

Appendix-A LTE Band 12

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	23.12	20.47	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.34	20.69	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.16	20.51	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.74	20.09	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.46	19.81	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.62	19.97	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.52	19.87	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.76	19.11	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.16	20.51	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.24	20.59	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.33	20.68	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.7	20.05	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.58	19.93	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.59	19.94	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.52	19.87	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.75	19.1	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.25	20.6	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.03	20.38	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.26	20.61	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.3	19.65	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.35	19.7	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.35	19.7	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.28	19.63	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.25	18.6	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.18	20.53	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.31	20.66	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.28	20.63	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.66	20.01	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.38	19.73	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.63	19.98	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.59	19.94	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.66	19.01	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.4	20.75	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.17	20.52	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.21	20.56	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.75	20.1	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.27	19.62	34.77	PASS

Band12	3MHz	16QAM	23095	1RB#8	22.43	19.78	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.33	19.68	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.71	19.06	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.2	20.55	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.04	20.39	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.17	20.52	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.5	19.85	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.36	19.71	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.19	19.54	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.03	19.38	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.3	18.65	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.05	20.4	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.45	20.8	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.08	20.43	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.53	19.88	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.75	20.1	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.4	19.75	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.61	19.96	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.43	18.78	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.33	20.68	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.78	21.13	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.03	20.38	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.57	19.92	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.43	19.78	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.74	20.09	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.17	19.52	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.63	18.98	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.11	20.46	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.34	20.69	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.1	20.45	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.47	19.82	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.42	19.77	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.89	20.24	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.63	19.98	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.52	18.87	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.22	20.57	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.32	20.67	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.21	20.56	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.66	20.01	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.31	19.66	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.53	19.88	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.68	20.03	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.59	18.94	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.32	20.67	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.59	20.94	34.77	PASS

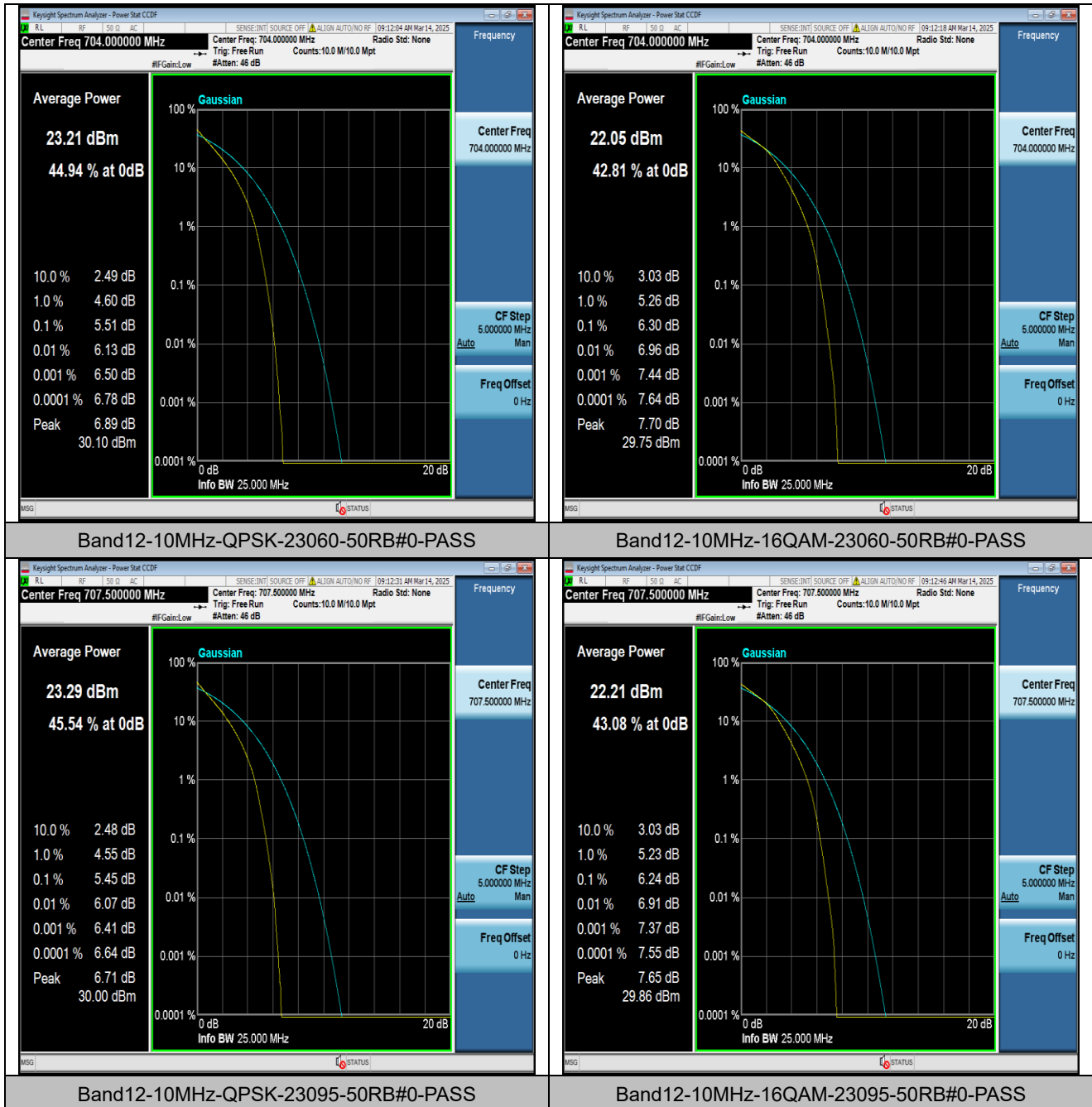
Band12	10MHz	QPSK	23095	1RB#49	23.06	20.41	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.64	19.99	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.53	19.88	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.51	19.86	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.49	19.84	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.59	18.94	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.31	20.66	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.52	20.87	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.01	20.36	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.54	19.89	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.8	20.15	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.54	19.89	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.36	19.71	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.4	18.75	34.77	PASS

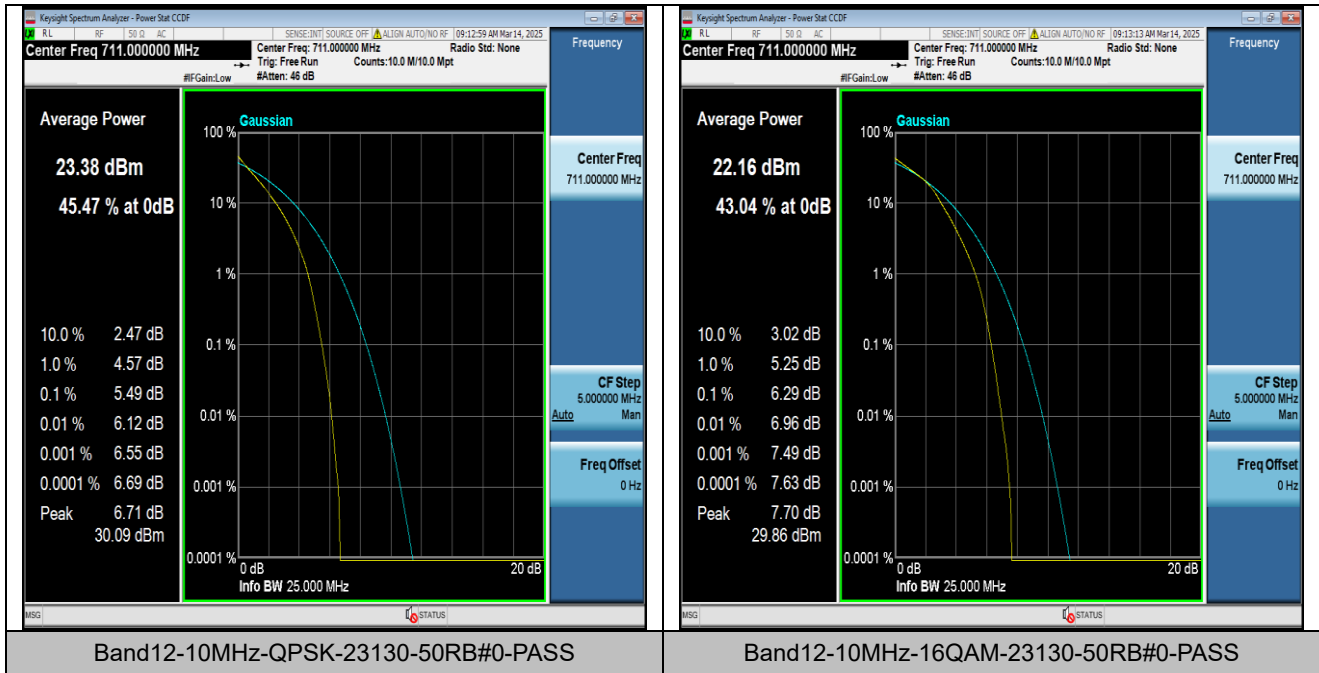
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band12	10MHz	QPSK	23060	50RB#0	5.51	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.30	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	5.45	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.24	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.49	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.29	13	PASS

