

Appendix for Band 13

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
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23181	1@0	20.31	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23181	1@47	20.38	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23230	1@0	20.53	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23230	1@47	20.53	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23279	1@0	20.57	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23279	1@47	20.49	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23181	1@0	20.49	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23181	1@47	20.39	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23230	1@0	20.53	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23230	1@47	20.56	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23279	1@0	20.56	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23279	1@47	20.48	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23181	1@0	20.74	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23181	1@11	20.39	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23181	3@3	20.87	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	1@0	20.32	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	1@11	20.46	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	3@3	21.07	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23279	1@0	20.93	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23279	1@11	20.93	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23279	3@3	21.03	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23181	1@0	20.85	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23181	1@11	20.75	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23181	3@3	20.80	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	1@0	20.53	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	1@11	20.57	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	3@3	21.06	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23279	1@0	20.51	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23279	1@11	20.42	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23279	3@3	20.97	PASS

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

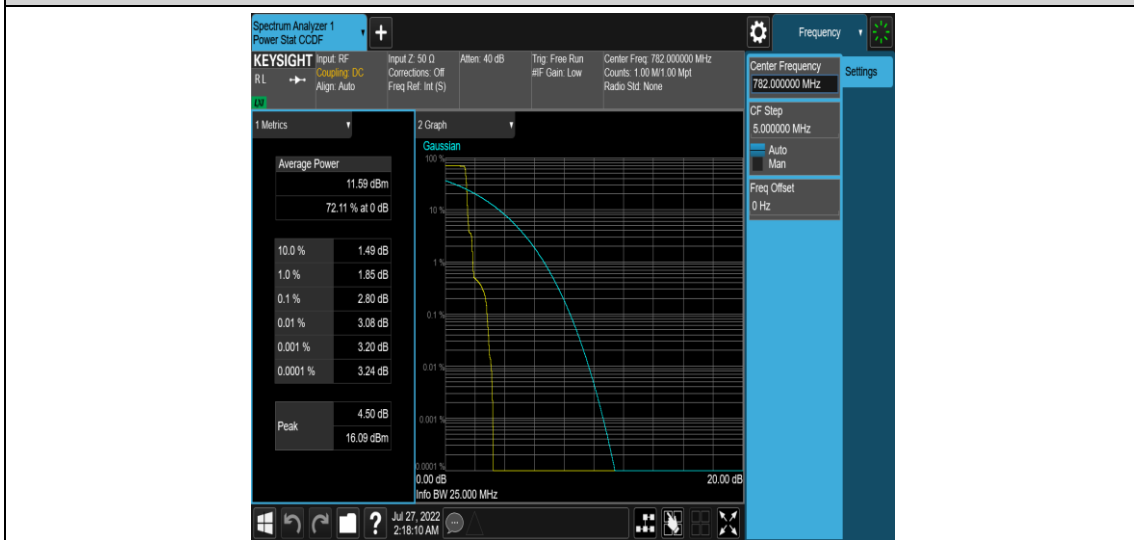
Test Result

Band	OpMode	SCS	BW	Modu	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23230	1@0	2.75	<=13	PASS
Band13	Stand-Alone	3.75kHz	NaN	BPSK	23230	1@47	2.8	<=13	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23230	1@0	2.94	<=13	PASS
Band13	Stand-Alone	3.75kHz	NaN	QPSK	23230	1@47	2.94	<=13	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	1@0	6.16	<=13	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	1@11	3.25	<=13	PASS
Band13	Stand-Alone	15kHz	NaN	BPSK	23230	3@3	8.94	<=13	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	1@0	6.13	<=13	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	1@11	7.19	<=13	PASS
Band13	Stand-Alone	15kHz	NaN	QPSK	23230	3@3	10.07	<=13	PASS

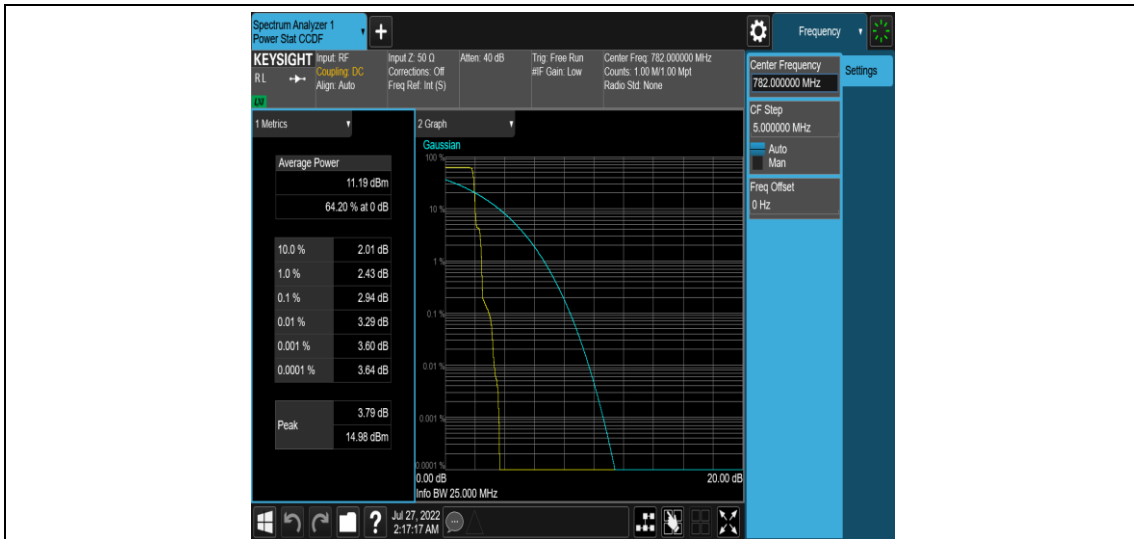
Test Graphs



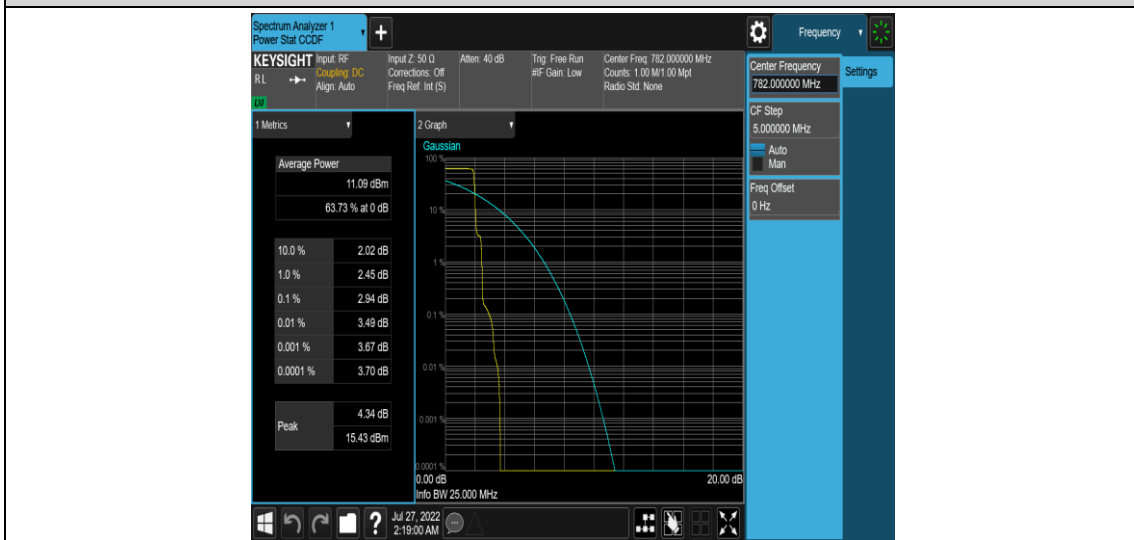
Band13-Stand-Alone-NaN-BPSK-23230-1 @0-3.75kHz-2.75-<=13-PASS



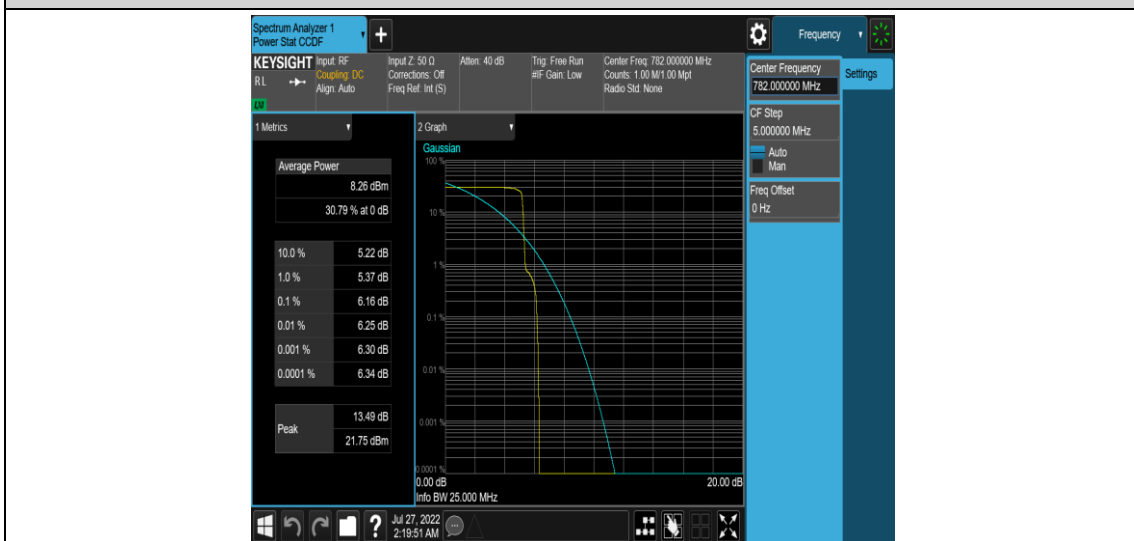
Band13-Stand-Alone-NaN-BPSK-23230-1 @47-3.75kHz-2.8-<=13-PASS



Band13-Stand-Alone-NaN-QPSK-23230-1 @0-3.75kHz-2.94-<=13-PASS



Band13-Stand-Alone-NaN-QPSK-23230-1 @47-3.75kHz-2.94-<=13-PASS



Band13-Stand-Alone-NaN-BPSK-23230-1 @0-15kHz-6.16-<=13-PASS



Band13-Stand-Alone-NaN-BPSK-23230-1 @ 11-15kHz-3.25-<=13-PASS



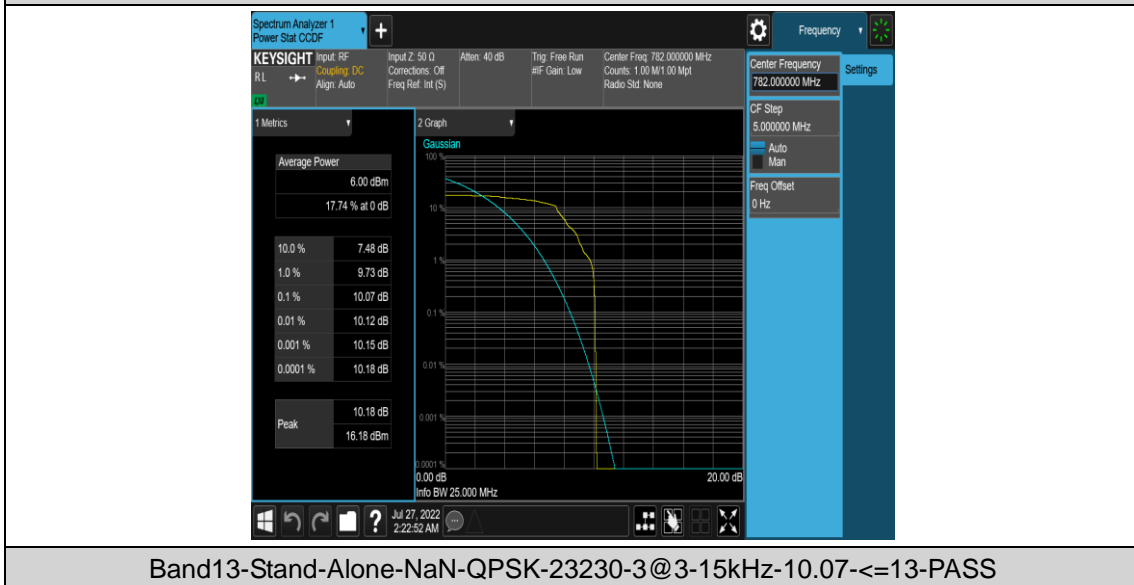
Band13-Stand-Alone-NaN-BPSK-23230-3 @ 3-15kHz-8.94-<=13-PASS



