

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	21.61	18.04	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	21.73	18.16	34.77	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	21.57	18	34.77	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	20.61	17.04	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	21.58	18.01	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	21.67	18.1	34.77	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	21.63	18.06	34.77	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	20.6	17.03	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	21.49	17.92	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	21.65	18.08	34.77	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	21.49	17.92	34.77	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	20.52	16.95	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	20.71	17.14	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	21.03	17.46	34.77	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	20.69	17.12	34.77	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	19.65	16.08	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	20.73	17.16	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	21.16	17.59	34.77	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	20.69	17.12	34.77	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	19.52	15.95	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	20.41	16.84	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	21.02	17.45	34.77	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	20.39	16.82	34.77	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	19.48	15.91	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#0	20.88	17.31	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#2	20.86	17.29	34.77	PASS
Band12	1.4MHz	64QAM	23017	1RB#5	20.69	17.12	34.77	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	19.8	16.23	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#0	20.63	17.06	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#2	20.74	17.17	34.77	PASS
Band12	1.4MHz	64QAM	23095	1RB#5	20.65	17.08	34.77	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	19.56	15.99	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#0	20.56	16.99	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#2	20.6	17.03	34.77	PASS
Band12	1.4MHz	64QAM	23173	1RB#5	20.51	16.94	34.77	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	19.41	15.84	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#0	21.56	17.99	34.77	PASS

Band12	3MHz	QPSK	23025	1RB#8	21.63	18.06	34.77	PASS
Band12	3MHz	QPSK	23025	1RB#14	21.64	18.07	34.77	PASS
Band12	3MHz	QPSK	23025	15RB#0	20.6	17.03	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#0	21.67	18.1	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#8	21.58	18.01	34.77	PASS
Band12	3MHz	QPSK	23095	1RB#14	21.62	18.05	34.77	PASS
Band12	3MHz	QPSK	23095	15RB#0	20.61	17.04	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#0	21.62	18.05	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#8	21.57	18	34.77	PASS
Band12	3MHz	QPSK	23165	1RB#14	21.57	18	34.77	PASS
Band12	3MHz	QPSK	23165	15RB#0	20.51	16.94	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#0	20.84	17.27	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#8	20.95	17.38	34.77	PASS
Band12	3MHz	16QAM	23025	1RB#14	20.81	17.24	34.77	PASS
Band12	3MHz	16QAM	23025	15RB#0	19.6	16.03	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#0	20.83	17.26	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#8	21.05	17.48	34.77	PASS
Band12	3MHz	16QAM	23095	1RB#14	20.73	17.16	34.77	PASS
Band12	3MHz	16QAM	23095	15RB#0	19.58	16.01	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#0	20.5	16.93	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#8	20.94	17.37	34.77	PASS
Band12	3MHz	16QAM	23165	1RB#14	20.44	16.87	34.77	PASS
Band12	3MHz	16QAM	23165	15RB#0	19.46	15.89	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#0	20.84	17.27	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#8	20.76	17.19	34.77	PASS
Band12	3MHz	64QAM	23025	1RB#14	20.8	17.23	34.77	PASS
Band12	3MHz	64QAM	23025	15RB#0	19.73	16.16	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#0	20.92	17.35	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#8	20.6	17.03	34.77	PASS
Band12	3MHz	64QAM	23095	1RB#14	20.74	17.17	34.77	PASS
Band12	3MHz	64QAM	23095	15RB#0	19.61	16.04	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#0	20.65	17.08	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#8	20.58	17.01	34.77	PASS
Band12	3MHz	64QAM	23165	1RB#14	20.43	16.86	34.77	PASS
Band12	3MHz	64QAM	23165	15RB#0	19.5	15.93	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#0	21.58	18.01	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#12	21.76	18.19	34.77	PASS
Band12	5MHz	QPSK	23035	1RB#24	21.62	18.05	34.77	PASS
Band12	5MHz	QPSK	23035	25RB#0	20.55	16.98	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#0	21.57	18	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#12	21.71	18.14	34.77	PASS
Band12	5MHz	QPSK	23095	1RB#24	21.54	17.97	34.77	PASS
Band12	5MHz	QPSK	23095	25RB#0	20.68	17.11	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#0	21.61	18.04	34.77	PASS
Band12	5MHz	QPSK	23155	1RB#12	21.93	18.36	34.77	PASS

Band12	5MHz	QPSK	23155	1RB#24	21.55	17.98	34.77	PASS
Band12	5MHz	QPSK	23155	25RB#0	20.57	17	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#0	20.61	17.04	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#12	20.98	17.41	34.77	PASS
Band12	5MHz	16QAM	23035	1RB#24	20.62	17.05	34.77	PASS
Band12	5MHz	16QAM	23035	25RB#0	19.57	16	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#0	20.83	17.26	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#12	21.23	17.66	34.77	PASS
Band12	5MHz	16QAM	23095	1RB#24	20.76	17.19	34.77	PASS
Band12	5MHz	16QAM	23095	25RB#0	19.66	16.09	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#0	20.57	17	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#12	21.12	17.55	34.77	PASS
Band12	5MHz	16QAM	23155	1RB#24	20.58	17.01	34.77	PASS
Band12	5MHz	16QAM	23155	25RB#0	19.58	16.01	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#0	20.89	17.32	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#12	20.88	17.31	34.77	PASS
Band12	5MHz	64QAM	23035	1RB#24	20.69	17.12	34.77	PASS
Band12	5MHz	64QAM	23035	25RB#0	19.61	16.04	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#0	20.54	16.97	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#12	21.1	17.53	34.77	PASS
Band12	5MHz	64QAM	23095	1RB#24	20.43	16.86	34.77	PASS
Band12	5MHz	64QAM	23095	25RB#0	19.58	16.01	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#0	20.63	17.06	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#12	20.87	17.3	34.77	PASS
Band12	5MHz	64QAM	23155	1RB#24	20.5	16.93	34.77	PASS
Band12	5MHz	64QAM	23155	25RB#0	19.4	15.83	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#0	21.59	18.02	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#24	21.83	18.26	34.77	PASS
Band12	10MHz	QPSK	23060	1RB#49	21.66	18.09	34.77	PASS
Band12	10MHz	QPSK	23060	50RB#0	20.58	17.01	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#0	21.68	18.11	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#24	21.71	18.14	34.77	PASS
Band12	10MHz	QPSK	23095	1RB#49	21.57	18	34.77	PASS
Band12	10MHz	QPSK	23095	50RB#0	20.82	17.25	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#0	21.7	18.13	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#24	21.8	18.23	34.77	PASS
Band12	10MHz	QPSK	23130	1RB#49	21.63	18.06	34.77	PASS
Band12	10MHz	QPSK	23130	50RB#0	20.51	16.94	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#0	20.76	17.19	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#24	21.12	17.55	34.77	PASS
Band12	10MHz	16QAM	23060	1RB#49	20.85	17.28	34.77	PASS
Band12	10MHz	16QAM	23060	50RB#0	19.53	15.96	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#0	20.78	17.21	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#24	21.28	17.71	34.77	PASS
Band12	10MHz	16QAM	23095	1RB#49	20.7	17.13	34.77	PASS

