

Appendix for Band 12

Product Name: Smart Light Controller

Model No: SLC-N-500-NB

Appendix A: Average Power Output Data

Test Result

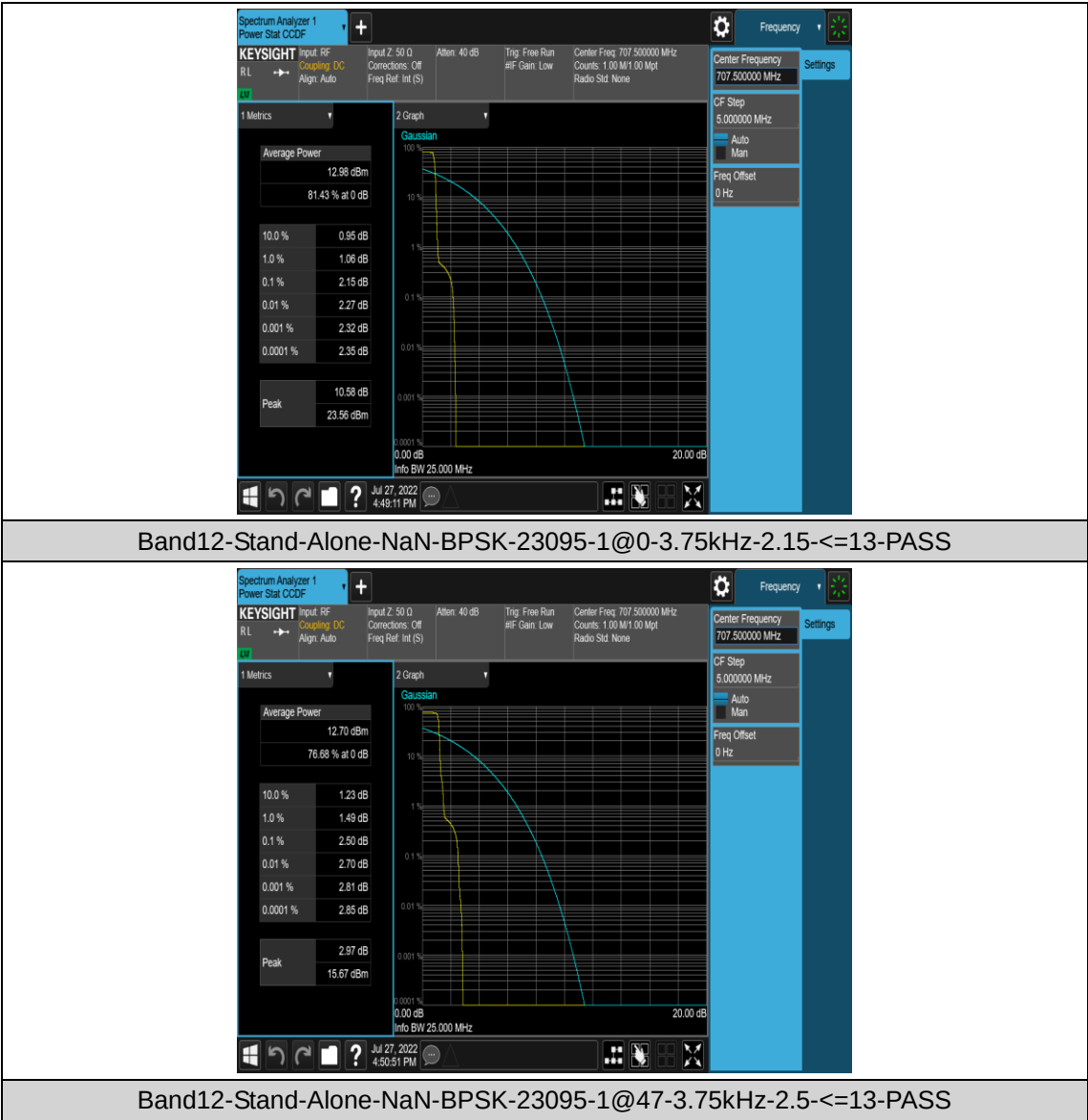
Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23011	1@0	21.13	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23011	1@47	21.09	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23095	1@0	21.00	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23095	1@47	21.00	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23179	1@0	21.25	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23179	1@47	21.20	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23011	1@0	21.11	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23011	1@47	21.07	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	21.04	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	20.94	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23179	1@0	21.26	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23179	1@47	21.19	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23011	1@0	21.67	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23011	1@11	21.64	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23011	3@3	22.06	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	1@0	21.69	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	1@11	21.54	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	3@3	21.95	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23179	1@0	21.80	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23179	1@11	21.77	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23179	3@3	22.10	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23011	1@0	21.71	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23011	1@11	21.60	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23011	3@3	22.05	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	21.54	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	21.55	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	3@3	21.94	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23179	1@0	21.79	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23179	1@11	21.75	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23179	3@3	22.12	PASS

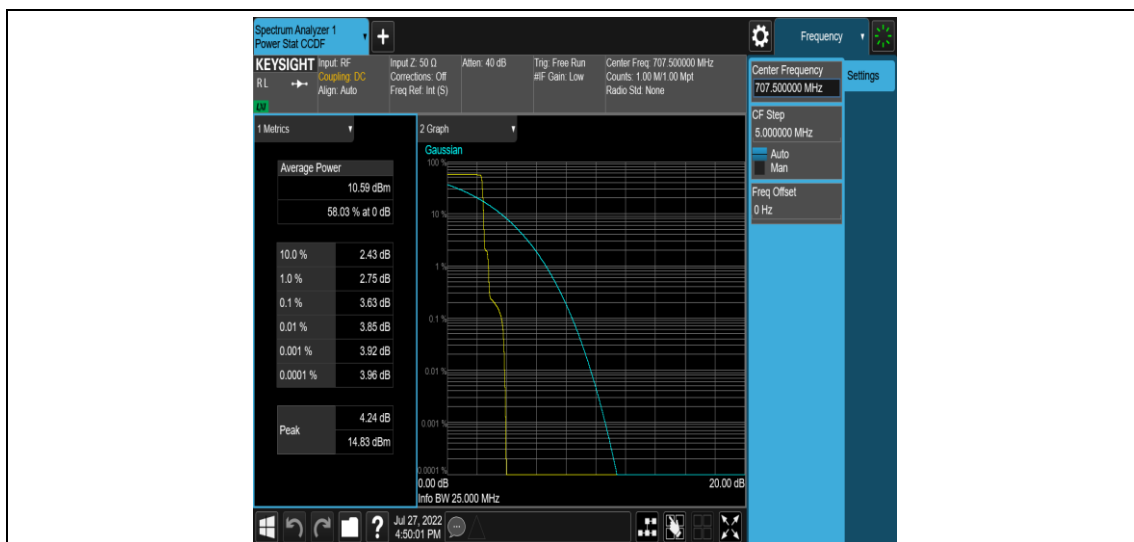
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23095	1@0	2.15	<=13	PASS
Band12	Stand-Alone	3.75kHz	NaN	BPSK	23095	1@47	2.5	<=13	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@0	3.63	<=13	PASS
Band12	Stand-Alone	3.75kHz	NaN	QPSK	23095	1@47	2.38	<=13	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	1@0	4.13	<=13	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	1@11	4.25	<=13	PASS
Band12	Stand-Alone	15kHz	NaN	BPSK	23095	3@3	8.69	<=13	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@0	5.46	<=13	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	1@11	6.05	<=13	PASS
Band12	Stand-Alone	15kHz	NaN	QPSK	23095	3@3	10.52	<=13	PASS

Test Graphs

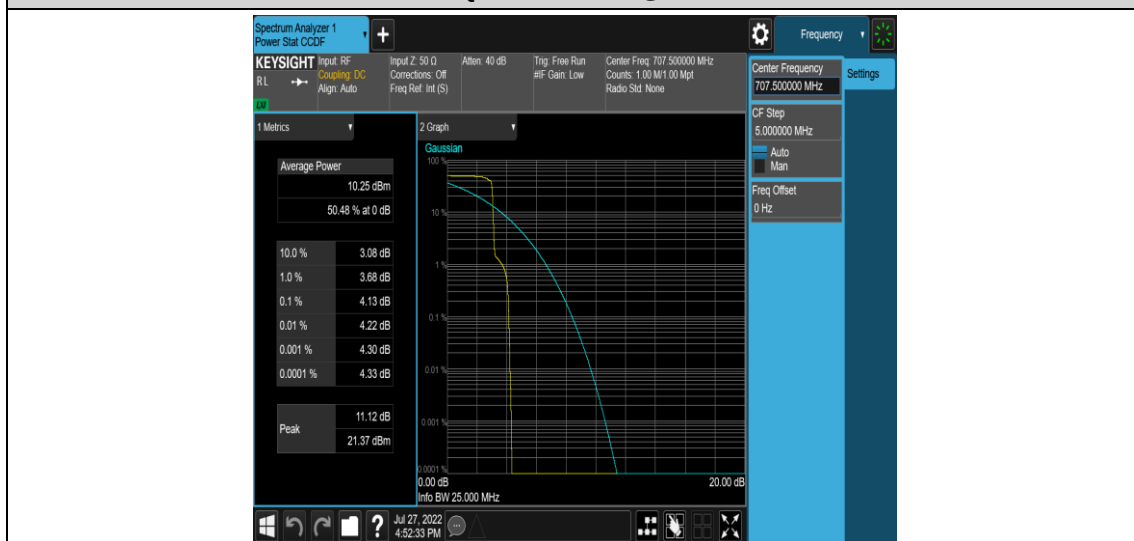




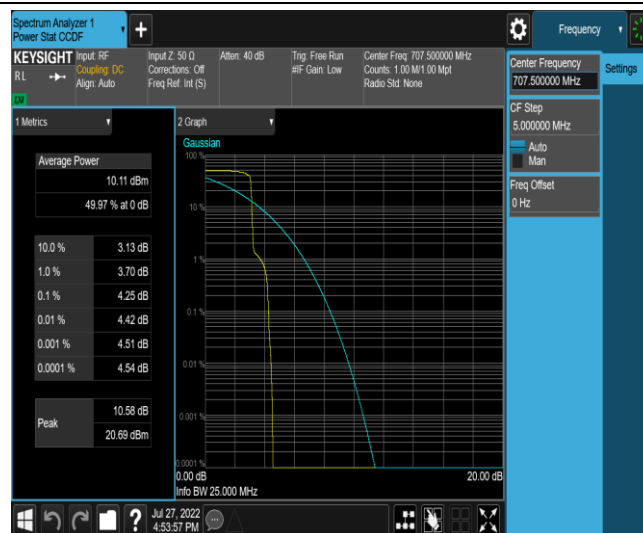
Band12-Stand-Alone-NaN-QPSK-23095-1@0-3.75kHz-3.63-<=13-PASS



