

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	23.06	20.41	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.14	20.49	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	23.06	20.41	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.5	19.85	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	23.12	20.47	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.12	20.47	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	23.04	20.39	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	22.6	19.95	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	23.06	20.41	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	22.92	20.27	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	23.07	20.42	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	22.41	19.76	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	22.17	19.52	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	21.91	19.26	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	22.22	19.57	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.76	19.11	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	22.23	19.58	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	22.05	19.4	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	21.94	19.29	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	21.71	19.06	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	22.26	19.61	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	22.15	19.5	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	22.03	19.38	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	21.54	18.89	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#0	21.61	18.96	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#2	21.57	18.92	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#5	21.67	19.02	34.77	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	20.53	17.88	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#0	21.72	19.07	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#2	21.49	18.84	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#5	21.73	19.08	34.77	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	20.67	18.02	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#0	21.59	18.94	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#2	21.68	19.03	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#5	21.62	18.97	34.77	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	20.61	17.96	34.77	PASS

Band12	3MHz	QPSK	23025	1RB#0	23.06	20.41	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.07	20.42	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.06	20.41	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.57	19.92	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	22.86	20.21	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	23.11	20.46	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	23.1	20.45	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	22.65	20	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	23.06	20.41	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	23.04	20.39	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	23.18	20.53	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	22.55	19.9	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.12	19.47	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.29	19.64	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.09	19.44	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.59	18.94	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	22.1	19.45	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	22.02	19.37	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	22.29	19.64	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	21.67	19.02	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	22.05	19.4	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	22.04	19.39	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	22.13	19.48	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	21.61	18.96	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#0	21.72	19.07	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#8	21.8	19.15	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#14	21.55	18.9	34.77	PASS
Band12	3MHz	64QAM	23025	15RB#0	20.62	17.97	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#0	21.97	19.32	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#8	21.67	19.02	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#14	21.21	18.56	34.77	PASS
Band12	3MHz	64QAM	23095	15RB#0	20.59	17.94	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#0	21.06	18.41	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#8	21.18	18.53	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#14	21.18	18.53	34.77	PASS
Band12	3MHz	64QAM	23165	15RB#0	20.63	17.98	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.08	20.43	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.02	20.37	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.09	20.44	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.6	19.95	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	22.92	20.27	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	23.07	20.42	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	23.08	20.43	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.7	20.05	34.77	PASS

Band12	5MHz	QPSK	23155	1RB#0	23.02	20.37	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	23.02	20.37	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.86	20.21	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	22.6	19.95	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.33	19.68	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.06	19.41	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	22.32	19.67	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	21.57	18.92	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	22	19.35	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	22.19	19.54	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	22.2	19.55	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	21.68	19.03	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	22.12	19.47	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	22.09	19.44	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	22.17	19.52	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	21.6	18.95	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#0	21.87	19.22	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#12	21.61	18.96	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#24	21.81	19.16	34.77	PASS
Band12	5MHz	64QAM	23035	25RB#0	20.6	17.95	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#0	21.24	18.59	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#12	21.35	18.7	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#24	21.01	18.36	34.77	PASS
Band12	5MHz	64QAM	23095	25RB#0	20.7	18.05	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#0	21.26	18.61	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#12	21.44	18.79	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#24	21.26	18.61	34.77	PASS
Band12	5MHz	64QAM	23155	25RB#0	20.63	17.98	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	23.1	20.45	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	23.2	20.55	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	23.17	20.52	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	22.72	20.07	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	23.11	20.46	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	23.11	20.46	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	23.05	20.4	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	22.64	19.99	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	22.96	20.31	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	23.06	20.41	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	22.96	20.31	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	22.59	19.94	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	22.28	19.63	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	22.24	19.59	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	22.21	19.56	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	21.68	19.03	34.77	PASS

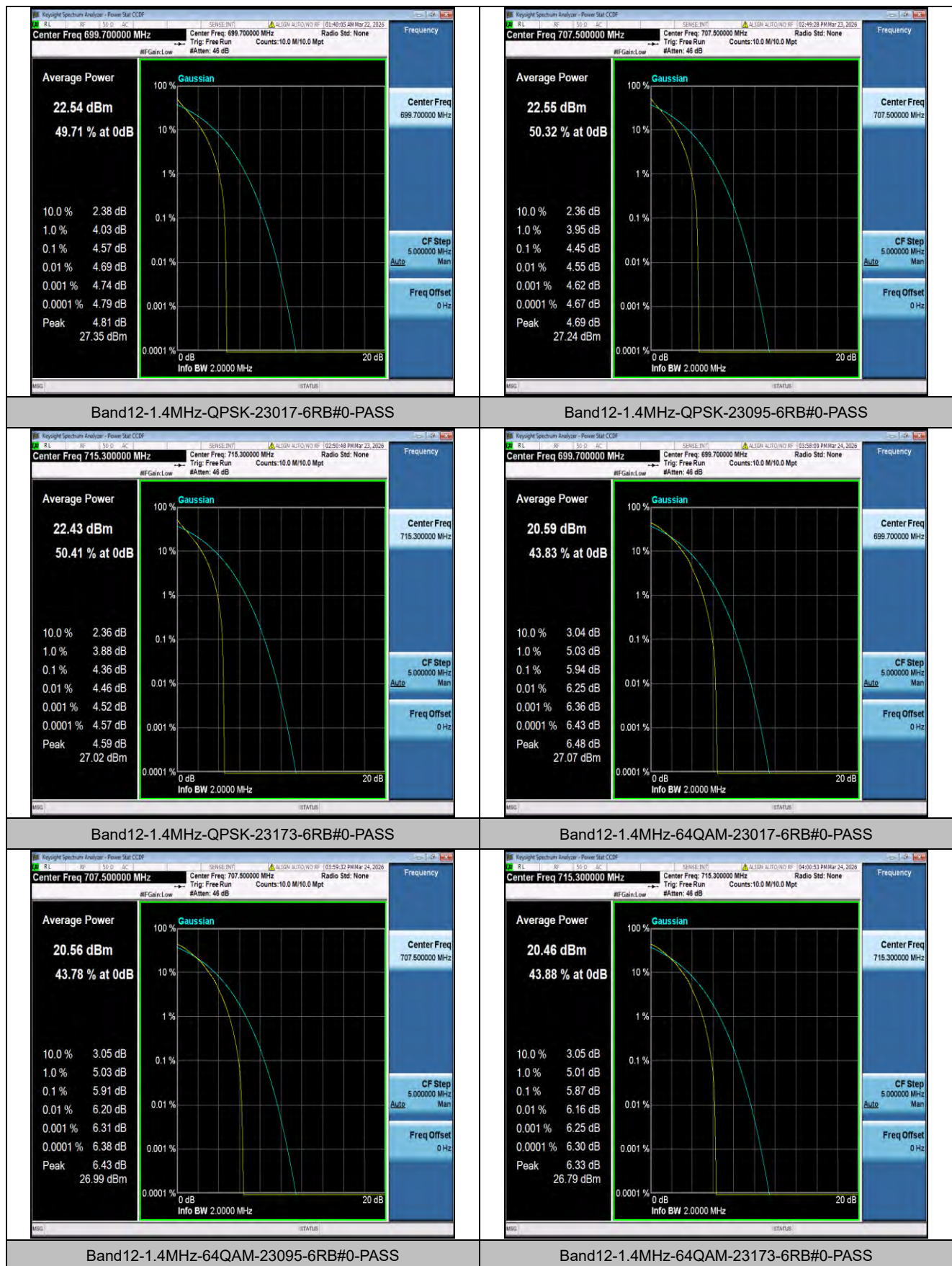
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Band12	10MHz	16QAM	23095	1RB#24	22.28	19.63	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	22.3	19.65	34.77	PASS
Band12	10MHz	16QAM	23095	50RB#0	21.66	19.01	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	22.33	19.68	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	22.04	19.39	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	22.08	19.43	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	21.63	18.98	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#0	21.78	19.13	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#24	21.65	19	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#49	21.71	19.06	34.77	PASS
Band12	10MHz	64QAM	23060	50RB#0	20.64	17.99	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#0	21.42	18.77	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#24	21.18	18.53	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#49	21.25	18.6	34.77	PASS
Band12	10MHz	64QAM	23095	50RB#0	20.63	17.98	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#0	21.21	18.56	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#24	21.19	18.54	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#49	21.15	18.5	34.77	PASS
Band12	10MHz	64QAM	23130	50RB#0	20.56	17.91	34.77	PASS