Band13-Stand-Alone-NaN-QPSK-23230-1 @ 0-15kHz-6.13-<=13-PASS



Band13-Stand-Alone-NaN-QPSK-23230-1 @ 11-15kHz-7.19-<=13-PASS



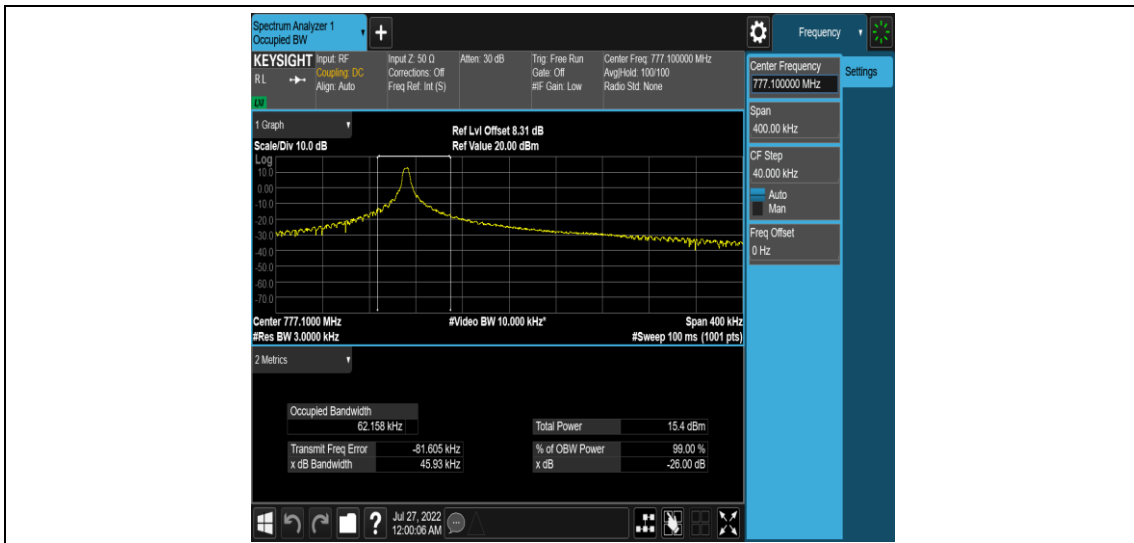
Band13-Stand-Alone-NaN-QPSK-23230-3 @ 3-15kHz-10.07-<=13-PASS

Appendix C: Emission Bandwidth for NB1

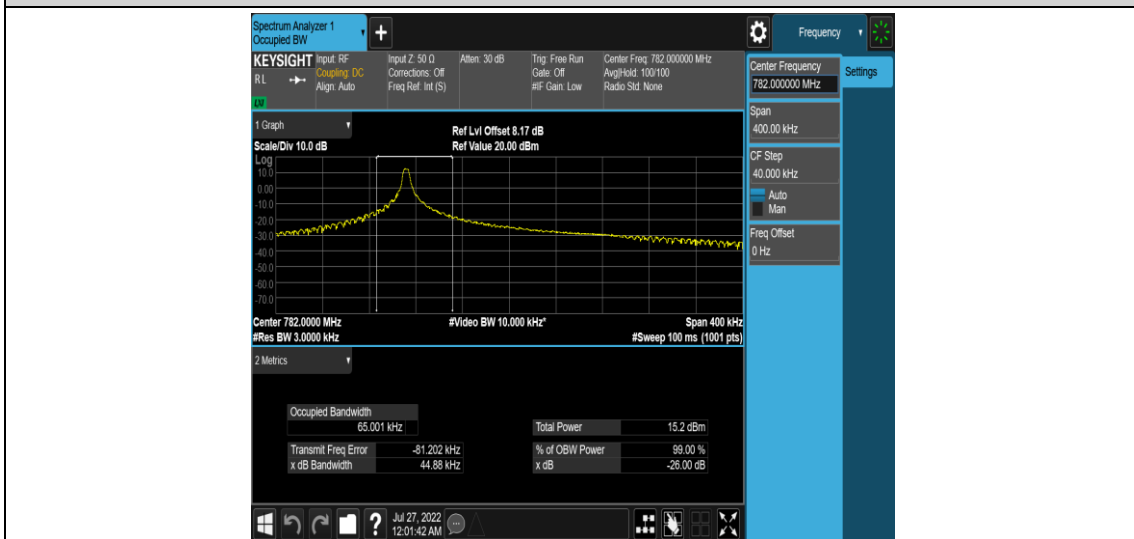
Test Result

Band	SCS	BW	Modu	Channel	Tones	Result (MHz)	Verdict
Band13	3.75kHz	NaN	BPSK	23181	1@0	0.0459	PASS
Band13	3.75kHz	NaN	BPSK	23230	1@0	0.0449	PASS
Band13	3.75kHz	NaN	BPSK	23279	1@0	0.0447	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@0	0.0465	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@0	0.0459	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	0.0472	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	0.1061	PASS
Band13	15kHz	NaN	BPSK	23181	12@0	0.2462	PASS
Band13	15kHz	NaN	BPSK	23230	1@0	0.1048	PASS
Band13	15kHz	NaN	BPSK	23230	12@0	0.2482	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	0.1058	PASS
Band13	15kHz	NaN	BPSK	23279	12@0	0.2472	PASS
Band13	15kHz	NaN	QPSK	23181	1@0	0.1161	PASS
Band13	15kHz	NaN	QPSK	23181	12@0	0.2480	PASS
Band13	15kHz	NaN	QPSK	23230	1@0	0.1155	PASS
Band13	15kHz	NaN	QPSK	23230	12@0	0.2496	PASS
Band13	15kHz	NaN	QPSK	23279	1@0	0.1171	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	0.2500	PASS

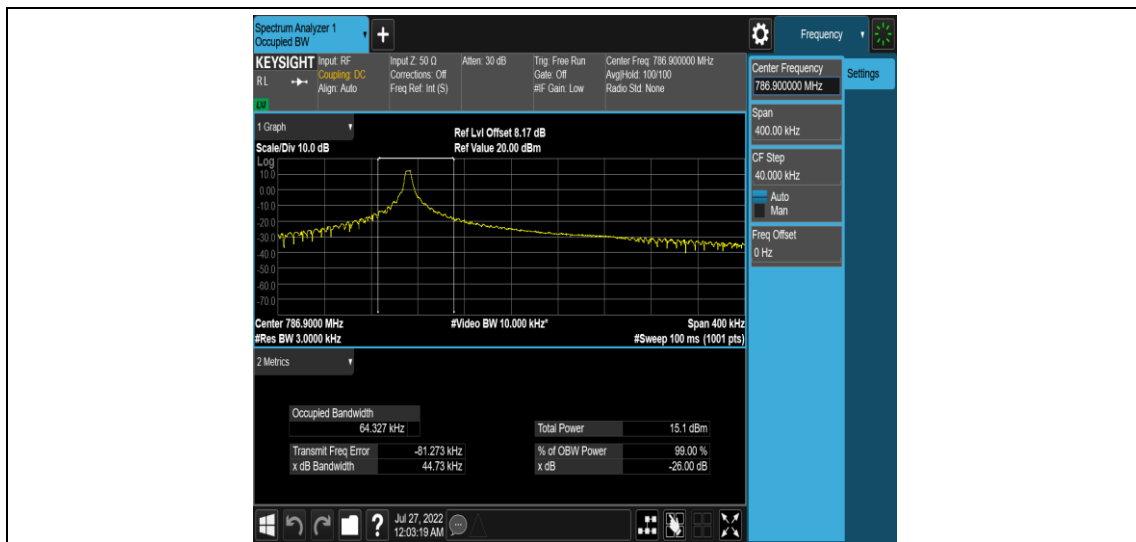
Test Graphs



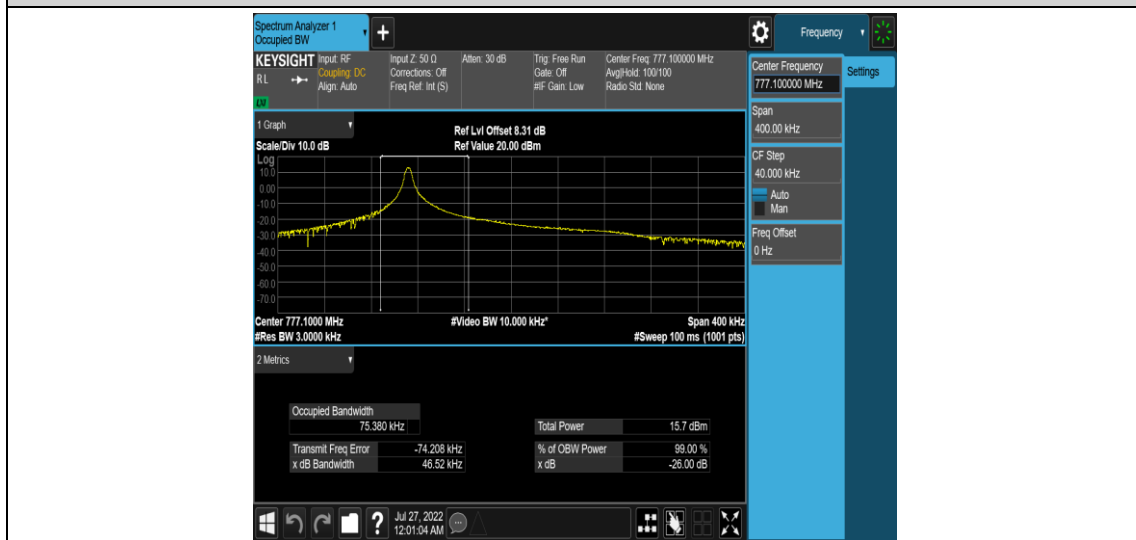
Band13-Stand-Alone-NaN-BPSK-23181-1 @0-3.75kHz-0.0459-PASS



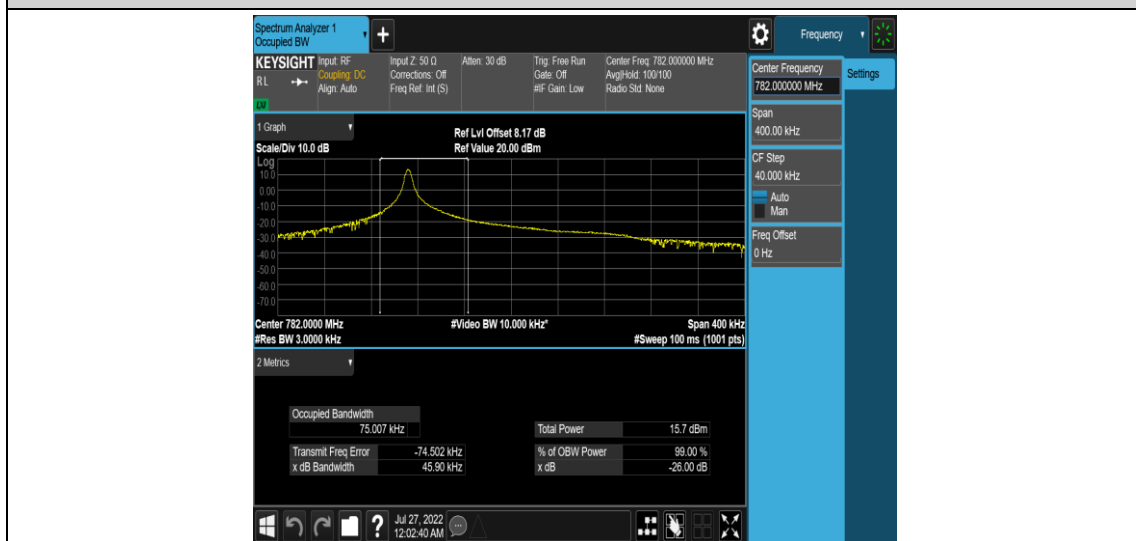
Band13-Stand-Alone-NaN-BPSK-23230-1 @0-3.75kHz-0.0449-PASS