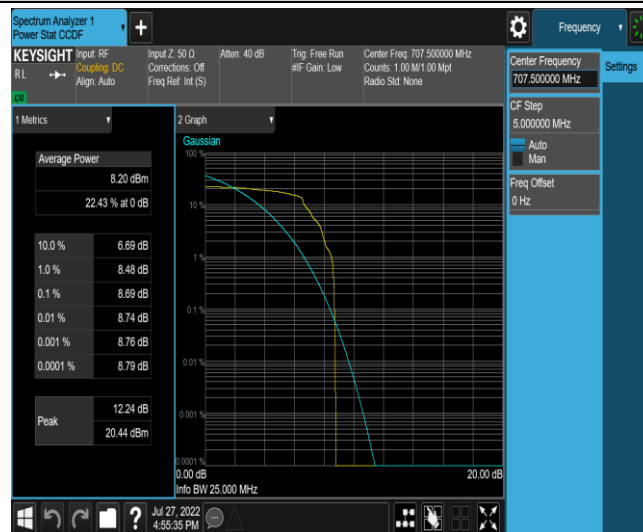
Band12-Stand-Alone-NaN-QPSK-23095-1@47-3.75kHz-2.38-<=13-PASS



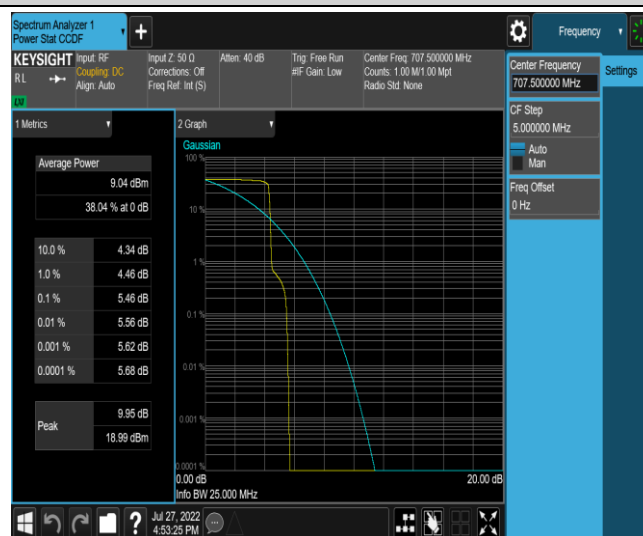
Band12-Stand-Alone-NaN-BPSK-23095-1@0-15kHz-4.13-<=13-PASS



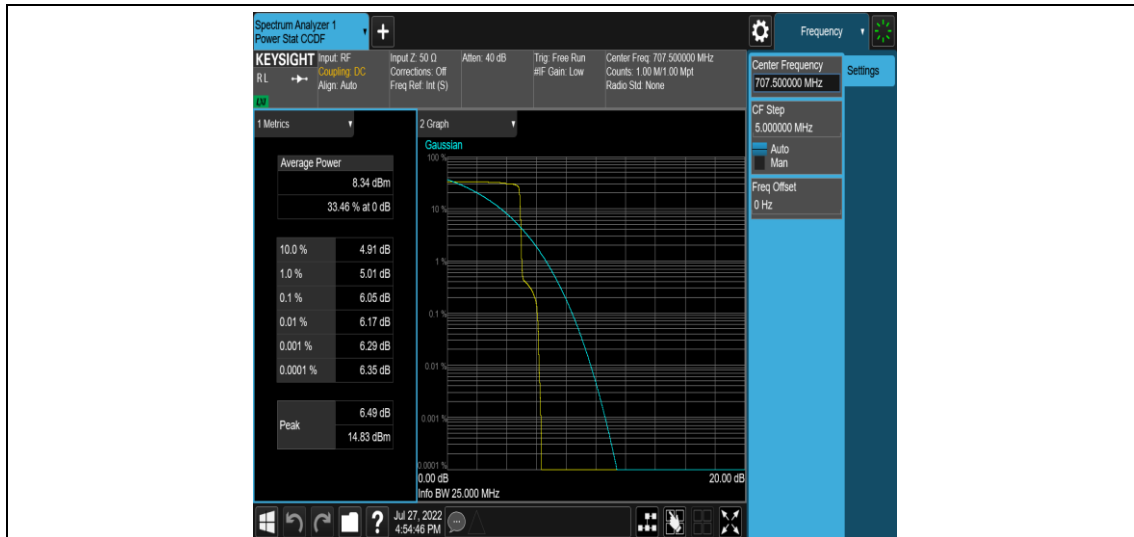
Band12-Stand-Alone-NaN-BPSK-23095-1@11-15kHz-4.25-≤13-PASS



Band12-Stand-Alone-NaN-BPSK-23095-3@3-15kHz-8.69-<=13-PASS



Band12-Stand-Alone-NaN-QPSK-23095-1@0-15kHz-5.46-<=13-PASS



Band12-Stand-Alone-NaN-QPSK-23095-1@11-15kHz-6.05-<=13-PASS



Band12-Stand-Alone-NaN-QPSK-23095-3@3-15kHz-10.52-<=13-PASS

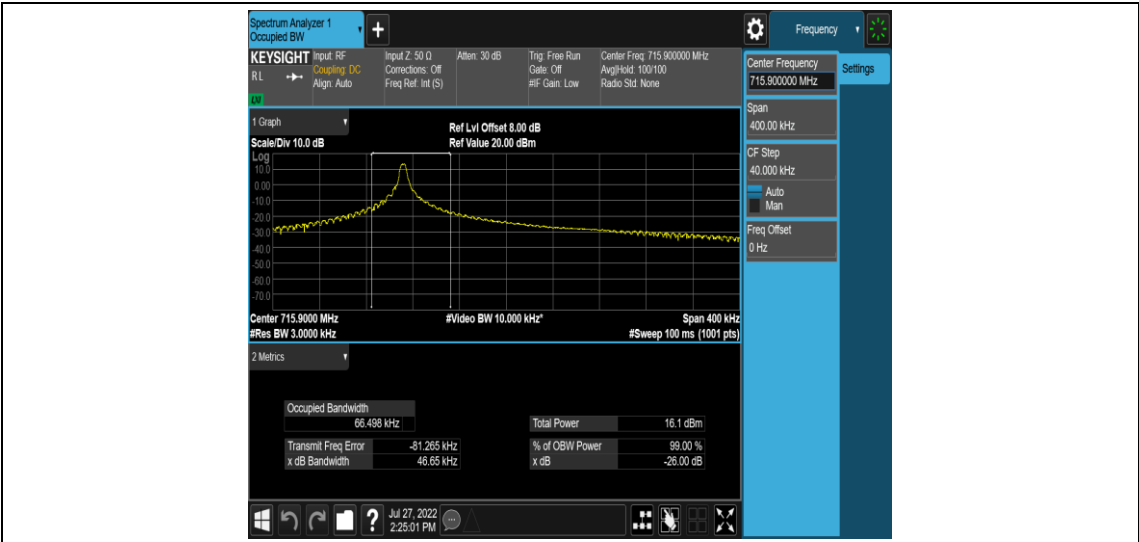
Appendix C: Emission Bandwidth for NB1

Test Result

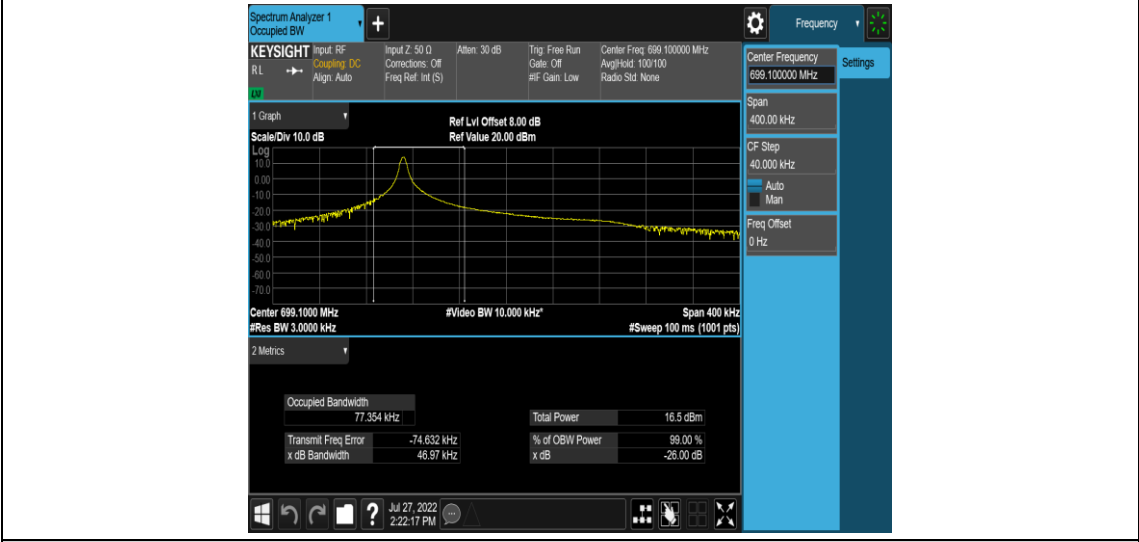
Band	SCS	BW	Modu	Channel	Tones	Result (MHz)	Verdict
Band12	3.75kHz	NaN	BPSK	23011	1@0	0.0468	PASS
Band12	3.75kHz	NaN	BPSK	23095	1@0	0.0459	PASS
Band12	3.75kHz	NaN	BPSK	23179	1@0	0.0467	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@0	0.0470	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@0	0.0477	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	0.0477	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	0.1009	PASS
Band12	15kHz	NaN	BPSK	23011	12@0	0.2484	PASS
Band12	15kHz	NaN	BPSK	23095	1@0	0.1058	PASS
Band12	15kHz	NaN	BPSK	23095	12@0	0.2580	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	0.1063	PASS
Band12	15kHz	NaN	BPSK	23179	12@0	0.2585	PASS
Band12	15kHz	NaN	QPSK	23011	1@0	0.1029	PASS
Band12	15kHz	NaN	QPSK	23011	12@0	0.2447	PASS
Band12	15kHz	NaN	QPSK	23095	1@0	0.1153	PASS
Band12	15kHz	NaN	QPSK	23095	12@0	0.2499	PASS
Band12	15kHz	NaN	QPSK	23179	1@0	0.1172	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	0.2493	PASS

