

Appendix for Band 4

Product Name: Smart Light Controller
Model No: SLC-N-500-NB

Appendix A: Average Power Output Data

Test Result

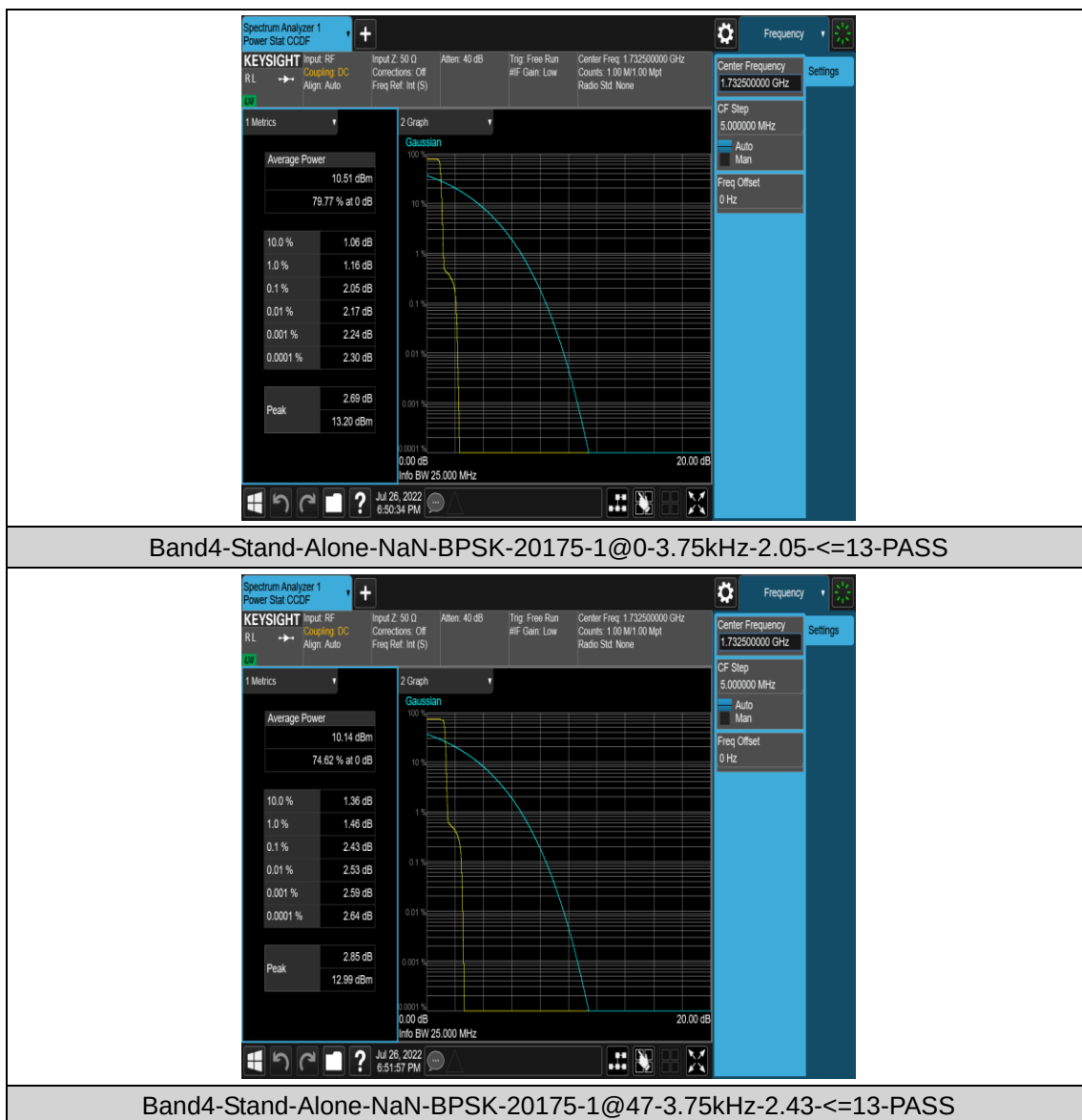
Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band4	Stand-Alone	3.75kHz	NaN	BPSK	19951	1@0	21.69	PASS
Band4	Stand-Alone	3.75kHz	NaN	BPSK	19951	1@47	21.68	PASS
Band4	Stand-Alone	3.75kHz	NaN	BPSK	20175	1@0	21.45	PASS
Band4	Stand-Alone	3.75kHz	NaN	BPSK	20175	1@47	21.42	PASS
Band4	Stand-Alone	3.75kHz	NaN	BPSK	20399	1@0	21.53	PASS
Band4	Stand-Alone	3.75kHz	NaN	BPSK	20399	1@47	21.35	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	19951	1@0	21.80	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	19951	1@47	21.68	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	20175	1@0	21.56	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	20175	1@47	21.48	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	20399	1@0	21.52	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	20399	1@47	21.44	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	19951	1@0	21.15	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	19951	1@11	21.02	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	19951	3@3	20.96	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20175	1@0	20.87	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20175	1@11	20.83	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20175	3@3	20.71	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20399	1@0	20.92	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20399	1@11	20.82	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20399	3@3	20.75	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	19951	1@0	21.22	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	19951	1@11	21.11	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	19951	3@3	20.97	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20175	1@0	20.98	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20175	1@11	20.92	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20175	3@3	20.71	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20399	1@0	21.02	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20399	1@11	20.91	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20399	3@3	20.75	PASS

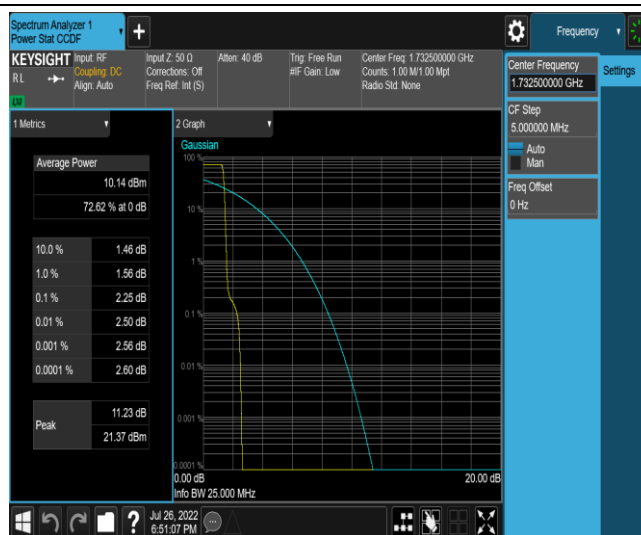
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

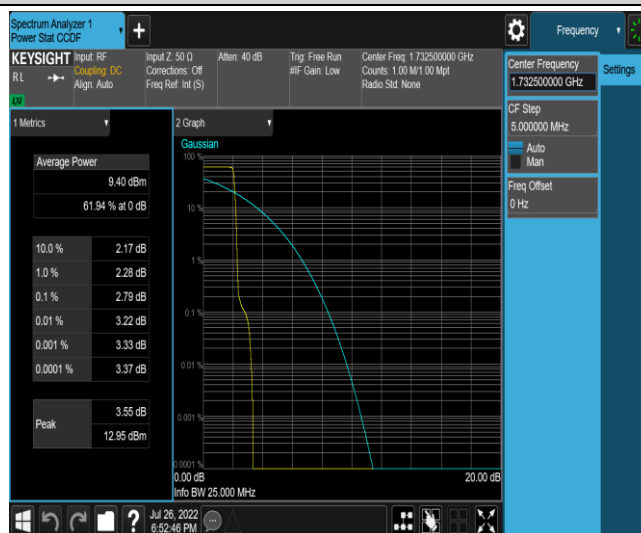
Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band4	Stand-Alone	3.75kHz	NaN	BPSK	20175	1@0	2.05	<=13	PASS
Band4	Stand-Alone	3.75kHz	NaN	BPSK	20175	1@47	2.43	<=13	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	20175	1@0	2.25	<=13	PASS
Band4	Stand-Alone	3.75kHz	NaN	QPSK	20175	1@47	2.79	<=13	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20175	1@0	4.73	<=13	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20175	1@11	3.79	<=13	PASS
Band4	Stand-Alone	15kHz	NaN	BPSK	20175	3@3	8.55	<=13	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20175	1@0	5.28	<=13	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20175	1@11	5.64	<=13	PASS
Band4	Stand-Alone	15kHz	NaN	QPSK	20175	3@3	11.01	<=13	PASS