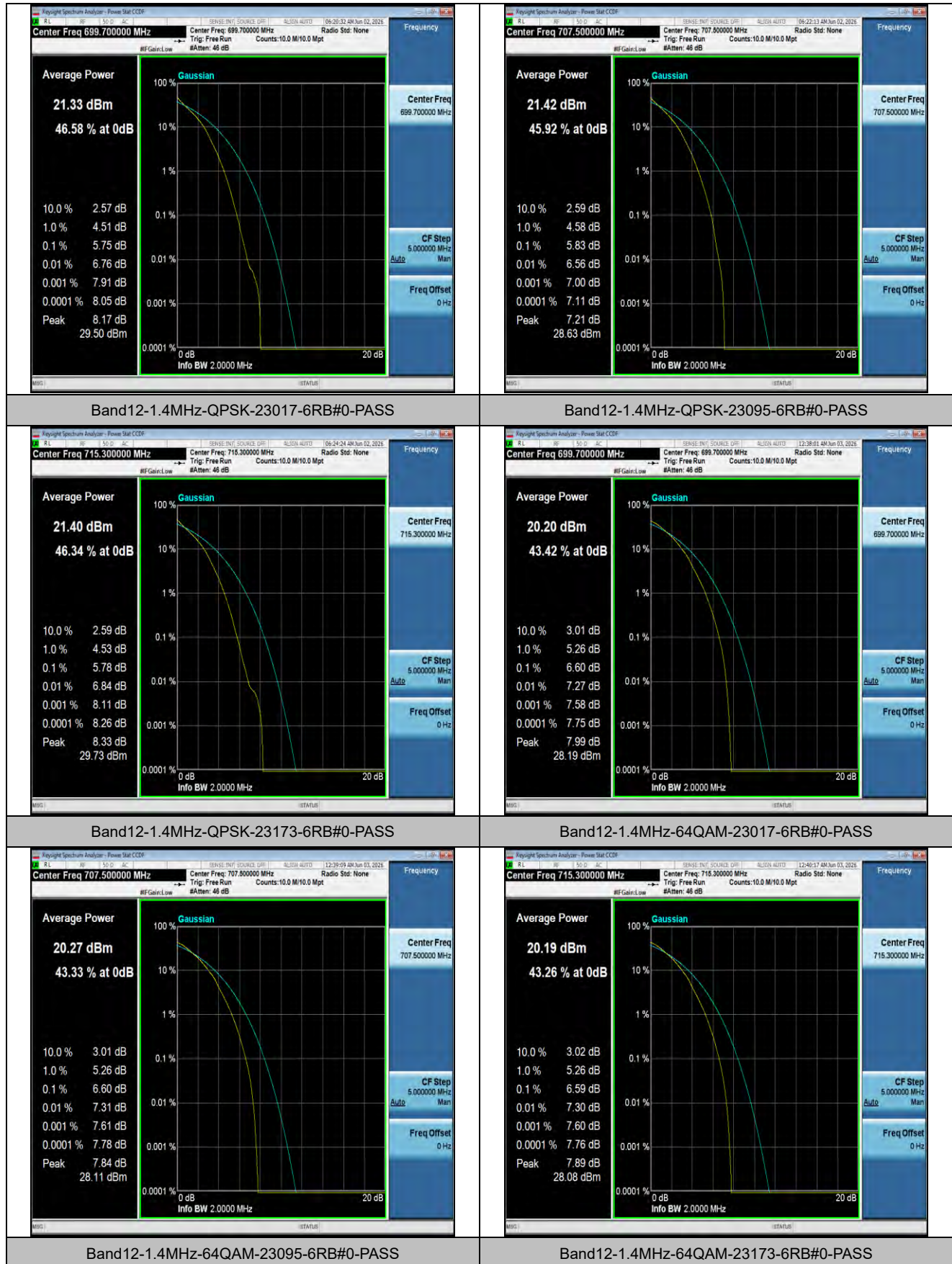
Band12	10MHz	16QAM	23095	50RB#0	19.87	16.3	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#0	20.61	17.04	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#24	21.12	17.55	34.77	PASS
Band12	10MHz	16QAM	23130	1RB#49	20.51	16.94	34.77	PASS
Band12	10MHz	16QAM	23130	50RB#0	19.55	15.98	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#0	21.09	17.52	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#24	20.95	17.38	34.77	PASS
Band12	10MHz	64QAM	23060	1RB#49	20.69	17.12	34.77	PASS
Band12	10MHz	64QAM	23060	50RB#0	19.68	16.11	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#0	20.9	17.33	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#24	20.95	17.38	34.77	PASS
Band12	10MHz	64QAM	23095	1RB#49	20.54	16.97	34.77	PASS
Band12	10MHz	64QAM	23095	50RB#0	19.74	16.17	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#0	20.86	17.29	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#24	20.65	17.08	34.77	PASS
Band12	10MHz	64QAM	23130	1RB#49	20.69	17.12	34.77	PASS
Band12	10MHz	64QAM	23130	50RB#0	19.55	15.98	34.77	PASS

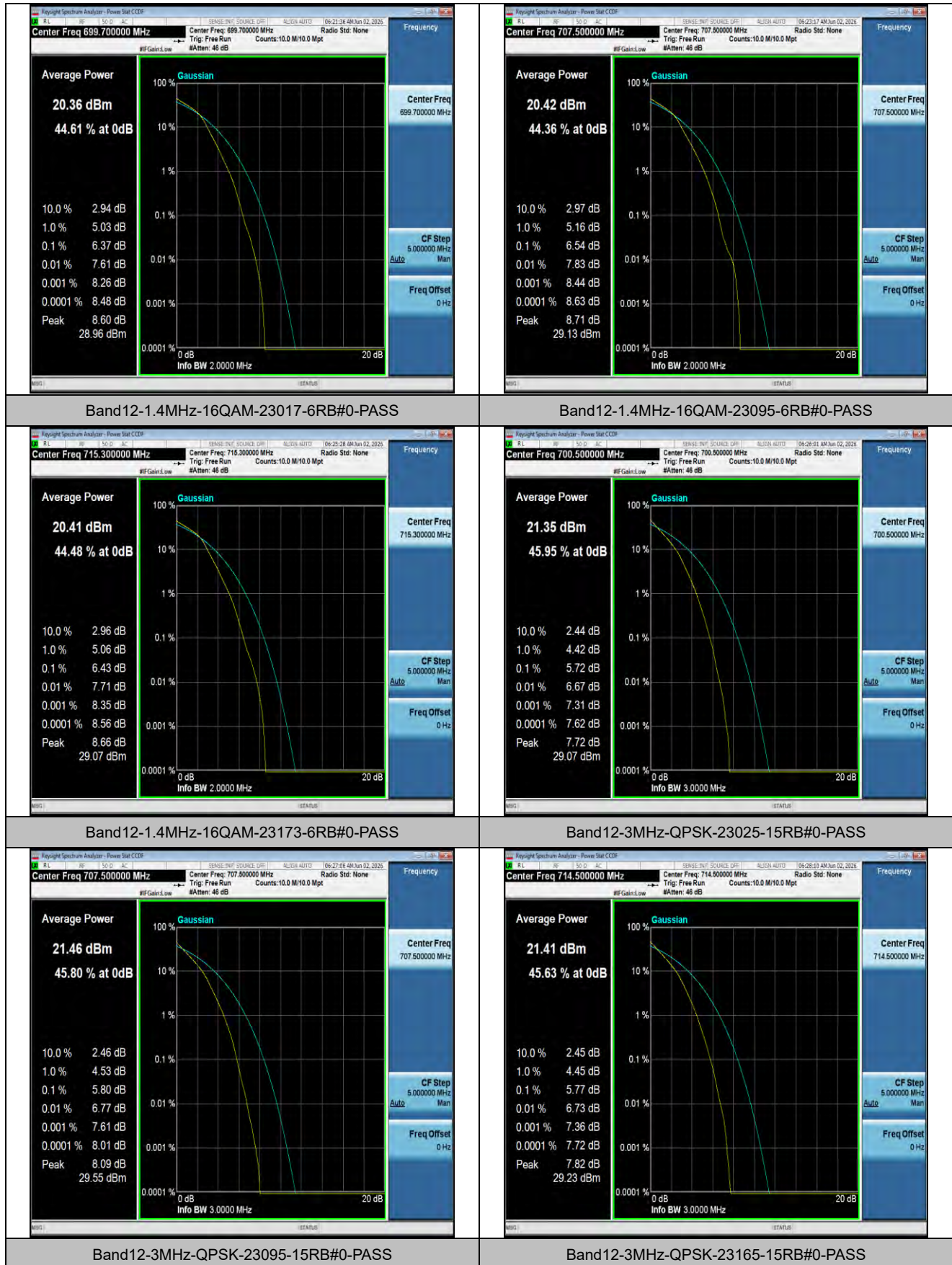
Peak-to-Average Ratio(CCDF)

