

Appendix-B LTE NB-IoT Band 25

Effective (Isotropic) Radiated Power Output Data for NB

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	EIRP (dBm)	Limit	Verdict
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26042	1@0	21.73	23.32	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	21.76	23.35	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26042	1@47	21.68	23.27	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@47	21.64	23.23	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26365	1@0	21.64	23.23	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	21.66	23.25	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26365	1@47	21.58	23.17	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@47	21.57	23.16	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26688	1@0	21.44	23.03	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	21.49	23.08	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26688	1@47	21.41	23	33.00	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@47	21.34	22.93	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26042	1@0	19.78	21.37	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	1@0	19.82	21.41	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26042	1@11	19.77	21.36	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	1@11	19.8	21.39	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26365	1@0	21.21	22.8	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	21.22	22.81	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26365	1@11	21.14	22.73	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@11	21.15	22.74	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26688	1@0	21.32	22.91	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	1@0	21.3	22.89	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26688	1@11	21.23	22.82	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	1@11	21.25	22.84	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	3@3	21.89	23.48	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	3@3	21.91	23.5	33.00	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	3@3	20.66	22.25	33.00	PASS

Peak-to-Average Ratio(CCDF) for NB

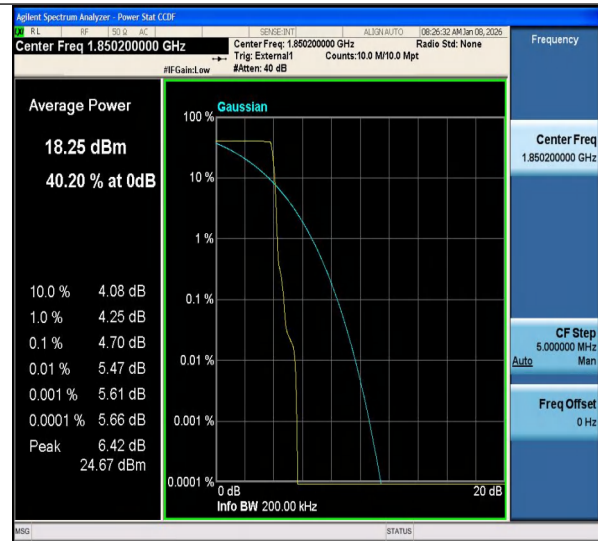
Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	5.12	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@47	4.7	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	5.15	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@47	4.96	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	5.2	<=13	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@47	4.94	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	1@0	6.6	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	1@11	6.9	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	6.56	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@11	6.91	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	1@0	6.62	<=13	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	1@11	6.93	<=13	PASS

