Texas
Instruments
Incorporated

UC1843A-SP
5962-8770409VPA

Radiation Test Report

5962-8670409VPA (UC1843AJG-SP) Radiation Testing

Note: The following radiation test results are provided for information only, as these devices are not Radiation Hardness Assured (RHA) at this time.

Samples of the 5962-8670409VPA, UC1843AJG-SP, device have been evaluated to determine performance effects after Total Ionizing Dose (TID) radiation exposure. Since the purpose of this new device qualification was to improve low dose rate TID performance for the existing device function based on customer request, the initial radiation test plan for this device involved testing 40 units at a dose rate of 10 mrad/second, with samples pulled at various total dose intervals. Twenty samples were exposed under unbiased conditions, and 20 samples were exposed under biased conditions. For the biased samples, the bias conditions were the same as the circuit used for burn-in.

Radiation exposure for all samples was performed at Radiation Assured Device, Inc. in Colorado Springs, CO. Pre and post radiation electrical testing was performed by Texas Instruments in Sherman, TX.

The TID samples were pulled from the initial qualification lot after completing normal class-V processing (assembly, burn-in, full-temp testing), and serialized datalogs were collected at 25C before and after radiation exposure. The electrical testing results are included in the release documentation. The test results are summarized below.

Lot Information

Device Traceability Information Confirmed By: Date:	 Kevin Treece 10/13/2008
Full Device Name:	5962-8670409VPA
Datecode or Lot Trace Code:	0832A
A/T Lot #:	8019459ALP
Full Die Name (Alias with Die Rev):	SMEXARC1843VS
Die Lot #:	8126840SHE

Summary: Units pass up to 40 krad(Si)

Dose rate requirement: 10 mrad(Si)/sec

Exposure groups by S/N:

Control – SN 155 (no radiation exposure)

Biased samples:
10krad(Si) – SN 133, 134, 135, 136, 137
20krad(Si) – SN 138, 139, 140, 141*, 142
30krad(Si) – SN 143, 144, 145*, 146, 147
40krad(Si) – SN 148, 149, 150, 153, 154

Uniased samples:
10krad(Si) – SN 78, 80, 81, 82, 83
20krad(Si) – SN 84, 85, 86, 87, 88
30krad(Si) – SN 89, 90, 94, 96, 124
40krad(Si) – SN 125, 127, 130, 131, 132

*** Note:** Unit #141 from the 20krad sample and #145 from the 30krad sample failed post radiation electrical testing with multiple gross parametric test failures. Due to the significant nature of the failures and the fact that higher dose samples did not exhibit similar characteristics, these failures are determined to be due to electrical overstress rather than radiation exposure. These devices were removed from the electrical test data.

Units: 45

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	5.77844688	47	50.3254983	51.1296	52.0857444	52.7461	0.29337436	-0.379	1.7352	53.8459906	57	5.5836004
OUTPUT HIGH LEVEL; VCC9.5V	v	41.3289094	7	8.04045405	8.0616	8.09336444	8.1036	0.0088184	-1.737	3.5015	8.14627484	9.5	53.170481
OUTPUT LOW LEVEL; VCC9.5V	v	0.74745648	0	-0.0085798	0.0031	0.00512	0.0116	0.0022833	1.6895	2.2219	0.01881979	0.4	57.6475809
OUTPUT LEAKAGE OK	m a			-0.0001929	0	1.3333E-05	0.0001	3.4378E-05	2.2324	3.1204	0.0002196		
PWR GND CHECK OK	v			0.99914249	1.0001	1.00039556	1.0007	0.00020884	-0.095	-1.256	1.00164862		
STANDBY/ START-UP CURRENT; VC13V	m a	11.4434628	0.05	0.12706893	0.1386	0.14339111	0.1516	0.00272036	0.7043	0.699	0.15971329	0.48	41.245588
*Delta Startup ICC	m a	7.63526269	0	0.07562957	0.0979	0.10247111	0.1174	0.00447359	0.8705	1.0322	0.12931265	0.2	7.26701095
UVLO SATURATION; VC5V, ISINK10MA	v	61.2815552	0.005	0.74904031	0.7648	0.77414222	0.782	0.00418365	-0.431	-0.295	0.79924414	1.1	25.9627814
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	29.0125541	2	12.5763549	13.1331	13.3594244	13.62	0.1305116	0.0871	-0.801	14.142494	16.9	9.04281202
OPERATING SUPPLY CURRENT; VC30V	m a	28.4708819	2	13.2805212	13.8968	14.1328178	14.4696	0.14204943	0.3594	-0.399	14.9851144	18.2	9.54405372
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.84009367	4.955	4.89532058	4.97	4.99822444	5.0308	0.01715064	0.1277	-0.868	5.10112831	5.045	0.9091117
*REFERENCE OUTPUT; VIN32V	v	1.3826474	4.935	4.90323894	4.9765	5.00613333	5.0403	0.01714907	0.1609	-0.806	5.10902773	5.065	1.14421523
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	3.47276329	4.82	4.89578107	4.9701	4.99869111	5.031	0.01715167	0.0932	-0.873	5.10160115	5.18	3.52363836
REFRENCE LINE REGULATION; VC12-25V	m v	21.8007333	-18.9	0.17410114	1.453	2.10070667	2.7836	0.32110092	0.2462	-0.355	4.02731219	18.9	17.4392662
>REFERENCE LOAD REGULATION; IO1-20MA	m v	7.90147428	-23.6	-8.0030996	-6.7296	-2.7173356	-1.4912	0.88096068	-2.434	9.1543	2.56842852	23.6	9.95781695
>REFERENCE OUTPUT SHORT CIRCUIT	m a	4.09891137	-174	-140.77462	-114.9316	-109.11499	-98.6463	5.27660483	0.6767	-1.295	-77.455364	-36	4.61881555
CT DISCHARGE CURRENT; VPIN 42V	m a	5.25202813	7.84	8.34174862	8.4958	8.65032444	8.7366	0.0514293	-0.529	0.3783	8.95890027	8.76	0.71084996
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	5.67154269	47.3	50.3589737	51.0921	52.0252889	52.6593	0.2777192	-0.468	2.1123	53.6916041	56.7	5.61083656
*S/R LATCH CHECK FOR HOLD	%			-0.006285	0.1222	0.18851111	0.2716	0.03246603	0.8093	0.8837	0.38330727	19.8	201.353963
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			-0.0331879	0.0355	0.08415556	0.1393	0.01955724	-0.261	1.1065	0.20149901	0.91	14.0756802
E/A INPUT VOLTAGE; PIN 12.5V	v	2.26066979	2.45	2.45698962	2.4953	2.51061778	2.5379	0.00893803	0.7645	0.9165	2.56424594	2.55	1.46871435
E/A PSRR; VCC12-25V	db	4.43246464	60.65	71.0151253	76.9348	79.5374489	82.1327	1.42038726	-0.07	-0.972	88.0597724	130	11.8424396
E/A INPUT BIAS CURRENT	u a	39.1088424	-0.975	-0.1614469	-0.1348	-0.1176	-0.1064	0.00730781	-0.74	-0.353	-0.0737531	-0.001	5.31851064
E/A AVOL; VOUT2-4V	db	6.66440915	67.5	80.4779263	83.1565	86.0425867	87.9328	0.92744339	-0.513	1.297	91.607247		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	12.7494148	2.2	6.37895913	6.9303	7.15648222	7.4747	0.12958718	0.3947	-0.515	7.93400532		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-1.0243526	-0.964	-0.92034	-0.8794	0.01733544	-0.223	0.0111	-0.8163274	-0.515	7.79405305
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	13.4315606	5.024	5.60365567	5.676	5.70506889	5.7397	0.0169022	0.1735	-0.851	5.80648211		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.79412728	0.8056	0.81325111	0.8197	0.00318731	-0.62	0.2902	0.83237495	1.084	28.3153331
C/S AMP GAIN	v/v	12.6608274	2.855	2.99117349	3.0075	3.01672	3.0256	0.00425775	0.0799	-0.788	3.04226651	3.145	10.0428576
C/S MAXIMUM INPUT SIGNAL; P15V	v	4.76025121	0.915	0.9622259	0.98	0.99644444	1.01	0.00570309	-0.604	0.1634	1.03066299	1.085	5.17588024
C/S INPUT BIAS CURRENT	u a	84.1077478	-9.8	-0.9496479	-0.8148	-0.7340689	-0.6823	0.03592983	-0.609	-0.454	-0.5184899		
PWM MAXIMUM DUTY CYCLE	%	10.854178	94.2	95.799659	96.0333	96.1609933	96.2927	0.06022238	-0.086	0.0627	96.5223276	100	21.2490583
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	4.68532459	0.01	0.04838223	0.0688	0.07696889	0.0915	0.00476444	0.7373	1.0801	0.10555555	0.39	21.9005031
>OUTPUT LOW LEVEL; I SINK200MA	v	8.85824784	0.5	1.42009885	1.5958	1.68841778	1.8265	0.04471982	0.3852	1.4179	1.9567367	2.17	3.58962543
OUTPUT HIGH LEVEL; I SOURCE20MA	v	16.4238652	13.03	13.4690876	13.4977	13.5299711	13.5451	0.01014725	-0.818	0.8161	13.5908546	15	48.2899027
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	5.78186955	12.04	12.8328442	12.9858	13.2521311	13.3441	0.06988115	-1.416	3.4287	13.671418	15	8.33734059
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	35.5318802	27.03	28.4145353	28.4512	28.4971156	28.5198	0.01376337	-0.877	1.2819	28.5796958	30	36.3981623
UVLO START THRESHOLD	v	8.14299401	7.82	8.27179584	8.4	8.41888889	8.45	0.02451551	0.5217	-1.81	8.56598193	8.98	7.62933576
UVLO MINIMUM OPERATING VOLTAGE	v	13.4224321	7.025	7.51810473	7.6	7.60444444	7.65	0.01438995	2.9898	7.2599	7.69078415	7.865	6.03559027
*UVLO INPUT VOLTAGE HYSTERISIS	v	8.93670233	0.2	0.67693411	0.8	0.81444444	0.85	0.02291839	0.964	-1.123	0.95195477	2.575	25.6061571
VCC ZENER VOLTAGE; ICC25MA	v	14.2705097	30.1	31.8466055	32.0177	32.1312889	32.2315	0.04744724	-0.363	-0.255	32.4159723	44.9	89.704629

Units: 5

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	4.41370287	47	49.7305662	51.6629	51.99312	52.5538	0.37709229	0.9164	-0.527	54.2556738	57	4.42586612
OUTPUT HIGH LEVEL; VCC9.5V	v	84.8826865	7	8.07845632	8.0981	8.10448	8.1085	0.00433728	-0.679	-0.286	8.13050368	9.5	107.250006
OUTPUT LOW LEVEL; VCC9.5V	v	0.76026661	0	-0.0082185	0.0027	0.00504	0.0084	0.00220975	0.8701	0.4972	0.01829851	0.4	59.5783536
OUTPUT LEAKAGE OK	m a			-0.0002886	0	0.00004	0.0001	5.4772E-05	0.6086	-3.333	0.00036863		
PWR GND CHECK OK	v			0.99847003	0.9997	1.00008	1.0003	0.00026833	-0.813	-1.539	1.00168997		
STANDBY/ START-UP CURRENT; VC13V	m a	11.9451854	0.05	0.12742887	0.1387	0.143	0.145	0.00259519	-1.509	2.3069	0.15857113	0.48	43.2852416
*Delta Startup ICC	m a	15.0409797	0	0.08573192	0.0979	0.09888	0.1028	0.00219135	2.2361	5	0.11202808	0.2	15.3817139
UVLO SATURATION; VC5V, ISINK10MA	v	44.9708989	0.005	0.73500336	0.7645	0.76898	0.7786	0.00566277	1.7203	3.1101	0.80295664	1.1	19.4851527
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	34.868883	2	12.6885641	13.1559	13.33894	13.4093	0.10839598	-1.719	2.6973	13.9893159	16.9	10.9507753
OPERATING SUPPLY CURRENT; VC30V	m a	42.2773982	2	13.5124423	13.921	14.0841	14.1564	0.09527628	-1.797	3.3366	14.6557577	18.2	14.3998761
REFERENCE OUTPUT VOLTAGE; IL1MA	v	1.41715513	4.955	4.93595782	4.9834	5.0013	5.011	0.01089036	-1.464	2.0563	5.06664218	5.045	1.33757406
*REFERENCE OUTPUT; VIN32V	v	2.24573052	4.935	4.94305778	4.9909	5.00864	5.0196	0.01093037	-1.305	2.0143	5.07422222	5.065	1.71875845
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	5.16846181	4.82	4.93136442	4.982	5.00166	5.0116	0.01171593	-1.625	2.6904	5.07195558	5.18	5.07400352
REFRENCE LINE REGULATION; VC12-25V	m v	19.289105	-18.9	0.02681057	1.5732	2.21626	2.4765	0.36490824	-2.068	4.4512	4.40570943	18.9	15.2401236
>REFERENCE LOAD REGULATION; IO1-20MA	m v	6.25166915	-23.6	-9.6169265	-4.8995	-3.03924	-2.1053	1.09628109	-1.693	3.1621	3.53844654	23.6	8.09988127
>REFERENCE OUTPUT SHORT CIRCUIT	m a	4.1867695	-174	-138.59178	-112.4939	-106.20774	-101.3668	5.39734036	-0.505	-3.099	-73.823698	-36	4.33594668
CT DISCHARGE CURRENT; VPIN 42V	m a	7.08275692	7.84	8.40685126	8.5829	8.6299	8.6858	0.03717479	0.5612	1.6006	8.85294874	8.76	1.16656118
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	4.27615369	47.3	49.7604571	51.6096	51.9224	52.4573	0.36032381	0.8835	-0.495	54.0843429	56.7	4.41972825
*S/R LATCH CHECK FOR HOLD	%			-0.1378652	0.1111	0.16466	0.2444	0.05042086	1.0768	1.5365	0.46718515	19.8	129.809636
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			-0.0523886	0.0452	0.08316	0.1033	0.02259144	-1.612	2.8467	0.21870862	0.91	12.199903
E/A INPUT VOLTAGE; PIN 12.5V	v	4.04556969	2.45	2.48167279	2.5068	2.51264	2.5191	0.0051612	0.2018	-2.067	2.54360721	2.55	2.4128749
E/A PSRR; VCC12-25V	db	3.68978131	60.65	69.0731752	77.1086	79.04272	80.9594	1.6615908	-0.062	-2.414	89.0122648	130	10.2225891
E/A INPUT BIAS CURRENT	u a	29.9820496	-0.975	-0.2039876	-0.1564	-0.14888	-0.134	0.00918461	1.3543	1.6092	-0.0937724	-0.001	5.36695092
E/A AVOL; VOUT2-4V	db	7.34802143	67.5	80.9263186	85.1408	85.94736	86.9108	0.83684024	0.5027	-3.077	90.9684014		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	7.24411462	2.2	5.8493943	6.8652	7.2412	7.4106	0.23196762	-1.44	1.3366	8.6330057		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-0.9843419	-0.9337	-0.91934	-0.9093	0.01083365	-0.675	-2.349	-0.8543381	-0.515	12.4408656
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	21.8762091	5.024	5.64552083	5.6905	5.70806	5.7162	0.0104232	-1.666	2.7634	5.77059917		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.77563542	0.8053	0.80962	0.8188	0.0056641	1.43	1.3697	0.84360458	1.084	16.147321
C/S AMP GAIN	v/v	24.9735752	2.855	2.99968429	3.0101	3.01228	3.0154	0.00209929	0.8404	-0.191	3.02487571	3.145	21.0738359
C/S MAXIMUM INPUT SIGNAL; P15V	v	4.92950302	0.915	0.96313665	0.99	0.996	1	0.00547723	-0.609	-3.333	1.02886335	1.085	5.41636751
C/S INPUT BIAS CURRENT	u a	87.130512	-9.8	-1.0734166	-0.904	-0.8684	-0.8149	0.03416943	1.0148	1.2134	-0.6633834		
PWM MAXIMUM DUTY CYCLE	%	11.3186223	94.2	95.7719432	96.0124	96.10932	96.1525	0.05622946	-1.851	3.6215	96.4466968	100	23.0643042
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	3.46548813	0.01	0.03770715	0.0676	0.07552	0.083	0.00630214	-0.215	-1.791	0.11333285	0.39	16.6334967
>OUTPUT LOW LEVEL; I SINK200MA	v	8.08263169	0.5	1.37328085	1.6083	1.66042	1.7118	0.04785653	-0.351	-2.877	1.94755915	2.17	3.54935925
OUTPUT HIGH LEVEL; I SOURCE20MA	v	16.6795826	13.03	13.4735316	13.517	13.53396	13.542	0.0100714	-1.641	2.8307	13.5943884	15	48.5215795
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	6.6513734	12.04	12.9105153	13.1794	13.28482	13.3339	0.06238411	-1.686	2.8874	13.6591247	15	9.16462028
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	42.0299403	27.03	28.4296879	28.4806	28.49962	28.5113	0.01165534	-1.334	2.2071	28.5695521	30	42.9096513
UVLO START THRESHOLD	v	8.79520071	7.82	8.27583592	8.4	8.41	8.45	0.02236068	2.2361	5	8.54416408	8.98	8.49705831
UVLO MINIMUM OPERATING VOLTAGE	v	Infinite	7.025	7.6	7.6	7.6	7.6	0	#DIV/0!	#DIV/0!	7.6	7.865	Infinite
*UVLO INPUT VOLTAGE HYSTERISIS	v	9.09334311	0.2	0.67583592	0.8	0.81	0.85	0.02236068	2.2361	5	0.94416408	2.575	26.3110665
VCC ZENER VOLTAGE; ICC25MA	v	20.5173965	30.1	31.9838336	32.1624	32.1873	32.2467	0.03391106	2.0038	4.2298	32.3907664	44.9	124.961197

