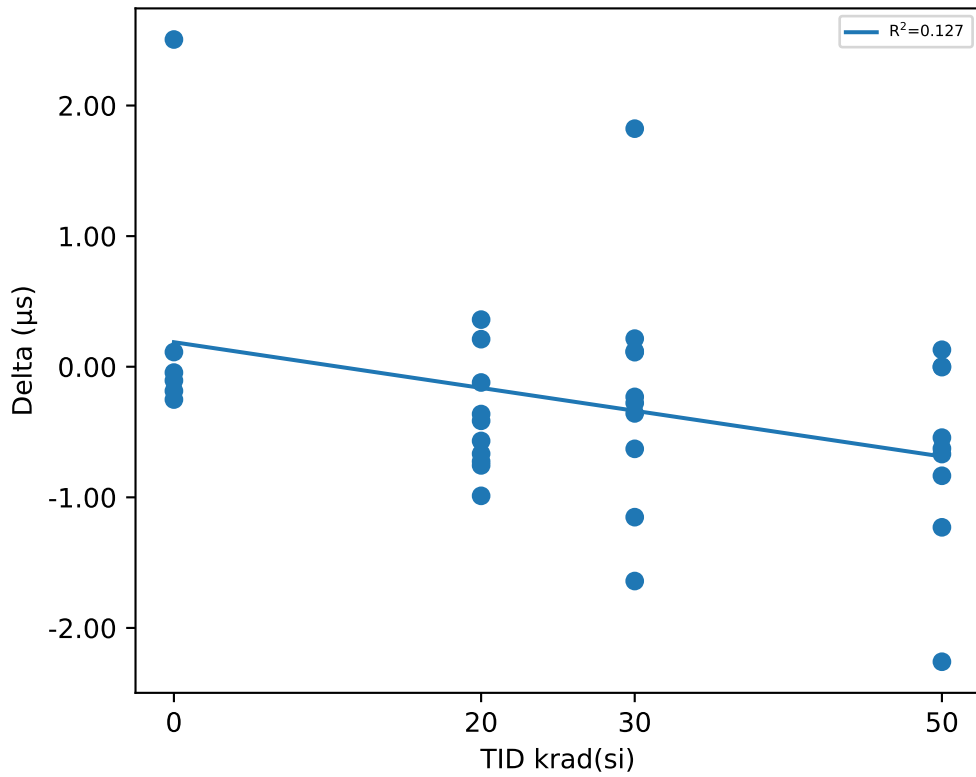
## TID vs Result Stats



## Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	33.872	33.206	-0.6663
2	20	HDR Unbiased	33.573	33.159	-0.414
3	20	HDR Unbiased	31.418	31.297	-0.1206
23	20	HDR Unbiased	34.576	33.588	-0.9886
24	20	HDR Unbiased	38.038	38.399	0.3608
25	20	HDR Biased	31.779	31.99	0.211
26	20	HDR Biased	32.07	31.708	-0.3623
27	20	HDR Biased	35.564	34.838	-0.7254
28	20	HDR Biased	32.393	31.825	-0.5682
29	20	HDR Biased	33.772	33.017	-0.7555
30	30	HDR Unbiased	32.748	34.571	1.8229
31	30	HDR Unbiased	34.559	34.774	0.2152
32	30	HDR Unbiased	32.965	33.077	0.1114
33	30	HDR Unbiased	37.939	36.298	-1.6409
34	30	HDR Unbiased	37.493	37.216	-0.2776
35	30	HDR Biased	39.416	38.787	-0.6287
36	30	HDR Biased	38.462	38.231	-0.2309
37	30	HDR Biased	37.264	37.384	0.1192
38	30	HDR Biased	35.422	34.27	-1.1519
39	30	HDR Biased	34.758	34.4	-0.3574
40	50	HDR Unbiased	36.691	35.856	-0.8349
41	50	HDR Unbiased	34.795	32.537	-2.2588
42	50	HDR Unbiased	38.07	37.527	-0.5429
43	50	HDR Unbiased	33.84	33.171	-0.6687
44	50	HDR Unbiased		34.595	
50	0	CORRELATION	32.45	32.265	-0.1852
51	0	CORRELATION	35.789	35.745	-0.0447
52	0	CORRELATION	40.334	40.083	-0.2513
53	0	CORRELATION	35.109	35.003	-0.1056
54	0	CORRELATION	33.424	35.93	2.5055
78	50	HDR Biased	35.221	35.222	0.001
79	50	HDR Biased	38.537	38.534	-0.003
80	50	HDR Biased	38.181	38.312	0.13
81	50	HDR Biased	35.149	34.523	-0.6261
82	50	HDR Biased	35.962	34.732	-1.2296
83	0	CORRELATION	35.554	35.667	0.1125

## TID vs Post - Pre Exposure Delta

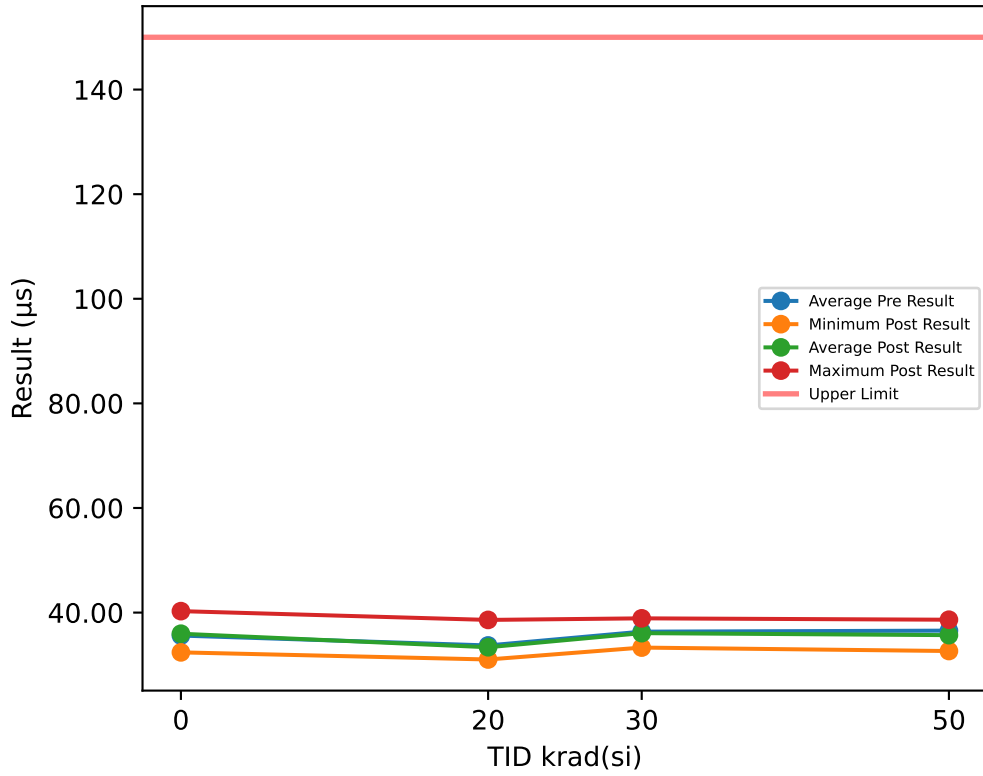


## Test Statistics (µs)

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	32.45	35.444	40.334	2.7278	32.265	35.782	40.083	2.5105	-0.2513	0.33853	2.5055	1.0689
20	31.418	33.706	38.038	2.0105	31.297	33.303	38.399	2.0816	-0.9886	-0.40291	0.3608	0.43585
30	32.748	36.103	39.416	2.3322	33.077	35.901	38.787	1.9371	-1.6409	-0.20187	1.8229	0.92263
50	33.84	36.272	38.537	1.6861	32.537	35.501	38.534	2.0546	-2.2588	-0.67033	0.13	0.74312

# Device Test: 13.32 THRESHOLD|DELAY/EN/14/5//10//@T\_EN\_DELAY

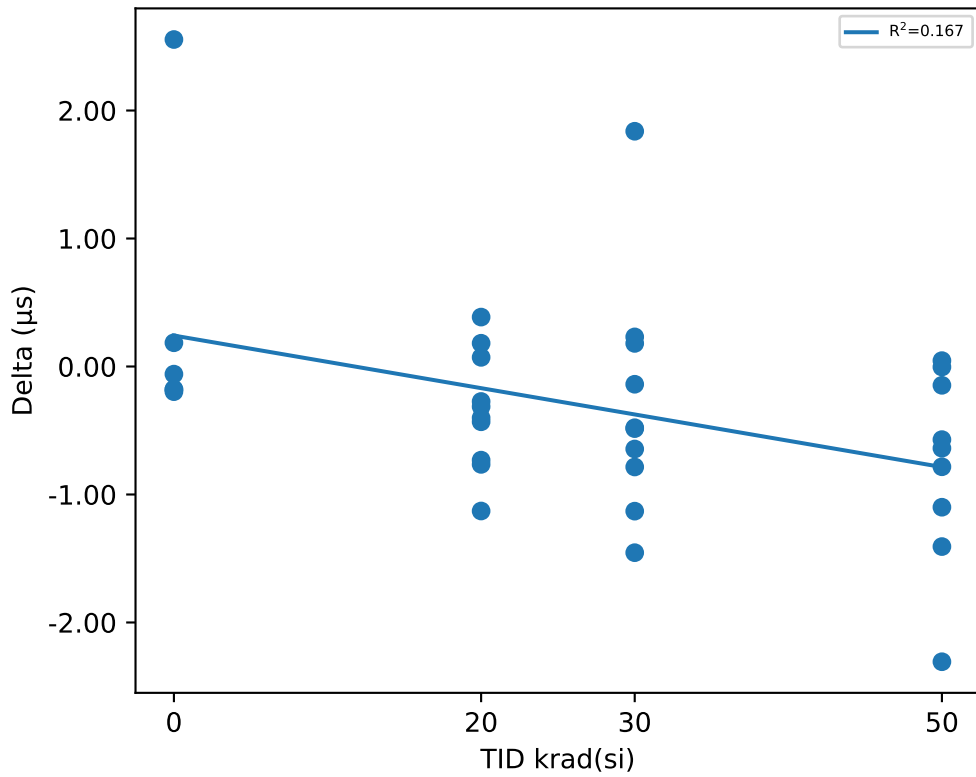
## TID vs Result Stats



## Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	34.092	33.327	-0.7647
2	20	HDR Unbiased	33.579	33.306	-0.2733
3	20	HDR Unbiased	30.963	31.035	0.0715
23	20	HDR Unbiased	34.795	33.666	-1.129
24	20	HDR Unbiased	38.215	38.601	0.3861
25	20	HDR Biased	31.801	31.983	0.1817
26	20	HDR Biased	32.146	31.745	-0.4011
27	20	HDR Biased	35.798	35.066	-0.7316
28	20	HDR Biased	32.158	31.845	-0.3133
29	20	HDR Biased	33.632	33.2	-0.4319
30	30	HDR Unbiased	32.849	34.688	1.838
31	30	HDR Unbiased	34.837	35.068	0.2313
32	30	HDR Unbiased	33.13	33.311	0.1804
33	30	HDR Unbiased	38.03	36.575	-1.4547
34	30	HDR Unbiased	37.878	37.4	-0.4784
35	30	HDR Biased	39.686	38.901	-0.785
36	30	HDR Biased	38.796	38.311	-0.4853
37	30	HDR Biased	37.598	37.459	-0.1387
38	30	HDR Biased	35.601	34.471	-1.1302
39	30	HDR Biased	35.158	34.513	-0.6446
40	50	HDR Unbiased	37.177	36.078	-1.0995
41	50	HDR Unbiased	34.96	32.654	-2.3067
42	50	HDR Unbiased	38.331	37.76	-0.5713
43	50	HDR Unbiased	34.159	33.375	-0.7834
44	50	HDR Unbiased		34.84	
50	0	CORRELATION	32.456	32.396	-0.0596
51	0	CORRELATION	36.009	35.812	-0.1966
52	0	CORRELATION	40.456	40.278	-0.1778
53	0	CORRELATION	35.359	35.18	-0.1793
54	0	CORRELATION	33.537	36.092	2.5548
78	50	HDR Biased	35.447	35.443	-0.0038
79	50	HDR Biased	38.592	38.638	0.0459
80	50	HDR Biased	38.661	38.514	-0.147
81	50	HDR Biased	35.339	34.7	-0.6384
82	50	HDR Biased	36.297	34.891	-1.4069
83	0	CORRELATION	35.818	36.004	0.1855

## TID vs Post - Pre Exposure Delta

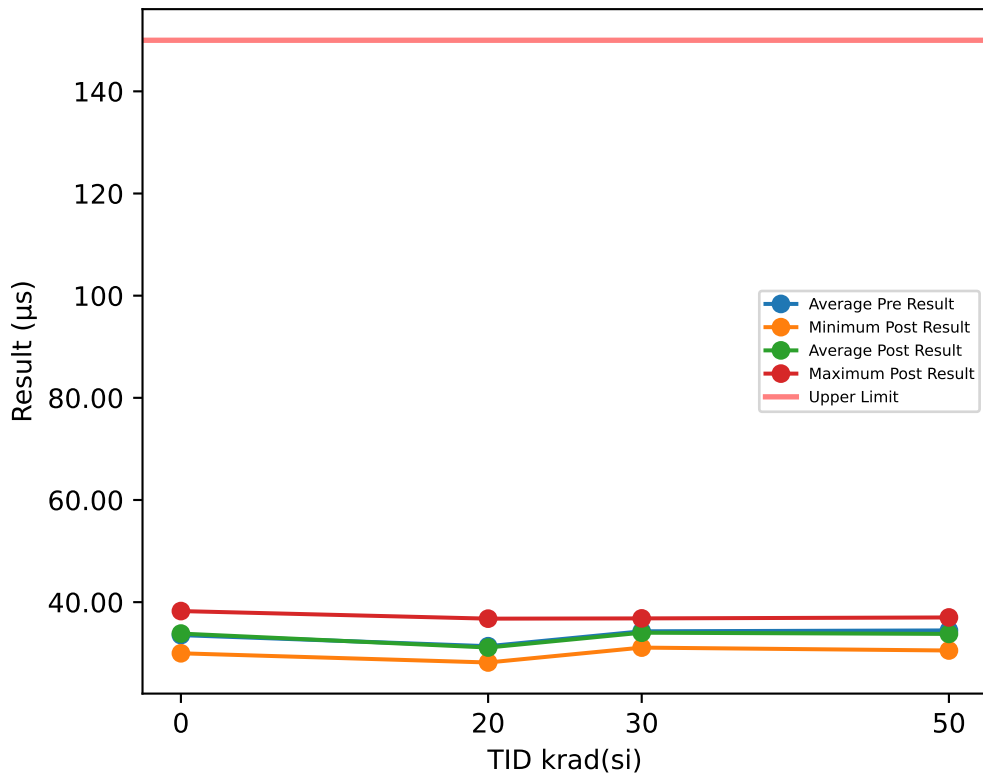


## Test Statistics (µs)

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	32.456	35.606	40.456	2.7567	32.396	35.96	40.278	2.5298	-0.1966	0.3545	2.5548	1.0875
20	30.963	33.718	38.215	2.1612	31.035	33.377	38.601	2.1783	-1.129	-0.34056	0.3861	0.46456
30	32.849	36.356	39.686	2.374	33.311	36.07	38.901	1.9003	-1.4547	-0.28672	1.838	0.91597
50	34.159	36.552	38.661	1.7026	32.654	35.689	38.638	2.0571	-2.3067	-0.7679	0.0459	0.7561

# Device Test: 13.33 THRESHOLD|DELAY/EN/14/13.9//10//@T\_EN\_DELAY

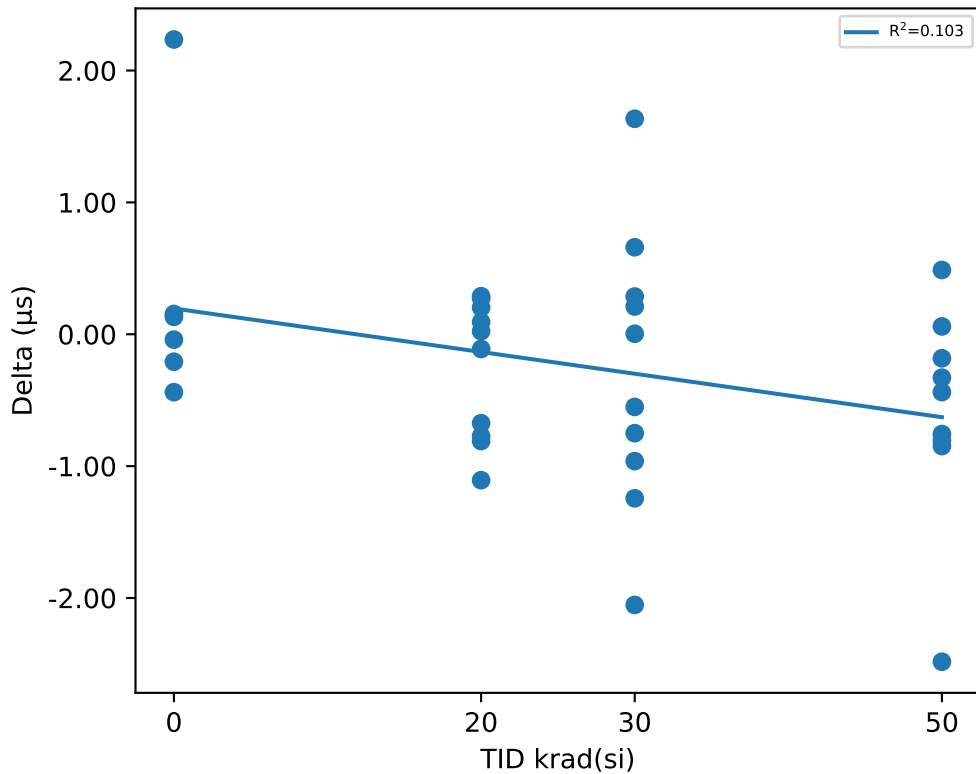
## TID vs Result Stats



## Test Results (Upper Limit = 150.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	32.254	31.147	-1.1065
2	20	HDR Unbiased	31.197	31.4	0.2031
3	20	HDR Unbiased	28.166	28.189	0.0231
23	20	HDR Unbiased	32.328	31.556	-0.7724
24	20	HDR Unbiased	36.499	36.771	0.2719
25	20	HDR Biased	29.736	29.828	0.0926
26	20	HDR Biased	28.922	28.81	-0.1118
27	20	HDR Biased	34.044	33.234	-0.8101
28	20	HDR Biased	28.957	29.246	0.2888
29	20	HDR Biased	31.665	30.99	-0.6745
30	30	HDR Unbiased	31.057	32.691	1.634
31	30	HDR Unbiased	32.097	32.757	0.6597
32	30	HDR Unbiased	31.099	31.103	0.0039
33	30	HDR Unbiased	36.627	34.574	-2.0524
34	30	HDR Unbiased	35.138	35.349	0.2105
35	30	HDR Biased	37.569	36.819	-0.7503
36	30	HDR Biased	37.202	36.651	-0.5511
37	30	HDR Biased	35.277	35.563	0.2863
38	30	HDR Biased	33.612	32.368	-1.2441
39	30	HDR Biased	33.271	32.309	-0.9618
40	50	HDR Unbiased	34.621	34.182	-0.4387
41	50	HDR Unbiased	33.018	30.535	-2.4833
42	50	HDR Unbiased	36.539	35.733	-0.8059
43	50	HDR Unbiased	31.699	31.369	-0.3291
44	50	HDR Unbiased		32.932	
50	0	CORRELATION	30.03	29.989	-0.0408
51	0	CORRELATION	33.898	33.459	-0.4392
52	0	CORRELATION	38.123	38.255	0.1319
53	0	CORRELATION	33.315	33.107	-0.2082
54	0	CORRELATION	31.908	34.143	2.2352
78	50	HDR Biased	34.093	33.911	-0.1822
79	50	HDR Biased	36.257	36.745	0.4873
80	50	HDR Biased	36.947	37.007	0.0595
81	50	HDR Biased	33.161	32.313	-0.8479
82	50	HDR Biased	33.872	33.115	-0.7567
83	0	CORRELATION	33.998	34.152	0.1538

## TID vs Post - Pre Exposure Delta

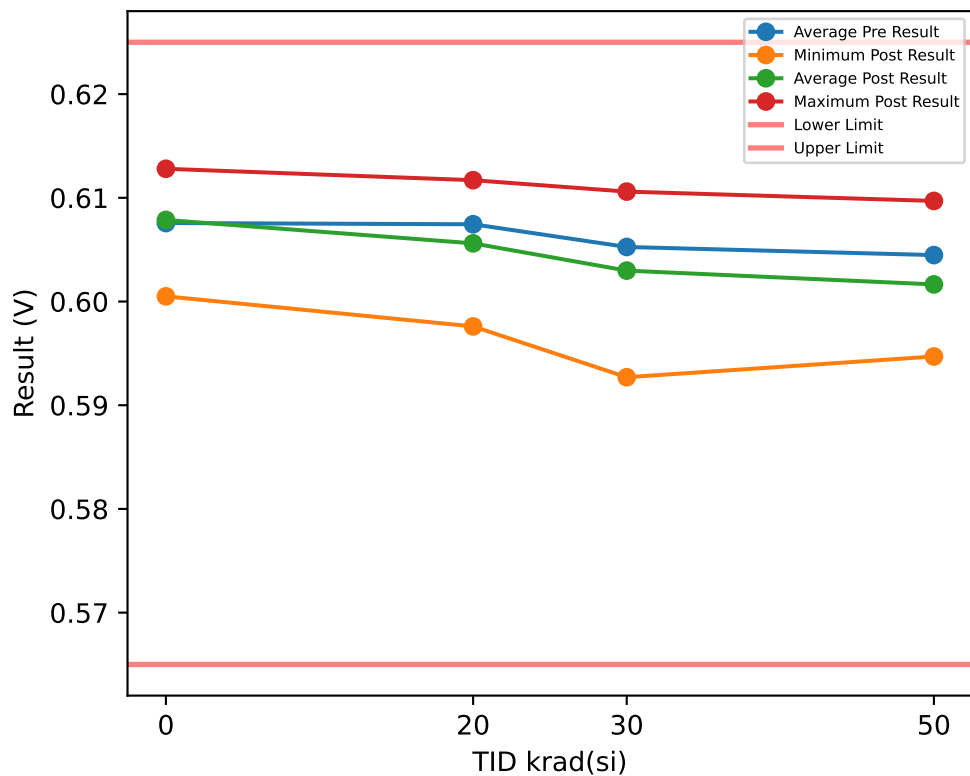


## Test Statistics (µs)

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	30.03	33.545	38.123	2.6972	29.989	33.851	38.255	2.6528	-0.4392	0.30545	2.2352	0.97111
20	28.166	31.377	36.499	2.5825	28.189	31.117	36.771	2.4898	-1.1065	-0.25958	0.2888	0.52478
30	31.057	34.295	37.569	2.4341	31.103	34.018	36.819	2.0203	-2.0524	-0.27653	1.634	1.0551
50	31.699	34.467	36.947	1.7902	30.535	33.784	37.007	2.182	-2.4833	-0.58856	0.4873	0.83405

# Device Test: 13.4 THRESHOLD|RISE/EN/3.3/0.6//10//@VIH\_EN

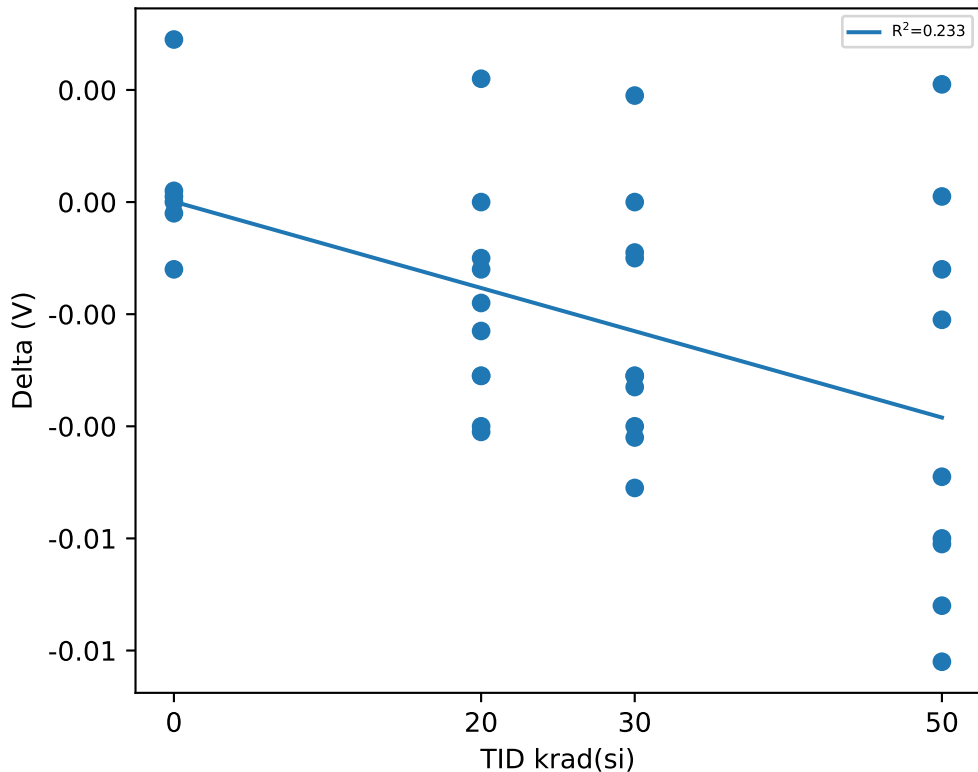
### TID vs Result Stats



### Test Results (Lower Limit = 0.565, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6127	0.6117	-0.001
2	20	HDR Unbiased	0.6089	0.6077	-0.0012
3	20	HDR Unbiased	0.6076	0.6098	0.0022
23	20	HDR Unbiased	0.6089	0.6066	-0.0023
24	20	HDR Unbiased	0.6097	0.6097	0
25	20	HDR Biased	0.6068	0.6028	-0.004
26	20	HDR Biased	0.6017	0.5976	-0.0041
27	20	HDR Biased	0.6048	0.6017	-0.0031
28	20	HDR Biased	0.6067	0.6049	-0.0018
29	20	HDR Biased	0.6067	0.6036	-0.0031
30	30	HDR Unbiased	0.6018	0.5987	-0.0031
31	30	HDR Unbiased	0.6057	0.6057	0
32	30	HDR Unbiased	0.6087	0.6106	0.0019
33	30	HDR Unbiased	0.6057	0.6048	-0.0009
34	30	HDR Unbiased	0.6059	0.6028	-0.0031
35	30	HDR Biased	0.6087	0.6036	-0.0051
36	30	HDR Biased	0.6068	0.6035	-0.0033
37	30	HDR Biased	0.6047	0.6037	-0.001
38	30	HDR Biased	0.5969	0.5927	-0.0042
39	30	HDR Biased	0.6077	0.6037	-0.004
40	50	HDR Unbiased	0.6079	0.6058	-0.0021
41	50	HDR Unbiased	0.5987	0.6008	0.0021
42	50	HDR Unbiased	0.6037	0.6025	-0.0012
43	50	HDR Unbiased	0.6056	0.6057	0.0001
44	50	HDR Unbiased		0.6097	
50	0	CORRELATION	0.6056	0.6058	0.0002
51	0	CORRELATION	0.6017	0.6005	-0.0012
52	0	CORRELATION	0.6089	0.6087	-0.0002
53	0	CORRELATION	0.6097	0.6097	0
54	0	CORRELATION	0.6068	0.6097	0.0029
78	50	HDR Biased	0.6077	0.6028	-0.0049
79	50	HDR Biased	0.6069	0.6008	-0.0061
80	50	HDR Biased	0.6041	0.5969	-0.0072
81	50	HDR Biased	0.6007	0.5947	-0.006
82	50	HDR Biased	0.605	0.5968	-0.0082
83	0	CORRELATION	0.6127	0.6128	0.0001

### TID vs Post - Pre Exposure Delta



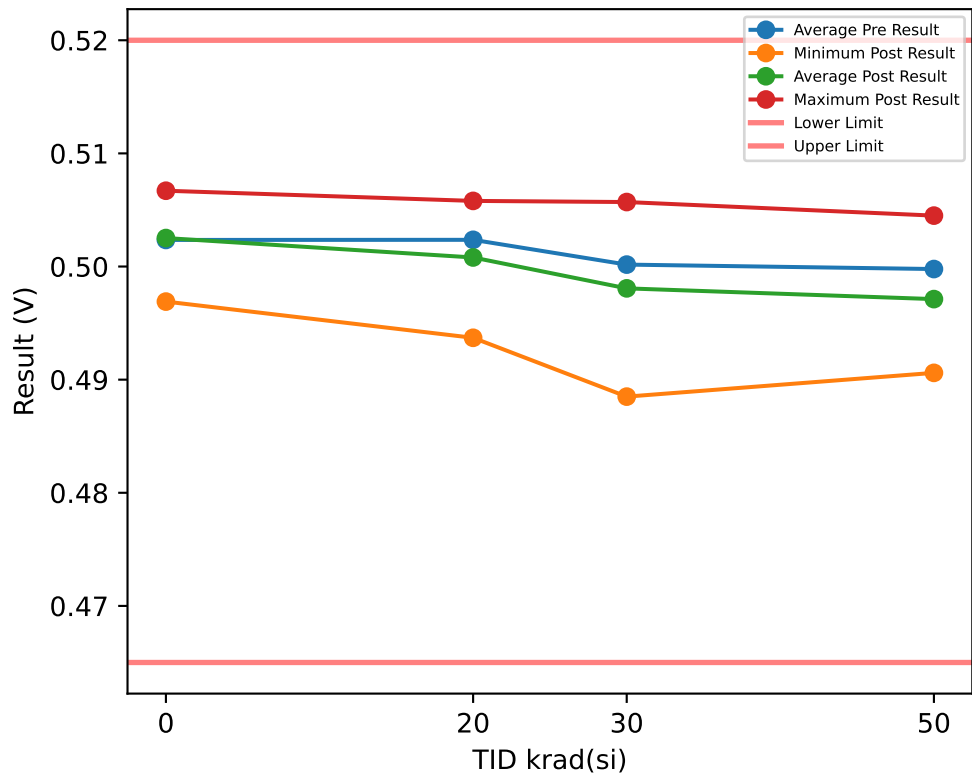
### Test Statistics (V)

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	0.6017	0.60757	0.6127	0.0037829	0.6005	0.60787	0.6128	0.0042495	-0.0012	0.0003	0.0029	0.0013711
20	0.6017	0.60745	0.6127	0.0029531	0.5976	0.60561	0.6117	0.0043283	-0.0041	-0.00184	0.0022	0.0019432
30	0.5969	0.60526	0.6087	0.003574	0.5927	0.60298	0.6106	0.0046487	-0.0051	-0.00228	0.0019	0.0021908
50	0.5987	0.60448	0.6079	0.0031204	0.5947	0.60165	0.6097	0.0046703	-0.0082	-0.0037222	0.0021	0.0035685



# Device Test: 13.5 THRESHOLD|FALL/EN/3.3/0.6//10//@VIL\_EN

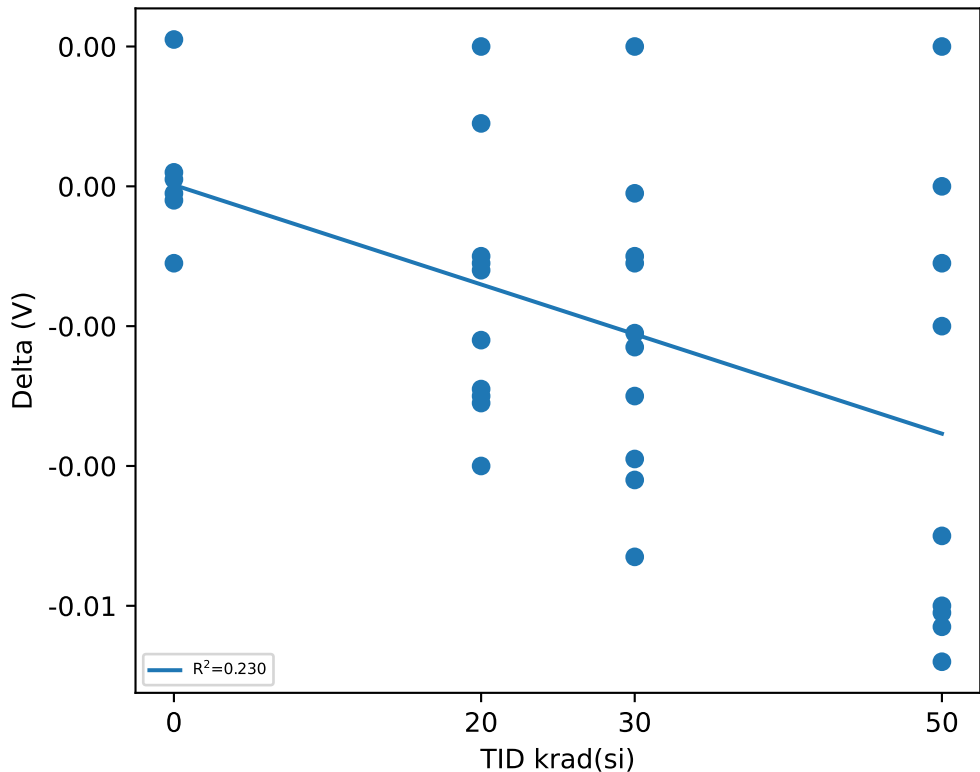
### TID vs Result Stats



### Test Results (Lower Limit = 0.465, Upper Limit = 0.52 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5069	0.5058	-0.0011
2	20	HDR Unbiased	0.5036	0.5026	-0.001
3	20	HDR Unbiased	0.5027	0.5047	0.002
23	20	HDR Unbiased	0.5026	0.5014	-0.0012
24	20	HDR Unbiased	0.5047	0.5056	0.0009
25	20	HDR Biased	0.5016	0.4976	-0.004
26	20	HDR Biased	0.4966	0.4937	-0.0029
27	20	HDR Biased	0.5006	0.4976	-0.003
28	20	HDR Biased	0.5026	0.4995	-0.0031
29	20	HDR Biased	0.5017	0.4995	-0.0022
30	30	HDR Unbiased	0.4969	0.4946	-0.0023
31	30	HDR Unbiased	0.5007	0.5006	-0.0001
32	30	HDR Unbiased	0.5037	0.5057	0.002
33	30	HDR Unbiased	0.5005	0.4995	-0.001
34	30	HDR Unbiased	0.5007	0.4986	-0.0021
35	30	HDR Biased	0.5038	0.4985	-0.0053
36	30	HDR Biased	0.5015	0.4985	-0.003
37	30	HDR Biased	0.4997	0.4986	-0.0011
38	30	HDR Biased	0.4927	0.4885	-0.0042
39	30	HDR Biased	0.5015	0.4976	-0.0039
40	50	HDR Unbiased	0.5036	0.5016	-0.002
41	50	HDR Unbiased	0.4947	0.4967	0.002
42	50	HDR Unbiased	0.4987	0.4976	-0.0011
43	50	HDR Unbiased	0.5017	0.5017	0
44	50	HDR Unbiased		0.5045	
50	0	CORRELATION	0.5006	0.5007	0.0001
51	0	CORRELATION	0.4967	0.4969	0.0002
52	0	CORRELATION	0.5037	0.5035	-0.0002
53	0	CORRELATION	0.5037	0.5036	-0.0001
54	0	CORRELATION	0.5016	0.5037	0.0021
78	50	HDR Biased	0.5026	0.4976	-0.005
79	50	HDR Biased	0.5017	0.4956	-0.0061
80	50	HDR Biased	0.4988	0.4925	-0.0063
81	50	HDR Biased	0.4966	0.4906	-0.006
82	50	HDR Biased	0.4996	0.4928	-0.0068
83	0	CORRELATION	0.5078	0.5067	-0.0011

### TID vs Post - Pre Exposure Delta



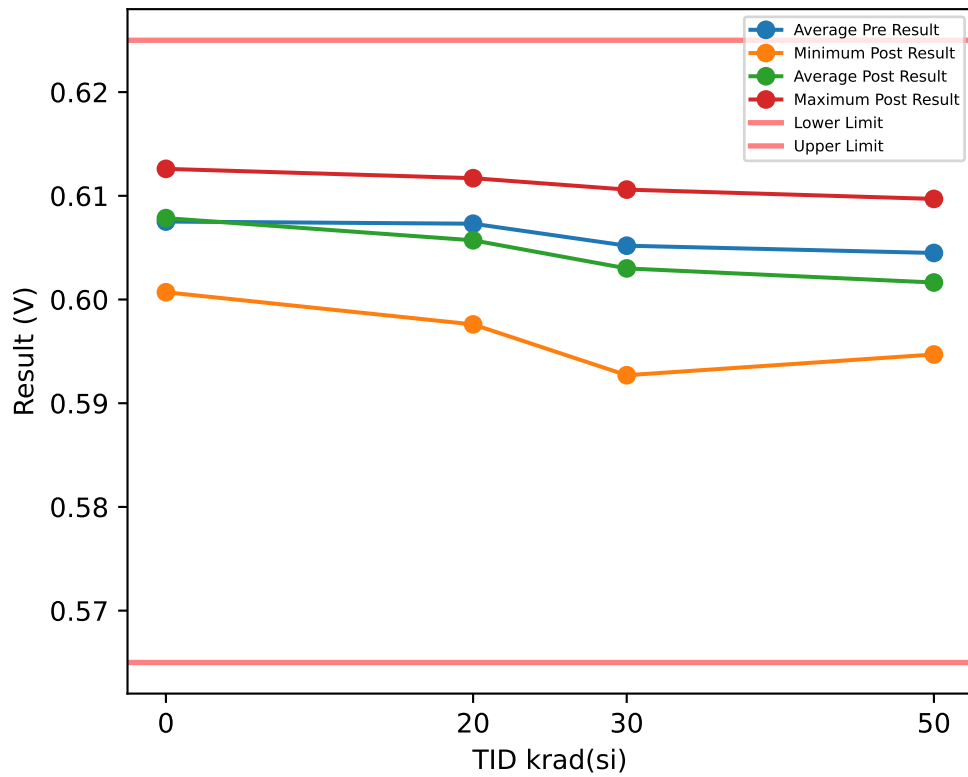
### Test Statistics (V)

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	0.4967	0.50235	0.5078	0.003712	0.4969	0.50252	0.5067	0.0033433	-0.0011	0.00016667	0.0021	0.0010539
20	0.4966	0.50236	0.5069	0.0026904	0.4937	0.5008	0.5058	0.0039598	-0.004	-0.00156	0.002	0.0018851
30	0.4927	0.50017	0.5038	0.0032755	0.4885	0.49807	0.5057	0.0043645	-0.0053	-0.0021	0.002	0.0021541
50	0.4947	0.49978	0.5036	0.0029154	0.4906	0.49712	0.5045	0.0044842	-0.0068	-0.0034778	0.002	0.0032499



# Device Test: 13.7 THRESHOLD|RISE/EN/5/0.6//10//@VIH\_EN

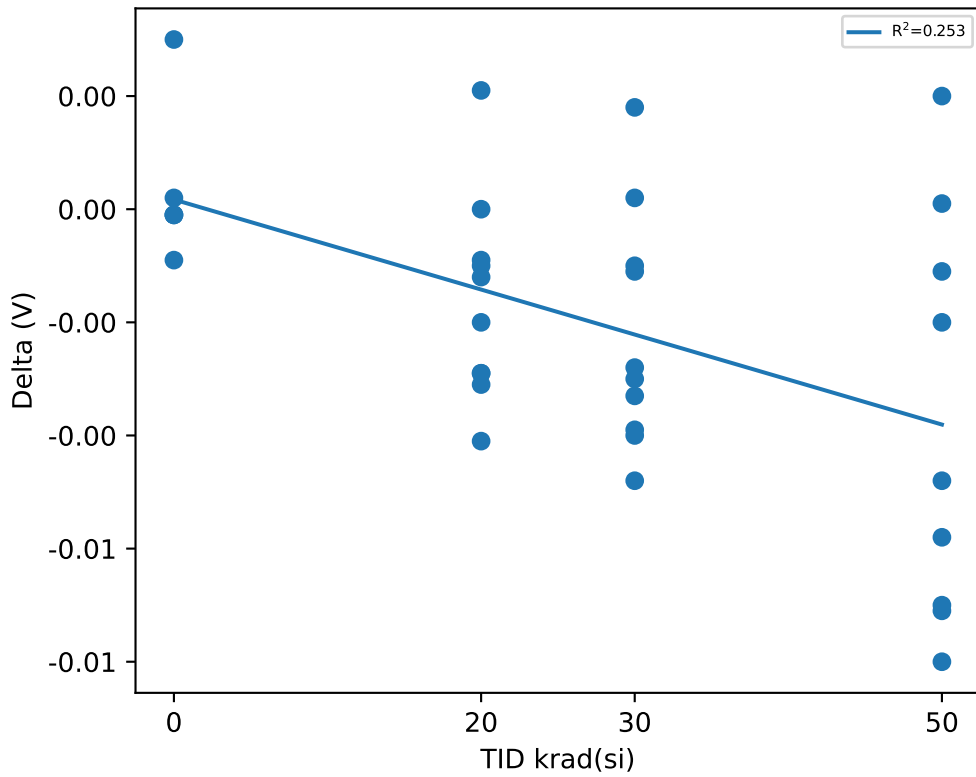
## TID vs Result Stats



## Test Results (Lower Limit = 0.565, Upper Limit = 0.625 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6127	0.6117	-0.001
2	20	HDR Unbiased	0.6089	0.6077	-0.0012
3	20	HDR Unbiased	0.6077	0.6098	0.0021
23	20	HDR Unbiased	0.6076	0.6067	-0.0009
24	20	HDR Unbiased	0.6097	0.6097	0
25	20	HDR Biased	0.6067	0.6038	-0.0029
26	20	HDR Biased	0.6017	0.5976	-0.0041
27	20	HDR Biased	0.6047	0.6018	-0.0029
28	20	HDR Biased	0.6067	0.6047	-0.002
29	20	HDR Biased	0.6067	0.6036	-0.0031
30	30	HDR Unbiased	0.6017	0.5987	-0.003
31	30	HDR Unbiased	0.6056	0.6058	0.0002
32	30	HDR Unbiased	0.6088	0.6106	0.0018
33	30	HDR Unbiased	0.6058	0.6047	-0.0011
34	30	HDR Unbiased	0.6056	0.6028	-0.0028
35	30	HDR Biased	0.6086	0.6038	-0.0048
36	30	HDR Biased	0.6067	0.6034	-0.0033
37	30	HDR Biased	0.6047	0.6037	-0.001
38	30	HDR Biased	0.5967	0.5927	-0.004
39	30	HDR Biased	0.6077	0.6038	-0.0039
40	50	HDR Unbiased	0.6077	0.6057	-0.002
41	50	HDR Unbiased	0.5987	0.6007	0.002
42	50	HDR Unbiased	0.6038	0.6027	-0.0011
43	50	HDR Unbiased	0.6057	0.6058	0.0001
44	50	HDR Unbiased		0.6097	
50	0	CORRELATION	0.6056	0.6058	0.0002
51	0	CORRELATION	0.6016	0.6007	-0.0009
52	0	CORRELATION	0.6089	0.6088	-0.0001
53	0	CORRELATION	0.6096	0.6095	-0.0001
54	0	CORRELATION	0.6067	0.6097	0.003
78	50	HDR Biased	0.6076	0.6028	-0.0048
79	50	HDR Biased	0.6066	0.6008	-0.0058
80	50	HDR Biased	0.6037	0.5966	-0.0071
81	50	HDR Biased	0.6017	0.5947	-0.007
82	50	HDR Biased	0.6049	0.5969	-0.008
83	0	CORRELATION	0.6127	0.6126	-0.0001

## TID vs Post - Pre Exposure Delta

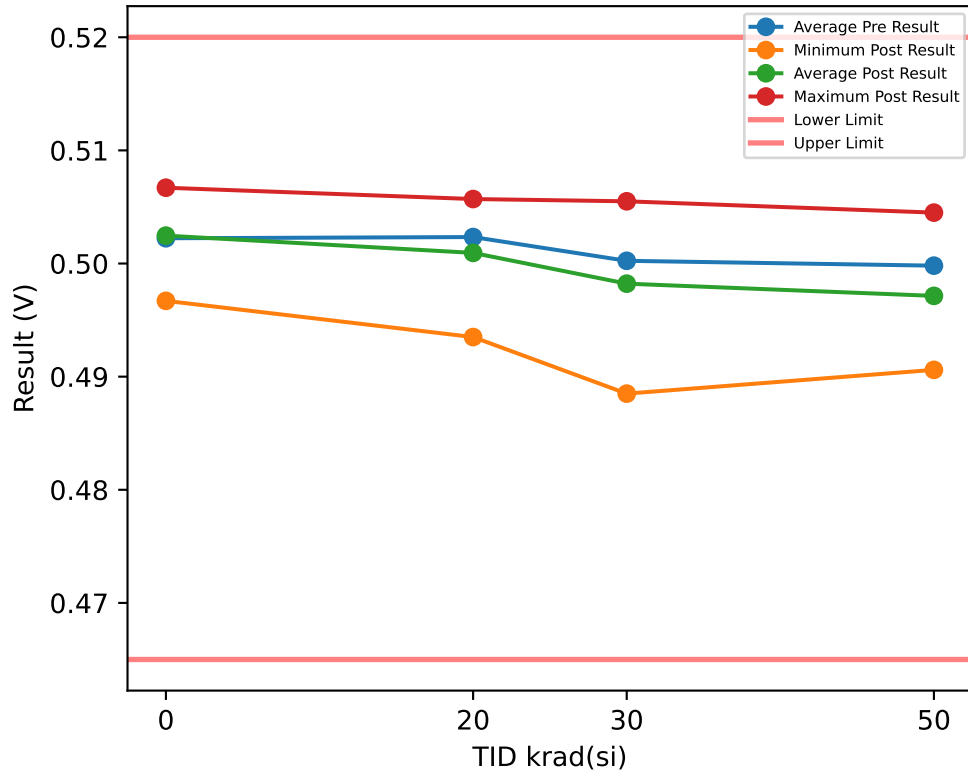


## Test Statistics (V)

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	0.6016	0.60752	0.6127	0.0038071	0.6007	0.60785	0.6126	0.0041215	-0.0009	0.00033333	0.003	0.0013574
20	0.6017	0.60731	0.6127	0.0029236	0.5976	0.60571	0.6117	0.0042642	-0.0041	-0.0016	0.0021	0.0018043
30	0.5967	0.60519	0.6088	0.0036278	0.5927	0.603	0.6106	0.0046552	-0.0048	-0.00219	0.0018	0.0020952
50	0.5987	0.60449	0.6077	0.0029255	0.5947	0.60164	0.6097	0.0047004	-0.008	-0.0037444	0.002	0.0035903

# Device Test: 13.8 THRESHOLD|FALL/EN/5/0.6//10//@VIL\_EN

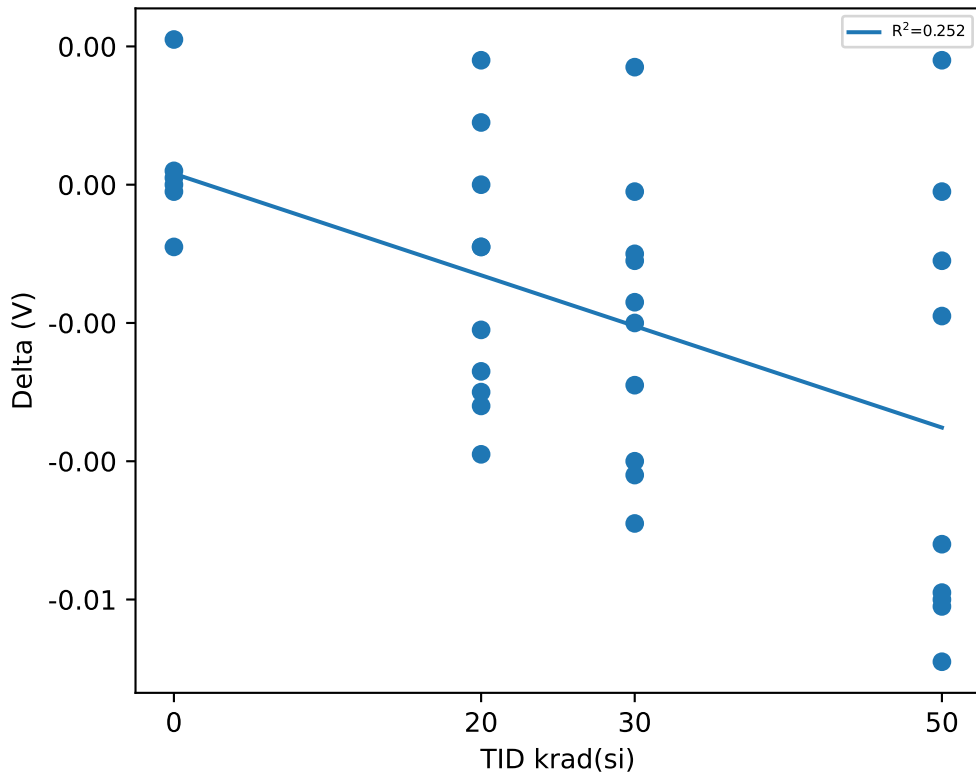
### TID vs Result Stats



### Test Results (Lower Limit = 0.465, Upper Limit = 0.52 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5066	0.5057	-0.0009
2	20	HDR Unbiased	0.5036	0.5036	0
3	20	HDR Unbiased	0.5028	0.5046	0.0018
23	20	HDR Unbiased	0.5026	0.5017	-0.0009
24	20	HDR Unbiased	0.5047	0.5056	0.0009
25	20	HDR Biased	0.5015	0.4976	-0.0039
26	20	HDR Biased	0.4967	0.4935	-0.0032
27	20	HDR Biased	0.5004	0.4977	-0.0027
28	20	HDR Biased	0.5027	0.4997	-0.003
29	20	HDR Biased	0.5018	0.4997	-0.0021
30	30	HDR Unbiased	0.4966	0.4946	-0.002
31	30	HDR Unbiased	0.5007	0.5006	-0.0001
32	30	HDR Unbiased	0.5038	0.5055	0.0017
33	30	HDR Unbiased	0.5006	0.4995	-0.0011
34	30	HDR Unbiased	0.5006	0.4989	-0.0017
35	30	HDR Biased	0.5036	0.4987	-0.0049
36	30	HDR Biased	0.5026	0.4986	-0.004
37	30	HDR Biased	0.4996	0.4986	-0.001
38	30	HDR Biased	0.4927	0.4885	-0.0042
39	30	HDR Biased	0.5016	0.4987	-0.0029
40	50	HDR Unbiased	0.5036	0.5017	-0.0019
41	50	HDR Unbiased	0.4947	0.4965	0.0018
42	50	HDR Unbiased	0.4987	0.4976	-0.0011
43	50	HDR Unbiased	0.5017	0.5016	-0.0001
44	50	HDR Unbiased		0.5045	
50	0	CORRELATION	0.5004	0.5006	0.0002
51	0	CORRELATION	0.4967	0.4967	0
52	0	CORRELATION	0.5033	0.5034	0.0001
53	0	CORRELATION	0.5038	0.5037	-0.0001
54	0	CORRELATION	0.5016	0.5037	0.0021
78	50	HDR Biased	0.5029	0.4977	-0.0052
79	50	HDR Biased	0.5016	0.4956	-0.006
80	50	HDR Biased	0.4987	0.4928	-0.0059
81	50	HDR Biased	0.4967	0.4906	-0.0061
82	50	HDR Biased	0.4997	0.4928	-0.0069
83	0	CORRELATION	0.5076	0.5067	-0.0009

### TID vs Post - Pre Exposure Delta

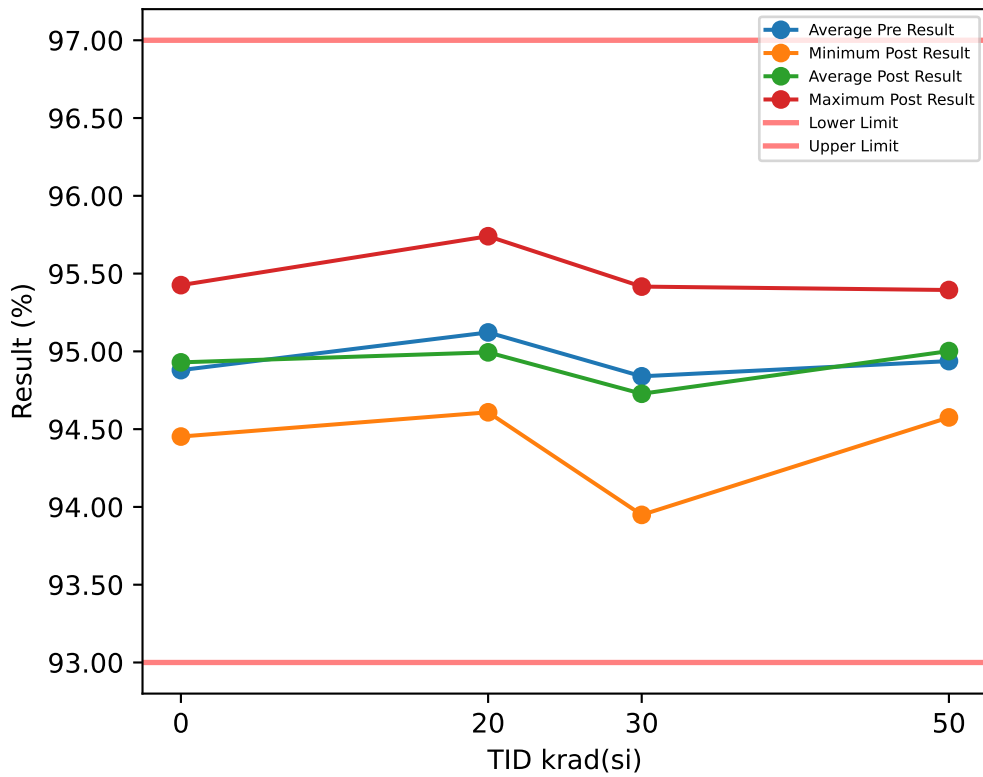


### Test Statistics (V)

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	0.4967	0.50223	0.5076	0.0036544	0.4967	0.50247	0.5067	0.0034227	-0.0009	0.00023333	0.0021	0.00099532
20	0.4967	0.50234	0.5066	0.0026307	0.4935	0.50094	0.5057	0.0040208	-0.0039	-0.0014	0.0018	0.0018921
30	0.4927	0.50024	0.5038	0.0033725	0.4885	0.49822	0.5055	0.0043346	-0.0049	-0.00202	0.0017	0.0020346
50	0.4947	0.49981	0.5036	0.0029357	0.4906	0.49714	0.5045	0.0044548	-0.0069	-0.0034889	0.0018	0.0031857

# Device Test: 14.1 THRESHOLD|RISE/FB/2.25/0.6//10//@VPG\_RISE

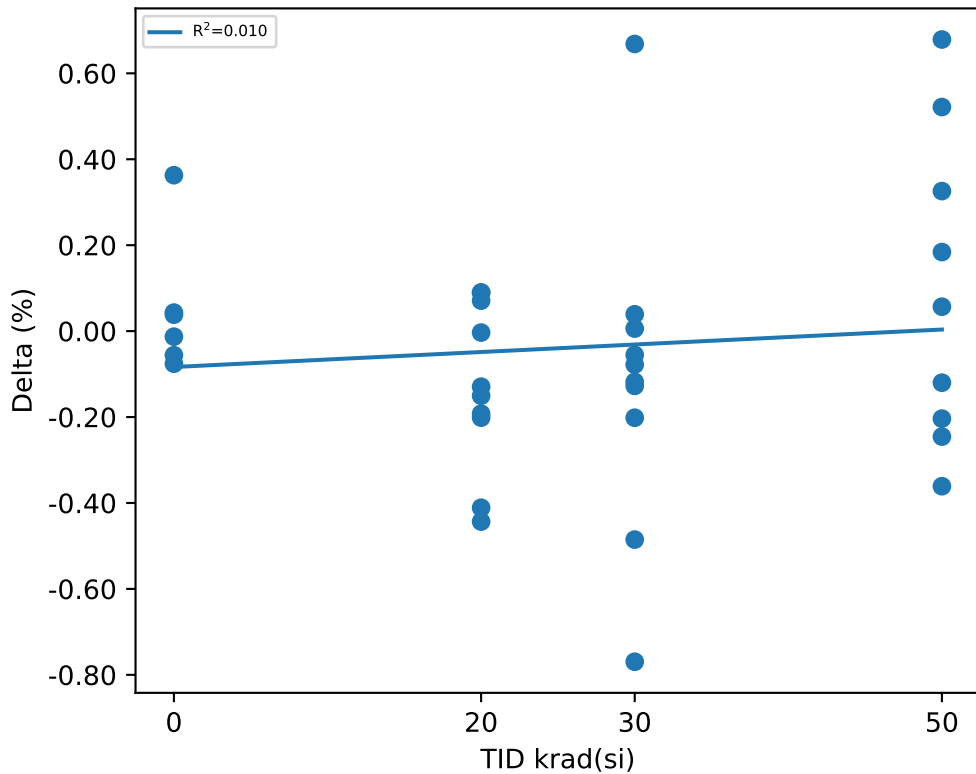
## TID vs Result Stats



## Test Results (Lower Limit = 93.0, Upper Limit = 97.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	95.126	94.683	-0.4433
2	20	HDR Unbiased	94.728	94.725	-0.0034
3	20	HDR Unbiased	94.738	94.608	-0.1293
23	20	HDR Unbiased	94.854	94.704	-0.1504
24	20	HDR Unbiased	95.492	95.081	-0.4111
25	20	HDR Biased	95.65	95.74	0.0897
26	20	HDR Biased	95.106	94.913	-0.1922
27	20	HDR Biased	94.717	94.788	0.0709
28	20	HDR Biased	95.001	95.091	0.0898
29	20	HDR Biased	95.807	95.605	-0.2014
30	30	HDR Unbiased	95.378	94.892	-0.4852
31	30	HDR Unbiased	94.896	94.902	0.006
32	30	HDR Unbiased	94.465	94.347	-0.1181
33	30	HDR Unbiased	94.748	95.416	0.6683
34	30	HDR Unbiased	95.546	94.776	-0.7695
35	30	HDR Biased	95.367	95.165	-0.2016
36	30	HDR Biased	95.063	95.102	0.0392
37	30	HDR Biased	94.54	94.462	-0.0779
38	30	HDR Biased	94.004	93.949	-0.0554
39	30	HDR Biased	94.391	94.264	-0.1275
40	50	HDR Unbiased	94.959	94.713	-0.2455
41	50	HDR Unbiased	94.654	95.333	0.6787
42	50	HDR Unbiased	94.79	95.312	0.5215
43	50	HDR Unbiased	94.854	94.65	-0.2037
44	50	HDR Unbiased		94.746	
50	0	CORRELATION	94.843	94.767	-0.0758
51	0	CORRELATION	94.916	94.86	-0.0561
52	0	CORRELATION	94.707	94.746	0.0382
53	0	CORRELATION	94.465	94.452	-0.0129
54	0	CORRELATION	95.063	95.426	0.3629
78	50	HDR Biased	95.755	95.394	-0.361
79	50	HDR Biased	94.938	95.122	0.184
80	50	HDR Biased	95.052	94.932	-0.12
81	50	HDR Biased	94.916	95.242	0.3259
82	50	HDR Biased	94.519	94.575	0.0568
83	0	CORRELATION	95.283	95.326	0.0431

## TID vs Post - Pre Exposure Delta

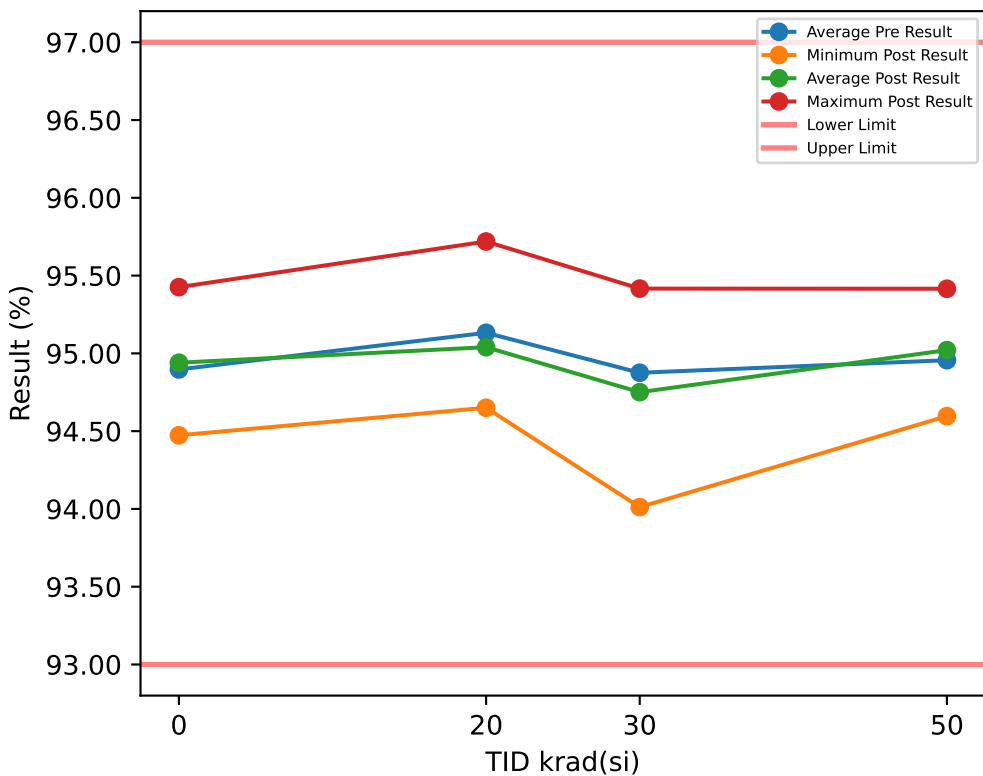


## Test Statistics (%)

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	94.465	94.879	95.283	0.28286	94.452	94.929	95.426	0.37313	-0.0758	0.0499	0.3629	0.16071
20	94.717	95.122	95.807	0.39984	94.608	94.994	95.74	0.39424	-0.4433	-0.12807	0.0898	0.19422
30	94.004	94.84	95.546	0.50066	93.949	94.728	95.416	0.45982	-0.7695	-0.11217	0.6683	0.36967
50	94.519	94.937	95.755	0.34781	94.575	95.002	95.394	0.31462	-0.361	0.092967	0.6787	0.36135

# Device Test: 14.10 THRESHOLD|RISE/FB/7/0.6//10//@VPG\_RISE

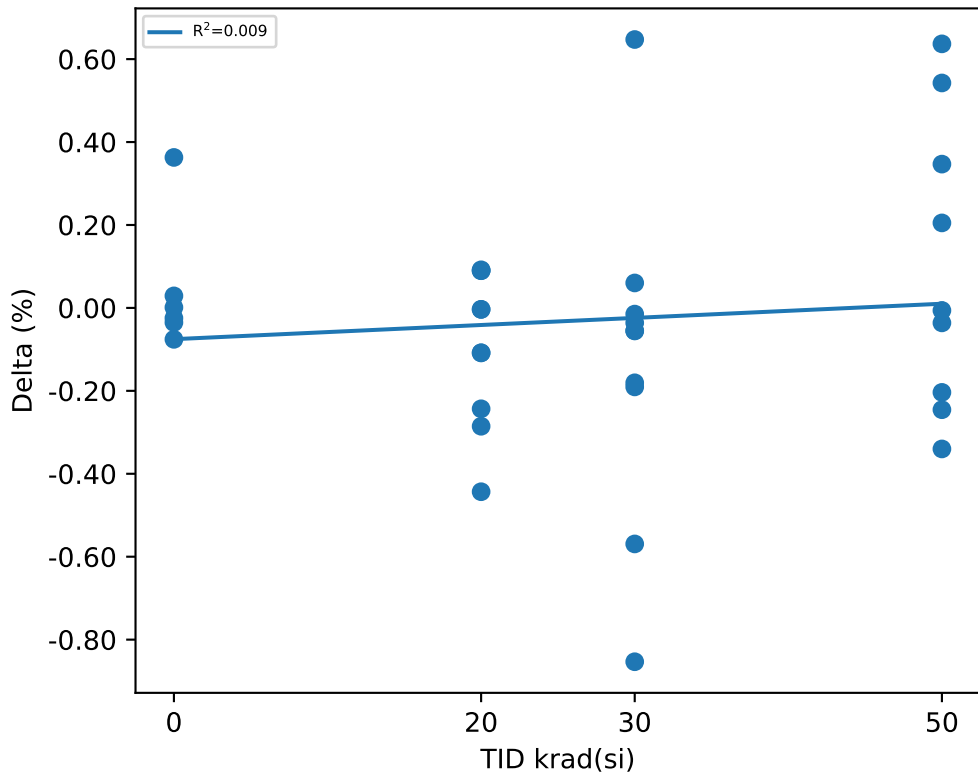
## TID vs Result Stats



## Test Results (Lower Limit = 93.0, Upper Limit = 97.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	95.147	94.704	-0.4433
2	20	HDR Unbiased	94.77	94.767	-0.0034
3	20	HDR Unbiased	94.759	94.65	-0.1084
23	20	HDR Unbiased	94.812	94.808	-0.0036
24	20	HDR Unbiased	95.45	95.165	-0.2854
25	20	HDR Biased	95.629	95.719	0.0897
26	20	HDR Biased	95.085	94.976	-0.1083
27	20	HDR Biased	94.738	94.83	0.0919
28	20	HDR Biased	95.064	95.153	0.0899
29	20	HDR Biased	95.869	95.626	-0.2433
30	30	HDR Unbiased	95.483	94.913	-0.5692
31	30	HDR Unbiased	94.917	94.902	-0.0149
32	30	HDR Unbiased	94.465	94.41	-0.0552
33	30	HDR Unbiased	94.769	95.416	0.6473
34	30	HDR Unbiased	95.629	94.776	-0.8533
35	30	HDR Biased	95.346	95.165	-0.1806
36	30	HDR Biased	95.042	95.102	0.0602
37	30	HDR Biased	94.582	94.546	-0.036
38	30	HDR Biased	94.067	94.012	-0.0554
39	30	HDR Biased	94.454	94.264	-0.1905
40	50	HDR Unbiased	95.043	94.797	-0.2455
41	50	HDR Unbiased	94.717	95.354	0.6368
42	50	HDR Unbiased	94.769	95.312	0.5425
43	50	HDR Unbiased	94.854	94.65	-0.2037
44	50	HDR Unbiased		94.704	
50	0	CORRELATION	94.822	94.851	0.029
51	0	CORRELATION	94.937	94.902	-0.0351
52	0	CORRELATION	94.728	94.704	-0.0246
53	0	CORRELATION	94.549	94.473	-0.0758
54	0	CORRELATION	95.063	95.426	0.3629
78	50	HDR Biased	95.755	95.415	-0.3401
79	50	HDR Biased	94.917	95.122	0.205
80	50	HDR Biased	95.031	94.995	-0.0361
81	50	HDR Biased	94.916	95.263	0.3468
82	50	HDR Biased	94.603	94.596	-0.0061
83	0	CORRELATION	95.283	95.284	0.0012

## TID vs Post - Pre Exposure Delta

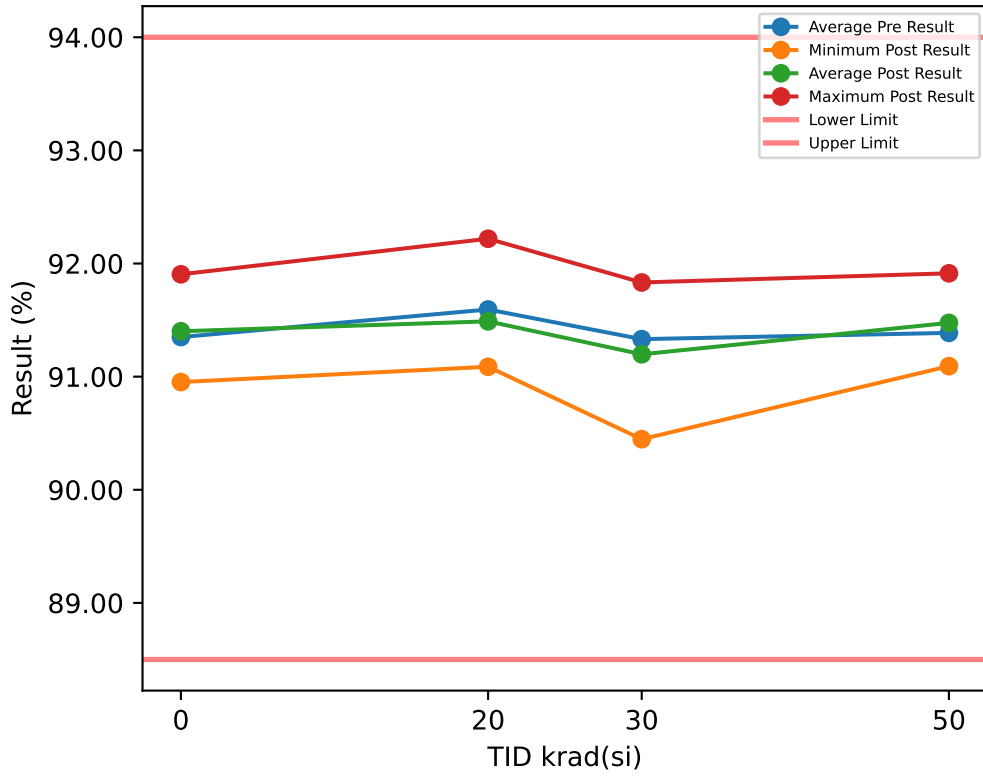


## Test Statistics (%)

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	94.549	94.897	95.283	0.25808	94.473	94.94	95.426	0.35703	-0.0758	0.042933	0.3629	0.16066
20	94.738	95.132	95.869	0.39832	94.65	95.04	95.719	0.37638	-0.4433	-0.09242	0.0919	0.18252
30	94.067	94.875	95.629	0.50378	94.012	94.751	95.416	0.43837	-0.8533	-0.12476	0.6473	0.39379
50	94.603	94.956	95.755	0.33223	94.596	95.021	95.415	0.3142	-0.3401	0.099956	0.6368	0.35195

# Device Test: 14.11 THRESHOLD|FALL/FB/7/0.6//10//@VPG\_FALL

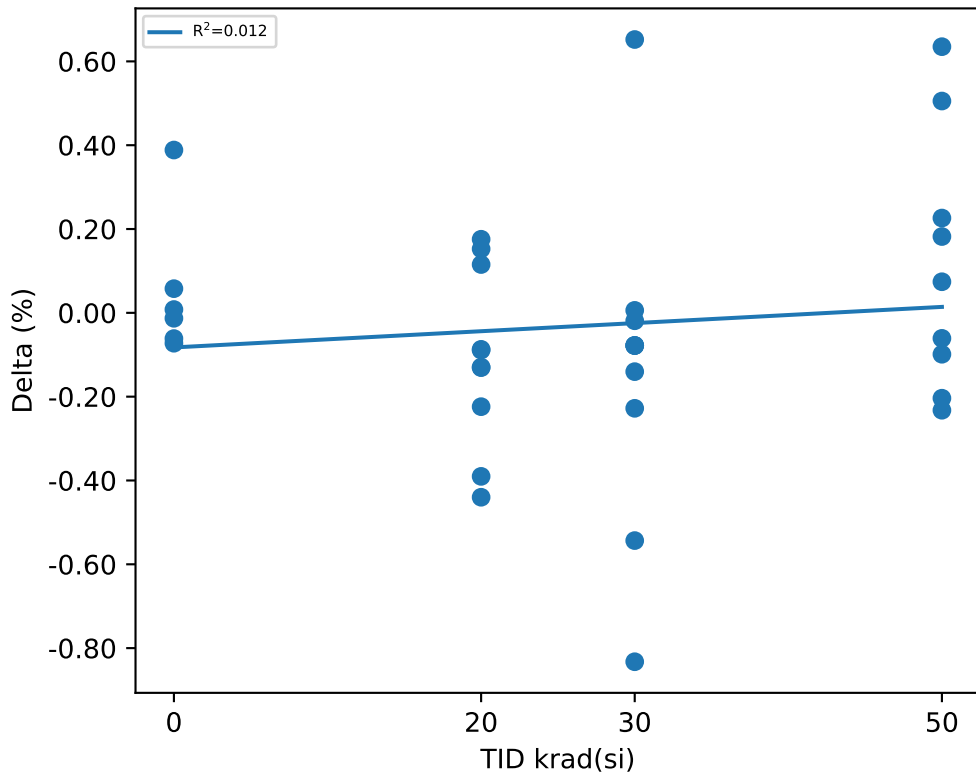
## TID vs Result Stats



## Test Results (Lower Limit = 88.5, Upper Limit = 94.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	91.621	91.181	-0.44
2	20	HDR Unbiased	91.27	91.183	-0.0871
3	20	HDR Unbiased	91.217	91.087	-0.1296
23	20	HDR Unbiased	91.291	91.202	-0.0889
24	20	HDR Unbiased	91.992	91.602	-0.3902
25	20	HDR Biased	92.104	92.219	0.1153
26	20	HDR Biased	91.564	91.433	-0.1307
27	20	HDR Biased	91.133	91.309	0.1756
28	20	HDR Biased	91.417	91.569	0.1526
29	20	HDR Biased	92.328	92.104	-0.2239
30	30	HDR Unbiased	91.936	91.392	-0.5434
31	30	HDR Unbiased	91.396	91.402	0.0059
32	30	HDR Unbiased	90.924	90.846	-0.0778
33	30	HDR Unbiased	91.18	91.833	0.6522
34	30	HDR Unbiased	92.067	91.234	-0.8325
35	30	HDR Biased	91.783	91.642	-0.1403
36	30	HDR Biased	91.516	91.497	-0.0189
37	30	HDR Biased	91.019	90.941	-0.078
38	30	HDR Biased	90.525	90.447	-0.078
39	30	HDR Biased	90.971	90.743	-0.2278
40	50	HDR Unbiased	91.438	91.234	-0.2037
41	50	HDR Unbiased	91.133	91.768	0.6351
42	50	HDR Unbiased	91.264	91.77	0.5054
43	50	HDR Unbiased	91.228	91.129	-0.0988
44	50	HDR Unbiased		91.244	
50	0	CORRELATION	91.322	91.309	-0.013
51	0	CORRELATION	91.411	91.339	-0.0725
52	0	CORRELATION	91.123	91.181	0.0577
53	0	CORRELATION	90.945	90.952	0.0079
54	0	CORRELATION	91.516	91.905	0.3885
78	50	HDR Biased	92.146	91.913	-0.2324
79	50	HDR Biased	91.396	91.578	0.1821
80	50	HDR Biased	91.447	91.386	-0.0609
81	50	HDR Biased	91.411	91.638	0.2262
82	50	HDR Biased	91.019	91.093	0.0742
83	0	CORRELATION	91.783	91.721	-0.0614

## TID vs Post - Pre Exposure Delta

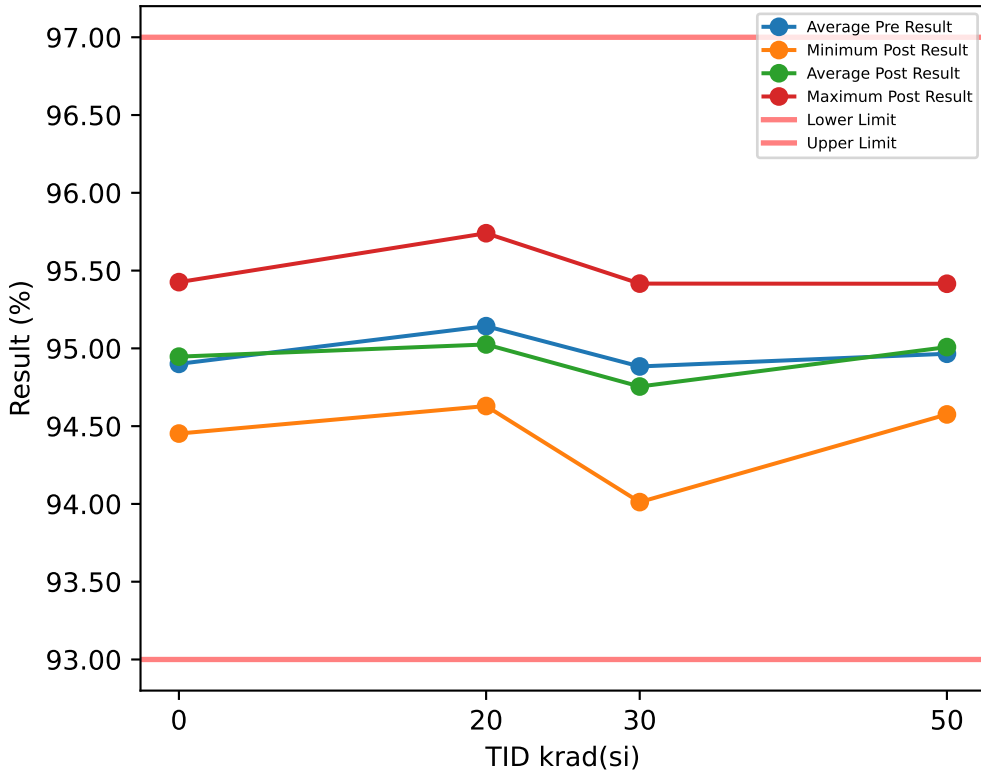


## Test Statistics (%)

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	90.945	91.35	91.783	0.29502	90.952	91.401	91.905	0.35165	-0.0725	0.0512	0.3885	0.17192
20	91.133	91.594	92.328	0.41381	91.087	91.489	92.219	0.39411	-0.44	-0.10469	0.1756	0.21165
30	90.525	91.332	92.067	0.49607	90.447	91.198	91.833	0.43863	-0.8325	-0.13386	0.6522	0.38365
50	91.019	91.387	92.146	0.32077	91.093	91.475	91.913	0.29569	-0.2324	0.11413	0.6351	0.30421