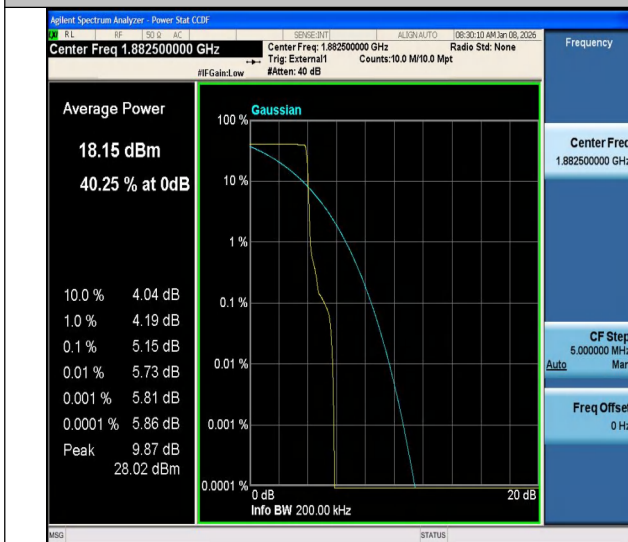
Test Graphs



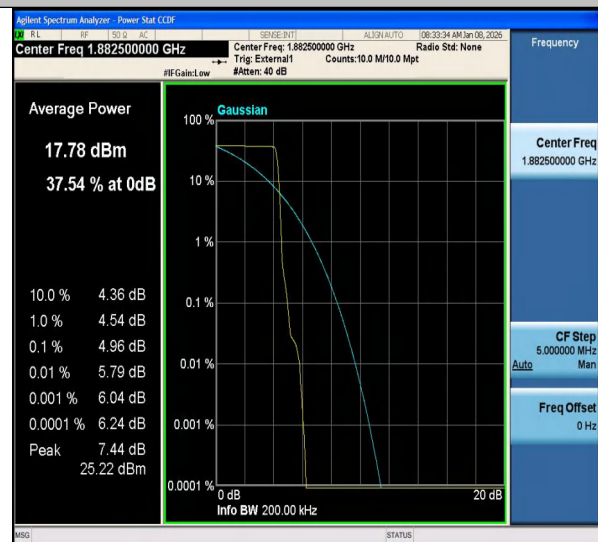
Band25-0.18-QPSK-26042-PASS



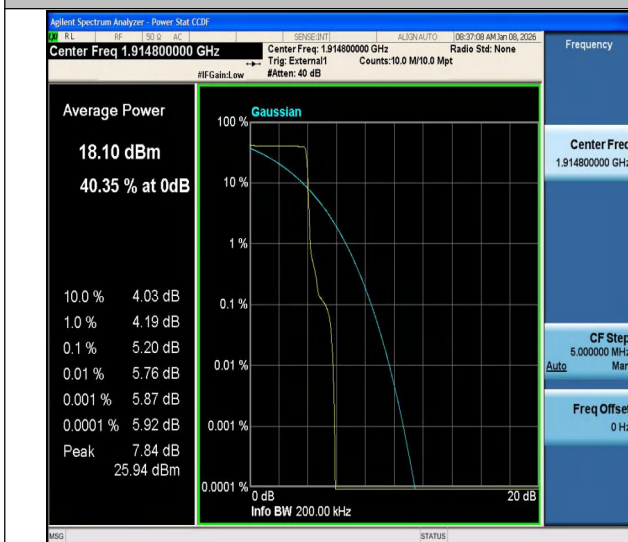
Band25-0.18-QPSK-26042-PASS



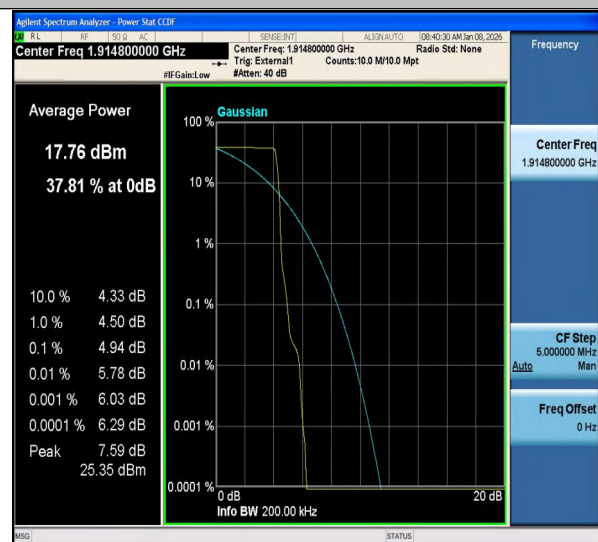
Band25-0.18-QPSK-26365-PASS



Band25-0.18-QPSK-26365-PASS



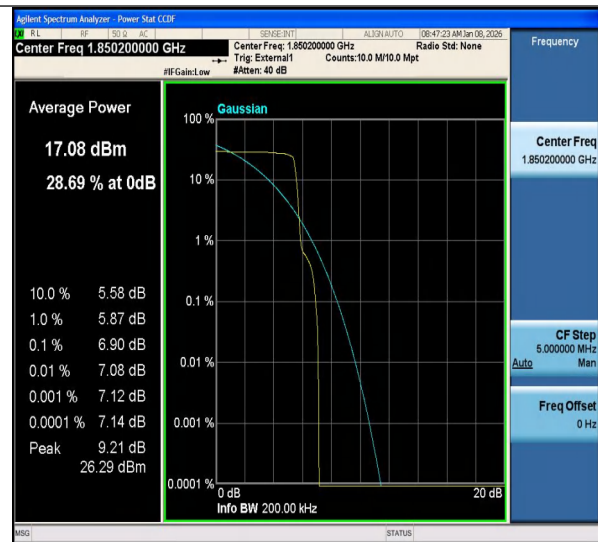
Band25-0.18-QPSK-26688-PASS



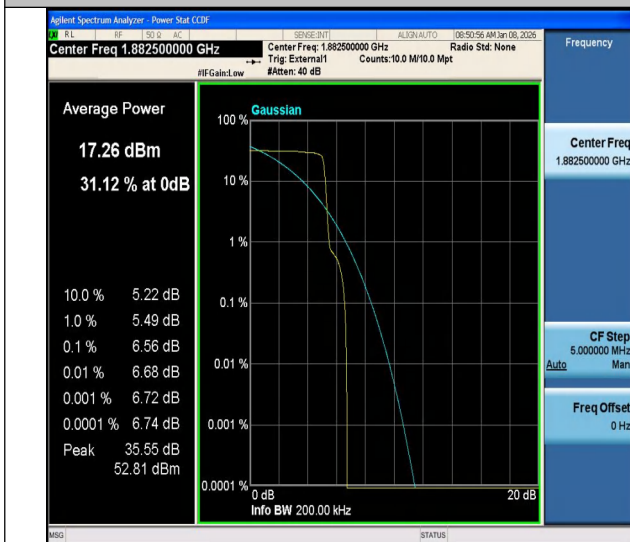
Band25-0.18-QPSK-26688-PASS



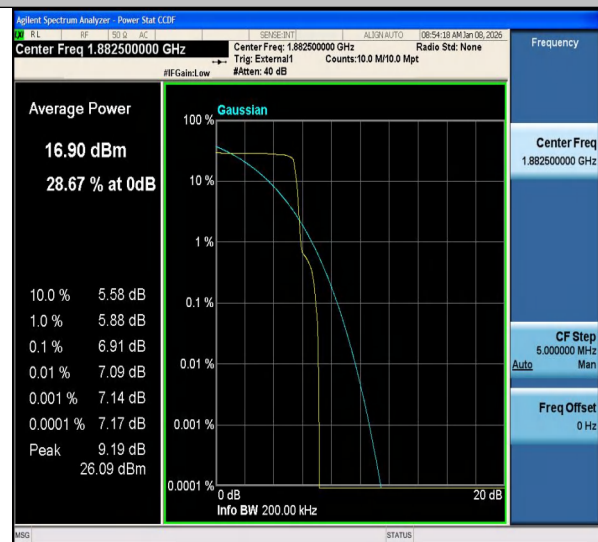
Band25-0.18-QPSK-26042-PASS



Band25-0.18-QPSK-26042-PASS



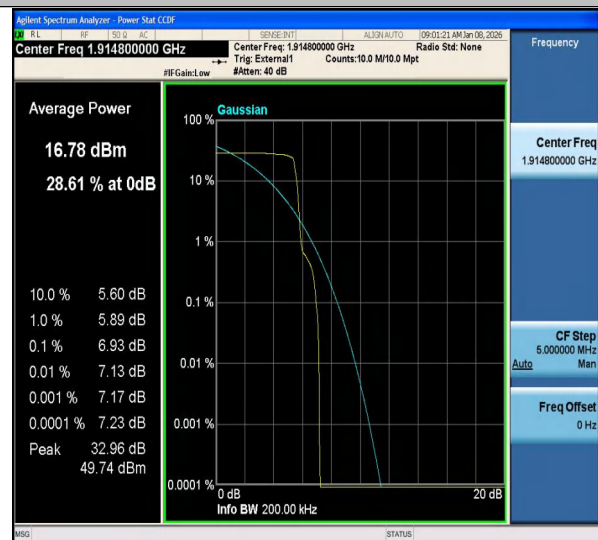
Band25-0.18-QPSK-26365-PASS



Band25-0.18-QPSK-26365-PASS



Band25-0.18-QPSK-26688-PASS



Band25-0.18-QPSK-26688-PASS

Emission Bandwidth for NB

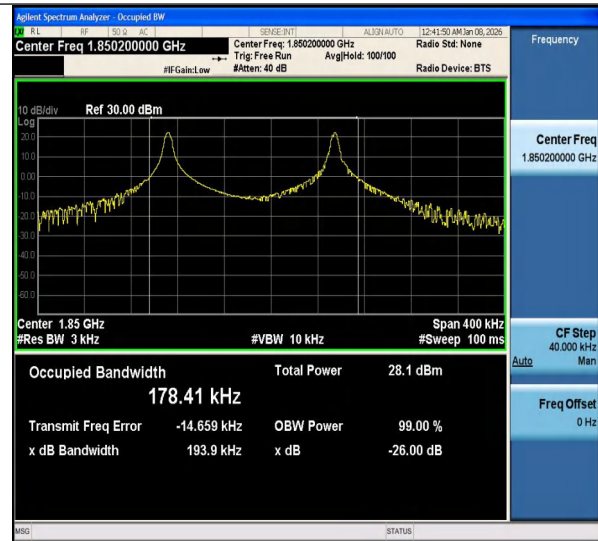
Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	OBW(MHz)	EBW(MHz)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26042	1@0	0.17951	0.1938	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26042	1@0	0.17841	0.1939	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26365	1@0	0.17797	0.1943	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	0.17814	0.1937	PASS
Band25	Stand-Alone	3.75kHz	0.18	BPSK	26688	1@0	0.17703	0.1949	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26688	1@0	0.17599	0.1905	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26042	1@0	0.12785	0.1157	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	1@0	0.12099	0.1154	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26042	12@0	0.19405	0.2258	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26042	12@0	0.19129	0.2135	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26365	1@0	0.12243	0.1141	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	0.12604	0.1294	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26365	12@0	0.19160	0.2267	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	12@0	0.19350	0.2134	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26688	1@0	0.12670	0.1132	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	1@0	0.11988	0.1135	PASS
Band25	Stand-Alone	15kHz	0.18	BPSK	26688	12@0	0.19296	0.2239	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26688	12@0	0.19453	0.2211	PASS

