



**SUMMARY TEST DATA
ON
SDLVA-100M4G-CD-2**

Customer: _____	Tested By: <u>E.Benson</u>
SO No: _____	Temperature: <u>25°C</u>
Model No: <u>SDLVA-100M4G-CD-2</u>	Date: <u>08/19/13</u>
Serial No: <u>PL13733</u>	Drawing No: <u>27619921</u>

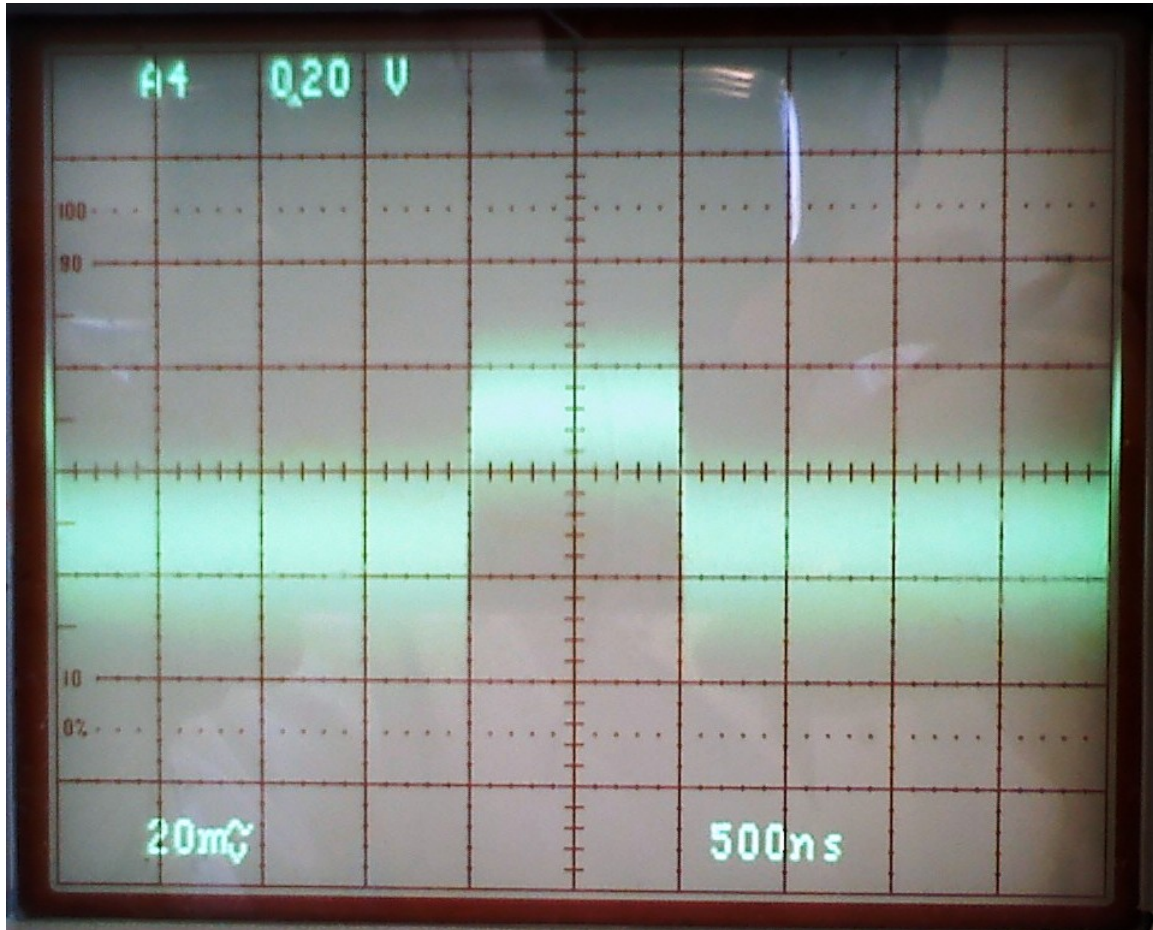
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	PASS FAIL	QA QC
1	Frequency Range:	100MHz to 4 GHz	See Plot #1A	
2	RF Gain (Small Signal):	55dB Typ (J1 to J2)@-50dBm	<u>51</u> dB	
3	Video Flatness over Frequency:	± 50mV Max @-45dBm	± <u>35</u> mV See Plot #1A	
4	TSS:	-73dBm Typ, -71dBm Max (-40°C, 25°C, +75°C)	<u>-73.2</u> dBm See Plots #2A, 2B, 2C	
5	VSWR:	2.0:1 (J1 VSWR)	<u>1.51</u> :1 See Plot #3	
6	PSAT:	+13dBm Typ (J2)	<u>+10.17</u> dBm See Plot #4	
7	Power Input:	+17dBm CW Max (J1)	Pass	
8	Log Slope:	25mV/dB Typ(J3) (50Ω Load) (-40°C, 25°C, +75°C)	<u>24.8</u> mV/dB Typ See Plots #1A, 1B, 1C	
9	Log Range:	-70 to 0 dBm	<u>-71</u> TO <u>0</u> dBm	
10	Log Linearity	±2.5dB (J3) (-40°C, 25°C, +75°C)	See Plots #1A, 1B, 1C	
11	DC Offset:	50 ± 50mV(J3)	<u>58</u> mV	
12	Pulse Range:	100ns to CW	Pass	
13	Rise Time:	30ns (Max)	<u>25.1</u> ns	
14	Recovery Time:	200ns (Max)	<u>187</u> ns	
15	Harmonics:	15dBc Min -70 to 0dBm	<u>16.5</u> dBc	
16	DC Supply:	+15VDC @ 350 mA -15VDC @ 180 mA	+15VDC @ <u>190</u> mA -15VDC @ <u>90</u> mA	

