


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

CUSTOMER: _____
 SO: _____
 MODEL NO: SDLVA-6G18G-CD-2-OPT218
 SERIAL NO: PL42907/2348

TESTED BY: Jim Hopson
 TEMPERATURE: +25°C
 DATE: 11/27/2023
 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	
2	Flatness	± 2.0 dB Maximum	± 1.2dB 25°C See Plots	
3	TSS	-70 dBm Minimum	-71dBm	
4	VSWR	2.0:1 (Input)	1.67:1	
5	Input Power	+17 dBm CW Maximum	Pass	
6	RF Out	+13 dBm ±3 dB Typical	14.6/12.2dBm	
7	Log Slope	25 mV/dB (±10%) 50Ω	24.7mV/dB See Plot	
8	Log Range	-70 to +5 dBm	See Plots	
9	Log Linearity	±2.5 dB (-40°C - +85°C)	1.47/-1.29dB See Plots	
10	Pulse Range	30 ns to CW	Pass	
11	Rise Time	10 ns (6 ns Typical)	6.3ns	
12	Recovery Time	60 ns Typical	60 ns Typical	
13	DC Supply	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	220 mA 100 mA	

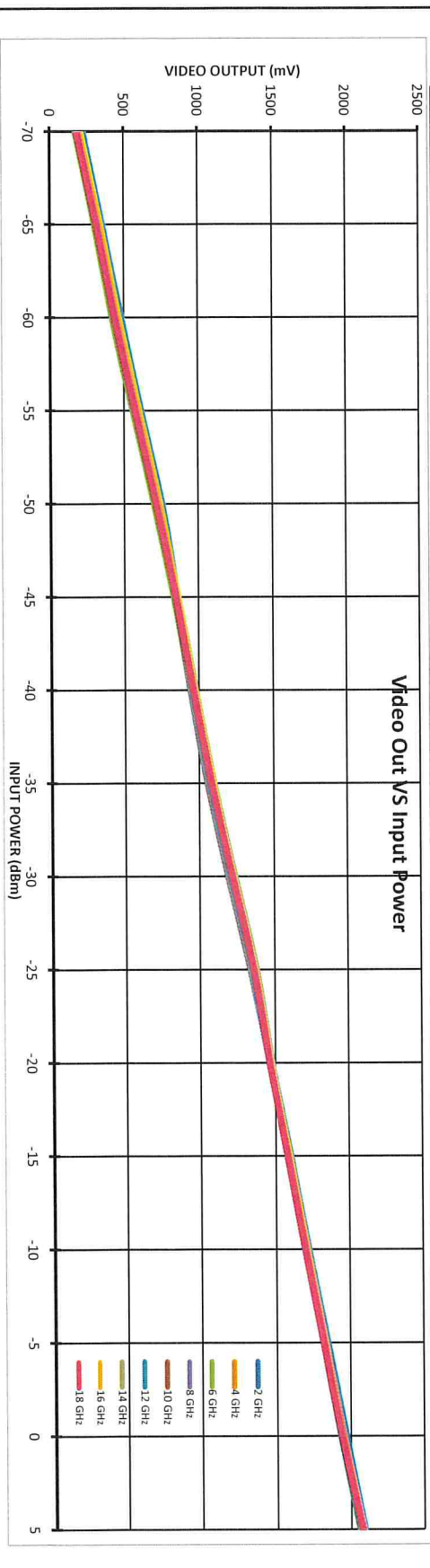
QA/QC Approval: 