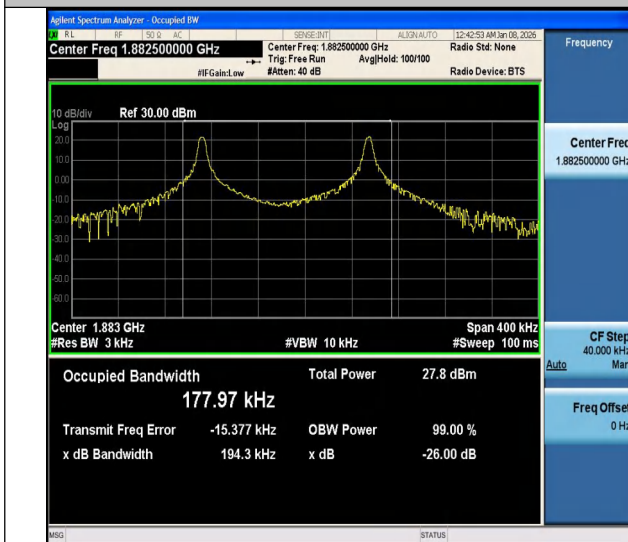
Test Graphs



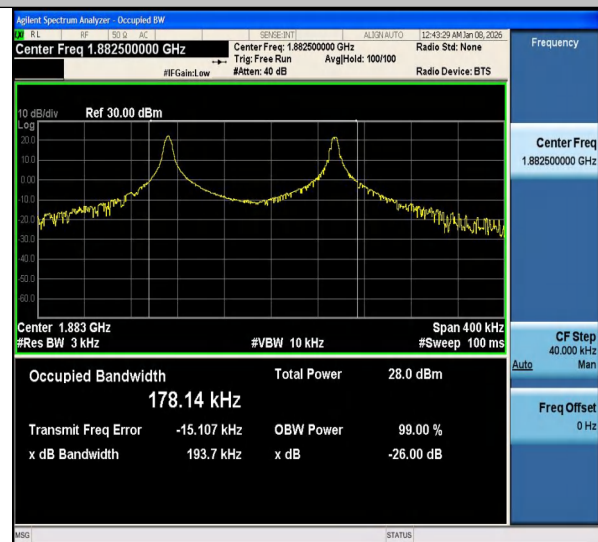
Band25-0.18-BPSK-26042-PASS



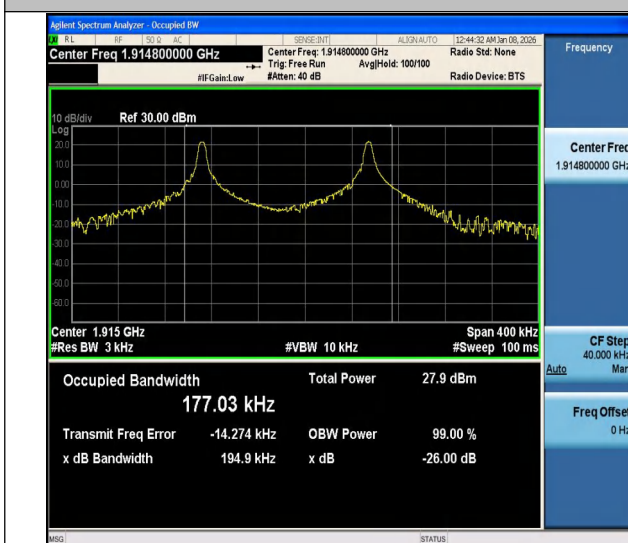
Band25-0.18-QPSK-26042-PASS



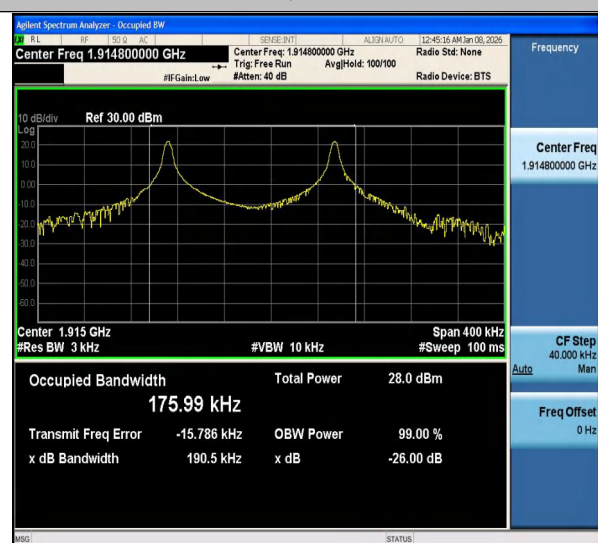
Band25-0.18-BPSK-26365-PASS



Band25-0.18-QPSK-26365-PASS



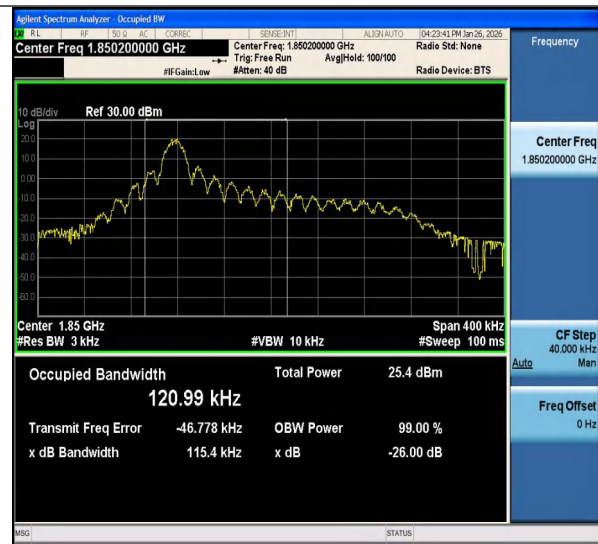
Band25-0.18-BPSK-26688-PASS



Band25-0.18-QPSK-26688-PASS



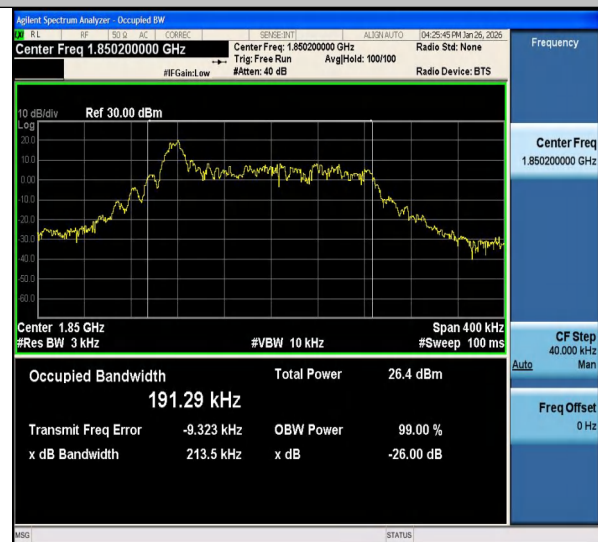
Band25-0.18-BPSK-26042-PASS



Band25-0.18-QPSK-26042-PASS



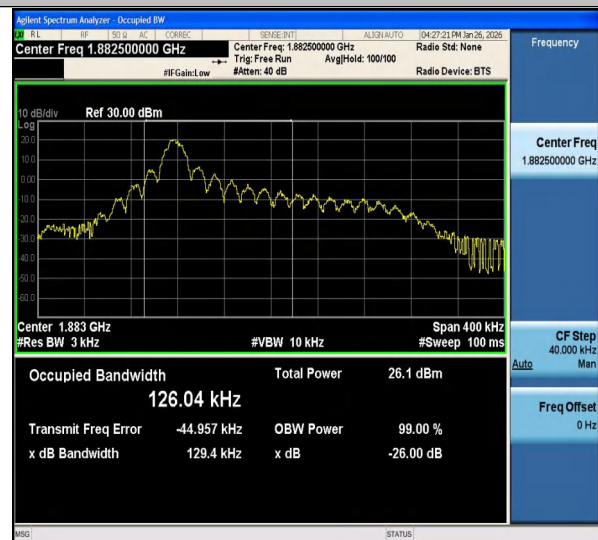
Band25-0.18-BPSK-26042-PASS



Band25-0.18-QPSK-26042-PASS



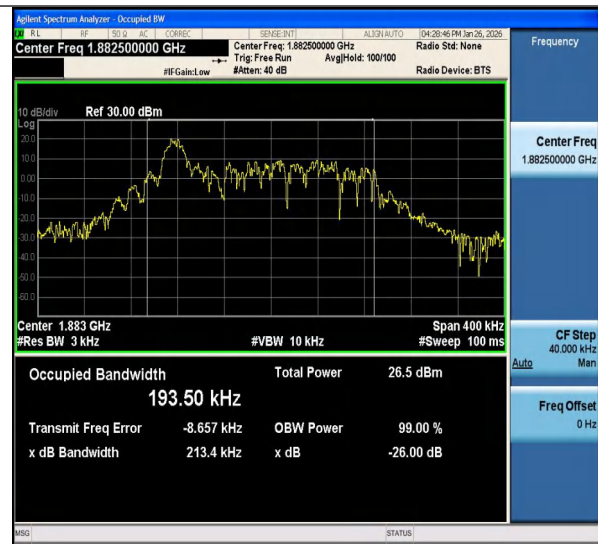
Band25-0.18-BPSK-26365-PASS



Band25-0.18-QPSK-26365-PASS



Band25-0.18-BPSK-26365-PASS



Band25-0.18-QPSK-26365-PASS



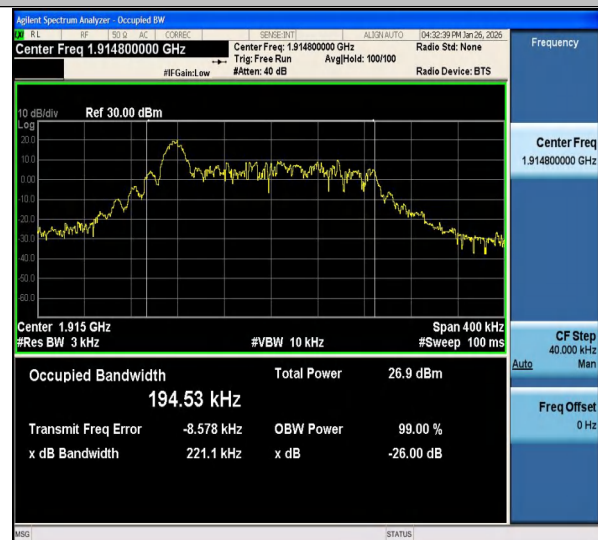
Band25-0.18-BPSK-26688-PASS