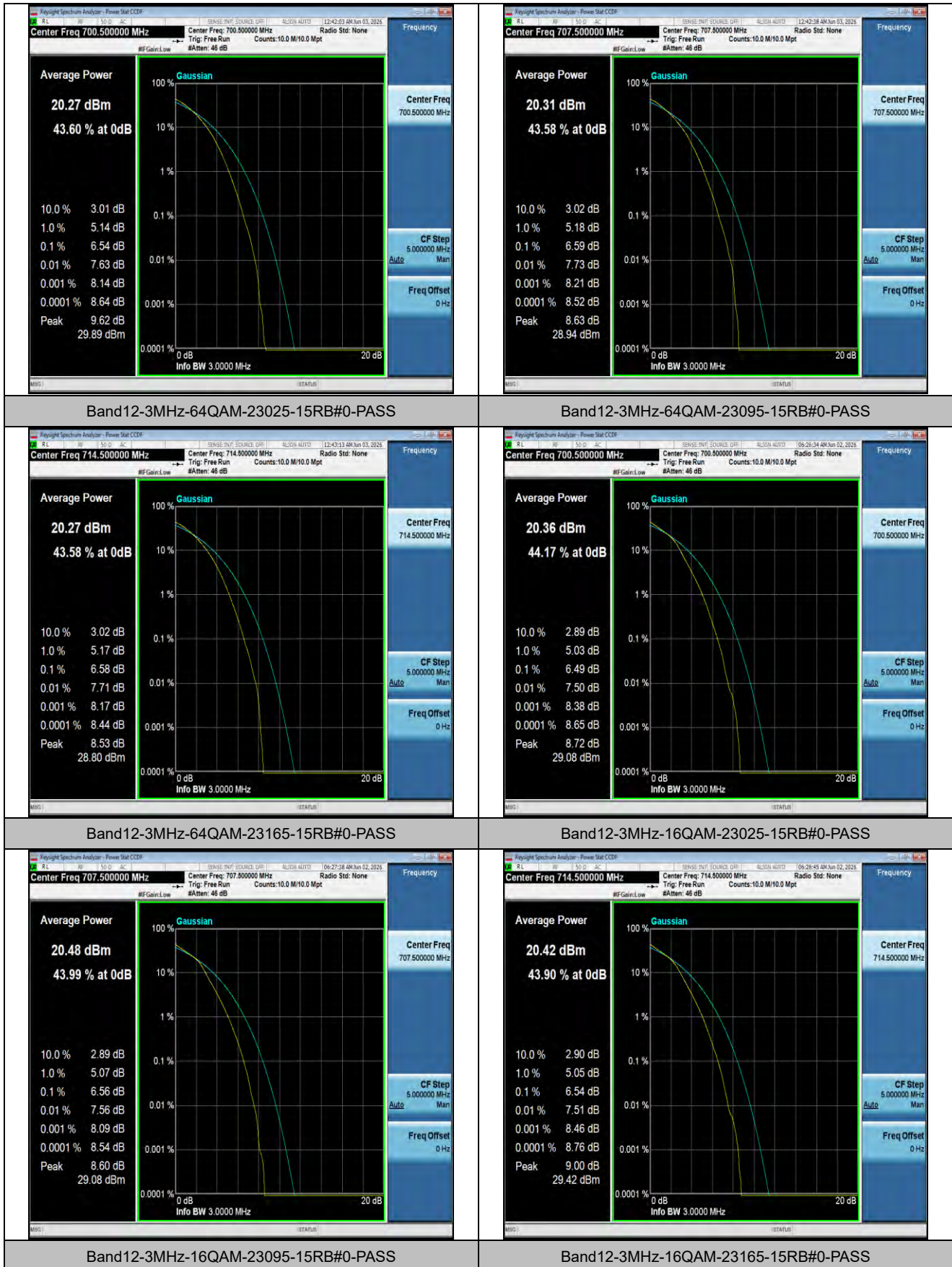
Test Result

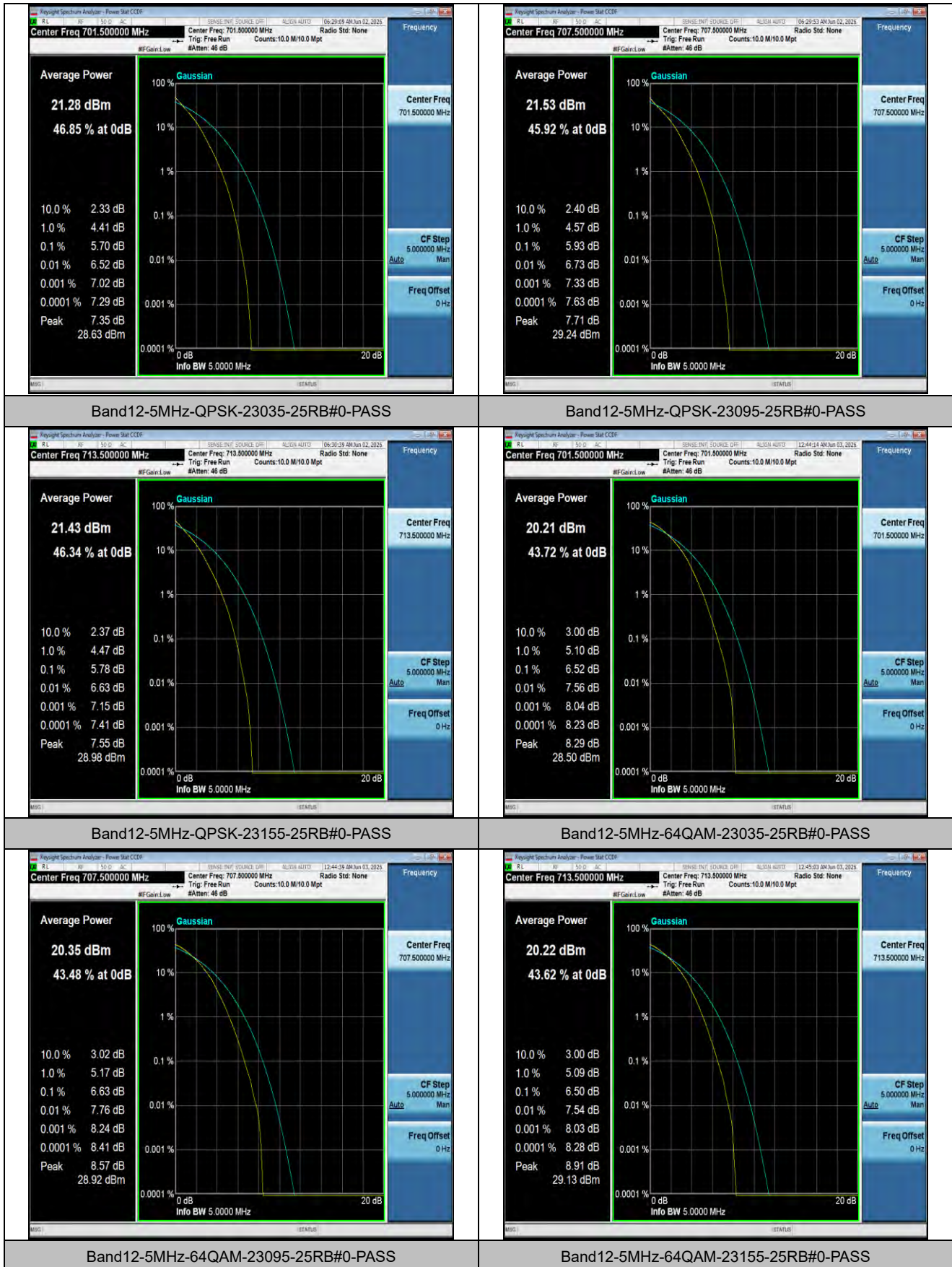
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	5.75	13	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	5.83	13	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	5.78	13	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	6.60	13	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	6.60	13	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	6.59	13	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	6.37	13	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	6.54	13	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	6.43	13	PASS
Band12	3MHz	QPSK	23025	15RB#0	5.72	13	PASS
Band12	3MHz	QPSK	23095	15RB#0	5.80	13	PASS
Band12	3MHz	QPSK	23165	15RB#0	5.77	13	PASS
Band12	3MHz	64QAM	23025	15RB#0	6.54	13	PASS
Band12	3MHz	64QAM	23095	15RB#0	6.59	13	PASS
Band12	3MHz	64QAM	23165	15RB#0	6.58	13	PASS
Band12	3MHz	16QAM	23025	15RB#0	6.49	13	PASS
Band12	3MHz	16QAM	23095	15RB#0	6.56	13	PASS
Band12	3MHz	16QAM	23165	15RB#0	6.54	13	PASS
Band12	5MHz	QPSK	23035	25RB#0	5.70	13	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.93	13	PASS
Band12	5MHz	QPSK	23155	25RB#0	5.78	13	PASS
Band12	5MHz	64QAM	23035	25RB#0	6.52	13	PASS
Band12	5MHz	64QAM	23095	25RB#0	6.63	13	PASS
Band12	5MHz	64QAM	23155	25RB#0	6.50	13	PASS
Band12	5MHz	16QAM	23035	25RB#0	6.36	13	PASS
Band12	5MHz	16QAM	23095	25RB#0	6.57	13	PASS
Band12	5MHz	16QAM	23155	25RB#0	6.40	13	PASS
Band12	10MHz	QPSK	23060	50RB#0	5.71	13	PASS
Band12	10MHz	QPSK	23095	50RB#0	6.03	13	PASS
Band12	10MHz	QPSK	23130	50RB#0	5.71	13	PASS
Band12	10MHz	64QAM	23060	50RB#0	6.41	13	PASS
Band12	10MHz	64QAM	23095	50RB#0	6.70	13	PASS
Band12	10MHz	64QAM	23130	50RB#0	6.57	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.43	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.68	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.44	13	PASS