Units: 5

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	4.06343845	47	49.6682971	51.7347	52.25456	52.7513	0.43104381	-0.027	-2.214	54.8408229	57	3.6697275
OUTPUT HIGH LEVEL; VCC9.5V	v	62.1387829	7	8.06180808	8.0877	8.09712	8.103	0.00588532	-1.232	1.5456	8.13243192	9.5	79.4564458
OUTPUT LOW LEVEL; VCC9.5V	v	3.69205576	0	0.0016682	0.0034	0.00364	0.004	0.00032863	0.6086	-3.333	0.0056118	0.4	402.028357
OUTPUT LEAKAGE OK	m a			-0.0002886	0	0.00004	0.0001	5.4772E-05	0.6086	-3.333	0.00036863		
PWR GND CHECK OK	v			0.99879038	0.9997	0.99996	1.0002	0.00019494	-0.081	-0.817	1.00112962		
STANDBY/ START-UP CURRENT; VC13V	m a	16.1451181	0.05	0.13076107	0.1398	0.14218	0.145	0.00190316	0.5008	1.1405	0.15359893	0.48	59.1684074
*Delta Startup ICC	m a	7.66956105	0	0.07454384	0.0979	0.10084	0.1077	0.00438269	1.2578	0.3125	0.12713616	0.2	7.54178574
UVLO SATURATION; VC5V, ISINK10MA	v	92.6155216	0.005	0.75801989	0.7711	0.77464	0.778	0.00277002	-0.223	-1.488	0.79126011	1.1	39.1525728
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	25.2633014	2	12.4601745	13.2085	13.35946	13.5771	0.14988091	0.7535	-0.712	14.2587455	16.9	7.87411805
OPERATING SUPPLY CURRENT; VC30V	m a	25.7501846	2	13.1958582	13.987	14.13866	14.3689	0.15713363	0.7367	-0.499	15.0814618	18.2	8.61546946
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.56168349	4.955	4.86542587	4.969	4.98998	5.014	0.02075902	0.3957	-2.924	5.11453413	5.045	0.88347129
*REFERENCE OUTPUT; VIN32V	v	0.9835997	4.935	4.87194514	4.9745	4.99602	5.019	0.02067914	0.3608	-2.943	5.12009486	5.065	1.11190933
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	2.78975124	4.82	4.86823291	4.9692	4.99038	5.0132	0.02035785	0.3596	-2.929	5.11252709	5.18	3.10478125
REFRENCE LINE REGULATION; VC12-25V	m v	15.7056683	-18.9	-0.7145869	1.466	1.93912	2.4459	0.44228448	0.1558	-2.744	4.59282689	18.9	12.7827833
>REFERENCE LOAD REGULATION; IO1-20MA	m v	8.48291846	-23.6	-7.9277551	-4.2105	-3.09282	-2.1818	0.80582251	-0.471	-0.959	1.74211508	23.6	11.0416457
>REFERENCE OUTPUT SHORT CIRCUIT	m a	29.205478	-174	-117.08001	-113.5704	-112.89556	-111.9972	0.69740843	0.5369	-2.438	-108.71111	-36	36.7530017
CT DISCHARGE CURRENT; VPIN 42V	m a	4.76760058	7.84	8.30034951	8.5633	8.63302	8.7037	0.05544508	0.1327	-1.187	8.96569049	8.76	0.76339805
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	4.39598833	47.3	49.9879834	51.8723	52.23172	52.6888	0.3739561	0.2784	-2.595	54.4754566	56.7	3.98289172
*S/R LATCH CHECK FOR HOLD	%			0.06635888	0.127	0.15194	0.1631	0.01426352	-1.978	4.2085	0.23752112	19.8	459.1681
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			0.00088492	0.0653	0.07836	0.092	0.01291251	0.0582	-2.975	0.15583508	0.91	21.4685806
E/A INPUT VOLTAGE; PIN 12.5V	v	3.77641933	2.45	2.47615412	2.5009	2.5056	2.5139	0.00490765	1.6192	3.309	2.53504588	2.55	3.01570176
E/A PSRR; VCC12-25V	db	4.75655658	60.65	71.9075933	78.6454	80.07546	81.9255	1.36131111	0.397	-1.444	88.2433267	130	12.2246217
E/A INPUT BIAS CURRENT	u a	47.9713428	-0.975	-0.1728192	-0.1442	-0.13792	-0.1319	0.00581653	-0.406	-2.99	-0.1030208	-0.001	7.84660516
E/A AVOL; VOUT2-4V	db	8.45327064	67.5	81.7316438	85.5101	86.14232	86.9523	0.73511271	0.5543	-3.259	90.5529962		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	21.1601064	2.2	6.74505138	7.1246	7.21948	7.3094	0.07907144	-0.284	-2.365	7.69390862		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-1.0894897	-0.9656	-0.93424	-0.901	0.02587495	0.0215	-1.385	-0.7789903	-0.515	5.40084795
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	11.7749642	5.024	5.58388509	5.6771	5.69844	5.7204	0.01909249	0.235	-2.613	5.81299491		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.80620624	0.8114	0.81226	0.8134	0.00100896	0.5018	-3.178	0.81831376	1.084	89.7756229
C/S AMP GAIN	v/v	13.7233507	2.855	2.9936298	3.0114	3.01728	3.0224	0.0039417	-0.466	1.7528	3.0409302	3.145	10.8007539
C/S MAXIMUM INPUT SIGNAL; P15V	v	5.73924114	0.915	0.96516718	0.99	0.992	1	0.00447214	2.2361	5	1.01883282	1.085	6.93181073
C/S INPUT BIAS CURRENT	u a	66.6458433	-9.8	-1.090784	-0.8907	-0.82134	-0.7893	0.04490733	-1.19	-0.009	-0.551896		
PWM MAXIMUM DUTY CYCLE	%	10.0263189	94.2	95.7846072	96.0997	96.17946	96.2528	0.0658088	0.0282	-2.276	96.5743128	100	19.3517183
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	4.45914172	0.01	0.0448758	0.0665	0.07324	0.0787	0.00472737	-0.566	-0.417	0.1016042	0.39	22.335195
>OUTPUT LOW LEVEL; I SINK200MA	v	6.71814413	0.5	1.33183071	1.6159	1.68444	1.7711	0.05876821	0.6435	0.3439	2.03704929	2.17	2.75409651
OUTPUT HIGH LEVEL; I SOURCE20MA	v	14.7145771	13.03	13.4555941	13.5053	13.52254	13.531	0.01115764	-1.184	0.0279	13.5894859	15	44.1389513
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	4.28067475	12.04	12.6669162	13.0731	13.21668	13.2953	0.0916273	-1.203	0.5558	13.7664438	15	6.48758616
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	31.264982	27.03	28.3916625	28.4616	28.48472	28.4981	0.01550958	-1.004	-0.672	28.5777775	30	32.5665433
UVLO START THRESHOLD	v	9.24241431	7.82	8.30583592	8.4	8.44	8.45	0.02236068	-2.236	5	8.57416408	8.98	8.04984472
UVLO MINIMUM OPERATING VOLTAGE	v	9.16787871	7.025	7.50583592	7.6	7.64	7.65	0.02236068	-2.236	5	7.77416408	7.865	3.35410197
*UVLO INPUT VOLTAGE HYSTERISIS	v	Infinite	0.2	0.8	0.8	0.8	0.8	0	#DIV/0!	#DIV/0!	0.8	2.575	Infinite
VCC ZENER VOLTAGE; ICC25MA	v	21.8528496	30.1	32.0169083	32.1554	32.21002	32.2336	0.03218528	-1.744	2.937	32.4031317	44.9	131.426349

20krad unbias

Units: 5

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	5.2030161	47	50.1602338	51.795	52.13352	52.5262	0.32888104	0.3178	-2.715	54.1068062	57	4.93236099
OUTPUT HIGH LEVEL; VCC9.5V	v	69.2001194	7	8.07032514	8.0967	8.10218	8.1103	0.00530914	0.9821	0.409	8.13403486	9.5	87.7618092
OUTPUT LOW LEVEL; VCC9.5V	v	2.74494713	0	0.00105299	0.0035	0.00388	0.0046	0.00047117	1.0688	-0.04	0.00670701	0.4	280.239293
OUTPUT LEAKAGE OK	m a			-0.0002483	0	0.00002	0.0001	4.4721E-05	2.2361	5	0.00028833		
PWR GND CHECK OK	v			0.99905601	0.9998	1.00006	1.0002	0.00016733	-1.089	0.5357	1.00106399		
STANDBY/ START-UP CURRENT; VC13V	m a	12.4156766	0.05	0.12620689	0.1373	0.14084	0.1436	0.00243885	-0.621	-0.179	0.15547311	0.48	46.3551395
*Delta Startup ICC	m a	9.88987444	0	0.08201106	0.0979	0.1028	0.1077	0.00346482	0	2	0.12358894	0.2	9.35112641
UVLO SATURATION; VC5V, ISINK10MA	v	85.27539	0.005	0.75709711	0.7718	0.77516	0.7783	0.00301048	0.2057	-2.765	0.79322289	1.1	35.967666
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	44.8826696	2	12.7109531	13.1107	13.2105	13.3342	0.08325782	0.5767	0.7985	13.7100469	16.9	14.7713848
OPERATING SUPPLY CURRENT; VC30V	m a	46.258932	2	13.452574	13.8722	13.9701	14.1037	0.08625433	0.8698	1.3842	14.487626	18.2	16.3466184
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.63432906	4.955	4.86871026	4.9621	4.99508	5.0161	0.02106162	-1.045	1.065	5.12144974	5.045	0.79006254
*REFERENCE OUTPUT; VIN32V	v	1.03643148	4.935	4.87326804	4.9678	5.0014	5.0221	0.02135533	-1.088	1.1137	5.12953196	5.065	0.99272654
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	2.77001915	4.82	4.86883611	4.9624	4.99568	5.0166	0.02114065	-1.082	1.1795	5.12252389	5.18	2.9062496
REFRENCE LINE REGULATION; VC12-25V	m v	51.4565326	-18.9	1.03349827	1.623	1.8396	1.9866	0.13435029	-1.176	2.26	2.64570173	18.9	42.3281562
>REFERENCE LOAD REGULATION; IO1-20MA	m v	23.9017048	-23.6	-4.331778	-3.0239	-2.57226	-2.2201	0.293253	-0.771	1.6702	-0.812742	23.6	29.7493516
>REFERENCE OUTPUT SHORT CIRCUIT	m a	37.4503207	-174	-115.15432	-112.5545	-111.83442	-111.2162	0.55331596	-0.242	-1.742	-108.51452	-36	45.6848203
CT DISCHARGE CURRENT; VPIN 42V	m a	4.56414295	7.84	8.29989081	8.5567	8.6586	8.7091	0.05978486	-1.743	3.2769	9.01730919	8.76	0.56536049
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	4.23652114	47.3	49.8516116	51.7096	52.13338	52.6212	0.38029473	0.1167	-1.828	54.4151484	56.7	4.0027025
*S/R LATCH CHECK FOR HOLD	%			0.08473746	0.1297	0.14616	0.1567	0.01023709	-1.203	1.8838	0.20758254	19.8	639.955335
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			-0.0020239	0.0658	0.07884	0.0979	0.01347731	0.7128	-1.296	0.15970389	0.91	20.5570136
E/A INPUT VOLTAGE; PIN 12.5V	v	1.90507939	2.45	2.44702445	2.4924	2.50972	2.5207	0.01044926	-1.397	2.9756	2.57241555	2.55	1.28493968
E/A PSRR; VCC12-25V	db	3.54633499	60.65	69.4137168	78.9351	80.74854	83.1341	1.88913719	0.49	-2.576	92.0833632	130	8.69029174
E/A INPUT BIAS CURRENT	u a	50.3175786	-0.975	-0.1873049	-0.1616	-0.1547	-0.1482	0.00543415	-0.085	-1.61	-0.1220951	-0.001	9.42802856
E/A AVOL; VOUT2-4V	db	6.31851476	67.5	80.5983456	85.405	86.66448	87.931	1.01102241	-0.07	-1.426	92.7306144		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	19.2736268	2.2	6.58359256	7.0086	7.09114	7.2154	0.08459124	0.6467	-0.244	7.59868744		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-0.992711	-0.9305	-0.91864	-0.9025	0.01234516	0.5989	-2.368	-0.844569	-0.515	10.8987373
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	11.2080082	5.024	5.58119582	5.6716	5.70222	5.7235	0.0201707	-0.803	0.5578	5.82324418		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.80142895	0.8116	0.81472	0.8171	0.00221517	-0.41	-0.751	0.82801105	1.084	40.5205018
C/S AMP GAIN	v/v	26.8525061	2.855	3.00286092	3.012	3.01476	3.0169	0.00198318	-0.591	-1.208	3.02665908	3.145	21.8907761
C/S MAXIMUM INPUT SIGNAL; P15V	v	4.92950302	0.915	0.96313665	0.99	0.996	1	0.00547723	-0.609	-3.333	1.02886335	1.085	5.41636751
C/S INPUT BIAS CURRENT	u a	283.12735	-9.8	-0.954052	-0.9081	-0.89112	-0.8815	0.01048866	-1.36	1.6137	-0.828188		
PWM MAXIMUM DUTY CYCLE	%	9.21430238	94.2	95.7273243	96.0632	96.15074	96.2477	0.07056928	0.3219	-0.412	96.5741557	100	18.1819441
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	17.2039876	0.01	0.06535797	0.0709	0.07264	0.0742	0.00121367	-0.311	0.7571	0.07992203	0.39	87.1624761
>OUTPUT LOW LEVEL; I SINK200MA	v	27.0837134	0.5	1.55226013	1.6136	1.63616	1.6497	0.01398331	-1.304	1.6716	1.72005987	2.17	12.7256456
OUTPUT HIGH LEVEL; I SOURCE20MA	v	27.3905006	13.03	13.4971804	13.5267	13.53398	13.5429	0.00613327	0.5853	0.1734	13.5707796	15	79.6758237
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	29.8778403	12.04	13.2320784	13.2968	13.3176	13.3365	0.0142536	-0.32	1.54	13.4031216	15	39.3444573
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	66.8880915	27.03	28.4569967	28.4913	28.50098	28.5108	0.00733055	0.0919	-0.045	28.5449633	30	68.1631205
UVLO START THRESHOLD	v	7.42468356	7.82	8.26568323	8.4	8.43	8.45	0.02738613	-0.609	-3.333	8.59431677	8.98	6.69438681
UVLO MINIMUM OPERATING VOLTAGE	v	8.72066511	7.025	7.47583592	7.6	7.61	7.65	0.02236068	2.2361	5	7.74416408	7.865	3.80131556
*UVLO INPUT VOLTAGE HYSTERISIS	v	7.54639968	0.2	0.65568323	0.8	0.82	0.85	0.02738613	0.6086	-3.333	0.98431677	2.575	21.3611797
VCC ZENER VOLTAGE; ICC25MA	v	26.1700938	30.1	32.0156278	32.1381	32.17414	32.2087	0.02641871	-0.118	0.1041	32.3326522	44.9	160.566283

