

SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

CUSTOMER: _____
SO: _____
MODEL NO: SDLVA-6G18G-CD-2-OPT218
SERIAL NO: PL46036/2420

TESTED BY: Jim Hopson
TEMPERATURE: +25°C
DATE: 5/10/2024
DRAWING NO: 27623906 REV: A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range	2.0 GHz – 18.0 GHz	GHz - GHz	PMI QA3
2	Flatness	± 2.0 dB Maximum	± 1.5 dB 25°C See Plots	
3	TSS	-70 dBm Minimum	-71dBm	
4	VSWR	2.0:1 (Input)	1.81:1	
5	Input Power	+17 dBm CW Maximum	Pass	
6	RF Out	+13 dBm ±3 dB Typical	13.8/12.1 dBm	
7	Log Slope	25 mV/dB (±10%) 50Ω	24.8 mV/dB See Plot	
8	Log Range	-70 to +5 dBm	See Plots	
9	Log Linearity	±2.5 dB (-40°C - +85°C)	1.54/- .86 dB See Plots	
10	Pulse Range	30 ns to CW	Pass	
11	Rise Time	10 ns (6 ns Typical)	6.5 ns	
12	Recovery Time	60 ns Typical	60 ns Typical	
13	DC Supply	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	280 mA 100 mA	

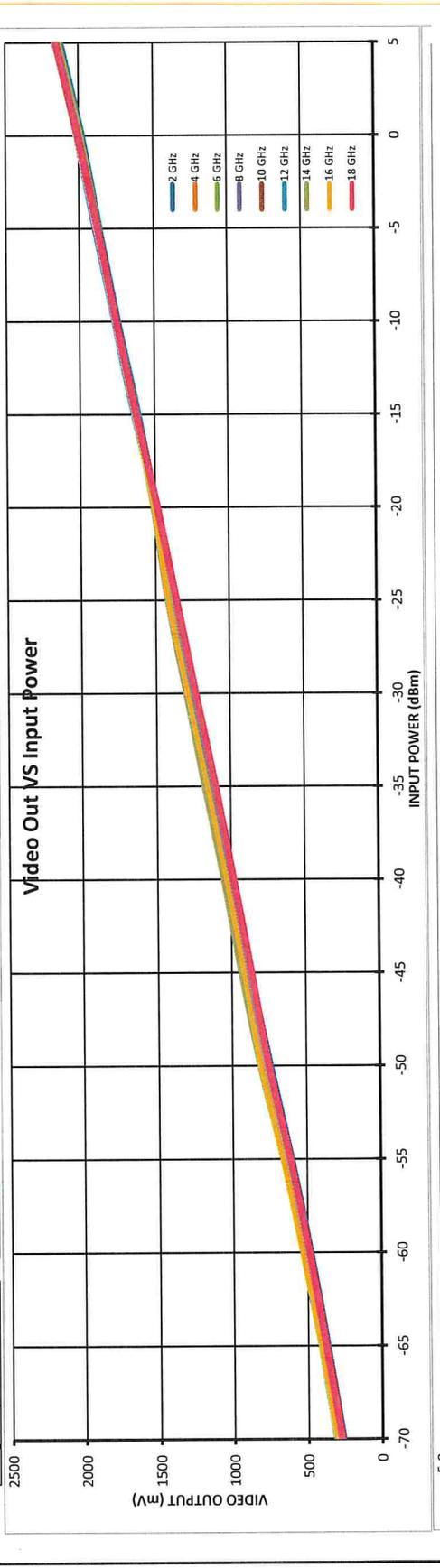
QA/QC Approval: *K. [Signature]*

Date: 5-13-24

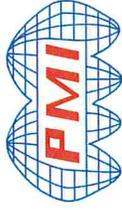
Model: SDLVA-6G18G-CD-2 - OPT218
 Serial No: PL46036
 Date: 5/10/24
 Tested By: Jim Hopson
 Test Temp: +25°C



