



AHEAD OF WHAT'S POSSIBLE™

HIGH DOSE RADIATION TEST REPORT RH6016S-CSH

March 2023

General

Radiation Test Report	
Product:	RH6016S-CSH
Gamma:	0,100k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	90 Rad/s
Facilities:	VPT RAD
Tested:	12/20/22

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It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

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	SN	+ISY @ +2.5V (uA)		-ISY @ +2.5V (uA)		+ISY @ +15V (uA)	
		PRE	POST	PRE	POST	PRE	POST
CTRL	56	617.573700	0.000000	-618.086700	0.000000	650.541000	0.000000
Biased	69	617.977700	620.489900	-618.833400	-621.539300	649.932300	656.640000
	70	619.200100	615.992800	-620.245500	-616.826100	651.159300	650.860800
	71	613.454300	615.431900	-614.406100	-616.444500	645.188400	650.794300
	72	614.132500	620.849400	-614.821700	-621.550200	646.453100	657.514500
	73	607.771100	610.073300	-608.770000	-611.243500	640.447500	646.807000
	Mean B	614.507140	616.567460	-615.415340	-617.520720	646.636120	652.523320
	Std. Dev	4.491429	4.402113	4.487346	4.284563	4.235338	4.480199
	Mean - 3 Sigma	601.032854	603.361121	-628.877378	-630.374410	633.930105	639.082723
	Mean + 3 Sigma	627.981426	629.773799	-601.953302	-604.667030	659.342135	665.963917
UnBiased	74	622.139800	618.201500	-623.048500	-619.128600	655.378900	652.645900
	75	620.896500	615.079000	-621.411500	-615.798400	653.812000	648.994000
	76	616.431500	616.799600	-617.178800	-617.227700	649.005900	651.527400
	77	615.277300	613.826800	-616.076800	-614.377200	647.161100	647.696000
	78	625.657600	621.520200	-626.643900	-622.240600	659.065100	657.002400
	Mean UNB	620.080540	617.085420	-620.871900	-617.754500	652.884600	651.573140
	Std. Dev	4.254308	2.984917	4.329455	3.062811	4.823975	3.616419
	Mean - 3 Sigma	607.317616	608.130668	-633.860264	-626.942933	638.412674	640.723883
	Mean + 3 Sigma	632.843464	626.040172	-607.883536	-608.566067	667.356526	662.422397

	SN	-ISY @ +15V (uA)		VOS @ +2.5V CH.A (uV)		VOS @ +2.5V CH.B (uV)	
		PRE	POST	PRE	POST	PRE	POST
CTRL	56	-650.069900	0.000000	-1.149619	0.000000	-11.743220	0.000000
Biased	69	-649.206800	-656.238000	2.982399	61.012740	1.216303	45.907120
	70	-650.697100	-650.823800	-34.398980	10.372880	-22.871040	10.071540
	71	-644.611000	-650.787200	-23.701030	39.840640	-12.587050	41.210190
	72	-646.081100	-657.384500	-49.402530	1.952599	-35.241220	45.106480
	73	-639.764100	-646.548300	3.692458	38.169990	6.190810	34.617160
	Mean B	-646.072020	-652.356360	-20.165537	30.269770	-12.658439	35.382498
	Std. Dev	4.276176	4.441111	23.318036	23.962959	17.044698	14.836743
	Mean - 3 Sigma	-658.900548	-665.679694	-90.119645	-41.619108	-63.792534	-9.127732
	Mean + 3 Sigma	-633.243492	-639.033026	49.788572	102.158647	38.475656	79.892728
UnBiased	74	-654.637100	-652.106500	6.711745	34.000810	29.403240	52.987340
	75	-653.270900	-648.801200	24.932730	47.450170	10.667180	18.970940
	76	-648.594000	-651.107600	-17.246760	14.712710	7.516909	61.527010
	77	-646.814500	-647.178200	5.109744	21.748520	-1.464320	9.925758
	78	-658.696300	-656.240600	-23.194660	3.538433	8.600005	31.580760
	Mean UNB	-652.402560	-651.086820	-0.737440	24.290129	10.944603	34.998362
	Std. Dev	4.772051	3.467816	19.528965	17.025748	11.313994	21.934939
	Mean - 3 Sigma	-666.718714	-661.490269	-59.324336	-26.787117	-22.997379	-30.806456
	Mean + 3 Sigma	-638.086406	-640.683371	57.849455	75.367374	44.886585	100.803179

