

Effective (Isotropic) Radiated Power Output Data for NB1

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Conducted POWER(dBm)	EIRP (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18601	1@0	19.19	22.69	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@0	19.22	22.72	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18601	1@47	19.22	22.72	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@47	19.21	22.71	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19199	1@0	19.76	23.26	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@0	19.74	23.24	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19199	1@47	19.74	23.24	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18876	1@0	19.70	23.20	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@0	19.65	23.15	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18876	1@47	19.70	23.20	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@47	19.69	23.19	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@47	19.70	23.20	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@0	19.23	22.73	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	1@0	19.25	22.75	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@11	19.20	22.70	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	1@11	19.32	22.82	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@0	19.79	23.29	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	1@0	19.83	23.33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@0	19.80	23.30	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	1@0	19.68	23.18	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@11	19.80	23.30	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	1@11	19.78	23.28	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@11	19.84	23.34	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	1@11	19.82	23.32	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	3@3	19.24	22.74	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	3@3	19.76	23.26	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18602	1@0	19.05	22.55	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@0	19.07	22.57	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18602	1@47	19.05	22.55	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@47	19.04	22.54	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19198	1@0	19.61	23.11	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@0	19.63	23.13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	3@3	19.61	23.11	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19198	1@47	19.57	23.07	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@47	19.63	23.13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@0	19.13	22.63	PASS

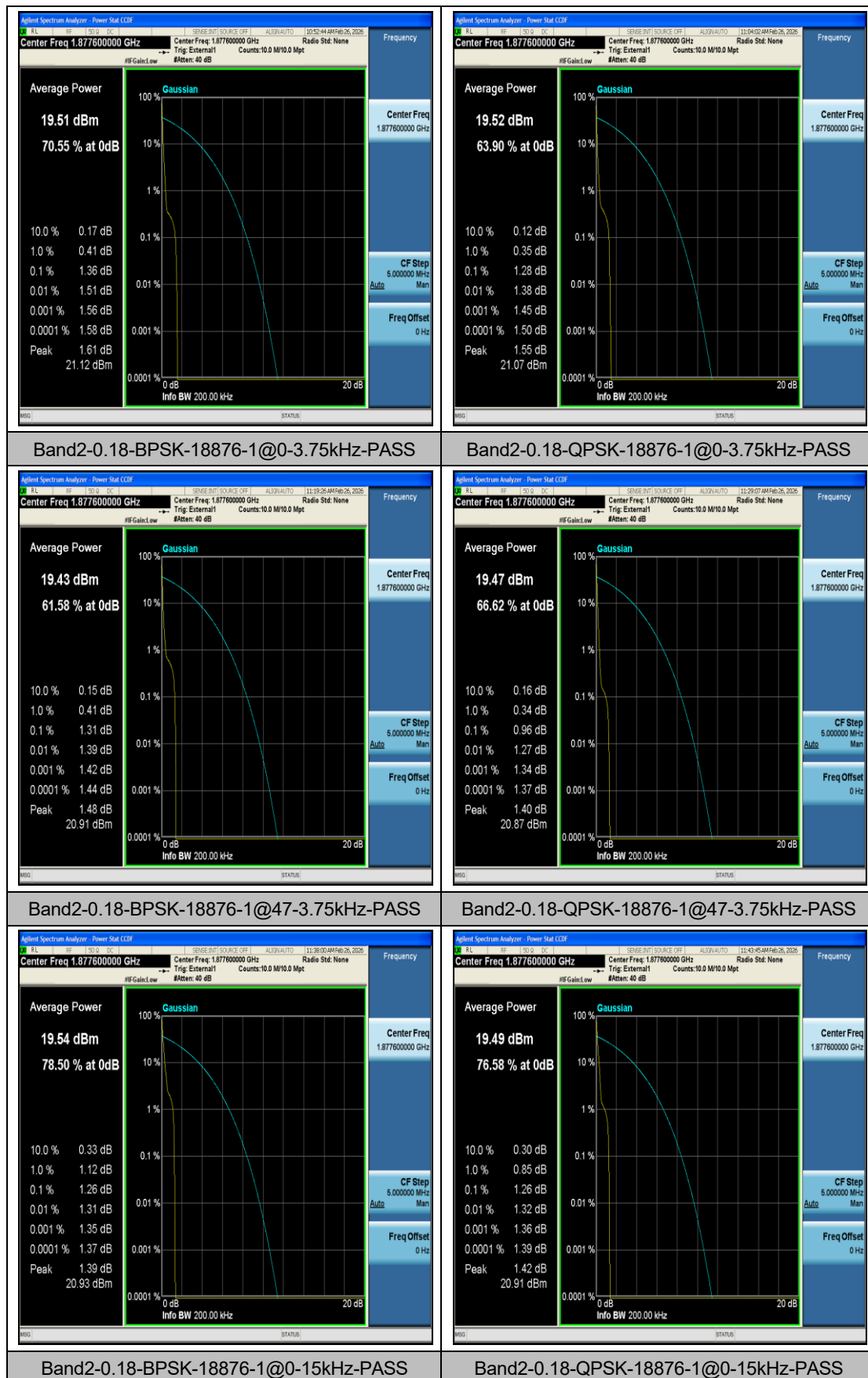
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	1@0	19.13	22.63	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@11	19.10	22.60	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	1@11	19.16	22.66	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@0	19.68	23.18	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	1@0	19.68	23.18	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@11	19.74	23.24	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	1@11	19.71	23.21	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	3@3	19.13	22.63	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	3@3	19.63	23.13	PASS

