

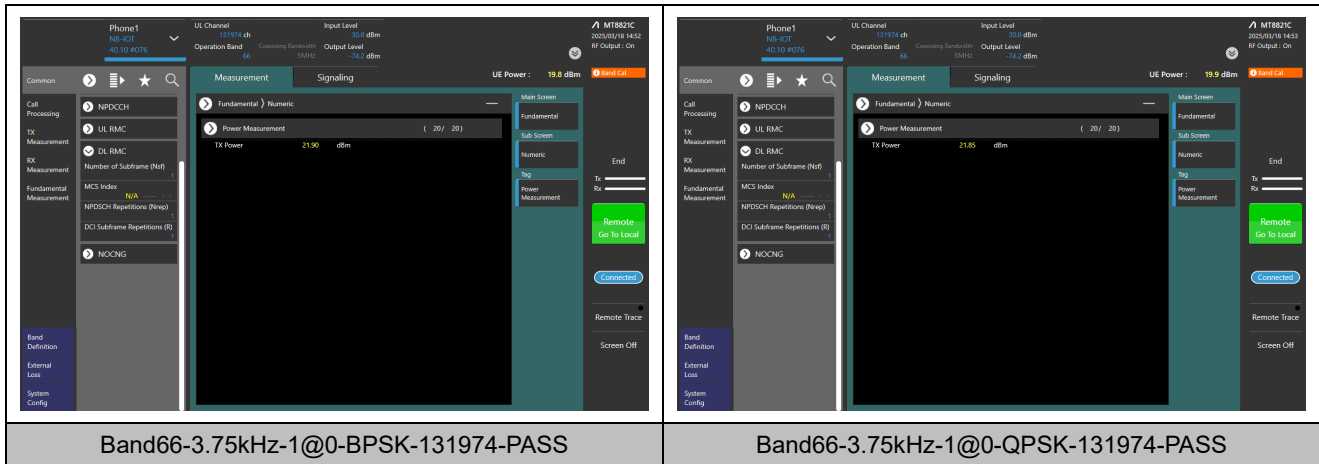
Appendix-C LTE NB-IoT Band 66

Effective (Isotropic) Radiated Power Output Data for NB1

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	POWER (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	BPSK	131974	1@0	21.9	23.9	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131974	1@0	21.85	23.85	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	131974	1@47	21.9	23.9	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131974	1@47	21.78	23.78	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132322	1@0	21.46	23.46	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	21.43	23.43	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132322	1@47	21.33	23.33	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@47	21.34	23.34	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132670	1@0	21.62	23.62	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	21.57	23.57	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132670	1@47	21.56	23.56	30	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@47	21.56	23.56	30	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	131974	1@0	21.61	23.61	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131974	1@0	21.69	23.69	30	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	131974	1@11	21.63	23.63	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131974	1@11	21.65	23.65	30	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	21.11	23.11	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	1@0	21.18	23.18	30	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132322	1@11	21.08	23.08	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	1@11	21.06	23.06	30	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	21.48	23.48	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	1@0	21.52	23.52	30	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132670	1@11	21.42	23.42	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	1@11	21.43	23.43	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131974	3@3	21.63	23.63	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	3@3	21.24	23.24	30	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	3@3	21.66	23.66	30	PASS