	SN	VOS @ +15V CH.A (uV)		VOS @ +15V CH.B (uV)		PSRR @ +2.5V, +25V CH.A (dB)	
		PRE	POST	PRE	POST	PRE	POST
CTRL	56	1.529750	0.000000	0.318706	0.000000	132.806	0.000
Biased	69	6.300212	61.307540	5.952597	47.517690	132.127	136.198
	70	-26.990340	19.004470	-17.041080	11.034280	126.499	123.324
	71	-18.939270	46.594140	-8.670739	42.698930	135.681	139.241
	72	-49.155340	6.258970	-23.867770	56.982510	121.557	130.995
	73	1.143300	41.221180	12.171130	36.578260	137.786	137.197
	Mean B	-17.528288	34.877260	-6.291172	38.962334	130.730	133.391
	Std. Dev	22.406569	22.062651	15.173382	17.302767	6.676	6.397
	Mean - 3 Sigma	-84.747994	-31.310693	-51.811320	-12.945968	110.701	114.201
	Mean + 3 Sigma	49.691419	101.065213	39.228975	90.870636	150.758	152.581
UnBiased	74	0.314427	31.858550	46.688370	64.756430	132.086	142.122
	75	26.847530	49.559890	19.085670	30.901910	138.068	136.163
	76	-2.823635	23.470250	7.217098	66.506180	124.537	126.911
	77	5.447361	21.287400	8.833044	18.123360	148.079	158.828
	78	-29.981310	5.876071	30.856930	49.217980	141.682	134.769
	Mean UNB	-8.429668	30.938064	5.537508	39.893379	124.069	126.594
	Std. Dev	33.590017	30.428062	26.031026	26.416629	35.370	36.327
	Mean - 3 Sigma	-109.199721	-60.346122	-72.555570	-39.356510	17.958	17.612
	Mean + 3 Sigma	92.340384	122.222250	83.630586	119.143267	230.180	235.576

	SN	PSRR @+2.5V,+25V CH.B (dB)		CMRR @+15V VCM=-15V,+13.25V CH.A (dB)		CMRR @+15V VCM=-15V,+13.25V CH.B (dB)	
		PRE	POST	PRE	POST	PRE	POST
CTRL	56	128.314	0.000	139.628	0.000	124.463	0.000
Biased	69	132.838	158.740	130.891	133.087	133.224	134.053
	70	128.432	140.510	130.614	125.238	149.288	127.357
	71	132.928	154.195	135.841	138.985	136.627	124.412
	72	117.979	126.945	122.422	132.242	117.854	129.719
	73	129.490	134.626	129.463	140.584	131.278	135.288
	Mean	128.733	134.020	130.393	134.260	132.201	127.611
	Std. Dev	8.818	13.224	7.856	10.892	12.153	7.198
	Mean + 3 Sigma	102.280	94.348	106.826	101.583	95.743	106.016
UnBiased	74	155.187	173.692	153.961	166.936	168.660	149.205
	74	123.165	123.987	125.909	136.931	125.504	127.565
	75	127.859	125.285	145.453	131.117	128.617	119.329
	76	149.482	131.243	121.067	119.147	125.953	138.731
	77	124.928	123.992	139.075	158.958	155.141	124.170
	78	120.233	120.679	123.198	126.310	118.527	115.484
	Mean	129.133	125.037	130.940	134.493	130.749	125.056
	Std. Dev	11.707	3.865	10.718	15.152	14.137	8.923
Mean - 3 Sigma	94.012	113.441	98.785	89.037	88.338	98.285	
Mean + 3 Sigma	164.255	136.633	163.096	179.948	173.160	151.826	

	SN	+IB @+2.5V CH.A (nA)		-IB @+2.5V CH.A (nA)		IOS @+2.5V CH.A (nA)	
		PRE	POST	PRE	POST	PRE	POST
CTRL	56	0.085	0.000	0.387	0.000	-0.301	0.000
Biased	69	0.427	-8.477	0.450	-7.161	-0.022	-1.315
	70	0.112	-9.816	0.191	-10.937	-0.079	1.121
	71	0.074	-9.520	-0.112	-8.485	0.187	-1.035
	72	-0.240	-8.638	0.014	-10.693	-0.254	2.054
	73	-0.159	-12.603	0.067	-13.633	-0.226	1.030
	Mean	0.043	-9.811	0.122	-10.182	-0.079	0.371
	Std. Dev	0.262	1.661	0.213	2.487	0.178	1.471
	Mean - 3 Sigma	-0.743	-14.794	-0.518	-17.644	-0.611	-4.041
Mean + 3 Sigma	0.829	-4.828	0.761	-2.720	0.454	4.783	
UnBiased	74	0.204	-29.178	0.185	-30.972	0.019	1.794
	75	-0.186	-29.158	0.199	-30.993	-0.385	1.834
	76	-0.127	-29.198	0.273	-30.957	-0.400	1.759
	77	0.122	-29.218	0.208	-30.932	-0.085	1.714
	78	0.568	-29.136	0.515	-31.015	0.054	1.879
	Mean	0.116	-29.178	0.276	-30.974	-0.160	1.796
	Std. Dev	0.301	0.032	0.138	0.032	0.219	0.064
	Mean - 3 Sigma	-0.788	-29.275	-0.137	-31.069	-0.816	1.604
Mean + 3 Sigma	1.020	-29.081	0.689	-30.879	0.497	1.988	