Test Graphs

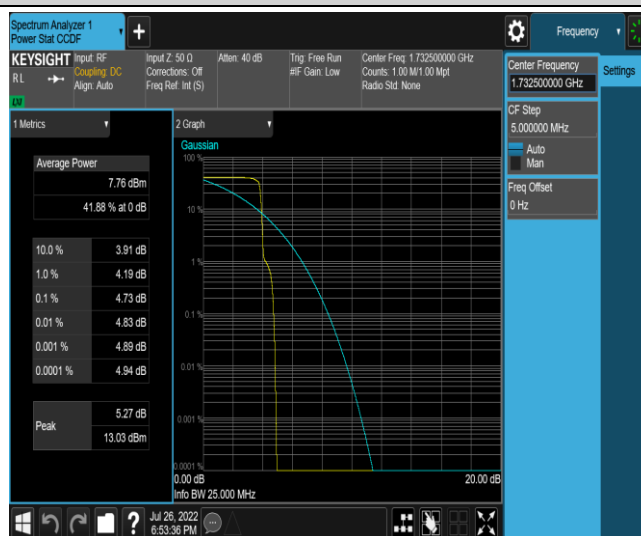




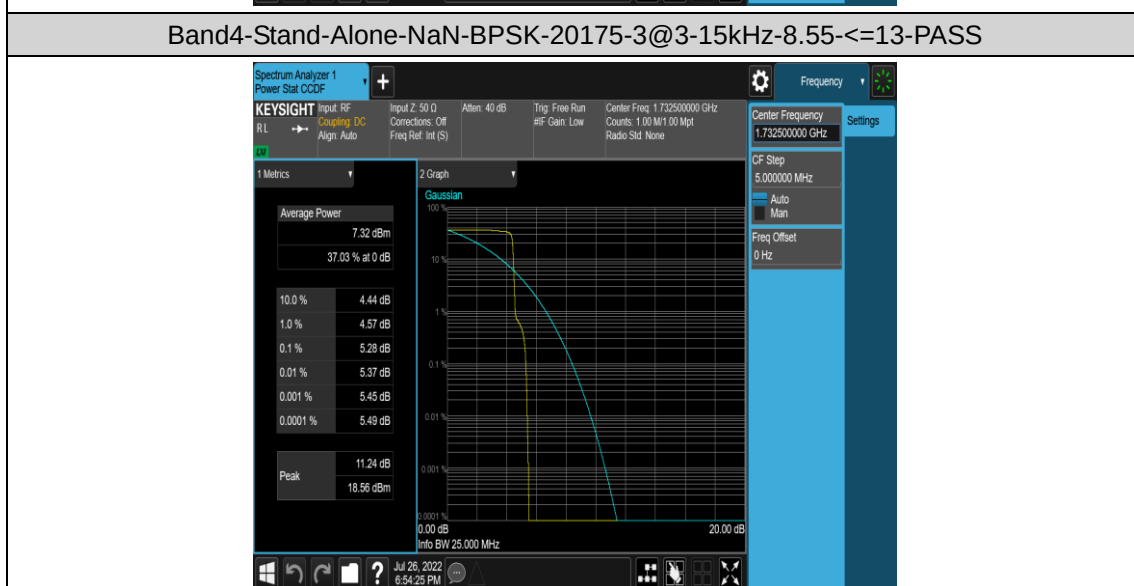
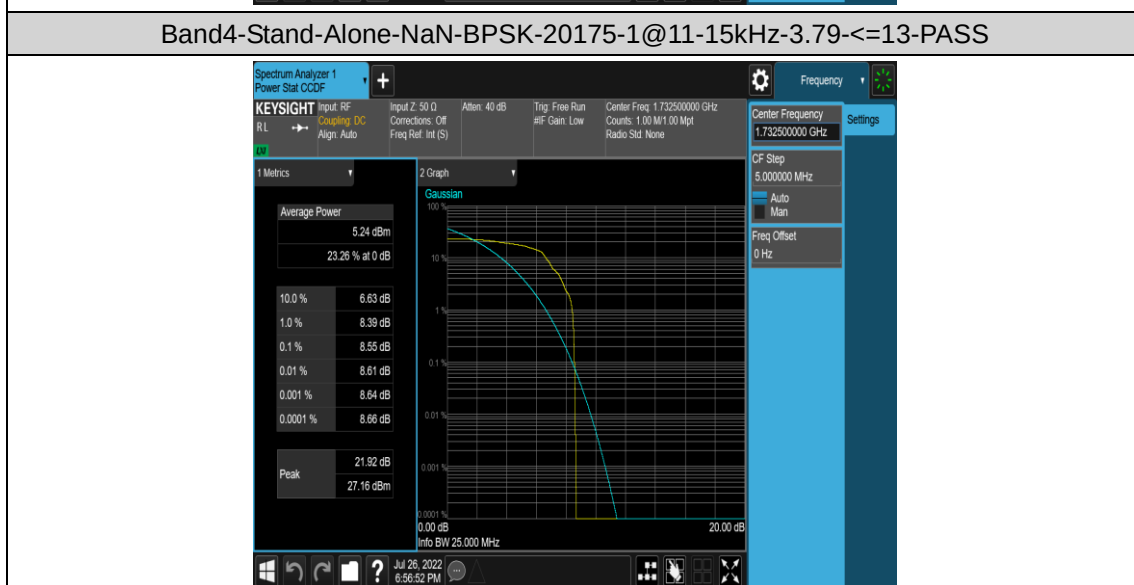
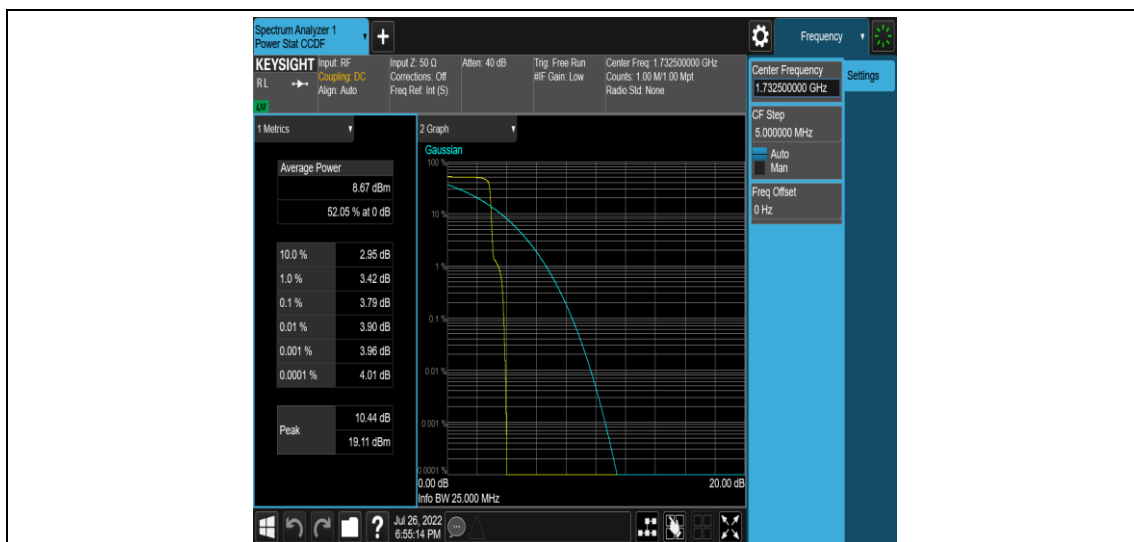
Band4-Stand-Alone-NaN-QPSK-20175-1@0-3.75kHz-2.25-<=13-PASS

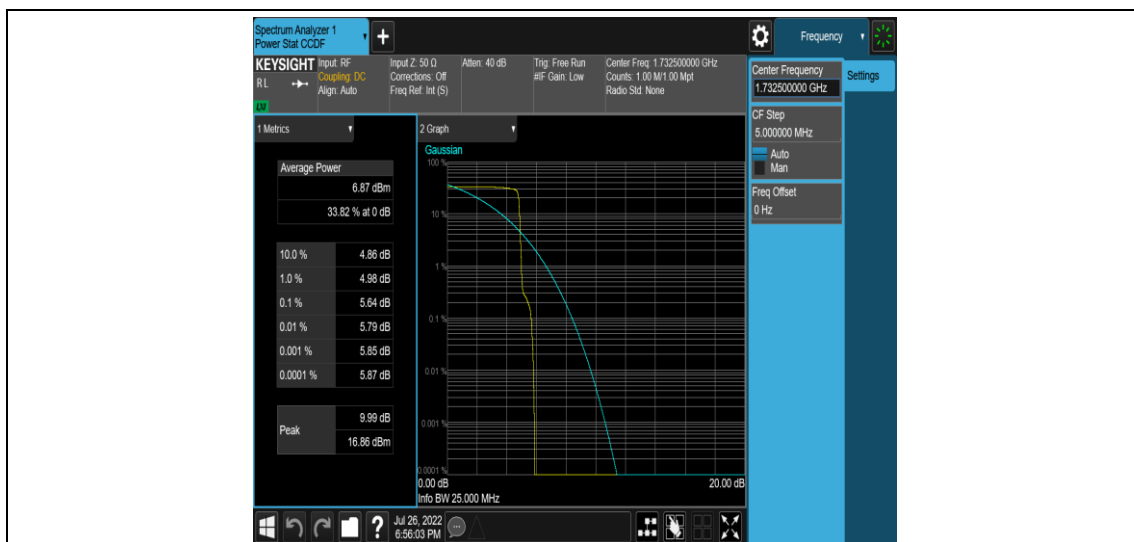


Band4-Stand-Alone-NaN-QPSK-20175-1@47-3.75kHz-2.79-<=13-PASS



Band4-Stand-Alone-NaN-BPSK-20175-1@0-15kHz-4.73-<=13-PASS





Band4-Stand-Alone-NaN-QPSK-20175-1@11-15kHz-5.64-<=13-PASS



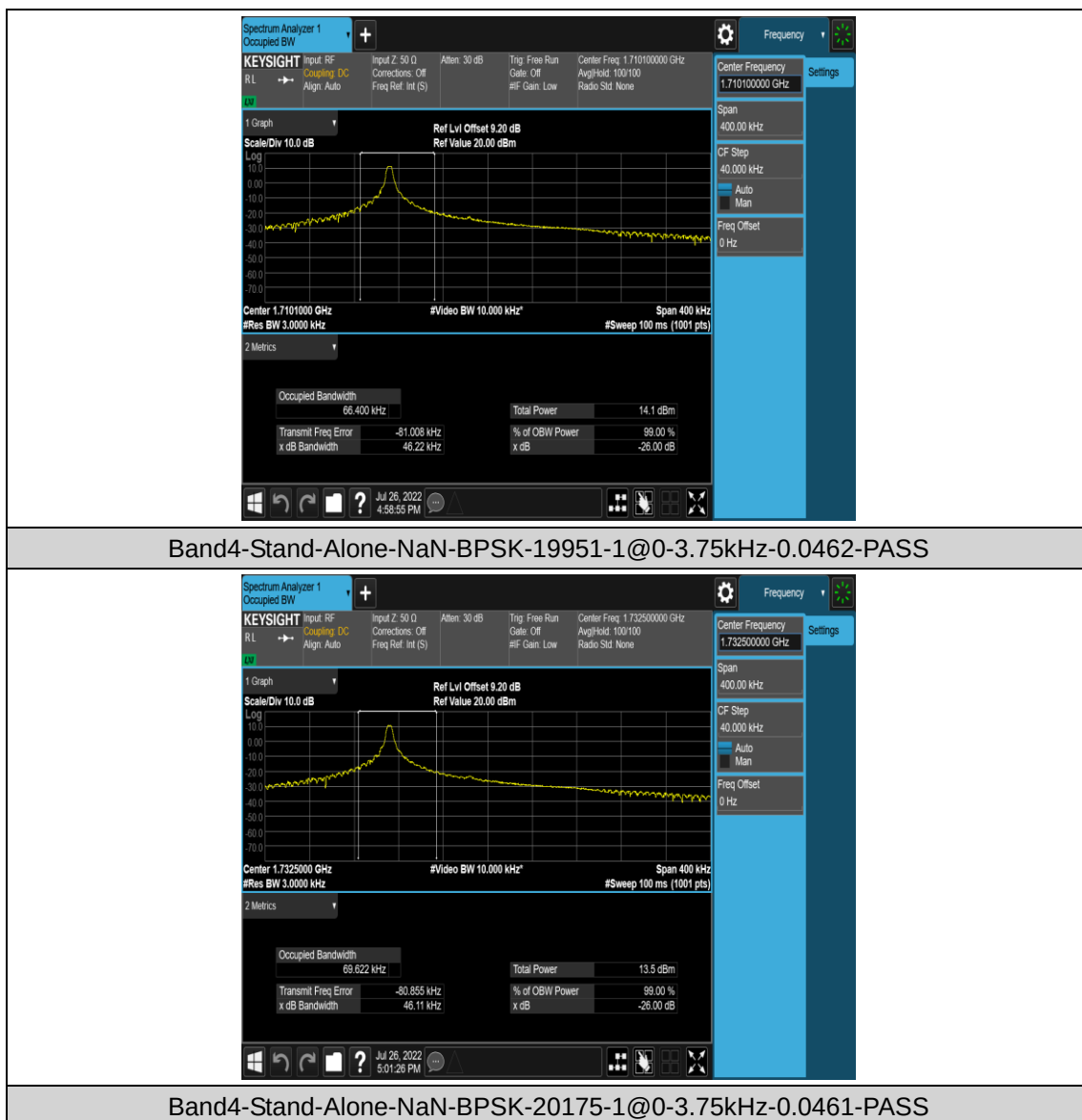
Band4-Stand-Alone-NaN-QPSK-20175-3@3-15kHz-11.01-<=13-PASS