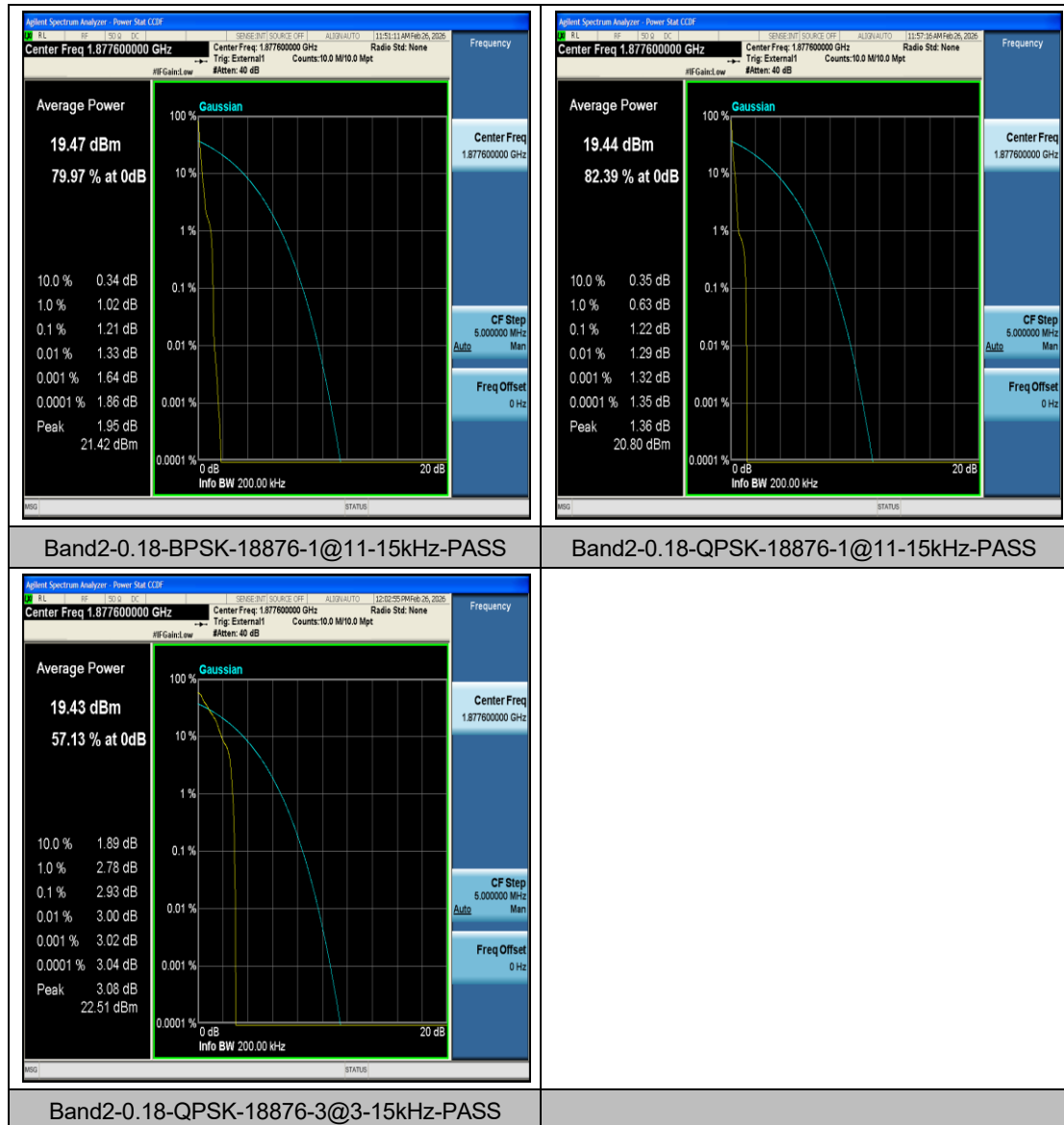
Peak-to-Average Ratio(CCDF) for NB1

Test Result

Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Limit (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18876	1@0	1.36	<=13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@0	1.28	<=13	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18876	1@47	1.31	<=13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@47	0.96	<=13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@0	1.26	<=13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	1@0	1.26	<=13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@11	1.21	<=13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	1@11	1.22	<=13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	3@3	2.93	<=13	PASS