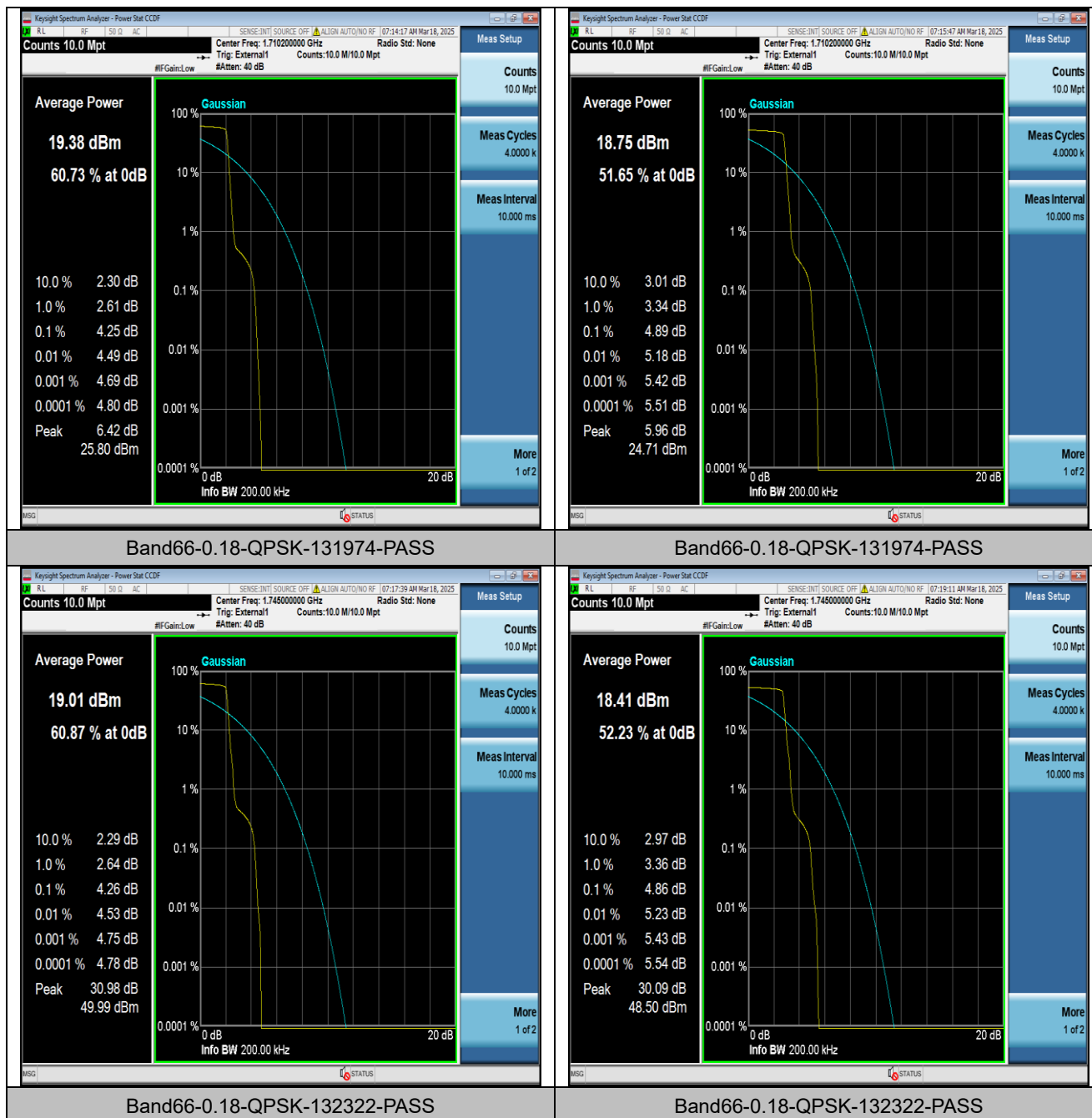
Test Graphs

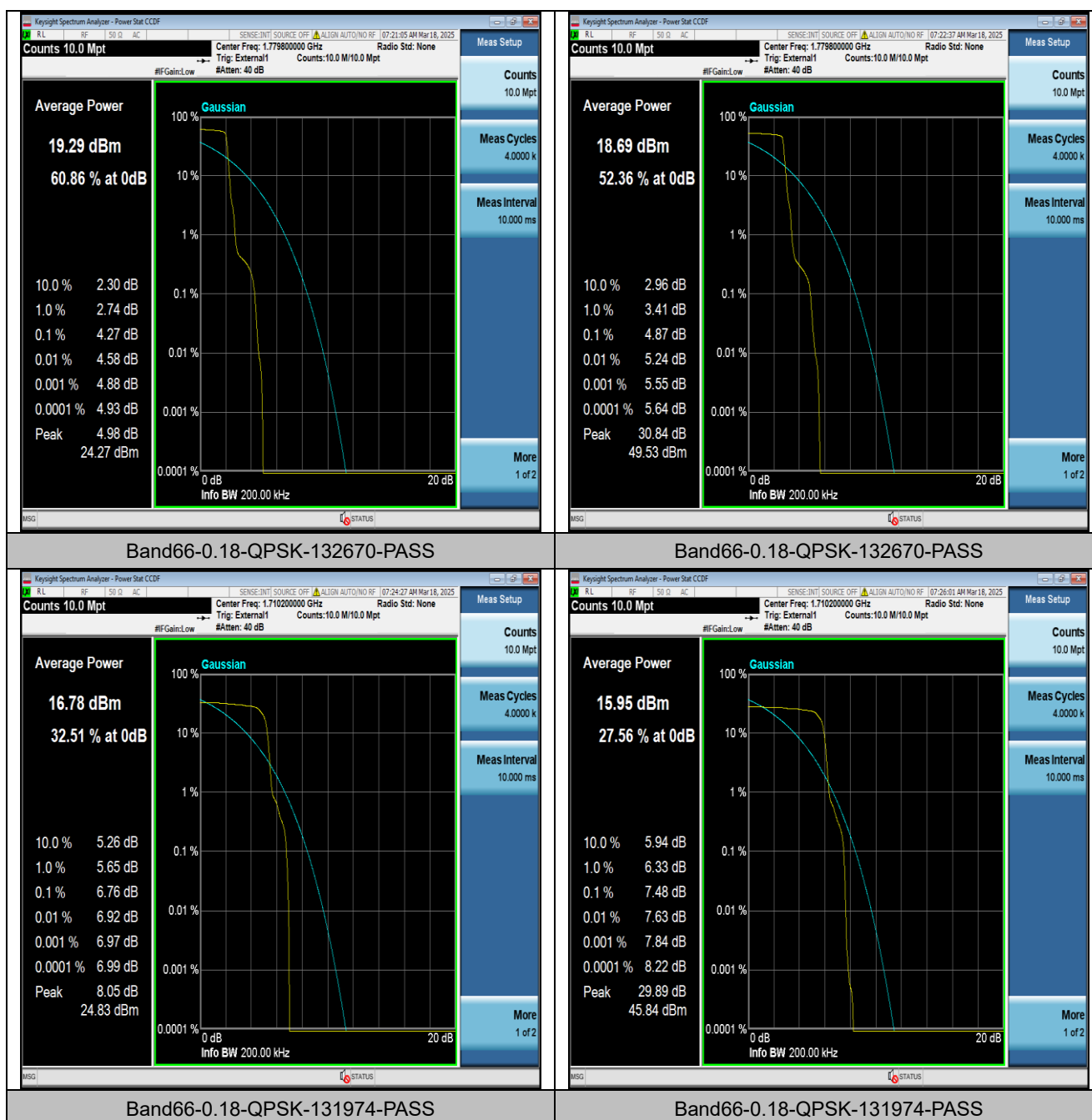


Peak-to-Average Ratio(CCDF) for NB1**Test Result**

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131974	1@0	4.25	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131974	1@47	4.89	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	4.26	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@47	4.86	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	4.27	<=13	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@47	4.87	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131974	1@0	6.76	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131974	1@11	7.48	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	1@0	6.85	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	1@11	7.46	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	1@0	6.88	<=13	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	1@11	7.39	<=13	PASS