Test Graphs



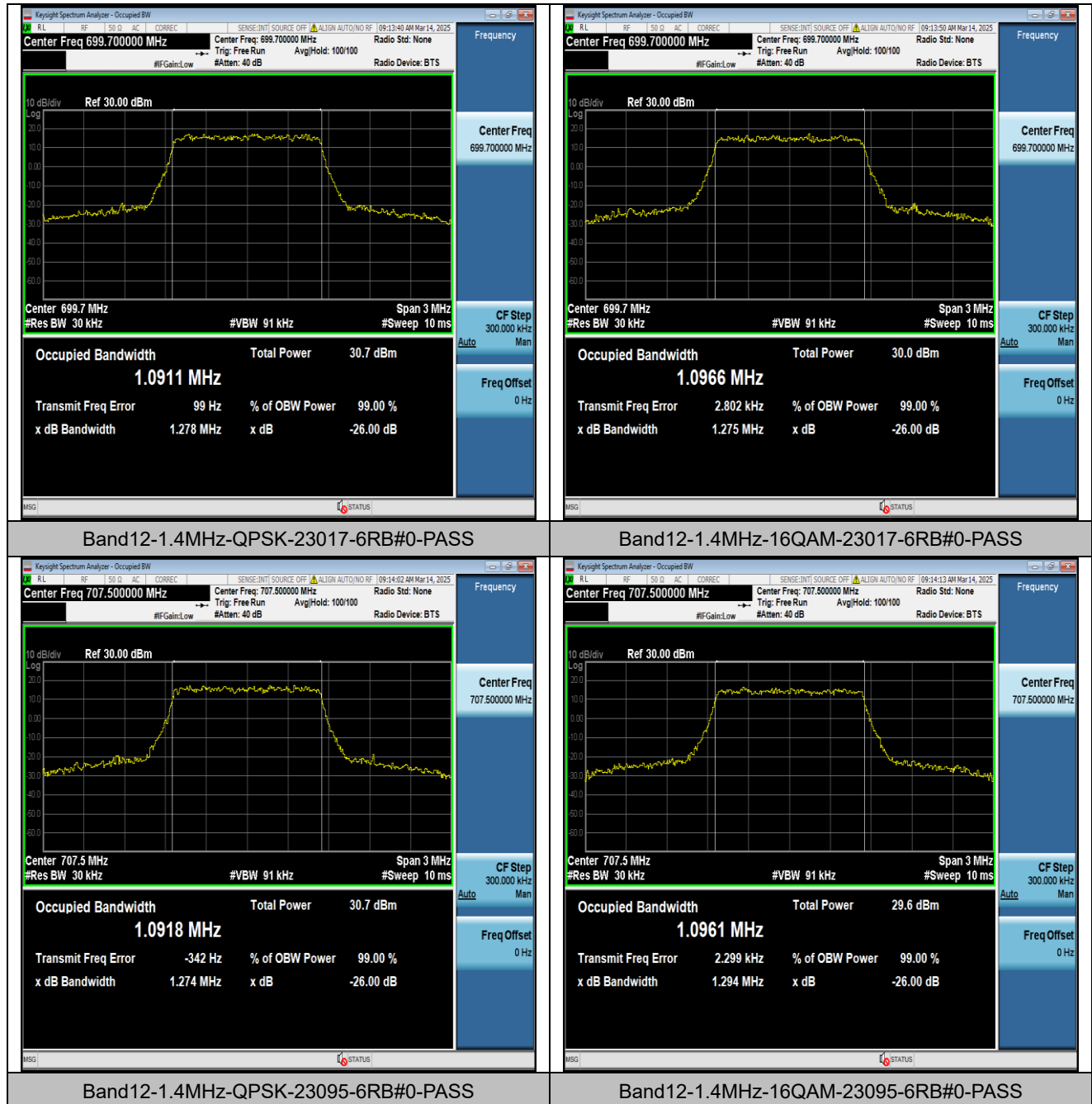


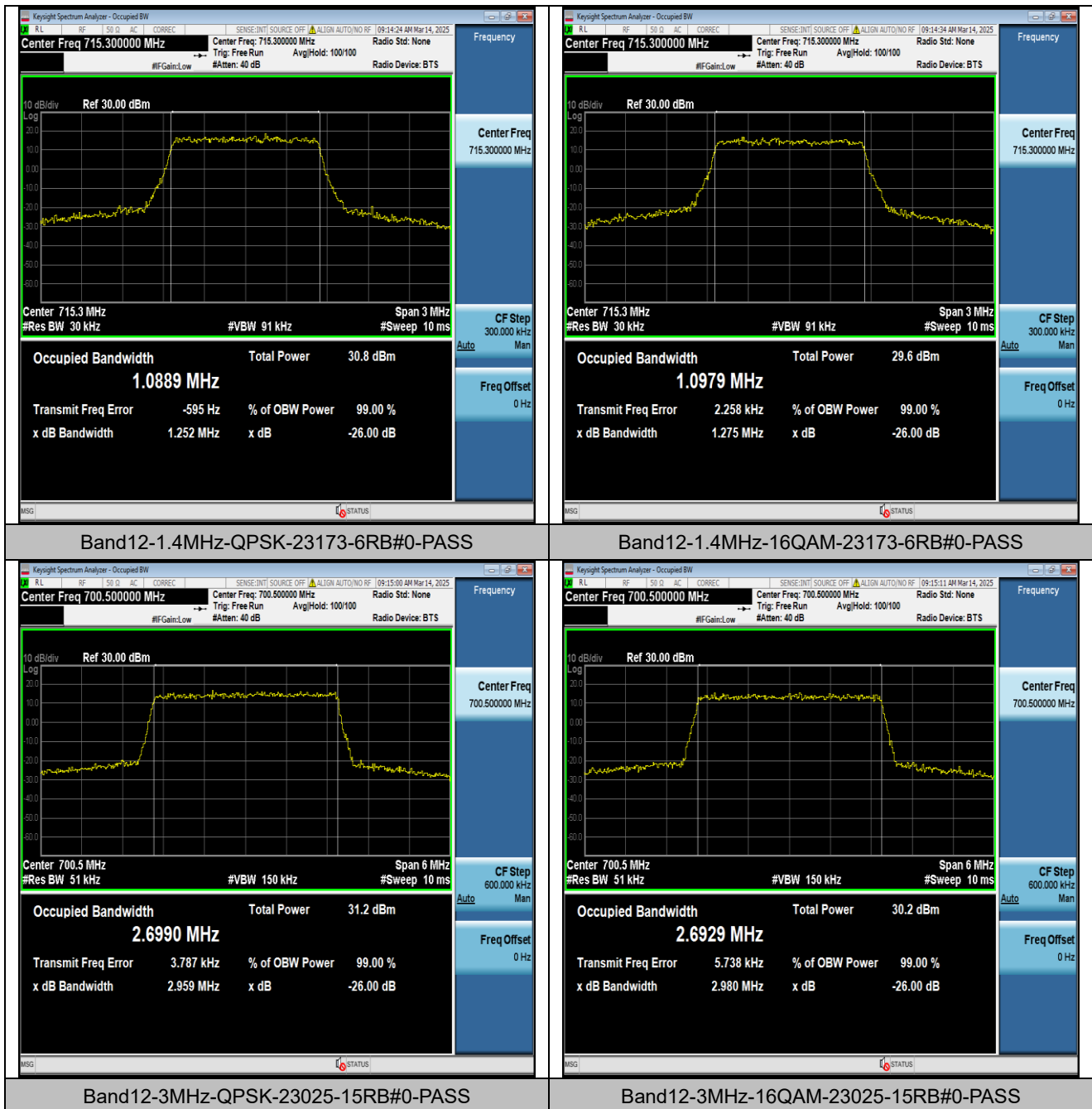
26dB Bandwidth and Occupied Bandwidth

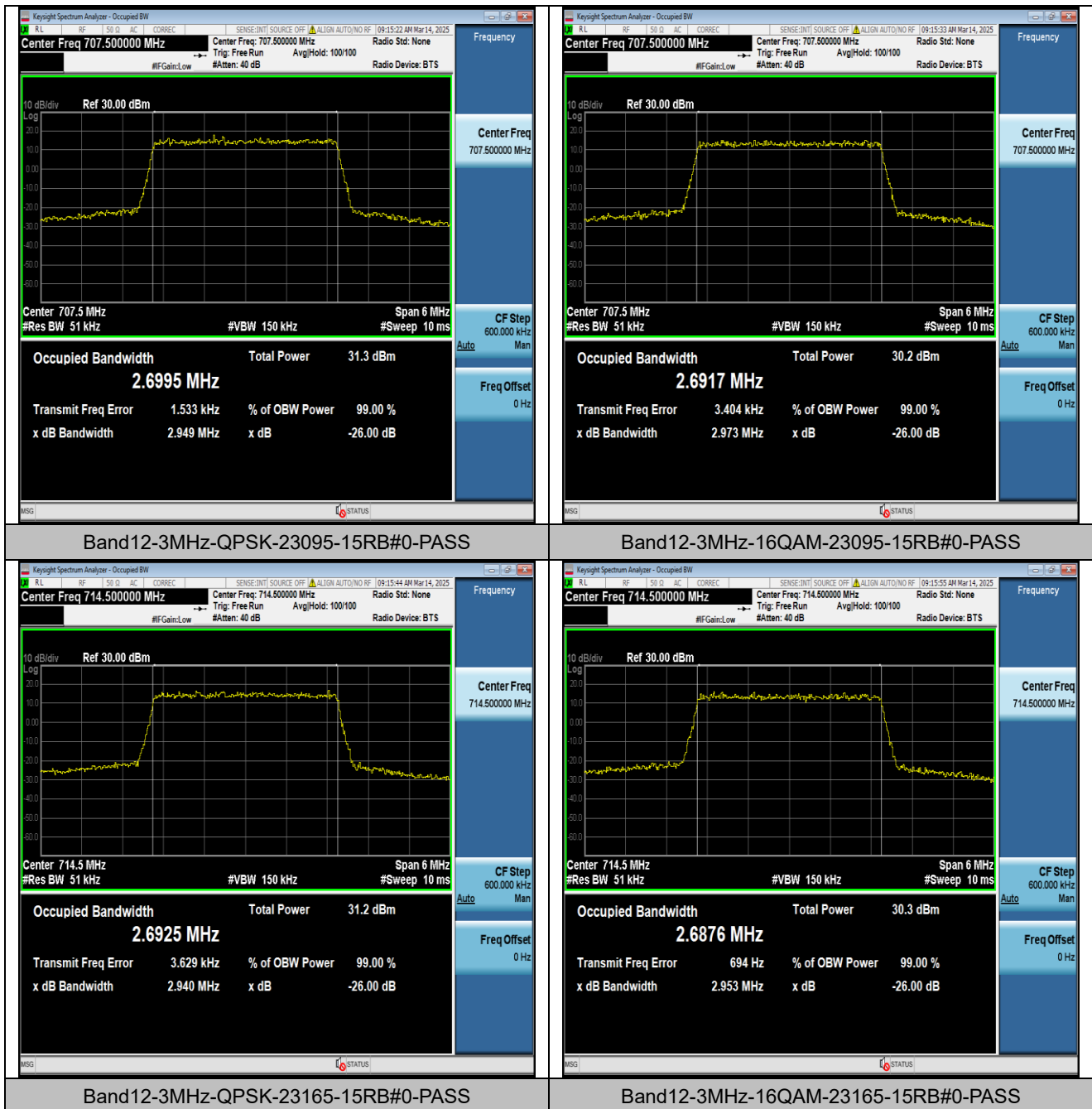
Test Result

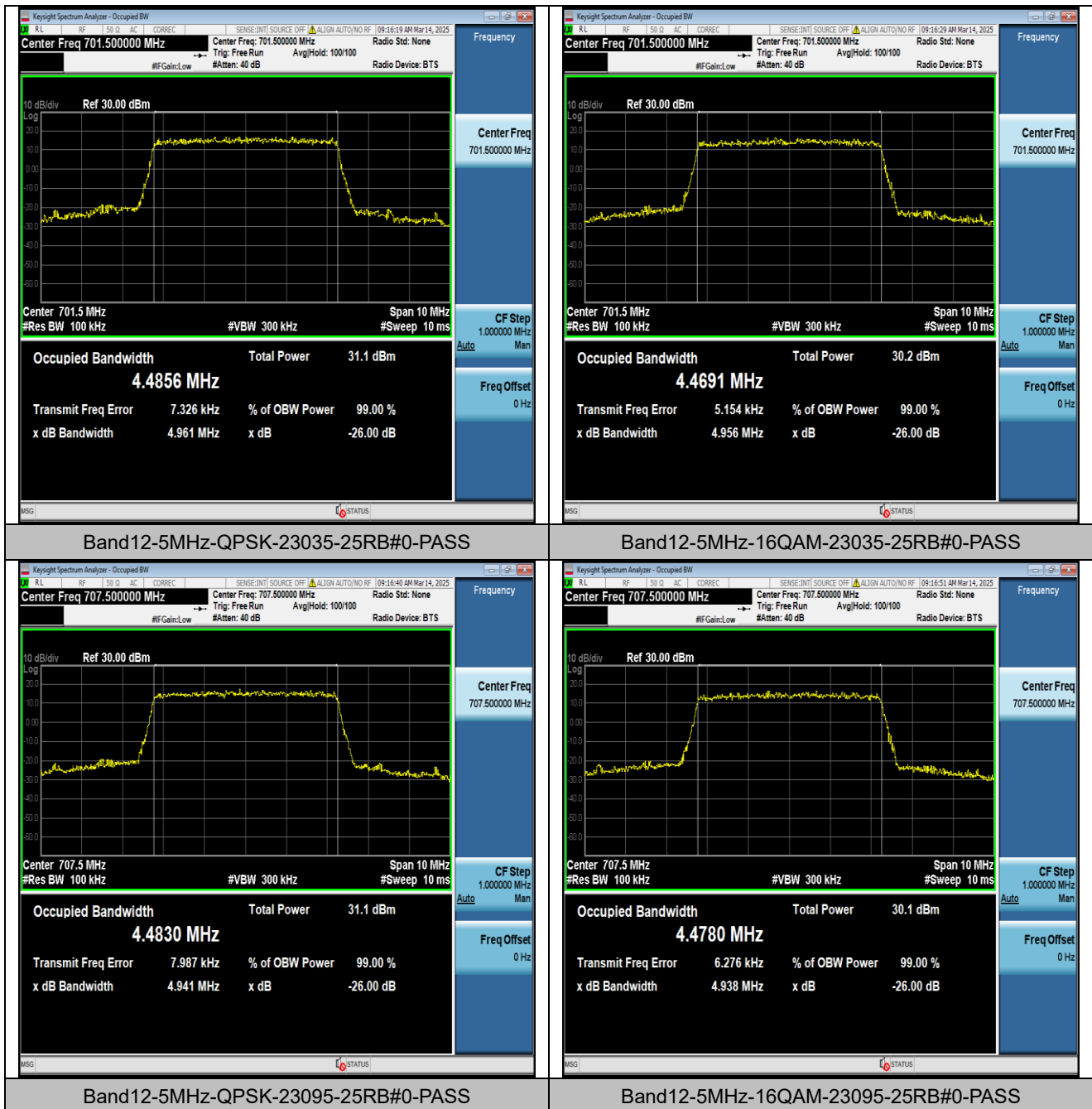
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0911	1.278	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0966	1.275	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0918	1.274	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0961	1.294	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0889	1.252	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0979	1.275	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6990	2.959	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6929	2.980	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.6995	2.949	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6917	2.973	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6925	2.940	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6876	2.953	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.4856	4.961	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.4691	4.956	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.4830	4.941	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.4780	4.938	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.4799	4.926	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.4777	4.910	PASS
Band12	10MHz	QPSK	23060	50RB#0	8.9583	9.812	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9276	9.719	PASS
Band12	10MHz	QPSK	23095	50RB#0	8.9590	9.807	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9575	9.794	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9524	9.760	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9469	9.755	PASS