	SN	+IB @+2.5V CH.B (nA)		-IB @+2.5V CH.B (nA)		IOS @+2.5V CH.B (nA)	
		PRE	POST	PRE	POST	PRE	POST
CTRL	56	0.186	0.000	0.299	0.000	-0.112	0.000
Biased	69	0.636	-8.825	0.544	-10.057	0.092	1.232
	70	0.242	-8.921	0.279	-9.915	-0.037	0.994
	71	0.054	-11.667	0.255	-7.945	-0.200	-3.722
	72	0.457	-9.119	0.601	-3.670	-0.145	-5.449
	73	0.392	-8.938	0.127	-11.832	0.266	2.893
	Mean	0.356	-9.494	0.361	-8.684	-0.005	-0.810
	Std. Dev	0.220	1.219	0.203	3.122	0.188	3.575
	Mean - 3 Sigma	-0.304	-13.152	-0.247	-18.051	-0.569	-11.536
Mean + 3 Sigma	1.016	-5.836	0.969	0.683	0.559	9.916	
UnBiased	74	0.079	-29.279	0.399	-30.916	-0.319	1.637
	75	0.035	-29.217	-0.041	-30.978	0.076	1.761
	76	0.036	-29.148	0.042	-31.047	-0.006	1.899
	77	0.353	-29.240	0.207	-30.955	0.146	1.716
	78	0.371	-29.212	0.398	-30.987	-0.027	1.775
	Mean	0.175	-29.219	0.201	-30.977	-0.026	1.757
	Std. Dev	0.172	0.048	0.201	0.048	0.178	0.096
	Mean - 3 Sigma	-0.341	-29.362	-0.403	-31.120	-0.559	1.470
Mean + 3 Sigma	0.690	-29.076	0.804	-30.833	0.507	2.045	

		+IB @+-15V CH.A (nA)		-IB @+-15V CH.A (nA)		IOS @+-15V CH.A (nA)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	-0.22	0.00	0.21	0.00	-0.43	0.00
Biased	69	0.25	-13.54	0.24	-12.10	0.01	-1.44
	70	-0.05	-14.67	0.06	-15.62	-0.11	0.95
	71	-0.06	-14.97	-0.11	-13.27	0.05	-1.70
	72	-0.34	-14.05	-0.09	-15.70	-0.25	1.65
	73	-0.23	-17.64	-0.03	-18.36	-0.20	0.72
	Mean	-0.09	-14.97	0.01	-15.01	-0.10	0.04
	Std. Dev	0.22	1.59	0.14	2.43	0.13	1.51
	Mean - 3 Sigma	-0.76	-19.75	-0.41	-22.29	-0.49	-4.49
Mean + 3 Sigma	0.58	-10.20	0.44	-7.73	0.29	4.56	
UnBiased	74	0.07	-29.22	0.05	-30.84	0.02	1.62
	75	-0.29	-29.18	0.04	-30.88	-0.33	1.70
	76	-0.23	-29.24	0.17	-30.80	-0.39	1.57
	77	-0.01	-29.18	0.10	-30.88	-0.11	1.69
	78	0.43	-29.18	0.32	-30.88	0.11	1.70
	Mean	-0.005	-29.200	0.138	-30.856	-0.143	1.656
	Std. Dev	0.285	0.028	0.114	0.033	0.217	0.061
	Mean - 3 Sigma	-0.860	-29.285	-0.204	-30.955	-0.796	1.472
Mean + 3 Sigma	0.851	-29.115	0.480	-30.757	0.509	1.839	