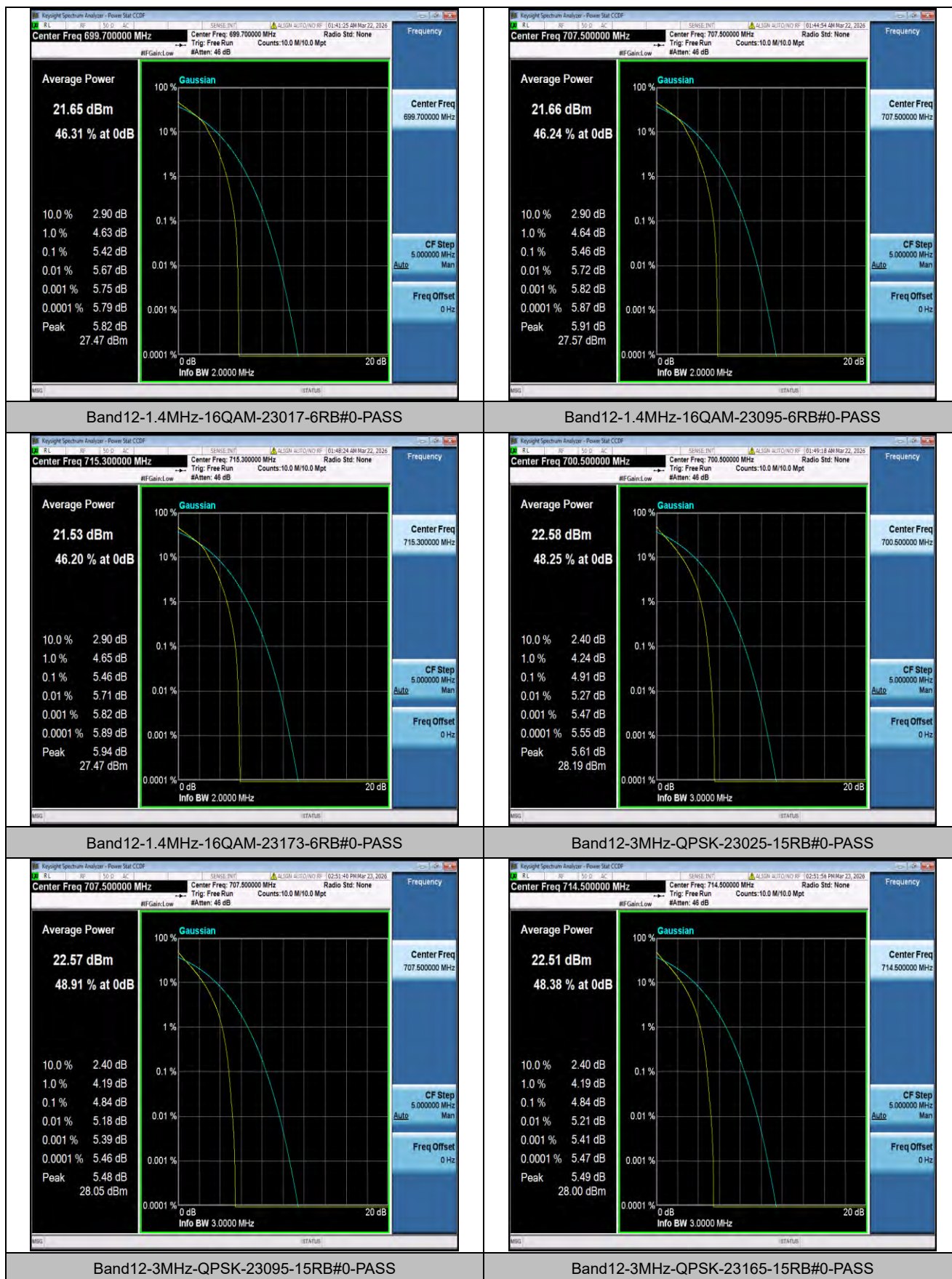
Peak-to-Average Ratio(CCDF)

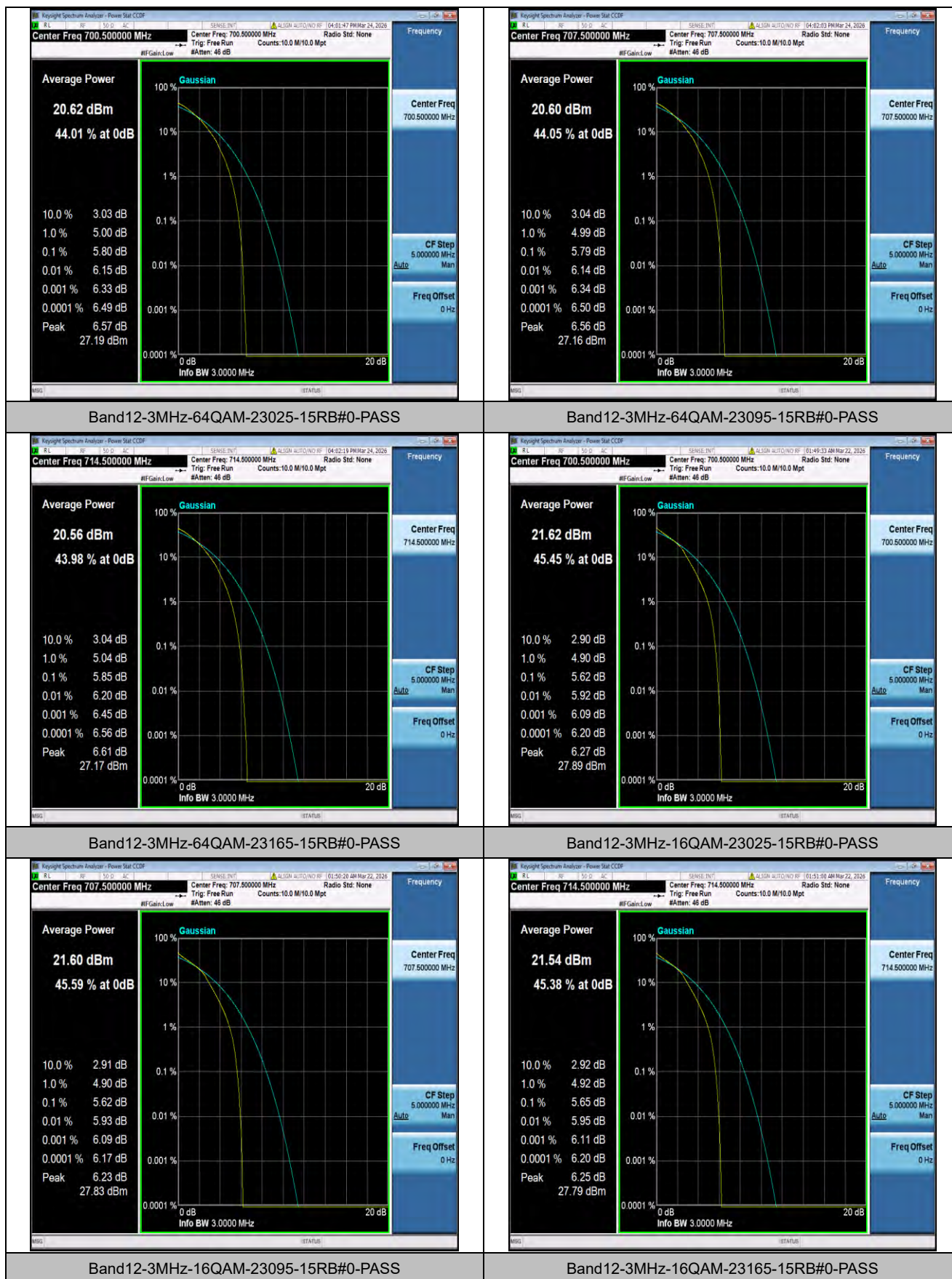
Test Result

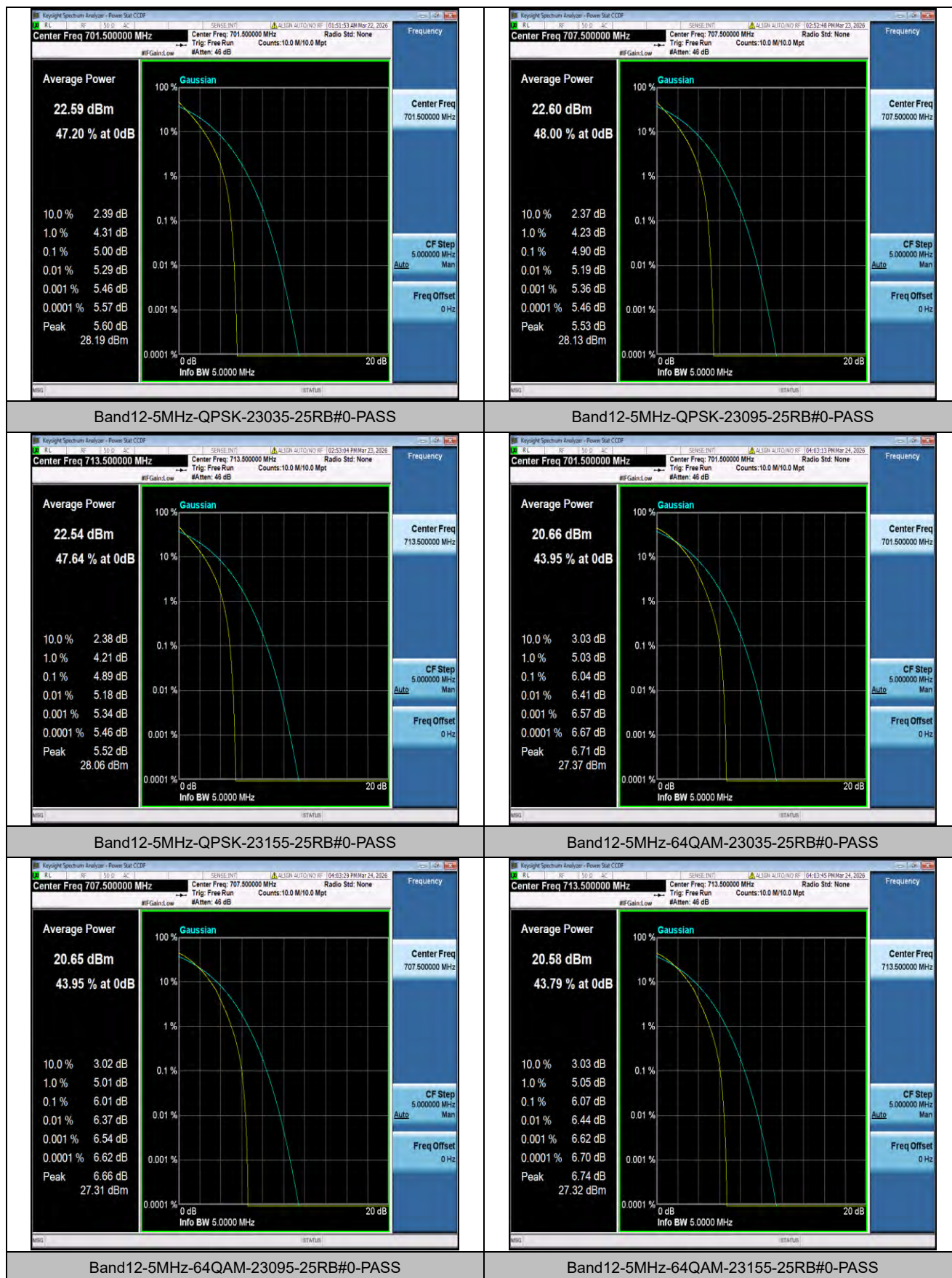
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	4.57	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	4.45	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	4.36	13	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	5.94	13	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	5.91	13	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	5.87	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	5.42	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	5.46	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	5.46	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	4.91	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	4.84	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	4.84	13	PASS
Band12	3MHz	64QAM	23025	15RB#0	5.80	13	PASS
Band12	3MHz	64QAM	23095	15RB#0	5.79	13	PASS
Band12	3MHz	64QAM	23165	15RB#0	5.85	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	5.62	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	5.62	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	5.65	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.00	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.90	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.89	13	PASS
Band12	5MHz	64QAM	23035	25RB#0	6.04	13	PASS
Band12	5MHz	64QAM	23095	25RB#0	6.01	13	PASS
Band12	5MHz	64QAM	23155	25RB#0	6.07	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	5.63	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	5.58	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	5.60	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.00	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	4.81	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	4.82	13	PASS
Band12	10MHz	64QAM	23060	50RB#0	6.08	13	PASS
Band12	10MHz	64QAM	23095	50RB#0	5.98	13	PASS
Band12	10MHz	64QAM	23130	50RB#0	5.99	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	5.69	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	5.60	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	5.62	13	PASS