Frequency	Intercept (mV)	Slope (mV/dB)	Lin. Err. (dB)	70	65	60	55	50	45	40	35	30	25	20	15	10	5		
2 GHz	2023	25.55	1.1	261	364	474	602	740	872	999	1126	1261	1388	1506	1641	1768	1895	2020	2157
				27	2	-15	-15	-5	-1	-1	-2	5	4	-6	2	1	0	-3	7
				1.06	0.09	-0.61	-0.60	-0.20	-0.03	-0.06	-0.09	0.20	0.17	-0.22	0.07	0.04	0.01	-0.10	0.26
4 GHz	2013	25	0.858	276	378	492	620	766	903	1027	1153	1280	1402	1502	1626	1755	1881	2005	2148
				13	-10	-21	-18	3	15	14	15	17	14	-11	-12	-8	-7	-8	10
				0.50	-0.42	-0.86	-0.74	0.10	0.58	0.54	0.58	0.67	0.55	-0.45	-0.49	-0.33	-0.29	-0.33	0.39
6 GHz	2001	25	0.735	268	371	482	610	754	884	1007	1128	1257	1382	1493	1620	1750	1874	1993	2134
				18	-4	-18	-15	4	9	7	3	7	7	-7	-5	0	-2	-8	8
				0.71	-0.17	-0.73	-0.62	0.14	0.34	0.26	0.10	0.26	0.26	-0.30	-0.22	-0.02	-0.06	-0.30	0.34
8 GHz	1991	24.78	0.813	272	374	484	611	755	887	1009	1127	1258	1387	1491	1607	1739	1862	1980	2126
				16	-6	-20	-17	3	11	9	3	10	16	-4	-12	-4	-5	-11	11
				0.63	-0.25	-0.81	-0.69	0.12	0.45	0.37	0.14	0.42	0.63	-0.17	-0.49	-0.16	-0.20	-0.44	0.45
10 GHz	1995	24.75	0.741	281	381	494	621	765	891	1011	1127	1252	1378	1495	1620	1749	1872	1989	2129
				18	-5	-16	-13	7	9	6	-2	-1	1	-5	-4	1	0	-6	10
				0.74	-0.22	-0.65	-0.52	0.29	0.38	0.23	-0.08	-0.03	0.06	-0.22	-0.17	0.04	0.01	-0.26	0.39
12 GHz	1993	24.12	1.021	307	408	530	658	804	920	1034	1159	1286	1415	1501	1614	1744	1866	1981	2124
				2	-17	-16	-9	17	12	5	10	16	25	-10	-18	-8	-7	-12	10
				0.09	-0.72	-0.67	-0.36	0.69	0.50	0.23	0.41	0.67	1.02	-0.41	-0.73	-0.34	-0.28	-0.52	0.41
14 GHz	2008	24.34	0.85	303	405	527	658	808	932	1047	1175	1296	1417	1508	1629	1755	1875	1994	2139
				-1	-21	-20	-11	17	20	13	19	18	18	-13	-14	-9	-11	-14	10
				-0.04	-0.85	-0.84	-0.46	0.71	0.80	0.53	0.78	0.76	0.73	-0.53	-0.56	-0.39	-0.46	-0.57	0.39
16 GHz	2011	24.36	0.682	313	416	539	668	809	917	1032	1159	1290	1418	1511	1635	1760	1882	2004	2149
				8	-11	-10	-3	16	3	-4	1	10	16	-12	-10	-7	-7	-7	17
				0.31	-0.46	-0.41	-0.11	0.67	0.11	-0.17	0.04	0.42	0.67	-0.51	-0.42	-0.29	-0.28	-0.27	0.68
18 GHz	2004	25.13	1.278	277	379	491	617	757	868	984	1103	1236	1363	1487	1627	1755	1880	2012	2159
				32	8	-5	-5	10	-5	-15	-21	-14	-13	-14	0	2	2	8	30
				1.28	0.34	-0.21	-0.19	0.38	-0.20	-0.59	-0.85	-0.56	-0.50	-0.57	0.00	0.10	0.07	0.32	1.17



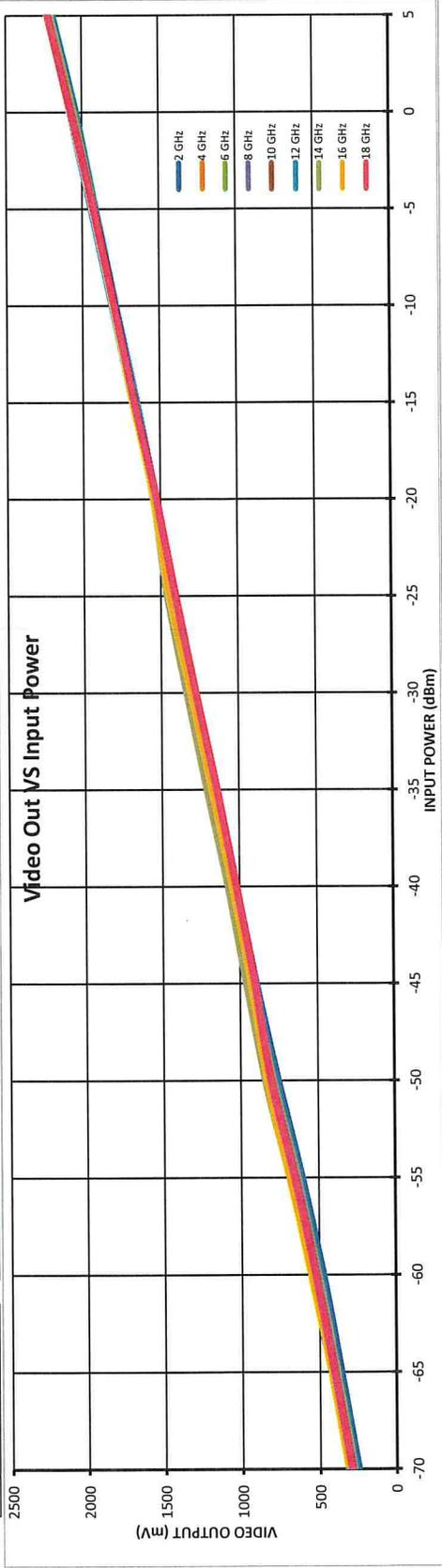
Model: SDLVA-6G18G-CD-2 - OPT218
 Serial No: PL46036
 Date: 5/10/24
 Tested By: Jim Hopson
 Test Temp: -40°C



