

Appendix A: Effective (Isotropic) Radiated Power Output Data for NB1

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Conducted POWER(d Bm)	EIRP(dB m)	Verdict
Band 66	Stand- Alone	3.75k Hz	0.18	QPSK	131973	1@0	22.52	25.47	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	QPSK	131973	1@47	22.47	25.42	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	BPSK	131973	1@0	22.41	25.36	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	BPSK	131973	1@47	22.44	25.39	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	QPSK	132322	1@0	22.37	25.32	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	QPSK	132322	1@47	22.40	25.35	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	BPSK	132322	1@0	22.35	25.3	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	BPSK	132322	1@47	22.42	25.37	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	QPSK	132670	1@0	22.24	25.19	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	QPSK	132670	1@47	22.25	25.2	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	BPSK	132670	1@0	22.21	25.16	PASS
Band 66	Stand- Alone	3.75k Hz	0.18	BPSK	132670	1@47	22.28	25.23	PASS
Band 66	Stand- Alone	15kHz	0.18	QPSK	131973	1@0	22.63	25.58	PASS
Band 66	Stand- Alone	15kHz	0.18	QPSK	131973	1@11	22.65	25.6	PASS
Band 66	Stand- Alone	15kHz	0.18	QPSK	131973	3@3	23.26	26.21	PASS
Band 66	Stand- Alone	15kHz	0.18	BPSK	131973	1@0	22.63	25.58	PASS
Band 66	Stand- Alone	15kHz	0.18	BPSK	131973	1@11	22.64	25.59	PASS

Band 66	Stand-Alone	15kHz	0.18	QPSK	132322	1@0	22.59	25.54	PASS
Band 66	Stand-Alone	15kHz	0.18	QPSK	132322	1@11	22.59	25.54	PASS
Band 66	Stand-Alone	15kHz	0.18	QPSK	132322	3@3	23.39	26.34	PASS
Band 66	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	22.57	25.52	PASS
Band 66	Stand-Alone	15kHz	0.18	BPSK	132322	1@11	22.60	25.55	PASS
Band 66	Stand-Alone	15kHz	0.18	QPSK	132670	1@0	22.46	25.41	PASS
Band 66	Stand-Alone	15kHz	0.18	QPSK	132670	1@11	22.47	25.42	PASS
Band 66	Stand-Alone	15kHz	0.18	QPSK	132670	3@3	23.32	26.27	PASS
Band 66	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	22.74	25.69	PASS
Band 66	Stand-Alone	15kHz	0.18	BPSK	132670	1@11	22.48	25.43	PASS

Appendix B: Peak-to-Average Ratio(CCDF) for NB1

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	4.99	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@47	4.91	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132322	1@0	5.09	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132322	1@47	4.99	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	1@0	6.13	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	1@11	6.17	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	3@3	12.14	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	6.15	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132322	1@11	6.12	<=13	PASS

Appendix C: Emission Bandwidth for NB1

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	OBW(MHz)	EBW(MHz)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@0	0.17736	0.3404	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	131973	1@0	0.17901	0.2695	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	0.18077	0.3404	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132322	1@0	0.18041	0.3390	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	0.17904	0.3399	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132670	1@0	0.18038	0.3409	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131973	12@0	0.20451	0.2653	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	131973	12@0	0.21065	0.2770	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	0.20628	0.2679	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132322	12@0	0.21245	0.2911	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	12@0	0.20322	0.2698	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132670	12@0	0.20663	0.2748	PASS

The figure consists of four screenshots of a Spectrum Analyzer interface, arranged in a 2x2 grid. Each screenshot shows a frequency spectrum plot with a yellow trace, a table of measured parameters, and a title indicating the filter type and center frequency.

Top Left Screenshot: The title is "Band66-0.18-QPSK-131973-1@0-3.75kHz-PASS". The plot shows a spectrum with a peak at 1.7101000 GHz. The table of measured parameters is as follows:

Measure Trace		Trace 1	
Occupied Bandwidth	177.36 kHz	Total Power	29.8 dBm
Transmit Freq Error	-14.871 kHz	% of OBW Power	99.00 %
x dB Bandwidth	340.4 kHz	x dB	-26.00 dB

Top Right Screenshot: The title is "Band66-0.18-BPSK-131973-1@0-3.75kHz-PASS". The plot shows a spectrum with a peak at 1.7101000 GHz. The table of measured parameters is as follows:

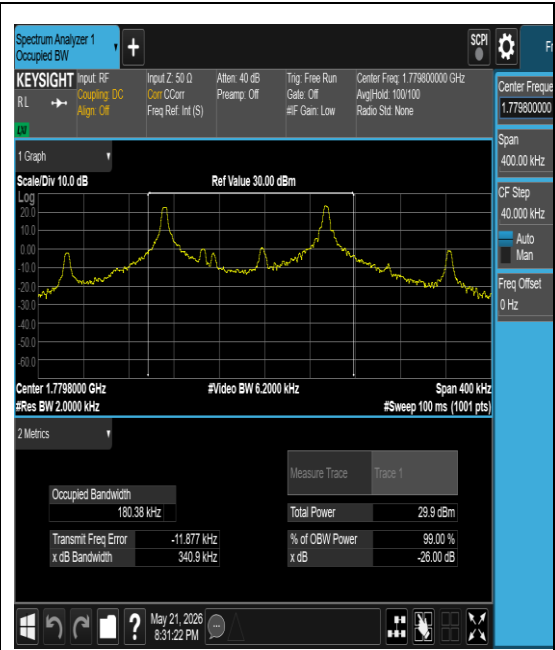
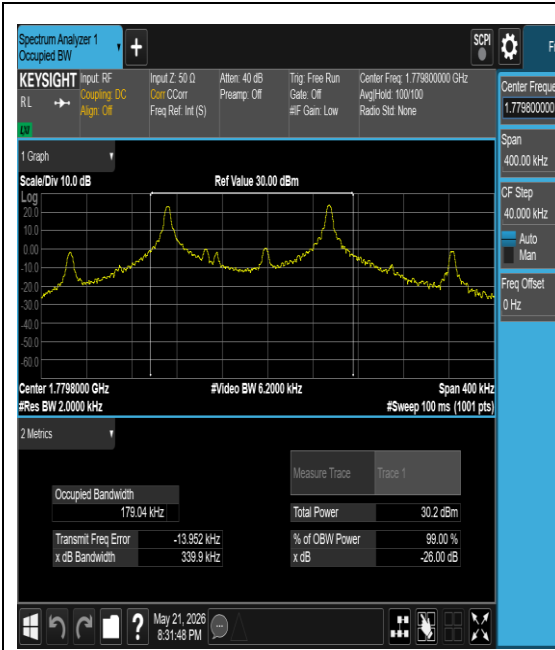
Measure Trace		Trace 1	
Occupied Bandwidth	179.01 kHz	Total Power	29.4 dBm
Transmit Freq Error	-11.766 kHz	% of OBW Power	99.00 %
x dB Bandwidth	269.5 kHz	x dB	-26.00 dB