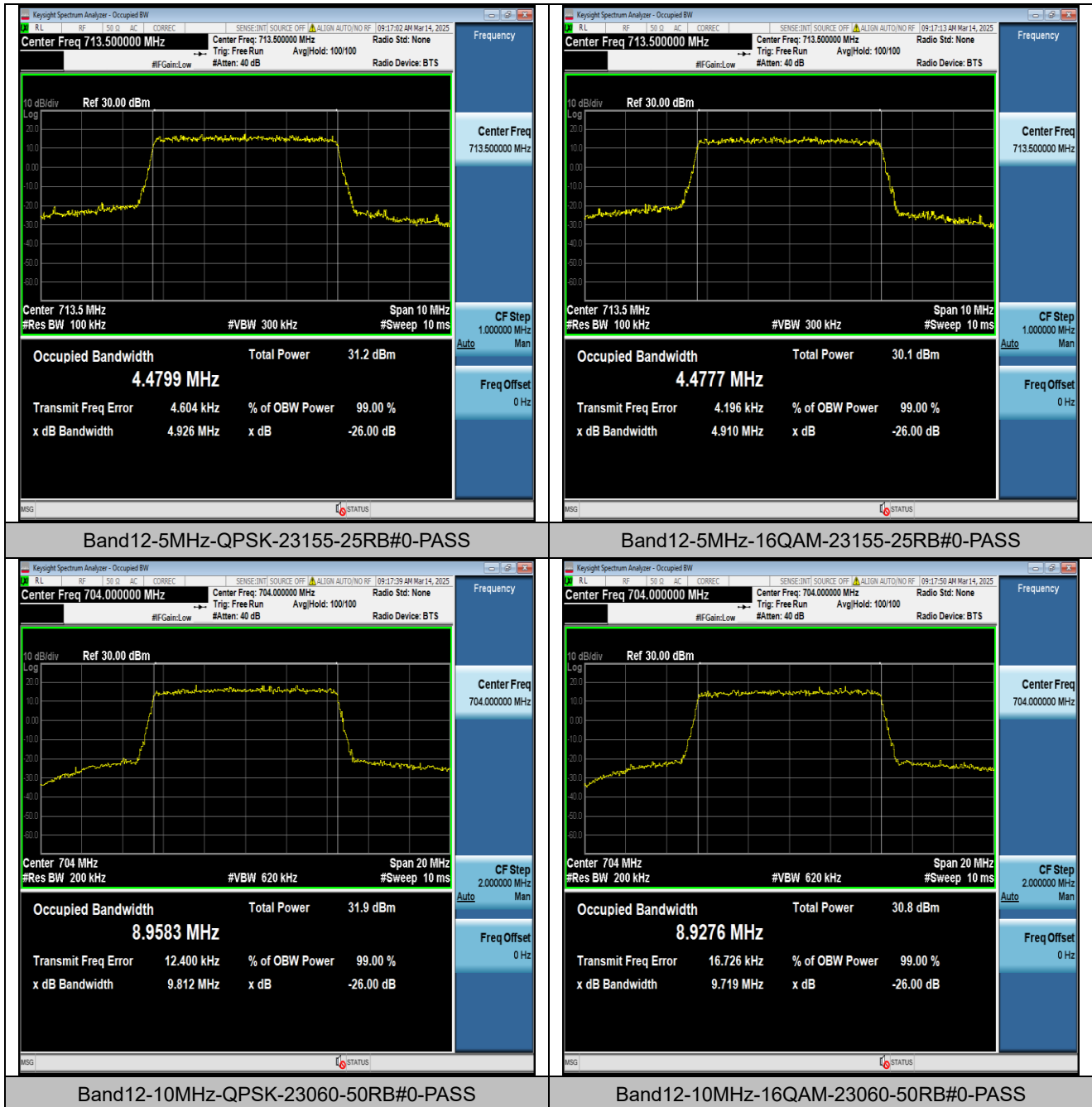
Test Graphs

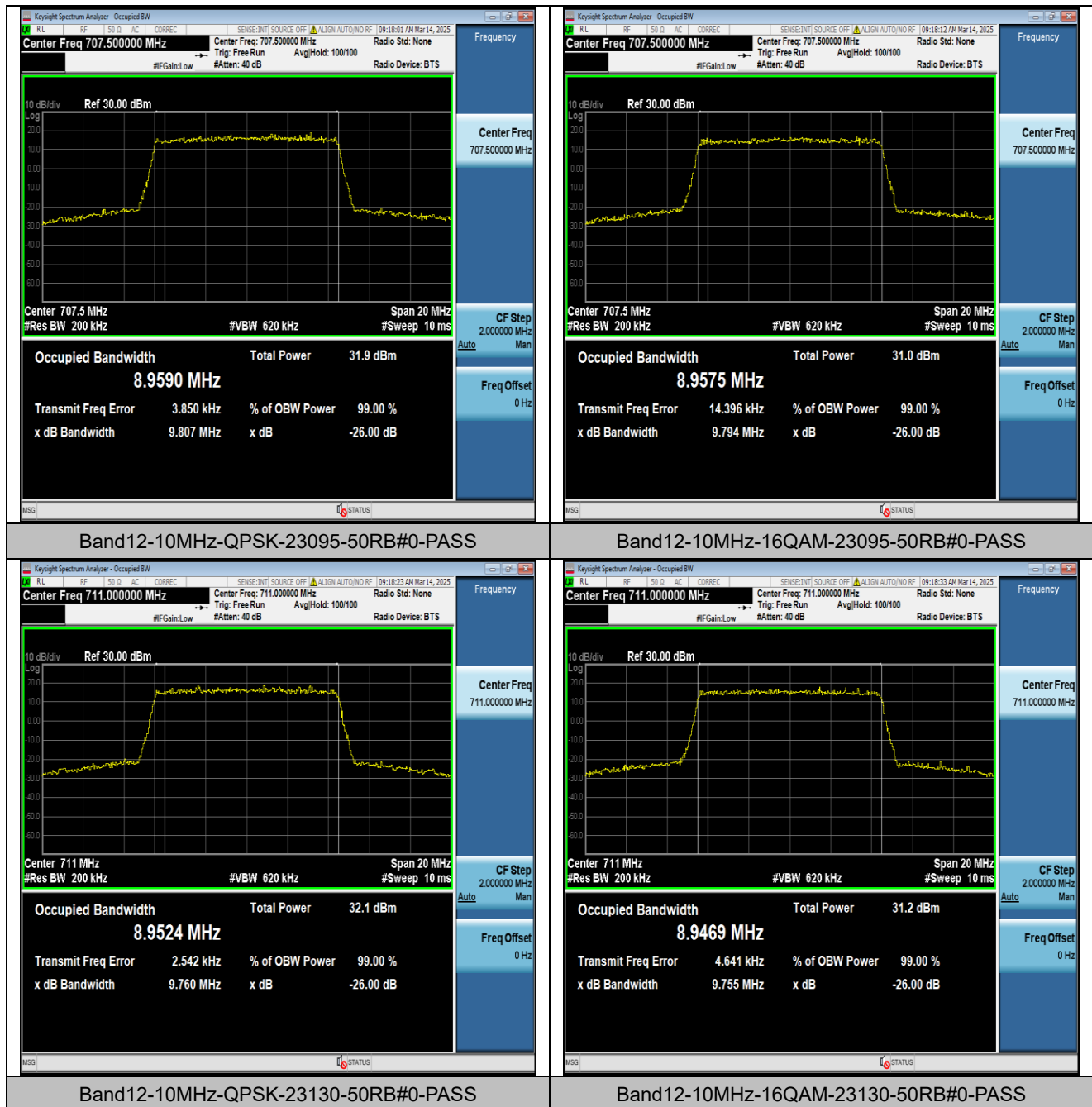






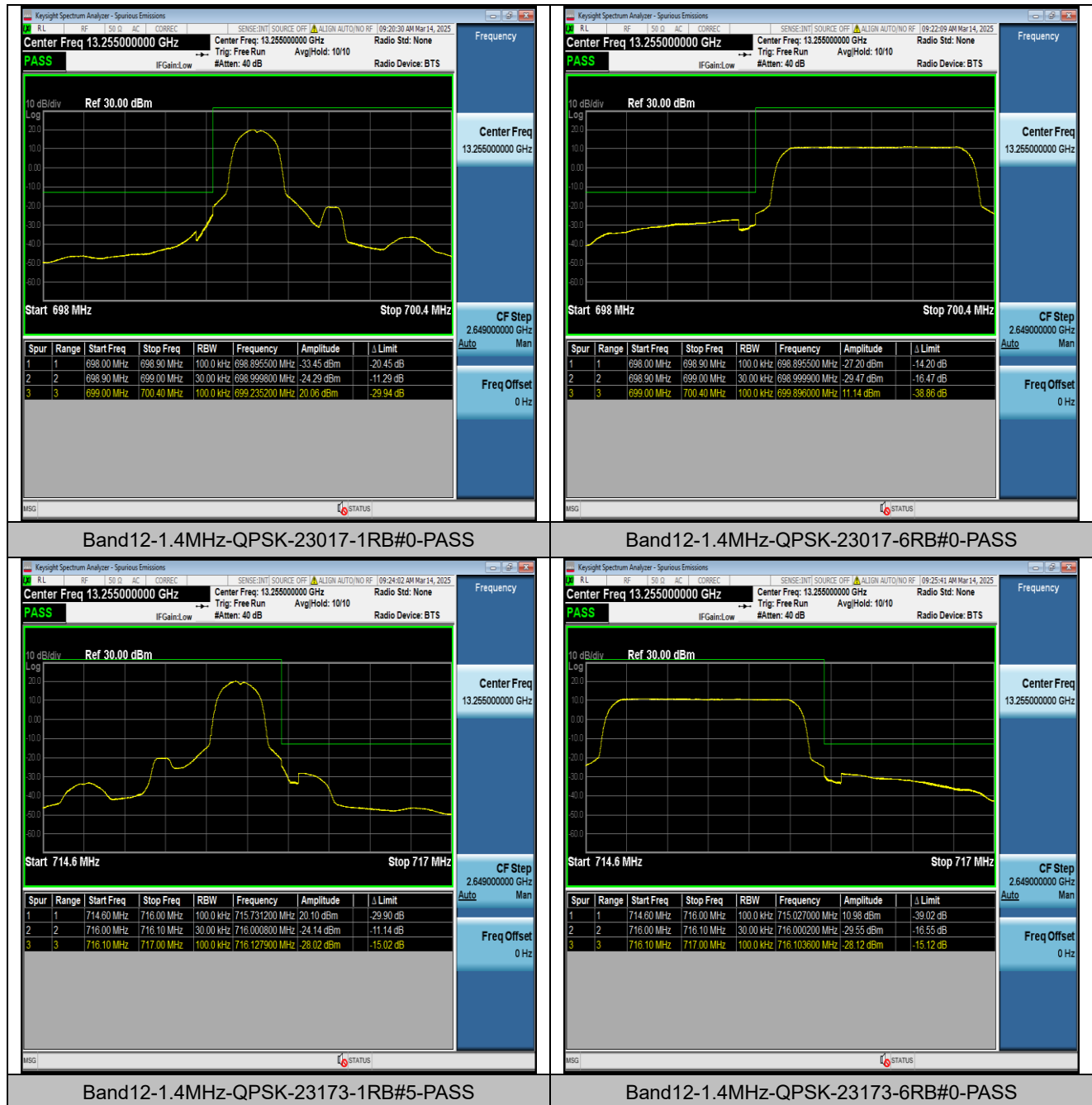


