

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

CUSTOMER: _____
 SO: _____
 MODEL NO: SDLVA-6G18G-CD-2-OPT218
 SERIAL NO: PL46037/2420

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	QA3
2	Flatness	± 2.0 dB Maximum	± 1.6 dB 25°C See Plots	
3	TSS	-70 dBm Minimum	-71dBm	
4	VSWR	2.0:1 (Input)	1.74:1	
5	Input Power	+17 dBm CW Maximum	Pass	
6	RF Out	+13 dBm ±3 dB Typical	13.9/12.2 dBm	
7	Log Slope	25 mV/dB (±10%) 50Ω	25.1 mV/dB See Plot	
8	Log Range	-70 to +5 dBm	See Plots	
9	Log Linearity	±2.5 dB (-40°C - +85°C)	1.64/-1.39 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

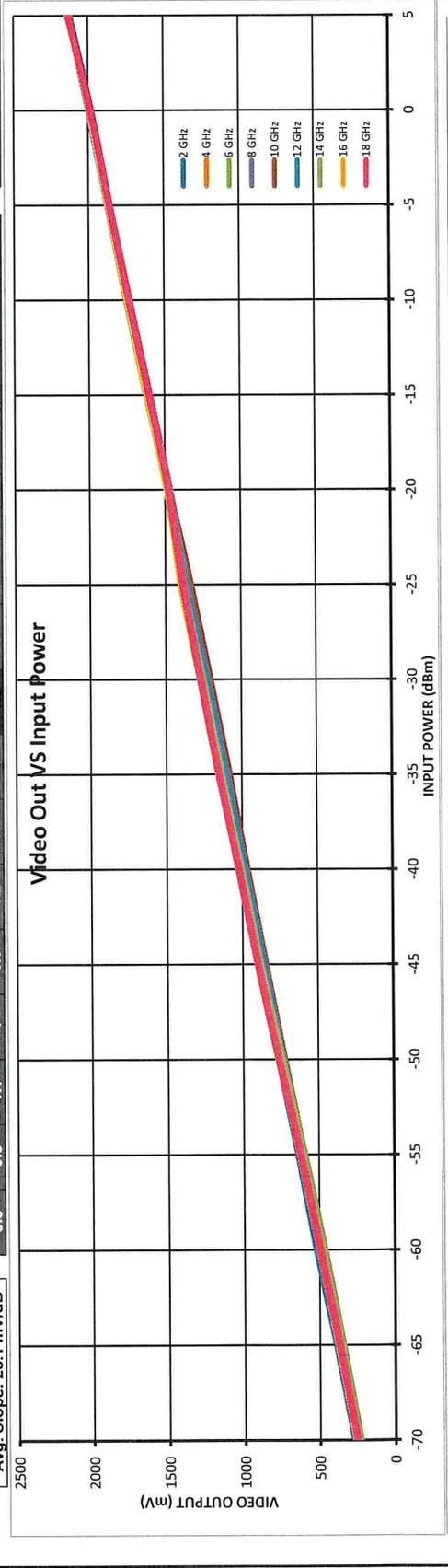
Model: SDLVA-6G18G-CD-2 - OPT218
 Serial No: PL46037
 Date: 5/10/24
 Tested By: Jim Hopson
 Test Temp: +25°C