Bottom Left Screenshot: The title is "Band66-0.18-QPSK-132322-1@0-3.75kHz-PASS". The plot shows a spectrum with a peak at 1.7450000 GHz. The table of measured parameters is as follows:

Measure Trace		Trace 1	
Occupied Bandwidth	180.77 kHz	Total Power	30.1 dBm
Transmit Freq Error	-13.305 kHz	% of OBW Power	99.00 %
x dB Bandwidth	340.4 kHz	x dB	-26.00 dB

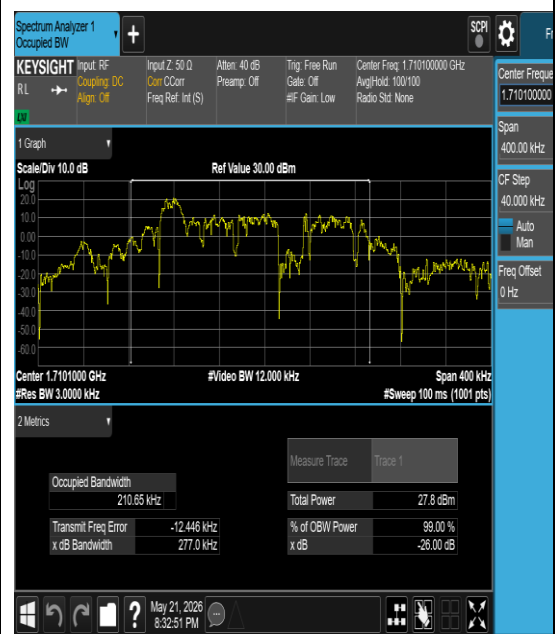
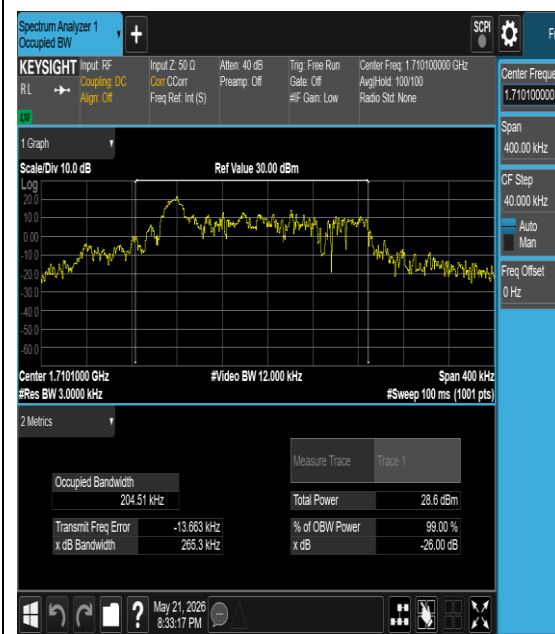
Bottom Right Screenshot: The title is "Band66-0.18-BPSK-132322-1@0-3.75kHz-PASS". The plot shows a spectrum with a peak at 1.7450000 GHz. The table of measured parameters is as follows:

Measure Trace		Trace 1	
Occupied Bandwidth	180.41 kHz	Total Power	29.9 dBm
Transmit Freq Error	-11.570 kHz	% of OBW Power	99.00 %
x dB Bandwidth	339.0 kHz	x dB	-26.00 dB



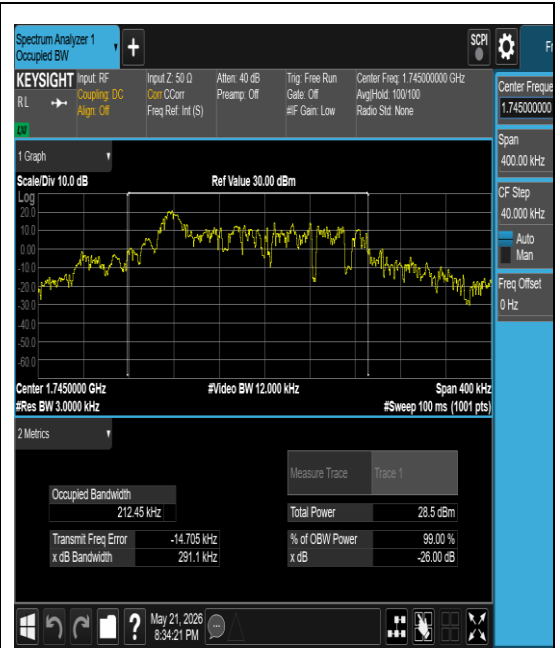
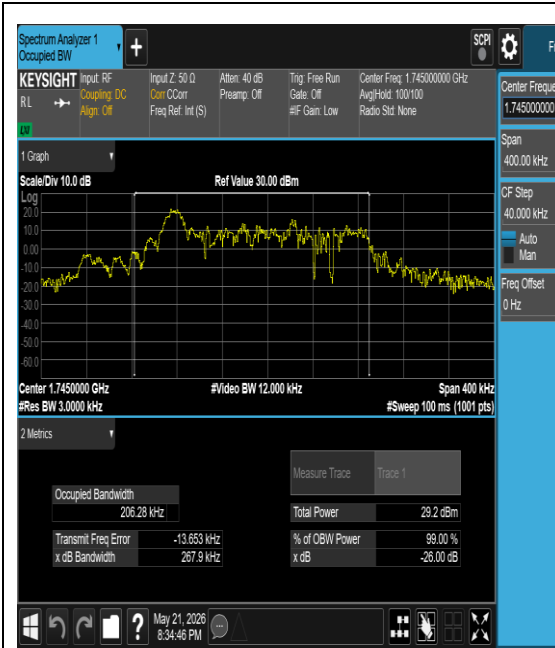
Band66-0.18-QPSK-132670-1@0-3.75kHz-PASS