Units: 4

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	14.7925333	47	51.4578754	51.9886	52.154825	52.2517	0.11615826	-1.485	2.2941	52.8517746	57	13.9039468
OUTPUT HIGH LEVEL; VCC9.5V	v	77.6772002	7	8.07274934	8.0951	8.1011	8.1054	0.00472511	-0.677	-1.812	8.12945066	9.5	98.6855285
OUTPUT LOW LEVEL; VCC9.5V	v	0.92376355	0	-0.0067282	0.0041	0.005775	0.0084	0.00208387	0.6682	-2.275	0.0182782	0.4	63.0598587
OUTPUT LEAKAGE OK	m a			0	0	0	0	0	#DIV/0!	#DIV/0!	0		
PWR GND CHECK OK	v			0.999175	0.9999	1.000075	1.0002	0.00015	-0.37	-3.901	1.000975		
STANDBY/ START-UP CURRENT; VC13V	m a	7.35116644	0.05	0.11607824	0.1377	0.140775	0.1468	0.00411613	1.721	3.0625	0.16547176	0.48	27.4712138
*Delta Startup ICC	m a	12.4012481	0	0.0882759	0.1028	0.10525	0.1077	0.00282902	-1E-14	-6	0.1222241	0.2	11.164069
UVLO SATURATION; VC5V, ISINK10MA	v	60.8156828	0.005	0.74614762	0.7674	0.77135	0.7756	0.0042004	0.0583	-5.394	0.79655238	1.1	26.0808693
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	24.302023	2	12.341771	13.049	13.2692	13.3882	0.15457149	-1.469	1.8713	14.196629	16.9	7.82981802
OPERATING SUPPLY CURRENT; VC30V	m a	23.0725782	2	12.9750337	13.7836	14.016675	14.1663	0.17360688	-1.005	-0.226	15.0583163	18.2	8.0321797
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.97695947	4.955	4.92117648	4.9764	4.9873	5.0016	0.01102059	0.7169	-0.578	5.05342352	5.045	1.74521862
*REFERENCE OUTPUT; VIN32V	v	1.68938848	4.935	4.92399136	4.984	4.994875	5.011	0.01181394	1.0757	0.728	5.06575864	5.065	1.97859486
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	5.10728937	4.82	4.9222421	4.978	4.98805	5.0025	0.01096798	0.8628	-0.622	5.0538579	5.18	5.83364591
REFRENCE LINE REGULATION; VC12-25V	m v	14.7382651	-18.9	-0.6955549	1.7187	2.162675	2.7215	0.47637165	0.3591	-3.581	5.0209049	18.9	11.7116716
>REFERENCE LOAD REGULATION; IO1-20MA	m v	13.1972829	-23.6	-5.752438	-3.1005	-2.5646	-1.8756	0.53130633	0.691	-0.4	0.623238	23.6	16.4152633
>REFERENCE OUTPUT SHORT CIRCUIT	m a	3.46613965	-174	-146.85378	-114.0026	-109.8229	-100.6935	6.17181326	1.8393	3.4359	-72.79202	-36	3.98709947
CT DISCHARGE CURRENT; VPIN 42V	m a	13.082268	7.84	8.48747599	8.5817	8.604325	8.6286	0.01947483	0.2378	0.6366	8.72117401	8.76	2.66454986
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	14.2353456	47.3	51.4136322	51.9228	52.08605	52.1665	0.11206964	-1.68	2.7765	52.7584678	56.7	13.7234615
*S/R LATCH CHECK FOR HOLD	%			0.02534845	0.1408	0.1603	0.1917	0.02249192	1.2705	1.343	0.29525155	19.8	291.062985
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			0.01565409	0.0844	0.095225	0.1141	0.01326182	1.447	1.9677	0.17479591	0.91	20.4792174
E/A INPUT VOLTAGE; PIN 12.5V	v	2.50903907	2.45	2.46119909	2.4962	2.5052	2.5123	0.00733348	-0.489	-2.377	2.54920091	2.55	2.03632156
E/A PSRR; VCC12-25V	db	4.67975102	60.65	71.0987791	77.8479	78.8971	80.7833	1.29972014	1.6199	2.8469	86.6954209	130	13.1061291
E/A INPUT BIAS CURRENT	u a	30.9564036	-0.975	-0.2258905	-0.1837	-0.17415	-0.1628	0.00862342	0.609	1.5229	-0.1224095	-0.001	6.69301528
E/A AVOL; VOUT2-4V	db	6.24671961	67.5	80.1670539	85.1238	86.132625	87.0512	0.99426185	-0.07	-5.429	92.0981961		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	13.4158092	2.2	6.43352915	7.0764	7.175225	7.3325	0.12361597	0.7167	-2.016	7.91692085		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-1.0705641	-0.9476	-0.91345	-0.884	0.02618568	-0.526	1.4793	-0.7563359	-0.515	5.07211006
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	18.1511678	5.024	5.61959717	5.6796	5.69335	5.7065	0.01229214	-0.087	-3.302	5.76710283		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.80180106	0.8104	0.81245	0.8143	0.00177482	-0.207	-3.048	0.82309894	1.084	51.000364
C/S AMP GAIN	v/v	42.3083312	2.855	3.00355411	3.0093	3.010925	3.0121	0.00122848	-0.853	-0.198	3.01829589	3.145	36.3796024
C/S MAXIMUM INPUT SIGNAL; P15V	v	4.61880215	0.915	0.96035898	0.99	0.995	1	0.0057735	-1E-13	-6	1.02964102	1.085	5.19615242
C/S INPUT BIAS CURRENT	u a	59.0889167	-9.8	-1.2558044	-1.0306	-0.956475	-0.923	0.04988823	-1.887	3.6391	-0.6571456		
PWM MAXIMUM DUTY CYCLE	%	11.7296102	94.2	95.7832916	96.0657	96.10875	96.188	0.05424306	1.6877	3.122	96.4342084	100	23.9124274
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	4.58269041	0.01	0.04671692	0.0709	0.07515	0.0813	0.00473885	0.7927	-1.221	0.10358308	0.39	22.1467395
>OUTPUT LOW LEVEL; I SINK200MA	v	10.5239326	0.5	1.43616852	1.6266	1.655825	1.7047	0.03660941	0.9872	-0.577	1.87548148	2.17	4.68162829
OUTPUT HIGH LEVEL; I SOURCE20MA	v	33.7347105	13.03	13.5027087	13.5282	13.5325	13.5368	0.00496521	1E-12	-6	13.5622913	15	98.5187814
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	17.7969302	12.04	13.1527883	13.2684	13.293675	13.3157	0.02348111	-0.149	-4.843	13.4345617	15	24.222663
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	64.5829818	27.03	28.4529752	28.4913	28.49845	28.505	0.00757914	-0.022	-5.875	28.5439248	30	66.0387322
UVLO START THRESHOLD	v	Infinite	7.82	8.45	8.45	8.45	8.45	0	#DIV/0!	#DIV/0!	8.45	8.98	Infinite
UVLO MINIMUM OPERATING VOLTAGE	v	Infinite	7.025	7.65	7.65	7.65	7.65	0	#DIV/0!	#DIV/0!	7.65	7.865	Infinite
*UVLO INPUT VOLTAGE HYSTERISIS	v	Infinite	0.2	0.8	0.8	0.8	0.8	0	#DIV/0!	#DIV/0!	0.8	2.575	Infinite
VCC ZENER VOLTAGE; ICC25MA	v	16.6618893	30.1	31.9432199	32.1332	32.19465	32.2259	0.04190501	-1.739	3.1466	32.4460801	44.9	101.064682

Units: 5

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	10.4389211	47	51.2729445	52.0935	52.28562	52.5107	0.16877926	0.3927	-1.471	53.2982955	57	9.3107414
OUTPUT HIGH LEVEL; VCC9.5V	v	226.252281	7	8.09061334	8.0993	8.10034	8.1031	0.00162111	1.7787	3.0163	8.11006666	9.5	287.79856
OUTPUT LOW LEVEL; VCC9.5V	v	1.28330858	0	-0.0022115	0.0035	0.00396	0.0058	0.00102859	2.2361	5	0.01013155	0.4	128.343821
OUTPUT LEAKAGE OK	m a			-0.0002686	0	0.00006	0.0001	5.4772E-05	-0.609	-3.333	0.00038863		
PWR GND CHECK OK	v			0.9989775	0.9999	1.0001	1.0003	0.00018708	-0.382	-2.898	1.0012225		
STANDBY/ START-UP CURRENT; VC13V	m a	8.06077186	0.05	0.11843655	0.1351	0.14102	0.1449	0.00376391	-1.102	1.1787	0.16360345	0.48	30.0202202
*Delta Startup ICC	m a	8.27878755	0	0.0772222	0.0979	0.10182	0.1077	0.00409963	0.5122	-0.612	0.1264178	0.2	7.98282618
UVLO SATURATION; VC5V, ISINK10MA	v	87.9756805	0.005	0.75839425	0.7719	0.77592	0.7791	0.00292096	-0.459	-1.221	0.79344575	1.1	36.9832908
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	26.8589127	2	12.4459233	13.0966	13.28634	13.4189	0.14006946	-0.584	-1.879	14.1267567	16.9	8.59968585
OPERATING SUPPLY CURRENT; VC30V	m a	24.9055436	2	13.0929572	13.8412	14.06154	14.2051	0.16143046	-0.708	-2.006	15.0301228	18.2	8.54539272
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.49501558	4.955	4.85375878	4.961	4.9883	5.017	0.02242354	-0.025	-1.383	5.12284122	5.045	0.84286436
*REFERENCE OUTPUT; VIN32V	v	0.85711568	4.935	4.85523557	4.9672	4.99482	5.0257	0.02326407	0.1273	-1.143	5.13440443	5.065	1.00555631
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	2.4803943	4.82	4.85250668	4.9604	4.98784	5.0166	0.02255555	-0.037	-1.427	5.12317332	5.18	2.8398032
REFRENCE LINE REGULATION; VC12-25V	m v	20.877628	-18.9	-0.1541036	1.3435	1.83194	2.1244	0.33100727	-0.904	-0.714	3.81798362	18.9	17.1880011
>REFERENCE LOAD REGULATION; IO1-20MA	m v	28.7155074	-23.6	-5.2689549	-4.2488	-3.89664	-3.6746	0.22871916	-0.927	0.6581	-2.5243251	23.6	40.0733667
>REFERENCE OUTPUT SHORT CIRCUIT	m a	19.4407488	-174	-119.55102	-114.5483	-113.30714	-112.1097	1.04064681	-0.245	-2.329	-107.06326	-36	24.7625287
CT DISCHARGE CURRENT; VPIN 42V	m a	5.79452572	7.84	8.36868389	8.5811	8.64734	8.7079	0.04644269	-0.289	0.8239	8.92599611	8.76	0.80859522
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	9.47128138	47.3	51.1790346	52.0241	52.21742	52.447	0.17306423	0.3638	-1.598	53.2558054	56.7	8.63375032
*S/R LATCH CHECK FOR HOLD	%			0.04012141	0.1294	0.15646	0.1835	0.01938977	-0.008	1.4765	0.27279859	19.8	337.696024
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			0.02075993	0.0718	0.08096	0.0976	0.01003334	1.4966	2.4682	0.14116007	0.91	27.5428267
E/A INPUT VOLTAGE; PIN 12.5V	v	1.17995441	2.45	2.41002471	2.4922	2.50752	2.5317	0.01624922	0.8524	-0.322	2.60501529	2.55	0.87142669
E/A PSRR; VCC12-25V	db	3.66821987	60.65	69.7068177	78.3069	80.56488	82.6768	1.80967706	0.0674	-1.861	91.4229423	130	9.10569832
E/A INPUT BIAS CURRENT	u a	91.6098322	-0.975	-0.18061	-0.1658	-0.16288	-0.1588	0.002955	0.6886	-1.686	-0.14515	-0.001	18.2606014
E/A AVOL; VOUT2-4V	db	8.53463873	67.5	81.78374	85.4152	86.15544	87.0436	0.72861666	0.0115	-2.363	90.52714		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	16.4998864	2.2	6.50881591	6.9958	7.10314	7.2498	0.09905402	0.7767	-0.066	7.69746409		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-1.0543213	-0.9476	-0.92706	-0.8999	0.02121021	0.3646	-2.282	-0.7997987	-0.515	6.4758121
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	9.42775552	5.024	5.5540725	5.668	5.6968	5.7271	0.02378792	-0.048	-1.466	5.8395275		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.80585378	0.8146	0.81644	0.8192	0.00176437	1.0133	1.1835	0.82702622	1.084	50.5487444
C/S AMP GAIN	v/v	11.5328688	2.855	2.98884026	3.0123	3.01692	3.0227	0.00467996	0.4896	-2.717	3.04499974	3.145	9.12259043
C/S MAXIMUM INPUT SIGNAL; P15V	v	3.06775343	0.915	0.9418004	0.98	0.992	1	0.0083666	-0.512	-0.612	1.0421996	1.085	3.70520869
C/S INPUT BIAS CURRENT	u a	159.464003	-9.8	-1.0360142	-0.9504	-0.9247	-0.9048	0.01855236	-0.426	-1.104	-0.8133858		
PWM MAXIMUM DUTY CYCLE	%	9.73644659	94.2	95.7568646	96.0594	96.15934	96.2315	0.06707923	-0.82	0.0134	96.5618154	100	19.0851924
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	3.91668107	0.01	0.04009586	0.0677	0.0715	0.0807	0.00523402	2.0397	4.3602	0.10290414	0.39	20.2839499
>OUTPUT LOW LEVEL; I SINK200MA	v	8.95364174	0.5	1.37591122	1.5892	1.62784	1.6986	0.04198813	1.606	3.0766	1.87976878	2.17	4.30407363
OUTPUT HIGH LEVEL; I SOURCE20MA	v	56.8378015	13.03	13.5169986	13.5306	13.53476	13.5389	0.00296024	-0.013	1.6601	13.5525214	15	164.991323
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	21.954734	12.04	13.2193931	13.3029	13.3376	13.3506	0.01970114	-2.069	4.3944	13.4558069	15	28.126965
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	114.297263	27.03	28.476557	28.4949	28.50232	28.505	0.00429383	-1.9	3.5949	28.528083	30	116.265978
UVLO START THRESHOLD	v	7.42468356	7.82	8.26568323	8.4	8.43	8.45	0.02738613	-0.609	-3.333	8.59431677	8.98	6.69438681
UVLO MINIMUM OPERATING VOLTAGE	v	Infinite	7.025	7.6	7.6	7.6	7.6	0	#DIV/0!	#DIV/0!	7.6	7.865	Infinite
*UVLO INPUT VOLTAGE HYSTERISIS	v	7.66811581	0.2	0.66568323	0.8	0.83	0.85	0.02738613	-0.609	-3.333	0.99431677	2.575	21.2394636
VCC ZENER VOLTAGE; ICC25MA	v	23.3706361	30.1	31.9772729	32.1274	32.15296	32.1991	0.02928119	1.1717	0.8833	32.3286471	44.9	145.110685