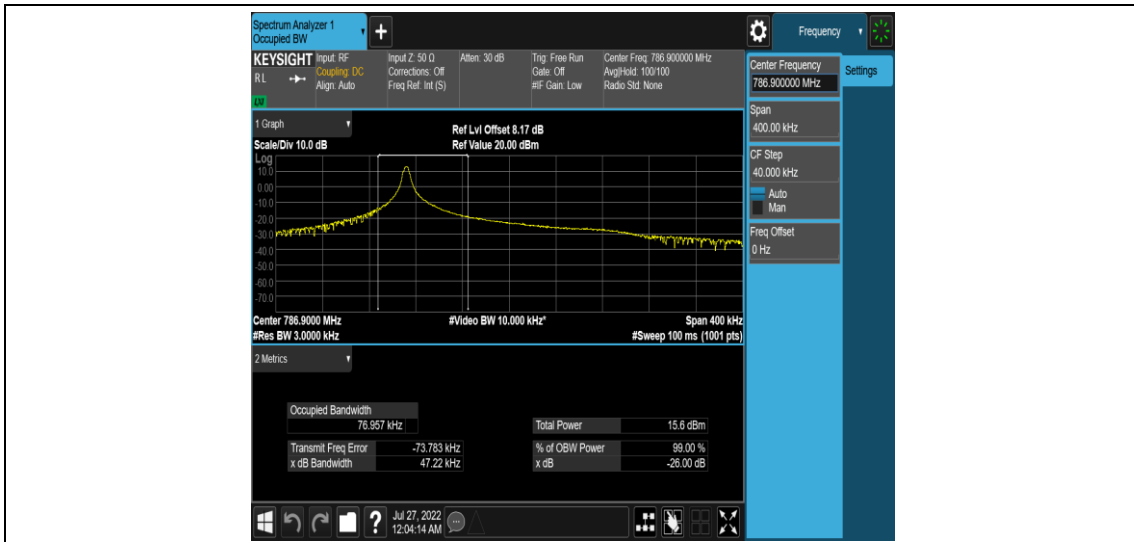
Band13-Stand-Alone-NaN-BPSK-23279-1 @0-3.75kHz-0.0447-PASS



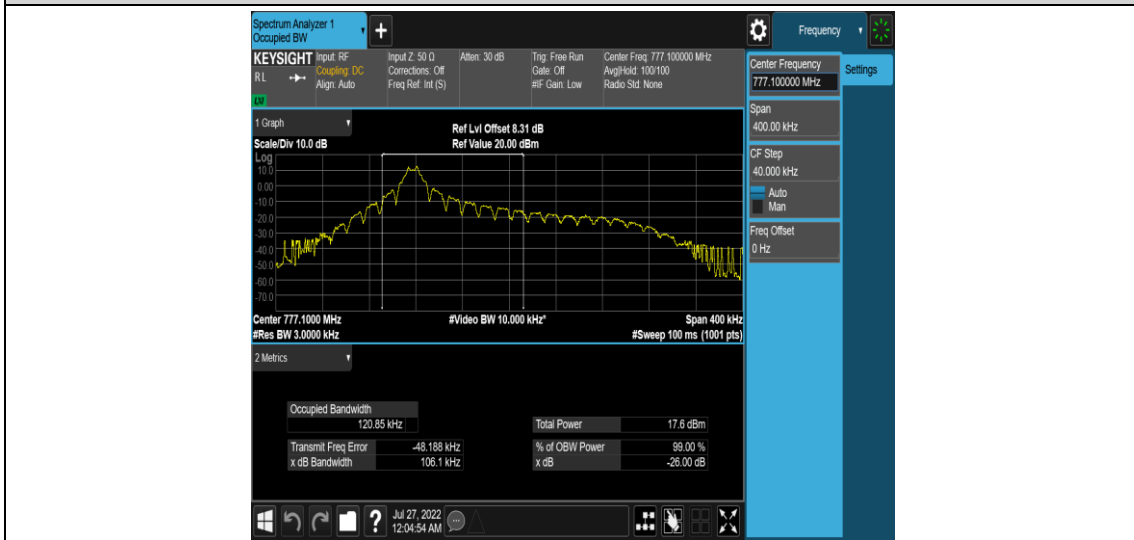
Band13-Stand-Alone-NaN-QPSK-23181-1 @0-3.75kHz-0.0465-PASS



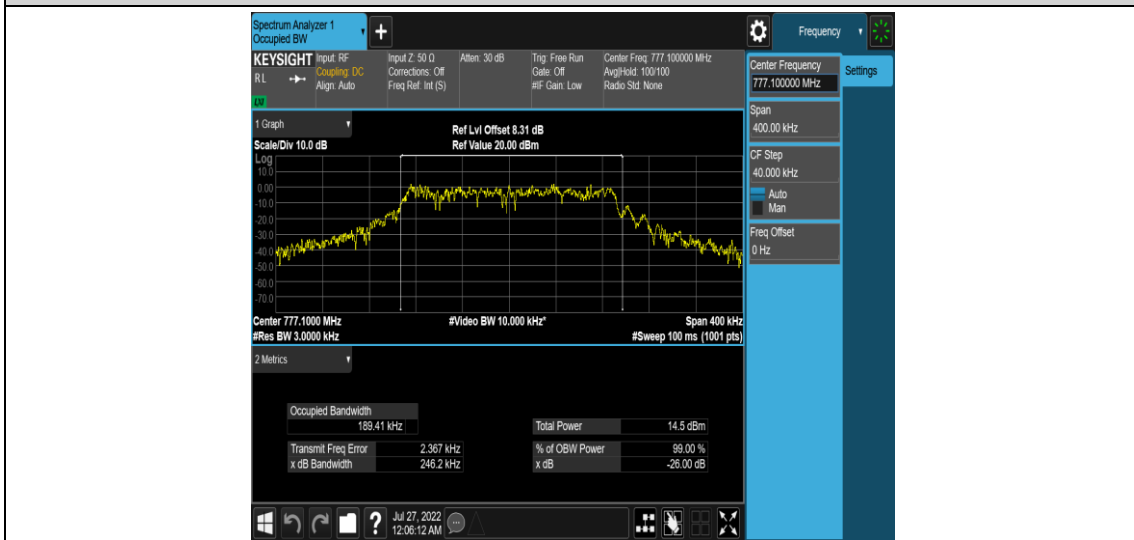
Band13-Stand-Alone-NaN-QPSK-23230-1 @0-3.75kHz-0.0459-PASS



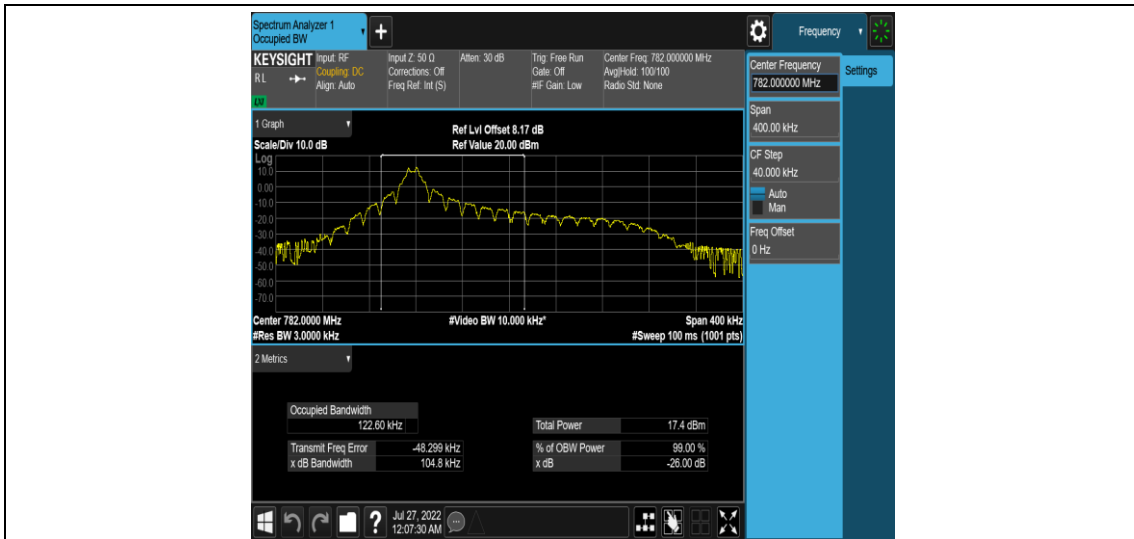
Band13-Stand-Alone-NaN-QPSK-23279-1 @0-3.75kHz-0.0472-PASS



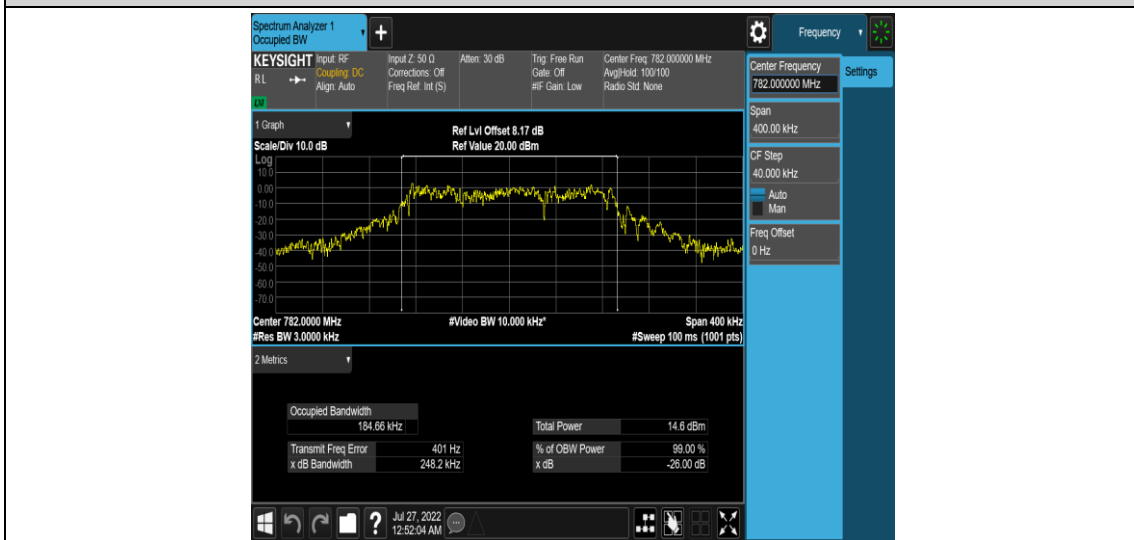
Band13-Stand-Alone-NaN-BPSK-23181-1 @0-15kHz-0.1061-PASS



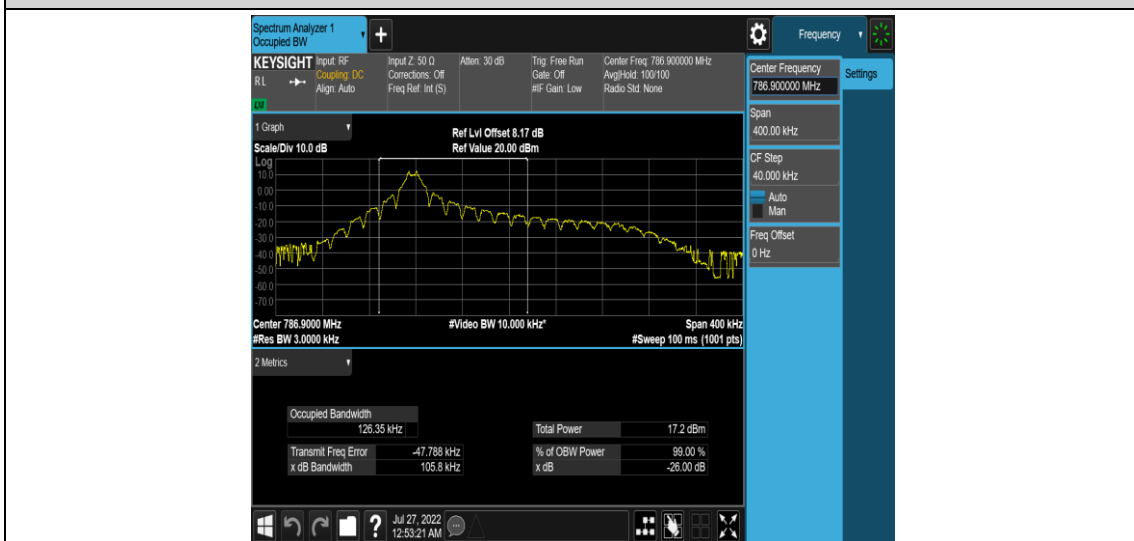
Band13-Stand-Alone-NaN-BPSK-23181-12 @0-15kHz-0.2462-PASS