Frequency

Frequency	Intercept (mV)	Slope (mV/dB)	Lin. Err. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
2 GHz	2083	26.6	1.0	248	357	470	606	753	889	1018	1145	1289	1427	1544	1685	1814	1945	2086	2227
				26	2	-18	-15	0	3	-1	-7	4	9	-7	1	-3	-5	3	11
				0.99	0.09	-0.66	-0.55	-0.02	0.09	-0.05	-0.28	0.13	0.32	-0.28	0.02	-0.13	-0.20	0.10	0.40
4 GHz	2068	25.74	0.846	276	385	502	637	790	926	1051	1179	1313	1441	1537	1665	1797	1926	2064	2215
				10	-10	-22	-15	9	16	13	12	17	16	-16	-17	-14	-13	-4	18
				0.37	-0.39	-0.85	-0.60	0.34	0.63	0.49	0.46	0.67	0.64	-0.63	-0.66	-0.53	-0.51	-0.15	0.72
6 GHz	2066	25.64	0.79	276	387	503	635	786	909	1031	1154	1289	1421	1531	1661	1794	1922	2054	2204
				15	-2	-14	-10	12	7	1	-4	3	6	-12	-10	-5	-5	-2	20
				0.59	-0.08	-0.56	-0.41	0.48	0.28	0.04	-0.16	0.10	0.25	-0.46	-0.39	-0.20	-0.21	-0.06	0.79
8 GHz	2044	25.26	0.983	287	395	513	645	794	916	1036	1158	1293	1428	1526	1646	1782	1909	2038	2195
				12	-7	-15	-9	14	9	3	-1	7	16	-12	-19	-9	-8	-6	25
				0.47	-0.26	-0.59	-0.36	0.54	0.36	0.12	-0.06	0.29	0.63	-0.49	-0.74	-0.36	-0.33	-0.22	0.99
10 GHz	2051	25.09	0.885	307	413	536	668	815	927	1045	1167	1299	1431	1535	1663	1794	1922	2051	2199
				12	-7	-10	-3	18	5	-3	-6	1	7	-14	-12	-6	-4	0	22
				0.49	-0.29	-0.39	-0.12	0.73	0.20	-0.10	-0.24	0.02	0.28	-0.57	-0.47	-0.25	-0.15	-0.01	0.89
12 GHz	2049	24.81	0.936	314	422	548	682	830	940	1057	1185	1318	1452	1537	1657	1789	1916	2042	2194
				2	-14	-12	-2	22	7	0	4	13	23	-16	-20	-12	-9	-7	21
				0.07	-0.58	-0.50	-0.10	0.87	0.30	0.02	0.18	0.54	0.94	-0.64	-0.80	-0.48	-0.36	-0.29	0.84
14 GHz	2066	25	0.855	312	421	548	685	837	958	1075	1208	1337	1458	1545	1672	1801	1925	2058	2211
				-4	-20	-18	-6	21	17	9	17	21	17	-21	-19	-15	-16	-8	20
				-0.14	-0.78	-0.70	-0.22	0.86	0.69	0.37	0.69	0.85	0.69	-0.83	-0.75	-0.59	-0.63	-0.31	0.81
16 GHz	2072	25.12	1.031	324	432	562	696	835	936	1054	1183	1318	1454	1553	1687	1813	1937	2075	2223
				11	-7	-2	6	19	-5	-13	-9	0	10	-16	-8	-7	-9	3	26
				0.43	-0.27	-0.09	0.24	0.77	-0.20	-0.51	-0.37	0.00	0.42	-0.64	-0.29	-0.35	0.14	1.03	
18 GHz	2062	25.58	1.54	295	406	526	657	802	904	1022	1145	1281	1410	1528	1670	1801	1930	2078	2229
				24	7	-1	2	19	-6	-16	-21	-13	-12	-22	-8	-5	-4	16	39
				0.94	0.28	-0.03	0.09	0.76	-0.25	-0.64	-0.83	-0.52	-0.47	-0.86	-0.31	-0.19	-0.15	0.64	1.54