Date: 11-27-23



Frequency

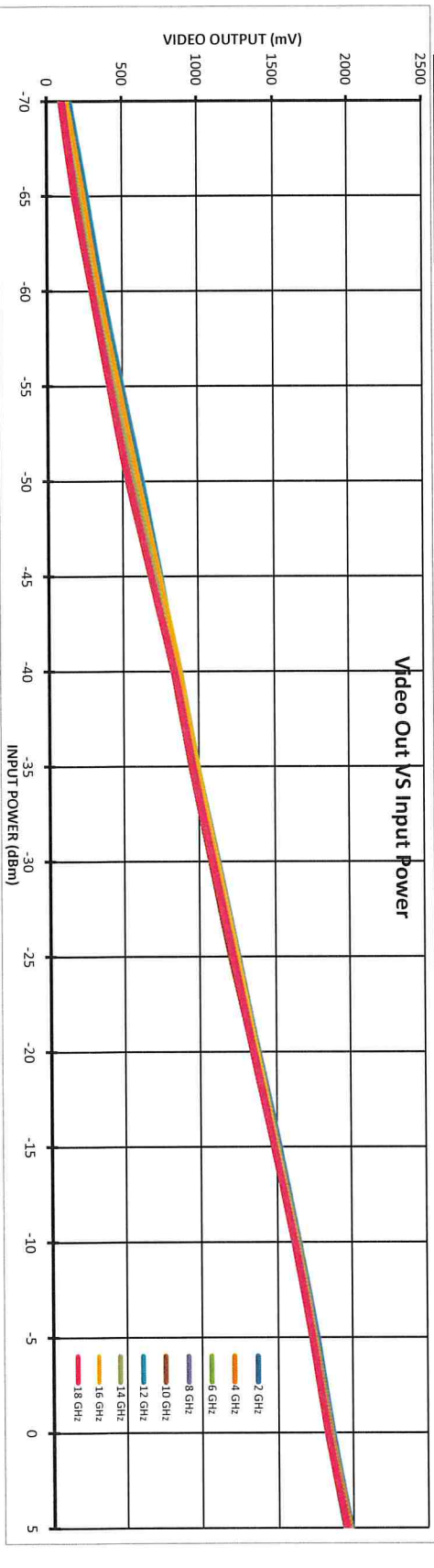
Frequency	INTERCEPT (mV)	SLOPE (mV/DB)	LN. ERR. (DB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
2 GHz	1986	25.69	1.0	175	309	432	570	712	843	959	1080	1223	1369	1482	1610	1726	1849	1974	2098
	1986	25.69	1.0	-12	-7	-12	-3	11	13	1	-6	8	26	10	10	-3	-8	-12	-16
	1986	25.69	1.0	-0.48	-0.27	-0.48	-0.11	0.42	0.52	0.04	-0.25	0.32	1.00	0.40	0.38	-0.10	-0.31	-0.45	-0.62
4 GHz	1972	25.5	0.802	173	305	428	565	709	845	961	1077	1214	1353	1470	1597	1714	1835	1957	2089
	1972	25.5	0.802	-14	-10	-14	-5	12	20	9	-3	7	19	8	8	-3	-9	-15	-10
	1972	25.5	0.802	-0.55	-0.38	-0.55	-0.18	0.47	0.80	0.35	-0.10	0.27	0.73	0.32	0.30	-0.11	-0.37	-0.58	-0.41
6 GHz	1961	25.5	0.692	168	298	419	556	699	831	943	1054	1192	1336	1462	1593	1710	1829	1946	2077
	1961	25.5	0.692	-8	-5	-12	-2	13	18	2	-14	-4	13	11	15	4	-4	-15	-11
	1961	25.5	0.692	-0.31	-0.21	-0.47	-0.09	0.51	0.69	0.08	-0.56	-0.15	0.50	0.44	0.58	0.17	-0.16	-0.58	-0.44
8 GHz	1951	24.88	1.062	197	331	455	590	733	842	946	1056	1192	1335	1461	1587	1706	1824	1940	2077
	1951	24.88	1.062	-12	-2	-3	8	26	11	-9	-24	-12	6	8	10	4	-2	-11	2
	1951	24.88	1.062	-0.48	-0.09	-0.11	0.31	1.06	0.44	-0.38	-0.96	-0.49	0.26	0.32	0.39	0.17	-0.09	-0.43	0.08
10 GHz	1962	24.96	1.176	206	341	465	598	738	844	948	1059	1198	1342	1472	1606	1720	1837	1954	2084