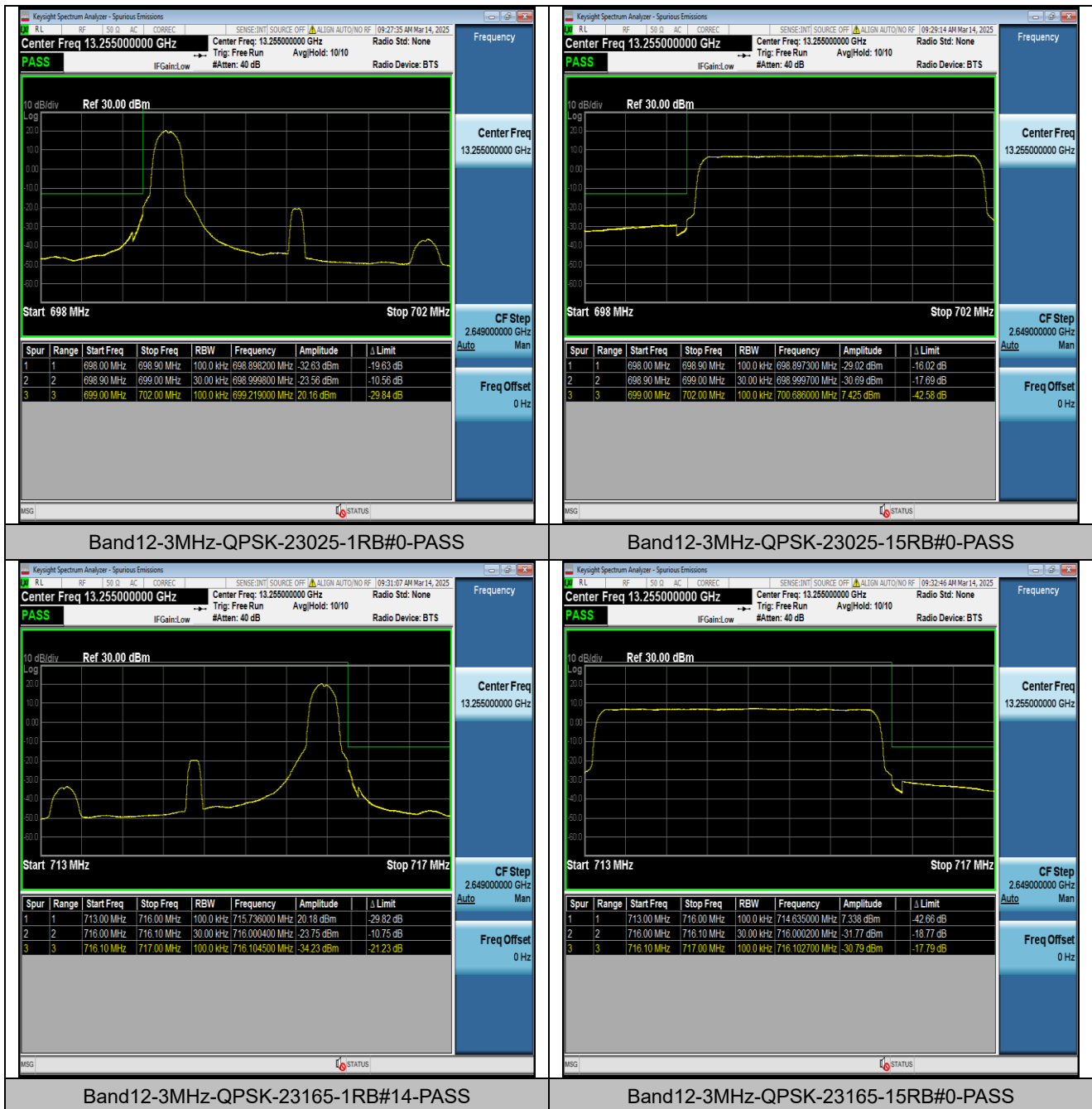


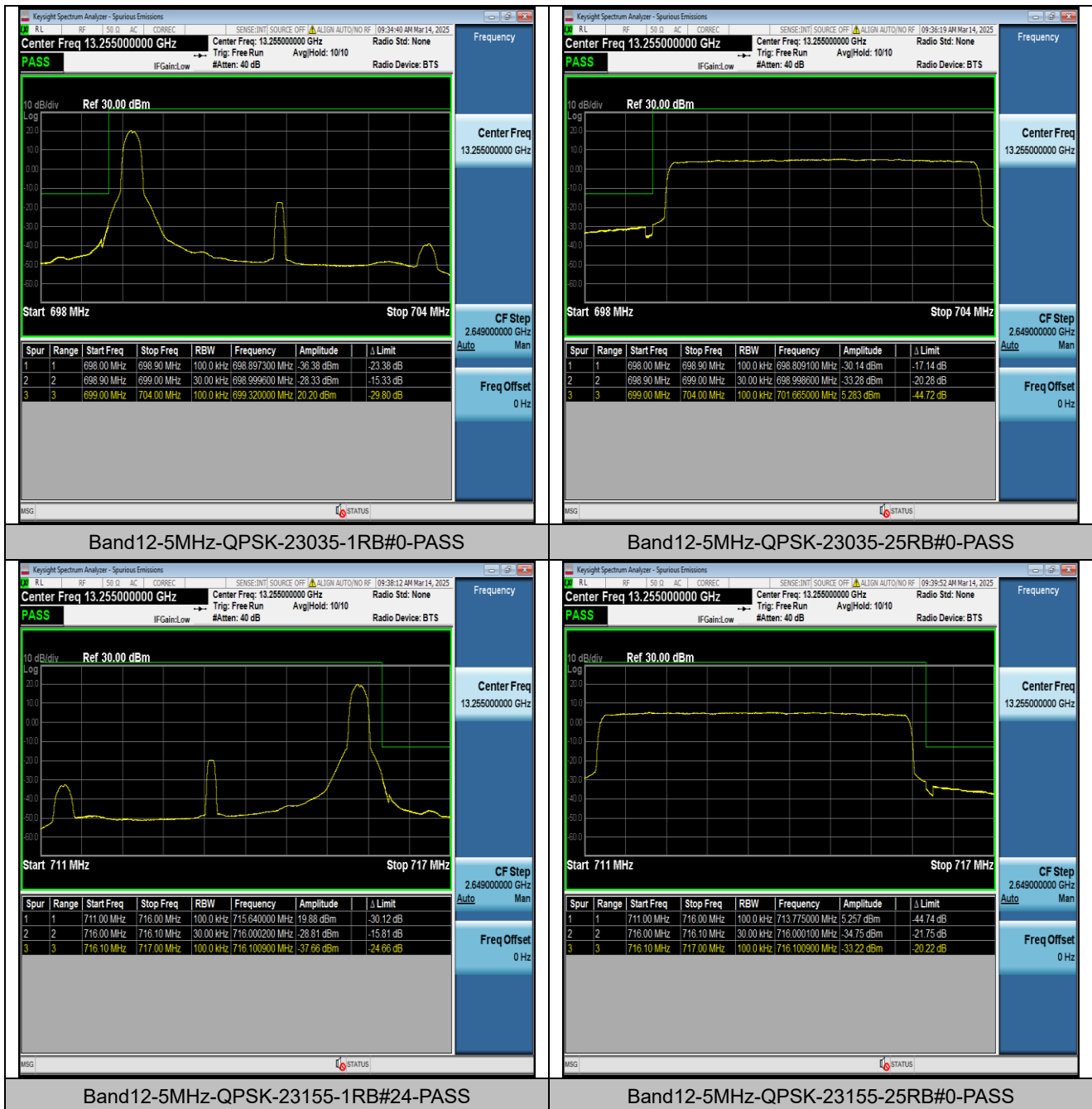


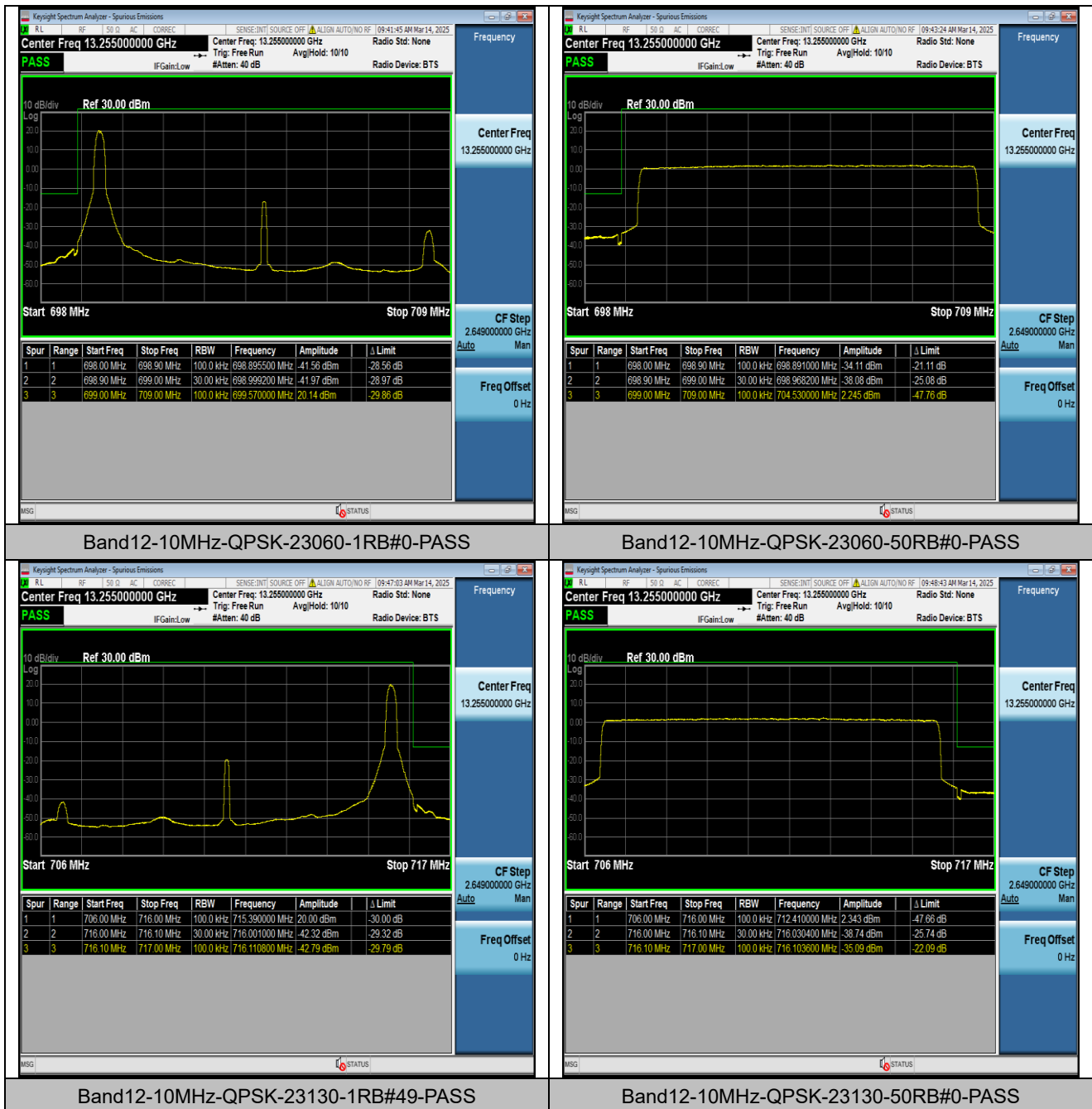
Band Edge

Test Graphs