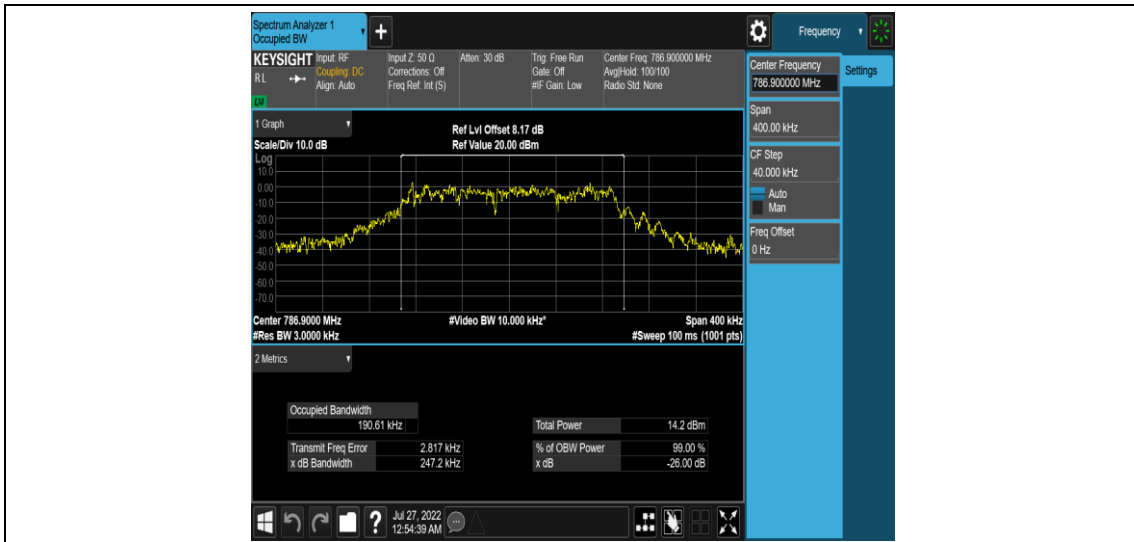
Band13-Stand-Alone-NaN-BPSK-23230-1 @ 0-15kHz-0.1048-PASS



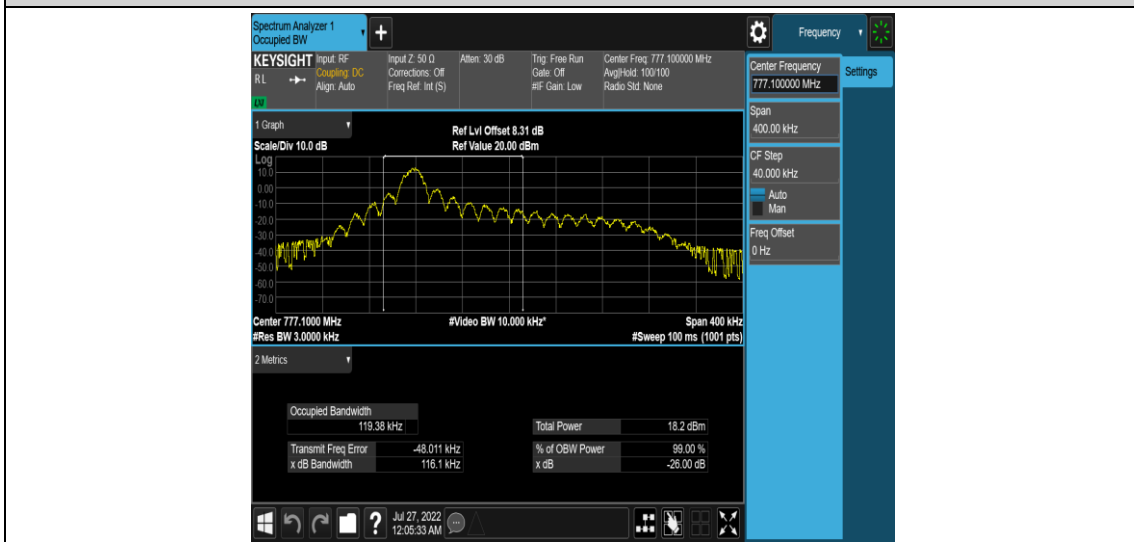
Band13-Stand-Alone-NaN-BPSK-23230-12 @ 0-15kHz-0.2482-PASS



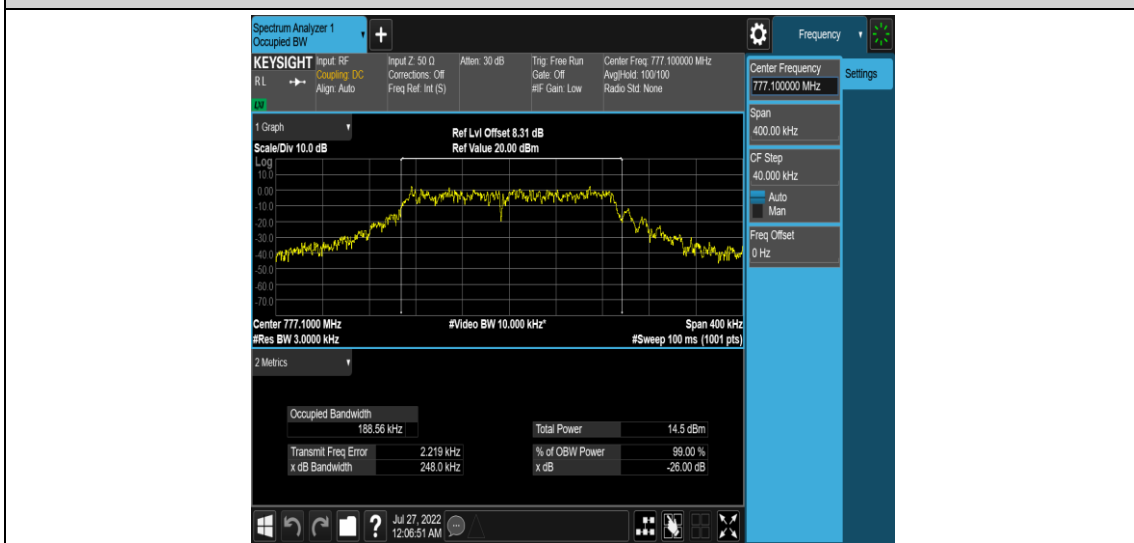
Band13-Stand-Alone-NaN-BPSK-23279-1 @ 0-15kHz-0.1058-PASS



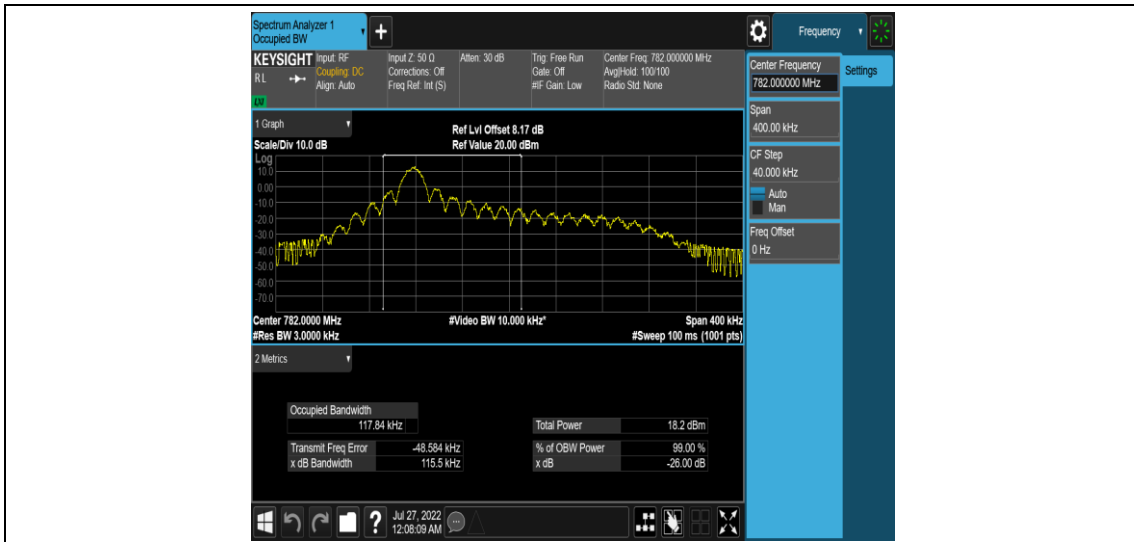
Band13-Stand-Alone-NaN-BPSK-23279-12@0-15kHz-0.2472-PASS



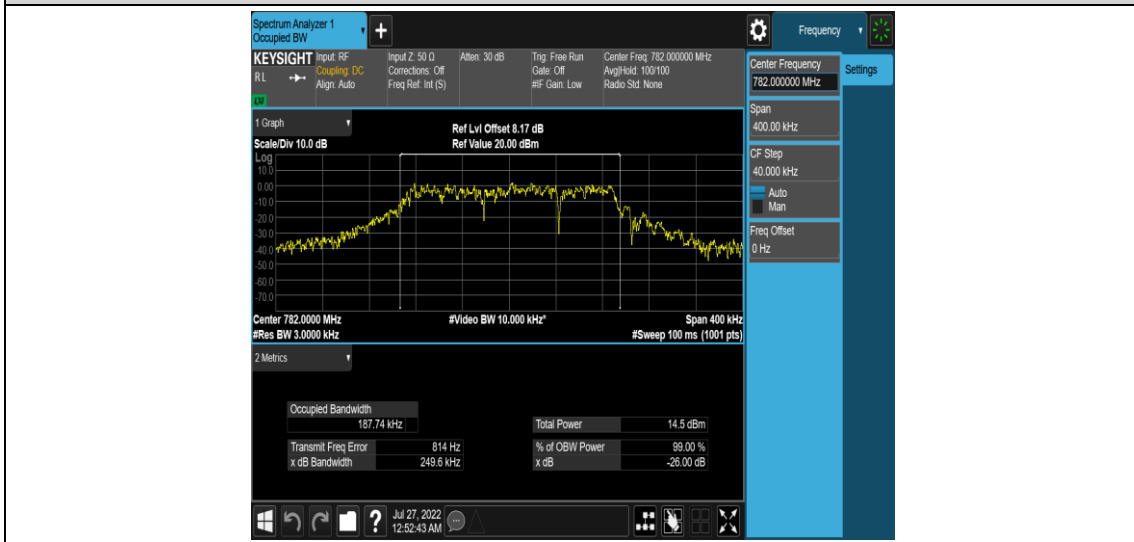
Band13-Stand-Alone-NaN-QPSK-23181-1@0-15kHz-0.1161-PASS



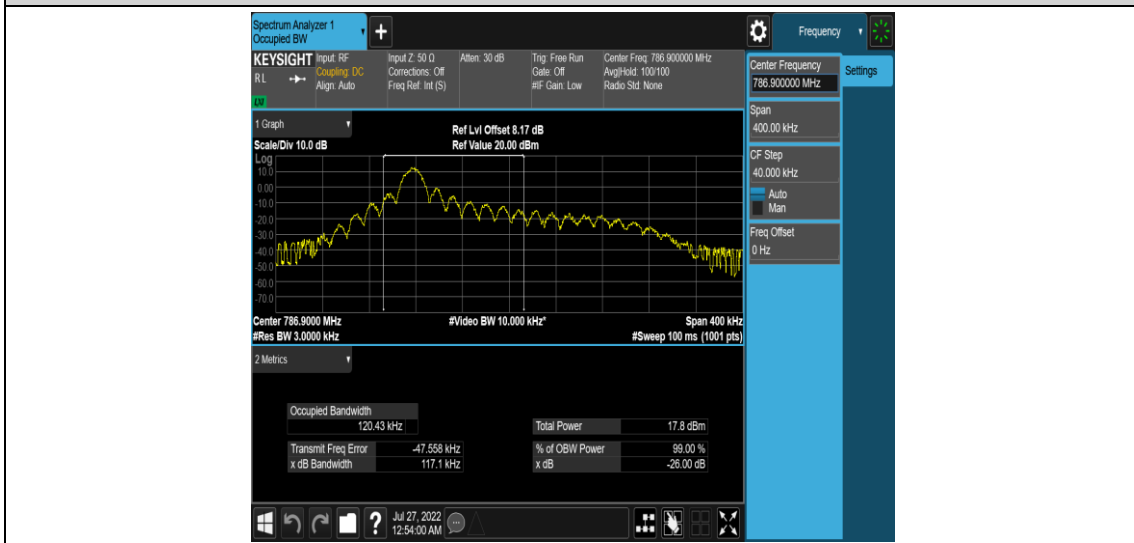
Band13-Stand-Alone-NaN-QPSK-23181-12@0-15kHz-0.2480-PASS