	1962	24.96	1.176	-9	1	1	9	24	5	-16	-29	-15	4	9	18	8	0	-8	-3
	1962	24.96	1.176	-0.35	0.06	0.03	0.36	0.96	0.21	-0.62	-1.18	-0.61	0.16	0.37	0.74	0.31	-0.01	-0.32	-0.11
12 GHz	1949	24.44	1.172	221	353	480	613	755	856	960	1073	1209	1353	1469	1591	1708	1824	1935	2066
	1949	24.44	1.172	-16	-7	-2	9	29	7	-11	-20	-6	16	9	9	4	-2	-14	-5
	1949	24.44	1.172	-0.67	-0.27	-0.08	0.36	1.17	0.30	-0.44	-0.82	-0.26	0.64	0.38	0.37	0.16	-0.10	-0.56	-0.20
14 GHz	1971	25.22	1.351	180	314	437	575	723	861	977	1097	1234	1374	1475	1598	1715	1831	1944	2077
	1971	25.22	1.351	-25	-17	-20	-8	14	26	15	9	20	34	9	6	-3	-13	-27	-20
	1971	25.22	1.351	-0.98	-0.67	-0.80	-0.33	0.54	1.01	0.61	-0.37	0.80	1.35	0.35	0.23	-0.13	-0.53	-1.05	-0.78
16 GHz	1964	24.7	0.948	212	347	472	608	750	866	979	1099	1231	1370	1476	1601	1717	1832	1945	2076
	1964	24.7	0.948	-23	-11	-10	2	21	13	3	-1	8	23	6	7	0	-9	-19	-12
	1964	24.7	0.948	-0.93	-0.47	-0.41	0.10	0.85	0.55	0.42	-0.02	0.32	0.95	0.24	0.30	0.00	-0.35	-0.77	-0.47
18 GHz	1963	25.11	1.079	184	320	443	580	721	850	967	1086	1223	1362	1466	1588	1705	1823	1942	2085
	1963	25.11	1.079	-21	-10	-13	-2	14	17	9	2	14	27	6	2	-7	-14	-21	-3
	1963	25.11	1.079	-0.83	-0.42	-0.52	-0.06	0.55	0.69	0.35	0.09	0.54	1.08	0.22	0.08	-0.26	-0.56	-0.82	-0.13
Avg. Slope: 25.1 mV/DB																			
Flatness: dB: ±1.2 dB																			