		+IB @+-15V CH.B (nA)		-IB @+-15V CH.B (nA)		IOS @+-15V CH.B (nA)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	0.04	0.00	0.18	0.00	-0.14	0.00
Biased	69	0.45	-13.82	0.40	-15.07	0.06	1.25
	70	0.12	-14.20	0.12	-15.28	0.01	1.08
	71	0.01	-16.62	0.12	-13.05	-0.11	-3.57
	72	0.25	-14.37	0.43	-9.09	-0.19	-5.28
	73	0.28	-13.85	0.00	-16.64	0.28	2.79
	Mean	0.22	-14.57	0.21	-13.82	0.01	-0.74
	Std. Dev	0.17	1.17	0.19	2.94	0.18	3.48
	Mean - 3 Sigma	-0.28	-18.07	-0.36	-22.65	-0.53	-11.17
Mean + 3 Sigma	0.73	-11.06	0.78	-5.00	0.54	9.68	
UnBiased	74	-0.04	-29.21	0.25	-30.84	-0.30	1.63
	75	-0.09	-29.15	-0.06	-30.89	-0.04	1.74
	76	-0.10	-29.14	-0.13	-30.90	0.03	1.75
	77	0.20	-29.20	0.06	-30.84	0.14	1.64
	78	0.25	-29.22	0.24	-30.84	0.01	1.62
	Mean	0.043	-29.184	0.074	-30.863	-0.032	1.678
	Std. Dev	0.170	0.036	0.170	0.029	0.161	0.065
	Mean - 3 Sigma	-0.466	-29.293	-0.437	-30.950	-0.516	1.483
Mean + 3 Sigma	0.552	-29.075	0.586	-30.775	0.453	1.874	

		AVOL @+-2.5V RL=10K CH.A (V/mV)		AVOL @+-2.5V RL=10K CH.B (V/mV)		AVOL @+-15V RL=10K CH.A (V/mV)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	12583.06	0.00	3623.92	0.00	1068.09	0.00
Biased	69	100000.00	238.94	100000.00	223.02	855.84	504.05
	70	15474.65	192.54	17000.79	196.26	857.47	495.05
	71	10746.84	232.65	11314.98	224.30	773.20	468.10
	72	16750.83	189.66	7711.14	210.82	1047.54	545.72
	73	34162.04	200.66	10062.61	205.11	1187.06	570.00
	Mean	35426.87	210.89	29217.90	211.90	944.22	516.58
	Std. Dev	37172.83	23.20	39715.69	11.93	168.99	40.85
	Mean - 3 Sigma	-76091.63	141.30	-89929.16	176.11	437.26	394.05
Mean + 3 Sigma	146945.37	280.48	148364.97	247.69	1451.19	639.12	
UnBiased	74	18807.54	2563.98	9888.47	846.57	797.22	587.89
	75	4768.91	899.90	14306.23	1175.30	727.18	514.19
	76	21888.79	482.73	12761.69	471.36	639.55	438.29
	77	6506.53	802.81	100000.00	1097.52	655.10	469.59
	78	29740.95	661.54	8208.28	914.66	785.83	536.23
	Mean	16342.54	1082.19	29032.93	901.08	720.98	509.24
	Std. Dev	10571.79	843.10	39743.33	274.59	72.50	58.19
	Mean - 3 Sigma	-15372.81	-1447.11	-90197.07	77.31	503.47	334.67
Mean + 3 Sigma	48057.90	3611.50	148262.94	1724.85	938.48	683.81	

		AVOL @+-15V RL=10K CH.B (V/mV)		GBW @ VS=+-2.5V CH.A (MHz)		GBW @ VS=+-2.5V CH.B (MHz)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	760.11	0.00	3.21	0.00	3.22	0.00
Biased	69	847.20	496.95	3.177	3.088	3.161	3.055
	70	859.11	504.94	3.182	3.072	3.174	3.066
	71	894.35	520.58	3.172	3.066	3.187	3.103
	72	1057.85	572.03	3.174	3.062	3.169	3.061
	73	913.38	499.84	3.160	3.035	3.164	3.039
	Mean	914.38	518.87	3.173	3.065	3.171	3.065
	Std. Dev	84.49	31.09	0.008	0.019	0.010	0.024
	Mean - 3 Sigma	660.91	425.61	3.148	3.007	3.142	2.994
Mean + 3 Sigma	1167.84	612.13	3.198	3.122	3.201	3.136	
UnBiased	74	705.53	524.68	3.198	3.116	3.203	3.119
	75	900.36	624.20	3.167	3.091	3.191	3.103
	76	818.48	512.47	3.147	3.043	3.153	3.041
	77	905.27	575.69	3.198	3.114	3.203	3.116
	78	1073.47	648.73	3.158	3.057	3.173	3.074
	Mean	880.622	577.152	3.174	3.084	3.185	3.091
	Std. Dev	134.819	59.741	0.024	0.033	0.022	0.033
	Mean - 3 Sigma	476.166	397.929	3.103	2.985	3.119	2.992
Mean + 3 Sigma	1285.078	756.376	3.244	3.183	3.250	3.190	