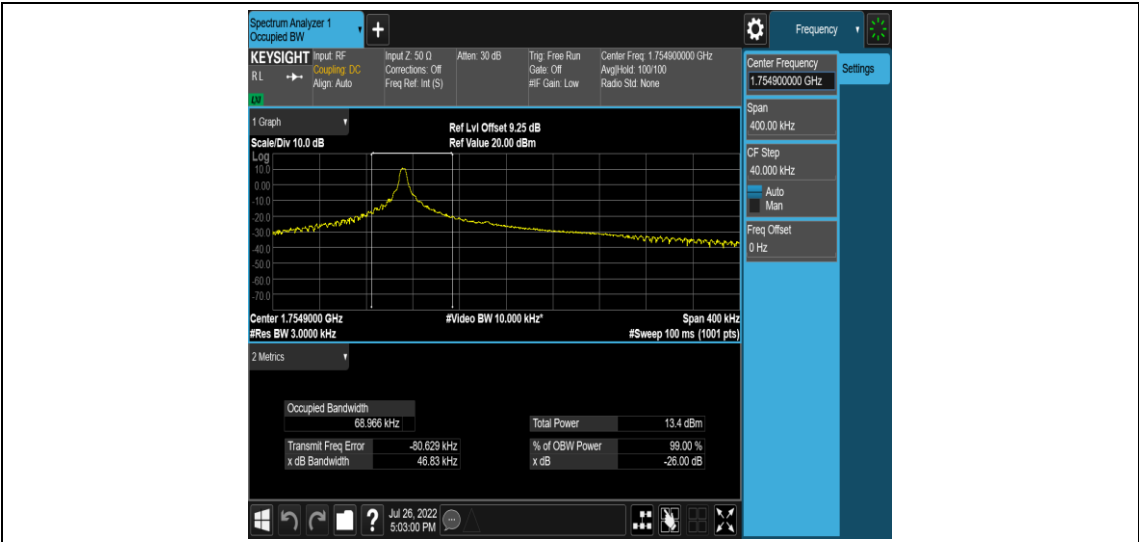
Appendix C: Emission Bandwidth

Test Result

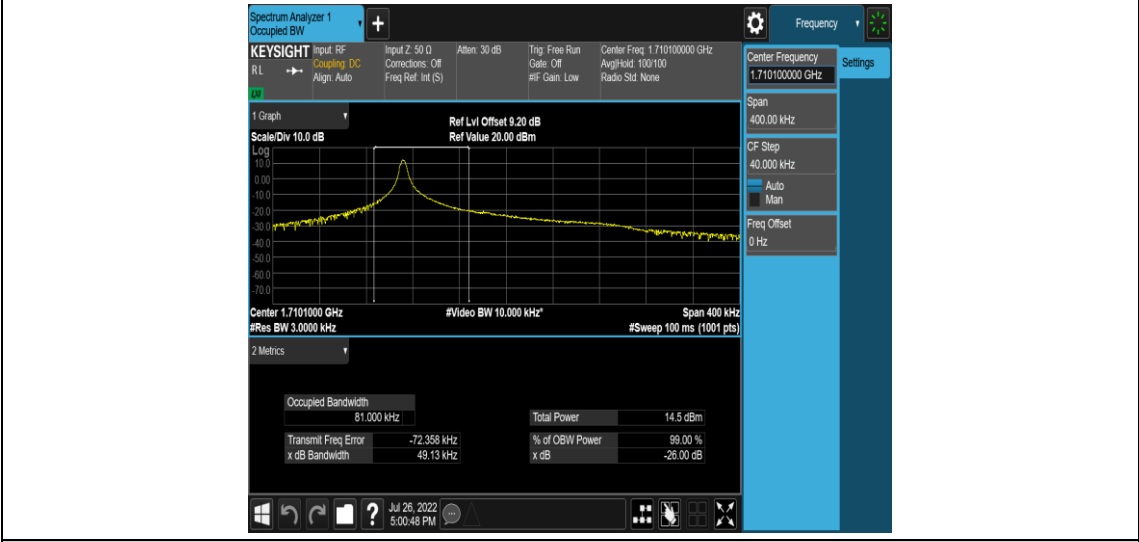
Band	SCS	BW	Modu	Channel	Tones	Result (MHz)	Verdict
Band4	3.75kHz	NaN	BPSK	19951	1@0	0.0462	PASS
Band4	3.75kHz	NaN	BPSK	20175	1@0	0.0461	PASS
Band4	3.75kHz	NaN	BPSK	20399	1@0	0.0468	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@0	0.0491	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@0	0.0489	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	0.0480	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	0.1040	PASS
Band4	15kHz	NaN	BPSK	19951	12@0	0.2489	PASS
Band4	15kHz	NaN	BPSK	20175	1@0	0.1057	PASS
Band4	15kHz	NaN	BPSK	20175	12@0	0.2584	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	0.1042	PASS
Band4	15kHz	NaN	BPSK	20399	12@0	0.2481	PASS
Band4	15kHz	NaN	QPSK	19951	1@0	0.1292	PASS
Band4	15kHz	NaN	QPSK	19951	12@0	0.2483	PASS
Band4	15kHz	NaN	QPSK	20175	1@0	0.1173	PASS
Band4	15kHz	NaN	QPSK	20175	12@0	0.2503	PASS
Band4	15kHz	NaN	QPSK	20399	1@0	0.1154	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	0.2462	PASS

Test Graphs

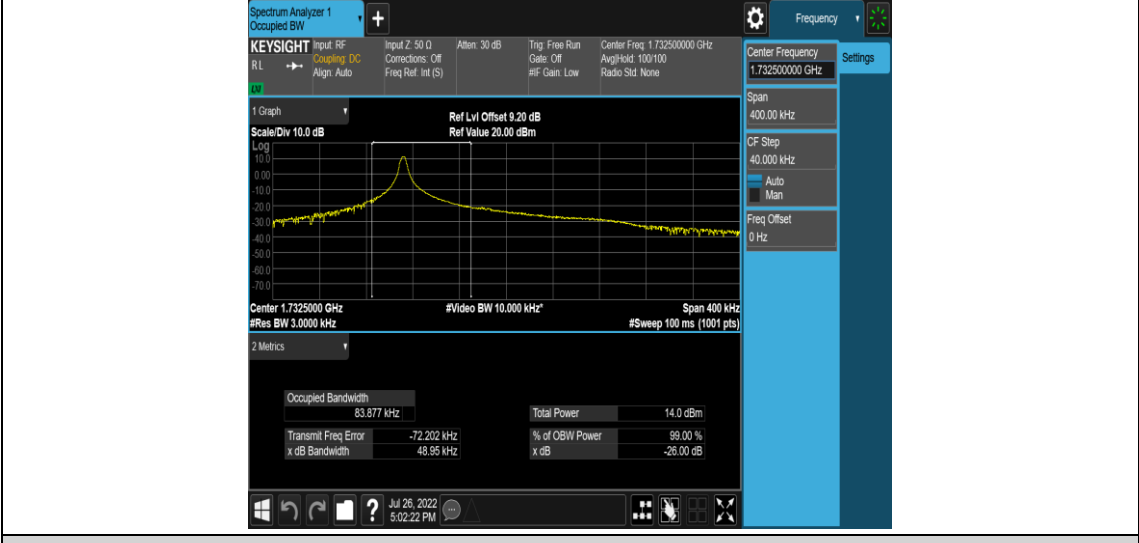




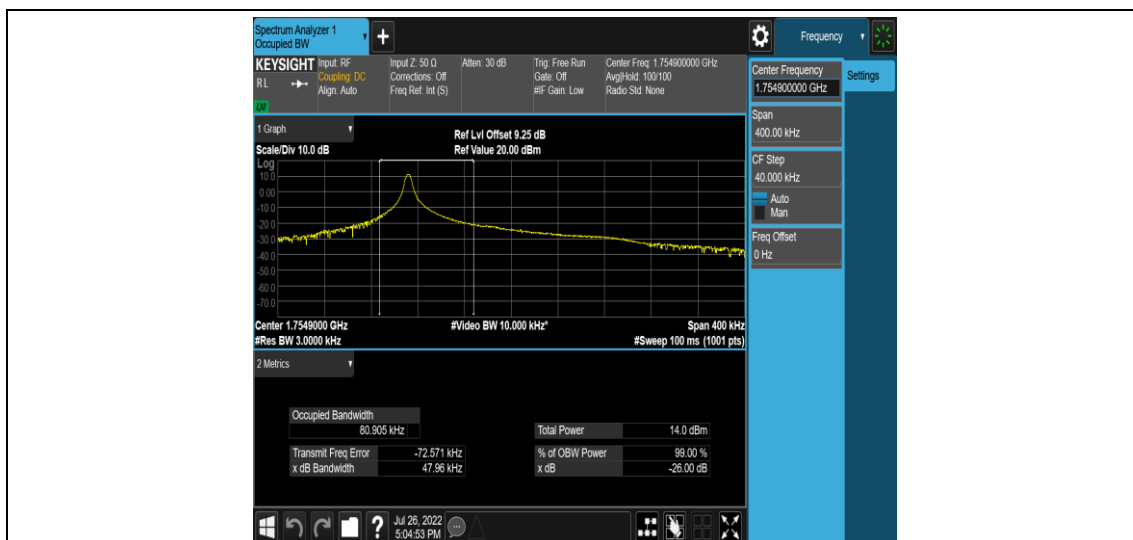
Band4-Stand-Alone-NaN-BPSK-20399-1@0-3.75kHz-0.0468-PASS



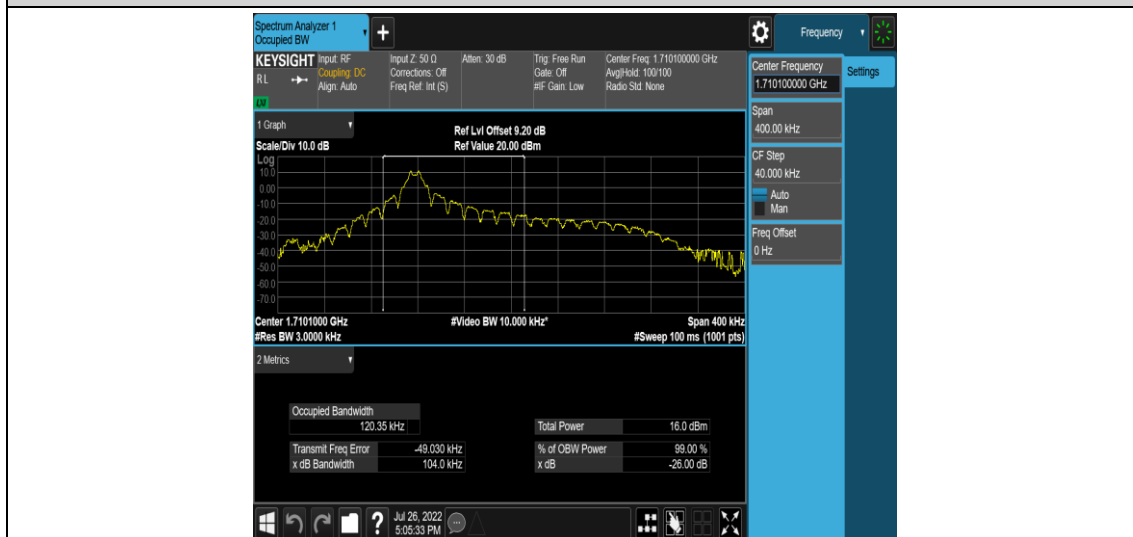
Band4-Stand-Alone-NaN-QPSK-19951-1@0-3.75kHz-0.0491-PASS