Band66-0.18-BPSK-132670-1@0-3.75kHz-PASS



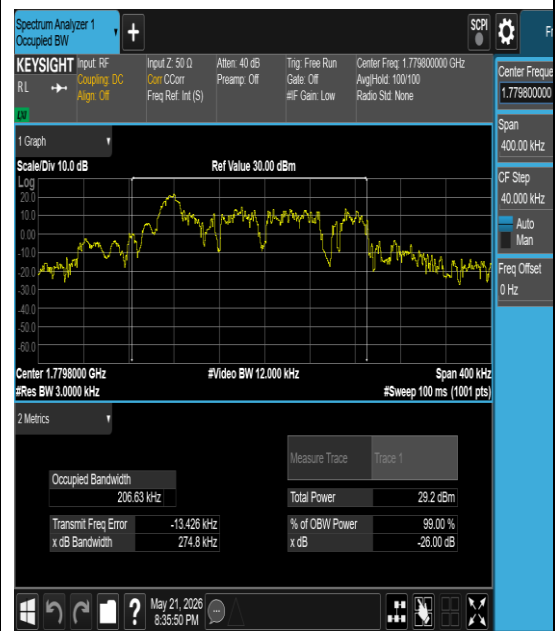
Band66-0.18-QPSK-131973-12@0-15kHz-PASS

Band66-0.18-BPSK-131973-12@0-15kHz-PASS



Band66-0.18-QPSK-132322-12@0-15kHz-PASS

Band66-0.18-BPSK-132322-12@0-15kHz-PASS



Band66-0.18-QPSK-132670-12@0-15kHz-PASS

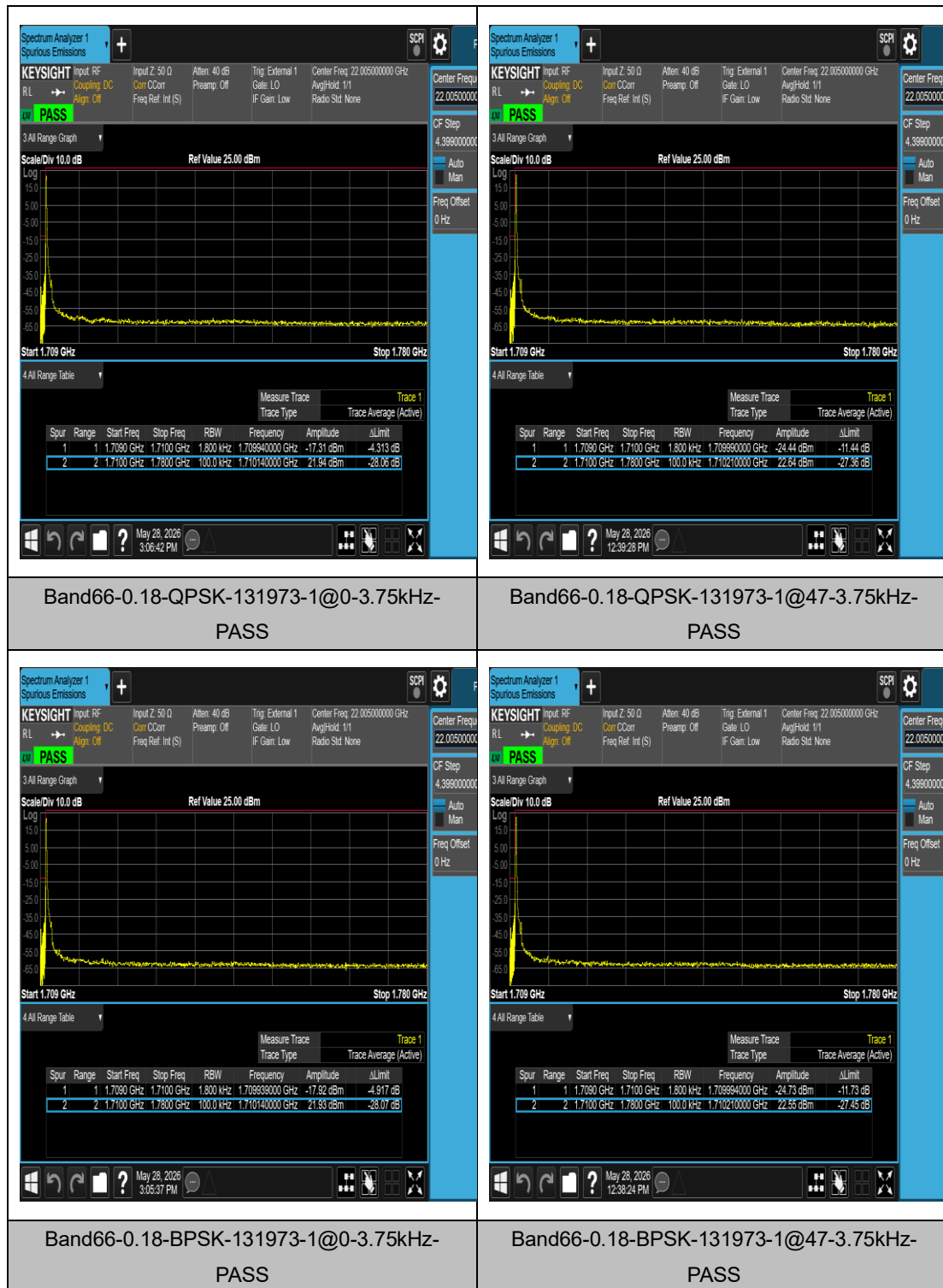
Band66-0.18-BPSK-132670-12@0-15kHz-PASS

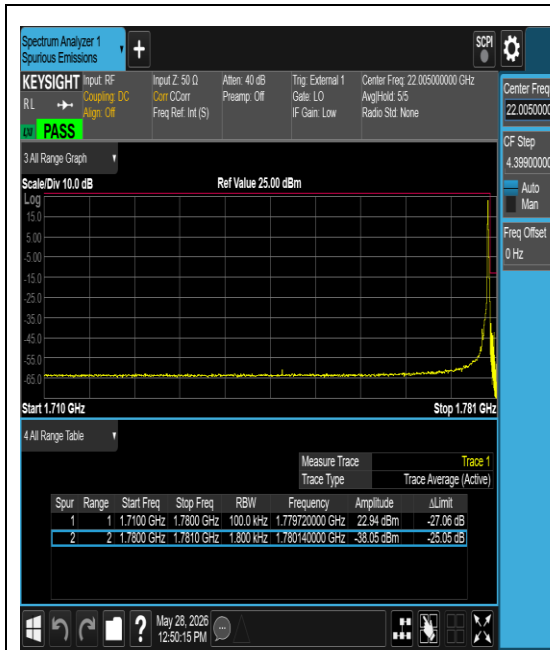
Appendix D: Band Edge for NB1

Test Result

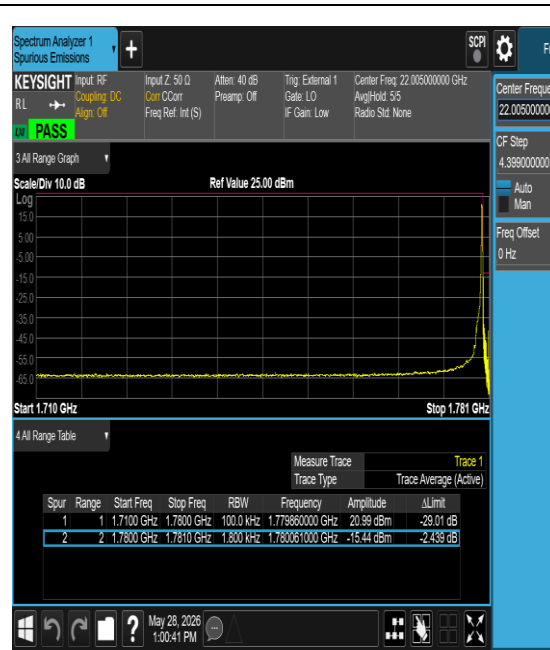
Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@0	-17.31	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@47	-24.44	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	131973	1@0	-17.92	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	131973	1@47	-24.73	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	-38.05	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@47	-15.44	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132670	1@0	-37.95	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132670	1@47	-16.00	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131973	1@0	-19.63	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131973	1@11	-17.63	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131973	12@0	-15.08	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	131973	1@0	-18.27	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	131973	1@11	-15.20	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	1@0	-34.21	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	1@11	-21.41	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	12@0	-31.25	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	-33.75	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132670	1@11	-18.90	PASS