Band25-0.18-QPSK-26688-PASS



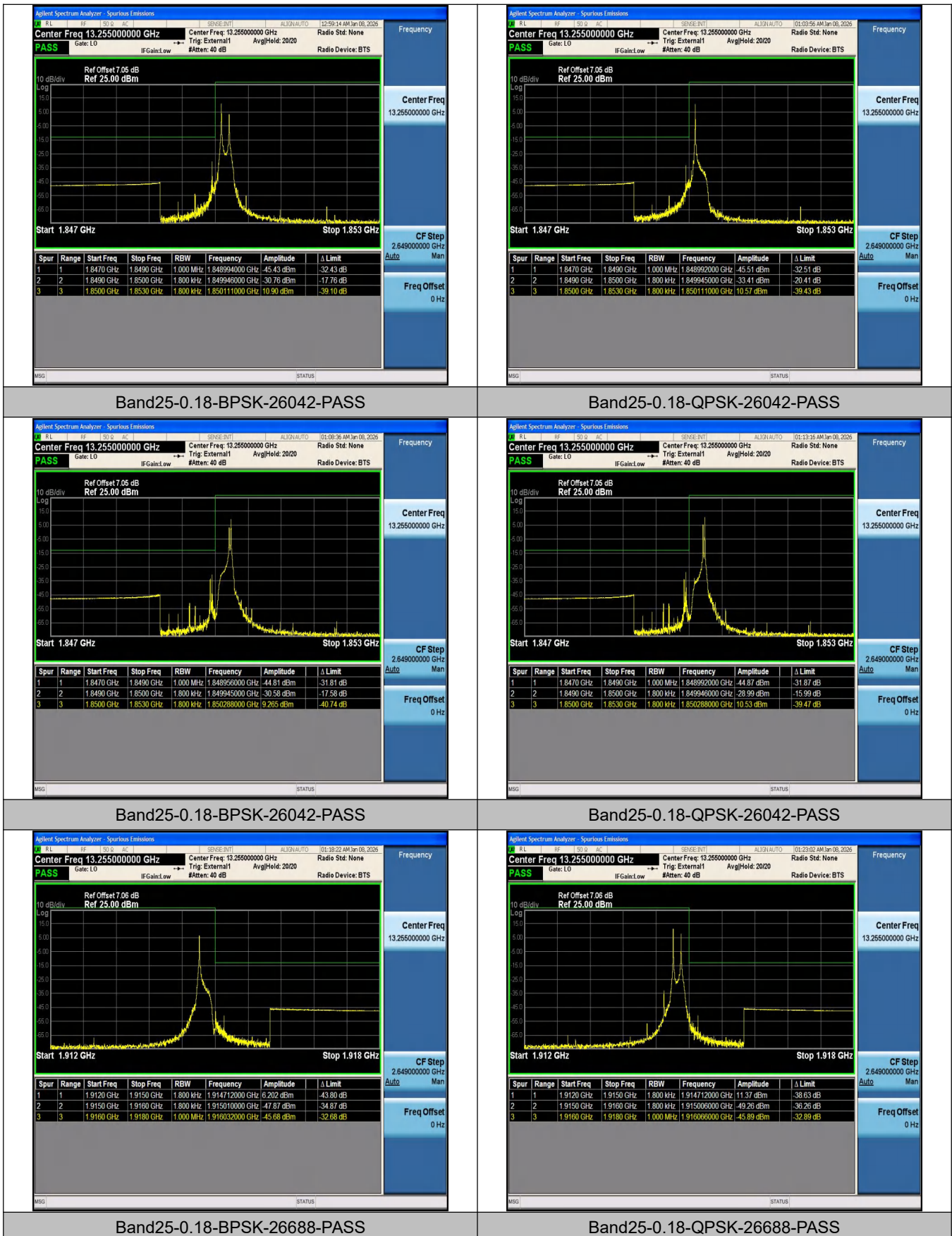
Band25-0.18-BPSK-26688-PASS

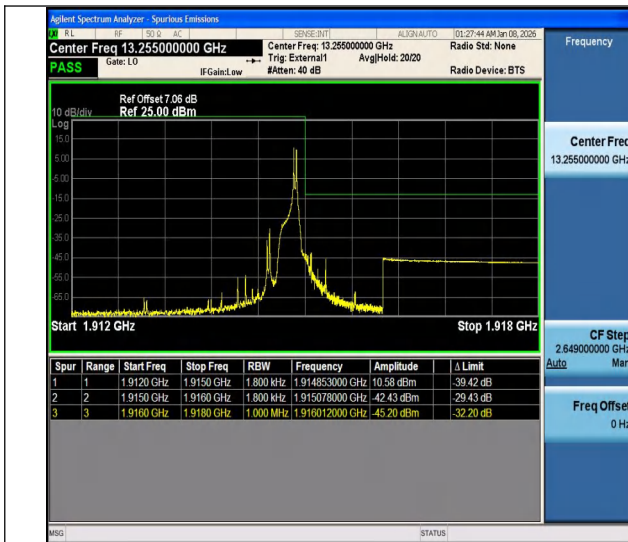


Band25-0.18-QPSK-26688-PASS

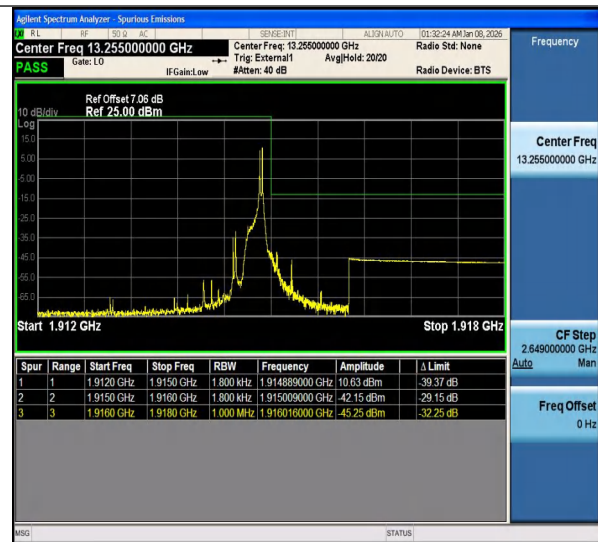
Band Edge for NB

Test Graphs

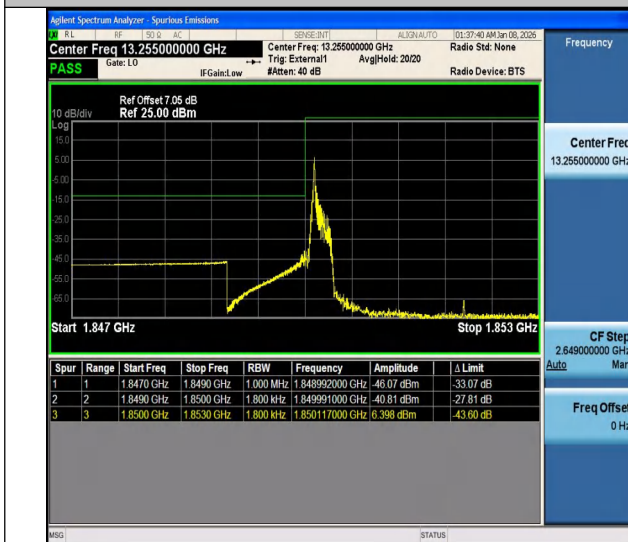




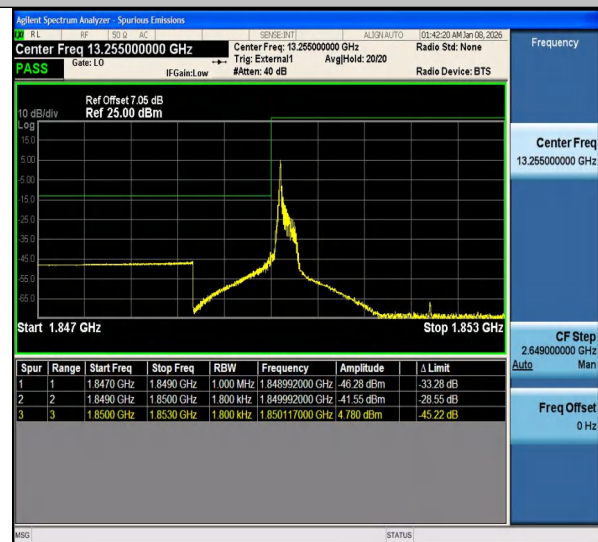
Band25-0.18-BPSK-26688-PASS



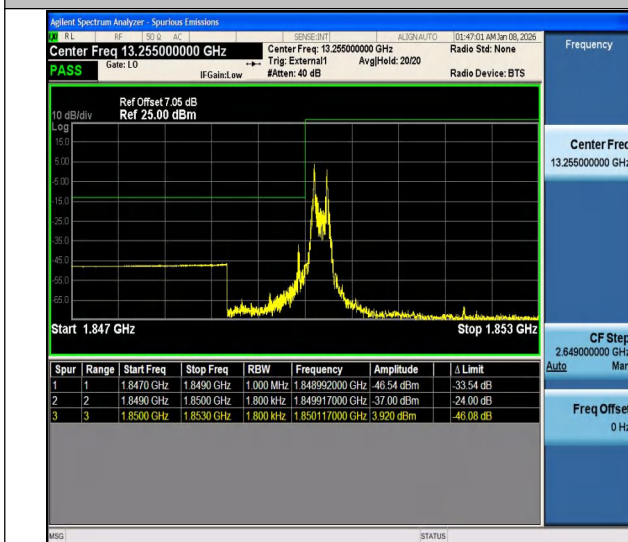
Band25-0.18-QPSK-26688-PASS



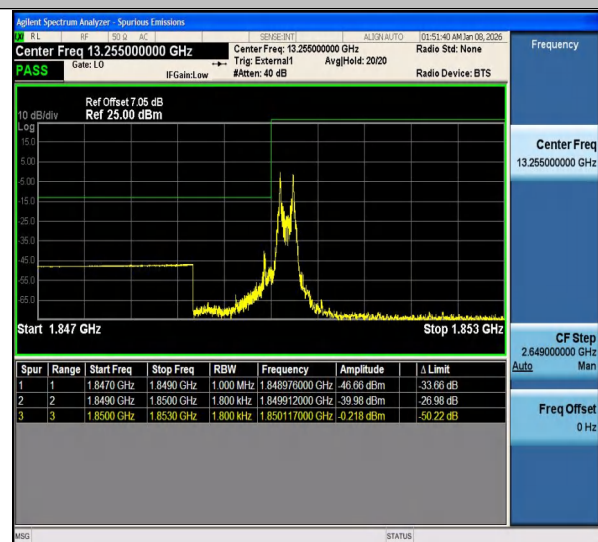
Band25-0.18-BPSK-26042-PASS



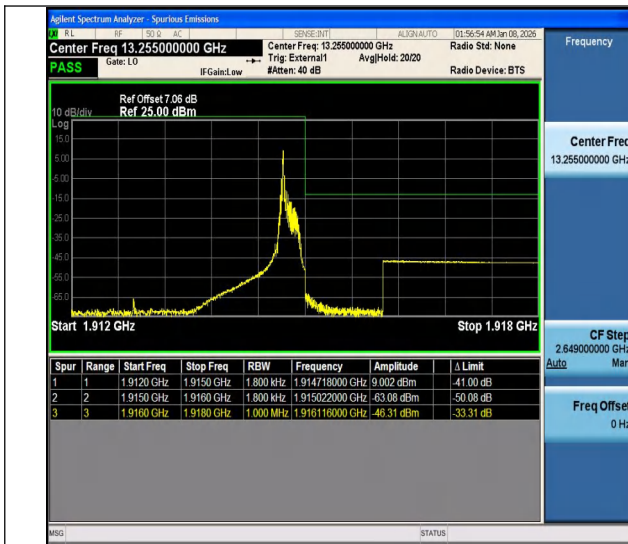
Band25-0.18-QPSK-26042-PASS



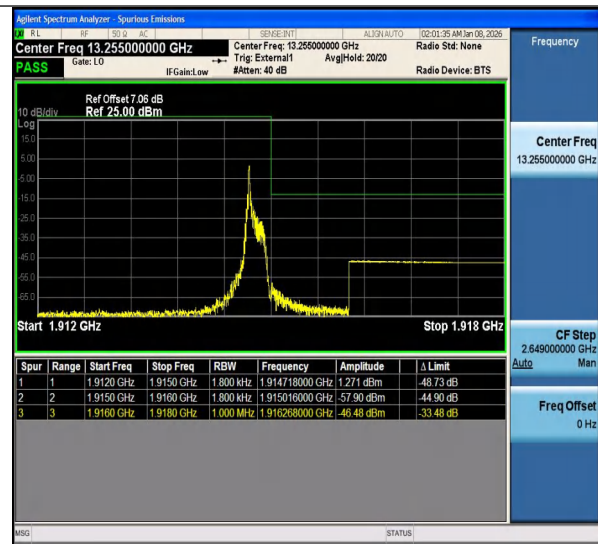
Band25-0.18-BPSK-26042-PASS



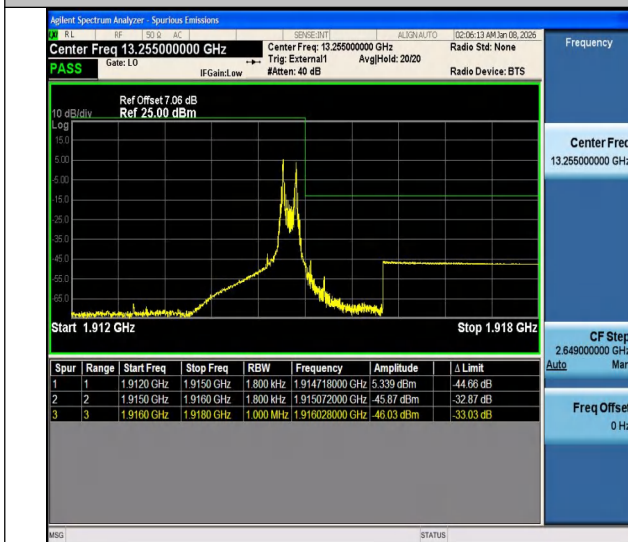
Band25-0.18-QPSK-26042-PASS



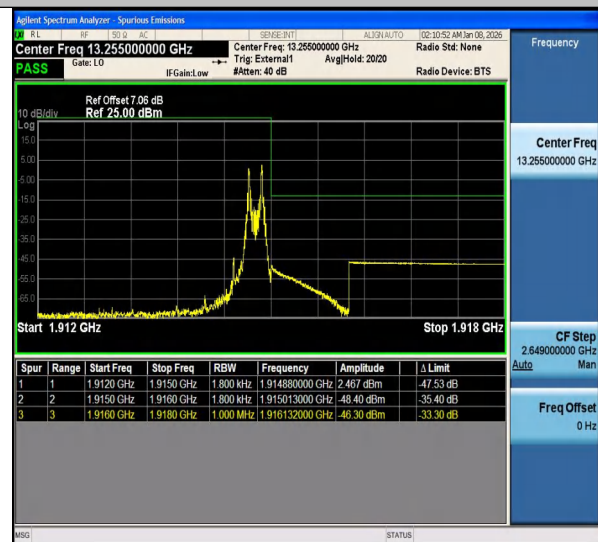
Band25-0.18-BPSK-26688-PASS



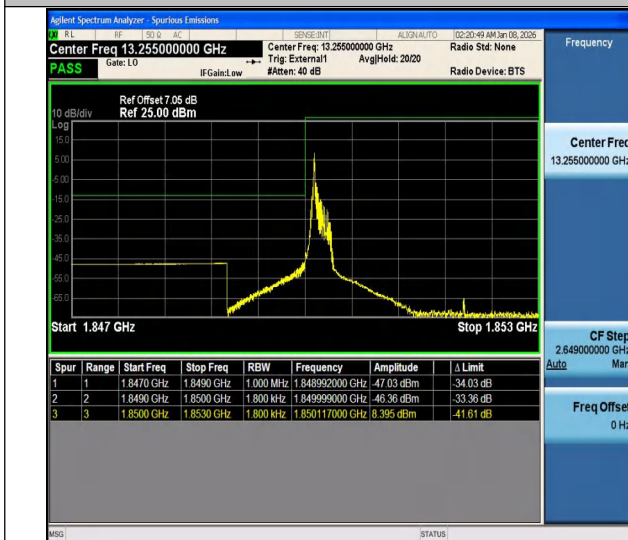
Band25-0.18-QPSK-26688-PASS



