

Appendix-B LTE NB-IoT Band 17

Effective (Isotropic) Radiated Power Output Data for NB

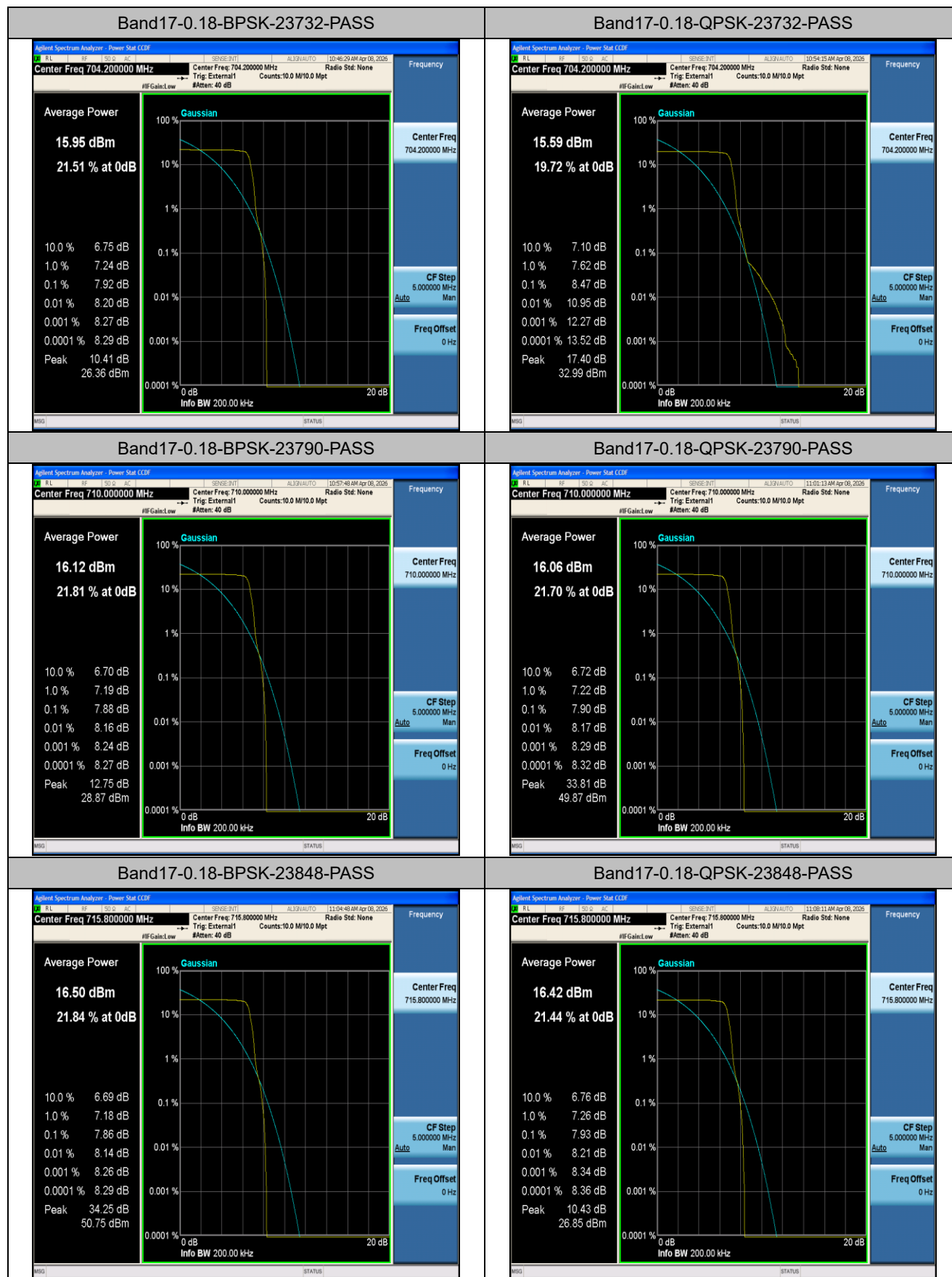
Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23732	1@0	21.13	25.48	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23732	1@0	21.01	25.36	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23732	1@47	20.95	25.3	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23732	1@47	20.86	25.21	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23790	1@0	20.85	25.2	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23790	1@0	20.77	25.12	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23790	1@47	20.72	25.07	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23790	1@47	20.73	25.08	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23848	1@0	21.04	25.39	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23848	1@0	20.86	25.21	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23848	1@47	20.81	25.16	34.77	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23848	1@47	20.8	25.15	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23732	1@0	21.42	25.77	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23732	1@0	21.39	25.74	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23732	1@11	21.4	25.75	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23732	1@11	21.44	25.79	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	1@0	21.52	25.87	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23790	1@0	21.5	25.85	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	1@11	21.46	25.81	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23790	1@11	21.49	25.84	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23848	1@0	21.77	26.12	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23848	1@0	21.76	26.11	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23848	1@11	21.71	26.06	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23848	1@11	21.71	26.06	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23732	3@3	22.54	26.89	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23790	3@3	22.56	26.91	34.77	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23848	3@3	22.78	27.13	34.77	PASS

Peak-to-Average Ratio(CCDF) for NB**Test Result**

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dB)	Limit (dB)	Verdict
Band17	Stand-Alone	15kHz	0.18	BPSK	23732	12@0	7.92	<=13	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23732	12@0	8.47	<=13	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	7.88	<=13	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23790	12@0	7.9	<=13	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23848	12@0	7.86	<=13	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23848	12@0	7.93	<=13	PASS