Test Graphs





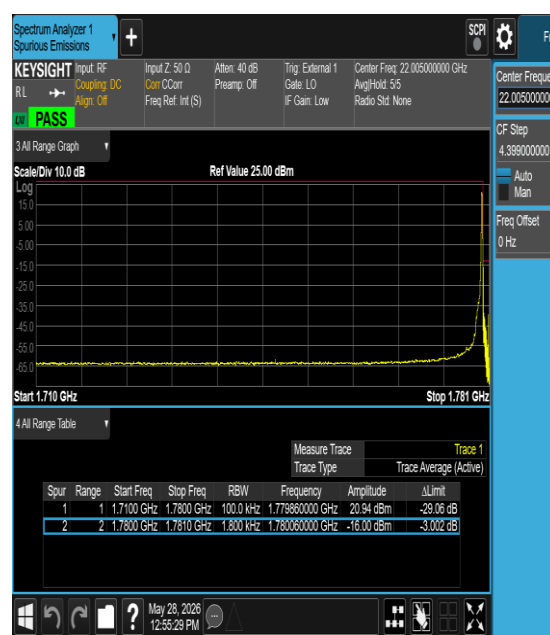
Band66-0.18-QPSK-132670-1@0-3.75kHz-
PASS



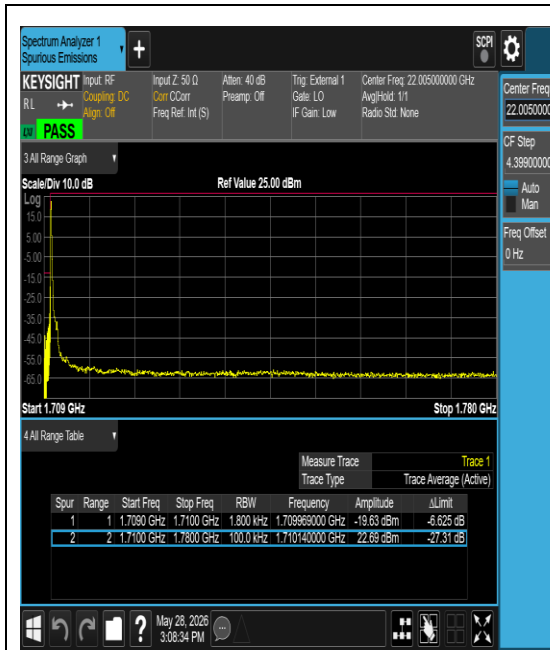
Band66-0.18-QPSK-132670-1@47-3.75kHz-
PASS



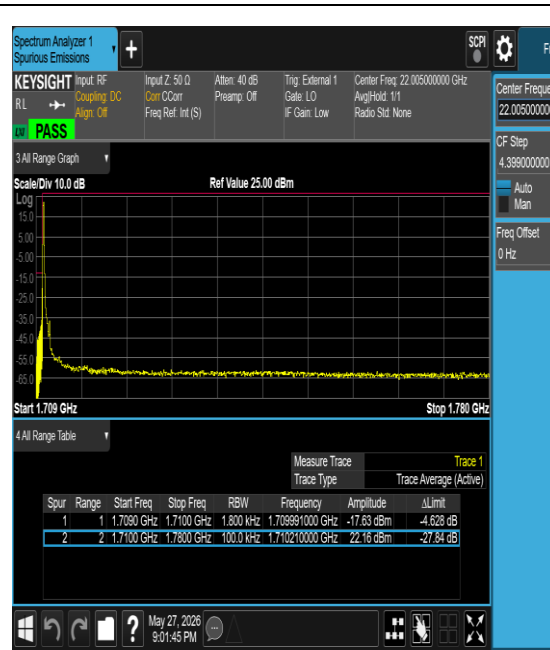
Band66-0.18-BPSK-132670-1@0-3.75kHz-
PASS



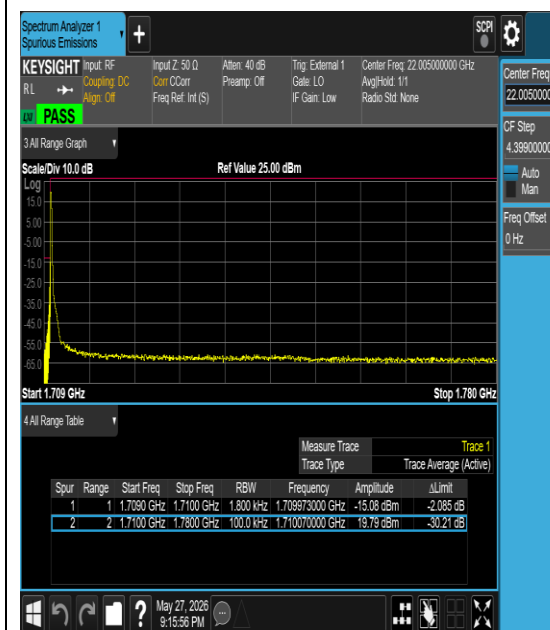
Band66-0.18-BPSK-132670-1@47-3.75kHz-
PASS