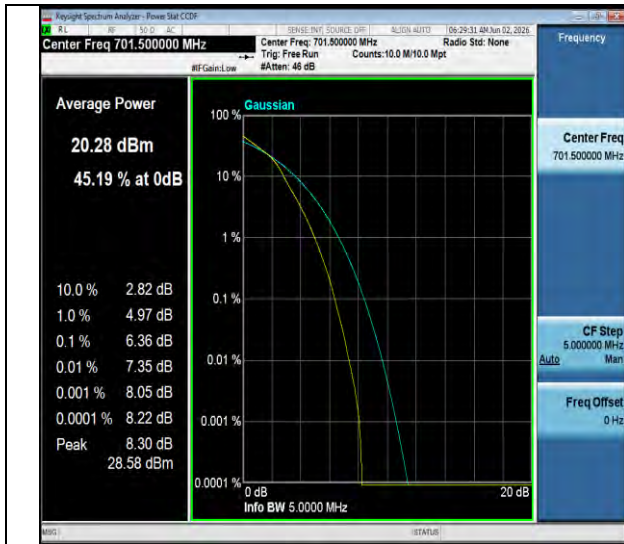
Test Graphs



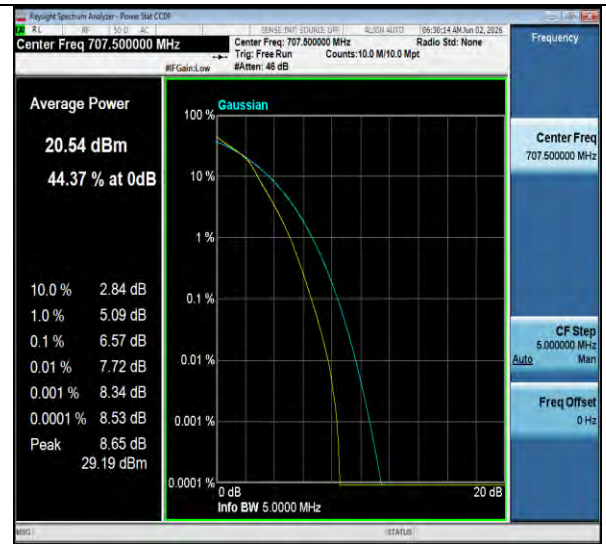




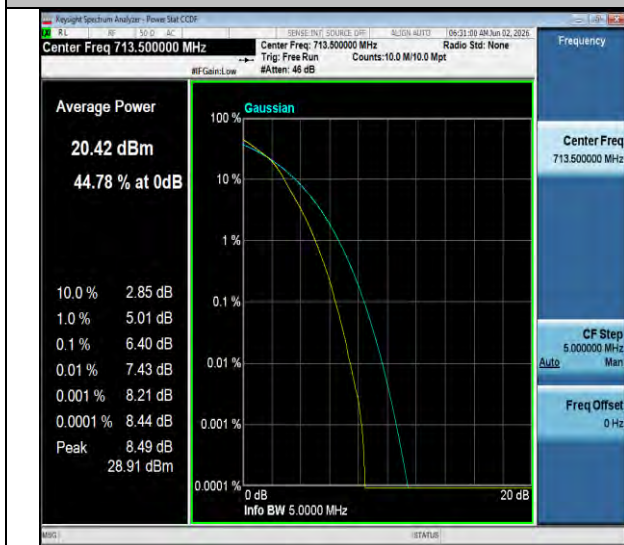




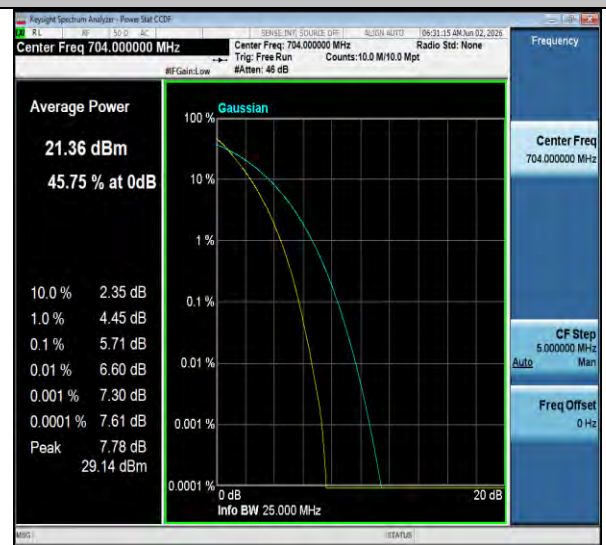
Band12-5MHz-16QAM-23035-25RB#0-PASS



Band12-5MHz-16QAM-23095-25RB#0-PASS



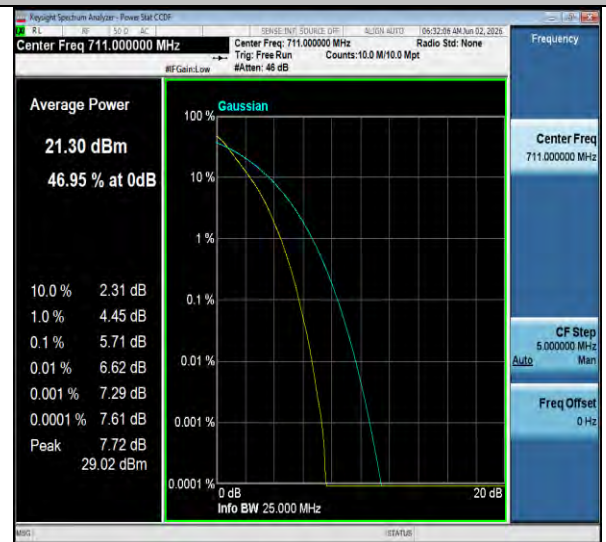
Band12-5MHz-16QAM-23155-25RB#0-PASS



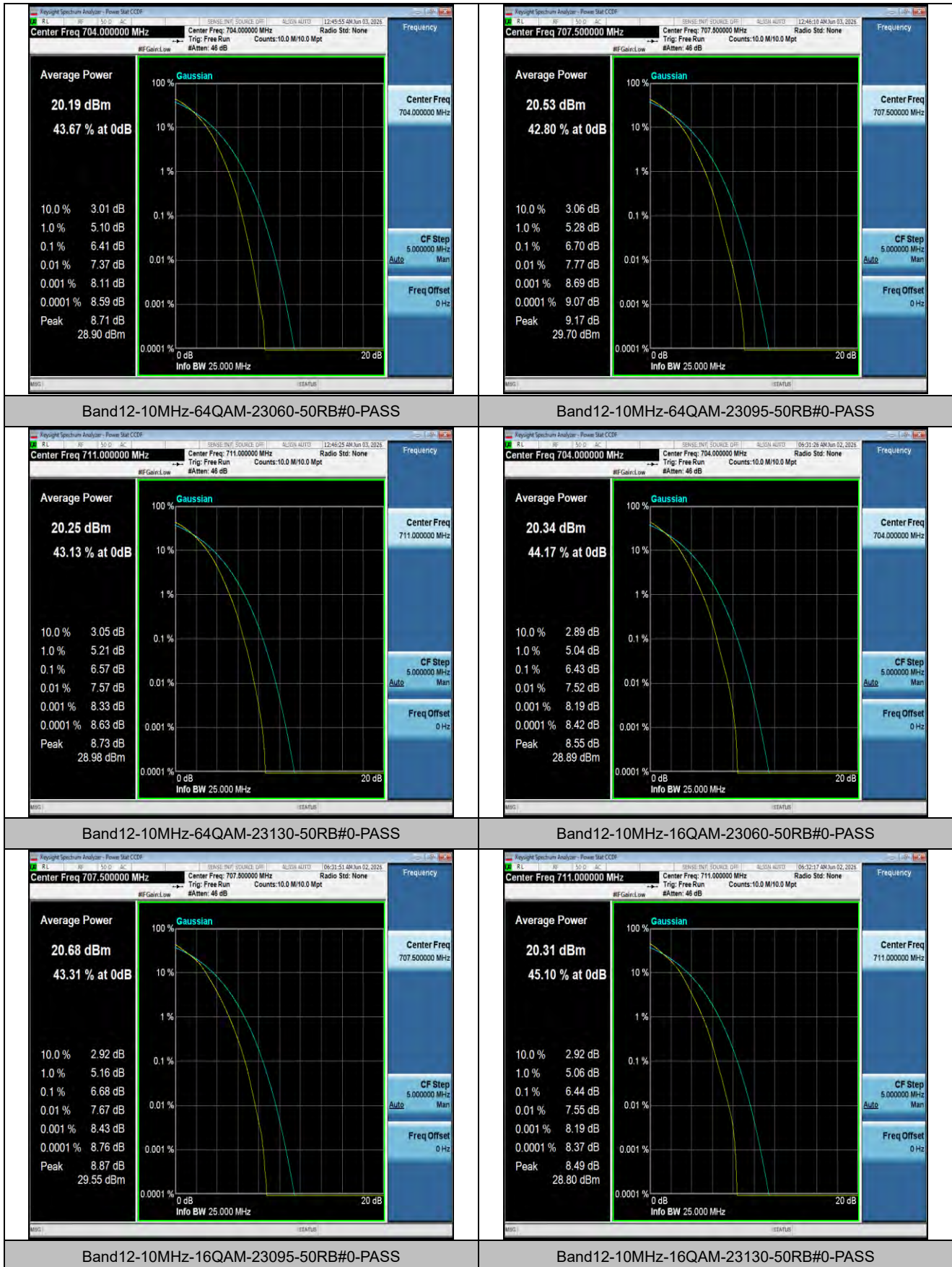
Band12-10MHz-QPSK-23060-50RB#0-PASS



Band12-10MHz-QPSK-23095-50RB#0-PASS



Band12-10MHz-QPSK-23130-50RB#0-PASS

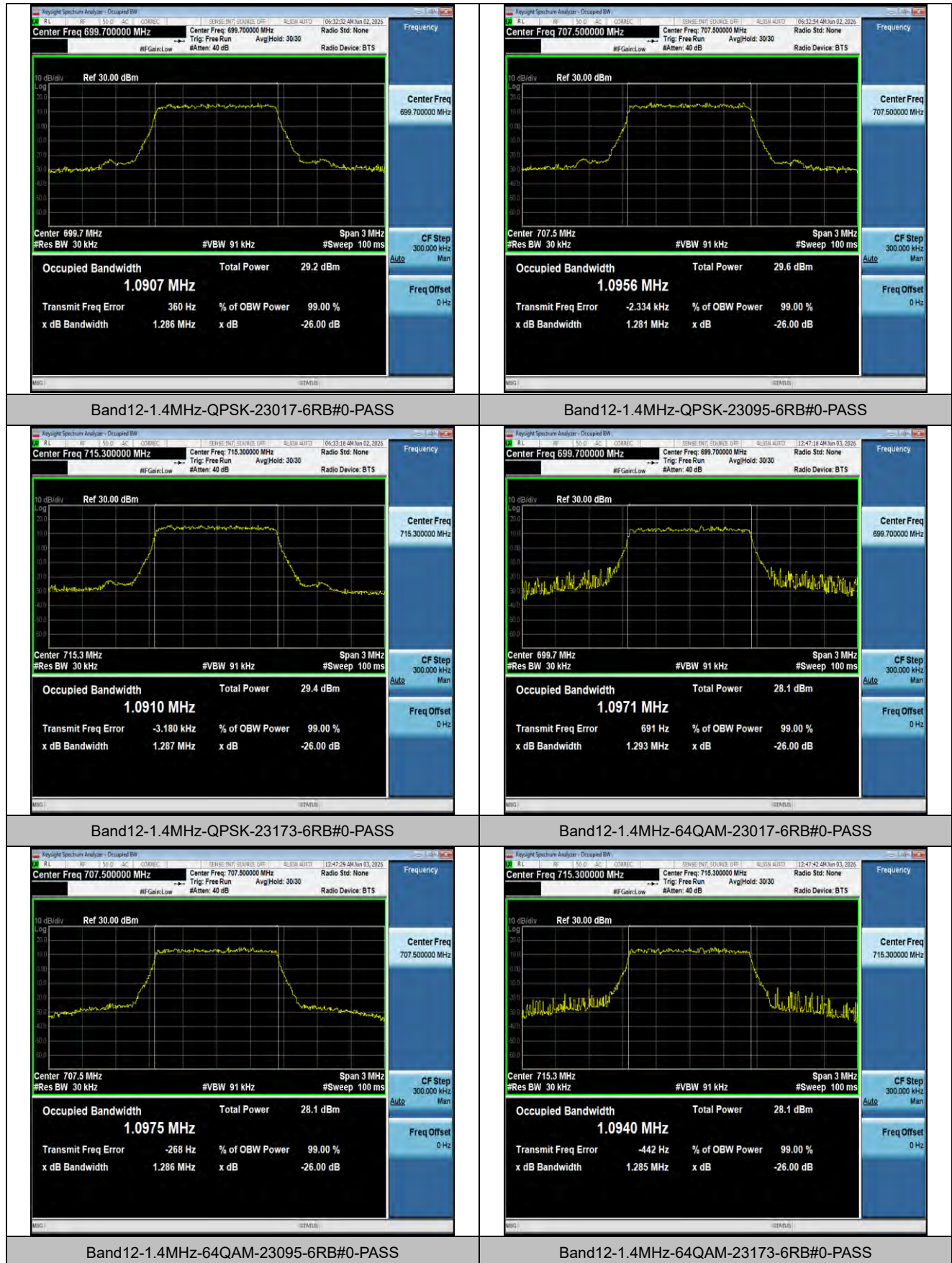


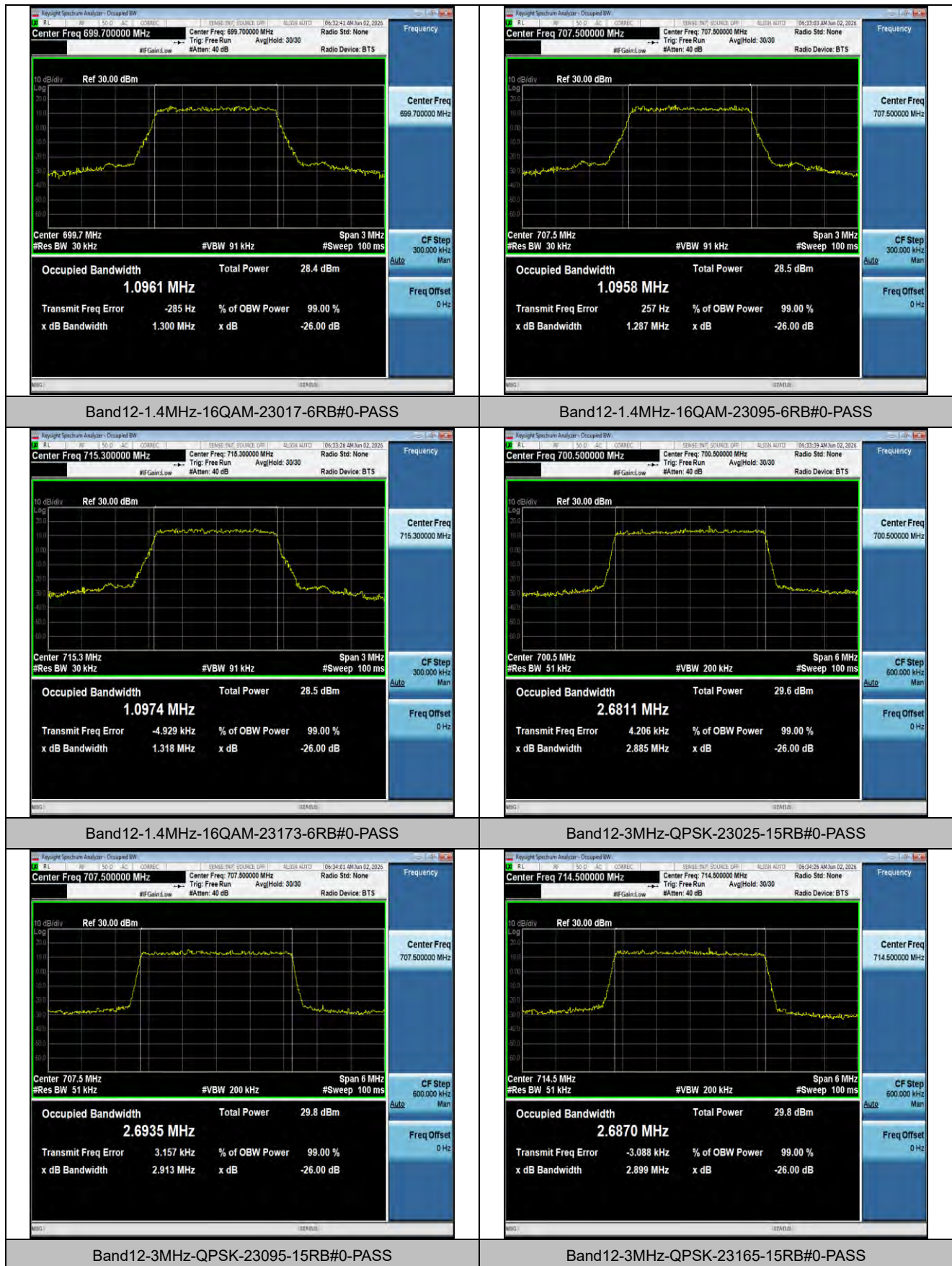
26dB Bandwidth and Occupied Bandwidth

Test Result

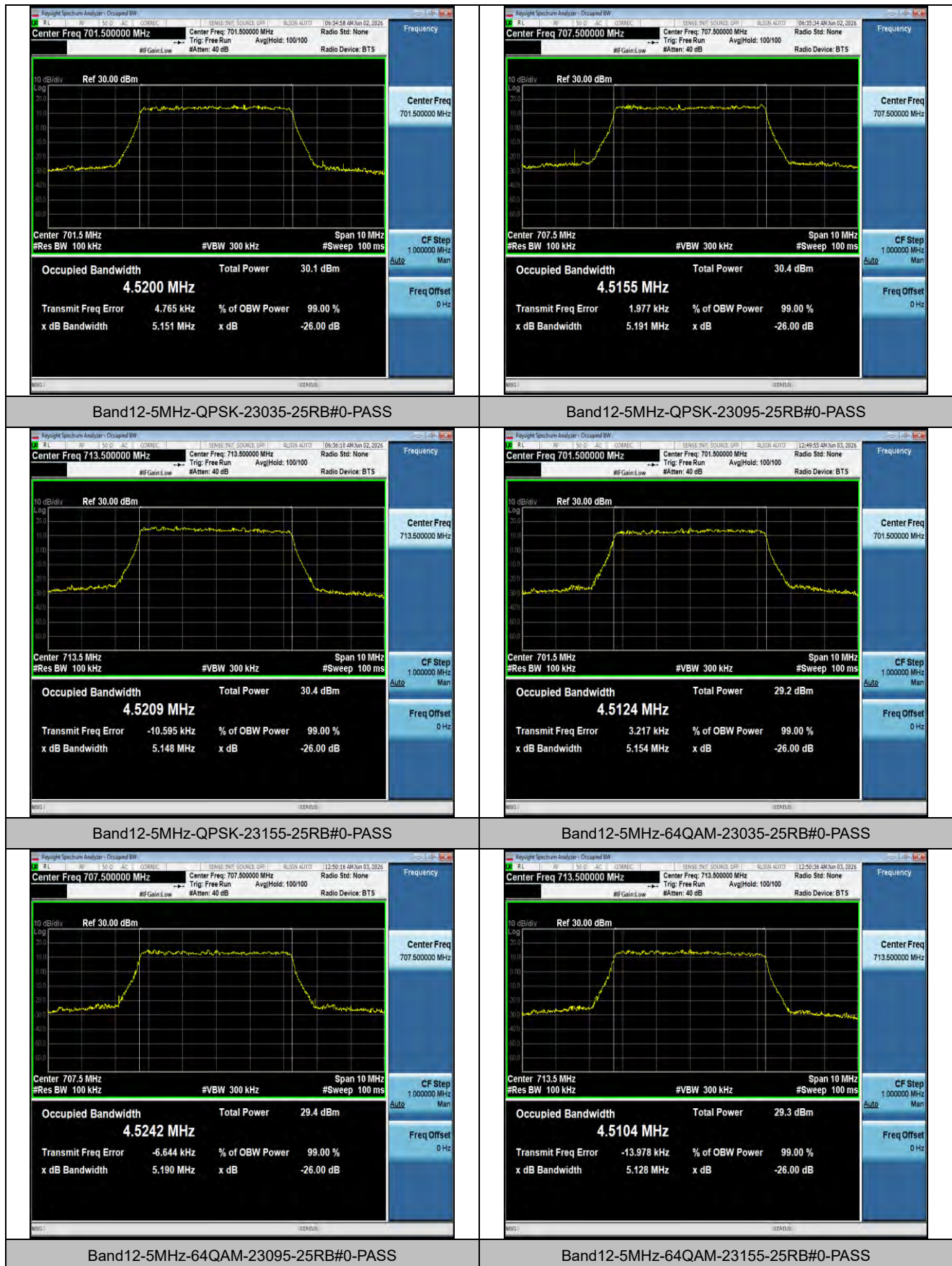
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	1.0907	1.286	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.0956	1.281	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	1.0910	1.287	PASS