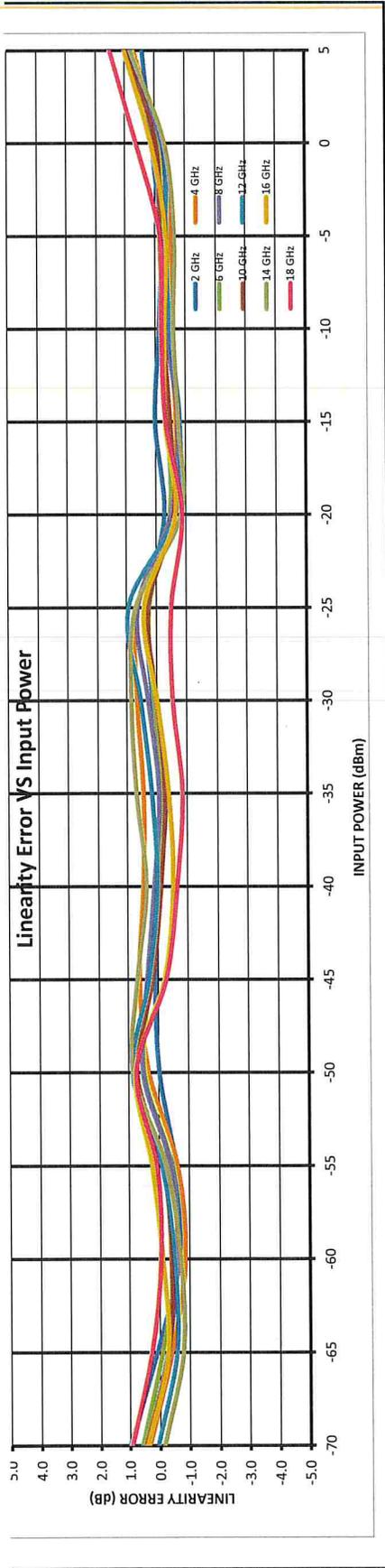
Flatness dB: ±1.8 dB



Avg. Slope: 25.4 mV/dB

PL46036

-40°C



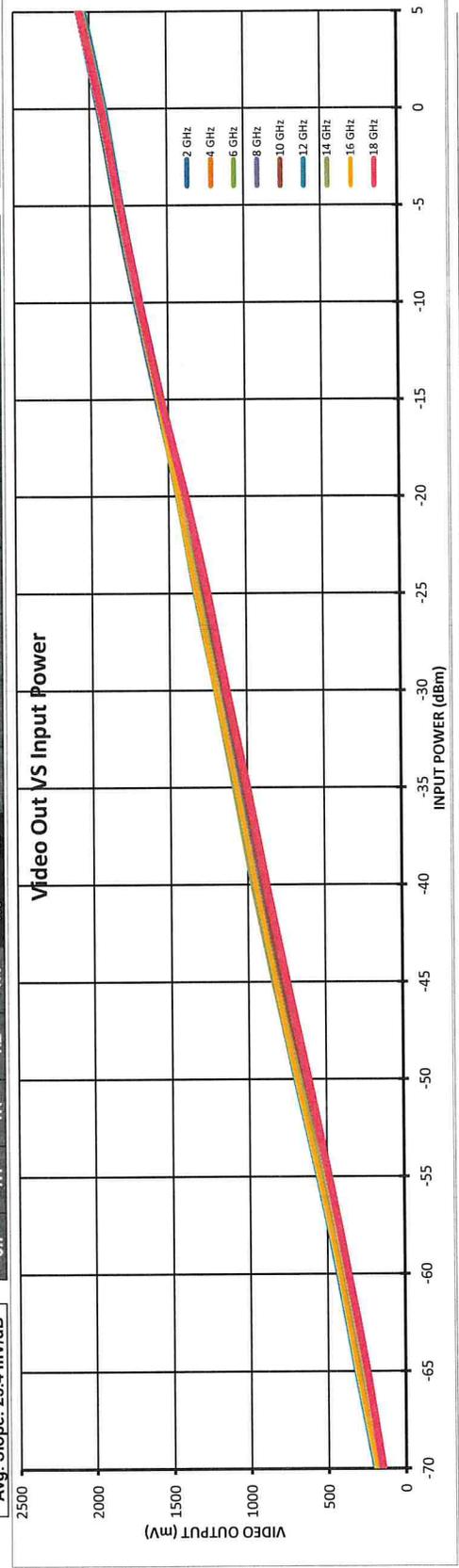
Model: SDLVA-6G18G-CD-2 - OPT218
 Serial No: PL46036
 Date: 5/10/24
 Tested By: Jim Hopson
 Test Temp: +85°C