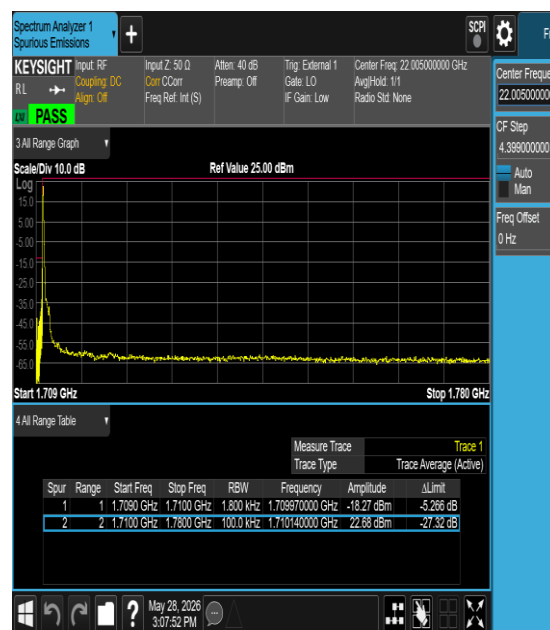
Band66-0.18-QPSK-131973-1@0-15kHz-PASS



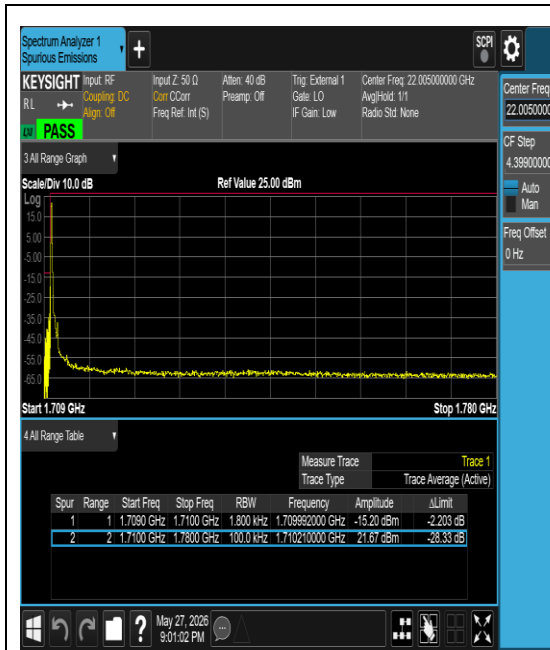
Band66-0.18-QPSK-131973-1@11-15kHz-PASS



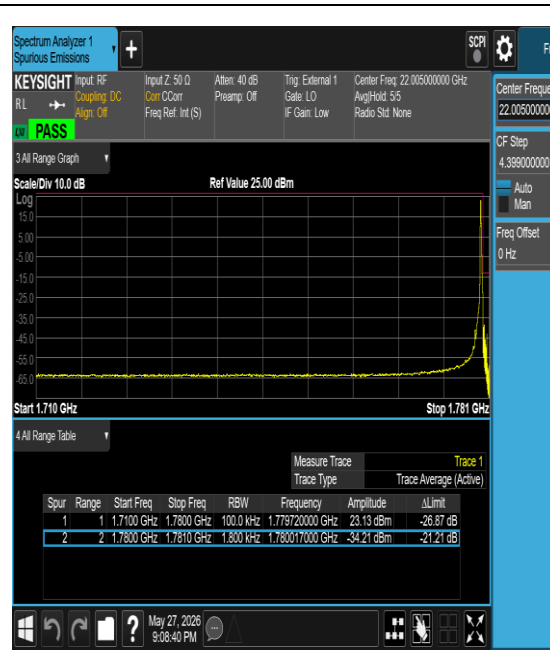
Band66-0.18-QPSK-131973-12@0-15kHz-PASS



Band66-0.18-BPSK-131973-1@0-15kHz-PASS



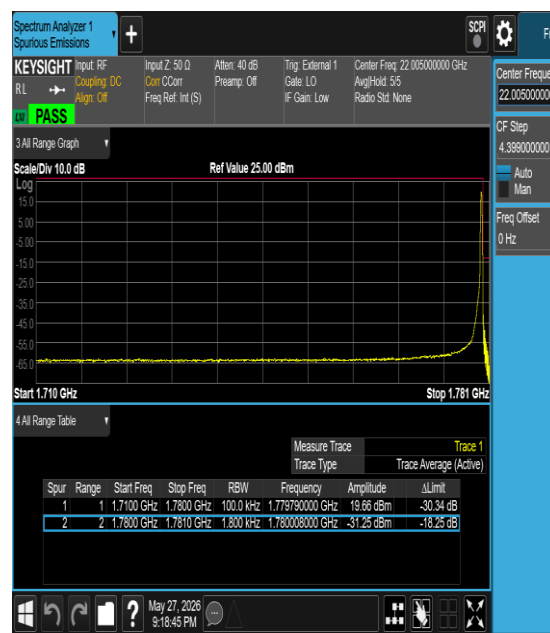
Band66-0.18-BPSK-131973-1@11-15kHz-PASS



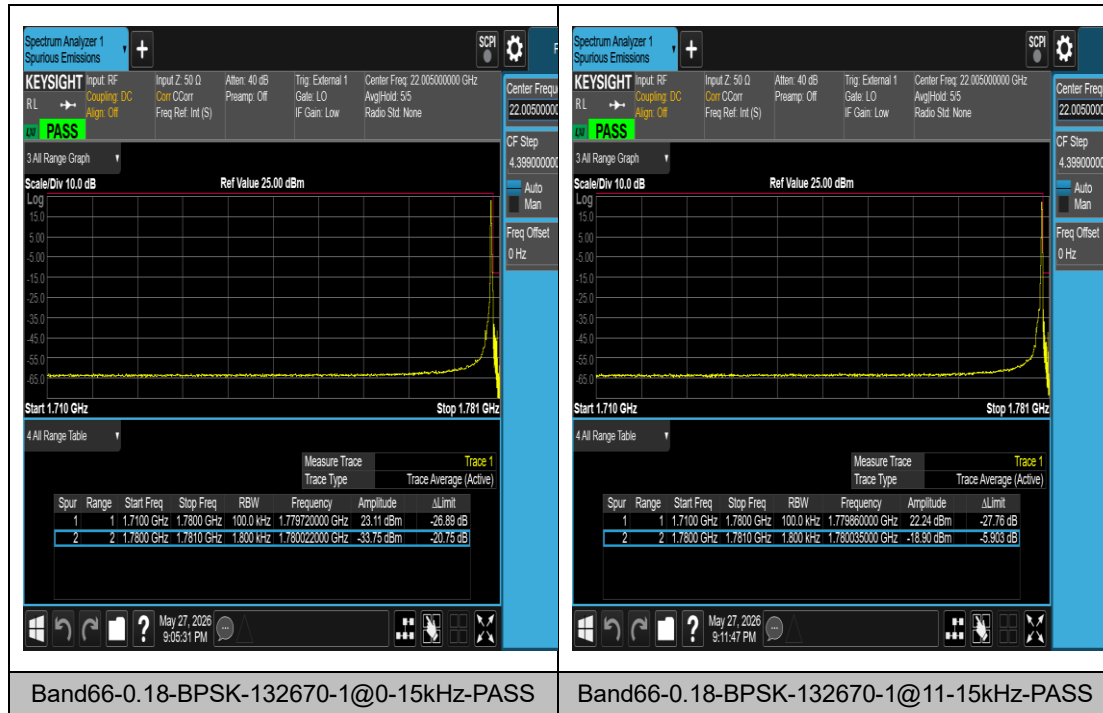
Band66-0.18-QPSK-132670-1@0-15kHz-PASS



Band66-0.18-QPSK-132670-1@11-15kHz-PASS



Band66-0.18-QPSK-132670-12@0-15kHz-PASS



Appendix E: Conducted Spurious Emission for NB1

Test Result

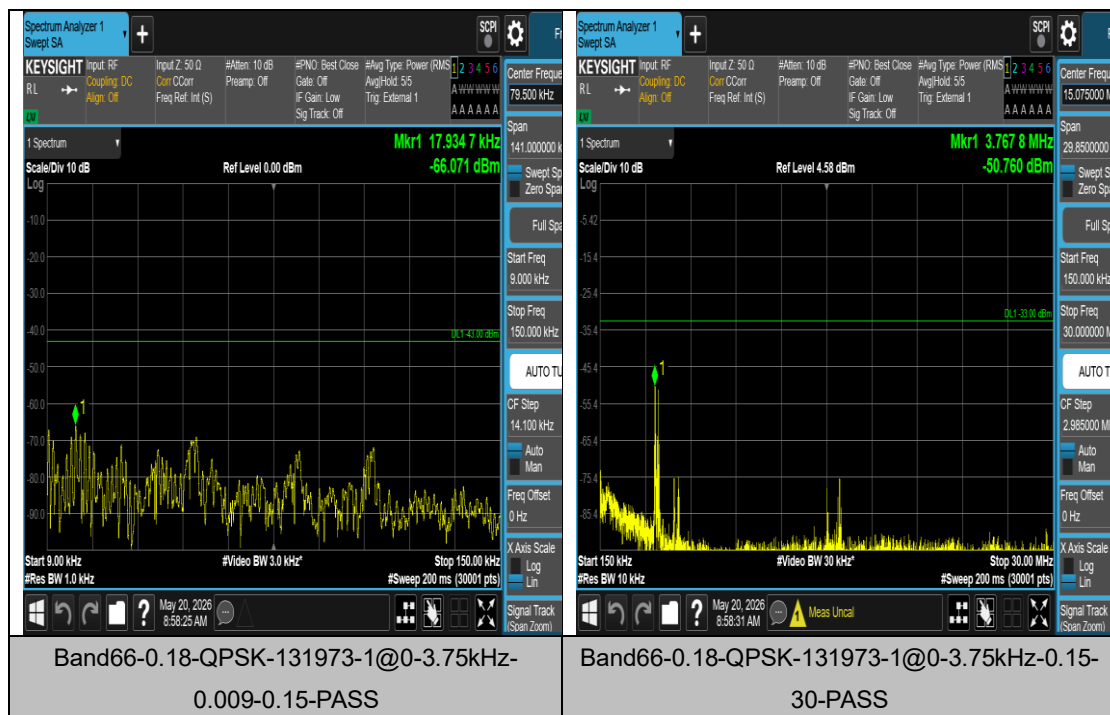
Band	OpMode	SCS	BW	Modulation	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Result (dBm)	Limit (dBm)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@0	0.009	0.15	-66.07	-43	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@0	0.15	30	-50.76	-33	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@0	30	1000	-56.93	-13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@0	1000	20000	-49.7	-13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@47	0.009	0.15	-63.74	-43	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@47	0.15	30	-51.57	-33	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@47	30	1000	-56.42	-13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131973	1@47	1000	20000	-49.6	-13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	0.009	0.15	-64	-43	PASS

Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	0.15	30	-76.84	-33	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	30	1000	-56.61	-13	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	1000	2000 0	-49.09	-13	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@47	0.009	0.15	-63.26	-43	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@47	0.15	30	-75.03	-33	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@47	30	1000	-56.62	-13	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@47	1000	2000 0	-49.11	-13	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	0.009	0.15	-61.77	-43	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	0.15	30	-69.94	-33	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	30	1000	-56.81	-13	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	1000	2000 0	-49.31	-13	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@47	0.009	0.15	-62.57	-43	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@47	0.15	30	-75.82	-33	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@47	30	1000	-56.95	-13	PASS