Test Graphs





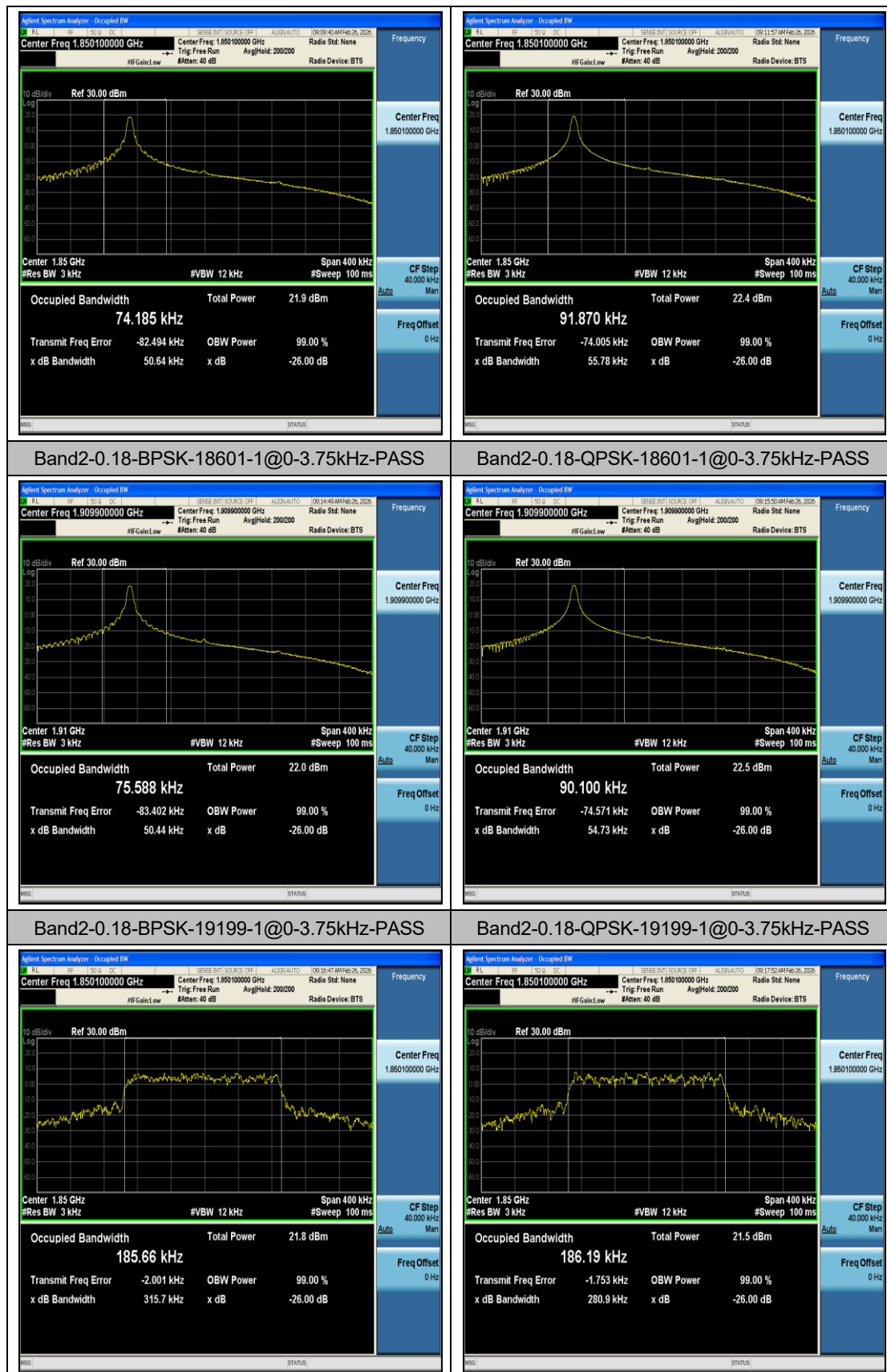
Emission Bandwidth for NB1

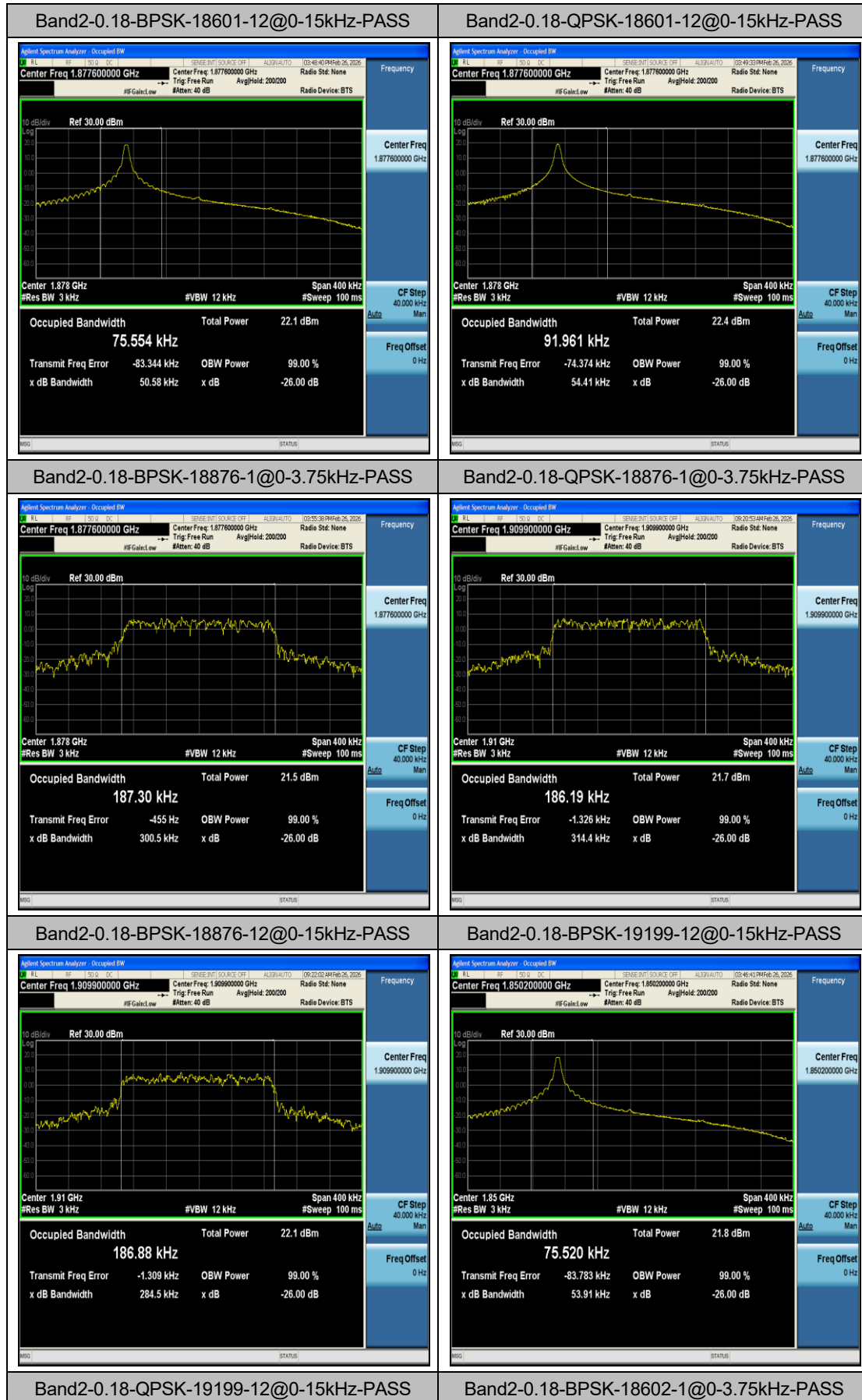
Test Result

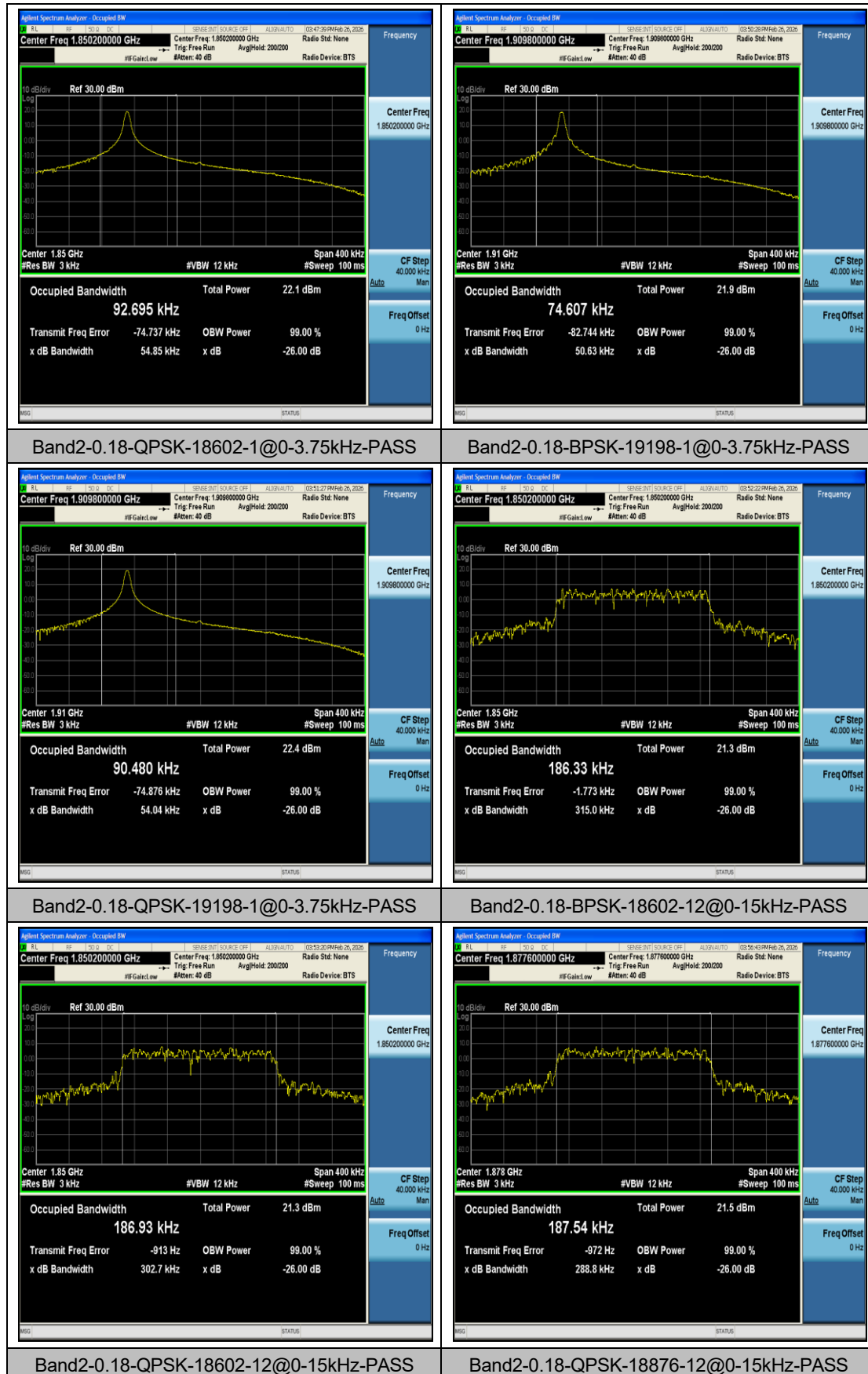
Band	OpMode	SCS	BW	Modulation	Channel	Tones	OBW(MHz)	EBW(MHz)	Verdict
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18601	1@0	0.07419	0.0506	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@0	0.09187	0.0558	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19199	1@0	0.07559	0.0504	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@0	0.09010	0.0547	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	12@0	0.18566	0.3157	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	12@0	0.18619	0.2809	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18876	1@0	0.07555	0.0506	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@0	0.09196	0.0544	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	12@0	0.18730	0.3005	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	12@0	0.18619	0.3144	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	12@0	0.18688	0.2845	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18602	1@0	0.07552	0.0539	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@0	0.09269	0.0548	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19198	1@0	0.07461	0.0506	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@0	0.09048	0.0540	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	12@0	0.18633	0.3150	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	12@0	0.18693	0.3027	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	12@0	0.18754	0.2888	PASS