Test Graphs

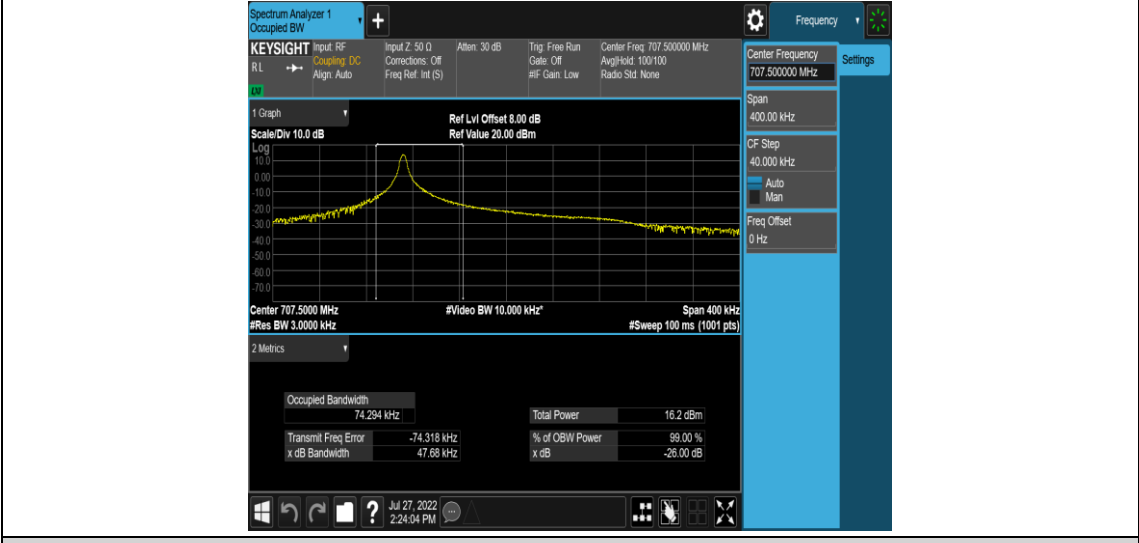




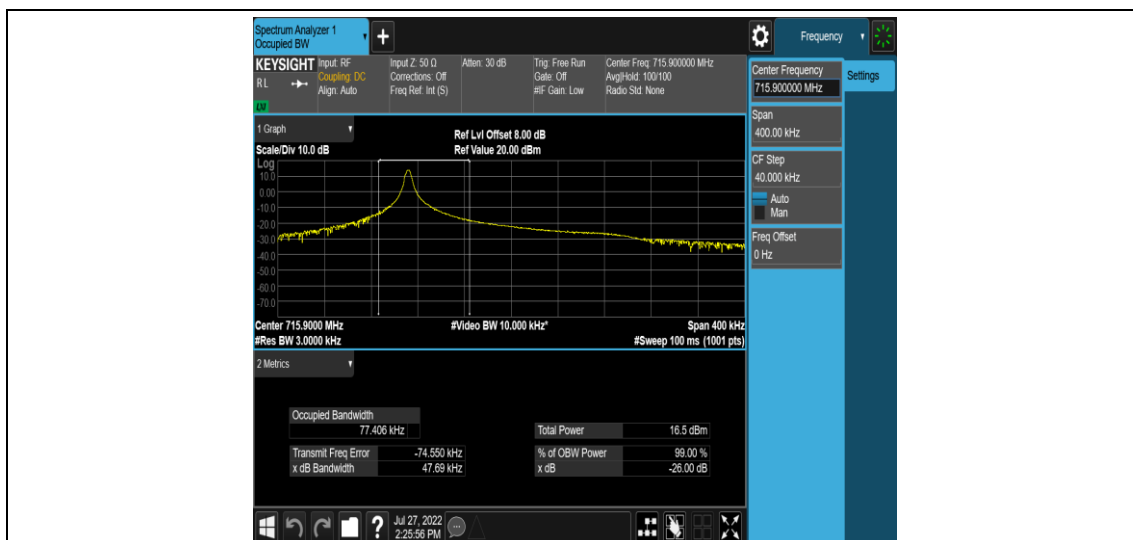
Band12-Stand-Alone-NaN-BPSK-23179-1@0-3.75kHz-0.0467-PASS



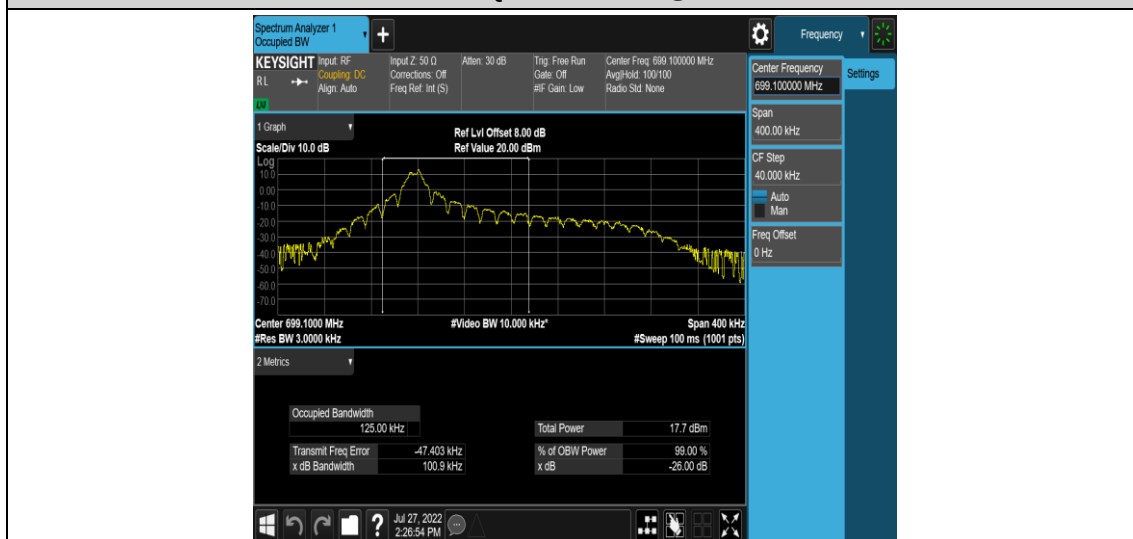
Band12-Stand-Alone-NaN-QPSK-23011-1@0-3.75kHz-0.0470-PASS



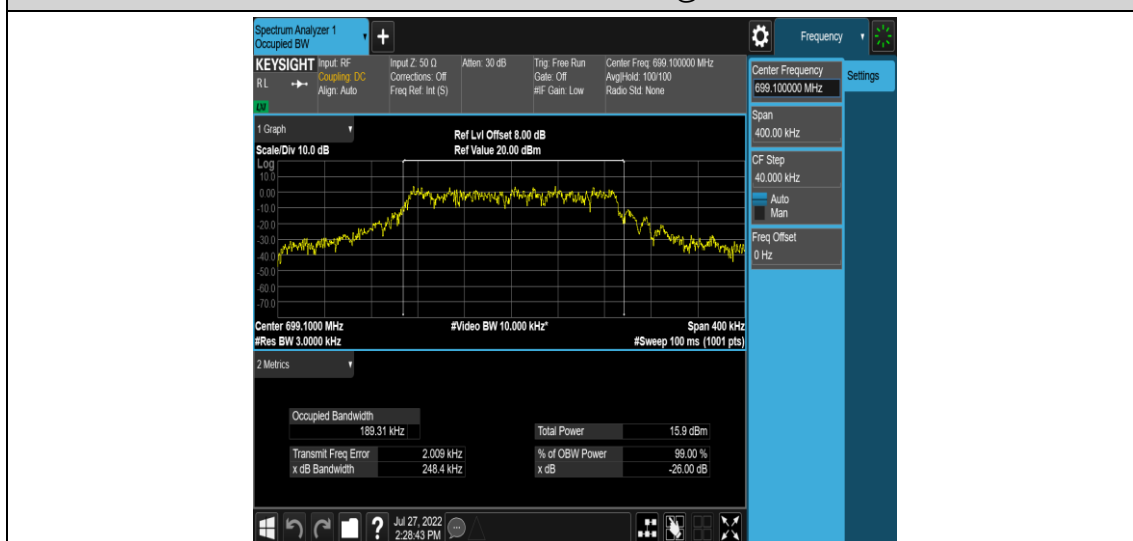
Band12-Stand-Alone-NaN-QPSK-23095-1@0-3.75kHz-0.0477-PASS



Band12-Stand-Alone-NaN-QPSK-23179-1@0-3.75kHz-0.0477-PASS



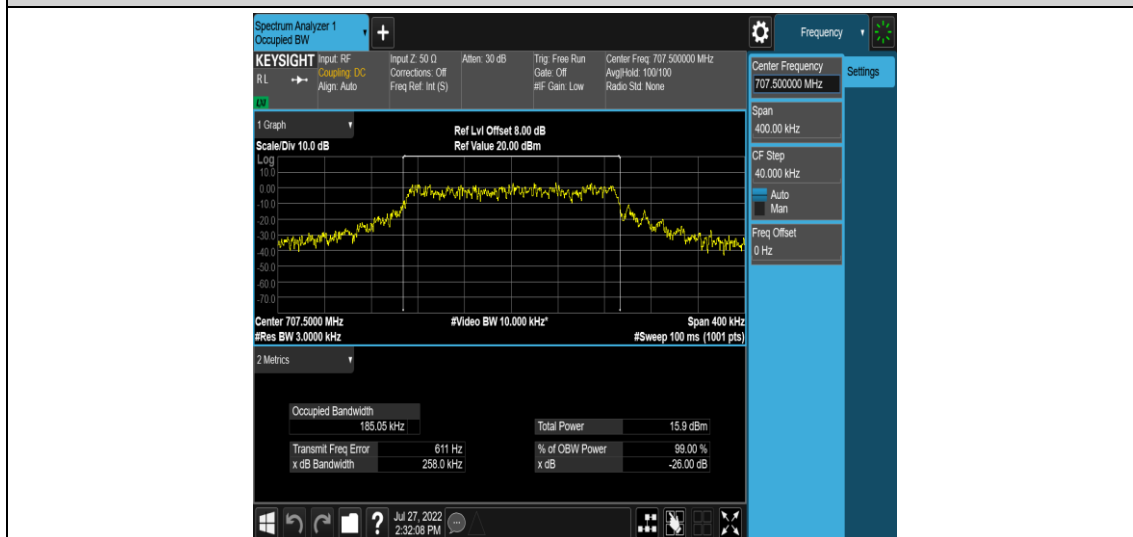
Band12-Stand-Alone-NaN-BPSK-23011-1@0-15kHz-0.1009-PASS