Test Graphs

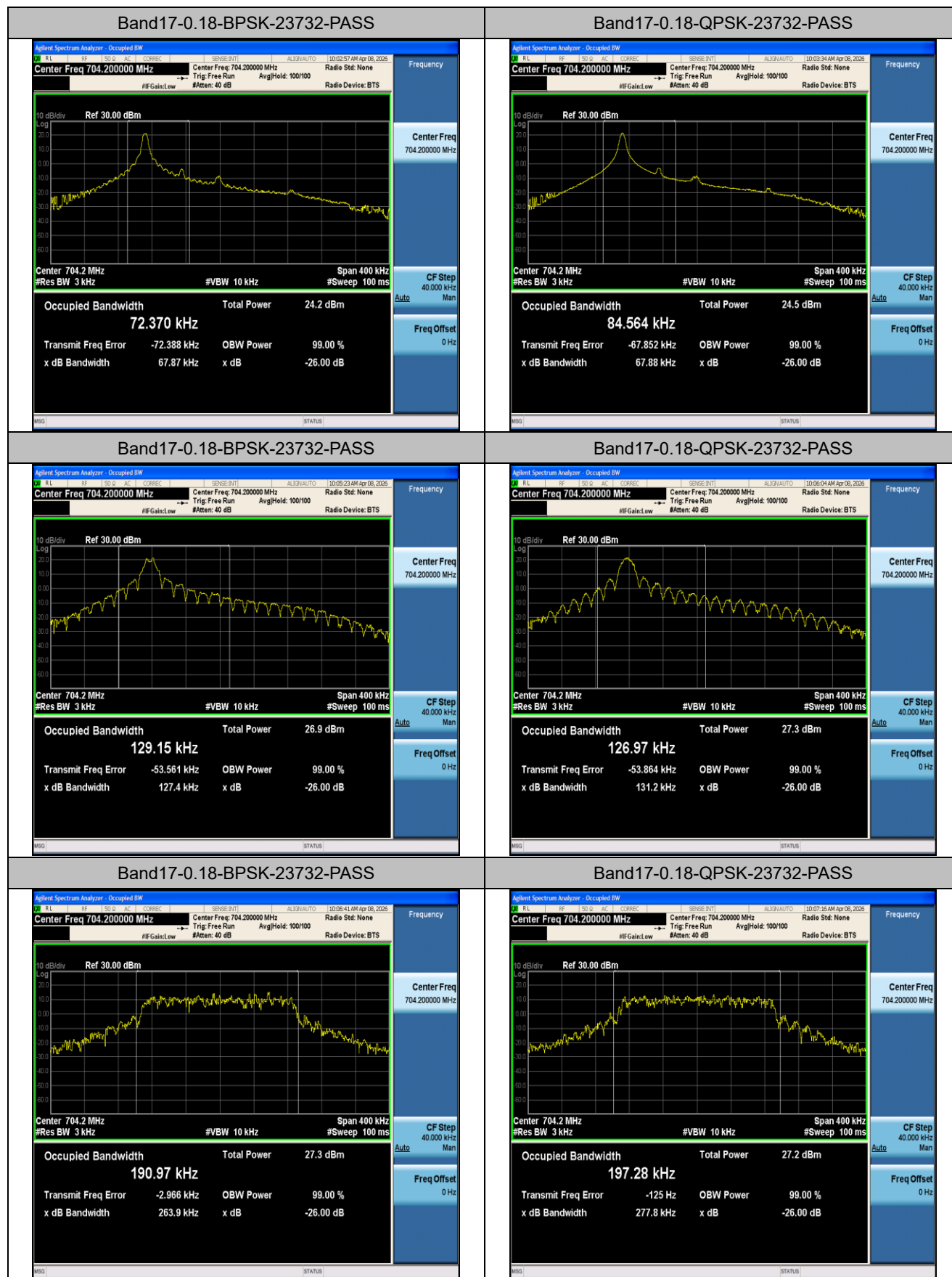


Emission Bandwidth for NB

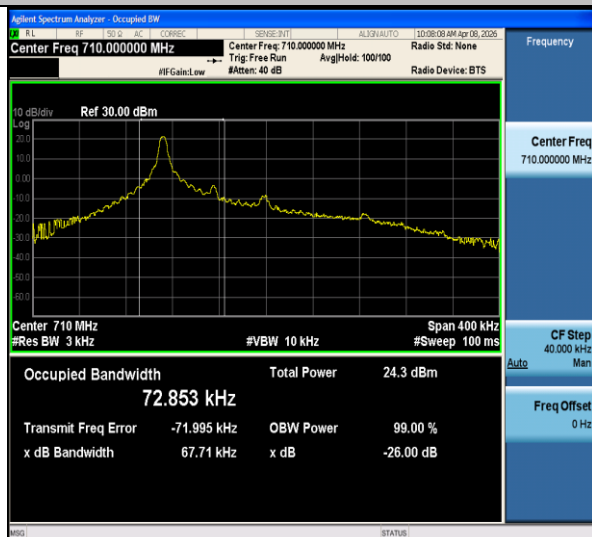
Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	OBW(MHz)	EBW(MHz)	Verdict
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23732	1@0	0.07237	0.0679	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23732	1@0	0.08456	0.0679	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23732	1@0	0.12915	0.1274	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23732	1@0	0.12697	0.1312	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23732	12@0	0.19097	0.2639	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23732	12@0	0.19728	0.2778	PASS
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23790	1@0	0.07285	0.0677	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23790	1@0	0.08388	0.0672	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	1@0	0.12879	0.1264	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23790	1@0	0.12725	0.1417	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	0.19206	0.2756	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23790	12@0	0.19105	0.2772	PASS
Band17	Stand-Alone	3.75kHz	0.18	BPSK	23848	1@0	0.07286	0.0673	PASS
Band17	Stand-Alone	3.75kHz	0.18	QPSK	23848	1@0	0.08408	0.0677	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23848	1@0	0.12901	0.1188	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23848	1@0	0.12582	0.1309	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23848	12@0	0.18952	0.2601	PASS
Band17	Stand-Alone	15kHz	0.18	QPSK	23848	12@0	0.19165	0.2774	PASS