# Device Test: 14.13 THRESHOLD|RISE/FB/12/0.6//10//@VPG\_RISE

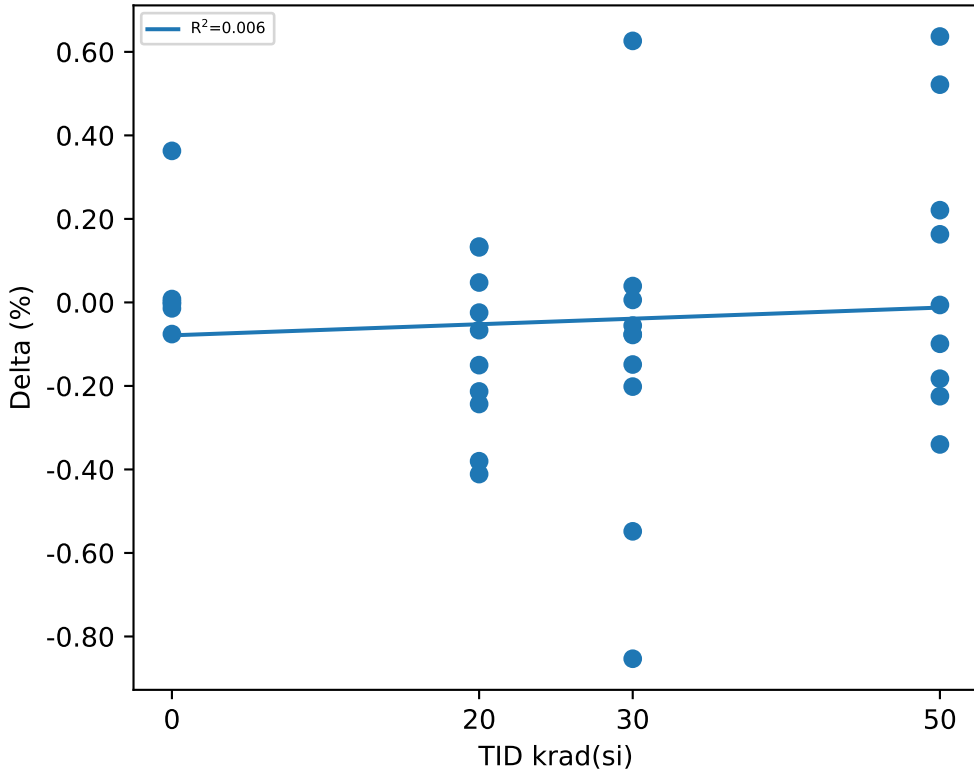
### TID vs Result Stats



### Test Results (Lower Limit = 93.0, Upper Limit = 97.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	95.084	94.704	-0.3803
2	20	HDR Unbiased	94.791	94.767	-0.0244
3	20	HDR Unbiased	94.696	94.629	-0.0664
23	20	HDR Unbiased	94.917	94.704	-0.2132
24	20	HDR Unbiased	95.513	95.102	-0.4111
25	20	HDR Biased	95.692	95.74	0.0477
26	20	HDR Biased	95.126	94.976	-0.1502
27	20	HDR Biased	94.717	94.851	0.1338
28	20	HDR Biased	95.022	95.153	0.1318
29	20	HDR Biased	95.869	95.626	-0.2433
30	30	HDR Unbiased	95.462	94.913	-0.5482
31	30	HDR Unbiased	94.896	94.902	0.006
32	30	HDR Unbiased	94.486	94.41	-0.0761
33	30	HDR Unbiased	94.79	95.416	0.6263
34	30	HDR Unbiased	95.629	94.776	-0.8533
35	30	HDR Biased	95.346	95.144	-0.2016
36	30	HDR Biased	95.063	95.102	0.0392
37	30	HDR Biased	94.623	94.546	-0.0779
38	30	HDR Biased	94.067	94.012	-0.0554
39	30	HDR Biased	94.475	94.327	-0.1487
40	50	HDR Unbiased	95.001	94.776	-0.2246
41	50	HDR Unbiased	94.717	95.354	0.6368
42	50	HDR Unbiased	94.79	95.312	0.5215
43	50	HDR Unbiased	94.833	94.65	-0.1827
44	50	HDR Unbiased		94.704	
50	0	CORRELATION	94.843	94.851	0.0081
51	0	CORRELATION	94.937	94.923	-0.0142
52	0	CORRELATION	94.728	94.725	-0.0036
53	0	CORRELATION	94.528	94.452	-0.0758
54	0	CORRELATION	95.063	95.426	0.3629
78	50	HDR Biased	95.755	95.415	-0.3401
79	50	HDR Biased	94.938	95.101	0.1631
80	50	HDR Biased	95.073	94.974	-0.099
81	50	HDR Biased	95	95.221	0.2209
82	50	HDR Biased	94.582	94.575	-0.0061
83	0	CORRELATION	95.304	95.305	0.0011

### 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	94.528	94.9	95.304	0.26902	94.452	94.947	95.426	0.36364	-0.0758	0.046417	0.3629	0.15799
20	94.696	95.143	95.869	0.4139	94.629	95.025	95.74	0.38843	-0.4111	-0.11756	0.1338	0.19584
30	94.067	94.884	95.629	0.49483	94.012	94.755	95.416	0.42884	-0.8533	-0.12897	0.6263	0.38497
50	94.582	94.965	95.755	0.33475	94.575	95.008	95.415	0.31521	-0.3401	0.076644	0.6368	0.33715

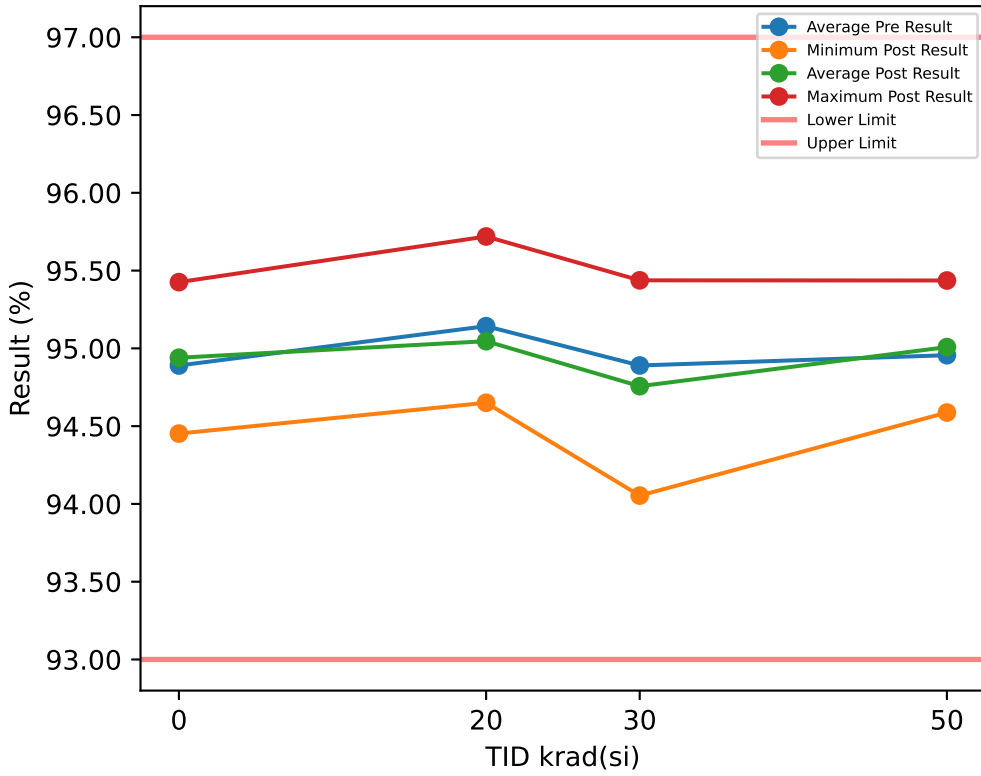






# Device Test: 14.16 THRESHOLD|RISE/FB/14/0.6//10//@VPG\_RISE

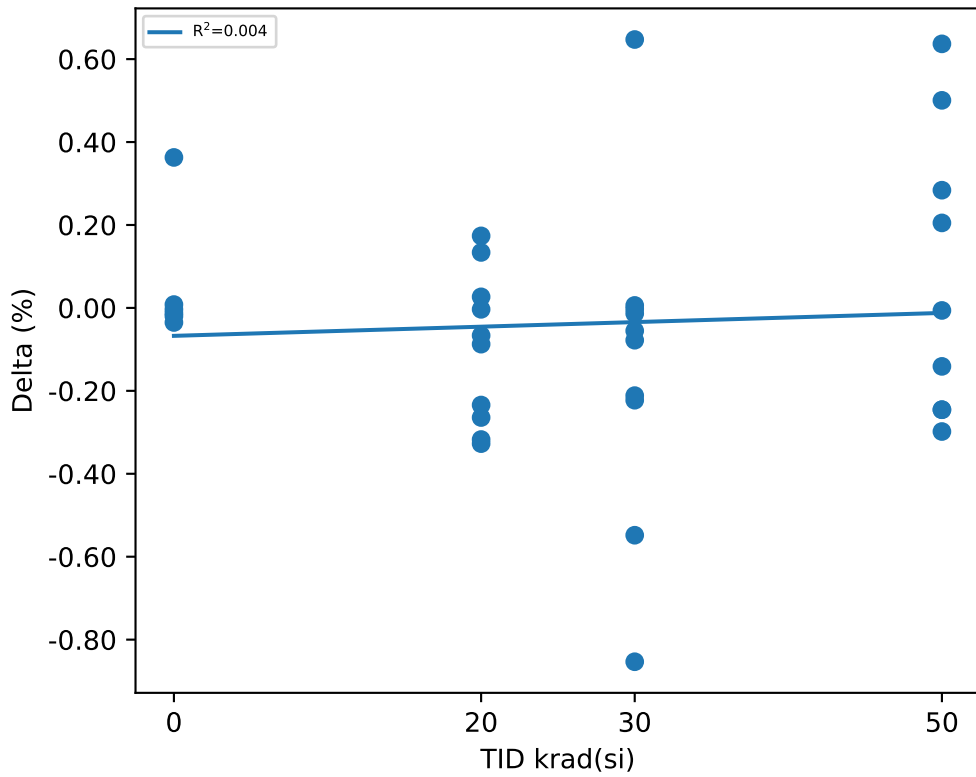
### TID vs Result Stats



### Test Results (Lower Limit = 93.0, Upper Limit = 97.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	95.105	94.787	-0.3174
2	20	HDR Unbiased	94.791	94.788	-0.0034
3	20	HDR Unbiased	94.717	94.65	-0.0665
23	20	HDR Unbiased	94.938	94.704	-0.2342
24	20	HDR Unbiased	95.492	95.165	-0.3273
25	20	HDR Biased	95.692	95.719	0.0267
26	20	HDR Biased	95.106	95.018	-0.0874
27	20	HDR Biased	94.717	94.851	0.1338
28	20	HDR Biased	94.98	95.153	0.1737
29	20	HDR Biased	95.89	95.626	-0.2643
30	30	HDR Unbiased	95.483	94.934	-0.5482
31	30	HDR Unbiased	94.917	94.923	0.006
32	30	HDR Unbiased	94.465	94.41	-0.0552
33	30	HDR Unbiased	94.79	95.437	0.6473
34	30	HDR Unbiased	95.629	94.776	-0.8533
35	30	HDR Biased	95.367	95.144	-0.2226
36	30	HDR Biased	95.105	95.102	-0.0028
37	30	HDR Biased	94.603	94.525	-0.0779
38	30	HDR Biased	94.067	94.054	-0.0135
39	30	HDR Biased	94.475	94.264	-0.2115
40	50	HDR Unbiased	95.022	94.776	-0.2455
41	50	HDR Unbiased	94.717	95.354	0.6368
42	50	HDR Unbiased	94.79	95.291	0.5006
43	50	HDR Unbiased	94.833	94.588	-0.2455
44	50	HDR Unbiased		94.787	
50	0	CORRELATION	94.843	94.851	0.0081
51	0	CORRELATION	94.937	94.902	-0.0351
52	0	CORRELATION	94.728	94.725	-0.0036
53	0	CORRELATION	94.465	94.452	-0.0129
54	0	CORRELATION	95.063	95.426	0.3629
78	50	HDR Biased	95.734	95.436	-0.2981
79	50	HDR Biased	94.917	95.122	0.205
80	50	HDR Biased	95.052	94.911	-0.141
81	50	HDR Biased	94.937	95.221	0.2839
82	50	HDR Biased	94.603	94.596	-0.0061
83	0	CORRELATION	95.304	95.284	-0.0198

### TID vs Post - Pre Exposure Delta

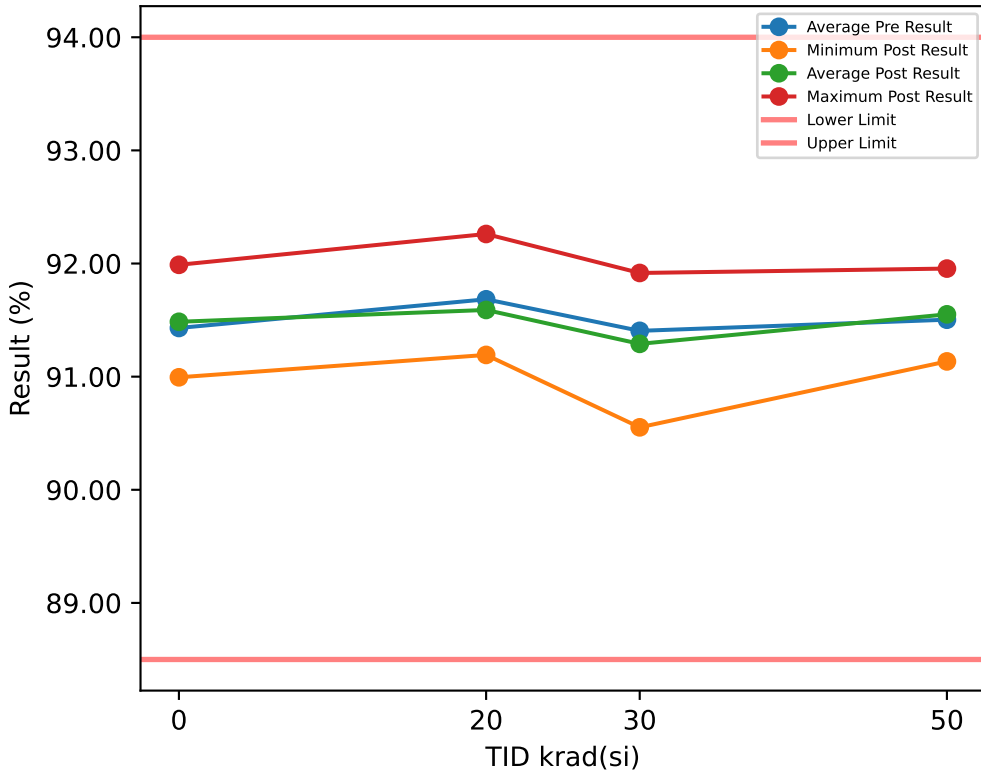


### Test Statistics (%)

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	94.465	94.89	95.304	0.28704	94.452	94.94	95.426	0.35994	-0.0351	0.049933	0.3629	0.15402
20	94.717	95.143	95.89	0.41382	94.65	95.046	95.719	0.37442	-0.3273	-0.09663	0.1737	0.18259
30	94.067	94.89	95.629	0.50486	94.054	94.757	95.437	0.43505	-0.8533	-0.13317	0.6473	0.39071
50	94.603	94.956	95.734	0.32526	94.588	95.008	95.436	0.31608	-0.2981	0.076678	0.6368	0.34553

# Device Test: 14.17 THRESHOLD|FALL/FB/14/0.6//10//@VPG\_FALL

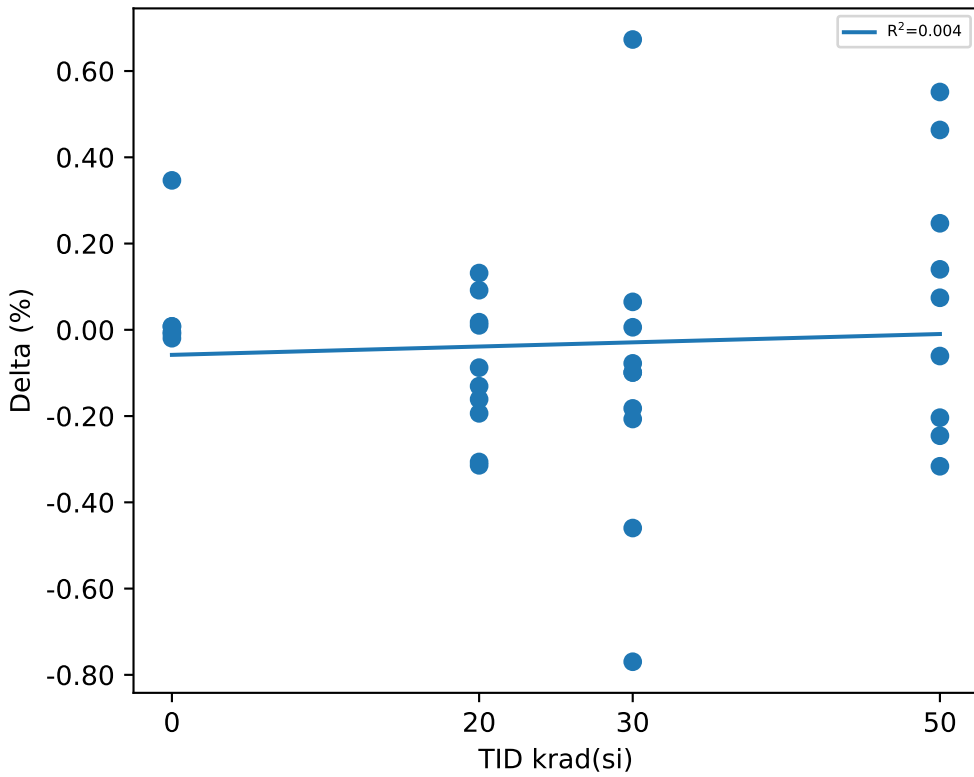
### TID vs Result Stats



### Test Results (Lower Limit = 88.5, Upper Limit = 94.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	91.642	91.328	-0.3142
2	20	HDR Unbiased	91.312	91.33	0.0177
3	20	HDR Unbiased	91.28	91.192	-0.0877
23	20	HDR Unbiased	91.459	91.265	-0.1937
24	20	HDR Unbiased	92.013	91.707	-0.3064
25	20	HDR Biased	92.251	92.261	0.0103
26	20	HDR Biased	91.626	91.496	-0.1307
27	20	HDR Biased	91.28	91.372	0.0918
28	20	HDR Biased	91.564	91.695	0.1316
29	20	HDR Biased	92.412	92.251	-0.161
30	30	HDR Unbiased	91.978	91.518	-0.4596
31	30	HDR Unbiased	91.438	91.444	0.0059
32	30	HDR Unbiased	91.007	90.93	-0.0778
33	30	HDR Unbiased	91.243	91.916	0.6731
34	30	HDR Unbiased	92.108	91.339	-0.7696
35	30	HDR Biased	91.888	91.705	-0.1822
36	30	HDR Biased	91.579	91.644	0.0648
37	30	HDR Biased	91.144	91.045	-0.0989
38	30	HDR Biased	90.651	90.552	-0.099
39	30	HDR Biased	91.013	90.806	-0.2068
40	50	HDR Unbiased	91.564	91.318	-0.2456
41	50	HDR Unbiased	91.301	91.852	0.5514
42	50	HDR Unbiased	91.348	91.812	0.4634
43	50	HDR Unbiased	91.396	91.192	-0.2037
44	50	HDR Unbiased		91.328	
50	0	CORRELATION	91.385	91.392	0.0079
51	0	CORRELATION	91.453	91.444	-0.0097
52	0	CORRELATION	91.27	91.265	-0.0051
53	0	CORRELATION	90.986	90.994	0.0079
54	0	CORRELATION	91.642	91.989	0.3465
78	50	HDR Biased	92.272	91.955	-0.3164
79	50	HDR Biased	91.501	91.641	0.1402
80	50	HDR Biased	91.573	91.512	-0.0608
81	50	HDR Biased	91.516	91.763	0.247
82	50	HDR Biased	91.061	91.135	0.0743
83	0	CORRELATION	91.846	91.826	-0.0195

### TID vs Post - Pre Exposure Delta

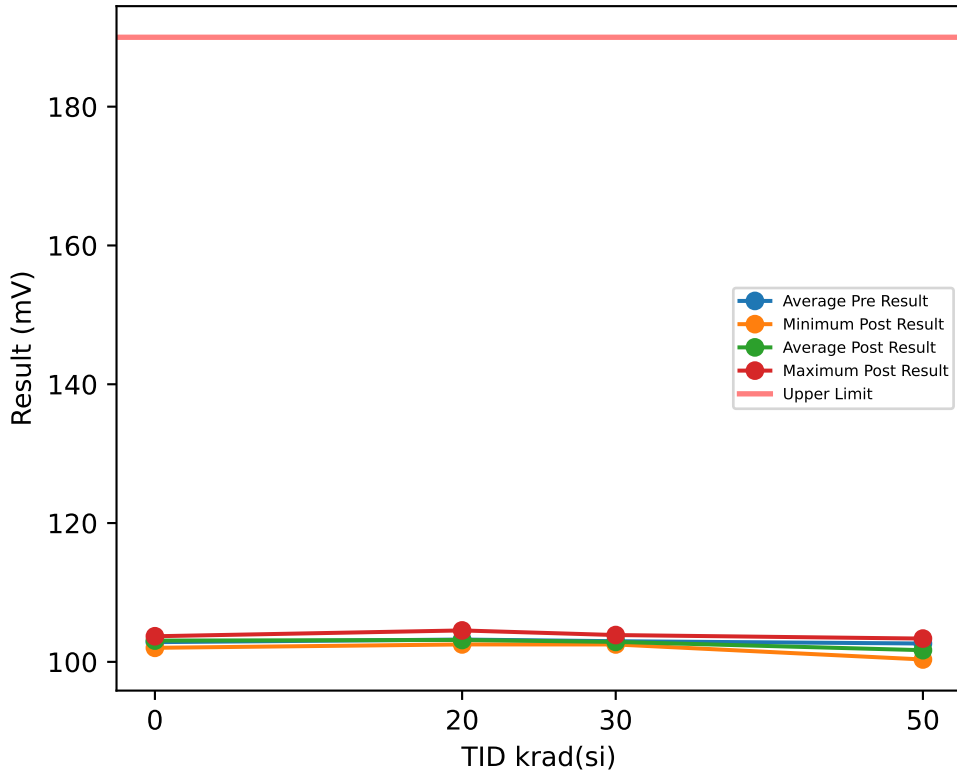


### Test Statistics (%)

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	90.986	91.43	91.846	0.29754	90.994	91.485	91.989	0.3659	-0.0195	0.054667	0.3465	0.14336
20	91.28	91.684	92.412	0.40748	91.192	91.59	92.261	0.3899	-0.3142	-0.09423	0.1316	0.1557
30	90.651	91.405	92.108	0.47864	90.552	91.29	91.916	0.43935	-0.7696	-0.11501	0.6731	0.36971
50	91.061	91.503	92.272	0.33012	91.135	91.551	91.955	0.29492	-0.3164	0.0722	0.5514	0.30896

# Device Test: 14.19 LEVELS|VOL/PG/2.25/////@VPG\_OL

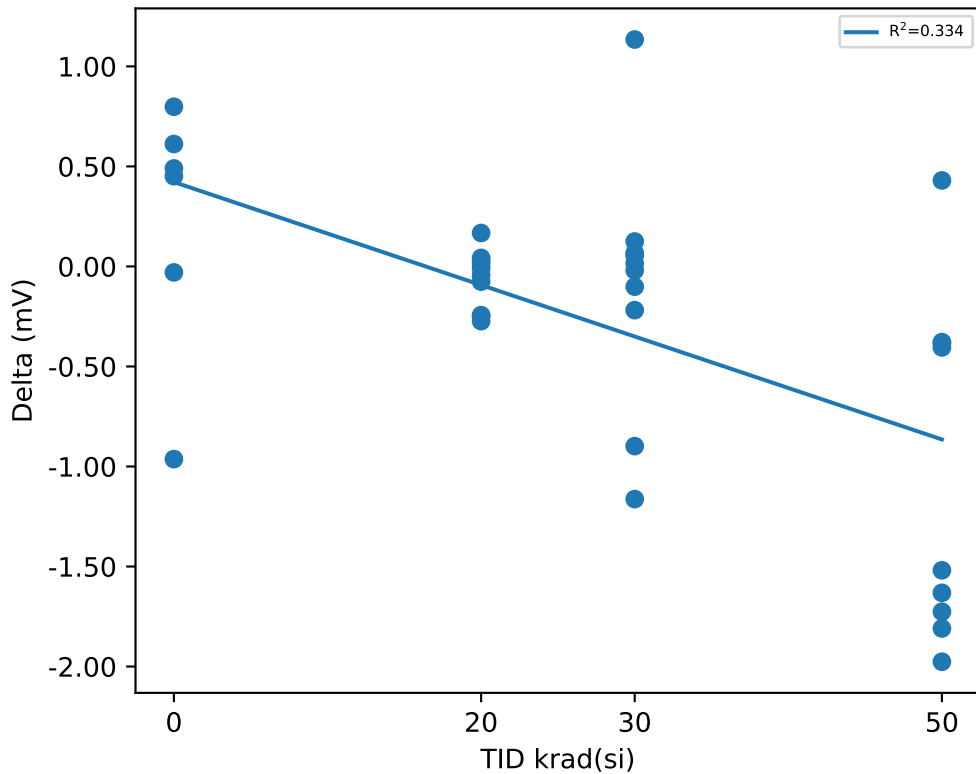
## TID vs Result Stats



## Test Results (Upper Limit = 190.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	102.98	102.73	-0.2483
2	20	HDR Unbiased	103.25	103.26	0.0149
3	20	HDR Unbiased	104.77	104.53	-0.2435
23	20	HDR Unbiased	102.75	102.71	-0.0435
24	20	HDR Unbiased	103.2	103.19	-0.0088
25	20	HDR Biased	103.56	103.29	-0.2734
26	20	HDR Biased	102.59	102.51	-0.0759
27	20	HDR Biased	103.09	103.26	0.1673
28	20	HDR Biased	102.64	102.67	0.0289
29	20	HDR Biased	103.35	103.39	0.0427
30	30	HDR Unbiased	103.47	102.57	-0.8982
31	30	HDR Unbiased	103.09	102.87	-0.2185
32	30	HDR Unbiased	102.94	102.92	-0.0198
33	30	HDR Unbiased	104.06	102.89	-1.163
34	30	HDR Unbiased	102.73	103.86	1.1344
35	30	HDR Biased	102.49	102.51	0.0152
36	30	HDR Biased	102.55	102.68	0.1248
37	30	HDR Biased	102.73	102.63	-0.1011
38	30	HDR Biased	102.52	102.58	0.0539
39	30	HDR Biased	103.21	103.27	0.0675
40	50	HDR Unbiased	103.05	102.67	-0.3784
41	50	HDR Unbiased	102.93	103.36	0.4299
42	50	HDR Unbiased	102.81	102.4	-0.4048
43	50	HDR Unbiased	103.58	103.2	-0.3822
44	50	HDR Unbiased		102.43	
50	0	CORRELATION	102.54	103.34	0.7982
51	0	CORRELATION	102.54	103.03	0.4898
52	0	CORRELATION	102.74	103.19	0.4512
53	0	CORRELATION	103.08	103.69	0.6121
54	0	CORRELATION	103.15	103.12	-0.0298
78	50	HDR Biased	102.45	100.72	-1.7261
79	50	HDR Biased	102.49	100.68	-1.8097
80	50	HDR Biased	101.97	100.34	-1.6315
81	50	HDR Biased	102.36	100.38	-1.976
82	50	HDR Biased	102.17	100.66	-1.5189
83	0	CORRELATION	102.99	102.02	-0.9632

## TID vs Post - Pre Exposure Delta

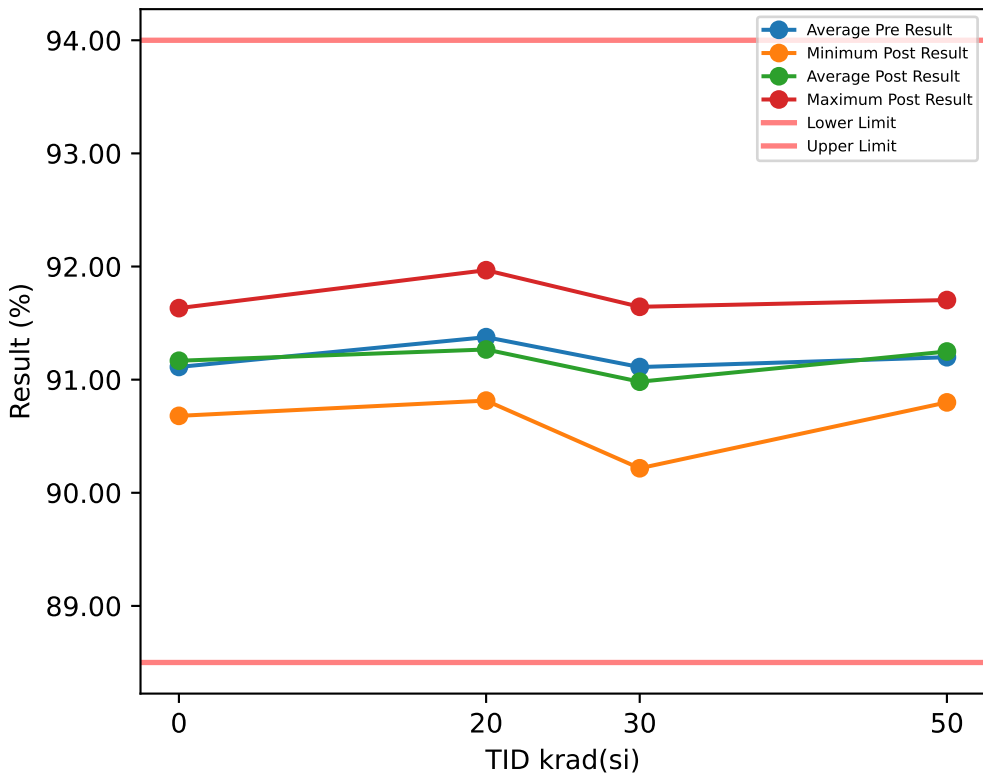


## Test Statistics (mV)

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	102.54	102.84	103.15	0.2703	102.02	103.07	103.69	0.56017	-0.9632	0.22638	0.7982	0.64443
20	102.59	103.22	104.77	0.63049	102.51	103.15	104.53	0.57894	-0.2734	-0.06396	0.1673	0.14658
30	102.49	102.98	104.06	0.496	102.51	102.88	103.86	0.41537	-1.163	-0.10048	1.1344	0.61706
50	101.97	102.64	103.58	0.49424	100.34	101.68	103.36	1.2295	-1.976	-1.0442	0.4299	0.86261

# Device Test: 14.2 THRESHOLD|FALL/FB/2.25/0.6//10//@VPG\_FALL

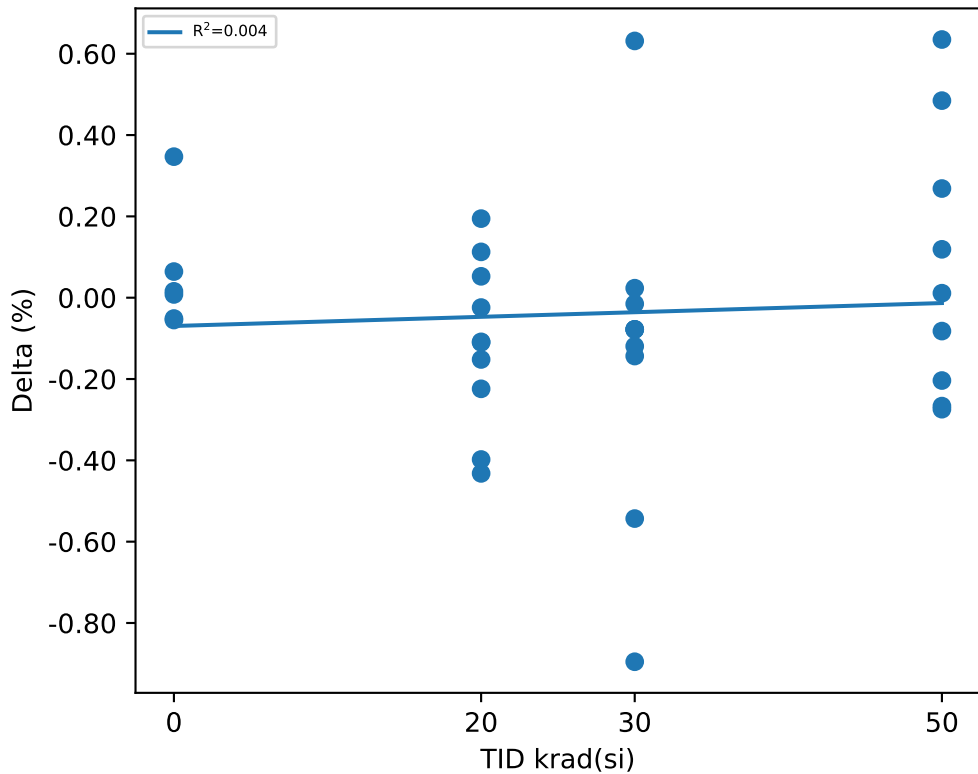
## TID vs Result Stats



## Test Results (Lower Limit = 88.5, Upper Limit = 94.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	91.39	90.992	-0.3979
2	20	HDR Unbiased	91.04	91.015	-0.0242
3	20	HDR Unbiased	90.924	90.815	-0.1086
23	20	HDR Unbiased	91.144	90.992	-0.1519
24	20	HDR Unbiased	91.804	91.372	-0.4321
25	20	HDR Biased	91.915	91.968	0.0526
26	20	HDR Biased	91.312	91.202	-0.1099
27	20	HDR Biased	90.945	91.057	0.1127
28	20	HDR Biased	91.207	91.402	0.1945
29	20	HDR Biased	92.076	91.852	-0.2241
30	30	HDR Unbiased	91.747	91.204	-0.5432
31	30	HDR Unbiased	91.123	91.108	-0.0151
32	30	HDR Unbiased	90.714	90.636	-0.0779
33	30	HDR Unbiased	91.013	91.644	0.6315
34	30	HDR Unbiased	91.899	91.004	-0.8953
35	30	HDR Biased	91.552	91.433	-0.1194
36	30	HDR Biased	91.264	91.288	0.0234
37	30	HDR Biased	90.83	90.752	-0.0779
38	30	HDR Biased	90.295	90.217	-0.0781
39	30	HDR Biased	90.677	90.533	-0.1435
40	50	HDR Unbiased	91.249	90.983	-0.2666
41	50	HDR Unbiased	90.945	91.579	0.635
42	50	HDR Unbiased	91.097	91.581	0.4847
43	50	HDR Unbiased	91.061	90.857	-0.2037
44	50	HDR Unbiased		91.013	
50	0	CORRELATION	91.049	91.057	0.008
51	0	CORRELATION	91.201	91.15	-0.0512
52	0	CORRELATION	90.914	90.93	0.0157
53	0	CORRELATION	90.735	90.68	-0.0549
54	0	CORRELATION	91.285	91.632	0.3469
78	50	HDR Biased	91.978	91.704	-0.2742
79	50	HDR Biased	91.207	91.326	0.119
80	50	HDR Biased	91.28	91.198	-0.0821
81	50	HDR Biased	91.18	91.449	0.2685
82	50	HDR Biased	90.788	90.799	0.0111
83	0	CORRELATION	91.489	91.554	0.0643

## TID vs Post - Pre Exposure Delta

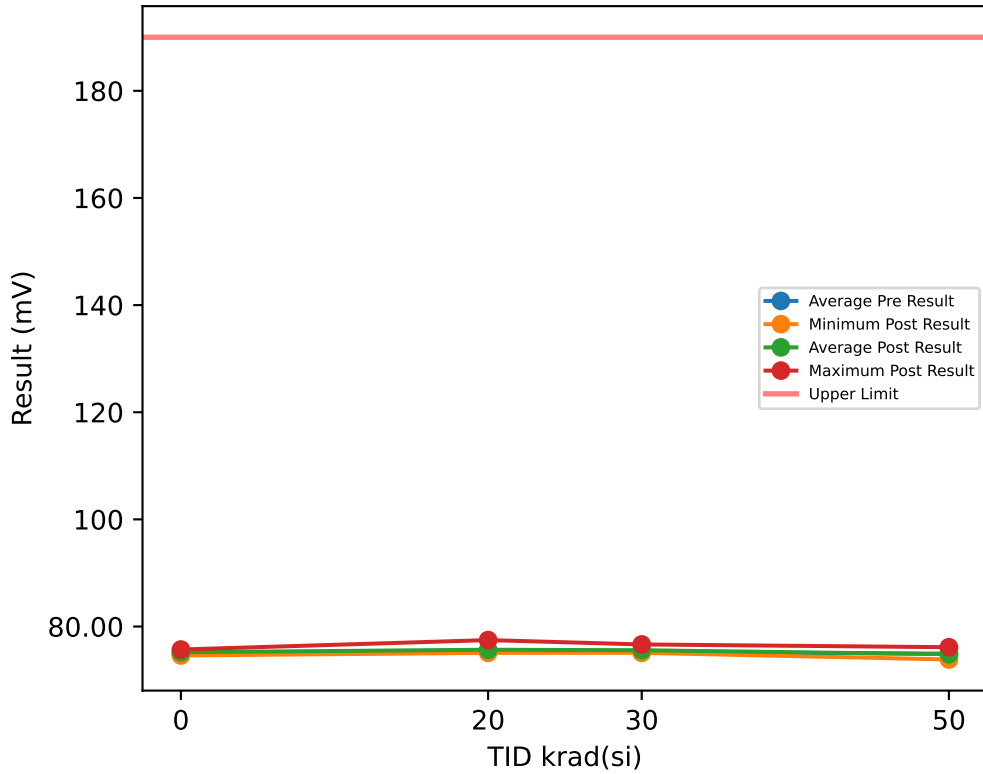


## Test Statistics (%)

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	90.735	91.112	91.489	0.2705	90.68	91.167	91.632	0.36657	-0.0549	0.0548	0.3469	0.14993
20	90.924	91.376	92.076	0.41558	90.815	91.267	91.968	0.38428	-0.4321	-0.10889	0.1945	0.20481
30	90.295	91.111	91.899	0.51042	90.217	90.982	91.644	0.44225	-0.8953	-0.12955	0.6315	0.39178
50	90.788	91.198	91.978	0.33157	90.799	91.249	91.704	0.3262	-0.2742	0.076856	0.635	0.32899

# Device Test: 14.20 LEVELS|VOL/PG/14/////@VPG\_OL

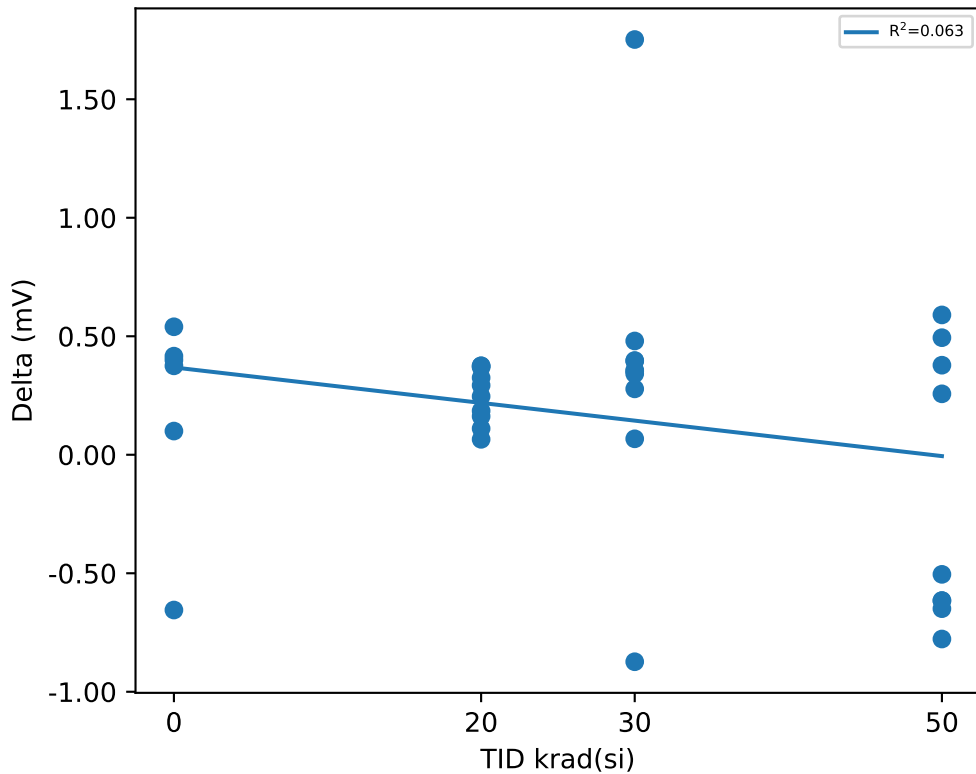
### TID vs Result Stats



### Test Results (Upper Limit = 190.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	75.052	75.214	0.1622
2	20	HDR Unbiased	75.291	75.667	0.3751
3	20	HDR Unbiased	77.355	77.466	0.1107
23	20	HDR Unbiased	74.707	75.082	0.3751
24	20	HDR Unbiased	75.454	75.639	0.1854
25	20	HDR Biased	75.983	76.048	0.0651
26	20	HDR Biased	74.842	75.088	0.2464
27	20	HDR Biased	75.105	75.398	0.2928
28	20	HDR Biased	75.028	75.397	0.3691
29	20	HDR Biased	75.355	75.68	0.3252
30	30	HDR Unbiased	75.429	75.497	0.0673
31	30	HDR Unbiased	75.448	75.726	0.278
32	30	HDR Unbiased	75.281	75.679	0.3977
33	30	HDR Unbiased	76.319	75.445	-0.8733
34	30	HDR Unbiased	74.9	76.653	1.7521
35	30	HDR Biased	74.694	75.089	0.3952
36	30	HDR Biased	74.988	75.341	0.3521
37	30	HDR Biased	74.973	75.315	0.3417
38	30	HDR Biased	74.764	75.244	0.4801
39	30	HDR Biased	75.396	75.753	0.3572
40	50	HDR Unbiased	75.26	75.638	0.3779
41	50	HDR Unbiased	75.19	75.78	0.59
42	50	HDR Unbiased	74.973	75.231	0.2571
43	50	HDR Unbiased	75.642	76.136	0.494
44	50	HDR Unbiased		75.403	
50	0	CORRELATION	74.622	75.162	0.54
51	0	CORRELATION	74.77	75.186	0.4161
52	0	CORRELATION	74.962	75.362	0.4001
53	0	CORRELATION	75.329	75.704	0.3752
54	0	CORRELATION	75.087	75.187	0.1
78	50	HDR Biased	74.941	74.325	-0.6157
79	50	HDR Biased	74.613	73.998	-0.6152
80	50	HDR Biased	74.496	73.846	-0.6494
81	50	HDR Biased	74.621	73.844	-0.7774
82	50	HDR Biased	74.571	74.066	-0.5046
83	0	CORRELATION	75.248	74.593	-0.6551

### TID vs Post - Pre Exposure Delta

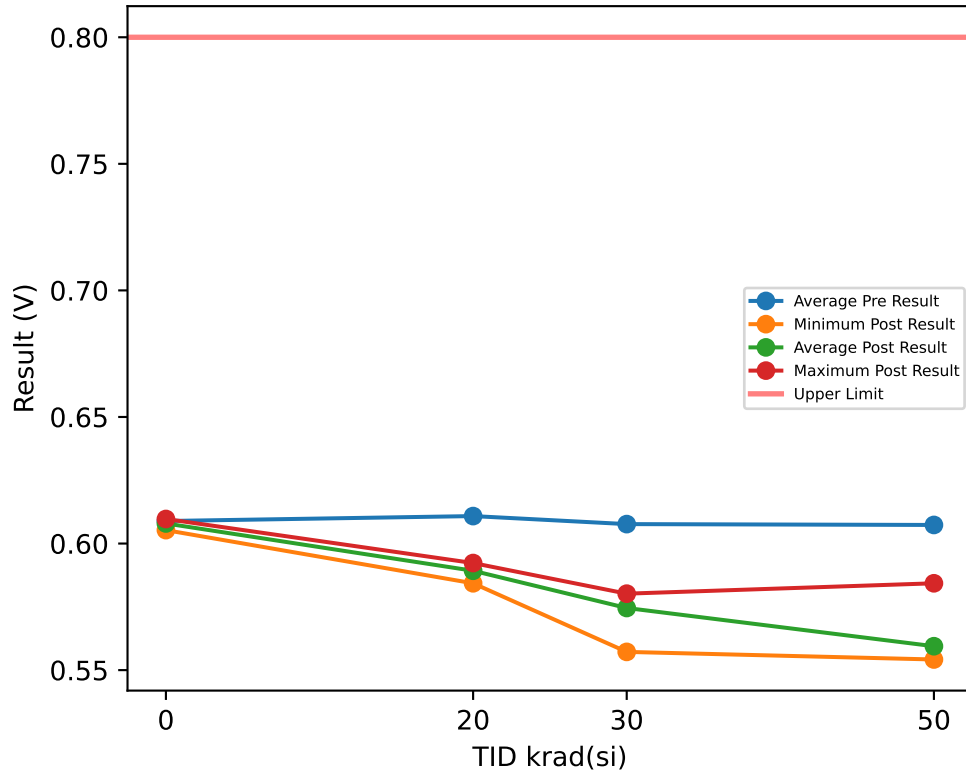


### Test Statistics (mV)

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	74.622	75.003	75.329	0.27366	74.593	75.199	75.704	0.36084	-0.6551	0.19605	0.54	0.44139
20	74.707	75.417	77.355	0.7684	75.082	75.668	77.466	0.69992	0.0651	0.25071	0.3751	0.11472
30	74.694	75.219	76.319	0.47591	75.089	75.574	76.653	0.43678	-0.8733	0.35481	1.7521	0.62969
50	74.496	74.923	75.642	0.38724	73.844	74.827	76.136	0.89583	-0.7774	-0.16037	0.59	0.57095

# Device Test: 14.21 VIN|MIN\_PG/PG/0.4/////@VIN\_MIN\_PG

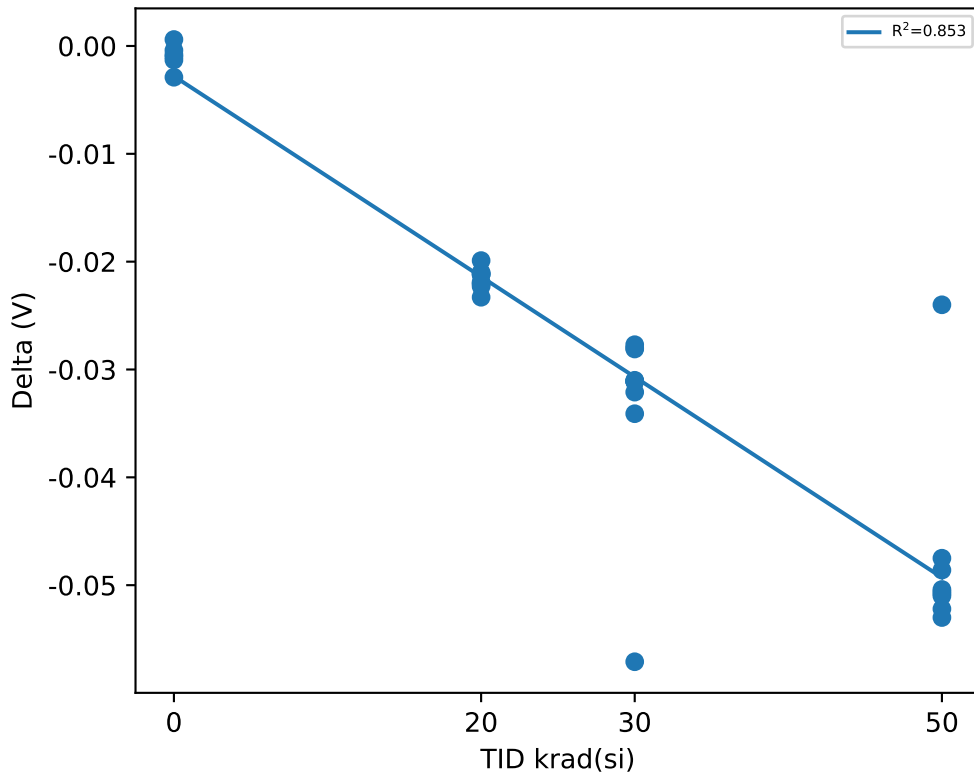
## TID vs Result Stats



## Test Results (Upper Limit = 0.8 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6142	0.5923	-0.0219
2	20	HDR Unbiased	0.6126	0.5903	-0.0223
3	20	HDR Unbiased	0.6063	0.5843	-0.022
23	20	HDR Unbiased	0.6135	0.5902	-0.0233
24	20	HDR Unbiased	0.6113	0.5892	-0.0221
25	20	HDR Biased	0.6082	0.5883	-0.0199
26	20	HDR Biased	0.6083	0.5871	-0.0212
27	20	HDR Biased	0.6123	0.5912	-0.0211
28	20	HDR Biased	0.6095	0.5883	-0.0212
29	20	HDR Biased	0.6123	0.5913	-0.021
30	30	HDR Unbiased	0.6143	0.5572	-0.0571
31	30	HDR Unbiased	0.6074	0.5763	-0.0311
32	30	HDR Unbiased	0.6073	0.5762	-0.0311
33	30	HDR Unbiased	0.6082	0.5741	-0.0341
34	30	HDR Unbiased	0.6054	0.5774	-0.028
35	30	HDR Biased	0.6083	0.5802	-0.0281
36	30	HDR Biased	0.6039	0.5762	-0.0277
37	30	HDR Biased	0.6064	0.5754	-0.031
38	30	HDR Biased	0.6073	0.5752	-0.0321
39	30	HDR Biased	0.6083	0.5772	-0.0311
40	50	HDR Unbiased	0.6084	0.5576	-0.0508
41	50	HDR Unbiased	0.6083	0.5843	-0.024
42	50	HDR Unbiased	0.6072	0.5542	-0.053
43	50	HDR Unbiased	0.6116	0.5594	-0.0522
44	50	HDR Unbiased		0.5564	
50	0	CORRELATION	0.6102	0.6092	-0.001
51	0	CORRELATION	0.6061	0.6053	-0.0008
52	0	CORRELATION	0.6084	0.608	-0.0004
53	0	CORRELATION	0.6073	0.606	-0.0013
54	0	CORRELATION	0.6123	0.6094	-0.0029
78	50	HDR Biased	0.603	0.5555	-0.0475
79	50	HDR Biased	0.6105	0.5595	-0.051
80	50	HDR Biased	0.6054	0.5548	-0.0506
81	50	HDR Biased	0.6083	0.5579	-0.0504
82	50	HDR Biased	0.6034	0.5548	-0.0486
83	0	CORRELATION	0.6091	0.6097	0.0006

## TID vs Post - Pre Exposure Delta



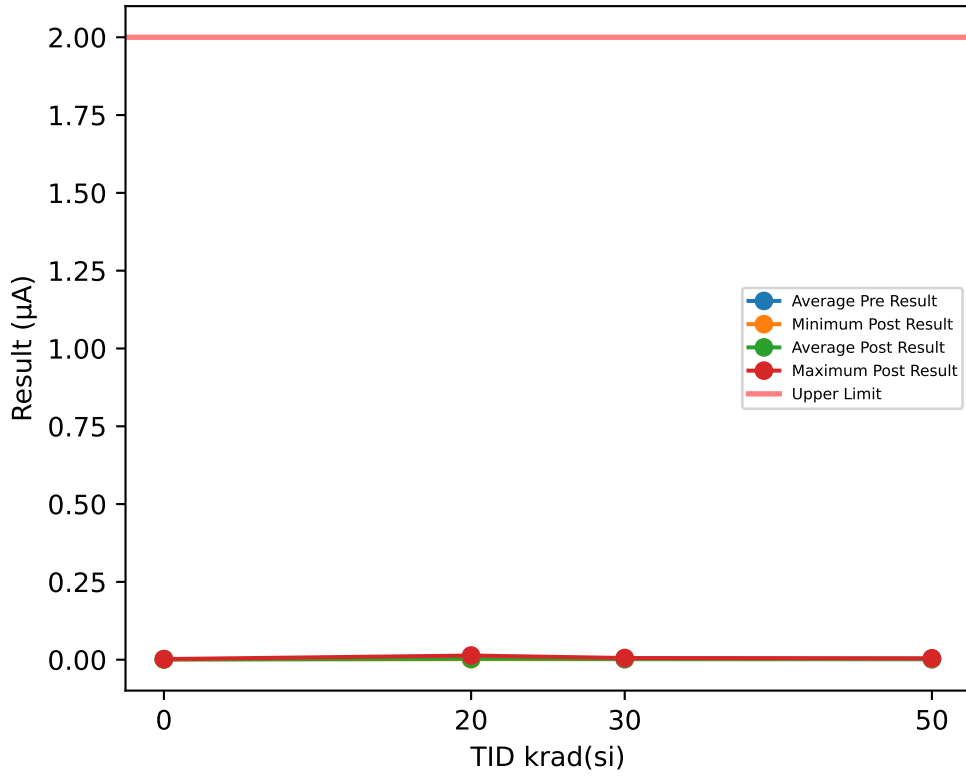
## Test Statistics (V)

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	0.6061	0.6089	0.6123	0.0021881	0.6053	0.60793	0.6097	0.0018737	-0.0029	-0.00096667	0.0006	0.0011535
20	0.6063	0.61085	0.6142	0.0026197	0.5843	0.58925	0.5923	0.0023628	-0.0233	-0.0216	-0.0199	0.00092496
30	0.6039	0.60768	0.6143	0.0027153	0.5572	0.57454	0.5802	0.0063065	-0.0571	-0.03314	-0.0277	0.0086575
50	0.603	0.60734	0.6116	0.002942	0.5542	0.55944	0.5843	0.0089385	-0.053	-0.047567	-0.024	0.0089925



# Device Test: 14.22 LEAK|LEAKAGE/PG/2.25/0.6//0//@IPG\_LKG

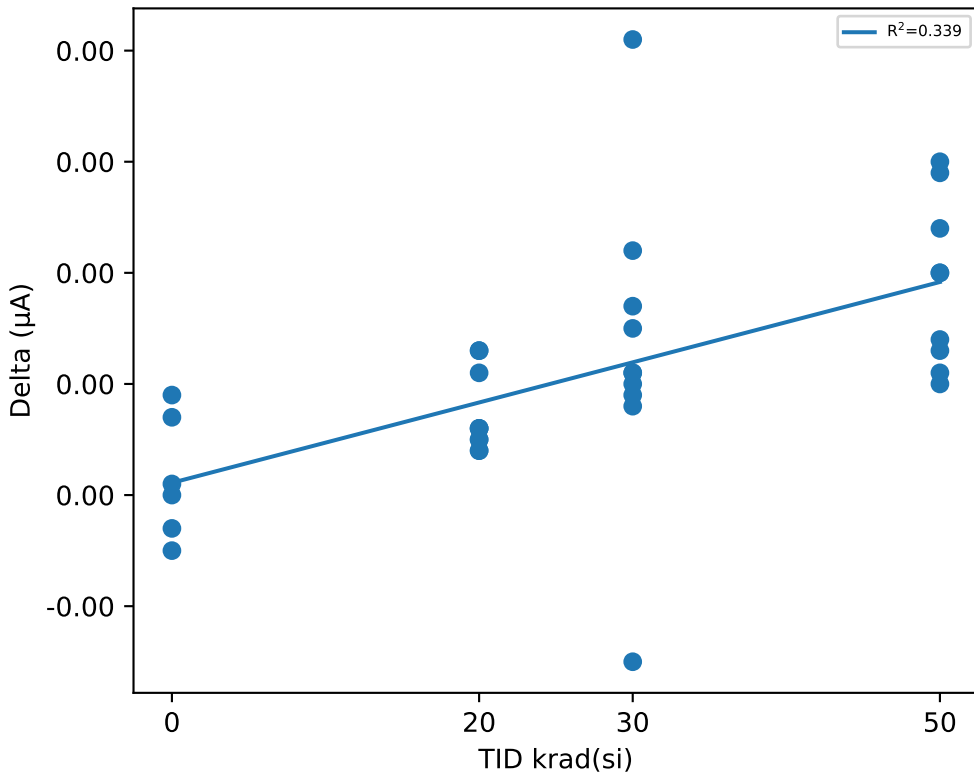
## TID vs Result Stats



## Test Results (Upper Limit = 2.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.0012	0.0017	0.0005
2	20	HDR Unbiased	0.0013	0.0017	0.0004
3	20	HDR Unbiased	0.0014	0.0027	0.0013
23	20	HDR Unbiased	0.0128	0.0134	0.0006
24	20	HDR Unbiased	0.0012	0.0018	0.0006
25	20	HDR Biased	0.0013	0.0026	0.0013
26	20	HDR Biased	0.0015	0.0019	0.0004
27	20	HDR Biased	0.0012	0.0018	0.0006
28	20	HDR Biased	0.0015	0.0026	0.0011
29	20	HDR Biased	0.0012	0.0017	0.0005
30	30	HDR Unbiased	0.0013	0.0035	0.0022
31	30	HDR Unbiased	0.002	0.0035	0.0015
32	30	HDR Unbiased	0.0013	0.0024	0.0011
33	30	HDR Unbiased	0.0038	0.0023	-0.0015
34	30	HDR Unbiased	0.0014	0.0055	0.0041
35	30	HDR Biased	0.0011	0.0021	0.001
36	30	HDR Biased	0.0015	0.0023	0.0008
37	30	HDR Biased	0.0014	0.0031	0.0017
38	30	HDR Biased	0.0014	0.0025	0.0011
39	30	HDR Biased	0.0018	0.0027	0.0009
40	50	HDR Unbiased	0.0015	0.0045	0.003
41	50	HDR Unbiased	0.0012	0.0022	0.001
42	50	HDR Unbiased	0.0016	0.004	0.0024
43	50	HDR Unbiased	0.0013	0.0042	0.0029
44	50	HDR Unbiased		0.0036	
50	0	CORRELATION	0.0011	0.0012	0.0001
51	0	CORRELATION	0.0014	0.0021	0.0007
52	0	CORRELATION	0.0016	0.0013	-0.0003
53	0	CORRELATION	0.0013	0.0013	0
54	0	CORRELATION	0.0012	0.0021	0.0009
78	50	HDR Biased	0.0014	0.0034	0.002
79	50	HDR Biased	0.0014	0.0034	0.002
80	50	HDR Biased	0.0013	0.0026	0.0013
81	50	HDR Biased	0.0014	0.0028	0.0014
82	50	HDR Biased	0.0015	0.0026	0.0011
83	0	CORRELATION	0.0012	0.0007	-0.0005

## TID vs Post - Pre Exposure Delta



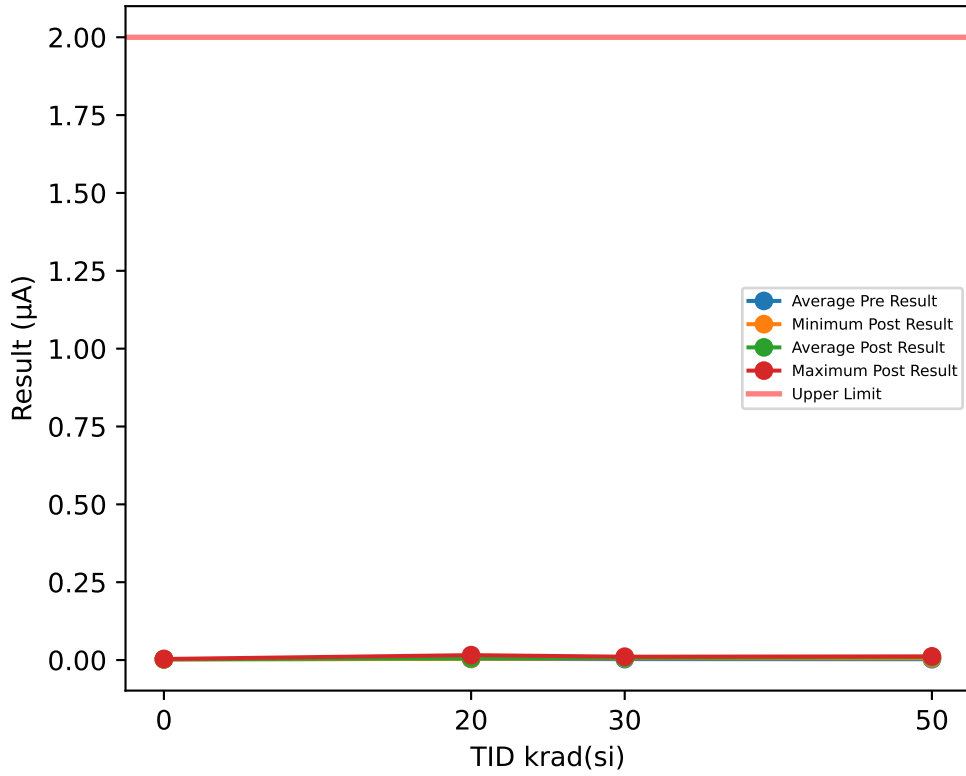
## Test Statistics (µA)

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	0.0011	0.0013	0.0016	0.00017889	0.0007	0.00145	0.0021	0.00055045	-0.0005	0.00015	0.0009	0.00055045
20	0.0012	0.00246	0.0128	0.0036351	0.0017	0.00319	0.0134	0.0036112	0.0004	0.00073	0.0013	0.00035917
30	0.0011	0.0017	0.0038	0.00078174	0.0021	0.00299	0.0055	0.0010137	-0.0015	0.00129	0.0041	0.0013852
50	0.0012	0.0014	0.0016	0.00012247	0.0022	0.00333	0.0045	0.00076601	0.001	0.0019	0.003	0.00075333



# Device Test: 14.23 LEAK|LEAKAGE/PG/14/0.6//0//@IPG\_LKG

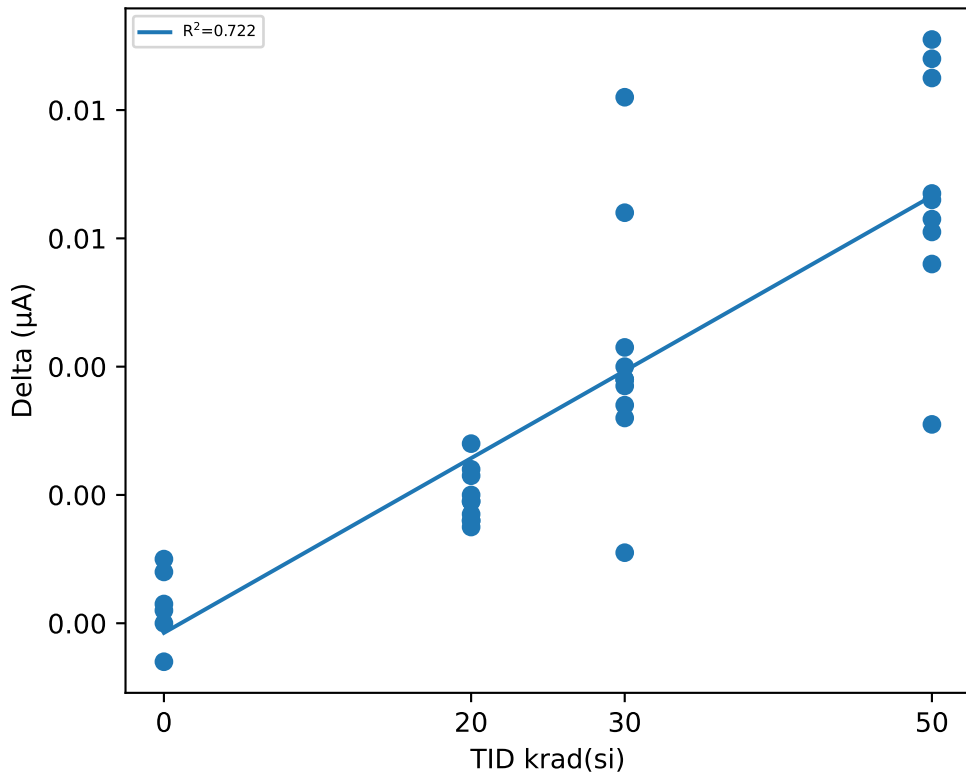
## TID vs Result Stats



## Test Results (Upper Limit = 2.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.0024	0.004	0.0016
2	20	HDR Unbiased	0.0026	0.0041	0.0015
3	20	HDR Unbiased	0.0025	0.0053	0.0028
23	20	HDR Unbiased	0.0142	0.0158	0.0016
24	20	HDR Unbiased	0.0023	0.0042	0.0019
25	20	HDR Biased	0.0026	0.0049	0.0023
26	20	HDR Biased	0.0028	0.0045	0.0017
27	20	HDR Biased	0.0024	0.0043	0.0019
28	20	HDR Biased	0.0027	0.0051	0.0024
29	20	HDR Biased	0.0022	0.0042	0.002
30	30	HDR Unbiased	0.0026	0.0108	0.0082
31	30	HDR Unbiased	0.0033	0.0071	0.0038
32	30	HDR Unbiased	0.0025	0.0063	0.0038
33	30	HDR Unbiased	0.0051	0.0062	0.0011
34	30	HDR Unbiased	0.0028	0.0092	0.0064
35	30	HDR Biased	0.0023	0.0057	0.0034
36	30	HDR Biased	0.0026	0.0058	0.0032
37	30	HDR Biased	0.0027	0.007	0.0043
38	30	HDR Biased	0.0027	0.0067	0.004
39	30	HDR Biased	0.0029	0.0066	0.0037
40	50	HDR Unbiased	0.0028	0.0116	0.0088
41	50	HDR Unbiased	0.0024	0.0055	0.0031
42	50	HDR Unbiased	0.0028	0.0119	0.0091
43	50	HDR Unbiased	0.0026	0.0111	0.0085
44	50	HDR Unbiased		0.011	
50	0	CORRELATION	0.0024	0.0026	0.0002
51	0	CORRELATION	0.0025	0.0035	0.001
52	0	CORRELATION	0.0027	0.0027	0
53	0	CORRELATION	0.0024	0.0027	0.0003
54	0	CORRELATION	0.0025	0.0033	0.0008
78	50	HDR Biased	0.0026	0.0092	0.0066
79	50	HDR Biased	0.0026	0.0093	0.0067
80	50	HDR Biased	0.0024	0.0087	0.0063
81	50	HDR Biased	0.0027	0.0088	0.0061
82	50	HDR Biased	0.0029	0.0085	0.0056
83	0	CORRELATION	0.0024	0.0018	-0.0006

## TID vs Post - Pre Exposure Delta

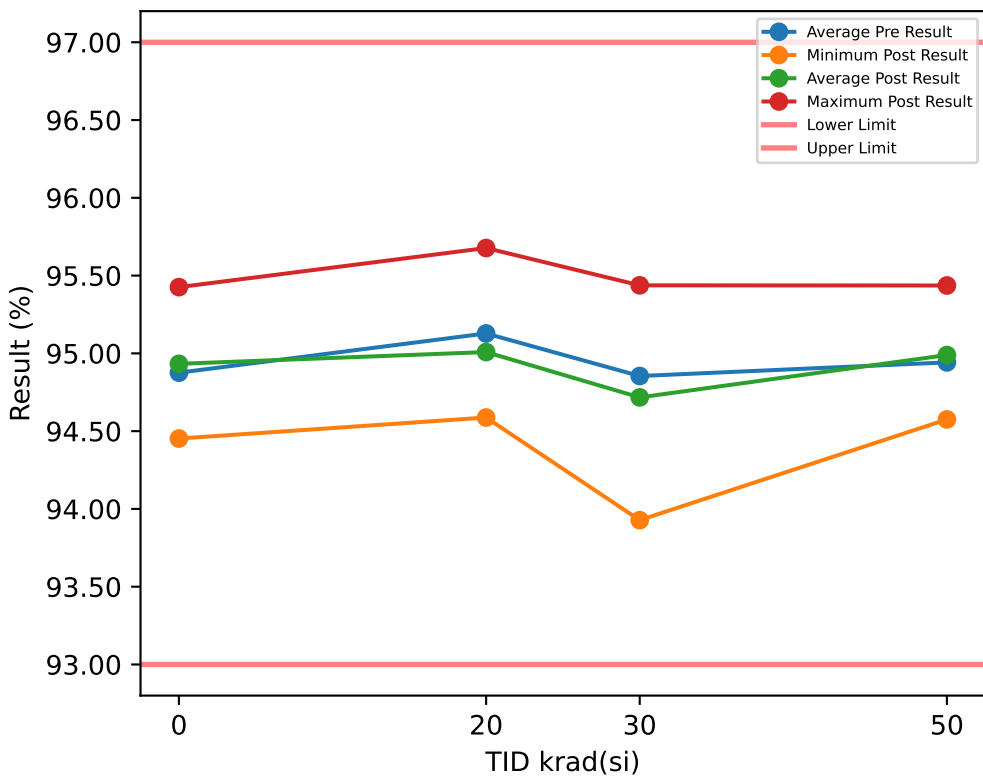


## Test Statistics (µA)

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	0.0024	0.0024833	0.0027	0.0001169	0.0018	0.0027667	0.0035	0.00059889	-0.0006	0.00028333	0.001	0.00057417
20	0.0022	0.00367	0.0142	0.0037044	0.004	0.00564	0.0158	0.0035976	0.0015	0.00197	0.0028	0.00041647
30	0.0023	0.00295	0.0051	0.00080035	0.0057	0.00714	0.0108	0.0016195	0.0011	0.00419	0.0082	0.0019064
50	0.0024	0.0026444	0.0029	0.00017401	0.0055	0.00956	0.0119	0.0019208	0.0031	0.0067556	0.0091	0.0018736

# Device Test: 14.4 THRESHOLD|RISE/FB/3.3/0.6//10//@VPG\_RISE

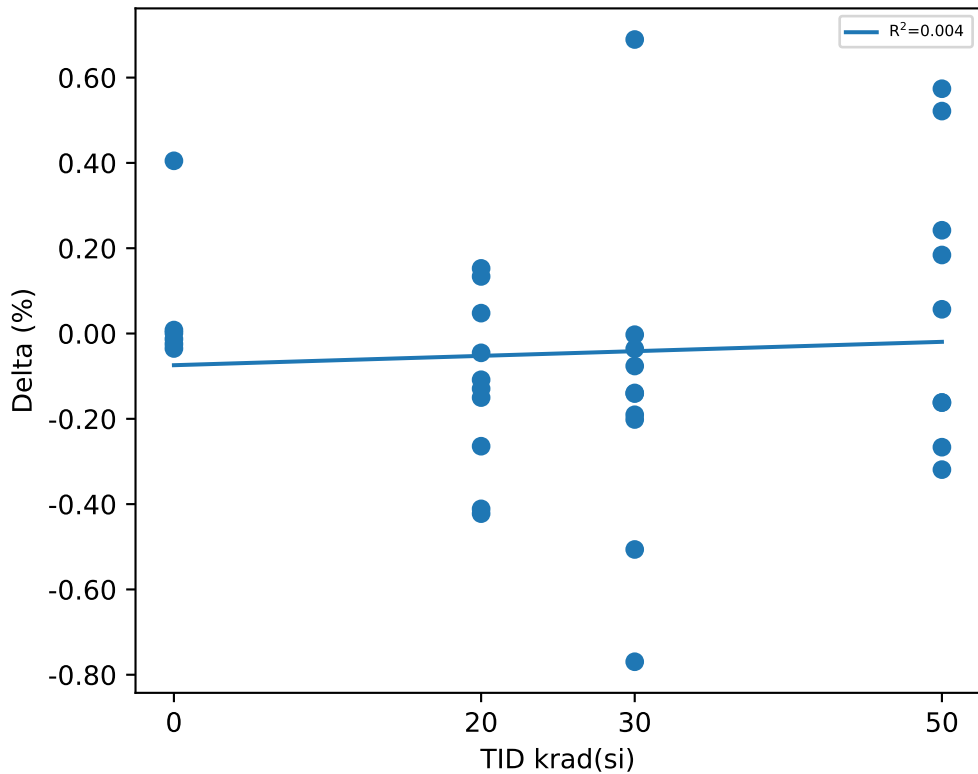
## TID vs Result Stats



## Test Results (Lower Limit = 93.0, Upper Limit = 97.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	95.126	94.704	-0.4223
2	20	HDR Unbiased	94.77	94.725	-0.0453
3	20	HDR Unbiased	94.717	94.588	-0.1293
23	20	HDR Unbiased	94.833	94.725	-0.1084
24	20	HDR Unbiased	95.492	95.081	-0.4111
25	20	HDR Biased	95.629	95.677	0.0478
26	20	HDR Biased	95.126	94.976	-0.1502
27	20	HDR Biased	94.717	94.851	0.1338
28	20	HDR Biased	95.001	95.153	0.1527
29	20	HDR Biased	95.869	95.605	-0.2642
30	30	HDR Unbiased	95.42	94.913	-0.5063
31	30	HDR Unbiased	94.917	94.881	-0.0359
32	30	HDR Unbiased	94.465	94.389	-0.0762
33	30	HDR Unbiased	94.748	95.437	0.6893
34	30	HDR Unbiased	95.546	94.776	-0.7695
35	30	HDR Biased	95.283	95.081	-0.2016
36	30	HDR Biased	95.042	95.039	-0.0027
37	30	HDR Biased	94.603	94.462	-0.1408
38	30	HDR Biased	94.067	93.928	-0.1393
39	30	HDR Biased	94.454	94.264	-0.1905
40	50	HDR Unbiased	94.98	94.713	-0.2665
41	50	HDR Unbiased	94.696	95.27	0.5739
42	50	HDR Unbiased	94.79	95.312	0.5215
43	50	HDR Unbiased	94.833	94.671	-0.1617
44	50	HDR Unbiased		94.746	
50	0	CORRELATION	94.843	94.851	0.0081
51	0	CORRELATION	94.916	94.881	-0.0351
52	0	CORRELATION	94.728	94.704	-0.0246
53	0	CORRELATION	94.465	94.452	-0.0129
54	0	CORRELATION	95.021	95.426	0.4049
78	50	HDR Biased	95.755	95.436	-0.3191
79	50	HDR Biased	94.917	95.101	0.1841
80	50	HDR Biased	95.073	94.911	-0.1619
81	50	HDR Biased	94.916	95.158	0.2421
82	50	HDR Biased	94.519	94.575	0.0568
83	0	CORRELATION	95.283	95.284	0.0012

## TID vs Post - Pre Exposure Delta

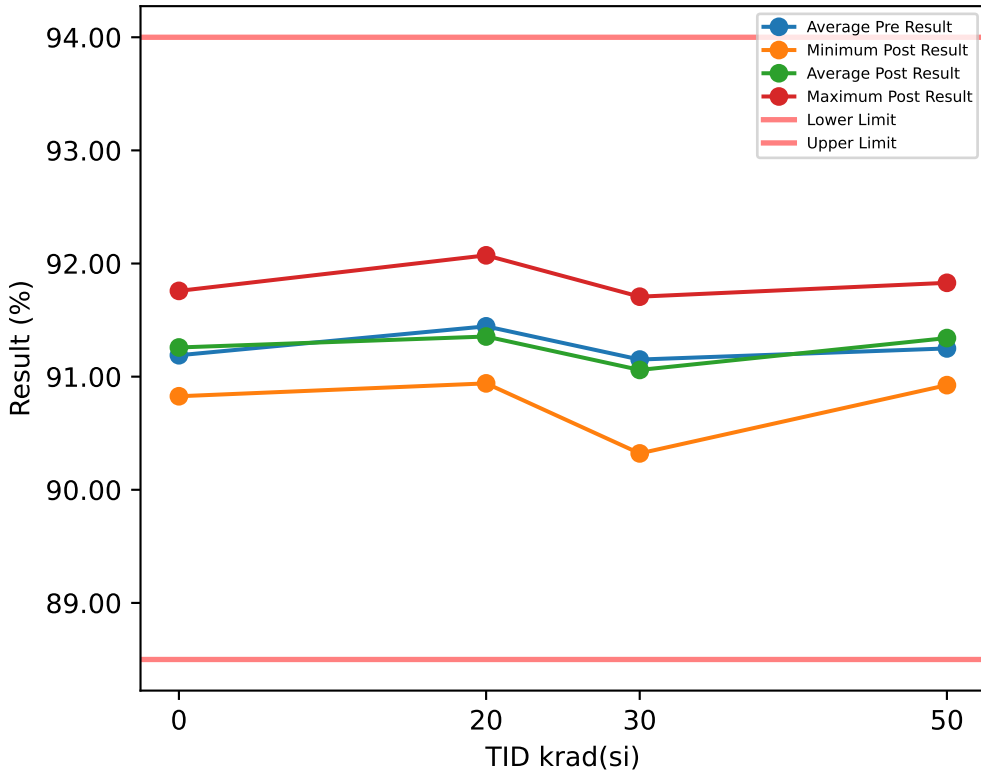


## Test Statistics (%)

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	94.465	94.876	95.283	0.27552	94.452	94.933	95.426	0.36305	-0.0351	0.056933	0.4049	0.17121
20	94.717	95.128	95.869	0.4087	94.588	95.008	95.677	0.37814	-0.4223	-0.11965	0.1527	0.20291
30	94.067	94.854	95.546	0.47444	93.928	94.717	95.437	0.45033	-0.7695	-0.13735	0.6893	0.3739
50	94.519	94.942	95.755	0.34578	94.575	94.989	95.436	0.30506	-0.3191	0.074356	0.5739	0.33025