Band6 6	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@47	1000	2000 0	-49.58	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	131973	12@0	0.009	0.15	-64.64	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	131973	12@0	0.15	30	-53.08	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	131973	12@0	30	1000	-55.93	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	131973	12@0	1000	2000 0	-49.54	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@0	0.009	0.15	-69.98	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@0	0.15	30	-53.88	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@0	30	1000	-56.93	-13	PASS

Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@0	1000	2000 0	-49.44	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@11	0.009	0.15	-68.54	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@11	0.15	30	-68.13	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@11	30	1000	-56.61	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	131973	1@11	1000	2000 0	-49.56	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	0.009	0.15	-61.91	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	0.15	30	-76.71	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	30	1000	-56.89	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	1000	2000 0	-49.66	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	0.009	0.15	-71.19	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	0.15	30	-72.74	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	30	1000	-55.88	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	1000	2000 0	-49.62	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@11	0.009	0.15	-69.17	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@11	0.15	30	-66.38	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@11	30	1000	-56.84	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132322	1@11	1000	2000 0	-49.65	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132670	12@0	0.009	0.15	-63.02	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132670	12@0	0.15	30	-77.12	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132670	12@0	30	1000	-56.8	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	QPSK	132670	12@0	1000	2000 0	-49.63	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	0.009	0.15	-69.76	-43	PASS

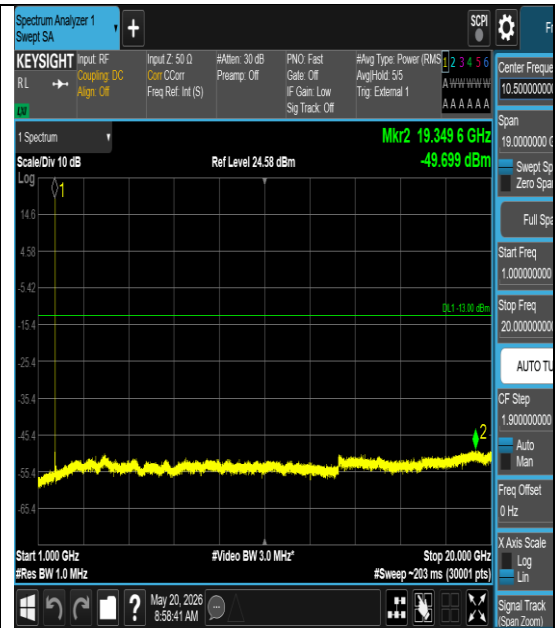
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	0.15	30	-78.4	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	30	1000	-56.73	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	1000	2000 0	-49.64	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@11	0.009	0.15	-67.9	-43	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@11	0.15	30	-71.79	-33	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@11	30	1000	-56.81	-13	PASS
Band6 6	Stand-Alone	15kHz	0.18	BPSK	132670	1@11	1000	2000 0	-49.71	-13	PASS