Test Graphs





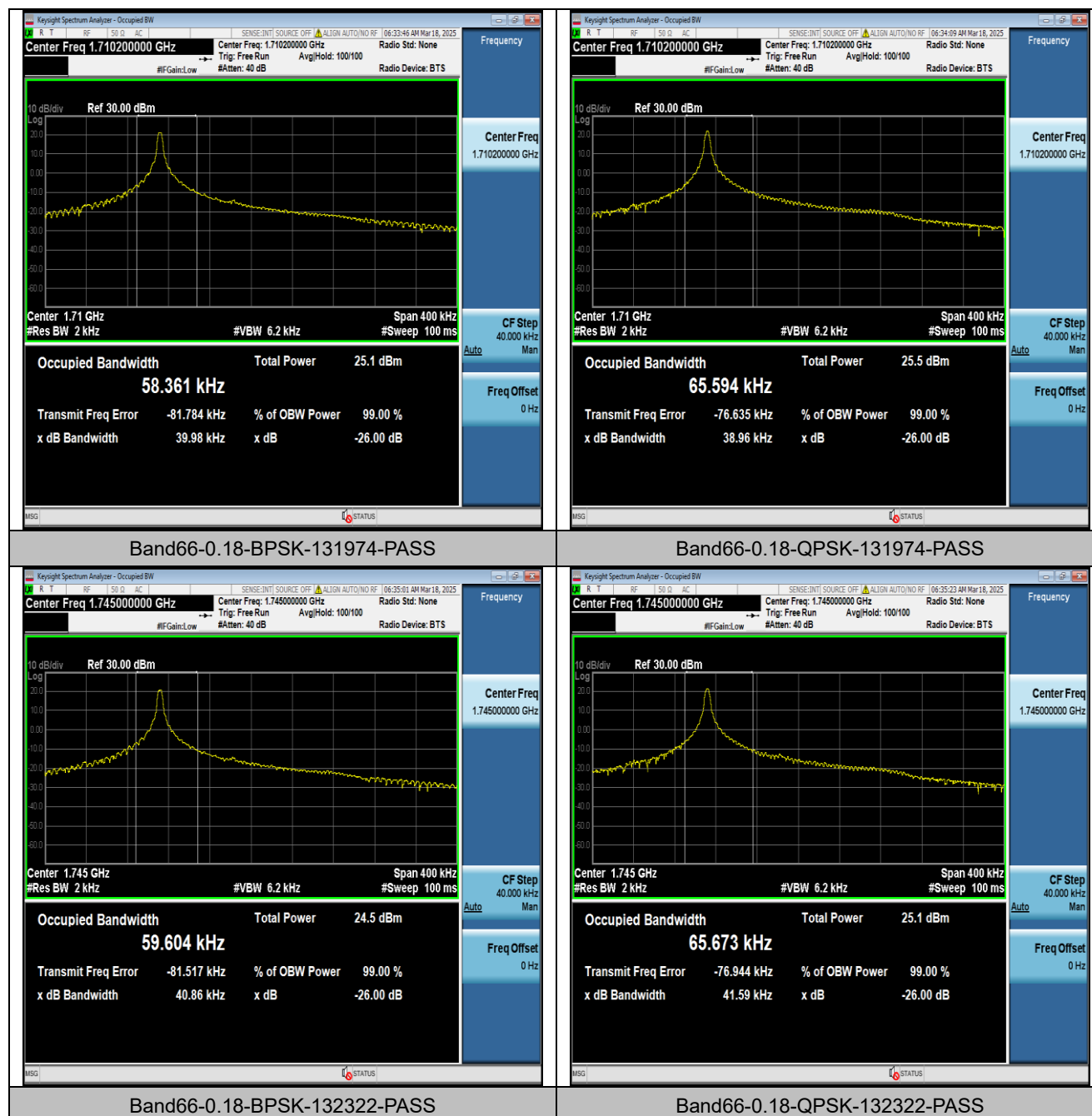


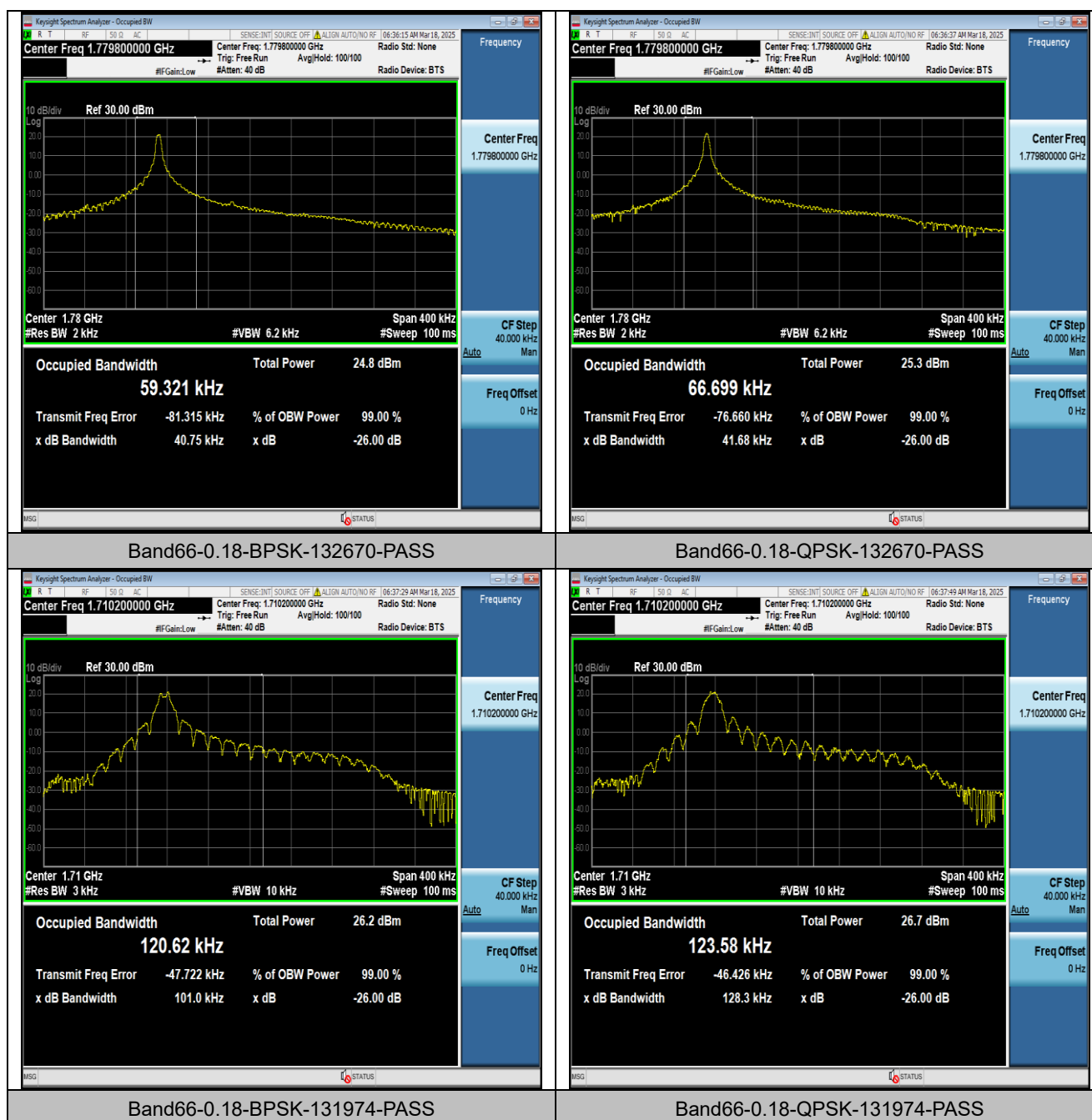
Emission Bandwidth for NB1

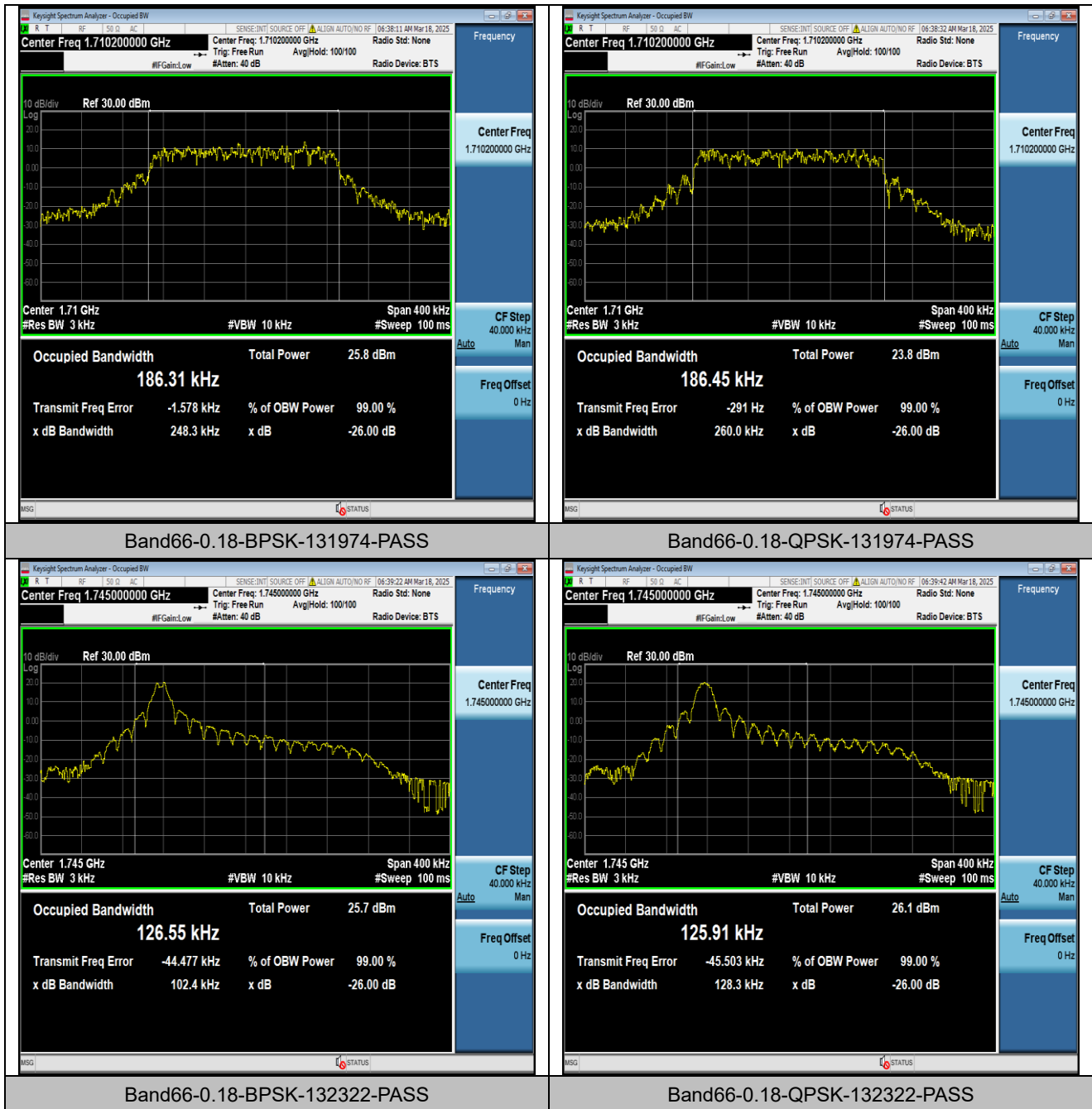
Test Result

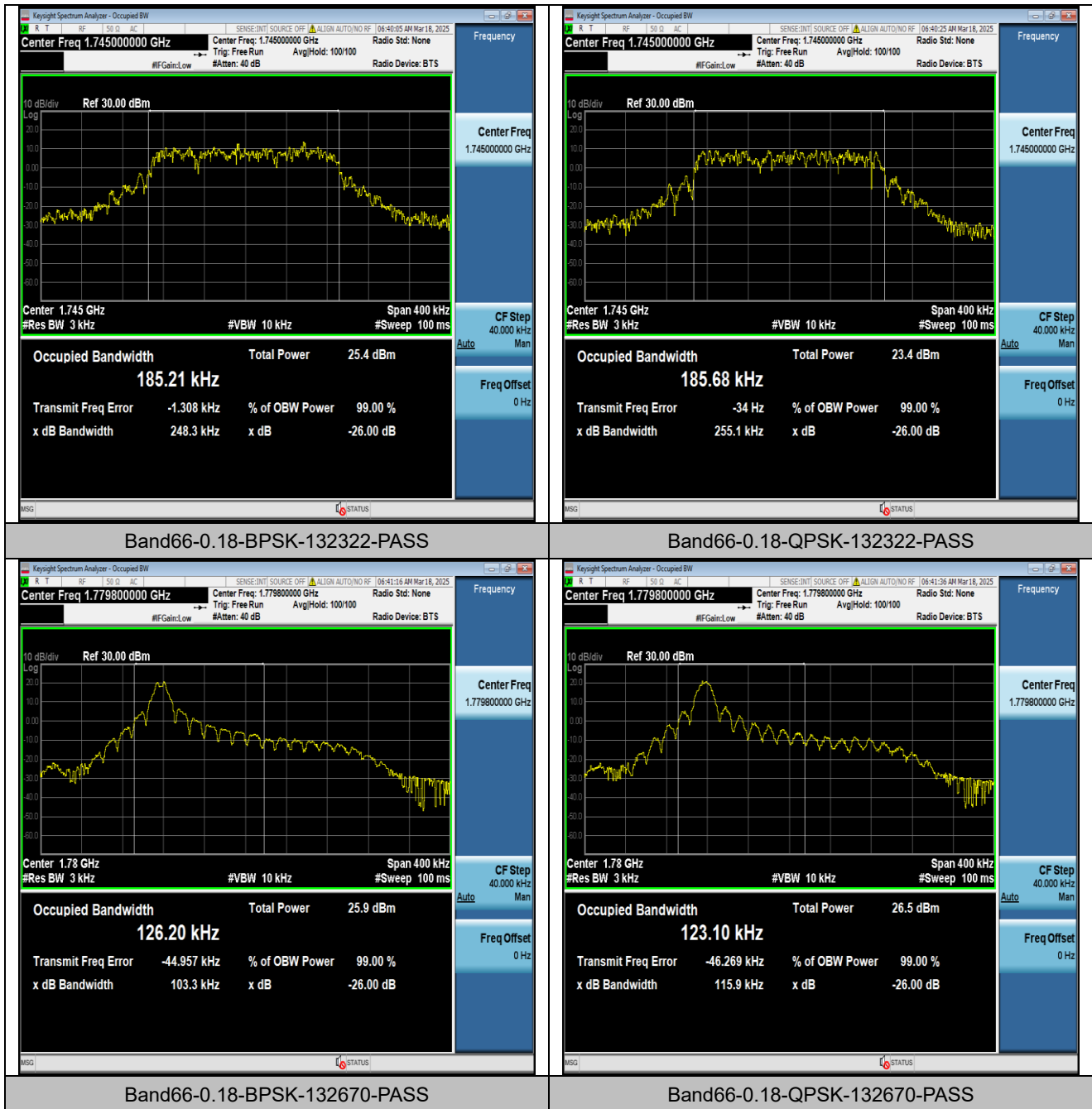
Band	OpMode	SCS	BW	Modulation	Channel	Tones	OBW(MHz)	EBW(MHz)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	BPSK	131974	1@0	0.05836	0.0400	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	131974	1@0	0.06559	0.0390	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132322	1@0	0.05960	0.0409	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	0.06567	0.0416	PASS
Band66	Stand-Alone	3.75kHz	0.18	BPSK	132670	1@0	0.05932	0.0407	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132670	1@0	0.06670	0.0417	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	131974	1@0	0.12062	0.1010	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131974	1@0	0.12358	0.1283	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	131974	12@0	0.18631	0.2483	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	131974	12@0	0.18645	0.2600	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132322	1@0	0.12655	0.1024	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	1@0	0.12591	0.1283	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132322	12@0	0.18521	0.2483	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	0.18568	0.2551	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132670	1@0	0.12620	0.1033	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	1@0	0.12310	0.1159	PASS
Band66	Stand-Alone	15kHz	0.18	BPSK	132670	12@0	0.18473	0.2620	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132670	12@0	0.18936	0.2563	PASS