QA/QC Approval: _____ Date: _____



**SUMMARY TEST DATA
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TSS PLOT #2A

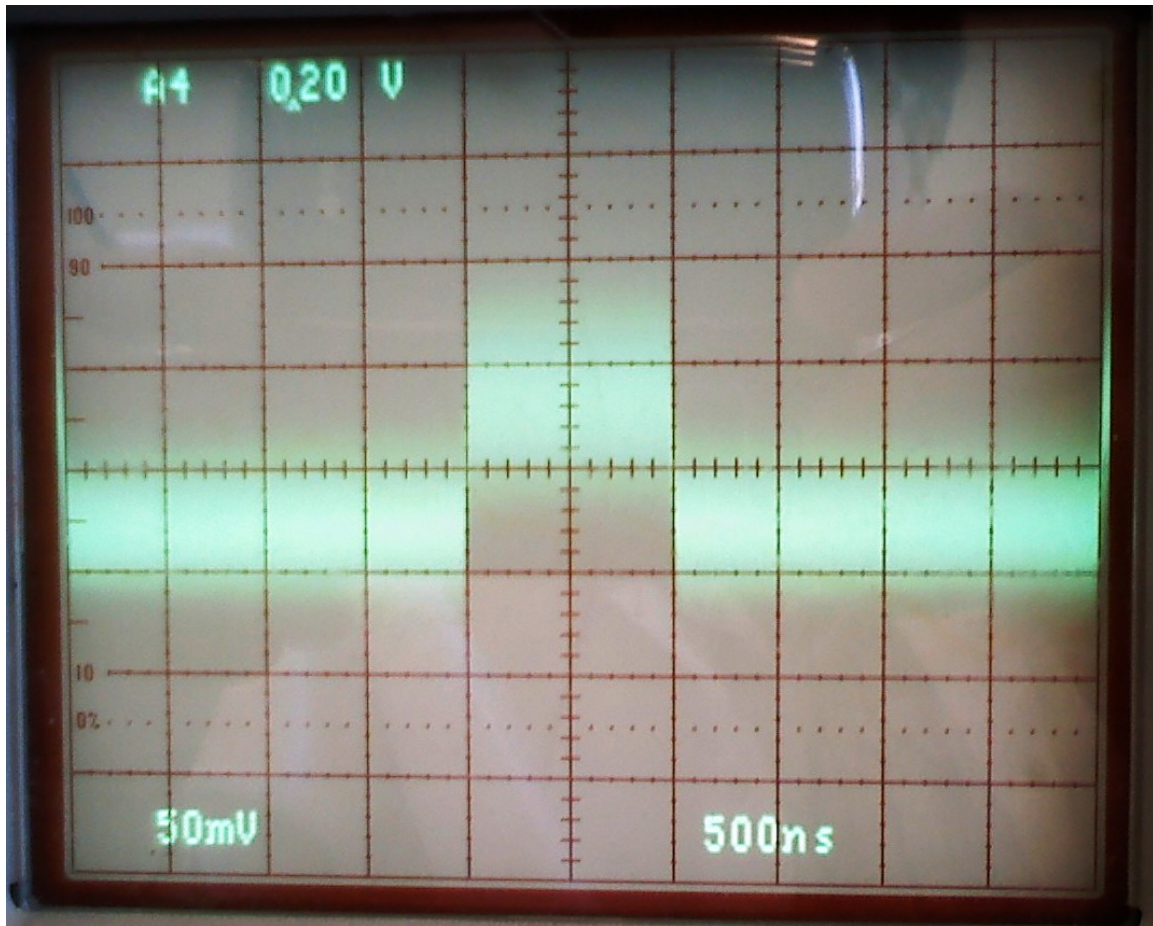


-74dBm TSS@-40C



**SUMMARY TEST DATA
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TSS PLOT #2B

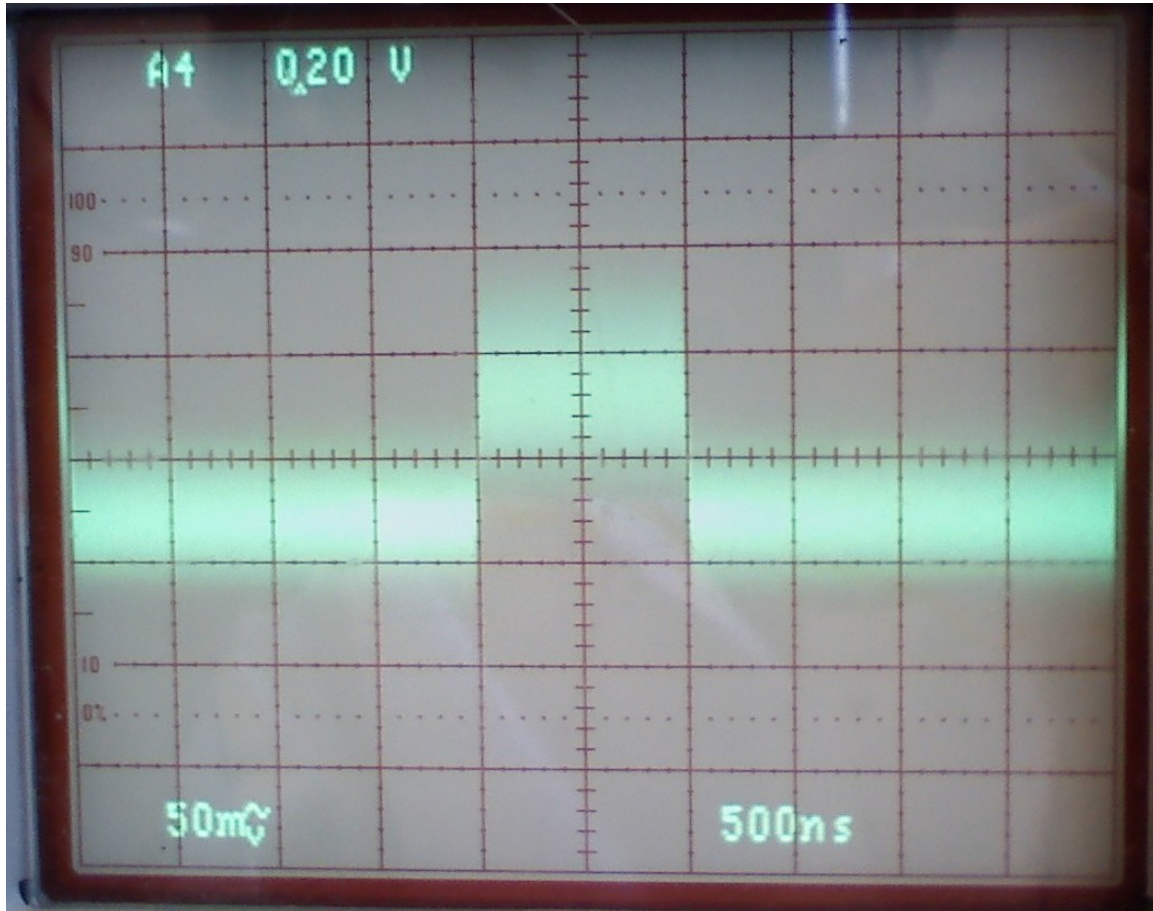


-74.5dBm TSS@+25C