# Device Test: 14.5 THRESHOLD|FALL/FB/3.3/0.6//10//@VPG\_FALL

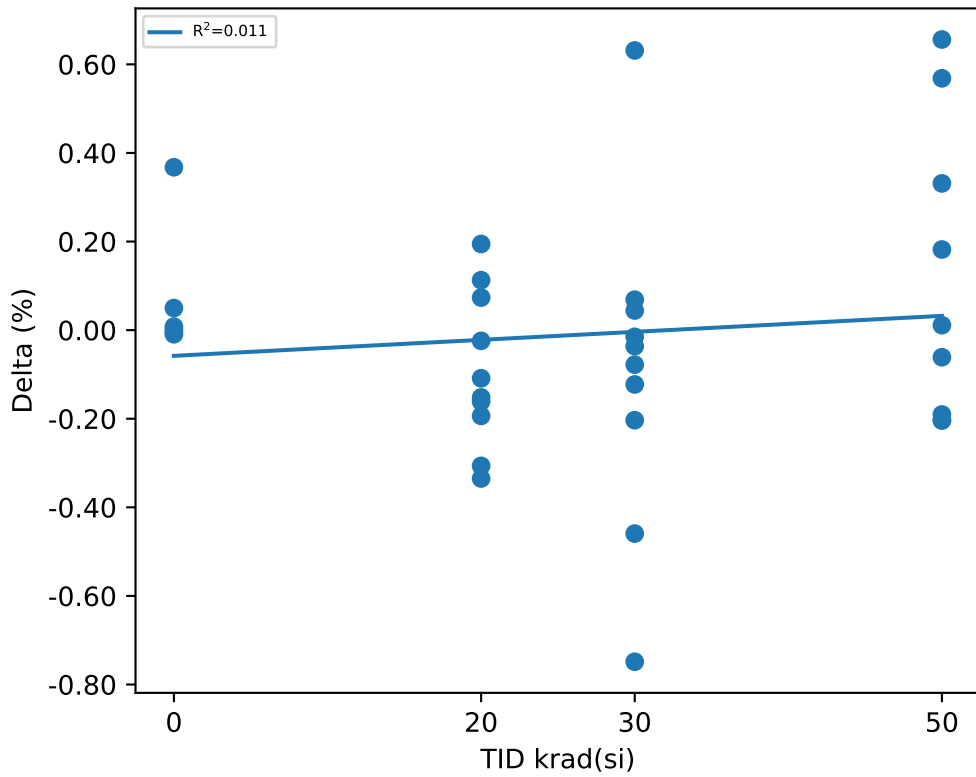
## TID vs Result Stats



## Test Results (Lower Limit = 88.5, Upper Limit = 94.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	91.39	91.055	-0.335
2	20	HDR Unbiased	91.081	91.057	-0.0242
3	20	HDR Unbiased	91.049	90.941	-0.1086
23	20	HDR Unbiased	91.207	91.055	-0.1519
24	20	HDR Unbiased	91.762	91.455	-0.3064
25	20	HDR Biased	91.999	92.072	0.0735
26	20	HDR Biased	91.459	91.265	-0.1937
27	20	HDR Biased	91.07	91.183	0.1128
28	20	HDR Biased	91.312	91.507	0.1945
29	20	HDR Biased	92.118	91.957	-0.1612
30	30	HDR Unbiased	91.705	91.246	-0.4593
31	30	HDR Unbiased	91.186	91.255	0.0688
32	30	HDR Unbiased	90.756	90.678	-0.0779
33	30	HDR Unbiased	91.076	91.707	0.6314
34	30	HDR Unbiased	91.878	91.129	-0.7486
35	30	HDR Biased	91.636	91.433	-0.2033
36	30	HDR Biased	91.327	91.372	0.0443
37	30	HDR Biased	90.851	90.836	-0.0151
38	30	HDR Biased	90.358	90.322	-0.0362
39	30	HDR Biased	90.74	90.617	-0.1226
40	50	HDR Unbiased	91.312	91.108	-0.2037
41	50	HDR Unbiased	91.007	91.663	0.6561
42	50	HDR Unbiased	91.076	91.644	0.5685
43	50	HDR Unbiased	91.165	90.962	-0.2037
44	50	HDR Unbiased		91.076	
50	0	CORRELATION	91.133	91.141	0.0079
51	0	CORRELATION	91.201	91.192	-0.0093
52	0	CORRELATION	91.019	91.013	-0.0052
53	0	CORRELATION	90.777	90.827	0.0499
54	0	CORRELATION	91.39	91.758	0.3677
78	50	HDR Biased	92.02	91.829	-0.1904
79	50	HDR Biased	91.228	91.41	0.182
80	50	HDR Biased	91.322	91.261	-0.0611
81	50	HDR Biased	91.201	91.533	0.3313
82	50	HDR Biased	90.914	90.925	0.0112
83	0	CORRELATION	91.615	91.617	0.0014

## TID vs Post - Pre Exposure Delta

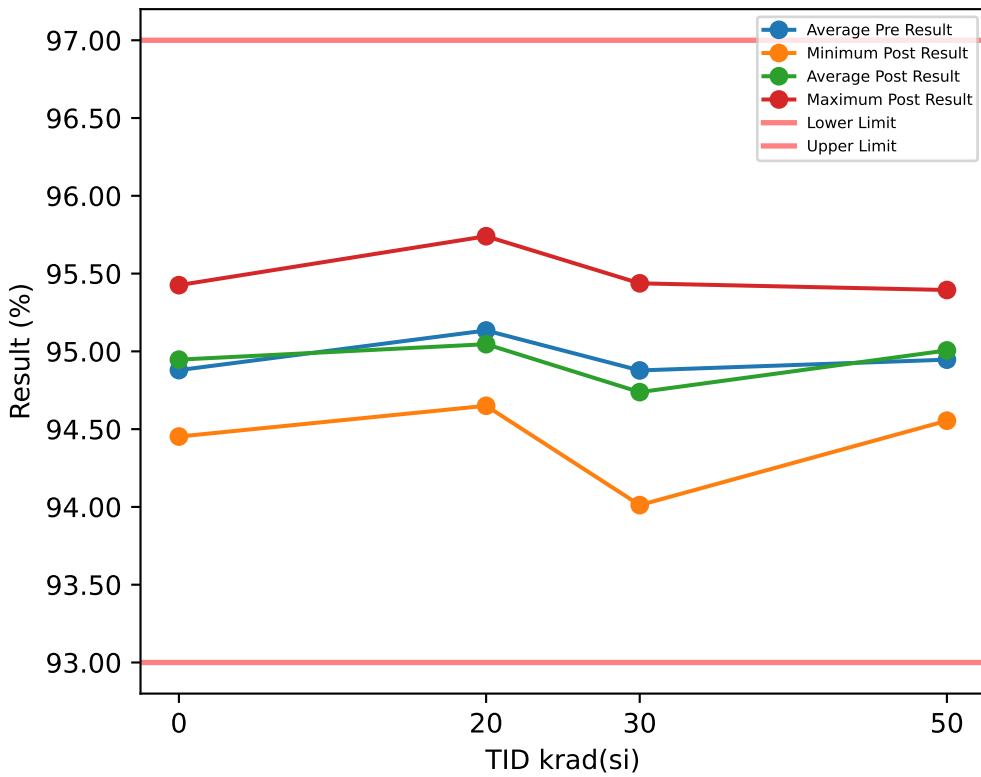


## Test Statistics (%)

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	90.777	91.189	91.615	0.29131	90.827	91.258	91.758	0.35844	-0.0093	0.068733	0.3677	0.148
20	91.049	91.445	92.118	0.38973	90.941	91.355	92.072	0.39267	-0.335	-0.09002	0.1945	0.17638
30	90.358	91.151	91.878	0.48916	90.322	91.059	91.707	0.43072	-0.7486	-0.09185	0.6314	0.35844
50	90.914	91.249	92.02	0.31901	90.925	91.341	91.829	0.32034	-0.2037	0.12113	0.6561	0.33309

# Device Test: 14.7 THRESHOLD|RISE/FB/5/0.6//10//@VPG\_RISE

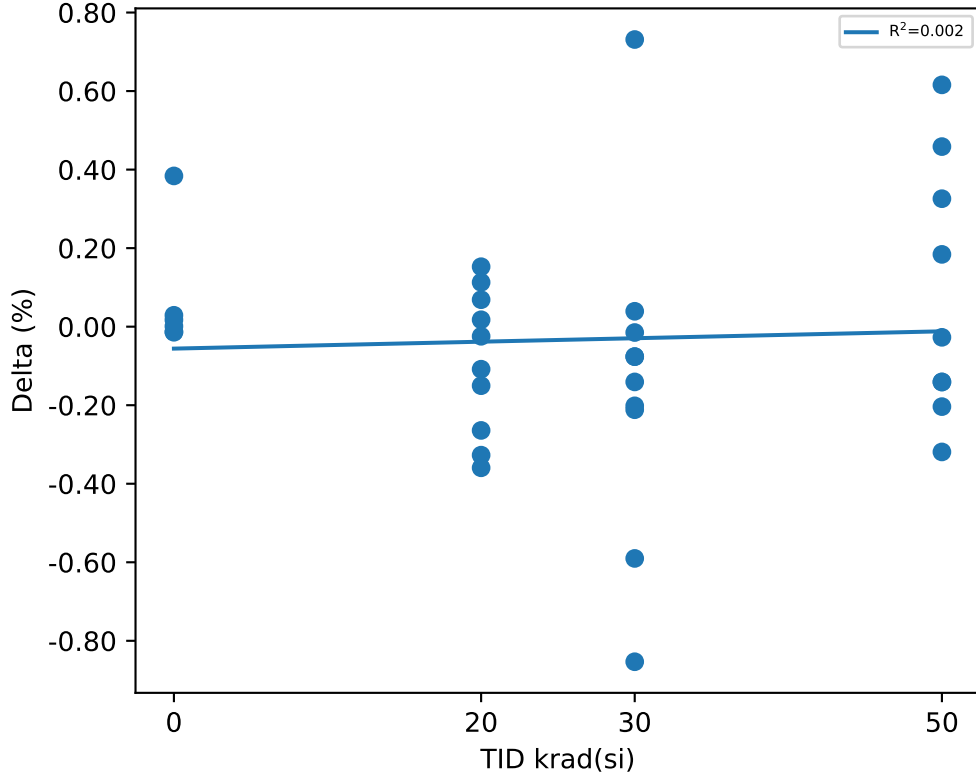
### TID vs Result Stats



### Test Results (Lower Limit = 93.0, Upper Limit = 97.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	95.126	94.766	-0.3594
2	20	HDR Unbiased	94.77	94.788	0.0176
3	20	HDR Unbiased	94.801	94.65	-0.1503
23	20	HDR Unbiased	94.812	94.787	-0.0245
24	20	HDR Unbiased	95.471	95.144	-0.3272
25	20	HDR Biased	95.671	95.74	0.0687
26	20	HDR Biased	95.085	94.976	-0.1083
27	20	HDR Biased	94.738	94.851	0.1129
28	20	HDR Biased	95.001	95.153	0.1527
29	20	HDR Biased	95.869	95.605	-0.2642
30	30	HDR Unbiased	95.504	94.913	-0.5902
31	30	HDR Unbiased	94.917	94.902	-0.0149
32	30	HDR Unbiased	94.465	94.389	-0.0762
33	30	HDR Unbiased	94.706	95.437	0.7313
34	30	HDR Unbiased	95.629	94.776	-0.8533
35	30	HDR Biased	95.367	95.165	-0.2016
36	30	HDR Biased	95.042	95.081	0.0392
37	30	HDR Biased	94.582	94.441	-0.1407
38	30	HDR Biased	94.088	94.012	-0.0764
39	30	HDR Biased	94.475	94.264	-0.2115
40	50	HDR Unbiased	94.98	94.776	-0.2036
41	50	HDR Unbiased	94.717	95.333	0.6158
42	50	HDR Unbiased	94.832	95.291	0.4586
43	50	HDR Unbiased	94.812	94.671	-0.1407
44	50	HDR Unbiased		94.787	
50	0	CORRELATION	94.843	94.871	0.029
51	0	CORRELATION	94.937	94.923	-0.0142
52	0	CORRELATION	94.686	94.704	0.0173
53	0	CORRELATION	94.465	94.452	-0.0129
54	0	CORRELATION	95.042	95.426	0.3839
78	50	HDR Biased	95.713	95.394	-0.319
79	50	HDR Biased	94.917	95.101	0.1841
80	50	HDR Biased	95.052	94.911	-0.141
81	50	HDR Biased	94.916	95.242	0.3259
82	50	HDR Biased	94.582	94.554	-0.0271
83	0	CORRELATION	95.304	95.305	0.0011

### TID vs Post - Pre Exposure Delta

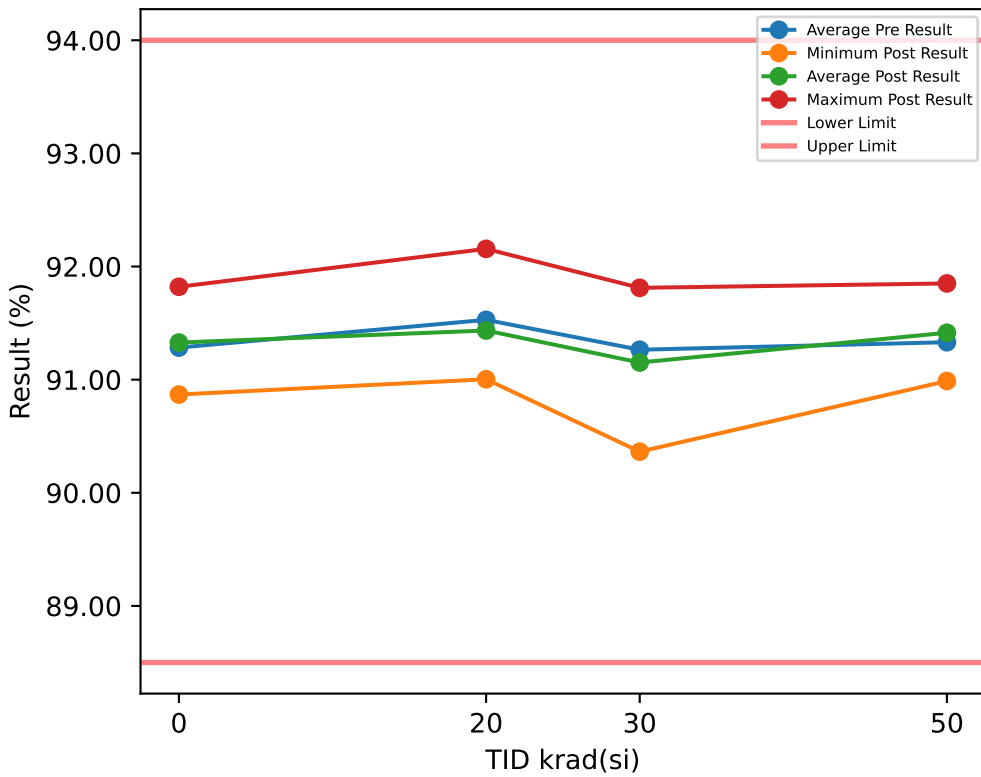


### Test Statistics (%)

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	94.465	94.879	95.304	0.28976	94.452	94.947	95.426	0.36534	-0.0142	0.067367	0.3839	0.15599
20	94.738	95.134	95.869	0.40387	94.65	95.046	95.74	0.36924	-0.3594	-0.0882	0.1527	0.18386
30	94.088	94.877	95.629	0.50518	94.012	94.738	95.437	0.44853	-0.8533	-0.13943	0.7313	0.41304
50	94.582	94.947	95.713	0.32006	94.554	95.006	95.394	0.30348	-0.319	0.083667	0.6158	0.32601

# Device Test: 14.8 THRESHOLD|FALL/FB/5/0.6//10//@VPG\_FALL

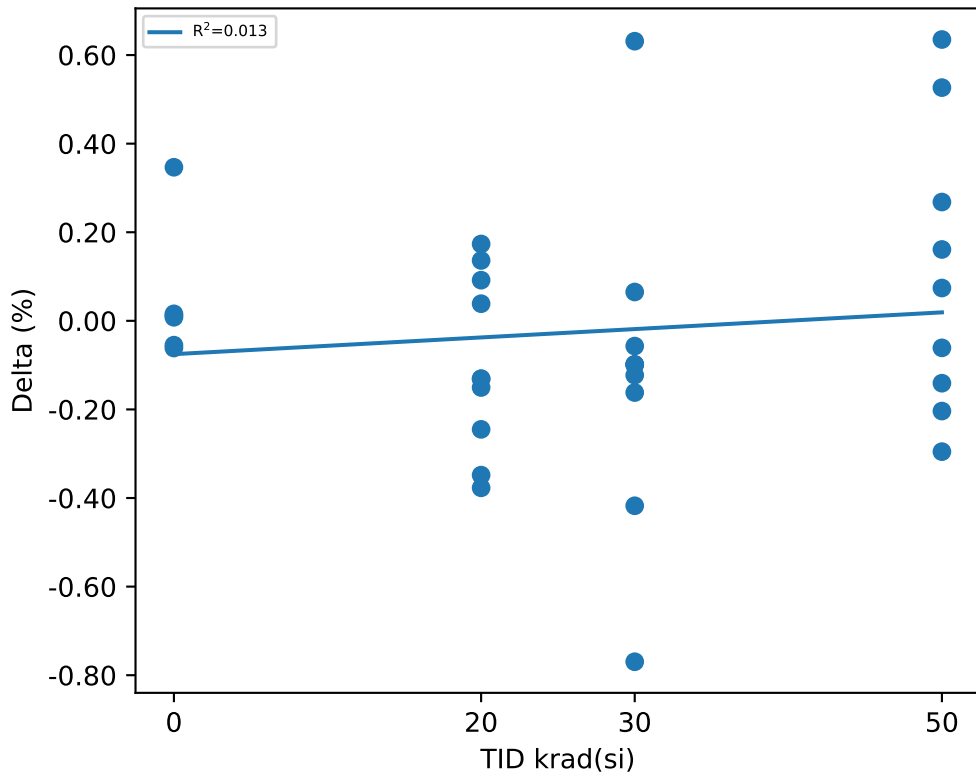
## TID vs Result Stats



## Test Results (Lower Limit = 88.5, Upper Limit = 94.0 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	91.516	91.139	-0.377
2	20	HDR Unbiased	91.144	91.183	0.0387
3	20	HDR Unbiased	91.154	91.004	-0.1505
23	20	HDR Unbiased	91.27	91.139	-0.1309
24	20	HDR Unbiased	91.867	91.518	-0.3483
25	20	HDR Biased	92.02	92.156	0.1363
26	20	HDR Biased	91.522	91.391	-0.1308
27	20	HDR Biased	91.154	91.246	0.0918
28	20	HDR Biased	91.375	91.548	0.1735
29	20	HDR Biased	92.265	92.02	-0.245
30	30	HDR Unbiased	91.81	91.392	-0.4175
31	30	HDR Unbiased	91.354	91.297	-0.057
32	30	HDR Unbiased	90.882	90.783	-0.0988
33	30	HDR Unbiased	91.18	91.812	0.6313
34	30	HDR Unbiased	91.962	91.192	-0.7696
35	30	HDR Biased	91.699	91.6	-0.0984
36	30	HDR Biased	91.39	91.455	0.0651
37	30	HDR Biased	91.04	90.941	-0.0989
38	30	HDR Biased	90.525	90.363	-0.1619
39	30	HDR Biased	90.803	90.68	-0.1227
40	50	HDR Unbiased	91.375	91.171	-0.2037
41	50	HDR Unbiased	91.07	91.705	0.6351
42	50	HDR Unbiased	91.18	91.707	0.5265
43	50	HDR Unbiased	91.207	91.066	-0.1408
44	50	HDR Unbiased		91.202	
50	0	CORRELATION	91.28	91.225	-0.0549
51	0	CORRELATION	91.327	91.339	0.0115
52	0	CORRELATION	91.061	91.076	0.0158
53	0	CORRELATION	90.861	90.869	0.008
54	0	CORRELATION	91.474	91.821	0.3467
78	50	HDR Biased	92.146	91.85	-0.2953
79	50	HDR Biased	91.354	91.515	0.1611
80	50	HDR Biased	91.406	91.344	-0.061
81	50	HDR Biased	91.327	91.596	0.2682
82	50	HDR Biased	90.914	90.988	0.0741
83	0	CORRELATION	91.699	91.638	-0.0614

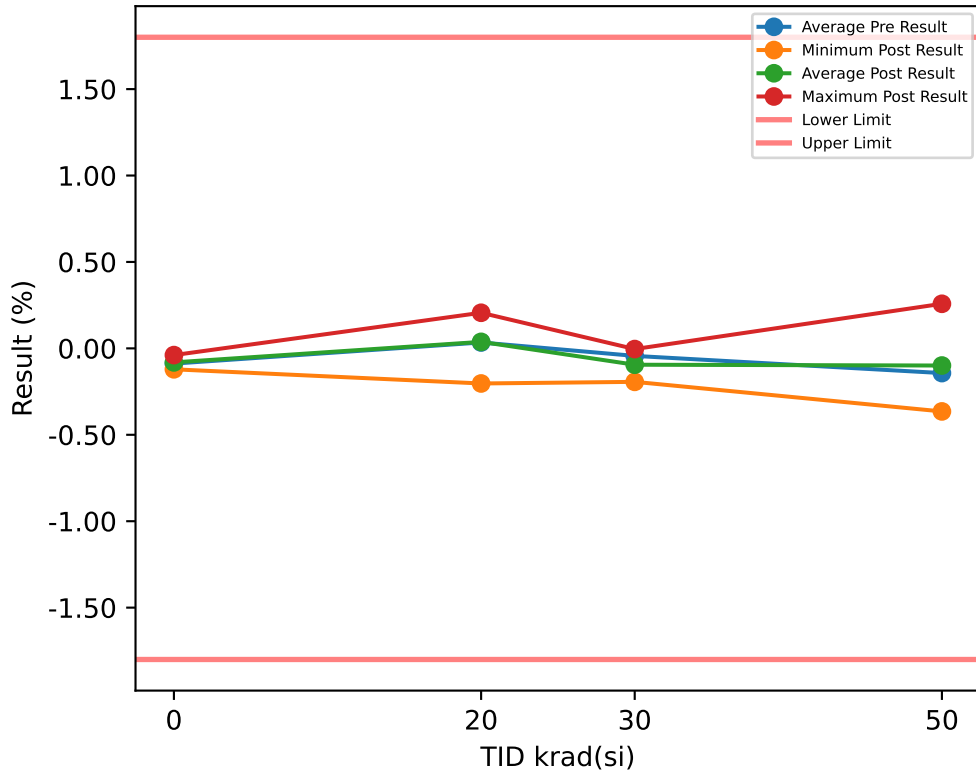
## TID vs Post - Pre Exposure Delta



## 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	90.861	91.284	91.699	0.29646	90.869	91.328	91.821	0.35324	-0.0614	0.044283	0.3467	0.1521
20	91.144	91.529	92.265	0.39674	91.004	91.434	92.156	0.38649	-0.377	-0.09422	0.1735	0.19726
30	90.525	91.264	91.962	0.46669	90.363	91.152	91.812	0.45148	-0.7696	-0.11284	0.6313	0.3521
50	90.914	91.331	92.146	0.34496	90.988	91.415	91.85	0.301	-0.2953	0.10713	0.6351	0.32266

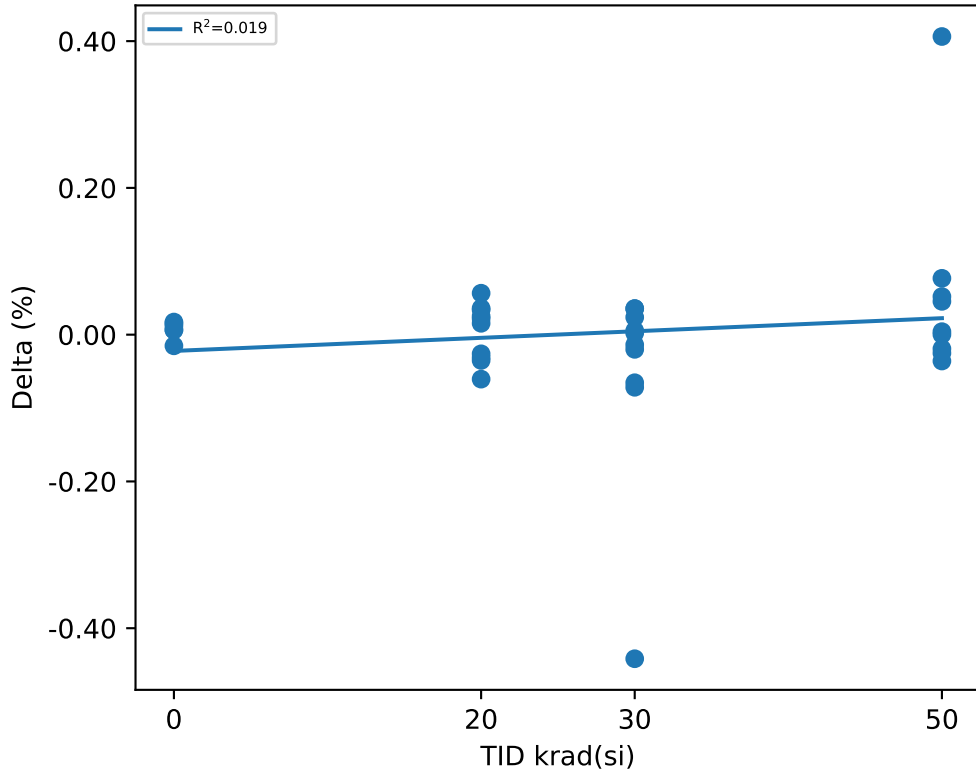
TID vs Result Stats



Test Results (Lower Limit = -1.8, Upper Limit = 1.8 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.1475	-0.091	0.0565
2	20	HDR Unbiased	0.2166	0.1815	-0.0351
3	20	HDR Unbiased	0.1976	0.1664	-0.0312
23	20	HDR Unbiased	-0.1238	-0.1083	0.0155
24	20	HDR Unbiased	-0.0116	-0.0722	-0.0606
25	20	HDR Biased	0.2321	0.206	-0.0261
26	20	HDR Biased	0.0433	0.0793	0.036
27	20	HDR Biased	-0.2282	-0.2031	0.0251
28	20	HDR Biased	0.1626	0.1844	0.0218
29	20	HDR Biased	-0.0001	0.0337	0.0338
30	30	HDR Unbiased	0.2655	-0.1761	-0.4416
31	30	HDR Unbiased	-0.0228	-0.0206	0.0022
32	30	HDR Unbiased	-0.0903	-0.162	-0.0717
33	30	HDR Unbiased	-0.0686	-0.033	0.0356
34	30	HDR Unbiased	-0.0032	-0.0687	-0.0655
35	30	HDR Biased	-0.0746	-0.0884	-0.0138
36	30	HDR Biased	-0.119	-0.1135	0.0055
37	30	HDR Biased	-0.1737	-0.1937	-0.02
38	30	HDR Biased	-0.1095	-0.0858	0.0237
39	30	HDR Biased	-0.0394	-0.004	0.0354
40	50	HDR Unbiased	-0.2439	-0.1671	0.0768
41	50	HDR Unbiased	-0.1484	0.2579	0.4063
42	50	HDR Unbiased	-0.3289	-0.3648	-0.0359
43	50	HDR Unbiased	-0.0006	-0.0257	-0.0251
44	50	HDR Unbiased		-0.2107	
50	0	CORRELATION	-0.0749	-0.0595	0.0154
51	0	CORRELATION	-0.099	-0.0871	0.0119
52	0	CORRELATION	-0.1277	-0.1211	0.0066
53	0	CORRELATION	-0.1116	-0.1053	0.0063
54	0	CORRELATION	-0.0594	-0.0746	-0.0152
78	50	HDR Biased	-0.0766	-0.0764	0.0002
79	50	HDR Biased	-0.0982	-0.1174	-0.0192
80	50	HDR Biased	-0.1997	-0.1956	0.0041
81	50	HDR Biased	0.0223	0.0677	0.0454
82	50	HDR Biased	-0.2121	-0.1602	0.0519
83	0	CORRELATION	-0.0561	-0.0389	0.0172

TID vs Post - Pre Exposure Delta



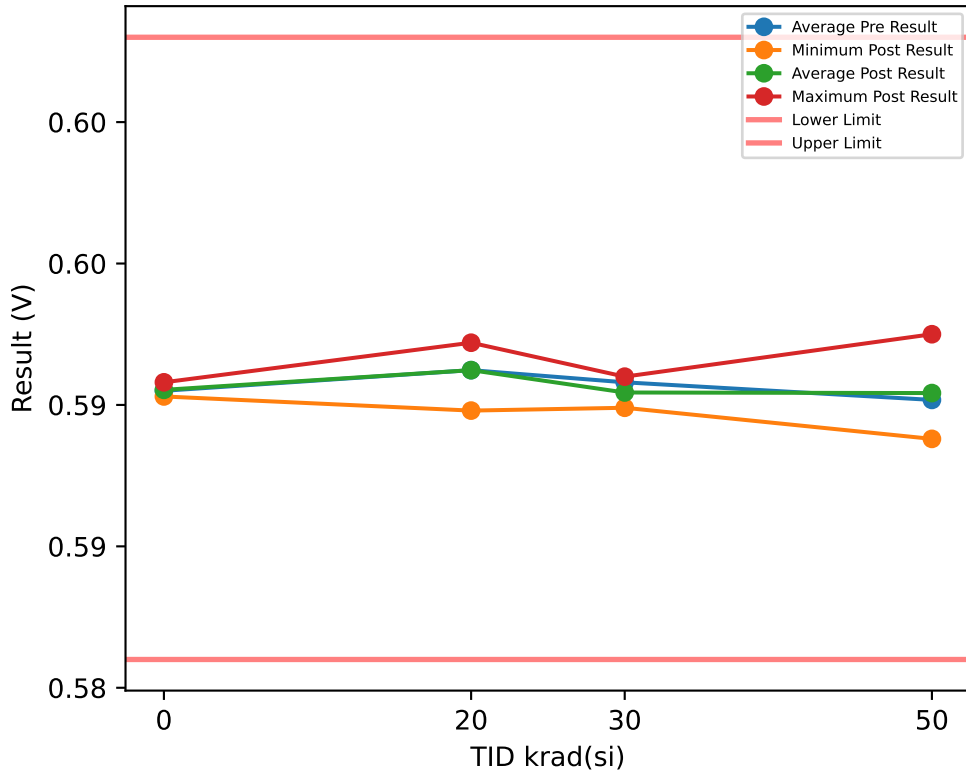
Test Statistics (%)

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	-0.1277	-0.088117	-0.0561	0.029193	-0.1211	-0.081083	-0.0389	0.030038	-0.0152	0.0070333	0.0172	0.011765
20	-0.2282	0.0341	0.2321	0.16526	-0.2031	0.03767	0.206	0.14787	-0.0606	0.00357	0.0565	0.038597
30	-0.1737	-0.04356	0.2655	0.11942	-0.1937	-0.09458	-0.004	0.066356	-0.4416	-0.05102	0.0356	0.14225
50	-0.3289	-0.1429	0.0223	0.11553	-0.3648	-0.09923	0.2579	0.17069	-0.0359	0.056056	0.4063	0.13682



# Device Test: 15.12 FB|VFB/FB/2.25/0.6//1000//@VFB\_VIN\_SUB\_3V

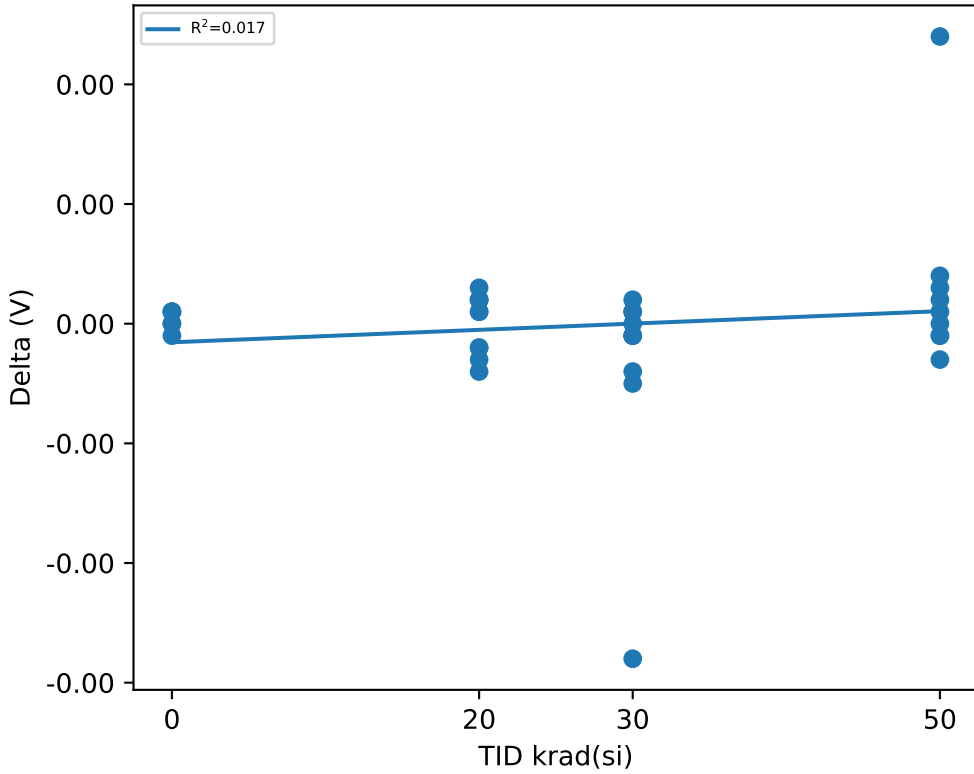
### TID vs Result Stats



### Test Results (Lower Limit = 0.586, Upper Limit = 0.608 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5952	0.5955	0.0003
2	20	HDR Unbiased	0.5973	0.5971	-0.0002
3	20	HDR Unbiased	0.5972	0.597	-0.0002
23	20	HDR Unbiased	0.5952	0.5953	0.0001
24	20	HDR Unbiased	0.596	0.5956	-0.0004
25	20	HDR Biased	0.5975	0.5972	-0.0003
26	20	HDR Biased	0.5963	0.5965	0.0002
27	20	HDR Biased	0.5946	0.5948	0.0002
28	20	HDR Biased	0.597	0.5971	0.0001
29	20	HDR Biased	0.596	0.5962	0.0002
30	30	HDR Unbiased	0.5977	0.5949	-0.0028
31	30	HDR Unbiased	0.5959	0.5959	0
32	30	HDR Unbiased	0.5955	0.595	-0.0005
33	30	HDR Unbiased	0.5957	0.5958	0.0001
34	30	HDR Unbiased	0.596	0.5956	-0.0004
35	30	HDR Biased	0.5956	0.5955	-0.0001
36	30	HDR Biased	0.5954	0.5953	-0.0001
37	30	HDR Biased	0.595	0.5949	-0.0001
38	30	HDR Biased	0.5954	0.5955	0.0001
39	30	HDR Biased	0.5958	0.596	0.0002
40	50	HDR Unbiased	0.5946	0.595	0.0004
41	50	HDR Unbiased	0.5951	0.5975	0.0024
42	50	HDR Unbiased	0.5941	0.5938	-0.0003
43	50	HDR Unbiased	0.596	0.5959	-0.0001
44	50	HDR Unbiased		0.5947	
50	0	CORRELATION	0.5956	0.5956	0
51	0	CORRELATION	0.5955	0.5955	0
52	0	CORRELATION	0.5952	0.5953	0.0001
53	0	CORRELATION	0.5953	0.5954	0.0001
54	0	CORRELATION	0.5957	0.5956	-0.0001
78	50	HDR Biased	0.5956	0.5956	0
79	50	HDR Biased	0.5954	0.5953	-0.0001
80	50	HDR Biased	0.5948	0.5949	0.0001
81	50	HDR Biased	0.5962	0.5964	0.0002
82	50	HDR Biased	0.5948	0.5951	0.0003
83	0	CORRELATION	0.5957	0.5958	0.0001

### TID vs Post - Pre Exposure Delta



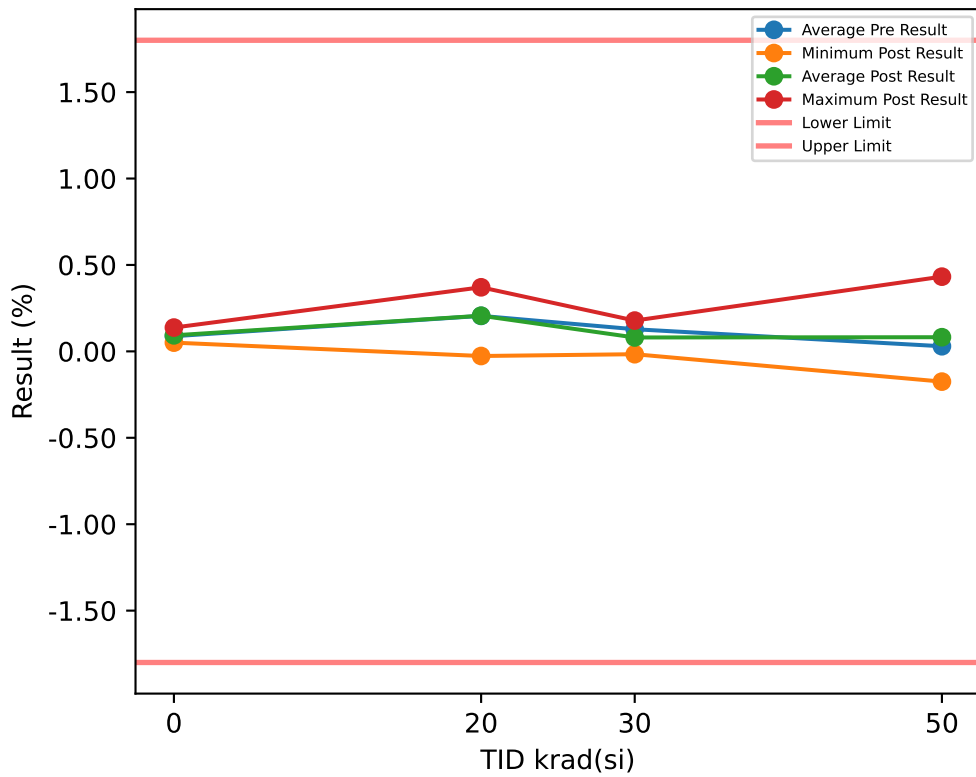
### Test Statistics (V)

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	0.5952	0.5955	0.5957	0.00020976	0.5953	0.59553	0.5958	0.00017512	-0.0001	3.3333e-05	0.0001	8.165e-05
20	0.5946	0.59623	0.5975	0.00101	0.5948	0.59623	0.5972	0.00087946	-0.0004	0	0.0003	0.00024944
30	0.595	0.5958	0.5977	0.00072725	0.5949	0.59544	0.596	0.00040607	-0.0028	-0.00036	0.0002	0.00088468
50	0.5941	0.59518	0.5962	0.00068333	0.5938	0.59542	0.5975	0.0010141	-0.0003	0.00032222	0.0024	0.00080898



# Device Test: 15.16 VIN|ACCURACY/OUT/2.5/2.25//10//@OUT\_ACC\_VIN\_SUB\_3V

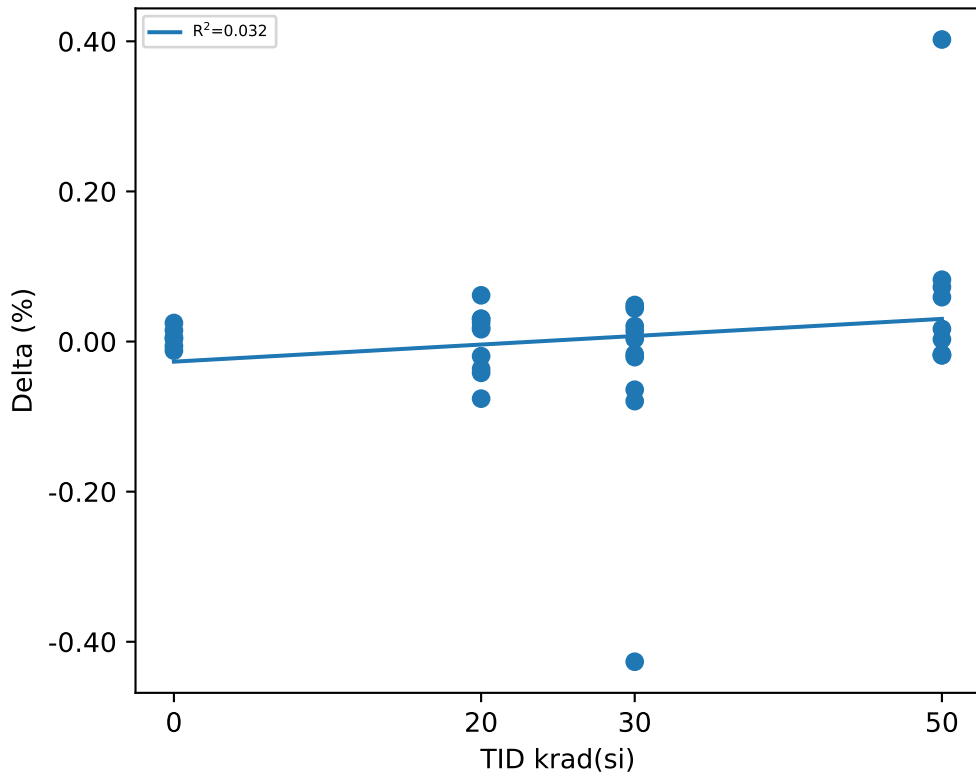
### TID vs Result Stats



### Test Results (Lower Limit = -1.8, Upper Limit = 1.8 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.0219	0.0835	0.0616
2	20	HDR Unbiased	0.3896	0.3532	-0.0364
3	20	HDR Unbiased	0.3793	0.3376	-0.0417
23	20	HDR Unbiased	0.0443	0.0628	0.0185
24	20	HDR Unbiased	0.1658	0.0897	-0.0761
25	20	HDR Biased	0.3902	0.3707	-0.0195
26	20	HDR Biased	0.2079	0.2381	0.0302
27	20	HDR Biased	-0.0432	-0.0268	0.0164
28	20	HDR Biased	0.3192	0.3495	0.0303
29	20	HDR Biased	0.1789	0.2039	0.025
30	30	HDR Unbiased	0.4297	0.0031	-0.4266
31	30	HDR Unbiased	0.1454	0.1489	0.0035
32	30	HDR Unbiased	0.0932	0.0138	-0.0794
33	30	HDR Unbiased	0.0953	0.1394	0.0441
34	30	HDR Unbiased	0.1651	0.1009	-0.0642
35	30	HDR Biased	0.1059	0.0851	-0.0208
36	30	HDR Biased	0.0379	0.0585	0.0206
37	30	HDR Biased	0.0004	-0.0164	-0.0168
38	30	HDR Biased	0.0788	0.0928	0.014
39	30	HDR Biased	0.1295	0.1782	0.0487
40	50	HDR Unbiased	-0.0612	0.0113	0.0725
41	50	HDR Unbiased	0.0299	0.4323	0.4024
42	50	HDR Unbiased	-0.1567	-0.175	-0.0183
43	50	HDR Unbiased	0.1787	0.1605	-0.0182
44	50	HDR Unbiased		-0.0306	
50	0	CORRELATION	0.1031	0.1067	0.0036
51	0	CORRELATION	0.0696	0.0943	0.0247
52	0	CORRELATION	0.0452	0.0506	0.0054
53	0	CORRELATION	0.0702	0.0642	-0.006
54	0	CORRELATION	0.1154	0.1033	-0.0121
78	50	HDR Biased	0.0917	0.0946	0.0029
79	50	HDR Biased	0.0695	0.0525	-0.017
80	50	HDR Biased	-0.0247	-0.0079	0.0168
81	50	HDR Biased	0.1942	0.2533	0.0591
82	50	HDR Biased	-0.0543	0.0281	0.0824
83	0	CORRELATION	0.1229	0.1377	0.0148

### TID vs Post - Pre Exposure Delta

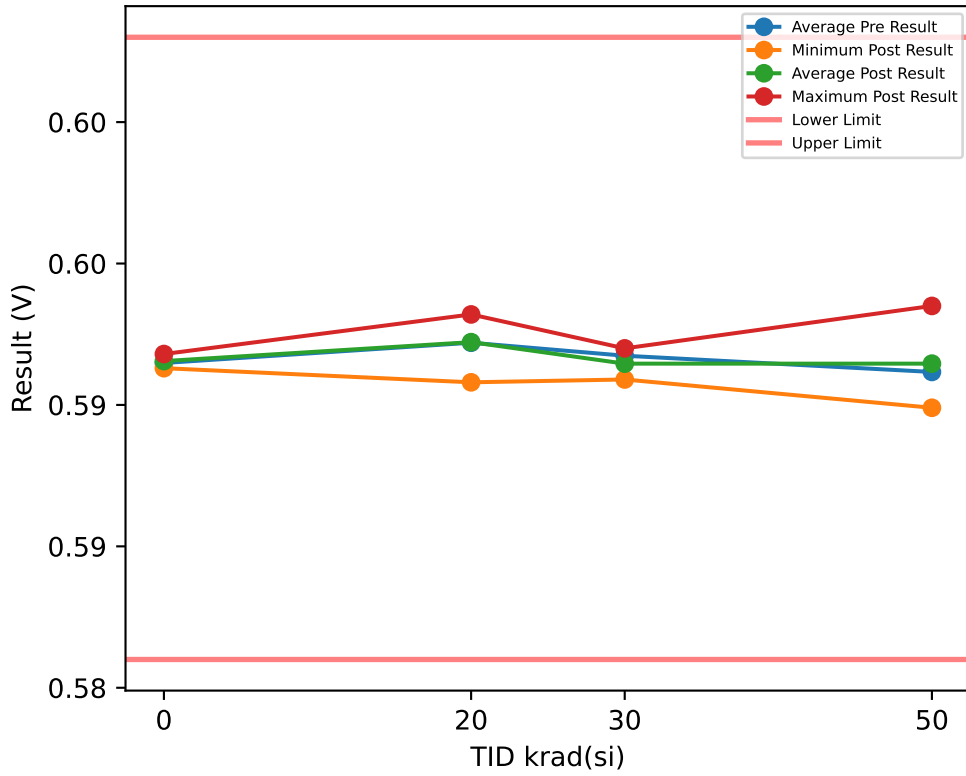


### Test Statistics (%)

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	0.0452	0.087733	0.1229	0.030606	0.0506	0.0928	0.1377	0.03137	-0.0121	0.0050667	0.0247	0.013414
20	-0.0432	0.20539	0.3902	0.16158	-0.0268	0.20622	0.3707	0.14567	-0.0761	0.00083	0.0616	0.042281
30	0.0004	0.12812	0.4297	0.11657	-0.0164	0.08043	0.1782	0.065485	-0.4266	-0.04769	0.0487	0.13958
50	-0.1567	0.029678	0.1942	0.11603	-0.175	0.08191	0.4323	0.16798	-0.0183	0.064733	0.4024	0.13276

# Device Test: 15.17 FB|VFB/FB/2.5/2.25//10//@VFB\_VIN\_SUB\_3V

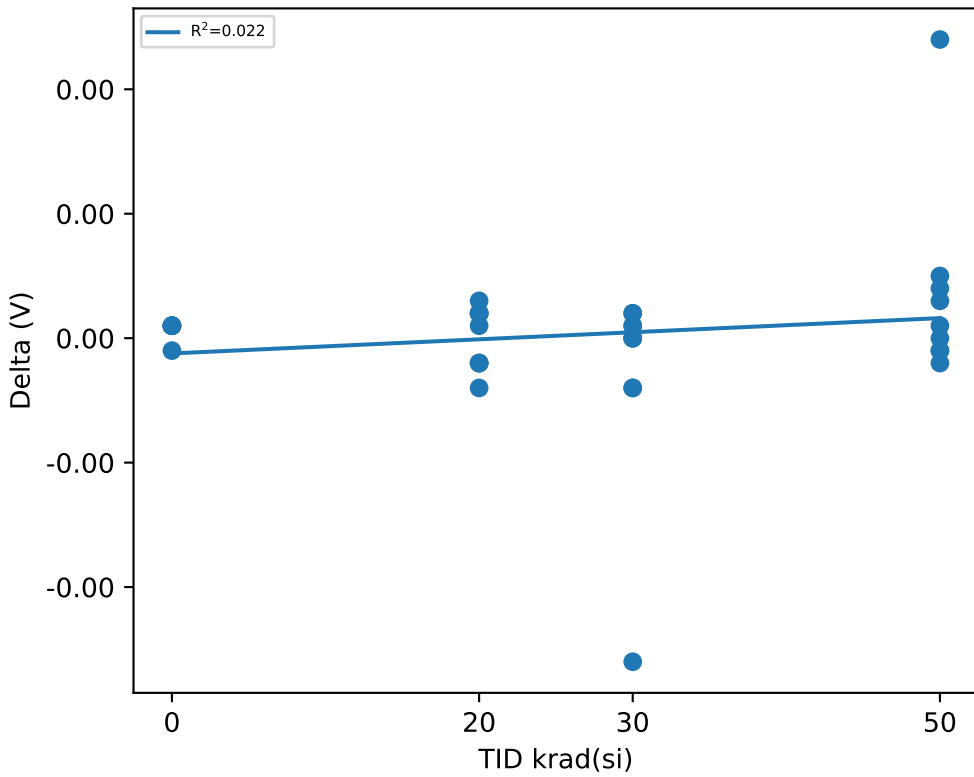
### TID vs Result Stats



### Test Results (Lower Limit = 0.586, Upper Limit = 0.608 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5962	0.5965	0.0003
2	20	HDR Unbiased	0.5983	0.5981	-0.0002
3	20	HDR Unbiased	0.5982	0.598	-0.0002
23	20	HDR Unbiased	0.5962	0.5964	0.0002
24	20	HDR Unbiased	0.5969	0.5965	-0.0004
25	20	HDR Biased	0.5984	0.5982	-0.0002
26	20	HDR Biased	0.5972	0.5974	0.0002
27	20	HDR Biased	0.5957	0.5958	0.0001
28	20	HDR Biased	0.5979	0.5981	0.0002
29	20	HDR Biased	0.597	0.5972	0.0002
30	30	HDR Unbiased	0.5986	0.596	-0.0026
31	30	HDR Unbiased	0.5968	0.5969	0.0001
32	30	HDR Unbiased	0.5965	0.5961	-0.0004
33	30	HDR Unbiased	0.5966	0.5968	0.0002
34	30	HDR Unbiased	0.597	0.5966	-0.0004
35	30	HDR Biased	0.5965	0.5965	0
36	30	HDR Biased	0.5963	0.5963	0
37	30	HDR Biased	0.5959	0.5959	0
38	30	HDR Biased	0.5964	0.5965	0.0001
39	30	HDR Biased	0.5968	0.597	0.0002
40	50	HDR Unbiased	0.5956	0.5961	0.0005
41	50	HDR Unbiased	0.5961	0.5985	0.0024
42	50	HDR Unbiased	0.5951	0.5949	-0.0002
43	50	HDR Unbiased	0.597	0.5969	-0.0001
44	50	HDR Unbiased		0.5958	
50	0	CORRELATION	0.5965	0.5966	0.0001
51	0	CORRELATION	0.5965	0.5966	0.0001
52	0	CORRELATION	0.5962	0.5963	0.0001
53	0	CORRELATION	0.5963	0.5964	0.0001
54	0	CORRELATION	0.5967	0.5966	-0.0001
78	50	HDR Biased	0.5966	0.5966	0
79	50	HDR Biased	0.5964	0.5963	-0.0001
80	50	HDR Biased	0.5958	0.5959	0.0001
81	50	HDR Biased	0.5972	0.5975	0.0003
82	50	HDR Biased	0.5957	0.5961	0.0004
83	0	CORRELATION	0.5967	0.5968	0.0001

### TID vs Post - Pre Exposure Delta

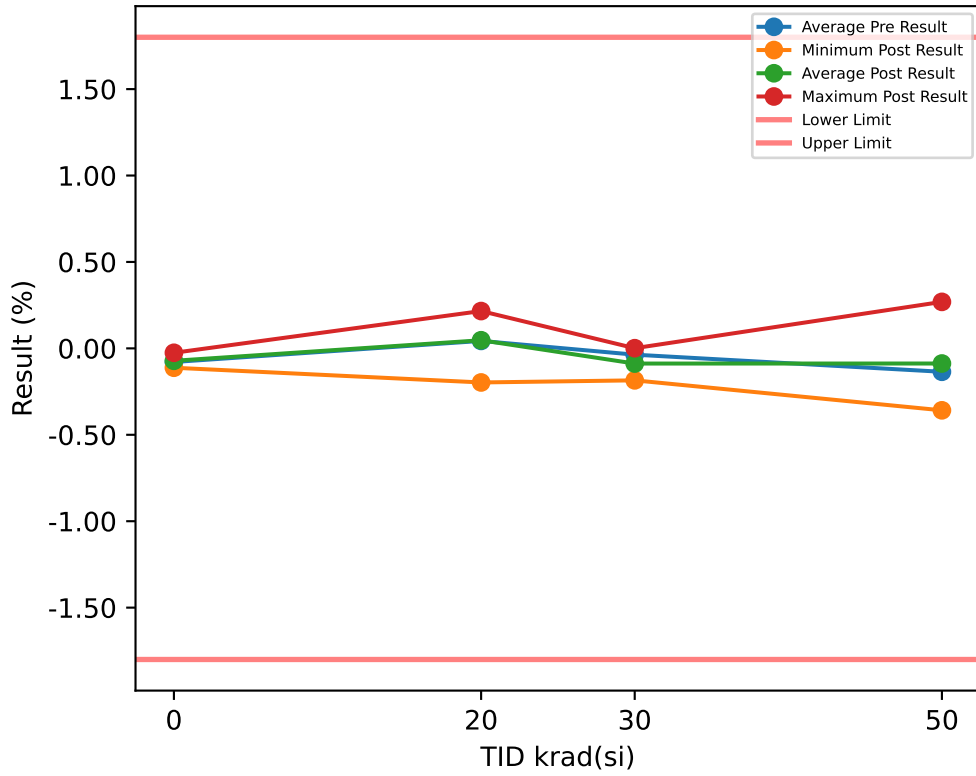


### Test Statistics (V)

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	0.5962	0.59648	0.5967	0.00020412	0.5963	0.59655	0.5968	0.00017607	-0.0001	6.6667e-05	0.0001	8.165e-05
20	0.5957	0.5972	0.5984	0.00097297	0.5958	0.59722	0.5982	0.00087407	-0.0004	2e-05	0.0003	0.00024404
30	0.5959	0.59674	0.5986	0.00072142	0.5959	0.59646	0.597	0.00038064	-0.0026	-0.00028	0.0002	0.00084301
50	0.5951	0.59617	0.5972	0.00069101	0.5949	0.59646	0.5985	0.00099577	-0.0002	0.00036667	0.0024	0.0008

# Device Test: 15.21 VIN|ACCURACY/OUT/2.25/1.1//1000//@OUT\_ACC\_VIN\_SUB\_3V

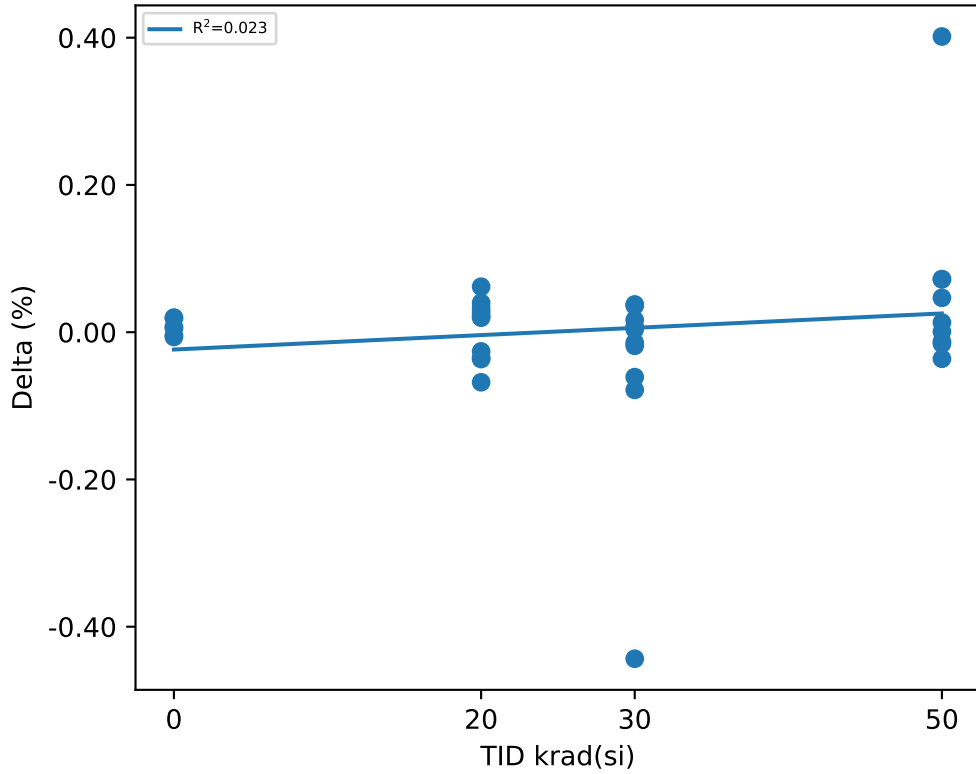
### TID vs Result Stats



### Test Results (Lower Limit = -1.8, Upper Limit = 1.8 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.141	-0.0792	0.0618
2	20	HDR Unbiased	0.2223	0.1876	-0.0347
3	20	HDR Unbiased	0.2132	0.1767	-0.0365
23	20	HDR Unbiased	-0.1182	-0.0958	0.0224
24	20	HDR Unbiased	0.0054	-0.0626	-0.068
25	20	HDR Biased	0.242	0.2159	-0.0261
26	20	HDR Biased	0.047	0.0869	0.0399
27	20	HDR Biased	-0.2169	-0.1972	0.0197
28	20	HDR Biased	0.166	0.1933	0.0273
29	20	HDR Biased	0.0118	0.0443	0.0325
30	30	HDR Unbiased	0.2718	-0.1717	-0.4435
31	30	HDR Unbiased	-0.0173	-0.0134	0.0039
32	30	HDR Unbiased	-0.0717	-0.1501	-0.0784
33	30	HDR Unbiased	-0.0644	-0.0283	0.0361
34	30	HDR Unbiased	-0.0008	-0.0618	-0.061
35	30	HDR Biased	-0.0631	-0.0816	-0.0185
36	30	HDR Biased	-0.1183	-0.1108	0.0075
37	30	HDR Biased	-0.1708	-0.185	-0.0142
38	30	HDR Biased	-0.0933	-0.0767	0.0166
39	30	HDR Biased	-0.0367	0.001	0.0377
40	50	HDR Unbiased	-0.2363	-0.1643	0.072
41	50	HDR Unbiased	-0.1326	0.269	0.4016
42	50	HDR Unbiased	-0.3223	-0.3584	-0.0361
43	50	HDR Unbiased	0.0056	-0.0101	-0.0157
44	50	HDR Unbiased		-0.1988	
50	0	CORRELATION	-0.0626	-0.0557	0.0069
51	0	CORRELATION	-0.0955	-0.0764	0.0191
52	0	CORRELATION	-0.118	-0.112	0.006
53	0	CORRELATION	-0.0942	-0.0984	-0.0042
54	0	CORRELATION	-0.0569	-0.0634	-0.0065
78	50	HDR Biased	-0.0706	-0.0699	0.0007
79	50	HDR Biased	-0.0945	-0.1072	-0.0127
80	50	HDR Biased	-0.1901	-0.1769	0.0132
81	50	HDR Biased	0.0305	0.0772	0.0467
82	50	HDR Biased	-0.2086	-0.1366	0.072
83	0	CORRELATION	-0.0454	-0.0256	0.0198

### TID vs Post - Pre Exposure Delta

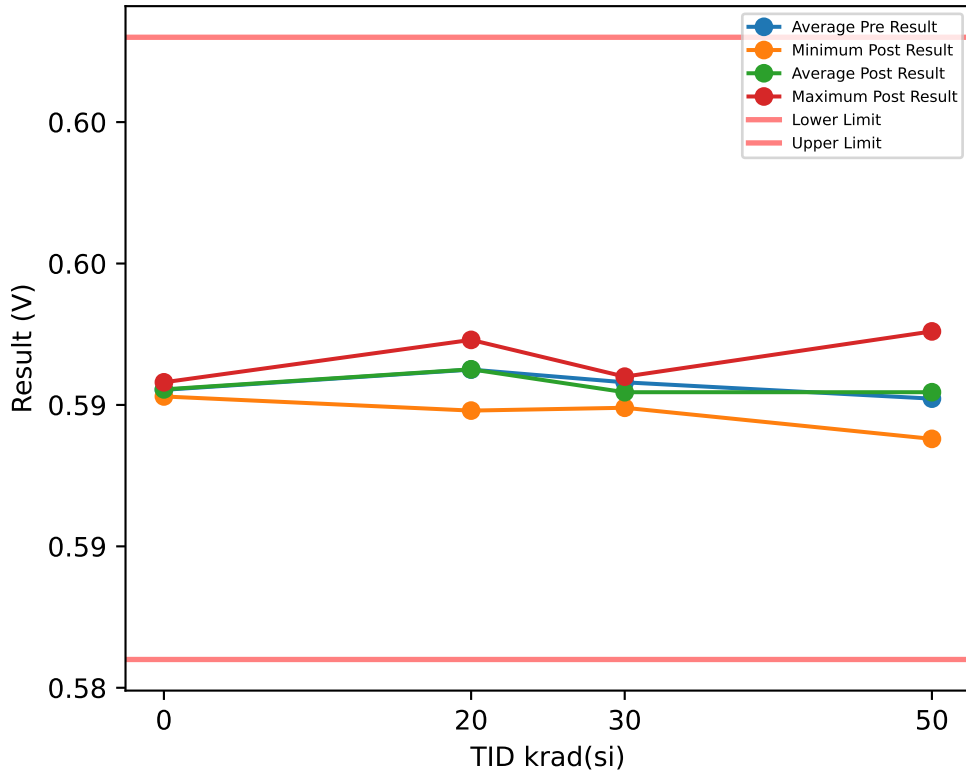


### Test Statistics (%)

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	-0.118	-0.078767	-0.0454	0.027965	-0.112	-0.071917	-0.0256	0.031013	-0.0065	0.00685	0.0198	0.011125
20	-0.2169	0.04316	0.242	0.16521	-0.1972	0.04699	0.2159	0.1476	-0.068	0.00383	0.0618	0.041896
30	-0.1708	-0.03646	0.2718	0.11896	-0.185	-0.08784	0.001	0.065571	-0.4435	-0.05138	0.0377	0.1429
50	-0.3223	-0.13543	0.0305	0.11551	-0.3584	-0.0876	0.269	0.17094	-0.0361	0.060189	0.4016	0.13375

# Device Test: 15.22 FB|VFB/FB/2.25/1.1//1000//@VFB\_VIN\_SUB\_3V

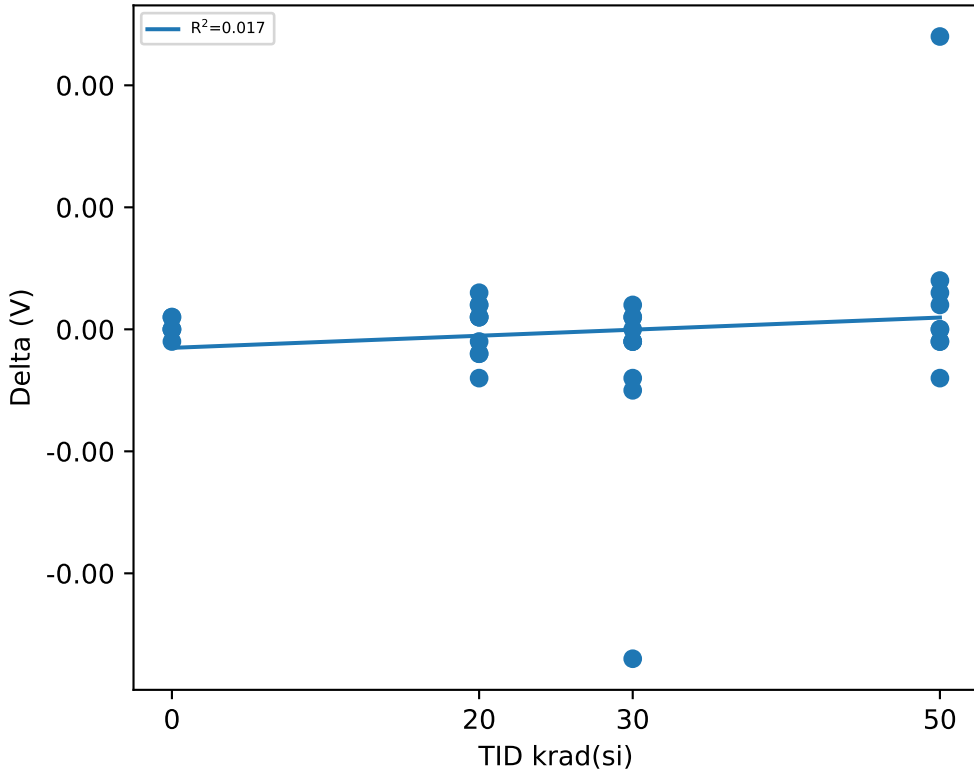
### TID vs Result Stats



### Test Results (Lower Limit = 0.586, Upper Limit = 0.608 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5952	0.5955	0.0003
2	20	HDR Unbiased	0.5973	0.5971	-0.0002
3	20	HDR Unbiased	0.5972	0.5971	-0.0001
23	20	HDR Unbiased	0.5953	0.5954	0.0001
24	20	HDR Unbiased	0.596	0.5956	-0.0004
25	20	HDR Biased	0.5975	0.5973	-0.0002
26	20	HDR Biased	0.5963	0.5965	0.0002
27	20	HDR Biased	0.5947	0.5948	0.0001
28	20	HDR Biased	0.597	0.5971	0.0001
29	20	HDR Biased	0.596	0.5962	0.0002
30	30	HDR Unbiased	0.5977	0.595	-0.0027
31	30	HDR Unbiased	0.5959	0.5959	0
32	30	HDR Unbiased	0.5955	0.595	-0.0005
33	30	HDR Unbiased	0.5957	0.5958	0.0001
34	30	HDR Unbiased	0.596	0.5956	-0.0004
35	30	HDR Biased	0.5956	0.5955	-0.0001
36	30	HDR Biased	0.5954	0.5953	-0.0001
37	30	HDR Biased	0.595	0.5949	-0.0001
38	30	HDR Biased	0.5954	0.5955	0.0001
39	30	HDR Biased	0.5958	0.596	0.0002
40	50	HDR Unbiased	0.5946	0.595	0.0004
41	50	HDR Unbiased	0.5952	0.5976	0.0024
42	50	HDR Unbiased	0.5942	0.5938	-0.0004
43	50	HDR Unbiased	0.596	0.5959	-0.0001
44	50	HDR Unbiased		0.5948	
50	0	CORRELATION	0.5956	0.5957	0.0001
51	0	CORRELATION	0.5955	0.5955	0
52	0	CORRELATION	0.5953	0.5953	0
53	0	CORRELATION	0.5954	0.5954	0
54	0	CORRELATION	0.5957	0.5956	-0.0001
78	50	HDR Biased	0.5956	0.5956	0
79	50	HDR Biased	0.5955	0.5954	-0.0001
80	50	HDR Biased	0.5949	0.5949	0
81	50	HDR Biased	0.5962	0.5964	0.0002
82	50	HDR Biased	0.5948	0.5951	0.0003
83	0	CORRELATION	0.5957	0.5958	0.0001

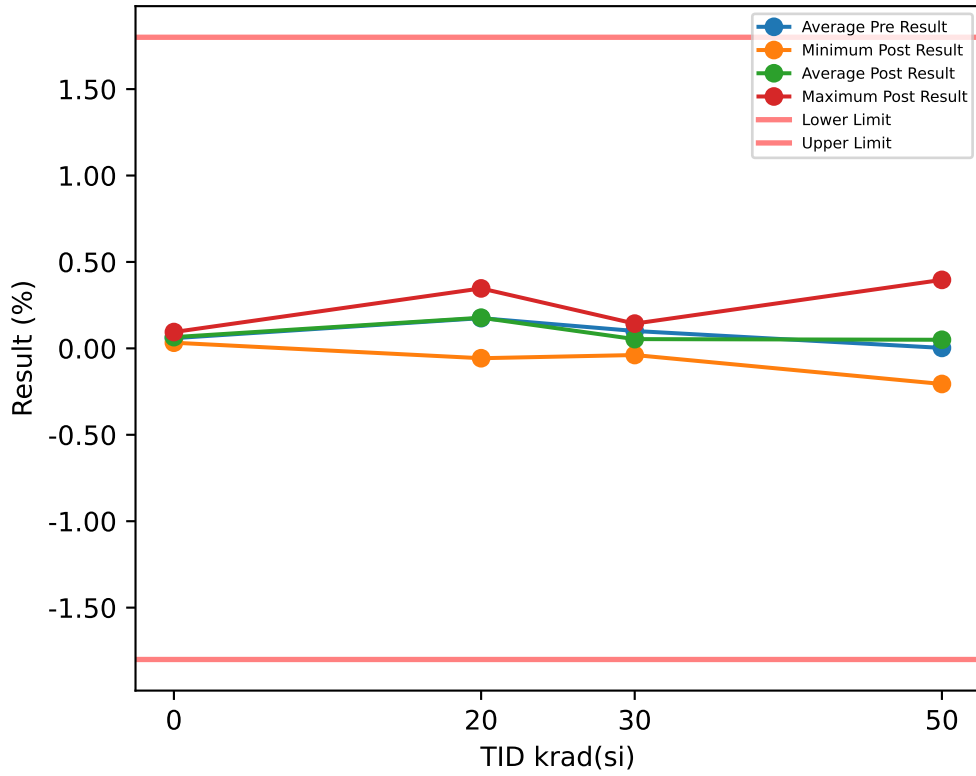
### TID vs Post - Pre Exposure Delta



### 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	0.5953	0.59553	0.5957	0.0001633	0.5953	0.59555	0.5958	0.00018708	-0.0001	1.6667e-05	0.0001	7.5277e-05
20	0.5947	0.59625	0.5975	0.00098121	0.5948	0.59626	0.5973	0.00089094	-0.0004	1e-05	0.0003	0.00022336
30	0.595	0.5958	0.5977	0.00072725	0.5949	0.59545	0.596	0.00039229	-0.0027	-0.00035	0.0002	0.00085408
50	0.5942	0.59522	0.5962	0.00066102	0.5938	0.59545	0.5976	0.0010288	-0.0004	0.0003	0.0024	0.0008231

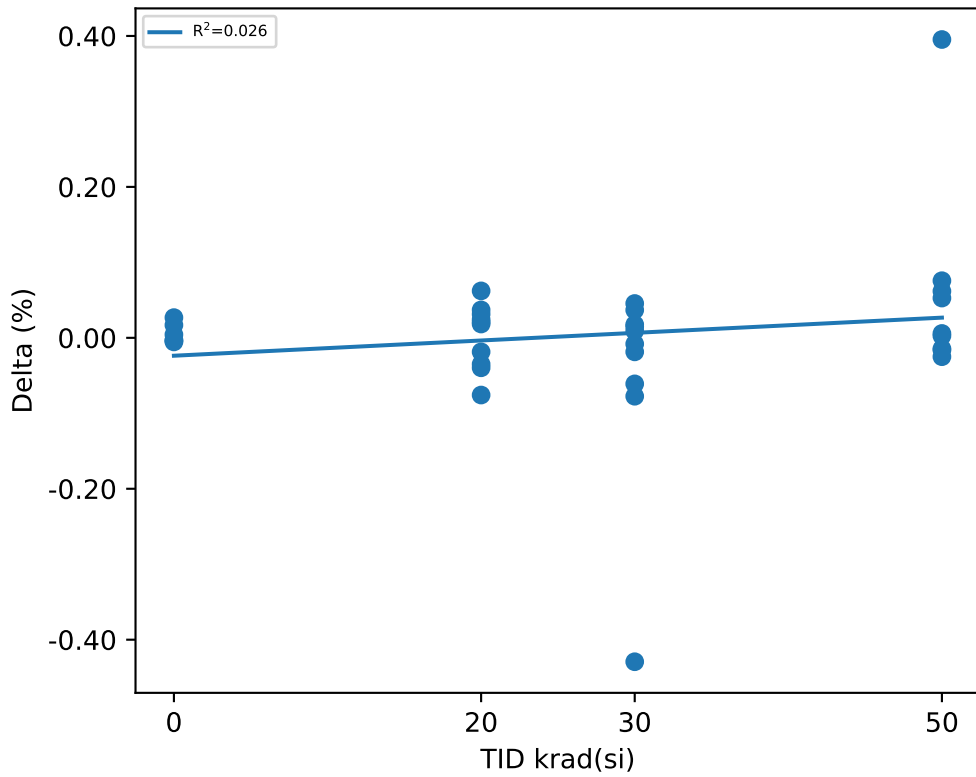
TID vs Result Stats



Test Results (Lower Limit = -1.8, Upper Limit = 1.8 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.0067	0.0555	0.0622
2	20	HDR Unbiased	0.3535	0.3186	-0.0349
3	20	HDR Unbiased	0.3482	0.3085	-0.0397
23	20	HDR Unbiased	0.0147	0.0355	0.0208
24	20	HDR Unbiased	0.1395	0.0637	-0.0758
25	20	HDR Biased	0.3655	0.3469	-0.0186
26	20	HDR Biased	0.173	0.21	0.037
27	20	HDR Biased	-0.0753	-0.057	0.0183
28	20	HDR Biased	0.2858	0.3172	0.0314
29	20	HDR Biased	0.1505	0.1748	0.0243
30	30	HDR Unbiased	0.4011	-0.0281	-0.4292
31	30	HDR Unbiased	0.1169	0.1261	0.0092
32	30	HDR Unbiased	0.0629	-0.0145	-0.0774
33	30	HDR Unbiased	0.0727	0.1095	0.0368
34	30	HDR Unbiased	0.1407	0.0797	-0.061
35	30	HDR Biased	0.0789	0.0603	-0.0186
36	30	HDR Biased	0.0173	0.0323	0.015
37	30	HDR Biased	-0.0304	-0.0385	-0.0081
38	30	HDR Biased	0.0481	0.0657	0.0176
39	30	HDR Biased	0.0978	0.1433	0.0455
40	50	HDR Unbiased	-0.0924	-0.0167	0.0757
41	50	HDR Unbiased	0.001	0.3963	0.3953
42	50	HDR Unbiased	-0.181	-0.206	-0.025
43	50	HDR Unbiased	0.1479	0.1335	-0.0144
44	50	HDR Unbiased		-0.065	
50	0	CORRELATION	0.0716	0.0759	0.0043
51	0	CORRELATION	0.0442	0.071	0.0268
52	0	CORRELATION	0.0159	0.0328	0.0169
53	0	CORRELATION	0.0417	0.0363	-0.0054
54	0	CORRELATION	0.0836	0.0798	-0.0038
78	50	HDR Biased	0.0628	0.0654	0.0026
79	50	HDR Biased	0.0488	0.0326	-0.0162
80	50	HDR Biased	-0.049	-0.0432	0.0058
81	50	HDR Biased	0.1601	0.2128	0.0527
82	50	HDR Biased	-0.0739	-0.0121	0.0618
83	0	CORRELATION	0.0973	0.0944	-0.0029

TID vs Post - Pre Exposure Delta

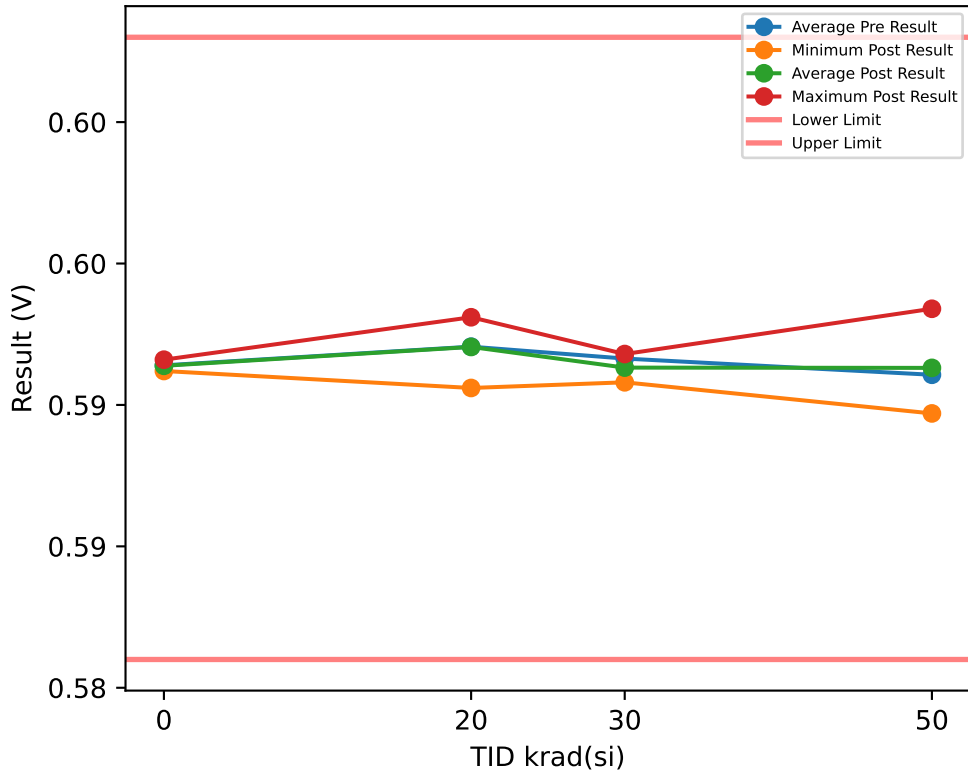


Test Statistics (%)

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	0.0159	0.05905	0.0973	0.030354	0.0328	0.065033	0.0944	0.024895	-0.0054	0.0059833	0.0268	0.013111
20	-0.0753	0.17487	0.3655	0.16113	-0.057	0.17737	0.3469	0.14504	-0.0758	0.0025	0.0622	0.042694
30	-0.0304	0.1006	0.4011	0.11629	-0.0385	0.05358	0.1433	0.064591	-0.4292	-0.04702	0.0455	0.13995
50	-0.181	0.0027	0.1601	0.11343	-0.206	0.04976	0.3963	0.16656	-0.025	0.059811	0.3953	0.13111