Frequency

Frequency	Intercept (mV)	Slope (mV/dB)	Lin. Err. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
2 GHz	1953	25.85	0.6	160	277	393	519	648	786	924	1050	1182	1303	1432	1575	1707	1831	1942	2076
				16	4	-9	-12	-12	-4	5	2	5	-4	-4	10	13	7	-11	-6
				0.64	0.16	-0.35	-0.47	-0.48	-0.14	0.20	0.07	0.18	-0.14	-0.15	0.38	0.49	0.29	-0.42	-0.24
4 GHz	1944	25.46	0.877	169	284	398	526	660	808	948	1070	1196	1315	1429	1558	1693	1817	1929	2066
				7	-5	-18	-18	-11	10	22	17	16	7	-6	-4	3	0	-15	-5
				0.28	-0.20	-0.72	-0.70	-0.43	0.38	0.88	0.67	0.62	0.29	-0.23	-0.17	0.14	0.01	-0.59	-0.21
6 GHz	1930	25.52	0.644	159	269	384	511	643	786	926	1045	1173	1292	1415	1550	1687	1809	1917	2049
				15	-3	-15	-16	-11	4	16	8	8	0	-5	3	12	6	-13	-9
				0.58	-0.11	-0.60	-0.62	-0.45	0.16	0.64	0.31	0.32	-0.01	-0.19	0.10	0.47	0.25	-0.52	-0.34
8 GHz	1925	25.49	0.742	157	263	379	504	636	783	924	1040	1171	1295	1417	1541	1679	1799	1908	2045
				16	-5	-16	-19	-14	5	19	7	11	8	2	-1	9	2	-17	-7
				0.64	-0.20	-0.65	-0.74	-0.56	0.21	0.74	0.29	0.43	0.30	0.08	-0.05	0.36	0.07	-0.65	-0.27
10 GHz	1924	25.46	0.726	160	267	382	508	639	786	922	1035	1158	1277	1412	1548	1685	1805	1912	2043
				18	-2	-14	-15	-12	8	17	2	-2	-10	-2	6	16	9	-12	-8
				0.73	-0.07	-0.55	-0.60	-0.46	0.32	0.66	0.10	-0.07	-0.40	-0.09	0.25	0.63	0.34	-0.45	-0.31
12 GHz	1927	24.78	0.747	187	308	422	549	689	826	953	1070	1197	1325	1432	1546	1682	1801	1908	2042
				-5	-6	-18	-14	2	15	18	11	14	18	1	-9	3	-2	-19	-8
				-0.19	-0.31	-0.71	-0.58	0.07	0.59	0.72	0.44	0.56	0.73	0.05	-0.35	0.13	-0.06	-0.75	-0.34
14 GHz	1939	25.09	1.013	178	299	413	543	684	830	961	1079	1199	1321	1436	1560	1692	1810	1919	2056
				-5	-9	-21	-16	-1	20	25	18	13	9	-1	-3	4	-4	-20	-9
				-0.20	-0.37	-0.83	-0.65	-0.03	0.79	1.01	0.72	0.50	0.36	-0.05	-0.11	0.15	-0.15	-0.80	-0.34
16 GHz	1942	25.11	0.681	185	307	421	549	688	822	949	1069	1200	1326	1439	1563	1694	1814	1925	2067
				0	-3	-15	-12	1	10	11	6	11	12	-1	-2	3	-3	-17	-1
				0.02	-0.13	-0.58	-0.49	0.05	0.39	0.45	0.22	0.44	0.46	-0.04	-0.10	0.12	-0.10	-0.68	-0.03
18 GHz	1924	25.92	1.507	149	250	367	490	618	750	879	1001	1130	1254	1391	1547	1683	1807	1926	2069
				39	10	-2	-9	-10	-8	-9	-16	-17	-22	-15	11	18	12	2	15
				1.51	0.40	-0.08	-0.34	-0.40	-0.31	-0.33	-0.62	-0.65	-0.86	-0.58	0.44	0.69	0.47	0.06	0.58