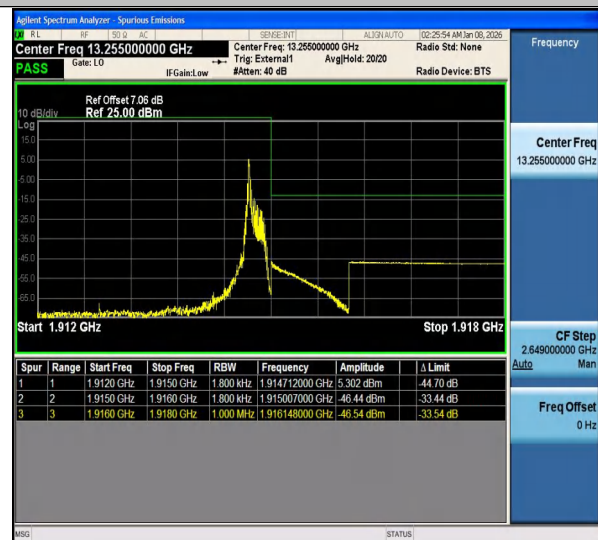
Band25-0.18-BPSK-26688-PASS



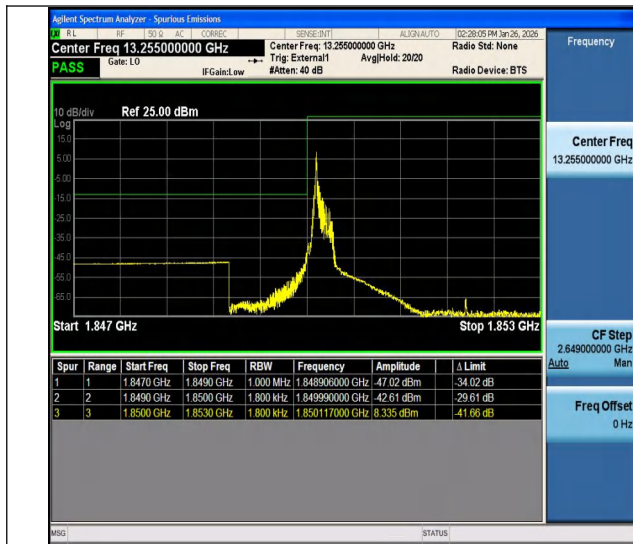
Band25-0.18-QPSK-26688-PASS



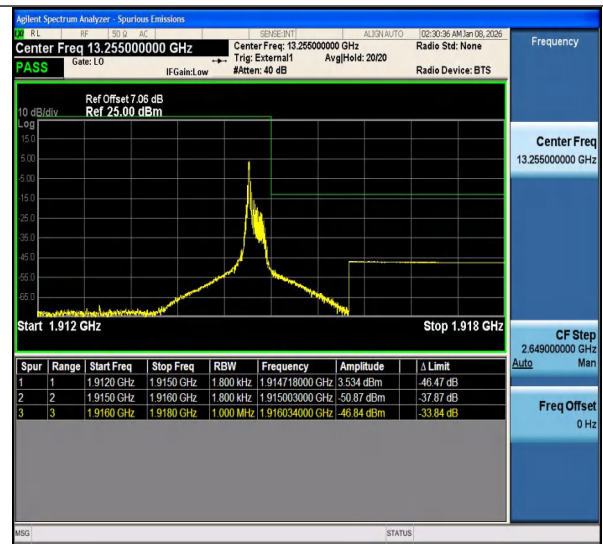
Band25-0.18-QPSK-26042-PASS



Band25-0.18-BPSK-26688-PASS



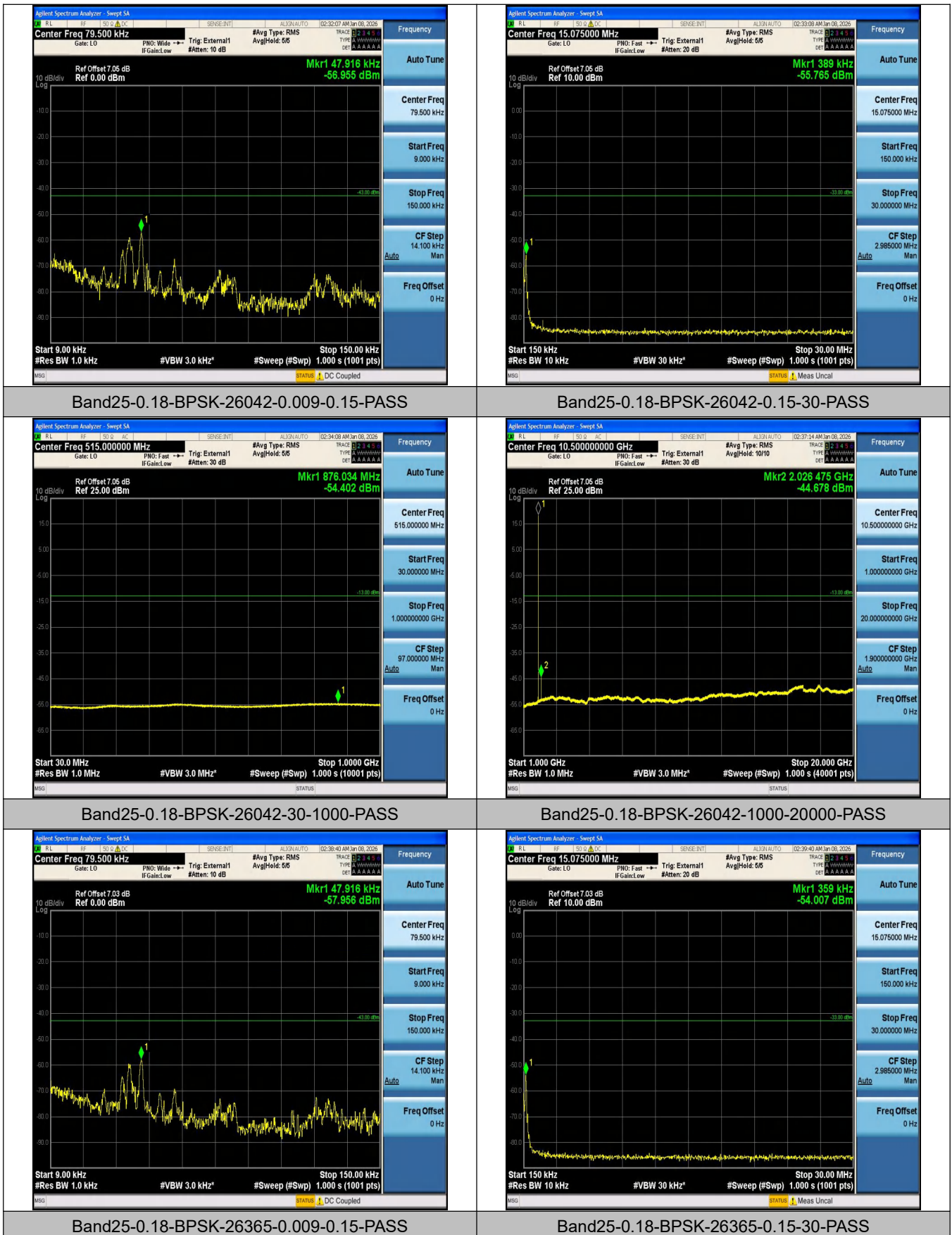
Band25-0.18-BPSK-26042-PASS

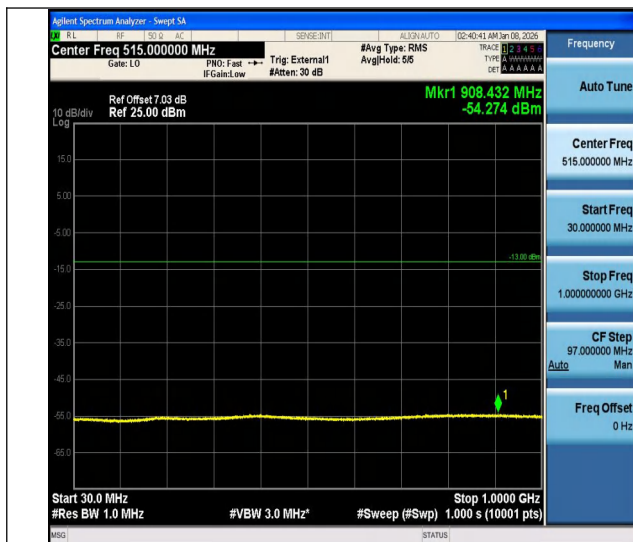


Band25-0.18-QPSK-26688-PASS

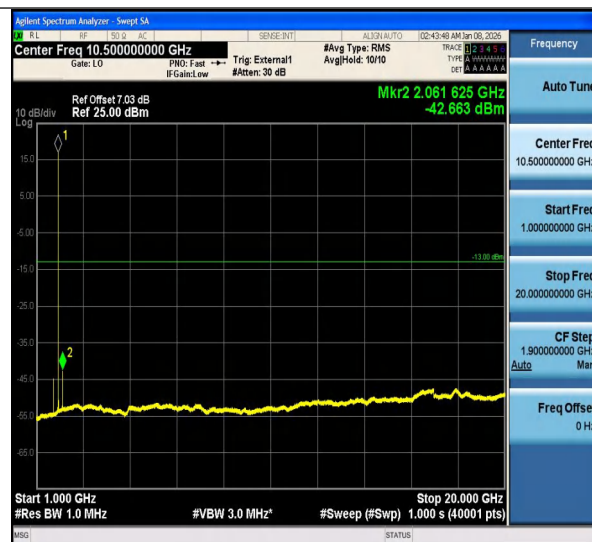
Conducted Spurious Emission for NB

Test Graphs





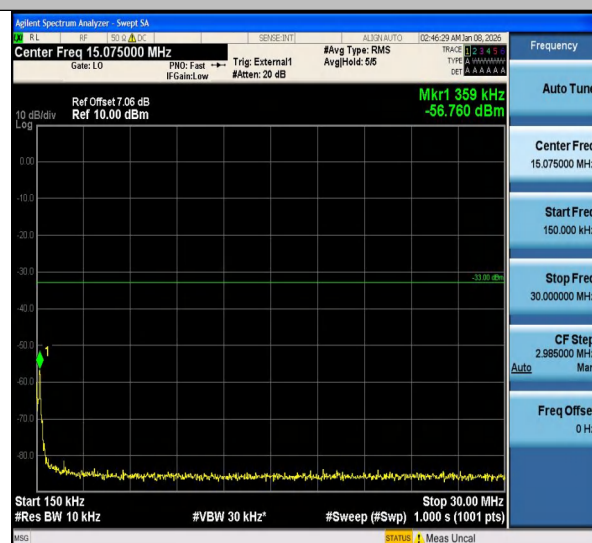
Band25-0.18-BPSK-26365-30-1000-PASS



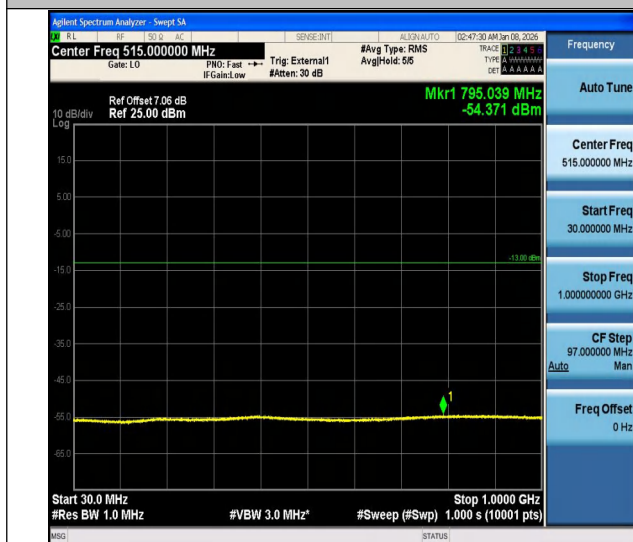
Band25-0.18-BPSK-26365-1000-20000-PASS



Band25-0.18-BPSK-26688-0.009-0.15-PASS



Band25-0.18-BPSK-26688-0.15-30-PASS



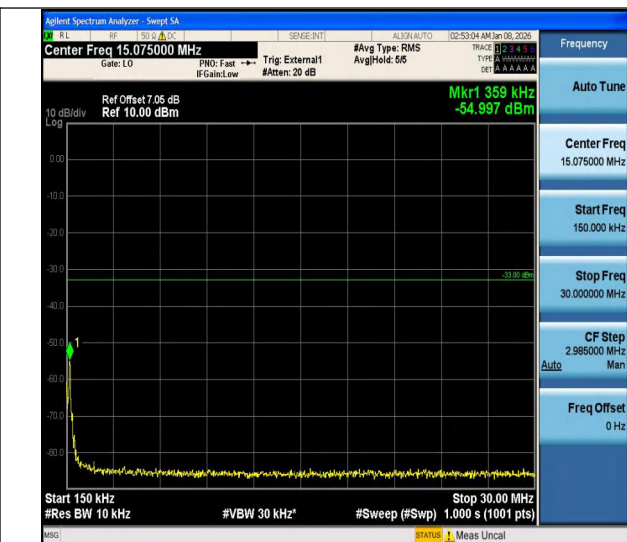
Band25-0.18-BPSK-26688-30-1000-PASS



Band25-0.18-BPSK-26688-1000-20000-PASS