**SUMMARY TEST DATA
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SDLVA-100M4G-CD-2**

TSS PLOT #2C



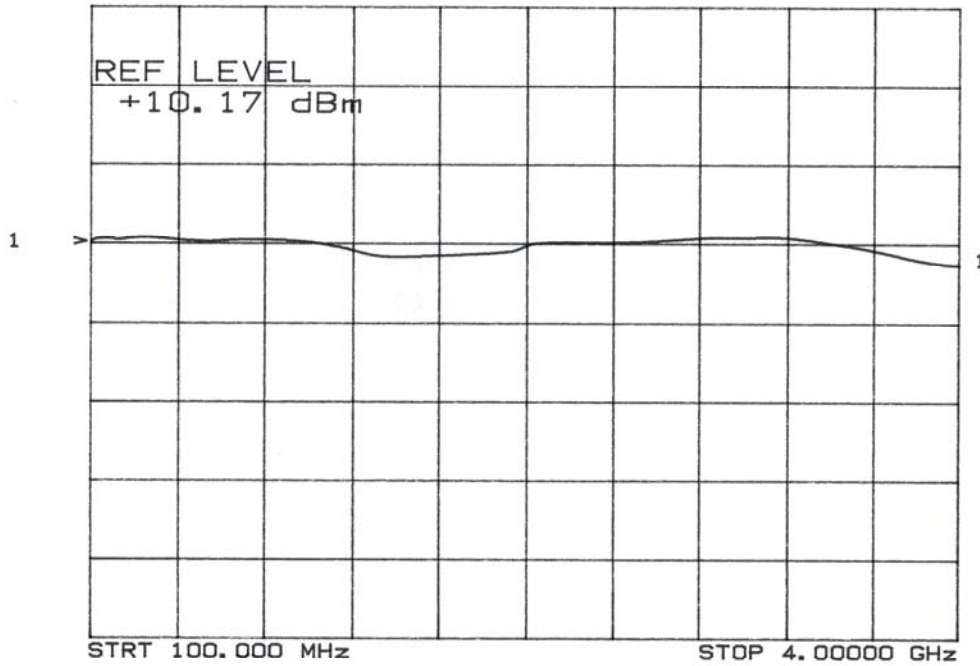
-73.2dBm TSS@+75C



**SUMMARY TEST DATA
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PSAT PLOT #4

CH1: A	S
2.0 dB/	REF 10.17 dBm