# Device Test: 15.27 FB|VFB/FB/3/0.6//10//@VFB\_VIN\_SUB\_3V

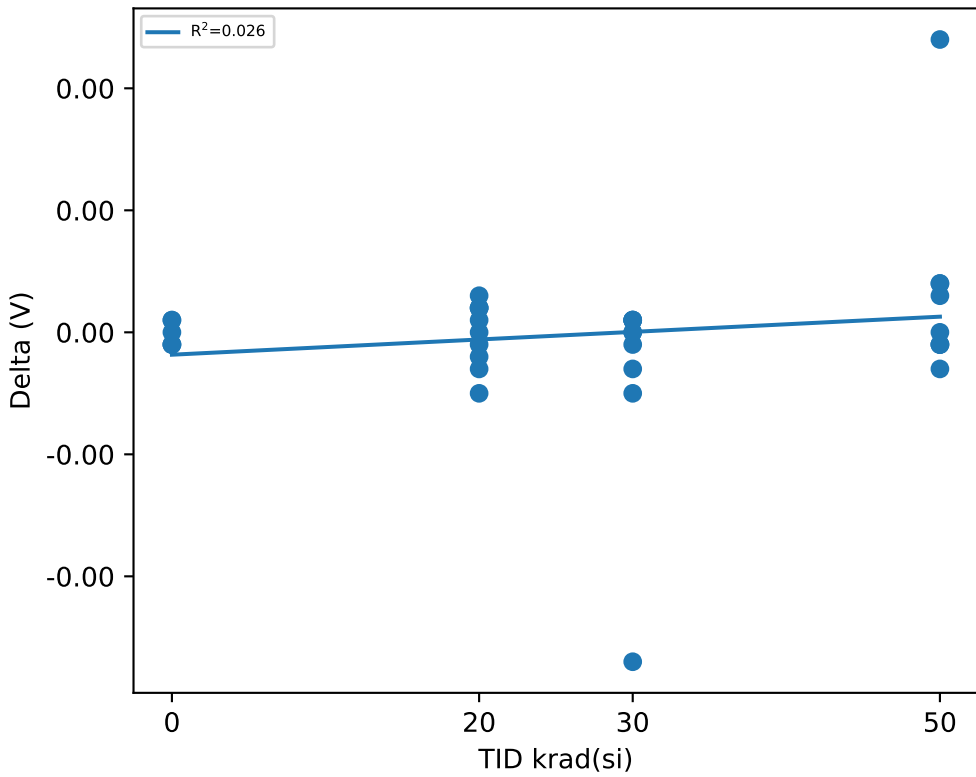
## TID vs Result Stats



## Test Results (Lower Limit = 0.586, Upper Limit = 0.608 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.596	0.5963	0.0003
2	20	HDR Unbiased	0.5981	0.5979	-0.0002
3	20	HDR Unbiased	0.5981	0.5978	-0.0003
23	20	HDR Unbiased	0.5961	0.5962	0.0001
24	20	HDR Unbiased	0.5969	0.5964	-0.0005
25	20	HDR Biased	0.5982	0.5981	-0.0001
26	20	HDR Biased	0.597	0.5972	0.0002
27	20	HDR Biased	0.5956	0.5956	0
28	20	HDR Biased	0.5977	0.5979	0.0002
29	20	HDR Biased	0.5969	0.5971	0.0002
30	30	HDR Unbiased	0.5985	0.5958	-0.0027
31	30	HDR Unbiased	0.5967	0.5968	0.0001
32	30	HDR Unbiased	0.5964	0.5959	-0.0005
33	30	HDR Unbiased	0.5965	0.5966	0.0001
34	30	HDR Unbiased	0.5968	0.5965	-0.0003
35	30	HDR Biased	0.5965	0.5964	-0.0001
36	30	HDR Biased	0.5962	0.5962	0
37	30	HDR Biased	0.5958	0.5958	0
38	30	HDR Biased	0.5963	0.5964	0.0001
39	30	HDR Biased	0.5967	0.5968	0.0001
40	50	HDR Unbiased	0.5955	0.5959	0.0004
41	50	HDR Unbiased	0.596	0.5984	0.0024
42	50	HDR Unbiased	0.595	0.5947	-0.0003
43	50	HDR Unbiased	0.5969	0.5968	-0.0001
44	50	HDR Unbiased		0.5956	
50	0	CORRELATION	0.5965	0.5964	-0.0001
51	0	CORRELATION	0.5963	0.5964	0.0001
52	0	CORRELATION	0.5961	0.5962	0.0001
53	0	CORRELATION	0.5963	0.5962	-0.0001
54	0	CORRELATION	0.5966	0.5965	-0.0001
78	50	HDR Biased	0.5965	0.5964	-0.0001
79	50	HDR Biased	0.5963	0.5962	-0.0001
80	50	HDR Biased	0.5958	0.5958	0
81	50	HDR Biased	0.597	0.5973	0.0003
82	50	HDR Biased	0.5956	0.596	0.0004
83	0	CORRELATION	0.5966	0.5966	0

## TID vs Post - Pre Exposure Delta

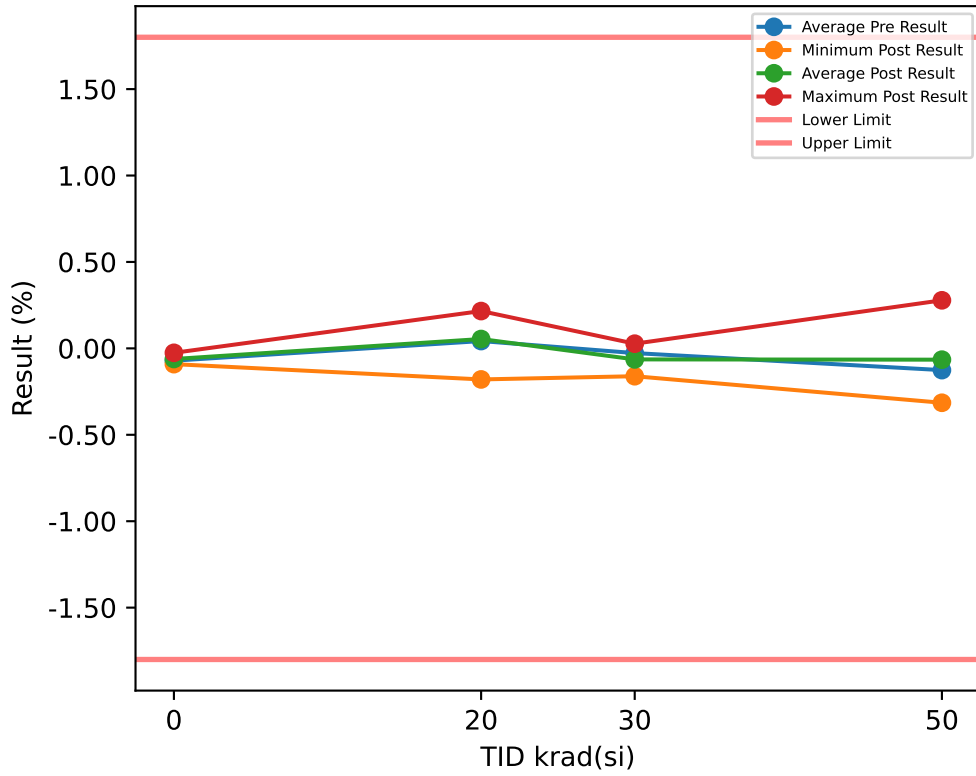


## Test Statistics (V)

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	0.5961	0.5964	0.5966	0.0002	0.5962	0.59638	0.5966	0.00016021	-0.0001	-1.6667e-05	0.0001	9.8319e-05
20	0.5956	0.59706	0.5982	0.00094892	0.5956	0.59705	0.5981	0.00087845	-0.0005	-1e-05	0.0003	0.00026013
30	0.5958	0.59664	0.5985	0.00071523	0.5958	0.59632	0.5968	0.00038239	-0.0027	-0.00032	0.0001	0.00085997
50	0.595	0.59607	0.597	0.00066708	0.5947	0.59631	0.5984	0.0010126	-0.0003	0.00032222	0.0024	0.0008182



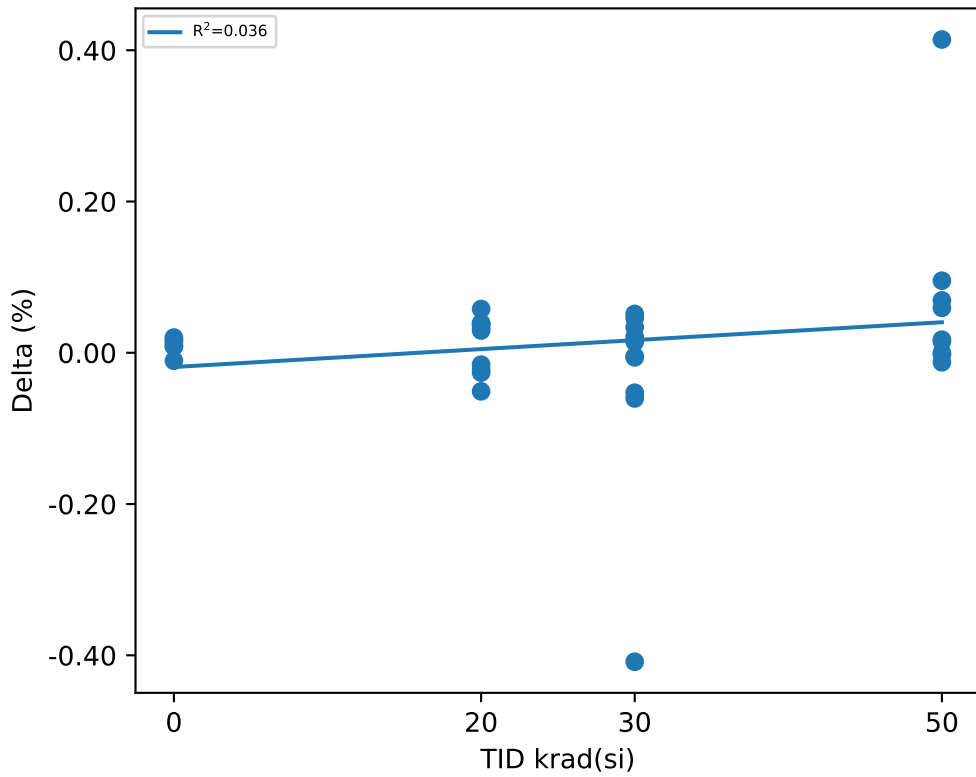
TID vs Result Stats



Test Results (Lower Limit = -1.8, Upper Limit = 1.8 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.1314	-0.0735	0.0579
2	20	HDR Unbiased	0.225	0.1988	-0.0262
3	20	HDR Unbiased	0.1985	0.1757	-0.0228
23	20	HDR Unbiased	-0.1133	-0.0839	0.0294
24	20	HDR Unbiased	0.0065	-0.0445	-0.051
25	20	HDR Biased	0.2316	0.2159	-0.0157
26	20	HDR Biased	0.0471	0.0862	0.0391
27	20	HDR Biased	-0.2115	-0.1797	0.0318
28	20	HDR Biased	0.1596	0.1961	0.0365
29	20	HDR Biased	0.0113	0.0499	0.0386
30	30	HDR Unbiased	0.2741	-0.1344	-0.4085
31	30	HDR Unbiased	-0.006	0.0084	0.0144
32	30	HDR Unbiased	-0.0849	-0.1377	-0.0528
33	30	HDR Unbiased	-0.0546	-0.0032	0.0514
34	30	HDR Unbiased	0.0171	-0.0433	-0.0604
35	30	HDR Biased	-0.0525	-0.0572	-0.0047
36	30	HDR Biased	-0.1015	-0.0801	0.0214
37	30	HDR Biased	-0.155	-0.1611	-0.0061
38	30	HDR Biased	-0.0905	-0.0565	0.034
39	30	HDR Biased	-0.0188	0.0271	0.0459
40	50	HDR Unbiased	-0.2295	-0.1342	0.0953
41	50	HDR Unbiased	-0.1361	0.2781	0.4142
42	50	HDR Unbiased	-0.3021	-0.3147	-0.0126
43	50	HDR Unbiased	0.01	0.0099	-0.0001
44	50	HDR Unbiased		-0.1767	
50	0	CORRELATION	-0.0701	-0.05	0.0201
51	0	CORRELATION	-0.078	-0.0638	0.0142
52	0	CORRELATION	-0.0998	-0.0912	0.0086
53	0	CORRELATION	-0.0947	-0.0864	0.0083
54	0	CORRELATION	-0.0411	-0.0516	-0.0105
78	50	HDR Biased	-0.0637	-0.0488	0.0149
79	50	HDR Biased	-0.0746	-0.0773	-0.0027
80	50	HDR Biased	-0.1866	-0.1693	0.0173
81	50	HDR Biased	0.0462	0.1056	0.0594
82	50	HDR Biased	-0.1956	-0.1263	0.0693
83	0	CORRELATION	-0.0435	-0.0258	0.0177

TID vs Post - Pre Exposure Delta

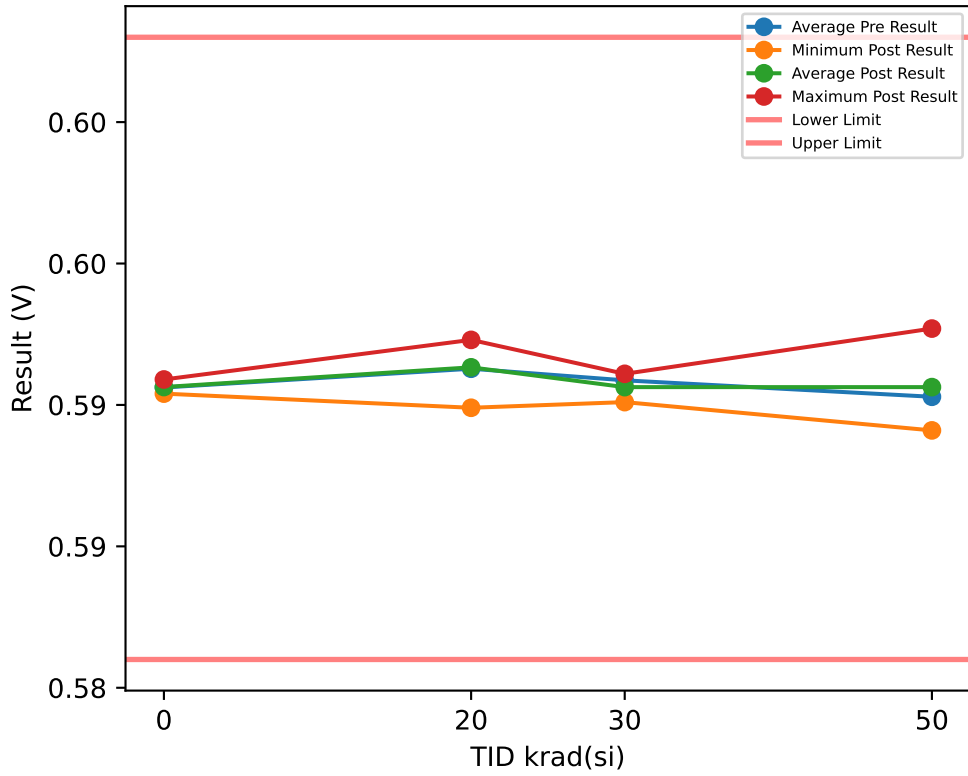


Test Statistics (%)

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	-0.0998	-0.0712	-0.0411	0.024863	-0.0912	-0.061467	-0.0258	0.024544	-0.0105	0.0097333	0.0201	0.010987
20	-0.2115	0.04234	0.2316	0.15932	-0.1797	0.0541	0.2159	0.14253	-0.051	0.01176	0.0579	0.036893
30	-0.155	-0.02726	0.2741	0.11731	-0.1611	-0.0638	0.0271	0.064845	-0.4085	-0.03654	0.0514	0.13605
50	-0.3021	-0.12578	0.0462	0.11457	-0.3147	-0.06537	0.2781	0.1657	-0.0126	0.072778	0.4142	0.13323

# Device Test: 15.32 FB|VFB/FB/3/0.6//1000//@VFB\_VIN\_SUB\_3V

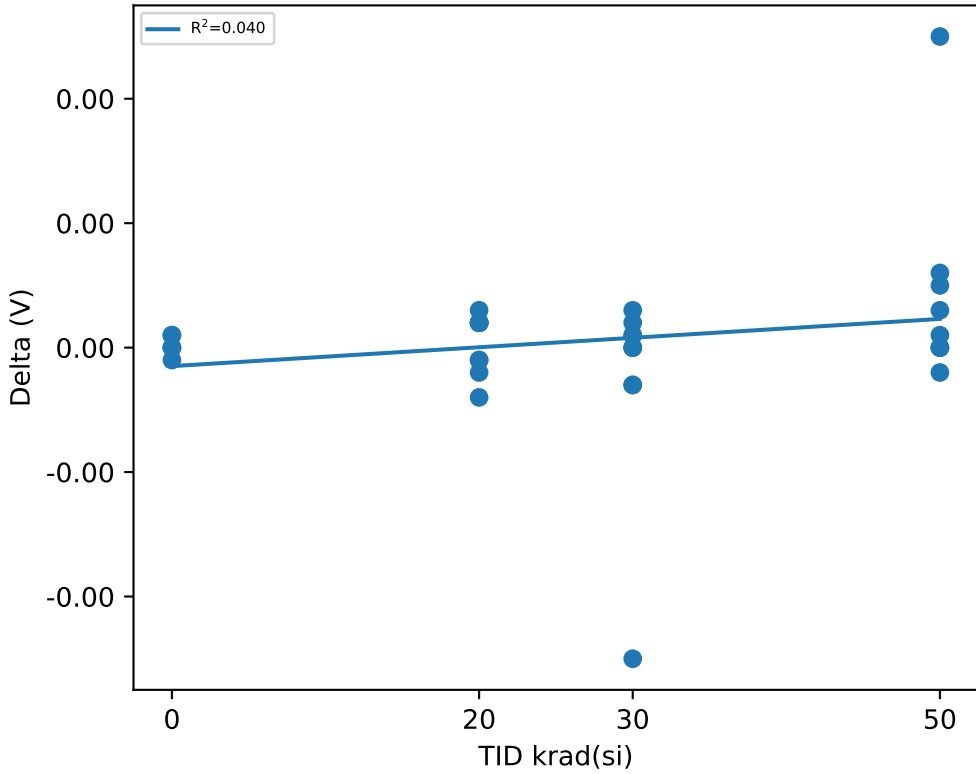
## TID vs Result Stats



## Test Results (Lower Limit = 0.586, Upper Limit = 0.608 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5953	0.5956	0.0003
2	20	HDR Unbiased	0.5973	0.5972	-0.0001
3	20	HDR Unbiased	0.5972	0.5971	-0.0001
23	20	HDR Unbiased	0.5953	0.5955	0.0002
24	20	HDR Unbiased	0.5961	0.5957	-0.0004
25	20	HDR Biased	0.5975	0.5973	-0.0002
26	20	HDR Biased	0.5963	0.5965	0.0002
27	20	HDR Biased	0.5947	0.5949	0.0002
28	20	HDR Biased	0.597	0.5972	0.0002
29	20	HDR Biased	0.5961	0.5963	0.0002
30	30	HDR Unbiased	0.5977	0.5952	-0.0025
31	30	HDR Unbiased	0.596	0.5961	0.0001
32	30	HDR Unbiased	0.5955	0.5952	-0.0003
33	30	HDR Unbiased	0.5957	0.596	0.0003
34	30	HDR Unbiased	0.5961	0.5958	-0.0003
35	30	HDR Biased	0.5957	0.5957	0
36	30	HDR Biased	0.5955	0.5955	0
37	30	HDR Biased	0.5951	0.5951	0
38	30	HDR Biased	0.5955	0.5956	0.0001
39	30	HDR Biased	0.5959	0.5961	0.0002
40	50	HDR Unbiased	0.5946	0.5952	0.0006
41	50	HDR Unbiased	0.5952	0.5977	0.0025
42	50	HDR Unbiased	0.5943	0.5941	-0.0002
43	50	HDR Unbiased	0.5961	0.5961	0
44	50	HDR Unbiased		0.5949	
50	0	CORRELATION	0.5956	0.5957	0.0001
51	0	CORRELATION	0.5956	0.5956	0
52	0	CORRELATION	0.5954	0.5954	0
53	0	CORRELATION	0.5955	0.5955	0
54	0	CORRELATION	0.5958	0.5957	-0.0001
78	50	HDR Biased	0.5957	0.5957	0
79	50	HDR Biased	0.5956	0.5956	0
80	50	HDR Biased	0.5949	0.595	0.0001
81	50	HDR Biased	0.5964	0.5967	0.0003
82	50	HDR Biased	0.5948	0.5953	0.0005
83	0	CORRELATION	0.5958	0.5959	0.0001

## TID vs Post - Pre Exposure Delta

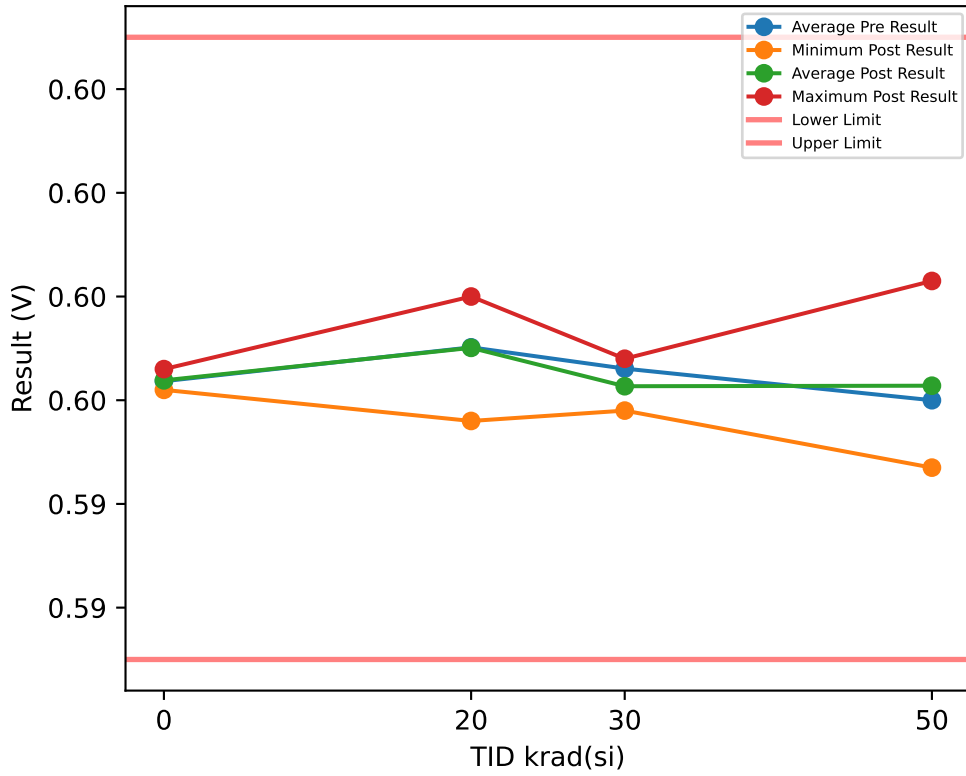


## Test Statistics (V)

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	0.5954	0.59562	0.5958	0.00016021	0.5954	0.59563	0.5959	0.00017512	-0.0001	1.6667e-05	0.0001	7.5277e-05
20	0.5947	0.59628	0.5975	0.00096471	0.5949	0.59633	0.5973	0.00086545	-0.0004	5e-05	0.0003	0.00023214
30	0.5951	0.59587	0.5977	0.00070561	0.5951	0.59563	0.5961	0.00037727	-0.0025	-0.00024	0.0003	0.00081677
50	0.5943	0.59529	0.5964	0.00070789	0.5941	0.59563	0.5977	0.0010122	-0.0002	0.00042222	0.0025	0.00082125

# Device Test: 15.36 FB|VFB/FB/3.3/0.6//10//@VFB\_25C

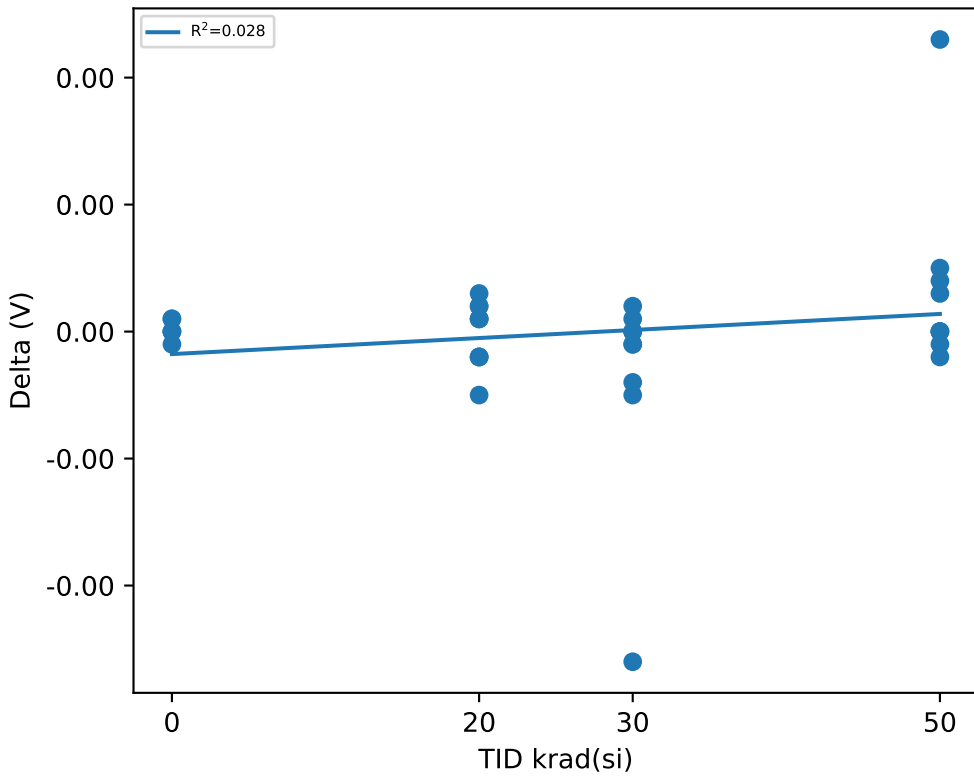
### TID vs Result Stats



### Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.596	0.5963	0.0003
2	20	HDR Unbiased	0.5981	0.5979	-0.0002
3	20	HDR Unbiased	0.598	0.5978	-0.0002
23	20	HDR Unbiased	0.596	0.5962	0.0002
24	20	HDR Unbiased	0.5968	0.5963	-0.0005
25	20	HDR Biased	0.5982	0.598	-0.0002
26	20	HDR Biased	0.597	0.5972	0.0002
27	20	HDR Biased	0.5955	0.5956	0.0001
28	20	HDR Biased	0.5977	0.5978	0.0001
29	20	HDR Biased	0.5969	0.597	0.0001
30	30	HDR Unbiased	0.5984	0.5958	-0.0026
31	30	HDR Unbiased	0.5967	0.5967	0
32	30	HDR Unbiased	0.5964	0.5959	-0.0005
33	30	HDR Unbiased	0.5965	0.5966	0.0001
34	30	HDR Unbiased	0.5968	0.5964	-0.0004
35	30	HDR Biased	0.5964	0.5963	-0.0001
36	30	HDR Biased	0.5962	0.5961	-0.0001
37	30	HDR Biased	0.5958	0.5958	0
38	30	HDR Biased	0.5963	0.5963	0
39	30	HDR Biased	0.5966	0.5968	0.0002
40	50	HDR Unbiased	0.5954	0.5959	0.0005
41	50	HDR Unbiased	0.596	0.5983	0.0023
42	50	HDR Unbiased	0.5949	0.5947	-0.0002
43	50	HDR Unbiased	0.5968	0.5968	0
44	50	HDR Unbiased		0.5956	
50	0	CORRELATION	0.5964	0.5964	0
51	0	CORRELATION	0.5963	0.5964	0.0001
52	0	CORRELATION	0.5961	0.5962	0.0001
53	0	CORRELATION	0.5962	0.5962	0
54	0	CORRELATION	0.5966	0.5965	-0.0001
78	50	HDR Biased	0.5964	0.5964	0
79	50	HDR Biased	0.5963	0.5962	-0.0001
80	50	HDR Biased	0.5957	0.5957	0
81	50	HDR Biased	0.597	0.5973	0.0003
82	50	HDR Biased	0.5955	0.5959	0.0004
83	0	CORRELATION	0.5966	0.5966	0

### TID vs Post - Pre Exposure Delta

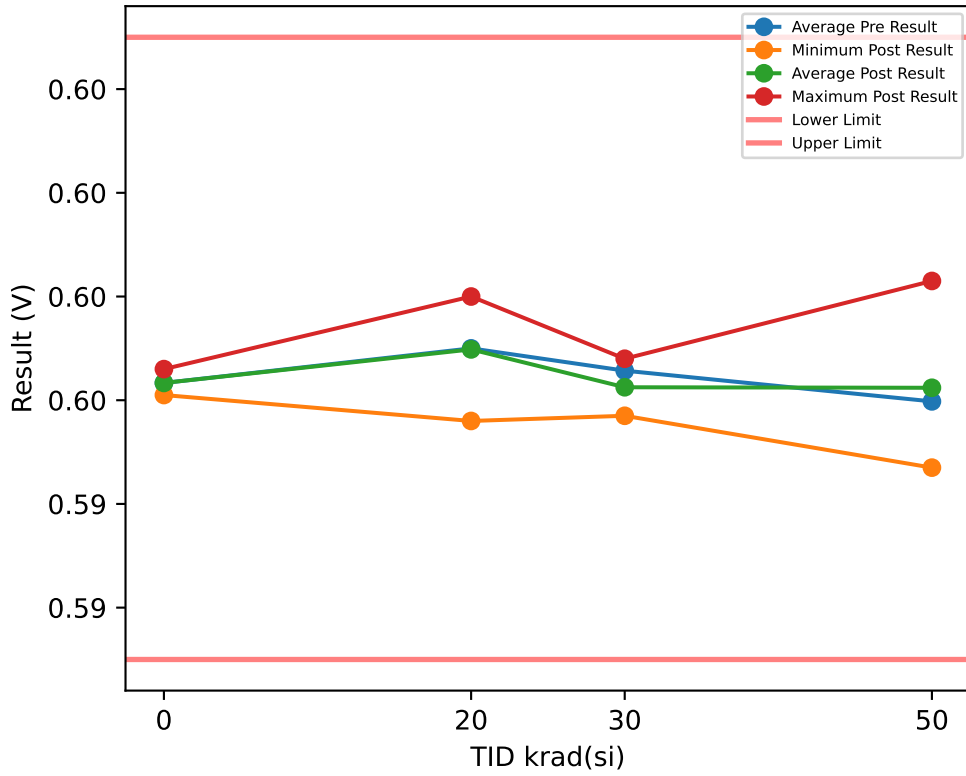


### Test Statistics (V)

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	0.5961	0.59637	0.5966	0.00020656	0.5962	0.59638	0.5966	0.00016021	-0.0001	1.6667e-05	0.0001	7.5277e-05
20	0.5955	0.59702	0.5982	0.00096816	0.5956	0.59701	0.598	0.00086339	-0.0005	-1e-05	0.0003	0.00025144
30	0.5958	0.59661	0.5984	0.00068872	0.5958	0.59627	0.5968	0.0003653	-0.0026	-0.00034	0.0002	0.00082219
50	0.5949	0.596	0.597	0.0006892	0.5947	0.59628	0.5983	0.00099978	-0.0002	0.00035556	0.0023	0.00076667

# Device Test: 15.40 OUTPUT|VFB\_25C/FB/5/0.6//10//@VFB\_25C

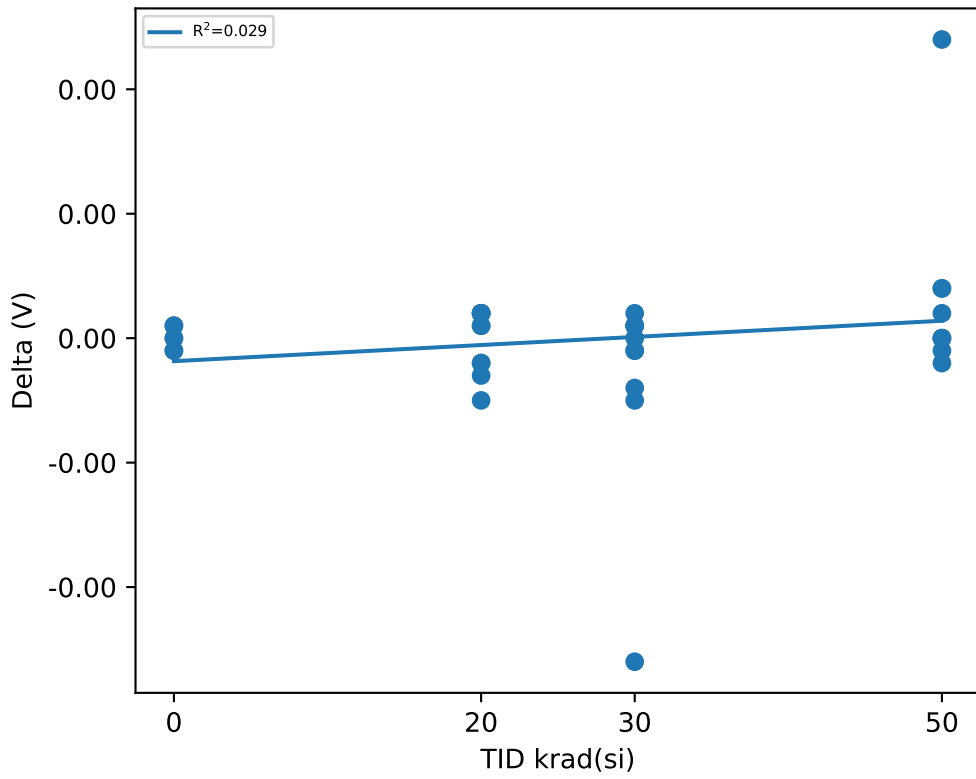
## TID vs Result Stats



## Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.596	0.5962	0.0002
2	20	HDR Unbiased	0.5981	0.5978	-0.0003
3	20	HDR Unbiased	0.598	0.5978	-0.0002
23	20	HDR Unbiased	0.596	0.5961	0.0001
24	20	HDR Unbiased	0.5968	0.5963	-0.0005
25	20	HDR Biased	0.5982	0.598	-0.0002
26	20	HDR Biased	0.597	0.5972	0.0002
27	20	HDR Biased	0.5955	0.5956	0.0001
28	20	HDR Biased	0.5976	0.5978	0.0002
29	20	HDR Biased	0.5968	0.597	0.0002
30	30	HDR Unbiased	0.5984	0.5958	-0.0026
31	30	HDR Unbiased	0.5966	0.5967	0.0001
32	30	HDR Unbiased	0.5963	0.5958	-0.0005
33	30	HDR Unbiased	0.5965	0.5966	0.0001
34	30	HDR Unbiased	0.5968	0.5964	-0.0004
35	30	HDR Biased	0.5964	0.5963	-0.0001
36	30	HDR Biased	0.5961	0.5961	0
37	30	HDR Biased	0.5958	0.5957	-0.0001
38	30	HDR Biased	0.5962	0.5963	0.0001
39	30	HDR Biased	0.5966	0.5968	0.0002
40	50	HDR Unbiased	0.5954	0.5958	0.0004
41	50	HDR Unbiased	0.5959	0.5983	0.0024
42	50	HDR Unbiased	0.5949	0.5947	-0.0002
43	50	HDR Unbiased	0.5968	0.5967	-0.0001
44	50	HDR Unbiased		0.5955	
50	0	CORRELATION	0.5964	0.5964	0
51	0	CORRELATION	0.5963	0.5964	0.0001
52	0	CORRELATION	0.5961	0.5961	0
53	0	CORRELATION	0.5962	0.5961	-0.0001
54	0	CORRELATION	0.5965	0.5964	-0.0001
78	50	HDR Biased	0.5964	0.5964	0
79	50	HDR Biased	0.5962	0.5962	0
80	50	HDR Biased	0.5957	0.5957	0
81	50	HDR Biased	0.597	0.5972	0.0002
82	50	HDR Biased	0.5955	0.5959	0.0004
83	0	CORRELATION	0.5965	0.5966	0.0001

## TID vs Post - Pre Exposure Delta

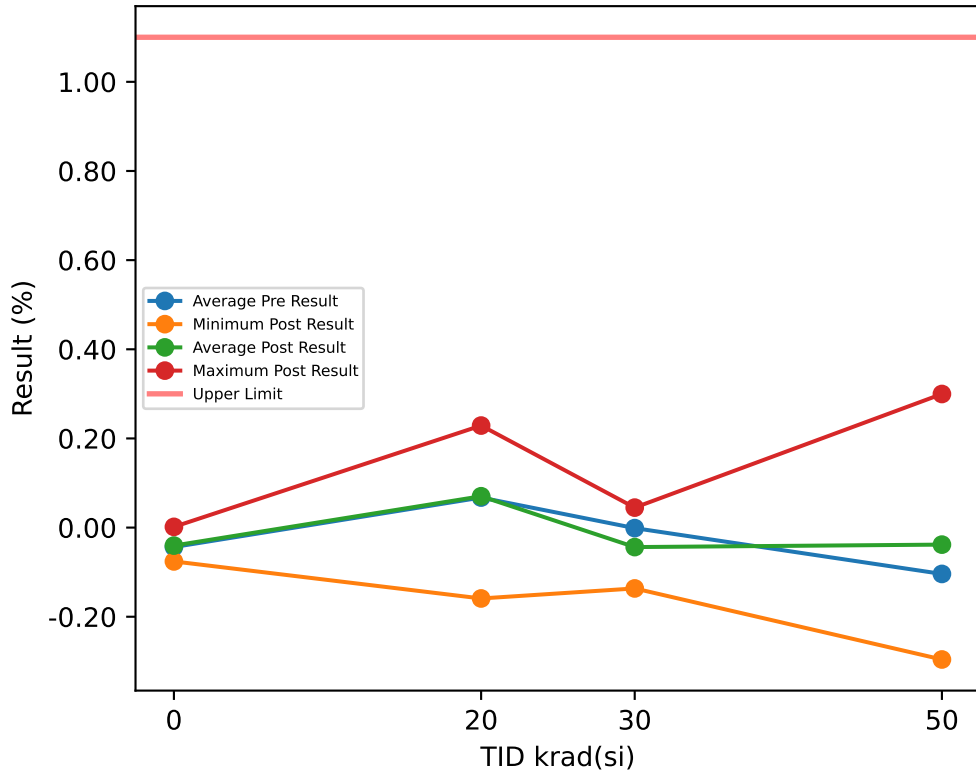


## Test Statistics (V)

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	0.5961	0.59633	0.5965	0.0001633	0.5961	0.59633	0.5966	0.00019664	-0.0001	0	0.0001	8.9443e-05
20	0.5955	0.597	0.5982	0.00096264	0.5956	0.59698	0.598	0.0008728	-0.0005	-2e-05	0.0002	0.00025734
30	0.5958	0.59657	0.5984	0.00070404	0.5957	0.59625	0.5968	0.00039229	-0.0026	-0.00032	0.0002	0.0008324
50	0.5949	0.59598	0.597	0.00068516	0.5947	0.59624	0.5983	0.00099577	-0.0002	0.00034444	0.0024	0.00079861

# Device Test: 15.44 VIN|ACCURACY/OUT/5/3.3//1000//@OUT\_ACC\_25C

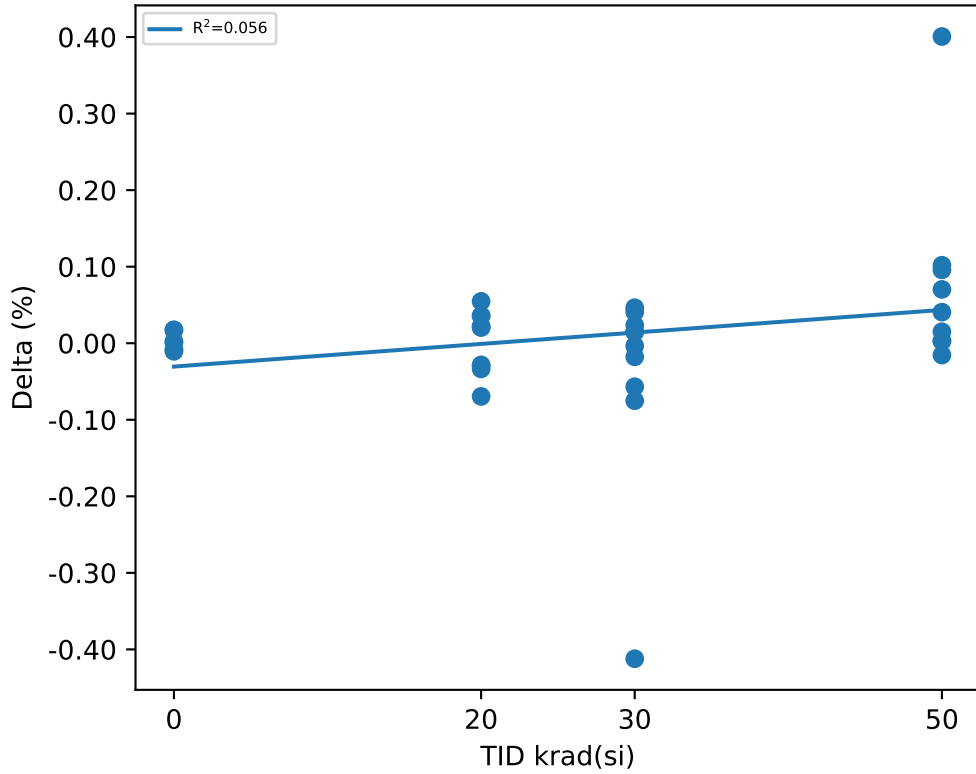
### TID vs Result Stats



### Test Results (Upper Limit = 1.1 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.1102	-0.0555	0.0547
2	20	HDR Unbiased	0.2462	0.2166	-0.0296
3	20	HDR Unbiased	0.2317	0.1981	-0.0336
23	20	HDR Unbiased	-0.0926	-0.0721	0.0205
24	20	HDR Unbiased	0.0416	-0.0279	-0.0695
25	20	HDR Biased	0.2572	0.2289	-0.0283
26	20	HDR Biased	0.0633	0.0988	0.0355
27	20	HDR Biased	-0.1801	-0.159	0.0211
28	20	HDR Biased	0.1725	0.2085	0.036
29	20	HDR Biased	0.0442	0.0666	0.0224
30	30	HDR Unbiased	0.2965	-0.1157	-0.4122
31	30	HDR Unbiased	0.0095	0.0329	0.0234
32	30	HDR Unbiased	-0.0522	-0.1273	-0.0751
33	30	HDR Unbiased	-0.0263	0.0201	0.0464
34	30	HDR Unbiased	0.0391	-0.0177	-0.0568
35	30	HDR Biased	-0.0212	-0.039	-0.0178
36	30	HDR Biased	-0.0736	-0.0588	0.0148
37	30	HDR Biased	-0.133	-0.1365	-0.0035
38	30	HDR Biased	-0.0548	-0.0399	0.0149
39	30	HDR Biased	0.0041	0.0448	0.0407
40	50	HDR Unbiased	-0.2072	-0.1114	0.0958
41	50	HDR Unbiased	-0.101	0.2997	0.4007
42	50	HDR Unbiased	-0.2804	-0.2959	-0.0155
43	50	HDR Unbiased	0.03	0.0328	0.0028
44	50	HDR Unbiased		-0.161	
50	0	CORRELATION	-0.0388	-0.0373	0.0015
51	0	CORRELATION	-0.0528	-0.0357	0.0171
52	0	CORRELATION	-0.0779	-0.0759	0.002
53	0	CORRELATION	-0.0596	-0.0677	-0.0081
54	0	CORRELATION	-0.0167	-0.0273	-0.0106
78	50	HDR Biased	-0.0431	-0.0281	0.015
79	50	HDR Biased	-0.057	-0.054	0.003
80	50	HDR Biased	-0.1614	-0.1208	0.0406
81	50	HDR Biased	0.067	0.1373	0.0703
82	50	HDR Biased	-0.1826	-0.0807	0.1019
83	0	CORRELATION	-0.0159	0.0016	0.0175

### TID vs Post - Pre Exposure Delta

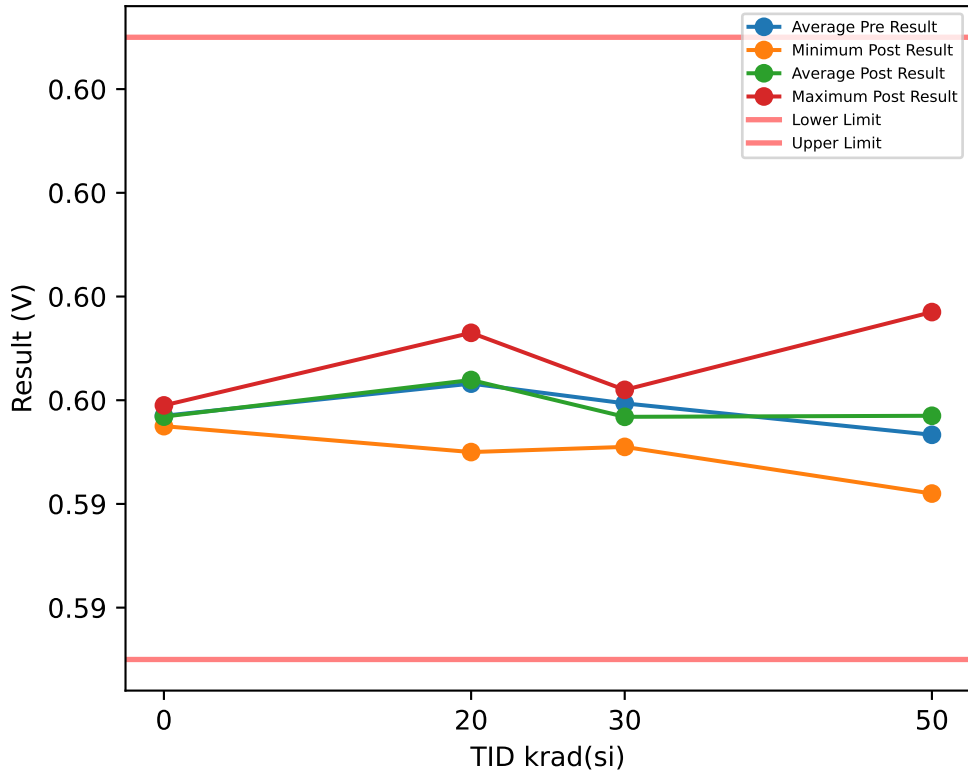


### Test Statistics (%)

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	-0.0779	-0.043617	-0.0159	0.024621	-0.0759	-0.040383	0.0016	0.028188	-0.0106	0.0032333	0.0175	0.012001
20	-0.1801	0.06738	0.2572	0.15834	-0.159	0.0703	0.2289	0.14187	-0.0695	0.00292	0.0547	0.040092
30	-0.133	-0.00119	0.2965	0.11523	-0.1365	-0.04371	0.0448	0.066245	-0.4122	-0.04252	0.0464	0.13574
50	-0.2804	-0.10397	0.067	0.11422	-0.2959	-0.03821	0.2997	0.16528	-0.0155	0.0794	0.4007	0.1277

# Device Test: 15.45 FB|VFB/FB/5/3.3//1000//@VFB\_25C

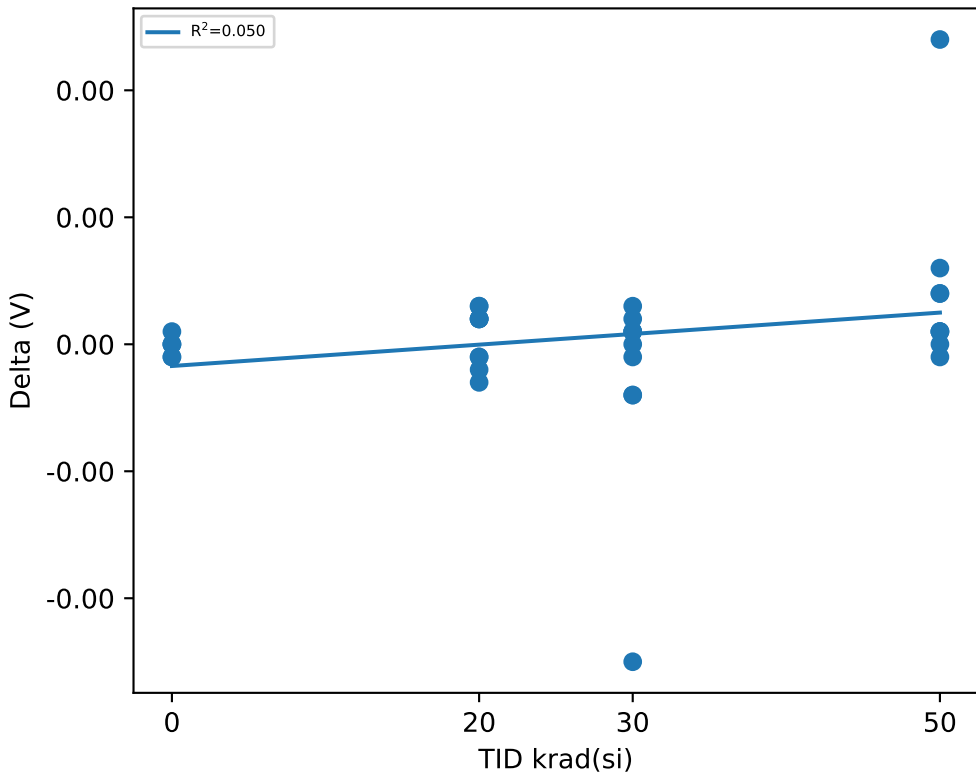
### TID vs Result Stats



### Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5953	0.5956	0.0003
2	20	HDR Unbiased	0.5974	0.5973	-0.0001
3	20	HDR Unbiased	0.5972	0.5971	-0.0001
23	20	HDR Unbiased	0.5954	0.5956	0.0002
24	20	HDR Unbiased	0.5961	0.5958	-0.0003
25	20	HDR Biased	0.5975	0.5973	-0.0002
26	20	HDR Biased	0.5963	0.5966	0.0003
27	20	HDR Biased	0.5948	0.595	0.0002
28	20	HDR Biased	0.597	0.5972	0.0002
29	20	HDR Biased	0.5962	0.5964	0.0002
30	30	HDR Unbiased	0.5978	0.5953	-0.0025
31	30	HDR Unbiased	0.596	0.5961	0.0001
32	30	HDR Unbiased	0.5956	0.5952	-0.0004
33	30	HDR Unbiased	0.5958	0.5961	0.0003
34	30	HDR Unbiased	0.5962	0.5958	-0.0004
35	30	HDR Biased	0.5958	0.5957	-0.0001
36	30	HDR Biased	0.5955	0.5956	0.0001
37	30	HDR Biased	0.5951	0.5951	0
38	30	HDR Biased	0.5956	0.5957	0.0001
39	30	HDR Biased	0.596	0.5962	0.0002
40	50	HDR Unbiased	0.5947	0.5953	0.0006
41	50	HDR Unbiased	0.5953	0.5977	0.0024
42	50	HDR Unbiased	0.5943	0.5942	-0.0001
43	50	HDR Unbiased	0.5961	0.5961	0
44	50	HDR Unbiased		0.595	
50	0	CORRELATION	0.5957	0.5957	0
51	0	CORRELATION	0.5957	0.5957	0
52	0	CORRELATION	0.5955	0.5955	0
53	0	CORRELATION	0.5956	0.5955	-0.0001
54	0	CORRELATION	0.5959	0.5958	-0.0001
78	50	HDR Biased	0.5957	0.5958	0.0001
79	50	HDR Biased	0.5956	0.5957	0.0001
80	50	HDR Biased	0.595	0.5951	0.0001
81	50	HDR Biased	0.5964	0.5968	0.0004
82	50	HDR Biased	0.5949	0.5953	0.0004
83	0	CORRELATION	0.5958	0.5959	0.0001

### TID vs Post - Pre Exposure Delta



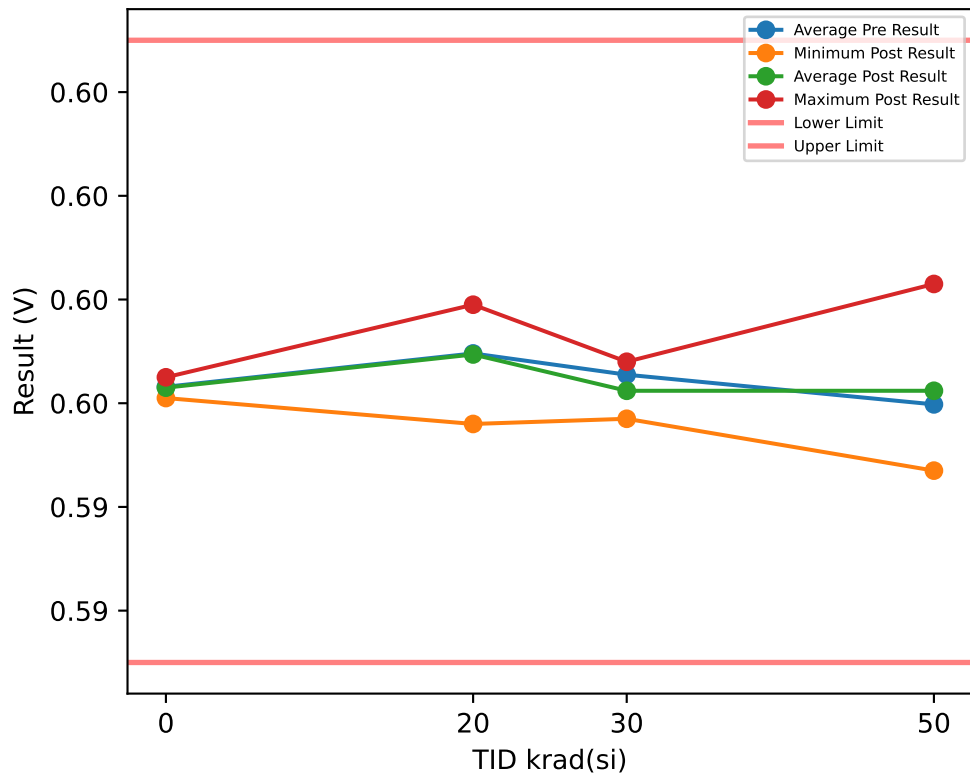
### Test Statistics (V)

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	0.5955	0.5957	0.5959	0.00014142	0.5955	0.59568	0.5959	0.00016021	-0.0001	-1.6667e-05	0.0001	7.5277e-05
20	0.5948	0.59632	0.5975	0.0009461	0.595	0.59639	0.5973	0.00084255	-0.0003	7e-05	0.0003	0.00022136
30	0.5951	0.59594	0.5978	0.00072296	0.5951	0.59568	0.5962	0.00038816	-0.0025	-0.00026	0.0003	0.00082084
50	0.5943	0.59533	0.5964	0.00068007	0.5942	0.5957	0.5977	0.00098883	-0.0001	0.00044444	0.0024	0.00076667



# Device Test: 15.49 FB|VFB/FB/7/0.6//10//@VFB\_25C

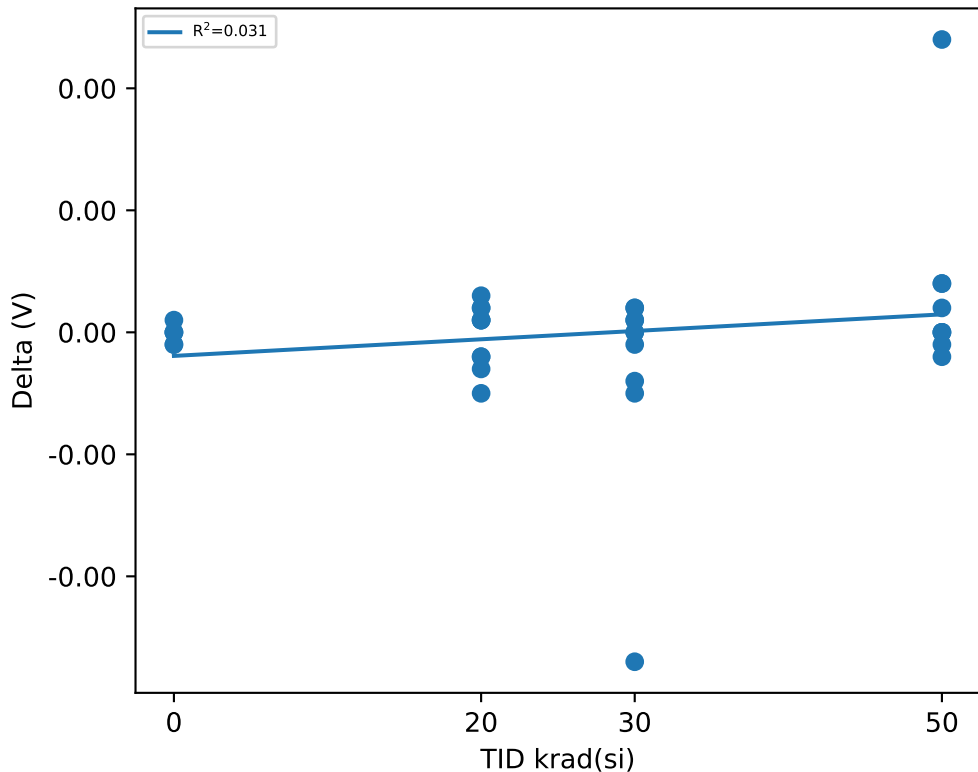
## TID vs Result Stats



## Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5959	0.5962	0.0003
2	20	HDR Unbiased	0.598	0.5978	-0.0002
3	20	HDR Unbiased	0.598	0.5977	-0.0003
23	20	HDR Unbiased	0.596	0.5961	0.0001
24	20	HDR Unbiased	0.5968	0.5963	-0.0005
25	20	HDR Biased	0.5981	0.5979	-0.0002
26	20	HDR Biased	0.5969	0.5971	0.0002
27	20	HDR Biased	0.5955	0.5956	0.0001
28	20	HDR Biased	0.5976	0.5977	0.0001
29	20	HDR Biased	0.5968	0.597	0.0002
30	30	HDR Unbiased	0.5984	0.5957	-0.0027
31	30	HDR Unbiased	0.5966	0.5967	0.0001
32	30	HDR Unbiased	0.5963	0.5958	-0.0005
33	30	HDR Unbiased	0.5964	0.5966	0.0002
34	30	HDR Unbiased	0.5968	0.5964	-0.0004
35	30	HDR Biased	0.5964	0.5963	-0.0001
36	30	HDR Biased	0.5961	0.5961	0
37	30	HDR Biased	0.5957	0.5957	0
38	30	HDR Biased	0.5962	0.5963	0.0001
39	30	HDR Biased	0.5966	0.5968	0.0002
40	50	HDR Unbiased	0.5954	0.5958	0.0004
41	50	HDR Unbiased	0.5959	0.5983	0.0024
42	50	HDR Unbiased	0.5949	0.5947	-0.0002
43	50	HDR Unbiased	0.5968	0.5967	-0.0001
44	50	HDR Unbiased		0.5955	
50	0	CORRELATION	0.5963	0.5964	0.0001
51	0	CORRELATION	0.5963	0.5963	0
52	0	CORRELATION	0.5961	0.5961	0
53	0	CORRELATION	0.5962	0.5961	-0.0001
54	0	CORRELATION	0.5965	0.5964	-0.0001
78	50	HDR Biased	0.5964	0.5964	0
79	50	HDR Biased	0.5962	0.5962	0
80	50	HDR Biased	0.5957	0.5957	0
81	50	HDR Biased	0.597	0.5972	0.0002
82	50	HDR Biased	0.5955	0.5959	0.0004
83	0	CORRELATION	0.5965	0.5965	0

## TID vs Post - Pre Exposure Delta

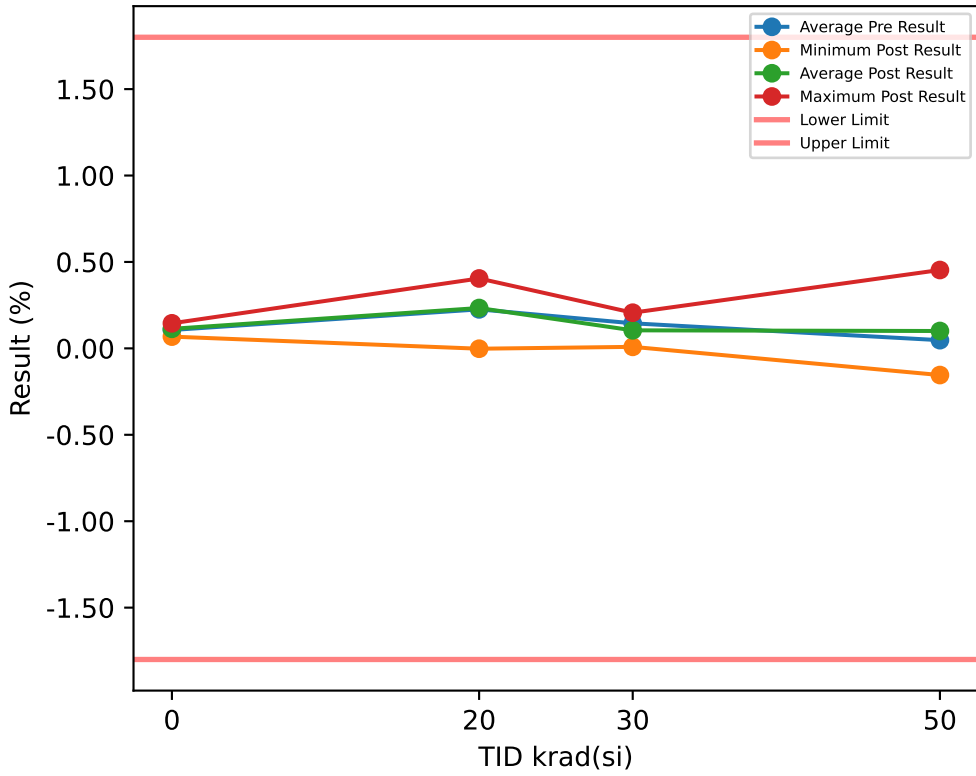


## Test Statistics (V)

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	0.5961	0.59632	0.5965	0.00016021	0.5961	0.5963	0.5965	0.00016733	-0.0001	-1.6667e-05	0.0001	7.5277e-05
20	0.5955	0.59696	0.5981	0.00094892	0.5956	0.59694	0.5979	0.00083693	-0.0005	-2e-05	0.0003	0.00026162
30	0.5957	0.59655	0.5984	0.00071841	0.5957	0.59624	0.5968	0.00040607	-0.0027	-0.00031	0.0002	0.00087235
50	0.5949	0.59598	0.597	0.00068516	0.5947	0.59624	0.5983	0.00099577	-0.0002	0.00034444	0.0024	0.00079861

# Device Test: 15.5 VIN|ACCURACY/OUT/2.25/0.6//10//@OUT\_ACC\_VIN\_SUB\_3V

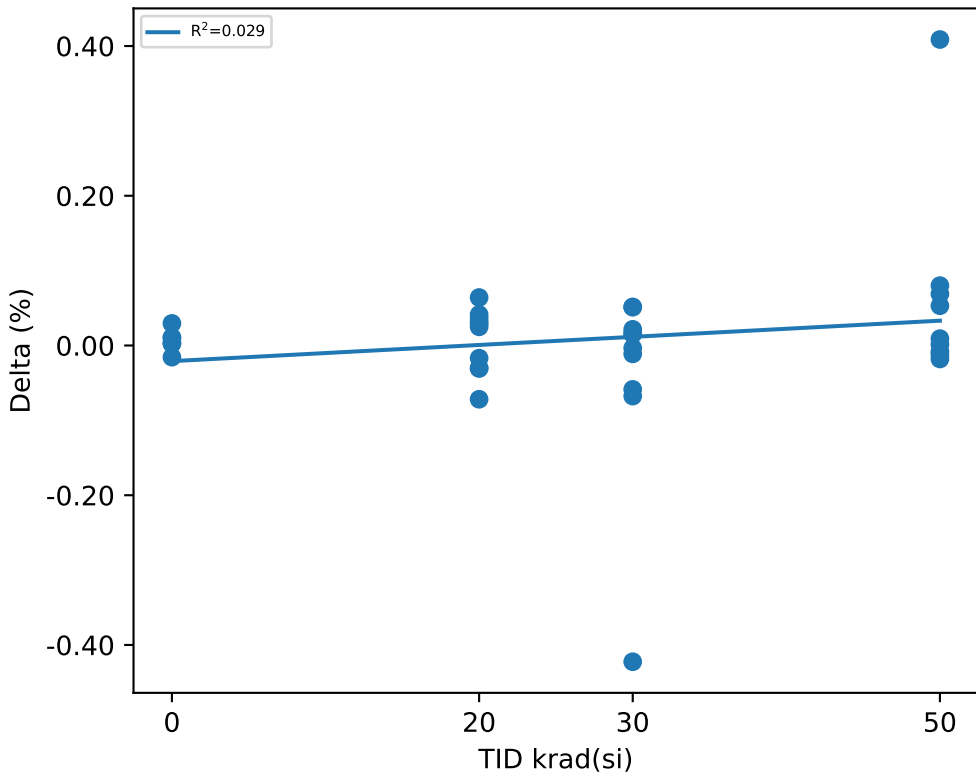
### TID vs Result Stats



### Test Results (Lower Limit = -1.8, Upper Limit = 1.8 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.0463	0.1104	0.0641
2	20	HDR Unbiased	0.4069	0.3762	-0.0307
3	20	HDR Unbiased	0.3981	0.3682	-0.0299
23	20	HDR Unbiased	0.0605	0.0897	0.0292
24	20	HDR Unbiased	0.1772	0.1054	-0.0718
25	20	HDR Biased	0.4214	0.4045	-0.0169
26	20	HDR Biased	0.2268	0.2682	0.0414
27	20	HDR Biased	-0.0269	-0.002	0.0249
28	20	HDR Biased	0.3468	0.3834	0.0366
29	20	HDR Biased	0.1994	0.2311	0.0317
30	30	HDR Unbiased	0.4518	0.0294	-0.4224
31	30	HDR Unbiased	0.1579	0.1743	0.0164
32	30	HDR Unbiased	0.1131	0.0455	-0.0676
33	30	HDR Unbiased	0.1099	0.1612	0.0513
34	30	HDR Unbiased	0.1813	0.1227	-0.0586
35	30	HDR Biased	0.1158	0.1046	-0.0112
36	30	HDR Biased	0.0584	0.0736	0.0152
37	30	HDR Biased	0.0122	0.0088	-0.0034
38	30	HDR Biased	0.0953	0.1169	0.0216
39	30	HDR Biased	0.155	0.2064	0.0514
40	50	HDR Unbiased	-0.0433	0.0367	0.08
41	50	HDR Unbiased	0.0447	0.4534	0.4087
42	50	HDR Unbiased	-0.1363	-0.1543	-0.018
43	50	HDR Unbiased	0.1948	0.1869	-0.0079
44	50	HDR Unbiased		-0.0046	
50	0	CORRELATION	0.1203	0.1312	0.0109
51	0	CORRELATION	0.0906	0.1201	0.0295
52	0	CORRELATION	0.0578	0.068	0.0102
53	0	CORRELATION	0.0857	0.088	0.0023
54	0	CORRELATION	0.142	0.1264	-0.0156
78	50	HDR Biased	0.107	0.1162	0.0092
79	50	HDR Biased	0.0898	0.0777	-0.0121
80	50	HDR Biased	-0.0064	-0.005	0.0014
81	50	HDR Biased	0.2112	0.2643	0.0531
82	50	HDR Biased	-0.0347	0.0342	0.0689
83	0	CORRELATION	0.1415	0.145	0.0035

### TID vs Post - Pre Exposure Delta

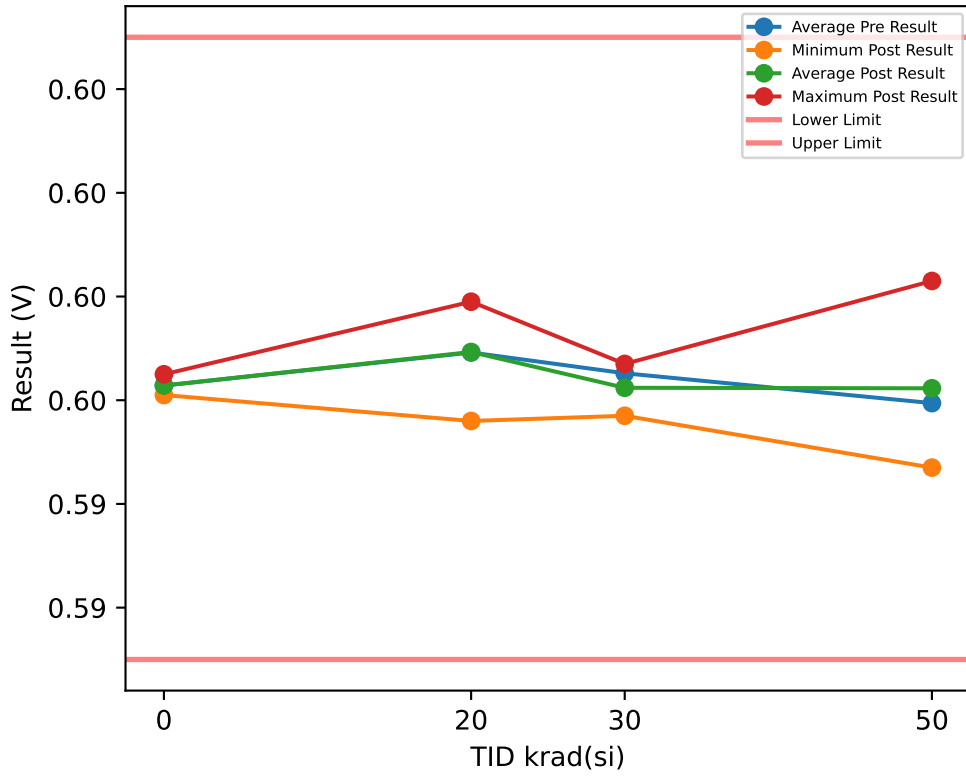


### Test Statistics (%)

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	0.0578	0.10632	0.142	0.03386	0.068	0.11312	0.145	0.029104	-0.0156	0.0068	0.0295	0.014674
20	-0.0269	0.22565	0.4214	0.16393	-0.002	0.23351	0.4045	0.14875	-0.0718	0.00786	0.0641	0.042556
30	0.0122	0.14507	0.4518	0.11852	0.0088	0.10434	0.2064	0.065141	-0.4224	-0.04073	0.0514	0.13993
50	-0.1363	0.047422	0.2112	0.11485	-0.1543	0.10055	0.4534	0.16838	-0.018	0.064811	0.4087	0.13408

# Device Test: 15.53 FB|VFB/FB/12/0.6//10//@VFB\_25C

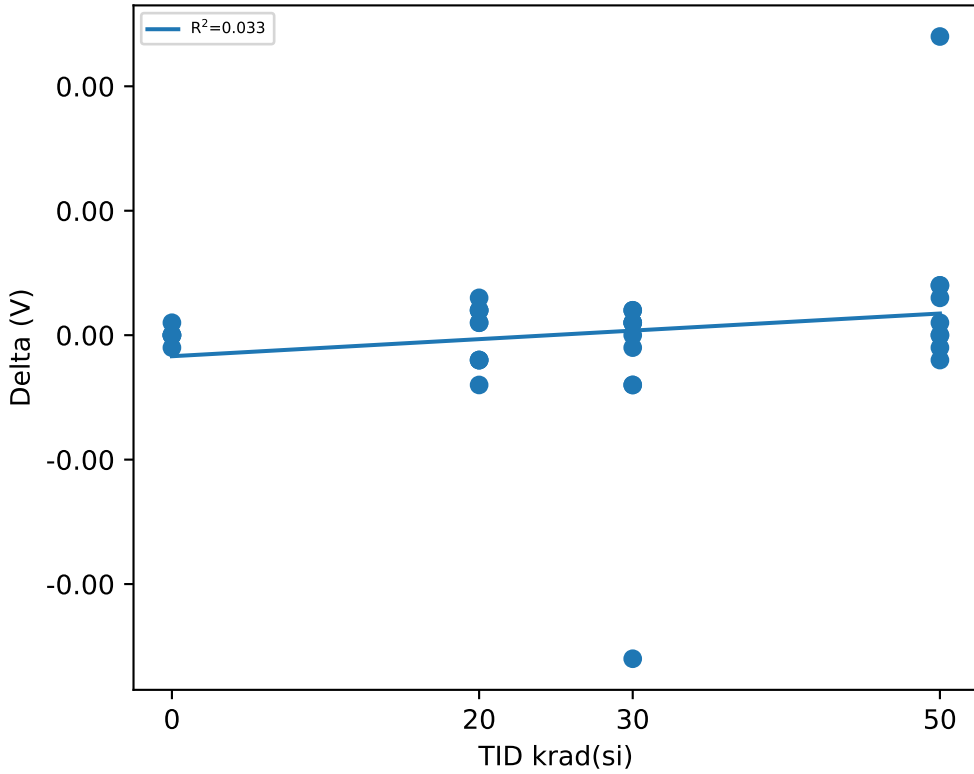
## TID vs Result Stats



## Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5959	0.5962	0.0003
2	20	HDR Unbiased	0.598	0.5978	-0.0002
3	20	HDR Unbiased	0.5979	0.5977	-0.0002
23	20	HDR Unbiased	0.596	0.5961	0.0001
24	20	HDR Unbiased	0.5967	0.5963	-0.0004
25	20	HDR Biased	0.5981	0.5979	-0.0002
26	20	HDR Biased	0.5969	0.5971	0.0002
27	20	HDR Biased	0.5954	0.5956	0.0002
28	20	HDR Biased	0.5975	0.5977	0.0002
29	20	HDR Biased	0.5968	0.5969	0.0001
30	30	HDR Unbiased	0.5983	0.5957	-0.0026
31	30	HDR Unbiased	0.5966	0.5967	0.0001
32	30	HDR Unbiased	0.5962	0.5958	-0.0004
33	30	HDR Unbiased	0.5964	0.5966	0.0002
34	30	HDR Unbiased	0.5968	0.5964	-0.0004
35	30	HDR Biased	0.5964	0.5963	-0.0001
36	30	HDR Biased	0.5961	0.5962	0.0001
37	30	HDR Biased	0.5957	0.5957	0
38	30	HDR Biased	0.5962	0.5963	0.0001
39	30	HDR Biased	0.5965	0.5967	0.0002
40	50	HDR Unbiased	0.5954	0.5958	0.0004
41	50	HDR Unbiased	0.5959	0.5983	0.0024
42	50	HDR Unbiased	0.5949	0.5947	-0.0002
43	50	HDR Unbiased	0.5968	0.5967	-0.0001
44	50	HDR Unbiased		0.5955	
50	0	CORRELATION	0.5963	0.5963	0
51	0	CORRELATION	0.5962	0.5963	0.0001
52	0	CORRELATION	0.5961	0.5961	0
53	0	CORRELATION	0.5961	0.5961	0
54	0	CORRELATION	0.5965	0.5964	-0.0001
78	50	HDR Biased	0.5963	0.5963	0
79	50	HDR Biased	0.5962	0.5962	0
80	50	HDR Biased	0.5956	0.5957	0.0001
81	50	HDR Biased	0.5969	0.5972	0.0003
82	50	HDR Biased	0.5955	0.5959	0.0004
83	0	CORRELATION	0.5965	0.5965	0

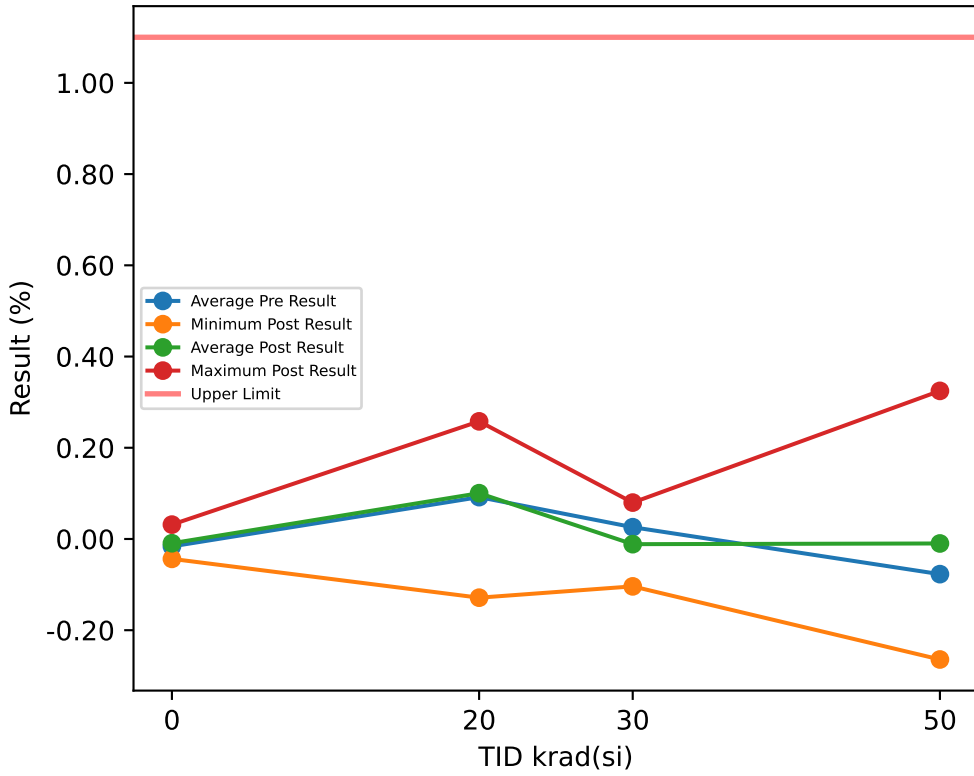
## TID vs Post - Pre Exposure Delta



## 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	0.5961	0.59628	0.5965	0.00018348	0.5961	0.59628	0.5965	0.00016021	-0.0001	1.8504e-17	0.0001	6.3246e-05
20	0.5954	0.59692	0.5981	0.00094962	0.5956	0.59693	0.5979	0.00083673	-0.0004	1e-05	0.0003	0.00023781
30	0.5957	0.59652	0.5983	0.0006941	0.5957	0.59624	0.5967	0.0003893	-0.0026	-0.00028	0.0002	0.00084433
50	0.5949	0.59594	0.5969	0.00066542	0.5947	0.59623	0.5983	0.00099448	-0.0002	0.00036667	0.0024	0.00079215