		GBW @ VS=+-15V CH.A (MHz)		GBW @ VS=+-15V CH.B (MHz)		+SLEW RATE @+-15V CH.A (V/us)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	3.28	0.00	3.29	0.00	1.39	0.00
Biased	69	3.256	3.175	3.233	3.158	1.393	1.359
	70	3.255	3.166	3.251	3.157	1.389	1.357
	71	3.255	3.162	3.260	3.193	1.385	1.357
	72	3.238	3.161	3.244	3.163	1.381	1.351
	73	3.242	3.136	3.235	3.142	1.374	1.342
	Mean	3.249	3.160	3.245	3.163	1.384	1.353
	Std. Dev	0.009	0.015	0.011	0.019	0.007	0.007
	Mean - 3 Sigma	3.223	3.116	3.210	3.106	1.362	1.333
Mean + 3 Sigma	3.275	3.204	3.279	3.219	1.406	1.373	
UnBiased	74	3.279	3.204	3.277	3.202	1.404	1.377
	75	3.237	3.179	3.268	3.188	1.397	1.364
	76	3.226	3.136	3.223	3.134	1.377	1.348
	77	3.278	3.195	3.286	3.196	1.404	1.374
	78	3.241	3.138	3.251	3.152	1.385	1.355
	Mean	3.252	3.170	3.261	3.174	1.394	1.364
	Std. Dev	0.025	0.032	0.025	0.030	0.012	0.012
	Mean - 3 Sigma	3.178	3.075	3.186	3.084	1.357	1.326
Mean + 3 Sigma	3.327	3.266	3.336	3.264	1.430	1.401	

		-SLEW RATE @+-15V CH.A (V/us)		+SLEW RATE @+-15V CH.B (V/us)		-SLEW RATE @+-15V CH.B (V/us)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	0.80	0.00	1.39	0.00	0.81	0.00
Biased	69	0.812	0.788	1.395	1.362	0.810	0.788
	70	0.806	0.787	1.385	1.353	0.801	0.782
	71	0.806	0.786	1.391	1.359	0.807	0.787
	72	0.802	0.783	1.377	1.350	0.799	0.781
	73	0.799	0.778	1.372	1.340	0.796	0.777
	Mean	0.805	0.784	1.384	1.353	0.803	0.783
	Std. Dev	0.005	0.004	0.009	0.009	0.006	0.005
	Mean - 3 Sigma	0.791	0.773	1.356	1.327	0.786	0.769
Mean + 3 Sigma	0.819	0.796	1.412	1.378	0.819	0.796	
UnBiased	74	0.815	0.793	1.401	1.374	0.815	0.791
	75	0.810	0.783	1.397	1.366	0.812	0.786
	76	0.801	0.771	1.377	1.348	0.799	0.769
	77	0.815	0.788	1.404	1.374	0.818	0.790
	78	0.802	0.775	1.387	1.355	0.804	0.775
	Mean	0.808	0.782	1.393	1.363	0.809	0.782
	Std. Dev	0.007	0.009	0.011	0.012	0.008	0.010
	Mean - 3 Sigma	0.788	0.755	1.360	1.329	0.786	0.753
Mean + 3 Sigma	0.829	0.809	1.426	1.398	0.833	0.811	

		+SLEW RATE @+2.5V CH.A (V/us)		-SLEW RATE @+2.5V CH.A (V/us)		+SLEW RATE @+2.5V CH.B (V/us)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	1.33	0.00	0.72	0.00	1.35135	0
Biased	69	1.351	1.205	0.7194	0.7092	1.351	1.220
	70	1.351	1.205	0.7194	0.7194	1.351	1.190
	71	1.333	1.190	0.7194	0.7092	1.351	1.190
	72	1.351	1.205	0.7194	0.7092	1.316	1.190
	73	1.316	1.176	0.7194	0.7092	1.316	1.176
	Mean	1.341	1.196	0.7194	0.7113	1.337	1.193
	Std. Dev	0.016	0.013	0.0000	0.0046	0.019	0.016
	Mean - 3 Sigma	1.293	1.158	0.7194	0.6976	1.279	1.146
Mean + 3 Sigma	1.388	1.234	0.7194	0.7250	1.396	1.241	
UnBiased	74	1.351	1.266	0.7299	0.7194	1.351	1.250
	75	1.351	1.250	0.7194	0.7092	1.351	1.235
	76	1.333	1.220	0.7143	0.6993	1.333	1.220
	77	1.351	1.250	0.7299	0.7092	1.351	1.250
	78	1.351	1.220	0.7194	0.6993	1.351	1.235
	Mean	1.348	1.241	0.7226	0.7073	1.348	1.238
	Std. Dev	0.008	0.021	0.0070	0.0084	0.008	0.013
	Mean - 3 Sigma	1.324	1.179	0.7016	0.6821	1.324	1.199
Mean + 3 Sigma	1.372	1.303	0.7436	0.7325	1.372	1.276	