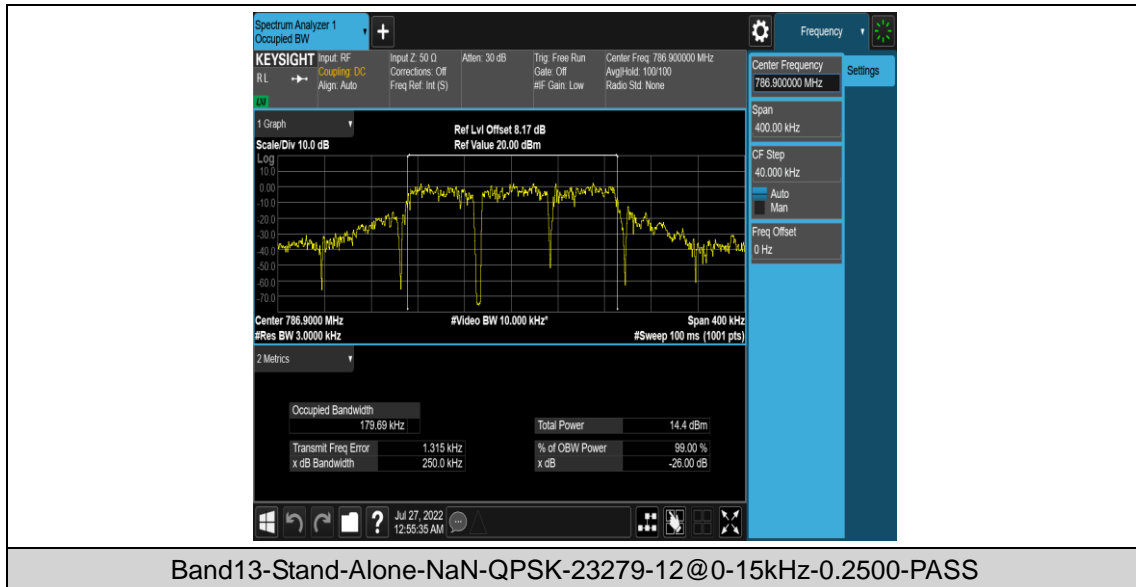
Band13-Stand-Alone-NaN-QPSK-23230-1 @0-15kHz-0.1155-PASS



Band13-Stand-Alone-NaN-QPSK-23230-12 @0-15kHz-0.2496-PASS



Band13-Stand-Alone-NaN-QPSK-23279-1 @0-15kHz-0.1171-PASS



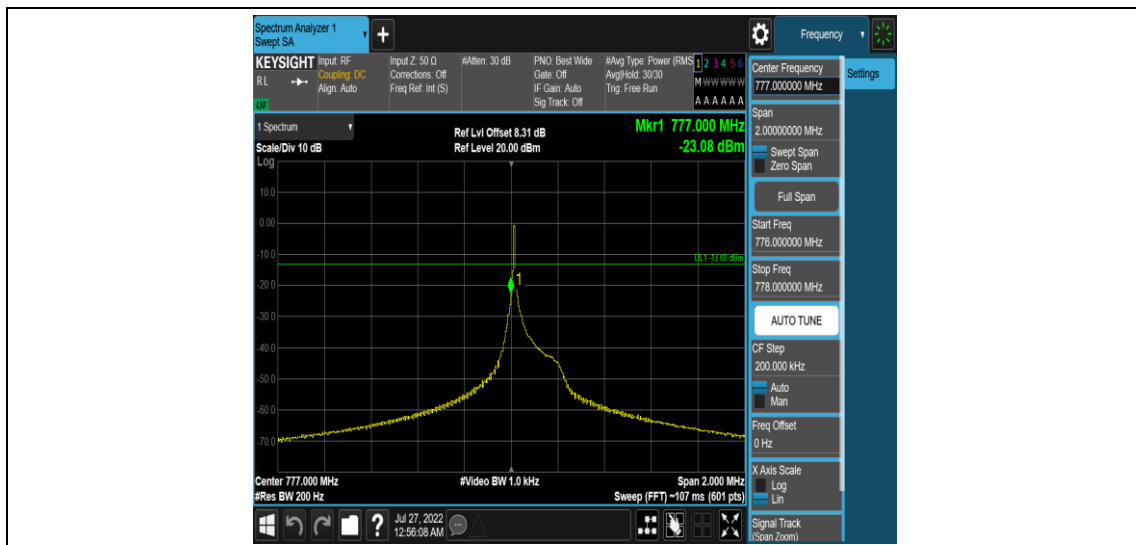
Band13-Stand-Alone-NaN-QPSK-23279-12@0-15kHz-0.2500-PASS

Appendix D: Band Edge for NB1

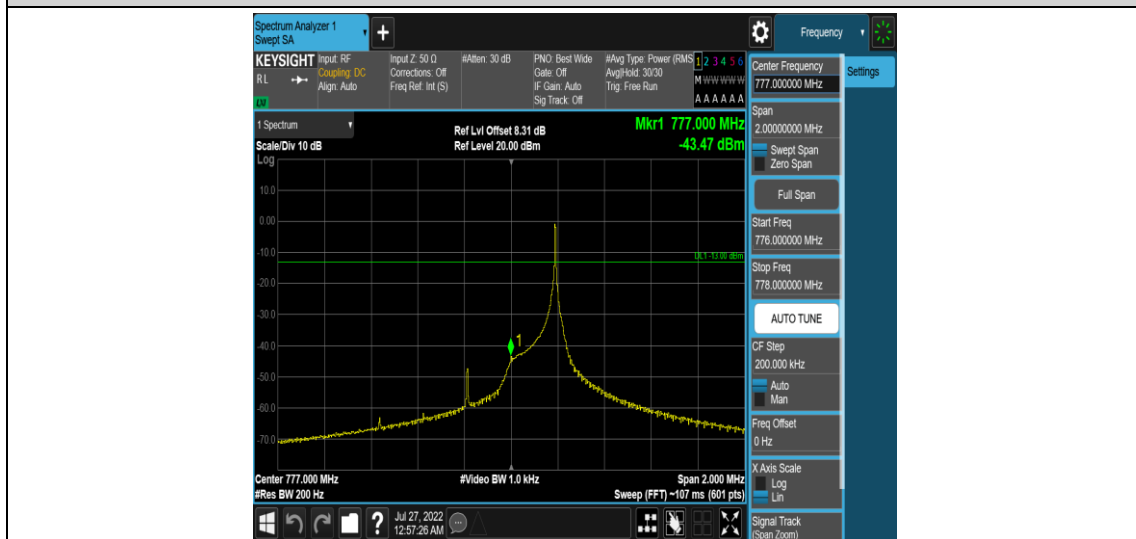
Test Result

Band	SCS	BW	Modu	Channel	Tones	Result (dBm)	Verdict
Band13	3.75kHz	NaN	BPSK	23181	1@0	-23.08	PASS
Band13	3.75kHz	NaN	BPSK	23181	1@47	-43.47	PASS
Band13	3.75kHz	NaN	BPSK	23279	1@0	-45.06	PASS
Band13	3.75kHz	NaN	BPSK	23279	1@47	-22.81	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@0	-22.93	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@47	-43.91	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	-44.13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@47	-22.48	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	-18.76	PASS
Band13	15kHz	NaN	BPSK	23181	1@11	-37.65	PASS
Band13	15kHz	NaN	BPSK	23181	12@0	-34.81	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	-37.80	PASS
Band13	15kHz	NaN	BPSK	23279	1@11	-18.93	PASS
Band13	15kHz	NaN	BPSK	23279	12@0	-32.38	PASS
Band13	15kHz	NaN	QPSK	23181	1@0	-19.50	PASS
Band13	15kHz	NaN	QPSK	23181	1@11	-37.78	PASS
Band13	15kHz	NaN	QPSK	23181	12@0	-35.01	PASS
Band13	15kHz	NaN	QPSK	23279	1@0	-37.77	PASS
Band13	15kHz	NaN	QPSK	23279	1@11	-18.64	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	-32.08	PASS

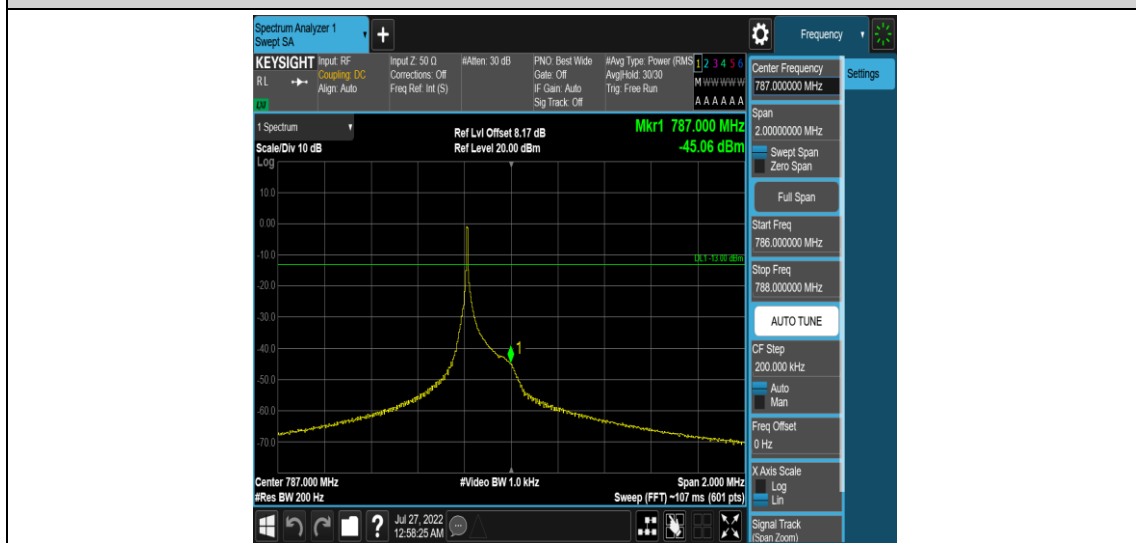
Test Graphs



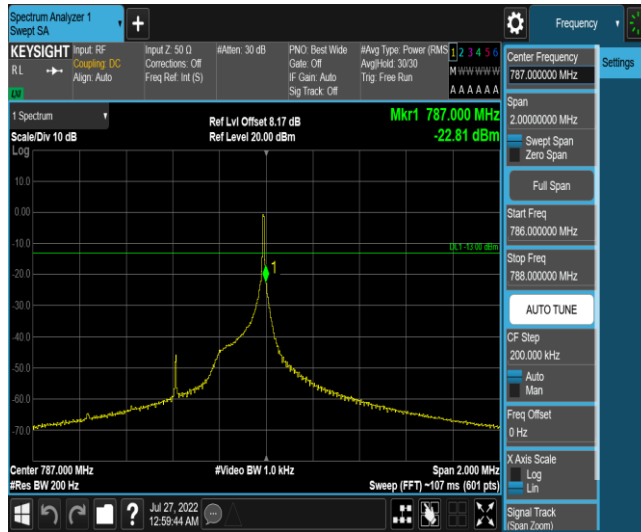
Band13-Stand-Alone-NaN-BPSK-23181-1 @0-3.75kHz--23.08-PASS



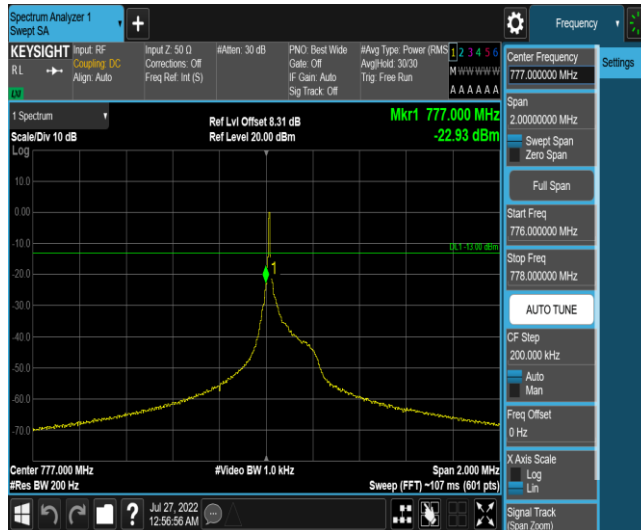
Band13-Stand-Alone-NaN-BPSK-23181-1 @47-3.75kHz--43.47-PASS