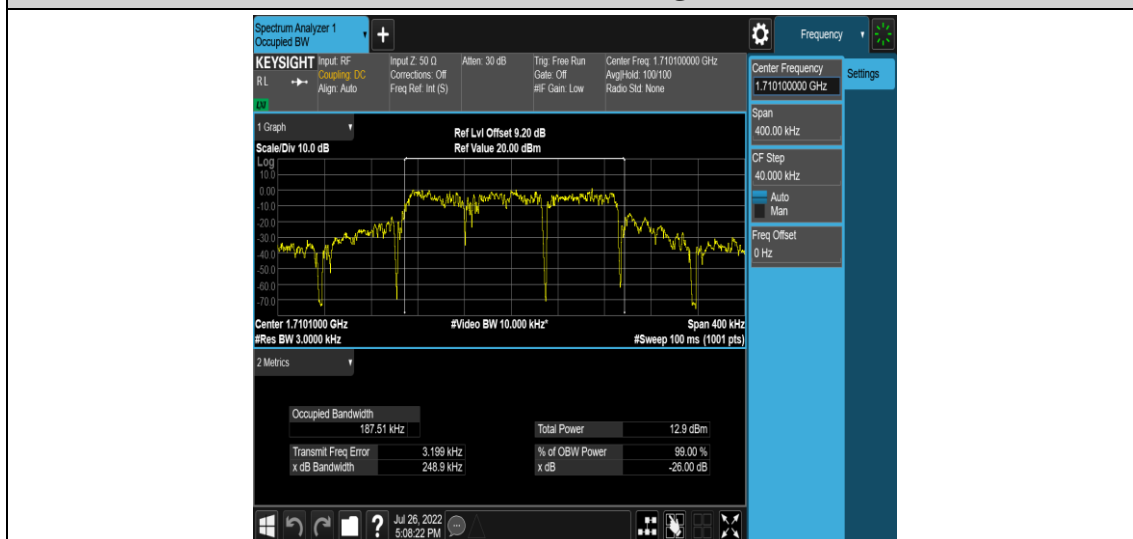
Band4-Stand-Alone-NaN-QPSK-20175-1@0-3.75kHz-0.0489-PASS



Band4-Stand-Alone-NaN-QPSK-20399-1@0-3.75kHz-0.0480-PASS



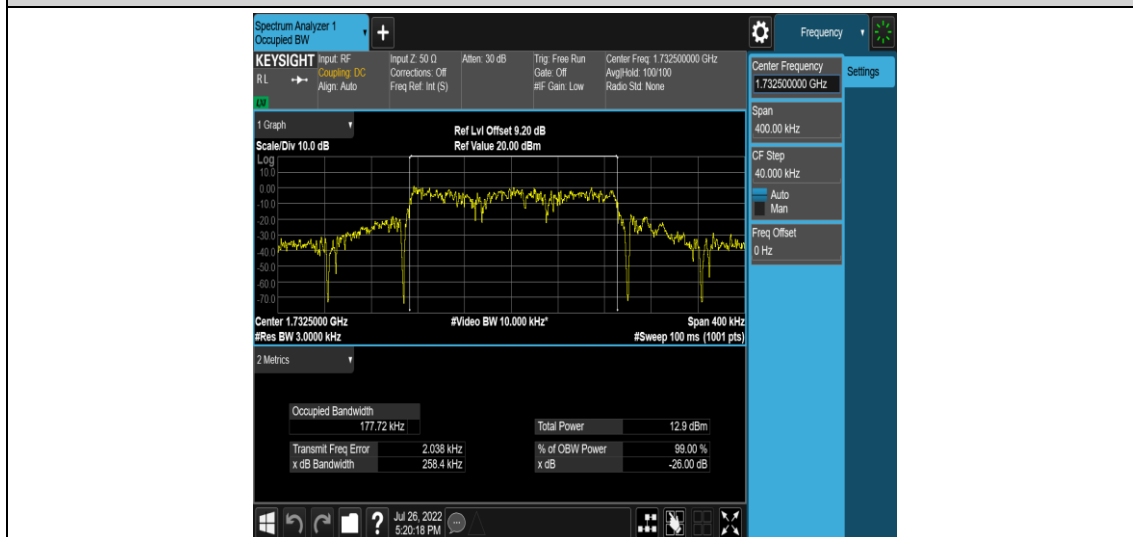
Band4-Stand-Alone-NaN-BPSK-19951-1@0-15kHz-0.1040-PASS



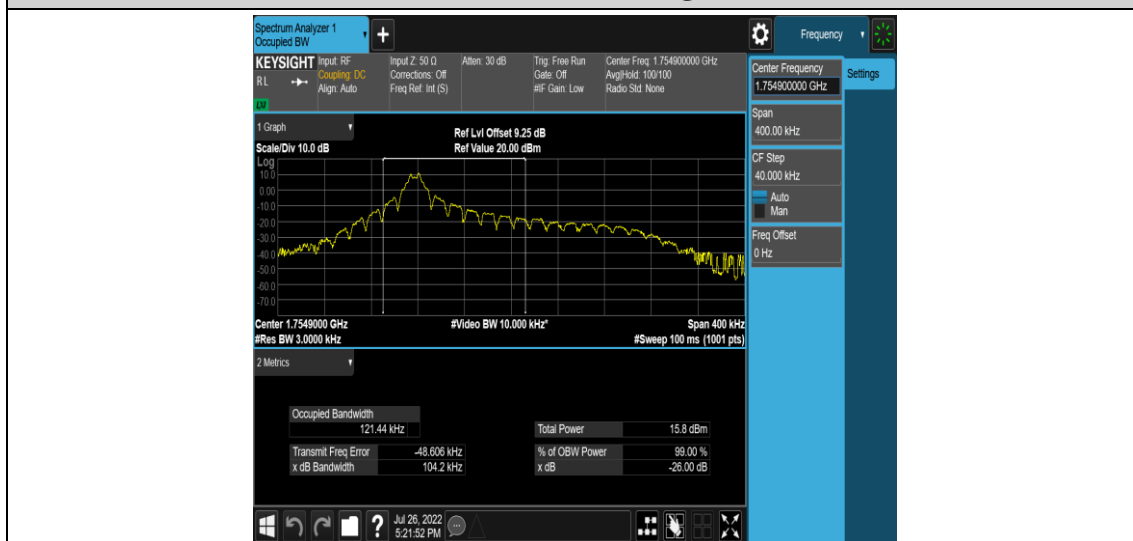
Band4-Stand-Alone-NaN-BPSK-19951-12@0-15kHz-0.2489-PASS



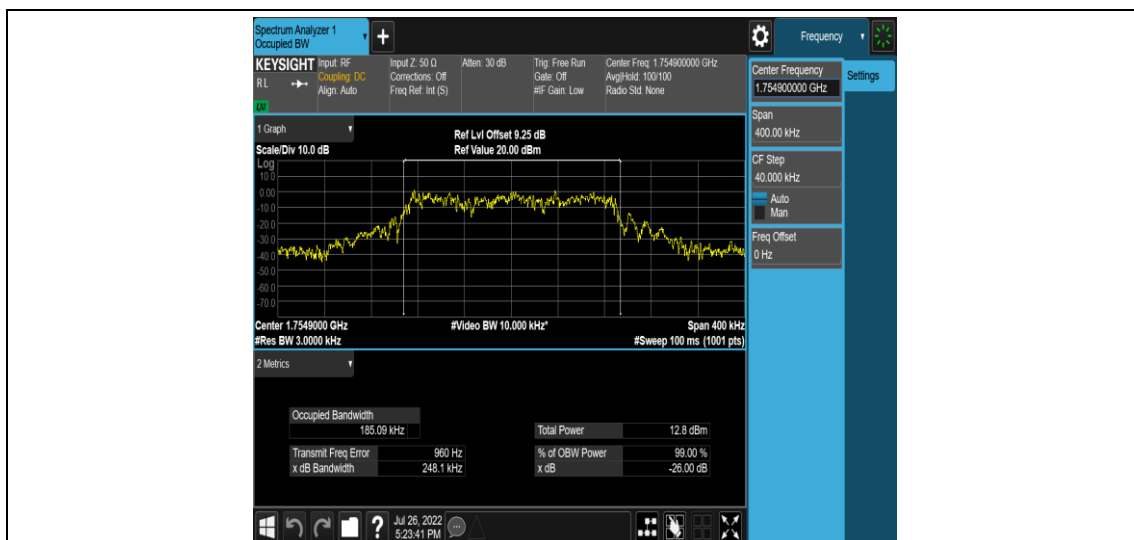
Band4-Stand-Alone-NaN-BPSK-20175-1@0-15kHz-0.1057-PASS



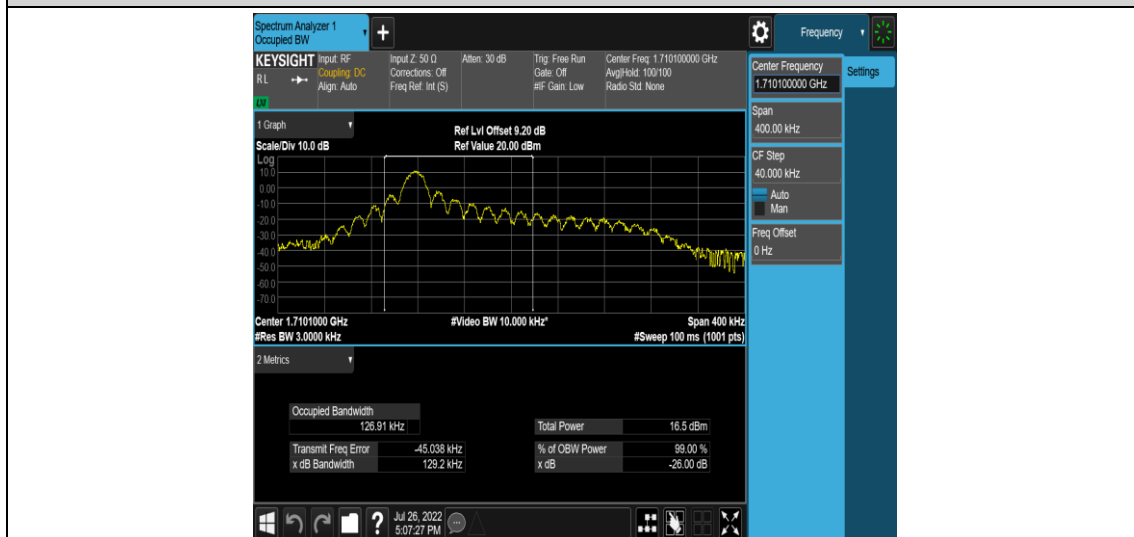
Band4-Stand-Alone-NaN-BPSK-20175-12@0-15kHz-0.2584-PASS