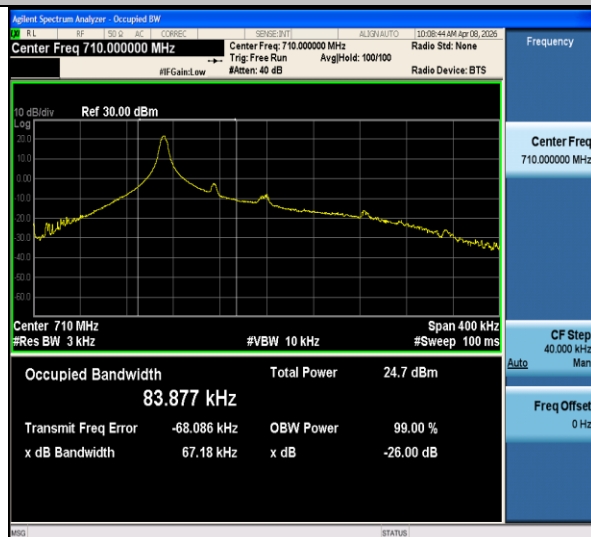
Test Graphs



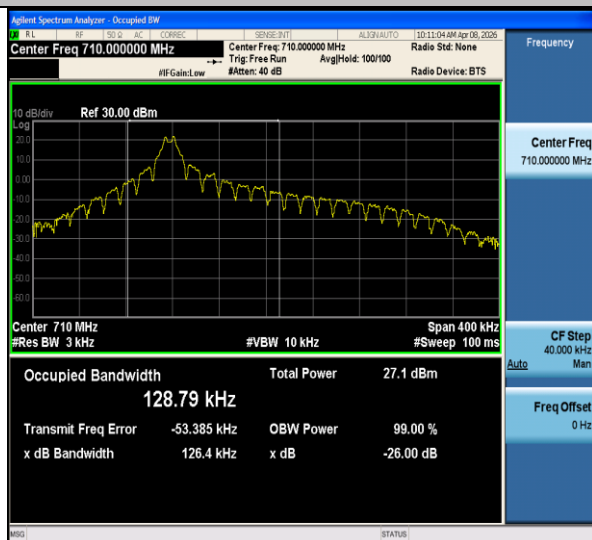
Band17-0.18-BPSK-23790-PASS



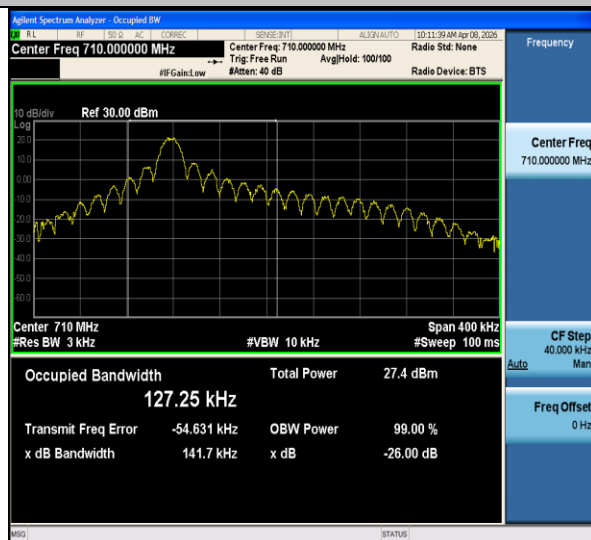
Band17-0.18-QPSK-23790-PASS



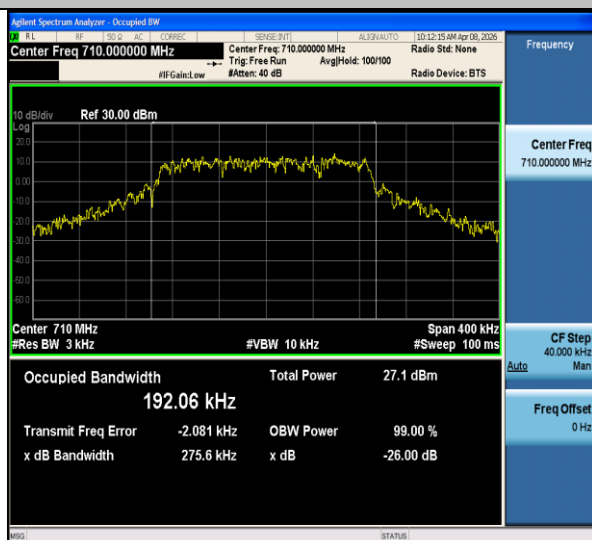
Band17-0.18-BPSK-23790-PASS



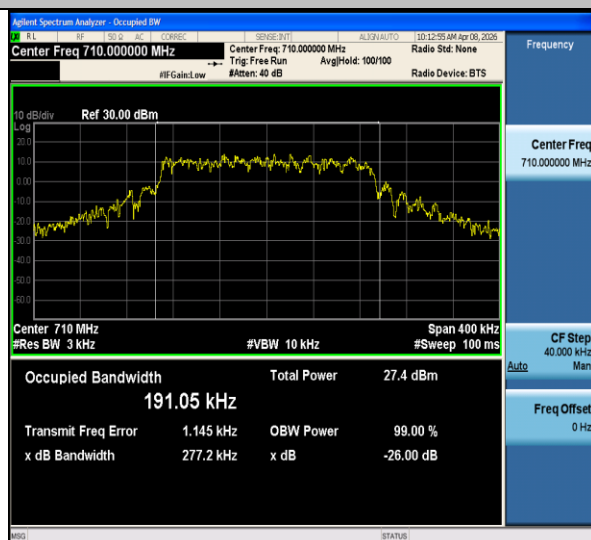
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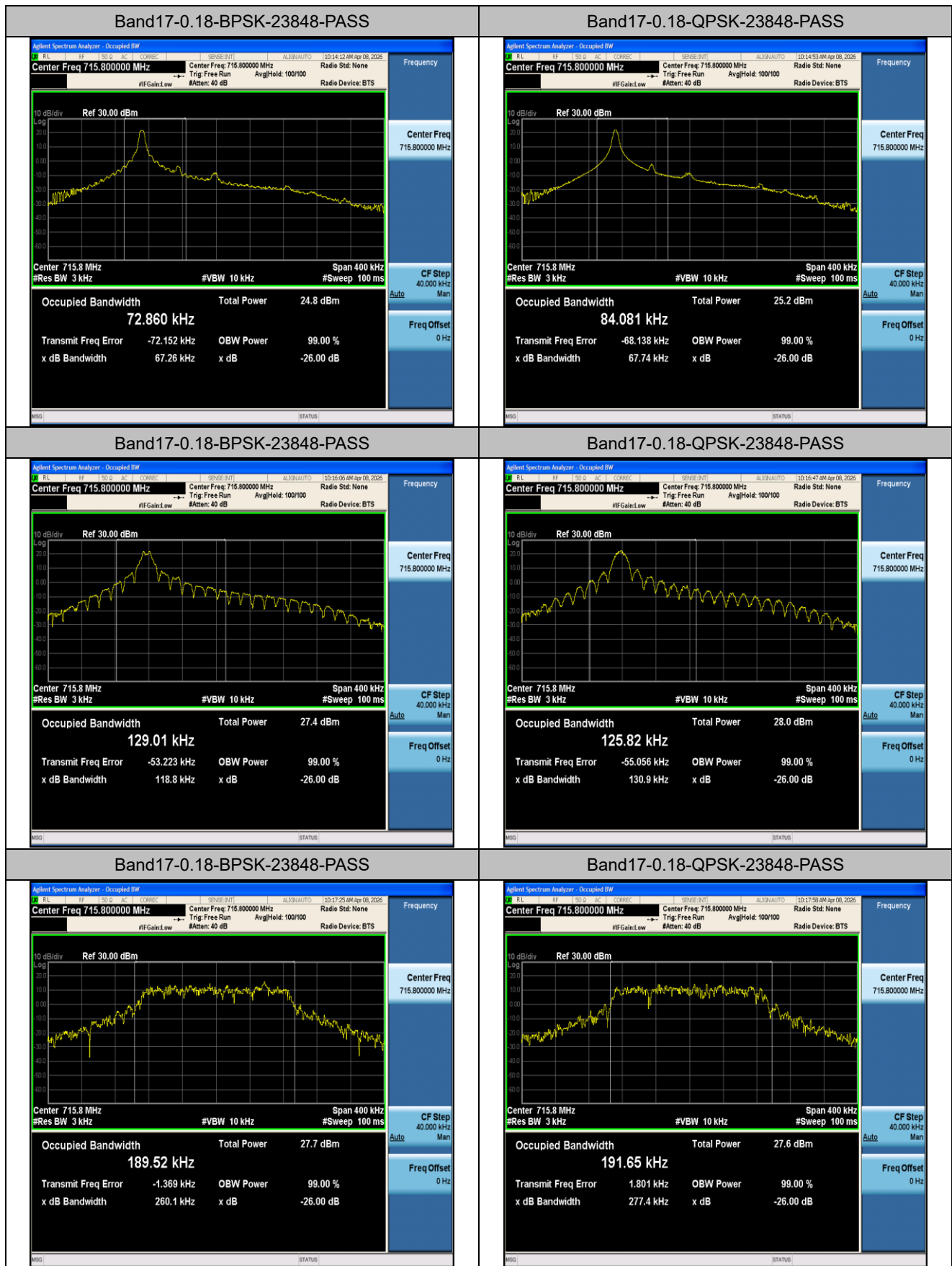


