



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

Customer: \_\_\_\_\_ Tested By: E.Benson  
 SO No: \_\_\_\_\_ Temperature: 25°C  
 Model No: SDLVA-100M4G-CD-2 Date: 08/19/13  
 Serial No: PL13734 Drawing No: 27619921

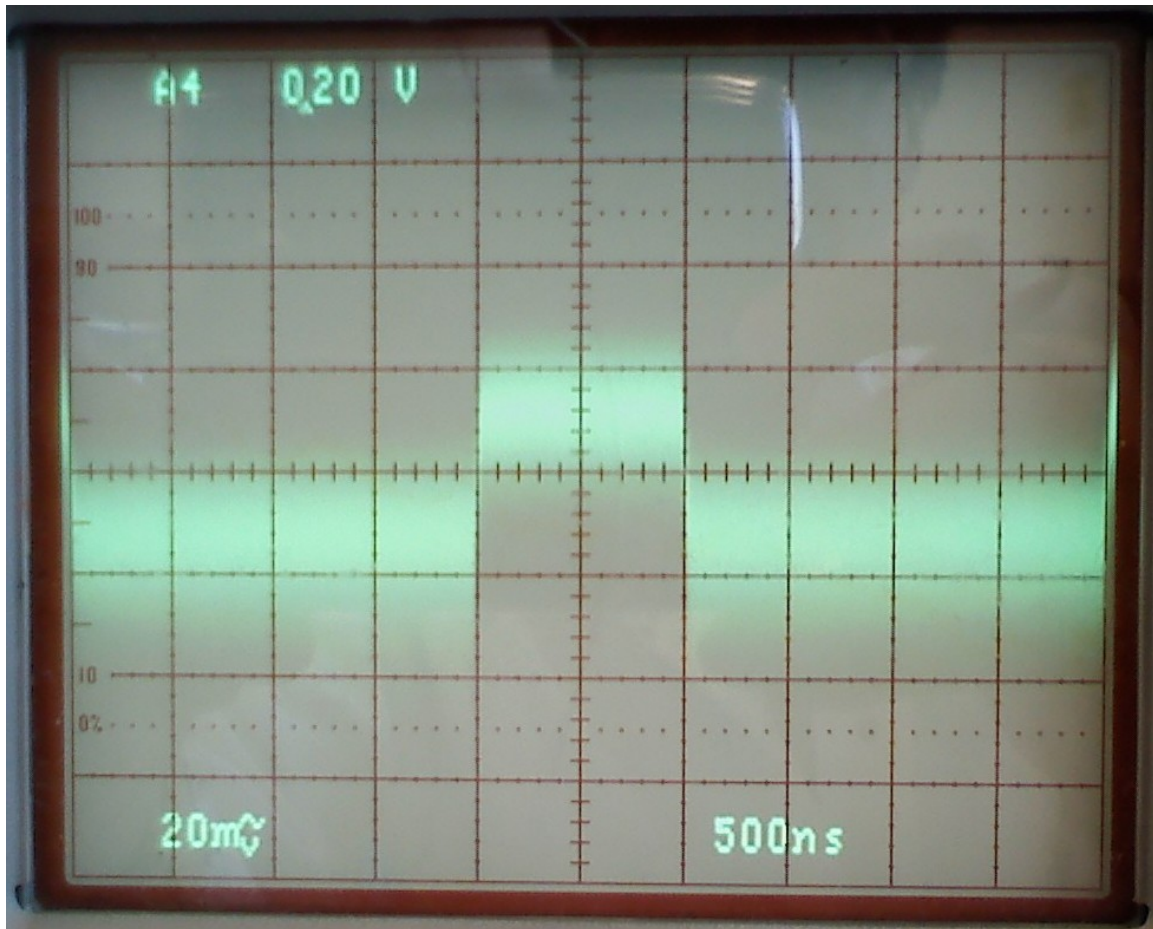
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	PASS FAIL	QA QC
1	Frequency Range:	100MHz to 4 GHz	See Plot #1A	
2	RF Gain (Small Signal):	55dB Typ (J1 to J2)@-50dBm	<u>52</u> dB	
3	Video Flatness over Frequency:	± 50mV Max @-45dBm	± <u>22.5</u> mV See Plot #1A	
4	TSS:	-73dBm Typ, -71dBm Max (-40°C, 25°C, +75°C)	<u>-72</u> dBm See Plots #2A, 2B, 2C	
5	VSWR:	2.0:1 (J1 VSWR)	<u>1.46</u> :1 See Plot #3	
6	PSAT:	+13dBm Typ (J2)	<u>+9.97</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>24.3</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>16.3</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**

