

Appendix-C 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	23.09	18.94	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.16	19.01	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.08	18.93	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.15	18	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.16	18.01	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.06	17.91	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.09	17.94	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.29	17.14	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.1	18.95	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.19	19.04	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.14	18.99	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.19	18.04	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.15	18	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.01	17.86	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	22.13	17.98	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.08	16.93	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.39	19.24	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	23.35	19.2	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.34	19.19	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.39	18.24	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.33	18.18	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.44	18.29	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.34	18.19	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.17	17.02	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.11	18.96	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23	18.85	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.16	19.01	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.19	18.04	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.08	17.93	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.07	17.92	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.16	18.01	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.69	17.54	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.1	18.95	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.18	19.03	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.15	19	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.24	18.09	34.77	PASS

Band12	3MHz	16QAM	23095	1RB#0	22.64	18.49	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.59	18.44	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.68	18.53	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.36	17.21	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.3	19.15	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.22	19.07	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.24	19.09	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.43	18.28	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.86	18.71	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.64	18.49	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.75	18.6	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.52	17.37	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.29	19.14	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.12	18.97	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.07	18.92	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.14	17.99	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.66	18.51	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.52	18.37	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.55	18.4	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.18	17.03	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	23.13	18.98	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.06	18.91	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.29	19.14	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.18	18.03	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22.18	18.03	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.24	18.09	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.39	18.24	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.44	17.29	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	23.39	19.24	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.44	19.29	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	23.36	19.21	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.33	18.18	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.28	18.13	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.31	18.16	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.39	18.24	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.59	17.44	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.15	19	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.21	19.06	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.17	19.02	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.21	18.06	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.49	18.34	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.13	17.98	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.17	18.02	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.22	17.07	34.77	PASS

Band12	10MHz	QPSK	23095	1RB#0	23.22	19.07	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.14	18.99	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.34	19.19	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.19	18.04	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	22.51	18.36	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	22.6	18.45	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.76	18.61	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.38	17.23	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	23.14	18.99	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.32	19.17	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	23.35	19.2	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.35	18.2	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.55	18.4	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.84	18.69	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.83	18.68	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.33	17.18	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	100RB#0	6.02	13	PASS
Band12	10MHz	16QAM	23060	100RB#0	6.66	13	PASS
Band12	10MHz	QPSK	23095	100RB#0	5.82	13	PASS
Band12	10MHz	16QAM	23095	100RB#0	6.47	13	PASS
Band12	10MHz	QPSK	23130	100RB#0	5.45	13	PASS
Band12	10MHz	16QAM	23130	100RB#0	6.18	13	PASS

