



**SUMMARY TEST DATA
ON
SDLVA-218-44-70MV**

Customer: _____ Tested By: RCombs
 SO No: _____ Temperature: +25°C
 Model No: SDLVA-218-44-70MV Date: 08/21/17
 Serial No: PL21474/1734 Drawing No: 27619605 Rev: A1

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	FREQUENCY RANGE:	2 GHz – 18 GHz	2 GHz – 18 GHz	PMI QA2
2	FLATNESS:	± 1.5 dB MAXIMUM	± 1.1 dB (See Plot)	
3	DYNAMIC RANGE:	-40 to +4 dBm MINIMUM	-42 to +5 dBm	
4	LOG LINEARITY AT 25°C:	± 0.75 dB MAXIMUM (-40 TO 0 dBm)	±0.82 dB (See Plot)	
5	LOG SLOPE:	70 ±3 mV/dB MAXIMUM	71.2 mV/dB (See Plot)	
6	DC OFFSET AT RF TERMINATED:	± 70 Mv MAXIMUM	+42 mV	
7	RISE TIME:	25 ns MAXIMUM	19.3 ns	
8	RECOVERY TIME:	500 ns MAXIMUM	200 ns	
9	NOISE AT RF TERMINATED:	150 mV (VP-P MAXIMUM)	100 mV	
10	TSS:	-42 dBm MAXIMUM	-44 dBm	
11	PULSE WIDTH RANGE:	50 ns~CW MINIMUM	50 ns to CW	
12	MAX INPUT POWER:	+ 20 dBm	Pass	
13	DC Supply:	+15V @ 200 mA Max -15V @ 150 mA Max	37 mA 42 mA	PMI QA2

QA/QC Approval:  PMI QA2 Date: 8/22/17



Frequency			-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	3031	40	208	532	883	1227	1570	1953	2327	2688	3042	3308	Measured Value (mV)
	SLOPE (mV/dB)	71.4	40	32	-1	-7	-19	-33	-7	10	14	10	-81	Error (mV)
			0.56	0.45	-0.01	-0.09	-0.27	-0.46	-0.10	0.14	0.19	0.14	-1.13	LINEARITY ERROR (dB)
3.6 GHz	INTERCEPT (mV)	2995	21	179	503	856	1202	1543	1914	2291	2649	3010	3305	Measured Value (mV)
	SLOPE (mV/dB)	71.1	21	30	-2	-4	-15	-29	-14	8	10	15	-45	Error (mV)
			0.30	0.42	-0.02	-0.06	-0.21	-0.41	-0.19	0.11	0.14	0.21	-0.64	LINEARITY ERROR (dB)
5.2 GHz	INTERCEPT (mV)	2952	7	147	456	807	1155	1497	1864	2244	2605	2980	3291	Measured Value (mV)
	SLOPE (mV/dB)	71.2	259	43	-4	-9	-17	-32	-20	4	8	28	-18	Error (mV)
			3.63	0.60	-0.06	-0.13	-0.24	-0.45	-0.29	0.05	0.12	0.39	-0.25	LINEARITY ERROR (dB)
6.8 GHz	INTERCEPT (mV)	2929	0	129	427	776	1128	1467	1833	2214	2582	2966	3308	Measured Value (mV)
	SLOPE (mV/dB)	71.3	281	53	-6	-13	-18	-36	-26	-1	10	37	22	Error (mV)
			3.94	0.74	-0.08	-0.18	-0.26	-0.50	-0.37	-0.02	0.14	0.52	0.31	LINEARITY ERROR (dB)
8.4 GHz	INTERCEPT (mV)	2940	0	131	430	781	1131	1472	1838	2222	2594	2980	3294	Measured Value (mV)
	SLOPE (mV/dB)	71.6	281	54	-5	-12	-20	-36	-29	-3	11	39	-5	Error (mV)
			3.92	0.75	-0.07	-0.16	-0.27	-0.51	-0.41	-0.04	0.16	0.55	-0.06	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	2957	4	144	452	804	1155	1496	1862	2244	2611	2985	3287	Measured Value (mV)
	SLOPE (mV/dB)	71.4	262	45	-5	-10	-16	-32	-23	1	11	28	-27	Error (mV)
			3.67	0.62	-0.07	-0.14	-0.22	-0.45	-0.33	0.02	0.16	0.40	-0.38	LINEARITY ERROR (dB)
11.6 GHz	INTERCEPT (mV)	2930	-2	128	420	771	1124	1465	1828	2212	2584	2971	3301	Measured Value (mV)
	SLOPE (mV/dB)	71.5	286	58	-8	-14	-19	-35	-30	-3	11	40	13	Error (mV)
			3.99	0.81	-0.11	-0.20	-0.26	-0.49	-0.42	-0.04	0.16	0.56	0.18	LINEARITY ERROR (dB)
13.2 GHz	INTERCEPT (mV)	2915	-3	124	413	763	1116	1455	1816	2199	2570	2955	3292	Measured Value (mV)
	SLOPE (mV/dB)	71.2	288	58	-9	-15	-18	-35	-30	-3	11	40	21	Error (mV)
			4.04	0.82	-0.13	-0.21	-0.25	-0.49	-0.42	-0.04	0.16	0.56	0.30	LINEARITY ERROR (dB)
14.8 GHz	INTERCEPT (mV)	2938	0	134	438	790	1140	1481	1845	2226	2592	2969	3303	Measured Value (mV)
	SLOPE (mV/dB)	71.3	269	47	-6	-10	-17	-32	-24	1	10	31	9	Error (mV)
			3.78	0.66	-0.09	-0.14	-0.23	-0.45	-0.34	0.01	0.14	0.44	0.13	LINEARITY ERROR (dB)
16.4 GHz	INTERCEPT (mV)	2929	0	133	436	789	1136	1476	1841	2221	2584	2958	3295	Measured Value (mV)
	SLOPE (mV/dB)	71	268	46	-6	-9	-17	-32	-23	2	10	29	11	Error (mV)
			3.77	0.64	-0.09	-0.13	-0.24	-0.45	-0.32	0.03	0.15	0.41	0.15	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	2884	-3	121	415	766	1117	1455	1812	2184	2538	2911	3226	Measured Value (mV)
	SLOPE (mV/dB)	70.2	272	45	-12	-12	-12	-25	-19	2	5	27	-9	Error (mV)
			3.87	0.64	-0.16	-0.17	-0.17	-0.35	-0.27	0.02	0.08	0.39	-0.13	LINEARITY ERROR (dB)

Average Slope	71.2
Flatness ± dB	
Average Offset @ -40dBm	143.5

0.6	0.8	0.8	0.8	0.8	1	1	1.1	0.9	0.6
121	413	763	1116	1455	1812	2184	2538	2911	3226
208	532	883	1227	1570	1953	2327	2688	3042	3308