Frequency

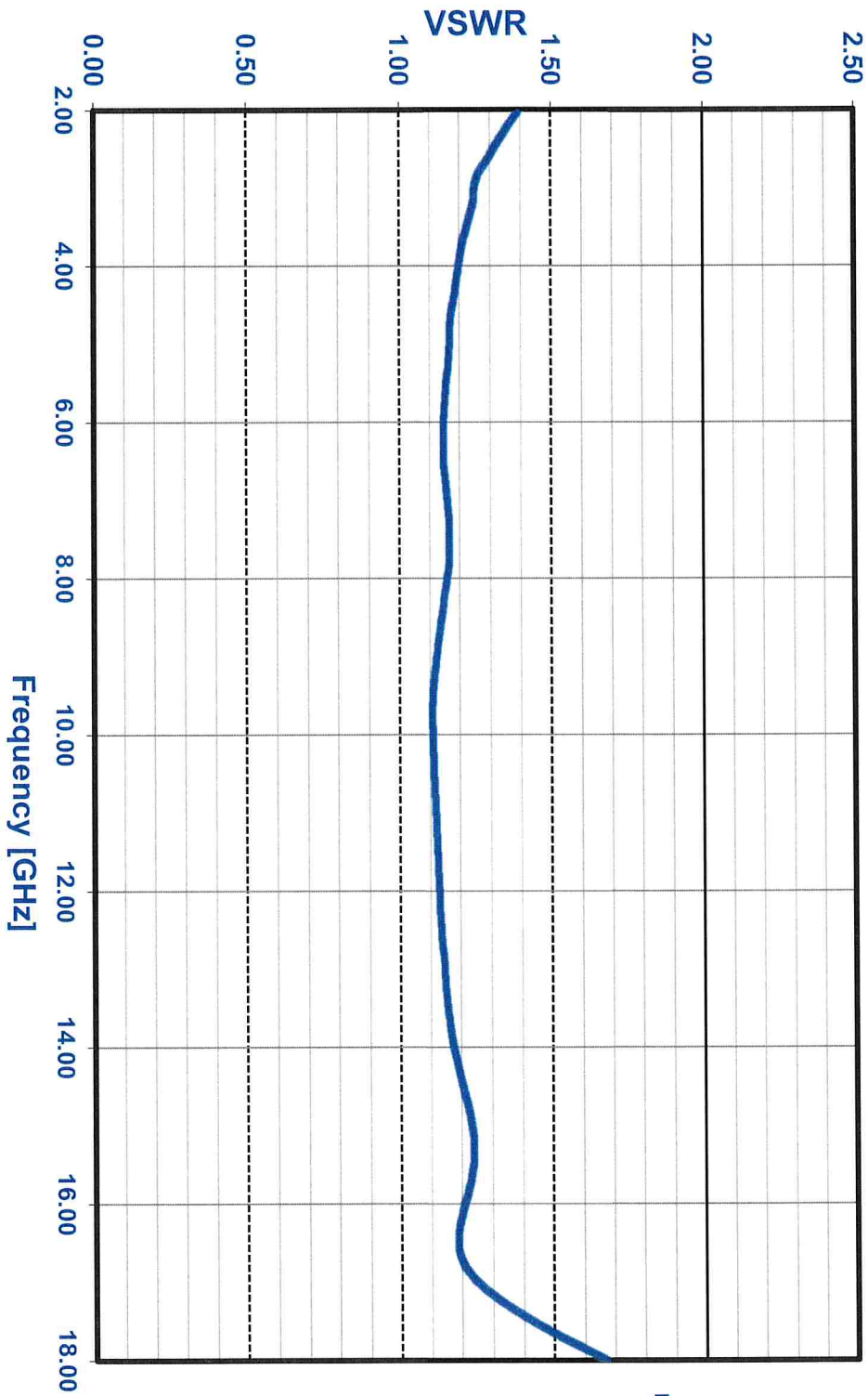
Frequency	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5		
2 GHz	INTERCEPT (mV)	1884	124	238	349	475	600	742	873	993	1126	1257	1383	1521	1647	1766	1869	1987
	SLOPE (mV/DB)	25.36	16	3	-13	-14	-16	0	4	-3	3	7	18	17	9	-15	-23	
	LN. ERR. (DB)	0.9	0.61	0.11	-0.51	-0.54	-0.61	-0.02	0.15	-0.12	0.13	0.29	0.26	0.70	0.67	0.37	-0.57	-0.92
4 GHz	INTERCEPT (mV)	1871	112	217	330	455	580	729	866	981	1111	1236	1367	1502	1633	1753	1857	1980
	SLOPE (mV/DB)	25.44	22	-1	-15	-17	-19	3	12	0	3	1	5	13	16	9	-14	-18
	LN. ERR. (DB)	0.845	0.885	-0.03	-0.58	-0.67	-0.75	0.10	0.49	0.01	0.12	0.04	0.19	0.49	0.64	0.36	-0.55	-0.71
6 GHz	INTERCEPT (mV)	1862	102	198	313	437	563	711	847	961	1092	1219	1357	1499	1631	1747	1849	1965
	SLOPE (mV/DB)	25.58	30	-1	-14	-18	-20	0	8	-6	-3	-4	7	21	25	13	-13	-25
	LN. ERR. (DB)	1.189	1.19	-0.06	-0.56	-0.71	-0.79	0.00	0.32	-0.22	-0.10	-0.14	0.26	0.81	0.97	0.51	-0.50	-0.97
8 GHz	INTERCEPT (mV)	1851	109	210	323	448	574	715	838	950	1078	1206	1349	1490	1625	1740	1843	1964
	SLOPE (mV/DB)	25.31	29	4	-10	-11	-12	2	-1	-16	-14	-13	4	18	27	15	-8	-14
	LN. ERR. (DB)	1.153	1.15	0.14	-0.39	-0.45	-0.47	0.10	-0.04	-0.62	-0.56	-0.50	0.15	0.72	1.05	0.60	-0.33	-0.55
10 GHz	INTERCEPT (mV)	1860	108	208	321	445	569	711	835	948	1076	1203	1352	1505	1637	1751	1851	1969