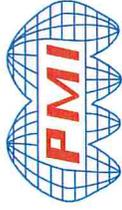
Frequency

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	1997	24.7	0.9	277	392	522	640	767	879	1000	1132	1252	1377	1480	1616	1748	1878	2001	2143
	9	1	7	2	5	2	5	-6	-9	0	-4	-2	-23	-10	-2	5	4	23	0.38
	0.38	0.04	0.30	0.07	0.22	-0.25	-0.35	-0.01	-0.15	-0.09	-0.32	-0.42	-0.07	0.19	0.17	0.91			
4 GHz	1994	24.9	0.955	260	375	499	622	755	877	997	1124	1244	1365	1475	1609	1741	1871	1996	2142
	9	0	-1	-2	6	4	-1	2	-3	-6	-21	-11	-4	2	2	2	2	24	0.37
	0.37	-0.01	-0.03	-0.09	0.25	0.15	-0.03	0.07	-0.11	-0.25	-0.33	-0.45	-0.15	0.07	0.09	0.95			
6 GHz	1992	25.14	0.775	249	365	486	609	741	855	976	1099	1225	1351	1475	1615	1745	1873	1996	2137
	17	7	3	0	6	-6	-10	-13	-12	-14	0	5	7	4	19				0.67
	0.67	0.29	0.10	-0.01	0.24	-0.22	-0.41	-0.52	-0.50	-0.49	0.01	0.18	0.27	0.17	0.77				
8 GHz	1981	25.02	1.001	247	360	480	604	735	853	974	1094	1221	1348	1465	1598	1732	1861	1983	2131
	17	5	0	-1	5	-2	-6	-11	-9	-7	-16	-8	1	5	2	25			0.69
	1.09	0.20	0.00	-0.04	0.20	-0.09	-0.25	-0.45	-0.38	-0.30	-0.62	-0.31	0.05	0.21	0.09	1.00			
10 GHz	1992	25.45	1.092	238	349	466	591	721	842	964	1079	1204	1331	1469	1617	1748	1875	1998	2141
	28	12	1	-1	2	-4	-10	-22	-24	-24	-14	7	11	11	11	6	22		1.09
	1.09	0.45	0.05	-0.04	0.07	-0.17	-0.38	-0.86	-0.95	-0.96	-0.54	0.28	0.43	0.42	0.25	0.87			
12 GHz	1989	25.1	0.511	244	358	477	601	736	862	984	1107	1234	1367	1476	1607	1739	1866	1983	2127
	12	1	-6	-7	2	3	-1	-3	-2	6	-11	-5	1	3	-6	13			0.49
	0.49	0.03	-0.23	-0.29	0.09	0.11	-0.03	-0.13	-0.07	0.23	-0.43	-0.21	0.05	0.11	-0.23	0.51			
14 GHz	2006	25.33	0.847	235	348	466	596	740	885	1010	1141	1262	1388	1488	1621	1750	1873	1990	2133
	2	-12	-20	-17	0	19	17	21	16	15	-11	-5	-3	-6	-16	0			0.08
	0.08	-0.46	-0.80	-0.67	0.01	0.74	0.67	0.85	0.62	0.60	-0.45	-0.20	-0.11	-0.25	-0.63	0.01			
16 GHz	2009	25.05	1.026	252	367	489	616	760	898	1019	1155	1283	1407	1492	1623	1750	1874	1993	2137
	-3	-14	-17	-15	4	16	12	23	26	24	-16	-10	-8	-9	-16	3			0.52
	0.52	-0.14	-0.55	-0.68	-0.60	0.14	0.65	0.49	0.92	1.03	0.98	-0.40	-0.33	-0.38	-0.63	0.12			
18 GHz	1997	24.81	1.064	257	371	495	620	763	900	1021	1155	1273	1386	1478	1605	1736	1864	1987	2139
	-3	-13	-13	-13	6	19	16	26	20	9	-23	-20	-13	-9	-10	18			0.51
	0.51	-0.14	-0.54	-0.50	0.26	0.78	0.66	1.06	0.82	0.38	-0.91	-0.79	-0.51	-0.35	-0.39	0.73			