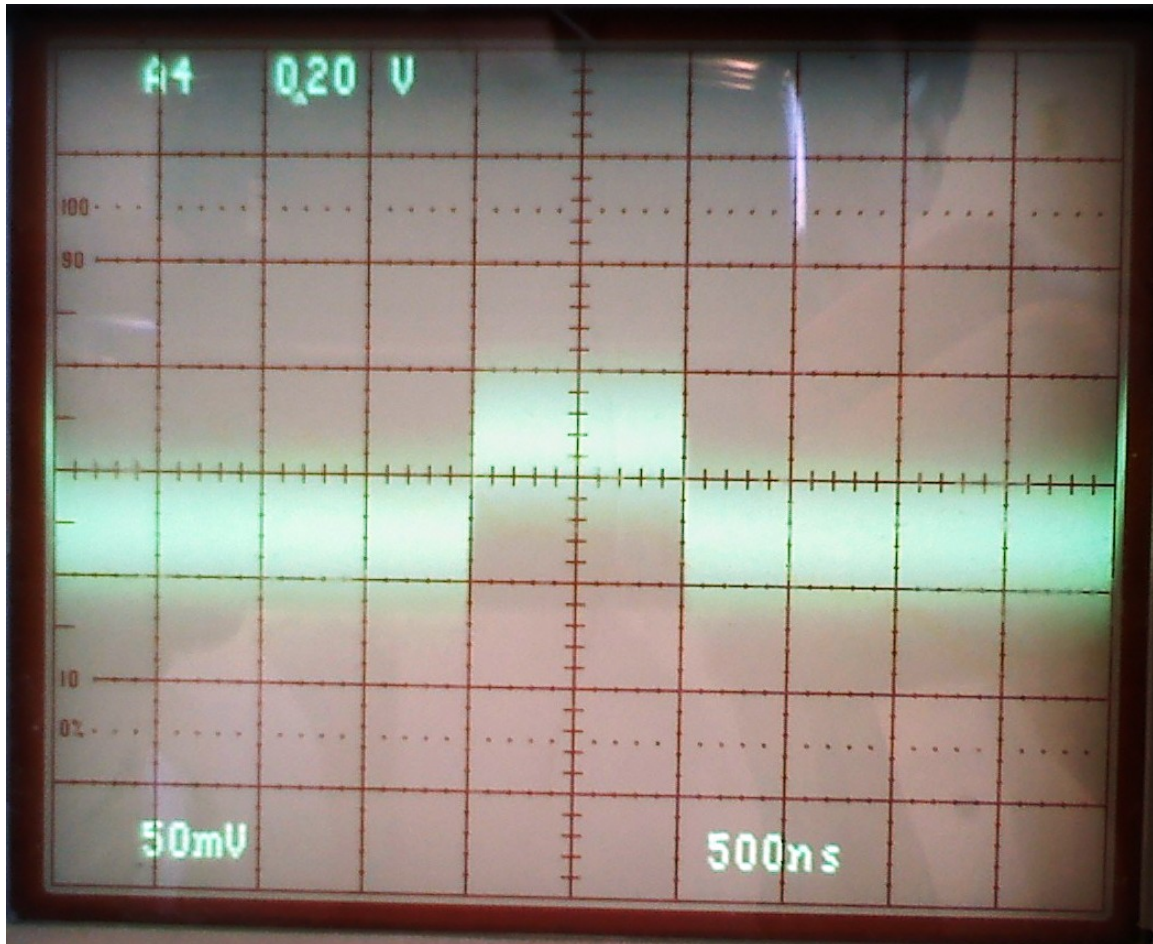


**-73.5dBm TSS@-40C**



**SUMMARY TEST DATA  
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**TSS PLOT #2B**

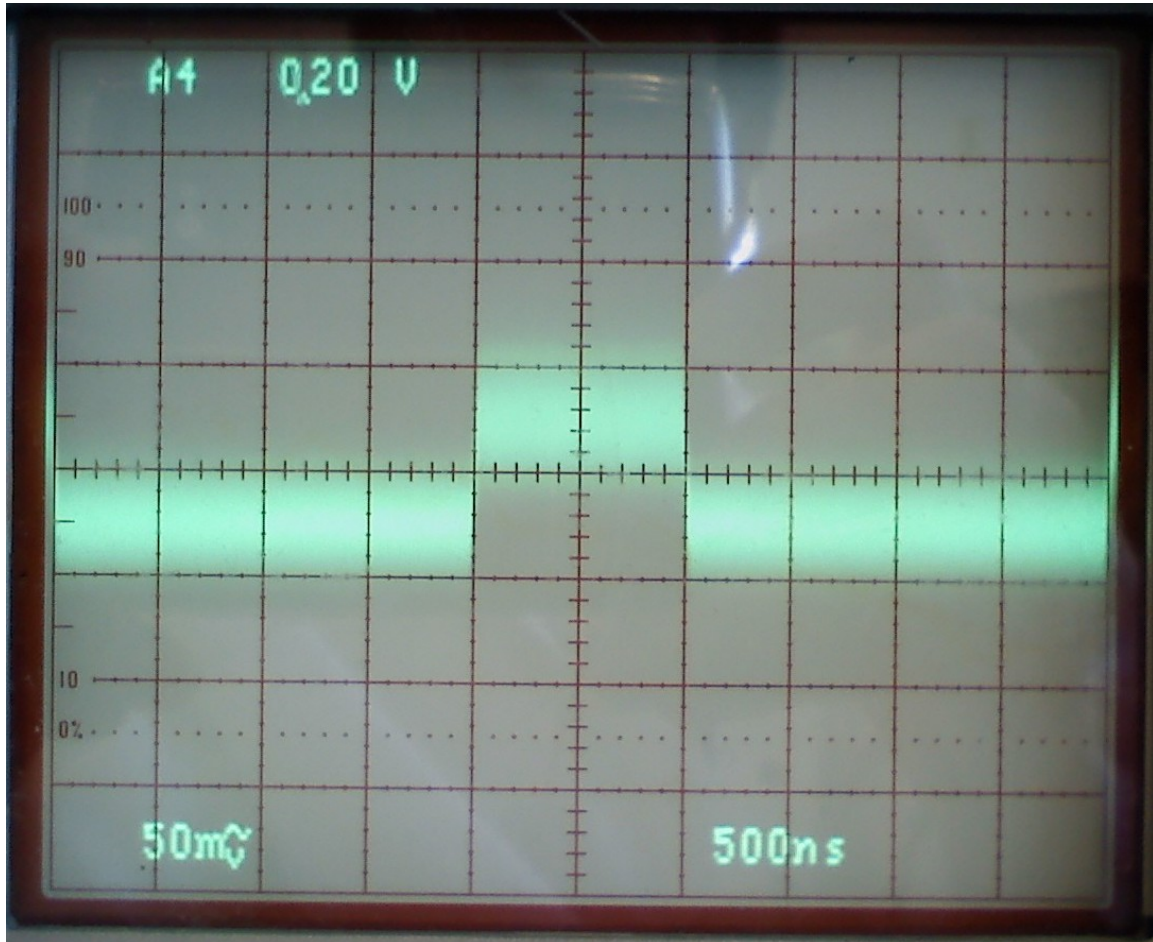


**-74.5dBm TSS@+25C**



**SUMMARY TEST DATA  
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**TSS PLOT #2C**

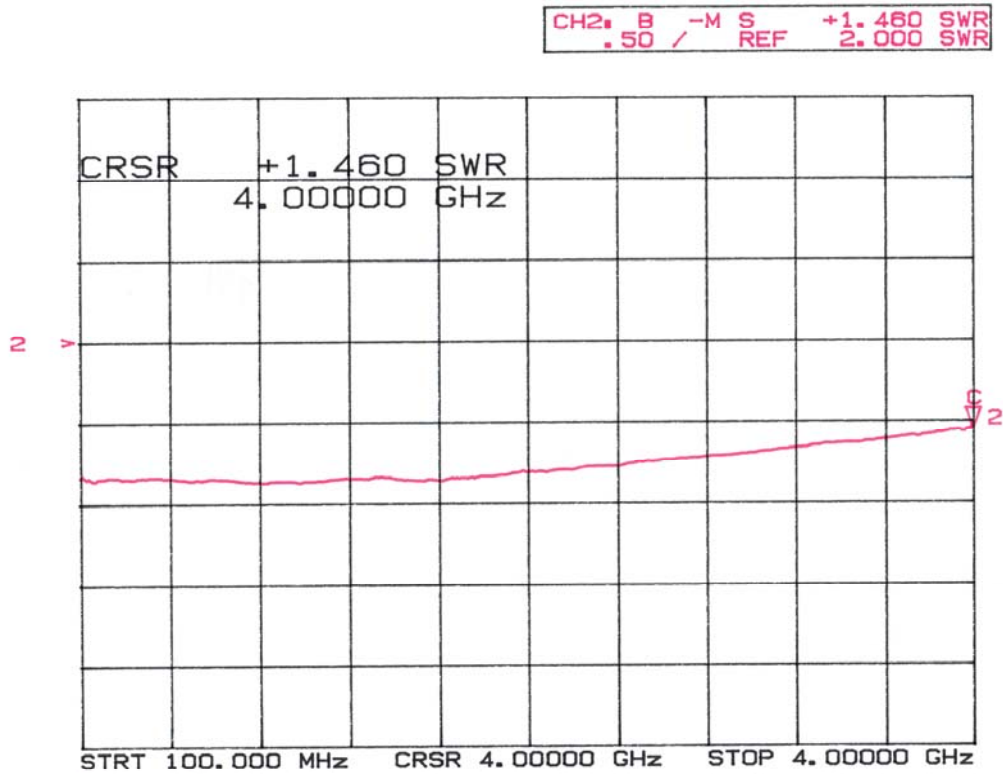


**-72dBm TSS@+75C**



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

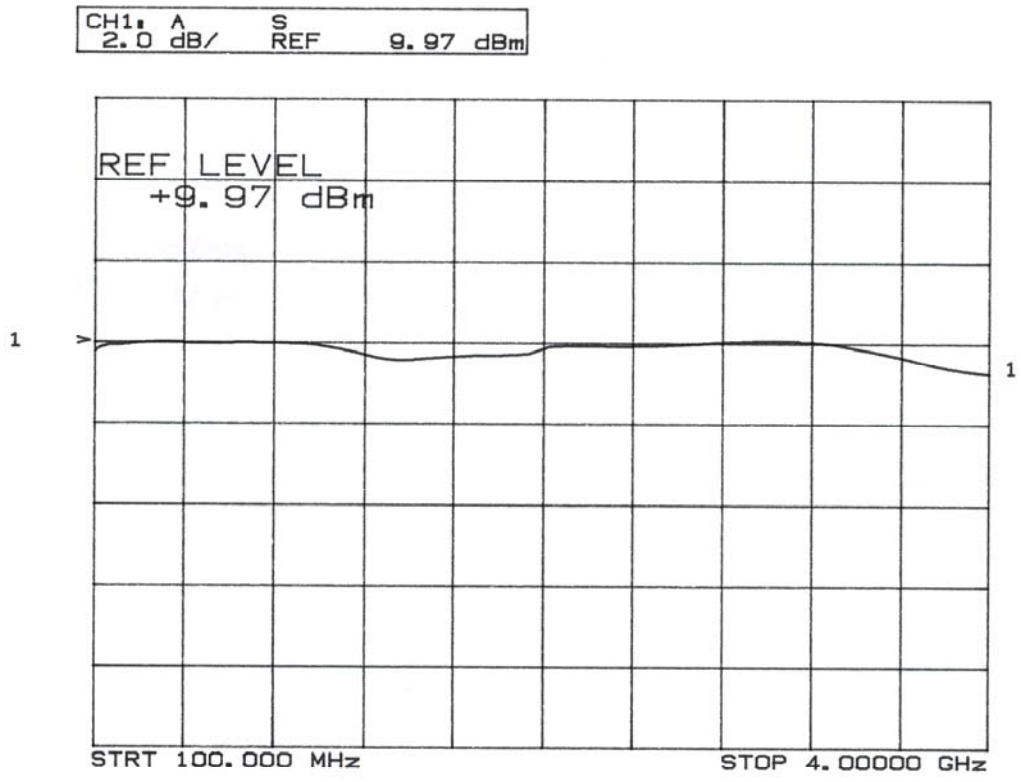