Band12-Stand-Alone-NaN-BPSK-23011-12@0-15kHz-0.2484-PASS



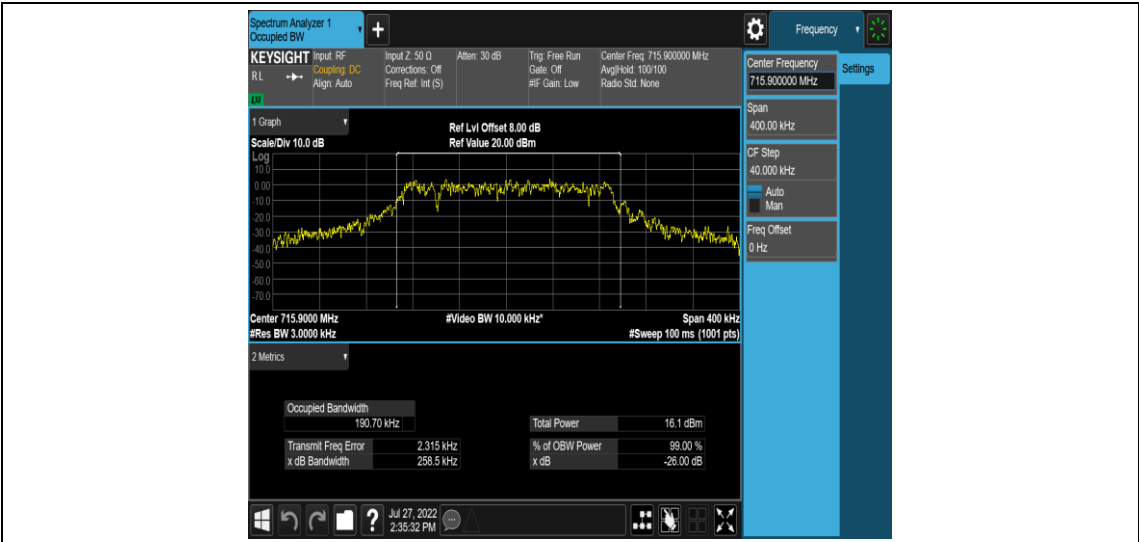
Band12-Stand-Alone-NaN-BPSK-23095-1@0-15kHz-0.1058-PASS



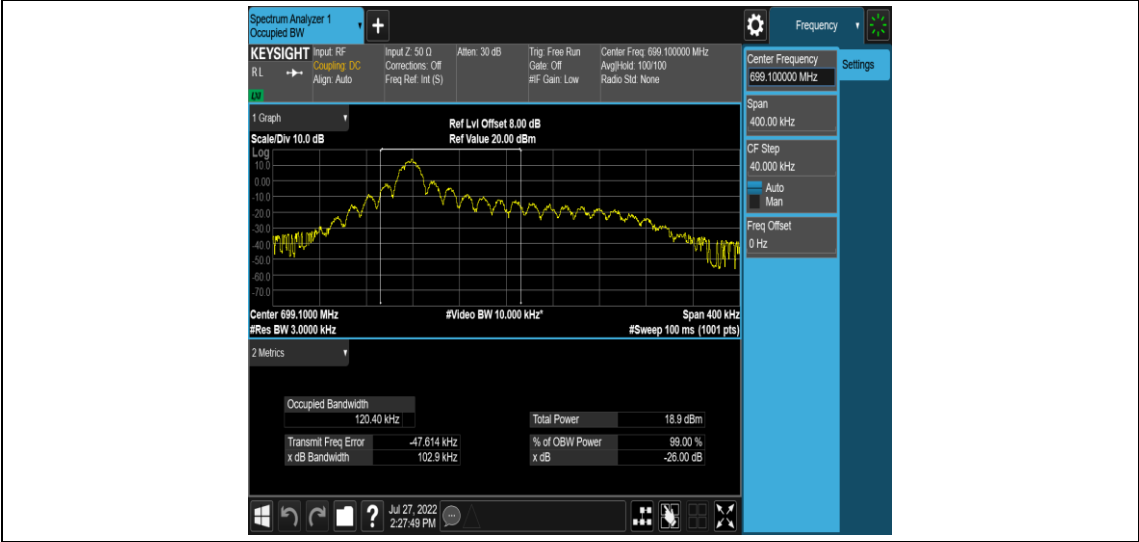
Band12-Stand-Alone-NaN-BPSK-23095-12@0-15kHz-0.2580-PASS



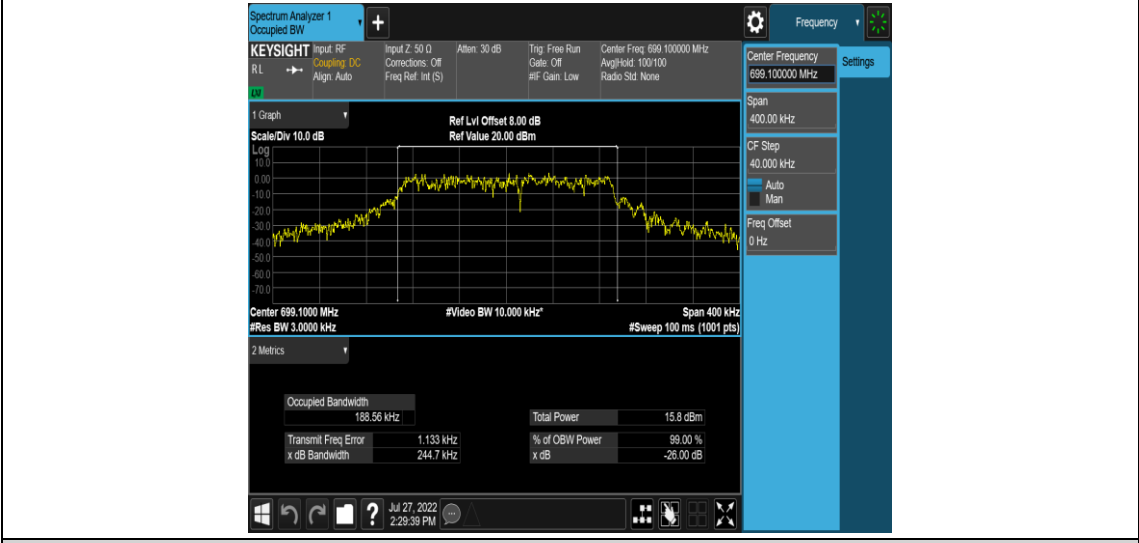
Band12-Stand-Alone-NaN-BPSK-23179-1@0-15kHz-0.1063-PASS



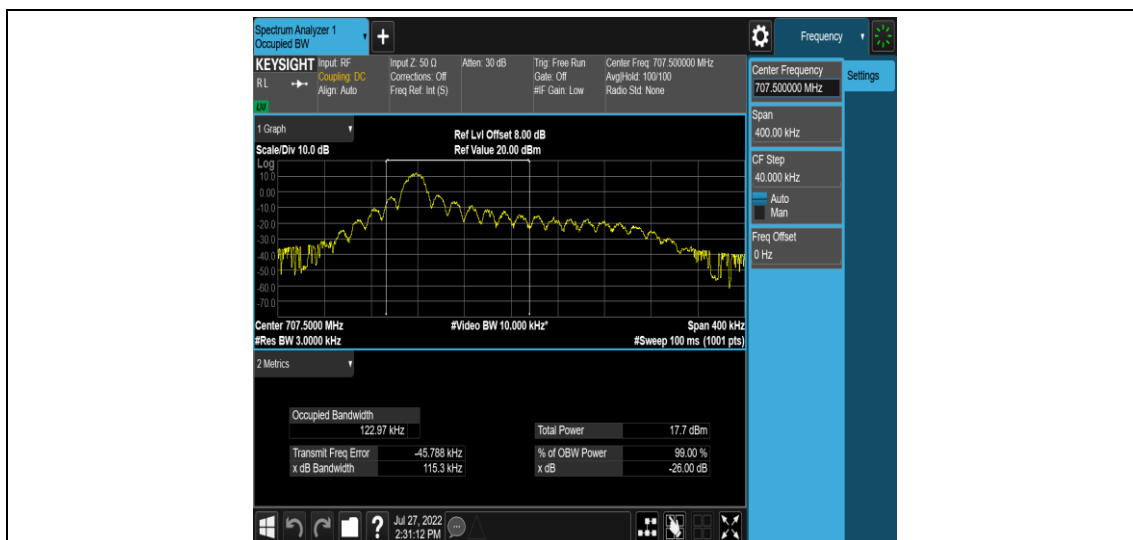
Band12-Stand-Alone-NaN-BPSK-23179-12@0-15kHz-0.2585-PASS



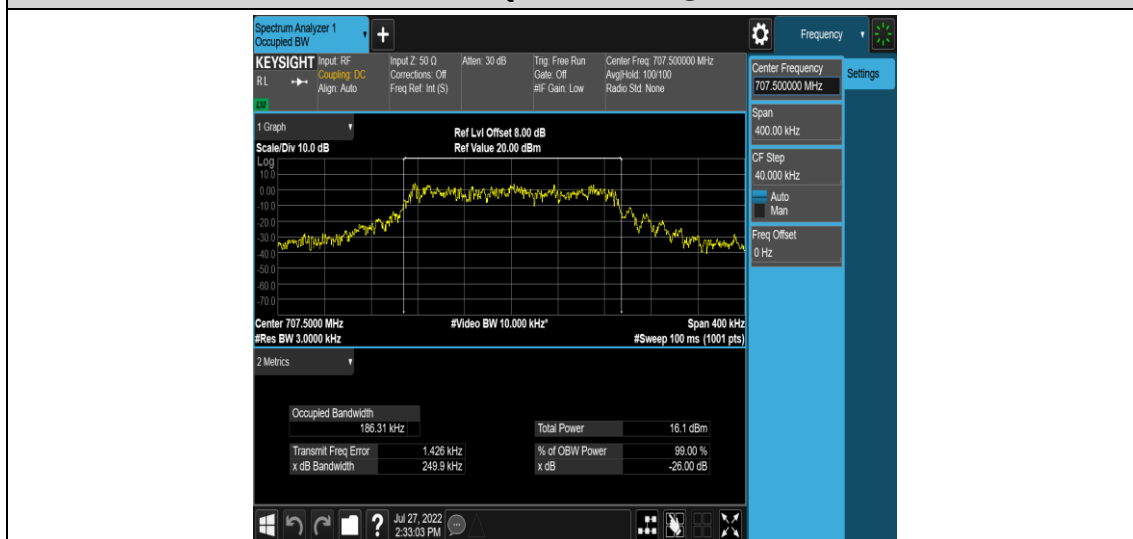
Band12-Stand-Alone-NaN-QPSK-23011-1@0-15kHz-0.1029-PASS