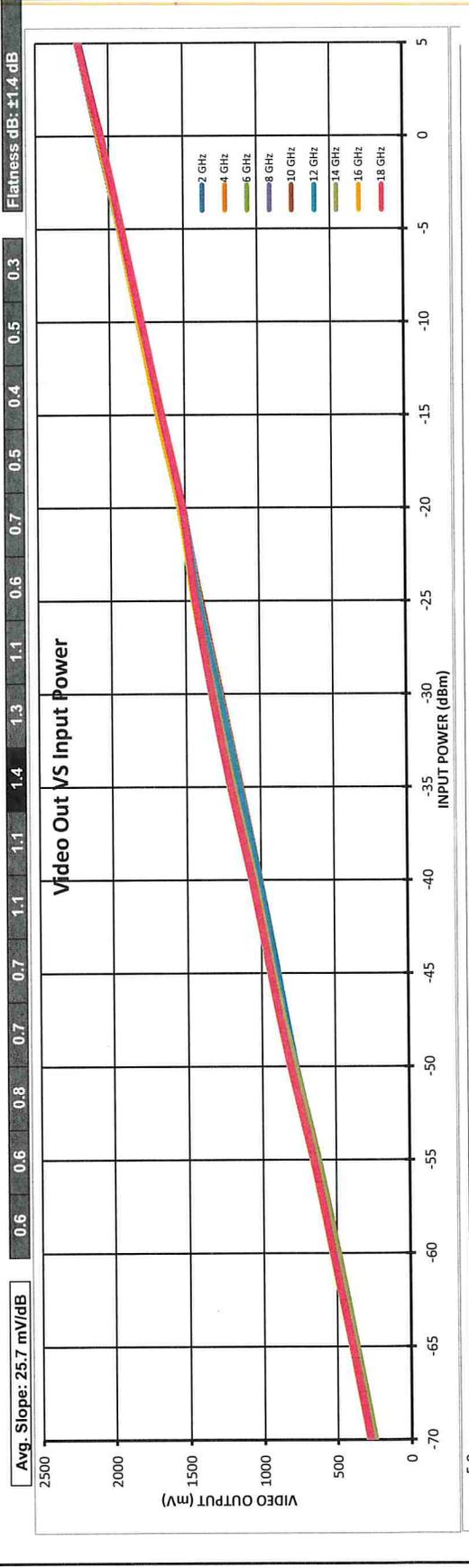
Avg. Slope: 25.1 mV/dB



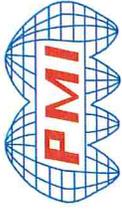
Model: SDLVA-6G18G-CD-2 - OPT218
 Serial No: PL46037
 Date: 5/10/24
 Tested By: Jim Hopson
 Test Temp: -40°C