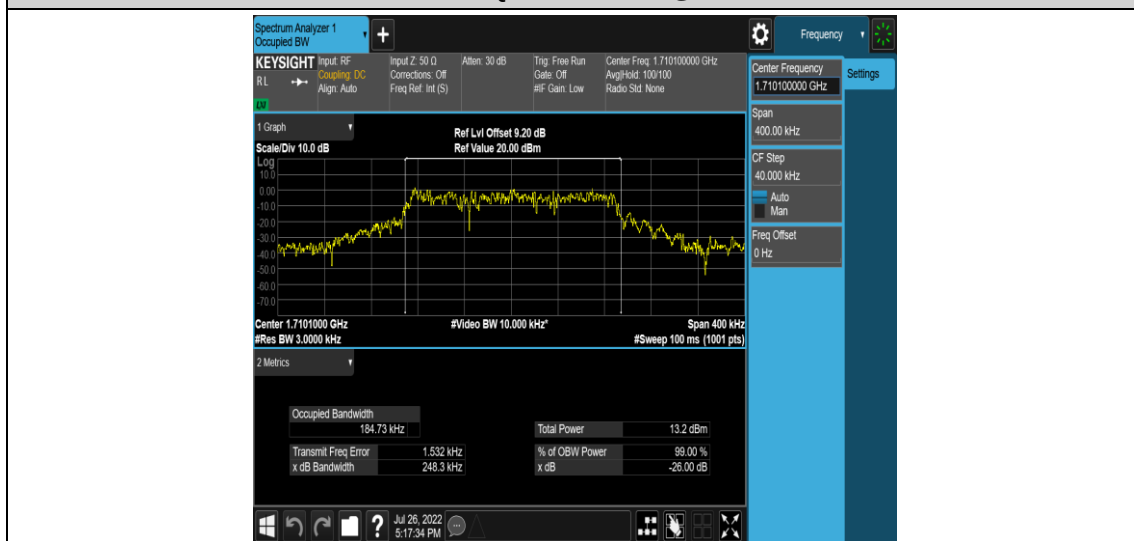
Band4-Stand-Alone-NaN-BPSK-20399-1@0-15kHz-0.1042-PASS



Band4-Stand-Alone-NaN-BPSK-20399-12@0-15kHz-0.2481-PASS



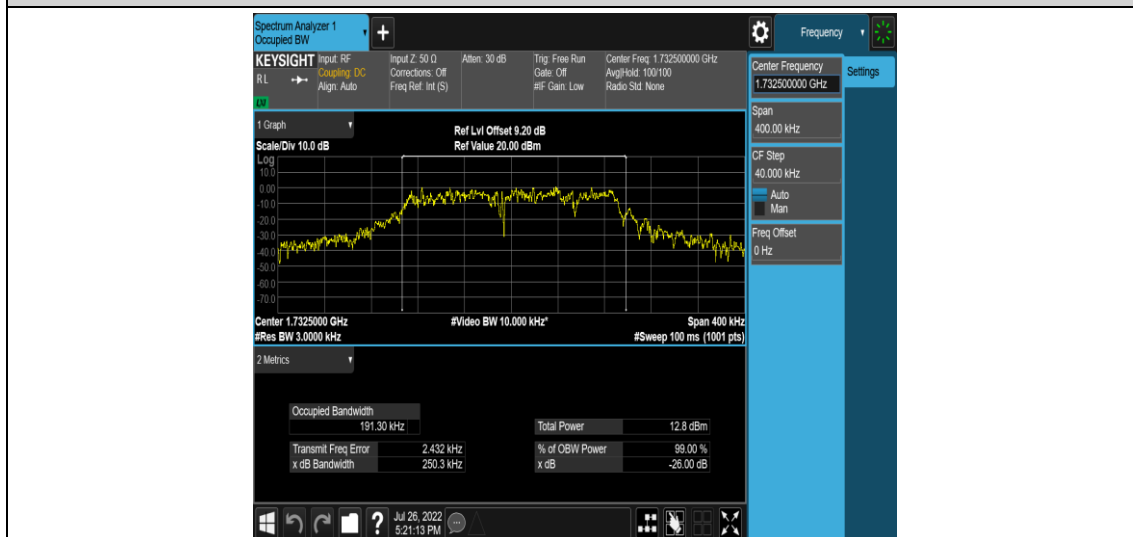
Band4-Stand-Alone-NaN-QPSK-19951-1@0-15kHz-0.1292-PASS



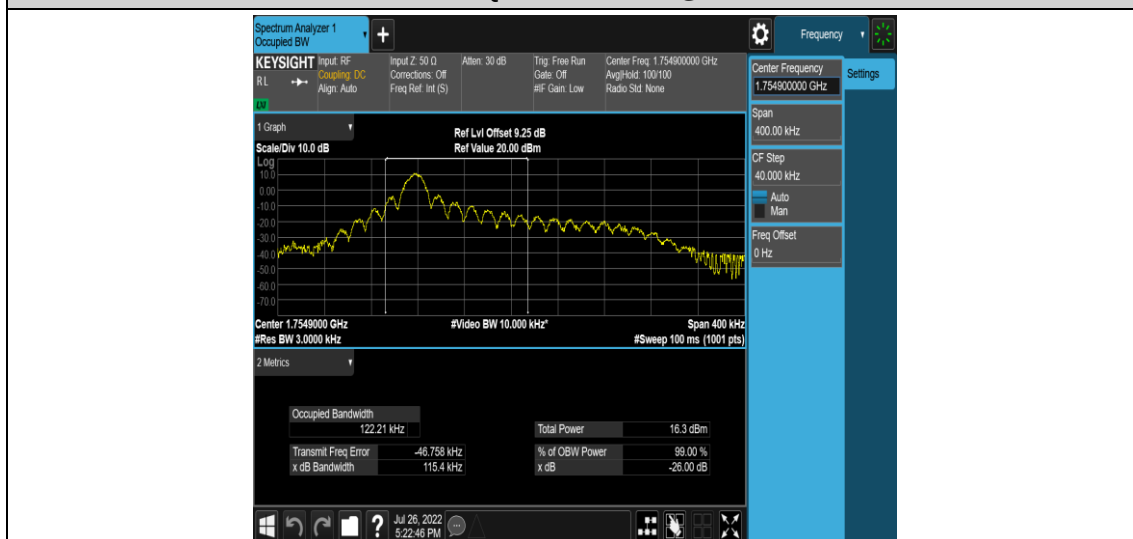
Band4-Stand-Alone-NaN-QPSK-19951-12@0-15kHz-0.2483-PASS



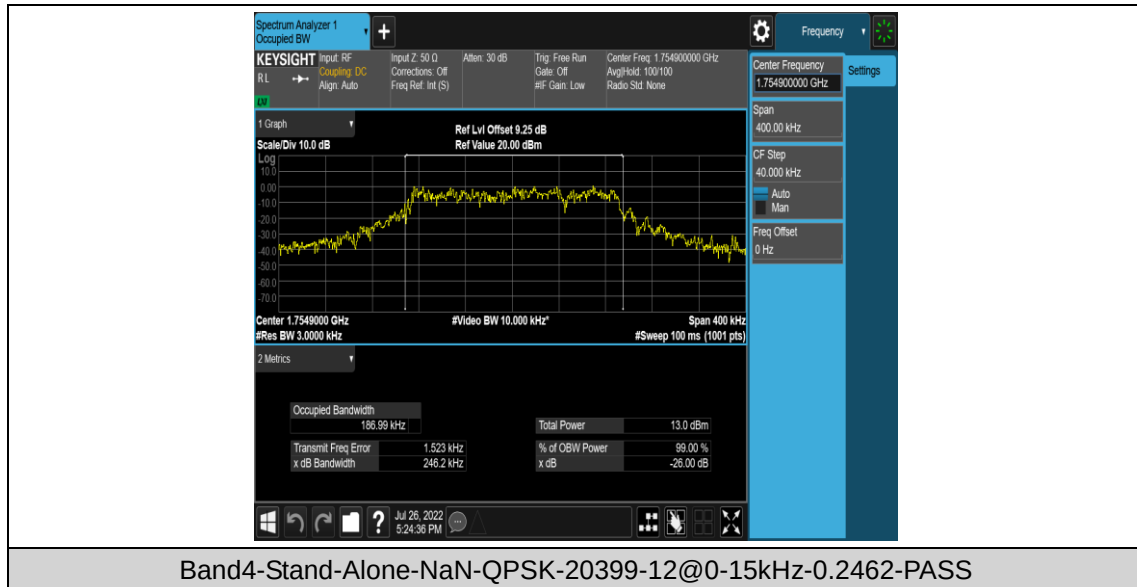
Band4-Stand-Alone-NaN-QPSK-20175-1@0-15kHz-0.1173-PASS