**SUMMARY TEST DATA
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SDLVA-100M4G-CD-2**

LOG SLOPE / LINEARITY PLOTS #1A

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-100M4G-CD-2
TESTED BY: E.Benson
TEST DATE: 08/19/13
SERIAL NO: PL13733
TEST TEMP: -40C

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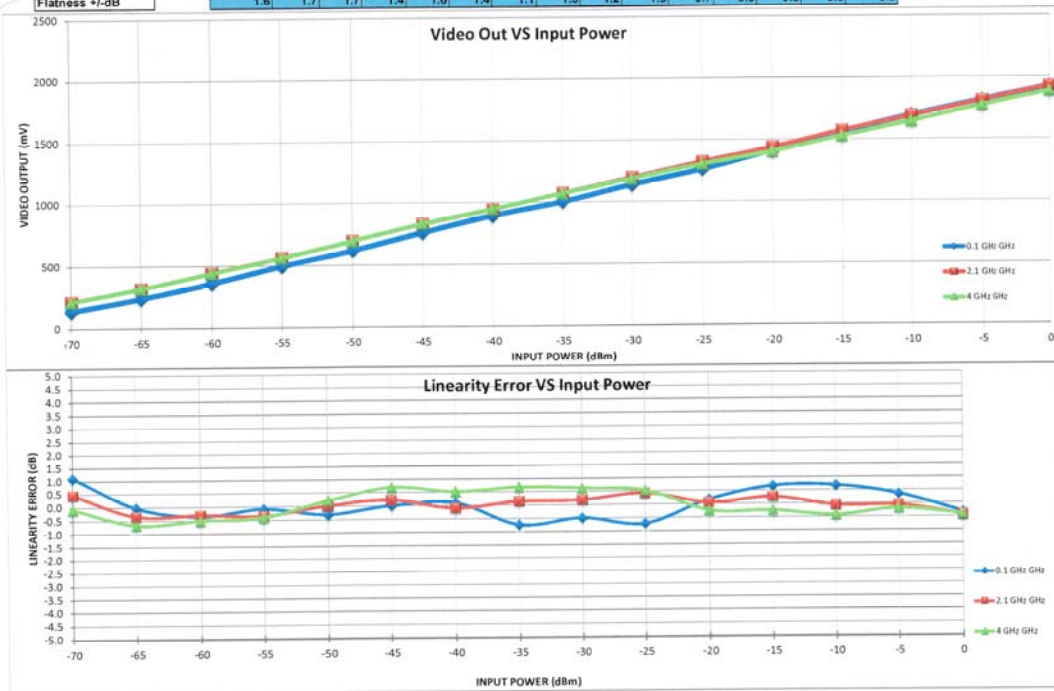
Plot #1A



PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704
USA

TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM

Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)	132	233	355	493	618	757	890	999	1136	1261	1415	1559	1690	1812	1925	Measured Value (mV)
	SLOPE (mV/dB)	29	-1	-10	-2	-8	0	2	-19	-13	-19	4	18	18	9	-9	Error (mV)
		1.10	-0.03	-0.37	-0.89	-0.31	0.01	0.09	-0.74	-0.50	-0.72	0.17	0.68	0.69	0.35	-0.33	LINEARITY ERROR (dB)
2.1 GHz	INTERCEPT (mV)	211	315	440	563	696	825	941	1071	1196	1326	1441	1570	1686	1810	1925	Measured Value (mV)
	SLOPE (mV/dB)	11	-9	-8	-9	0	5	-3	3	4	10	1	6	-2	-2	-11	Error (mV)
		0.45	-0.35	-0.31	-0.35	0.01	0.21	-0.11	0.13	0.17	0.41	0.05	0.25	-0.07	-0.07	-0.43	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	208	314	438	561	696	828	944	1068	1187	1305	1407	1527	1643	1769	1884	Measured Value (mV)
	SLOPE (mV/dB)	-2	-16	-12	-10	5	17	12	16	15	12	-6	-6	-10	-5	-10	Error (mV)
		-0.08	-0.67	-0.52	-0.41	0.21	0.69	0.51	0.67	0.61	0.52	-0.24	-0.25	-0.43	-0.19	-0.41	LINEARITY ERROR (dB)
Flatness +/-dB		1.6	1.7	1.7	1.4	1.6	1.4	1.1	1.5	1.2	1.3	0.7	0.9	0.9	0.9	0.8	





**SUMMARY TEST DATA
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LOG SLOPE / LINEARITY PLOTS #1B

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-100M4G-CD-2
TESTED BY: E.Benson
TEST DATE: 08/19/13
SERIAL NO: PL13733
TEST TEMP: +25C

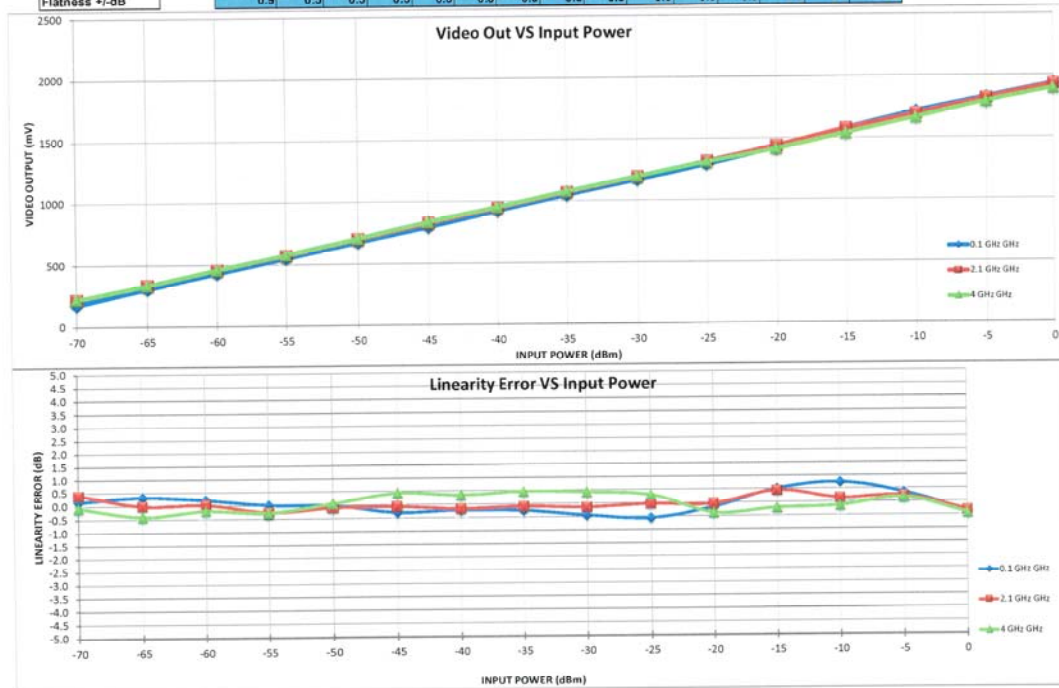
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Plot #1B



PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704
USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM

Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)	179	309	432	553	678	797	925	1050	1171	1294	1430	1573	1705	1821	1929	Measured Value (mV)
	SLOPE (mV/dB)	4	8	5	0	-1	-8	-5	-6	-11	-14	-4	13	19	9	-9	Error (mV)
		0.17	0.33	0.21	0.01	-0.02	-0.30	-0.22	-0.25	-0.45	-0.57	-0.17	0.51	0.75	0.36	-0.36	LINEARITY ERROR (dB)
2.1 GHz	INTERCEPT (mV)	220	333	457	573	700	824	945	1070	1192	1318	1441	1576	1692	1817	1927	Measured Value (mV)
	SLOPE (mV/dB)	10	0	1	-7	-3	-2	-4	-2	-4	-1	-1	11	4	5	-8	Error (mV)
		0.41	0.00	0.03	-0.26	-0.11	-0.08	-0.17	-0.09	-0.14	-0.03	-0.04	0.44	0.15	0.22	-0.32	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	222	334	459	577	705	834	952	1075	1194	1311	1415	1539	1661	1788	1894	Measured Value (mV)
	SLOPE (mV/dB)	-2	-10	-5	-7	1	10	8	11	10	7	-9	-5	-3	4	-10	Error (mV)
		-0.07	-0.41	-0.20	-0.28	0.05	0.42	0.33	0.46	0.41	0.29	-0.38	-0.22	-0.13	0.16	-0.43	LINEARITY ERROR (dB)
Flatness +/-dB		0.9	0.5	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.5	0.5	0.8	0.9	0.7	0.7	





**SUMMARY TEST DATA
ON
SDLVA-100M4G-CD-2**

LOG SLOPE / LINEARITY PLOTS #1C

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-100M4G-CD-2
TESTED BY: E.Benson
TEST DATE: 08/19/13
SERIAL NO: PL13733
TEST TEMP: +75C

Tuesday, August 20, 2013
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PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704
USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM

Plot #1C

Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)	81	249	388	516	632	753	887	1005	1124	1239	1380	1534	1668	1780	1880	Measured Value (mV)
	SLOPE (mV/dB)	-34	6	18	18	7	0	7	-3	-11	-24	-10	16	23	7	-20	Error (mV)
		-1.34	0.25	0.70	0.72	0.27	0.01	0.27	-0.11	-0.44	-0.93	-0.40	0.64	0.89	0.28	-0.80	LINEARITY ERROR (dB)
2.1 GHz	INTERCEPT (mV)	98	255	391	516	632	765	897	1016	1145	1264	1406	1557	1677	1802	1910	Measured Value (mV)
	SLOPE (mV/dB)	-21	7	14	10	-3	1	4	-6	-6	-16	-3	19	10	6	-15	Error (mV)
		-0.81	0.28	0.55	0.39	-0.12	0.04	0.15	-0.24	-0.24	-0.62	-0.12	0.73	0.38	0.22	-0.59	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	109	268	401	525	645	780	910	1027	1153	1267	1386	1521	1649	1777	1881	Measured Value (mV)
	SLOPE (mV/dB)	-33	1	8	7	1	11	16	7	8	-4	-10	-1	2	4	-17	Error (mV)
		-1.31	0.03	0.33	0.27	0.05	0.44	0.62	0.28	0.30	-0.15	-0.41	-0.03	0.08	0.18	-0.68	LINEARITY ERROR (dB)
Flatness +/-dB		0.5	0.4	0.3	0.2	0.3	0.5	0.4	0.4	0.6	0.5	0.5	0.7	0.5	0.5	0.6	