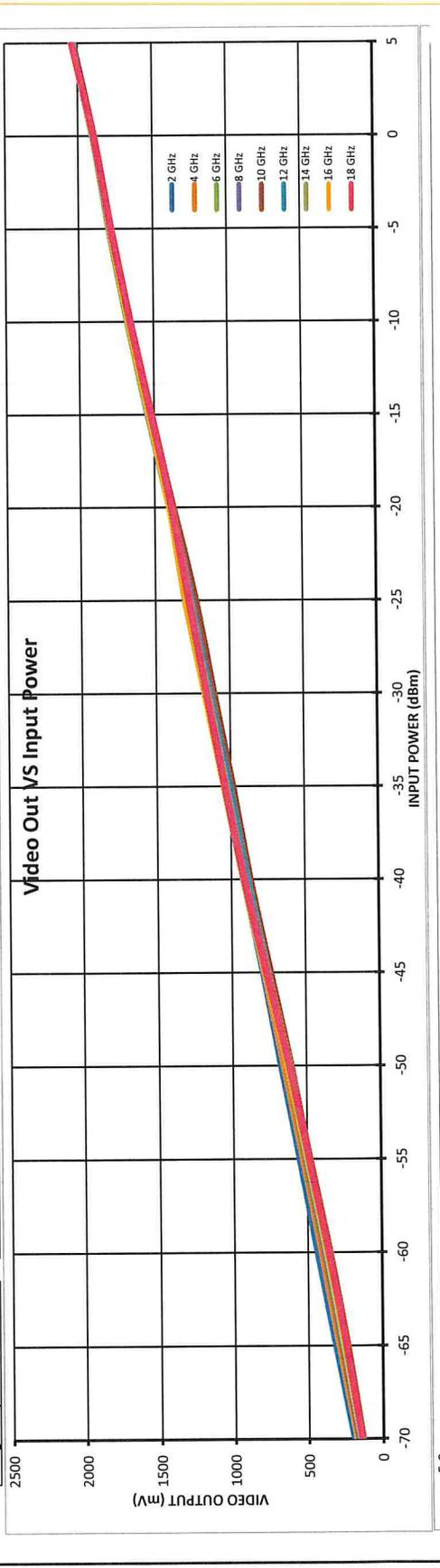
Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
2 GHz	2067	25.79	1.0	392	526	653	787	900	1024	1161	1291	1422	1528	1673	1805	1936	2076	2221	
				10	6	4	9	-7	-12	-4	-3	-1	-24	-7	-4	-2	9	25	
				0.38	0.03	0.23	0.15	0.35	-0.27	-0.46	-0.14	-0.10	-0.02	-0.91	-0.29	-0.17	-0.09	0.34	0.96
4 GHz	2060	25.71	1.116	388	516	645	784	903	1026	1158	1284	1411	1522	1665	1797	1928	2067	2217	
				13	0	-1	0	0	-5	-2	-4	-6	-23	-9	-6	-3	7	29	
				0.52	-0.01	-0.03	-0.02	0.39	0.02	-0.20	-0.07	-0.17	-0.23	-0.91	-0.35	-0.22	-0.12	0.28	1.12
6 GHz	2057	25.85	1.047	385	512	639	774	882	1004	1132	1265	1398	1522	1671	1801	1930	2068	2213	
				22	9	6	4	10	-11	-19	-20	-16	-12	-18	2	3	11	27	
				0.84	0.33	0.24	0.16	0.38	-0.44	-0.72	-0.77	-0.63	-0.48	-0.68	0.08	0.11	0.10	0.44	1.05
8 GHz	2043	25.52	1.392	391	518	644	777	885	1007	1133	1264	1398	1511	1652	1786	1917	2052	2206	
				20	7	6	4	10	-10	-17	-13	-7	-22	-8	-2	2	9	36	
				0.79	0.26	0.24	0.18	0.39	-0.38	-0.60	-0.66	-0.53	-0.27	-0.85	-0.32	-0.07	0.07	0.36	1.39
10 GHz	2060	25.86	1.151	390	516	642	775	884	1006	1129	1259	1394	1524	1678	1807	1935	2075	2219	
				28	11	8	4	8	-12	-19	-26	-25	-19	-6	6	4	15	30	
				1.10	0.43	0.30	0.17	0.31	-0.47	-0.75	-1.00	-0.97	-0.75	-0.72	0.23	0.22	0.17	0.58	1.15
12 GHz	2055	25.82	0.816	380	503	631	770	890	1014	1142	1274	1414	1523	1665	1796	1925	2056	2205	
				17	3	-3	-4	6	-3	-8	-9	5	-16	-3	-1	1	21		
				0.67	0.13	-0.11	-0.15	0.23	-0.12	-0.32	-0.36	-0.25	0.18	-0.60	-0.10	-0.03	0.04	0.82	
14 GHz	2074	26.04	0.868	369	491	625	775	921	1046	1185	1314	1439	1555	1677	1806	1931	2062	2211	
				2	-12	-20	-17	3	19	14	23	21	16	-18	-6	-7	-13	7	
				0.08	-0.47	-0.78	-0.64	0.12	0.73	0.53	0.87	0.82	0.62	-0.69	-0.24	-0.29	-0.49	-0.45	0.27
16 GHz	2077	25.66	0.858	398	529	658	803	930	1052	1193	1328	1452	1542	1686	1813	1937	2072	2217	
				1	-11	-9	-8	9	8	1	14	21	16	-22	-6	-8	-12	-5	11
				0.04	-0.44	-0.33	-0.31	0.34	0.29	0.05	0.54	0.80	-0.64	-0.86	-0.25	-0.30	-0.46	-0.20	0.45
18 GHz	2060	25.3	1.301	399	530	660	808	941	1062	1202	1327	1436	1521	1655	1788	1919	2056	2215	
				-5	-17	-12	-8	13	20	14	28	26	9	-33	-25	-19	-4	29	
				-0.20	-0.66	-0.47	-0.34	0.51	0.77	0.56	1.09	1.03	0.34	-1.30	-1.00	-0.75	-0.57	-0.15	1.13



Model: SDLVA-6G18G-CD-2 - OPT218
 Serial No: PL46037
 Date: 5/10/24
 Tested By: Jim Hopson
 Test Temp: +85°C