Band4-Stand-Alone-NaN-QPSK-20175-12@0-15kHz-0.2503-PASS



Band4-Stand-Alone-NaN-QPSK-20399-1@0-15kHz-0.1154-PASS

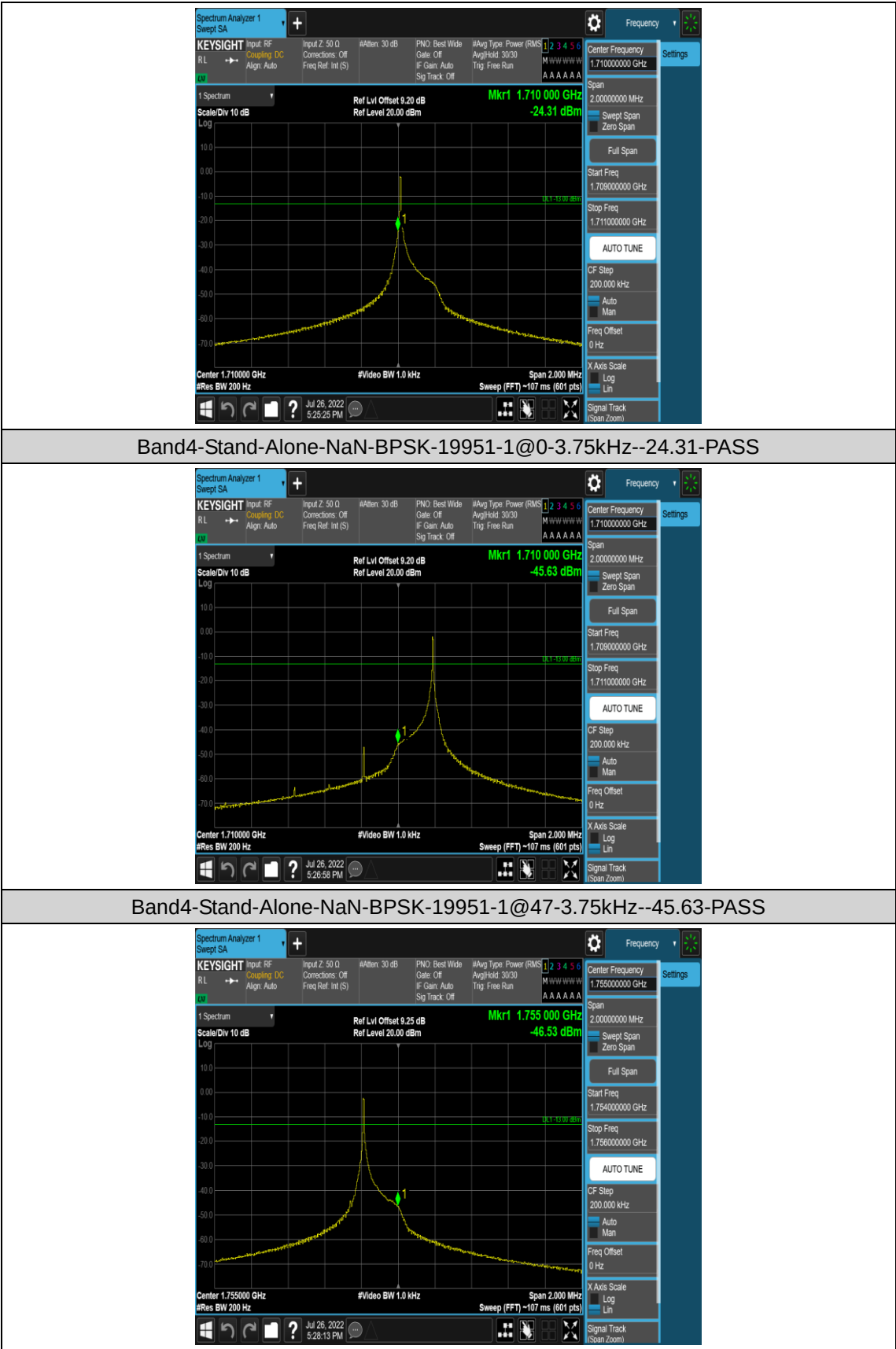


Appendix D: Band Edge for NB1

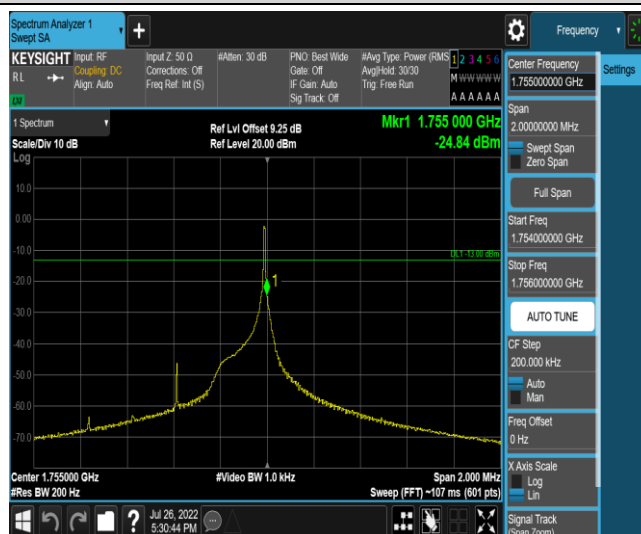
Test Result

Band	SCS	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band4	3.75kHz	NaN	BPSK	19951	1@0	-24.31	PASS
Band4	3.75kHz	NaN	BPSK	19951	1@47	-45.63	PASS
Band4	3.75kHz	NaN	BPSK	20399	1@0	-46.53	PASS
Band4	3.75kHz	NaN	BPSK	20399	1@47	-24.84	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@0	-24.07	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@47	-44.54	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	-45.83	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@47	-24.67	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	-19.34	PASS
Band4	15kHz	NaN	BPSK	19951	1@11	-39.13	PASS
Band4	15kHz	NaN	BPSK	19951	12@0	-35.85	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	-39.20	PASS
Band4	15kHz	NaN	BPSK	20399	1@11	-21.05	PASS
Band4	15kHz	NaN	BPSK	20399	12@0	-33.71	PASS
Band4	15kHz	NaN	QPSK	19951	1@0	-20.47	PASS
Band4	15kHz	NaN	QPSK	19951	1@11	-38.49	PASS
Band4	15kHz	NaN	QPSK	19951	12@0	-35.50	PASS
Band4	15kHz	NaN	QPSK	20399	1@0	-39.40	PASS
Band4	15kHz	NaN	QPSK	20399	1@11	-20.66	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	-33.81	PASS

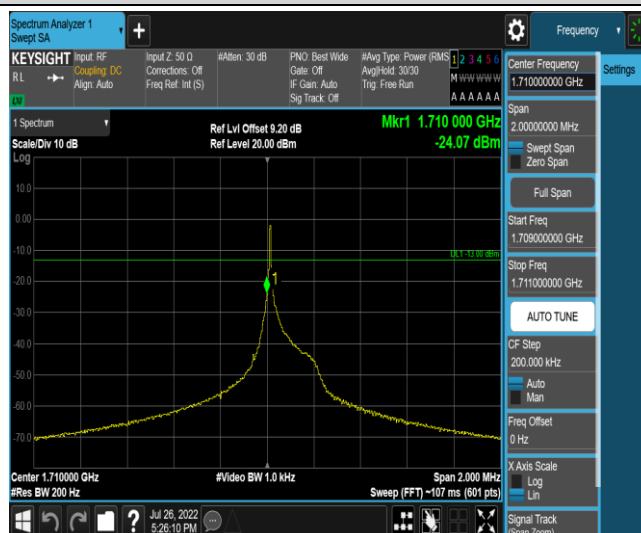
Test Graphs



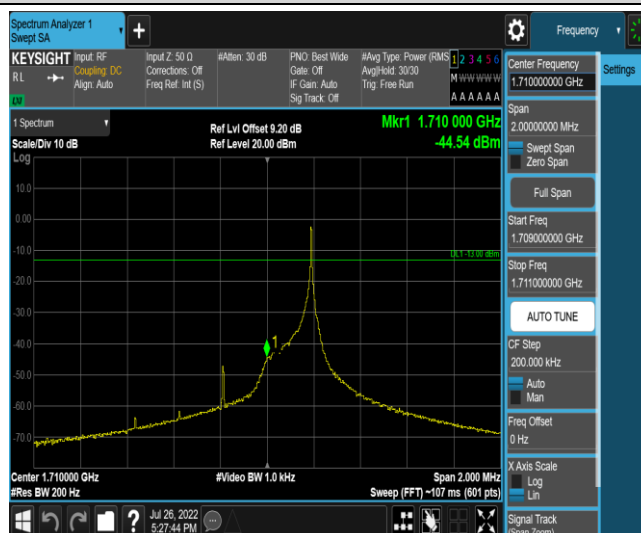
Band4-Stand-Alone-NaN-BPSK-20399-1@0-3.75kHz--46.53-PASS



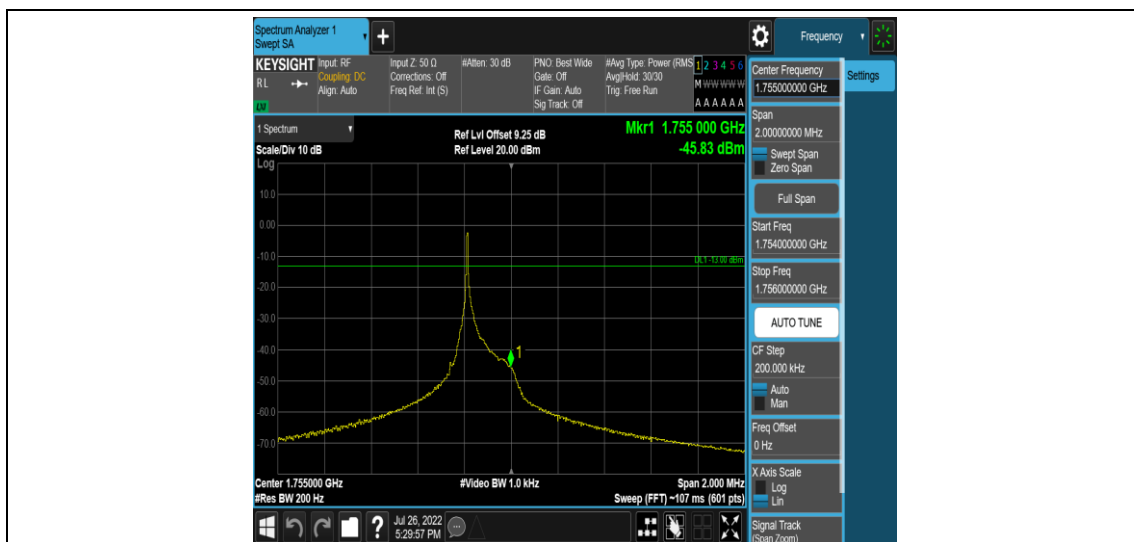
Band4-Stand-Alone-NaN-BPSK-20399-1@47-3.75kHz--24.84-PASS



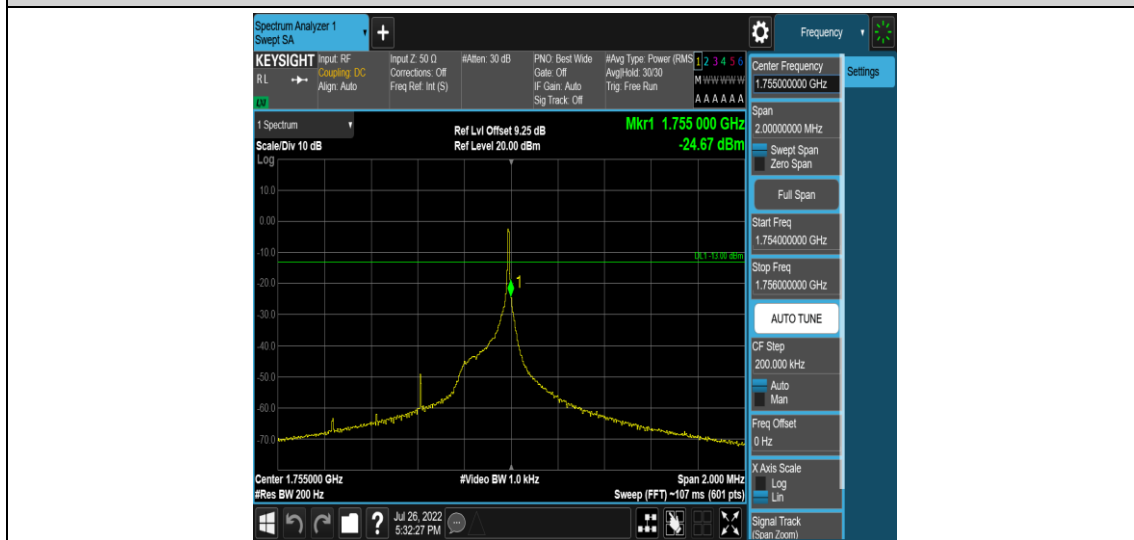
Band4-Stand-Alone-NaN-QPSK-19951-1@0-3.75kHz--24.07-PASS