Band17-0.18-BPSK-23790-PASS



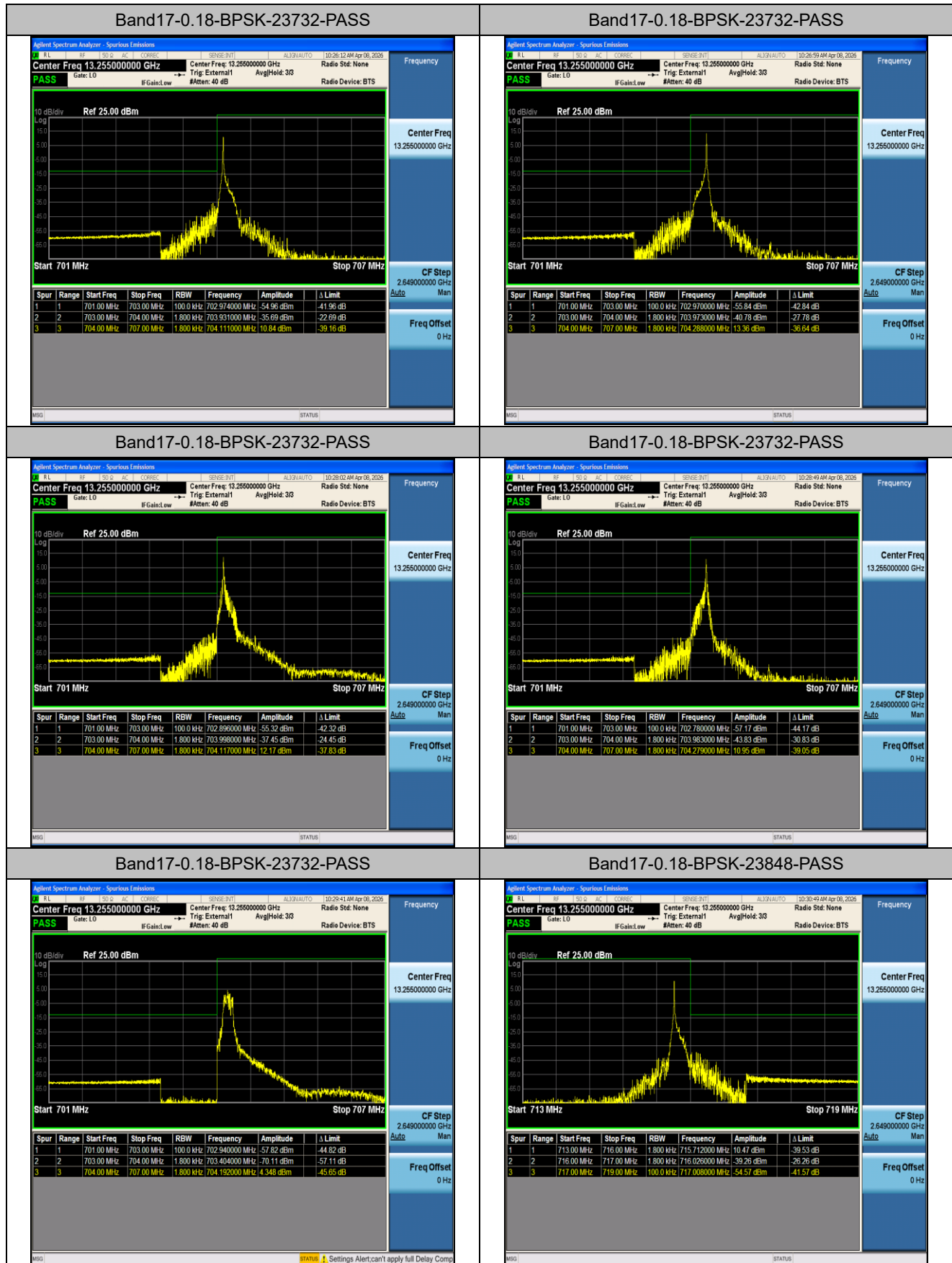
Band17-0.18-QPSK-23790-PASS

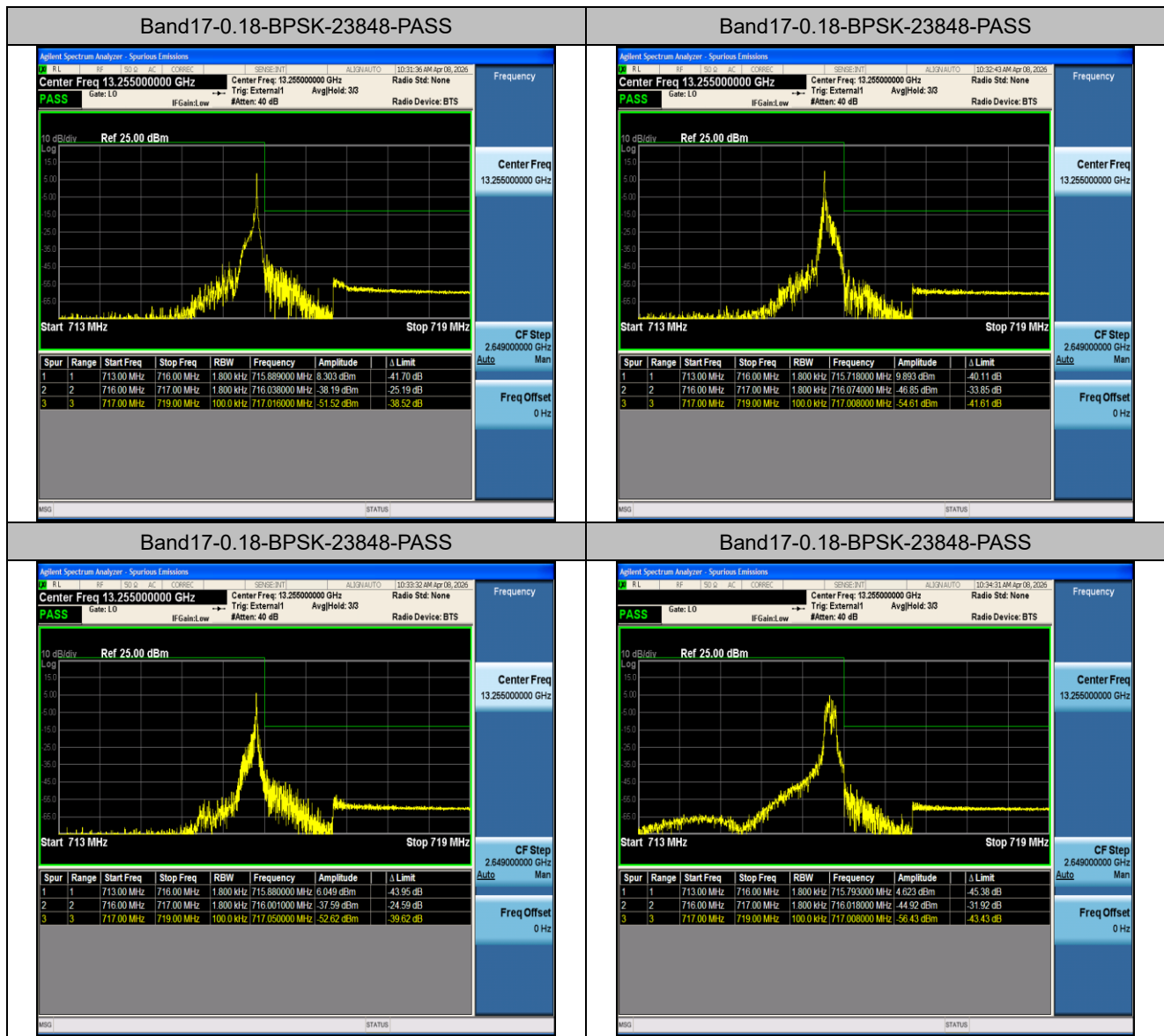




Band Edge for NB

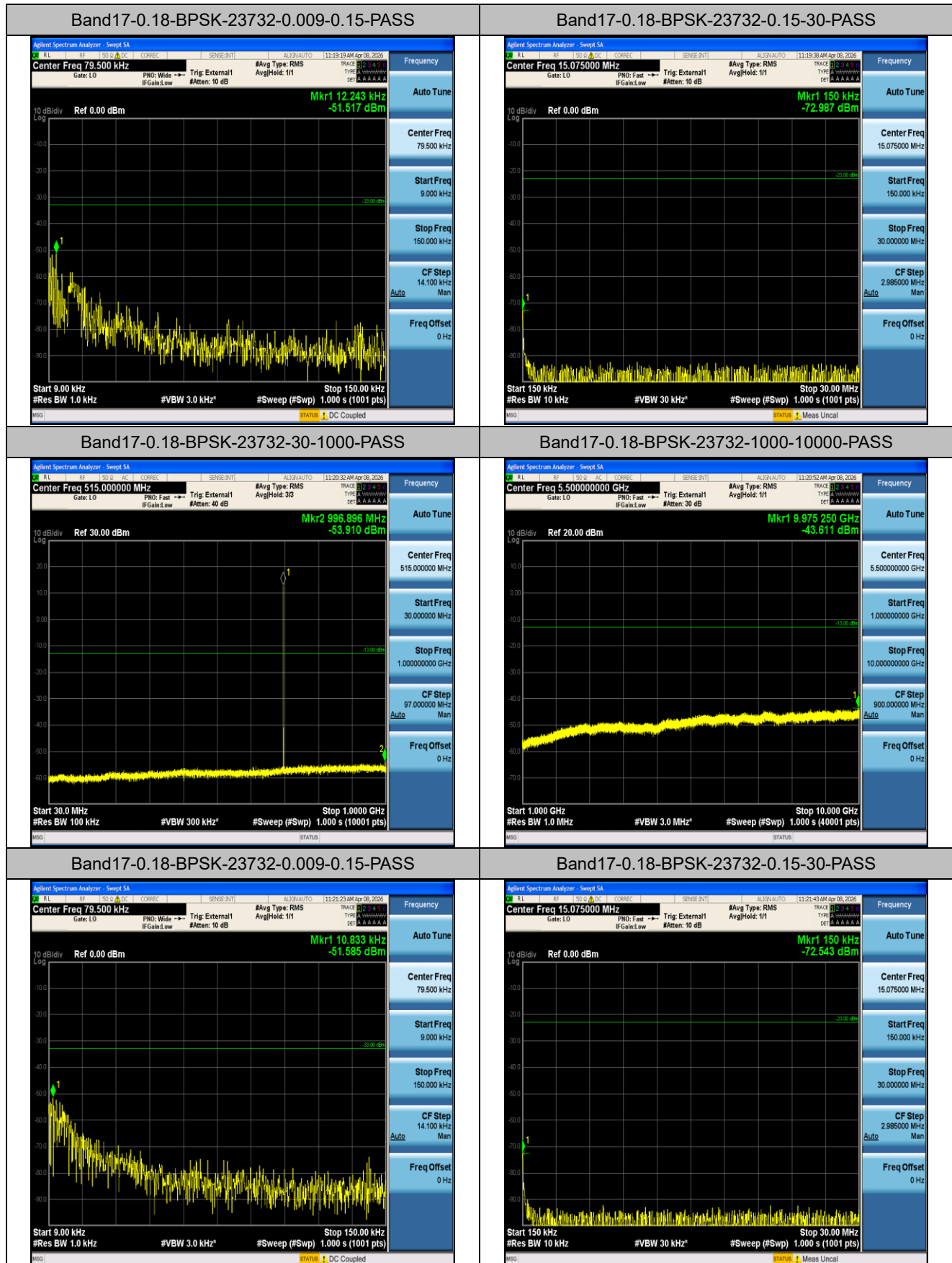
Test Graphs



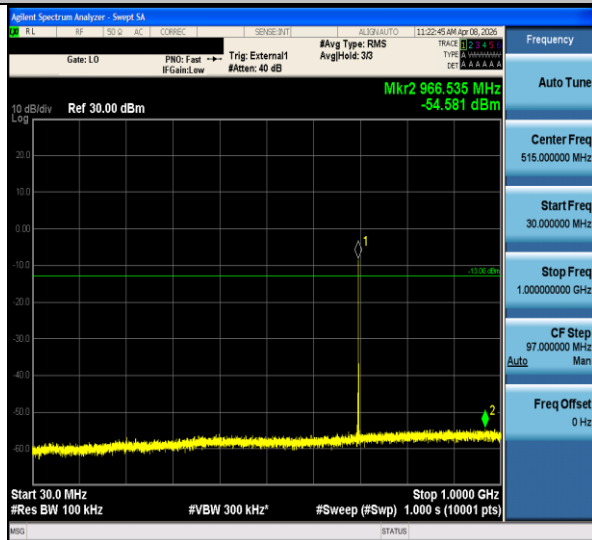


Conducted Spurious Emission for NB

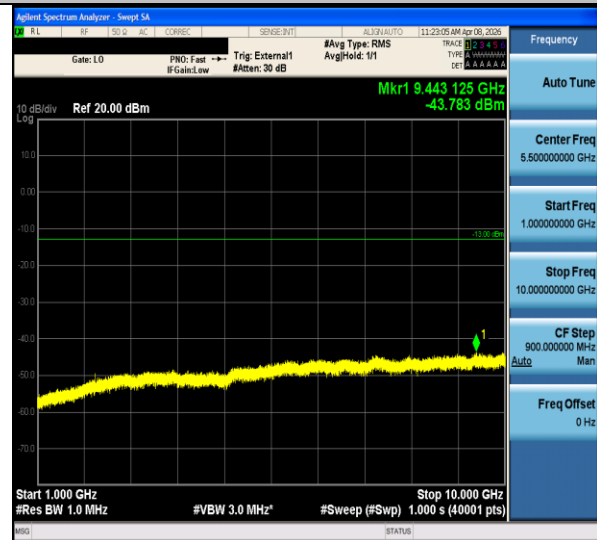
Test Graphs



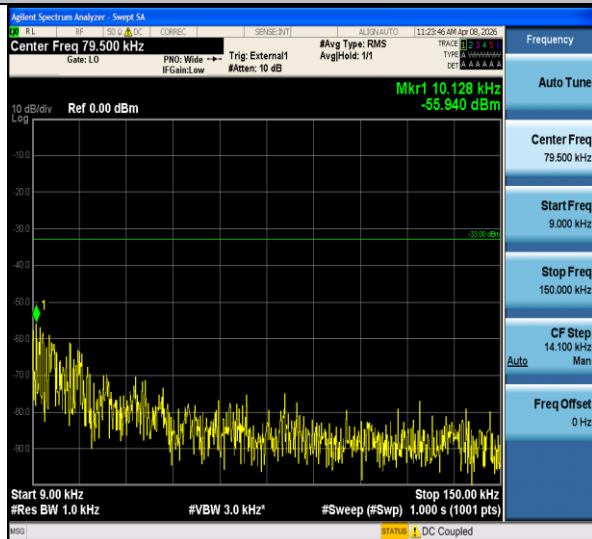
Band17-0.18-BPSK-23732-30-1000-PASS