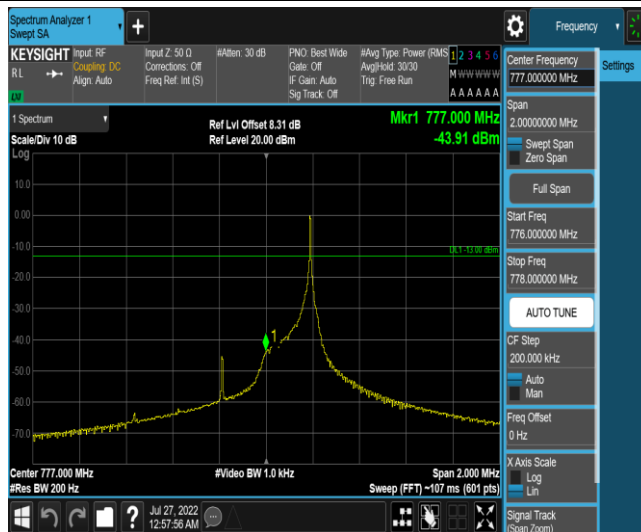
Band13-Stand-Alone-NaN-BPSK-23279-1 @0-3.75kHz--45.06-PASS



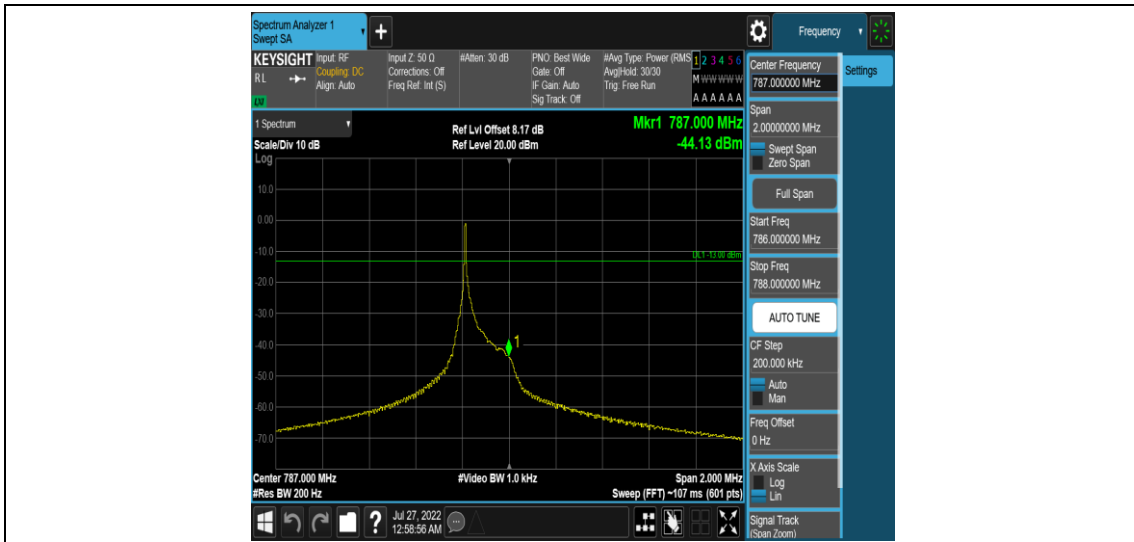
Band13-Stand-Alone-NaN-BPSK-23279-1 @47-3.75kHz--22.81-PASS



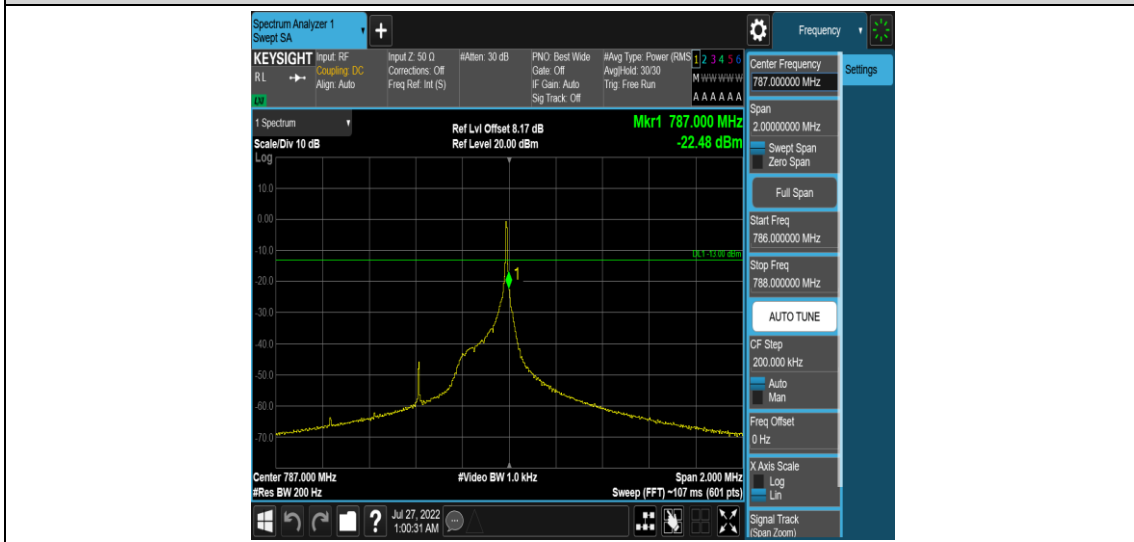
Band13-Stand-Alone-NaN-QPSK-23181-1 @0-3.75kHz--22.93-PASS



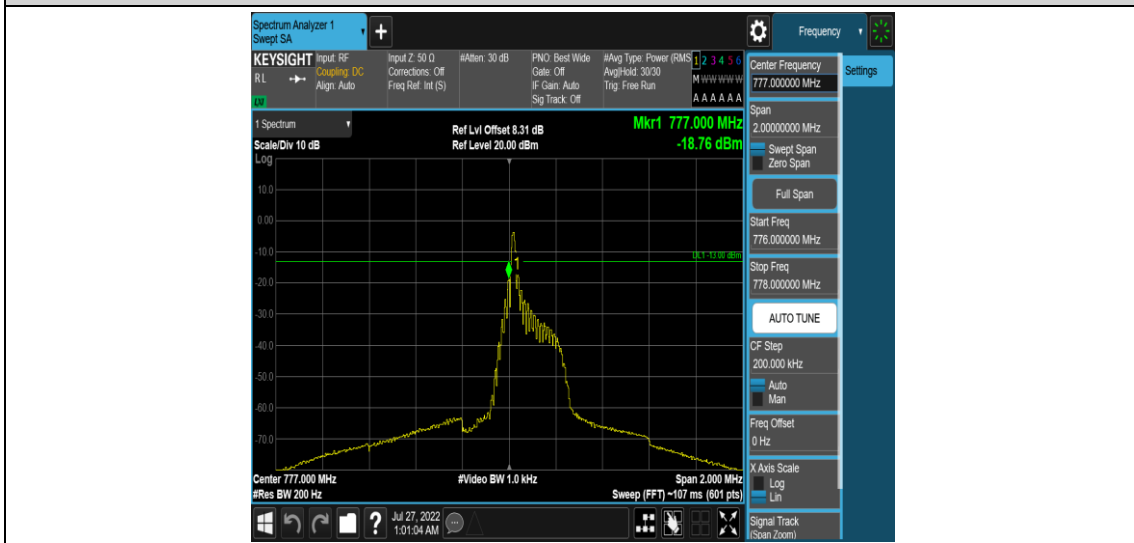
Band13-Stand-Alone-NaN-QPSK-23181-1 @47-3.75kHz--43.91-PASS



Band13-Stand-Alone-NaN-QPSK-23279-1 @0-3.75kHz--44.13-PASS



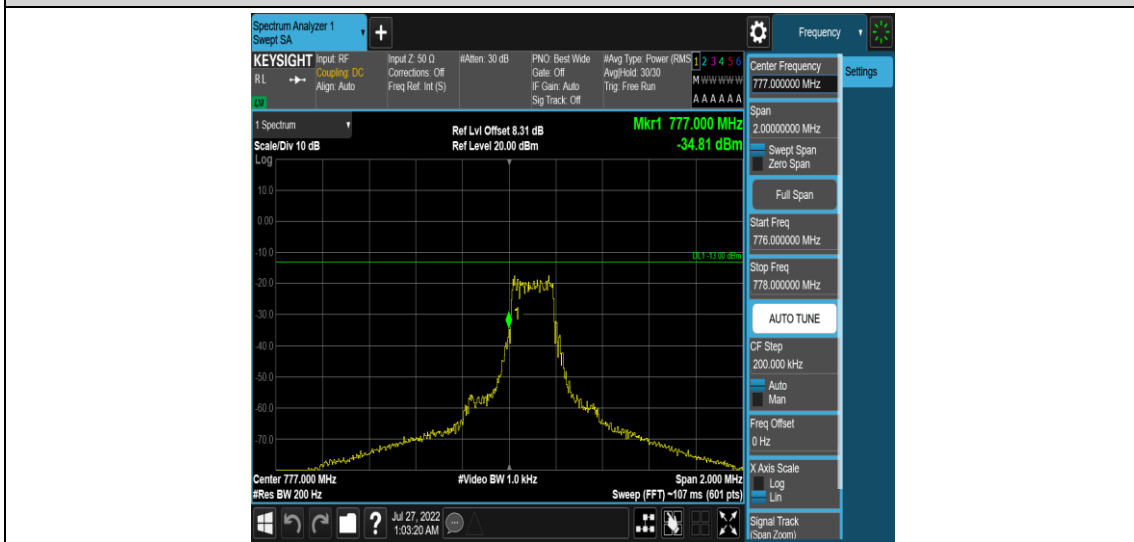
Band13-Stand-Alone-NaN-QPSK-23279-1 @47-3.75kHz--22.48-PASS



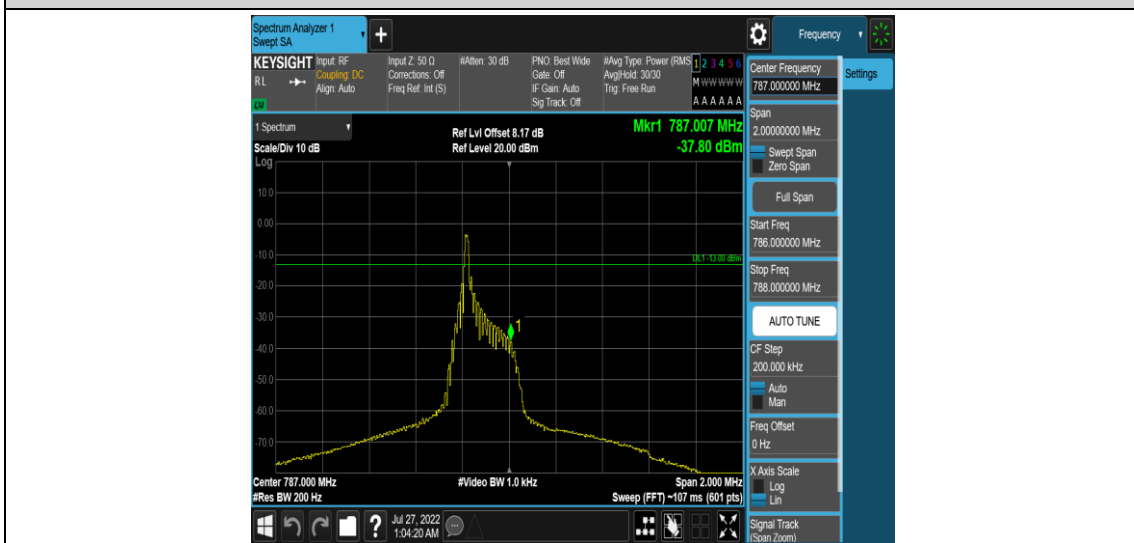
Band13-Stand-Alone-NaN-BPSK-23181-1 @0-15kHz--18.76-PASS