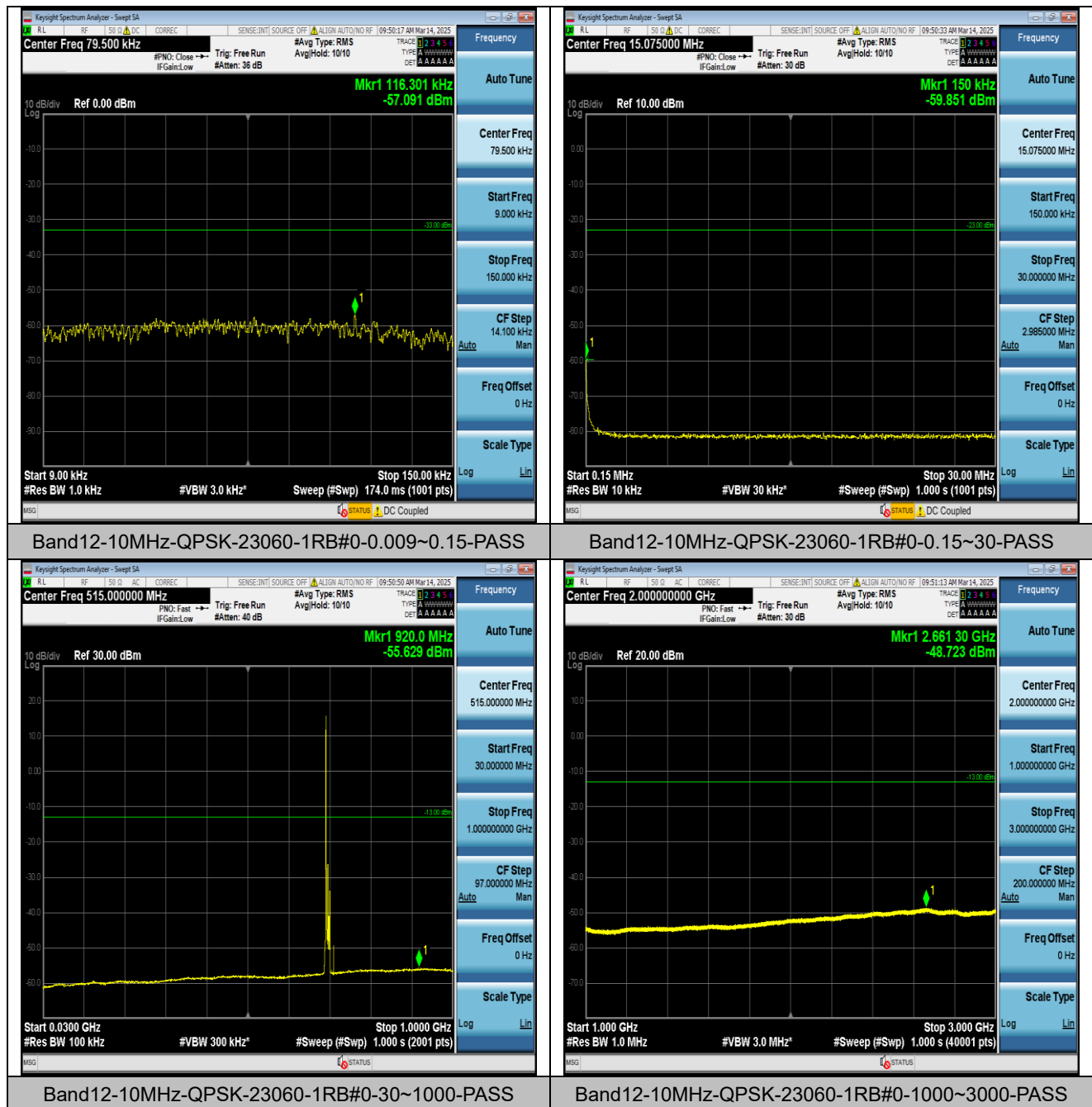


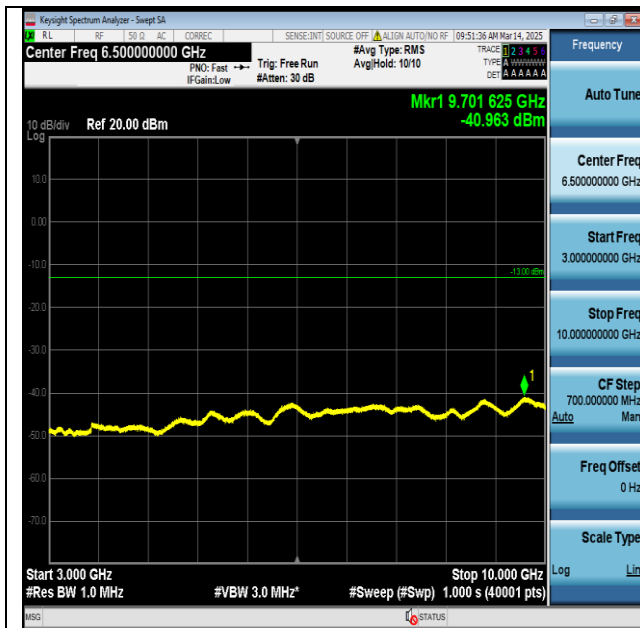




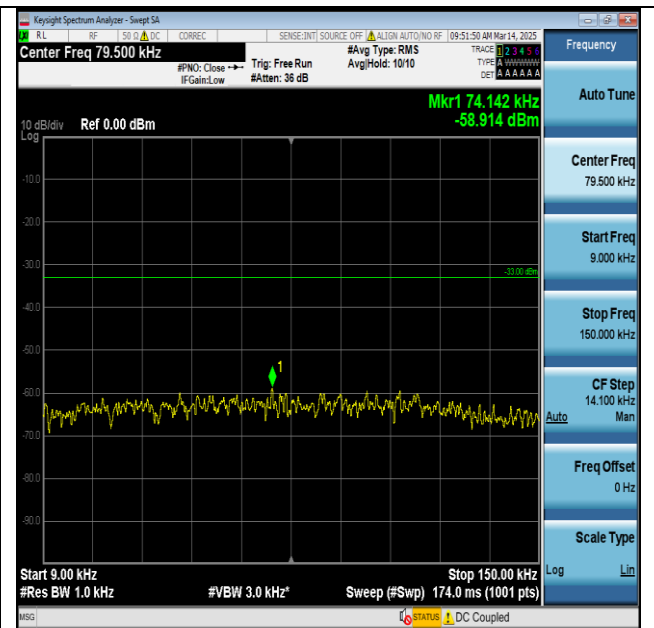
Conducted Spurious Emission