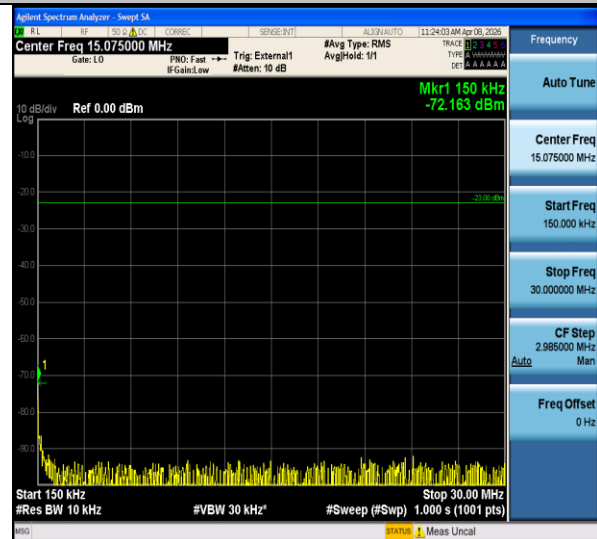
Band17-0.18-BPSK-23732-1000-10000-PASS



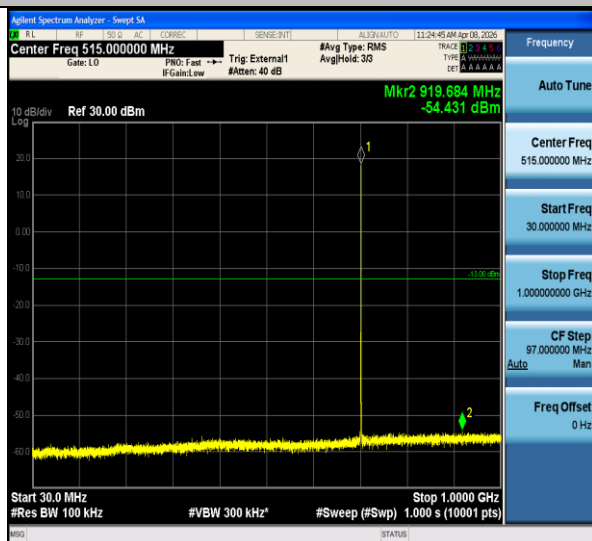
Band17-0.18-BPSK-23790-0.009-0.15-PASS



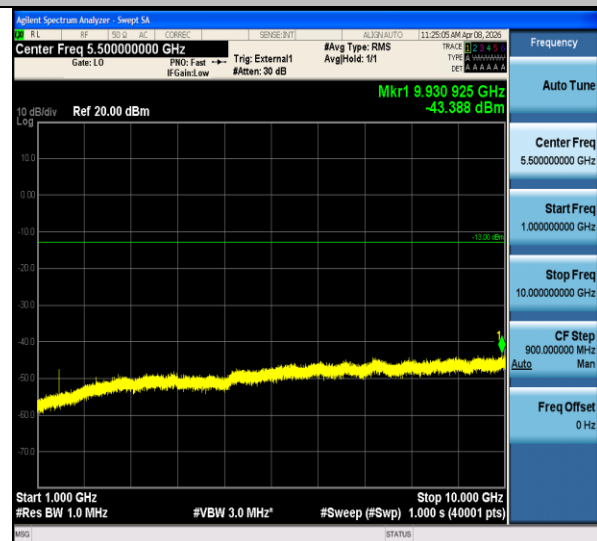
Band17-0.18-BPSK-23790-0.15-30-PASS



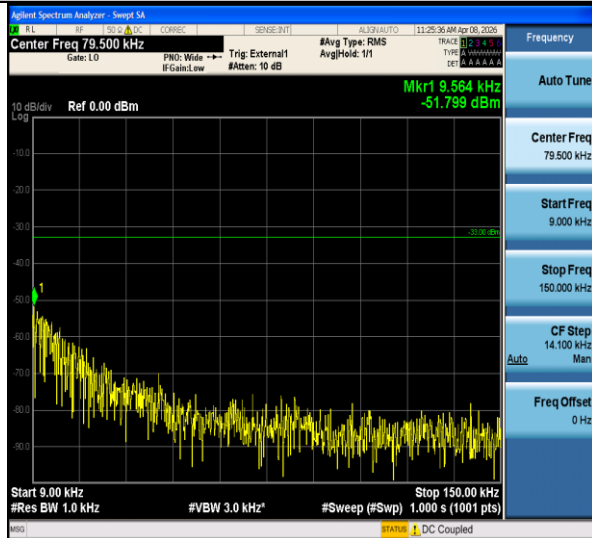
Band17-0.18-BPSK-23790-30-1000-PASS



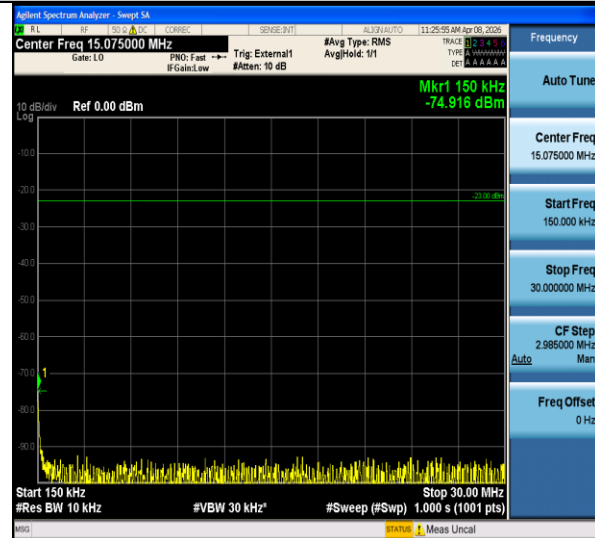
Band17-0.18-BPSK-23790-1000-10000-PASS



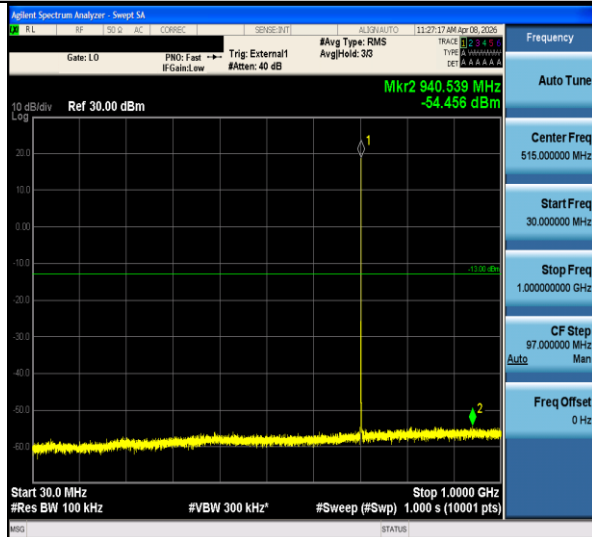