	SLOPE (mV/DB)	25.51	34	6	-8	-12	-15	-1	-4	-19	-18	-19	3	28	33	19	-9	-18
	LN. ERR. (DB)	1.33	1.33	0.25	-0.32	-0.46	-0.60	-0.03	-0.17	-0.74	-0.72	-0.74	0.10	1.10	1.28	0.75	-0.33	-0.71
12 GHz	INTERCEPT (mV)	1848	139	254	365	490	622	749	861	970	1099	1228	1364	1492	1626	1739	1837	1954
	SLOPE (mV/DB)	24.57	11	3	-9	-6	3	7	-4	-18	-12	-6	8	13	24	14	-11	-17
	LN. ERR. (DB)	0.971	0.45	0.13	-0.35	-0.26	0.11	0.28	-0.16	-0.73	-0.48	-0.23	0.31	0.52	0.97	0.57	-0.44	-0.68
14 GHz	INTERCEPT (mV)	1869	109	211	325	452	582	737	874	987	1118	1248	1373	1503	1635	1748	1846	1963
	SLOPE (mV/DB)	25.37	16	-9	-22	-22	-19	10	20	6	10	13	11	15	20	6	-23	-33
	LN. ERR. (DB)	1.288	0.62	-0.36	-0.86	-0.86	-0.73	0.38	0.78	0.24	0.40	0.52	0.45	0.58	0.78	0.24	-0.90	-1.29
16 GHz	INTERCEPT (mV)	1860	126	238	348	476	605	749	877	990	1118	1247	1371	1497	1630	1742	1840	1958
	SLOPE (mV/DB)	24.89	9	-4	-18	-15	-10	9	13	1	5	10	9	11	19	7	-20	-26
	LN. ERR. (DB)	1.046	0.34	-0.16	-0.74	-0.59	-0.41	0.38	0.52	0.06	0.20	0.39	0.37	0.43	0.77	0.27	-0.79	-1.05
18 GHz	INTERCEPT (mV)	1855	93	177	295	416	539	690	841	959	1090	1223	1352	1486	1619	1732	1834	1960
	SLOPE (mV/DB)	25.7	38	-7	-17	-25	-30	-8	15	4	7	11	12	17	22	5	-21	-23
	LN. ERR. (DB)	1.471	1.47	-0.26	-0.67	-0.96	-1.18	-0.30	0.57	0.16	0.26	0.43	0.45	0.66	0.84	0.23	-0.80	-0.90
Avg. Slope: 25.3 mV/DB																		
Flatness: dB: ±1.6 dB																		