VSWR PLOT #3





**SUMMARY TEST DATA  
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**PSAT PLOT #4**





**SUMMARY TEST DATA  
ON  
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: PL13734  
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)	352	430	544	677	807	931	1059	1191	1308	1419	1520	1651	1787	1905	2023	Measured Value (mV)
	SLOPE (mV/dB)	29	-15	-22	-11	-2	0	7	17	13	2	-18	-9	6	2	-1	Error (mV)
		1.19	-0.60	-0.91	-0.44	-0.09	0.02	0.28	0.72	0.53	0.10	-0.75	-0.36	0.24	0.10	-0.05	LINEARITY ERROR (dB)
2.1 GHz	INTERCEPT (mV)	401	481	598	731	847	972	1096	1227	1351	1445	1523	1652	1771	1897	2016	Measured Value (mV)
	SLOPE (mV/dB)	15	-21	-21	-4	-4	4	12	26	34	12	-27	-14	-11	-2	1	Error (mV)
		0.64	-0.92	-0.89	-0.18	-0.19	0.18	0.51	1.14	1.47	0.51	-1.14	-0.60	-0.49	-0.07	0.04	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	383	450	563	696	822	948	1063	1195	1314	1418	1494	1615	1732	1863	1982	Measured Value (mV)
	SLOPE (mV/dB)	24	-25	-28	-10	0	10	10	26	29	17	-22	-17	-16	0	3	Error (mV)
		1.03	-1.08	-1.19	-0.45	0.00	0.44	0.41	1.11	1.26	0.75	-0.96	-0.74	-0.68	-0.02	0.12	LINEARITY ERROR (dB)
Flatness +/-dB		1.1	1.1	1.2	1.2	0.9	0.9	0.8	0.8	0.9	0.6	0.6	0.8	1.2	0.9	0.9	





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

**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: PL13734  
TEST TEMP: +25C

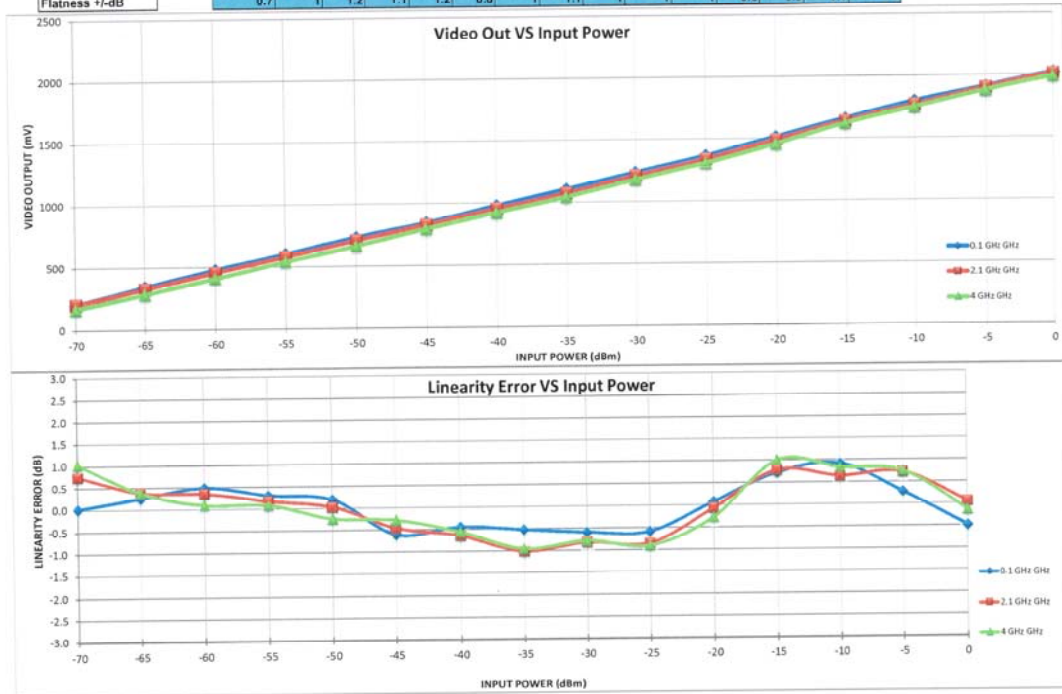
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Plot #1B