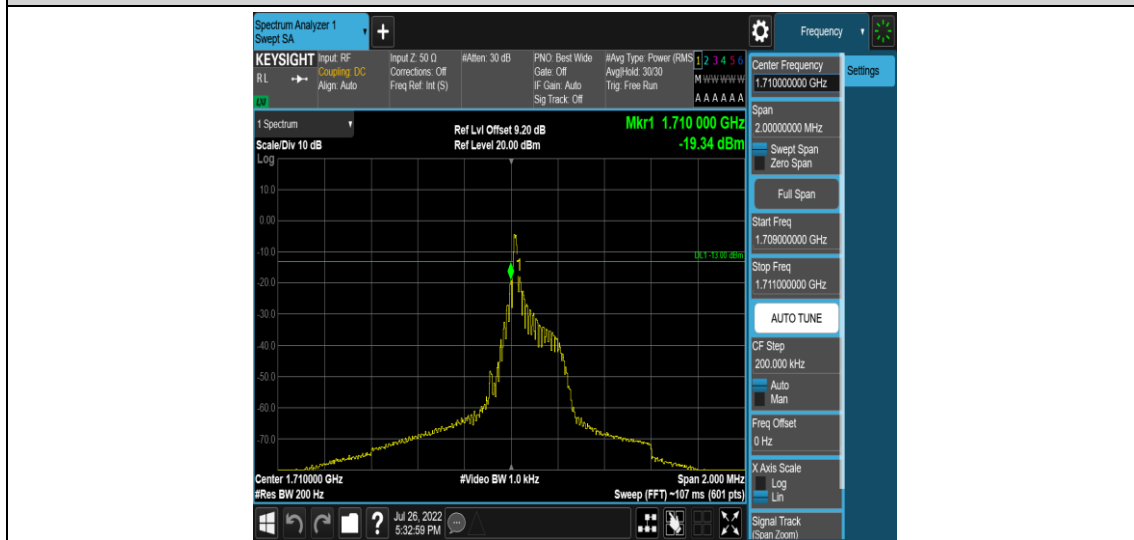
Band4-Stand-Alone-NaN-QPSK-19951-1@47-3.75kHz--44.54-PASS



Band4-Stand-Alone-NaN-QPSK-20399-1@0-3.75kHz--45.83-PASS



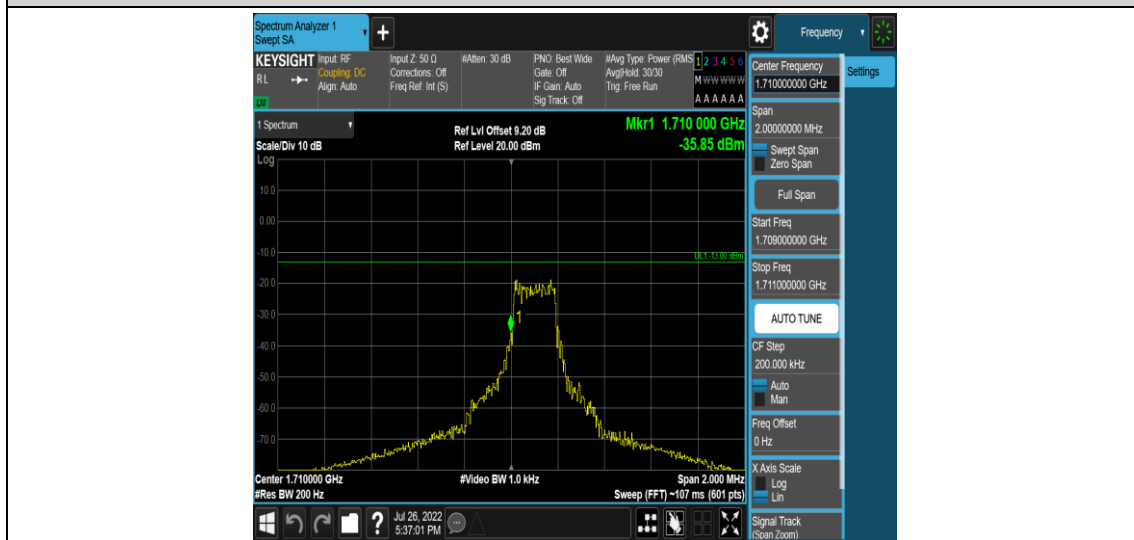
Band4-Stand-Alone-NaN-QPSK-20399-1@47-3.75kHz--24.67-PASS



Band4-Stand-Alone-NaN-BPSK-19951-1@0-15kHz--19.34-PASS



Band4-Stand-Alone-NaN-BPSK-19951-1@11-15kHz--39.13-PASS



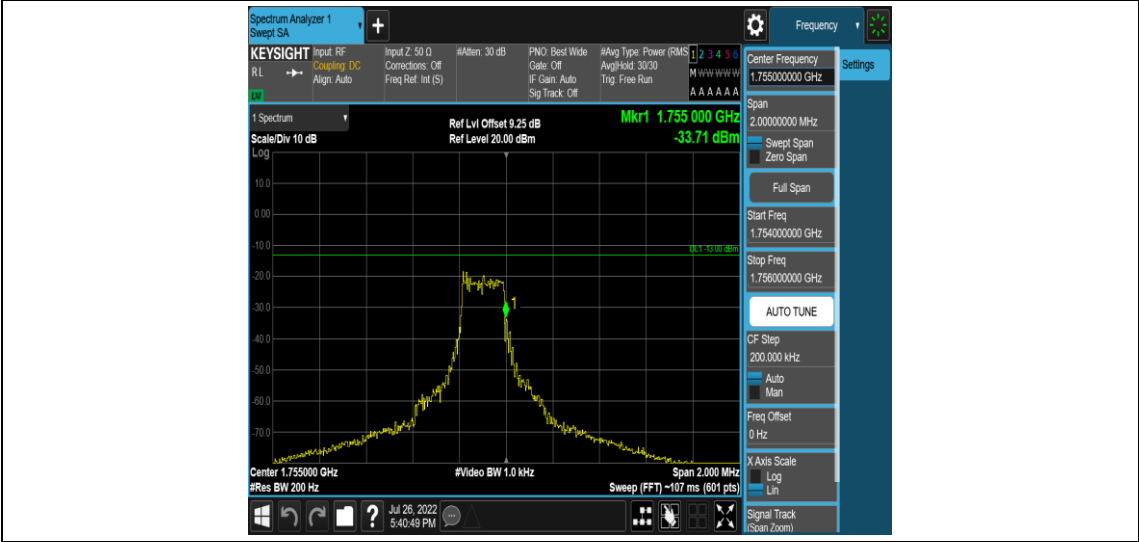
Band4-Stand-Alone-NaN-BPSK-19951-12@0-15kHz--35.85-PASS



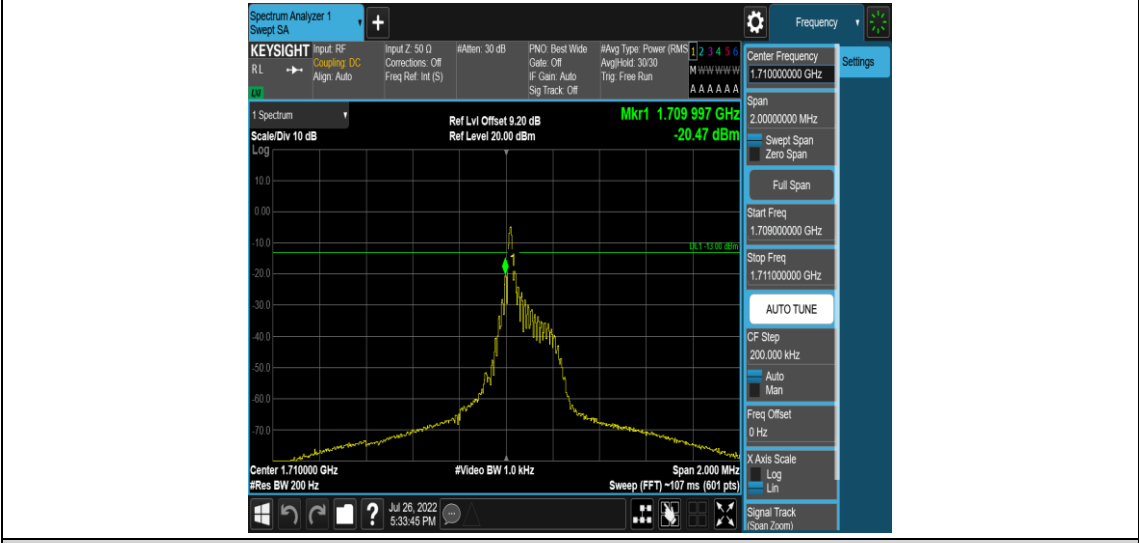
Band4-Stand-Alone-NaN-BPSK-20399-1@0-15kHz--39.20-PASS



Band4-Stand-Alone-NaN-BPSK-20399-1@11-15kHz--21.05-PASS



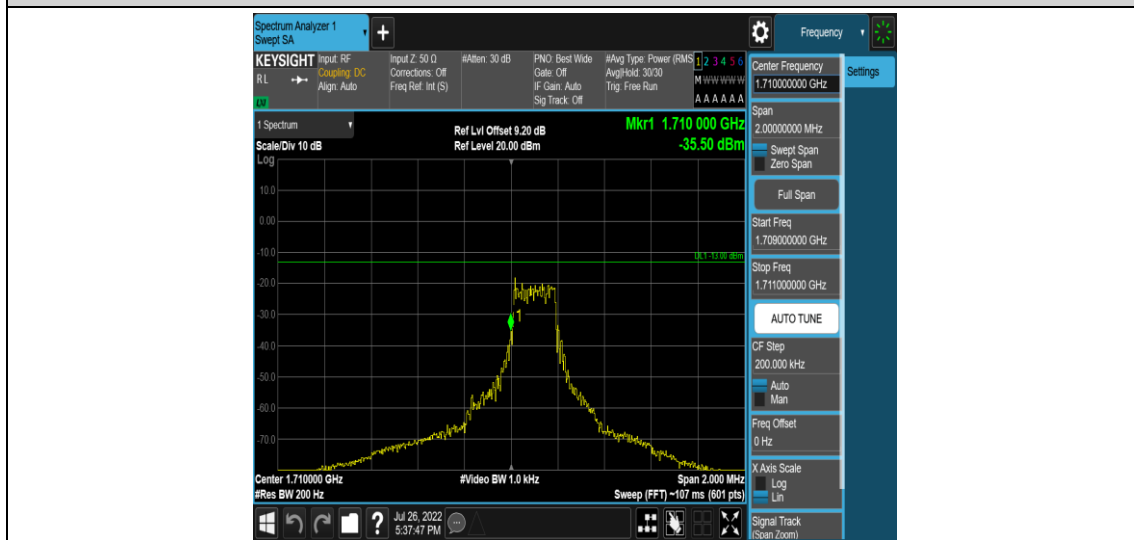
Band4-Stand-Alone-NaN-BPSK-20399-12@0-15kHz--33.71-PASS