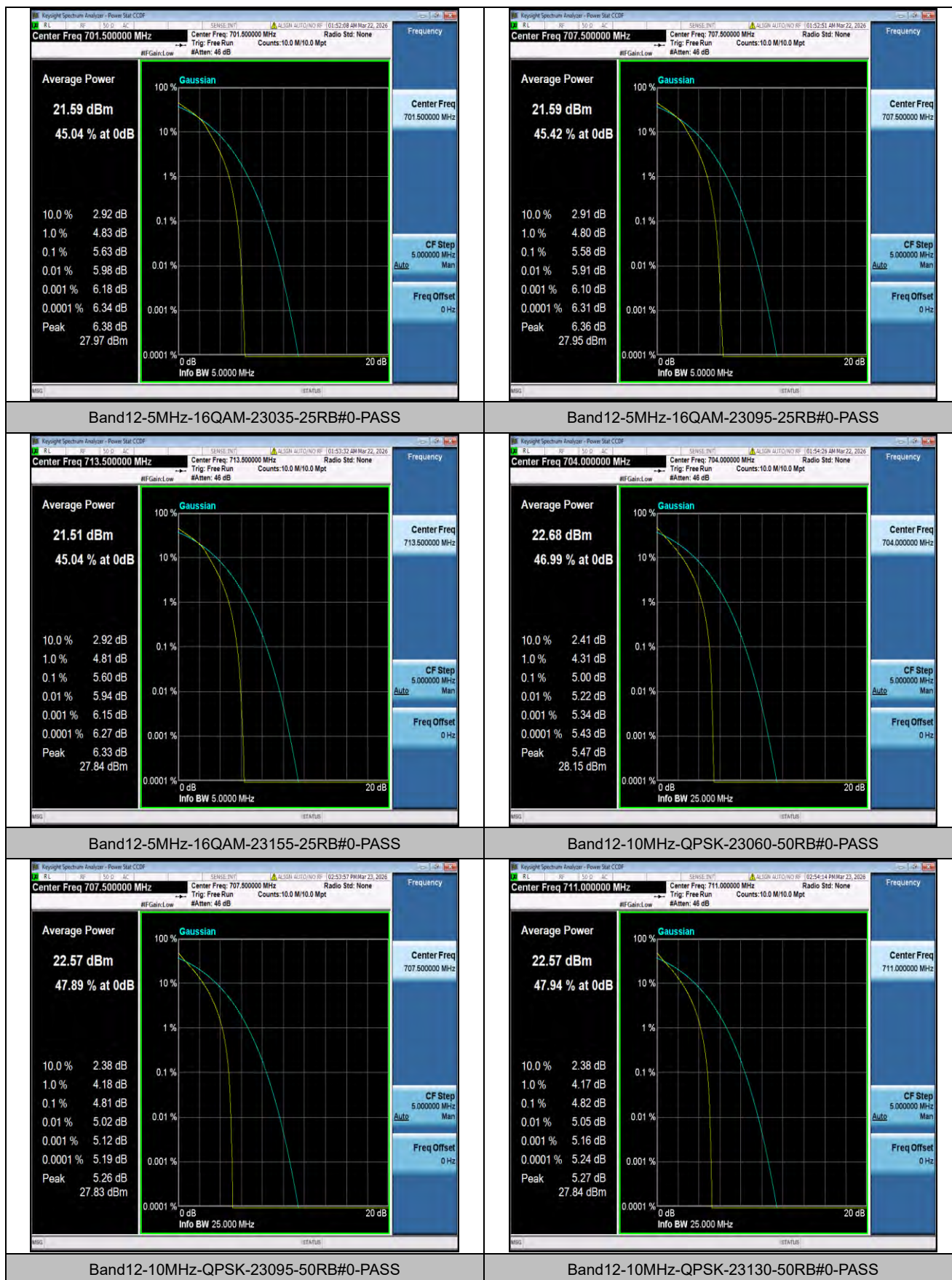
Test Graphs

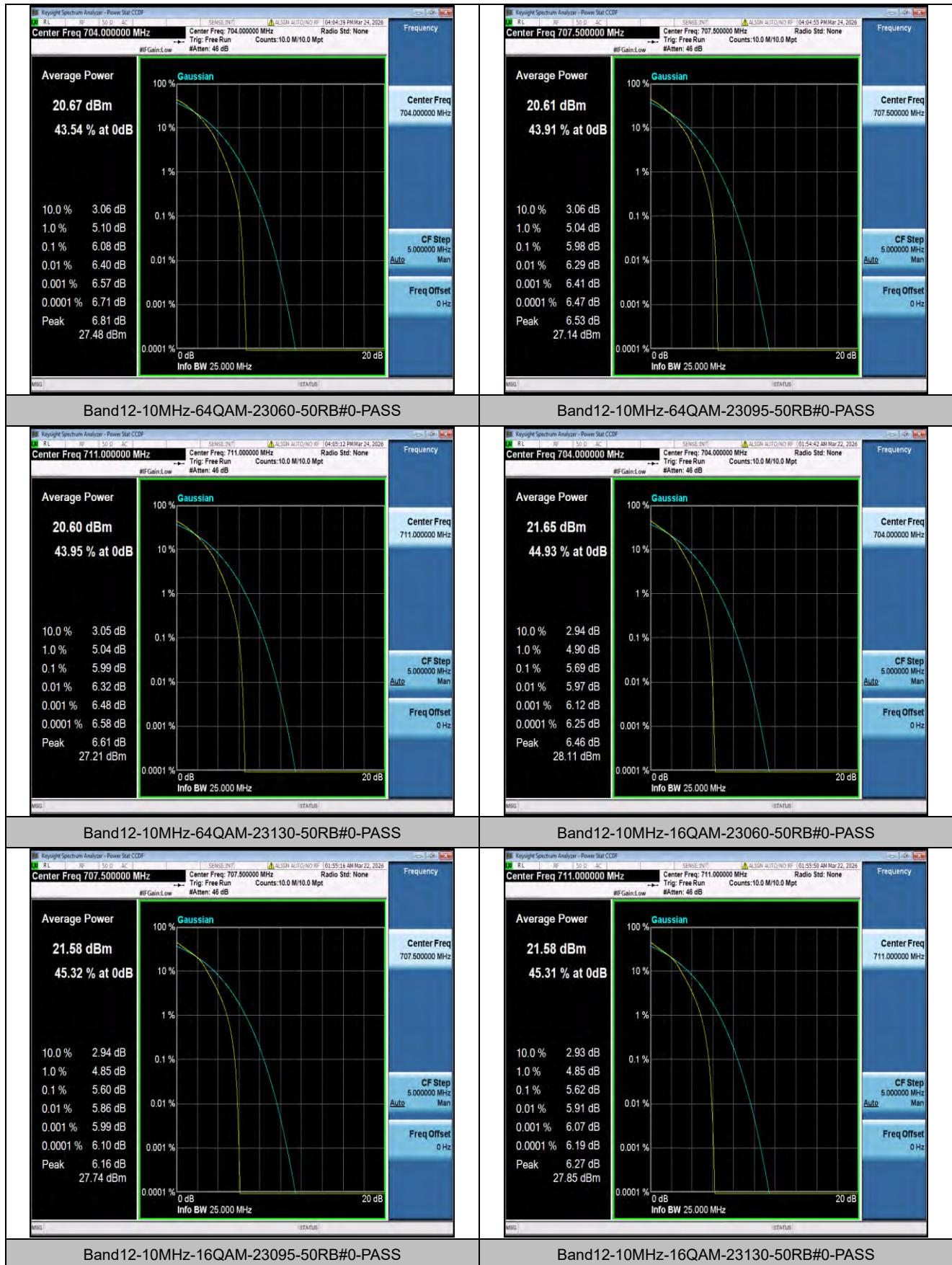










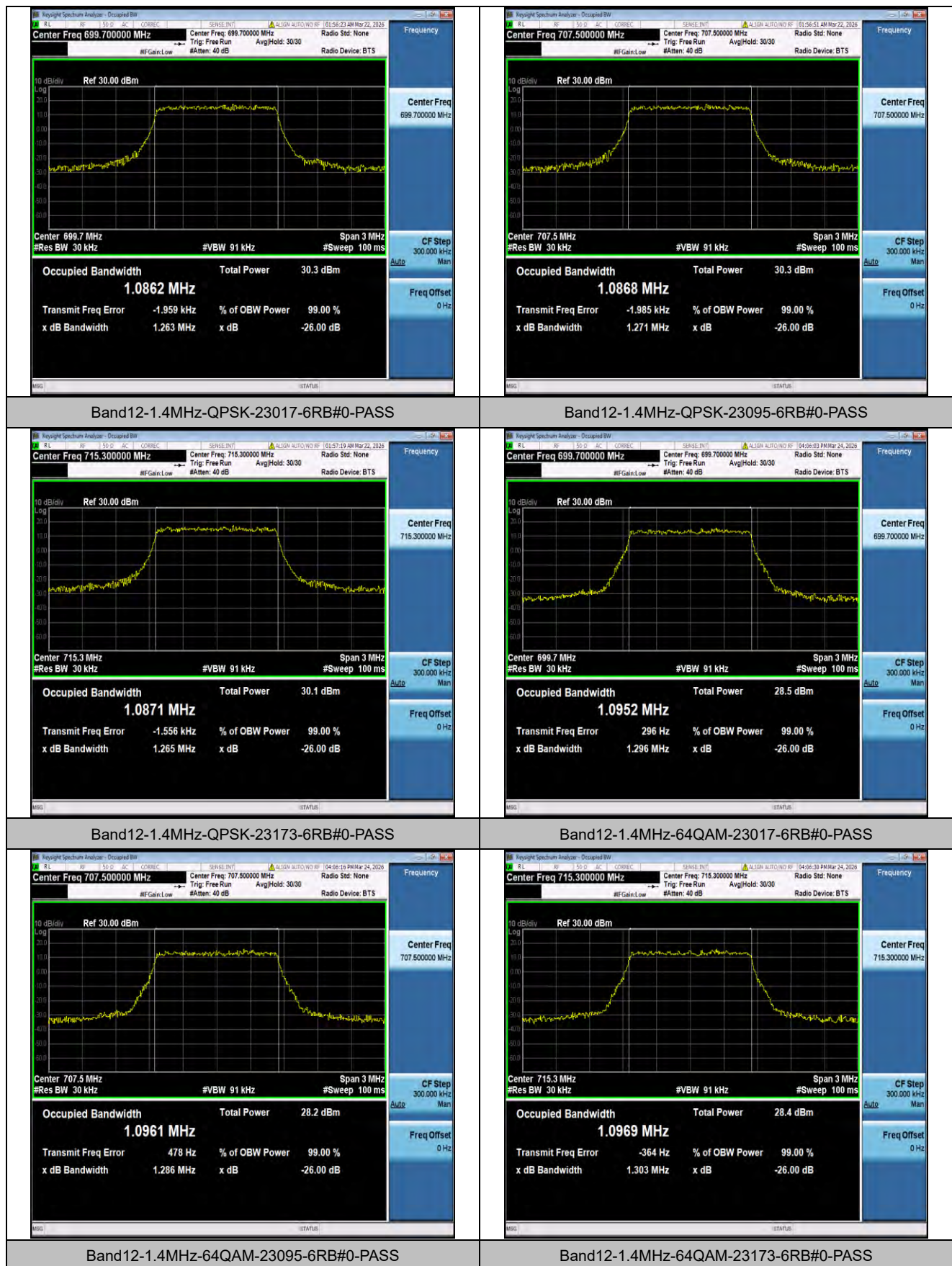


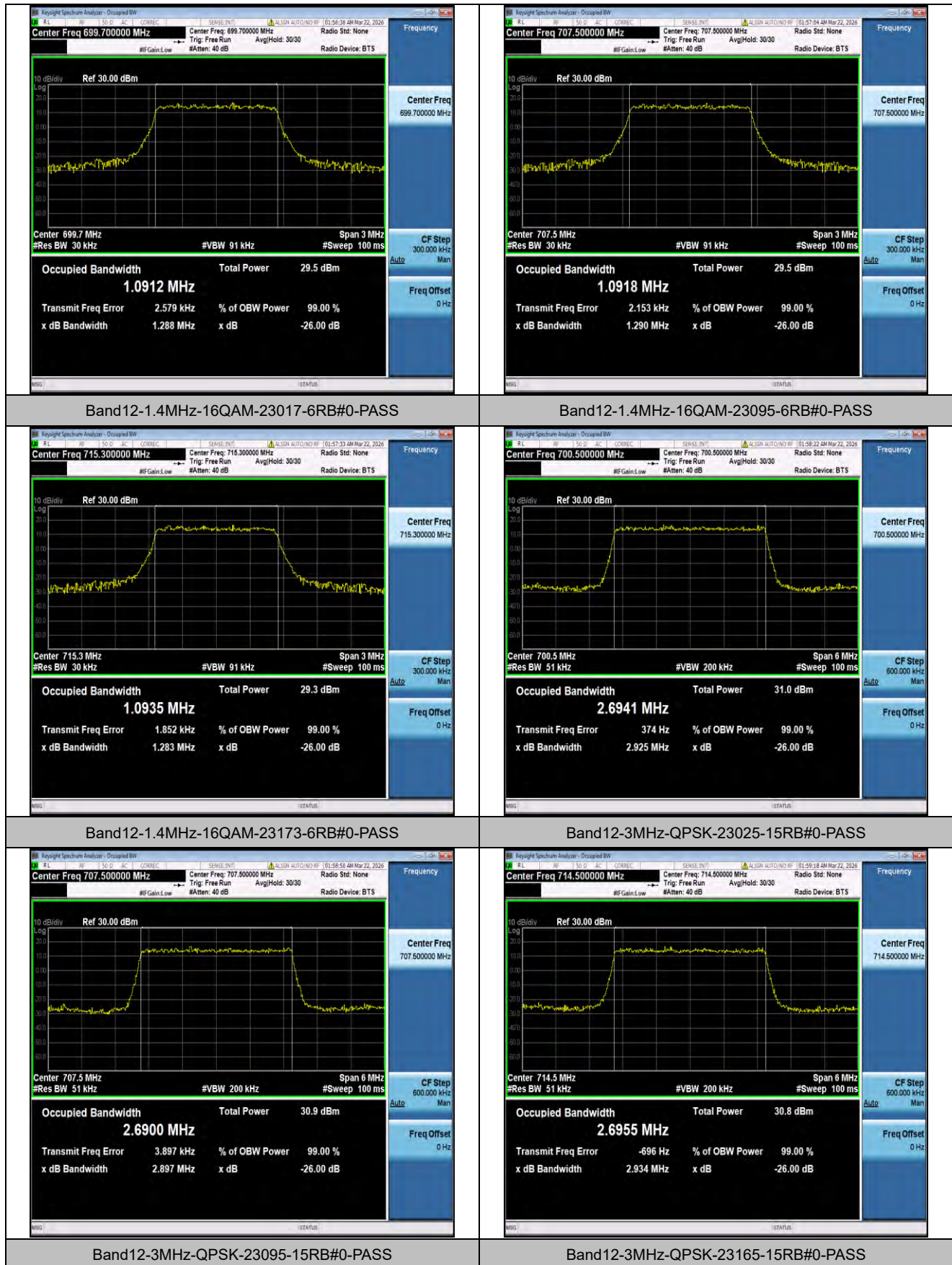
26dB Bandwidth and Occupied Bandwidth

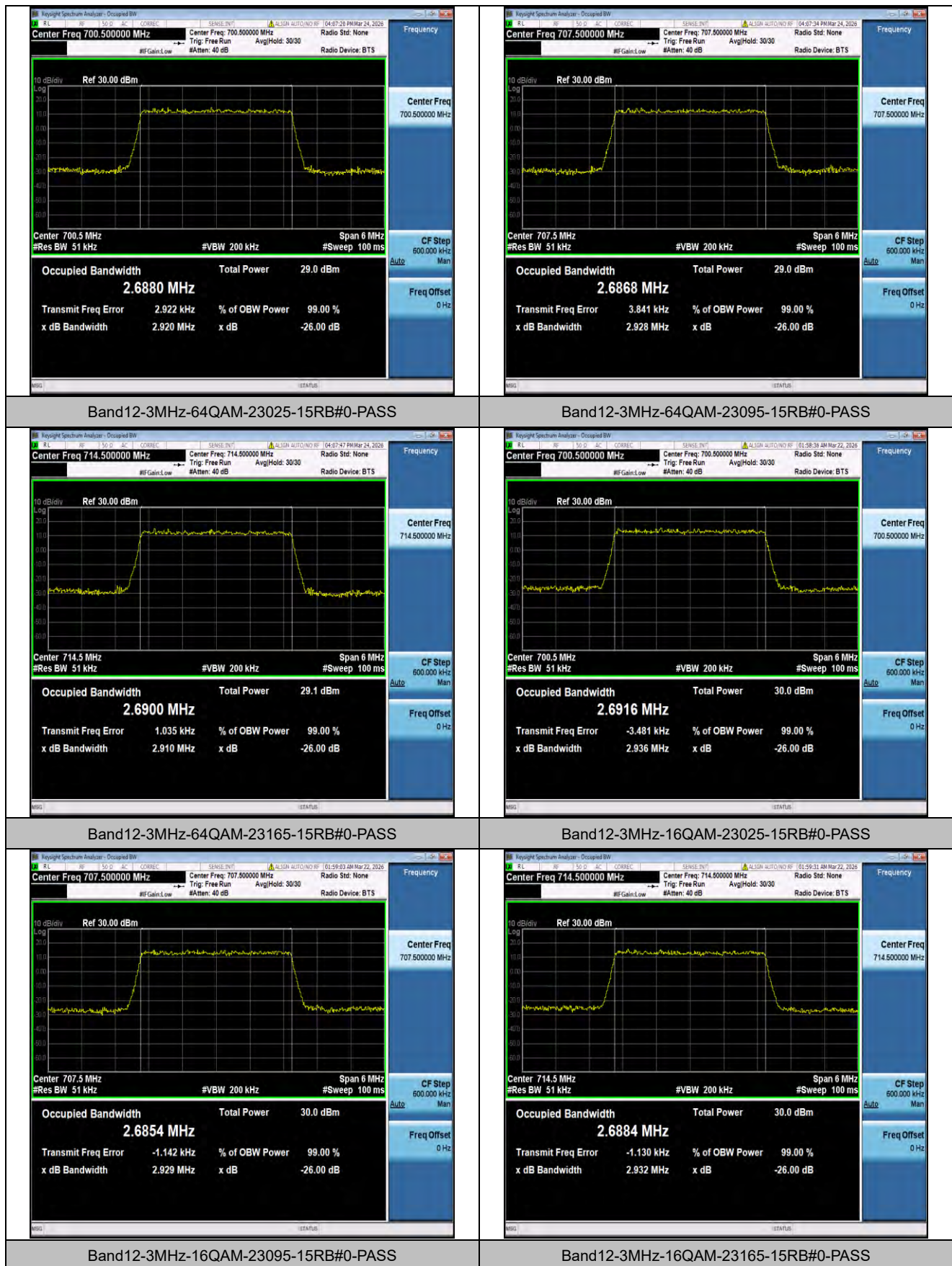
Test Result

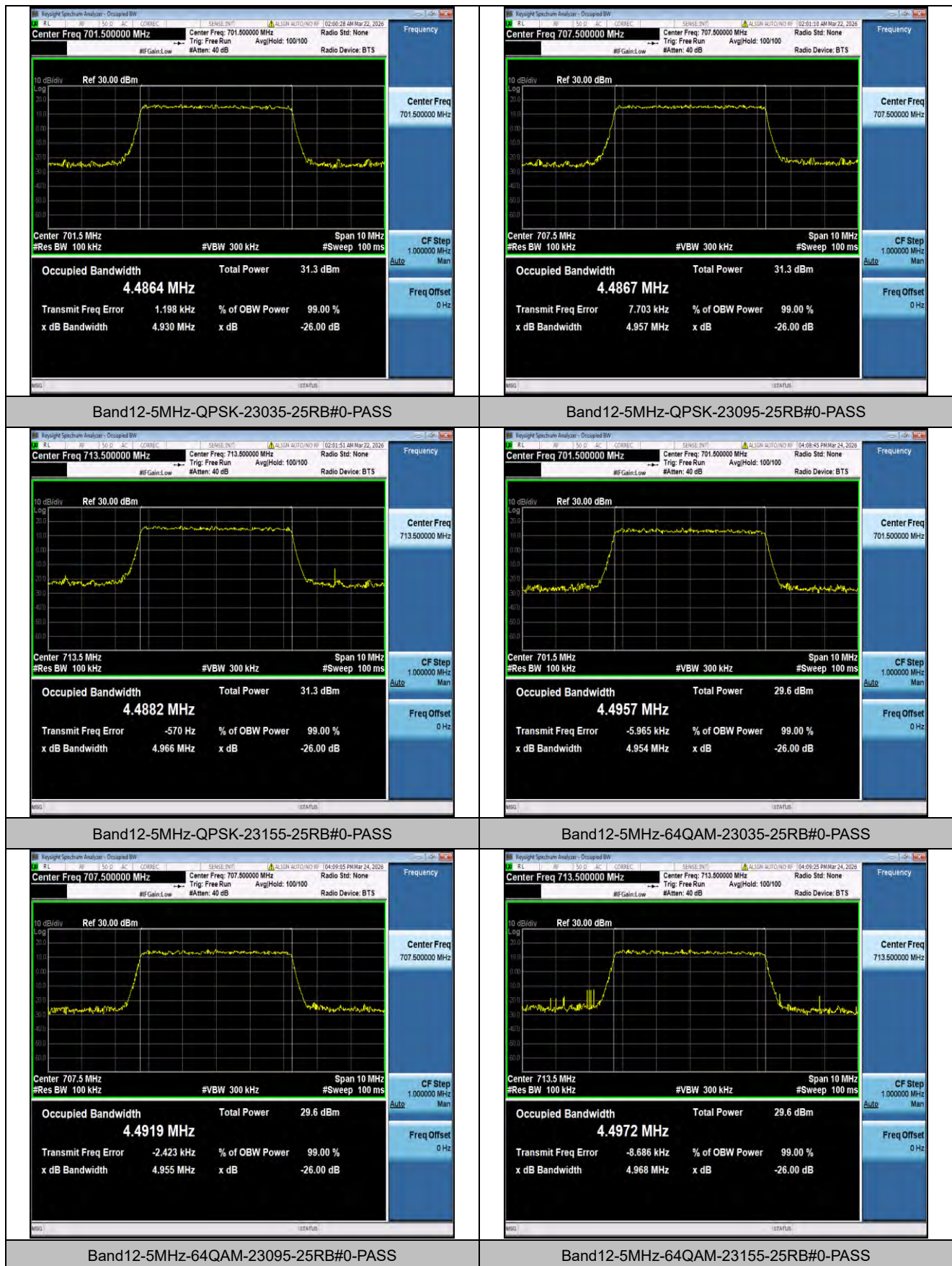
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0862	1.263	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0868	1.271	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0871	1.265	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	1.0952	1.296	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	1.0961	1.286	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	1.0969	1.303	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0912	1.288	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0918	