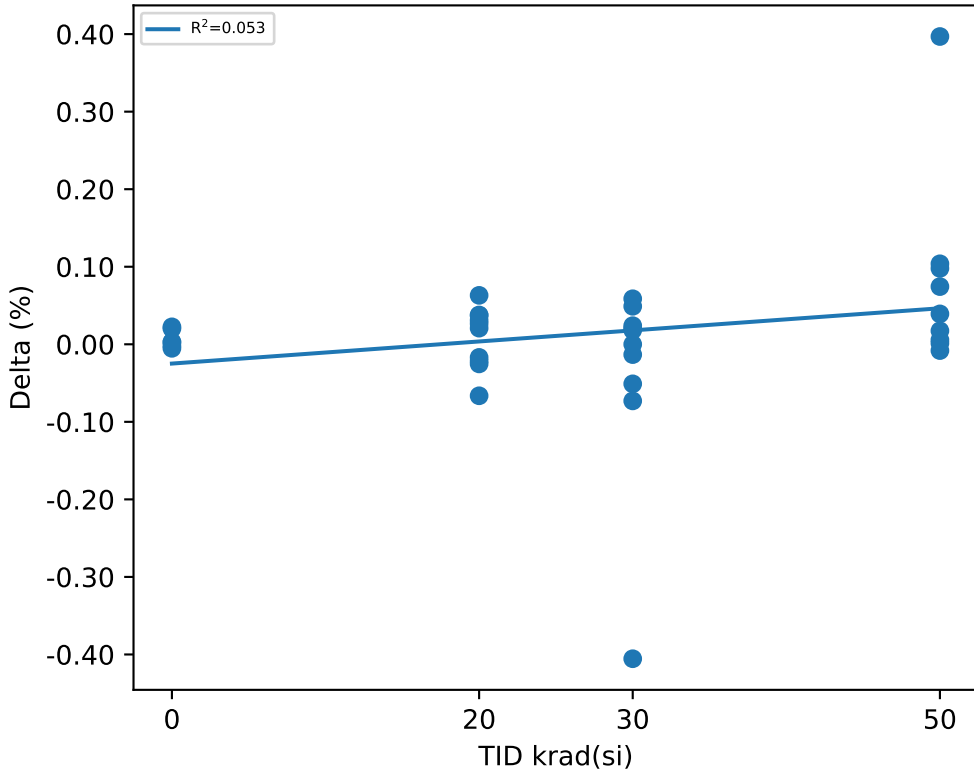
TID vs Result Stats



Test Results (Upper Limit = 1.1 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.0874	-0.0243	0.0631
2	20	HDR Unbiased	0.2724	0.2508	-0.0216
3	20	HDR Unbiased	0.2527	0.2274	-0.0253
23	20	HDR Unbiased	-0.0628	-0.042	0.0208
24	20	HDR Unbiased	0.0697	0.0033	-0.0664
25	20	HDR Biased	0.2748	0.2579	-0.0169
26	20	HDR Biased	0.09	0.1278	0.0378
27	20	HDR Biased	-0.1553	-0.1287	0.0266
28	20	HDR Biased	0.1942	0.2314	0.0372
29	20	HDR Biased	0.0693	0.1003	0.031
30	30	HDR Unbiased	0.3214	-0.0841	-0.4055
31	30	HDR Unbiased	0.0389	0.0629	0.024
32	30	HDR Unbiased	-0.0236	-0.0966	-0.073
33	30	HDR Unbiased	-0.0002	0.0488	0.049
34	30	HDR Unbiased	0.0648	0.0138	-0.051
35	30	HDR Biased	0.0095	-0.0038	-0.0133
36	30	HDR Biased	-0.0451	-0.0243	0.0208
37	30	HDR Biased	-0.1039	-0.1039	0
38	30	HDR Biased	-0.0246	-0.0064	0.0182
39	30	HDR Biased	0.0211	0.0798	0.0587
40	50	HDR Unbiased	-0.1804	-0.0825	0.0979
41	50	HDR Unbiased	-0.0722	0.3247	0.3969
42	50	HDR Unbiased	-0.2561	-0.2642	-0.0081
43	50	HDR Unbiased	0.058	0.0637	0.0057
44	50	HDR Unbiased		-0.1331	
50	0	CORRELATION	-0.0099	-0.0072	0.0027
51	0	CORRELATION	-0.0278	-0.0053	0.0225
52	0	CORRELATION	-0.0466	-0.0436	0.003
53	0	CORRELATION	-0.0314	-0.0366	-0.0052
54	0	CORRELATION	0.0071	0.0051	-0.002
78	50	HDR Biased	-0.0195	-0.0021	0.0174
79	50	HDR Biased	-0.0276	-0.0262	0.0014
80	50	HDR Biased	-0.1306	-0.0914	0.0392
81	50	HDR Biased	0.0904	0.1648	0.0744
82	50	HDR Biased	-0.1559	-0.0521	0.1038
83	0	CORRELATION	0.0112	0.0315	0.0203

TID vs Post - Pre Exposure Delta

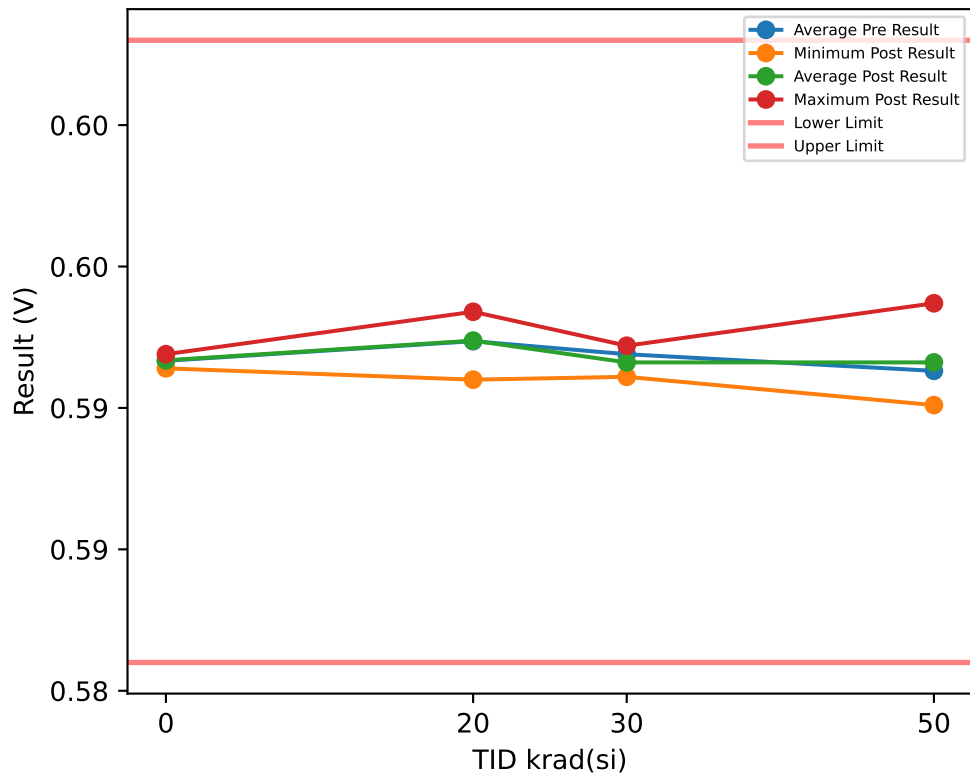


Test Statistics (%)

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	-0.0466	-0.016233	0.0112	0.022905	-0.0436	-0.00935	0.0315	0.027619	-0.0052	0.0068833	0.0225	0.011674
20	-0.1553	0.09176	0.2748	0.15654	-0.1287	0.10039	0.2579	0.14111	-0.0664	0.00863	0.0631	0.039373
30	-0.1039	0.02583	0.3214	0.11395	-0.1039	-0.01138	0.0798	0.066204	-0.4055	-0.03721	0.0587	0.13576
50	-0.2561	-0.0771	0.0904	0.11395	-0.2642	-0.00984	0.3247	0.1639	-0.0081	0.080956	0.3969	0.12569

# Device Test: 15.6 FB|VFB/FB/2.25/0.6//10//@VFB\_VIN\_SUB\_3V

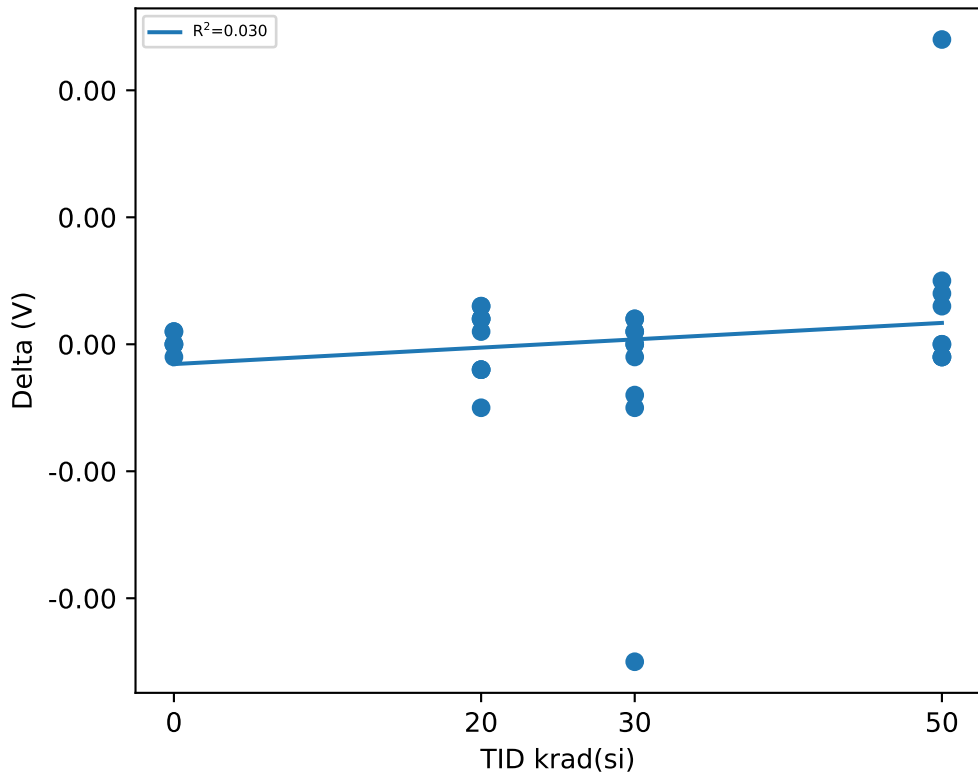
### TID vs Result Stats



### Test Results (Lower Limit = 0.586, Upper Limit = 0.608 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5963	0.5966	0.0003
2	20	HDR Unbiased	0.5984	0.5982	-0.0002
3	20	HDR Unbiased	0.5984	0.5982	-0.0002
23	20	HDR Unbiased	0.5964	0.5965	0.0001
24	20	HDR Unbiased	0.5971	0.5966	-0.0005
25	20	HDR Biased	0.5986	0.5984	-0.0002
26	20	HDR Biased	0.5973	0.5976	0.0003
27	20	HDR Biased	0.5958	0.596	0.0002
28	20	HDR Biased	0.5981	0.5983	0.0002
29	20	HDR Biased	0.5972	0.5974	0.0002
30	30	HDR Unbiased	0.5987	0.5962	-0.0025
31	30	HDR Unbiased	0.597	0.5971	0.0001
32	30	HDR Unbiased	0.5967	0.5962	-0.0005
33	30	HDR Unbiased	0.5967	0.5969	0.0002
34	30	HDR Unbiased	0.5971	0.5967	-0.0004
35	30	HDR Biased	0.5967	0.5966	-0.0001
36	30	HDR Biased	0.5964	0.5964	0
37	30	HDR Biased	0.5961	0.5961	0
38	30	HDR Biased	0.5966	0.5967	0.0001
39	30	HDR Biased	0.597	0.5972	0.0002
40	50	HDR Unbiased	0.5957	0.5962	0.0005
41	50	HDR Unbiased	0.5963	0.5987	0.0024
42	50	HDR Unbiased	0.5952	0.5951	-0.0001
43	50	HDR Unbiased	0.5972	0.5971	-0.0001
44	50	HDR Unbiased		0.596	
50	0	CORRELATION	0.5968	0.5968	0
51	0	CORRELATION	0.5966	0.5967	0.0001
52	0	CORRELATION	0.5963	0.5964	0.0001
53	0	CORRELATION	0.5965	0.5965	0
54	0	CORRELATION	0.5969	0.5968	-0.0001
78	50	HDR Biased	0.5967	0.5967	0
79	50	HDR Biased	0.5966	0.5965	-0.0001
80	50	HDR Biased	0.596	0.596	0
81	50	HDR Biased	0.5973	0.5976	0.0003
82	50	HDR Biased	0.5958	0.5962	0.0004
83	0	CORRELATION	0.5969	0.5969	0

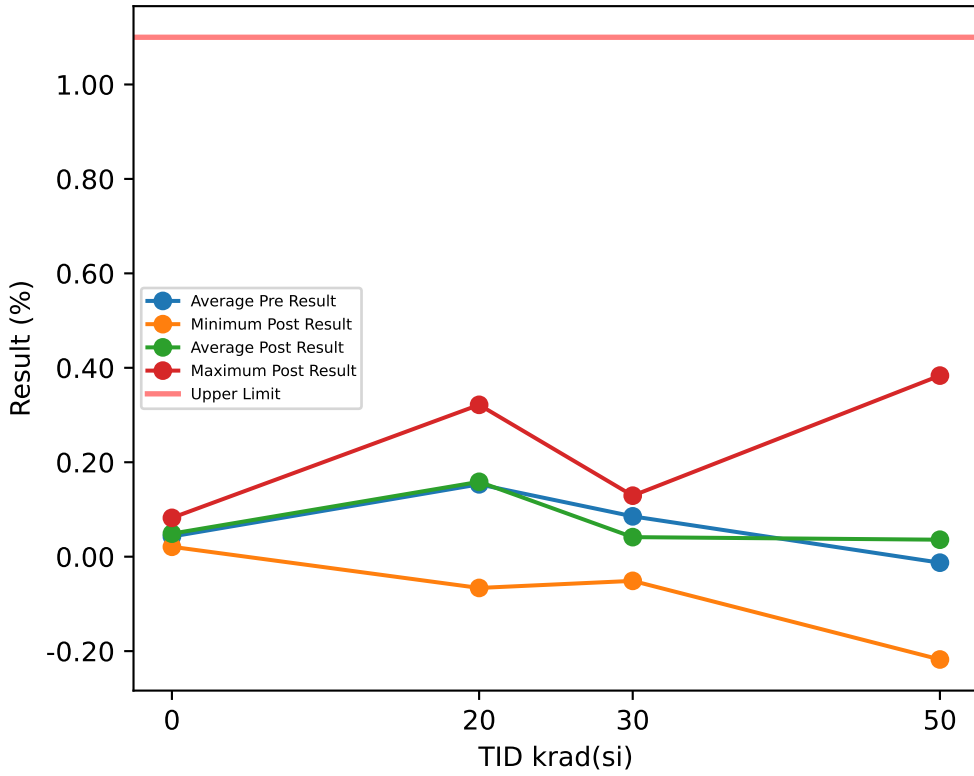
### TID vs Post - Pre Exposure Delta



### 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	0.5963	0.59667	0.5969	0.00024221	0.5964	0.59668	0.5969	0.00019408	-0.0001	1.6667e-05	0.0001	7.5277e-05
20	0.5958	0.59736	0.5986	0.00099017	0.596	0.59738	0.5984	0.00089294	-0.0005	2e-05	0.0003	0.00027406
30	0.5961	0.5969	0.5987	0.00069921	0.5961	0.59661	0.5972	0.00038427	-0.0025	-0.00029	0.0002	0.00081165
50	0.5952	0.59631	0.5973	0.00070435	0.5951	0.59661	0.5987	0.00099828	-0.0001	0.00036667	0.0024	0.00079687

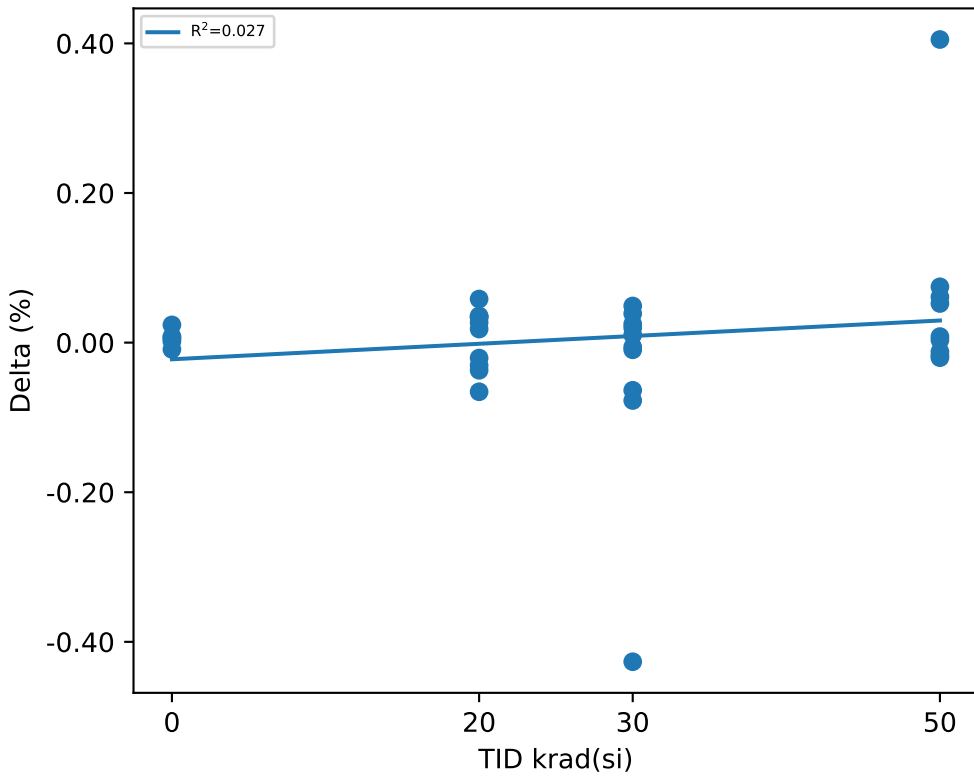
TID vs Result Stats



Test Results (Upper Limit = 1.1 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.0227	0.0356	0.0583
2	20	HDR Unbiased	0.3377	0.3072	-0.0305
3	20	HDR Unbiased	0.3204	0.2834	-0.037
23	20	HDR Unbiased	-0.003	0.0151	0.0181
24	20	HDR Unbiased	0.1206	0.0549	-0.0657
25	20	HDR Biased	0.3422	0.3216	-0.0206
26	20	HDR Biased	0.1496	0.1836	0.034
27	20	HDR Biased	-0.0931	-0.0662	0.0269
28	20	HDR Biased	0.2516	0.2858	0.0342
29	20	HDR Biased	0.1289	0.1646	0.0357
30	30	HDR Unbiased	0.3846	-0.042	-0.4266
31	30	HDR Unbiased	0.0991	0.1095	0.0104
32	30	HDR Unbiased	0.0459	-0.0315	-0.0774
33	30	HDR Unbiased	0.0609	0.0997	0.0388
34	30	HDR Unbiased	0.1271	0.0634	-0.0637
35	30	HDR Biased	0.0612	0.0554	-0.0058
36	30	HDR Biased	0.0096	0.0294	0.0198
37	30	HDR Biased	-0.0416	-0.0512	-0.0096
38	30	HDR Biased	0.0273	0.0522	0.0249
39	30	HDR Biased	0.0802	0.1292	0.049
40	50	HDR Unbiased	-0.1063	-0.0317	0.0746
41	50	HDR Unbiased	-0.0217	0.3835	0.4052
42	50	HDR Unbiased	-0.1976	-0.2177	-0.0201
43	50	HDR Unbiased	0.1339	0.1168	-0.0171
44	50	HDR Unbiased		-0.0814	
50	0	CORRELATION	0.0519	0.0564	0.0045
51	0	CORRELATION	0.0272	0.0509	0.0237
52	0	CORRELATION	0.0134	0.0214	0.008
53	0	CORRELATION	0.0193	0.021	0.0017
54	0	CORRELATION	0.0699	0.0609	-0.009
78	50	HDR Biased	0.0444	0.0525	0.0081
79	50	HDR Biased	0.0374	0.0253	-0.0121
80	50	HDR Biased	-0.0631	-0.0597	0.0034
81	50	HDR Biased	0.1463	0.1986	0.0523
82	50	HDR Biased	-0.0876	-0.0266	0.061
83	0	CORRELATION	0.0748	0.0822	0.0074

TID vs Post - Pre Exposure Delta



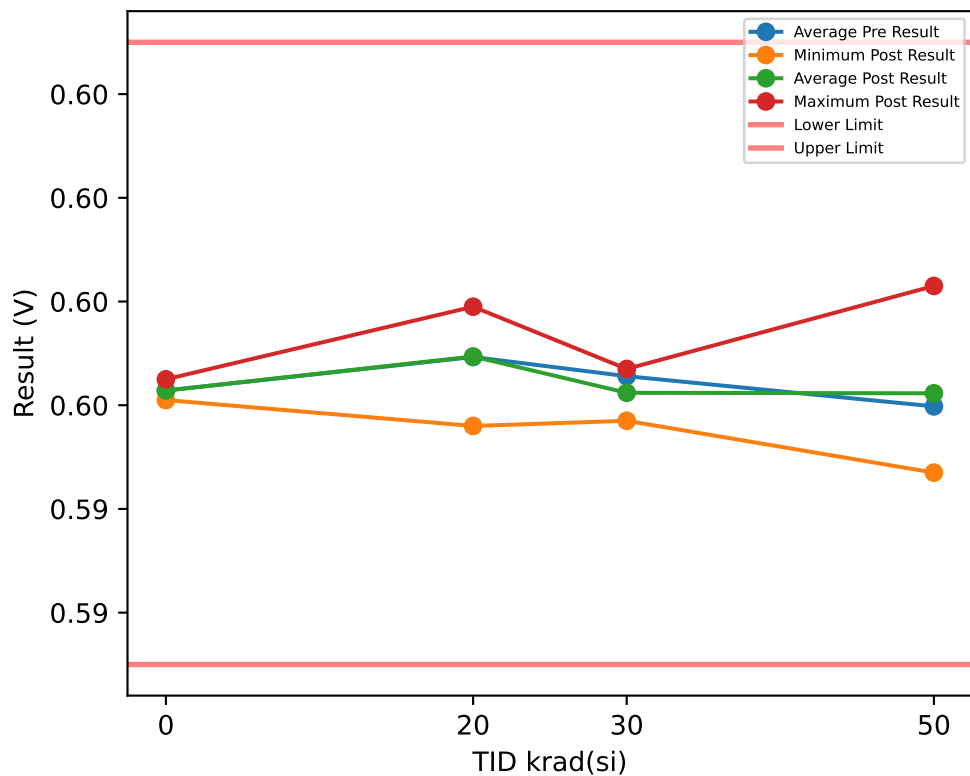
Test Statistics (%)

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	0.0134	0.04275	0.0748	0.026462	0.021	0.0488	0.0822	0.023865	-0.009	0.00605	0.0237	0.01063
20	-0.0931	0.15322	0.3422	0.15814	-0.0662	0.15856	0.3216	0.14066	-0.0657	0.00534	0.0583	0.040559
30	-0.0416	0.08543	0.3846	0.11522	-0.0512	0.04141	0.1292	0.064576	-0.4266	-0.04402	0.049	0.14056
50	-0.1976	-0.0127	0.1463	0.11387	-0.2177	0.03596	0.3835	0.16664	-0.0201	0.0617	0.4052	0.13363

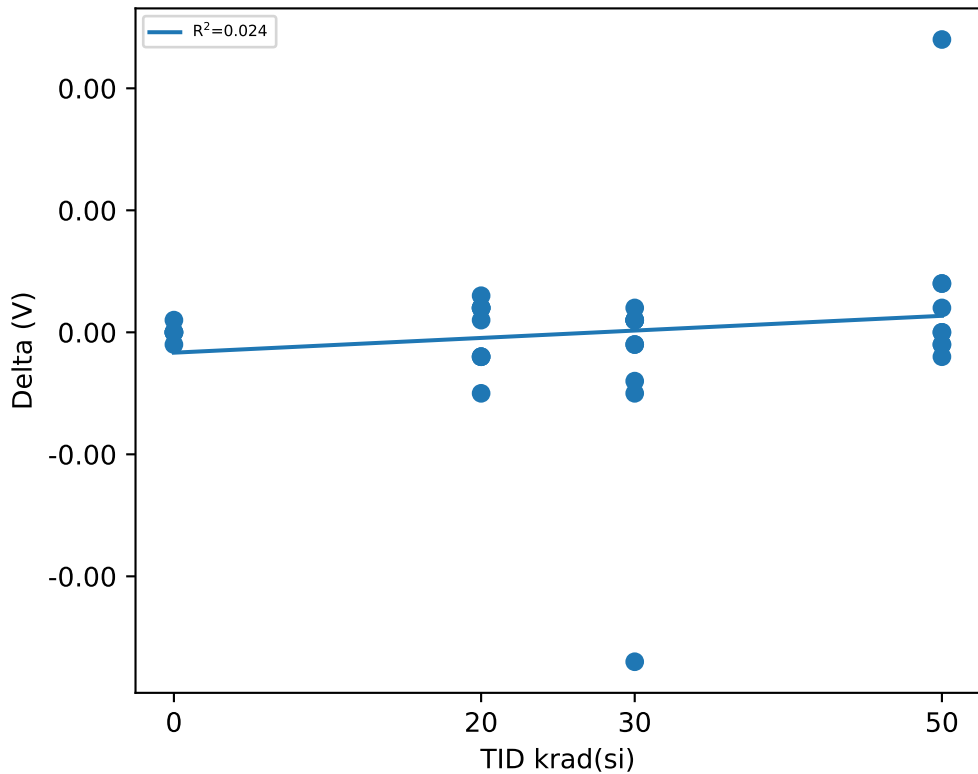


# Device Test: 15.63 FB|VFB/FB/14/0.6//10//@VFB\_25C

### TID vs Result Stats



### TID vs Post - Pre Exposure Delta



### Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

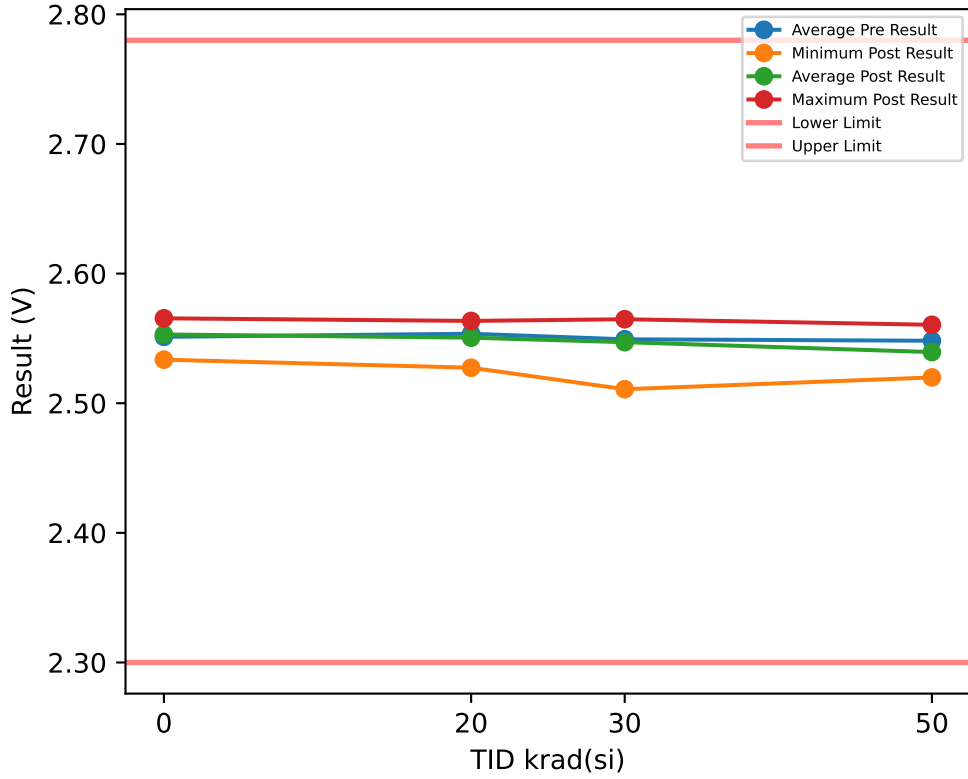
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5959	0.5962	0.0003
2	20	HDR Unbiased	0.598	0.5978	-0.0002
3	20	HDR Unbiased	0.5979	0.5977	-0.0002
23	20	HDR Unbiased	0.596	0.5961	0.0001
24	20	HDR Unbiased	0.5968	0.5963	-0.0005
25	20	HDR Biased	0.5981	0.5979	-0.0002
26	20	HDR Biased	0.5969	0.5971	0.0002
27	20	HDR Biased	0.5954	0.5956	0.0002
28	20	HDR Biased	0.5975	0.5977	0.0002
29	20	HDR Biased	0.5968	0.597	0.0002
30	30	HDR Unbiased	0.5984	0.5957	-0.0027
31	30	HDR Unbiased	0.5966	0.5967	0.0001
32	30	HDR Unbiased	0.5963	0.5958	-0.0005
33	30	HDR Unbiased	0.5964	0.5966	0.0002
34	30	HDR Unbiased	0.5968	0.5964	-0.0004
35	30	HDR Biased	0.5964	0.5963	-0.0001
36	30	HDR Biased	0.5961	0.5962	0.0001
37	30	HDR Biased	0.5958	0.5957	-0.0001
38	30	HDR Biased	0.5962	0.5963	0.0001
39	30	HDR Biased	0.5966	0.5967	0.0001
40	50	HDR Unbiased	0.5954	0.5958	0.0004
41	50	HDR Unbiased	0.5959	0.5983	0.0024
42	50	HDR Unbiased	0.5949	0.5947	-0.0002
43	50	HDR Unbiased	0.5968	0.5967	-0.0001
44	50	HDR Unbiased		0.5955	
50	0	CORRELATION	0.5963	0.5963	0
51	0	CORRELATION	0.5962	0.5963	0.0001
52	0	CORRELATION	0.5961	0.5961	0
53	0	CORRELATION	0.5961	0.5961	0
54	0	CORRELATION	0.5965	0.5964	-0.0001
78	50	HDR Biased	0.5964	0.5963	-0.0001
79	50	HDR Biased	0.5962	0.5962	0
80	50	HDR Biased	0.5957	0.5957	0
81	50	HDR Biased	0.597	0.5972	0.0002
82	50	HDR Biased	0.5955	0.5959	0.0004
83	0	CORRELATION	0.5965	0.5965	0

### 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	0.5961	0.59628	0.5965	0.00018348	0.5961	0.59628	0.5965	0.00016021	-0.0001	1.8504e-17	0.0001	6.3246e-05
20	0.5954	0.59693	0.5981	0.00094757	0.5956	0.59694	0.5979	0.00083693	-0.0005	1e-05	0.0003	0.00026437
30	0.5958	0.59656	0.5984	0.00070585	0.5957	0.59624	0.5967	0.0003893	-0.0027	-0.00032	0.0002	0.00086769
50	0.5949	0.59598	0.597	0.00068516	0.5947	0.59623	0.5983	0.00099448	-0.0002	0.00033333	0.0024	0.00080467

# Device Test: 15.64 OUTPUT|VLDO/VLDO/14/0.6//10//@V\_VLDO

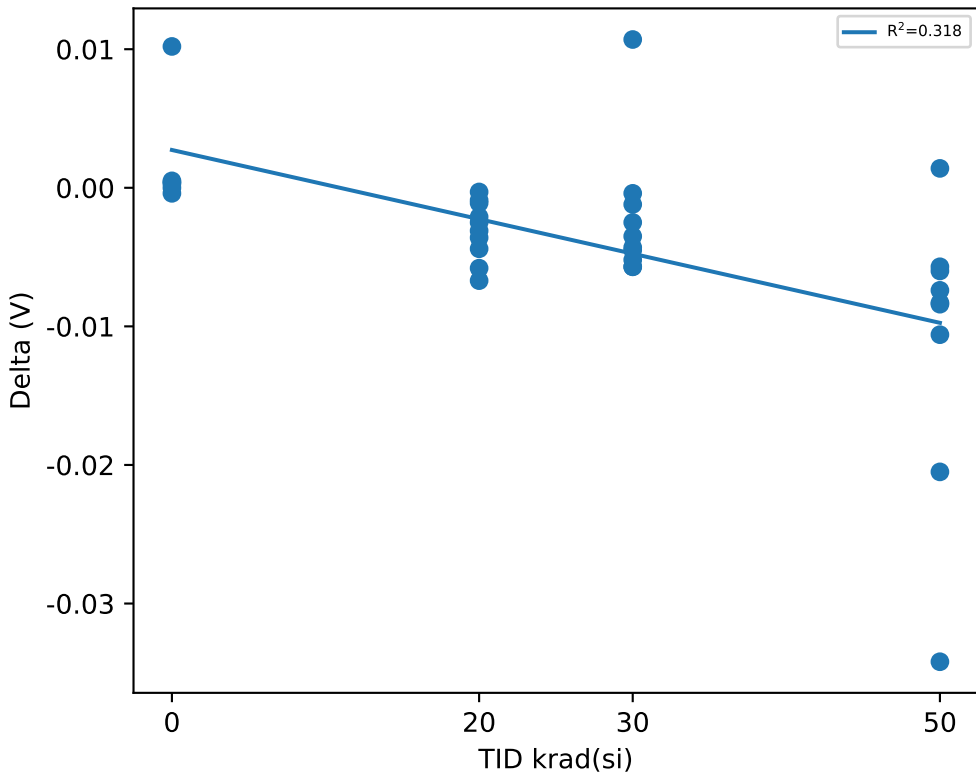
### TID vs Result Stats



### Test Results (Lower Limit = 2.3, Upper Limit = 2.78 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	2.5447	2.5416	-0.0031
2	20	HDR Unbiased	2.5318	2.5274	-0.0044
3	20	HDR Unbiased	2.5631	2.561	-0.0021
23	20	HDR Unbiased	2.5524	2.5457	-0.0067
24	20	HDR Unbiased	2.5679	2.5621	-0.0058
25	20	HDR Biased	2.5624	2.5599	-0.0025
26	20	HDR Biased	2.5374	2.5338	-0.0036
27	20	HDR Biased	2.5571	2.5562	-0.0009
28	20	HDR Biased	2.5546	2.5543	-0.0003
29	20	HDR Biased	2.5646	2.5635	-0.0011
30	30	HDR Unbiased	2.5264	2.5371	0.0107
31	30	HDR Unbiased	2.5527	2.5475	-0.0052
32	30	HDR Unbiased	2.5601	2.5558	-0.0043
33	30	HDR Unbiased	2.5653	2.5596	-0.0057
34	30	HDR Unbiased	2.5604	2.5592	-0.0012
35	30	HDR Biased	2.5652	2.5648	-0.0004
36	30	HDR Biased	2.5399	2.5364	-0.0035
37	30	HDR Biased	2.5603	2.5578	-0.0025
38	30	HDR Biased	2.5165	2.5108	-0.0057
39	30	HDR Biased	2.5464	2.5419	-0.0045
40	50	HDR Unbiased	2.5728	2.5386	-0.0342
41	50	HDR Unbiased	2.5404	2.5199	-0.0205
42	50	HDR Unbiased	2.5523	2.5466	-0.0057
43	50	HDR Unbiased	2.5378	2.5304	-0.0074
44	50	HDR Unbiased		2.5605	
50	0	CORRELATION	2.5389	2.5394	0.0005
51	0	CORRELATION	2.5332	2.5336	0.0004
52	0	CORRELATION	2.5655	2.5655	0
53	0	CORRELATION	2.5548	2.5551	0.0003
54	0	CORRELATION	2.5548	2.565	0.0102
78	50	HDR Biased	2.5647	2.5564	-0.0083
79	50	HDR Biased	2.5387	2.5401	0.0014
80	50	HDR Biased	2.535	2.5266	-0.0084
81	50	HDR Biased	2.5313	2.5253	-0.006
82	50	HDR Biased	2.5608	2.5502	-0.0106
83	0	CORRELATION	2.5601	2.5597	-0.0004

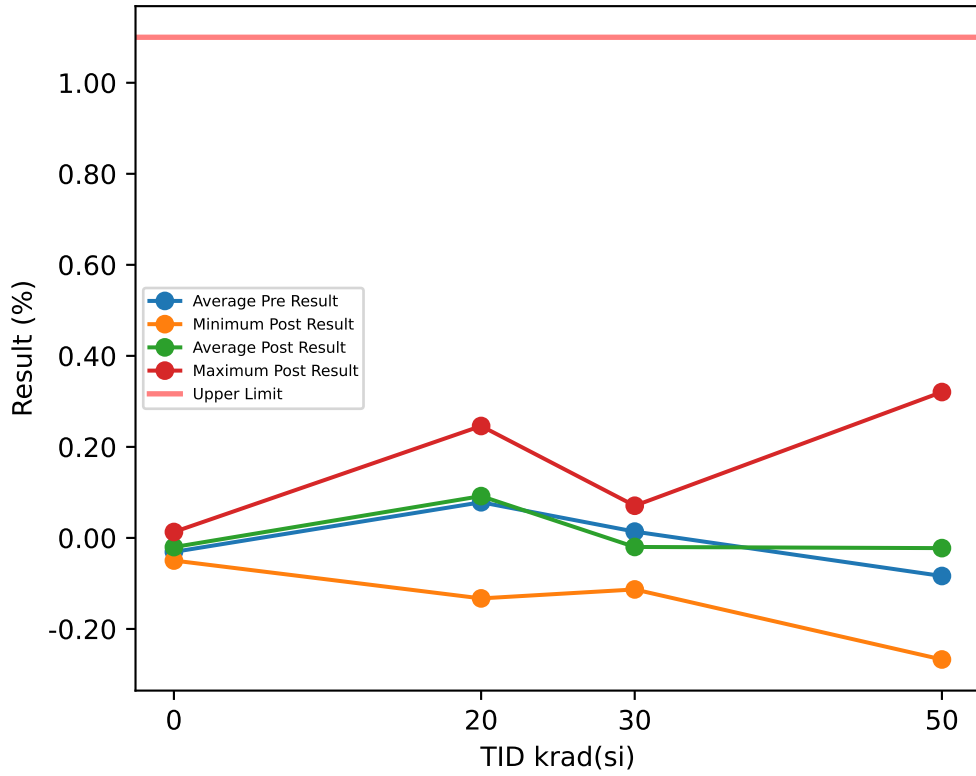
### TID vs Post - Pre Exposure Delta



### 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	2.5332	2.5512	2.5655	0.012529	2.5336	2.5531	2.5655	0.013497	-0.0004	0.0018333	0.0102	0.0041118
20	2.5318	2.5536	2.5679	0.012132	2.5274	2.5505	2.5635	0.012753	-0.0067	-0.00305	-0.0003	0.0021136
30	2.5165	2.5493	2.5653	0.016925	2.5108	2.5471	2.5648	0.016212	-0.0057	-0.00223	0.0107	0.0048947
50	2.5313	2.5482	2.5728	0.014883	2.5199	2.5395	2.5605	0.013855	-0.0342	-0.011078	0.0014	0.010383

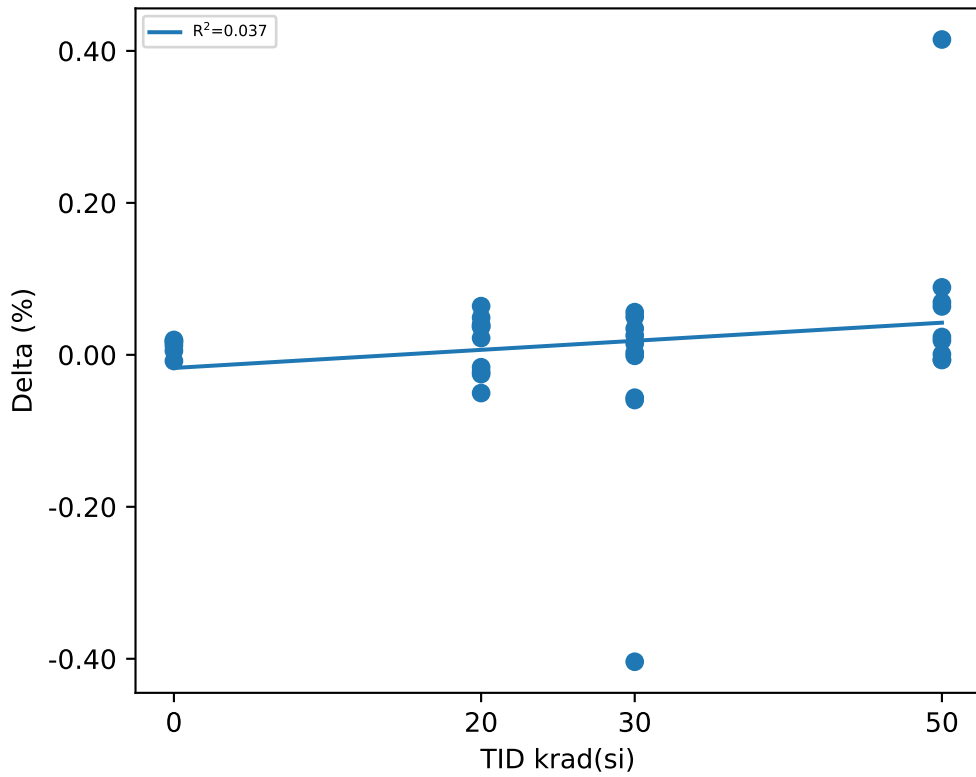
TID vs Result Stats



Test Results (Upper Limit = 1.1 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.0952	-0.0311	0.0641
2	20	HDR Unbiased	0.2677	0.2423	-0.0254
3	20	HDR Unbiased	0.2306	0.2083	-0.0223
23	20	HDR Unbiased	-0.0708	-0.0487	0.0221
24	20	HDR Unbiased	0.0445	-0.0058	-0.0503
25	20	HDR Biased	0.2622	0.2459	-0.0163
26	20	HDR Biased	0.0806	0.1206	0.04
27	20	HDR Biased	-0.1701	-0.1329	0.0372
28	20	HDR Biased	0.1841	0.2212	0.0371
29	20	HDR Biased	0.0497	0.0987	0.049
30	30	HDR Unbiased	0.3089	-0.095	-0.4039
31	30	HDR Unbiased	0.032	0.0467	0.0147
32	30	HDR Unbiased	-0.0429	-0.0993	-0.0564
33	30	HDR Unbiased	-0.01	0.0399	0.0499
34	30	HDR Unbiased	0.0601	0.0006	-0.0595
35	30	HDR Biased	-0.0104	-0.0074	0.003
36	30	HDR Biased	-0.0552	-0.0298	0.0254
37	30	HDR Biased	-0.1119	-0.1132	-0.0013
38	30	HDR Biased	-0.0464	-0.0119	0.0345
39	30	HDR Biased	0.0145	0.0707	0.0562
40	50	HDR Unbiased	-0.185	-0.0962	0.0888
41	50	HDR Unbiased	-0.0945	0.3205	0.415
42	50	HDR Unbiased	-0.2604	-0.2671	-0.0067
43	50	HDR Unbiased	0.0549	0.0483	-0.0066
44	50	HDR Unbiased		-0.1375	
50	0	CORRELATION	-0.0312	-0.013	0.0182
51	0	CORRELATION	-0.0344	-0.018	0.0164
52	0	CORRELATION	-0.055	-0.0497	0.0053
53	0	CORRELATION	-0.0544	-0.0423	0.0121
54	0	CORRELATION	-0.0028	-0.0109	-0.0081
78	50	HDR Biased	-0.0249	-0.0061	0.0188
79	50	HDR Biased	-0.0307	-0.03	0.0007
80	50	HDR Biased	-0.142	-0.1185	0.0235
81	50	HDR Biased	0.0858	0.1495	0.0637
82	50	HDR Biased	-0.1563	-0.0871	0.0692
83	0	CORRELATION	-0.0066	0.013	0.0196

TID vs Post - Pre Exposure Delta

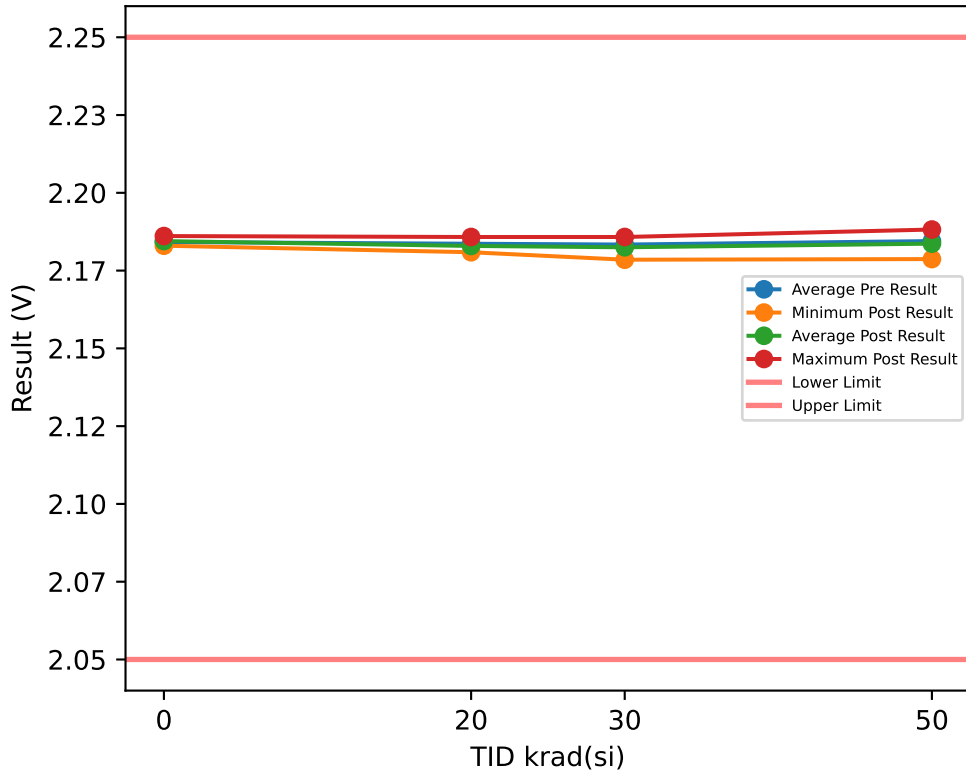


Test Statistics (%)

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	-0.055	-0.030733	-0.0028	0.022474	-0.0497	-0.02015	0.013	0.022821	-0.0081	0.010583	0.0196	0.010511
20	-0.1701	0.07833	0.2677	0.15638	-0.1329	0.09185	0.2459	0.13842	-0.0503	0.01352	0.0641	0.038685
30	-0.1119	0.01387	0.3089	0.11456	-0.1132	-0.01987	0.0707	0.064642	-0.4039	-0.03374	0.0562	0.13589
50	-0.2604	-0.083678	0.0858	0.11428	-0.2671	-0.02242	0.3205	0.1648	-0.0067	0.074044	0.415	0.13257

# Device Test: 15.7 OUTPUT|VLDO/VLDO/2.25/0.6//10//@V\_VLDO\_VIN\_2p25

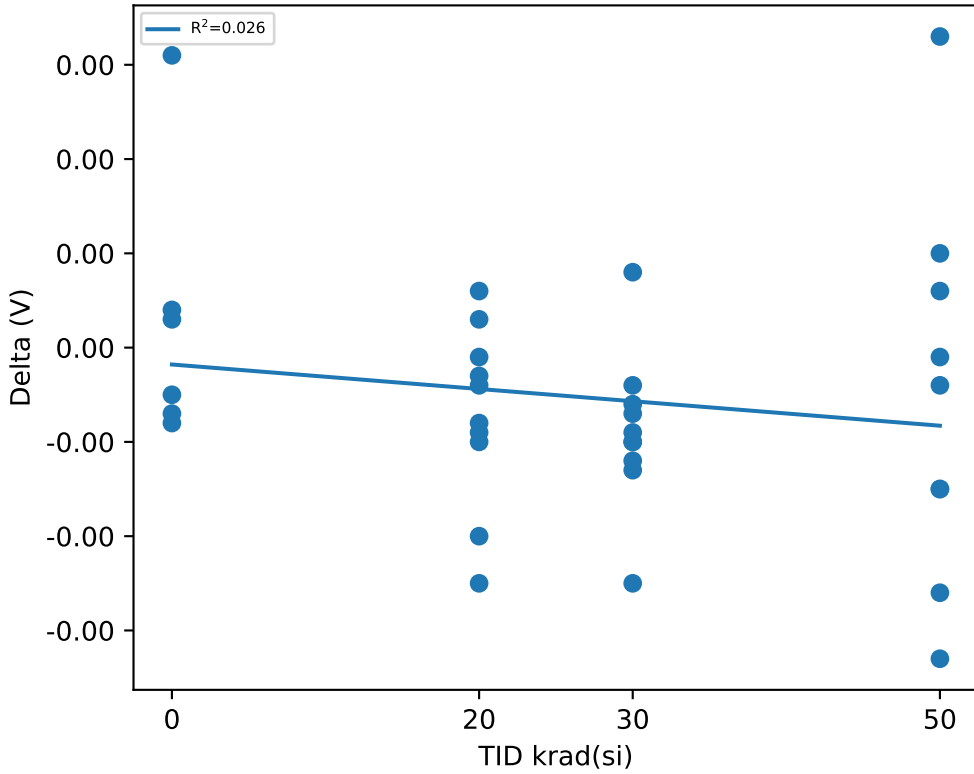
### TID vs Result Stats



### Test Results (Lower Limit = 2.05, Upper Limit = 2.25 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	2.1829	2.1821	-0.0008
2	20	HDR Unbiased	2.1834	2.1809	-0.0025
3	20	HDR Unbiased	2.181	2.1813	0.0003
23	20	HDR Unbiased	2.1847	2.1827	-0.002
24	20	HDR Unbiased	2.1835	2.1834	-0.0001
25	20	HDR Biased	2.1837	2.1843	0.0006
26	20	HDR Biased	2.1841	2.1838	-0.0003
27	20	HDR Biased	2.1823	2.1814	-0.0009
28	20	HDR Biased	2.1868	2.1858	-0.001
29	20	HDR Biased	2.1839	2.1835	-0.0004
30	30	HDR Unbiased	2.1823	2.1831	0.0008
31	30	HDR Unbiased	2.1852	2.184	-0.0012
32	30	HDR Unbiased	2.1794	2.1785	-0.0009
33	30	HDR Unbiased	2.1826	2.1822	-0.0004
34	30	HDR Unbiased	2.1851	2.1826	-0.0025
35	30	HDR Biased	2.182	2.1813	-0.0007
36	30	HDR Biased	2.1868	2.1858	-0.001
37	30	HDR Biased	2.1837	2.1831	-0.0006
38	30	HDR Biased	2.1813	2.18	-0.0013
39	30	HDR Biased	2.1853	2.1843	-0.001
40	50	HDR Unbiased	2.1802	2.1787	-0.0015
41	50	HDR Unbiased	2.1848	2.1815	-0.0033
42	50	HDR Unbiased	2.1872	2.1857	-0.0015
43	50	HDR Unbiased	2.1821	2.1795	-0.0026
44	50	HDR Unbiased		2.1807	
50	0	CORRELATION	2.1844	2.1839	-0.0005
51	0	CORRELATION	2.1848	2.1852	0.0004
52	0	CORRELATION	2.1854	2.1846	-0.0008
53	0	CORRELATION	2.1848	2.1841	-0.0007
54	0	CORRELATION	2.183	2.1861	0.0031
78	50	HDR Biased	2.1831	2.183	-0.0001
79	50	HDR Biased	2.1851	2.1857	0.0006
80	50	HDR Biased	2.1833	2.1866	0.0033
81	50	HDR Biased	2.1886	2.1882	-0.0004
82	50	HDR Biased	2.186	2.187	0.001
83	0	CORRELATION	2.1827	2.183	0.0003

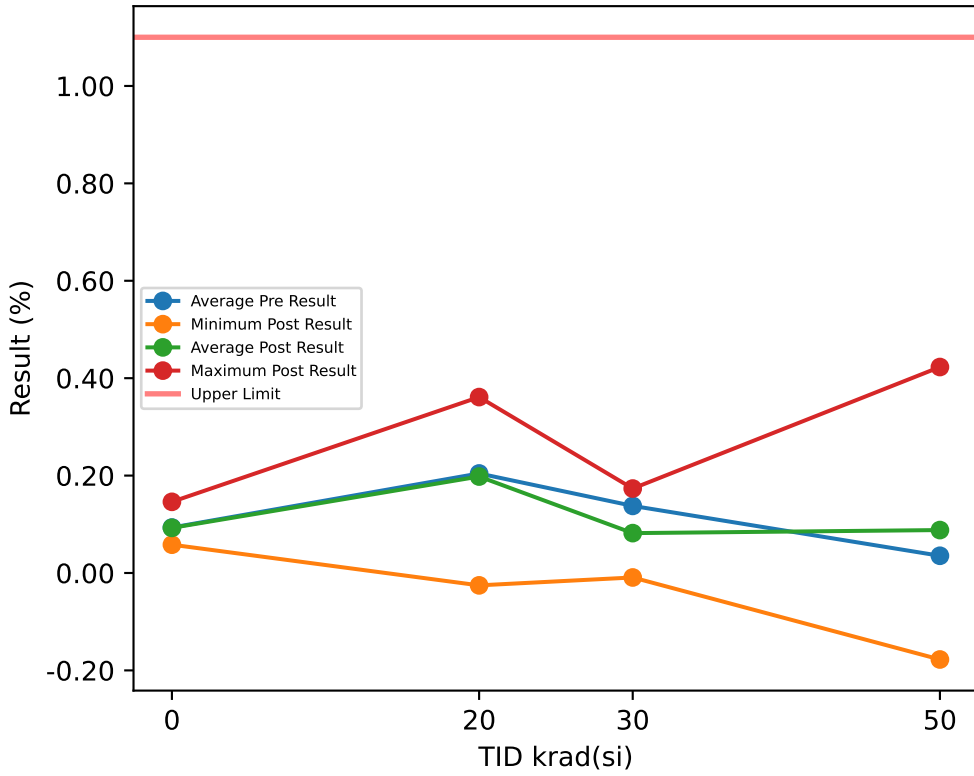
### TID vs Post - Pre Exposure Delta



### 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	2.1827	2.1842	2.1854	0.0010852	2.183	2.1845	2.1861	0.0010797	-0.0008	0.0003	0.0031	0.0014629
20	2.181	2.1836	2.1868	0.0015195	2.1809	2.1829	2.1858	0.0015375	-0.0025	-0.00071	0.0006	0.00096431
30	2.1794	2.1834	2.1868	0.002251	2.1785	2.1825	2.1858	0.0021315	-0.0025	-0.00088	0.0008	0.000823
50	2.1802	2.1845	2.1886	0.0026089	2.1787	2.1837	2.1882	0.0034076	-0.0033	-0.0005	0.0033	0.00201

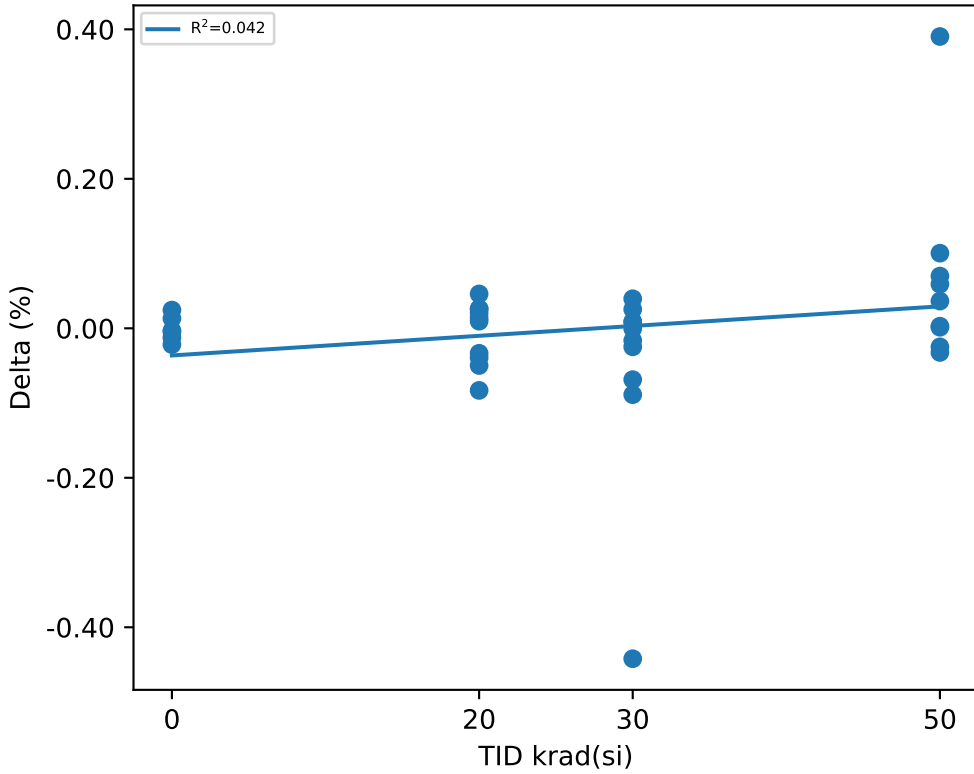
TID vs Result Stats



Test Results (Upper Limit = 1.1 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.0265	0.0725	0.046
2	20	HDR Unbiased	0.3856	0.3463	-0.0393
3	20	HDR Unbiased	0.3719	0.3221	-0.0498
23	20	HDR Unbiased	0.0443	0.0538	0.0095
24	20	HDR Unbiased	0.1772	0.0941	-0.0831
25	20	HDR Biased	0.3946	0.3612	-0.0334
26	20	HDR Biased	0.2002	0.2263	0.0261
27	20	HDR Biased	-0.0395	-0.0254	0.0141
28	20	HDR Biased	0.2999	0.3258	0.0259
29	20	HDR Biased	0.183	0.2036	0.0206
30	30	HDR Unbiased	0.4415	-0.0006	-0.4421
31	30	HDR Unbiased	0.1499	0.1494	-0.0005
32	30	HDR Unbiased	0.0939	0.0051	-0.0888
33	30	HDR Unbiased	0.1134	0.1388	0.0254
34	30	HDR Unbiased	0.1758	0.1071	-0.0687
35	30	HDR Biased	0.1171	0.0923	-0.0248
36	30	HDR Biased	0.0609	0.0695	0.0086
37	30	HDR Biased	0.0071	-0.0092	-0.0163
38	30	HDR Biased	0.0841	0.0928	0.0087
39	30	HDR Biased	0.1339	0.1734	0.0395
40	50	HDR Unbiased	-0.0571	0.0128	0.0699
41	50	HDR Unbiased	0.0325	0.4229	0.3904
42	50	HDR Unbiased	-0.1453	-0.1776	-0.0323
43	50	HDR Unbiased	0.1807	0.1559	-0.0248
44	50	HDR Unbiased		-0.0402	
50	0	CORRELATION	0.0988	0.0942	-0.0046
51	0	CORRELATION	0.0793	0.0925	0.0132
52	0	CORRELATION	0.0611	0.0581	-0.003
53	0	CORRELATION	0.0757	0.0632	-0.0125
54	0	CORRELATION	0.1234	0.1016	-0.0218
78	50	HDR Biased	0.1035	0.1049	0.0014
79	50	HDR Biased	0.0719	0.0747	0.0028
80	50	HDR Biased	-0.0212	0.0152	0.0364
81	50	HDR Biased	0.2041	0.2631	0.059
82	50	HDR Biased	-0.0509	0.0496	0.1005
83	0	CORRELATION	0.1217	0.1461	0.0244

TID vs Post - Pre Exposure Delta

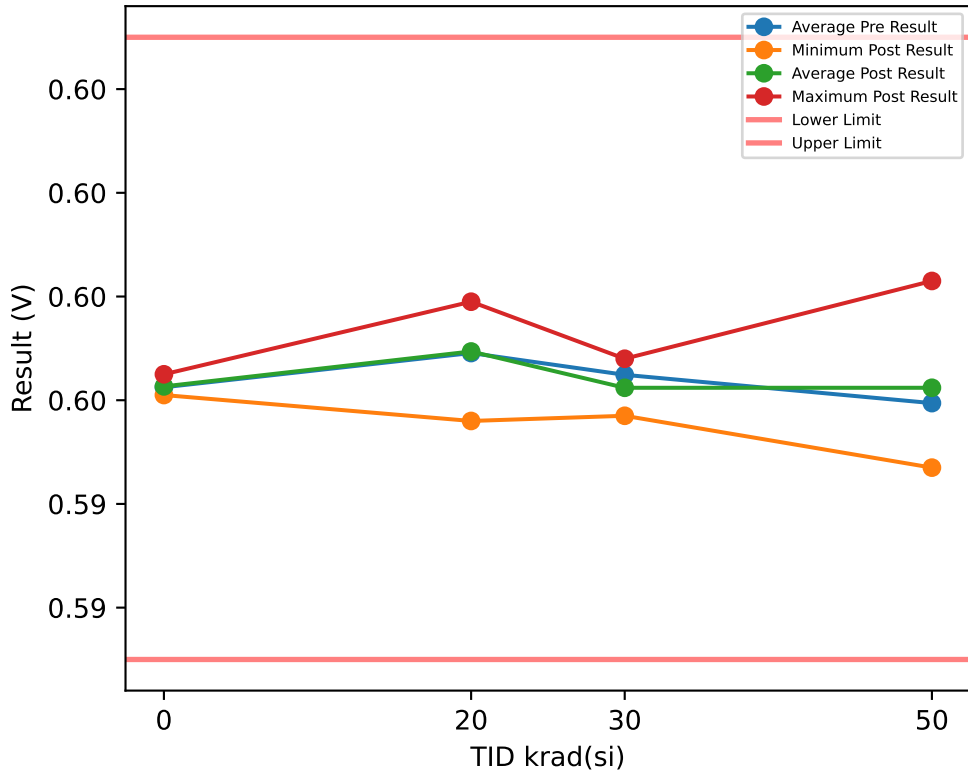


Test Statistics (%)

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	0.0611	0.093333	0.1234	0.025634	0.0581	0.092617	0.1461	0.031624	-0.0218	-0.00071667	0.0244	0.016901
20	-0.0395	0.20437	0.3946	0.15782	-0.0254	0.19803	0.3612	0.14081	-0.0831	-0.00634	0.046	0.041933
30	0.0071	0.13776	0.4415	0.11675	-0.0092	0.08186	0.1734	0.065137	-0.4421	-0.0559	0.0395	0.14144
50	-0.1453	0.035356	0.2041	0.11587	-0.1776	0.08813	0.4229	0.16576	-0.0323	0.067033	0.3904	0.12915

# Device Test: 15.74 FB|VFB/FB/14/13.9//10//@VFB\_25C

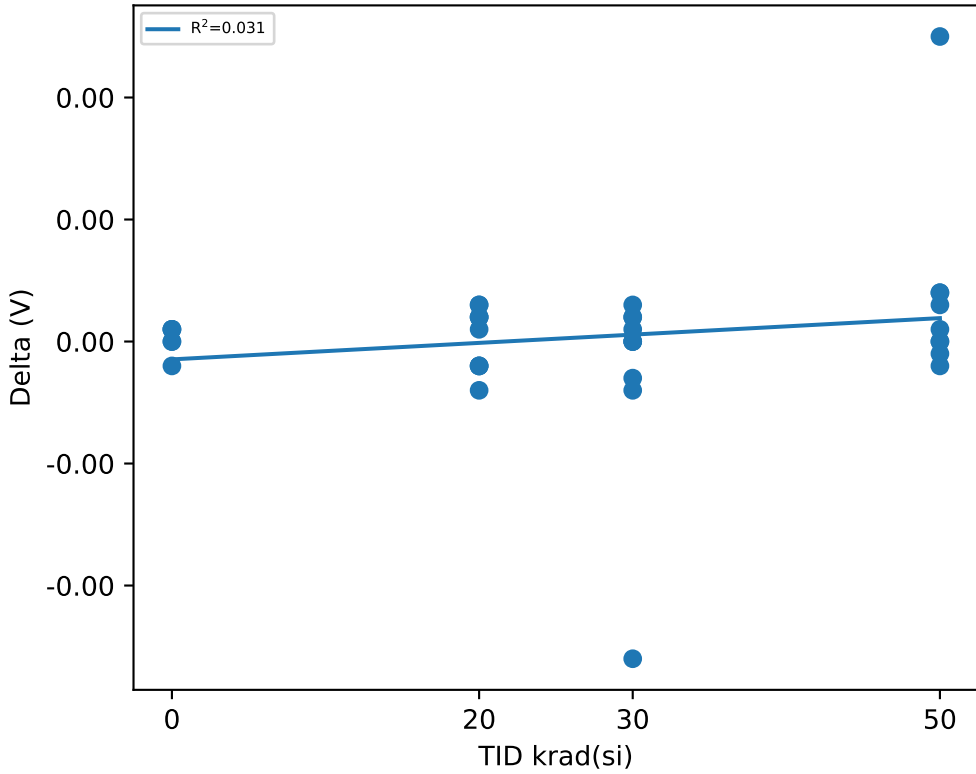
## TID vs Result Stats



## Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5959	0.5962	0.0003
2	20	HDR Unbiased	0.598	0.5978	-0.0002
3	20	HDR Unbiased	0.5979	0.5977	-0.0002
23	20	HDR Unbiased	0.596	0.5961	0.0001
24	20	HDR Unbiased	0.5967	0.5963	-0.0004
25	20	HDR Biased	0.5981	0.5979	-0.0002
26	20	HDR Biased	0.5969	0.5971	0.0002
27	20	HDR Biased	0.5954	0.5956	0.0002
28	20	HDR Biased	0.5975	0.5977	0.0002
29	20	HDR Biased	0.5967	0.597	0.0003
30	30	HDR Unbiased	0.5983	0.5957	-0.0026
31	30	HDR Unbiased	0.5966	0.5966	0
32	30	HDR Unbiased	0.5962	0.5958	-0.0004
33	30	HDR Unbiased	0.5964	0.5966	0.0002
34	30	HDR Unbiased	0.5967	0.5964	-0.0003
35	30	HDR Biased	0.5963	0.5963	0
36	30	HDR Biased	0.5961	0.5962	0.0001
37	30	HDR Biased	0.5957	0.5957	0
38	30	HDR Biased	0.5961	0.5963	0.0002
39	30	HDR Biased	0.5965	0.5968	0.0003
40	50	HDR Unbiased	0.5954	0.5958	0.0004
41	50	HDR Unbiased	0.5958	0.5983	0.0025
42	50	HDR Unbiased	0.5949	0.5947	-0.0002
43	50	HDR Unbiased	0.5968	0.5967	-0.0001
44	50	HDR Unbiased		0.5955	
50	0	CORRELATION	0.5962	0.5963	0.0001
51	0	CORRELATION	0.5962	0.5963	0.0001
52	0	CORRELATION	0.5961	0.5961	0
53	0	CORRELATION	0.5961	0.5961	0
54	0	CORRELATION	0.5965	0.5963	-0.0002
78	50	HDR Biased	0.5964	0.5964	0
79	50	HDR Biased	0.5962	0.5962	0
80	50	HDR Biased	0.5956	0.5957	0.0001
81	50	HDR Biased	0.5969	0.5972	0.0003
82	50	HDR Biased	0.5955	0.5959	0.0004
83	0	CORRELATION	0.5964	0.5965	0.0001

## TID vs Post - Pre Exposure Delta

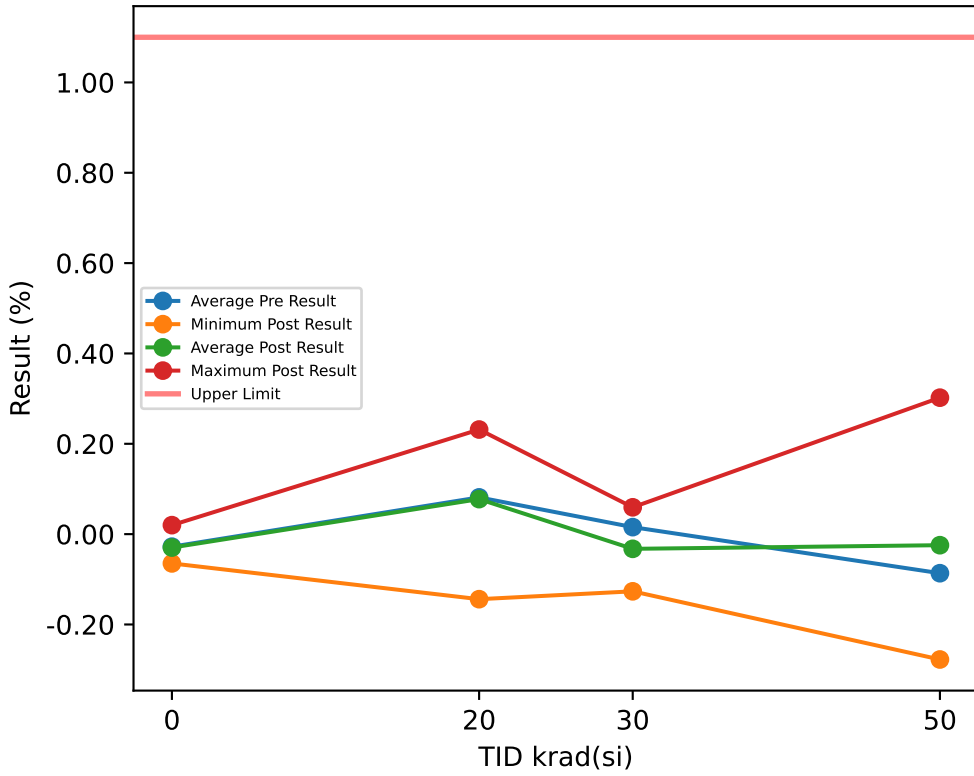


## Test Statistics (V)

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	0.5961	0.59625	0.5965	0.00016432	0.5961	0.59627	0.5965	0.00015055	-0.0002	1.6667e-05	0.0001	0.0001169
20	0.5954	0.59691	0.5981	0.00095155	0.5956	0.59694	0.5979	0.00083693	-0.0004	3e-05	0.0003	0.00025408
30	0.5957	0.59649	0.5983	0.00069833	0.5957	0.59624	0.5968	0.00039215	-0.0026	-0.00025	0.0003	0.00085408
50	0.5949	0.59594	0.5969	0.00067474	0.5947	0.59624	0.5983	0.00099577	-0.0002	0.00037778	0.0025	0.00082428



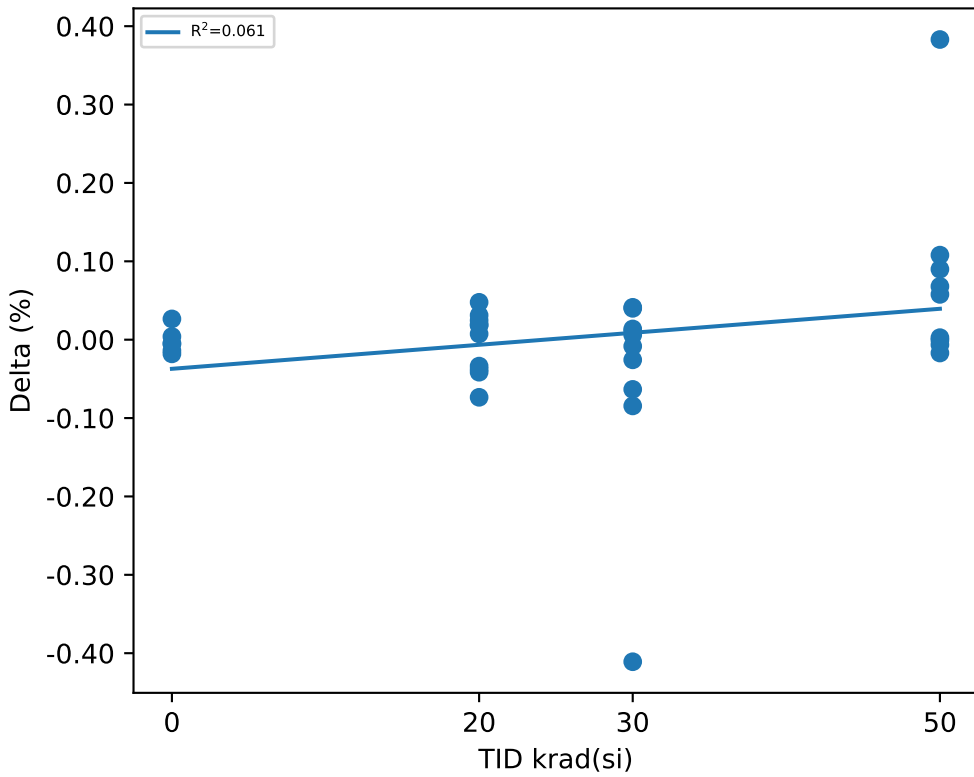
TID vs Result Stats



Test Results (Upper Limit = 1.1 (%))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	-0.0954	-0.0477	0.0477
2	20	HDR Unbiased	0.2581	0.2244	-0.0337
3	20	HDR Unbiased	0.2394	0.1979	-0.0415
23	20	HDR Unbiased	-0.0737	-0.0663	0.0074
24	20	HDR Unbiased	0.0612	-0.0123	-0.0735
25	20	HDR Biased	0.2695	0.2316	-0.0379
26	20	HDR Biased	0.0792	0.1038	0.0246
27	20	HDR Biased	-0.1631	-0.144	0.0191
28	20	HDR Biased	0.1786	0.2097	0.0311
29	20	HDR Biased	0.0599	0.0783	0.0184
30	30	HDR Unbiased	0.3108	-0.1001	-0.4109
31	30	HDR Unbiased	0.0278	0.039	0.0112
32	30	HDR Unbiased	-0.038	-0.1225	-0.0845
33	30	HDR Unbiased	-0.009	0.0323	0.0413
34	30	HDR Unbiased	0.0534	-0.01	-0.0634
35	30	HDR Biased	-0.0032	-0.0289	-0.0257
36	30	HDR Biased	-0.0519	-0.0382	0.0137
37	30	HDR Biased	-0.1183	-0.1266	-0.0083
38	30	HDR Biased	-0.0357	-0.0297	0.006
39	30	HDR Biased	0.0194	0.0594	0.04
40	50	HDR Unbiased	-0.1929	-0.103	0.0899
41	50	HDR Unbiased	-0.0809	0.3021	0.383
42	50	HDR Unbiased	-0.2605	-0.2775	-0.017
43	50	HDR Unbiased	0.0439	0.0375	-0.0064
44	50	HDR Unbiased		-0.1515	
50	0	CORRELATION	-0.0238	-0.0284	-0.0046
51	0	CORRELATION	-0.0351	-0.0311	0.004
52	0	CORRELATION	-0.0593	-0.0648	-0.0055
53	0	CORRELATION	-0.0406	-0.0546	-0.014
54	0	CORRELATION	-0.0012	-0.0193	-0.0181
78	50	HDR Biased	-0.0194	-0.0199	-0.0005
79	50	HDR Biased	-0.0418	-0.0392	0.0026
80	50	HDR Biased	-0.1527	-0.0949	0.0578
81	50	HDR Biased	0.0919	0.1599	0.068
82	50	HDR Biased	-0.1661	-0.0582	0.1079
83	0	CORRELATION	-0.0066	0.0199	0.0265

TID vs Post - Pre Exposure Delta

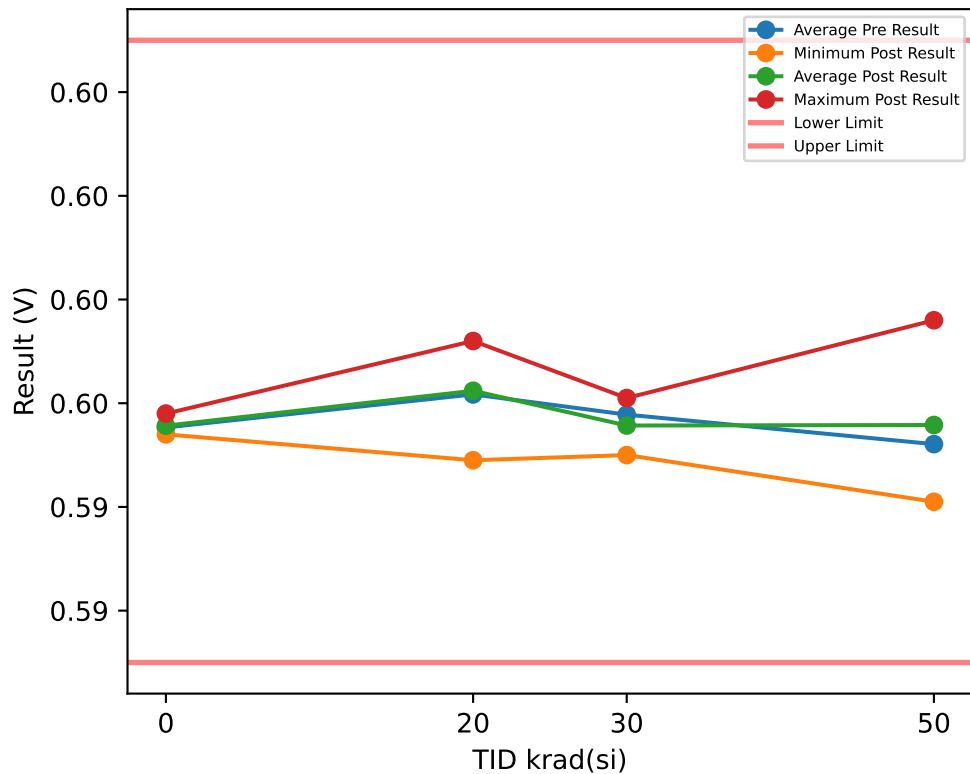


Test Statistics (%)

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	-0.0593	-0.027767	-0.0012	0.021828	-0.0648	-0.029717	0.0199	0.029746	-0.0181	-0.00195	0.0265	0.01594
20	-0.1631	0.08137	0.2695	0.15527	-0.144	0.07754	0.2316	0.13803	-0.0735	-0.00383	0.0477	0.039659
30	-0.1183	0.01553	0.3108	0.11435	-0.1266	-0.03253	0.0594	0.066534	-0.4109	-0.04806	0.0413	0.13387
50	-0.2605	-0.0865	0.0919	0.11602	-0.2775	-0.02447	0.3021	0.16232	-0.017	0.076144	0.383	0.12376