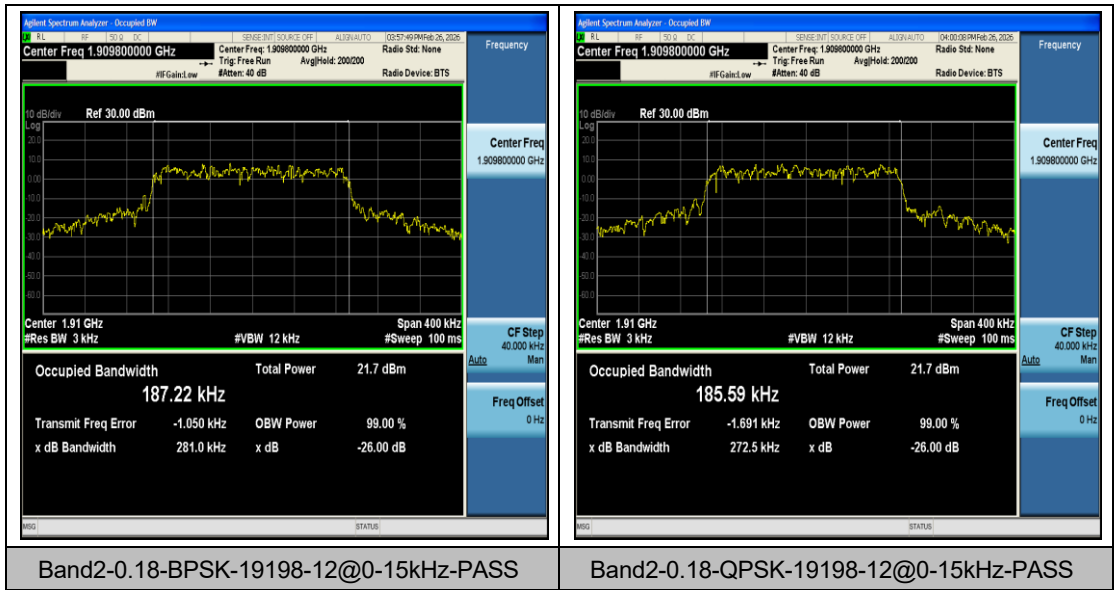
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	12@0	0.18722	0.2810	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	12@0	0.18559	0.2725	PASS