Units: 4

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	2.99002134	47	48.6862195	51.2968	52.09265	52.5866	0.56773842	-1.3	1.5385	55.4990805	57	2.88122711
OUTPUT HIGH LEVEL; VCC9.5V	v	140.196243	7	8.08659954	8.1005	8.102325	8.1061	0.00262091	1.5765	2.2556	8.11805046	9.5	177.759539
OUTPUT LOW LEVEL; VCC9.5V	v	4.05555556	0	0.00185	0.0035	0.00365	0.0041	0.0003	2	4	0.00545	0.4	440.388889
OUTPUT LEAKAGE OK	m a			-0.000275	0	0.000025	0.0001	0.00005	2	4	0.000325		
PWR GND CHECK OK	v			0.99862171	0.9999	1.00005	1.0004	0.00023805	1.7792	3.1349	1.00147829		
STANDBY/ START-UP CURRENT; VC13V	m a	13.263239	0.05	0.12954949	0.1423	0.143675	0.1472	0.00235425	1.9781	3.9311	0.15780051	0.48	47.6195235
*Delta Startup ICC	m a	7.21711751	0	0.07342664	0.0979	0.101575	0.1077	0.00469139	0.8546	-1.289	0.12972336	0.2	6.99330338
UVLO SATURATION; VC5V, ISINK10MA	v	55.4823531	0.005	0.7437973	0.7647	0.771425	0.7746	0.00460462	-1.709	2.862	0.7990527	1.1	23.7859075
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	24.7872988	2	12.4672807	13.1681	13.385975	13.4974	0.15311572	-1.466	1.7601	14.3046693	16.9	7.65004205
OPERATING SUPPLY CURRENT; VC30V	m a	24.5434744	2	13.1795992	13.9316	14.171425	14.3097	0.16530429	-1.603	2.9721	15.1632508	18.2	8.12355391
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.40706971	4.955	4.82400686	4.9514	4.988475	5.0171	0.02741136	-0.875	1.6404	5.15294314	5.045	0.68736716
*REFERENCE OUTPUT; VIN32V	v	0.71443042	4.935	4.8274389	4.9568	4.994775	5.0236	0.02788935	-0.933	1.7805	5.1621111	5.065	0.83932876
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	1.94216665	4.82	4.81499511	4.9486	4.988075	5.0175	0.02884665	-0.985	1.8212	5.16115489	5.18	2.21776192
REFRENCE LINE REGULATION; VC12-25V	m v	23.0023754	-18.9	0.09105742	1.5311	1.899525	2.2201	0.30141126	-0.357	-1.529	3.70799258	18.9	18.800973
>REFERENCE LOAD REGULATION; IO1-20MA	m v	2.89285267	-23.6	-17.544735	-7.3493	-3.980875	-2.6029	2.26064341	-1.923	3.7221	9.58298548	23.6	4.06681786
>REFERENCE OUTPUT SHORT CIRCUIT	m a	2.98096262	-174	-152.91648	-115.3092	-109.9311	-99.4389	7.16422938	1.7252	3.0973	-66.945724	-36	3.43982565
CT DISCHARGE CURRENT; VPIN 42V	m a	2.71841197	7.84	8.04090948	8.4652	8.600225	8.676	0.09321925	-1.6	2.7779	9.15954052	8.76	0.57132332
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	2.81072518	47.3	48.6655104	51.2508	52.034125	52.5314	0.56143577	-1.255	1.4235	55.4027396	56.7	2.77020407
*S/R LATCH CHECK FOR HOLD	%			-0.0281729	0.1043	0.1408	0.1723	0.02816215	-0.508	1.1366	0.3097729	19.8	232.690571
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			-0.0022567	0.0576	0.068325	0.0846	0.01176361	1.175	1.23	0.13890665	0.91	23.8496817
E/A INPUT VOLTAGE; PIN 12.5V	v	1.17215432	2.45	2.41143821	2.4892	2.5046	2.5262	0.01552697	1.1332	2.2211	2.59776179	2.55	0.97464846
E/A PSRR; VCC12-25V	db	8.43972803	60.65	74.873044	78.6503	79.290325	80.1781	0.73621349	0.4778	-3.231	83.707606	130	22.9596783
E/A INPUT BIAS CURRENT	u a	38.2325268	-0.975	-0.2190763	-0.1873	-0.17735	-0.1716	0.00695438	-1.487	2.2526	-0.1356237	-0.001	8.45271247
E/A AVOL; VOUT2-4V	db	11.0394714	67.5	82.4816761	85.0374	85.7964	86.3393	0.55245399	-1.059	1.5562	89.1111239		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	17.0168303	2.2	6.61044918	7.1105	7.19785	7.3303	0.09790014	1.0378	0.2017	7.78525082		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-0.9703246	-0.9383	-0.92775	-0.9231	0.00709577	-1.896	3.6525	-0.8851754	-0.515	19.3894768
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	8.51971089	5.024	5.53901342	5.6618	5.697	5.7253	0.0263311	-0.756	1.6044	5.85498658		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.79300013	0.8092	0.813925	0.8171	0.00348748	-1.035	0.365	0.83484987	1.084	25.8137859
C/S AMP GAIN	v/v	11.1092704	2.855	2.98758918	3.0103	3.0167	3.0212	0.0048518	-0.862	-0.51	3.04581082	3.145	8.81459114
C/S MAXIMUM INPUT SIGNAL; P15V	v	Infinite	0.915	0.99	0.99	0.99	0.99	0	#DIV/0!	#DIV/0!	0.99	1.085	Infinite
C/S INPUT BIAS CURRENT	u a	74.2413247	-9.8	-1.2137843	-1.0247	-0.976075	-0.9311	0.03961821	-0.239	-0.325	-0.7383657		
PWM MAXIMUM DUTY CYCLE	%	14.2304879	94.2	95.8802163	96.0933	96.154975	96.1948	0.04579311	-1.021	-0.078	96.4297337	100	27.9883792
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	34.7044399	0.01	0.06571765	0.0683	0.069125	0.0696	0.00056789	-1.615	3.0385	0.07253235	0.39	188.343123
>OUTPUT LOW LEVEL; I SINK200MA	v	44.7333758	0.5	1.5508436	1.5884	1.600025	1.6076	0.0081969	-1.349	2.4566	1.6492064	2.17	23.1784786
OUTPUT HIGH LEVEL; I SOURCE20MA	v	72.0319149	13.03	13.523725	13.5355	13.537825	13.541	0.00235	0.9435	0.9211	13.551925	15	207.400709
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	113.854811	12.04	13.3242374	13.342	13.3472	13.3512	0.0038271	-0.902	1.8491	13.3701626	15	143.95596
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	174.082889	27.03	28.4904759	28.505	28.50745	28.5099	0.00282902	0	-6	28.5244241	30	175.86207
UVLO START THRESHOLD	v	Infinite	7.82	8.45	8.45	8.45	8.45	0	#DIV/0!	#DIV/0!	8.45	8.98	Infinite
UVLO MINIMUM OPERATING VOLTAGE	v	6.92820323	7.025	7.45179492	7.6	7.625	7.65	0.02886751	0	-6	7.79820508	7.865	2.77128129
*UVLO INPUT VOLTAGE HYSTERISIS	v	7.21687836	0.2	0.65179492	0.8	0.825	0.85	0.02886751	1E-14	-6	0.99820508	2.575	20.2072594
VCC ZENER VOLTAGE; ICC25MA	v	8.54244147	30.1	31.6711923	32.0839	32.1515	32.2509	0.08005128	0.5998	-2.605	32.6318077	44.9	53.0847259

control (unexposed) unit #155 included with 40krad unbiased sample data

Units: 6

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	14.4816146	47	51.4896482	52.0715	52.20905	52.3629	0.1199003	0.0453	-2.07	52.9284518	57	13.31926
OUTPUT HIGH LEVEL; VCC9.5V	v	152.711685	7	8.07620174	8.0871	8.09048333	8.0931	0.00238027	-0.191	-1.127	8.10476493	9.5	197.389229
OUTPUT LOW LEVEL; VCC9.5V	v	5.70654006	0	0.00230581	0.0033	0.00355	0.0038	0.00020736	-0.404	-1.617	0.00479419	0.4	637.283889
OUTPUT LEAKAGE OK	m a			0	0	0	0	0	#DIV/0!	#DIV/0!	0		
PWR GND CHECK OK	v			0.99896158	0.9999	1.0001	1.0003	0.00018974	0	-2.685	1.00123842		
STANDBY/ START-UP CURRENT; VC13V	m a	9.96247025	0.05	0.1237305	0.1375	0.14225	0.1458	0.00308658	-0.596	-0.64	0.1607695	0.48	36.4750605
*Delta Startup ICC	m a	17.4022201	0	0.09206225	0.1024	0.10401667	0.1073	0.0019924	0.8982	-0.144	0.11597108	0.2	16.0582255
UVLO SATURATION; VC5V, ISINK10MA	v	128.342236	0.005	0.76396884	0.7736	0.77598333	0.7781	0.00200242	-0.095	-2.796	0.78799782	1.1	53.9376425
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	30.9592594	2	12.5705852	13.1646	13.3006167	13.4953	0.12167191	0.677	-0.126	14.0306481	16.9	9.86089924
OPERATING SUPPLY CURRENT; VC30V	m a	30.077275	2	13.2723794	13.912	14.0753333	14.2781	0.13382566	0.4633	-0.644	14.8782873	18.2	10.2737316
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.50938589	4.955	4.84726352	4.9679	4.99181667	5.022	0.02409219	0.5617	-1.875	5.13636981	5.045	0.73583087
*REFERENCE OUTPUT; VIN32V	v	0.8537191	4.935	4.85065663	4.973	4.99781667	5.0291	0.02452667	0.5584	-1.848	5.1449767	5.065	0.91306493
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	2.34358347	4.82	4.84518203	4.9672	4.99176667	5.0227	0.02443077	0.5598	-1.858	5.1383513	5.18	2.56825458
REFRENCE LINE REGULATION; VC12-25V	m v	22.377282	-18.9	0.04374912	1.3848	1.90305	2.2203	0.30988348	-0.824	0.6484	3.76235088	18.9	18.2831624
>REFERENCE LOAD REGULATION; IO1-20MA	m v	12.1965487	-23.6	-6.4267726	-3.6242	-3.0583333	-2.289	0.56140654	0.6744	-1.713	0.31010593	23.6	15.8282999
>REFERENCE OUTPUT SHORT CIRCUIT	m a	3.98788357	-174	-142.49982	-115.2313	-110.80763	-103.5188	5.28203039	0.9129	-1.767	-79.115451	-36	4.72088874
CT DISCHARGE CURRENT; VPIN 42V	m a	5.77906863	7.84	8.34979874	8.5412	8.6196	8.6794	0.04496688	-0.871	2.4187	8.88940126	8.76	1.04076608
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	15.3486704	47.3	51.5438969	52.0156	52.17975	52.2961	0.10597552	-0.778	-0.664	52.8156031	56.7	14.2179061
*S/R LATCH CHECK FOR HOLD	%			0.07971152	0.136	0.15406667	0.168	0.01239252	-0.389	-1.104	0.22842181	19.8	528.435056
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			-0.1528219	0.052	0.08536667	0.1596	0.03969809	1.6042	3.0028	0.32355523	0.91	6.92420593
E/A INPUT VOLTAGE; PIN 12.5V	v	1.49241158	2.45	2.43086865	2.4907	2.50625	2.521	0.01256356	0.2301	-1.834	2.58163135	2.55	1.16076456
E/A PSRR; VCC12-25V	db	3.85363121	60.65	70.4011342	79.338	80.92225	84.2937	1.75351929	1.8553	3.8373	91.4433658	130	9.32938125
E/A INPUT BIAS CURRENT	u a	10.5207078	-0.975	-0.3204803	-0.1933	-0.16685	-0.1188	0.02560506	1.5797	3.3311	-0.0132197	-0.001	2.15907861
E/A AVOL; VOUT2-4V	db	4.99876147	67.5	78.6152637	84.2063	86.0285	87.3016	1.23553938	-0.545	-1.242	93.4417363		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	21.2244189	2.2	6.70207911	7.0511	7.17045	7.2639	0.07806182	-0.472	-0.682	7.63882089		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-1.0333704	-0.9387	-0.9150833	-0.8899	0.0197145	-0.33	-1.404	-0.7967963	-0.515	6.76461915
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	9.45175587	5.024	5.55794329	5.6792	5.70125	5.7318	0.02388445	0.7177	-1.87	5.84455671		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.80422087	0.8123	0.81568333	0.8171	0.00191041	-1.329	1.3031	0.82714579	1.084	46.8165918
C/S AMP GAIN	v/v	16.265829	2.855	2.99791413	3.0133	3.01795	3.0222	0.00333931	-0.161	-1.346	3.03798587	3.145	12.6822557
C/S MAXIMUM INPUT SIGNAL; P15V	v	3.18727629	0.915	0.9448004	0.98	0.995	1	0.0083666	-1.537	1.4286	1.0451996	1.085	3.58568583
C/S INPUT BIAS CURRENT	u a	29.5904365	-9.8	-1.5096421	-1.0032	-0.9086833	-0.7172	0.1001598	1.7621	3.7776	-0.3077245		
PWM MAXIMUM DUTY CYCLE	%	9.81313805	94.2	95.7833331	96.0733	96.1886333	96.2457	0.06755003	-1.18	0.5069	96.5939335	100	18.8076236
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	14.9274808	0.01	0.05920431	0.0656	0.06681667	0.0684	0.00126873	0.402	-2.392	0.07442903	0.39	84.910173
>OUTPUT LOW LEVEL; I SINK200MA	v	29.1627472	0.5	1.5293581	1.5879	1.60515	1.6171	0.01263198	-0.73	-1.733	1.6809419	2.17	14.9052868
OUTPUT HIGH LEVEL; I SOURCE20MA	v	62.3593695	13.03	13.5153997	13.5273	13.5314833	13.5347	0.00268061	-0.509	-0.23	13.547567	15	182.609805
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	100.416451	12.04	13.3191716	13.3378	13.3451667	13.3494	0.00433251	-1.004	0.6214	13.3711617	15	127.318982
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	148.063867	27.03	28.4787297	28.4934	28.4985667	28.502	0.00330616	-0.506	-0.405	28.5184036	30	151.37755
UVLO START THRESHOLD	v	7.3638255	7.82	8.26068323	8.4	8.425	8.45	0.02738613	1E-13	-3.333	8.58931677	8.98	6.75524488
UVLO MINIMUM OPERATING VOLTAGE	v	1.97E+14	7.025	7.6	7.6	7.6	7.6	9.7295E-16	-1.369	-3.333	7.6	7.865	9.0789E+13
*UVLO INPUT VOLTAGE HYSTERISIS	v	7.60725774	0.2	0.66068323	0.8	0.825	0.85	0.02738613	3E-14	-3.333	0.98931677	2.575	21.3003217
VCC ZENER VOLTAGE; ICC25MA	v	13.9724082	30.1	31.8509093	32.0574	32.1434	32.1888	0.04874846	-1.217	1.4999	32.4358907	44.9	87.2273773