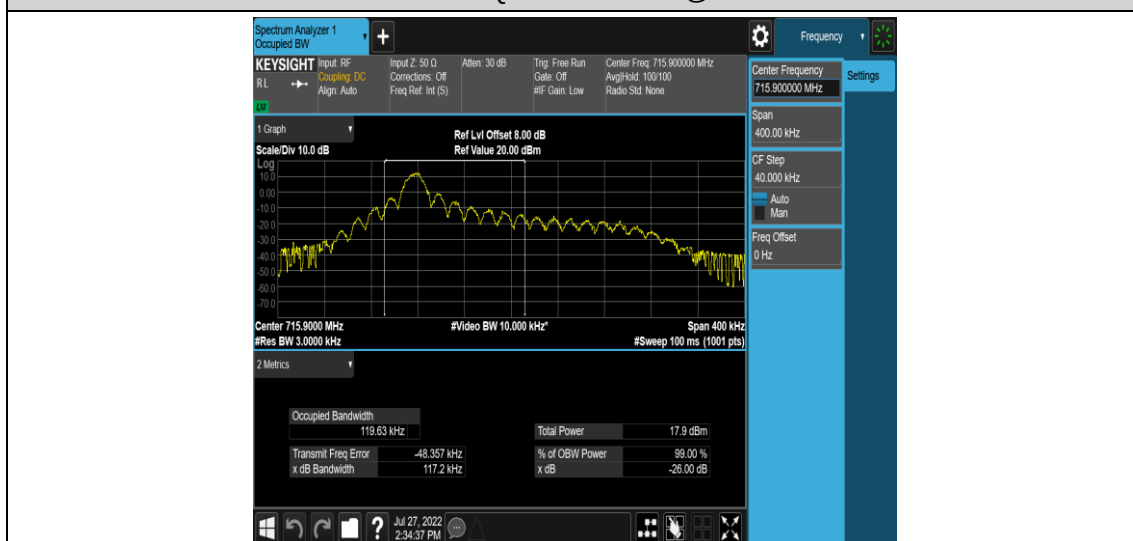
Band12-Stand-Alone-NaN-QPSK-23011-12@0-15kHz-0.2447-PASS



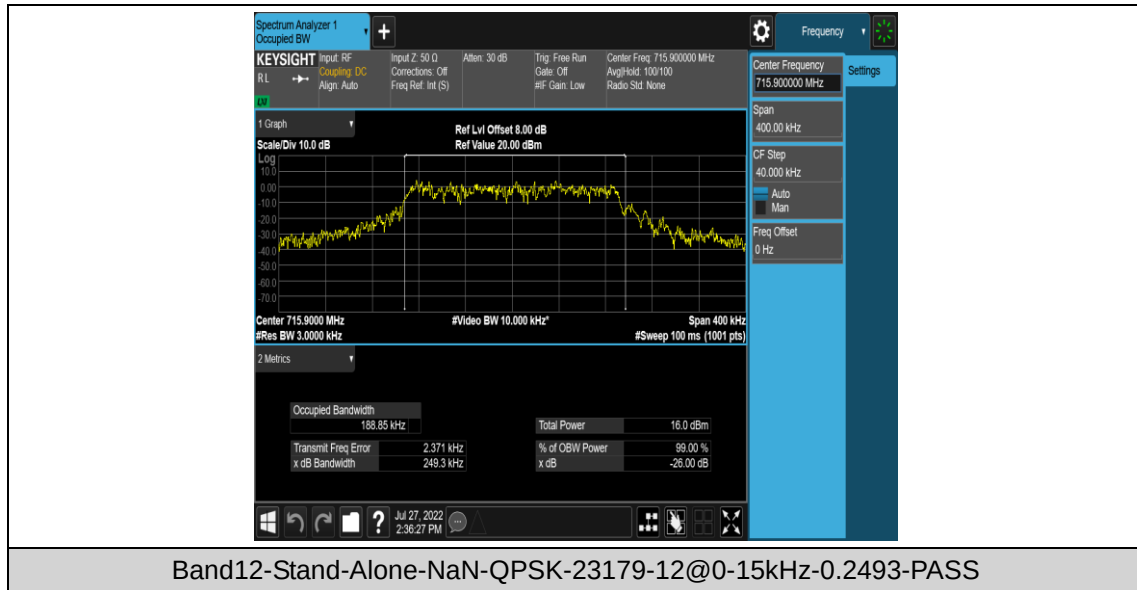
Band12-Stand-Alone-NaN-QPSK-23095-1@0-15kHz-0.1153-PASS



Band12-Stand-Alone-NaN-QPSK-23095-12@0-15kHz-0.2499-PASS



Band12-Stand-Alone-NaN-QPSK-23179-1@0-15kHz-0.1172-PASS

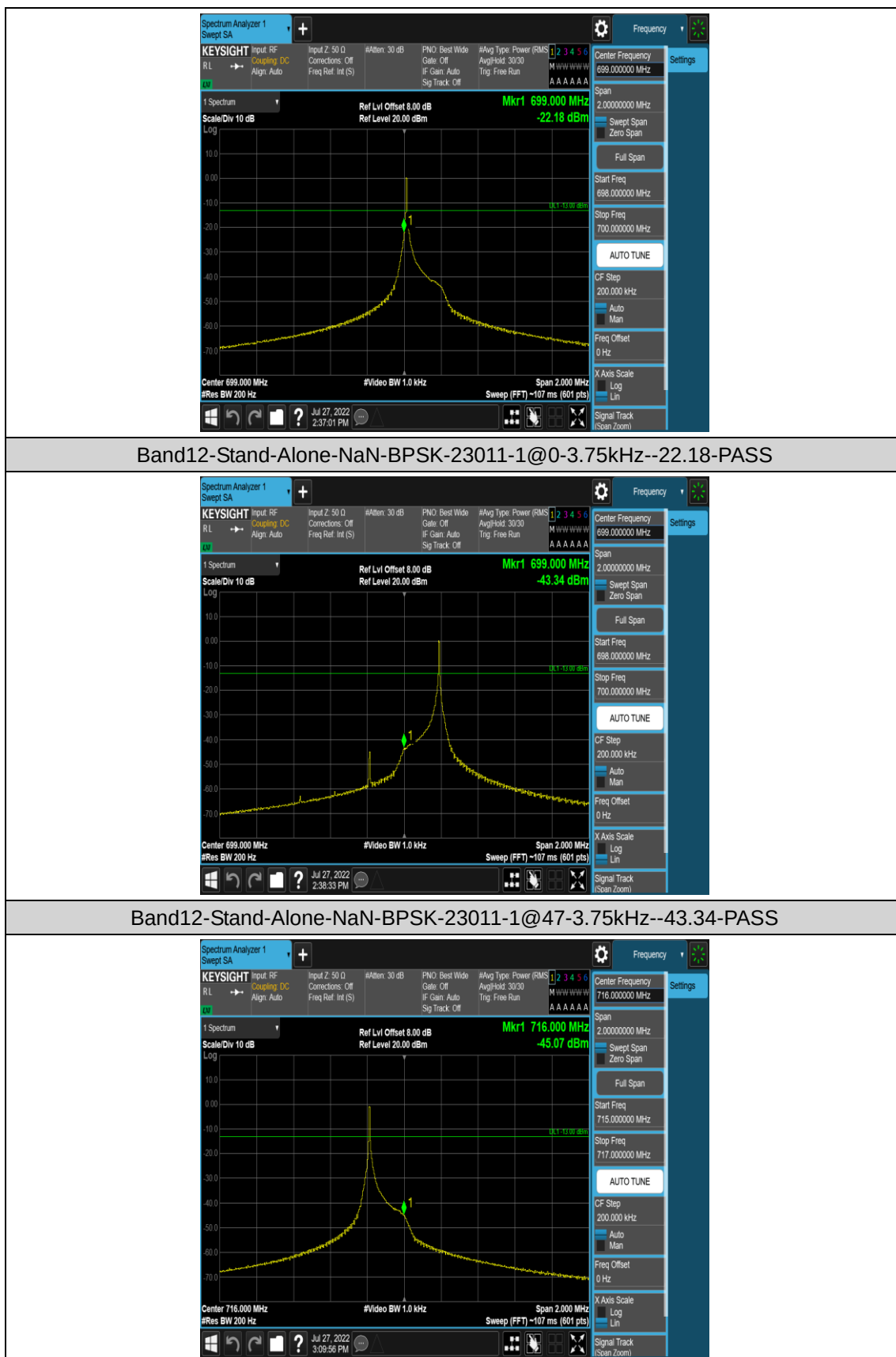


Appendix D: Band Edge for NB1

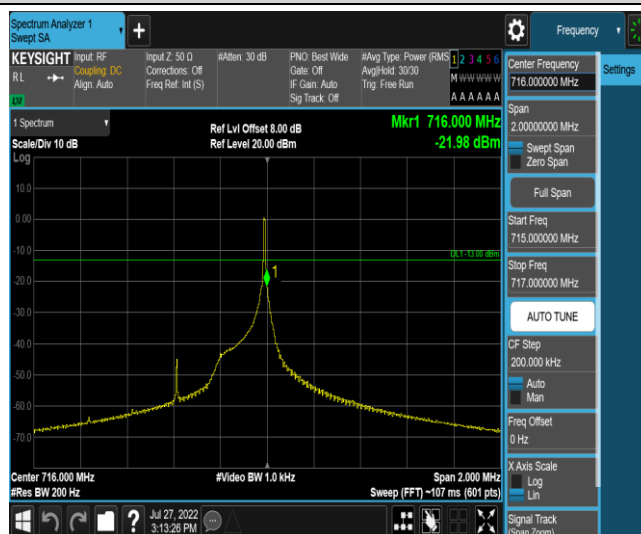
Test Result

Band	SCS	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band12	3.75kHz	NaN	BPSK	23011	1@0	-22.18	PASS
Band12	3.75kHz	NaN	BPSK	23011	1@47	-43.34	PASS
Band12	3.75kHz	NaN	BPSK	23179	1@0	-45.07	PASS
Band12	3.75kHz	NaN	BPSK	23179	1@47	-21.98	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@0	-21.88	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@47	-42.26	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	-43.58	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@47	-21.58	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	-18.37	PASS
Band12	15kHz	NaN	BPSK	23011	1@11	-37.49	PASS
Band12	15kHz	NaN	BPSK	23011	12@0	-33.38	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	-37.85	PASS
Band12	15kHz	NaN	BPSK	23179	1@11	-19.17	PASS
Band12	15kHz	NaN	BPSK	23179	12@0	-30.63	PASS
Band12	15kHz	NaN	QPSK	23011	1@0	-18.86	PASS
Band12	15kHz	NaN	QPSK	23011	1@11	-37.37	PASS
Band12	15kHz	NaN	QPSK	23011	12@0	-33.26	PASS
Band12	15kHz	NaN	QPSK	23179	1@0	-37.97	PASS
Band12	15kHz	NaN	QPSK	23179	1@11	-18.69	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	-30.23	PASS