Test Graphs







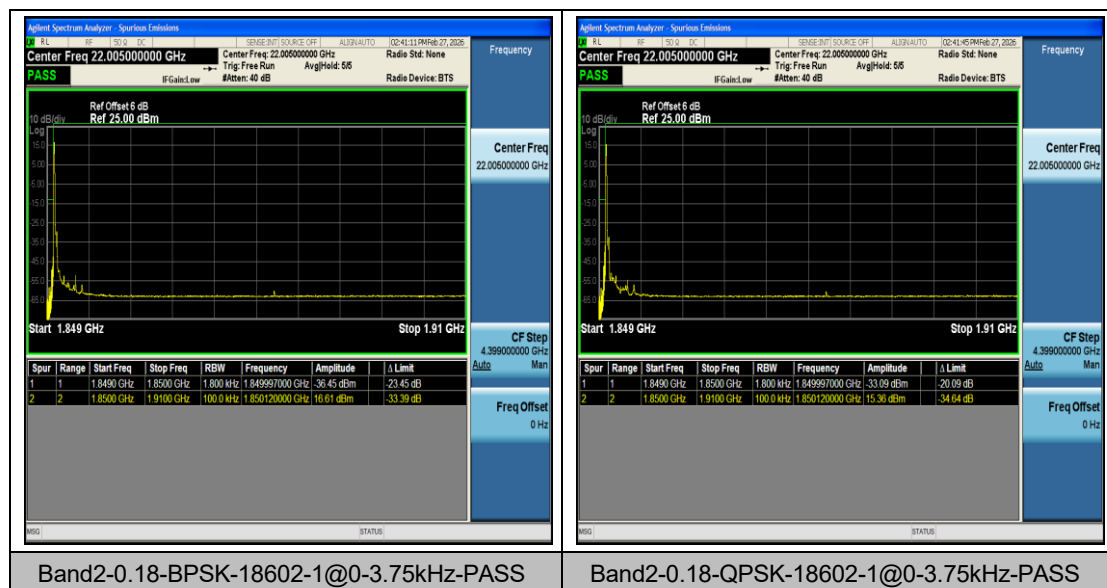


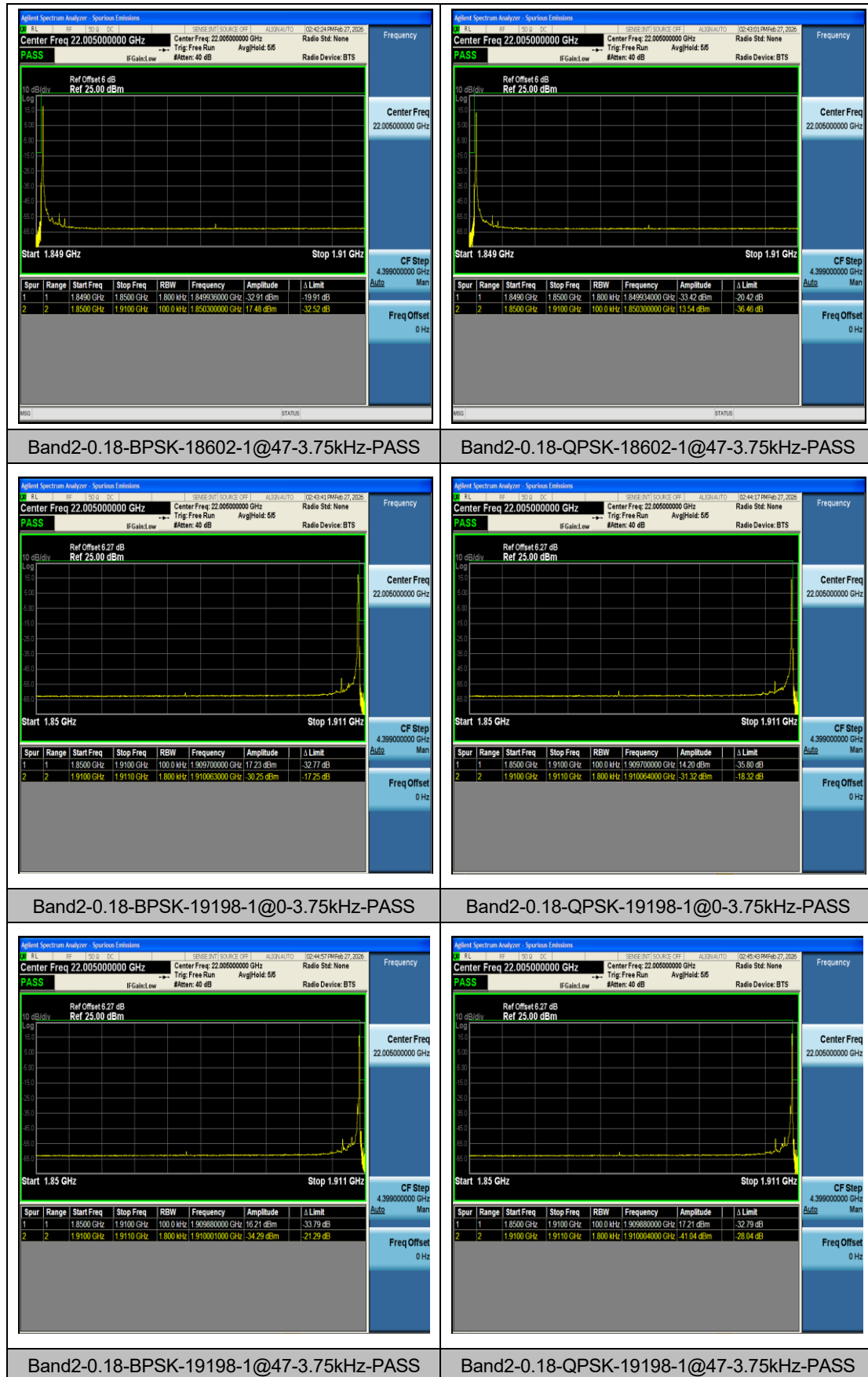
Band Edge for NB1

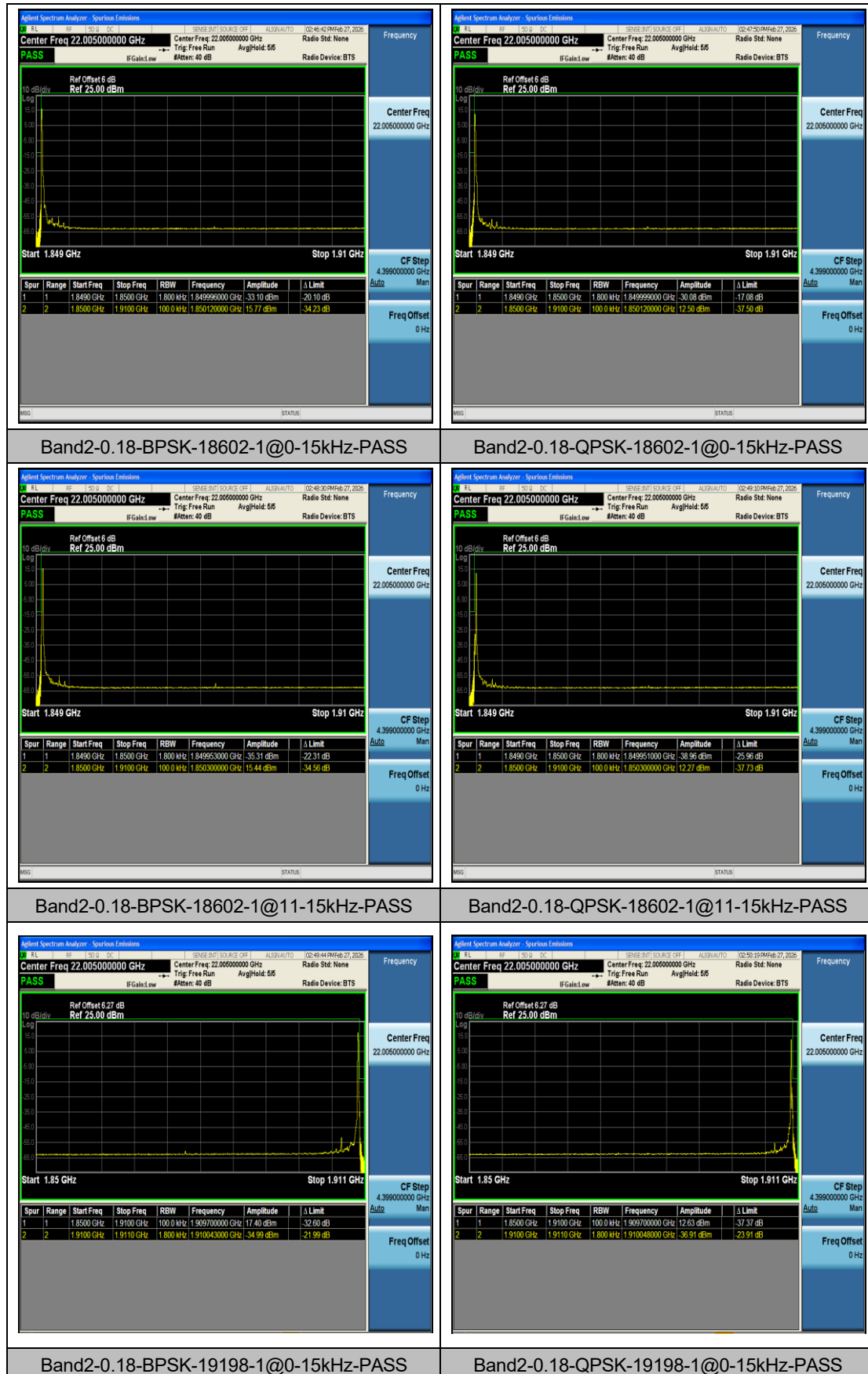
Test Result

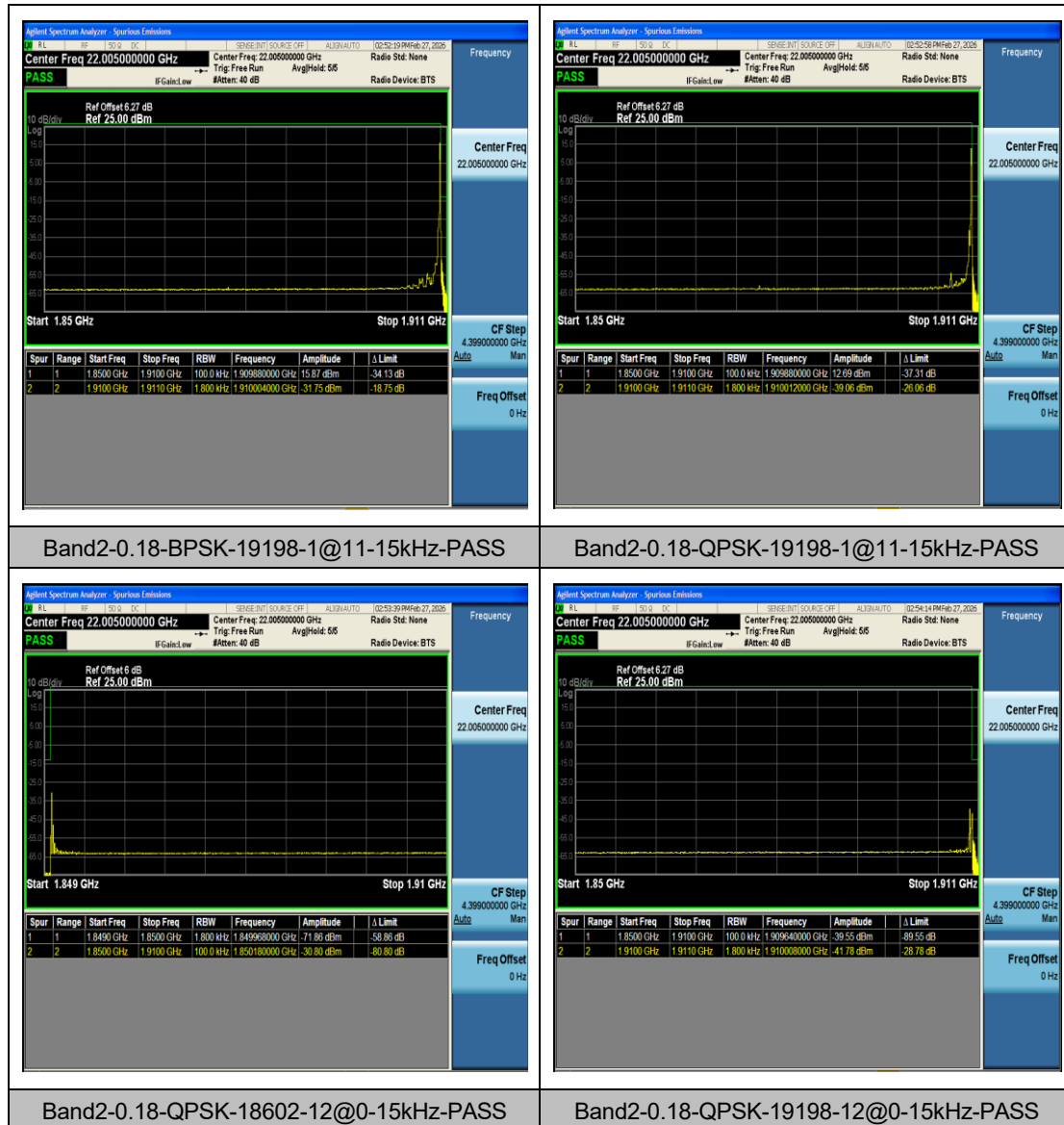
Band	OpMode	SCS	BW	Modulation	Channel	Tones	Result (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18602	1@0	-36.45	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@0	-33.09	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	18602	1@47	-32.91	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@47	-33.42	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19198	1@0	-30.25	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@0	-31.32	PASS
Band2	Stand-Alone	3.75kHz	0.18	BPSK	19198	1@47	-34.29	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@47	-41.04	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@0	-33.10	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	1@0	-30.08	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@11	-35.31	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	1@11	-38.96	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@0	-34.99	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	1@0	-36.91	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@11	-31.75	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	1@11	-39.06	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	12@0	-71.86	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	12@0	-41.78	PASS