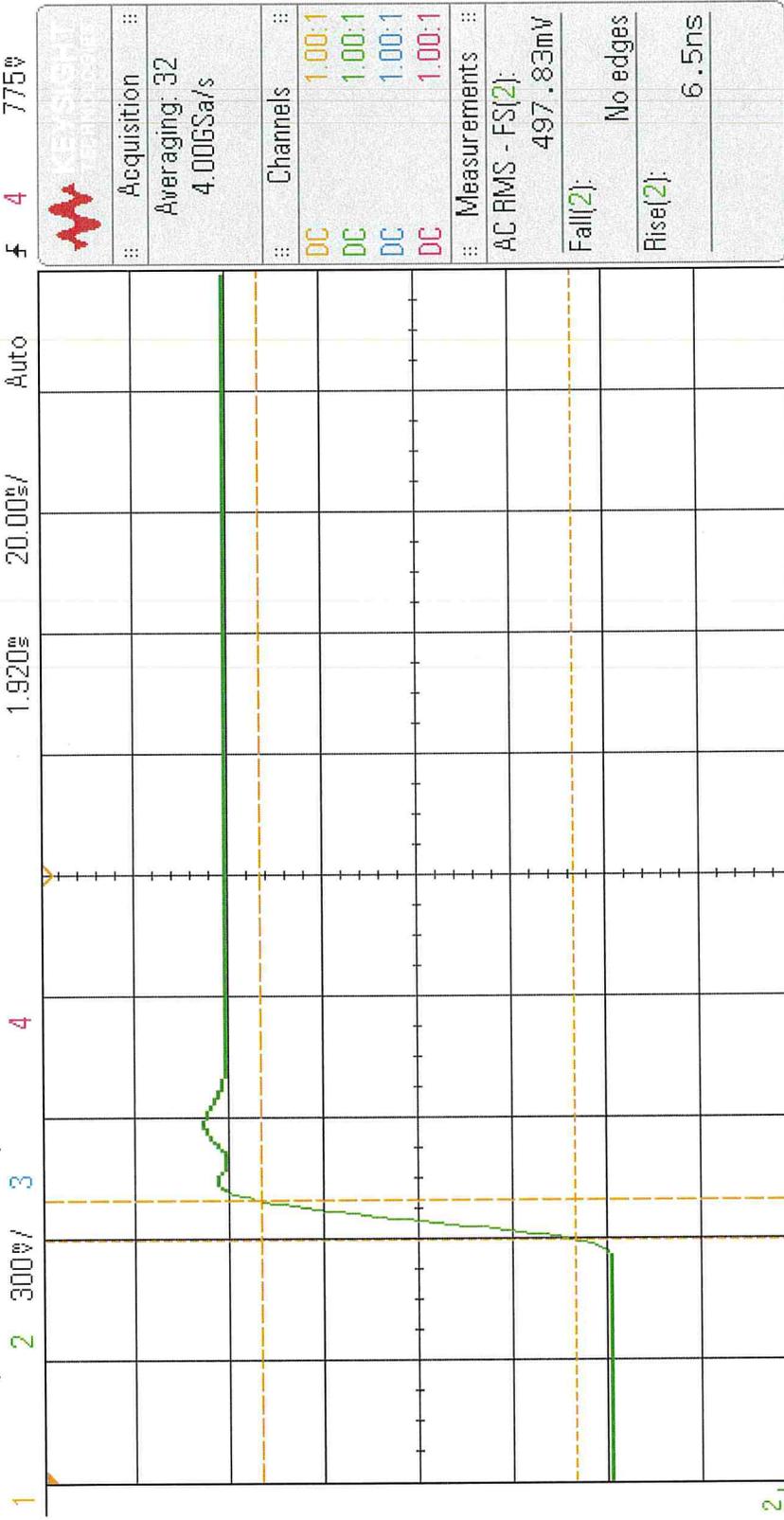


Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	
2 GHz	1906	24.56	0.9	196	317	438	554	677	794	922	1045	1162	1280	1393	1532	1668	1794	1908	2044	
				9	8	6	-1	-1	-7	-2	-1	-7	-12	-22	-6	8	11	2	15	
				0.38	0.31	0.23	-0.04	-0.04	-0.04	-0.27	-0.06	-0.05	-0.29	-0.49	-0.89	-0.23	0.31	0.44	0.08	0.62
4 GHz	1904	24.9	0.851	175	292	407	530	655	785	914	1032	1152	1269	1385	1523	1661	1789	1905	2045	
				14	6	-3	-5	-4	1	6	-1	-5	-13	-21	-8	6	9	1	16	
				0.56	0.25	-0.13	-0.19	-0.17	0.05	0.23	-0.03	-0.21	-0.51	-0.85	-0.31	0.23	0.37	0.03	0.85	
6 GHz	1901	25.21	0.908	159	273	386	511	634	761	890	1007	1132	1250	1381	1527	1664	1790	1902	2036	
				23	11	-2	-3	-6	-5	-2	-11	-12	-21	-16	4	15	15	1	9	
				0.91	0.43	-0.09	-0.13	-0.25	-0.21	-0.09	-0.45	-0.49	-0.81	-0.62	0.18	0.61	0.61	0.05	0.37	
8 GHz	1894	25.29	1.126	152	259	372	498	620	751	882	997	1124	1244	1373	1514	1654	1781	1894	2035	
				28	9	-4	-5	-9	-5	0	-12	-11	-18	-15	0	13	14	0	15	
				1.13	0.36	-0.17	-0.19	-0.37	-0.19	-0.01	-0.46	-0.44	-0.69	-0.59	-0.02	0.52	0.54	0.01	0.58	
10 GHz	1902	25.75	1.636	141	240	354	480	600	735	868	981	1103	1222	1370	1531	1669	1794	1905	2041	