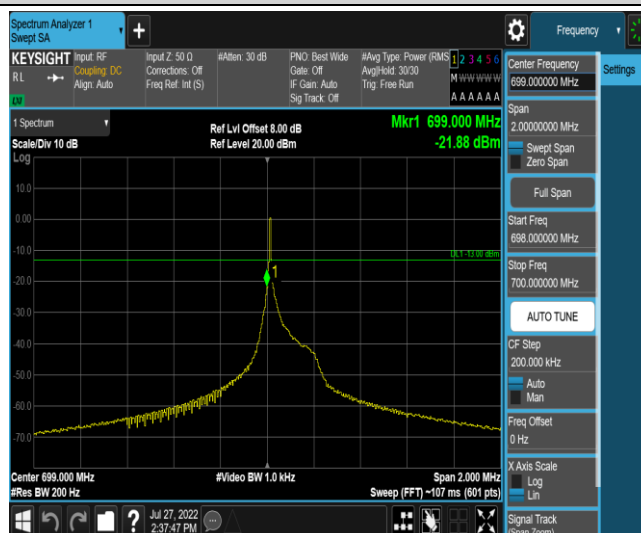
Test Graphs



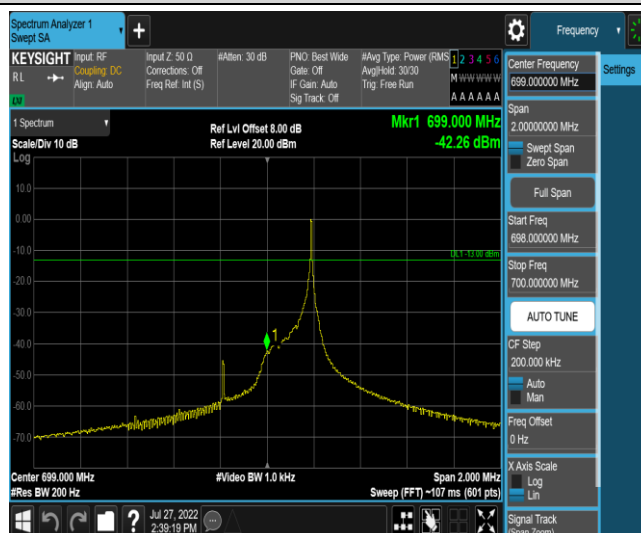
Band12-Stand-Alone-NaN-BPSK-23179-1@0-3.75kHz--45.07-PASS



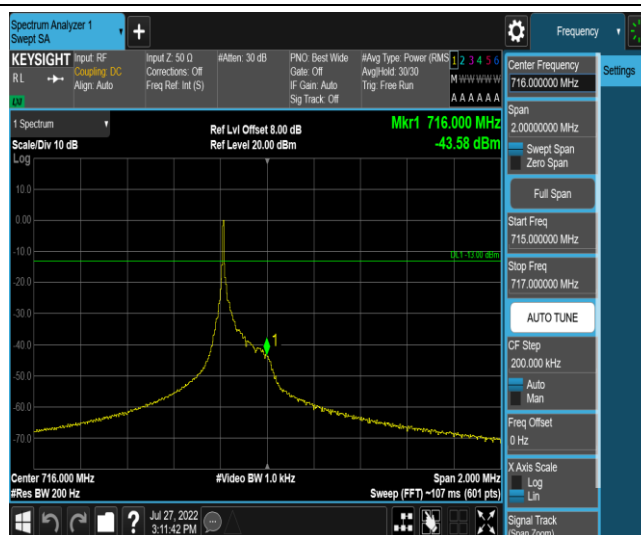
Band12-Stand-Alone-NaN-BPSK-23179-1@47-3.75kHz--21.98-PASS



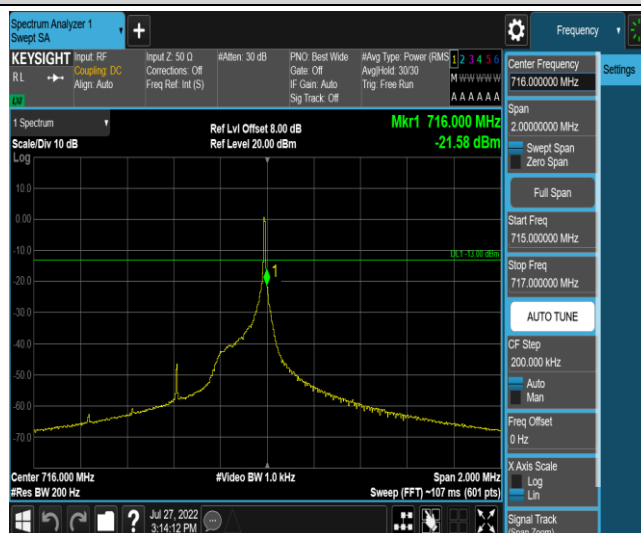
Band12-Stand-Alone-NaN-QPSK-23011-1@0-3.75kHz--21.88-PASS



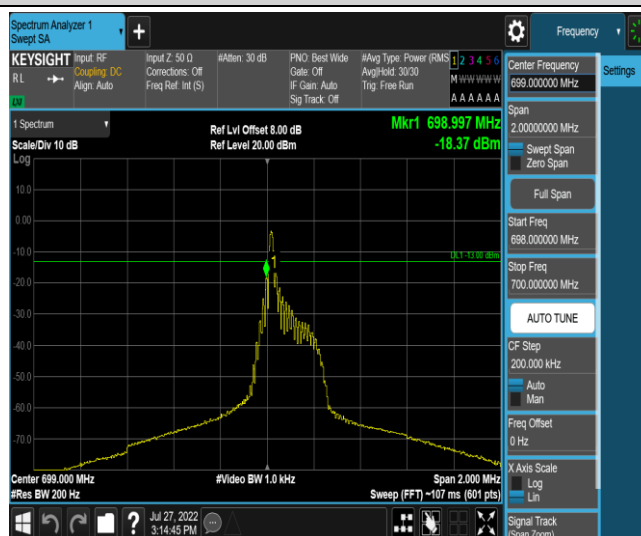
Band12-Stand-Alone-NaN-QPSK-23011-1@47-3.75kHz--42.26-PASS



Band12-Stand-Alone-NaN-QPSK-23179-1@0-3.75kHz--43.58-PASS



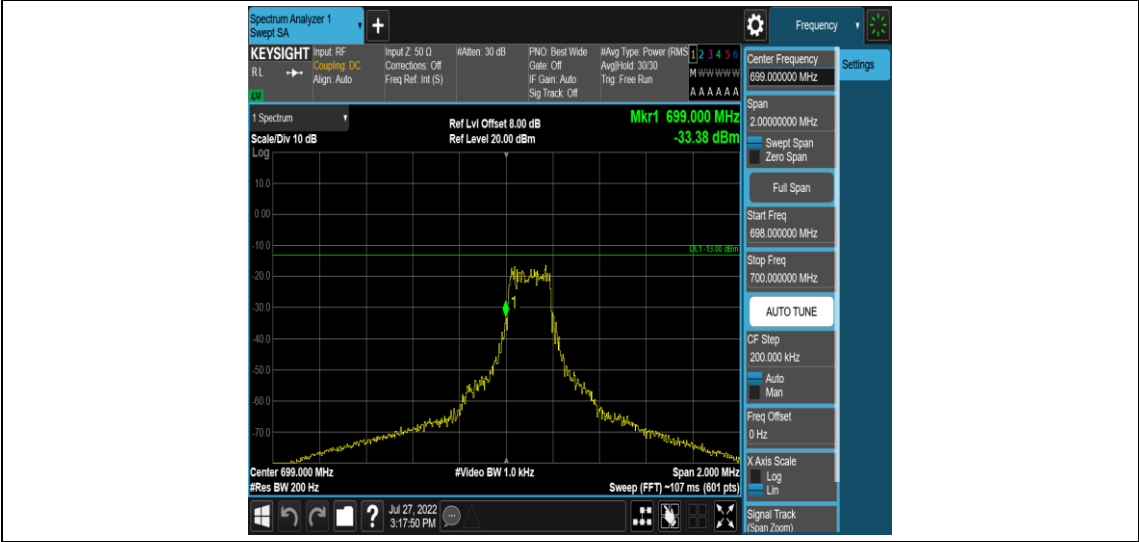
Band12-Stand-Alone-NaN-QPSK-23179-1@47-3.75kHz--21.58-PASS



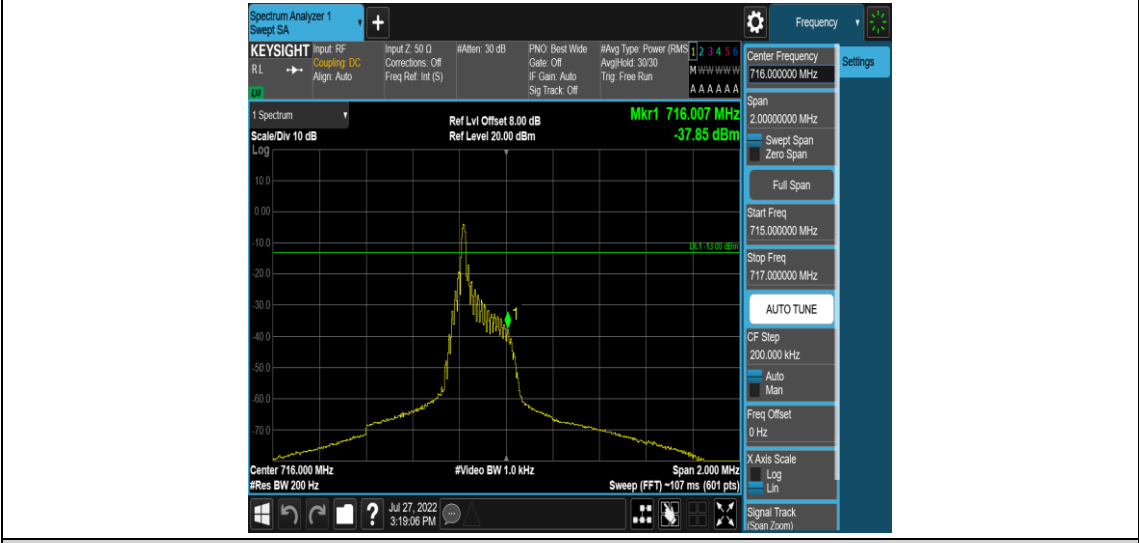
Band12-Stand-Alone-NaN-BPSK-23011-1@0-15kHz--18.37-PASS