Units: 5

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	11.0086167	47	51.3631242	52.1241	52.33178	52.5676	0.16144263	0.3862	1.1516	53.3004358	57	9.63855307
OUTPUT HIGH LEVEL; VCC9.5V	v	232.338111	7	8.08160851	8.0893	8.091	8.0923	0.00156525	-0.535	-3.247	8.10039149	9.5	300.059027
OUTPUT LOW LEVEL; VCC9.5V	v	6.41426981	0	0.0024775	0.0033	0.0036	0.0038	0.00018708	-1.145	2	0.0047225	0.4	706.282375
OUTPUT LEAKAGE OK	m a			0	0	0	0	0	#DIV/0!	#DIV/0!	0		
PWR GND CHECK OK	v			0.99874547	0.9997	1.00006	1.0002	0.00021909	-1.531	1.7448	1.00137453		
STANDBY/ START-UP CURRENT; VC13V	m a	15.9464868	0.05	0.13088121	0.1399	0.14248	0.1446	0.00193313	-0.181	-1.405	0.15407879	0.48	58.199159
*Delta Startup ICC	m a	6.4329599	0	0.06888255	0.0963	0.09996	0.1073	0.00517958	0.8893	-1.719	0.13103745	0.2	6.43810832
UVLO SATURATION; VC5V, ISINK10MA	v	96.4057086	0.005	0.75912377	0.7728	0.7751	0.7792	0.00266271	1.0663	0.2528	0.79107623	1.1	40.6729187
*GLITCHLESS OUTPUT ON STARTUP	v	Infinite	0.01	1	1	1	1	0	#DIV/0!	#DIV/0!	1	1.9	Infinite
OPERATING SUPPLY CURRENT; VC15V	m a	41.2719296	2	12.6623204	13.0766	13.20532	13.2958	0.09049993	-0.554	-0.863	13.7483196	16.9	13.6084086
OPERATING SUPPLY CURRENT; VC30V	m a	43.9218404	2	13.420913	13.8433	13.96578	14.0592	0.09081116	-0.295	-1.468	14.510647	18.2	15.5422158
REFERENCE OUTPUT VOLTAGE; IL1MA	v	0.63721348	4.955	4.90183277	4.964	4.97986	4.9902	0.01300454	-0.632	-3.087	5.05788723	5.045	1.66967361
*REFERENCE OUTPUT; VIN32V	v	1.32266071	4.935	4.90883151	4.97	4.9861	4.9971	0.01287808	-0.634	-2.915	5.06336849	5.065	2.04222956
VREF CHECK TEST	v			1	1	1	1	0	#DIV/0!	#DIV/0!	1		
*REFERENCE OUTPUT; ICC20MA	v	4.09585679	4.82	4.90199508	4.9642	4.98024	4.9907	0.01304082	-0.639	-3.047	5.05848492	5.18	5.10601818
REFRENCE LINE REGULATION; VC12-25V	m v	47.2808556	-18.9	1.14352215	1.877	2.02882	2.2699	0.14754964	1.3073	2.3955	2.91411785	18.9	38.1141328
>REFERENCE LOAD REGULATION; IO1-20MA	m v	13.73268	-23.6	-5.7251407	-3.5098	-2.67812	-2.2127	0.50783678	-1.429	1.9936	0.36890069	23.6	17.2484027
>REFERENCE OUTPUT SHORT CIRCUIT	m a	4.19007902	-174	-141.10394	-113.8813	-111.06296	-102.1641	5.00682999	2.1647	4.7454	-81.02198	-36	4.99737093
CT DISCHARGE CURRENT; VPIN 42V	m a	6.99091522	7.84	8.36045789	8.522	8.56902	8.6039	0.03476035	-0.578	-1.831	8.77758211	8.76	1.83139693
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	10.8644307	47.3	51.3563443	52.0698	52.27154	52.49	0.15253261	0.2437	1.1136	53.1867357	56.7	9.67762438
*S/R LATCH CHECK FOR HOLD	%			0.08451278	0.1293	0.14492	0.1539	0.01006787	-1.02	0.6705	0.20532722	19.8	650.752695
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			-0.0214816	0.0586	0.0837	0.1012	0.01753026	-0.605	-0.801	0.18888156	0.91	15.7118799
E/A INPUT VOLTAGE; PIN 12.5V	v	2.73259494	2.45	2.46422512	2.4971	2.50306	2.5132	0.00647248	1.0561	0.9753	2.54189488	2.55	2.41741437
E/A PSRR; VCC12-25V	db	4.90268621	60.65	72.5132912	79.2628	80.6873	82.7101	1.36233479	0.8492	-0.216	88.8613088	130	12.0657321
E/A INPUT BIAS CURRENT	u a	47.0997522	-0.975	-0.2198289	-0.1927	-0.18634	-0.1782	0.00558149	0.5946	0.0014	-0.1528511	-0.001	11.0687344
E/A AVOL; VOUT2-4V	db	7.11271533	67.5	81.2386955	85.7775	86.61302	87.7693	0.89572074	0.569	-2.491	91.9873445		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	18.0925599	2.2	6.62602859	7.0164	7.1761	7.2407	0.09167857	-1.961	3.9632	7.72617141		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			-0.971182	-0.9363	-0.92166	-0.9167	0.00825367	-2.142	4.6684	-0.872138	-0.515	16.4234094
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	18.8836564	5.024	5.61921247	5.6768	5.68972	5.6987	0.01175126	-0.607	-3.33	5.76022753		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			0.80401618	0.8136	0.81574	0.8184	0.00195397	0.5515	-1.481	0.82746382	1.084	45.7632336
C/S AMP GAIN	v/v	26.9251097	2.855	3.00196729	3.0108	3.01376	3.0158	0.00196545	-0.809	0.2571	3.02555271	3.145	22.2578193
C/S MAXIMUM INPUT SIGNAL; P15V	v	4.80778689	0.915	0.96113665	0.99	0.994	1	0.00547723	0.6086	-3.333	1.02686335	1.085	5.53808364
C/S INPUT BIAS CURRENT	u a	110.628847	-9.8	-1.1853078	-1.062	-1.0267	-0.9946	0.02643464	-0.308	-1.006	-0.8680922		
PWM MAXIMUM DUTY CYCLE	%	14.7172691	94.2	95.9033588	96.1245	96.17124	96.226	0.04464687	0.0669	-2.341	96.4391212	100	28.5855052
PWM MINIMUM DUTY CYCLE	%	Infinite	-0.001	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0.001	Infinite
OUTPUT LOW LEVEL; I SINK20MA	v	24.7642162	0.01	0.06232304	0.066	0.06692	0.068	0.00076616	0.3262	-0.193	0.07151696	0.39	140.562596
>OUTPUT LOW LEVEL; I SINK200MA	v	32.2376496	0.5	1.53098768	1.5909	1.59918	1.619	0.01136539	1.9624	4.0476	1.66737232	2.17	16.7414756
OUTPUT HIGH LEVEL; I SOURCE20MA	v	74.6698214	13.03	13.51943	13.5299	13.5329	13.5347	0.00224499	-0.716	-2.362	13.54637	15	217.83276
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	71.6064561	12.04	13.3116225	13.3374	13.34816	13.3517	0.00608958	-2.105	4.5044	13.3846975	15	90.4189154
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	234.232296	27.03	28.486913	28.4971	28.49946	28.502	0.00209117	0.0658	-2.257	28.512007	30	239.186456
UVLO START THRESHOLD	v	9.24241431	7.82	8.30583592	8.4	8.44	8.45	0.02236068	-2.236	5	8.57416408	8.98	8.04984472
UVLO MINIMUM OPERATING VOLTAGE	v	7.24210937	7.025	7.45568323	7.6	7.62	7.65	0.02738613	0.6086	-3.333	7.78431677	7.865	2.98204504
*UVLO INPUT VOLTAGE HYSTERISIS	v	7.54639968	0.2	0.65568323	0.8	0.82	0.85	0.02738613	0.6086	-3.333	0.98431677	2.575	21.3611797
VCC ZENER VOLTAGE; ICC25MA	v	24.4122801	30.1	31.974799	32.0973	32.1421	32.1742	0.02788351	-1.083	2.5328	32.309401	44.9	152.514289

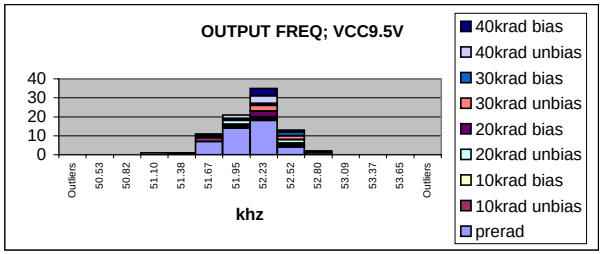
Units: 1

Parameter		Cpk (LL)	Lower Limit	-6 Sigma	Min	Ave	Max	Sigma	Skew	Kurt	+6 Sigma	Upper Limit	Cpk (UL)
OUTPUT FREQ; VCC9.5V	k hz	#DIV/0!	47	#DIV/0!	52.3629	52.3629	52.3629	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	57	#DIV/0!
OUTPUT HIGH LEVEL; VCC9.5V	v	#DIV/0!	7	#DIV/0!	8.0887	8.0887	8.0887	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	9.5	#DIV/0!
OUTPUT LOW LEVEL; VCC9.5V	v	#DIV/0!	0	#DIV/0!	0.0038	0.0038	0.0038	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.4	#DIV/0!
OUTPUT LEAKAGE OK	m a			#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
PWR GND CHECK OK	v			#DIV/0!	1.0003	1.0003	1.0003	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
STANDBY/ START-UP CURRENT; VC13V	m a	#DIV/0!	0.05	#DIV/0!	0.1436	0.1436	0.1436	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.48	#DIV/0!
*Delta Startup ICC	m a	#DIV/0!	0	#DIV/0!	0.1048	0.1048	0.1048	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.2	#DIV/0!
UVLO SATURATION; VC5V, ISINK10MA	v	#DIV/0!	0.005	#DIV/0!	0.7778	0.7778	0.7778	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.1	#DIV/0!
*GLITCHLESS OUTPUT ON STARTUP	v	#DIV/0!	0.01	#DIV/0!	1	1	1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.9	#DIV/0!
OPERATING SUPPLY CURRENT; VC15V	m a	#DIV/0!	2	#DIV/0!	13.1646	13.1646	13.1646	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	16.9	#DIV/0!
OPERATING SUPPLY CURRENT; VC30V	m a	#DIV/0!	2	#DIV/0!	13.912	13.912	13.912	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	18.2	#DIV/0!
REFERENCE OUTPUT VOLTAGE; IL1MA	v	#DIV/0!	4.955	#DIV/0!	5.022	5.022	5.022	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	5.045	#DIV/0!
*REFERENCE OUTPUT; VIN32V	v	#DIV/0!	4.935	#DIV/0!	5.0291	5.0291	5.0291	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	5.065	#DIV/0!
VREF CHECK TEST	v			#DIV/0!	1	1	1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
*REFERENCE OUTPUT; ICC20MA	v	#DIV/0!	4.82	#DIV/0!	5.0227	5.0227	5.0227	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	5.18	#DIV/0!
REFRENCE LINE REGULATION; VC12-25V	m v	#DIV/0!	-18.9	#DIV/0!	2.2203	2.2203	2.2203	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	18.9	#DIV/0!
>REFERENCE LOAD REGULATION; IO1-20MA	m v	#DIV/0!	-23.6	#DIV/0!	-2.289	-2.289	-2.289	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	23.6	#DIV/0!
>REFERENCE OUTPUT SHORT CIRCUIT	m a	#DIV/0!	-174	#DIV/0!	-113.1021	-113.1021	-113.1021	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	-36	#DIV/0!
CT DISCHARGE CURRENT; VPIN 42V	m a	#DIV/0!	7.84	#DIV/0!	8.6794	8.6794	8.6794	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	8.76	#DIV/0!
OSCILLATOR INITIAL ACCURACY (52KHZ)	k hz	#DIV/0!	47.3	#DIV/0!	52.2961	52.2961	52.2961	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	56.7	#DIV/0!
*S/R LATCH CHECK FOR HOLD	%			#DIV/0!	0.1659	0.1659	0.1659	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	19.8	#DIV/0!
OSCILLATOR VOLTAGE STABILITY; VCC12-25V	%			#DIV/0!	0.0818	0.0818	0.0818	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.91	#DIV/0!
E/A INPUT VOLTAGE; PIN 12.5V	v	#DIV/0!	2.45	#DIV/0!	2.521	2.521	2.521	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2.55	#DIV/0!
E/A PSRR; VCC12-25V	db	#DIV/0!	60.65	#DIV/0!	80.38	80.38	80.38	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	130	#DIV/0!
E/A INPUT BIAS CURRENT	u a	#DIV/0!	-0.975	#DIV/0!	-0.1188	-0.1188	-0.1188	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	-0.001	#DIV/0!
E/A AVOL; VOUT2-4V	db	#DIV/0!	67.5	#DIV/0!	87.3016	87.3016	87.3016	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V	m a	#DIV/0!	2.2	#DIV/0!	7.0511	7.0511	7.0511	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V	m a			#DIV/0!	-0.8899	-0.8899	-0.8899	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	-0.515	#DIV/0!
E/A VOUT HIGH; P22.3V,RL15K TO GND	v	#DIV/0!	5.024	#DIV/0!	5.7305	5.7305	5.7305	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
E/A VOUT LOW; P22.7V,RL15K TO P8	v			#DIV/0!	0.8171	0.8171	0.8171	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.084	#DIV/0!
C/S AMP GAIN	v/v	#DIV/0!	2.855	#DIV/0!	3.0156	3.0156	3.0156	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	3.145	#DIV/0!
C/S MAXIMUM INPUT SIGNAL; P15V	v	#DIV/0!	0.915	#DIV/0!	1	1	1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.085	#DIV/0!
C/S INPUT BIAS CURRENT	u a	#DIV/0!	-9.8	#DIV/0!	-0.7172	-0.7172	-0.7172	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
PWM MAXIMUM DUTY CYCLE	%	#DIV/0!	94.2	#DIV/0!	96.0733	96.0733	96.0733	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	100	#DIV/0!
PWM MINIMUM DUTY CYCLE	%	#DIV/0!	-0.001	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.001	#DIV/0!
OUTPUT LOW LEVEL; I SINK20MA	v	#DIV/0!	0.01	#DIV/0!	0.0671	0.0671	0.0671	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.39	#DIV/0!
>OUTPUT LOW LEVEL; I SINK200MA	v	#DIV/0!	0.5	#DIV/0!	1.6159	1.6159	1.6159	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2.17	#DIV/0!
OUTPUT HIGH LEVEL; I SOURCE20MA	v	#DIV/0!	13.03	#DIV/0!	13.5311	13.5311	13.5311	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	15	#DIV/0!
>OUTPUT HIGH LEVEL; I SOURCE200MA	v	#DIV/0!	12.04	#DIV/0!	13.3438	13.3438	13.3438	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	15	#DIV/0!
OUTPUT HIGH LEVEL; IL20MA VCC30V	v	#DIV/0!	27.03	#DIV/0!	28.4974	28.4974	28.4974	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	30	#DIV/0!
UVLO START THRESHOLD	v	#DIV/0!	7.82	#DIV/0!	8.4	8.4	8.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	8.98	#DIV/0!
UVLO MINIMUM OPERATING VOLTAGE	v	#DIV/0!	7.025	#DIV/0!	7.6	7.6	7.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	7.865	#DIV/0!
*UVLO INPUT VOLTAGE HYSTERISIS	v	#DIV/0!	0.2	#DIV/0!	0.8	0.8	0.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2.575	#DIV/0!
VCC ZENER VOLTAGE; ICC25MA	v	#DIV/0!	30.1	#DIV/0!	32.0574	32.0574	32.0574	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	44.9	#DIV/0!

control (unexposed) unit #155 included with 40krad unbiased sample data

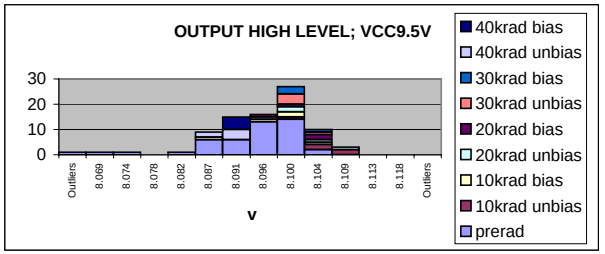
OUTPUT FREQ; VCC9.5V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
50.53	0	0	0	0	0	0	0	0	0
50.82	0	0	0	0	0	0	0	0	0
51.10	1	0	0	0	0	0	0	0	0
51.38	0	0	0	0	0	0	1	0	0
51.67	7	2	1	1	0	0	0	0	0
51.95	14	1	1	2	1	0	0	2	0
52.23	18	1	1	0	3	3	1	4	4
52.52	4	1	1	2	0	2	2	0	1
52.80	1	0	1	0	0	0	0	0	0
53.09	0	0	0	0	0	0	0	0	0
53.37	0	0	0	0	0	0	0	0	0
53.65	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



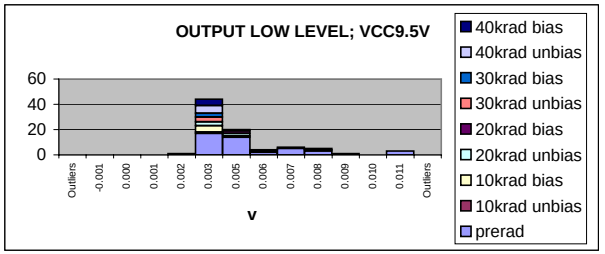
OUTPUT HIGH LEVEL; VCC9.5V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	1	0	0	0	0	0	0	0	0
8.069	1	0	0	0	0	0	0	0	0
8.074	1	0	0	0	0	0	0	0	0
8.078	0	0	0	0	0	0	0	0	0
8.082	1	0	0	0	0	0	0	0	0
8.087	6	0	1	0	0	0	0	2	0
8.091	6	0	0	0	0	0	0	4	5
8.096	13	0	1	1	1	0	0	0	0
8.100	14	1	2	2	1	4	3	0	0
8.104	2	2	1	1	2	1	1	0	0
8.109	0	2	0	1	0	0	0	0	0
8.113	0	0	0	0	0	0	0	0	0
8.118	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