Test Graphs

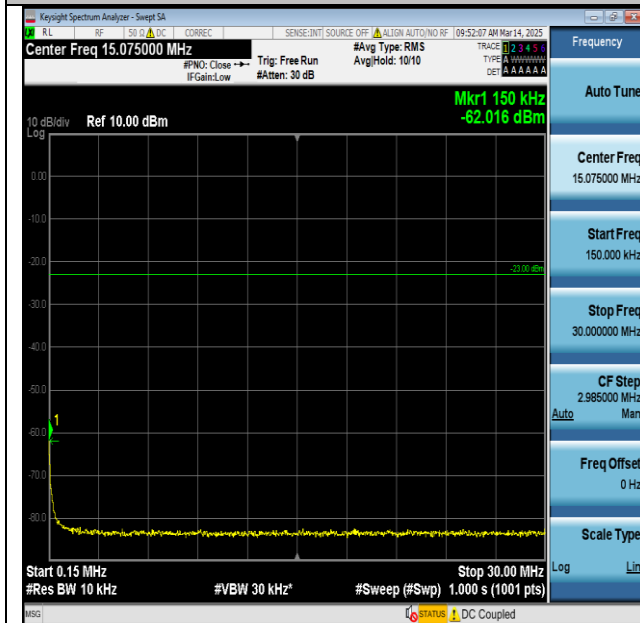




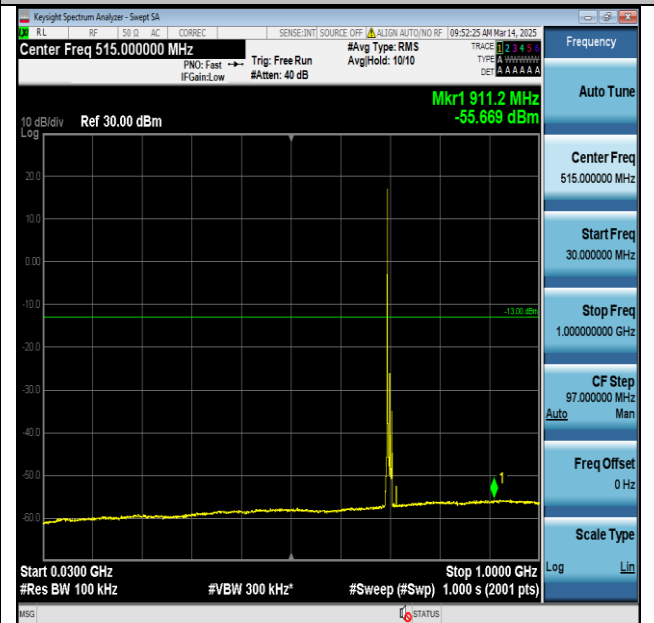
Band12-10MHz-QPSK-23060-1RB#0-3000~10000-PASS