1.290	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0935	1.283	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6941	2.925	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.6900	2.897	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6955	2.934	PASS
Band12	3MHz	64QAM	23025	15RB#0	2.6880	2.920	PASS
Band12	3MHz	64QAM	23095	15RB#0	2.6868	2.928	PASS
Band12	3MHz	64QAM	23165	15RB#0	2.6900	2.910	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6916	2.936	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6854	2.929	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6884	2.932	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.4864	4.930	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.4867	4.957	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.4882	4.966	PASS
Band12	5MHz	64QAM	23035	25RB#0	4.4957	4.954	PASS
Band12	5MHz	64QAM	23095	25RB#0	4.4919	4.955	PASS
Band12	5MHz	64QAM	23155	25RB#0	4.4972	4.968	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.4839	4.953	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.4860	4.967	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.4896	4.966	PASS
Band12	10MHz	QPSK	23060	50RB#0	9.0007	9.806	PASS
Band12	10MHz	QPSK	23095	50RB#0	9.0077	9.803	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9965	9.778	PASS
Band12	10MHz	64QAM	23060	50RB#0	8.9981	9.896	PASS
Band12	10MHz	64QAM	23095	50RB#0	8.9818	9.823	PASS
Band12	10MHz	64QAM	23130	50RB#0	8.9796	9.845	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9795	9.746	PASS
Band12	10MHz	16QAM	23095	50RB#0	8.9532	9.790	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9545	9.790	PASS