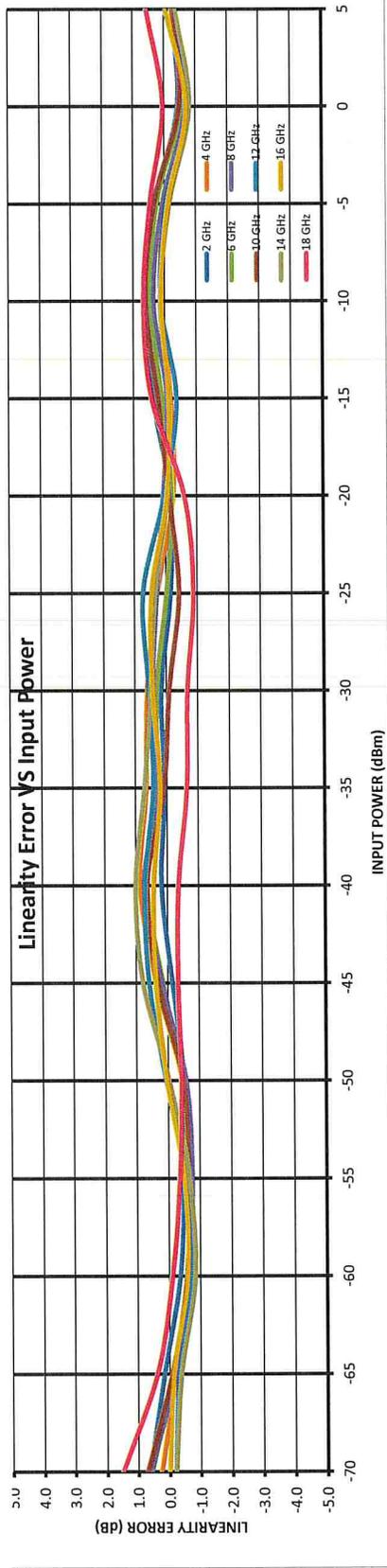
Avg. Slope: 25.4 mV/dB



Flatness dB: ±1.6 dB

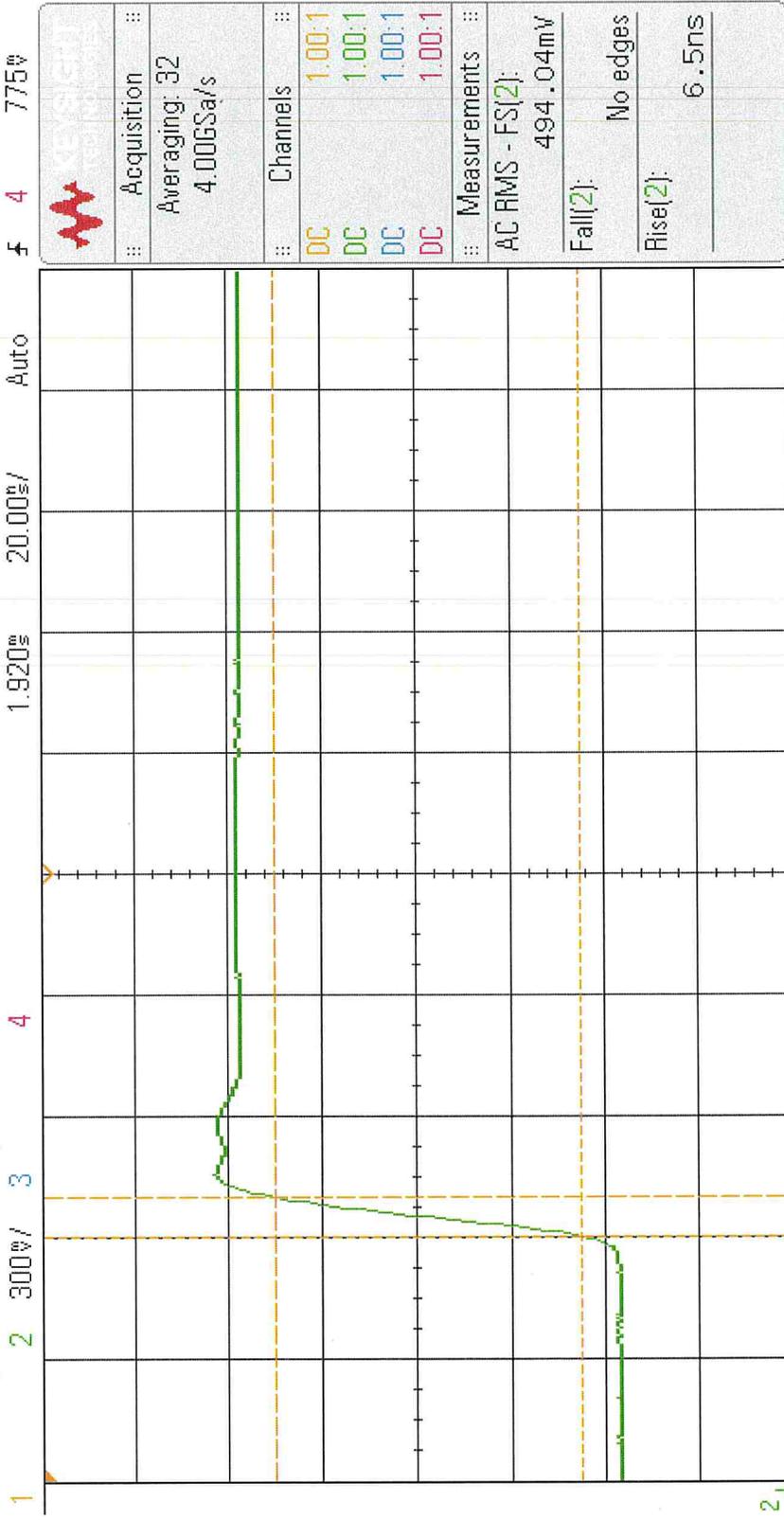
PL46036

85°C



PL46036
Rise Time

DSO-X 3034A, MY52394003: Fri May 10 13:39:50 2024