Band12	1.4MHz	64QAM	23017	6RB#0	1.0971	1.293	PASS
Band12	1.4MHz	64QAM	23095	6RB#0	1.0975	1.286	PASS
Band12	1.4MHz	64QAM	23173	6RB#0	1.0940	1.285	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	1.0961	1.300	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.0958	1.287	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	1.0974	1.318	PASS
Band12	3MHz	QPSK	23025	15RB#0	2.6811	2.885	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.6935	2.913	PASS
Band12	3MHz	QPSK	23165	15RB#0	2.6870	2.899	PASS
Band12	3MHz	64QAM	23025	15RB#0	2.6805	2.898	PASS
Band12	3MHz	64QAM	23095	15RB#0	2.6867	2.887	PASS
Band12	3MHz	64QAM	23165	15RB#0	2.6798	2.890	PASS
Band12	3MHz	16QAM	23025	15RB#0	2.6798	2.933	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.6858	2.904	PASS
Band12	3MHz	16QAM	23165	15RB#0	2.6805	2.900	PASS
Band12	5MHz	QPSK	23035	25RB#0	4.5200	5.151	PASS
Band12	5MHz	QPSK	23095	25RB#0	4.5155	5.191	PASS
Band12	5MHz	QPSK	23155	25RB#0	4.5209	5.148	PASS
Band12	5MHz	64QAM	23035	25RB#0	4.5124	5.154	PASS
Band12	5MHz	64QAM	23095	25RB#0	4.5242	5.190	PASS
Band12	5MHz	64QAM	23155	25RB#0	4.5104	5.128	PASS
Band12	5MHz	16QAM	23035	25RB#0	4.4956	5.105	PASS
Band12	5MHz	16QAM	23095	25RB#0	4.5445	5.239	PASS
Band12	5MHz	16QAM	23155	25RB#0	4.5019	5.102	PASS
Band12	10MHz	QPSK	23060	50RB#0	9.0044	10.15	PASS
Band12	10MHz	QPSK	23095	50RB#0	9.0541	10.23	PASS
Band12	10MHz	QPSK	23130	50RB#0	8.9979	10.36	PASS
Band12	10MHz	64QAM	23060	50RB#0	8.9785	10.02	PASS
Band12	10MHz	64QAM	23095	50RB#0	9.0237	10.13	PASS
Band12	10MHz	64QAM	23130	50RB#0	8.9940	10.02	PASS
Band12	10MHz	16QAM	23060	50RB#0	8.9851	9.922	PASS
Band12	10MHz	16QAM	23095	50RB#0	9.0345	10.20	PASS
Band12	10MHz	16QAM	23130	50RB#0	8.9634	10.01	PASS