Model Number: SDLVA-6G18G-CD-2 OPT218
Serial Number: PL42907
Date: 11/27/2023

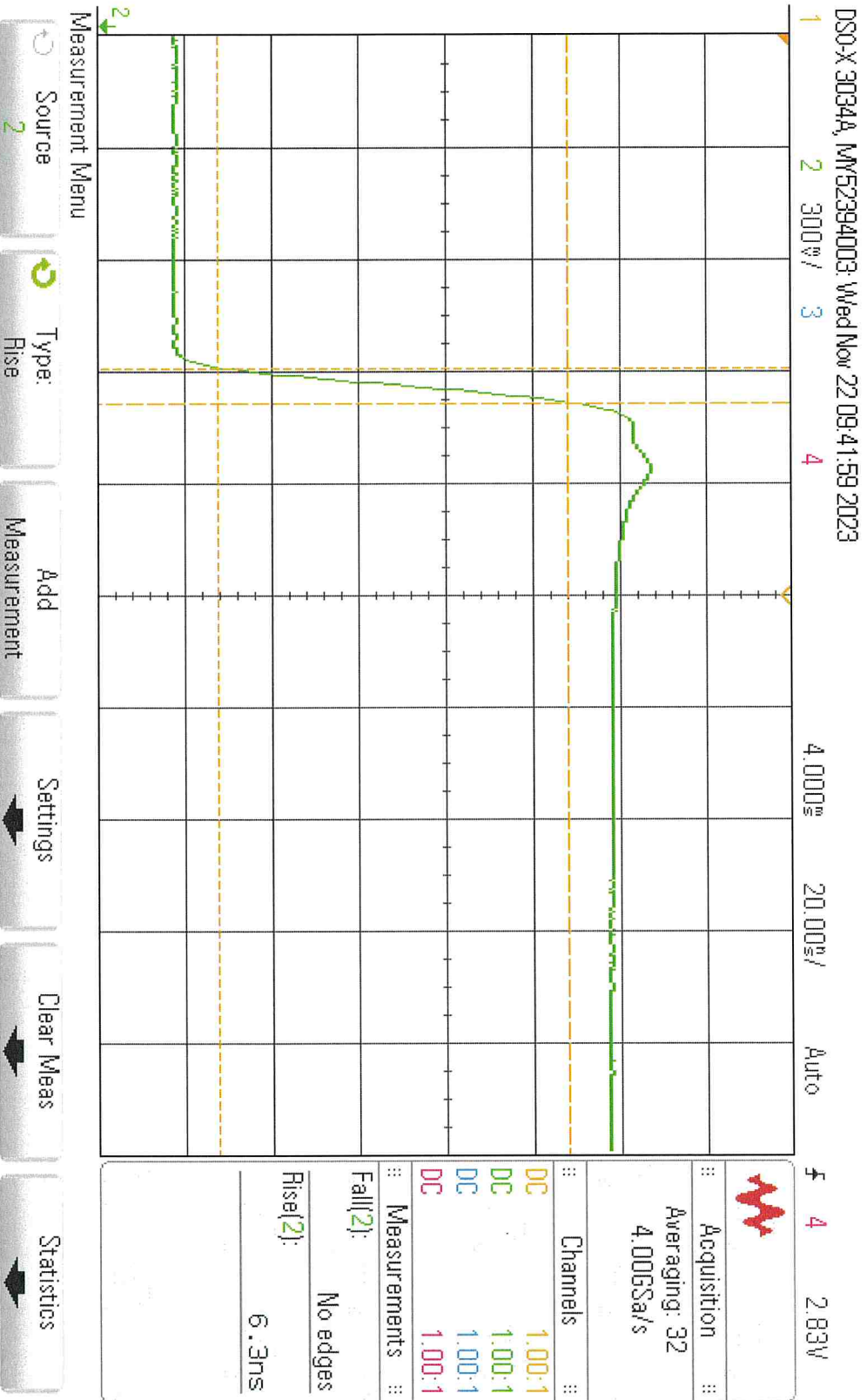
Temperature: +25C

VSWR GRAPH



Input VSWR 1.57:1 Max

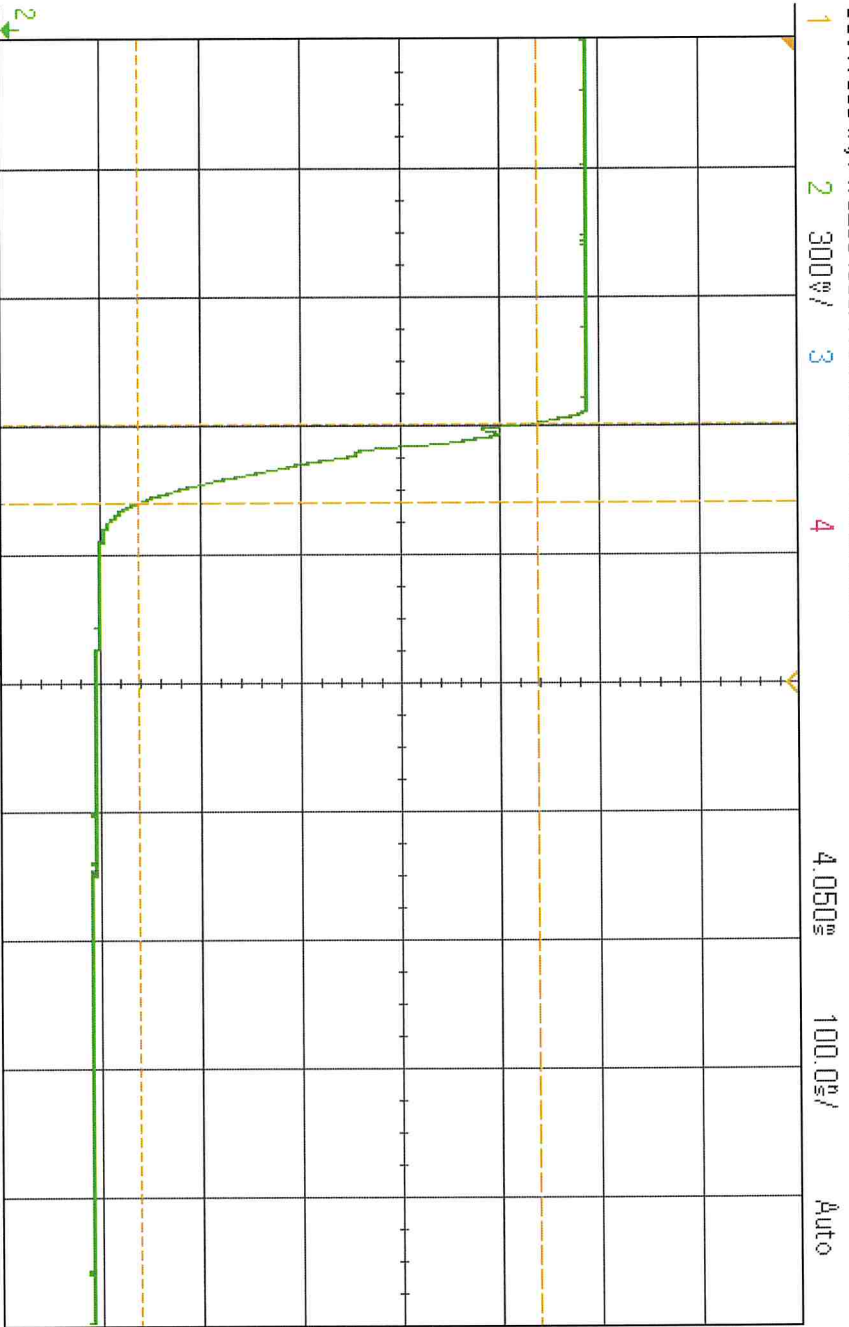
PL42907
Rise Time



PL42907

Recovery