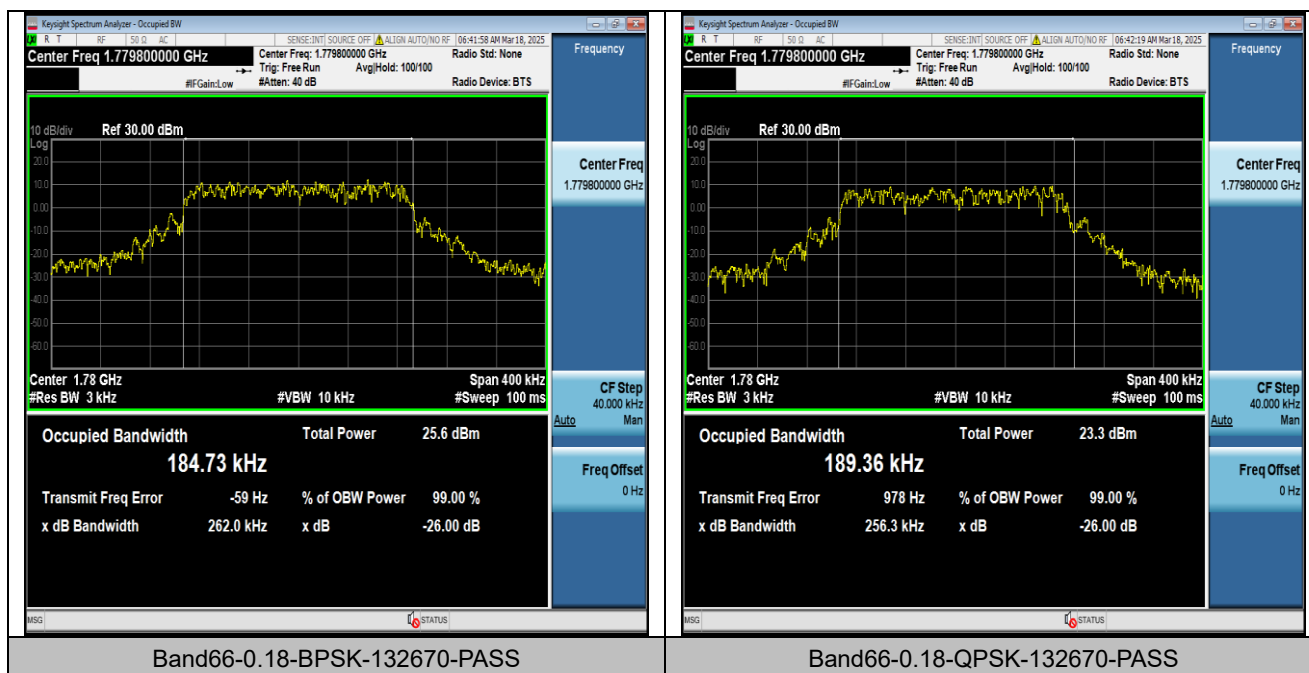
Test Graphs





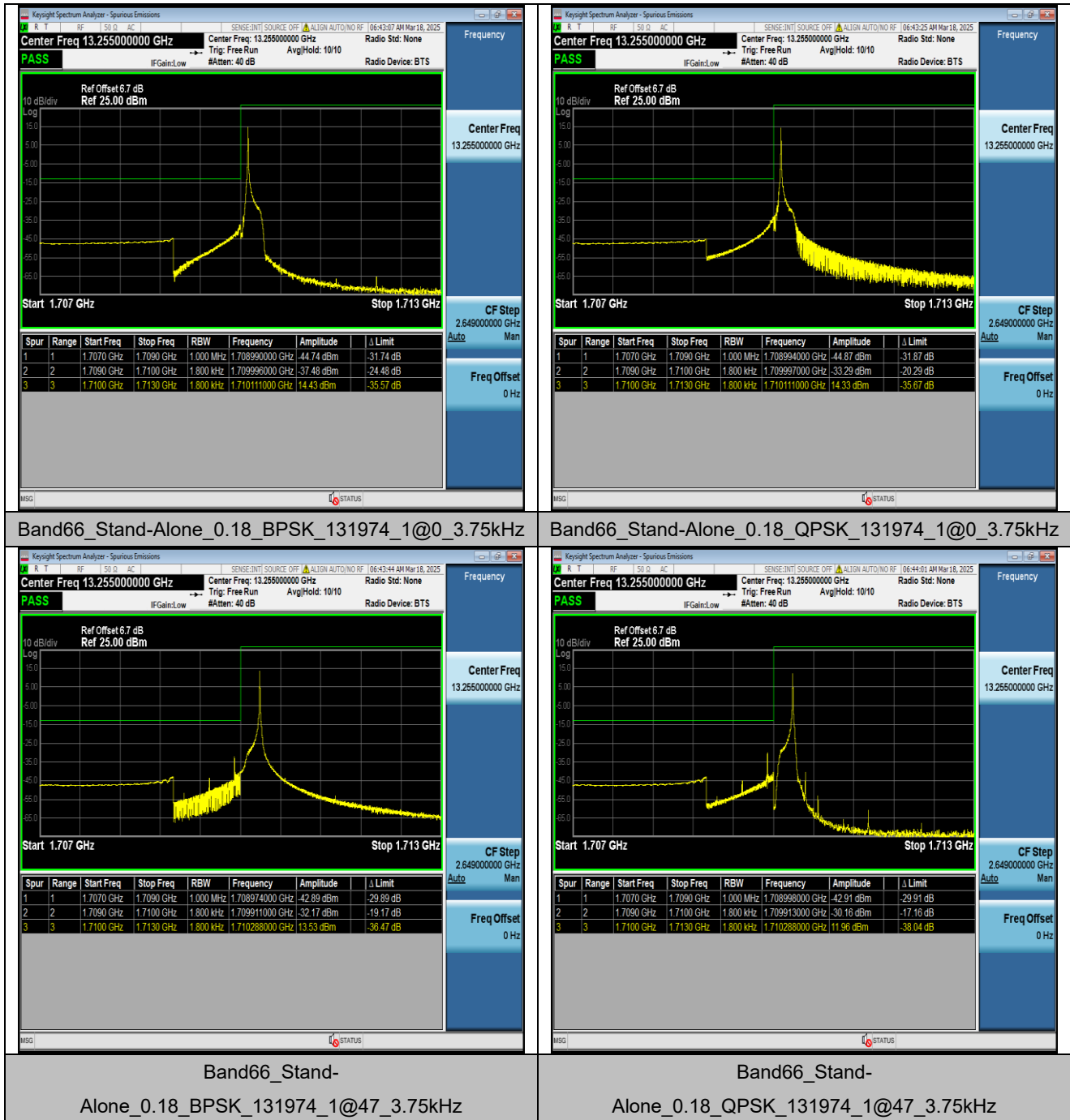


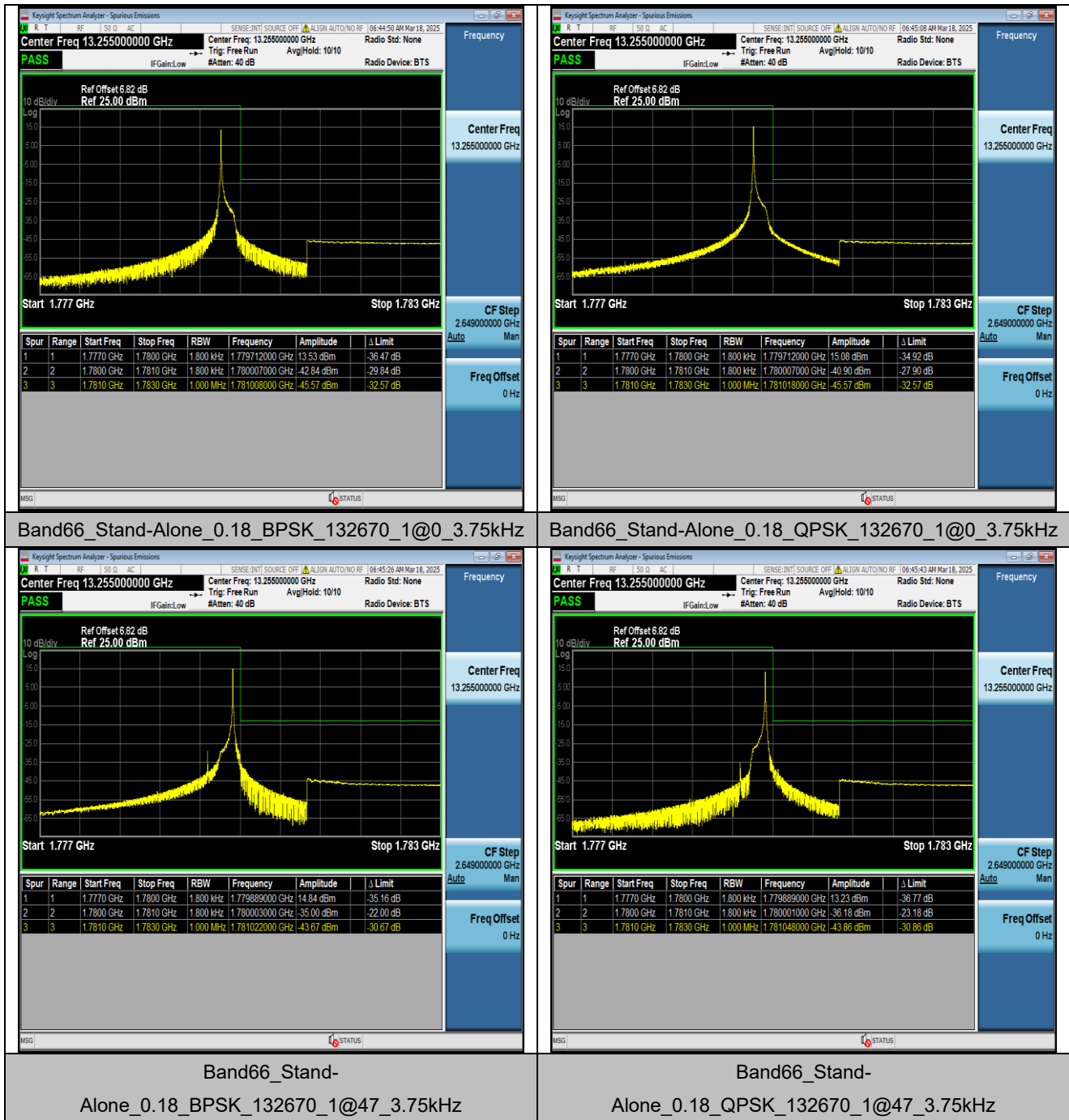


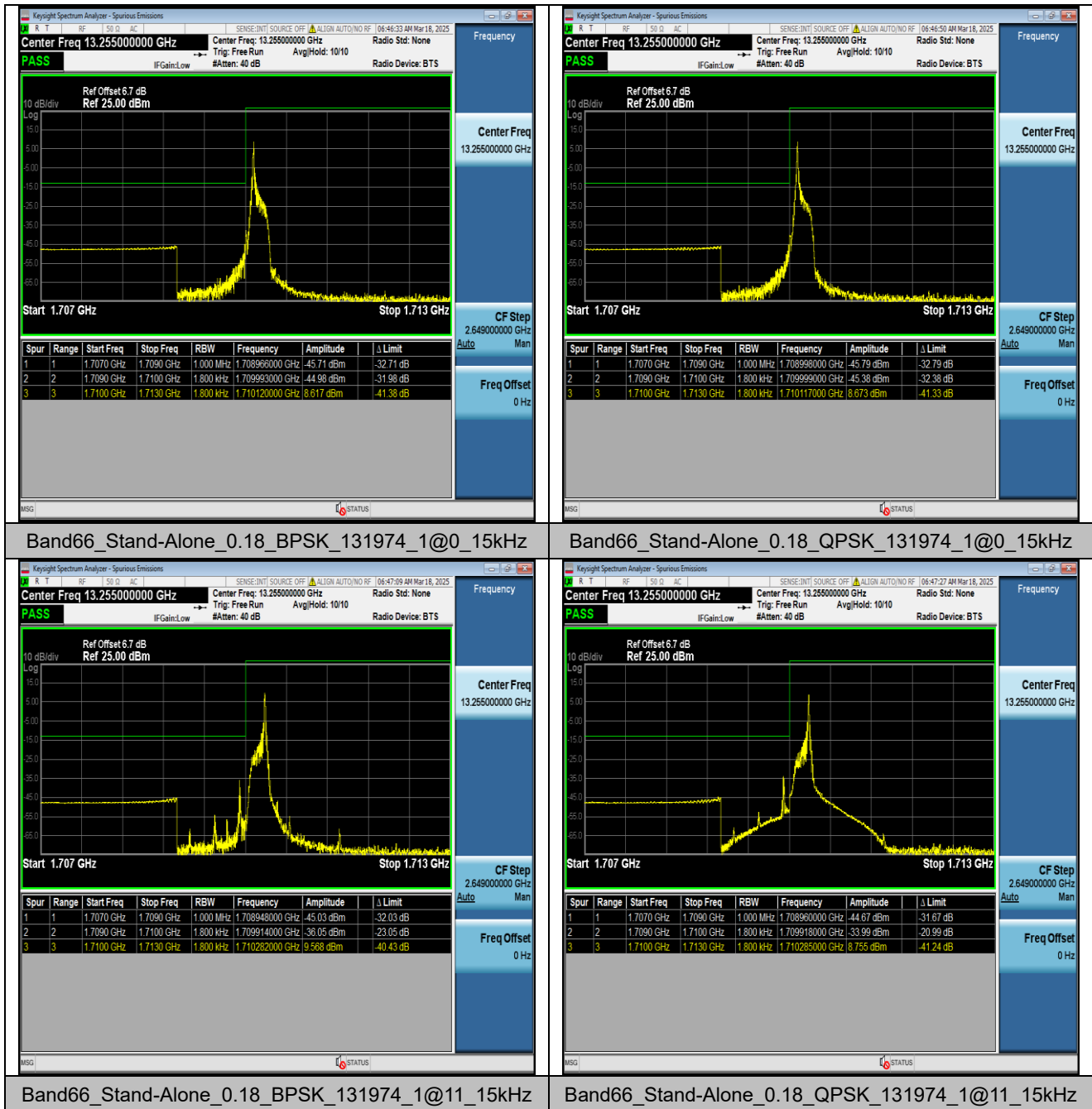


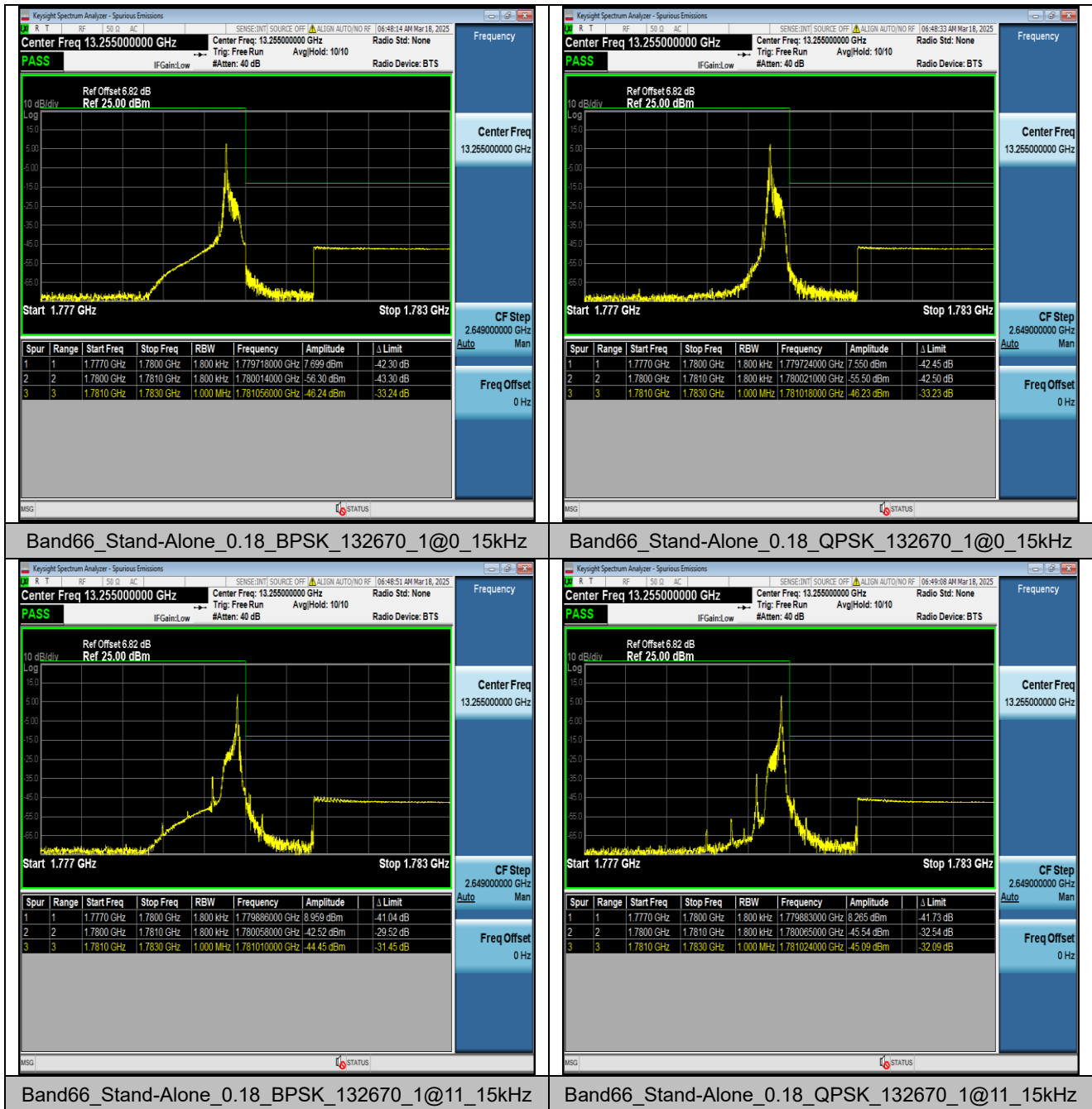
Band Edge for NB1

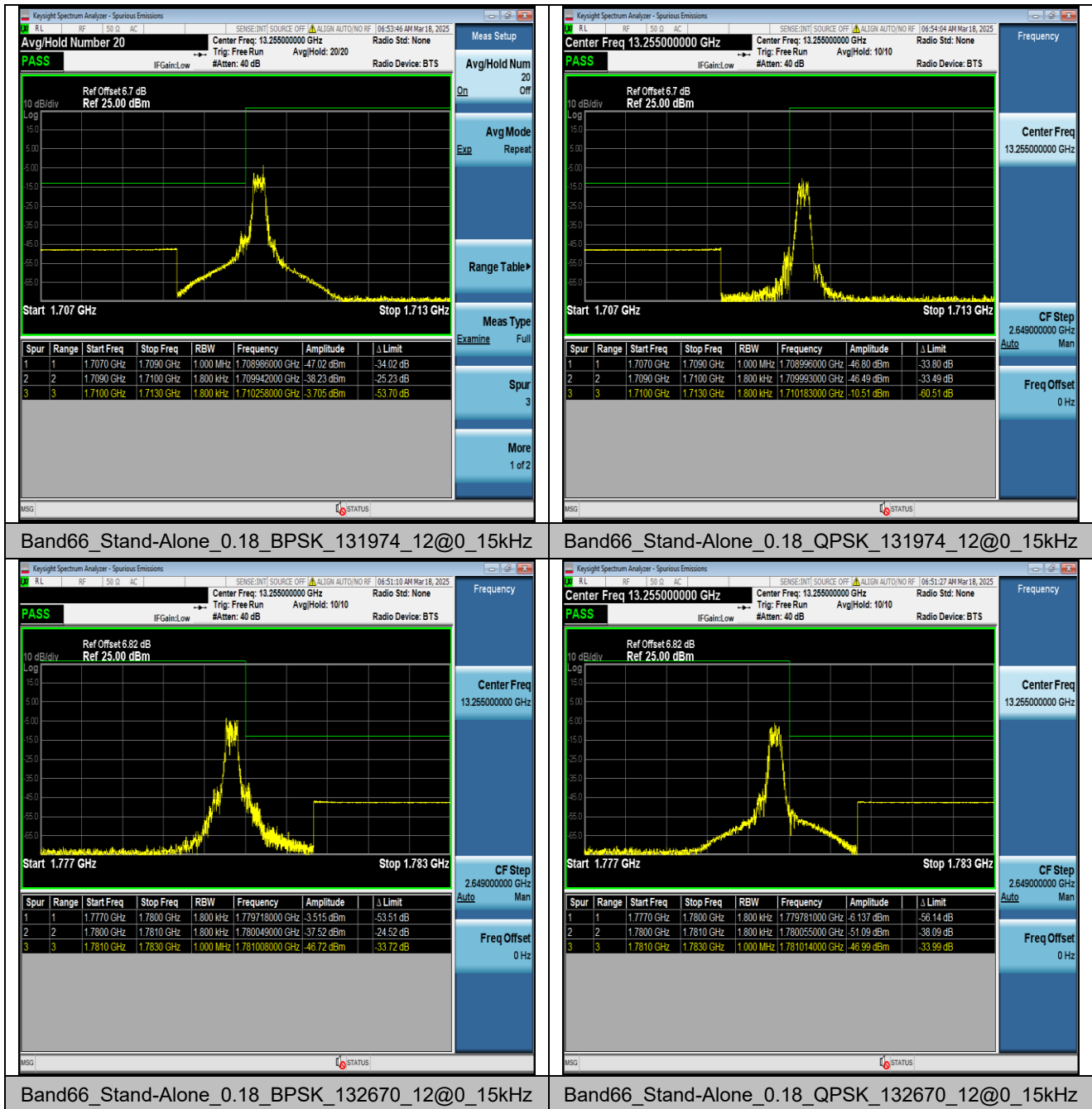
Test Graphs





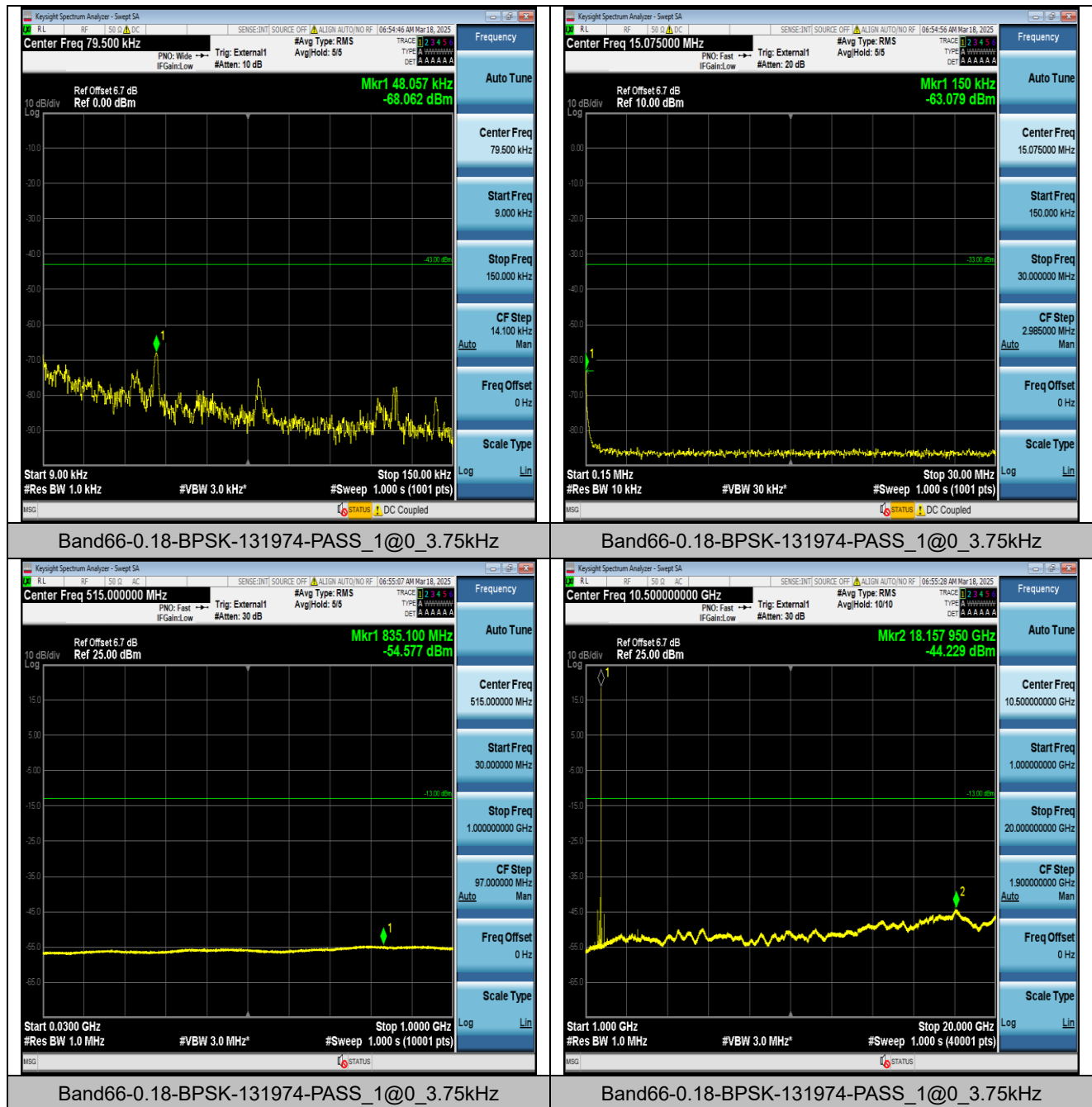


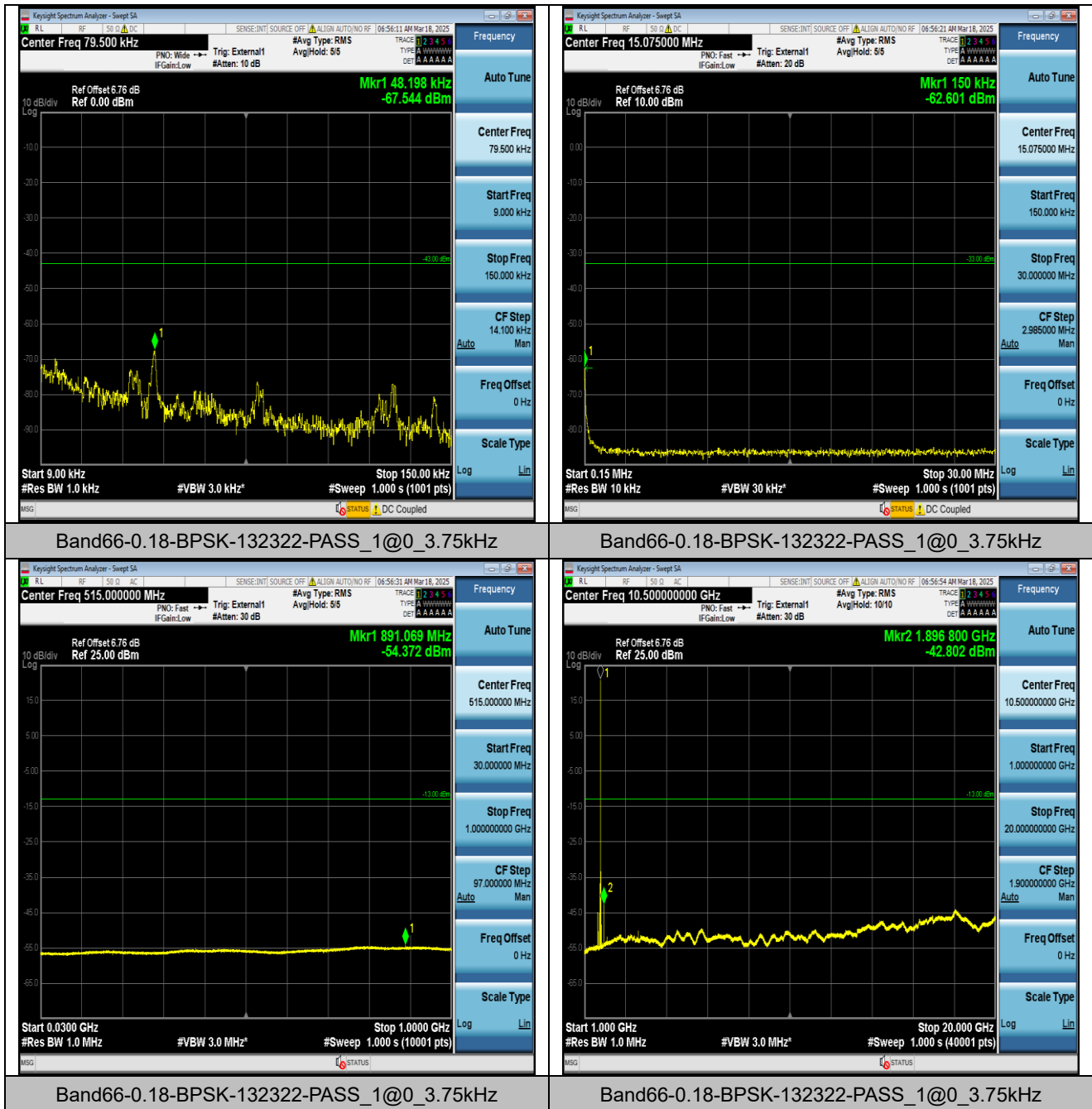


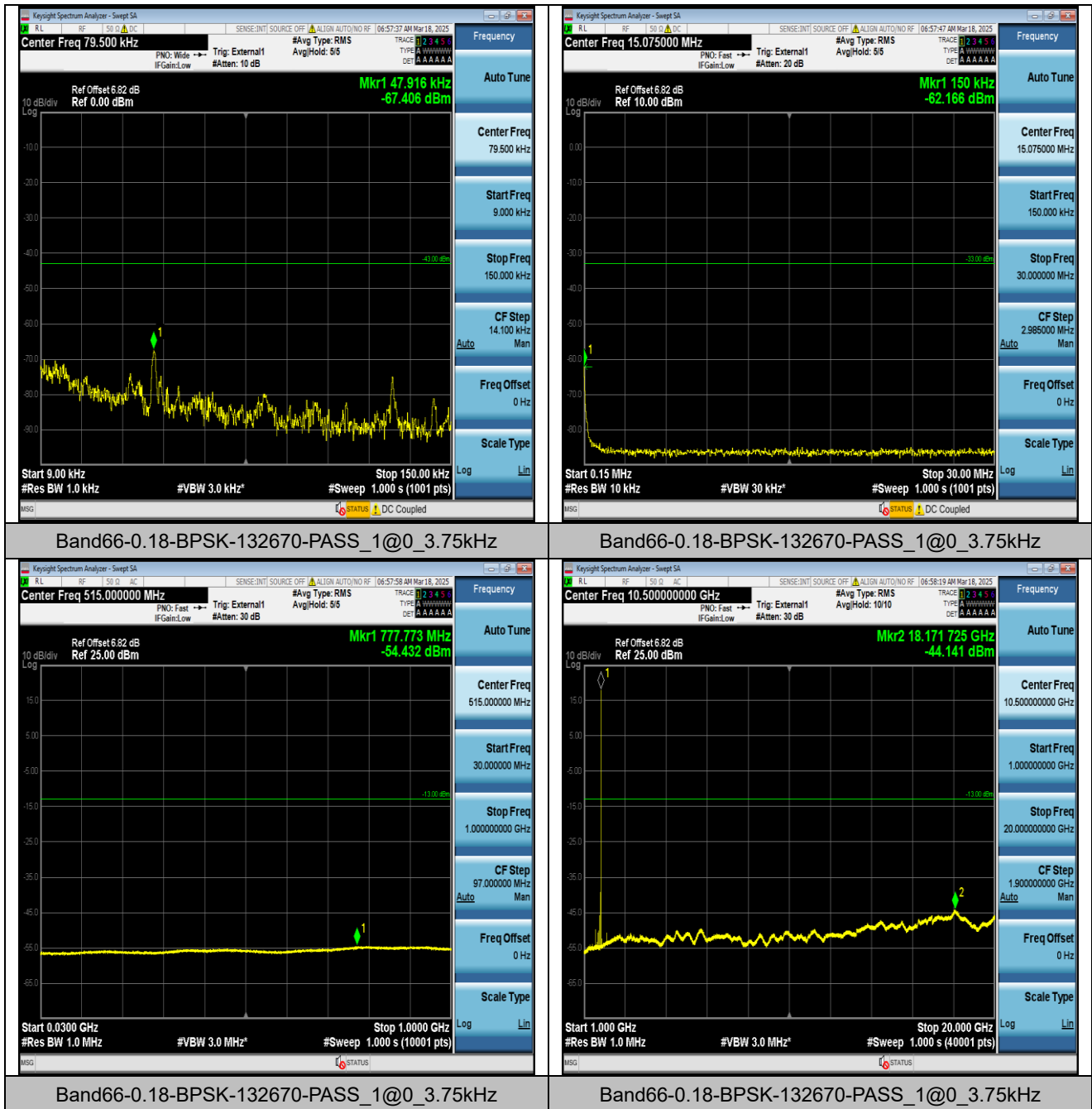


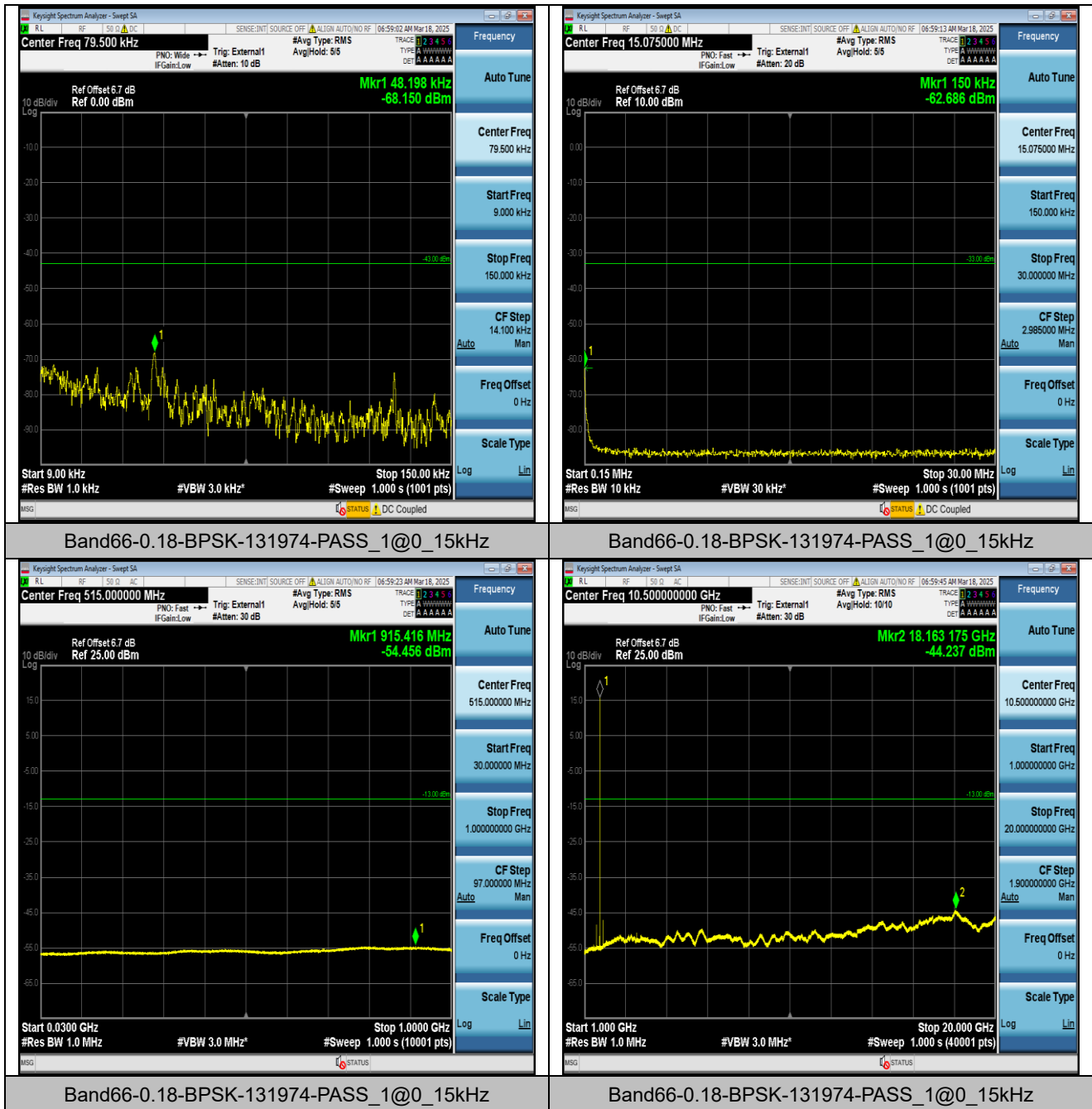