		-SLEW RATE @+2.5V CH.B (V/us)		VOH @+2.5V, IL=0A CH.A (mV)		VOL @+2.5V, IL=0A CH.A (mV)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	0.7194241	0	426.1042	0	2.780696	0
Biased	69	0.730	0.709	411.94	410.69	3.050	3.873
	70	0.719	0.709	427.09	424.73	2.840	3.496
	71	0.719	0.704	421.82	419.86	2.988	3.850
	72	0.709	0.709	436.36	433.09	2.306	3.375
	73	0.709	0.699	434.00	431.45	2.924	3.697
	Mean	0.717	0.706	426.24	423.96	2.822	3.658
	Std. Dev	0.009	0.004	9.84	9.12	0.299	0.219
	Mean - 3 Sigma	0.692	0.693	396.72	396.59	1.926	3.003
Mean + 3 Sigma	0.743	0.720	455.77	451.33	3.718	4.314	
UnBiased	74	0.730	0.719	417.70	414.50	2.230	3.315
	75	0.730	0.714	423.78	420.91	2.213	3.260
	76	0.714	0.699	426.48	421.68	1.984	3.601
	77	0.730	0.719	424.44	420.33	2.211	3.391
	78	0.719	0.699	421.59	418.23	2.153	3.410
	Mean	0.725	0.710	422.797	419.129	2.158	3.396
	Std. Dev	0.007	0.010	3.339	2.889	0.102	0.130
	Mean - 3 Sigma	0.703	0.679	412.778	410.463	1.853	3.006
Mean + 3 Sigma	0.747	0.741	432.815	427.796	2.463	3.785	

		VOH @+2.5V, IL=0A CH.B (mV)		VOL @+2.5V, IL=0A CH.B (mV)		VOH @+2.5V, IL=+5MA CH.A (mV)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	425.9137	0	2.64962	0	1020.681	0
Biased	69	418.74	417.48	2.771	3.663	1011.69	1771.41
	70	424.12	421.55	2.704	3.682	1022.68	1848.50
	71	422.01	419.92	2.840	3.594	1015.01	1793.41
	72	427.75	424.39	2.211	3.356	1027.32	1838.94
	73	429.34	426.94	2.628	3.642	1025.13	1821.50
	Mean	424.39	422.06	2.631	3.588	1020.37	1814.75
	Std. Dev	4.28	3.71	0.248	0.134	6.71	32.03
	Mean - 3 Sigma	411.54	410.93	1.887	3.186	1000.23	1718.65
Mean + 3 Sigma	437.24	433.19	3.374	3.989	1040.51	1910.85	
UnBiased	74	423.59	420.11	2.075	3.127	1011.31	1259.82
	75	423.89	420.91	2.211	2.974	1015.58	1263.33
	76	427.17	422.27	2.115	3.315	1021.69	1344.09
	77	424.45	420.47	2.134	3.279	1015.95	1288.60
	78	426.71	423.66	2.058	3.203	1014.73	1292.93
	Mean	425.162	421.483	2.119	3.180	1015.852	1289.756
	Std. Dev	1.660	1.467	0.060	0.136	3.744	33.757
	Mean - 3 Sigma	420.181	417.082	1.939	2.772	1004.621	1188.485
Mean + 3 Sigma	430.143	425.885	2.298	3.587	1027.083	1391.027	

		VOL @+2.5V, IL=-5MA CH.A (mV)		VOH @+2.5V, IL=+5MA CH.B (mV)		VOL @+2.5V, IL=-5MA CH.B (mV)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	273.41	0.00	1020.60	0.00	273.86	0.00
Biased	69	275.63	278.00	1015.36	1775.99	275.56	277.66
	70	274.73	277.22	1020.16	1834.74	274.77	277.15
	71	275.54	278.00	1013.35	1785.60	275.24	277.68
	72	271.00	274.47	1018.94	1820.83	270.96	273.95
	73	273.86	276.65	1020.83	1814.92	274.61	277.41
	Mean	274.15	276.87	1017.73	1806.42	274.23	276.77
	Std. Dev	1.90	1.46	3.23	24.71	1.86	1.59
	Mean - 3 Sigma	268.44	272.50	1008.03	1732.30	268.64	272.00
Mean + 3 Sigma	279.86	281.23	1027.43	1880.54	279.81	281.54	
UnBiased	74	272.71	275.94	1013.22	1267.23	271.65	275.04
	75	274.45	277.91	1014.42	1263.03	273.65	276.72
	76	275.58	280.36	1020.07	1339.93	276.04	280.74
	77	273.48	277.35	1014.42	1284.46	271.82	275.99
	78	269.44	272.83	1017.02	1293.31	270.18	273.77
	Mean	273.133	276.879	1015.828	1289.592	272.666	276.453
	Std. Dev	2.330	2.770	2.746	30.741	2.251	2.642
	Mean - 3 Sigma	266.142	268.568	1007.590	1197.367	265.912	268.528
Mean + 3 Sigma	280.124	285.189	1024.067	1381.816	279.419	284.378	