				42	12	-2	-5	-14	-8	-3	-19	-26	-36	-17	16	25	21	3	11	
				1.64	0.48	-0.09	-0.20	-0.54	-0.30	-0.13	-0.75	-1.01	-1.39	-0.64	0.61	0.97	0.82	0.13	0.41	
12 GHz	1903	25.31	0.881	154	263	375	502	626	763	896	1013	1140	1266	1390	1525	1663	1788	1896	2031	
				22	5	-10	-9	-12	-1	5	-4	-4	-4	-7	1	13	11	-7	1	
				0.88	0.19	-0.39	-0.37	-0.47	-0.05	0.20	-0.17	-0.16	-0.18	-0.28	0.06	0.51	0.45	-0.28	0.05	
14 GHz	1920	25.76	0.937	139	238	353	482	613	767	914	1036	1156	1280	1402	1541	1674	1795	1902	2037	
				22	-8	-22	-21	-19	6	24	17	9	4	-3	7	11	4	-18	-12	
				0.85	-0.31	-0.84	-0.83	-0.75	0.23	0.94	0.67	0.33	0.15	-0.12	0.28	0.44	0.14	-0.71	-0.47	
16 GHz	1923	25.44	0.858	153	262	375	504	636	787	926	1053	1179	1307	1410	1540	1673	1794	1902	2042	
				11	-8	-22	-20	-15	9	20	20	19	20	-4	-2	4	-2	-21	-8	
				0.42	-0.30	-0.86	-0.79	-0.60	0.34	0.80	0.79	0.75	0.78	-0.17	-0.06	0.16	-0.08	-0.84	-0.33	
18 GHz	1909	25.47	0.993	145	246	360	488	618	768	915	1040	1158	1274	1388	1520	1656	1782	1895	2039	
				20	-7	-20	-20	-17	6	25	23	14	2	-11	-7	2	1	-14	3	
				0.77	-0.27	-0.79	-0.77	-0.67	0.22	0.99	0.90	0.53	0.09	-0.44	-0.26	0.08	0.03	-0.54	0.12	