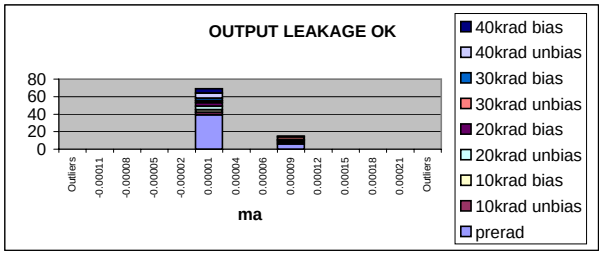
OUTPUT LOW LEVEL; VCC9.5V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-0.001	0	0	0	0	0	0	0	0	0
0.000	0	0	0	0	0	0	0	0	0
0.001	0	0	0	0	0	0	0	0	0
0.002	0	1	0	0	0	0	0	0	0
0.003	17	1	5	3	0	4	3	6	5
0.005	14	1	0	2	2	0	1	0	0
0.006	2	1	0	0	0	1	0	0	0
0.007	5	0	0	0	1	0	0	0	0
0.008	3	1	0	0	1	0	0	0	0
0.009	1	0	0	0	0	0	0	0	0
0.010	0	0	0	0	0	0	0	0	0
0.011	3	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



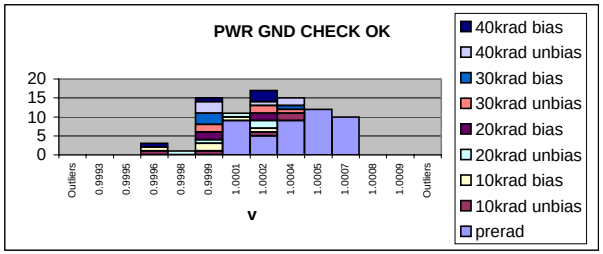
OUTPUT LEAKAGE OK

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-0.00011	0	0	0	0	0	0	0	0	0
-0.00008	0	0	0	0	0	0	0	0	0
-0.00005	0	0	0	0	0	0	0	0	0
-0.00002	0	0	0	0	0	0	0	0	0
0.00001	39	3	3	4	4	2	3	6	5
0.00004	0	0	0	0	0	0	0	0	0
0.00006	0	0	0	0	0	0	0	0	0
0.00009	6	2	2	1	0	3	1	0	0
0.00012	0	0	0	0	0	0	0	0	0
0.00015	0	0	0	0	0	0	0	0	0
0.00018	0	0	0	0	0	0	0	0	0
0.00021	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



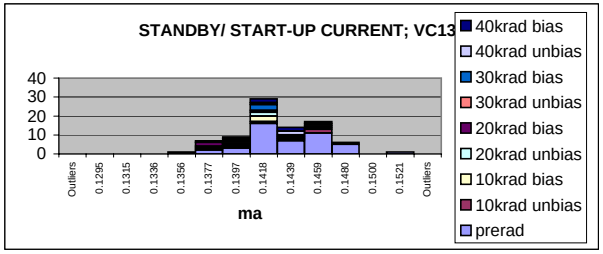
PWR GND CHECK OK

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.9993	0	0	0	0	0	0	0	0	0
0.9995	0	0	0	0	0	0	0	0	0
0.9996	0	1	1	0	0	0	0	0	1
0.9998	0	0	0	1	0	0	0	0	0
0.9999	0	1	2	1	2	2	3	3	1
1.0001	9	0	1	1	0	0	0	0	0
1.0002	5	1	1	2	2	2	0	1	3
1.0004	9	2	0	0	0	1	1	2	0
1.0005	12	0	0	0	0	0	0	0	0
1.0007	10	0	0	0	0	0	0	0	0
1.0008	0	0	0	0	0	0	0	0	0
1.0009	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



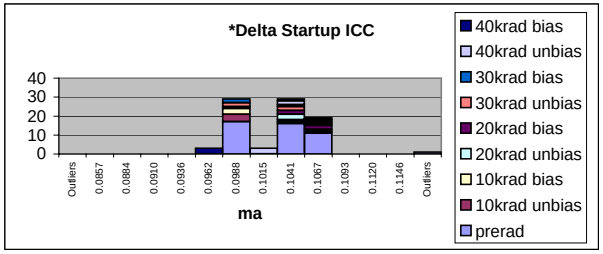
STANDBY/ START-UP CURRENT; VC13V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.1295	0	0	0	0	0	0	0	0	0
0.1315	0	0	0	0	0	0	0	0	0
0.1336	0	0	0	0	0	0	0	0	0
0.1356	0	0	0	0	0	1	0	0	0
0.1377	2	1	0	1	2	0	0	1	0
0.1397	3	0	1	1	1	1	0	1	1
0.1418	16	1	3	2	0	1	3	1	2
0.1439	7	1	0	1	0	1	0	2	2
0.1459	11	2	1	0	1	1	0	1	0
0.1480	5	0	0	0	0	0	1	0	0
0.1500	0	0	0	0	0	0	0	0	0
0.1521	1	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



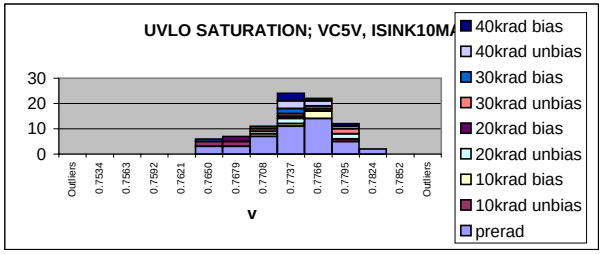
***Delta Startup ICC**

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.0857	0	0	0	0	0	0	0	0	0
0.0884	0	0	0	0	0	0	0	0	0
0.0910	0	0	0	0	0	0	0	0	0
0.0936	0	0	0	0	0	0	0	0	0
0.0962	0	0	0	0	0	0	0	0	3
0.0988	17	4	3	1	0	2	2	0	0
0.1015	0	0	0	0	0	0	0	3	0
0.1041	16	1	1	3	2	2	1	2	1
0.1067	11	0	1	1	2	1	1	1	1
0.1093	0	0	0	0	0	0	0	0	0
0.1120	0	0	0	0	0	0	0	0	0
0.1146	0	0	0	0	0	0	0	0	0
Outliers	1	0	0	0	0	0	0	0	0



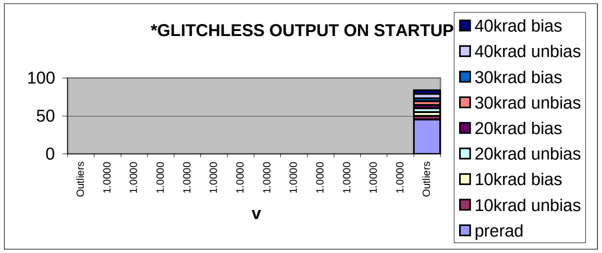
UVLO SATURATION; VC5V, ISINK10MA

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.7534	0	0	0	0	0	0	0	0	0
0.7563	0	0	0	0	0	0	0	0	0
0.7592	0	0	0	0	0	0	0	0	0
0.7621	0	0	0	0	0	0	0	0	0
0.7650	3	2	0	0	0	0	1	0	0
0.7679	3	2	0	0	2	0	0	0	0
0.7708	7	0	1	1	0	1	1	0	0
0.7737	11	0	1	2	1	1	2	3	3
0.7766	14	0	3	0	1	1	0	2	1
0.7795	5	1	0	2	0	2	0	1	1
0.7824	2	0	0	0	0	0	0	0	0
0.7852	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



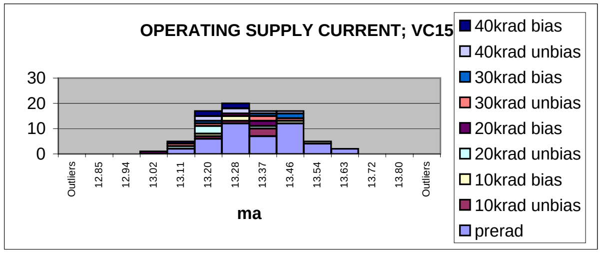
***GLITCHLESS OUTPUT ON STARTUP**

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
1.0000	0	0	0	0	0	0	0	0	0
Outliers	45	5	5	5	4	5	4	6	5



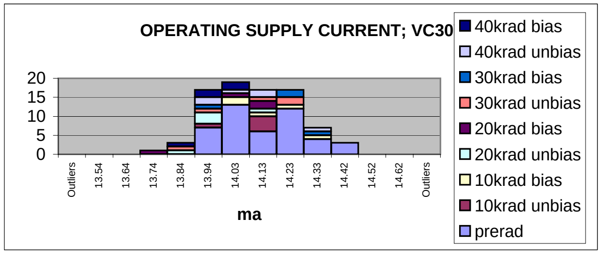
OPERATING SUPPLY CURRENT; VC15V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
12.85	0	0	0	0	0	0	0	0	0
12.94	0	0	0	0	0	0	0	0	0
13.02	0	0	0	0	1	0	0	0	0
13.11	2	0	0	1	0	1	0	0	1
13.20	6	1	1	3	0	1	1	2	2
13.28	12	1	2	0	1	0	0	2	2
13.37	7	3	0	1	2	2	1	1	0
13.46	12	0	1	0	0	1	2	1	0
13.54	4	0	1	0	0	0	0	0	0
13.63	2	0	0	0	0	0	0	0	0
13.72	0	0	0	0	0	0	0	0	0
13.80	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



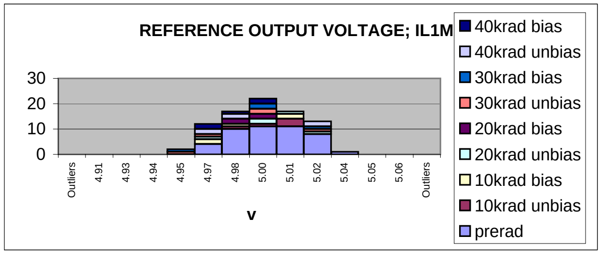
OPERATING SUPPLY CURRENT; VC30V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
13.54	0	0	0	0	0	0	0	0	0
13.64	0	0	0	0	0	0	0	0	0
13.74	0	0	0	0	1	0	0	0	0
13.84	0	0	0	1	0	1	0	0	1
13.94	7	1	0	3	0	1	1	2	2
14.03	13	0	2	0	1	0	0	1	2
14.13	6	4	1	1	2	1	0	2	0
14.23	12	0	1	0	0	2	2	0	0
14.33	4	0	1	0	0	0	1	1	0
14.42	3	0	0	0	0	0	0	0	0
14.52	0	0	0	0	0	0	0	0	0
14.62	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



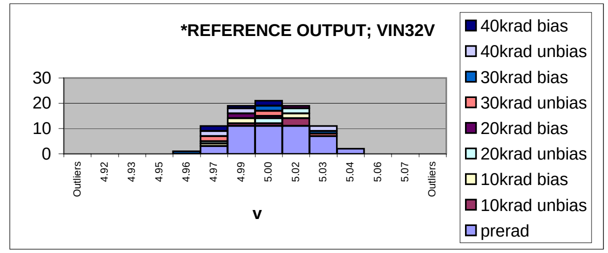
REFERENCE OUTPUT VOLTAGE; IL1MA

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
4.91	0	0	0	0	0	0	0	0	0
4.93	0	0	0	0	0	0	0	0	0
4.94	0	0	0	0	0	0	0	0	0
4.95	0	0	0	0	0	1	1	0	0
4.97	4	0	2	1	0	1	0	2	2
4.98	10	1	1	0	2	0	0	2	1
5.00	11	1	0	2	2	2	2	0	2
5.01	11	3	2	1	0	0	0	0	0
5.02	8	0	0	1	0	1	1	2	0
5.04	1	0	0	0	0	0	0	0	0
5.05	0	0	0	0	0	0	0	0	0
5.06	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



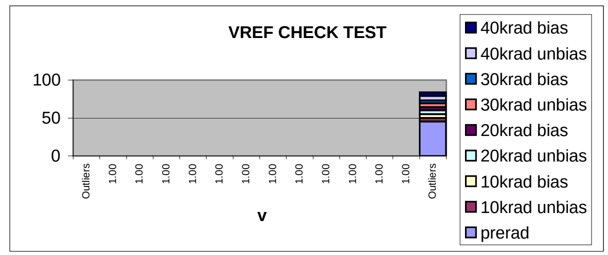
***REFERENCE OUTPUT; VIN32V**

Bin	preread	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
4.92	0	0	0	0	0	0	0	0	0
4.93	0	0	0	0	0	0	0	0	0
4.95	0	0	0	0	0	0	0	0	0
4.96	0	0	0	0	0	0	1	0	0
4.97	3	0	1	1	0	2	0	2	2
4.99	11	1	2	0	2	0	0	2	1
5.00	11	1	0	2	1	2	2	0	2
5.02	11	3	2	2	1	0	0	0	0
5.03	7	0	0	0	0	1	1	2	0
5.04	2	0	0	0	0	0	0	0	0
5.06	0	0	0	0	0	0	0	0	0
5.07	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



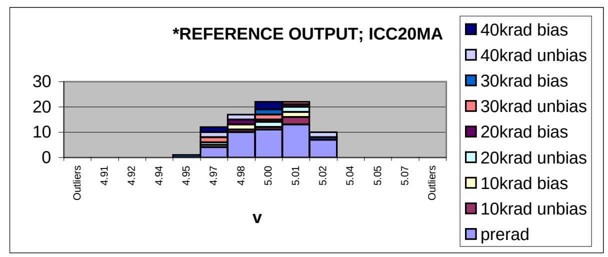
VREF CHECK TEST

Bin	preread	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
1.00	0	0	0	0	0	0	0	0	0
Outliers	45	5	5	5	4	5	4	6	5



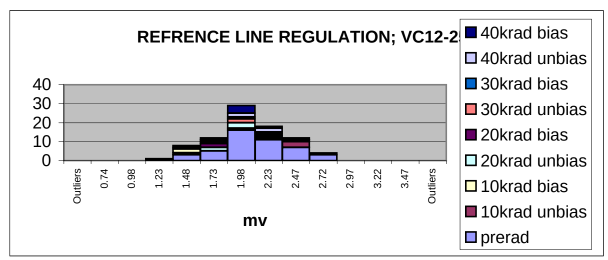
***REFERENCE OUTPUT; ICC20MA**

Bin	preread	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
4.91	0	0	0	0	0	0	0	0	0
4.92	0	0	0	0	0	0	0	0	0
4.94	0	0	0	0	0	0	0	0	0
4.95	0	0	0	0	0	0	1	0	0
4.97	4	0	1	1	0	2	0	2	2
4.98	10	1	2	0	2	0	0	2	0
5.00	11	1	0	2	1	2	2	0	3
5.01	13	3	2	2	1	1	0	0	0
5.02	7	0	0	0	0	0	1	2	0
5.04	0	0	0	0	0	0	0	0	0
5.05	0	0	0	0	0	0	0	0	0
5.07	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



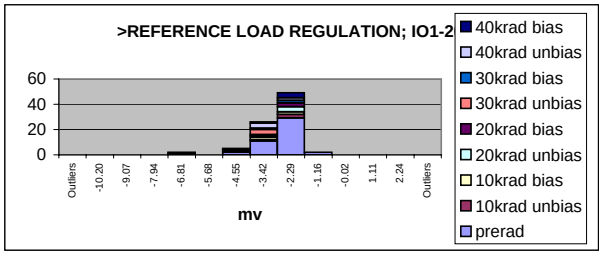
REFRENCE LINE REGULATION; VC12-25V

Bin	preread	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.74	0	0	0	0	0	0	0	0	0
0.98	0	0	0	0	0	0	0	0	0
1.23	0	0	0	0	0	1	0	0	0
1.48	3	1	2	0	0	0	1	1	0
1.73	5	0	0	2	2	1	1	1	0
1.98	16	0	1	3	0	2	1	2	4
2.23	11	1	1	0	0	1	1	2	1
2.47	7	3	1	0	1	0	0	0	0
2.72	3	0	0	0	1	0	0	0	0
2.97	0	0	0	0	0	0	0	0	0
3.22	0	0	0	0	0	0	0	0	0
3.47	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



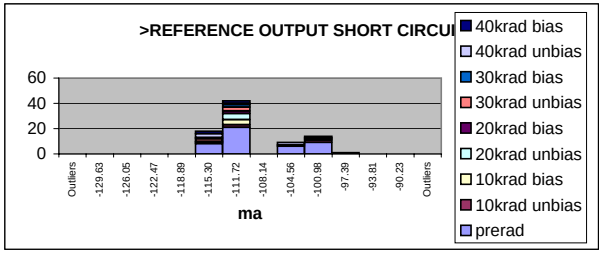
>REFERENCE LOAD REGULATION; IO1-20MA

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-10.20	0	0	0	0	0	0	0	0	0
-9.07	0	0	0	0	0	0	0	0	0
-7.94	0	0	0	0	0	0	0	0	0
-6.81	1	0	0	0	0	0	1	0	0
-5.68	0	0	0	0	0	0	0	0	0
-4.55	2	1	1	0	0	1	0	0	0
-3.42	11	1	2	1	1	4	1	4	1
-2.29	29	3	2	4	3	0	2	2	4
-1.16	2	0	0	0	0	0	0	0	0
-0.02	0	0	0	0	0	0	0	0	0
1.11	0	0	0	0	0	0	0	0	0
2.24	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