DSO-X 3034A, MW52394003 Wed Nov 22 09:43:02 2023



Measurement Menu

Source 2

Type: Fall

Add Measurement

Settings

Clear Meas

Statistics

W

Acquisition ::
Averaging: 32
4.006Sa/s

Channels ::
DC 1.00:1
DC 1.00:1
DC 1.00:1
DC 1.00:1

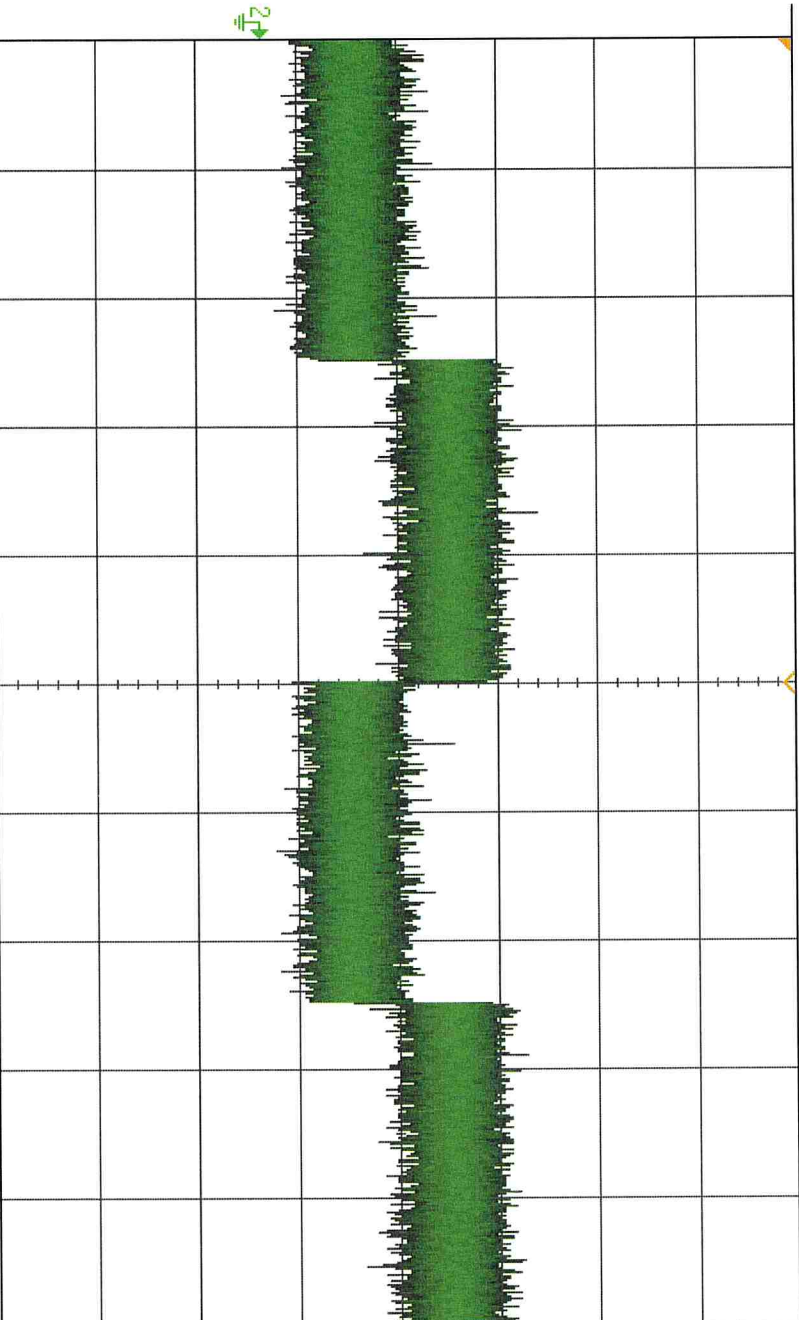
Measurements ::
Rise[2]: No edges
Fall[2]: 61.3ns

PL42907

TSS -71

DSO-X 3034A, MY52394003, Wed Nov 22 09:58:23 2023

1 2 100% / 3 4 4.050µs 20.00µs / Auto f 4 2.68V



Acquisition	Normal
Channels	4.00GSa/s
DC	1.00:1
DC	1.00:1
DC	1.00:1
DC	1.00:1

Acquire Menu

Acq Mode Normal

Avgs 32

Segmented