# Device Test: 15.79 FB|VFB/FB/14/13.3//2000//@VFB\_25C

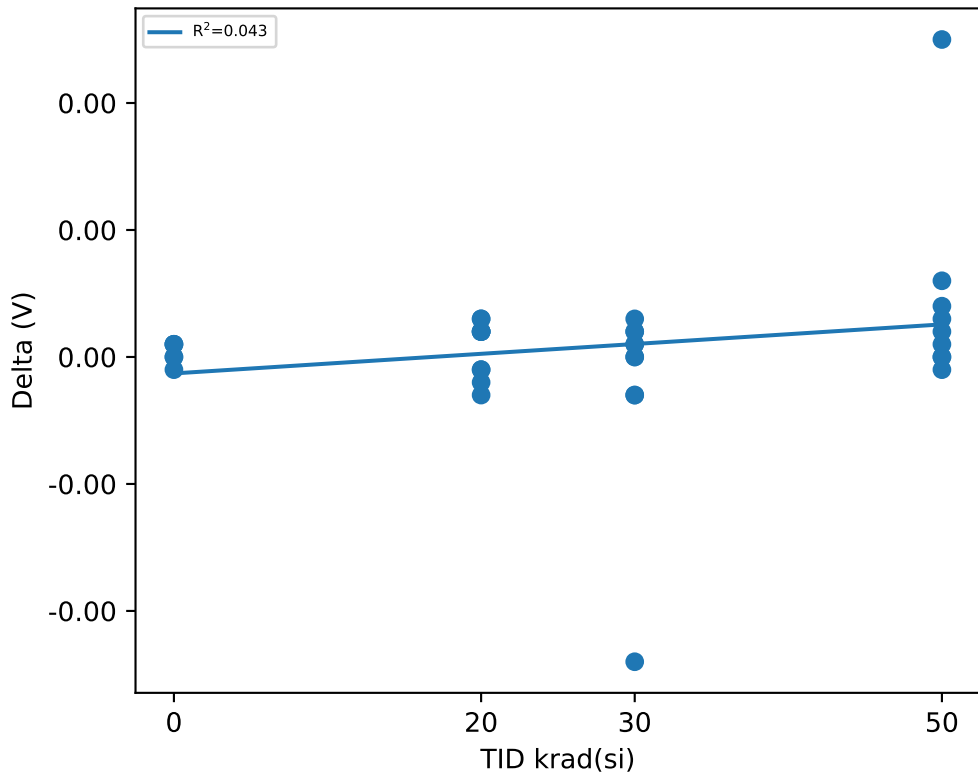
### TID vs Result Stats



### Test Results (Lower Limit = 0.591, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.5952	0.5955	0.0003
2	20	HDR Unbiased	0.5972	0.5971	-0.0001
3	20	HDR Unbiased	0.5971	0.5969	-0.0002
23	20	HDR Unbiased	0.5952	0.5954	0.0002
24	20	HDR Unbiased	0.596	0.5957	-0.0003
25	20	HDR Biased	0.5973	0.5972	-0.0001
26	20	HDR Biased	0.5962	0.5964	0.0002
27	20	HDR Biased	0.5947	0.5949	0.0002
28	20	HDR Biased	0.5968	0.597	0.0002
29	20	HDR Biased	0.596	0.5963	0.0003
30	30	HDR Unbiased	0.5976	0.5952	-0.0024
31	30	HDR Unbiased	0.5959	0.596	0.0001
32	30	HDR Unbiased	0.5954	0.5951	-0.0003
33	30	HDR Unbiased	0.5957	0.5959	0.0002
34	30	HDR Unbiased	0.596	0.5957	-0.0003
35	30	HDR Biased	0.5956	0.5956	0
36	30	HDR Biased	0.5954	0.5955	0.0001
37	30	HDR Biased	0.595	0.595	0
38	30	HDR Biased	0.5954	0.5956	0.0002
39	30	HDR Biased	0.5958	0.5961	0.0003
40	50	HDR Unbiased	0.5946	0.5952	0.0006
41	50	HDR Unbiased	0.5951	0.5976	0.0025
42	50	HDR Unbiased	0.5942	0.5941	-0.0001
43	50	HDR Unbiased	0.596	0.596	0
44	50	HDR Unbiased		0.5949	
50	0	CORRELATION	0.5955	0.5956	0.0001
51	0	CORRELATION	0.5955	0.5956	0.0001
52	0	CORRELATION	0.5954	0.5954	0
53	0	CORRELATION	0.5954	0.5954	0
54	0	CORRELATION	0.5957	0.5956	-0.0001
78	50	HDR Biased	0.5956	0.5957	0.0001
79	50	HDR Biased	0.5955	0.5955	0
80	50	HDR Biased	0.5948	0.595	0.0002
81	50	HDR Biased	0.5963	0.5966	0.0003
82	50	HDR Biased	0.5948	0.5952	0.0004
83	0	CORRELATION	0.5957	0.5958	0.0001

### TID vs Post - Pre Exposure Delta

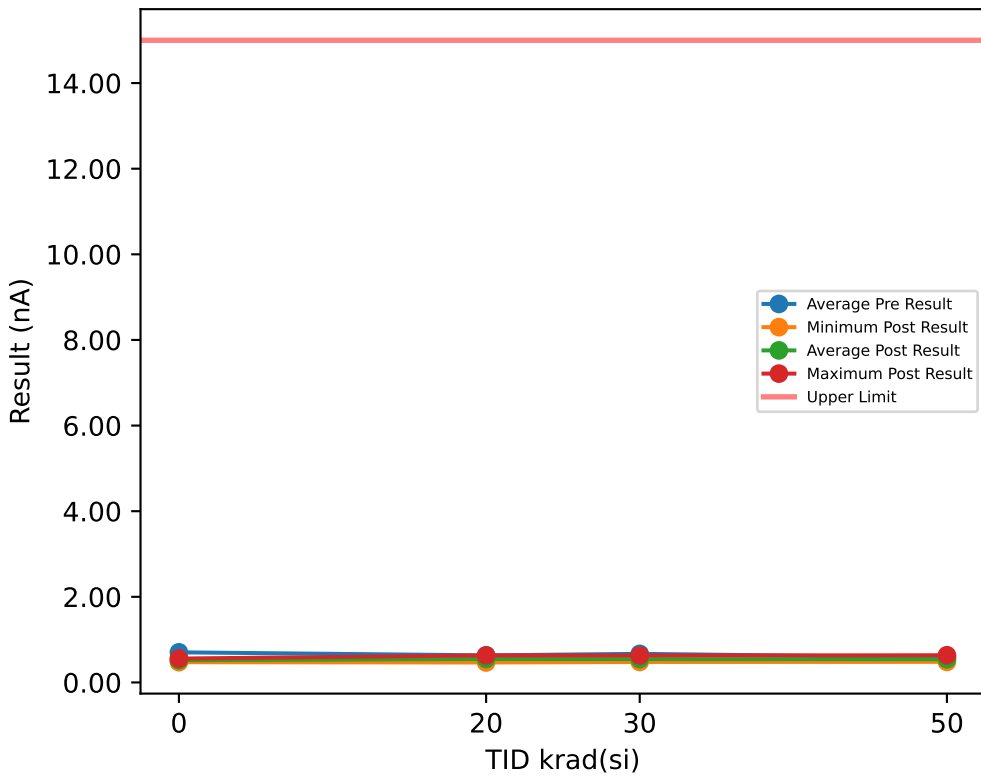


### Test Statistics (V)

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	0.5954	0.59553	0.5957	0.00013663	0.5954	0.59557	0.5958	0.00015055	-0.0001	3.3333e-05	0.0001	8.165e-05
20	0.5947	0.59617	0.5973	0.00092502	0.5949	0.59624	0.5972	0.00081948	-0.0003	7e-05	0.0003	0.00022136
30	0.595	0.59578	0.5976	0.00070364	0.595	0.59557	0.5961	0.00037727	-0.0024	-0.00021	0.0003	0.00079505
50	0.5942	0.59521	0.5963	0.00068819	0.5941	0.59558	0.5976	0.0009773	-0.0001	0.00044444	0.0025	0.00080173

# Device Test: 15.80 LEAK|CURRENT/FB/5/////@I\_FB

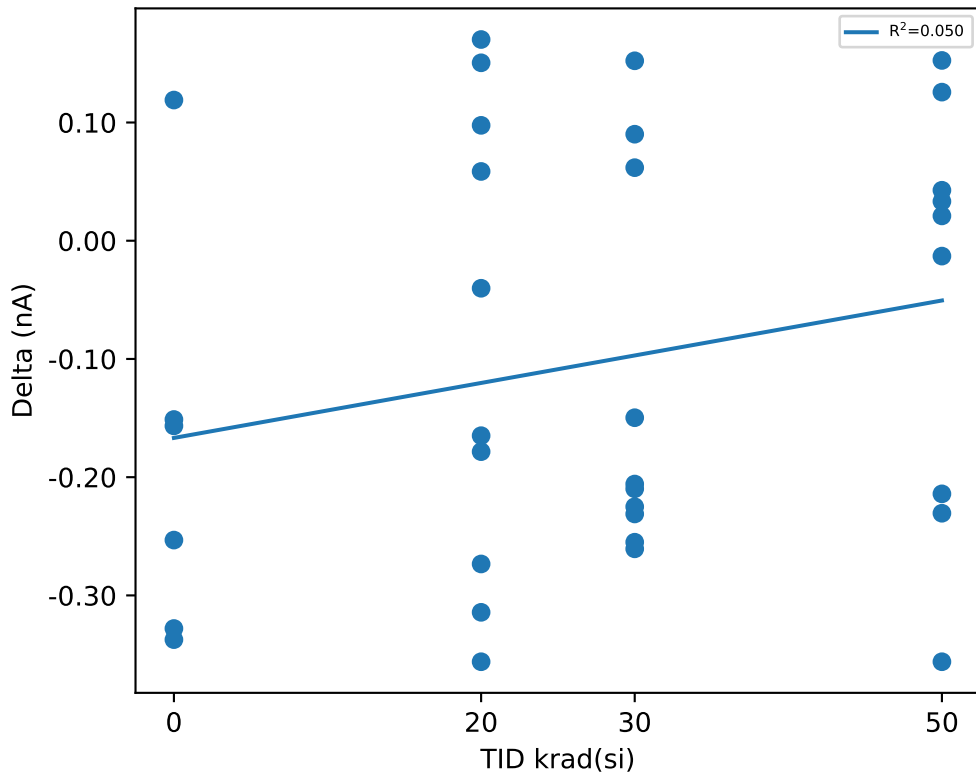
## TID vs Result Stats



## Test Results (Upper Limit = 15.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.6712	0.631	-0.0402
2	20	HDR Unbiased	0.4077	0.4663	0.0586
3	20	HDR Unbiased	0.7784	0.505	-0.2734
23	20	HDR Unbiased	0.4773	0.6278	0.1505
24	20	HDR Unbiased	0.8411	0.485	-0.3561
25	20	HDR Biased	0.7137	0.5353	-0.1784
26	20	HDR Biased	0.4542	0.6244	0.1702
27	20	HDR Biased	0.8002	0.4859	-0.3143
28	20	HDR Biased	0.4149	0.5125	0.0976
29	20	HDR Biased	0.7699	0.605	-0.1649
30	30	HDR Unbiased	0.6759	0.5262	-0.1497
31	30	HDR Unbiased	0.4586	0.5487	0.0901
32	30	HDR Unbiased	0.7849	0.5538	-0.2311
33	30	HDR Unbiased	0.7459	0.4909	-0.255
34	30	HDR Unbiased	0.4582	0.52	0.0618
35	30	HDR Biased	0.8339	0.6281	-0.2058
36	30	HDR Biased	0.7681	0.5431	-0.225
37	30	HDR Biased	0.4249	0.5771	0.1522
38	30	HDR Biased	0.7905	0.5807	-0.2098
39	30	HDR Biased	0.7387	0.4781	-0.2606
40	50	HDR Unbiased	0.3416	0.4941	0.1525
41	50	HDR Unbiased	0.7625	0.532	-0.2305
42	50	HDR Unbiased	0.7206	0.5065	-0.2141
43	50	HDR Unbiased	0.4377	0.4804	0.0427
44	50	HDR Unbiased		0.5801	
50	0	CORRELATION	0.8271	0.4897	-0.3374
51	0	CORRELATION	0.6784	0.5272	-0.1512
52	0	CORRELATION	0.4164	0.5354	0.119
53	0	CORRELATION	0.8008	0.4728	-0.328
54	0	CORRELATION	0.6872	0.5306	-0.1566
78	50	HDR Biased	0.5835	0.5705	-0.013
79	50	HDR Biased	0.4876	0.6133	0.1257
80	50	HDR Biased	0.8551	0.499	-0.3561
81	50	HDR Biased	0.6144	0.6354	0.021
82	50	HDR Biased	0.4735	0.5068	0.0333
83	0	CORRELATION	0.8115	0.5583	-0.2532

## TID vs Post - Pre Exposure Delta

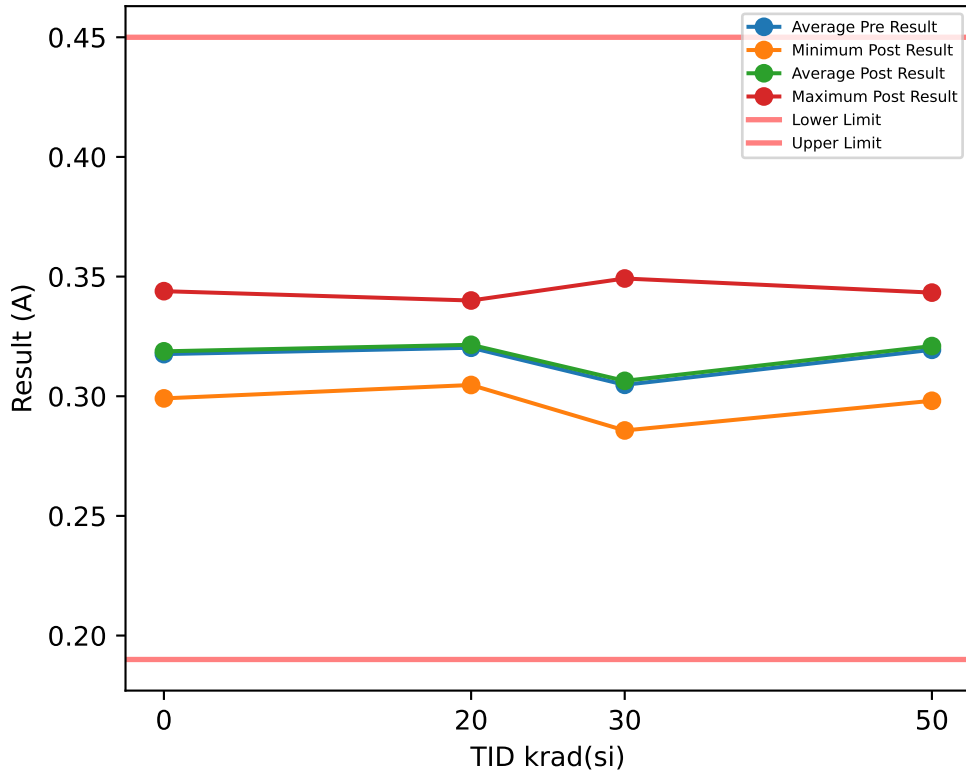


## Test Statistics (nA)

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	0.4164	0.70357	0.8271	0.15475	0.4728	0.519	0.5583	0.031649	-0.3374	-0.18457	0.119	0.16893
20	0.4077	0.63286	0.8411	0.17437	0.4663	0.54782	0.631	0.066761	-0.3561	-0.08504	0.1702	0.19811
30	0.4249	0.66796	0.8339	0.15787	0.4781	0.54467	0.6281	0.044328	-0.2606	-0.12329	0.1522	0.15946
50	0.3416	0.58628	0.8551	0.16829	0.4804	0.54181	0.6354	0.054373	-0.3561	-0.048722	0.1525	0.17572

# Device Test: 16.1 THRESHOLD|CL\_MIN/CL/3.3/////@I\_LIM\_MIN

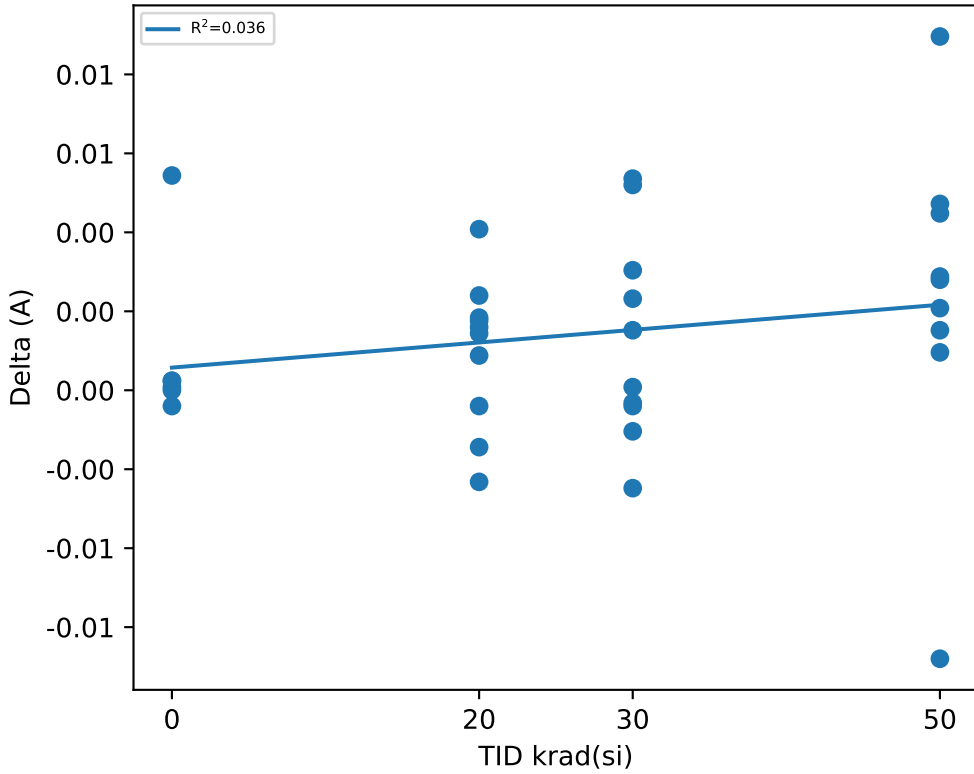
### TID vs Result Stats



### Test Results (Lower Limit = 0.19, Upper Limit = 0.45 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.3239	0.329	0.0051
2	20	HDR Unbiased	0.3388	0.3359	-0.0029
3	20	HDR Unbiased	0.3155	0.3177	0.0022
23	20	HDR Unbiased	0.3052	0.3047	-0.0005
24	20	HDR Unbiased	0.313	0.3112	-0.0018
25	20	HDR Biased	0.3282	0.33	0.0018
26	20	HDR Biased	0.3179	0.3199	0.002
27	20	HDR Biased	0.3047	0.307	0.0023
28	20	HDR Biased	0.3184	0.3195	0.0011
29	20	HDR Biased	0.337	0.34	0.003
30	30	HDR Unbiased	0.3156	0.3143	-0.0013
31	30	HDR Unbiased	0.2858	0.2887	0.0029
32	30	HDR Unbiased	0.3186	0.3253	0.0067
33	30	HDR Unbiased	0.3051	0.302	-0.0031
34	30	HDR Unbiased	0.2996	0.3034	0.0038
35	30	HDR Biased	0.2856	0.2857	0.0001
36	30	HDR Biased	0.3473	0.3492	0.0019
37	30	HDR Biased	0.3003	0.2999	-0.0004
38	30	HDR Biased	0.3015	0.308	0.0065
39	30	HDR Biased	0.2883	0.2878	-0.0005
40	50	HDR Unbiased	0.3066	0.2981	-0.0085
41	50	HDR Unbiased	0.3073	0.3185	0.0112
42	50	HDR Unbiased	0.3152	0.3164	0.0012
43	50	HDR Unbiased	0.3033	0.3092	0.0059
44	50	HDR Unbiased		0.308	
50	0	CORRELATION	0.3439	0.3439	0
51	0	CORRELATION	0.3069	0.3072	0.0003
52	0	CORRELATION	0.3043	0.3046	0.0003
53	0	CORRELATION	0.299	0.2991	0.0001
54	0	CORRELATION	0.3201	0.3269	0.0068
78	50	HDR Biased	0.3398	0.3433	0.0035
79	50	HDR Biased	0.3101	0.3157	0.0056
80	50	HDR Biased	0.3271	0.3297	0.0026
81	50	HDR Biased	0.3278	0.3314	0.0036
82	50	HDR Biased	0.3374	0.3393	0.0019
83	0	CORRELATION	0.3314	0.3309	-0.0005

### TID vs Post - Pre Exposure Delta

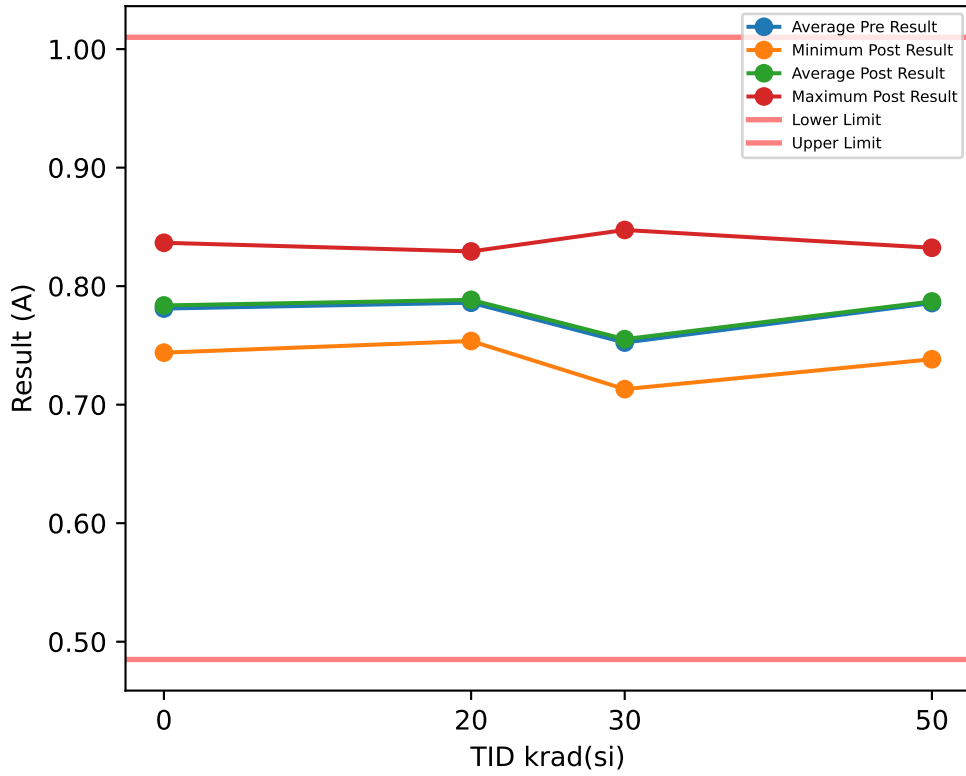


### Test Statistics (A)

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	0.299	0.3176	0.3439	0.017468	0.2991	0.31877	0.3439	0.017699	-0.0005	0.0011667	0.0068	0.0027754
20	0.3047	0.32026	0.3388	0.011802	0.3047	0.32149	0.34	0.012008	-0.0029	0.00123	0.0051	0.0023655
30	0.2856	0.30477	0.3473	0.018778	0.2857	0.30643	0.3492	0.019472	-0.0031	0.00166	0.0067	0.0032959
50	0.3033	0.3194	0.3398	0.013891	0.2981	0.32096	0.3433	0.014546	-0.0085	0.003	0.0112	0.0052426

# Device Test: 16.2 THRESHOLD|CL\_SMALL/CL/3.3/////@I\_LIM\_SMALL

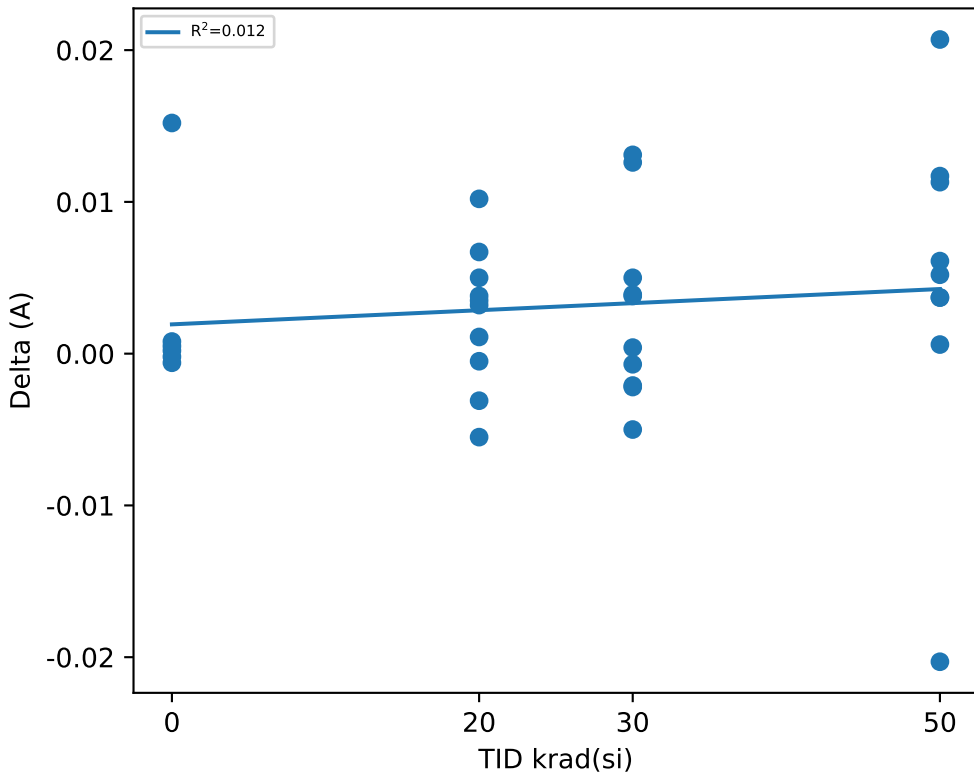
### TID vs Result Stats



### Test Results (Lower Limit = 0.485, Upper Limit = 1.01 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.7952	0.8054	0.0102
2	20	HDR Unbiased	0.824	0.8185	-0.0055
3	20	HDR Unbiased	0.779	0.7828	0.0038
23	20	HDR Unbiased	0.7542	0.7537	-0.0005
24	20	HDR Unbiased	0.7677	0.7646	-0.0031
25	20	HDR Biased	0.8031	0.8066	0.0035
26	20	HDR Biased	0.783	0.7862	0.0032
27	20	HDR Biased	0.7495	0.7545	0.005
28	20	HDR Biased	0.7818	0.7829	0.0011
29	20	HDR Biased	0.8226	0.8293	0.0067
30	30	HDR Unbiased	0.7747	0.7726	-0.0021
31	30	HDR Unbiased	0.7092	0.7131	0.0039
32	30	HDR Unbiased	0.7811	0.7942	0.0131
33	30	HDR Unbiased	0.7509	0.7459	-0.005
34	30	HDR Unbiased	0.7416	0.7466	0.005
35	30	HDR Biased	0.7142	0.7146	0.0004
36	30	HDR Biased	0.8436	0.8474	0.0038
37	30	HDR Biased	0.7428	0.7421	-0.0007
38	30	HDR Biased	0.7453	0.7579	0.0126
39	30	HDR Biased	0.7206	0.7184	-0.0022
40	50	HDR Unbiased	0.7586	0.7383	-0.0203
41	50	HDR Unbiased	0.7582	0.7789	0.0207
42	50	HDR Unbiased	0.778	0.7786	0.0006
43	50	HDR Unbiased	0.7501	0.7614	0.0113
44	50	HDR Unbiased		0.7568	
50	0	CORRELATION	0.8368	0.8366	-0.0002
51	0	CORRELATION	0.7569	0.7574	0.0005
52	0	CORRELATION	0.7536	0.7544	0.0008
53	0	CORRELATION	0.7437	0.7439	0.0002
54	0	CORRELATION	0.7859	0.8011	0.0152
78	50	HDR Biased	0.8272	0.8324	0.0052
79	50	HDR Biased	0.7696	0.7813	0.0117
80	50	HDR Biased	0.8038	0.8075	0.0037
81	50	HDR Biased	0.8064	0.8125	0.0061
82	50	HDR Biased	0.8196	0.8233	0.0037
83	0	CORRELATION	0.8096	0.809	-0.0006

### TID vs Post - Pre Exposure Delta

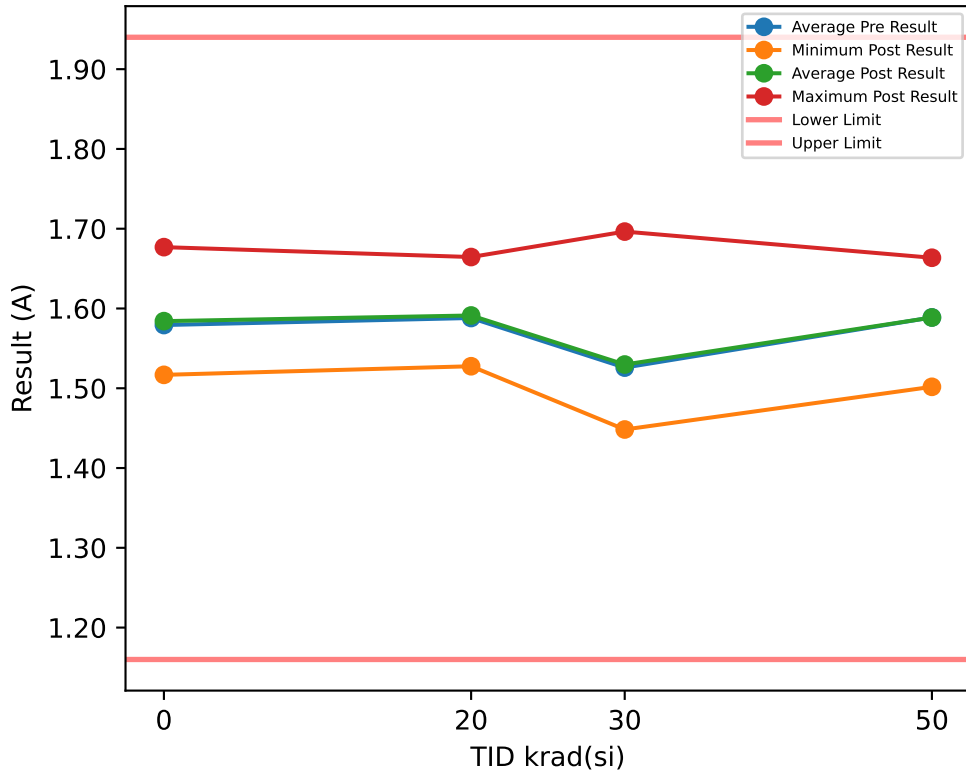


### Test Statistics (A)

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	0.7437	0.78108	0.8368	0.036547	0.7439	0.78373	0.8366	0.037082	-0.0006	0.00265	0.0152	0.0061682
20	0.7495	0.78601	0.824	0.025636	0.7537	0.78845	0.8293	0.026215	-0.0055	0.00244	0.0102	0.0046265
30	0.7092	0.7524	0.8436	0.039772	0.7131	0.75528	0.8474	0.041418	-0.005	0.00288	0.0131	0.006119
50	0.7501	0.78572	0.8272	0.028948	0.7383	0.7871	0.8324	0.030835	-0.0203	0.0047444	0.0207	0.01115

# Device Test: 16.3 THRESHOLD|CL\_LARGE/CL/3.3/////@I\_LIM\_LARGE

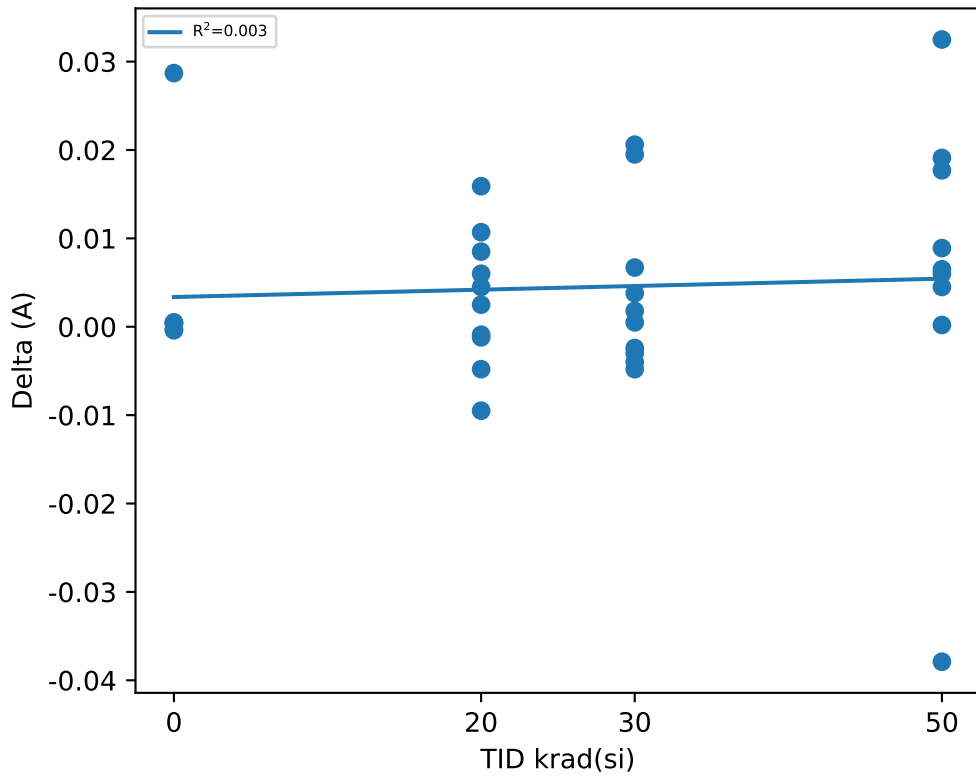
### TID vs Result Stats



### Test Results (Lower Limit = 1.16, Upper Limit = 1.94 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	1.6058	1.6217	0.0159
2	20	HDR Unbiased	1.6546	1.6451	-0.0095
3	20	HDR Unbiased	1.5799	1.5844	0.0045
23	20	HDR Unbiased	1.5318	1.5306	-0.0012
24	20	HDR Unbiased	1.5505	1.5457	-0.0048
25	20	HDR Biased	1.6162	1.6222	0.006
26	20	HDR Biased	1.5871	1.5896	0.0025
27	20	HDR Biased	1.5191	1.5276	0.0085
28	20	HDR Biased	1.5819	1.581	-0.0009
29	20	HDR Biased	1.6538	1.6645	0.0107
30	30	HDR Unbiased	1.5649	1.5619	-0.003
31	30	HDR Unbiased	1.4445	1.4483	0.0038
32	30	HDR Unbiased	1.5757	1.5963	0.0206
33	30	HDR Unbiased	1.5175	1.5135	-0.004
34	30	HDR Unbiased	1.5075	1.5093	0.0018
35	30	HDR Biased	1.4609	1.4614	0.0005
36	30	HDR Biased	1.6897	1.6964	0.0067
37	30	HDR Biased	1.5099	1.5075	-0.0024
38	30	HDR Biased	1.513	1.5325	0.0195
39	30	HDR Biased	1.4753	1.4705	-0.0048
40	50	HDR Unbiased	1.5397	1.5018	-0.0379
41	50	HDR Unbiased	1.5376	1.5701	0.0325
42	50	HDR Unbiased	1.576	1.5762	0.0002
43	50	HDR Unbiased	1.5249	1.5426	0.0177
44	50	HDR Unbiased		1.5302	
50	0	CORRELATION	1.6772	1.6769	-0.0003
51	0	CORRELATION	1.5338	1.5343	0.0005
52	0	CORRELATION	1.5313	1.5317	0.0004
53	0	CORRELATION	1.5164	1.5168	0.0004
54	0	CORRELATION	1.5874	1.6161	0.0287
78	50	HDR Biased	1.6571	1.6636	0.0065
79	50	HDR Biased	1.5658	1.5849	0.0191
80	50	HDR Biased	1.625	1.6295	0.0045
81	50	HDR Biased	1.6294	1.6383	0.0089
82	50	HDR Biased	1.6436	1.6496	0.006
83	0	CORRELATION	1.6294	1.629	-0.0004

### TID vs Post - Pre Exposure Delta



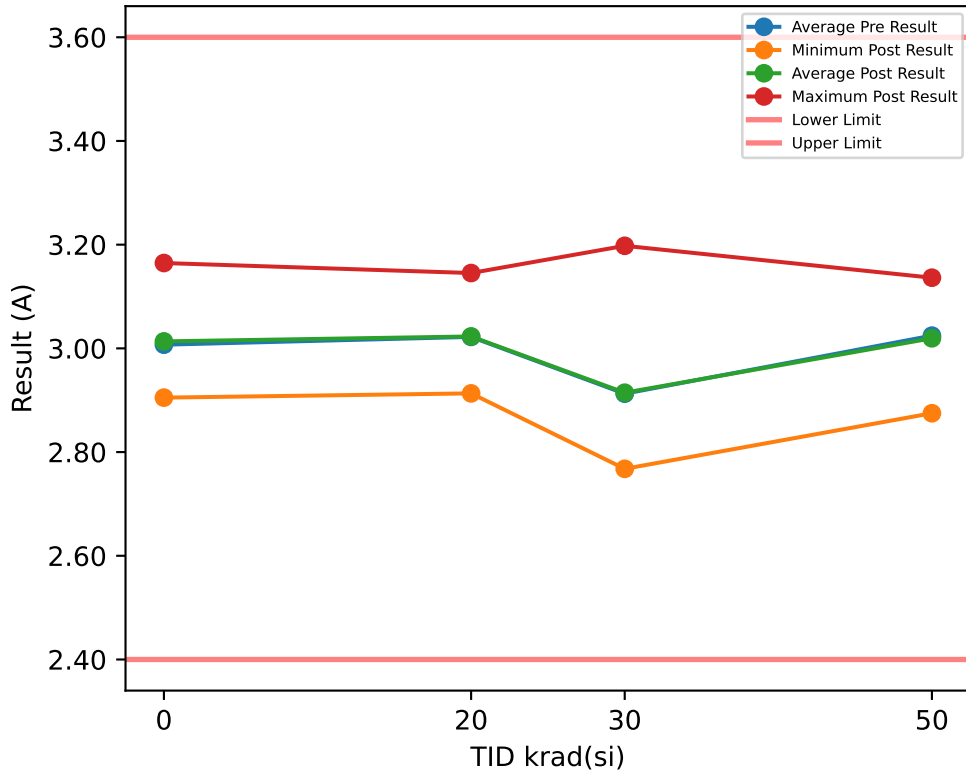
### Test Statistics (A)

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	1.5164	1.5793	1.6772	0.064017	1.5168	1.5841	1.6769	0.065432	-0.0004	0.0048833	0.0287	0.011674
20	1.5191	1.5881	1.6546	0.046299	1.5276	1.5912	1.6645	0.04727	-0.0095	0.00317	0.0159	0.00758
30	1.4445	1.5259	1.6897	0.070769	1.4483	1.5298	1.6964	0.073964	-0.0048	0.00387	0.0206	0.0092584
50	1.5249	1.5888	1.6571	0.050541	1.5018	1.5887	1.6636	0.054832	-0.0379	0.0063889	0.0325	0.019304



# Device Test: 16.4 THRESHOLD|CL\_MAX/CL/3.3/////@I\_LIM\_MAX

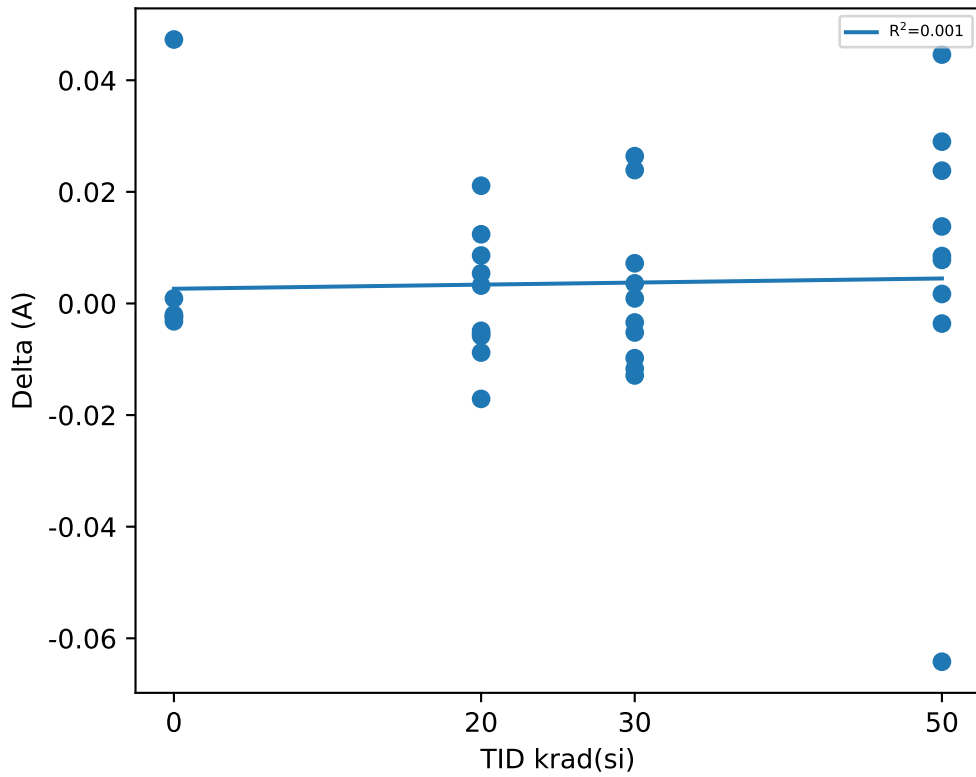
### TID vs Result Stats



### Test Results (Lower Limit = 2.4, Upper Limit = 3.6 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	3.0534	3.0745	0.0211
2	20	HDR Unbiased	3.1312	3.1141	-0.0171
3	20	HDR Unbiased	3.0145	3.0177	0.0032
23	20	HDR Unbiased	2.9271	2.9217	-0.0054
24	20	HDR Unbiased	2.9491	2.9403	-0.0088
25	20	HDR Biased	3.0648	3.0702	0.0054
26	20	HDR Biased	3.0299	3.025	-0.0049
27	20	HDR Biased	2.9046	2.9132	0.0086
28	20	HDR Biased	3.0137	3.0079	-0.0058
29	20	HDR Biased	3.1329	3.1453	0.0124
30	30	HDR Unbiased	2.9788	2.969	-0.0098
31	30	HDR Unbiased	2.7668	2.7677	0.0009
32	30	HDR Unbiased	2.9952	3.0216	0.0264
33	30	HDR Unbiased	2.8863	2.8899	0.0036
34	30	HDR Unbiased	2.8826	2.8697	-0.0129
35	30	HDR Biased	2.8093	2.8059	-0.0034
36	30	HDR Biased	3.1906	3.1978	0.0072
37	30	HDR Biased	2.8868	2.8816	-0.0052
38	30	HDR Biased	2.8902	2.9141	0.0239
39	30	HDR Biased	2.8394	2.8277	-0.0117
40	50	HDR Unbiased	2.9391	2.8749	-0.0642
41	50	HDR Unbiased	2.9361	2.9807	0.0446
42	50	HDR Unbiased	3.0053	3.0017	-0.0036
43	50	HDR Unbiased	2.9197	2.9435	0.0238
44	50	HDR Unbiased		2.9121	
50	0	CORRELATION	3.1678	3.1646	-0.0032
51	0	CORRELATION	2.9263	2.9243	-0.002
52	0	CORRELATION	2.9252	2.9227	-0.0025
53	0	CORRELATION	2.9073	2.905	-0.0023
54	0	CORRELATION	3.0224	3.0697	0.0473
78	50	HDR Biased	3.1285	3.1363	0.0078
79	50	HDR Biased	2.9939	3.0229	0.029
80	50	HDR Biased	3.0931	3.0948	0.0017
81	50	HDR Biased	3.0976	3.1114	0.0138
82	50	HDR Biased	3.1076	3.1161	0.0085
83	0	CORRELATION	3.0936	3.0945	0.0009

### TID vs Post - Pre Exposure Delta

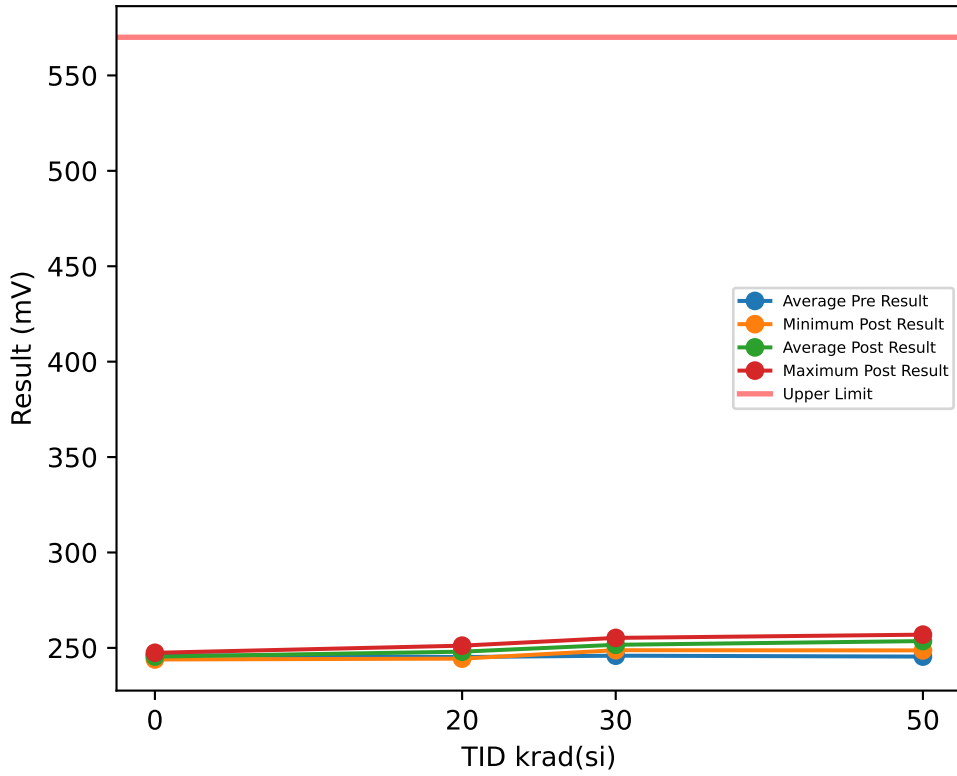


### Test Statistics (A)

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	2.9073	3.0071	3.1678	0.10652	2.905	3.0135	3.1646	0.11002	-0.0032	0.0063667	0.0473	0.020103
20	2.9046	3.0221	3.1329	0.078409	2.9132	3.023	3.1453	0.079968	-0.0171	0.00087	0.0211	0.01136
30	2.7668	2.9126	3.1906	0.11951	2.7677	2.9145	3.1978	0.1244	-0.0129	0.0019	0.0264	0.013887
50	2.9197	3.0245	3.1285	0.083041	2.8749	3.0194	3.1363	0.092582	-0.0642	0.0068222	0.0446	0.030493

# Device Test: 17.12 VIN|DROPOUT/OUT//2.25//1000//@VDO\_1A\_LV

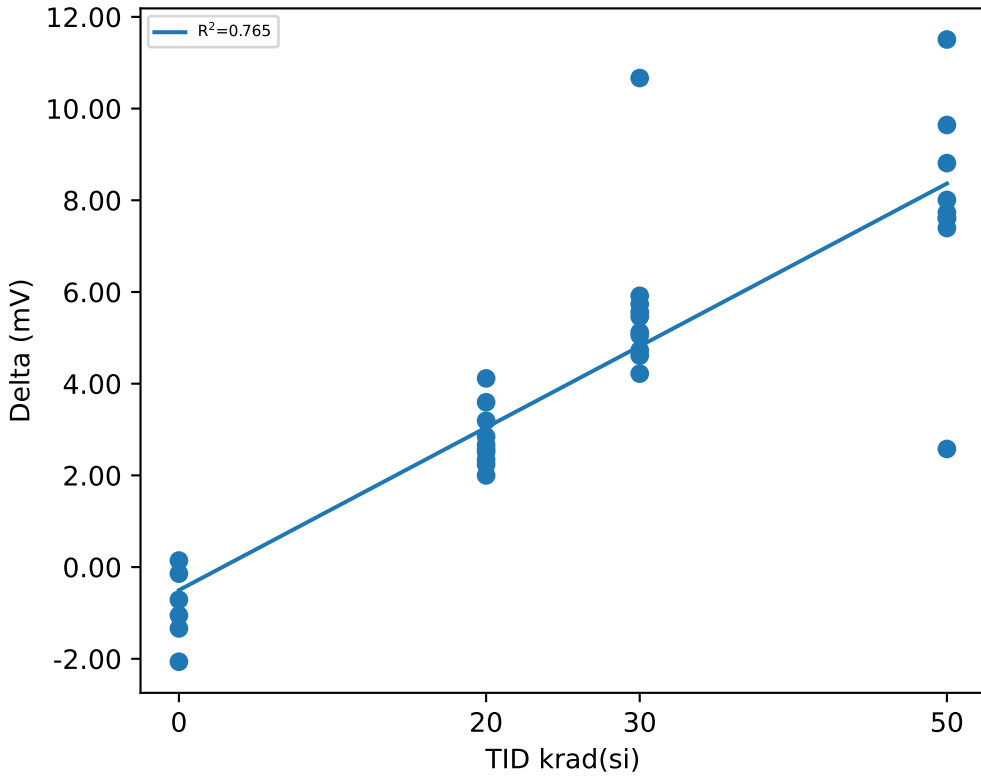
## TID vs Result Stats



## Test Results (Upper Limit = 570.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	246.27	250.38	4.1153
2	20	HDR Unbiased	245.43	247.43	1.9994
3	20	HDR Unbiased	245.61	248.27	2.6683
23	20	HDR Unbiased	245.77	249.36	3.5956
24	20	HDR Unbiased	243.9	246.41	2.5105
25	20	HDR Biased	242.03	244.37	2.3425
26	20	HDR Biased	246.11	248.34	2.2376
27	20	HDR Biased	247.98	251.17	3.1919
28	20	HDR Biased	243.56	246.41	2.8455
29	20	HDR Biased	245.43	248	2.5716
30	30	HDR Unbiased	244.57	255.24	10.666
31	30	HDR Unbiased	243.22	248.78	5.5649
32	30	HDR Unbiased	247.47	252.93	5.4603
33	30	HDR Unbiased	245.76	251.67	5.9164
34	30	HDR Unbiased	245.94	250.99	5.0562
35	30	HDR Biased	247.81	252.42	4.6115
36	30	HDR Biased	244.57	249.3	4.7309
37	30	HDR Biased	246.61	252.35	5.7366
38	30	HDR Biased	248.15	253.27	5.1219
39	30	HDR Biased	245.08	249.3	4.219
40	50	HDR Unbiased	247.29	256.93	9.6421
41	50	HDR Unbiased	246.11	248.69	2.5766
42	50	HDR Unbiased	245.75	254.56	8.8108
43	50	HDR Unbiased	244.75	256.25	11.506
44	50	HDR Unbiased		255.82	
50	0	CORRELATION	246.28	245.23	-1.0524
51	0	CORRELATION	247.28	247.43	0.1428
52	0	CORRELATION	245.09	244.94	-0.1428
53	0	CORRELATION	246.11	245.4	-0.7121
54	0	CORRELATION	247.62	245.56	-2.0642
78	50	HDR Biased	246.1	253.71	7.6142
79	50	HDR Biased	244.75	252.35	7.6053
80	50	HDR Biased	245.09	252.82	7.7309
81	50	HDR Biased	244.91	252.92	8.0076
82	50	HDR Biased	244.24	251.63	7.3945
83	0	CORRELATION	245.26	243.92	-1.3378

## TID vs Post - Pre Exposure Delta

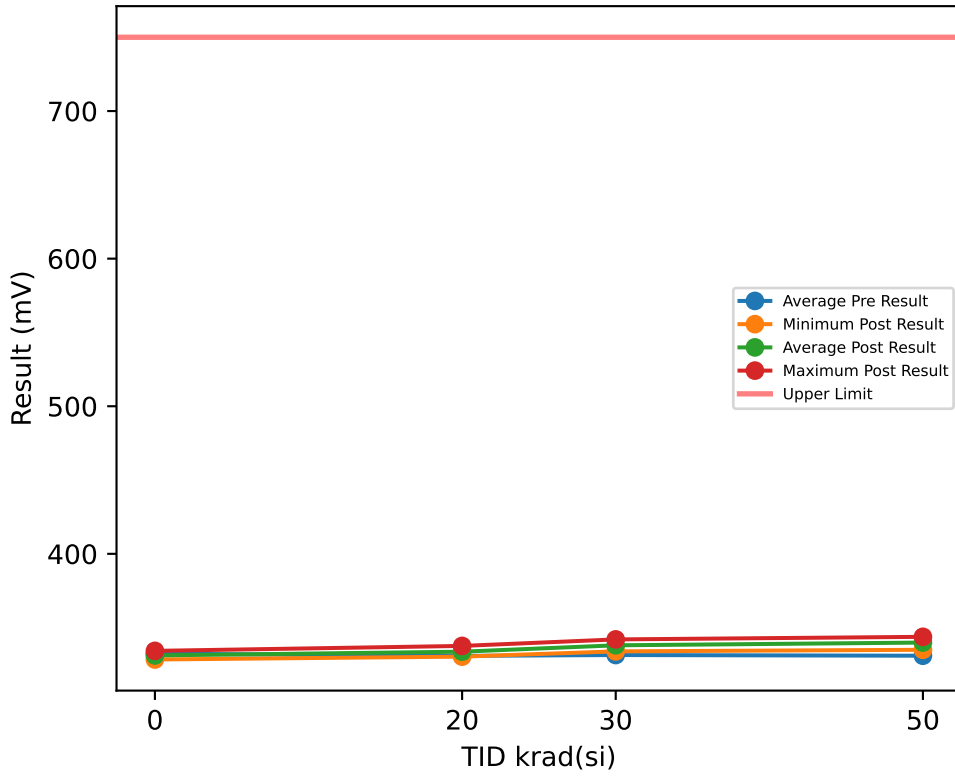


## Test Statistics (mV)

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	245.09	246.27	247.62	1.0299	243.92	245.41	247.43	1.1445	-2.0642	-0.86108	0.1428	0.80713
20	242.03	245.21	247.98	1.6564	244.37	248.01	251.17	2.0088	1.9994	2.8078	4.1153	0.65302
30	243.22	245.92	248.15	1.6012	248.78	251.63	255.24	2.0526	4.219	5.7083	10.666	1.8211
50	244.24	245.44	247.29	0.94988	248.69	253.57	256.93	2.4644	2.5766	7.8765	11.506	2.3892

# Device Test: 17.15 VIN|DROPOUT/OUT//2.5//1500//@VDO\_1P5A\_LV

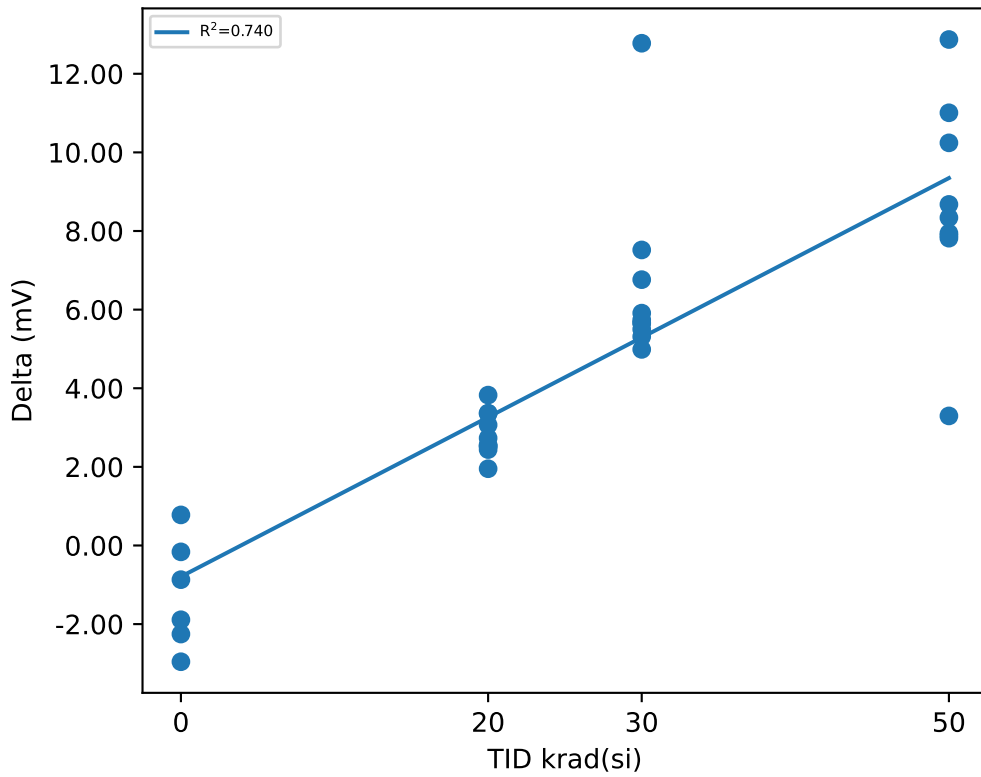
## TID vs Result Stats



## Test Results (Upper Limit = 750.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	332.12	335.49	3.3653
2	20	HDR Unbiased	330.72	332.68	1.9527
3	20	HDR Unbiased	331.18	333.91	2.7318
23	20	HDR Unbiased	331.4	334.47	3.0668
24	20	HDR Unbiased	329.48	332	2.5236
25	20	HDR Biased	326.52	330.35	3.8256
26	20	HDR Biased	331.91	334.47	2.5582
27	20	HDR Biased	335.08	337.61	2.5246
28	20	HDR Biased	329.19	332.56	3.361
29	20	HDR Biased	331.01	333.45	2.44
30	30	HDR Unbiased	329.24	342.02	12.777
31	30	HDR Unbiased	328.18	333.92	5.7406
32	30	HDR Unbiased	333.22	338.2	4.9882
33	30	HDR Unbiased	330.76	338.28	7.5183
34	30	HDR Unbiased	331.23	337.14	5.9111
35	30	HDR Biased	333.38	339.05	5.6695
36	30	HDR Biased	330.59	335.91	5.3139
37	30	HDR Biased	332.25	339.01	6.7625
38	30	HDR Biased	335.08	340.58	5.4996
39	30	HDR Biased	330.42	336.07	5.6495
40	50	HDR Unbiased	332.76	343.76	11.007
41	50	HDR Unbiased	331.69	334.98	3.2959
42	50	HDR Unbiased	331.44	341.68	10.242
43	50	HDR Unbiased	329.53	342.41	12.872
44	50	HDR Unbiased		341.94	
50	0	CORRELATION	332.37	330.48	-1.8892
51	0	CORRELATION	333.48	334.26	0.7777
52	0	CORRELATION	330.89	330.73	-0.1622
53	0	CORRELATION	332.37	331.5	-0.8693
54	0	CORRELATION	334.5	331.54	-2.9573
78	50	HDR Biased	332.29	340.24	7.9441
79	50	HDR Biased	330.21	338.03	7.8175
80	50	HDR Biased	330.67	338.55	7.8834
81	50	HDR Biased	330.93	339.28	8.3403
82	50	HDR Biased	329.19	337.87	8.6766
83	0	CORRELATION	330.67	328.42	-2.2531

## TID vs Post - Pre Exposure Delta

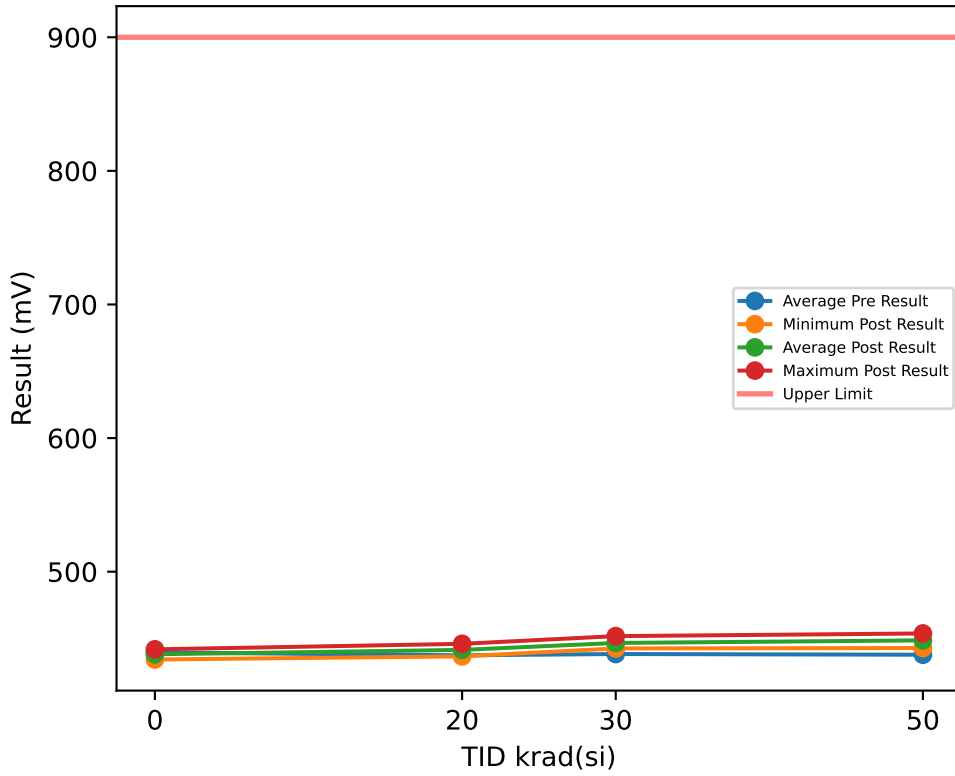


## Test Statistics (mV)

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	330.67	332.38	334.5	1.4722	328.42	331.15	334.26	1.8989	-2.9573	-1.2256	0.7777	1.3976
20	326.52	330.86	335.08	2.2216	330.35	333.7	337.61	2.0051	1.9527	2.835	3.8256	0.55857
30	328.18	331.44	335.08	2.0712	333.92	338.02	342.02	2.37	4.9882	6.583	12.777	2.2964
50	329.19	330.97	332.76	1.2021	334.98	339.87	343.76	2.6389	3.2959	8.6755	12.872	2.6564

# Device Test: 17.18 VIN|DROPOUT/OUT//2.5//2000//@VDO\_2A\_LV

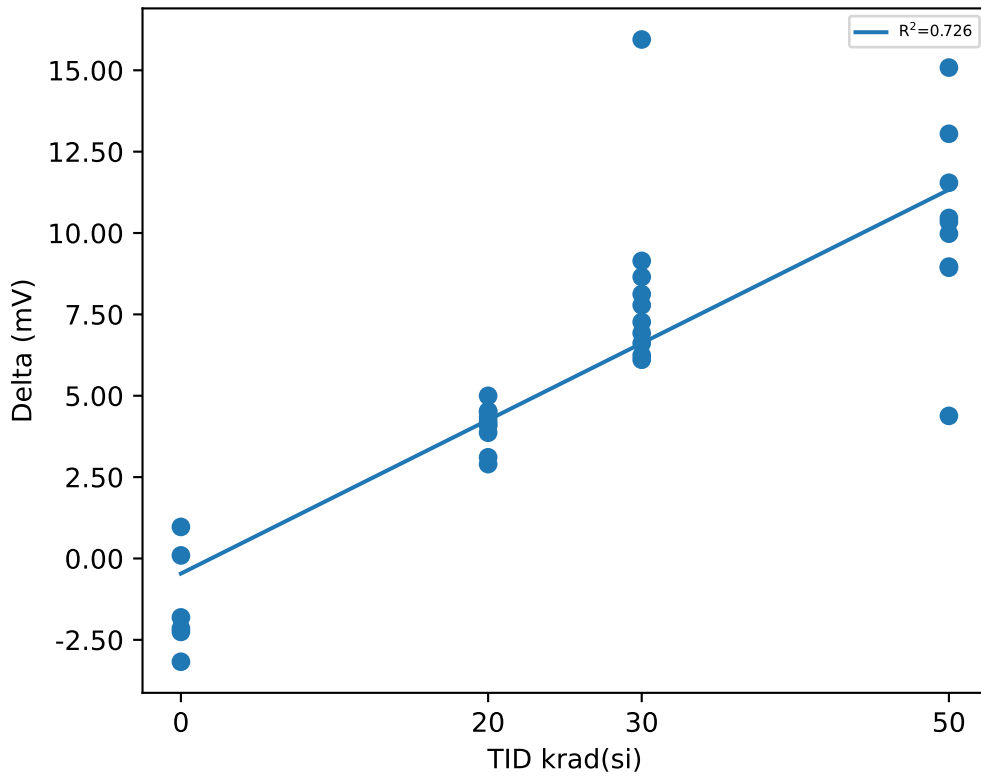
## TID vs Result Stats



## Test Results (Upper Limit = 900.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	439.05	444.05	4.9973
2	20	HDR Unbiased	436.99	439.89	2.8997
3	20	HDR Unbiased	437.81	441.89	4.0748
23	20	HDR Unbiased	438.18	442.69	4.512
24	20	HDR Unbiased	435.77	438.88	3.1087
25	20	HDR Biased	432.1	436.62	4.5252
26	20	HDR Biased	438.52	442.86	4.3428
27	20	HDR Biased	441.88	446.01	4.1297
28	20	HDR Biased	436.31	440.53	4.2148
29	20	HDR Biased	437.47	441.33	3.8638
30	30	HDR Unbiased	435.83	451.78	15.946
31	30	HDR Unbiased	434.45	442.57	8.1225
32	30	HDR Unbiased	440.86	447.11	6.2437
33	30	HDR Unbiased	437.87	446.52	8.6503
34	30	HDR Unbiased	437.84	445.62	7.783
35	30	HDR Biased	440.86	447.79	6.9248
36	30	HDR Biased	437.19	443.29	6.1069
37	30	HDR Biased	439.2	448.34	9.1431
38	30	HDR Biased	442.9	450.17	7.2659
39	30	HDR Biased	436.85	443.46	6.6135
40	50	HDR Unbiased	440.73	453.77	13.049
41	50	HDR Unbiased	438.49	442.87	4.381
42	50	HDR Unbiased	438.54	450.09	11.544
43	50	HDR Unbiased	436.82	451.91	15.083
44	50	HDR Unbiased		452.54	
50	0	CORRELATION	439.51	437.36	-2.1494
51	0	CORRELATION	440.92	441.89	0.9694
52	0	CORRELATION	438.35	438.44	0.0937
53	0	CORRELATION	439.68	437.86	-1.811
54	0	CORRELATION	441.6	439.34	-2.2564
78	50	HDR Biased	438.71	449.18	10.463
79	50	HDR Biased	436.14	446.12	9.98
80	50	HDR Biased	437.64	446.6	8.9681
81	50	HDR Biased	437.36	447.7	10.342
82	50	HDR Biased	436.31	445.25	8.9342
83	0	CORRELATION	437.47	434.3	-3.1726

## TID vs Post - Pre Exposure Delta

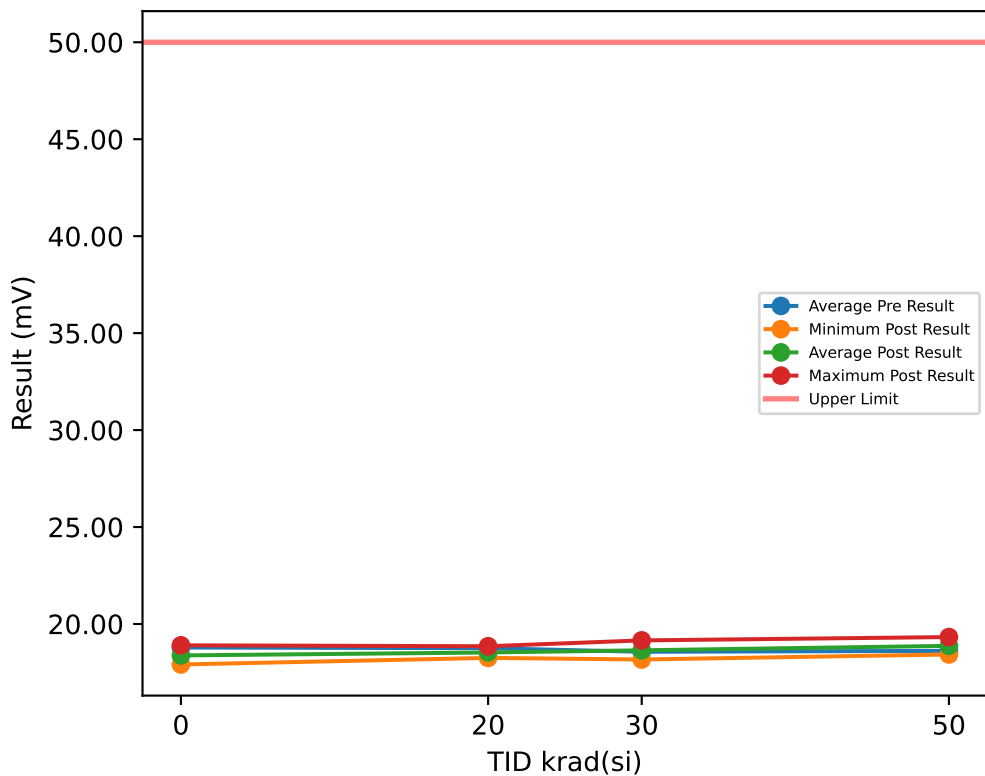


## Test Statistics (mV)

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	437.47	439.59	441.6	1.5401	434.3	438.2	441.89	2.4916	-3.1726	-1.3877	0.9694	1.578
20	432.1	437.41	441.88	2.5154	436.62	441.48	446.01	2.6762	2.8997	4.0669	4.9973	0.64097
30	434.45	438.38	442.9	2.5768	442.57	446.66	451.78	3.0225	6.1069	8.28	15.946	2.8758
50	436.14	437.86	440.73	1.4369	442.87	448.6	453.77	3.5094	4.381	10.305	15.083	2.9747

# Device Test: 17.21 VIN|DROPOUT/OUT//3//100//@VDO\_100MA

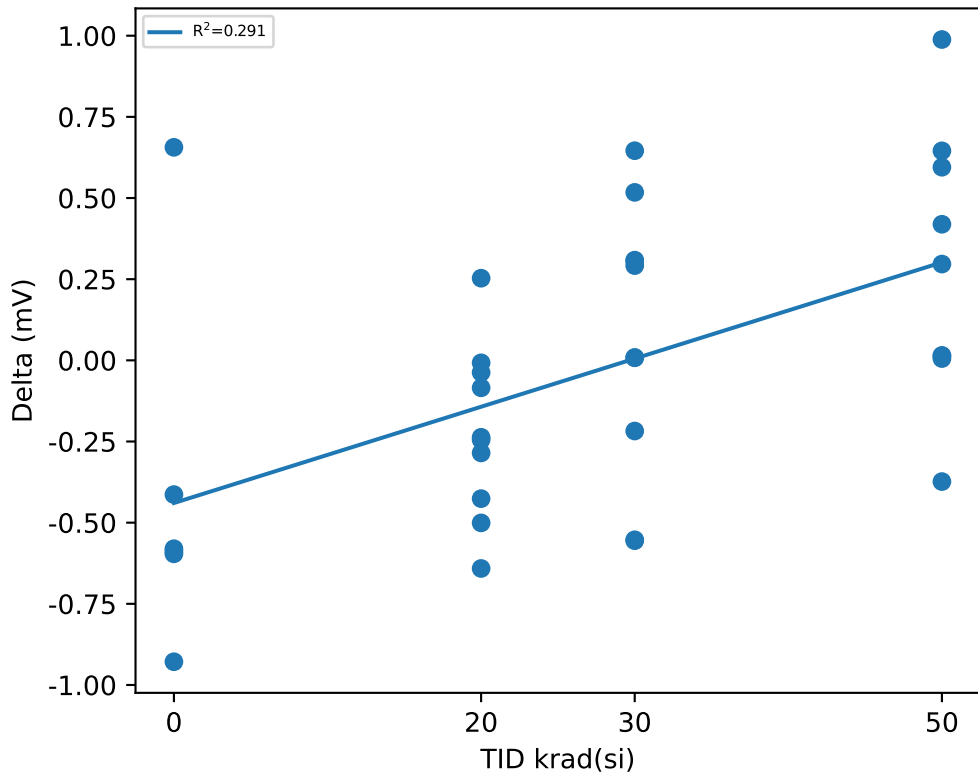
## TID vs Result Stats



## Test Results (Upper Limit = 50.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	18.893	18.252	-0.6411
2	20	HDR Unbiased	18.511	18.503	-0.0076
3	20	HDR Unbiased	18.758	18.473	-0.2852
23	20	HDR Unbiased	18.168	18.421	0.253
24	20	HDR Unbiased	18.924	18.679	-0.2448
25	20	HDR Biased	18.899	18.473	-0.426
26	20	HDR Biased	18.679	18.594	-0.0846
27	20	HDR Biased	19.09	18.852	-0.237
28	20	HDR Biased	18.51	18.473	-0.0374
29	20	HDR Biased	19.094	18.593	-0.5007
30	30	HDR Unbiased	18.56	18.852	0.2918
31	30	HDR Unbiased	18.169	18.475	0.3059
32	30	HDR Unbiased	18.583	19.1	0.5174
33	30	HDR Unbiased	18.724	18.169	-0.5555
34	30	HDR Unbiased	18.509	19.154	0.6458
35	30	HDR Biased	18.584	18.591	0.0079
36	30	HDR Biased	18.893	18.341	-0.5527
37	30	HDR Biased	18.508	18.816	0.3087
38	30	HDR Biased	18.583	18.592	0.0088
39	30	HDR Biased	18.555	18.338	-0.2177
40	50	HDR Unbiased	18.337	19.325	0.9883
41	50	HDR Unbiased	18.412	18.428	0.0152
42	50	HDR Unbiased	19.23	18.856	-0.3734
43	50	HDR Unbiased	18.169	18.815	0.6454
44	50	HDR Unbiased		18.59	
50	0	CORRELATION	18.753	18.34	-0.4135
51	0	CORRELATION	19.233	18.645	-0.5885
52	0	CORRELATION	18.508	17.912	-0.596
53	0	CORRELATION	18.752	18.172	-0.5803
54	0	CORRELATION	19.234	18.305	-0.9284
78	50	HDR Biased	18.555	18.974	0.4192
79	50	HDR Biased	18.508	18.805	0.2966
80	50	HDR Biased	18.751	18.765	0.0136
81	50	HDR Biased	18.895	18.901	0.0055
82	50	HDR Biased	18.677	19.271	0.5949
83	0	CORRELATION	18.245	18.901	0.6562

## TID vs Post - Pre Exposure Delta

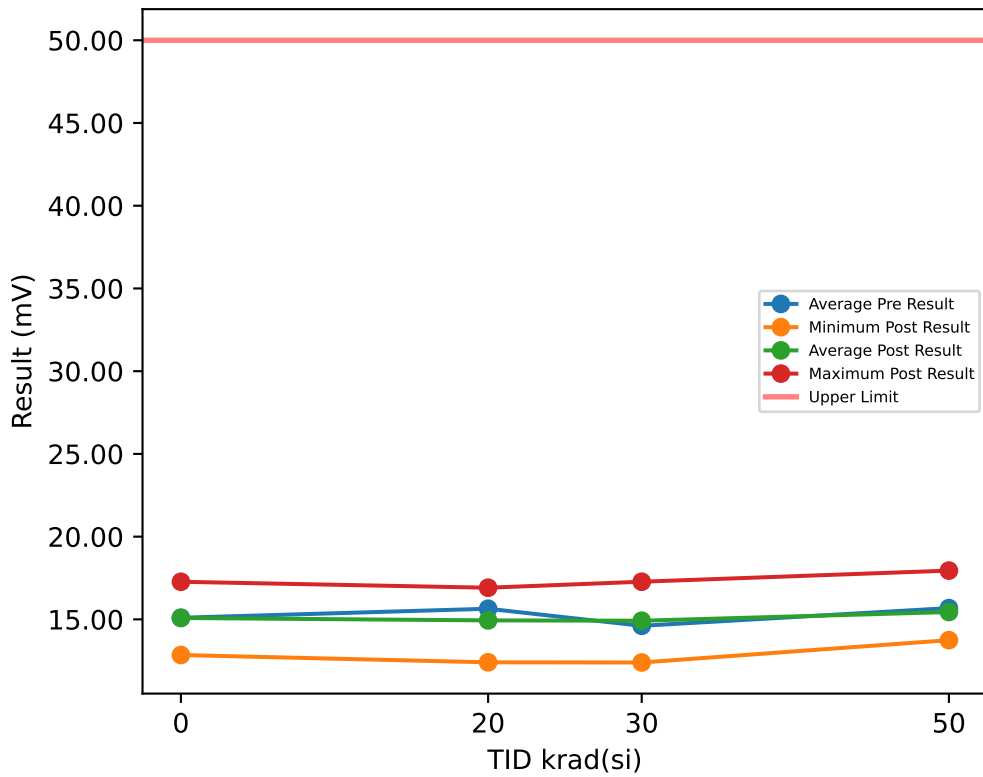


## Test Statistics (mV)

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	18.245	18.788	19.234	0.39333	17.912	18.379	18.901	0.34966	-0.9284	-0.40842	0.6562	0.5479
20	18.168	18.753	19.094	0.29153	18.252	18.531	18.852	0.1613	-0.6411	-0.22114	0.253	0.26336
30	18.169	18.567	18.893	0.18189	18.169	18.643	19.154	0.33113	-0.5555	0.07604	0.6458	0.41667
50	18.169	18.615	19.23	0.31837	18.428	18.873	19.325	0.27349	-0.3734	0.28948	0.9883	0.41782

# Device Test: 17.24 VIN|DROPOUT/OUT//13.3//100//@VDO\_100MA

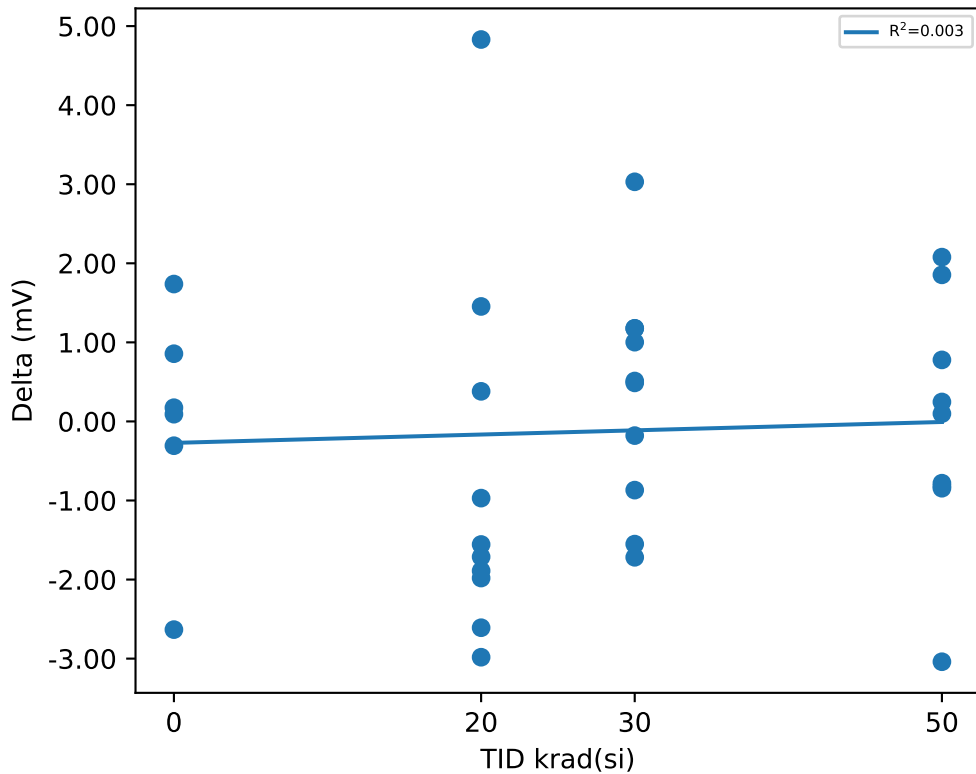
## TID vs Result Stats



## Test Results (Upper Limit = 50.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	17.092	15.111	-1.9808
2	20	HDR Unbiased	15.424	16.878	1.4543
3	20	HDR Unbiased	18.885	15.902	-2.9822
23	20	HDR Unbiased	14.05	14.43	0.3805
24	20	HDR Unbiased	12.082	16.913	4.8304
25	20	HDR Biased	17.112	15.223	-1.8893
26	20	HDR Biased	14.057	13.087	-0.9699
27	20	HDR Biased	17.5	14.891	-2.6092
28	20	HDR Biased	16.101	14.544	-1.5564
29	20	HDR Biased	14.117	12.404	-1.7128
30	30	HDR Unbiased	15.757	16.244	0.4873
31	30	HDR Unbiased	12.697	13.873	1.1759
32	30	HDR Unbiased	12.075	15.105	3.0307
33	30	HDR Unbiased	16.418	15.549	-0.8688
34	30	HDR Unbiased	14.055	13.876	-0.1793
35	30	HDR Biased	14.113	12.394	-1.7185
36	30	HDR Biased	13.7	14.877	1.1778
37	30	HDR Biased	16.765	17.276	0.5112
38	30	HDR Biased	14.111	15.113	1.0023
39	30	HDR Biased	16.419	14.867	-1.5517
40	50	HDR Unbiased	15.404	14.559	-0.8449
41	50	HDR Unbiased	17.503	14.463	-3.0394
42	50	HDR Unbiased	16.404	15.585	-0.8193
43	50	HDR Unbiased	16.093	17.947	1.8539
44	50	HDR Unbiased		13.743	
50	0	CORRELATION	16.828	14.195	-2.6331
51	0	CORRELATION	16.416	17.272	0.8564
52	0	CORRELATION	14.051	15.789	1.7376
53	0	CORRELATION	12.754	12.845	0.0915
54	0	CORRELATION	15.06	15.234	0.1736
78	50	HDR Biased	15.739	15.986	0.2461
79	50	HDR Biased	15.409	14.628	-0.7811
80	50	HDR Biased	14.784	16.862	2.078
81	50	HDR Biased	14.385	15.163	0.7782
82	50	HDR Biased	15.404	15.502	0.0983
83	0	CORRELATION	15.472	15.164	-0.3071