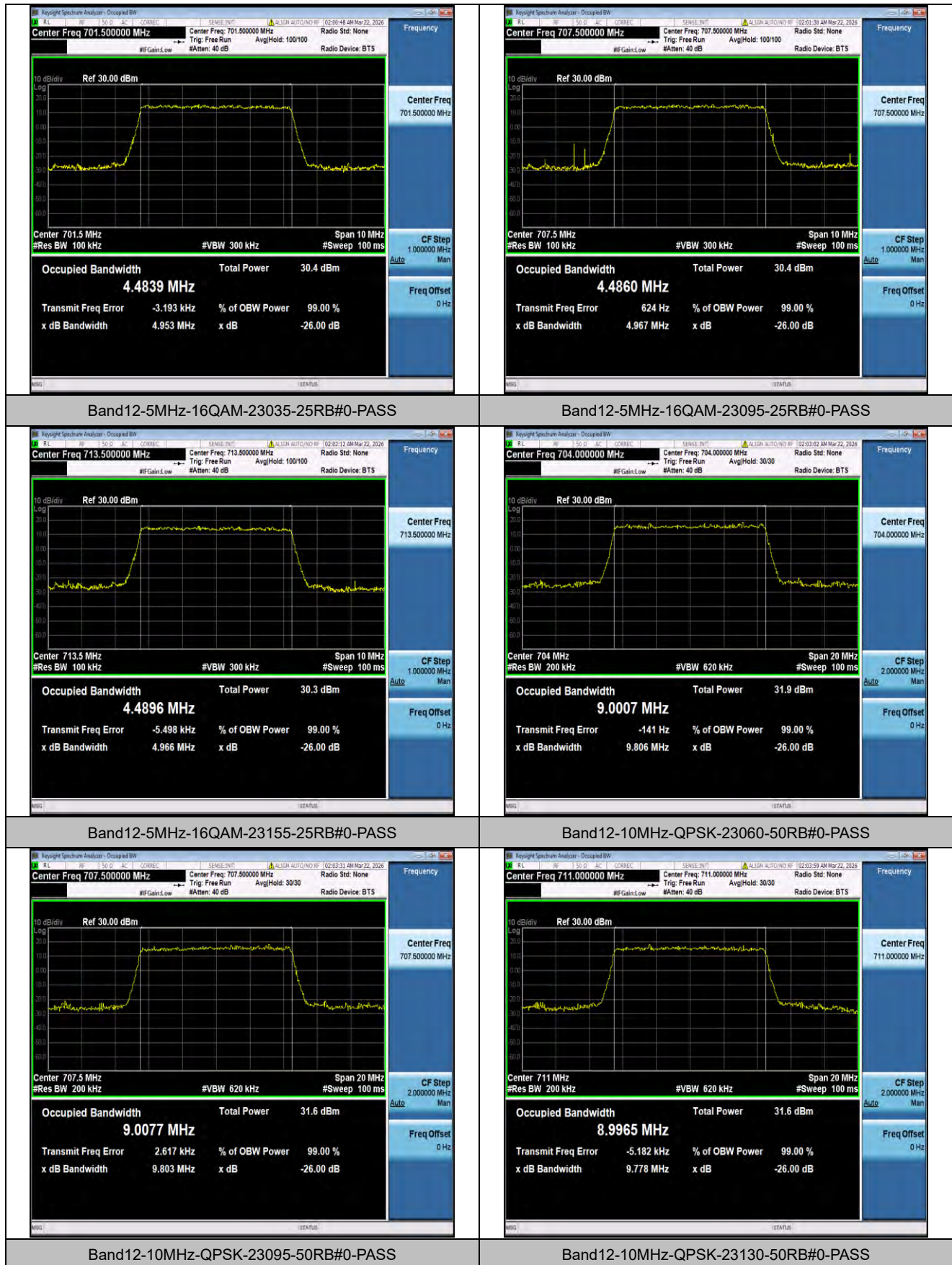
Test Graphs

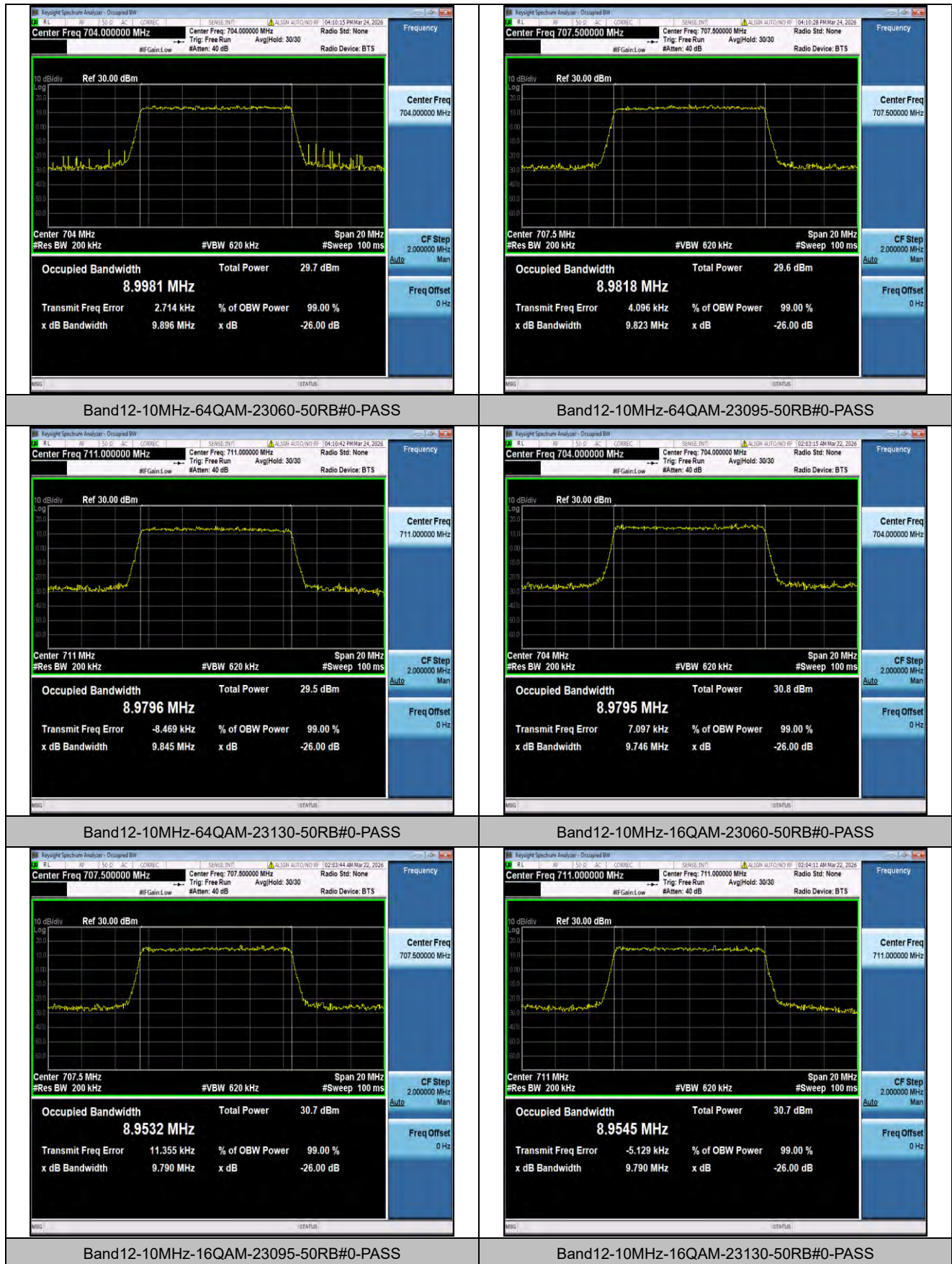






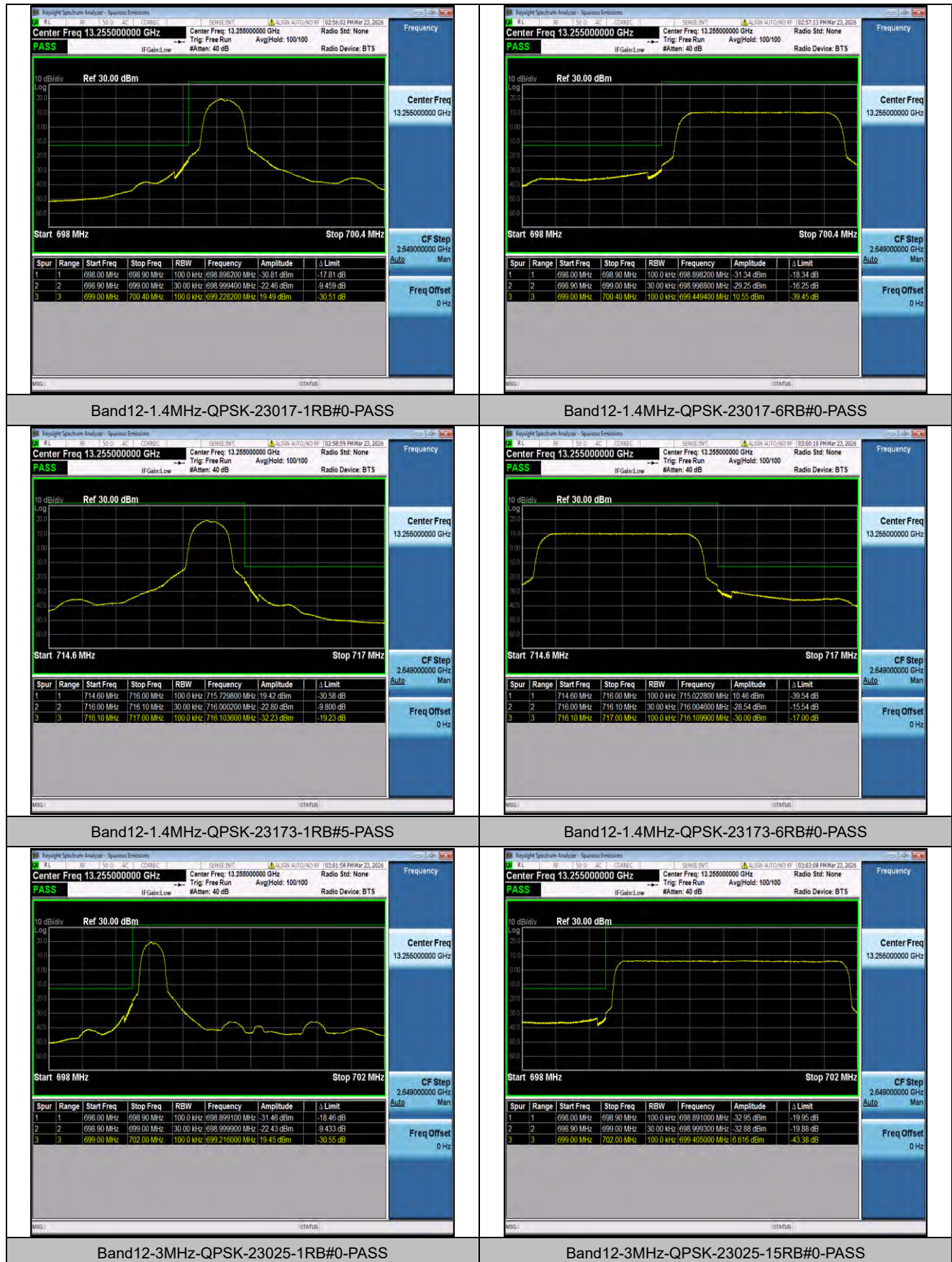


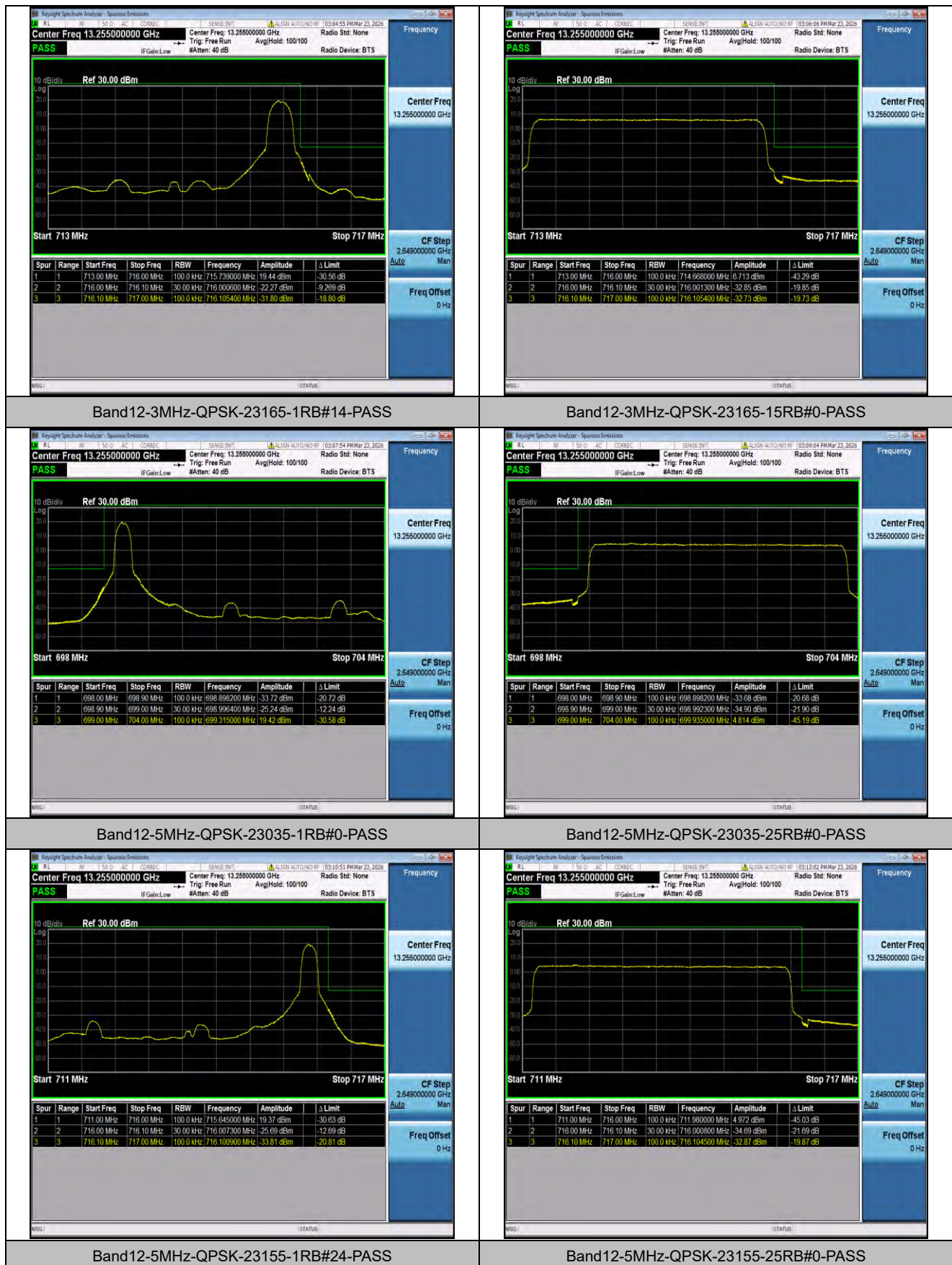


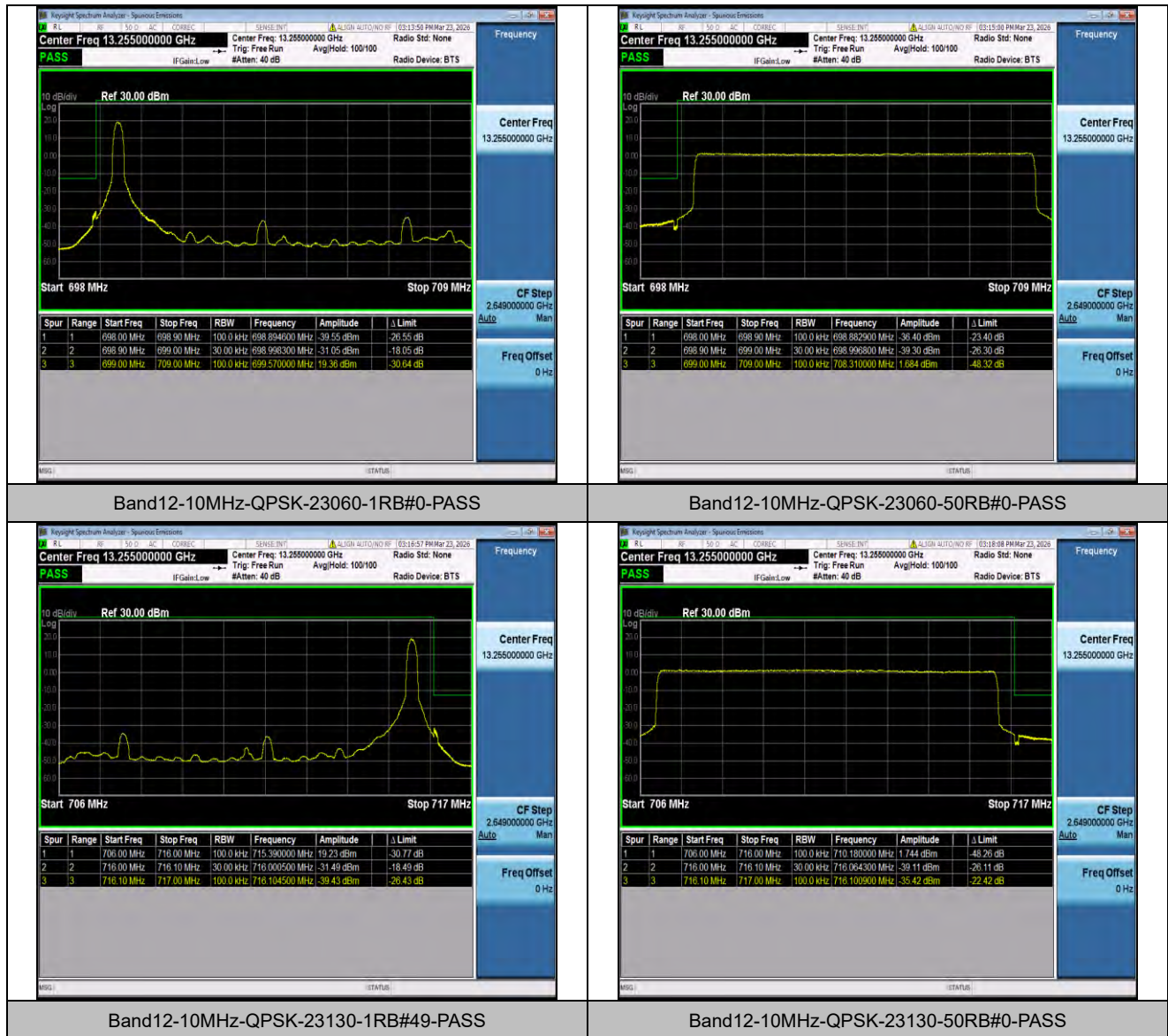


Band Edge

Test Graphs

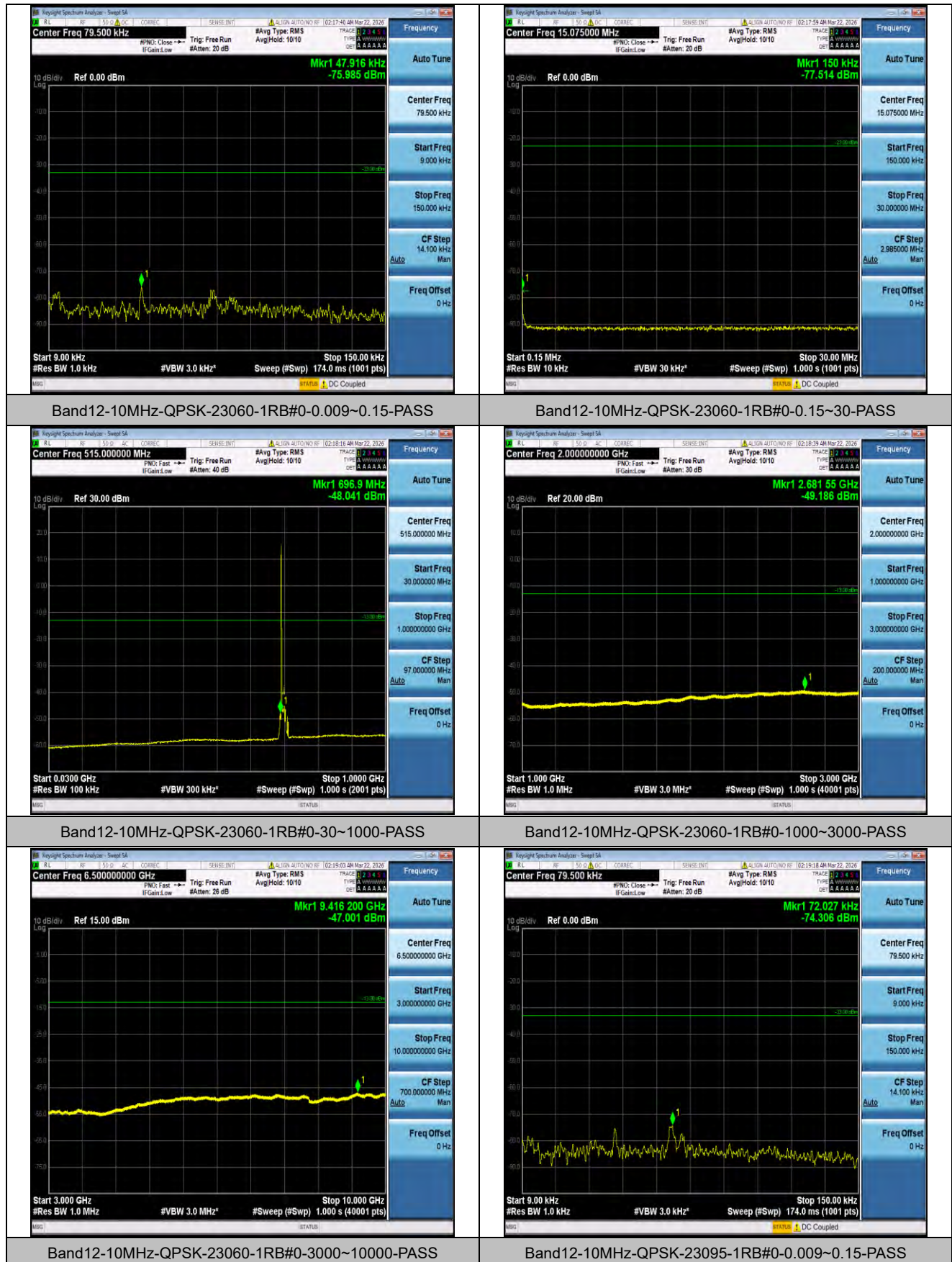


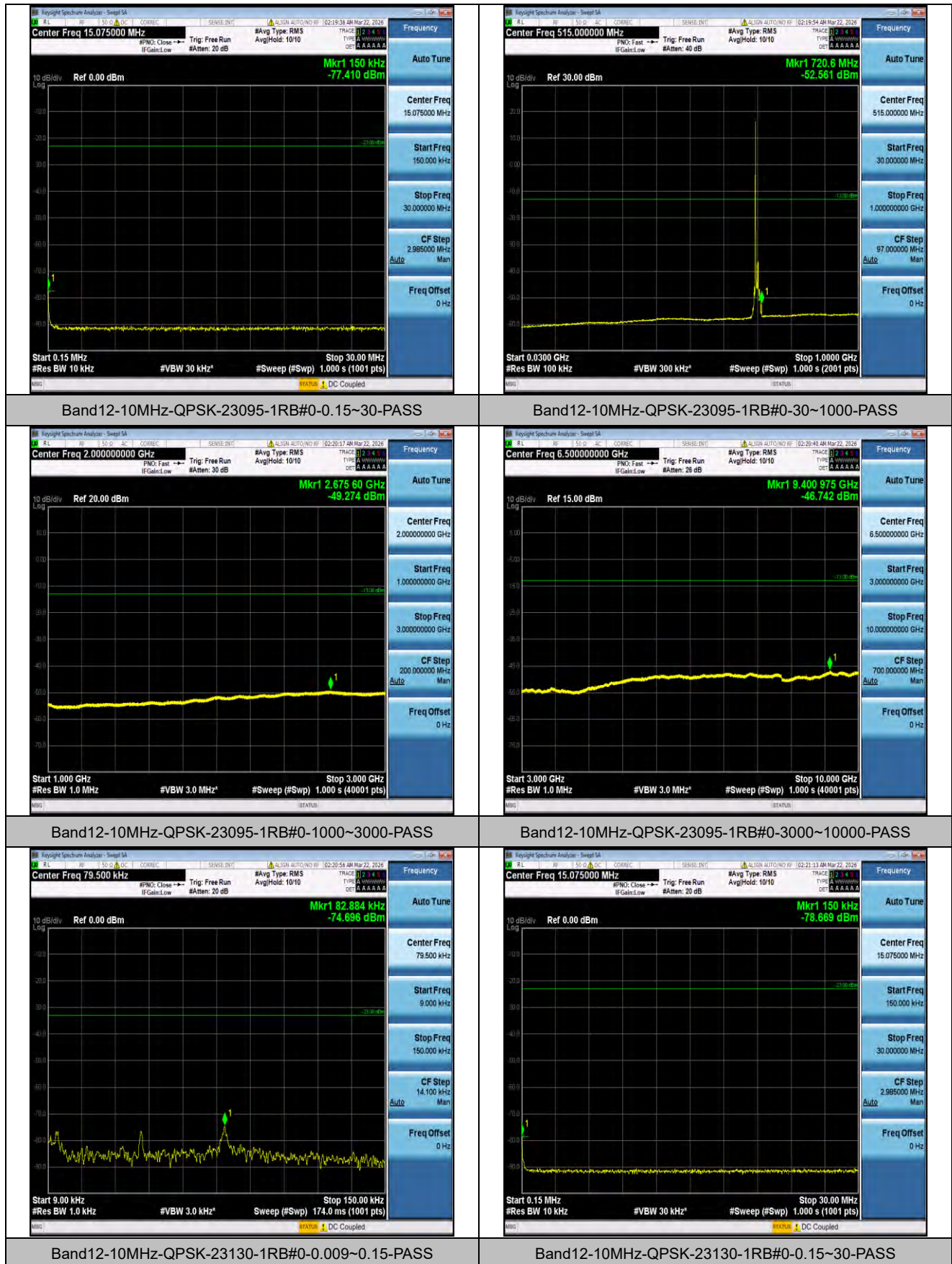


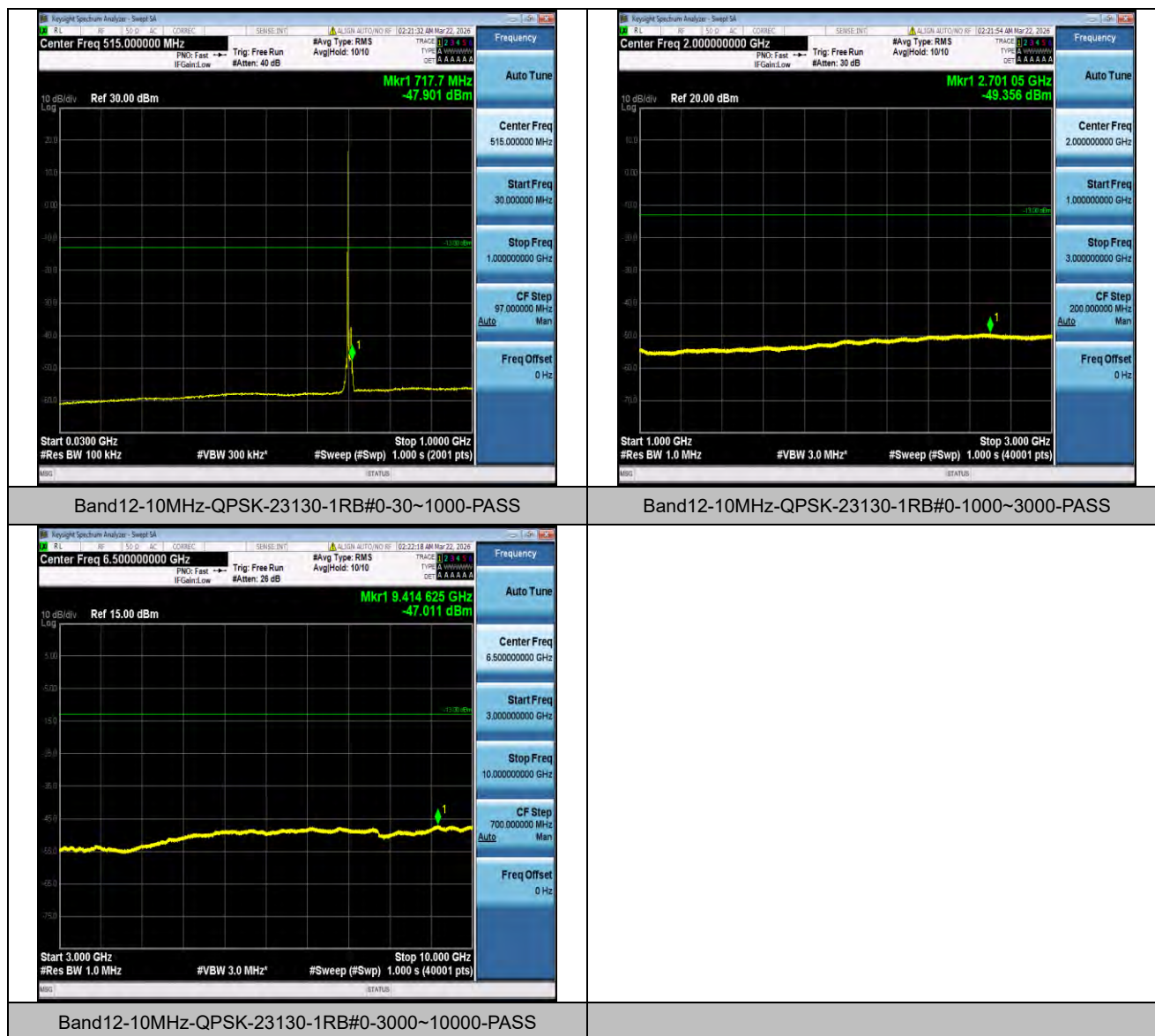


Conducted Spurious Emission

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	50RB#0	VN	NT	-6.40	-0.009046	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	-8.40	-0.011873	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-7.40	-0.010459	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	0.70	0.000989	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	3.10	0.004382	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-10	-5.10	-0.007208	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	6.00	0.008481	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-6.30	-0.008905	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	-3.80	-0.005371	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	0.50	0.000707	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	2.40	0.003392	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	-3.80	-0.005371	PASS

~The End~