Test Graphs

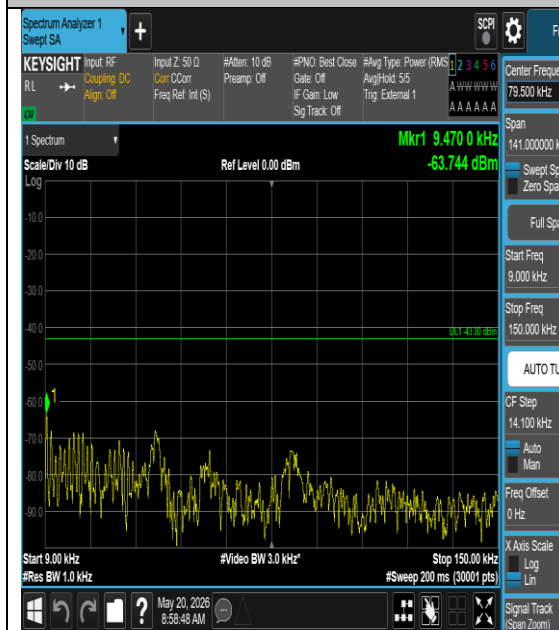




Band66-0.18-QPSK-131973-1@0-3.75kHz-30-1000-PASS



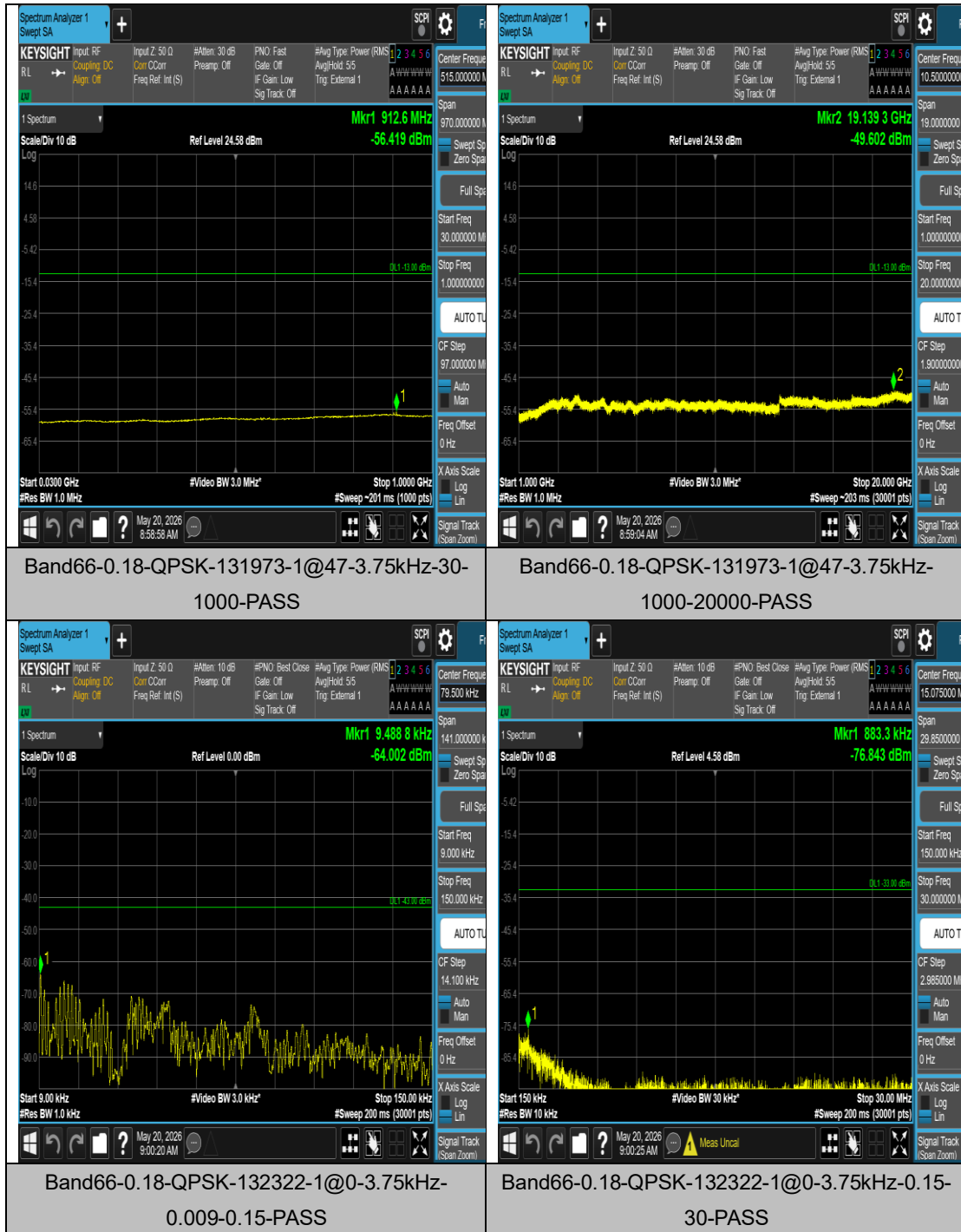
Band66-0.18-QPSK-131973-1@0-3.75kHz-1000-20000-PASS