Band12-Stand-Alone-NaN-BPSK-23011-1@11-15kHz--37.49-PASS



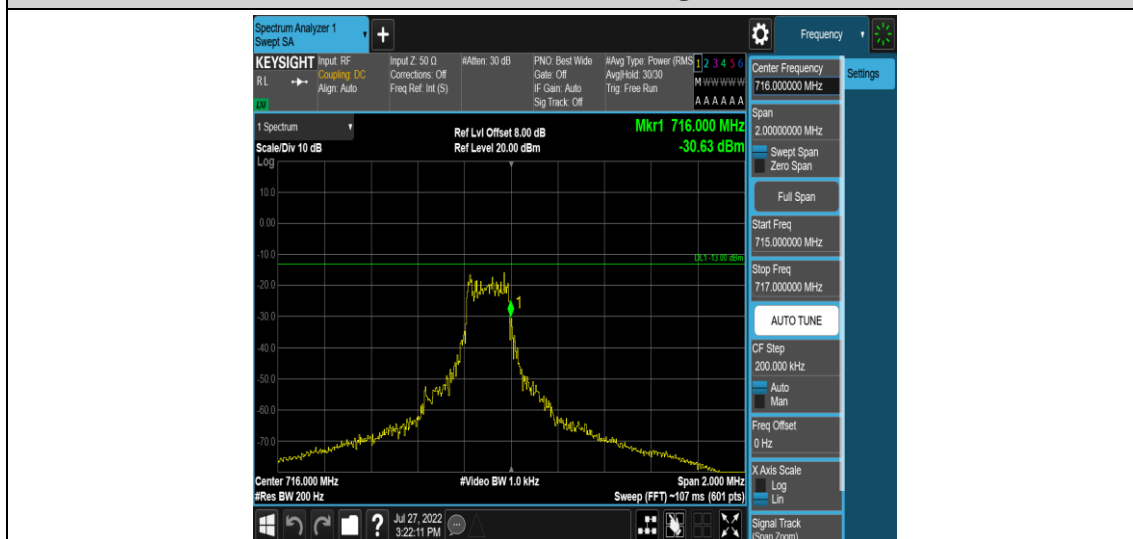
Band12-Stand-Alone-NaN-BPSK-23011-12@0-15kHz--33.38-PASS



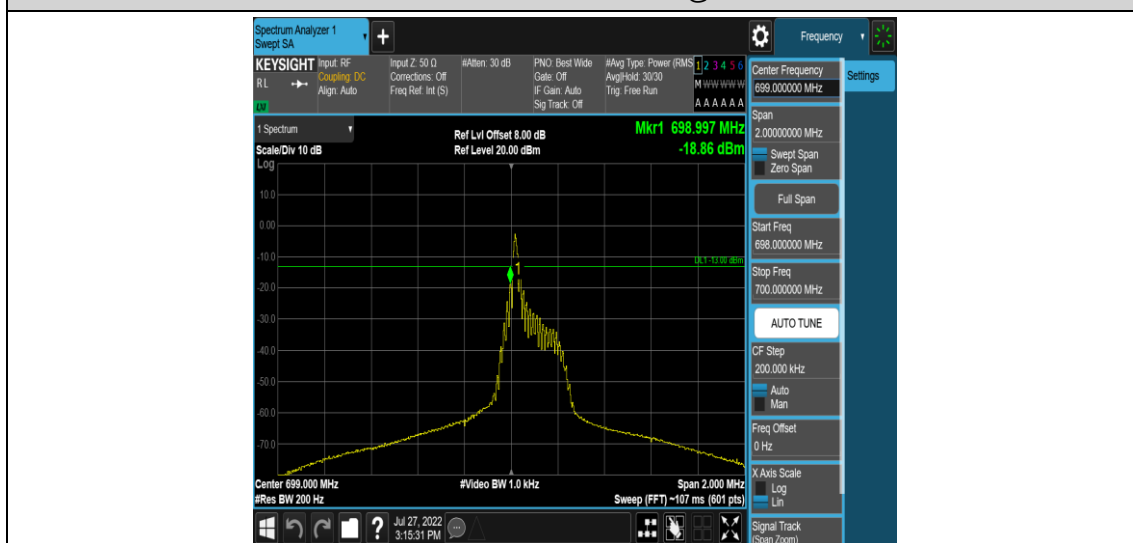
Band12-Stand-Alone-NaN-BPSK-23179-1@0-15kHz--37.85-PASS



Band12-Stand-Alone-NaN-BPSK-23179-1@11-15kHz--19.17-PASS



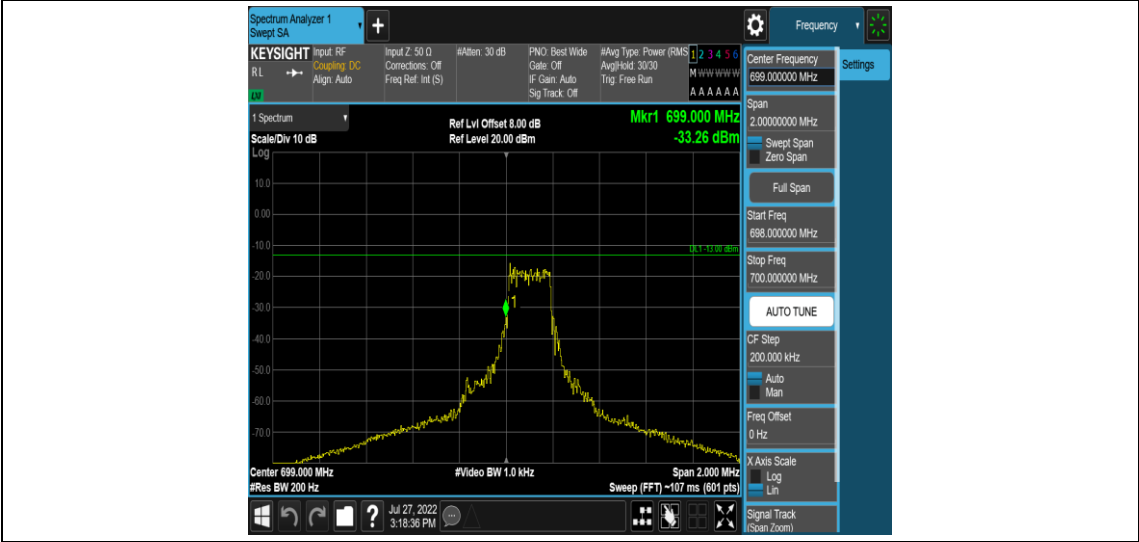
Band12-Stand-Alone-NaN-BPSK-23179-12@0-15kHz--30.63-PASS



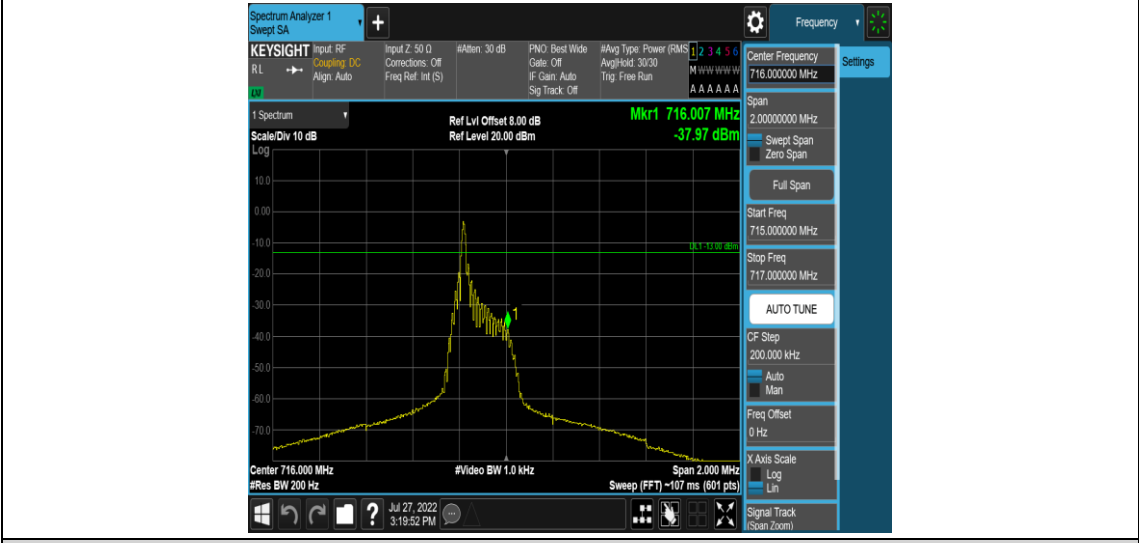
Band12-Stand-Alone-NaN-QPSK-23011-1@0-15kHz--18.86-PASS



Band12-Stand-Alone-NaN-QPSK-23011-1@11-15kHz--37.37-PASS



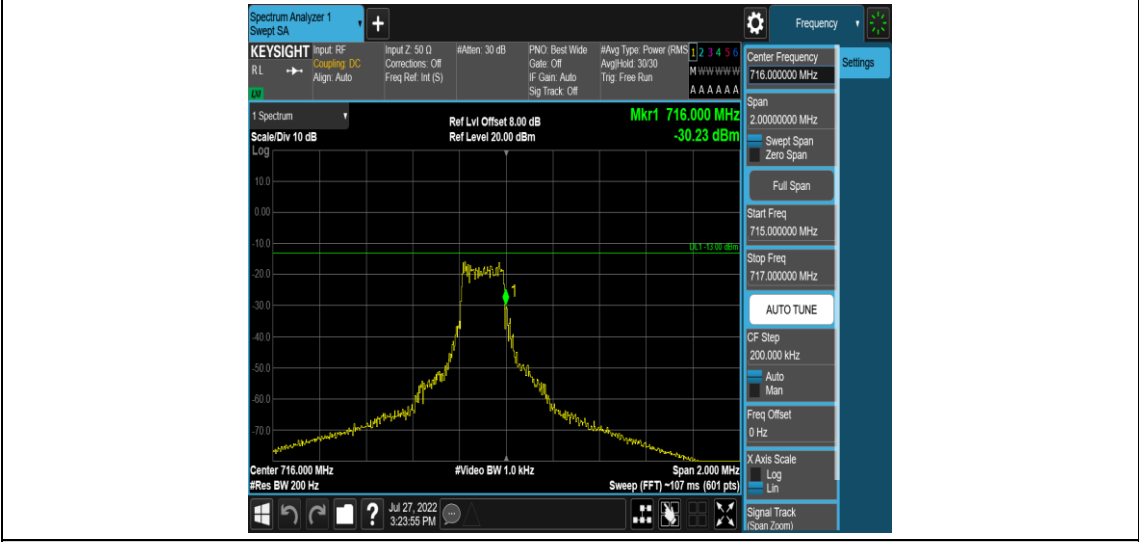
Band12-Stand-Alone-NaN-QPSK-23011-12@0-15kHz--33.26-PASS