Test Graphs

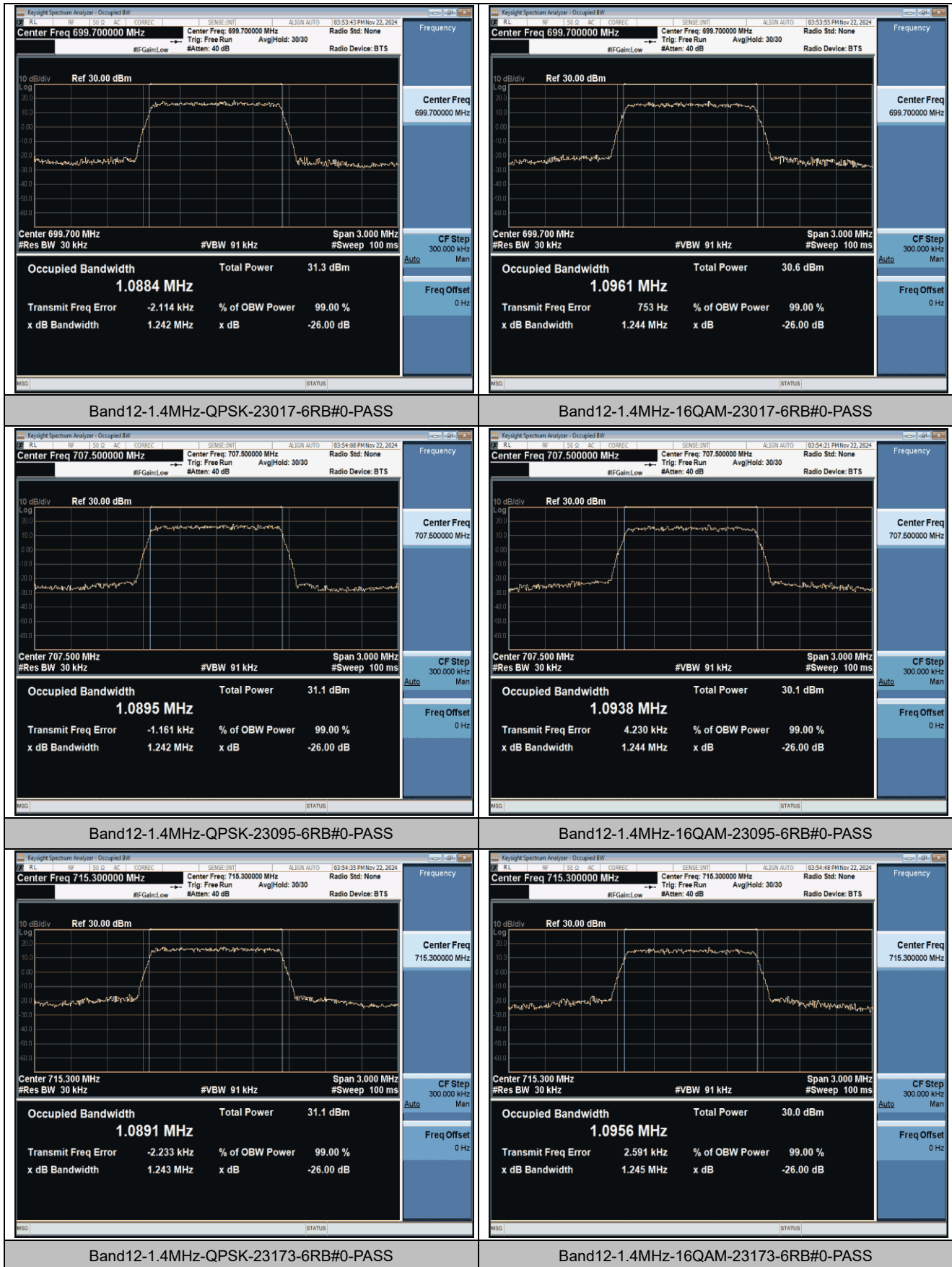


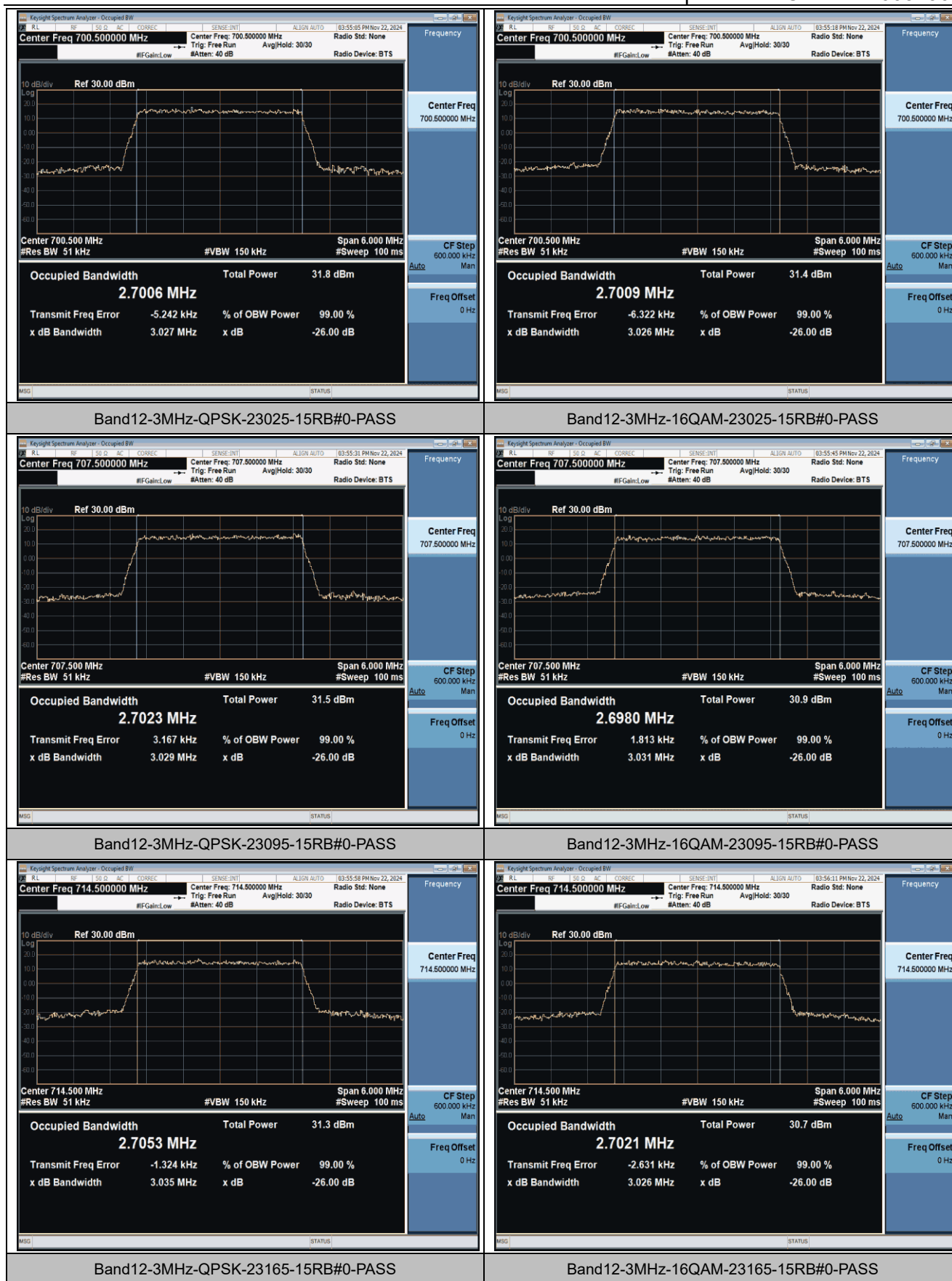
26dB Bandwidth and Occupied Bandwidth

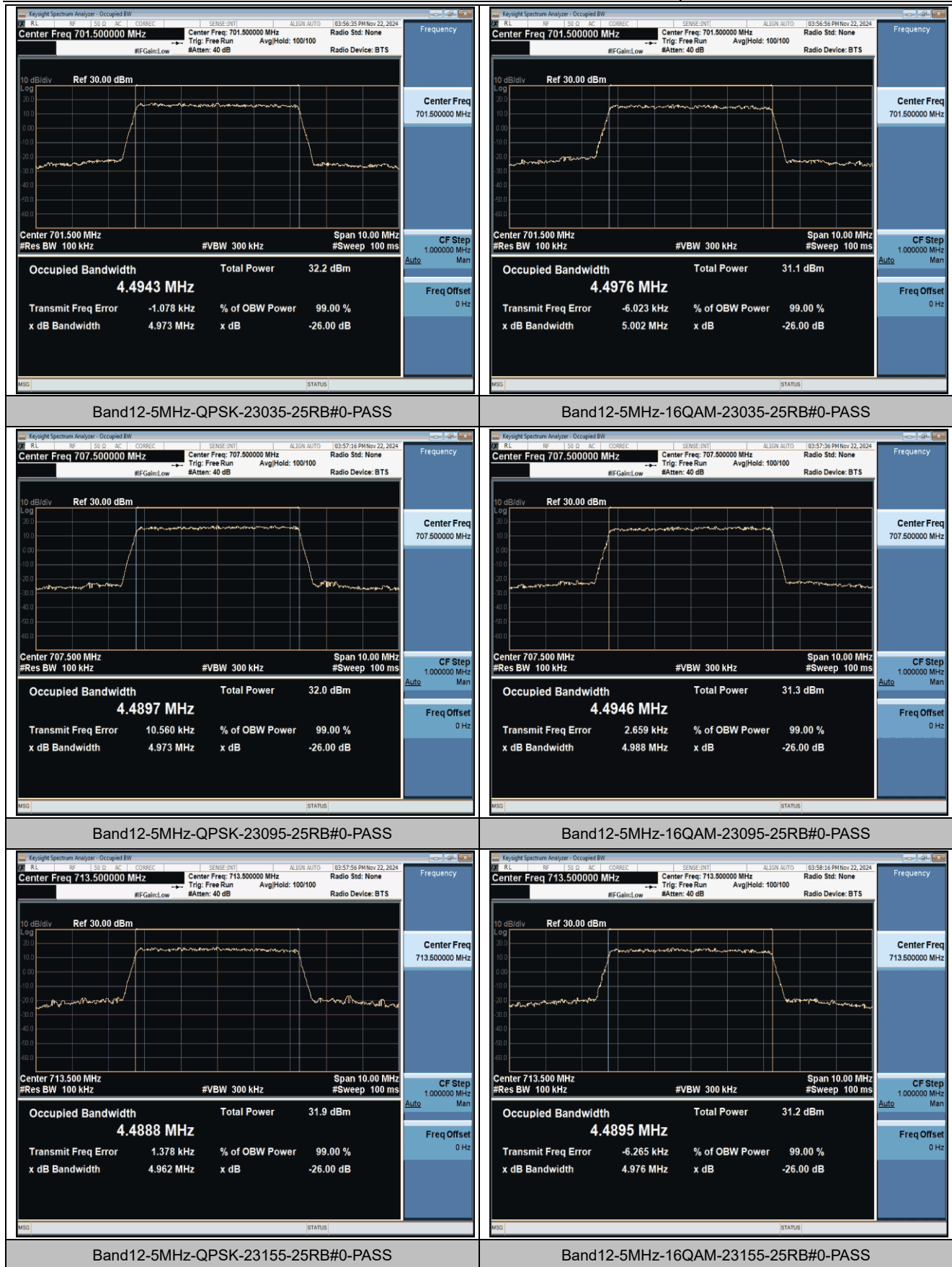
Test Result

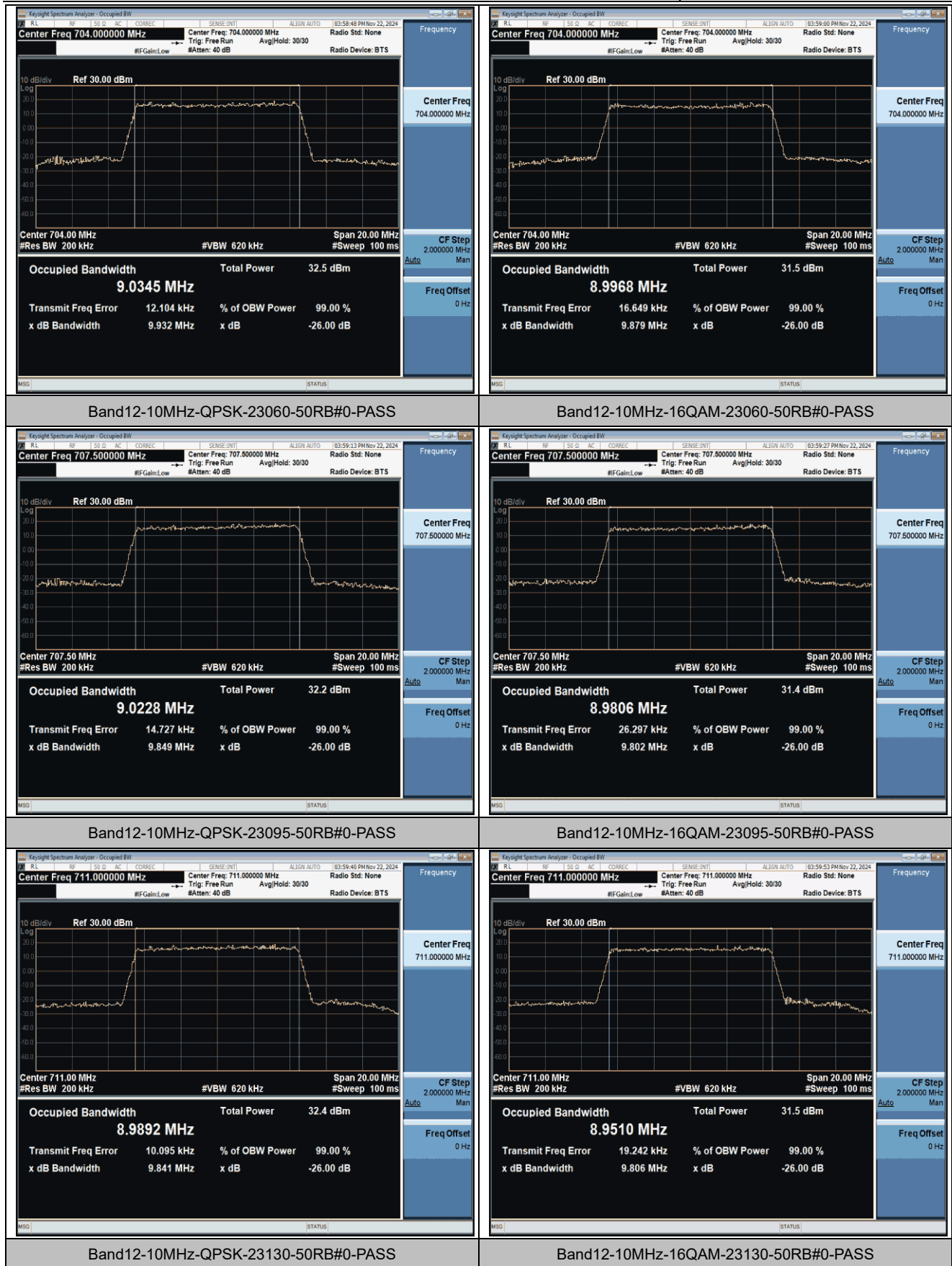
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0884	1.242	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0961	1.244	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0895	1.242	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0938	1.244	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0891	1.243	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0956	1.245	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.7006	3.027	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.7009	3.026	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.7023	3.029	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6980	3.031	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.7053	3.035	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.7021	3.026	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.4943	4.973	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.4976	5.002	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.4897	4.973	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.4946	4.988	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.4888	4.962	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.4895	4.976	PASS
Band12	10MHz	QPSK	23060	50RB#0	9.0345	9.932	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9968	9.879	PASS
Band12	10MHz	QPSK	23095	50RB#0	9.0228	9.849	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9806	9.802	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9892	9.841	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9510	9.806	PASS