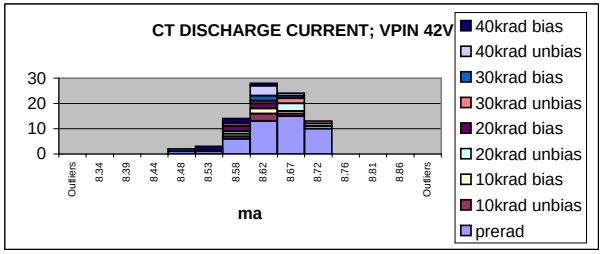
>REFERENCE OUTPUT SHORT CIRCUIT

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-129.63	0	0	0	0	0	0	0	0	0
-126.05	0	0	0	0	0	0	0	0	0
-122.47	0	0	0	0	0	0	0	0	0
-118.89	0	0	0	0	0	0	0	0	0
-115.30	8	0	1	0	1	2	1	3	2
-111.72	21	2	4	5	2	3	2	1	2
-108.14	0	0	0	0	0	0	0	0	0
-104.56	6	1	0	0	0	0	0	2	0
-100.98	9	2	0	0	1	0	1	0	1
-97.39	1	0	0	0	0	0	0	0	0
-93.81	0	0	0	0	0	0	0	0	0
-90.23	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



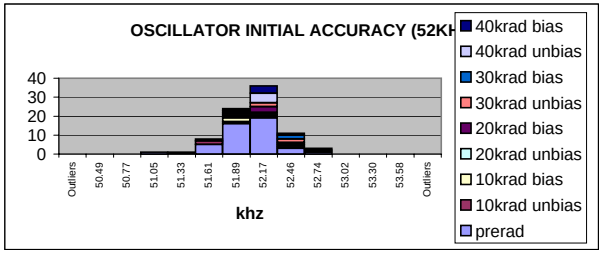
CT DISCHARGE CURRENT; VPIN 42V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
8.34	0	0	0	0	0	0	0	0	0
8.39	0	0	0	0	0	0	0	0	0
8.44	0	0	0	0	0	0	0	0	0
8.48	1	0	0	0	0	0	1	0	0
8.53	0	0	0	0	0	0	0	1	2
8.58	6	1	1	1	2	1	0	0	2
8.62	13	3	2	0	2	1	2	4	1
8.67	15	1	1	3	0	2	1	1	0
8.72	10	0	1	1	0	1	0	0	0
8.76	0	0	0	0	0	0	0	0	0
8.81	0	0	0	0	0	0	0	0	0
8.86	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



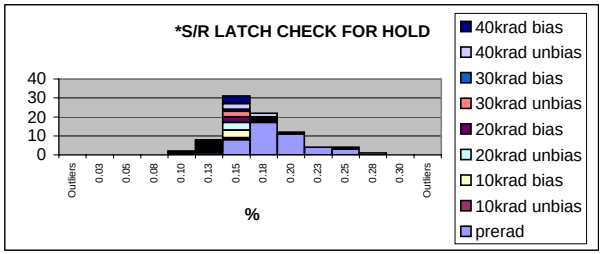
OSCILLATOR INITIAL ACCURACY (52KHZ)

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
50.49	0	0	0	0	0	0	0	0	0
50.77	0	0	0	0	0	0	0	0	0
51.05	1	0	0	0	0	0	0	0	0
51.33	0	0	0	0	0	0	1	0	0
51.61	5	2	0	1	0	0	0	0	0
51.89	16	1	2	1	1	1	1	1	0
52.17	19	1	1	1	3	2	0	5	4
52.46	3	1	1	1	0	2	2	0	1
52.74	1	0	1	1	0	0	0	0	0
53.02	0	0	0	0	0	0	0	0	0
53.30	0	0	0	0	0	0	0	0	0
53.58	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



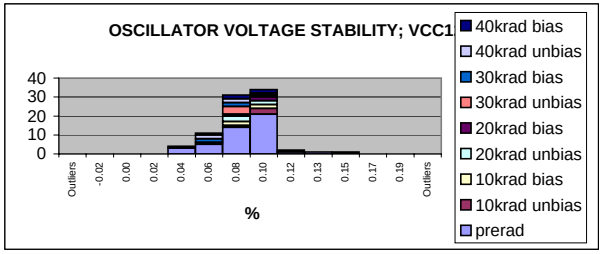
***S/R LATCH CHECK FOR HOLD**

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.03	0	0	0	0	0	0	0	0	0
0.05	0	0	0	0	0	0	0	0	0
0.08	0	0	0	0	0	0	0	0	0
0.10	0	1	0	0	0	0	1	0	0
0.13	1	1	1	1	0	1	1	1	1
0.15	8	1	4	4	3	3	1	3	4
0.18	17	1	0	0	0	1	1	2	0
0.20	11	0	0	0	1	0	0	0	0
0.23	4	0	0	0	0	0	0	0	0
0.25	3	1	0	0	0	0	0	0	0
0.28	1	0	0	0	0	0	0	0	0
0.30	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



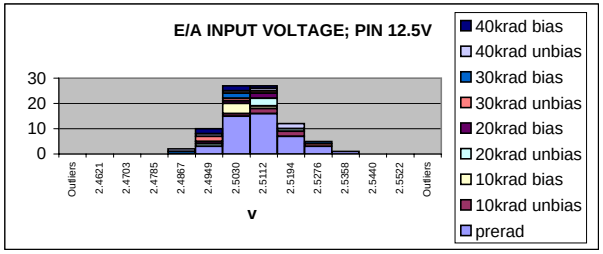
OSCILLATOR VOLTAGE STABILITY; VCC12-25V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-0.02	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.02	0	0	0	0	0	0	0	0	0
0.04	3	1	0	0	0	0	0	0	0
0.06	5	0	1	0	0	0	2	2	1
0.08	14	1	2	3	1	4	2	2	2
0.10	21	3	2	2	2	1	0	1	2
0.12	1	0	0	0	1	0	0	0	0
0.13	1	0	0	0	0	0	0	0	0
0.15	0	0	0	0	0	0	0	1	0
0.17	0	0	0	0	0	0	0	0	0
0.19	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



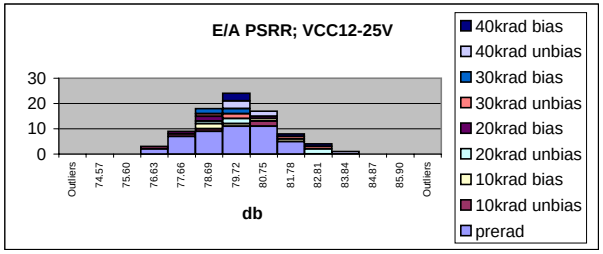
E/A INPUT VOLTAGE; PIN 12.5V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
2.4621	0	0	0	0	0	0	0	0	0
2.4703	0	0	0	0	0	0	0	0	0
2.4785	0	0	0	0	0	0	0	0	0
2.4867	0	0	0	0	0	0	1	1	0
2.4949	3	0	0	1	1	2	0	1	2
2.5030	15	1	4	0	1	1	2	1	2
2.5112	16	2	1	3	2	1	0	1	1
2.5194	7	2	0	1	0	0	0	2	0
2.5276	3	0	0	0	0	1	1	0	0
2.5358	1	0	0	0	0	0	0	0	0
2.5440	0	0	0	0	0	0	0	0	0
2.5522	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



E/A PSRR; VCC12-25V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
74.57	0	0	0	0	0	0	0	0	0
75.60	0	0	0	0	0	0	0	0	0
76.63	2	1	0	0	0	0	0	0	0
77.66	7	1	0	0	1	0	0	0	0
78.69	9	1	2	1	2	1	2	0	0
79.72	11	0	1	2	0	2	2	3	3
80.75	11	2	1	0	1	0	0	2	0
81.78	5	0	1	0	0	1	0	0	1
82.81	0	0	0	2	0	1	0	0	1
83.84	0	0	0	0	0	0	0	1	0
84.87	0	0	0	0	0	0	0	0	0
85.90	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



E/A INPUT BIAS CURRENT

Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-0.24	0	0	0	0	0	0	0	0	0
-0.22	0	0	0	0	0	0	0	0	0
-0.21	0	0	0	0	0	0	0	0	0
-0.20	0	0	0	0	0	0	0	1	1
-0.19	0	0	0	0	1	0	1	1	3
-0.17	0	0	0	0	2	0	3	2	1
-0.16	0	2	0	3	1	5	0	1	0
-0.15	0	2	2	2	0	0	0	0	0
-0.13	6	1	3	0	0	0	0	0	0
-0.12	15	0	0	0	0	0	0	1	0
-0.11	24	0	0	0	0	0	0	0	0
-0.10	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0

E/A AVOL; VOUT2-4V

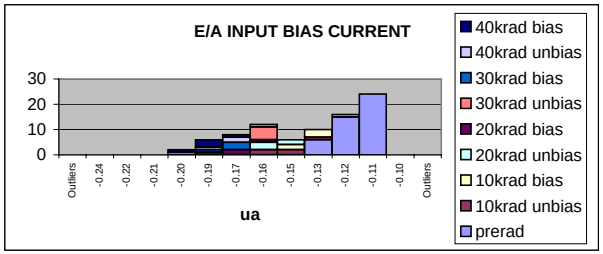
Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
82.63	0	0	0	0	0	0	0	0	0
83.25	1	0	0	0	0	0	0	0	0
83.87	1	0	0	0	0	0	0	0	0
84.48	1	0	0	0	0	0	0	1	0
85.10	7	2	0	1	1	0	1	1	0
85.72	13	1	3	1	1	2	2	1	2
86.34	12	0	0	0	0	2	1	1	1
86.96	6	2	2	2	2	1	0	1	0
87.57	3	0	0	0	0	0	0	1	2
88.19	1	0	0	1	0	0	0	0	0
88.81	0	0	0	0	0	0	0	0	0
89.43	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0

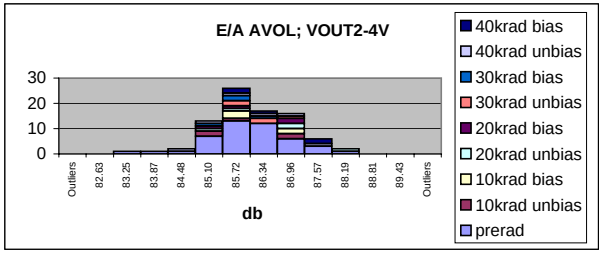
E/A OUTPUT SINK CURRENT; P22.7V,P11.1V

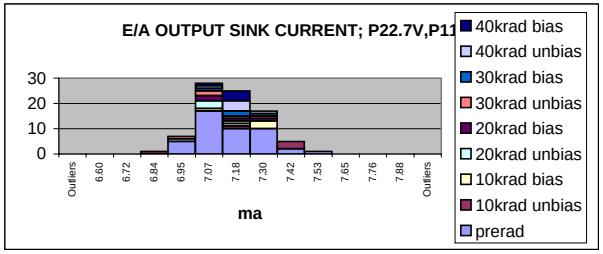
Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
6.60	0	0	0	0	0	0	0	0	0
6.72	0	0	0	0	0	0	0	0	0
6.84	0	1	0	0	0	0	0	0	0
6.95	5	0	0	1	0	1	0	0	0
7.07	17	0	1	3	2	2	1	1	1
7.18	10	1	1	1	1	1	2	4	4
7.30	10	0	3	0	1	1	1	1	0
7.42	2	3	0	0	0	0	0	0	0
7.53	1	0	0	0	0	0	0	0	0
7.65	0	0	0	0	0	0	0	0	0
7.76	0	0	0	0	0	0	0	0	0
7.88	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0

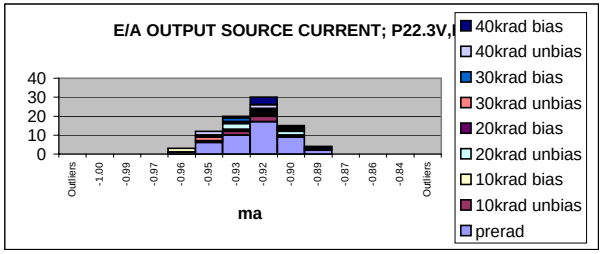
E/A OUTPUT SOURCE CURRENT; P22.3V,P15V

Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-1.00	0	0	0	0	0	0	0	0	0
-0.99	0	0	0	0	0	0	0	0	0
-0.97	0	0	0	0	0	0	0	0	0
-0.96	1	0	2	0	0	0	0	0	0
-0.95	6	0	0	0	1	2	1	2	0
-0.93	10	2	1	3	0	1	2	0	1
-0.92	17	3	1	0	1	1	1	2	4
-0.90	9	0	1	2	1	1	0	1	0
-0.89	2	0	0	0	1	0	0	1	0
-0.87	0	0	0	0	0	0	0	0	0
-0.86	0	0	0	0	0	0	0	0	0
-0.84	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



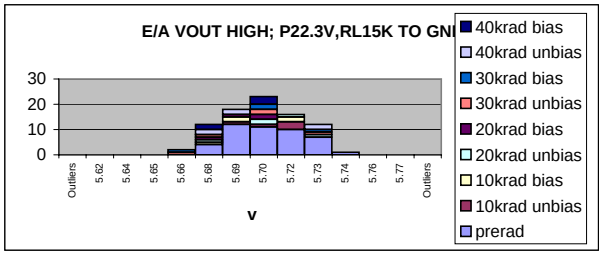






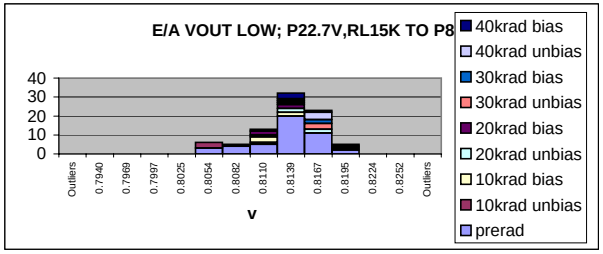
E/A VOUT HIGH; P22.3V,RL15K TO GND

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
5.62	0	0	0	0	0	0	0	0	0
5.64	0	0	0	0	0	0	0	0	0
5.65	0	0	0	0	0	0	0	0	0
5.66	0	0	0	0	0	1	1	0	0
5.68	4	0	1	1	1	1	0	2	2
5.69	12	1	2	0	1	0	0	2	0
5.70	11	1	0	2	2	2	2	0	3
5.72	10	3	2	1	0	0	0	0	0
5.73	7	0	0	1	0	1	1	2	0
5.74	1	0	0	0	0	0	0	0	0
5.76	0	0	0	0	0	0	0	0	0
5.77	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



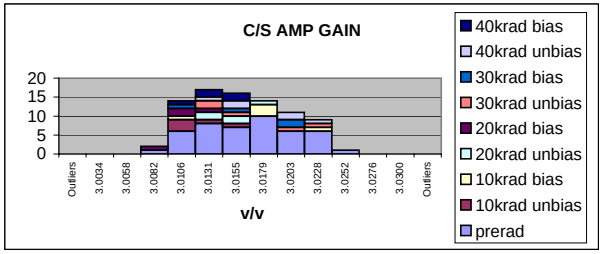
E/A VOUT LOW; P22.7V,RL15K TO P8

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.7940	0	0	0	0	0	0	0	0	0
0.7969	0	0	0	0	0	0	0	0	0
0.7997	0	0	0	0	0	0	0	0	0
0.8025	0	0	0	0	0	0	0	0	0
0.8054	3	3	0	0	0	0	0	0	0
0.8082	4	0	0	0	0	0	1	0	0
0.8110	5	1	3	1	2	0	0	1	0
0.8139	20	0	2	2	2	1	1	1	3
0.8167	11	0	0	2	0	3	2	4	1
0.8195	2	1	0	0	0	1	0	0	1
0.8224	0	0	0	0	0	0	0	0	0
0.8252	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