Band12-Stand-Alone-NaN-QPSK-23179-1@0-15kHz--37.97-PASS



Band12-Stand-Alone-NaN-QPSK-23179-1@11-15kHz--18.69-PASS



Band12-Stand-Alone-NaN-QPSK-23179-12@0-15kHz--30.23-PASS

Appendix E: Conducted Spurious Emission for NB1

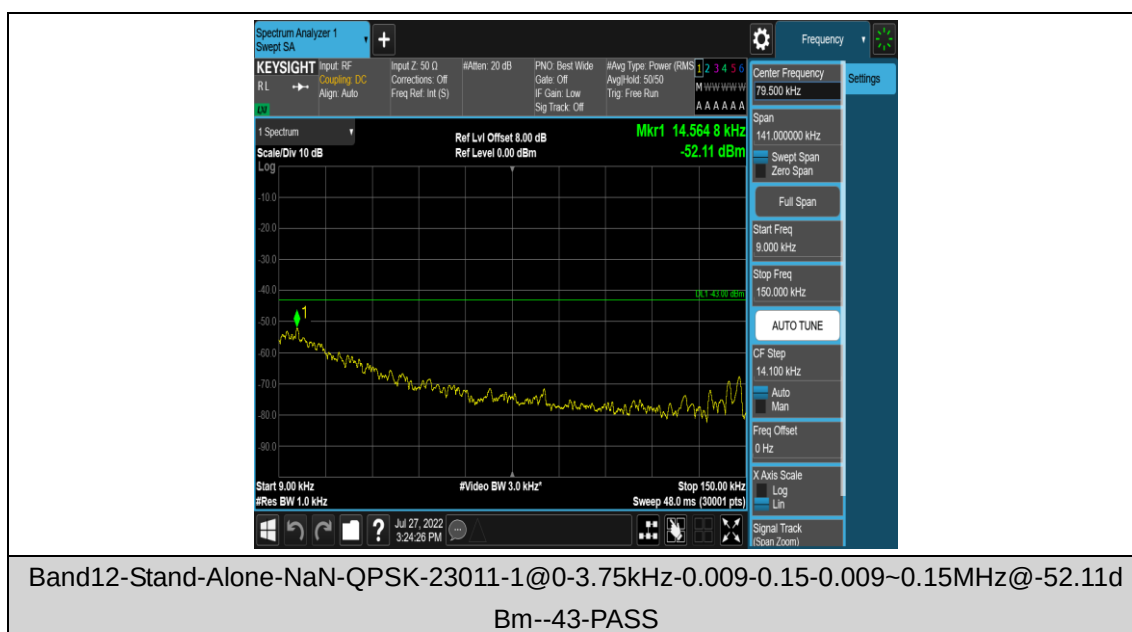
Test Result

Band	SCS	BW	Modu	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Limit (dBm)	Verdict
Band12	3.75kHz	NaN	QPSK	23011	1@0	0.009	0.15	-43	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@0	0.15	30	-23	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@0	30	1000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@0	1000	5000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@0	5000	12000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@0	12000	26500	-13	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@47	0.009	0.15	-43	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@47	0.15	30	-23	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@47	30	1000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@47	1000	5000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@47	5000	12000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23011	1@47	12000	26500	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@0	0.009	0.15	-43	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@0	0.15	30	-23	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@0	30	1000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@0	1000	5000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@0	5000	12000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@0	12000	26500	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@47	0.009	0.15	-43	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@47	0.15	30	-23	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@47	30	1000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@47	1000	5000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@47	5000	12000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23095	1@47	12000	26500	-13	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	0.009	0.15	-43	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	0.15	30	-23	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	30	1000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	1000	5000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	5000	12000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@0	12000	26500	-13	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@47	0.009	0.15	-43	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@47	0.15	30	-23	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@47	30	1000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@47	1000	5000	-13	PASS

Band12	3.75kHz	NaN	QPSK	23179	1@47	5000	12000	-13	PASS
Band12	3.75kHz	NaN	QPSK	23179	1@47	12000	26500	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	0.009	0.15	-43	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	0.15	30	-23	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	30	1000	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	1000	5000	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	5000	12000	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@0	12000	26500	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@11	0.009	0.15	-43	PASS
Band12	15kHz	NaN	BPSK	23011	1@11	0.15	30	-23	PASS
Band12	15kHz	NaN	BPSK	23011	1@11	30	1000	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@11	1000	5000	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@11	5000	12000	-13	PASS
Band12	15kHz	NaN	BPSK	23011	1@11	12000	26500	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@0	0.009	0.15	-43	PASS
Band12	15kHz	NaN	BPSK	23095	1@0	0.15	30	-23	PASS
Band12	15kHz	NaN	BPSK	23095	1@0	30	1000	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@0	1000	5000	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@0	5000	12000	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@0	12000	26500	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@11	0.009	0.15	-43	PASS
Band12	15kHz	NaN	BPSK	23095	1@11	0.15	30	-23	PASS
Band12	15kHz	NaN	BPSK	23095	1@11	30	1000	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@11	1000	5000	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@11	5000	12000	-13	PASS
Band12	15kHz	NaN	BPSK	23095	1@11	12000	26500	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	0.009	0.15	-43	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	0.15	30	-23	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	30	1000	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	1000	5000	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	5000	12000	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@0	12000	26500	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@11	0.009	0.15	-43	PASS
Band12	15kHz	NaN	BPSK	23179	1@11	0.15	30	-23	PASS
Band12	15kHz	NaN	BPSK	23179	1@11	30	1000	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@11	1000	5000	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@11	5000	12000	-13	PASS
Band12	15kHz	NaN	BPSK	23179	1@11	12000	26500	-13	PASS
Band12	15kHz	NaN	QPSK	23011	12@0	0.009	0.15	-43	PASS
Band12	15kHz	NaN	QPSK	23011	12@0	0.15	30	-23	PASS
Band12	15kHz	NaN	QPSK	23011	12@0	30	1000	-13	PASS
Band12	15kHz	NaN	QPSK	23011	12@0	1000	5000	-13	PASS

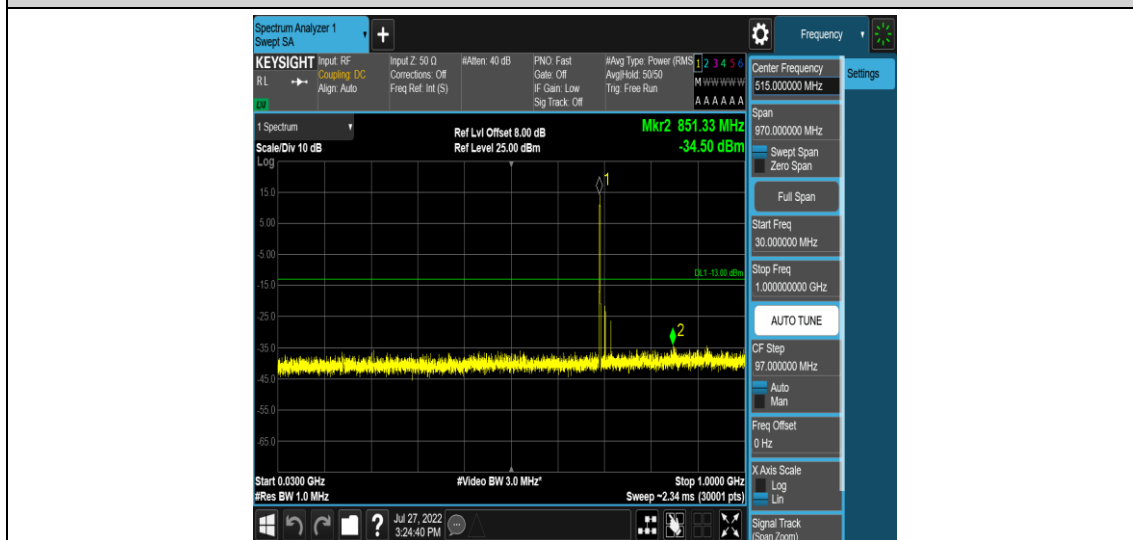
Band12	15kHz	NaN	QPSK	23011	12@0	5000	12000	-13	PASS
Band12	15kHz	NaN	QPSK	23011	12@0	12000	26500	-13	PASS
Band12	15kHz	NaN	QPSK	23095	12@0	0.009	0.15	-43	PASS
Band12	15kHz	NaN	QPSK	23095	12@0	0.15	30	-23	PASS
Band12	15kHz	NaN	QPSK	23095	12@0	30	1000	-13	PASS
Band12	15kHz	NaN	QPSK	23095	12@0	1000	5000	-13	PASS
Band12	15kHz	NaN	QPSK	23095	12@0	5000	12000	-13	PASS
Band12	15kHz	NaN	QPSK	23095	12@0	12000	26500	-13	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	0.009	0.15	-43	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	0.15	30	-23	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	30	1000	-13	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	1000	5000	-13	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	5000	12000	-13	PASS
Band12	15kHz	NaN	QPSK	23179	12@0	12000	26500	-13	PASS

Test Graphs





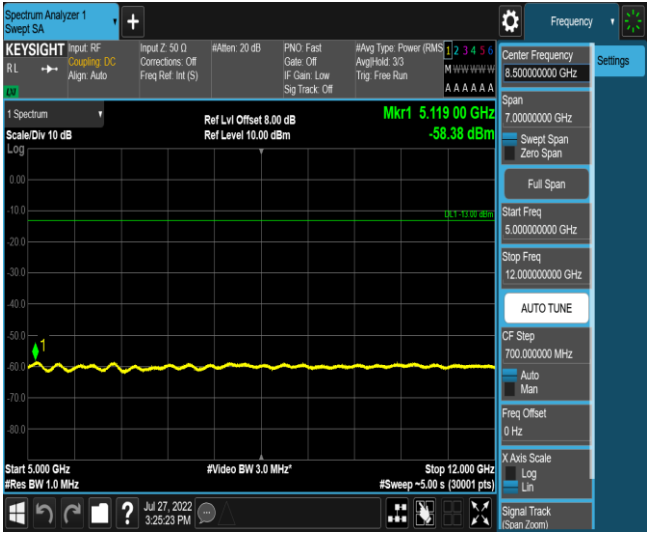
Band12-Stand-Alone-NaN-QPSK-23011-1@0-3.75kHz-0.15-30-0.15~30MHz@-52.07dBm--2
3-PASS



Band12-Stand-Alone-NaN-QPSK-23011-1@0-3.75kHz-30-1000-30~1000MHz@-34.5dBm--1
3-PASS



Band12-Stand-Alone-NaN-QPSK-23011-1@0-3.75kHz-1000-5000-1000~5000MHz@-37.17d
Bm--13-PASS



Band12-Stand-Alone-NaN-QPSK-23011-1@0-3.75kHz-5000-12000-5000~12000MHz@-58.3
8dBm--13-PASS



Band12-Stand-Alone-NaN-QPSK-23011-1@0-3.75kHz-12000-26500-12000~26500MHz@-52
.8dBm--13-PASS