Band12-10MHz-QPSK-23095-1RB#0-0.009~0.15-PASS



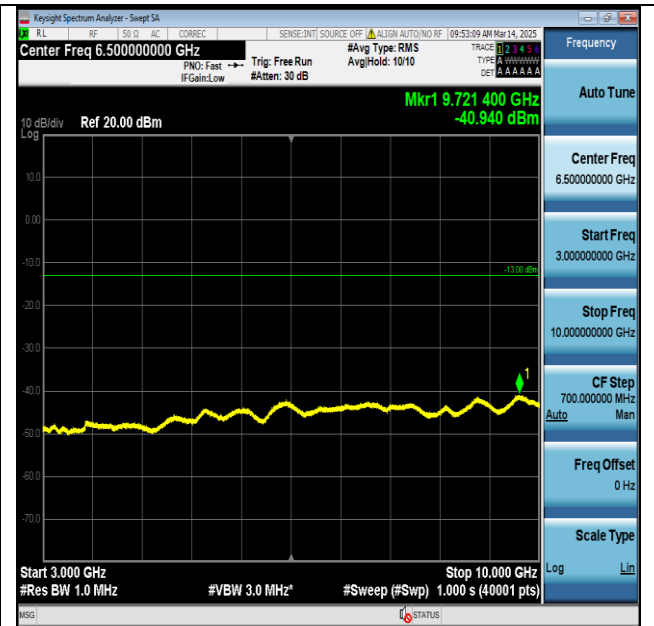
Band12-10MHz-QPSK-23095-1RB#0-0.15~30-PASS



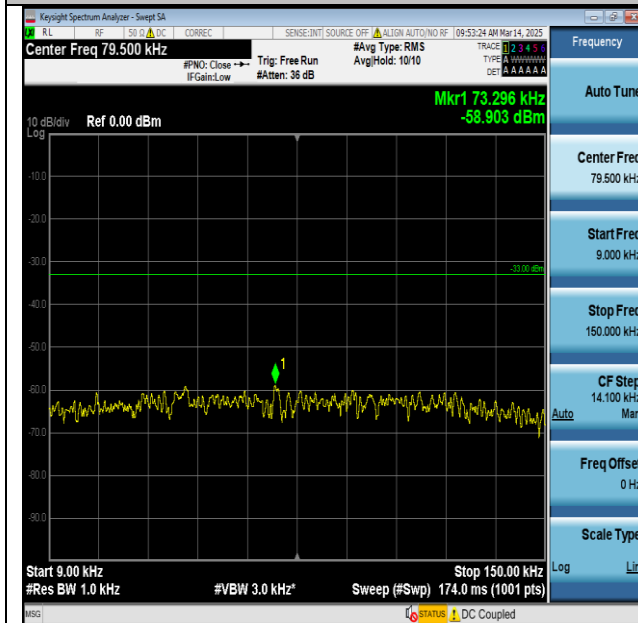
Band12-10MHz-QPSK-23095-1RB#0-30~1000-PASS



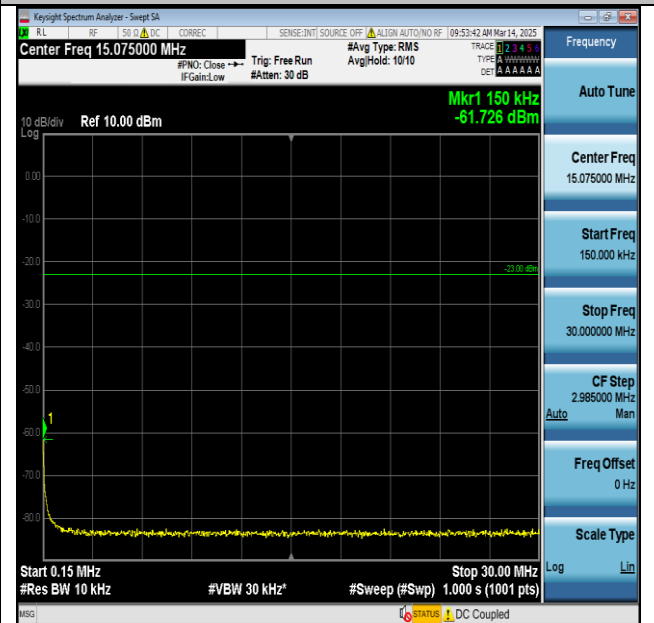
Band12-10MHz-QPSK-23095-1RB#0-1000~3000-PASS



Band12-10MHz-QPSK-23095-1RB#0-3000~10000-PASS



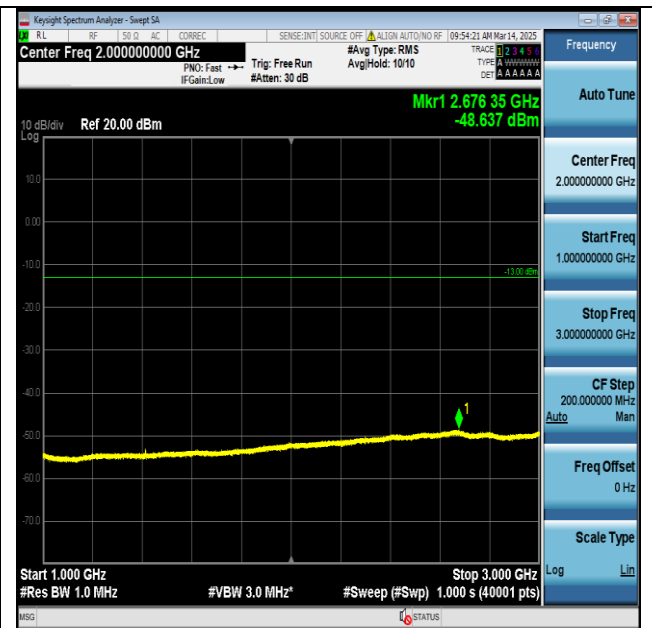
Band12-10MHz-QPSK-23130-1RB#0-0.009~0.15-PASS



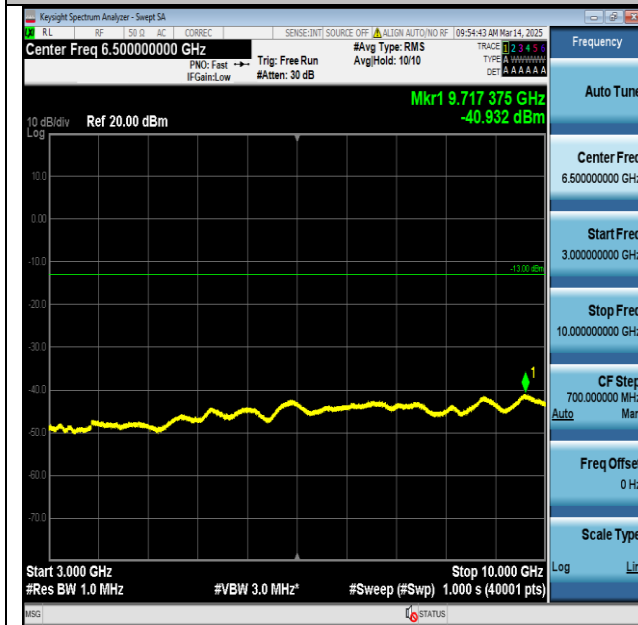
Band12-10MHz-QPSK-23130-1RB#0-0.15~30-PASS



Band12-10MHz-QPSK-23130-1RB#0-30~1000-PASS



Band12-10MHz-QPSK-23130-1RB#0-1000~3000-PASS



Band12-10MHz-QPSK-23130-1RB#0-3000~10000-PASS

Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band12	10MHz	QPSK	23095	100RB#0	VN	NT	0.90	0.001272	PASS
Band12	10MHz	QPSK	23095	100RB#0	VL	NT	0.40	0.000565	PASS
Band12	10MHz	QPSK	23095	100RB#0	VH	NT	0.70	0.000989	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band12	10MHz	QPSK	23095	100RB#0	NV	-30	-0.70	-0.000989	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	-20	-0.80	-0.001131	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	-10	-0.10	-0.000141	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	0	-0.20	-0.000283	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	10	0.50	0.000707	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	20	0.70	0.000989	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	30	0.60	0.000848	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	40	-0.40	-0.000565	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	50	0.10	0.000141	PASS

~The End~