Test Graphs









Conducted Spurious Emission for NB1

Test Result

Band	Op Mode	SCS	BW	Modulation	Channel	Tones	Freq Start [MHz]	Freq Stop [MHz]	Result (dBm)	Limit (dBm)	Verdict
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@0	0.009	0.15	-58.35	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@0	0.15	30	-74.54	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@0	30	1000	-55.79	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@0	1000	20000	-42.82	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@47	0.009	0.15	-59.91	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@47	0.15	30	-75.82	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@47	30	1000	-55.75	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18601	1@47	1000	20000	-48.62	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@0	0.009	0.15	-60.38	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@0	0.15	30	-75.99	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@0	30	1000	-55.27	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@0	1000	20000	-46.28	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@47	0.009	0.15	-60.52	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@47	0.15	30	-76.91	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@47	30	1000	-55.19	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18876	1@47	1000	20000	-45.54	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@0	0.009	0.15	-59.58	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@0	0.15	30	-75.1	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@0	30	1000	-55.62	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@0	1000	20000	-44.88	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@47	0.009	0.15	-58.6	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@47	0.15	30	-76.08	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@47	30	1000	-55.56	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19199	1@47	1000	20000	-46.55	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	12@0	0.009	0.15	-59.62	-43	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	12@0	0.15	30	-76.62	-33	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	12@0	30	1000	-55.84	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18601	12@0	1000	20000	-48.91	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	12@0	0.009	0.15	-70.45	-43	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	12@0	0.15	30	-78.4	-33	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	12@0	30	1000	-55.37	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18876	12@0	1000	20000	-48.9	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	12@0	0.009	0.15	-59.3	-43	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	12@0	0.15	30	-76.23	-33	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	12@0	30	1000	-55.44	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19199	12@0	1000	20000	-47.88	-13	PASS

Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@0	0.009	0.15	-60.48	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@0	0.15	30	-74.52	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@0	30	1000	-55.71	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@0	1000	20000	-48.46	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@11	0.009	0.15	-59.31	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@11	0.15	30	-77.6	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@11	30	1000	-55.86	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18601	1@11	1000	20000	-43.36	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@0	0.009	0.15	-73.56	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@0	0.15	30	-77.93	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@0	30	1000	-55.79	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@0	1000	20000	-48.92	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@0	0.009	0.15	-59.02	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@0	0.15	30	-70.94	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@0	30	1000	-55.6	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@0	1000	20000	-46.03	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@11	0.009	0.15	-72.7	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@11	0.15	30	-74.71	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@11	30	1000	-55.76	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18876	1@11	1000	20000	-46.73	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@11	0.009	0.15	-58.54	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@11	0.15	30	-75.68	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@11	30	1000	-55.58	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19199	1@11	1000	20000	-45.95	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@0	0.009	0.15	-58.18	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@0	0.15	30	-75.23	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@0	30	1000	-55.74	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@0	1000	20000	-48.72	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@47	0.009	0.15	-60.05	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@47	0.15	30	-72.83	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@47	30	1000	-55.19	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	18602	1@47	1000	20000	-48.45	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@0	0.009	0.15	-71.11	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@0	0.15	30	-74.81	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@0	30	1000	-54.98	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@0	1000	20000	-48.31	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@47	0.009	0.15	-73.1	-43	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@47	0.15	30	-74.47	-33	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@47	30	1000	-54.89	-13	PASS
Band2	Stand-Alone	3.75kHz	0.18	QPSK	19198	1@47	1000	20000	-44.46	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	12@0	0.009	0.15	-70.68	-43	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	12@0	0.15	30	-72.77	-33	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	18602	12@0	30	1000	-54.78	-13	PASS

Band2	Stand-Alone	15kHz	0.18	QPSK	18602	12@0	1000	20000	-48.41	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	12@0	0.009	0.15	-72.14	-43	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	12@0	0.15	30	-77.09	-33	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	12@0	30	1000	-55.5	-13	PASS
Band2	Stand-Alone	15kHz	0.18	QPSK	19198	12@0	1000	20000	-48.65	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@0	0.009	0.15	-73.17	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@0	0.15	30	-74.49	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@0	30	1000	-55.8	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@0	1000	20000	-47.02	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@11	0.009	0.15	-67.97	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@11	0.15	30	-77.25	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@11	30	1000	-55.72	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	18602	1@11	1000	20000	-45.1	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@0	0.009	0.15	-75.13	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@0	0.15	30	-74.53	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@0	30	1000	-55.48	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@0	1000	20000	-46.34	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@11	0.009	0.15	-72.99	-43	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@11	0.15	30	-75.49	-33	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@11	30	1000	-55.56	-13	PASS
Band2	Stand-Alone	15kHz	0.18	BPSK	19198	1@11	1000	20000	-47.41	-13	PASS

Test Graphs