PL46037
RiseTime

DSO-X 3034A, MY52394003: Fri May 10 13:36:17 2024



Measurement Menu

Source 2

Type: Rise

Add Measurement

Settings

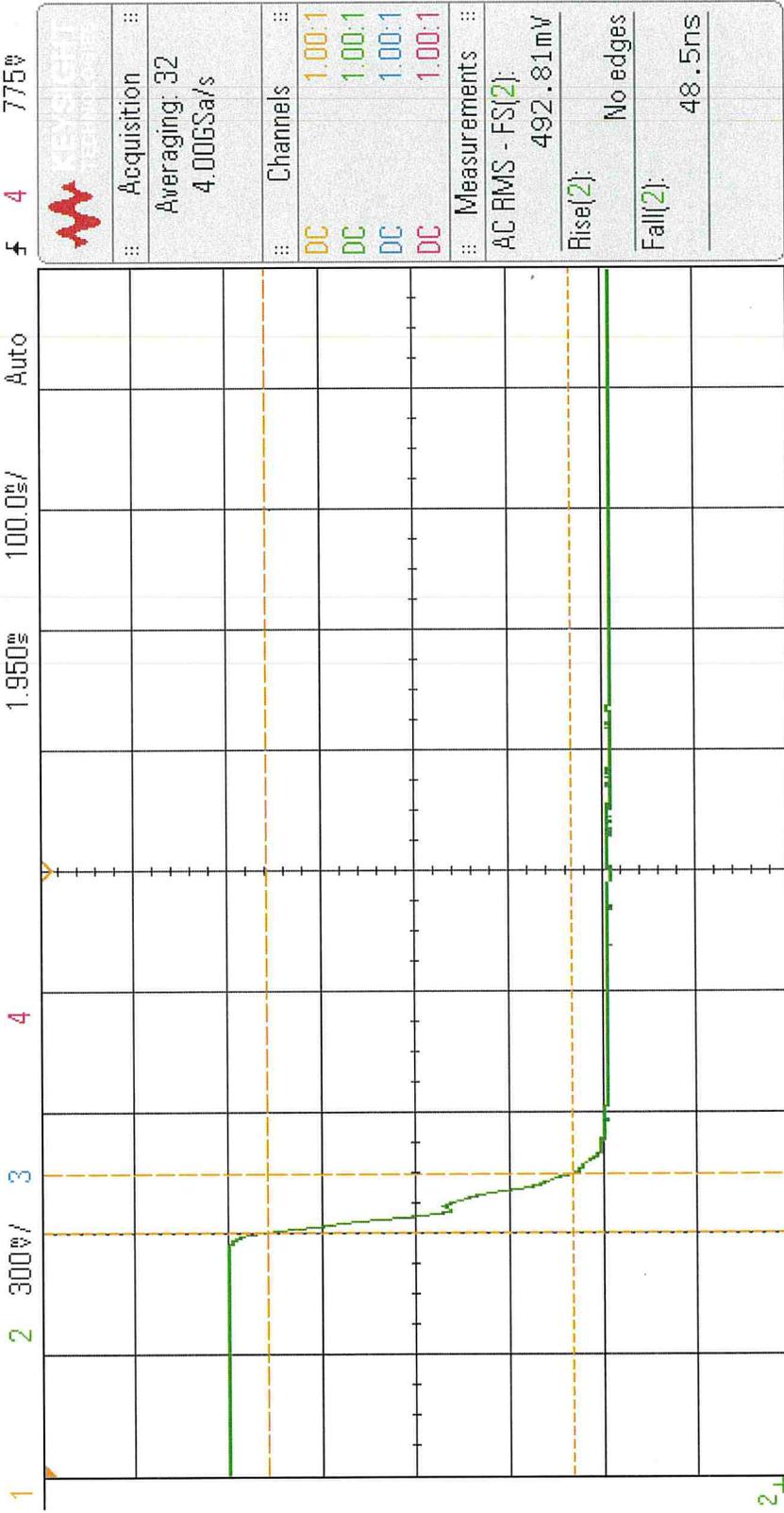
Clear Meas

Statistics

PL46037

Recovery/Fall

DSO-X 3034A, MY52394003: Fri May 10 13:37:14 2024