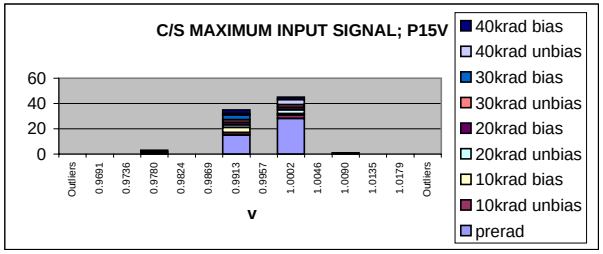
C/S AMP GAIN

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
3.0034	0	0	0	0	0	0	0	0	0
3.0058	0	0	0	0	0	0	0	0	0
3.0082	1	0	0	0	1	0	0	0	0
3.0106	6	3	1	0	2	0	1	0	1
3.0131	8	1	0	2	1	2	0	1	2
3.0155	7	1	0	2	0	1	1	2	2
3.0179	10	0	3	1	0	0	0	0	0
3.0203	6	0	0	0	0	1	2	2	0
3.0228	6	0	1	0	0	1	0	1	0
3.0252	1	0	0	0	0	0	0	0	0
3.0276	0	0	0	0	0	0	0	0	0
3.0300	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



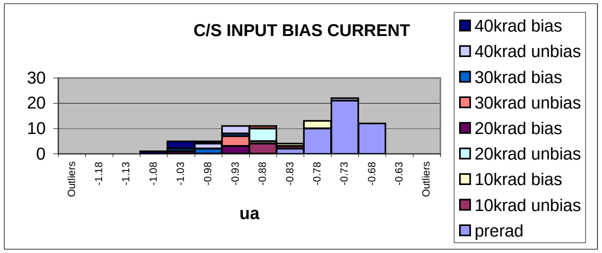
C/S MAXIMUM INPUT SIGNAL; P15V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.9691	0	0	0	0	0	0	0	0	0
0.9736	0	0	0	0	0	0	0	0	0
0.9780	1	0	0	0	0	1	0	1	0
0.9824	0	0	0	0	0	0	0	0	0
0.9869	0	0	0	0	0	0	0	0	0
0.9913	15	2	4	2	2	2	4	1	3
0.9957	0	0	0	0	0	0	0	0	0
1.0002	28	3	1	3	2	2	0	4	2
1.0046	0	0	0	0	0	0	0	0	0
1.0090	1	0	0	0	0	0	0	0	0
1.0135	0	0	0	0	0	0	0	0	0
1.0179	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



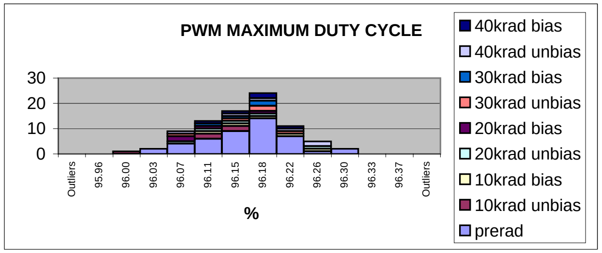
C/S INPUT BIAS CURRENT

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
-1.18	0	0	0	0	0	0	0	0	0
-1.13	0	0	0	0	0	0	0	0	0
-1.08	0	0	0	0	0	0	0	0	1
-1.03	0	0	0	0	1	0	1	0	3
-0.98	0	0	0	0	0	0	2	2	1
-0.93	0	0	0	0	3	4	1	3	0
-0.88	0	4	1	5	0	1	0	0	0
-0.83	2	1	1	0	0	0	0	0	0
-0.78	10	0	3	0	0	0	0	0	0
-0.73	21	0	0	0	0	0	0	1	0
-0.68	12	0	0	0	0	0	0	0	0
-0.63	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



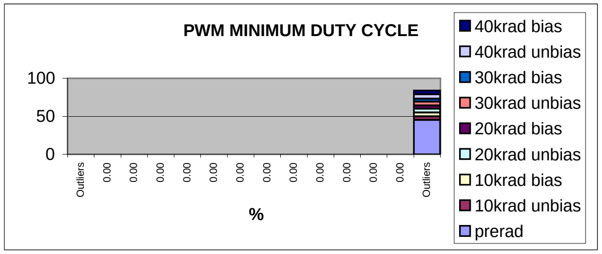
PWM MAXIMUM DUTY CYCLE

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
95.96	0	0	0	0	0	0	0	0	0
96.00	0	1	0	0	0	0	0	0	0
96.03	2	0	0	0	0	0	0	0	0
96.07	4	0	0	1	2	1	0	1	0
96.11	6	2	1	1	1	0	1	0	1
96.15	9	2	1	1	0	1	1	1	1
96.18	14	0	1	1	1	2	2	1	2
96.22	7	0	1	0	0	1	0	1	1
96.26	1	0	1	1	0	0	0	2	0
96.30	2	0	0	0	0	0	0	0	0
96.33	0	0	0	0	0	0	0	0	0
96.37	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



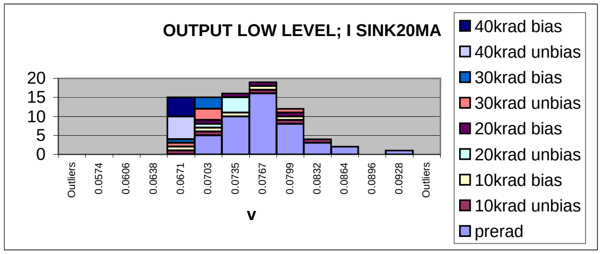
PWM MINIMUM DUTY CYCLE

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
0.00	0	0	0	0	0	0	0	0	0
Outliers	45	5	5	5	4	5	4	6	5



OUTPUT LOW LEVEL; I SINK20MA

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.0574	0	0	0	0	0	0	0	0	0
0.0606	0	0	0	0	0	0	0	0	0
0.0638	0	0	0	0	0	0	0	0	0
0.0671	0	1	1	0	0	1	1	6	5
0.0703	5	1	1	1	1	3	3	0	0
0.0735	10	0	1	4	1	0	0	0	0
0.0767	16	1	1	0	1	0	0	0	0
0.0799	8	1	1	0	1	1	0	0	0
0.0832	3	1	0	0	0	0	0	0	0
0.0864	2	0	0	0	0	0	0	0	0
0.0896	0	0	0	0	0	0	0	0	0
0.0928	1	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



>OUTPUT LOW LEVEL; I SINK200MA

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
1.52	0	0	0	0	0	0	0	0	0
1.55	0	0	0	0	0	0	0	0	0
1.58	0	0	0	0	0	1	1	2	1
1.61	4	2	1	1	0	2	3	4	4
1.64	3	0	0	4	2	1	0	0	0
1.67	11	1	2	0	1	0	0	0	0
1.70	16	1	1	0	1	1	0	0	0
1.73	8	1	0	0	0	0	0	0	0
1.76	1	0	0	0	0	0	0	0	0
1.79	1	0	1	0	0	0	0	0	0
1.82	1	0	0	0	0	0	0	0	0
1.85	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0

OUTPUT HIGH LEVEL; I SOURCE20MA

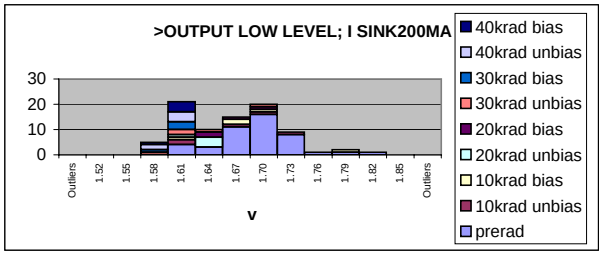
Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
13.4922	0	0	0	0	0	0	0	0	0
13.4985	1	0	0	0	0	0	0	0	0
13.5047	0	0	1	0	0	0	0	0	0
13.5110	1	0	0	0	0	0	0	0	0
13.5172	6	1	1	0	0	0	0	0	0
13.5235	7	0	0	0	0	0	0	0	0
13.5297	10	0	3	3	2	1	0	4	2
13.5360	11	2	0	1	2	4	3	2	3
13.5423	9	2	0	1	0	0	1	0	0
13.5485	0	0	0	0	0	0	0	0	0
13.5548	0	0	0	0	0	0	0	0	0
13.5610	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0

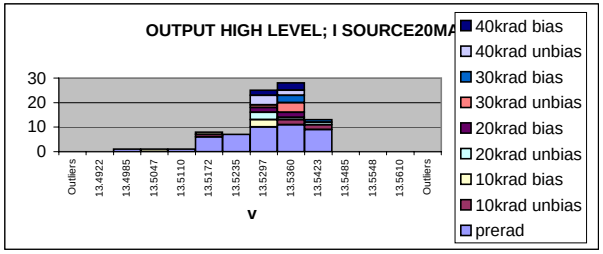
>OUTPUT HIGH LEVEL; I SOURCE200MA

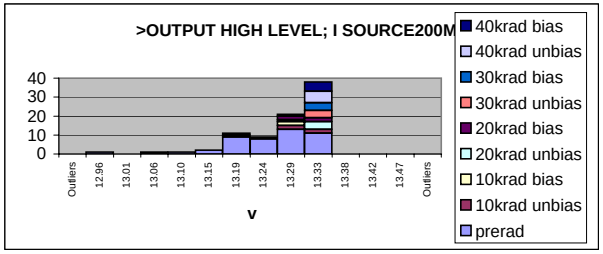
Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
12.96	1	0	0	0	0	0	0	0	0
13.01	0	0	0	0	0	0	0	0	0
13.06	0	0	1	0	0	0	0	0	0
13.10	1	0	0	0	0	0	0	0	0
13.15	2	0	0	0	0	0	0	0	0
13.19	9	1	1	0	0	0	0	0	0
13.24	8	0	1	0	0	0	0	0	0
13.29	13	2	2	1	2	1	0	0	0
13.33	11	2	0	4	2	4	4	6	5
13.38	0	0	0	0	0	0	0	0	0
13.42	0	0	0	0	0	0	0	0	0
13.47	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0

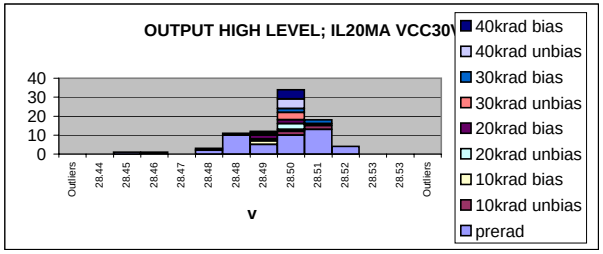
OUTPUT HIGH LEVEL; IL20MA VCC30V

Bin	prerad	10krad unbia	10krad bias	20krad unbia	20krad bias	30krad unbia	30krad bias	40krad unbia	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
28.44	0	0	0	0	0	0	0	0	0
28.45	1	0	0	0	0	0	0	0	0
28.46	0	0	1	0	0	0	0	0	0
28.47	0	0	0	0	0	0	0	0	0
28.48	2	0	1	0	0	0	0	0	0
28.48	10	1	0	0	0	0	0	0	0
28.49	5	0	2	1	2	1	0	1	0
28.50	10	2	1	3	2	4	2	5	5
28.51	13	2	0	1	0	0	2	0	0
28.52	4	0	0	0	0	0	0	0	0
28.53	0	0	0	0	0	0	0	0	0
28.53	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



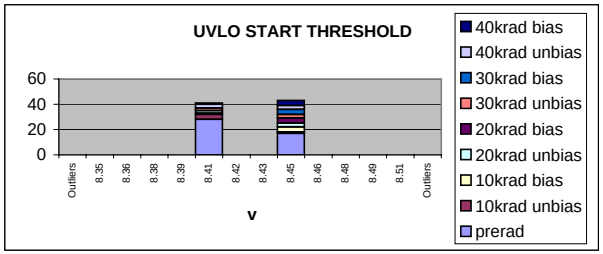






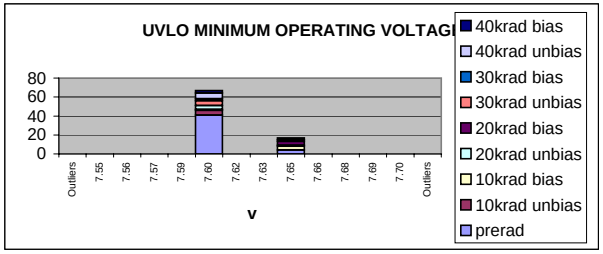
UVLO START THRESHOLD

Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
8.35	0	0	0	0	0	0	0	0	0
8.36	0	0	0	0	0	0	0	0	0
8.38	0	0	0	0	0	0	0	0	0
8.39	0	0	0	0	0	0	0	0	0
8.41	28	4	1	2	0	2	0	3	1
8.42	0	0	0	0	0	0	0	0	0
8.43	0	0	0	0	0	0	0	0	0
8.45	17	1	4	3	4	3	4	3	4
8.46	0	0	0	0	0	0	0	0	0
8.48	0	0	0	0	0	0	0	0	0
8.49	0	0	0	0	0	0	0	0	0
8.51	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



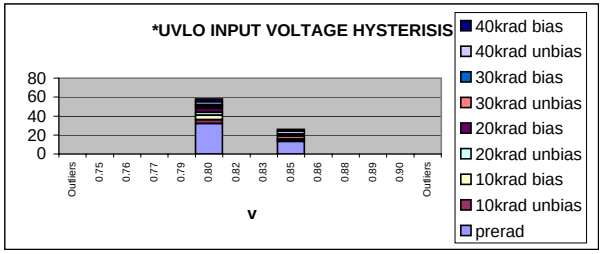
UVLO MINIMUM OPERATING VOLTAGE

Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
7.55	0	0	0	0	0	0	0	0	0
7.56	0	0	0	0	0	0	0	0	0
7.57	0	0	0	0	0	0	0	0	0
7.59	0	0	0	0	0	0	0	0	0
7.60	41	5	1	4	0	5	2	6	3
7.62	0	0	0	0	0	0	0	0	0
7.63	0	0	0	0	0	0	0	0	0
7.65	4	0	4	1	4	0	2	0	2
7.66	0	0	0	0	0	0	0	0	0
7.68	0	0	0	0	0	0	0	0	0
7.69	0	0	0	0	0	0	0	0	0
7.70	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



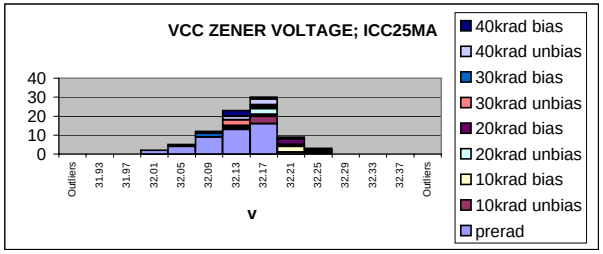
***UVLO INPUT VOLTAGE HYSTERISIS**

Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
0.75	0	0	0	0	0	0	0	0	0
0.76	0	0	0	0	0	0	0	0	0
0.77	0	0	0	0	0	0	0	0	0
0.79	0	0	0	0	0	0	0	0	0
0.80	32	4	5	3	4	2	2	3	3
0.82	0	0	0	0	0	0	0	0	0
0.83	0	0	0	0	0	0	0	0	0
0.85	13	1	0	2	0	3	2	3	2
0.86	0	0	0	0	0	0	0	0	0
0.88	0	0	0	0	0	0	0	0	0
0.89	0	0	0	0	0	0	0	0	0
0.90	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



VCC ZENER VOLTAGE; ICC25MA

Bin	prerad	10krad unbias	10krad bias	20krad unbias	20krad bias	30krad unbias	30krad bias	40krad unbias	40krad bias
Outliers	0	0	0	0	0	0	0	0	0
31.93	0	0	0	0	0	0	0	0	0
31.97	0	0	0	0	0	0	0	0	0
32.01	2	0	0	0	0	0	0	0	0
32.05	4	0	0	0	0	0	0	1	0
32.09	9	0	0	0	0	0	2	0	1
32.13	13	0	0	1	1	3	0	2	3
32.17	16	4	1	3	0	1	1	3	1
32.21	1	0	3	1	3	1	0	0	0
32.25	0	1	1	0	0	0	1	0	0
32.29	0	0	0	0	0	0	0	0	0
32.33	0	0	0	0	0	0	0	0	0
32.37	0	0	0	0	0	0	0	0	0
Outliers	0	0	0	0	0	0	0	0	0



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