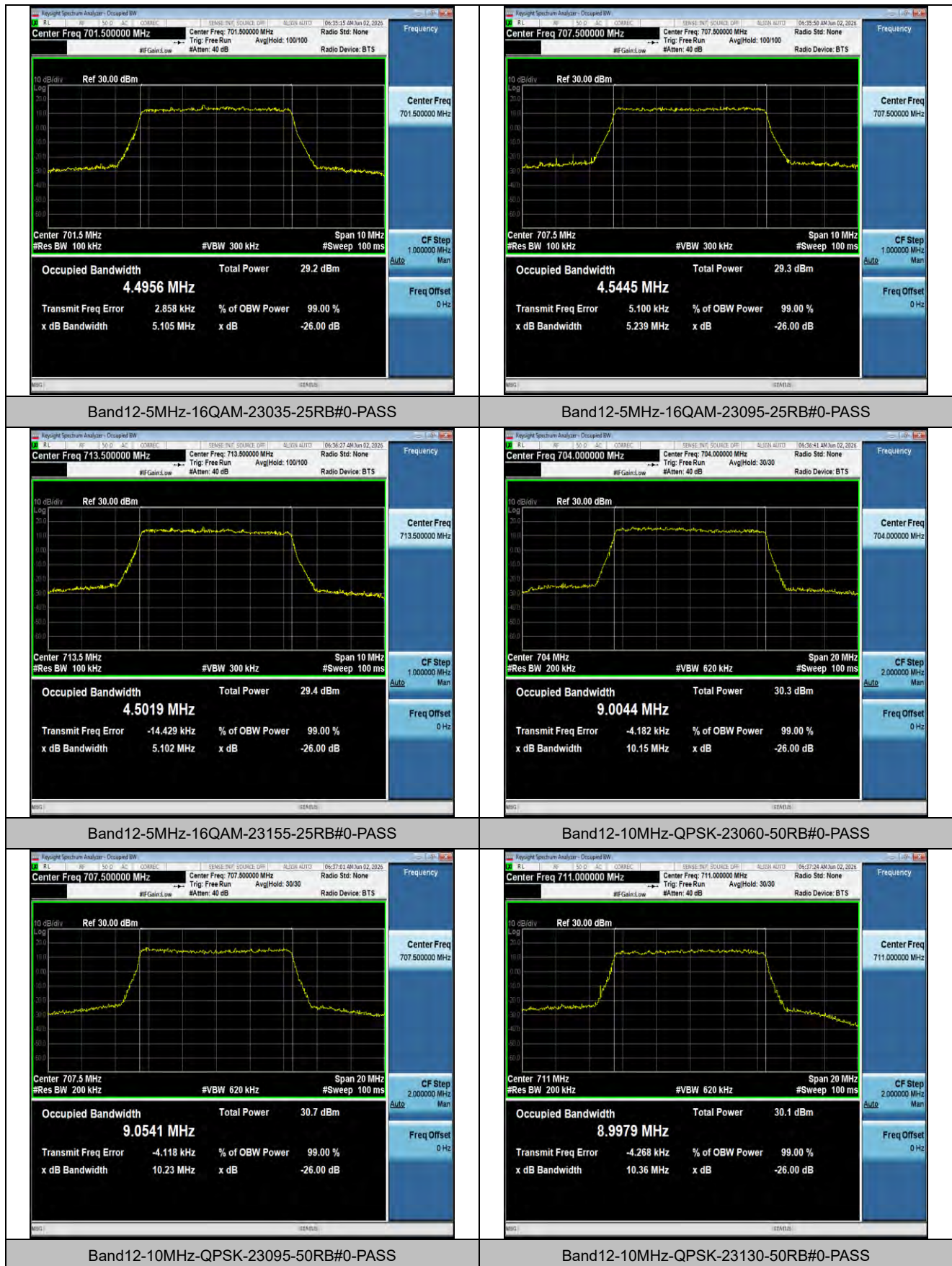
Test Graphs

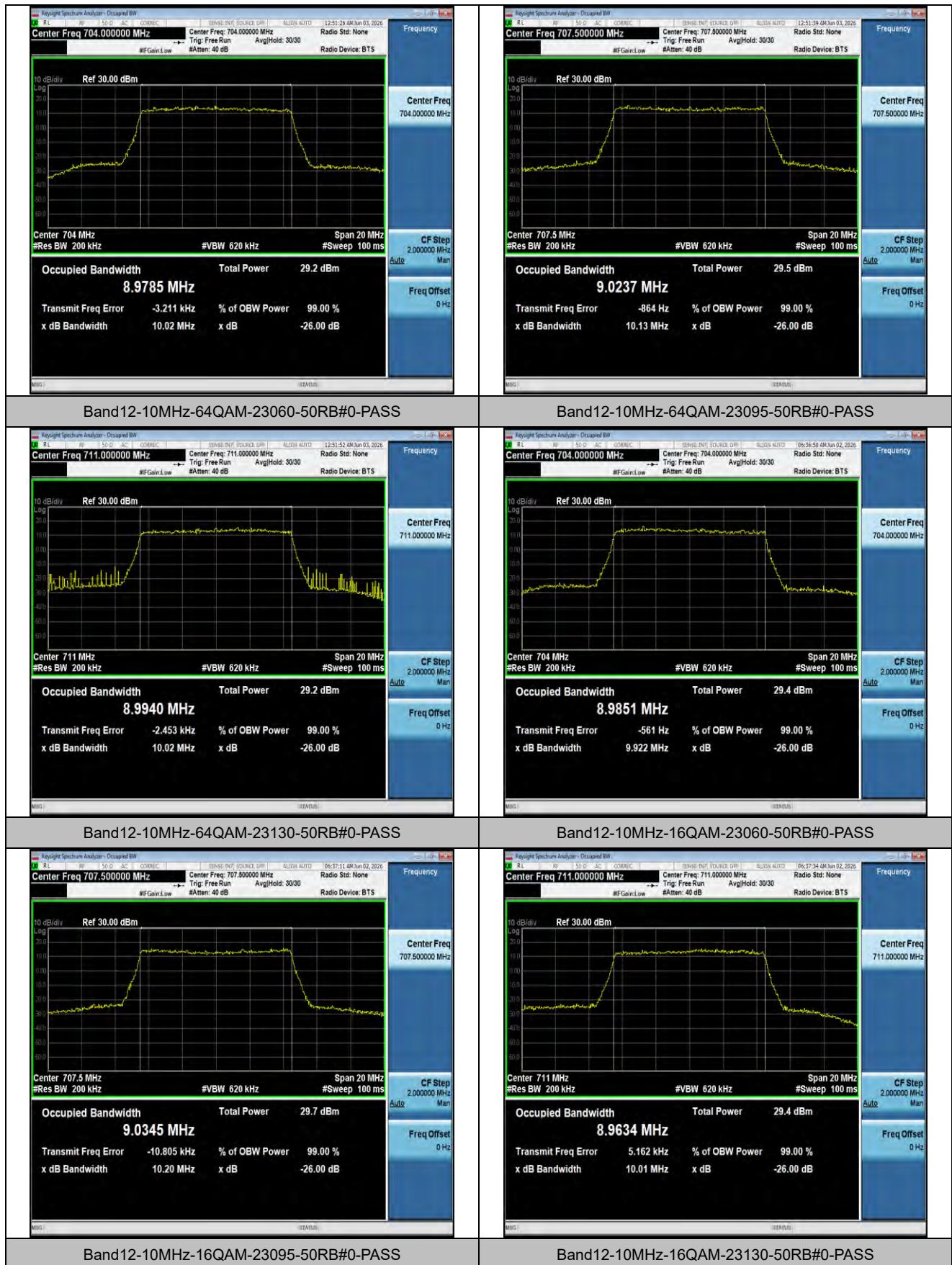






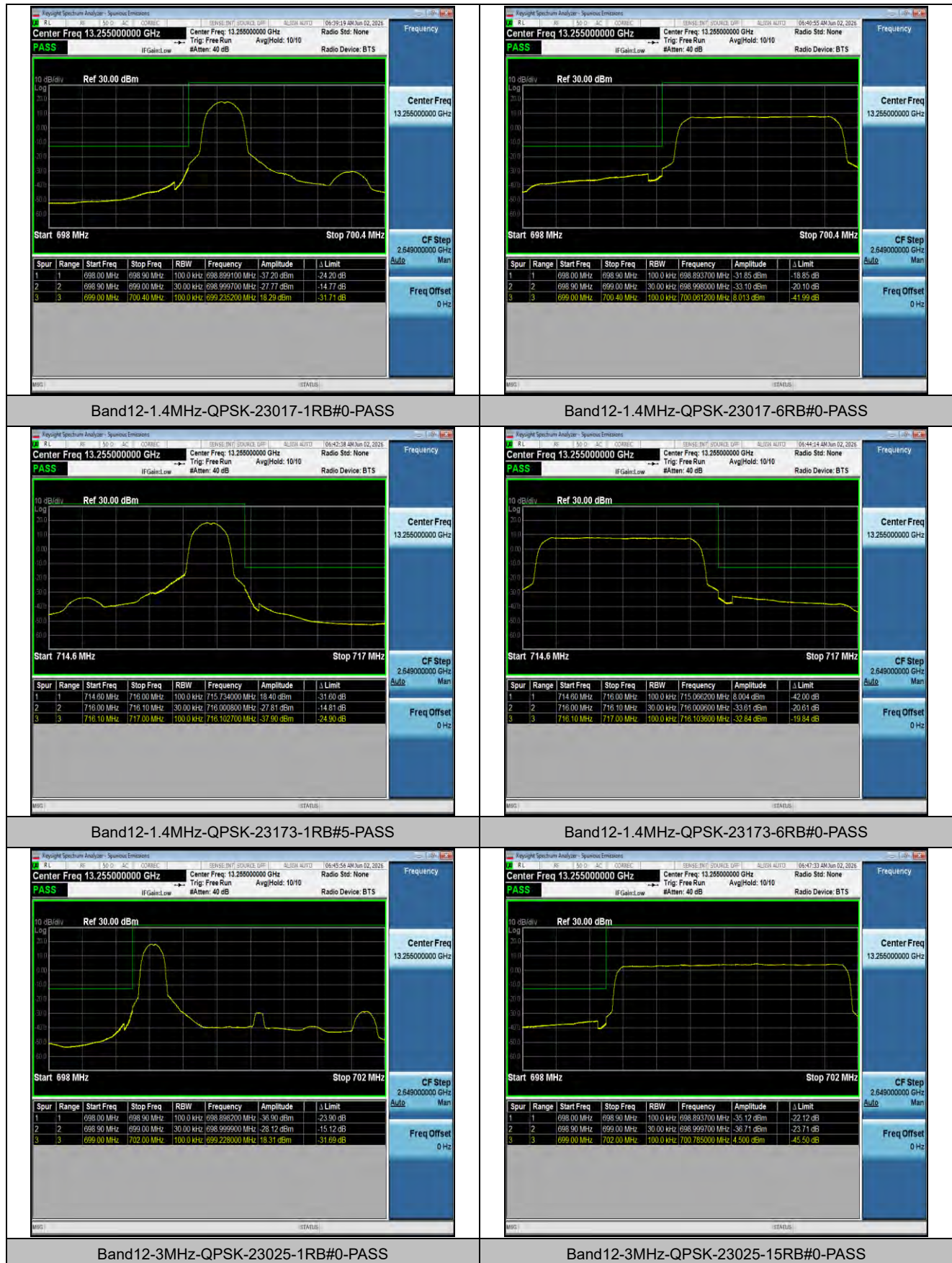






Band Edge

Test Graphs





Band12-3MHz-QPSK-23165-1RB#14-PASS



Band12-3MHz-QPSK-23165-15RB#0-PASS



Band12-5MHz-QPSK-23035-1RB#0-PASS



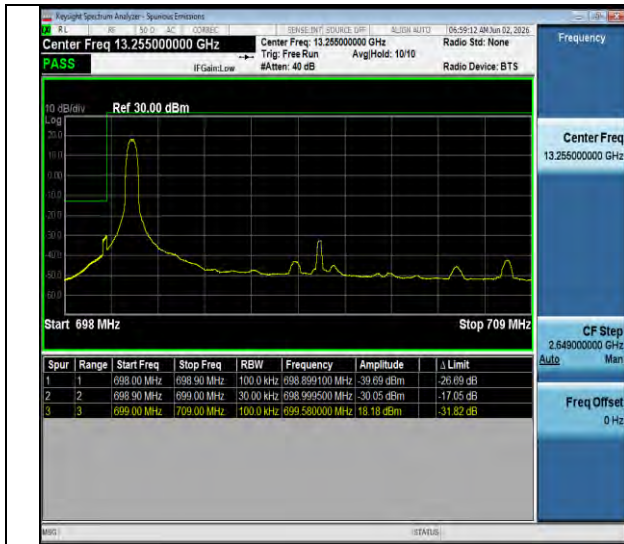