Band17-0.18-BPSK-23790-0.009-0.15-PASS



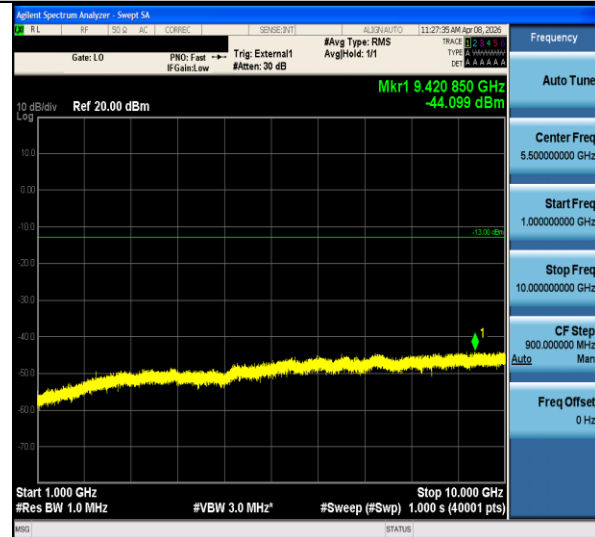
Band17-0.18-BPSK-23790-0.15-30-PASS



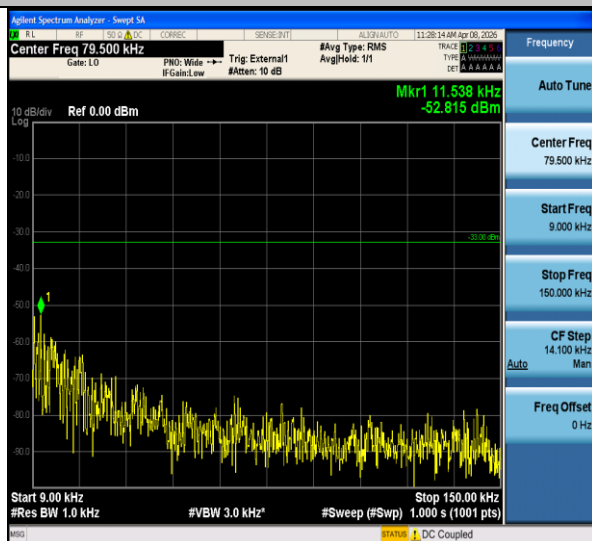
Band17-0.18-BPSK-23790-30-1000-PASS



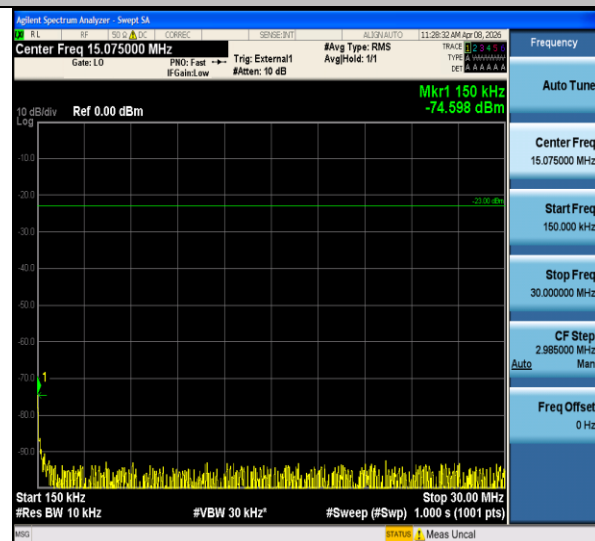
Band17-0.18-BPSK-23790-1000-10000-PASS

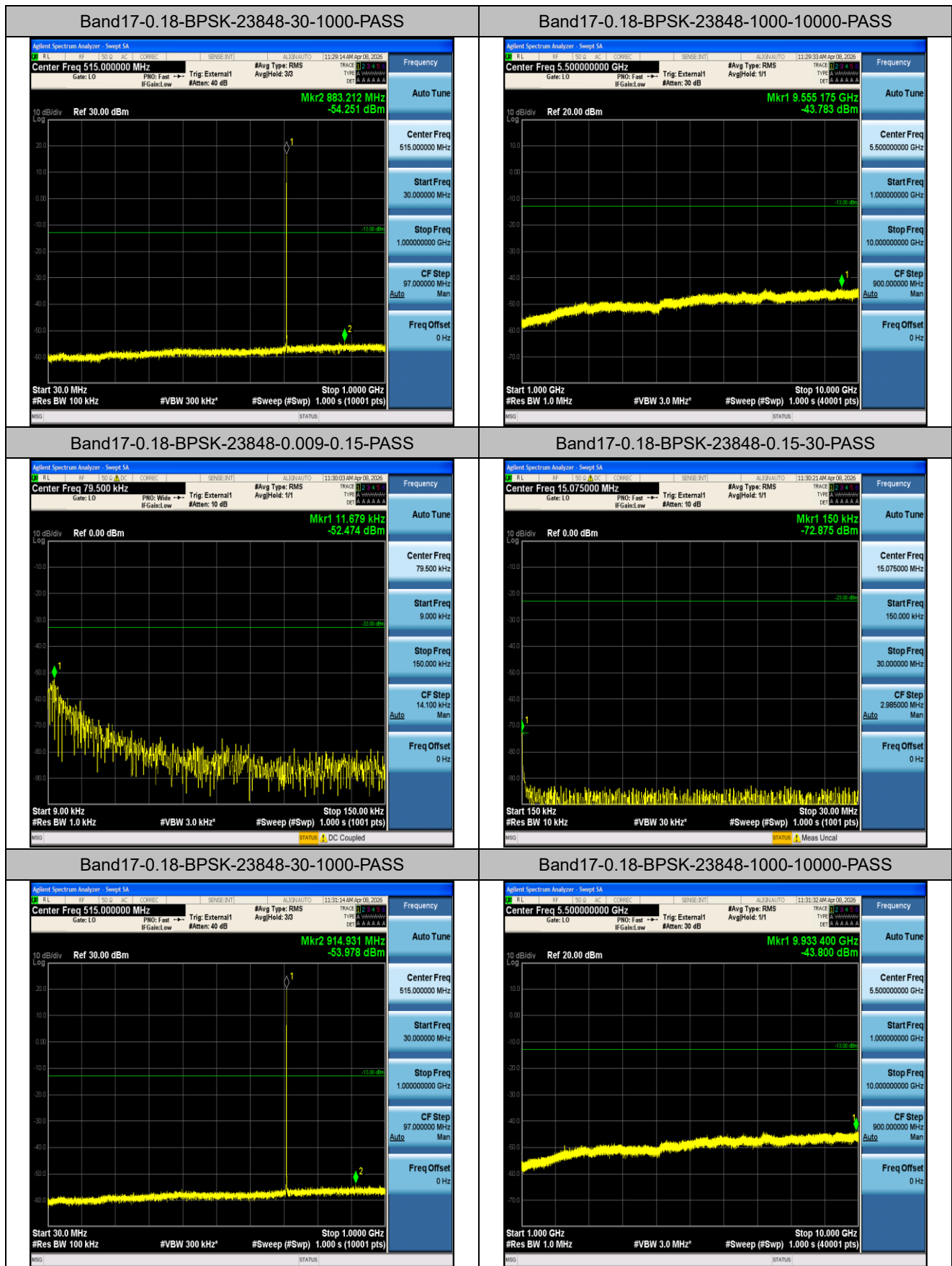


Band17-0.18-BPSK-23848-0.009-0.15-PASS



Band17-0.18-BPSK-23848-0.15-30-PASS





Frequency Stability for NB

Test Result

Voltage											
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	VN	NT	3.60	0.005070	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	VL	NT	3.00	0.004225	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	VH	NT	2.80	0.003944	PASS

Temperature											
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	-30	3.80	0.005352	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	-20	3.90	0.005493	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	-10	3.70	0.005211	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	0	4.00	0.005634	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	10	4.30	0.006056	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	20	4.10	0.005775	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	30	4.60	0.006479	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	40	4.60	0.006479	PASS
Band17	Stand-Alone	15kHz	0.18	BPSK	23790	12@0	NV	50	5.40	0.007606	PASS

~The End~