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)	197	334	471	597	725	835	970	1099	1228	1359	1507	1655	1791	1905	2016	Measured Value (mV)
	SLOPE (mV/dB)	0	7	13	8	5	-16	-12	-14	-15	2	19	24	7	-13		Error (mV)
		0.02	0.25	0.49	0.30	0.19	-0.61	-0.45	-0.52	-0.59	-0.59	0.07	0.72	0.92	0.27	-0.48	LINEARITY ERROR (dB)
2.1 GHz	INTERCEPT (mV)	202	323	453	579	706	824	950	1071	1207	1337	1488	1641	1768	1901	2014	Measured Value (mV)
	SLOPE (mV/dB)	20	10	9	4	1	-12	-17	-27	-21	-22	-2	20	17	19	1	Error (mV)
		0.75	0.37	0.35	0.17	0.02	-0.46	-0.65	-1.02	-0.82	-0.84	-0.07	0.78	0.64	0.73	0.05	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	167	282	407	539	663	794	919	1041	1178	1307	1456	1622	1750	1890	1989	Measured Value (mV)
	SLOPE (mV/dB)	27	10	2	2	-6	-8	-15	-26	-21	-24	-7	26	22	20	-4	Error (mV)
		1.02	0.37	0.09	0.08	-0.24	-0.29	-0.56	-0.95	-0.78	-0.90	-0.27	1.00	0.83	0.75	-0.14	LINEARITY ERROR (dB)
Flatness +/-dB		0.7	1	1.2	1.1	1.2	0.8	1	1.1	1	1	1	0.6	0.8	0.5	0.5	





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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: PL13734  
TEST TEMP: +75C

Tuesday, August 20, 2013  
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Plot #1C



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)	101	254	399	537	655	771	904	1031	1166	1294	1459	1622	1758	1868	1972	Measured Value (mV)
	SLOPE (mV/dB)	-11	8	10	22	6	-13	-14	-22	-21	-28	3	32	33	9	-22	Error (mV)
		-0.40	0.29	0.68	0.82	0.20	-0.48	-0.53	-0.81	-0.79	-1.03	0.11	1.18	1.23	0.33	-0.80	LINEARITY ERROR (dB)
2.1 GHz	INTERCEPT (mV)	100	222	371	506	624	754	878	1010	1144	1278	1442	1624	1759	1893	2002	Measured Value (mV)
	SLOPE (mV/dB)	23	7	18	16	-4	-11	-25	-30	-34	-38	-11	33	31	27	-1	Error (mV)
		0.82	0.25	0.67	0.57	-0.14	-0.41	-0.90	-1.11	-1.24	-1.37	-0.41	1.21	1.11	0.99	-0.05	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	78	169	329	461	582	713	843	982	1112	1253	1408	1600	1740	1872	1977	Measured Value (mV)
	SLOPE (mV/dB)	44	-4	17	9	-9	-17	-26	-26	-35	-33	-17	36	37	29	-5	Error (mV)
		1.57	-0.15	0.60	0.34	-0.31	-0.60	-0.93	-0.93	-1.26	-1.19	-0.62	1.28	1.31	1.06	-0.17	LINEARITY ERROR (dB)
Flatness +/-dB		0.4	1.5	1.3	1.4	1.3	1.1	1.1	0.9	1	0.7	0.9	0.4	0.3	0.5	0.5	