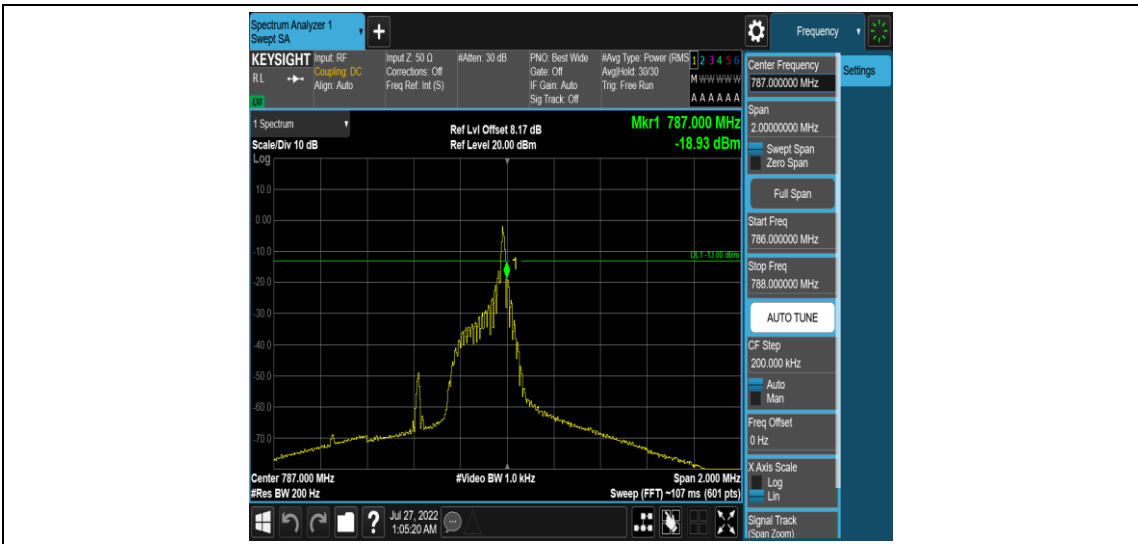
Band13-Stand-Alone-NaN-BPSK-23181-1 @ 11-15kHz--37.65-PASS



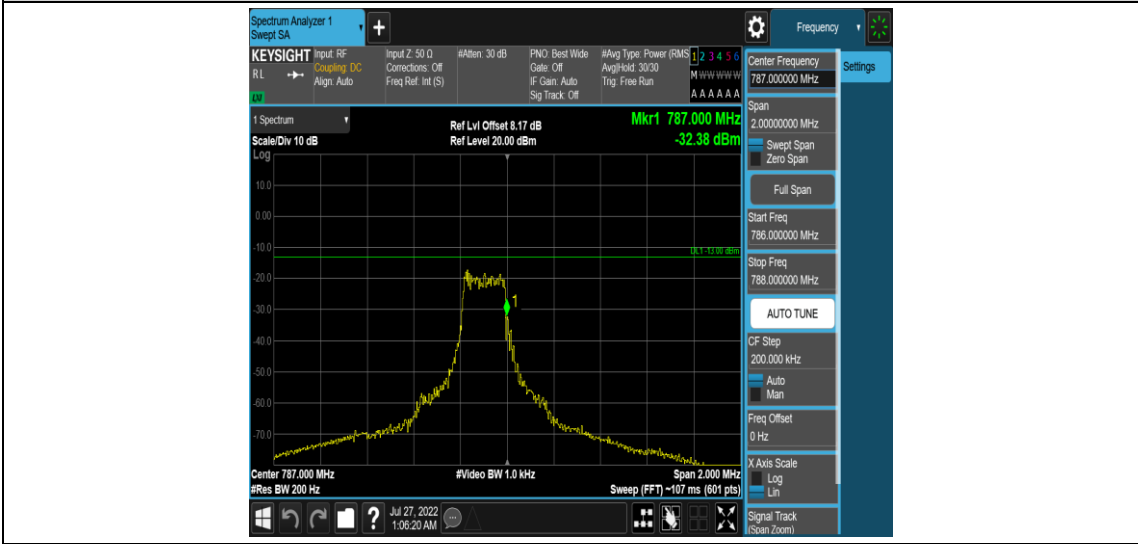
Band13-Stand-Alone-NaN-BPSK-23181-12 @ 0-15kHz--34.81-PASS



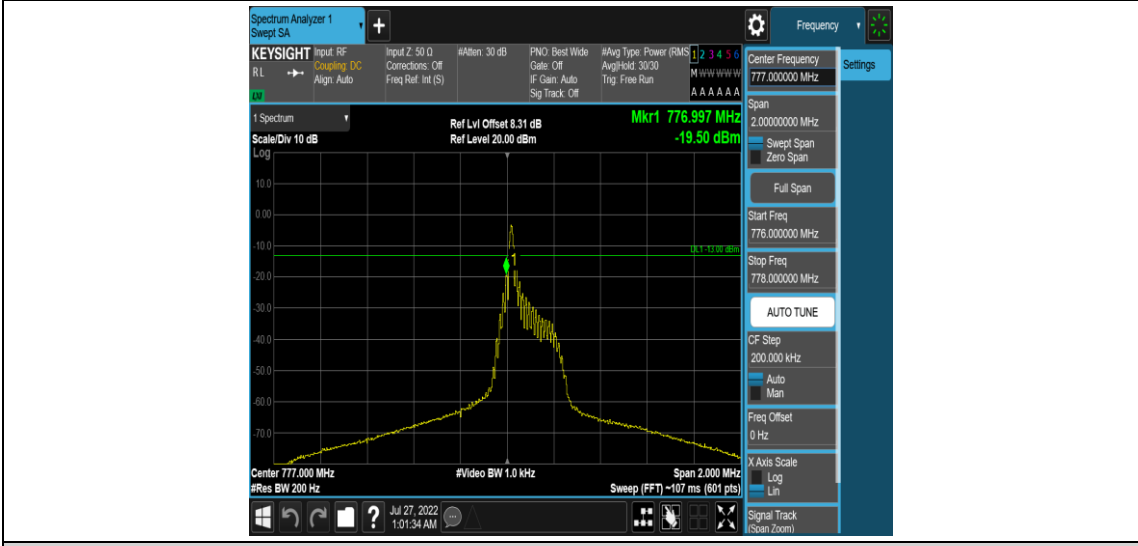
Band13-Stand-Alone-NaN-BPSK-23279-1 @ 0-15kHz--37.80-PASS



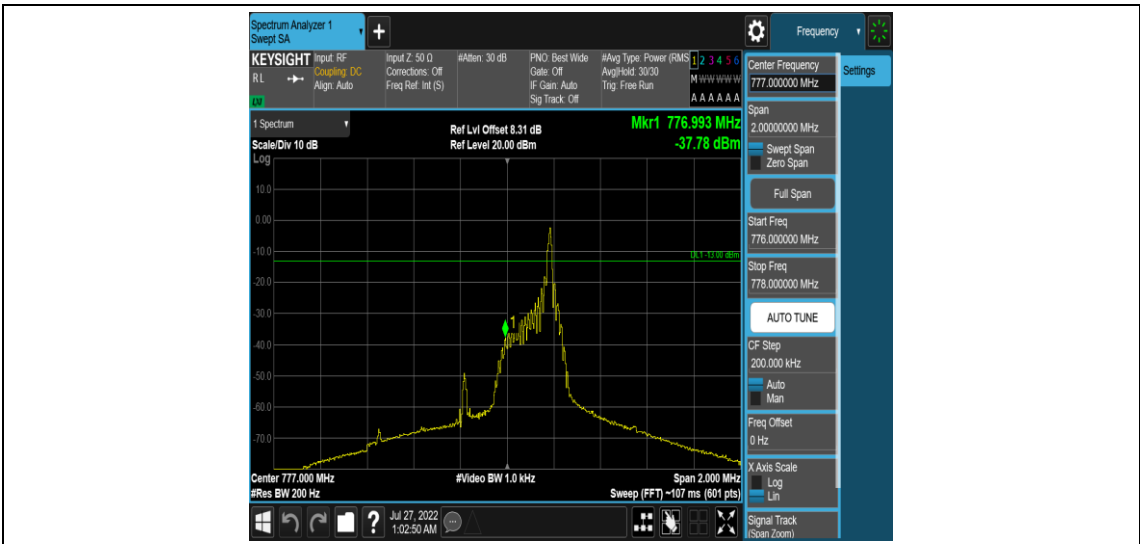
Band13-Stand-Alone-NaN-BPSK-23279-1 @ 11-15kHz--18.93-PASS



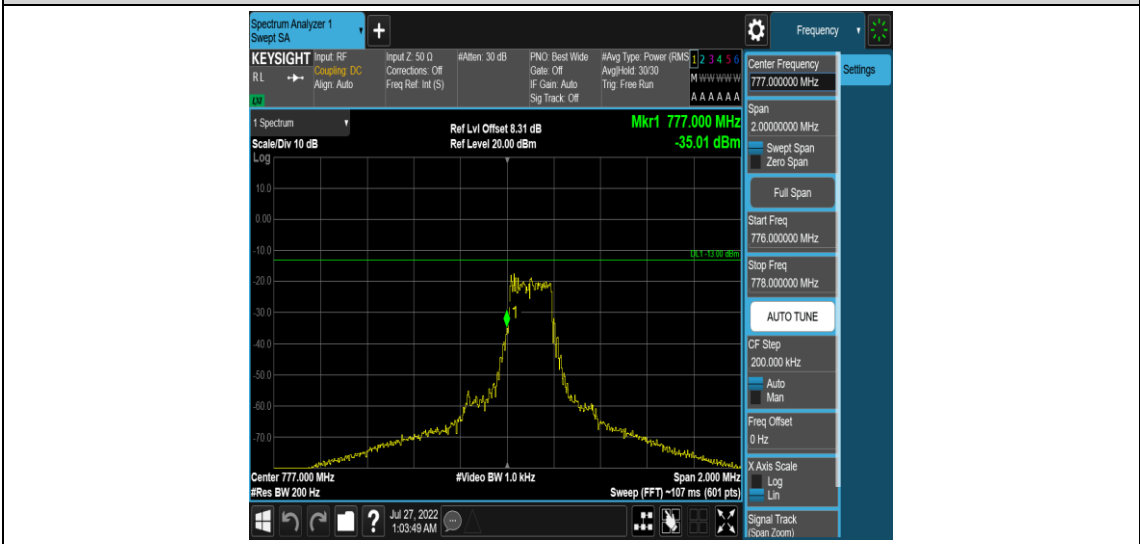
Band13-Stand-Alone-NaN-BPSK-23279-12 @ 0-15kHz--32.38-PASS



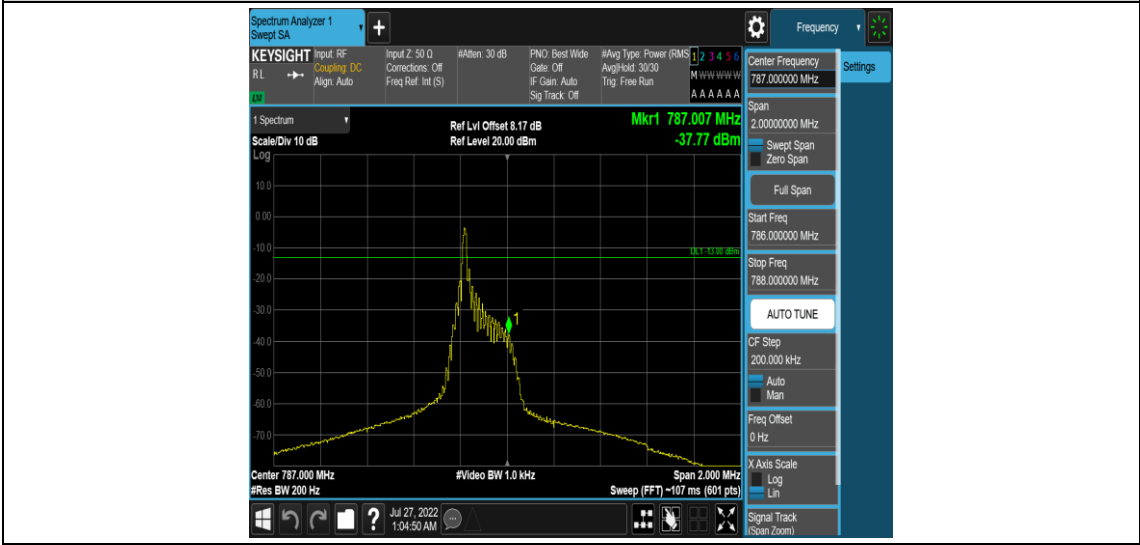
Band13-Stand-Alone-NaN-QPSK-23181-1 @ 0-15kHz--19.50-PASS