		VOH @+15V IL=0A CH.A (mV)		VOL @+15V, IL=0A CH.A (mV)		VOH @+15V, IL=0A CH.B (mV)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	426.41	0.00	2.628	0.000	426.13	0.00
Biased	69	412.36	411.21	3.146	3.947	418.91	417.93
	70	427.56	425.48	2.759	3.725	424.56	422.13
	71	422.20	420.46	2.962	3.802	422.30	420.37
	72	436.55	433.74	2.766	3.601	427.78	425.02
	73	434.31	431.83	2.917	3.620	429.62	427.20
	Mean	426.60	424.54	2.910	3.739	424.64	422.53
	Std. Dev	9.77	9.12	0.159	0.142	4.27	3.67
	Mean - 3 Sigma	397.30	397.18	2.432	3.314	411.82	411.51
Mean + 3 Sigma	455.89	451.91	3.388	4.165	437.45	433.55	
UnBiased	74	417.24	414.96	2.991	3.432	423.04	420.60
	75	423.39	421.59	2.878	3.561	423.39	421.51
	76	426.24	422.44	2.984	3.611	426.85	422.91
	77	424.24	420.94	2.984	3.496	424.26	420.75
	78	421.21	418.40	2.869	3.222	426.44	423.81
	Mean	422.462	419.667	2.941	3.464	424.796	421.915
	Std. Dev	3.430	3.033	0.062	0.151	1.751	1.397
	Mean - 3 Sigma	412.172	410.570	2.756	3.011	419.544	417.723
Mean + 3 Sigma	432.753	428.765	3.126	3.918	430.048	426.107	

		VOL @+15V, IL=0A CH.B (mV)		VOH @+15V, IL=+5MA CH.A (mV)		VOL @+15V, IL=-5MA CH.A (mV)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	2.73	0.00	1019.25	0.00	272.93	0.00
Biased	69	2.933	3.850	1010.30	1757.99	274.97	276.80
	70	2.800	3.671	1021.01	1834.29	274.09	276.14
	71	3.107	3.840	1013.51	1780.59	274.82	276.83
	72	2.733	3.601	1025.39	1824.84	270.79	273.31
	73	3.067	3.611	1023.28	1807.36	273.23	275.33
	Mean	2.928	3.715	1018.70	1801.01	273.58	275.68
	Std. Dev	0.163	0.122	6.49	31.56	1.71	1.46
	Mean - 3 Sigma	2.440	3.349	999.22	1706.34	268.46	271.30
Mean + 3 Sigma	3.417	4.080	1038.18	1895.68	278.70	280.07	
UnBiased	74	2.991	3.315	1008.87	1252.91	272.60	274.85
	75	2.847	3.306	1013.27	1256.27	274.58	276.91
	76	3.038	3.642	1018.85	1335.22	275.63	279.09
	77	3.031	3.339	1013.49	1280.72	273.48	276.60
	78	2.974	3.069	1012.36	1285.34	269.28	271.92
	Mean	2.976	3.334	1013.367	1282.091	273.115	275.875
	Std. Dev	0.077	0.204	3.582	32.989	2.430	2.677
	Mean - 3 Sigma	2.745	2.723	1002.622	1183.124	265.826	267.845
Mean + 3 Sigma	3.207	3.945	1024.113	1381.059	280.404	283.905	

		VOH @+-15V, IL=+5MA CH.B (mV)		VOL @+-15V, IL=-5MA CH.B (mV)		+ISC @+-2.5V CH.A (mA)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	1019.02	0.00	273.31	0.00	23.713	0.000
Biased	69	1013.83	1765.36	275.15	276.72	23.672	14.102
	70	1018.73	1823.64	274.21	276.01	23.653	13.572
	71	1011.98	1775.51	274.82	276.53	23.753	13.932
	72	1016.86	1809.71	270.61	272.83	23.717	13.719
	73	1019.46	1803.32	274.21	276.38	23.672	13.877
	Mean	1016.17	1795.51	273.80	275.69	23.693	13.841
	Std. Dev	3.20	24.30	1.83	1.62	0.041	0.203
	Mean - 3 Sigma	1006.58	1722.59	268.32	270.83	23.571	13.231
Mean + 3 Sigma	1025.77	1868.42	279.28	280.56	23.816	14.450	
UnBiased	74	1010.91	1261.25	271.89	274.32	23.876	20.334
	75	1012.13	1257.38	273.63	275.92	23.860	20.350
	76	1017.82	1332.40	276.34	279.70	23.650	19.516
	77	1012.36	1278.26	272.14	275.15	23.860	20.073
	78	1014.73	1286.81	270.26	272.96	23.782	20.048
	Mean	1013.589	1283.218	272.853	275.613	23.806	20.064
	Std. Dev	2.738	30.025	2.289	2.535	0.094	0.337
	Mean - 3 Sigma	1005.376	1193.143	265.985	268.006	23.523	19.052
Mean + 3 Sigma	1021.802	1373.292	279.720	283.219	24.089	21.076	