Conducted Spurious Emission for NB1

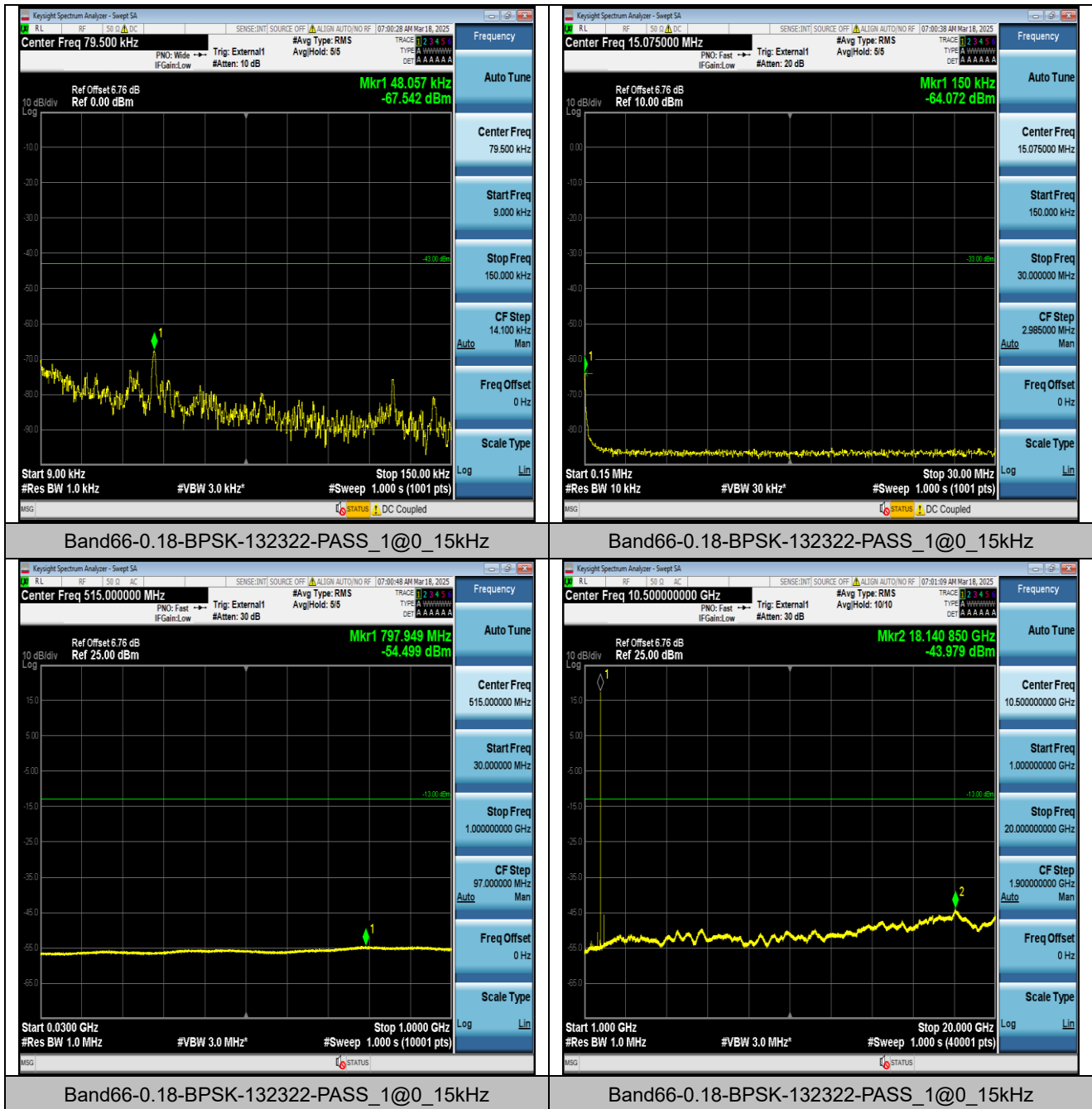
Test Graphs

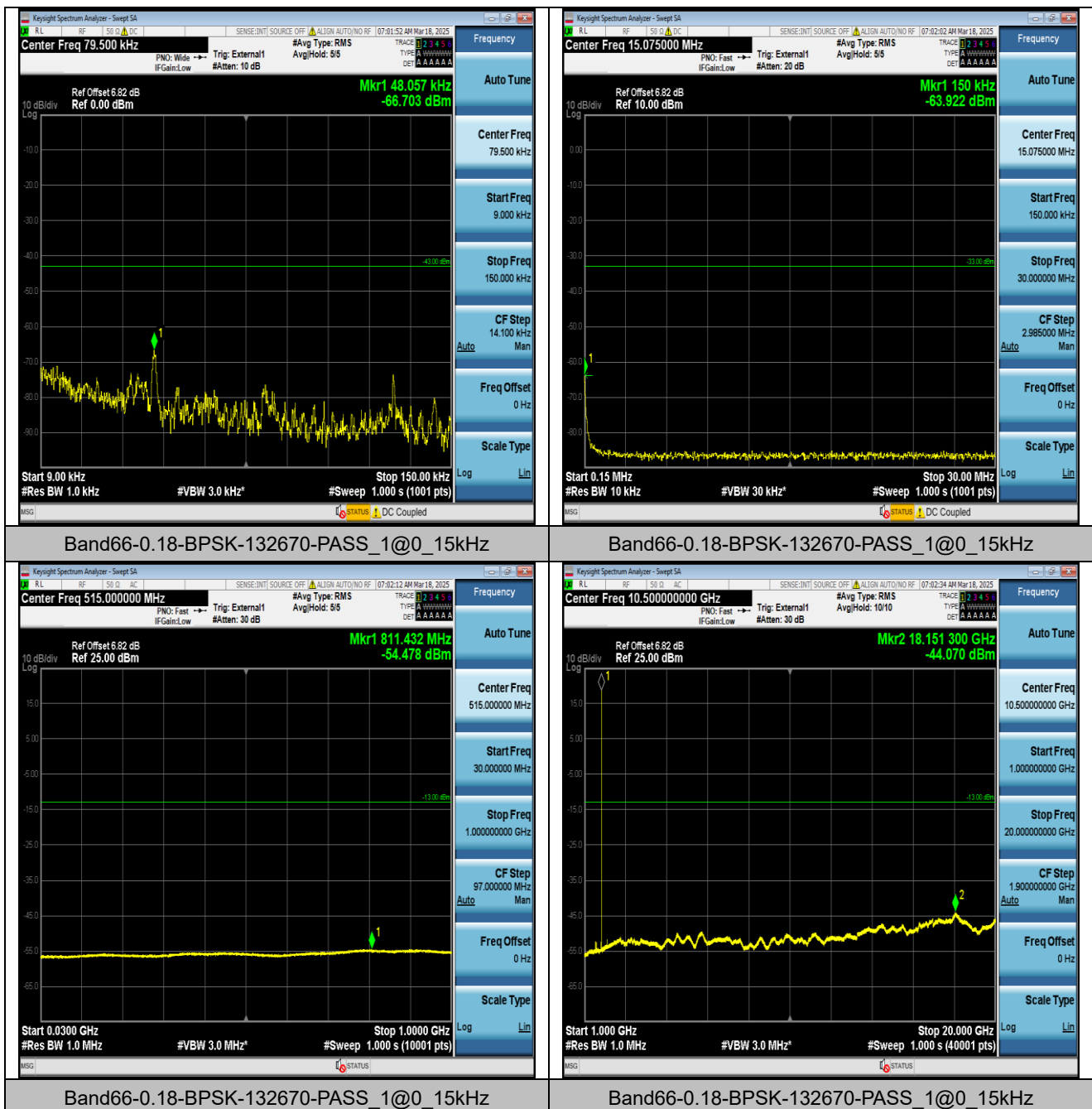












Frequency Stability for NB1

Test Result

Voltage										
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	VN	NT	-4.70	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	VL	NT	-4.40	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	VH	NT	-2.70	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	VN	NT	-1.40	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	VL	NT	-2.60	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	VH	NT	-2.50	PASS

Temperature											
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	-30	2.00	0.001146	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	-20	-1.90	-0.001089	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	-10	-4.90	-0.002808	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	0	-3.90	-0.002235	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	10	-1.60	-0.000917	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	20	0.50	0.000287	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	30	-2.20	-0.001261	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	40	0.80	0.000458	PASS
Band66	Stand-Alone	3.75kHz	0.18	QPSK	132322	1@0	NV	50	0.50	0.000287	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	-30	-5.50	-0.003152	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	-20	1.20	0.000688	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	-10	-3.20	-0.001834	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	0	-4.60	-0.002636	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	10	0.40	0.000229	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	20	-2.70	-0.001547	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	30	-3.00	-0.001719	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	40	-4.80	-0.002751	PASS
Band66	Stand-Alone	15kHz	0.18	QPSK	132322	12@0	NV	50	-1.20	-0.000688	PASS

~The End~