Band4-Stand-Alone-NaN-QPSK-19951-1@0-15kHz--20.47-PASS



Band4-Stand-Alone-NaN-QPSK-19951-1@11-15kHz--38.49-PASS



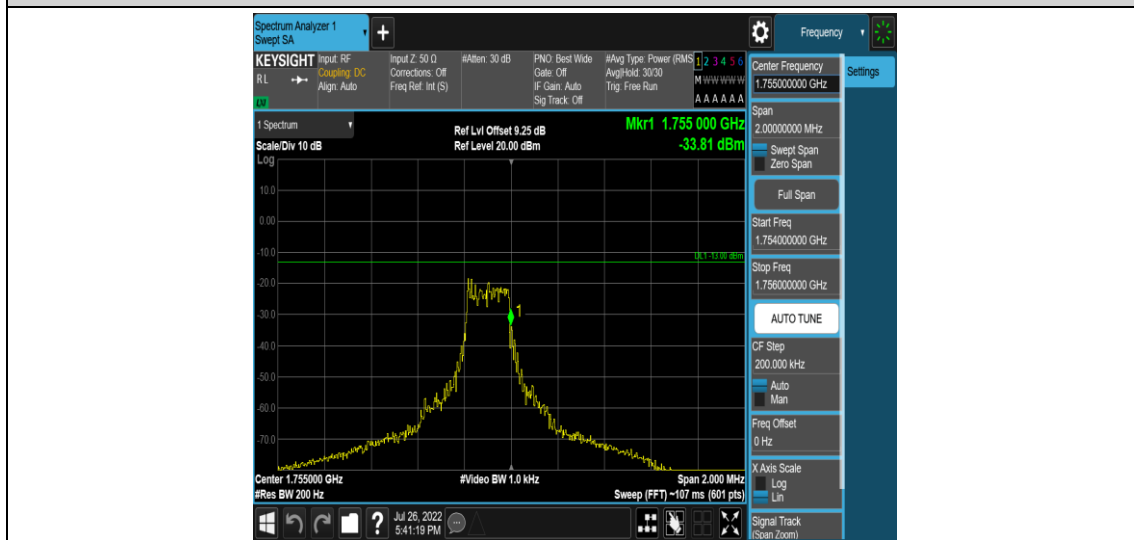
Band4-Stand-Alone-NaN-QPSK-19951-12@0-15kHz--35.50-PASS



Band4-Stand-Alone-NaN-QPSK-20399-1@0-15kHz--39.40-PASS



Band4-Stand-Alone-NaN-QPSK-20399-1@11-15kHz--20.66-PASS



Band4-Stand-Alone-NaN-QPSK-20399-12@0-15kHz--33.81-PASS

Appendix E: Conducted Spurious Emission for NB1

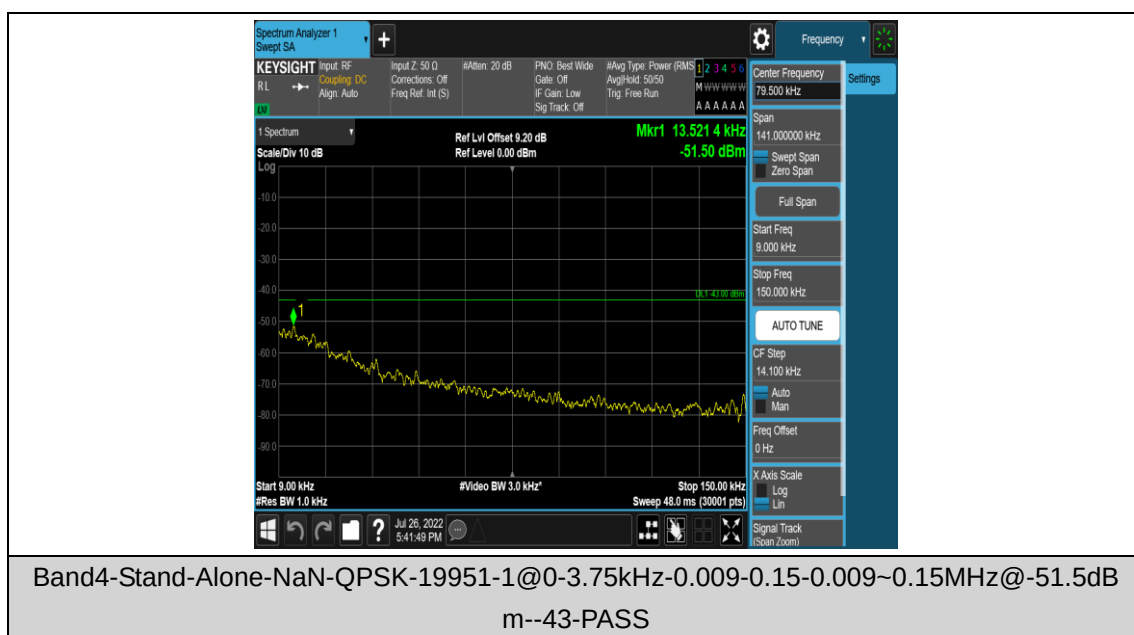
Test Result

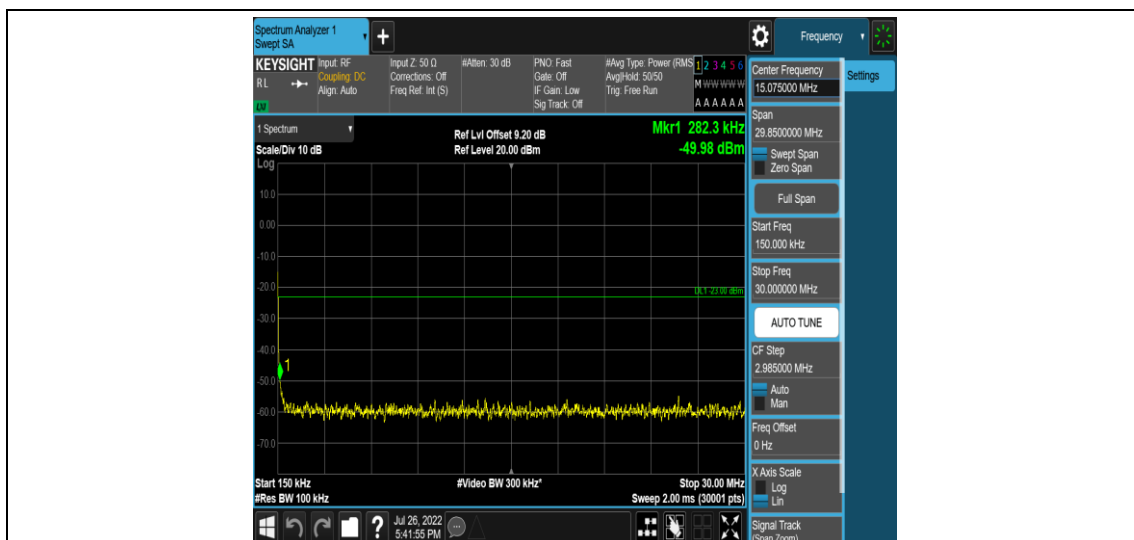
Band	SCS	BW	Modu	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Limit (dBm)	Verdict
Band4	3.75kHz	NaN	QPSK	19951	1@0	0.009	0.15	-43	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@0	0.15	30	-23	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@0	30	1000	-13	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@0	1000	5000	-13	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@0	5000	12000	-13	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@0	12000	26500	-13	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@47	0.009	0.15	-43	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@47	0.15	30	-23	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@47	30	1000	-13	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@47	1000	5000	-13	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@47	5000	12000	-13	PASS
Band4	3.75kHz	NaN	QPSK	19951	1@47	12000	26500	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@0	0.009	0.15	-43	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@0	0.15	30	-23	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@0	30	1000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@0	1000	5000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@0	5000	12000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@0	12000	26500	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@47	0.009	0.15	-43	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@47	0.15	30	-23	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@47	30	1000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@47	1000	5000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@47	5000	12000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20175	1@47	12000	26500	-13	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	0.009	0.15	-43	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	0.15	30	-23	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	30	1000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	1000	5000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	5000	12000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@0	12000	26500	-13	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@47	0.009	0.15	-43	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@47	0.15	30	-23	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@47	30	1000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@47	1000	5000	-13	PASS

Band4	3.75kHz	NaN	QPSK	20399	1@47	5000	12000	-13	PASS
Band4	3.75kHz	NaN	QPSK	20399	1@47	12000	26500	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	0.009	0.15	-43	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	0.15	30	-23	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	30	1000	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	1000	5000	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	5000	12000	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@0	12000	26500	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@11	0.009	0.15	-43	PASS
Band4	15kHz	NaN	BPSK	19951	1@11	0.15	30	-23	PASS
Band4	15kHz	NaN	BPSK	19951	1@11	30	1000	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@11	1000	5000	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@11	5000	12000	-13	PASS
Band4	15kHz	NaN	BPSK	19951	1@11	12000	26500	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@0	0.009	0.15	-43	PASS
Band4	15kHz	NaN	BPSK	20175	1@0	0.15	30	-23	PASS
Band4	15kHz	NaN	BPSK	20175	1@0	30	1000	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@0	1000	5000	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@0	5000	12000	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@0	12000	26500	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@11	0.009	0.15	-43	PASS
Band4	15kHz	NaN	BPSK	20175	1@11	0.15	30	-23	PASS
Band4	15kHz	NaN	BPSK	20175	1@11	30	1000	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@11	1000	5000	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@11	5000	12000	-13	PASS
Band4	15kHz	NaN	BPSK	20175	1@11	12000	26500	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	0.009	0.15	-43	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	0.15	30	-23	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	30	1000	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	1000	5000	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	5000	12000	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@0	12000	26500	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@11	0.009	0.15	-43	PASS
Band4	15kHz	NaN	BPSK	20399	1@11	0.15	30	-23	PASS
Band4	15kHz	NaN	BPSK	20399	1@11	30	1000	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@11	1000	5000	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@11	5000	12000	-13	PASS
Band4	15kHz	NaN	BPSK	20399	1@11	12000	26500	-13	PASS
Band4	15kHz	NaN	QPSK	19951	12@0	0.009	0.15	-43	PASS
Band4	15kHz	NaN	QPSK	19951	12@0	0.15	30	-23	PASS
Band4	15kHz	NaN	QPSK	19951	12@0	30	1000	-13	PASS
Band4	15kHz	NaN	QPSK	19951	12@0	1000	5000	-13	PASS

Band4	15kHz	NaN	QPSK	19951	12@0	5000	12000	-13	PASS
Band4	15kHz	NaN	QPSK	19951	12@0	12000	26500	-13	PASS
Band4	15kHz	NaN	QPSK	20175	12@0	0.009	0.15	-43	PASS
Band4	15kHz	NaN	QPSK	20175	12@0	0.15	30	-23	PASS
Band4	15kHz	NaN	QPSK	20175	12@0	30	1000	-13	PASS
Band4	15kHz	NaN	QPSK	20175	12@0	1000	5000	-13	PASS
Band4	15kHz	NaN	QPSK	20175	12@0	5000	12000	-13	PASS
Band4	15kHz	NaN	QPSK	20175	12@0	12000	26500	-13	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	0.009	0.15	-43	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	0.15	30	-23	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	30	1000	-13	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	1000	5000	-13	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	5000	12000	-13	PASS
Band4	15kHz	NaN	QPSK	20399	12@0	12000	26500	-13	PASS

Test Graphs





Band4-Stand-Alone-NaN-QPSK-19951-1@0-3.75kHz-0.15-30-0.15~30MHz@-49.98dBm--23-PASS



Band4-Stand-Alone-NaN-QPSK-19951-1@0-3.75kHz-30-1000-30~1000MHz@-33.18dBm--13-PASS



Band4-Stand-Alone-NaN-QPSK-19951-1@0-3.75kHz-1000-5000-1000~5000MHz@-35.79dBm--13-PASS



Band4-Stand-Alone-NaN-QPSK-19951-1@0-3.75kHz-5000-12000-5000~12000MHz@-57.04 dBm--13-PASS



Band4-Stand-Alone-NaN-QPSK-19951-1@0-3.75kHz-12000-26500-12000~26500MHz@-51.51dBm--13-PASS