Band13-Stand-Alone-NaN-QPSK-23181-1 @ 11-15kHz--37.78-PASS



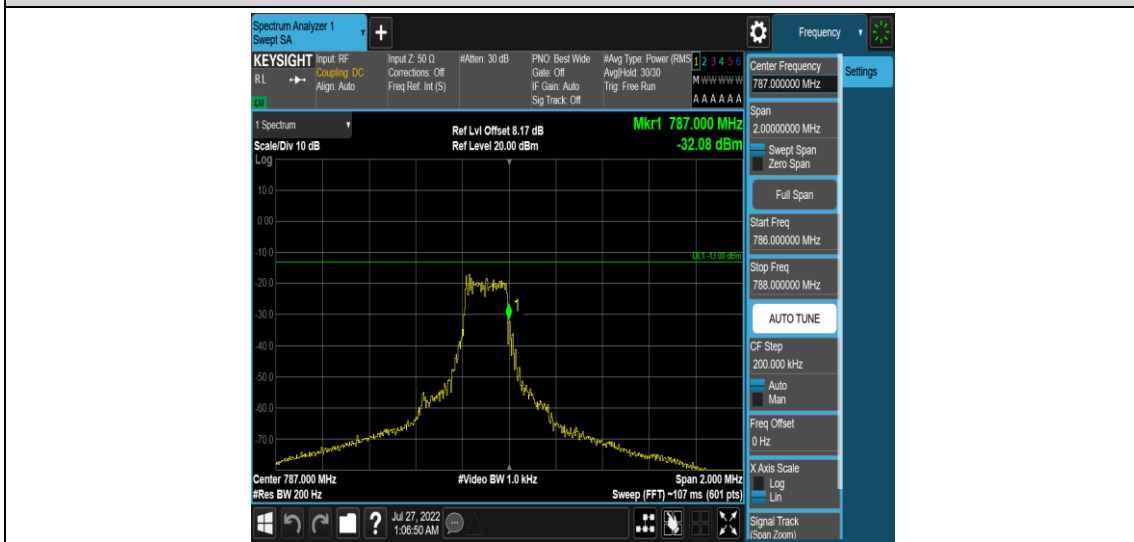
Band13-Stand-Alone-NaN-QPSK-23181-12 @ 0-15kHz--35.01-PASS



Band13-Stand-Alone-NaN-QPSK-23279-1 @ 0-15kHz--37.77-PASS



Band13-Stand-Alone-NaN-QPSK-23279-1 @ 11-15kHz--18.64-PASS



Band13-Stand-Alone-NaN-QPSK-23279-12 @ 0-15kHz--32.08-PASS

Appendix E: Conducted Spurious Emission for NB1

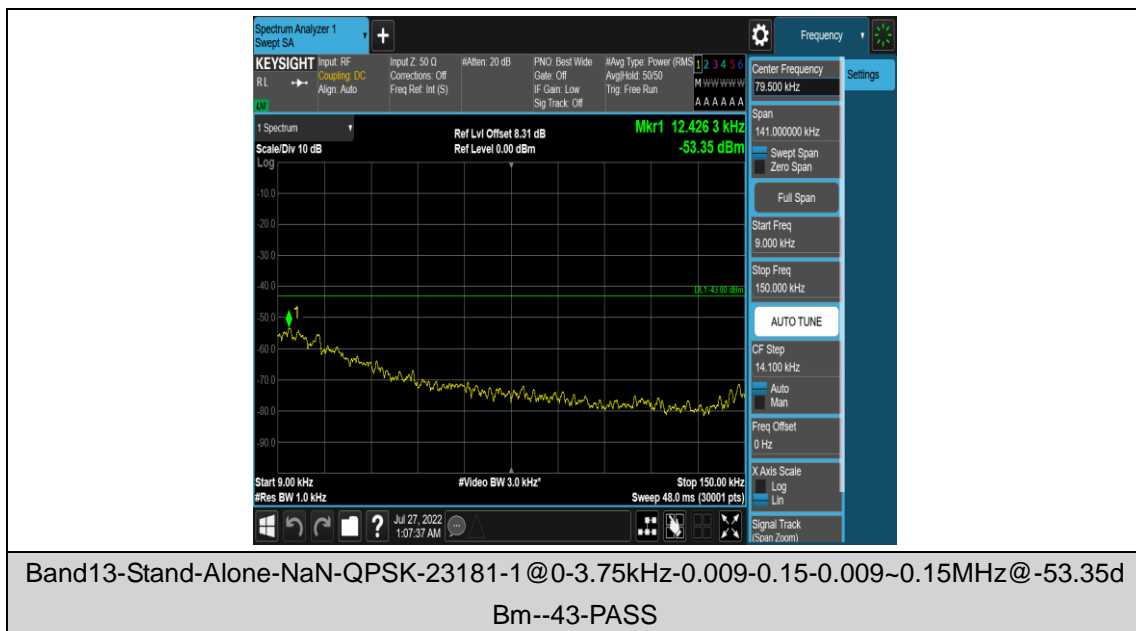
Test Result

Band	SCS	BW	Modu	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Limit (dBm)	Verdict
Band13	3.75kHz	NaN	QPSK	23181	1@0	0.009	0.15	-43	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@0	0.15	30	-23	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@0	30	1000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@0	1000	5000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@0	5000	12000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@0	12000	26500	-13	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@47	0.009	0.15	-43	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@47	0.15	30	-23	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@47	30	1000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@47	1000	5000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@47	5000	12000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23181	1@47	12000	26500	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@0	0.009	0.15	-43	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@0	0.15	30	-23	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@0	30	1000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@0	1000	5000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@0	5000	12000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@0	12000	26500	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@47	0.009	0.15	-43	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@47	0.15	30	-23	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@47	30	1000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@47	1000	5000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@47	5000	12000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23230	1@47	12000	26500	-13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	0.009	0.15	-43	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	0.15	30	-23	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	30	1000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	1000	5000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	5000	12000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@0	12000	26500	-13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@47	0.009	0.15	-43	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@47	0.15	30	-23	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@47	30	1000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@47	1000	5000	-13	PASS

Band13	3.75kHz	NaN	QPSK	23279	1@47	5000	12000	-13	PASS
Band13	3.75kHz	NaN	QPSK	23279	1@47	12000	26500	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	0.009	0.15	-43	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	0.15	30	-23	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	30	1000	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	1000	5000	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	5000	12000	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@0	12000	26500	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@11	0.009	0.15	-43	PASS
Band13	15kHz	NaN	BPSK	23181	1@11	0.15	30	-23	PASS
Band13	15kHz	NaN	BPSK	23181	1@11	30	1000	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@11	1000	5000	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@11	5000	12000	-13	PASS
Band13	15kHz	NaN	BPSK	23181	1@11	12000	26500	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@0	0.009	0.15	-43	PASS
Band13	15kHz	NaN	BPSK	23230	1@0	0.15	30	-23	PASS
Band13	15kHz	NaN	BPSK	23230	1@0	30	1000	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@0	1000	5000	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@0	5000	12000	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@0	12000	26500	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@11	0.009	0.15	-43	PASS
Band13	15kHz	NaN	BPSK	23230	1@11	0.15	30	-23	PASS
Band13	15kHz	NaN	BPSK	23230	1@11	30	1000	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@11	1000	5000	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@11	5000	12000	-13	PASS
Band13	15kHz	NaN	BPSK	23230	1@11	12000	26500	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	0.009	0.15	-43	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	0.15	30	-23	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	30	1000	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	1000	5000	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	5000	12000	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@0	12000	26500	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@11	0.009	0.15	-43	PASS
Band13	15kHz	NaN	BPSK	23279	1@11	0.15	30	-23	PASS
Band13	15kHz	NaN	BPSK	23279	1@11	30	1000	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@11	1000	5000	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@11	5000	12000	-13	PASS
Band13	15kHz	NaN	BPSK	23279	1@11	12000	26500	-13	PASS
Band13	15kHz	NaN	QPSK	23181	12@0	0.009	0.15	-43	PASS
Band13	15kHz	NaN	QPSK	23181	12@0	0.15	30	-23	PASS
Band13	15kHz	NaN	QPSK	23181	12@0	30	1000	-13	PASS
Band13	15kHz	NaN	QPSK	23181	12@0	1000	5000	-13	PASS

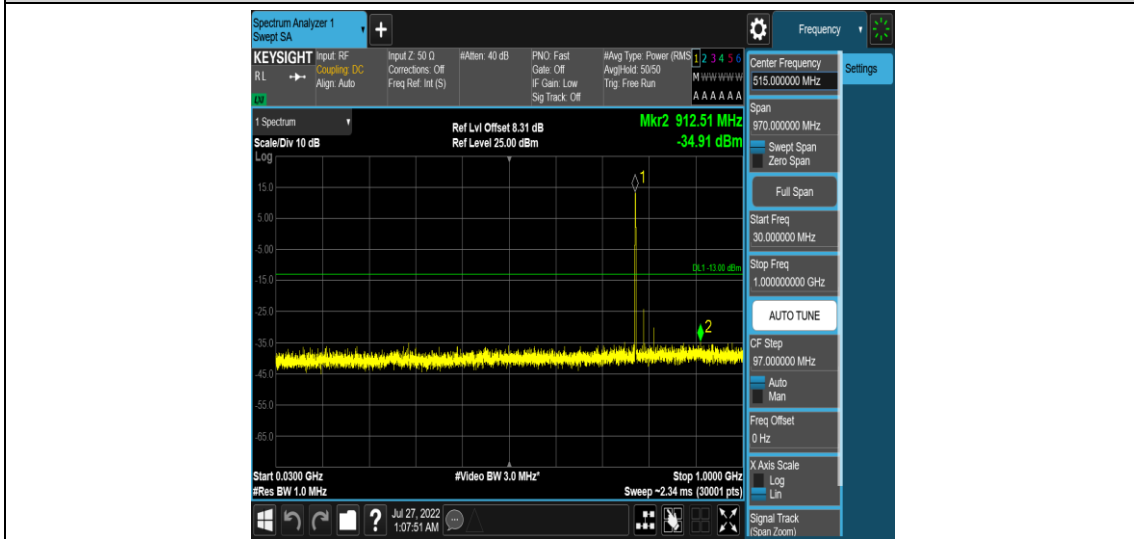
Band13	15kHz	NaN	QPSK	23181	12@0	5000	12000	-13	PASS
Band13	15kHz	NaN	QPSK	23181	12@0	12000	26500	-13	PASS
Band13	15kHz	NaN	QPSK	23230	12@0	0.009	0.15	-43	PASS
Band13	15kHz	NaN	QPSK	23230	12@0	0.15	30	-23	PASS
Band13	15kHz	NaN	QPSK	23230	12@0	30	1000	-13	PASS
Band13	15kHz	NaN	QPSK	23230	12@0	1000	5000	-13	PASS
Band13	15kHz	NaN	QPSK	23230	12@0	5000	12000	-13	PASS
Band13	15kHz	NaN	QPSK	23230	12@0	12000	26500	-13	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	0.009	0.15	-43	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	0.15	30	-23	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	30	1000	-13	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	1000	5000	-13	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	5000	12000	-13	PASS
Band13	15kHz	NaN	QPSK	23279	12@0	12000	26500	-13	PASS

Test Graphs





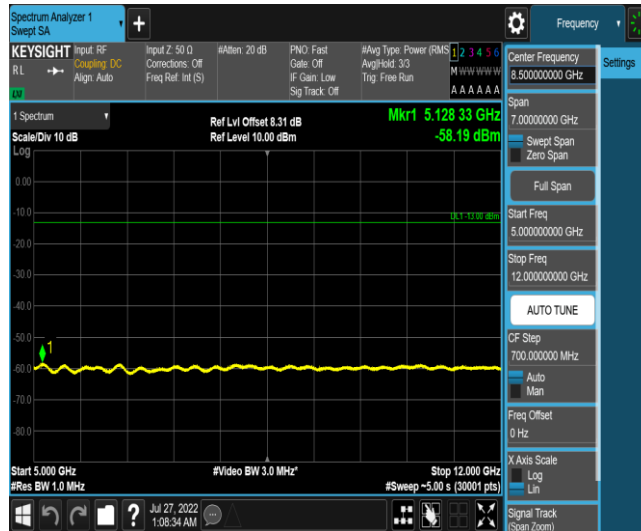
Band13-Stand-Alone-NaN-QPSK-23181-1 @0-3.75kHz-0.15-30-0.15~30MHz@ -51.3dBm--23-PASS



Band13-Stand-Alone-NaN-QPSK-23181-1 @0-3.75kHz-30-1000-30~1000MHz@ -34.91dBm--13-PASS



Band13-Stand-Alone-NaN-QPSK-23181-1 @0-3.75kHz-1000-5000-1000~5000MHz@ -36.79dBm--13-PASS



Band13-Stand-Alone-NaN-QPSK-23181-1 @0-3.75kHz-5000-12000-5000~12000MHz@ -58.19dBm--13-PASS



Band13-Stand-Alone-NaN-QPSK-23181-1 @0-3.75kHz-12000-26500-12000~26500MHz@ -52.64dBm--13-PASS