Test Graphs



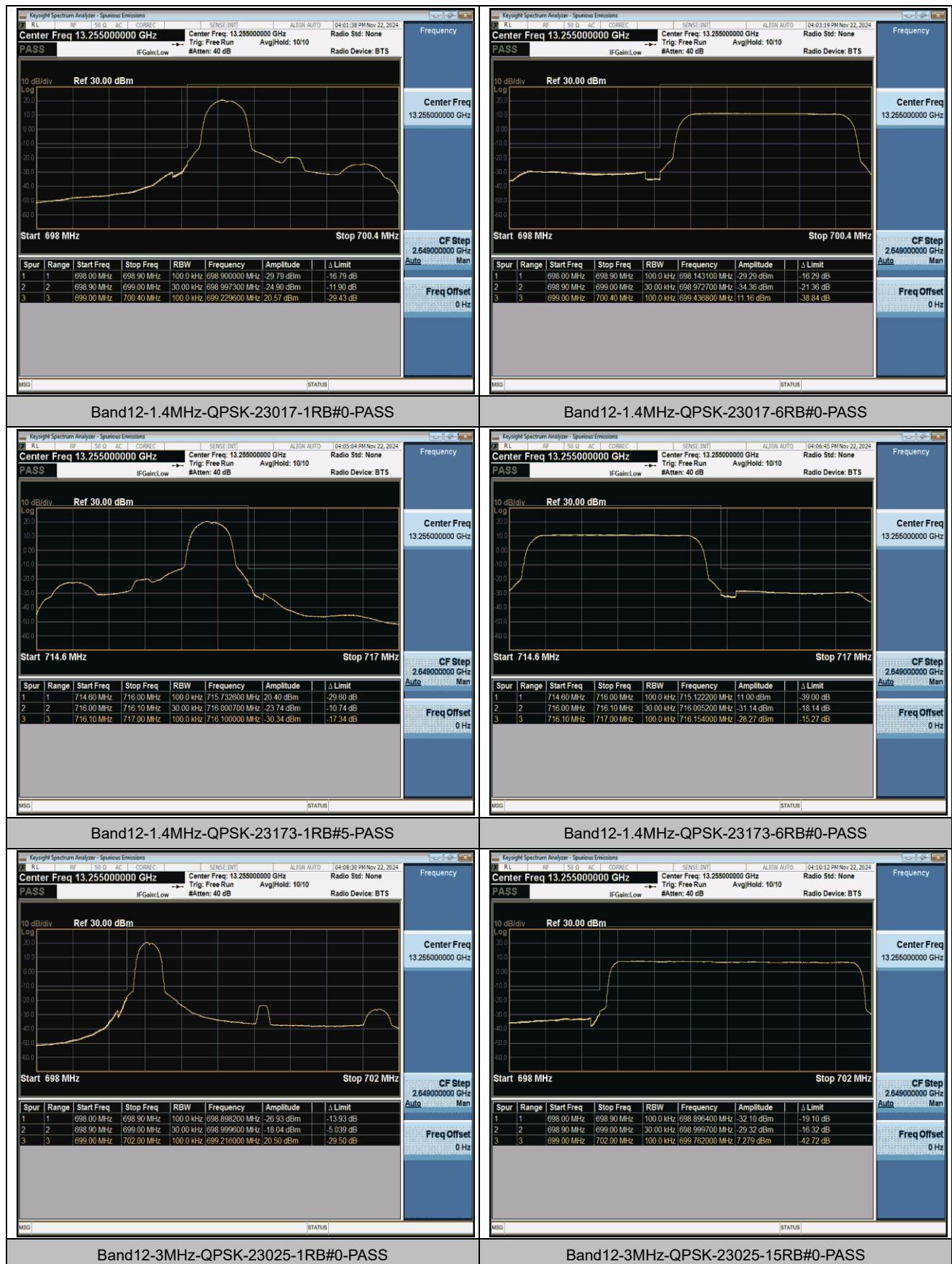


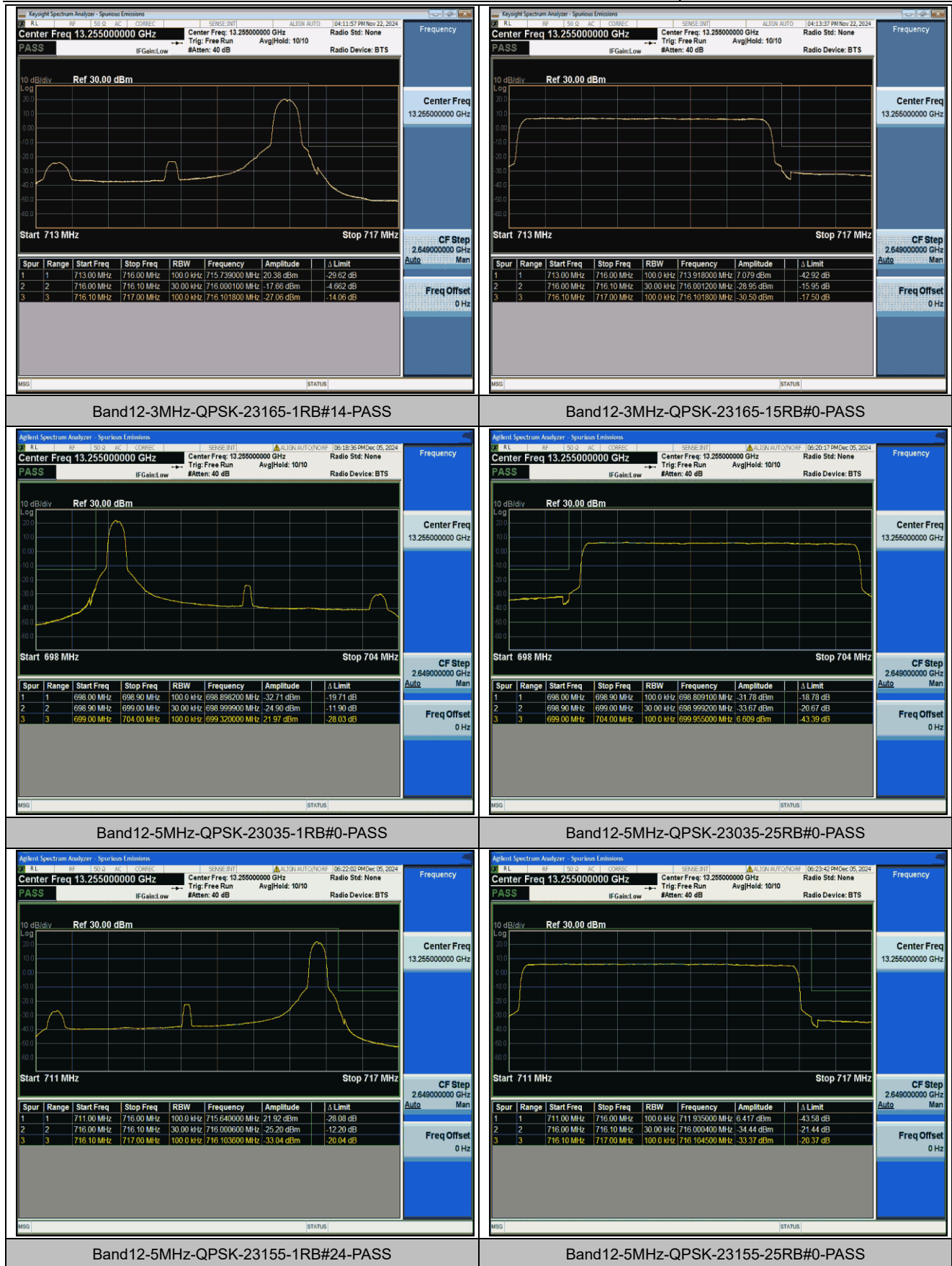


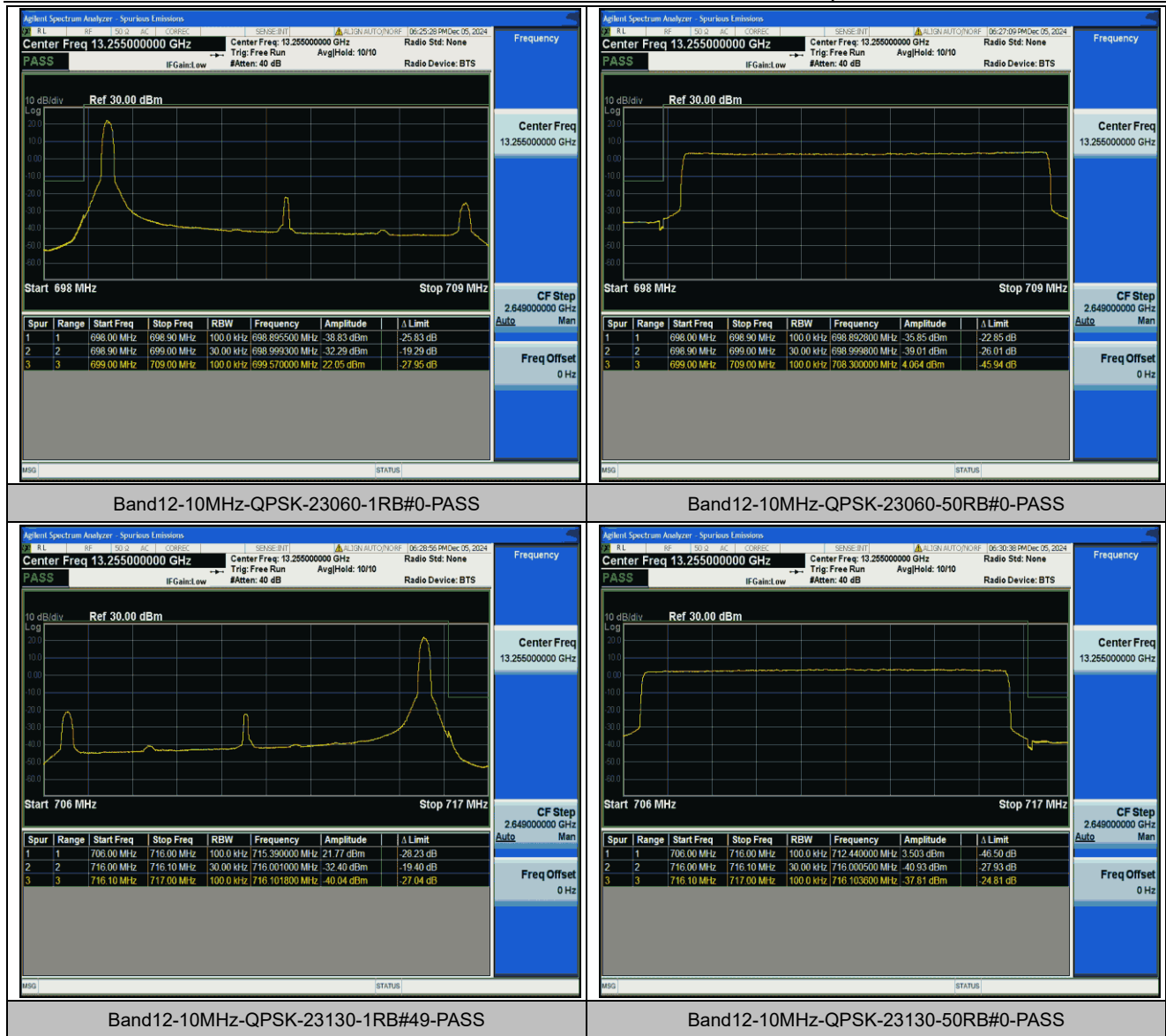


Band Edge

Test Graphs

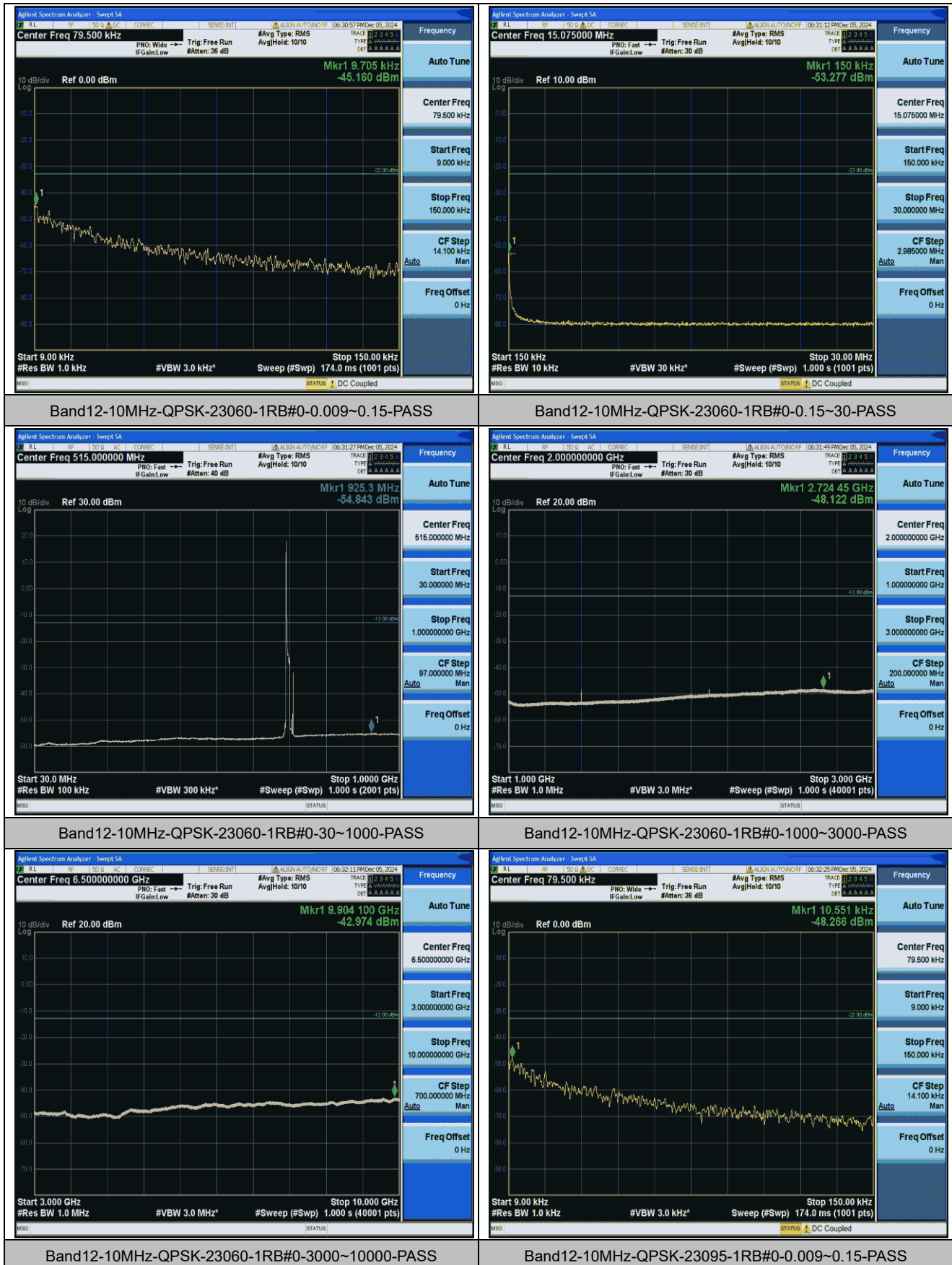


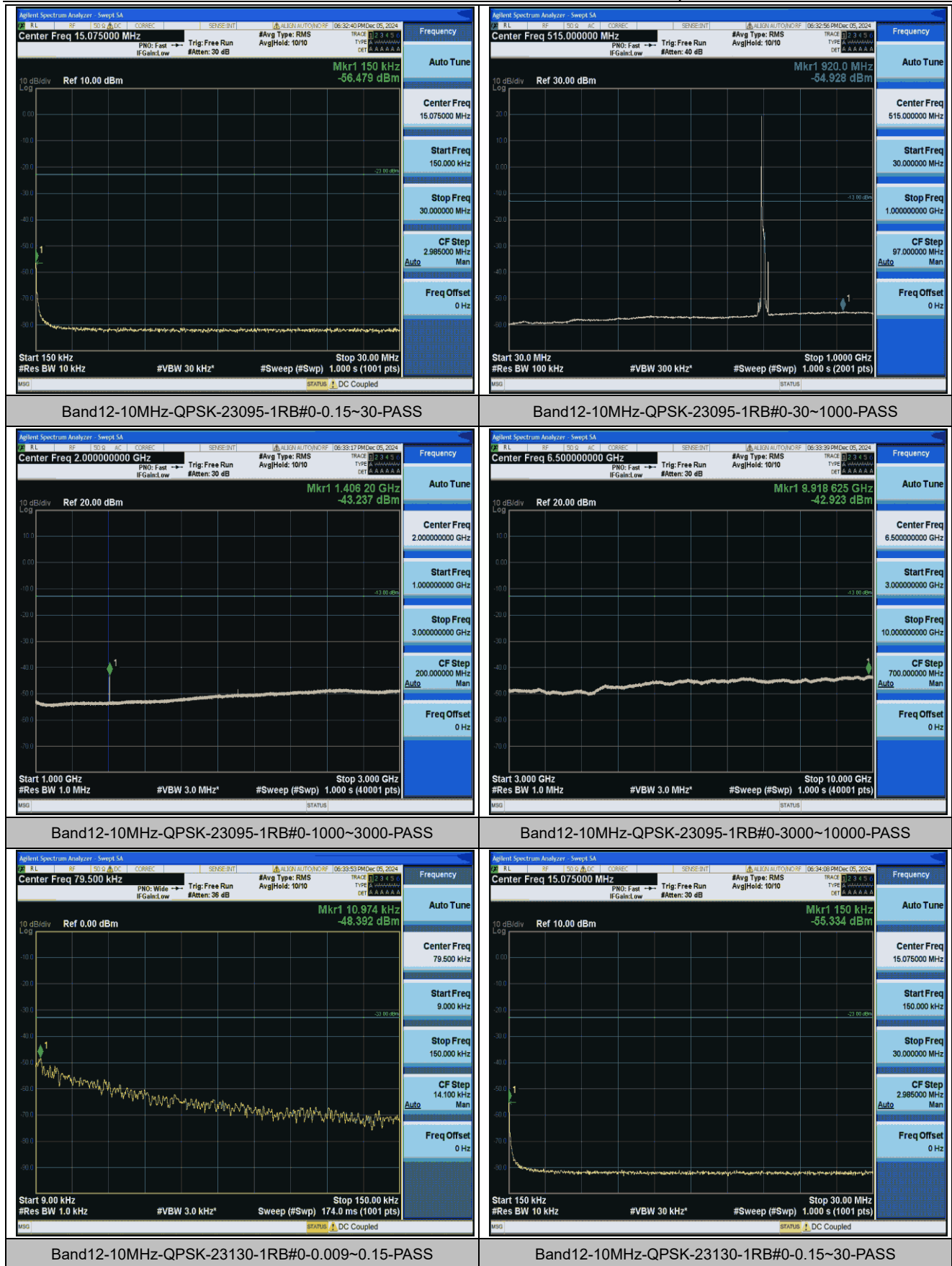


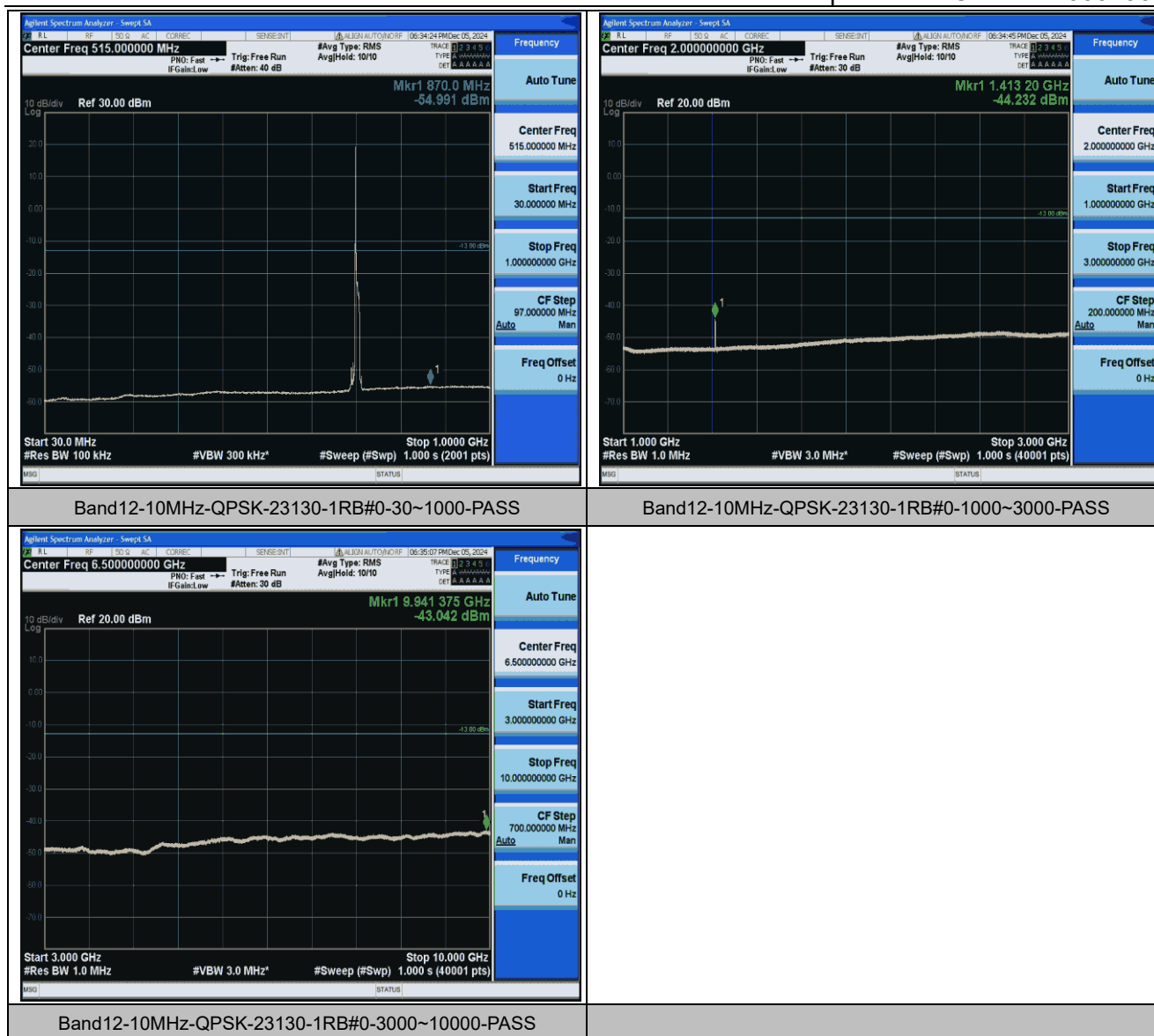


Conducted Spurious Emission

Test Graphs







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	1.70	0.002403	PASS
Band12	10MHz	QPSK	23095	100RB#0	VL	NT	-7.50	-0.010601	PASS
Band12	10MHz	QPSK	23095	100RB#0	VH	NT	-12.70	-0.017951	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	-16.30	-0.023039	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	-20	-17.10	-0.024170	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	-10	-20.60	-0.029117	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	0	-21.00	-0.029682	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	10	-21.30	-0.030106	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	20	-21.30	-0.030106	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	30	-22.30	-0.031519	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	40	-22.80	-0.032226	PASS
Band12	10MHz	QPSK	23095	100RB#0	NV	50	-22.90	-0.032367	PASS

~The End~