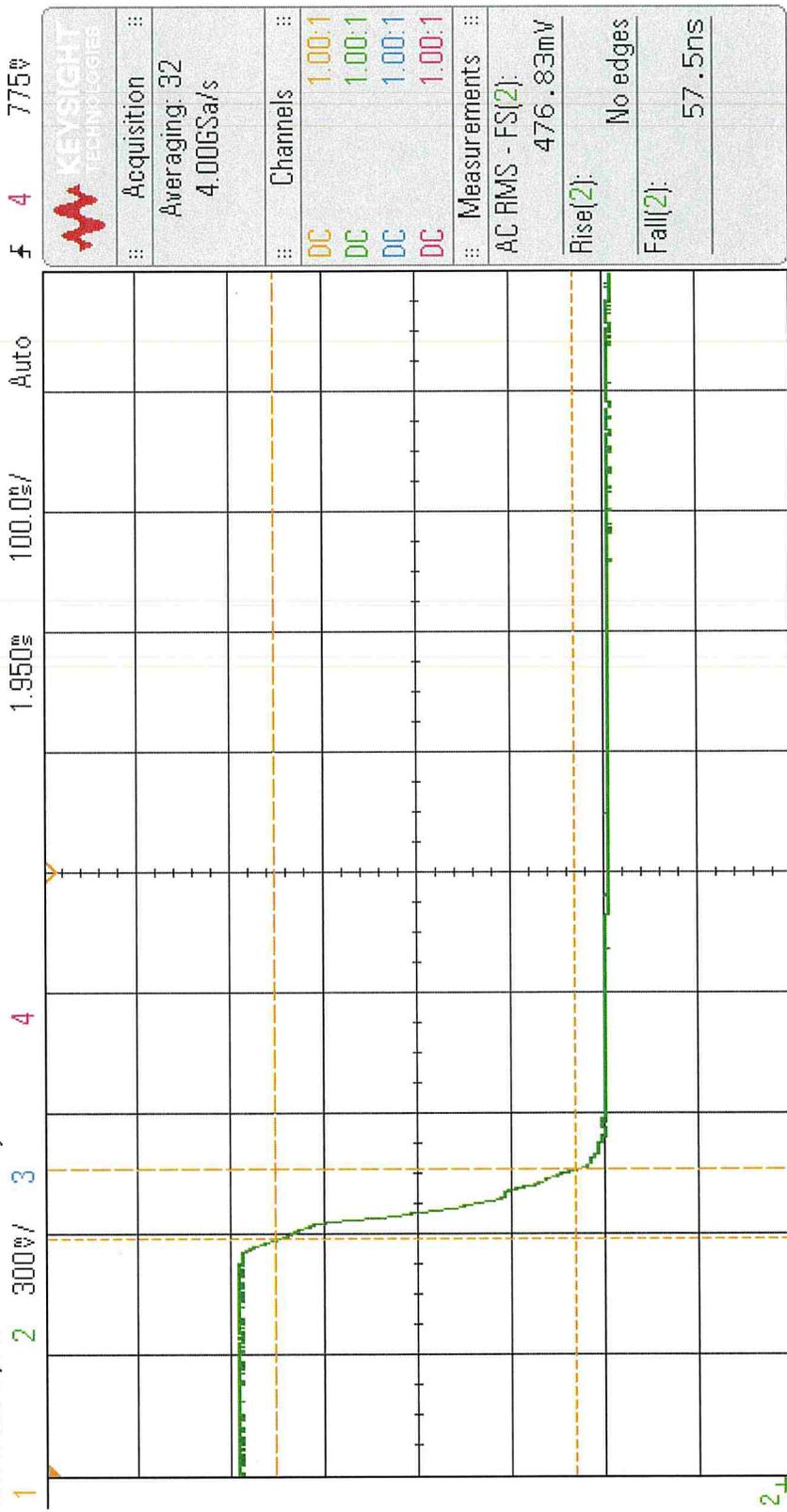


Measurement Menu

- Source 2
- Type: Rise
- Add Measurement
- Settings
- Clear Meas
- Statistics

PL 46036
Recovery/Fall

DSO-X 3034A, MY52394003: Fri May 10 13:38:47 2024



Analyze Menu