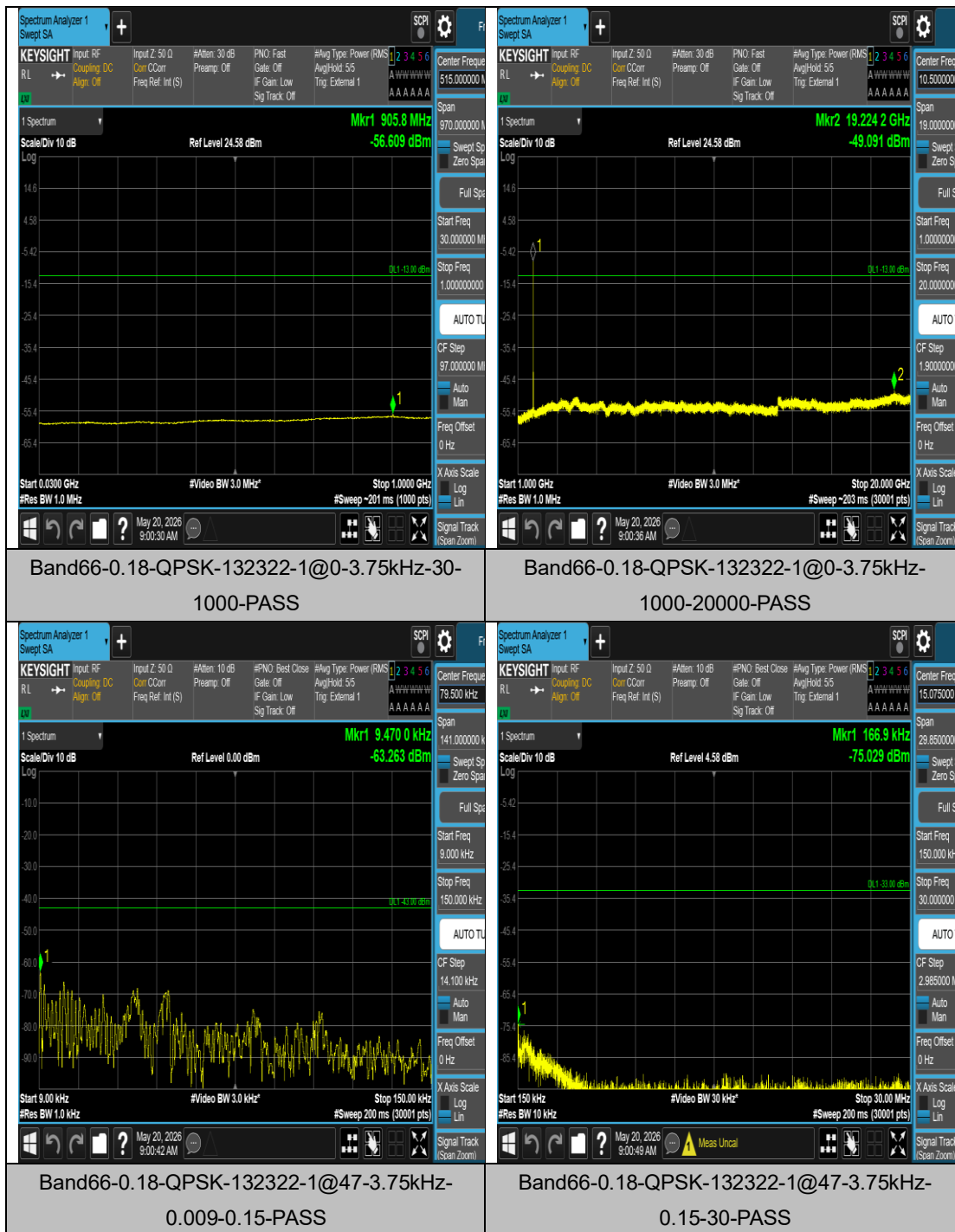


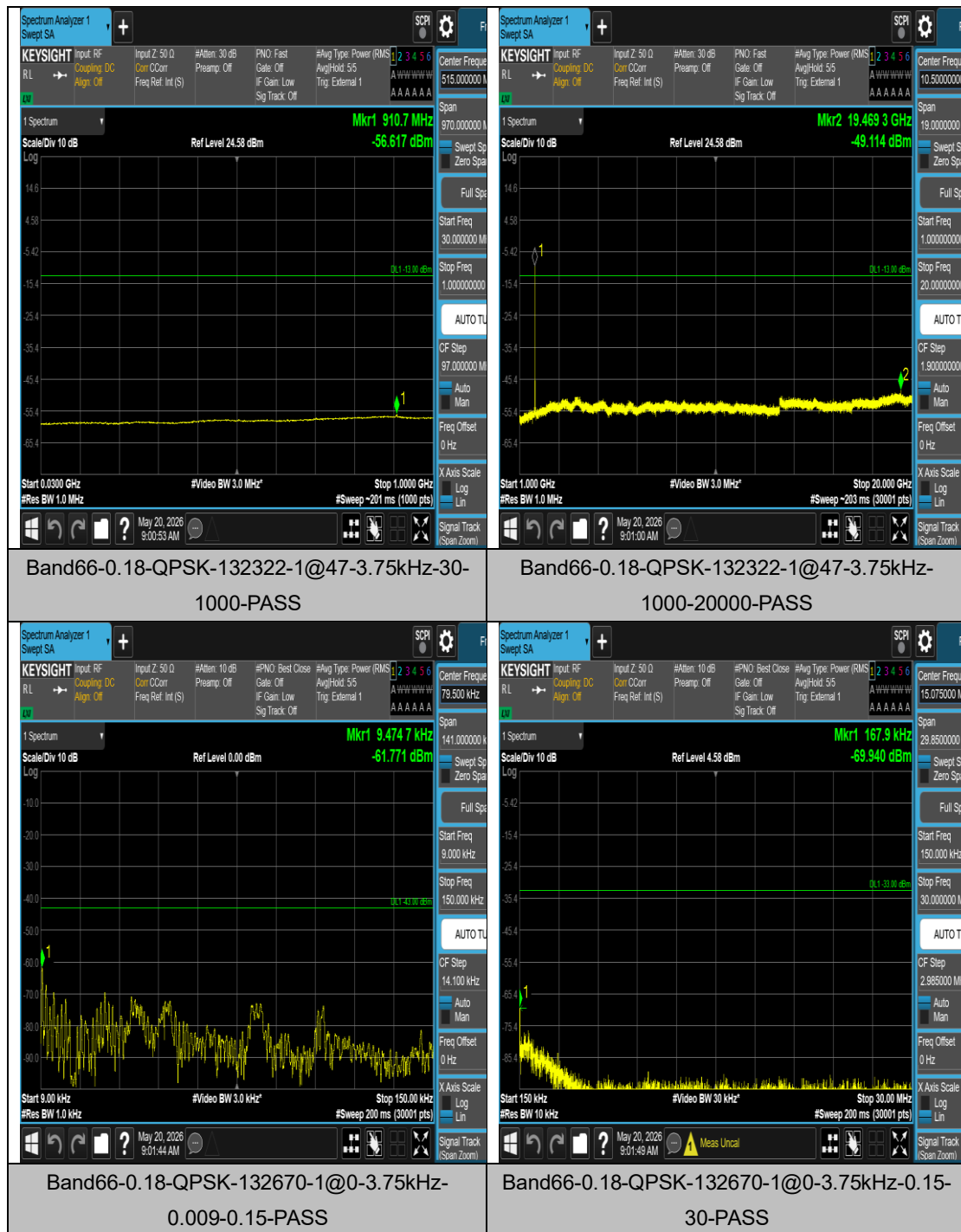
Band66-0.18-QPSK-131973-1@47-3.75kHz-0.009-0.15-PASS



Band66-0.18-QPSK-131973-1@47-3.75kHz-0.15-30-PASS

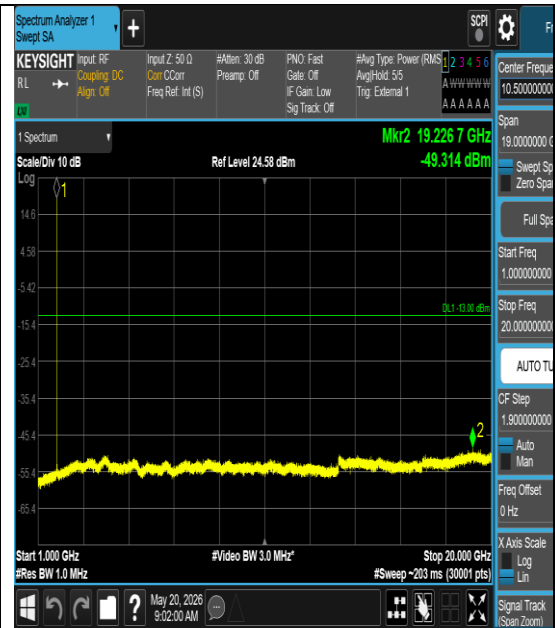




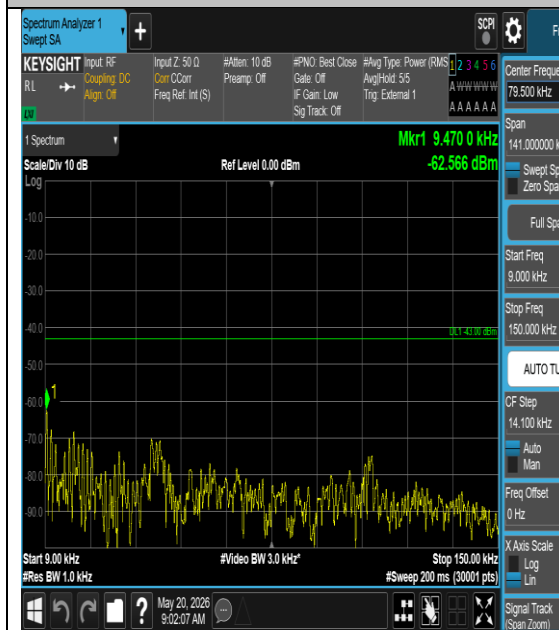




Band66-0.18-QPSK-132670-1@0-3.75kHz-30-1000-PASS



Band66-0.18-QPSK-132670-1@0-3.75kHz-1000-20000-PASS



Band66-0.18-QPSK-132670-1@47-3.75kHz-0.009-0.15-PASS



Band66-0.18-QPSK-132670-1@47-3.75kHz-0.15-30-PASS