		-ISC @+-2.5V CH.A (mA)		+ISC @+-2.5V CH.B (mA)		-ISC @+-2.5V CH.B (mA)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	-25.334	0.000	23.686	0.000	-25.324	0.000
Biased	69	-25.418	-28.250	23.689	14.093	-25.117	-27.999
	70	-25.312	-28.213	23.646	13.656	-25.222	-28.152
	71	-25.331	-28.208	23.835	13.990	-25.207	-28.152
	72	-25.467	-28.259	23.813	13.813	-25.329	-28.219
	73	-25.622	-28.270	23.684	13.911	-25.143	-27.937
	Mean	-25.430	-28.240	23.733	13.893	-25.203	-28.092
	Std. Dev	0.125	0.028	0.085	0.168	0.083	0.118
	Mean - 3 Sigma	-25.805	-28.324	23.479	13.389	-25.451	-28.447
Mean + 3 Sigma	-25.056	-28.156	23.987	14.396	-24.956	-27.737	
UnBiased	74	-25.649	-28.289	23.885	20.262	-25.510	-28.284
	75	-25.512	-28.253	23.863	20.329	-25.439	-28.309
	76	-25.314	-27.923	23.722	19.555	-25.136	-27.899
	77	-25.756	-28.425	23.892	20.082	-25.407	-28.308
	78	-25.549	-28.231	23.846	20.083	-25.281	-28.131
	Mean	-25.556	-28.224	23.842	20.062	-25.355	-28.186
	Std. Dev	0.165	0.185	0.069	0.303	0.148	0.177
	Mean - 3 Sigma	-26.052	-28.778	23.634	19.152	-25.798	-28.717
Mean + 3 Sigma	-25.060	-27.670	24.049	20.973	-24.911	-27.655	

		+ISC @+-15V CH.A (mA)		-ISC @+-15V CH.A (mA)		+ISC @+-15V CH.B (mA)	
	SN	PRE	POST	PRE	POST	PRE	POST
CTRL	56	30.88	0.00	-34.46	0.00	30.69	0.00
Biased	69	30.472	28.244	-34.721	-35.894	30.339	27.993
	70	30.549	27.321	-34.523	-35.569	30.409	27.278
	71	30.381	27.829	-34.670	-35.894	30.419	27.779
	72	30.832	27.753	-34.708	-35.617	30.784	27.724
	73	30.529	27.987	-34.863	-35.787	30.390	27.809
	Mean	30.552	27.827	-34.697	-35.752	30.468	27.717
	Std. Dev	0.169	0.340	0.122	0.153	0.179	0.265
	Mean - 3 Sigma	30.045	26.808	-35.062	-36.210	29.930	26.921
Mean + 3 Sigma	31.060	28.845	-34.332	-35.295	31.006	28.512	
UnBiased	74	30.618	39.783	-34.935	-35.720	30.491	39.551
	75	30.662	40.026	-34.708	-35.491	30.489	39.755
	76	30.519	40.555	-34.620	-35.436	30.480	40.451
	77	30.723	40.231	-34.930	-35.621	30.593	39.968
	78	30.664	40.334	-34.701	-35.438	30.680	40.538
	Mean	30.637	40.186	-34.779	-35.541	30.547	40.053
	Std. Dev	0.076	0.295	0.144	0.125	0.088	0.431
	Mean - 3 Sigma	30.409	39.300	-35.212	-35.916	30.284	38.760
Mean + 3 Sigma	30.865	41.072	-34.345	-35.166	30.810	41.345	

		-ISC @+-15V CH.B (mA)	
	SN	PRE	POST
CTRL	56	-34.27	0.00
Biased	69	-34.337	-35.625
	70	-34.309	-35.352
	71	-34.430	-35.624
	72	-34.527	-35.474
	73	-34.329	-35.370
	Mean	-34.386	-35.489
	Std. Dev	0.091	0.132
	Mean - 3 Sigma	-34.660	-35.886
	Mean + 3 Sigma	-34.113	-35.092
UnBiased	74	-34.777	-35.674
	75	-34.569	-35.398
	76	-34.258	-34.963
	77	-34.743	-35.659
	78	-34.311	-35.034
	Mean	-34.532	-35.345
	Std. Dev	0.240	0.336
	Mean - 3 Sigma	-35.251	-36.354
	Mean + 3 Sigma	-33.813	-34.337