Features DVM

Source 1

Mode AC RMS

Transparent

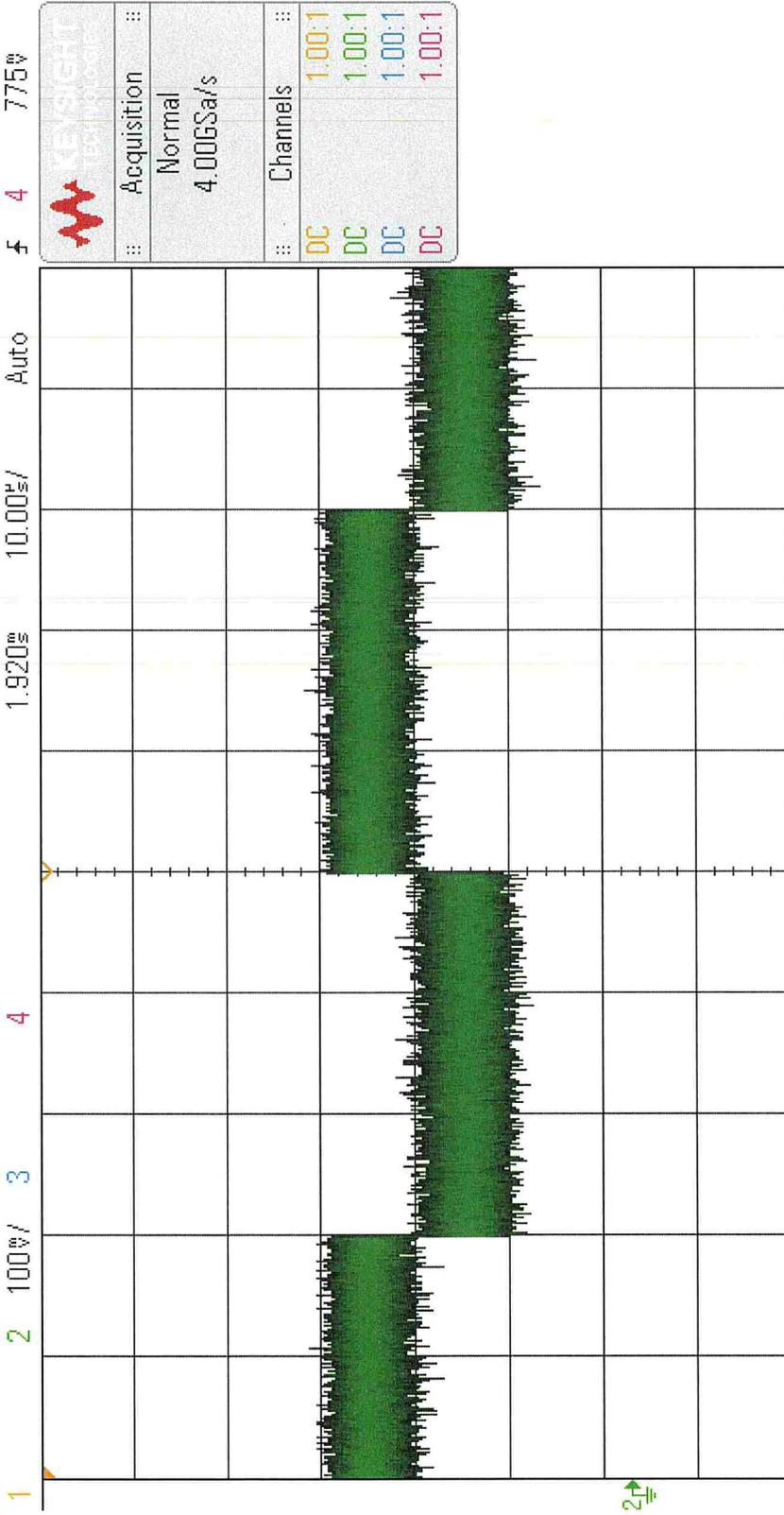
Auto Range

2

PL46036

TSS - 71 dbm

DSO-X 3034A, MY52394003: Fri May 10 13:41:23 2024



Acquire Menu

Acq Mode
Normal

Averages
32

Segmented