Measurement Menu

Source 2

Type: Fall

Add Measurement

Settings

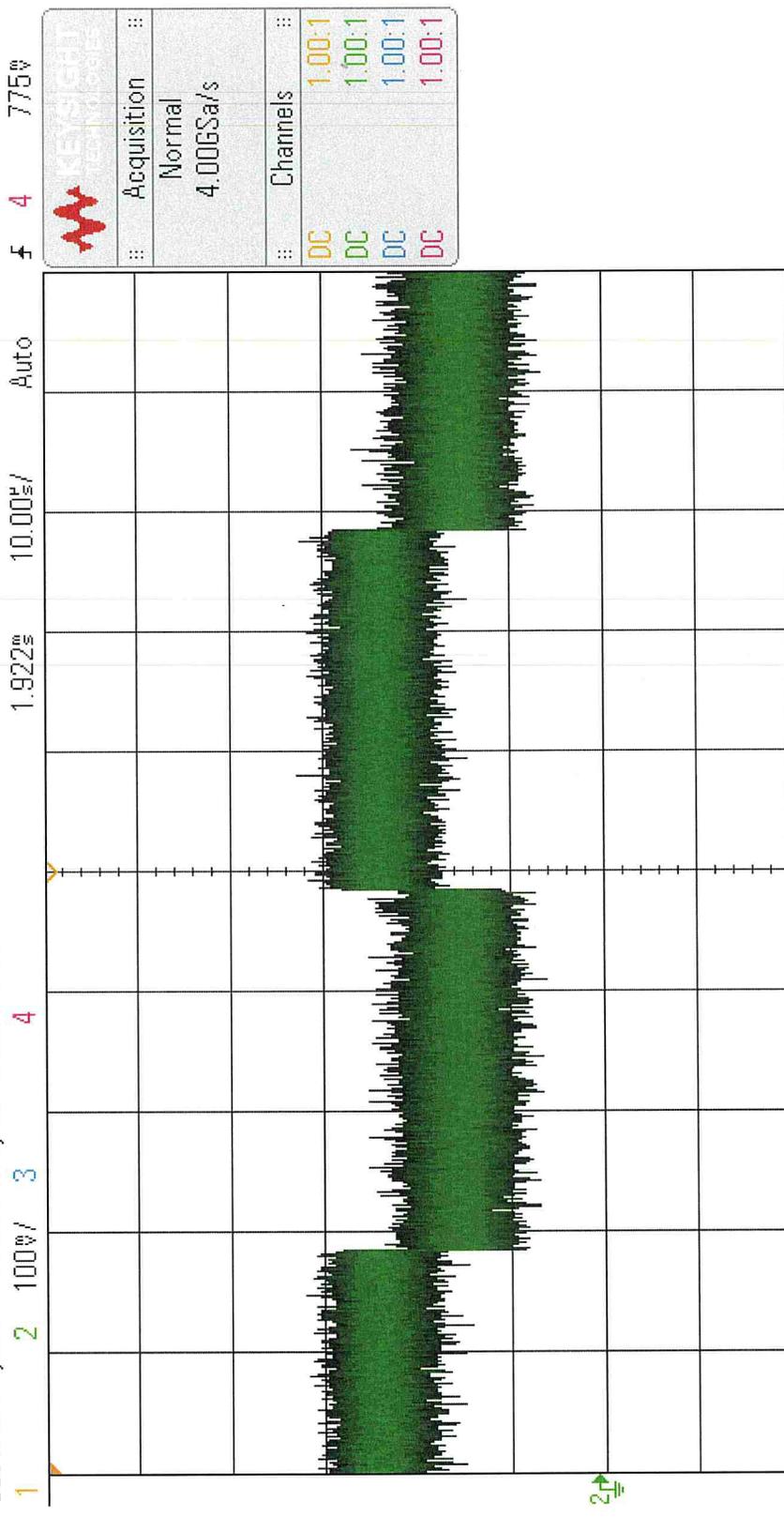
Clear Meas

Statistics

PL46037

TSS -71dbm

DSO-X 3034A, MY52394003: Fri May 10 13:35:07 2024



Save to file = pl46037_tss_71

Save

Recall

Default/Erase

Press to Save