Band25-0.18-BPSK-26042-0.009-0.15-PASS



Band25-0.18-BPSK-26042-0.15-30-PASS



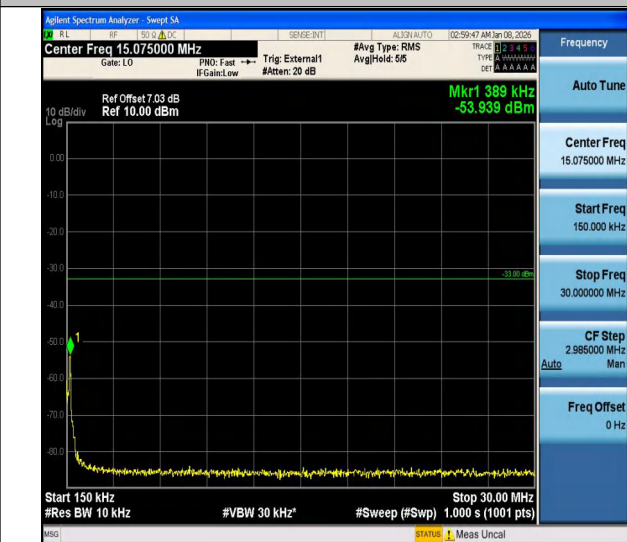
Band25-0.18-BPSK-26042-30-1000-PASS



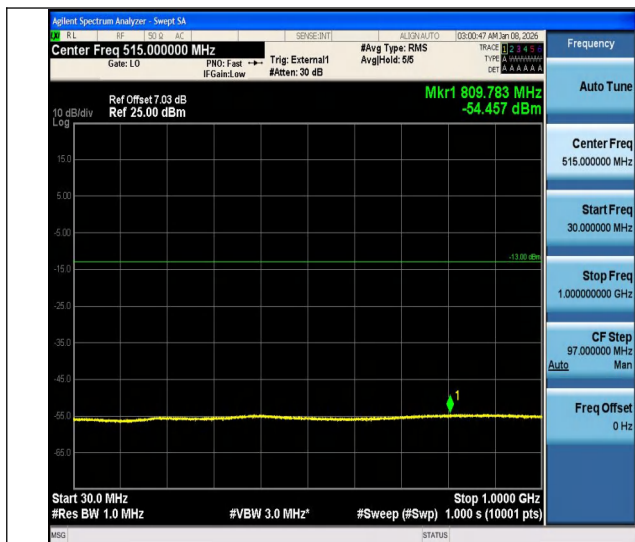
Band25-0.18-BPSK-26042-1000-20000-PASS



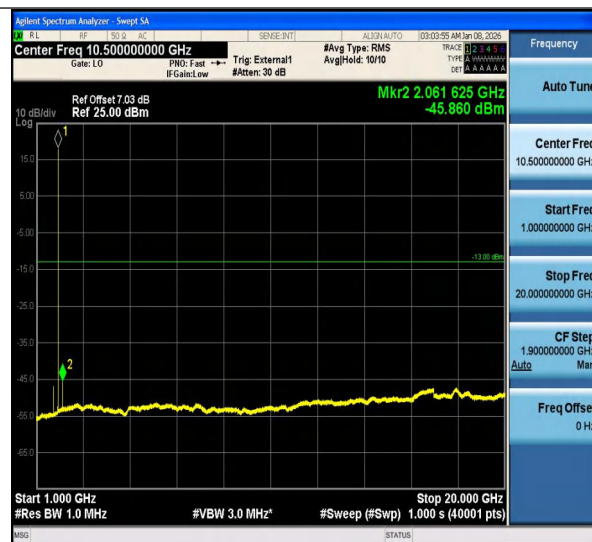
Band25-0.18-BPSK-26365-0.009-0.15-PASS



Band25-0.18-BPSK-26365-0.15-30-PASS



Band25-0.18-BPSK-26365-30-1000-PASS



Band25-0.18-BPSK-26365-1000-20000-PASS



Band25-0.18-BPSK-26688-0.009-0.15-PASS



Band25-0.18-BPSK-26688-0.15-30-PASS



Band25-0.18-BPSK-26688-30-1000-PASS



Band25-0.18-BPSK-26688-1000-20000-PASS

Frequency Stability for NB

Test Result

Voltage											
Band	OpMode	SCS	Bandwidth	Modulation	Channel	Tones	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	VN	NT	-10.70	-0.005684	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	VL	NT	-7.90	-0.004197	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	VH	NT	-10.60	-0.005631	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	VN	NT	-7.70	-0.004090	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	VL	NT	-5.80	-0.003081	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	VH	NT	-6.70	-0.003559	PASS

Temperature											
Band	OpMode	Bandwidth	Modulation	Channel	Tones	SCS	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	-30	-7.90	-0.004197	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	-20	-6.20	-0.003293	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	-10	-11.00	-0.005843	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	0	-8.20	-0.004356	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	10	-5.40	-0.002869	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	20	-9.30	-0.004940	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	30	-7.10	-0.003772	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	40	-4.10	-0.002178	PASS
Band25	Stand-Alone	3.75kHz	0.18	QPSK	26365	1@0	NV	50	-5.60	-0.002975	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	-30	-3.50	-0.001859	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	-20	-5.20	-0.002762	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	-10	-5.20	-0.002762	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	0	-5.20	-0.002762	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	10	-7.20	-0.003825	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	20	-5.40	-0.002869	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	30	-7.30	-0.003878	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	40	-7.40	-0.003931	PASS
Band25	Stand-Alone	15kHz	0.18	QPSK	26365	1@0	NV	50	-8.20	-0.004356	PASS

~The End~