## TID vs Post - Pre Exposure Delta



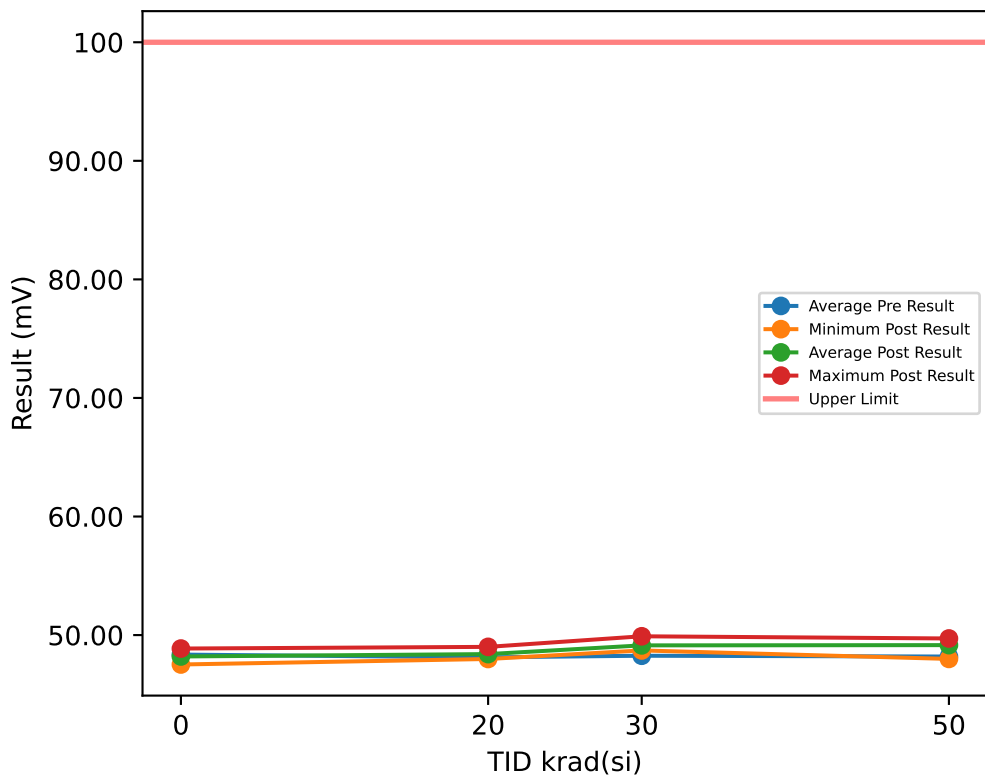
## Test Statistics (mV)

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	12.754	15.097	16.828	1.5142	12.845	15.083	17.272	1.491	-2.6331	-0.013517	1.7376	1.4709
20	12.082	15.642	18.885	2.0692	12.404	14.938	16.913	1.4516	-2.9822	-0.70354	4.8304	2.3602
30	12.075	14.611	16.765	1.6403	12.394	14.917	17.276	1.3474	-1.7185	0.30669	3.0307	1.4401
50	14.385	15.681	17.503	0.91698	13.743	15.444	17.947	1.2461	-3.0394	-0.0478	2.078	1.567



# Device Test: 17.27 VIN|DROPOUT/OUT//3//250//@VDO\_250MA

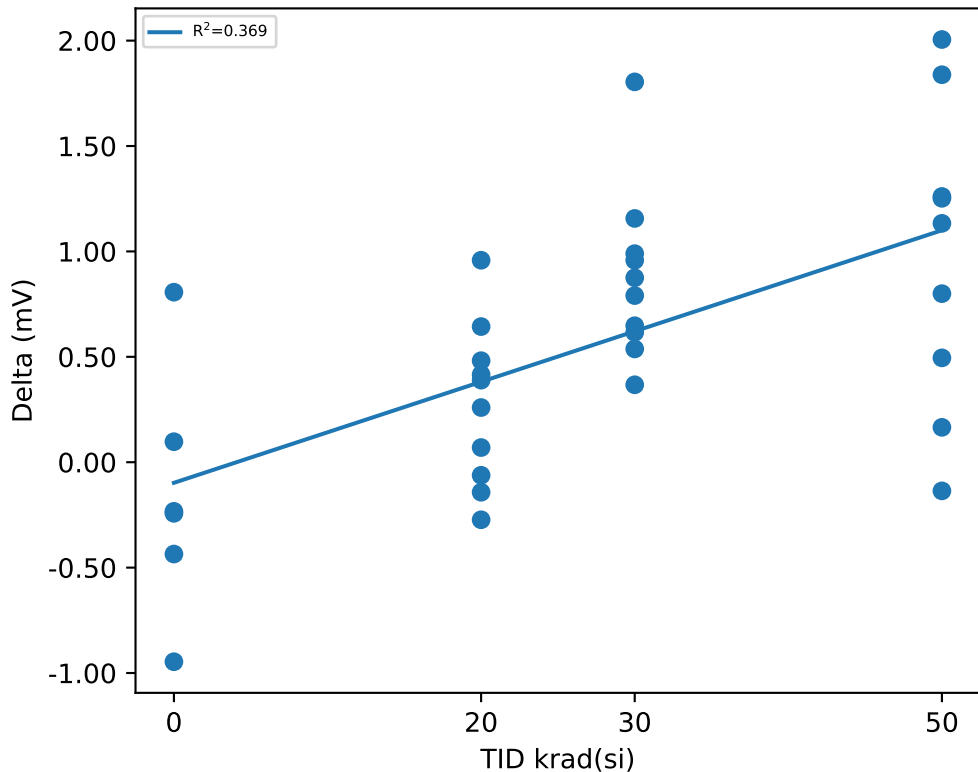
## TID vs Result Stats



## Test Results (Upper Limit = 100.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	48.256	47.983	-0.273
2	20	HDR Unbiased	47.709	48.191	0.4816
3	20	HDR Unbiased	48.302	48.692	0.3893
23	20	HDR Unbiased	48.555	48.493	-0.062
24	20	HDR Unbiased	47.959	48.029	0.0696
25	20	HDR Biased	47.923	48.182	0.2594
26	20	HDR Biased	48.047	49.006	0.9582
27	20	HDR Biased	48.464	48.88	0.416
28	20	HDR Biased	47.709	48.352	0.6435
29	20	HDR Biased	48.298	48.156	-0.1424
30	30	HDR Unbiased	48.094	49.898	1.8043
31	30	HDR Unbiased	47.707	48.864	1.1565
32	30	HDR Unbiased	48.297	49.172	0.875
33	30	HDR Unbiased	48.258	49.216	0.958
34	30	HDR Unbiased	48.217	48.864	0.6475
35	30	HDR Biased	48.466	49.004	0.5374
36	30	HDR Biased	48.257	49.048	0.7905
37	30	HDR Biased	48.385	49.375	0.9895
38	30	HDR Biased	48.806	49.173	0.3674
39	30	HDR Biased	48.089	48.705	0.6161
40	50	HDR Unbiased	47.876	49.714	1.8383
41	50	HDR Unbiased	48.126	47.99	-0.1359
42	50	HDR Unbiased	48.424	49.224	0.7997
43	50	HDR Unbiased	47.538	49.543	2.0053
44	50	HDR Unbiased		49.001	
50	0	CORRELATION	48.466	47.52	-0.9465
51	0	CORRELATION	48.767	48.864	0.0973
52	0	CORRELATION	47.876	47.643	-0.233
53	0	CORRELATION	48.466	48.03	-0.4356
54	0	CORRELATION	48.937	48.695	-0.2425
78	50	HDR Biased	48.428	49.688	1.2607
79	50	HDR Biased	47.707	48.84	1.1332
80	50	HDR Biased	48.464	48.959	0.495
81	50	HDR Biased	48.938	49.104	0.1655
82	50	HDR Biased	48.215	49.467	1.2519
83	0	CORRELATION	47.619	48.425	0.8066

## TID vs Post - Pre Exposure Delta

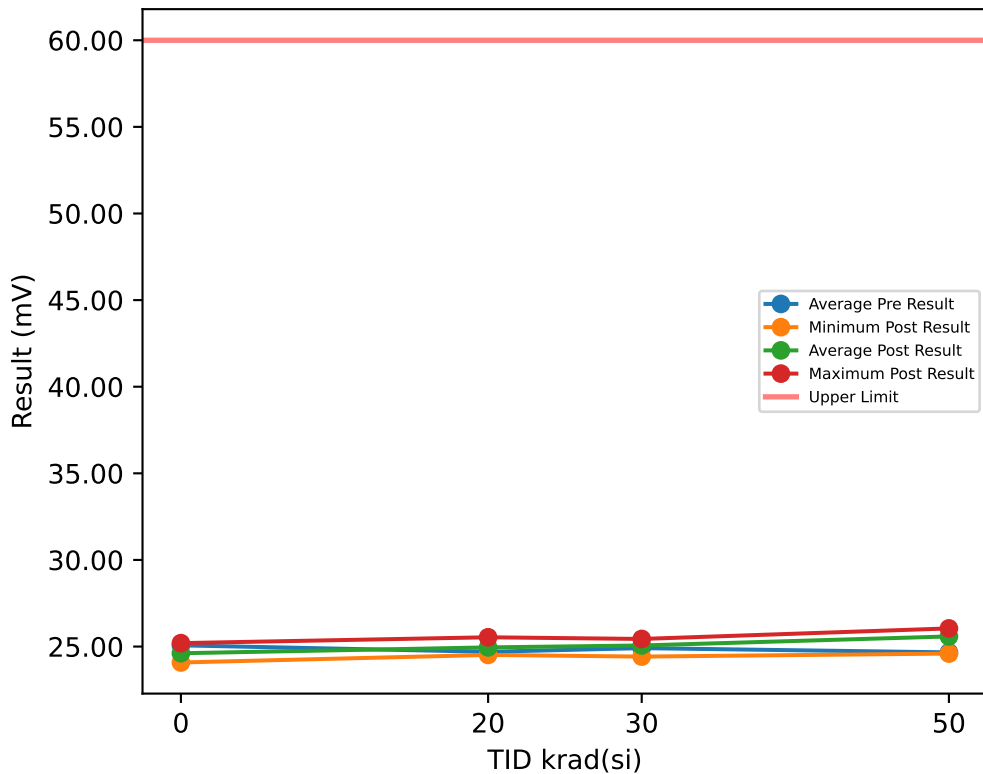


## Test Statistics (mV)

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	47.619	48.355	48.937	0.51082	47.52	48.196	48.864	0.5546	-0.9465	-0.15895	0.8066	0.58433
20	47.709	48.122	48.555	0.29803	47.983	48.396	49.006	0.35834	-0.273	0.27402	0.9582	0.38133
30	47.707	48.258	48.806	0.28321	48.705	49.132	49.898	0.3343	0.3674	0.87422	1.8043	0.40282
50	47.538	48.191	48.938	0.4344	47.99	49.153	49.714	0.51328	-0.1359	0.9793	2.0053	0.71942

# Device Test: 17.3 VIN|DROPOUT/OUT//2.25//100//@VDO\_100MA\_LV

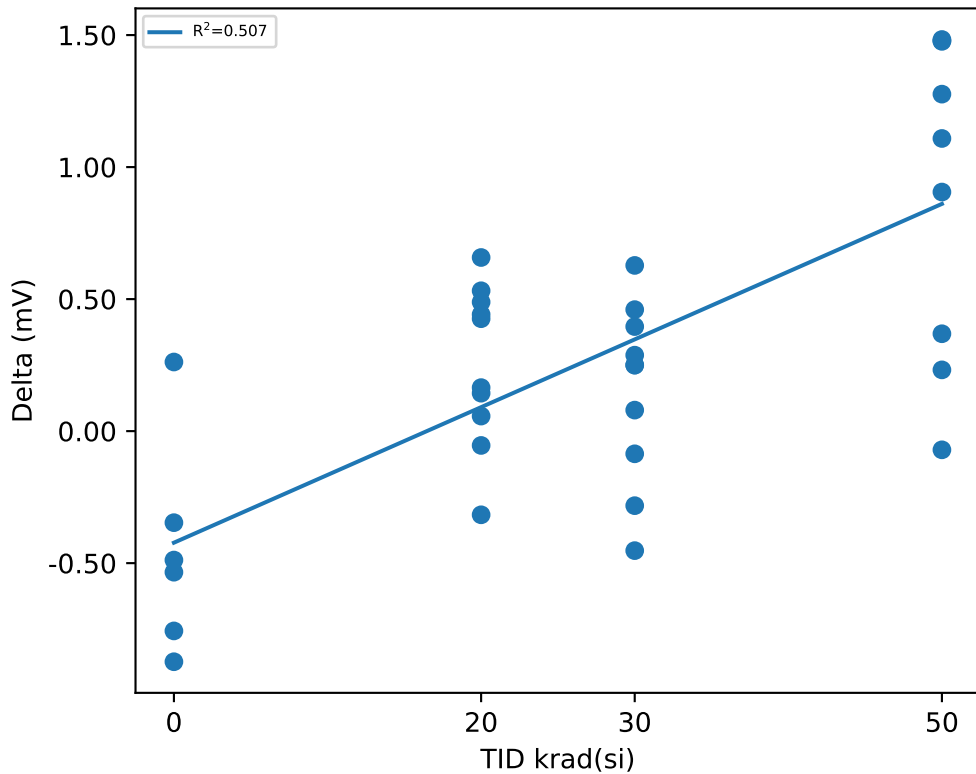
### TID vs Result Stats



### Test Results (Upper Limit = 60.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	24.935	25.1	0.1648
2	20	HDR Unbiased	24.571	25.013	0.4418
3	20	HDR Unbiased	24.878	25.535	0.6576
23	20	HDR Unbiased	24.569	25.1	0.5316
24	20	HDR Unbiased	24.535	24.679	0.1437
25	20	HDR Biased	24.43	24.856	0.4258
26	20	HDR Biased	24.909	24.592	-0.3169
27	20	HDR Biased	24.871	25.36	0.4888
28	20	HDR Biased	24.57	24.516	-0.0542
29	20	HDR Biased	24.705	24.762	0.057
30	30	HDR Unbiased	25.109	25.359	0.2498
31	30	HDR Unbiased	24.4	24.688	0.2877
32	30	HDR Unbiased	25.043	25.439	0.396
33	30	HDR Unbiased	24.936	25.186	0.2505
34	30	HDR Unbiased	24.57	25.197	0.6276
35	30	HDR Biased	24.873	24.421	-0.4526
36	30	HDR Biased	25.105	25.019	-0.0859
37	30	HDR Biased	24.568	25.029	0.4602
38	30	HDR Biased	25.382	25.1	-0.2823
39	30	HDR Biased	25.106	25.185	0.0796
40	50	HDR Unbiased	24.568	26.047	1.4787
41	50	HDR Unbiased	24.363	24.595	0.232
42	50	HDR Unbiased	24.763	25.872	1.1084
43	50	HDR Unbiased	24.4	25.876	1.4762
44	50	HDR Unbiased		25.608	
50	0	CORRELATION	25.213	24.678	-0.5343
51	0	CORRELATION	24.936	25.198	0.2618
52	0	CORRELATION	24.569	24.08	-0.4883
53	0	CORRELATION	25.383	24.509	-0.8734
54	0	CORRELATION	25.614	24.858	-0.7567
78	50	HDR Biased	25.105	25.474	0.3688
79	50	HDR Biased	24.739	25.644	0.9055
80	50	HDR Biased	24.362	25.845	1.4832
81	50	HDR Biased	25.276	25.206	-0.0708
82	50	HDR Biased	24.398	25.675	1.2763
83	0	CORRELATION	24.704	24.357	-0.3467

### TID vs Post - Pre Exposure Delta

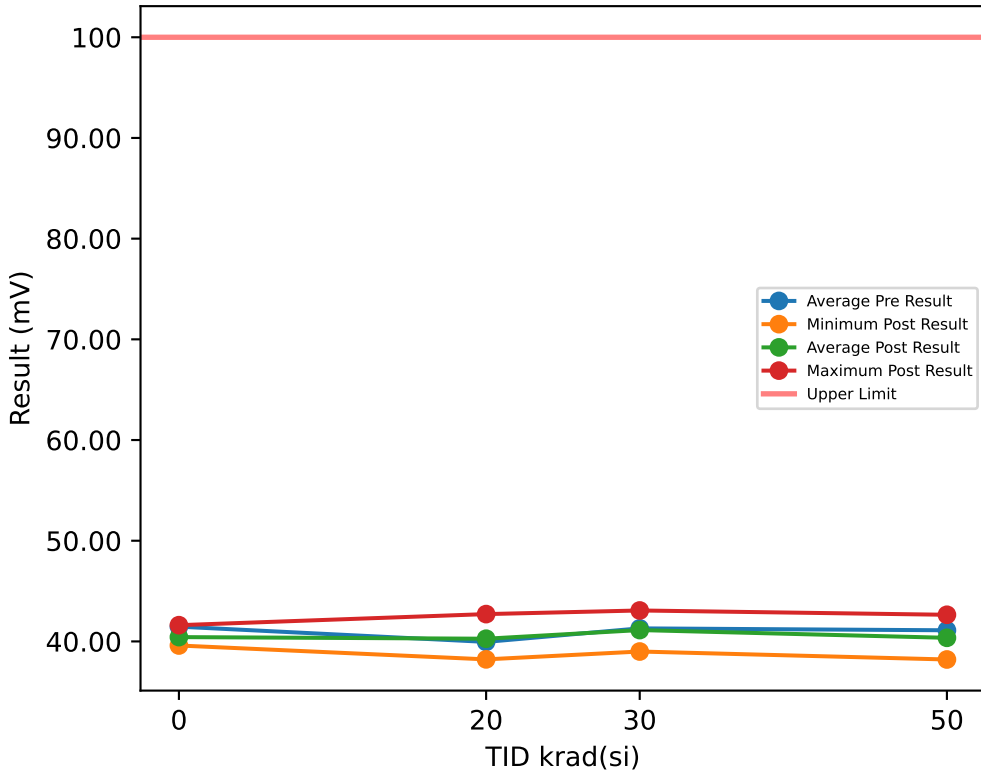


### Test Statistics (mV)

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	24.569	25.07	25.614	0.4045	24.08	24.613	25.198	0.39134	-0.8734	-0.45627	0.2618	0.39975
20	24.43	24.697	24.935	0.18578	24.516	24.951	25.535	0.33218	-0.3169	0.254	0.6576	0.30545
30	24.4	24.909	25.382	0.30758	24.421	25.062	25.439	0.30461	-0.4526	0.15306	0.6276	0.33902
50	24.362	24.664	25.276	0.33853	24.595	25.584	26.047	0.42118	-0.0708	0.91759	1.4832	0.59793

# Device Test: 17.30 VIN|DROPOUT/OUT//13.3//250//@VDO\_250MA

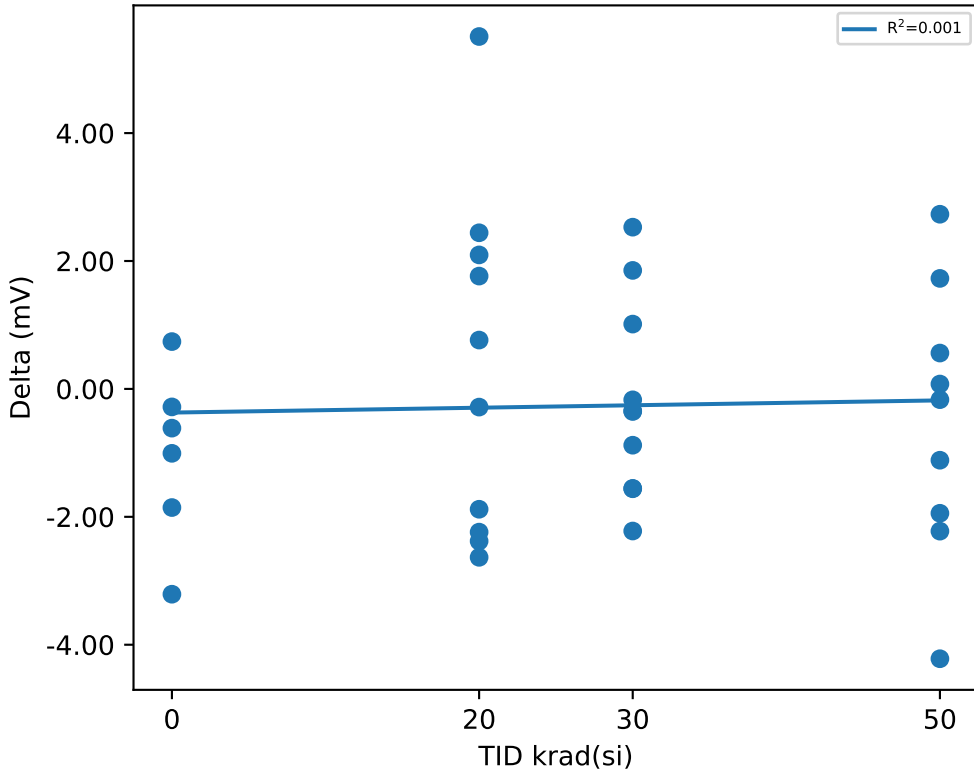
## TID vs Result Stats



## Test Results (Upper Limit = 100.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	40.851	38.218	-2.6331
2	20	HDR Unbiased	37.156	42.666	5.5103
3	20	HDR Unbiased	39.262	41.026	1.7643
23	20	HDR Unbiased	39.178	38.894	-0.2842
24	20	HDR Unbiased	38.568	40.663	2.0953
25	20	HDR Biased	42.228	40.346	-1.8816
26	20	HDR Biased	37.828	40.269	2.4414
27	20	HDR Biased	41.949	42.713	0.7639
28	20	HDR Biased	41.906	39.667	-2.2393
29	20	HDR Biased	40.608	38.228	-2.3795
30	30	HDR Unbiased	43.589	42.708	-0.8802
31	30	HDR Unbiased	41.22	38.998	-2.222
32	30	HDR Unbiased	40.601	40.248	-0.3529
33	30	HDR Unbiased	42.212	40.657	-1.5555
34	30	HDR Unbiased	41.221	43.074	1.853
35	30	HDR Biased	39.924	40.937	1.0137
36	30	HDR Biased	40.173	42.702	2.5291
37	30	HDR Biased	41.213	41.042	-0.1707
38	30	HDR Biased	41.279	40.937	-0.3423
39	30	HDR Biased	41.535	39.974	-1.5612
40	50	HDR Unbiased	40.53	40.362	-0.1678
41	50	HDR Unbiased	38.559	40.287	1.728
42	50	HDR Unbiased	44.235	40.016	-4.219
43	50	HDR Unbiased	42.579	40.355	-2.224
44	50	HDR Unbiased		38.206	
50	0	CORRELATION	39.923	40.663	0.7401
51	0	CORRELATION	43.569	40.358	-3.2101
52	0	CORRELATION	41.894	41.613	-0.2814
53	0	CORRELATION	41.28	40.667	-0.6132
54	0	CORRELATION	41.533	39.679	-1.8549
78	50	HDR Biased	41.533	40.419	-1.1149
79	50	HDR Biased	39.859	40.42	0.5608
80	50	HDR Biased	39.915	42.646	2.7313
81	50	HDR Biased	41.539	39.595	-1.9445
82	50	HDR Biased	41.211	41.287	0.0763
83	0	CORRELATION	40.603	39.596	-1.0071

## TID vs Post - Pre Exposure Delta

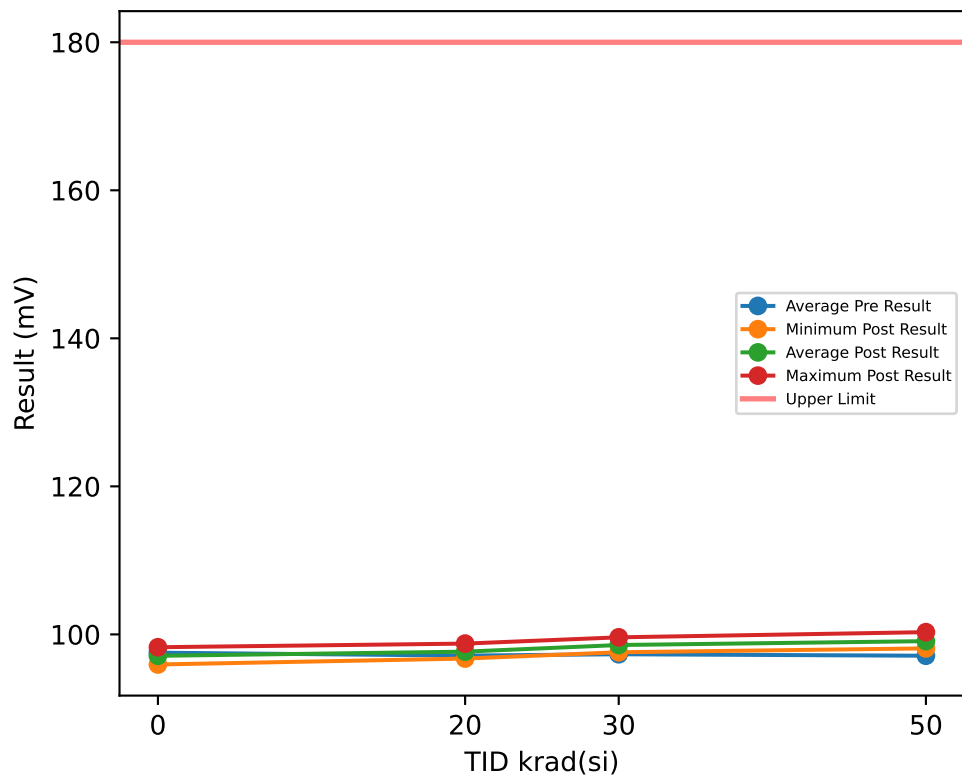


## Test Statistics (mV)

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	39.923	41.467	43.569	1.2466	39.596	40.429	41.613	0.74494	-3.2101	-1.0378	0.7401	1.3639
20	37.156	39.953	42.228	1.8119	38.218	40.269	42.713	1.6015	-2.6331	0.31575	5.5103	2.6801
30	39.924	41.297	43.589	1.0435	38.998	41.128	43.074	1.321	-2.222	-0.1689	2.5291	1.5424
50	38.559	41.107	44.235	1.6634	38.206	40.359	42.646	1.1276	-4.219	-0.5082	2.7313	2.1284

# Device Test: 17.33 VIN|DROPOUT/OUT//3//500//@VDO\_500MA

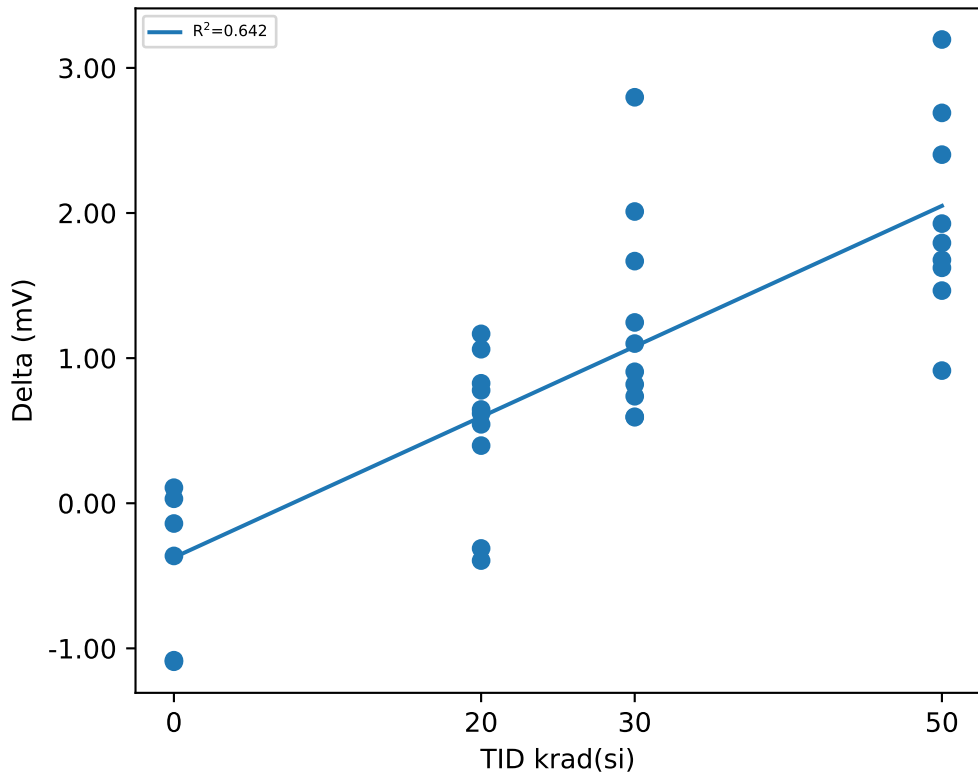
## TID vs Result Stats



## Test Results (Upper Limit = 180.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	97.819	97.424	-0.3951
2	20	HDR Unbiased	96.77	97.389	0.6192
3	20	HDR Unbiased	97.033	98.095	1.0614
23	20	HDR Unbiased	96.937	97.764	0.8266
24	20	HDR Unbiased	97.199	96.888	-0.3114
25	20	HDR Biased	95.958	96.736	0.7782
26	20	HDR Biased	96.939	98.106	1.1673
27	20	HDR Biased	98.213	98.757	0.5438
28	20	HDR Biased	97.109	97.755	0.6461
29	20	HDR Biased	97.369	97.766	0.3972
30	30	HDR Unbiased	96.808	99.605	2.7976
31	30	HDR Unbiased	96.768	97.587	0.8192
32	30	HDR Unbiased	97.876	98.782	0.906
33	30	HDR Unbiased	97.82	98.413	0.5927
34	30	HDR Unbiased	96.938	98.607	1.6685
35	30	HDR Biased	97.028	98.274	1.246
36	30	HDR Biased	97.31	97.906	0.5958
37	30	HDR Biased	97.276	99.287	2.0104
38	30	HDR Biased	98.216	98.953	0.7372
39	30	HDR Biased	97.142	98.242	1.1003
40	50	HDR Unbiased	97.445	100.14	2.6901
41	50	HDR Unbiased	97.196	98.11	0.9141
42	50	HDR Unbiased	97.307	99.101	1.7938
43	50	HDR Unbiased	97.108	100.3	3.1957
44	50	HDR Unbiased		99.122	
50	0	CORRELATION	97.028	96.888	-0.1397
51	0	CORRELATION	98.16	98.267	0.1072
52	0	CORRELATION	97.277	96.914	-0.3631
53	0	CORRELATION	97.366	97.397	0.0308
54	0	CORRELATION	98.33	97.248	-1.0817
78	50	HDR Biased	97.651	99.578	1.9271
79	50	HDR Biased	96.768	98.39	1.6224
80	50	HDR Biased	97.026	98.491	1.4654
81	50	HDR Biased	97.313	98.99	1.6768
82	50	HDR Biased	96.257	98.659	2.4023
83	0	CORRELATION	97.028	95.936	-1.0922

## TID vs Post - Pre Exposure Delta

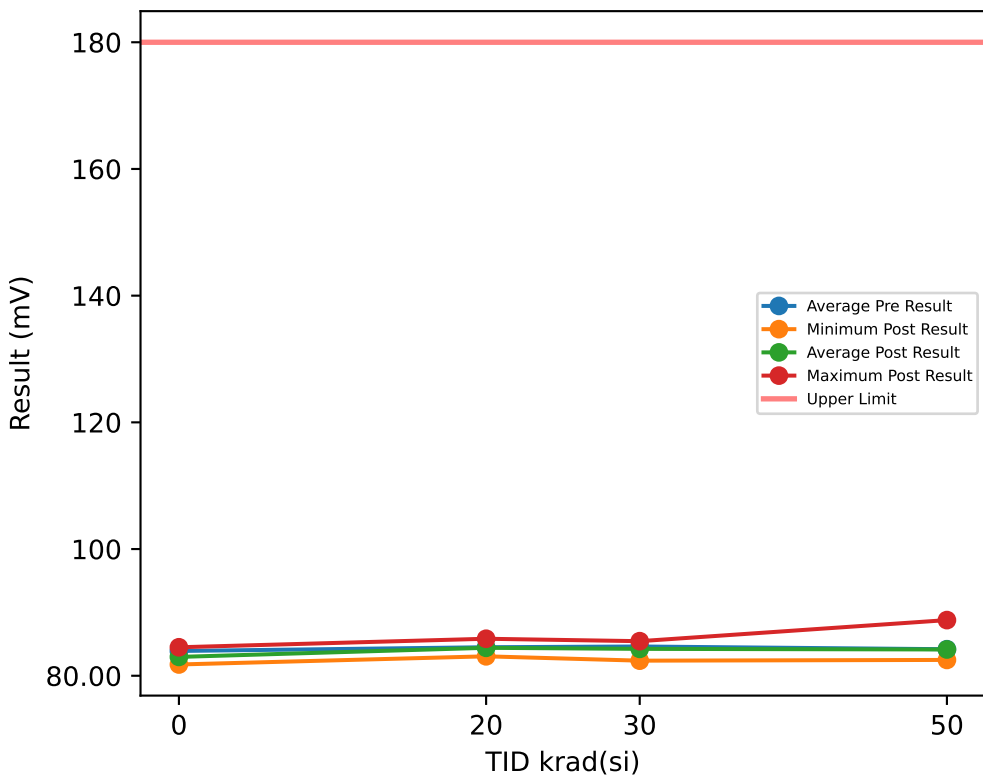


## Test Statistics (mV)

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	97.028	97.531	98.33	0.57127	95.936	97.108	98.267	0.76246	-1.0922	-0.42312	0.1072	0.539
20	95.958	97.135	98.213	0.6052	96.736	97.668	98.757	0.59636	-0.3951	0.53333	1.1673	0.52079
30	96.768	97.318	98.216	0.49374	97.587	98.566	99.605	0.615	0.5927	1.2474	2.7976	0.71474
50	96.257	97.119	97.651	0.40975	98.11	99.088	100.3	0.73098	0.9141	1.9653	3.1957	0.69072

# Device Test: 17.36 VIN|DROPOUT/OUT//13.3//500//@VDO\_500MA

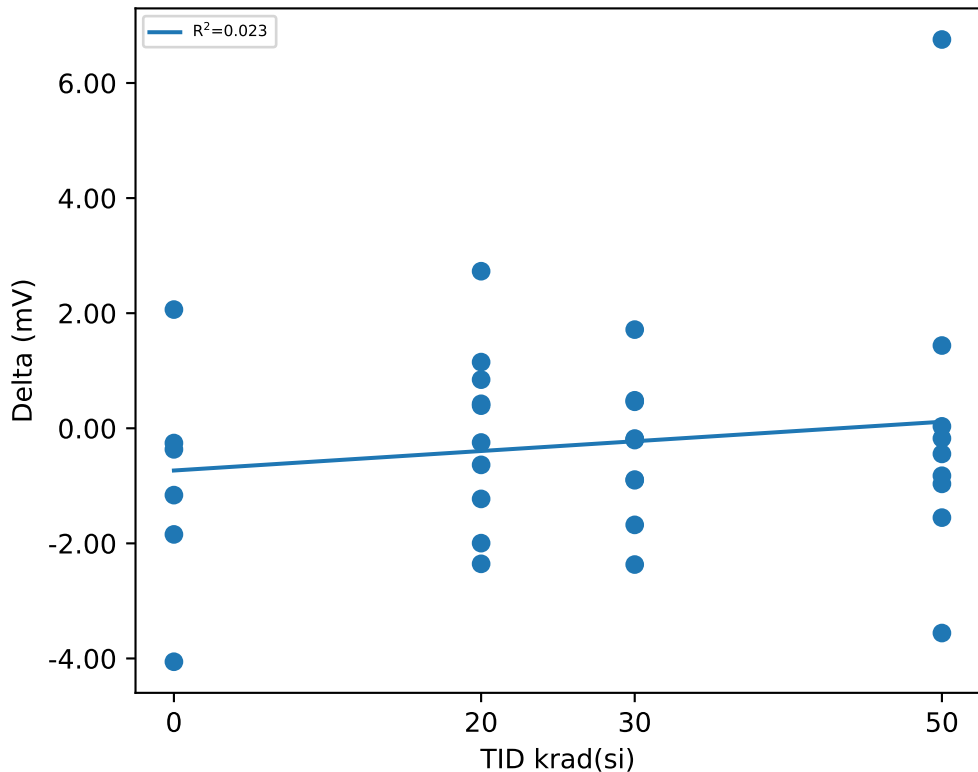
## TID vs Result Stats



## Test Results (Upper Limit = 180.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	86.334	85.107	-1.2274
2	20	HDR Unbiased	85.374	84.738	-0.6361
3	20	HDR Unbiased	84.092	84.485	0.393
23	20	HDR Unbiased	82.643	83.068	0.4253
24	20	HDR Unbiased	82.718	85.447	2.7294
25	20	HDR Biased	84.996	85.841	0.845
26	20	HDR Biased	83.329	83.082	-0.247
27	20	HDR Biased	86.101	84.105	-1.9961
28	20	HDR Biased	84.013	85.163	1.1501
29	20	HDR Biased	85.436	83.08	-2.3556
30	30	HDR Unbiased	84.997	85.458	0.4606
31	30	HDR Unbiased	83.326	83.813	0.4864
32	30	HDR Unbiased	84.75	82.382	-2.368
33	30	HDR Unbiased	84.978	84.086	-0.8917
34	30	HDR Unbiased	84.686	84.495	-0.1917
35	30	HDR Biased	82.713	84.428	1.7147
36	30	HDR Biased	84.298	84.093	-0.205
37	30	HDR Biased	84.678	84.499	-0.1783
38	30	HDR Biased	86.788	85.11	-1.6785
39	30	HDR Biased	84.982	84.079	-0.9031
40	50	HDR Unbiased	83.316	83.14	-0.1754
41	50	HDR Unbiased	85.426	84.46	-0.966
42	50	HDR Unbiased	86.323	82.765	-3.5582
43	50	HDR Unbiased	84.686	83.134	-1.5526
44	50	HDR Unbiased		83.06	
50	0	CORRELATION	86.791	82.734	-4.0569
51	0	CORRELATION	85.657	84.496	-1.1616
52	0	CORRELATION	82.643	82.386	-0.2566
53	0	CORRELATION	81.355	83.418	2.0628
54	0	CORRELATION	83.623	81.778	-1.8444
78	50	HDR Biased	83.623	83.178	-0.4453
79	50	HDR Biased	83.323	82.499	-0.8249
80	50	HDR Biased	82.028	88.784	6.7558
81	50	HDR Biased	84.985	86.423	1.4381
82	50	HDR Biased	83.997	84.03	0.0334
83	0	CORRELATION	83.396	83.03	-0.3663

## TID vs Post - Pre Exposure Delta

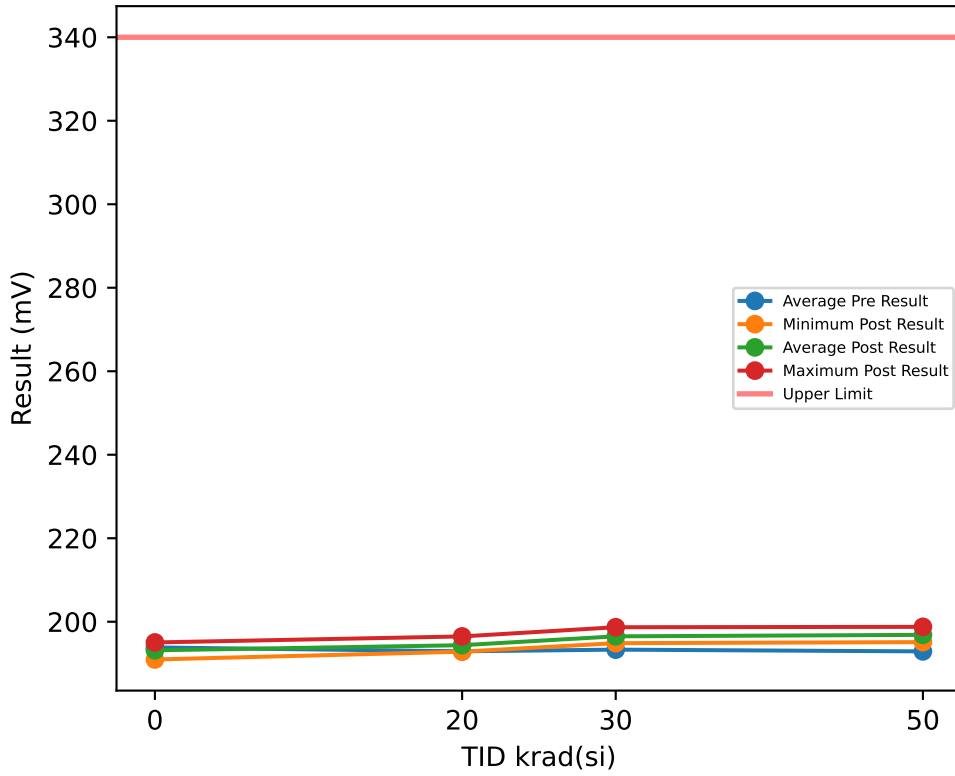


## Test Statistics (mV)

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	81.355	83.911	86.791	1.9916	81.778	82.974	84.496	0.93248	-4.0569	-0.93717	2.0628	2.0197
20	82.643	84.504	86.334	1.3421	83.068	84.412	85.841	1.039	-2.3556	-0.09194	2.7294	1.5363
30	82.713	84.62	86.788	1.0822	82.382	84.244	85.458	0.82407	-2.368	-0.37546	1.7147	1.1607
50	82.028	84.19	86.323	1.2991	82.499	84.147	88.784	1.9884	-3.5582	0.078322	6.7558	2.841

# Device Test: 17.39 VIN|DROPOUT/OUT//3//1000//@VDO\_1A

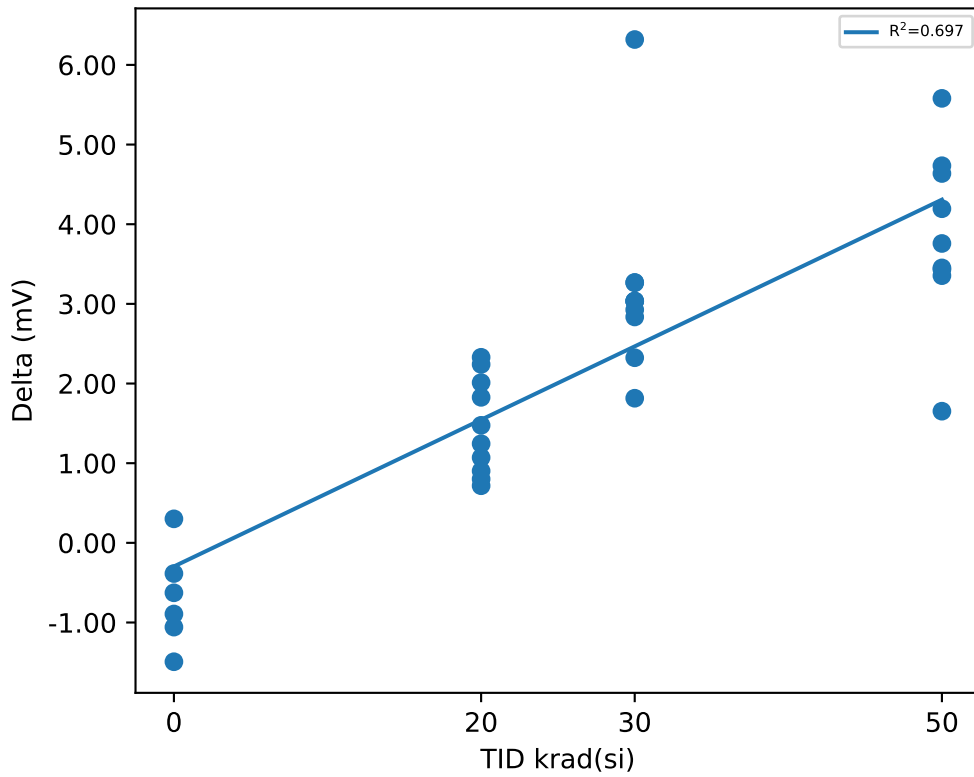
## TID vs Result Stats



## Test Results (Upper Limit = 340.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	194.06	194.77	0.717
2	20	HDR Unbiased	192.51	193.58	1.0705
3	20	HDR Unbiased	192.28	194.53	2.2404
23	20	HDR Unbiased	193.53	194.43	0.9027
24	20	HDR Unbiased	192.62	193.42	0.8013
25	20	HDR Biased	190.5	192.83	2.3294
26	20	HDR Biased	193.7	194.95	1.2443
27	20	HDR Biased	194.65	196.48	1.8268
28	20	HDR Biased	192.17	194.19	2.0113
29	20	HDR Biased	193.13	194.6	1.4754
30	30	HDR Unbiased	192.37	198.68	6.3188
31	30	HDR Unbiased	191.83	194.87	3.0337
32	30	HDR Unbiased	193.98	196.3	2.3239
33	30	HDR Unbiased	193.55	196.47	2.9261
34	30	HDR Unbiased	193.02	196.06	3.0339
35	30	HDR Biased	194.49	196.3	1.8155
36	30	HDR Biased	192.53	195.8	3.2692
37	30	HDR Biased	193.87	196.91	3.0362
38	30	HDR Biased	195	197.83	2.8358
39	30	HDR Biased	192.53	195.8	3.2649
40	50	HDR Unbiased	194.04	198.77	4.7343
41	50	HDR Unbiased	193.47	195.12	1.6528
42	50	HDR Unbiased	192.87	197.5	4.6368
43	50	HDR Unbiased	192.68	198.26	5.58
44	50	HDR Unbiased		197.66	
50	0	CORRELATION	193.47	193.08	-0.3851
51	0	CORRELATION	194.74	195.04	0.3013
52	0	CORRELATION	193.53	192.9	-0.627
53	0	CORRELATION	194.15	193.25	-0.8931
54	0	CORRELATION	194.74	193.68	-1.0578
78	50	HDR Biased	193.21	196.64	3.4328
79	50	HDR Biased	191.83	195.28	3.4516
80	50	HDR Biased	192.62	196.37	3.7584
81	50	HDR Biased	193.21	197.4	4.1945
82	50	HDR Biased	192.17	195.53	3.3543
83	0	CORRELATION	192.45	190.96	-1.4925

## TID vs Post - Pre Exposure Delta



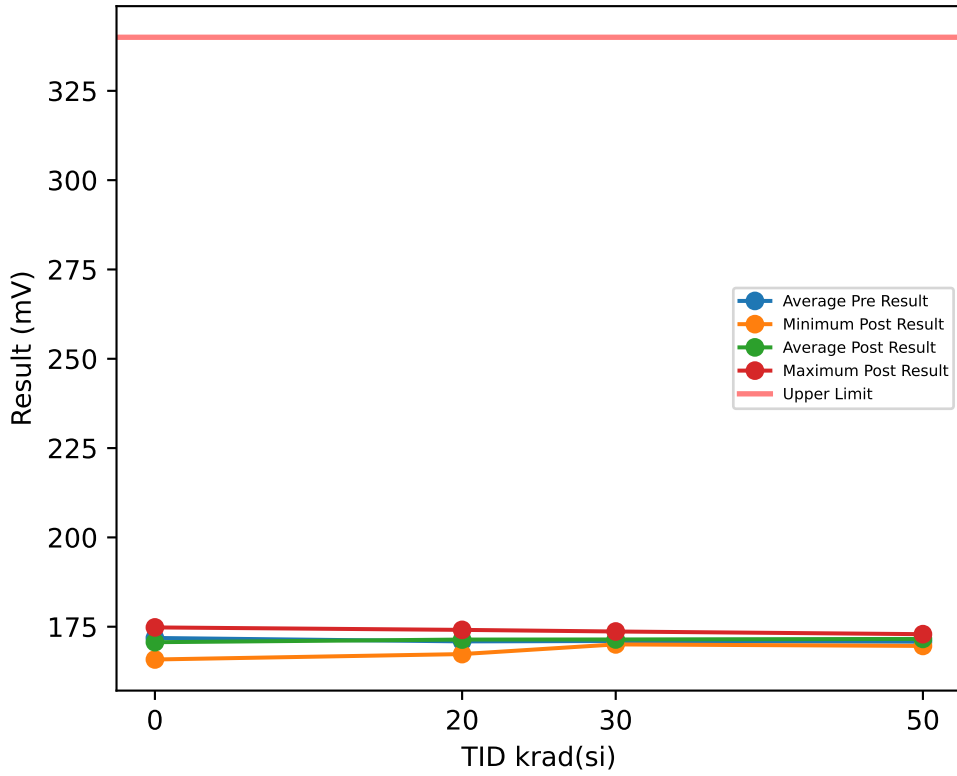
## Test Statistics (mV)

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	192.45	193.84	194.74	0.87962	190.96	193.15	195.04	1.3211	-1.4925	-0.69237	0.3013	0.61646
20	190.5	192.92	194.65	1.1739	192.83	194.38	196.48	0.99773	0.717	1.4619	2.3294	0.60537
30	191.83	193.32	195	1.0227	194.87	196.5	198.68	1.0873	1.8155	3.1858	6.3188	1.1883
50	191.83	192.9	194.04	0.67152	195.12	196.85	198.77	1.2715	1.6528	3.8662	5.58	1.1138



# Device Test: 17.42 VIN|DROPOUT/OUT//13.3//1000//@VDO\_1A

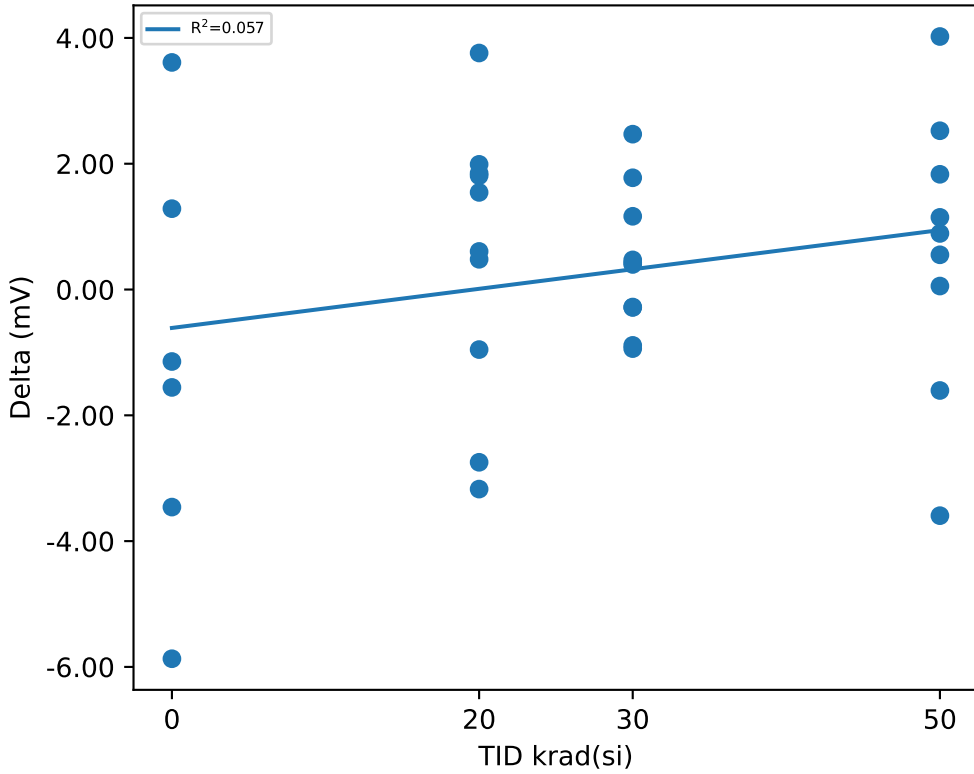
## TID vs Result Stats



## Test Results (Upper Limit = 340.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	170.51	167.34	-3.1728
2	20	HDR Unbiased	171.63	168.88	-2.7466
3	20	HDR Unbiased	169.67	173.44	3.7603
23	20	HDR Unbiased	169.57	170.05	0.4806
24	20	HDR Unbiased	170.34	170.95	0.6056
25	20	HDR Biased	171.21	172.76	1.544
26	20	HDR Biased	170.94	172.79	1.8492
27	20	HDR Biased	171.01	173	1.9903
28	20	HDR Biased	172.3	174.11	1.8101
29	20	HDR Biased	171.7	170.75	-0.9546
30	30	HDR Unbiased	169.86	171.63	1.7767
31	30	HDR Unbiased	170.94	170.05	-0.8879
32	30	HDR Unbiased	171.02	170.73	-0.2851
33	30	HDR Unbiased	170.52	170.94	0.4254
34	30	HDR Unbiased	172.3	172.77	0.4711
35	30	HDR Biased	171.02	171.42	0.3986
36	30	HDR Biased	171.19	173.66	2.47
37	30	HDR Biased	170.93	172.09	1.1644
38	30	HDR Biased	171.02	170.74	-0.2785
39	30	HDR Biased	171.2	170.26	-0.9394
40	50	HDR Unbiased	168.21	170.73	2.5244
41	50	HDR Unbiased	173.05	171.45	-1.6051
42	50	HDR Unbiased	173.22	169.62	-3.5953
43	50	HDR Unbiased	170.26	171.41	1.1473
44	50	HDR Unbiased		172.77	
50	0	CORRELATION	171.02	172.3	1.2855
51	0	CORRELATION	171.19	174.8	3.6106
52	0	CORRELATION	170.93	169.38	-1.5564
53	0	CORRELATION	173.05	169.59	-3.4589
54	0	CORRELATION	173.23	172.09	-1.1444
78	50	HDR Biased	169.84	170.73	0.8917
79	50	HDR Biased	170.25	172.09	1.832
80	50	HDR Biased	171.01	171.56	0.5521
81	50	HDR Biased	172.56	172.61	0.0553
82	50	HDR Biased	168.89	172.91	4.0226
83	0	CORRELATION	171.7	165.83	-5.8699

## TID vs Post - Pre Exposure Delta

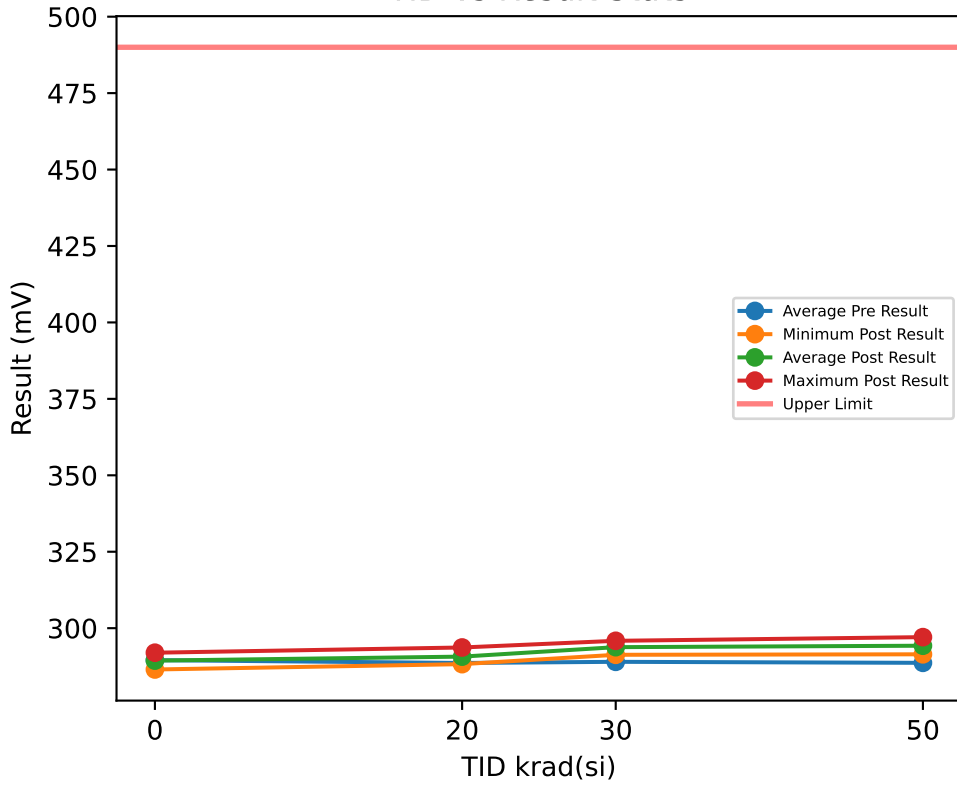


## Test Statistics (mV)

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	170.93	171.85	173.23	1.0341	165.83	170.66	174.8	3.1001	-5.8699	-1.1889	3.6106	3.3574
20	169.57	170.89	172.3	0.88007	167.34	171.41	174.11	2.1886	-3.1728	0.51661	3.7603	2.2018
30	169.86	171	172.3	0.60633	170.05	171.43	173.66	1.1422	-0.9394	0.43153	2.47	1.1127
50	168.21	170.81	173.22	1.7999	169.62	171.59	172.91	1.045	-3.5953	0.64722	4.0226	2.2378

# Device Test: 17.45 VIN|DROPOUT/OUT//3//1500//@VDO\_1P5A

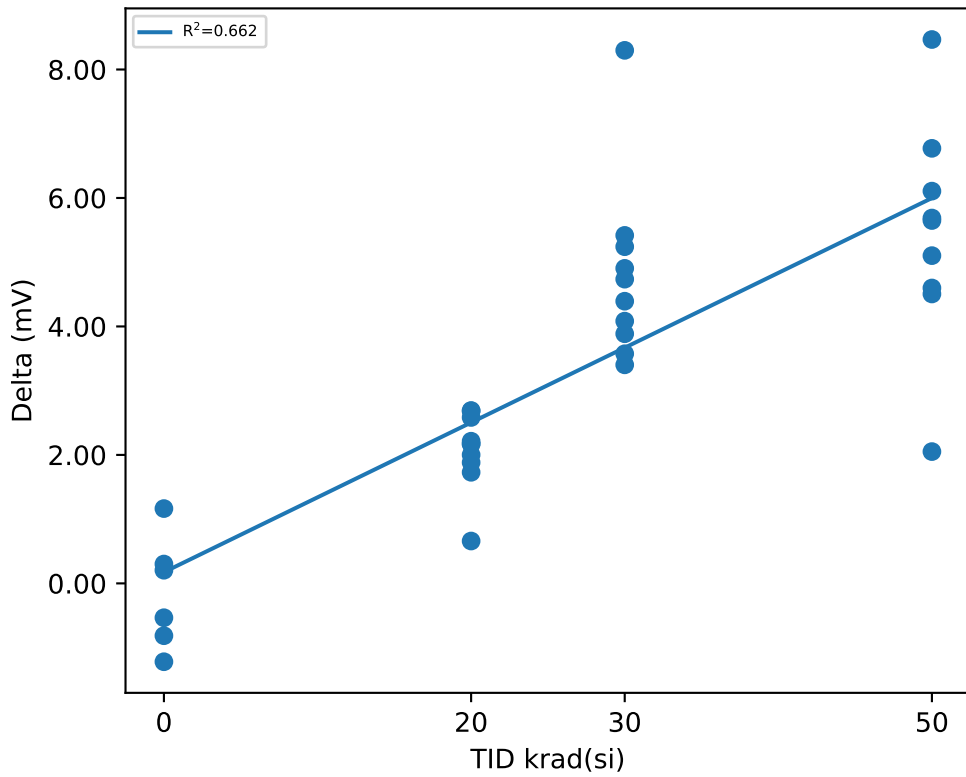
## TID vs Result Stats



## Test Results (Upper Limit = 490.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	289.28	291.45	2.1685
2	20	HDR Unbiased	288.6	289.26	0.6595
3	20	HDR Unbiased	288.9	290.78	1.8818
23	20	HDR Unbiased	288.94	290.94	2.0018
24	20	HDR Unbiased	287.71	289.44	1.7295
25	20	HDR Biased	285.55	288.24	2.6834
26	20	HDR Biased	289.62	291.79	2.1727
27	20	HDR Biased	291.1	293.68	2.5832
28	20	HDR Biased	287.75	290.44	2.6912
29	20	HDR Biased	288.73	290.94	2.2134
30	30	HDR Unbiased	287.42	295.72	8.2982
31	30	HDR Unbiased	286.05	291.29	5.2414
32	30	HDR Unbiased	290.08	293.49	3.4024
33	30	HDR Unbiased	288.94	293.68	4.736
34	30	HDR Unbiased	288.77	293.16	4.3928
35	30	HDR Biased	290.42	294.51	4.0829
36	30	HDR Biased	287.75	293.17	5.4176
37	30	HDR Biased	290.12	295.03	4.9045
38	30	HDR Biased	292.29	295.87	3.5751
39	30	HDR Biased	288.09	291.98	3.886
40	50	HDR Unbiased	290.29	297.07	6.7728
41	50	HDR Unbiased	289.4	291.45	2.0518
42	50	HDR Unbiased	288.94	295.04	6.1066
43	50	HDR Unbiased	288.09	296.56	8.4669
44	50	HDR Unbiased		295.69	
50	0	CORRELATION	289.57	288.76	-0.8146
51	0	CORRELATION	290.81	291.97	1.1647
52	0	CORRELATION	289.11	289.41	0.3013
53	0	CORRELATION	289.4	289.61	0.2048
54	0	CORRELATION	290.64	290.11	-0.5345
78	50	HDR Biased	288.94	294.04	5.1024
79	50	HDR Biased	287.41	292.01	4.5987
80	50	HDR Biased	288.89	293.4	4.5056
81	50	HDR Biased	288.77	294.46	5.6877
82	50	HDR Biased	287.24	292.89	5.6491
83	0	CORRELATION	287.71	286.49	-1.2197

## TID vs Post - Pre Exposure Delta

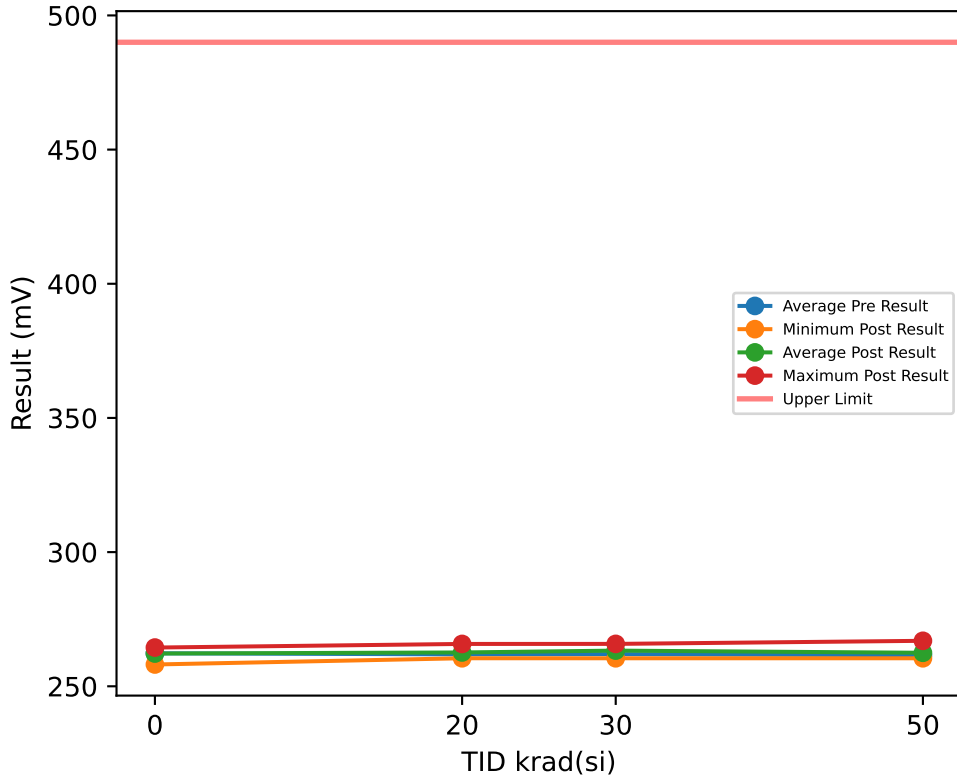


## Test Statistics (mV)

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	287.71	289.54	290.81	1.1301	286.49	289.39	291.97	1.792	-1.2197	-0.14967	1.1647	0.87084
20	285.55	288.62	291.1	1.4441	288.24	290.7	293.68	1.512	0.6595	2.0785	2.6912	0.59732
30	286.05	288.99	292.29	1.7925	291.29	293.79	295.87	1.508	3.4024	4.7937	8.2982	1.4062
50	287.24	288.66	290.29	0.95879	291.45	294.26	297.07	1.8702	2.0518	5.438	8.4669	1.7558

# Device Test: 17.48 VIN|DROPOUT/OUT//13.3//1500//@VDO\_1P5A

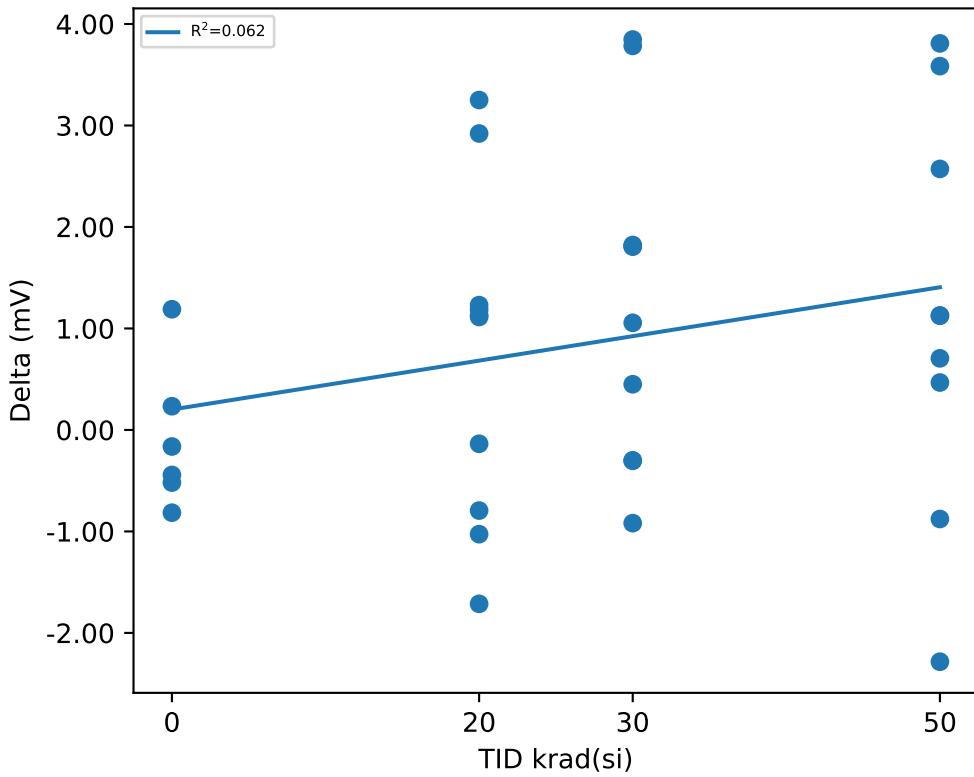
## TID vs Result Stats



## Test Results (Upper Limit = 490.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	262.16	260.44	-1.7137
2	20	HDR Unbiased	261.95	261.16	-0.7944
3	20	HDR Unbiased	263.41	262.39	-1.0271
23	20	HDR Unbiased	260.58	260.44	-0.1364
24	20	HDR Unbiased	260.68	261.87	1.1854
25	20	HDR Biased	260.82	263.74	2.9211
26	20	HDR Biased	263.3	264.54	1.2303
27	20	HDR Biased	260.67	263.92	3.251
28	20	HDR Biased	264.67	265.78	1.1129
29	20	HDR Biased	260.68	261.82	1.132
30	30	HDR Unbiased	260.82	261.88	1.0557
31	30	HDR Unbiased	259.23	263.07	3.8472
32	30	HDR Unbiased	261.36	260.44	-0.9184
33	30	HDR Unbiased	263.52	263.22	-0.2995
34	30	HDR Unbiased	261.26	263.08	1.811
35	30	HDR Biased	262.04	263.84	1.8062
36	30	HDR Biased	260.8	264.59	3.7842
37	30	HDR Biased	263.97	265.8	1.8225
38	30	HDR Biased	262.71	263.16	0.4501
39	30	HDR Biased	264.2	263.89	-0.3043
40	50	HDR Unbiased	261.93	262.4	0.4673
41	50	HDR Unbiased	261.35	260.48	-0.8774
42	50	HDR Unbiased	262.83	260.54	-2.284
43	50	HDR Unbiased	261.94	263.07	1.1282
44	50	HDR Unbiased		260.44	
50	0	CORRELATION	261.36	262.55	1.1892
51	0	CORRELATION	264.88	264.43	-0.4435
52	0	CORRELATION	264.66	263.84	-0.8154
53	0	CORRELATION	261.36	261.19	-0.1631
54	0	CORRELATION	262.84	263.07	0.2337
78	50	HDR Biased	261.48	265.07	3.5849
79	50	HDR Biased	258.54	262.35	3.809
80	50	HDR Biased	261.35	262.48	1.1254
81	50	HDR Biased	266.24	266.95	0.7057
82	50	HDR Biased	258.54	261.11	2.5721
83	0	CORRELATION	258.64	258.12	-0.5188

## TID vs Post - Pre Exposure Delta

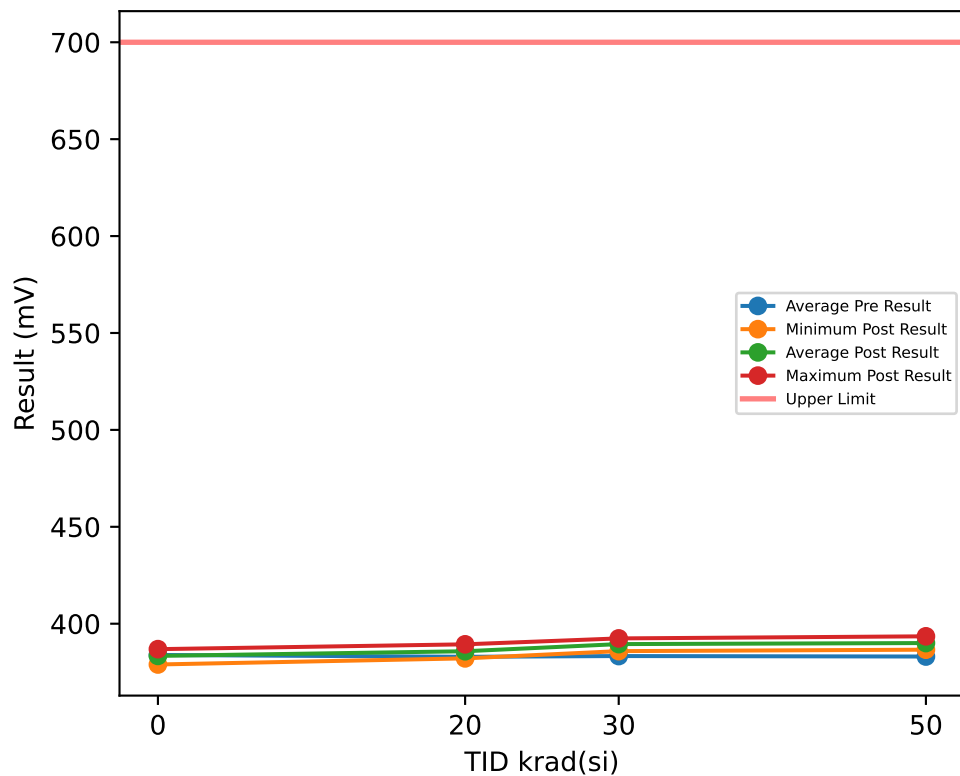


## Test Statistics (mV)

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	258.64	262.29	264.88	2.3509	258.12	262.2	264.43	2.2888	-0.8154	-0.086317	1.1892	0.71853
20	260.58	261.89	264.67	1.4672	260.44	262.61	265.78	1.8099	-1.7137	0.71611	3.251	1.6348
30	259.23	261.99	264.2	1.5995	260.44	263.3	265.8	1.448	-0.9184	1.3055	3.8472	1.6427
50	258.54	261.58	266.24	2.2943	260.44	262.49	266.95	2.1298	-2.284	1.1368	3.809	1.9871

# Device Test: 17.51 VIN|DROPOUT/OUT//3//2000//@VDO\_2A

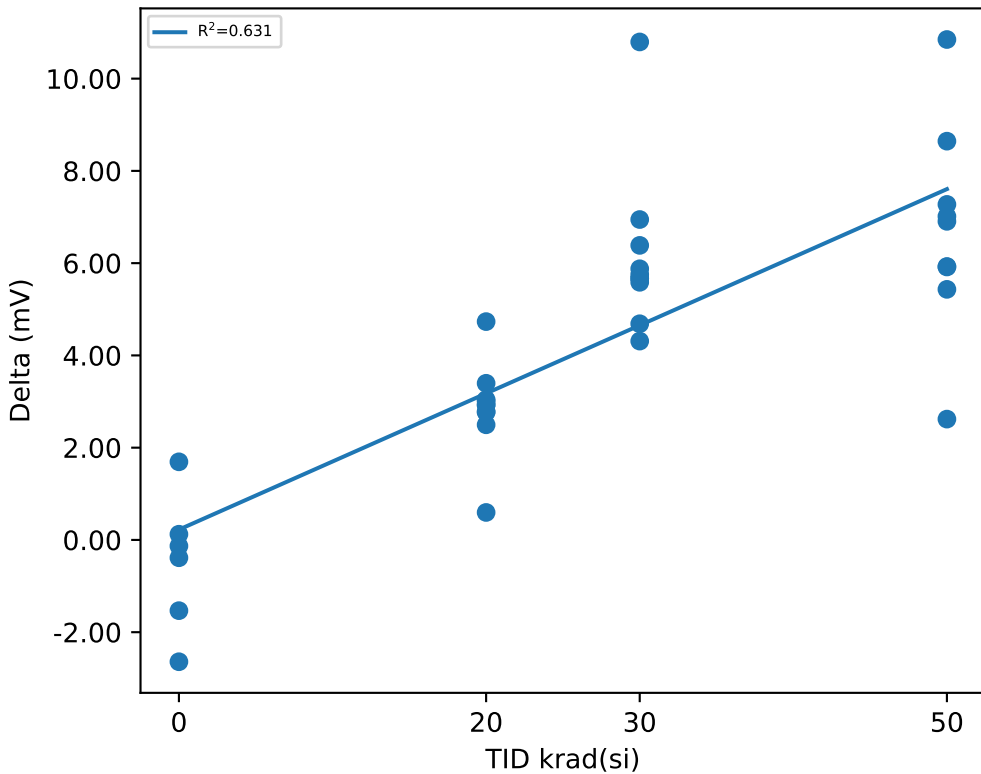
## TID vs Result Stats



## Test Results (Upper Limit = 700.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	383.99	386.76	2.7686
2	20	HDR Unbiased	383.5	384.09	0.5958
3	20	HDR Unbiased	382.46	385.85	3.3958
23	20	HDR Unbiased	383.49	386.42	2.9278
24	20	HDR Unbiased	381.43	383.93	2.4962
25	20	HDR Biased	379.08	382.12	3.042
26	20	HDR Biased	384.34	387.27	2.9287
27	20	HDR Biased	386.35	389.36	3.0098
28	20	HDR Biased	381.8	386.53	4.7329
29	20	HDR Biased	382.79	385.57	2.7809
30	30	HDR Unbiased	381.62	392.42	10.795
31	30	HDR Unbiased	380.27	385.85	5.5849
32	30	HDR Unbiased	384.66	388.97	4.3104
33	30	HDR Unbiased	383.31	389.7	6.3853
34	30	HDR Unbiased	382.99	388.74	5.7554
35	30	HDR Biased	384.83	390.5	5.6703
36	30	HDR Biased	382.29	388.17	5.878
37	30	HDR Biased	383.83	390.78	6.9458
38	30	HDR Biased	386.7	392.37	5.6722
39	30	HDR Biased	382.64	387.32	4.6863
40	50	HDR Unbiased	384.85	393.5	8.6443
41	50	HDR Unbiased	383.98	386.6	2.6193
42	50	HDR Unbiased	383.99	390.9	6.9065
43	50	HDR Unbiased	382.31	393.15	10.848
44	50	HDR Unbiased		392.03	
50	0	CORRELATION	383.64	383.25	-0.386
51	0	CORRELATION	385.18	386.87	1.6933
52	0	CORRELATION	382.98	382.85	-0.1318
53	0	CORRELATION	383.81	383.93	0.1237
54	0	CORRELATION	386.03	384.5	-1.5331
78	50	HDR Biased	383.48	389.41	5.9271
79	50	HDR Biased	381.46	387.37	5.9176
80	50	HDR Biased	383.13	388.56	5.4321
81	50	HDR Biased	383.83	390.84	7.0148
82	50	HDR Biased	380.61	387.88	7.2735
83	0	CORRELATION	381.6	378.96	-2.6404

## TID vs Post - Pre Exposure Delta

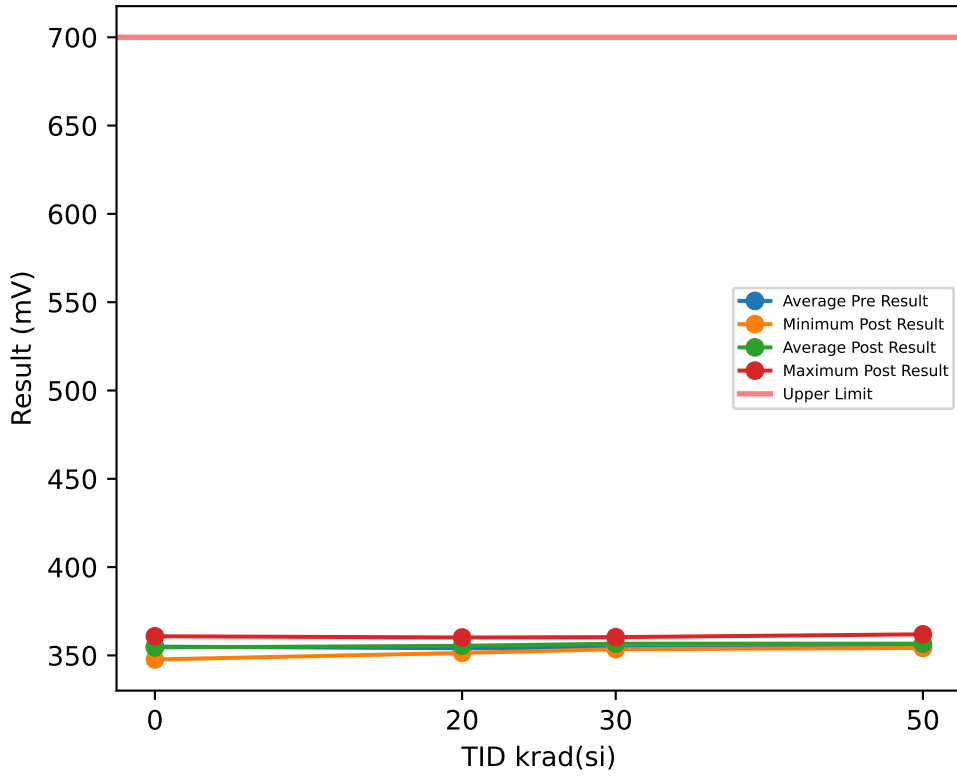


## Test Statistics (mV)

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	381.6	383.87	386.03	1.5723	378.96	383.4	386.87	2.5908	-2.6404	-0.47905	1.6933	1.4828
20	379.08	382.92	386.35	1.9467	382.12	385.79	389.36	2.0204	0.5958	2.8679	4.7329	1.0073
30	380.27	383.31	386.7	1.812	385.85	389.48	392.42	2.1098	4.3104	6.1684	10.795	1.7888
50	380.61	383.07	384.85	1.3616	386.6	390.02	393.5	2.4303	2.6193	6.7315	10.848	2.2616

# Device Test: 17.54 VIN|DROPOUT/OUT//13.3//2000//@VDO\_2A

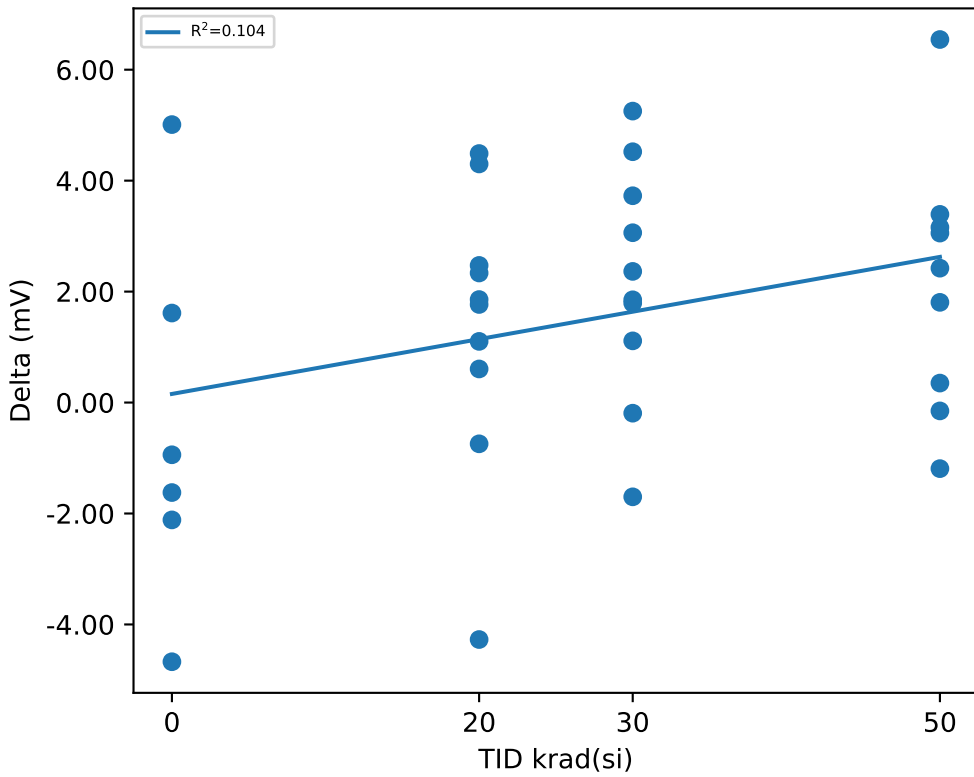
## TID vs Result Stats



## Test Results (Upper Limit = 700.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	351.77	352.87	1.1025
2	20	HDR Unbiased	355.68	351.4	-4.2715
3	20	HDR Unbiased	355.11	357.45	2.3355
23	20	HDR Unbiased	354.3	354.91	0.6056
24	20	HDR Unbiased	351.7	353.47	1.7681
25	20	HDR Biased	351.79	356.09	4.301
26	20	HDR Biased	357.03	356.28	-0.7439
27	20	HDR Biased	354.41	356.88	2.4719
28	20	HDR Biased	355.67	360.16	4.4889
29	20	HDR Biased	353.06	354.92	1.8568
30	30	HDR Unbiased	353.83	357.55	3.7279
31	30	HDR Unbiased	353.63	354.74	1.1119
32	30	HDR Unbiased	353.74	353.54	-0.1917
33	30	HDR Unbiased	356.52	354.82	-1.6994
34	30	HDR Unbiased	353.63	355.42	1.7929
35	30	HDR Biased	354.41	356.27	1.8521
36	30	HDR Biased	355.84	358.9	3.0613
37	30	HDR Biased	353.62	358.14	4.5214
38	30	HDR Biased	355.09	360.35	5.2537
39	30	HDR Biased	354.49	356.85	2.3641
40	50	HDR Unbiased	354.3	356.1	1.8063
41	50	HDR Unbiased	354.41	354.26	-0.1507
42	50	HDR Unbiased	356.51	358.93	2.4223
43	50	HDR Unbiased	352.27	358.81	6.5441
44	50	HDR Unbiased		354.22	
50	0	CORRELATION	353.06	351.44	-1.6222
51	0	CORRELATION	355.84	360.85	5.0106
52	0	CORRELATION	355.66	353.55	-2.1153
53	0	CORRELATION	355.77	354.83	-0.9413
54	0	CORRELATION	357.2	358.82	1.6136
78	50	HDR Biased	356.52	355.33	-1.1911
79	50	HDR Biased	354.3	354.66	0.351
80	50	HDR Biased	353.05	356.1	3.0546
81	50	HDR Biased	358.57	361.96	3.3922
82	50	HDR Biased	352.94	356.1	3.1576
83	0	CORRELATION	352.38	347.71	-4.672

## TID vs Post - Pre Exposure Delta

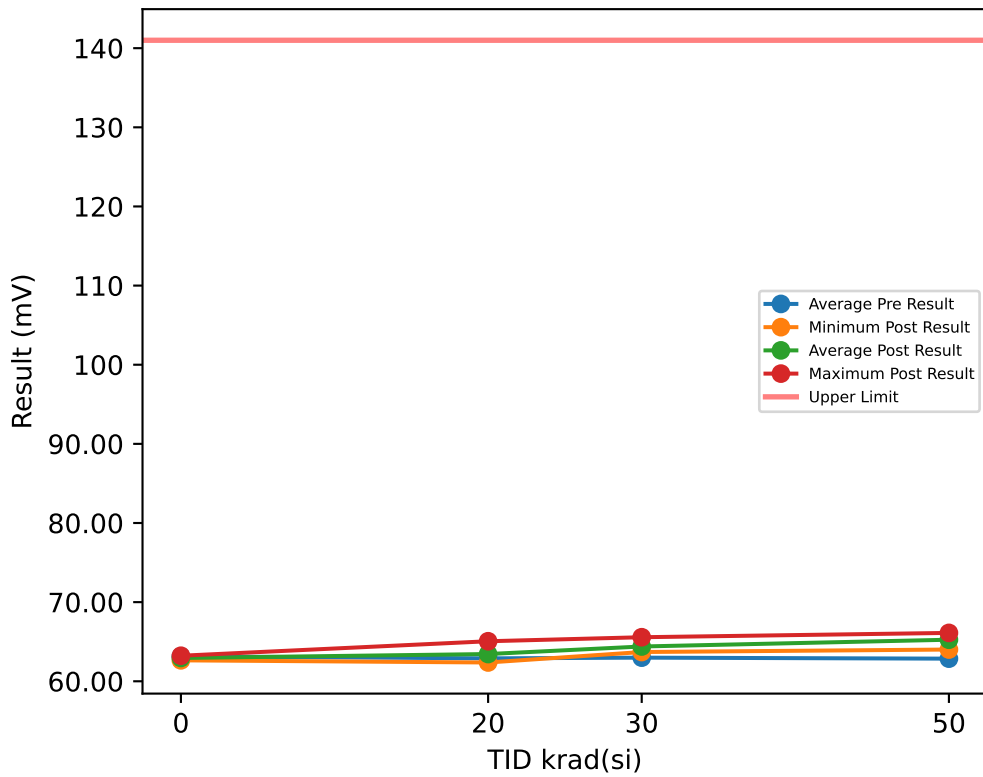


## Test Statistics (mV)

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	352.38	354.99	357.2	1.8566	347.71	354.53	360.85	4.8073	-4.672	-0.45443	5.0106	3.3553
20	351.7	354.05	357.03	1.8937	351.4	355.44	360.16	2.5135	-4.2715	1.3915	4.4889	2.5344
30	353.62	354.48	356.52	1.0319	353.54	356.66	360.35	2.1112	-1.6994	2.1794	5.2537	2.1137
50	352.27	354.76	358.57	2.0504	354.22	356.65	361.96	2.5012	-1.1911	2.154	6.5441	2.3068

# Device Test: 17.6 VIN|DROPOUT/OUT//2.25//250//@VDO\_250MA\_LV

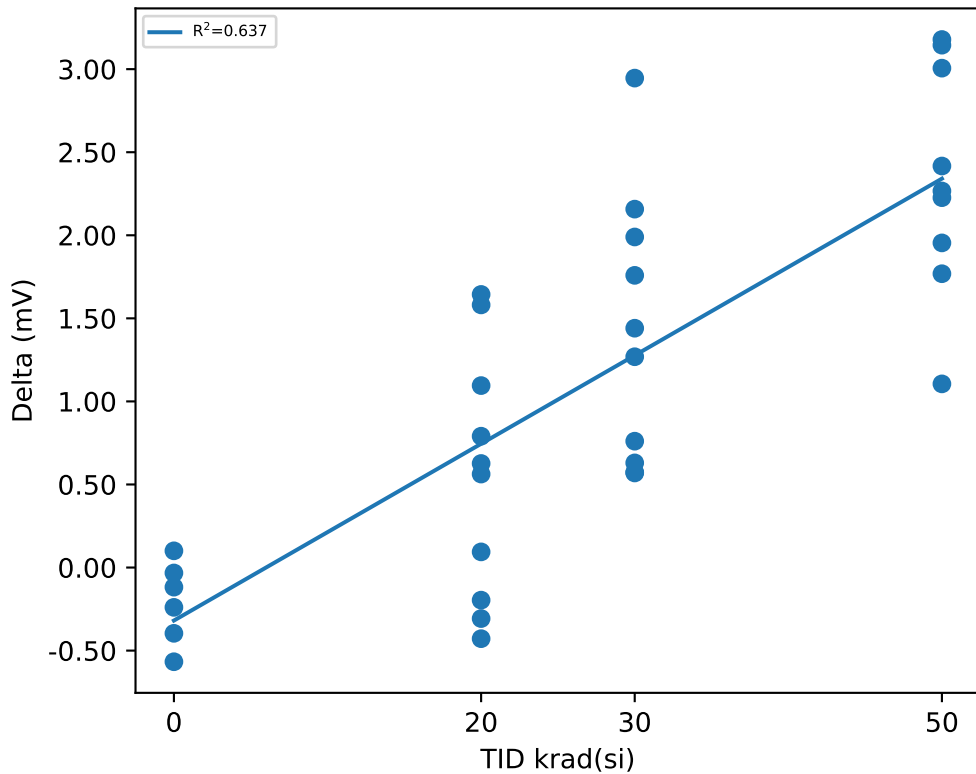
### TID vs Result Stats



### Test Results (Upper Limit = 141.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	63.974	63.667	-0.3071
2	20	HDR Unbiased	62.258	63.353	1.0953
3	20	HDR Unbiased	63.59	63.394	-0.1962
23	20	HDR Unbiased	62.765	64.346	1.5809
24	20	HDR Unbiased	62.229	63.02	0.7906
25	20	HDR Biased	62.28	62.375	0.0942
26	20	HDR Biased	62.766	63.328	0.5627
27	20	HDR Biased	63.414	65.058	1.6439
28	20	HDR Biased	62.088	62.714	0.6263
29	20	HDR Biased	63.587	63.159	-0.4282
30	30	HDR Unbiased	62.62	65.566	2.9461
31	30	HDR Unbiased	61.577	63.734	2.1574
32	30	HDR Unbiased	63.246	64.515	1.2689
33	30	HDR Unbiased	63.126	64.884	1.7588
34	30	HDR Unbiased	63.275	63.905	0.6299
35	30	HDR Biased	63.755	64.516	0.7606
36	30	HDR Biased	63.125	63.699	0.5739
37	30	HDR Biased	62.595	64.585	1.9898
38	30	HDR Biased	63.416	64.856	1.4406
39	30	HDR Biased	63.127	63.696	0.5693
40	50	HDR Unbiased	62.934	66.112	3.1784
41	50	HDR Unbiased	62.906	64.011	1.1055
42	50	HDR Unbiased	63.632	65.4	1.7686
43	50	HDR Unbiased	62.766	65.772	3.006
44	50	HDR Unbiased		65.704	
50	0	CORRELATION	63.246	62.679	-0.567
51	0	CORRELATION	63.125	63.226	0.1006
52	0	CORRELATION	62.765	62.647	-0.118
53	0	CORRELATION	63.416	63.02	-0.396
54	0	CORRELATION	63.465	63.226	-0.2397
78	50	HDR Biased	63.126	65.352	2.2264
79	50	HDR Biased	62.596	65.013	2.4169
80	50	HDR Biased	62.566	65.71	3.1443
81	50	HDR Biased	62.787	64.741	1.9541
82	50	HDR Biased	62.425	64.691	2.2666
83	0	CORRELATION	62.907	62.875	-0.0327

### TID vs Post - Pre Exposure Delta



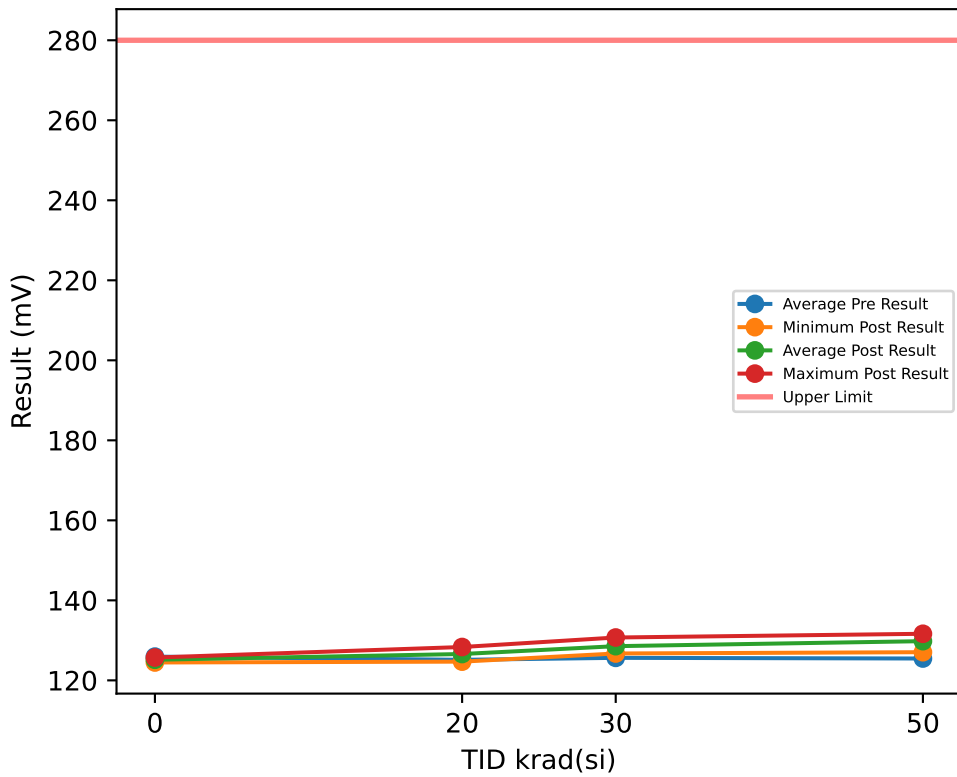
### Test Statistics (mV)

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	62.765	63.154	63.465	0.27823	62.647	62.945	63.226	0.25591	-0.567	-0.2088	0.1006	0.24466
20	62.088	62.895	63.974	0.69173	62.375	63.441	65.058	0.77659	-0.4282	0.54624	1.6439	0.75104
30	61.577	62.986	63.755	0.60168	63.696	64.396	65.566	0.62708	0.5693	1.4095	2.9461	0.80505
50	62.425	62.86	63.632	0.35942	64.011	65.251	66.112	0.63488	1.1055	2.3408	3.1784	0.69074



# Device Test: 17.9 VIN|DROPOUT/OUT//2.25//500//@VDO\_500MA\_LV

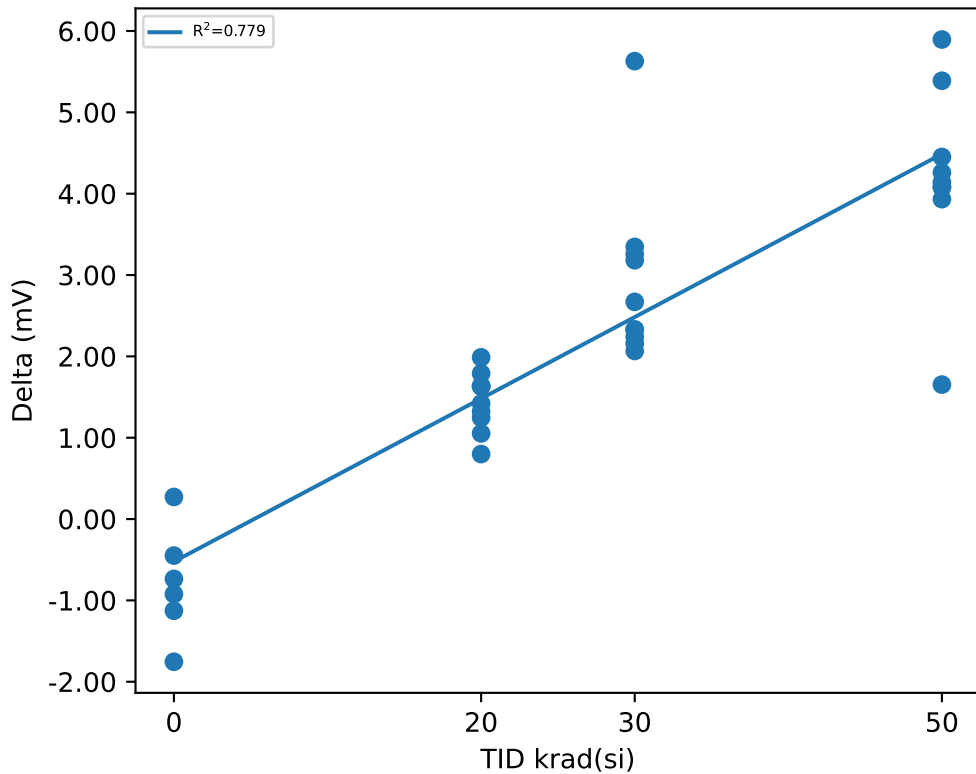
## TID vs Result Stats



## Test Results (Upper Limit = 280.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	125.93	127.72	1.791
2	20	HDR Unbiased	125.41	126.46	1.0536
3	20	HDR Unbiased	125.39	126.72	1.3223
23	20	HDR Unbiased	125.58	127.21	1.6322
24	20	HDR Unbiased	124.71	125.96	1.2462
25	20	HDR Biased	123.05	124.68	1.6346
26	20	HDR Biased	125.07	126.7	1.6322
27	20	HDR Biased	126.92	128.34	1.4202
28	20	HDR Biased	123.71	125.7	1.988
29	20	HDR Biased	125.56	126.36	0.7989
30	30	HDR Unbiased	125.08	130.71	5.6296
31	30	HDR Unbiased	124.39	126.72	2.3301
32	30	HDR Unbiased	126.07	129.42	3.346
33	30	HDR Unbiased	125.59	128.84	3.2547
34	30	HDR Unbiased	125.58	128.25	2.6701
35	30	HDR Biased	126.41	128.57	2.1584
36	30	HDR Biased	124.91	127.15	2.2392
37	30	HDR Biased	125.75	128.93	3.1817
38	30	HDR Biased	126.92	129.25	2.3287
39	30	HDR Biased	125.59	127.65	2.0662
40	50	HDR Unbiased	126.25	131.64	5.3885
41	50	HDR Unbiased	125.39	127.04	1.6527
42	50	HDR Unbiased	125.92	130.38	4.4513
43	50	HDR Unbiased	125.07	130.96	5.8954
44	50	HDR Unbiased		130.94	
50	0	CORRELATION	125.56	125.11	-0.4489
51	0	CORRELATION	126.44	125.7	-0.736
52	0	CORRELATION	124.9	125.17	0.2716
53	0	CORRELATION	126.07	124.94	-1.127
54	0	CORRELATION	127.28	125.53	-1.754
78	50	HDR Biased	126.1	130.17	4.077
79	50	HDR Biased	125.07	129.33	4.2586
80	50	HDR Biased	125.39	129.32	3.9327
81	50	HDR Biased	125.08	129.22	4.1402
82	50	HDR Biased	124.9	128.98	4.085
83	0	CORRELATION	125.39	124.47	-0.9222

## TID vs Post - Pre Exposure Delta

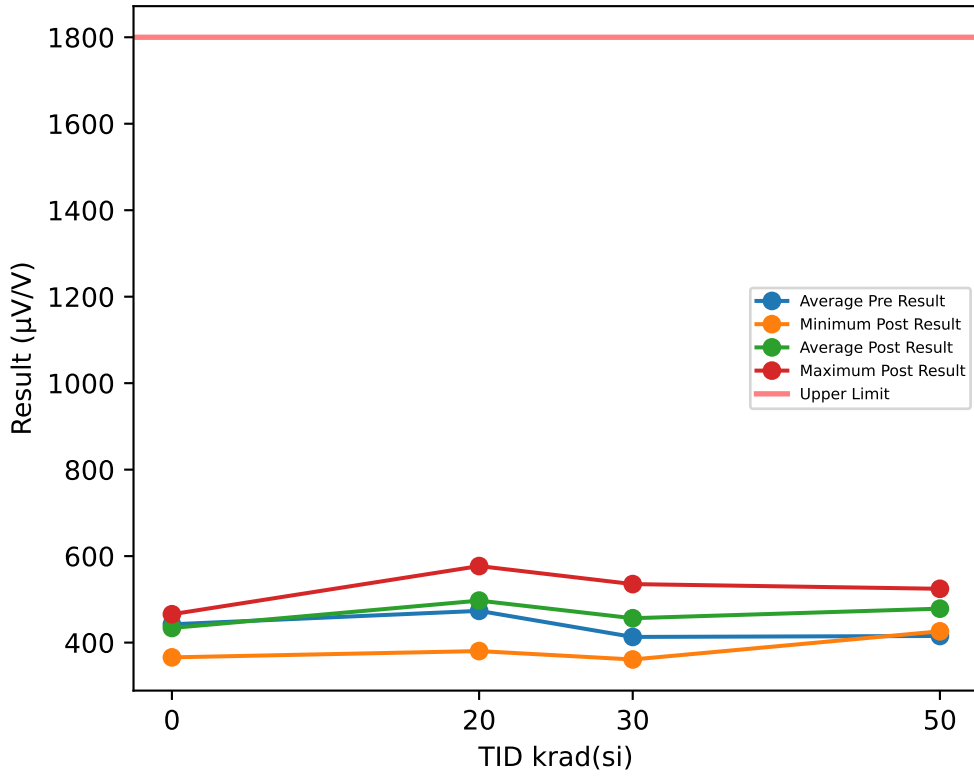


## Test Statistics (mV)

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	124.9	125.94	127.28	0.84917	124.47	125.15	125.7	0.43753	-1.754	-0.78608	0.2716	0.67919
20	123.05	125.13	126.92	1.1003	124.68	126.58	128.34	1.0351	0.7989	1.4519	1.988	0.35683
30	124.39	125.63	126.92	0.7335	126.72	128.55	130.71	1.1715	2.0662	2.9205	5.6296	1.0665
50	124.9	125.46	126.25	0.50411	127.04	129.8	131.64	1.3163	1.6527	4.209	5.8954	1.1697

# Device Test: 18.4 VIN|REGULATION/OUT/2.25/0.6//10//@LINE\_REG\_2p25

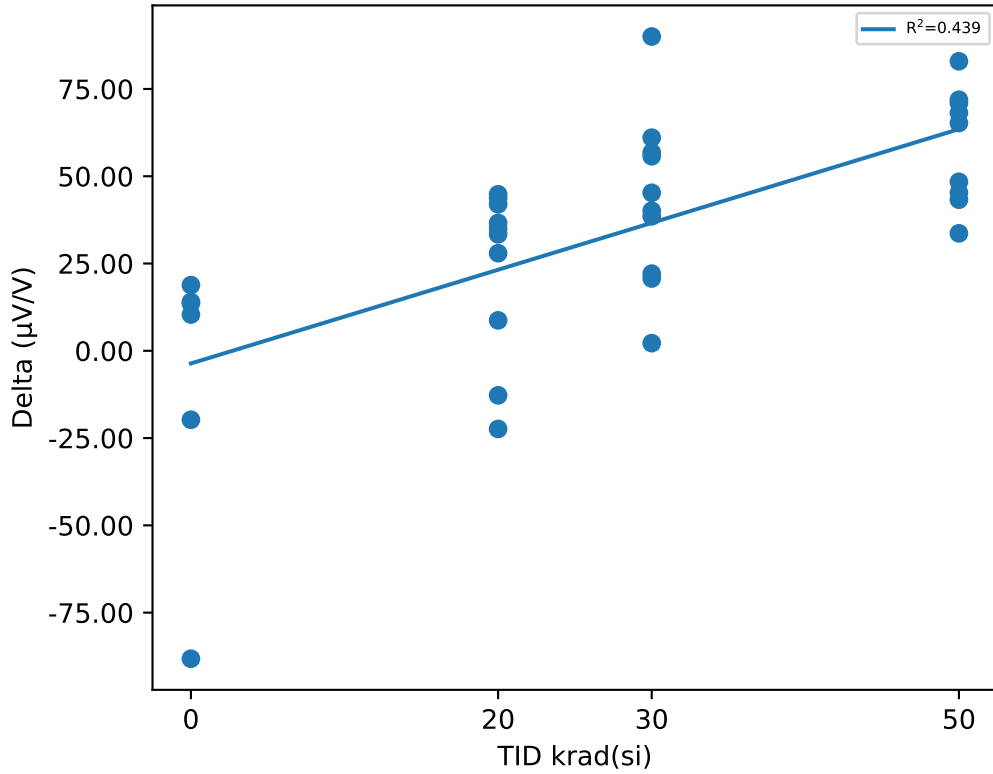
### TID vs Result Stats



### Test Results (Upper Limit = 1800.0 (µV/V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	475.07	517.04	41.975
2	20	HDR Unbiased	458.83	495.45	36.621
3	20	HDR Unbiased	499.05	543.88	44.827
23	20	HDR Unbiased	444.35	488.08	43.731
24	20	HDR Unbiased	352.45	380.4	27.95
25	20	HDR Biased	494.46	529.42	34.959
26	20	HDR Biased	507.27	484.89	-22.381
27	20	HDR Biased	475.11	462.35	-12.751
28	20	HDR Biased	568.29	577.01	8.7178
29	20	HDR Biased	459.26	492.64	33.377
30	30	HDR Unbiased	455.57	511.3	55.732
31	30	HDR Unbiased	429.83	451.94	22.103
32	30	HDR Unbiased	450.6	511.65	61.052
33	30	HDR Unbiased	364.19	454.21	90.025
34	30	HDR Unbiased	403.6	405.79	2.1884
35	30	HDR Biased	349.72	406.55	56.832
36	30	HDR Biased	340.24	360.95	20.706
37	30	HDR Biased	403.62	448.88	45.26
38	30	HDR Biased	437.05	477.17	40.125
39	30	HDR Biased	496.77	535.3	38.524
40	50	HDR Unbiased	426.24	498.16	71.912
41	50	HDR Unbiased	454.72	498.01	43.288
42	50	HDR Unbiased	425.73	474.13	48.405
43	50	HDR Unbiased	459.22	524.46	65.246
44	50	HDR Unbiased		517.51	
50	0	CORRELATION	455.17	465.56	10.386
51	0	CORRELATION	447.9	461.52	13.627
52	0	CORRELATION	347.03	365.85	18.818
53	0	CORRELATION	430.27	444.26	13.989
54	0	CORRELATION	534.77	446.57	-88.205
78	50	HDR Biased	413.06	495.99	82.932
79	50	HDR Biased	385.05	430.35	45.297
80	50	HDR Biased	355.16	426.08	70.916
81	50	HDR Biased	442.03	475.68	33.646
82	50	HDR Biased	376.49	444.64	68.158
83	0	CORRELATION	438.88	419.13	-19.747

### TID vs Post - Pre Exposure Delta

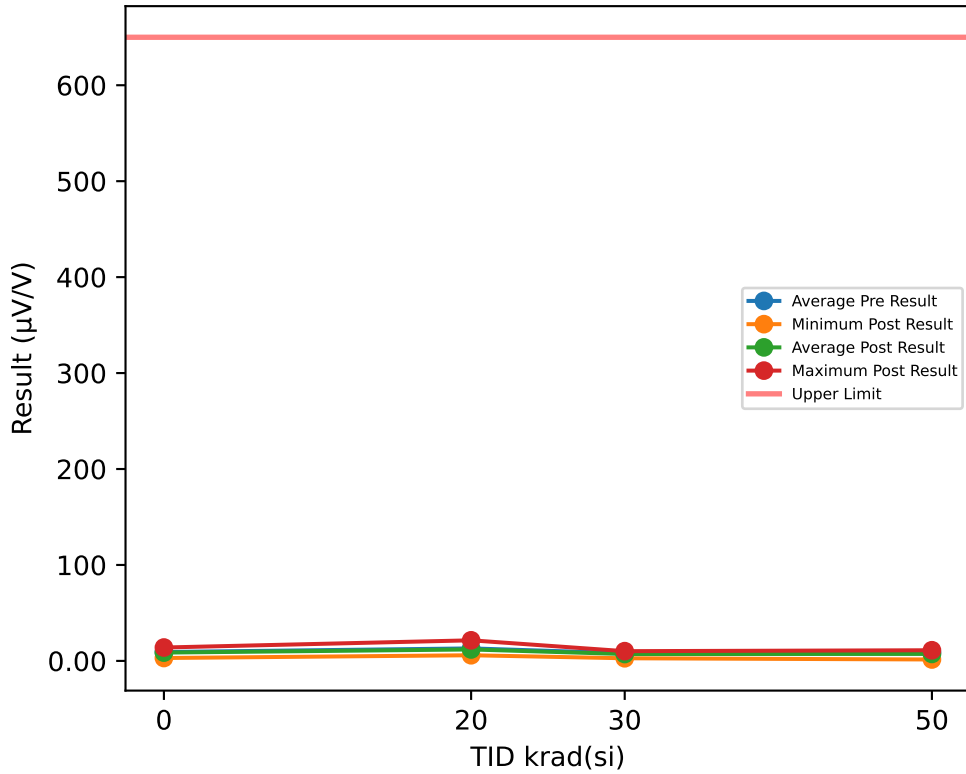


### Test Statistics (µV/V)

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	347.03	442.34	534.77	59.967	365.85	433.81	465.56	37.1	-88.205	-8.5219	18.818	41.419
20	352.45	473.41	568.29	54.918	380.4	497.12	577.01	52.805	-22.381	23.702	44.827	24.184
30	340.24	413.12	496.77	50.511	360.95	456.37	535.3	54.733	2.1884	43.255	90.025	24.772
50	355.16	415.3	459.22	36.174	426.08	478.5	524.46	34.876	33.646	58.867	82.932	16.56

# Device Test: 18.5 VIN|REGULATION/OUT/14/0.6//10//@LINE\_REG

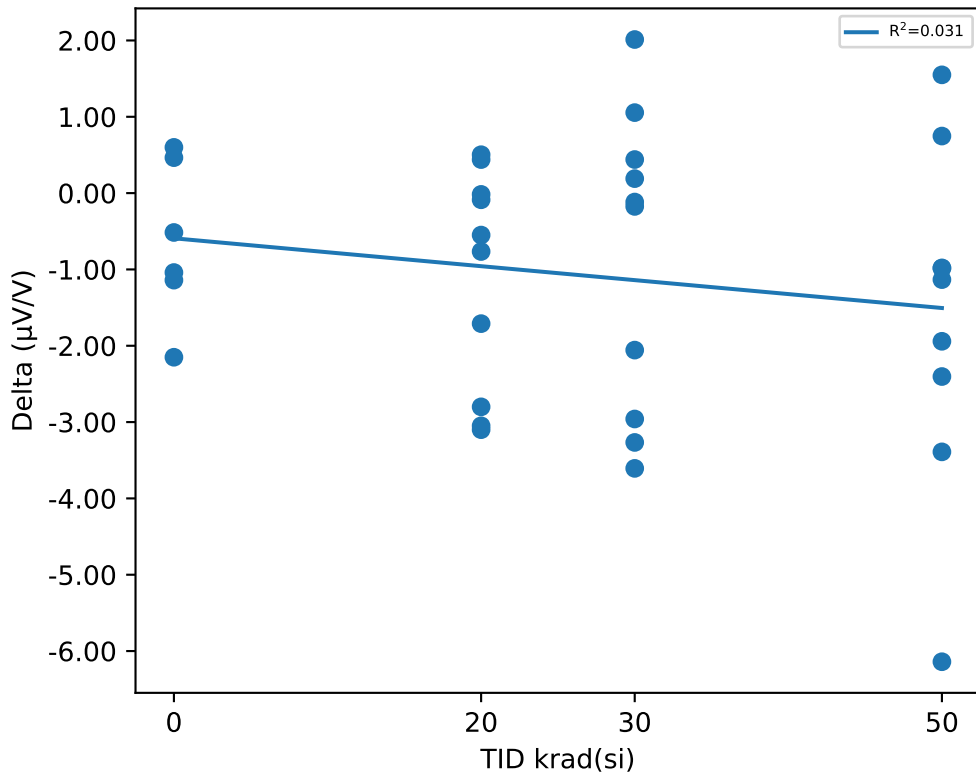
## TID vs Result Stats



## Test Results (Upper Limit = 650.0 (µV/V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	11.968	12.471	0.503
2	20	HDR Unbiased	11.94	9.1399	-2.8004
3	20	HDR Unbiased	14.221	14.205	-0.0168
23	20	HDR Unbiased	11.941	11.391	-0.5497
24	20	HDR Unbiased	5.985	5.8978	-0.0872
25	20	HDR Biased	17.767	14.668	-3.0994
26	20	HDR Biased	14.409	14.848	0.4394
27	20	HDR Biased	7.5583	6.7932	-0.7651
28	20	HDR Biased	23.171	21.461	-1.7101
29	20	HDR Biased	11.476	8.4273	-3.0489
30	30	HDR Unbiased	10.302	10.128	-0.1743
31	30	HDR Unbiased	9.1327	9.5727	0.44
32	30	HDR Unbiased	10.273	10.156	-0.117
33	30	HDR Unbiased	5.2438	7.2563	2.0125
34	30	HDR Unbiased	6.1091	7.1638	1.0547
35	30	HDR Biased	6.386	3.4266	-2.9594
36	30	HDR Biased	6.0148	2.7482	-3.2666
37	30	HDR Biased	7.9912	4.3847	-3.6065
38	30	HDR Biased	7.3732	7.563	0.1898
39	30	HDR Biased	11.382	9.325	-2.0569
40	50	HDR Unbiased	6.9731	8.5226	1.5495
41	50	HDR Unbiased	10.366	11.113	0.7476
42	50	HDR Unbiased	8.6985	7.5652	-1.1333
43	50	HDR Unbiased	9.287	8.3065	-0.9805
44	50	HDR Unbiased		8.8904	
50	0	CORRELATION	13.358	13.957	0.5993
51	0	CORRELATION	8.8219	7.7814	-1.0405
52	0	CORRELATION	4.1653	3.0251	-1.1402
53	0	CORRELATION	10.211	9.6956	-0.5157
54	0	CORRELATION	10.302	8.1519	-2.1504
78	50	HDR Biased	8.9761	7.0346	-1.9415
79	50	HDR Biased	7.6209	1.481	-6.1399
80	50	HDR Biased	6.6636	4.2605	-2.4031
81	50	HDR Biased	10.58	9.5961	-0.9838
82	50	HDR Biased	9.3796	5.9894	-3.3902
83	0	CORRELATION	8.854	9.3186	0.4646

## TID vs Post - Pre Exposure Delta

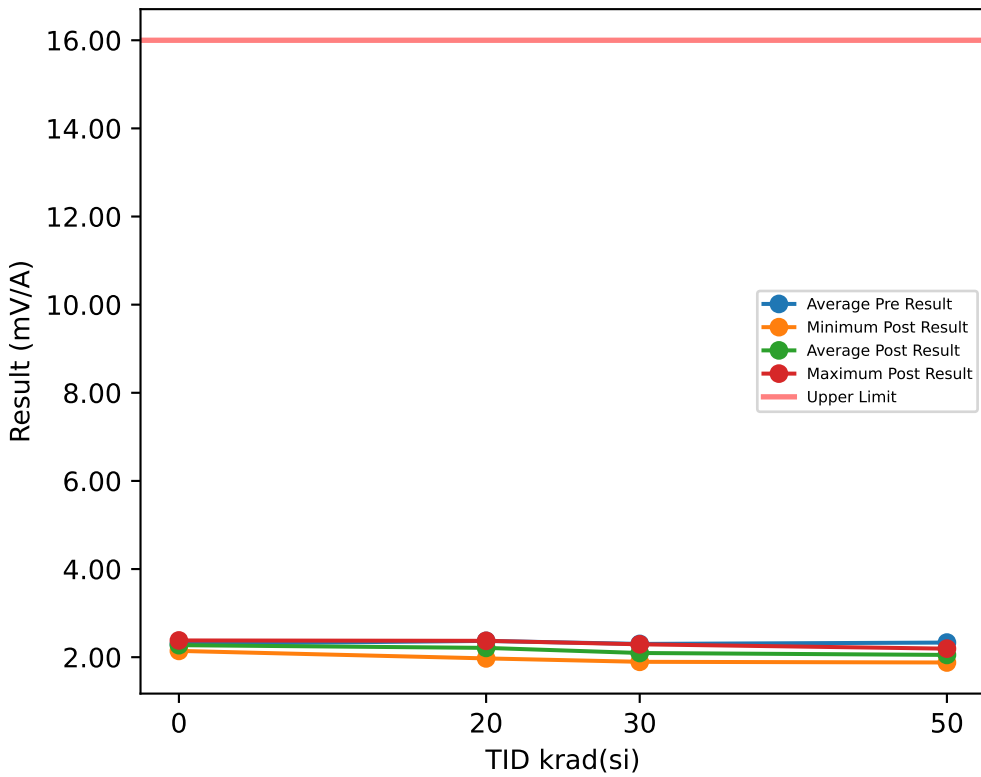


## Test Statistics (µV/V)

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	4.1653	9.2854	13.358	3.003	3.0251	8.6549	13.957	3.5312	-2.1504	-0.63048	0.5993	1.0453
20	5.985	13.044	23.171	4.8773	5.8978	11.93	21.461	4.66	-3.0994	-1.1135	0.503	1.438
30	5.2438	8.0208	11.382	2.142	2.7482	7.1724	10.156	2.7802	-3.6065	-0.84837	2.0125	1.9694
50	6.6636	8.7271	10.58	1.3909	1.481	7.2759	11.113	2.7849	-6.1399	-1.6306	1.5495	2.2633

# Device Test: 19.5 VOUT|REGULATION/OUT/5/3.3////@LOAD\_REG

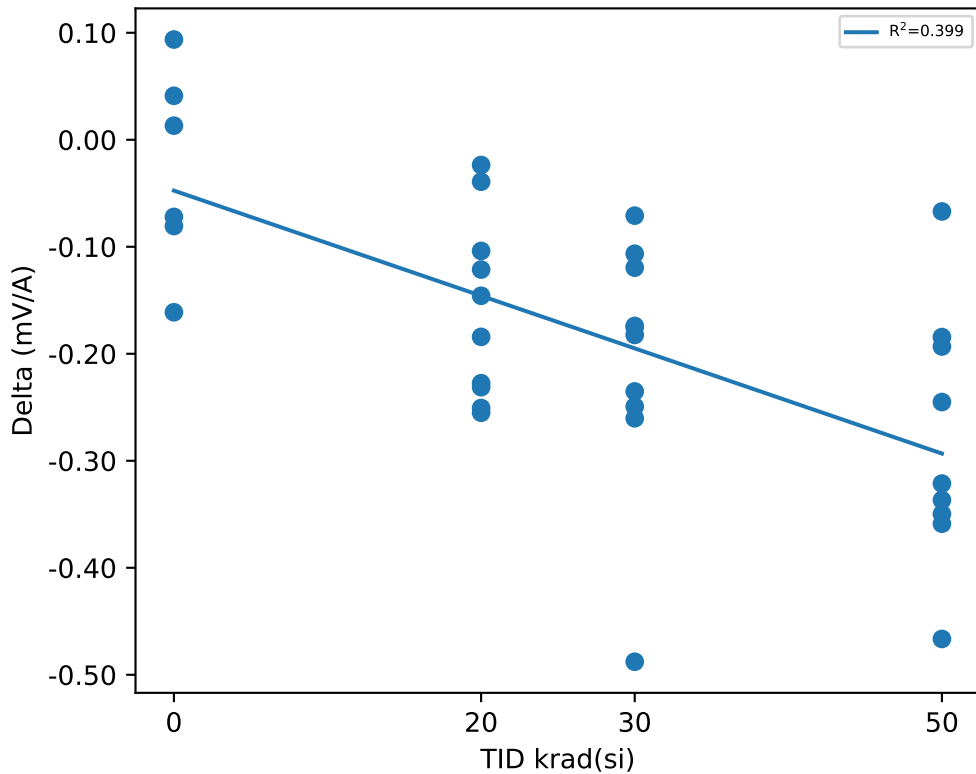
## TID vs Result Stats



## Test Results (Upper Limit = 16.0 (mV/A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	2.3886	2.2428	-0.1458
2	20	HDR Unbiased	2.4044	2.1493	-0.2551
3	20	HDR Unbiased	2.5171	2.2859	-0.2312
23	20	HDR Unbiased	2.296	2.1118	-0.1842
24	20	HDR Unbiased	2.2	1.9725	-0.2275
25	20	HDR Biased	2.4106	2.3714	-0.0392
26	20	HDR Biased	2.4109	2.1602	-0.2507
27	20	HDR Biased	2.3987	2.2774	-0.1213
28	20	HDR Biased	2.3493	2.2454	-0.1039
29	20	HDR Biased	2.3188	2.2952	-0.0236
30	30	HDR Unbiased	2.3829	1.8951	-0.4878
31	30	HDR Unbiased	2.2924	2.0431	-0.2493
32	30	HDR Unbiased	2.5275	2.2923	-0.2352
33	30	HDR Unbiased	2.288	2.0277	-0.2603
34	30	HDR Unbiased	2.2654	2.0905	-0.1749
35	30	HDR Biased	2.1797	2.1088	-0.0709
36	30	HDR Biased	2.2432	2.0608	-0.1824
37	30	HDR Biased	2.2716	2.1521	-0.1195
38	30	HDR Biased	2.3052	2.1987	-0.1065
39	30	HDR Biased	2.256	2.082	-0.174
40	50	HDR Unbiased	2.5265	2.06	-0.4665
41	50	HDR Unbiased	2.2217	2.1547	-0.067
42	50	HDR Unbiased	2.2112	1.9661	-0.2451
43	50	HDR Unbiased	2.5526	2.1938	-0.3588
44	50	HDR Unbiased		2.0495	
50	0	CORRELATION	2.3389	2.38	0.0411
51	0	CORRELATION	2.2075	2.3012	0.0937
52	0	CORRELATION	2.2341	2.2473	0.0132
53	0	CORRELATION	2.2233	2.1427	-0.0806
54	0	CORRELATION	2.4118	2.2506	-0.1612
78	50	HDR Biased	2.3848	2.0635	-0.3213
79	50	HDR Biased	2.2227	2.0383	-0.1844
80	50	HDR Biased	2.4343	2.0976	-0.3367
81	50	HDR Biased	2.2295	1.8798	-0.3497
82	50	HDR Biased	2.205	2.0118	-0.1932
83	0	CORRELATION	2.3865	2.3144	-0.0721

## TID vs Post - Pre Exposure Delta

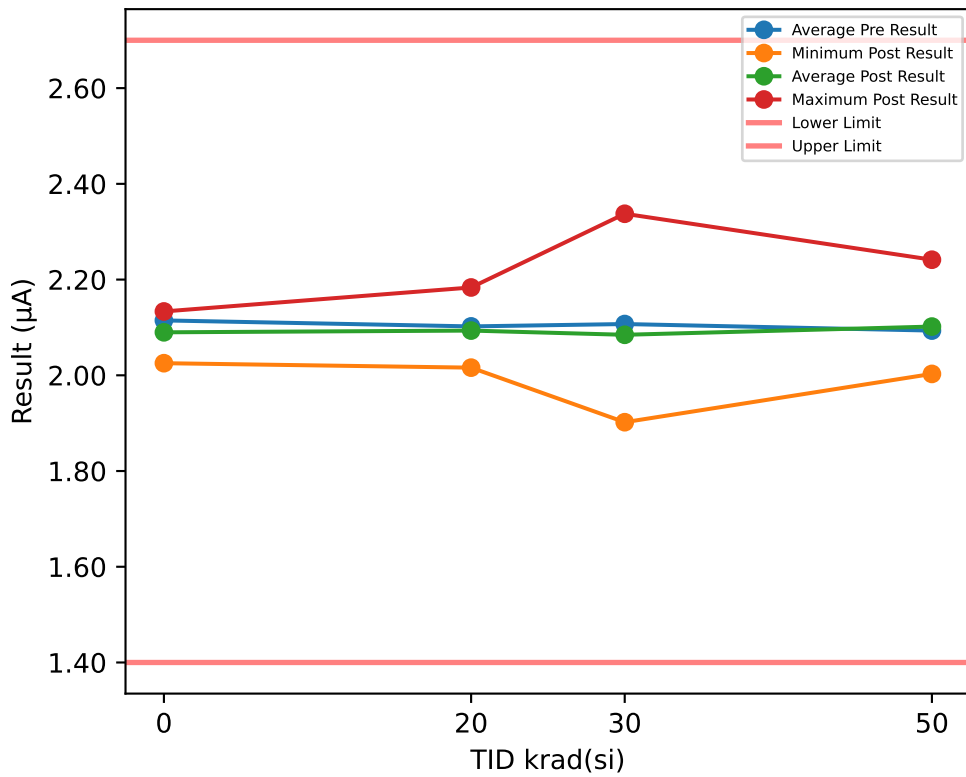


## Test Statistics (mV/A)

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	2.2075	2.3003	2.4118	0.089751	2.1427	2.2727	2.38	0.080122	-0.1612	-0.02765	0.0937	0.093527
20	2.2	2.3694	2.5171	0.08481	1.9725	2.2112	2.3714	0.11457	-0.2551	-0.15825	-0.0236	0.085307
30	2.1797	2.3012	2.5275	0.094564	1.8951	2.0951	2.2923	0.10629	-0.4878	-0.20608	-0.0709	0.11703
50	2.205	2.332	2.5526	0.14365	1.8798	2.0515	2.1938	0.089299	-0.4665	-0.2803	-0.067	0.11939

# Device Test: 20.1 TIMING|CURRENT/SS/2.25/0.6//10//@I\_SS

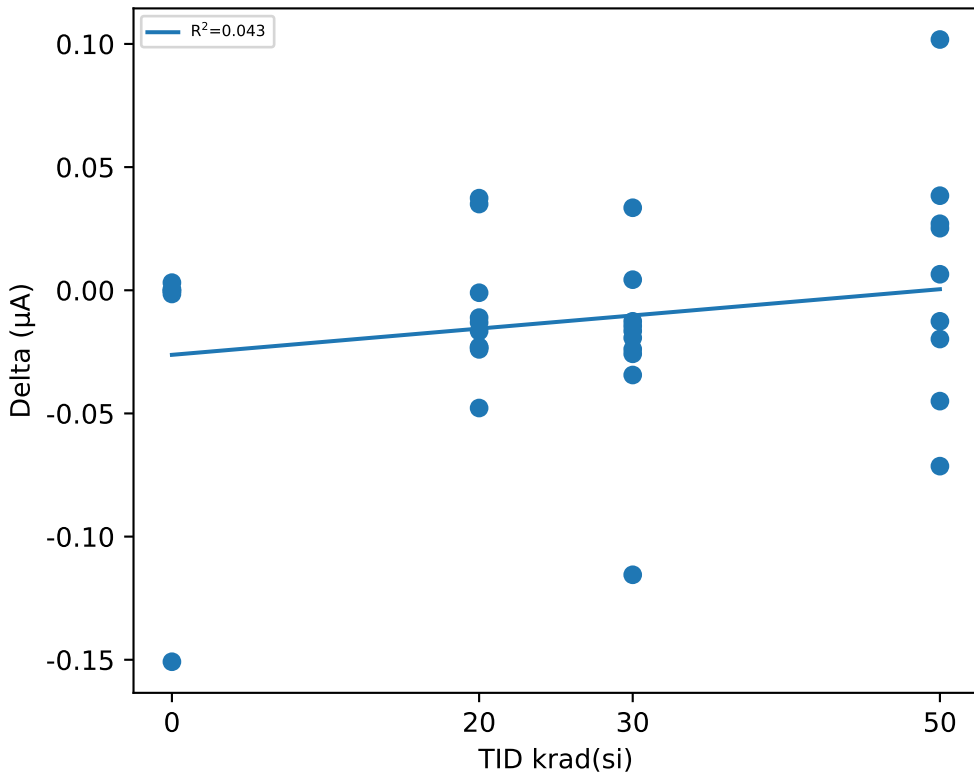
### TID vs Result Stats



### Test Results (Lower Limit = 1.4, Upper Limit = 2.7 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	2.0271	2.016	-0.0111
2	20	HDR Unbiased	2.062	2.0994	0.0374
3	20	HDR Unbiased	2.2065	2.1835	-0.023
23	20	HDR Unbiased	2.0906	2.1256	0.035
24	20	HDR Unbiased	2.0427	2.0187	-0.024
25	20	HDR Biased	2.1242	2.0764	-0.0478
26	20	HDR Biased	2.1156	2.0924	-0.0232
27	20	HDR Biased	2.1403	2.1237	-0.0166
28	20	HDR Biased	2.0666	2.0535	-0.0131
29	20	HDR Biased	2.1462	2.1452	-0.001
30	30	HDR Unbiased	2.1176	2.0021	-0.1155
31	30	HDR Unbiased	2.103	2.0865	-0.0165
32	30	HDR Unbiased	2.3332	2.3375	0.0043
33	30	HDR Unbiased	2.1524	2.118	-0.0344
34	30	HDR Unbiased	2.1082	2.1417	0.0335
35	30	HDR Biased	2.1512	2.1273	-0.0239
36	30	HDR Biased	1.9165	1.902	-0.0145
37	30	HDR Biased	2.0075	1.9817	-0.0258
38	30	HDR Biased	2.1428	2.1302	-0.0126
39	30	HDR Biased	2.0387	2.0194	-0.0193
40	50	HDR Unbiased	2.2031	2.2415	0.0384
41	50	HDR Unbiased	1.9954	2.0972	0.1018
42	50	HDR Unbiased	2.0393	2.0195	-0.0198
43	50	HDR Unbiased	2.1757	2.2009	0.0252
44	50	HDR Unbiased		2.1273	
50	0	CORRELATION	2.0789	2.0787	-0.0002
51	0	CORRELATION	2.1195	2.118	-0.0015
52	0	CORRELATION	2.0559	2.0556	-0.0003
53	0	CORRELATION	2.1329	2.1334	0.0005
54	0	CORRELATION	2.1761	2.0253	-0.1508
78	50	HDR Biased	2.0721	2.0786	0.0065
79	50	HDR Biased	2.1488	2.1038	-0.045
80	50	HDR Biased	2.0743	2.0029	-0.0714
81	50	HDR Biased	2.0157	2.0031	-0.0126
82	50	HDR Biased	2.1164	2.1434	0.027
83	0	CORRELATION	2.1248	2.1279	0.0031

### TID vs Post - Pre Exposure Delta

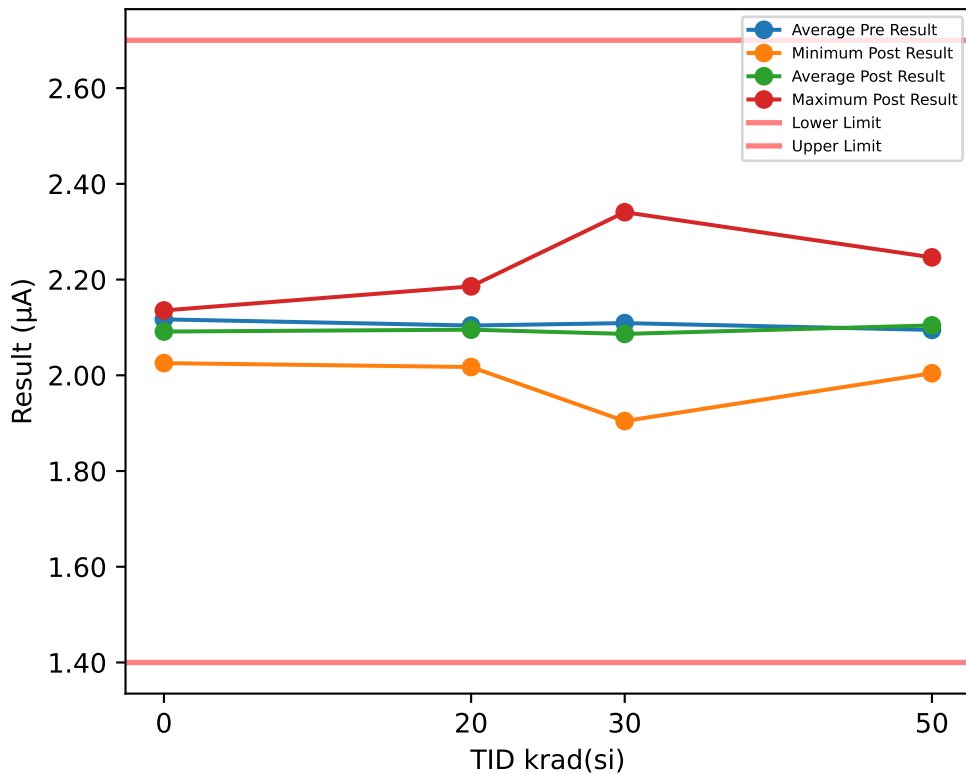


### Test Statistics (µA)

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	2.0559	2.1147	2.1761	0.042345	2.0253	2.0898	2.1334	0.04382	-0.1508	-0.024867	0.0031	0.061713
20	2.0271	2.1022	2.2065	0.054902	2.016	2.0934	2.1835	0.054001	-0.0478	-0.00874	0.0374	0.026582
30	1.9165	2.1071	2.3332	0.10926	1.902	2.0846	2.3375	0.1189	-0.1155	-0.02247	0.0335	0.037809
50	1.9954	2.0934	2.2031	0.072277	2.0029	2.1018	2.2415	0.080676	-0.0714	0.0055667	0.1018	0.050792

# Device Test: 20.2 TIMING|CURRENT/SS/14/13.3//10//@I\_SS

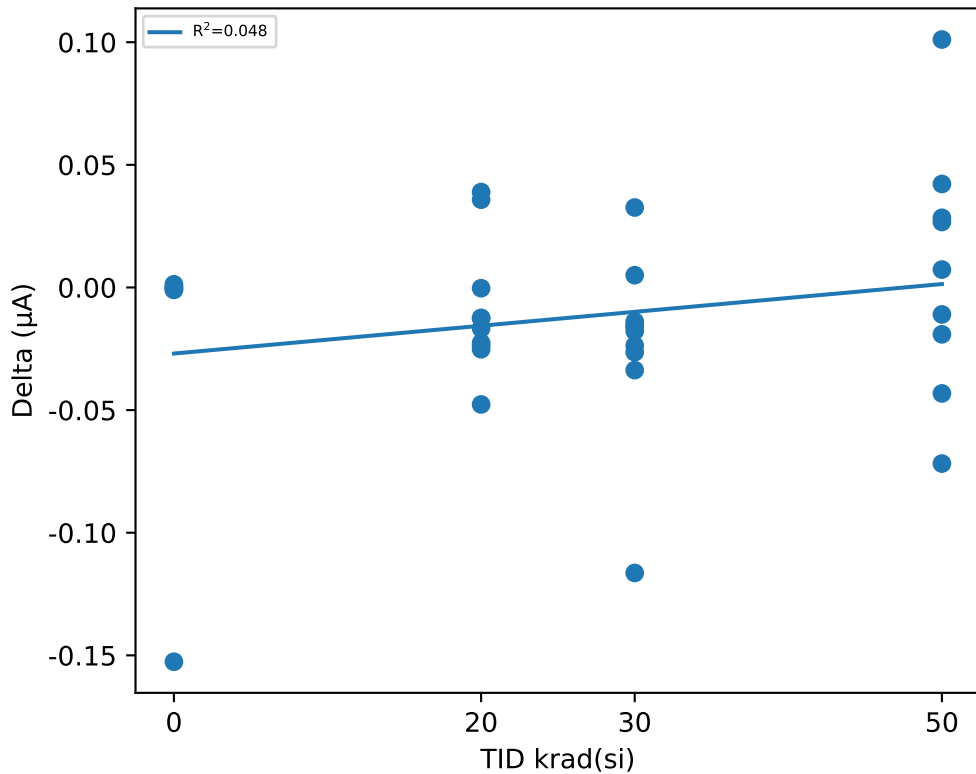
### TID vs Result Stats



### Test Results (Lower Limit = 1.4, Upper Limit = 2.7 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	2.0299	2.0173	-0.0126
2	20	HDR Unbiased	2.0626	2.1015	0.0389
3	20	HDR Unbiased	2.2084	2.1858	-0.0226
23	20	HDR Unbiased	2.0923	2.1281	0.0358
24	20	HDR Unbiased	2.0447	2.0195	-0.0252
25	20	HDR Biased	2.1266	2.0789	-0.0477
26	20	HDR Biased	2.1169	2.0932	-0.0237
27	20	HDR Biased	2.1425	2.1258	-0.0167
28	20	HDR Biased	2.0678	2.0554	-0.0124
29	20	HDR Biased	2.1483	2.148	-0.0003
30	30	HDR Unbiased	2.1187	2.0023	-0.1164
31	30	HDR Unbiased	2.1037	2.0878	-0.0159
32	30	HDR Unbiased	2.3357	2.3407	0.005
33	30	HDR Unbiased	2.1541	2.1204	-0.0337
34	30	HDR Unbiased	2.1095	2.1421	0.0326
35	30	HDR Biased	2.1534	2.1297	-0.0237
36	30	HDR Biased	1.9201	1.9044	-0.0157
37	30	HDR Biased	2.0091	1.9827	-0.0264
38	30	HDR Biased	2.1457	2.1318	-0.0139
39	30	HDR Biased	2.0406	2.0228	-0.0178
40	50	HDR Unbiased	2.2042	2.2464	0.0422
41	50	HDR Unbiased	1.9969	2.098	0.1011
42	50	HDR Unbiased	2.0409	2.0218	-0.0191
43	50	HDR Unbiased	2.1774	2.2041	0.0267
44	50	HDR Unbiased		2.1291	
50	0	CORRELATION	2.0818	2.081	-0.0008
51	0	CORRELATION	2.121	2.12	-0.001
52	0	CORRELATION	2.0572	2.0574	0.0002
53	0	CORRELATION	2.1354	2.1355	0.0001
54	0	CORRELATION	2.1781	2.0255	-0.1526
78	50	HDR Biased	2.0733	2.0806	0.0073
79	50	HDR Biased	2.1498	2.1066	-0.0432
80	50	HDR Biased	2.076	2.0042	-0.0718
81	50	HDR Biased	2.0172	2.0062	-0.011
82	50	HDR Biased	2.1178	2.1462	0.0284
83	0	CORRELATION	2.1278	2.1291	0.0013

### TID vs Post - Pre Exposure Delta



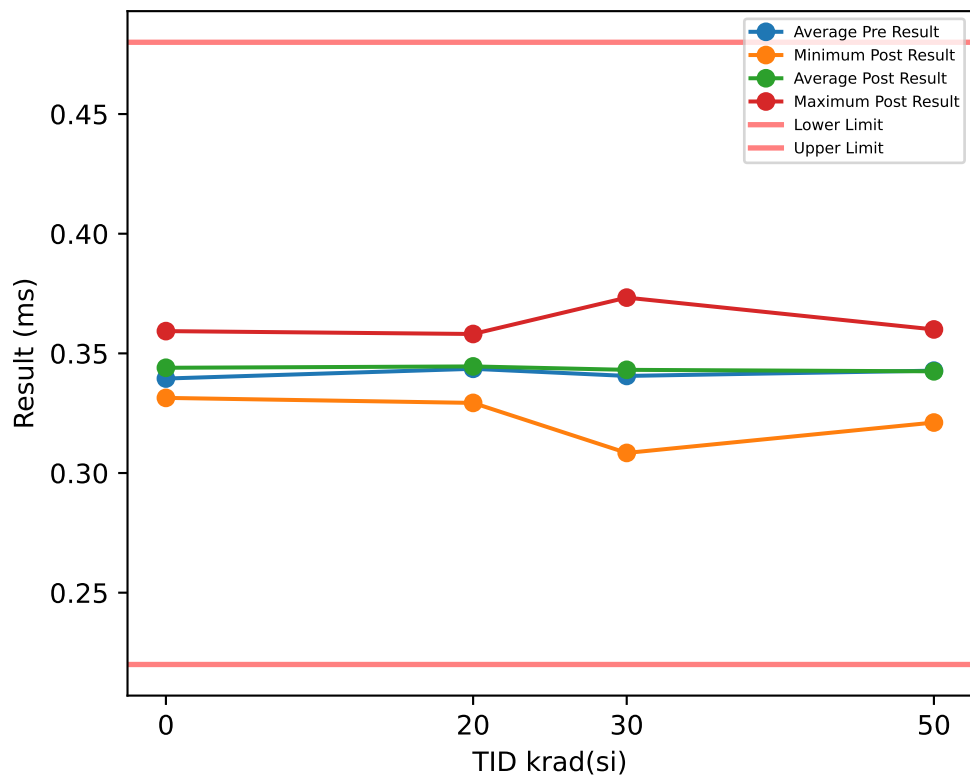
### Test Statistics (µA)

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	2.0572	2.1169	2.1781	0.042472	2.0255	2.0914	2.1355	0.044252	-0.1526	-0.025467	0.0013	0.062288
20	2.0299	2.104	2.2084	0.054964	2.0173	2.0953	2.1858	0.054474	-0.0477	-0.00865	0.0389	0.027123
30	1.9201	2.1091	2.3357	0.10914	1.9044	2.0865	2.3407	0.11919	-0.1164	-0.02259	0.0326	0.037914
50	1.9969	2.0948	2.2042	0.072174	2.0042	2.1043	2.2464	0.081363	-0.0718	0.0067333	0.1011	0.050836



# Device Test: 20.3 LEVEL|TIMING/SS/5/3.3//10//@TSS\_1NF

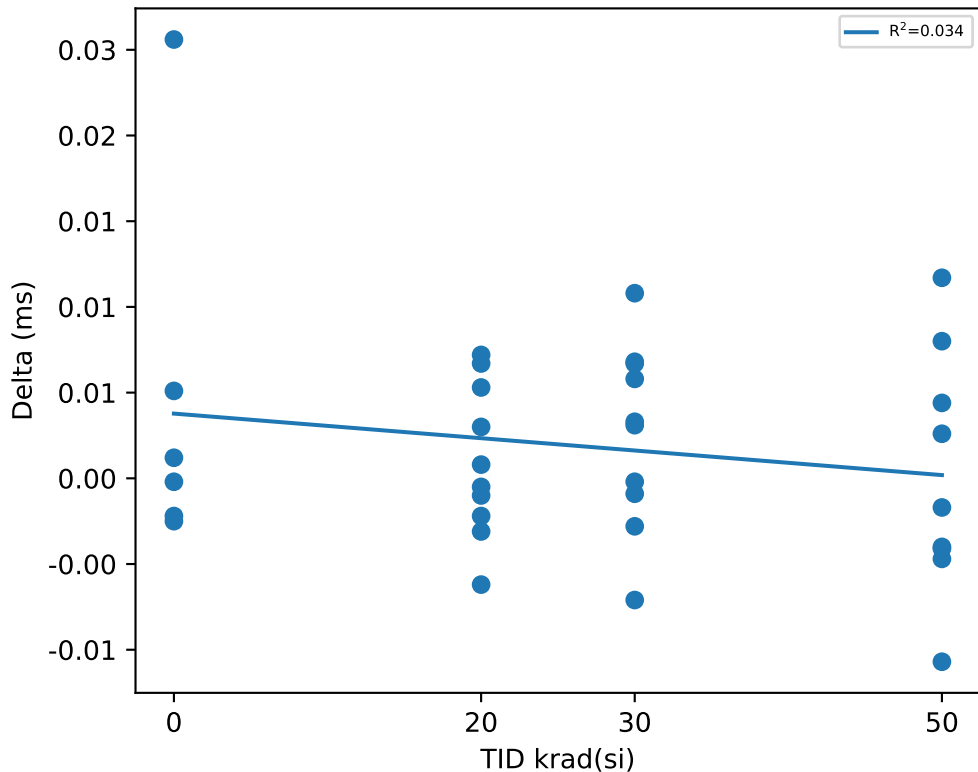
## TID vs Result Stats



## Test Results (Lower Limit = 0.22, Upper Limit = 0.48 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	0.3586	0.3581	-0.0005
2	20	HDR Unbiased	0.3446	0.3384	-0.0062
3	20	HDR Unbiased	0.3263	0.3293	0.003
23	20	HDR Unbiased	0.3412	0.3381	-0.0031
24	20	HDR Unbiased	0.3546	0.3524	-0.0022
25	20	HDR Biased	0.3464	0.3536	0.0072
26	20	HDR Biased	0.34	0.3453	0.0053
27	20	HDR Biased	0.335	0.3358	0.0008
28	20	HDR Biased	0.3452	0.3519	0.0067
29	20	HDR Biased	0.3436	0.3426	-0.001
30	30	HDR Unbiased	0.3451	0.3559	0.0108
31	30	HDR Unbiased	0.3384	0.3442	0.0058
32	30	HDR Unbiased	0.3086	0.3084	-0.0002
33	30	HDR Unbiased	0.3327	0.3395	0.0068
34	30	HDR Unbiased	0.3417	0.3346	-0.0071
35	30	HDR Biased	0.3351	0.3384	0.0033
36	30	HDR Biased	0.3742	0.3733	-0.0009
37	30	HDR Biased	0.3513	0.358	0.0067
38	30	HDR Biased	0.3293	0.3324	0.0031
39	30	HDR Biased	0.3493	0.3465	-0.0028
40	50	HDR Unbiased	0.3258	0.3211	-0.0047
41	50	HDR Unbiased	0.3585	0.3478	-0.0107
42	50	HDR Unbiased	0.3513	0.3539	0.0026
43	50	HDR Unbiased	0.3278	0.3261	-0.0017
44	50	HDR Unbiased		0.3385	
50	0	CORRELATION	0.3462	0.344	-0.0022
51	0	CORRELATION	0.3401	0.3399	-0.0002
52	0	CORRELATION	0.3414	0.3465	0.0051
53	0	CORRELATION	0.3339	0.3314	-0.0025
54	0	CORRELATION	0.3337	0.3593	0.0256
78	50	HDR Biased	0.3551	0.3511	-0.004
79	50	HDR Biased	0.3299	0.3416	0.0117
80	50	HDR Biased	0.3472	0.3552	0.008
81	50	HDR Biased	0.3556	0.36	0.0044
82	50	HDR Biased	0.3338	0.3297	-0.0041
83	0	CORRELATION	0.3416	0.3428	0.0012

## TID vs Post - Pre Exposure Delta

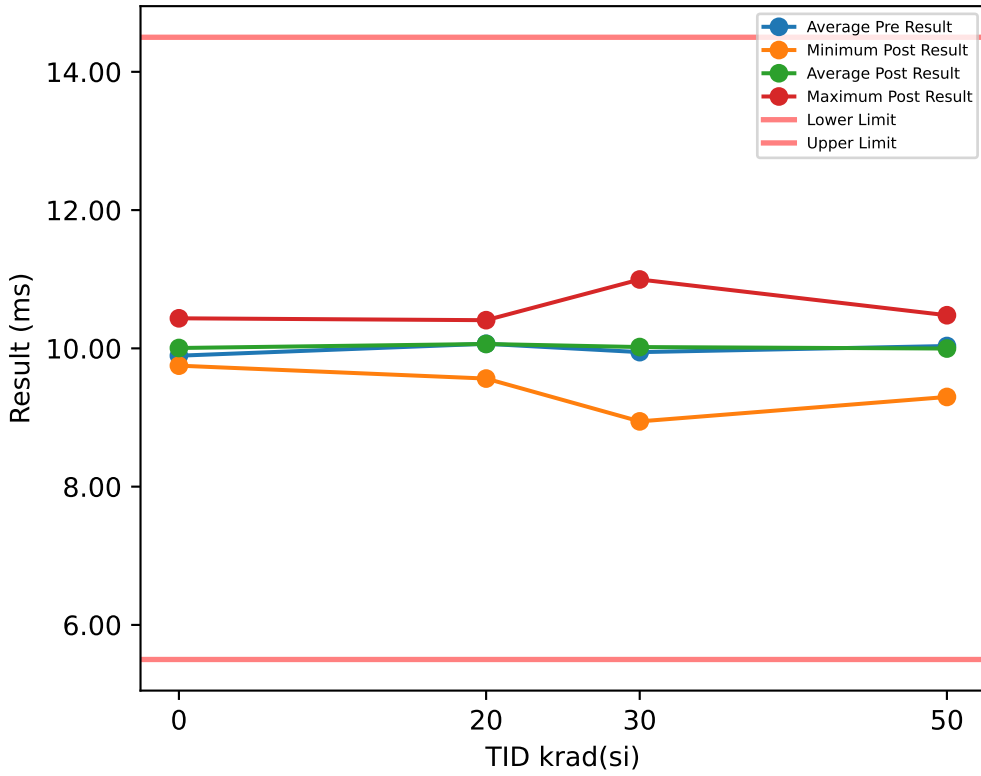


## Test Statistics (ms)

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	0.3337	0.33948	0.3462	0.0048635	0.3314	0.34398	0.3593	0.0091362	-0.0025	0.0045	0.0256	0.0107
20	0.3263	0.34355	0.3586	0.0091247	0.3293	0.34455	0.3581	0.009274	-0.0062	0.001	0.0072	0.0044547
30	0.3086	0.34057	0.3742	0.016963	0.3084	0.34312	0.3733	0.017437	-0.0071	0.00255	0.0108	0.0053332
50	0.3258	0.34278	0.3585	0.013298	0.3211	0.3425	0.36	0.013363	-0.0107	0.00016667	0.0117	0.0070626

# Device Test: 20.4 LEVEL|TIMING/SS/5/3.3//10//@TSS\_33NF

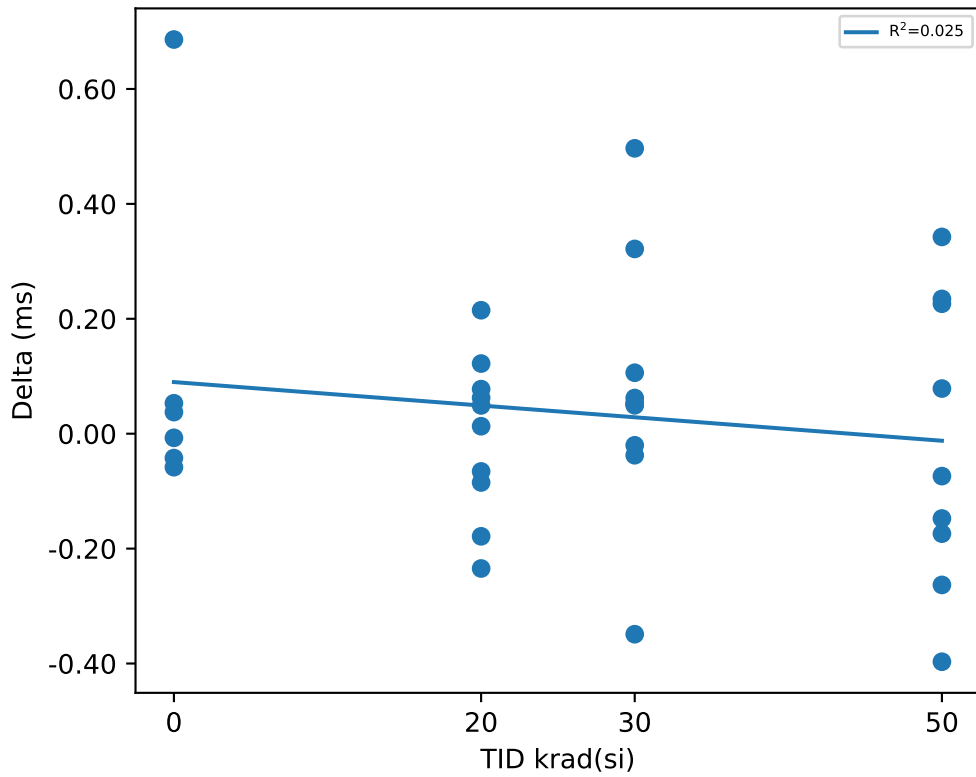
## TID vs Result Stats



## Test Results (Lower Limit = 5.5, Upper Limit = 14.5 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	HDR Unbiased	10.493	10.408	-0.0849
2	20	HDR Unbiased	10.196	10.017	-0.1786
3	20	HDR Unbiased	9.4857	9.5633	0.0776
23	20	HDR Unbiased	10.096	9.8611	-0.2346
24	20	HDR Unbiased	10.295	10.344	0.0492
25	20	HDR Biased	10.088	10.303	0.2149
26	20	HDR Biased	10.024	10.037	0.013
27	20	HDR Biased	9.7753	9.8974	0.1221
28	20	HDR Biased	10.179	10.241	0.0625
29	20	HDR Biased	10.031	9.9649	-0.0657
30	30	HDR Unbiased	10.073	10.57	0.4967
31	30	HDR Unbiased	10.017	9.9971	-0.0202
32	30	HDR Unbiased	8.9814	8.9439	-0.0375
33	30	HDR Unbiased	9.6585	9.9801	0.3216
34	30	HDR Unbiased	10.021	9.6724	-0.349
35	30	HDR Biased	9.6809	9.743	0.0621
36	30	HDR Biased	10.89	10.996	0.1061
37	30	HDR Biased	10.349	10.4	0.0516
38	30	HDR Biased	9.5627	9.6164	0.0537
39	30	HDR Biased	10.221	10.271	0.0494
40	50	HDR Unbiased	9.5605	9.2973	-0.2632
41	50	HDR Unbiased	10.495	10.098	-0.3969
42	50	HDR Unbiased	10.177	10.403	0.2262
43	50	HDR Unbiased	9.6987	9.5247	-0.174
44	50	HDR Unbiased		9.8435	
50	0	CORRELATION	10.093	10.146	0.053
51	0	CORRELATION	9.8777	9.8353	-0.0424
52	0	CORRELATION	9.9914	9.9331	-0.0583
53	0	CORRELATION	9.7124	9.75	0.0376
54	0	CORRELATION	9.7488	10.435	0.6861
78	50	HDR Biased	10.41	10.262	-0.1476
79	50	HDR Biased	9.662	9.8966	0.2346
80	50	HDR Biased	10.071	10.414	0.3425
81	50	HDR Biased	10.401	10.479	0.0786
82	50	HDR Biased	9.833	9.7592	-0.0738
83	0	CORRELATION	9.9403	9.9331	-0.0072

## 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	9.7124	9.894	10.093	0.14538	9.75	10.005	10.435	0.24857	-0.0583	0.11147	0.6861	0.28484
20	9.4857	10.066	10.493	0.27684	9.5633	10.064	10.408	0.26202	-0.2346	-0.00245	0.2149	0.13825
30	8.9814	9.9456	10.89	0.51504	8.9439	10.019	10.996	0.57586	-0.349	0.07345	0.4967	0.22184
50	9.5605	10.034	10.495	0.35796	9.2973	9.9977	10.479	0.40195	-0.3969	-0.019289	0.3425	0.25265

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