Band12-5MHz-QPSK-23035-25RB#0-PASS



Band12-5MHz-QPSK-23155-1RB#24-PASS



Band12-5MHz-QPSK-23155-25RB#0-PASS



Band12-10MHz-QPSK-23060-1RB#0-PASS



Band12-10MHz-QPSK-23060-50RB#0-PASS



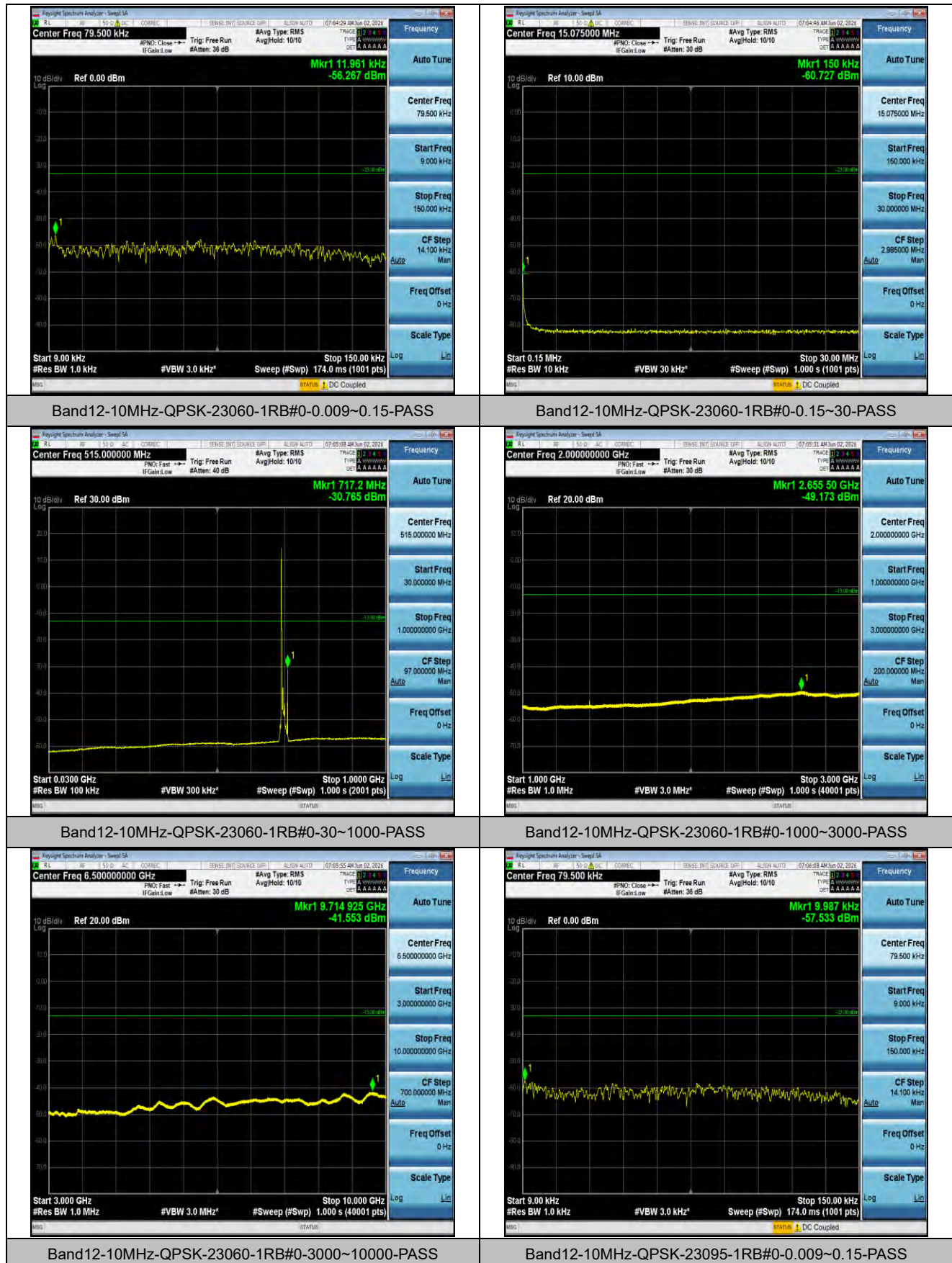
Band12-10MHz-QPSK-23130-1RB#49-PASS

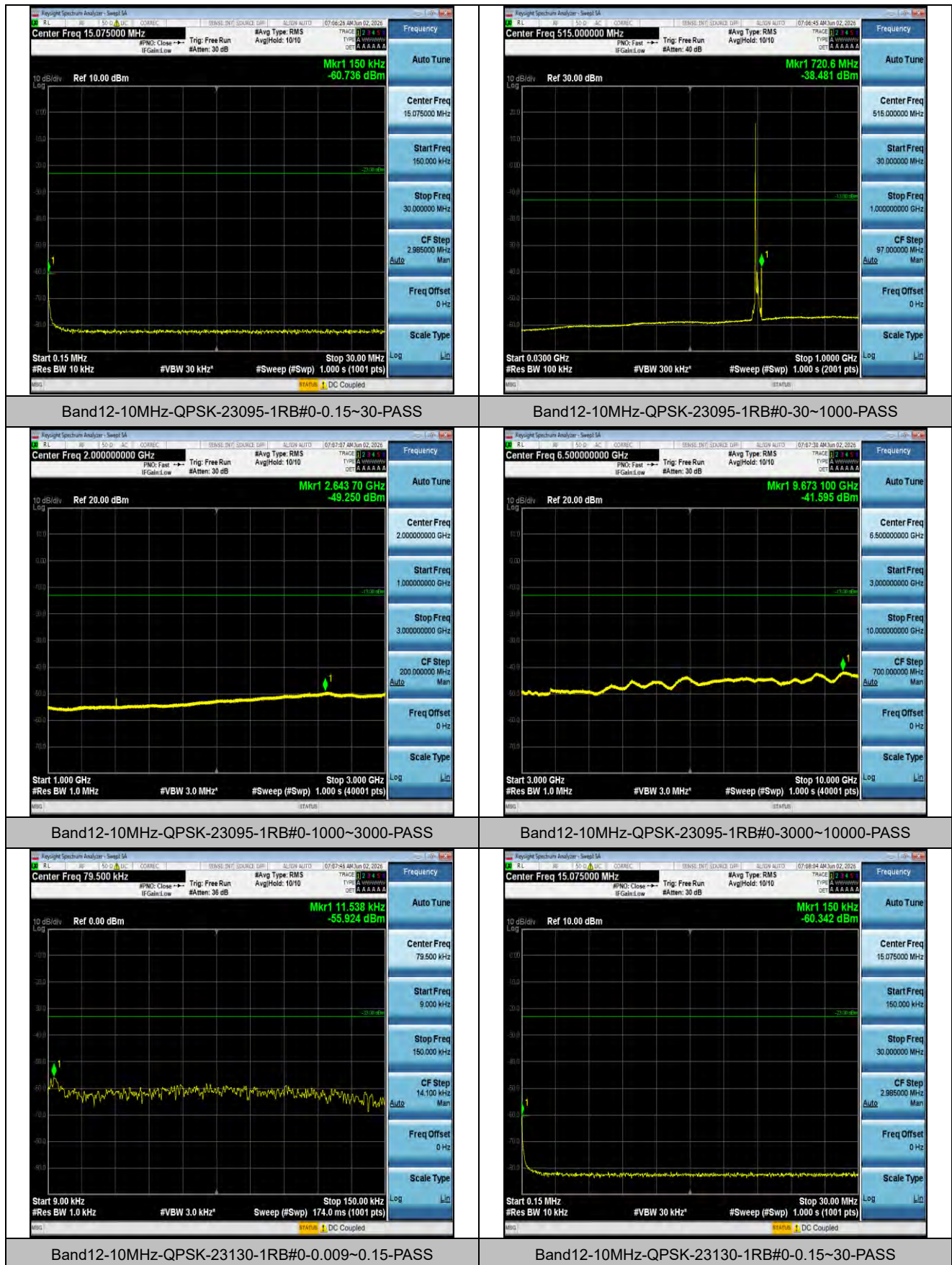


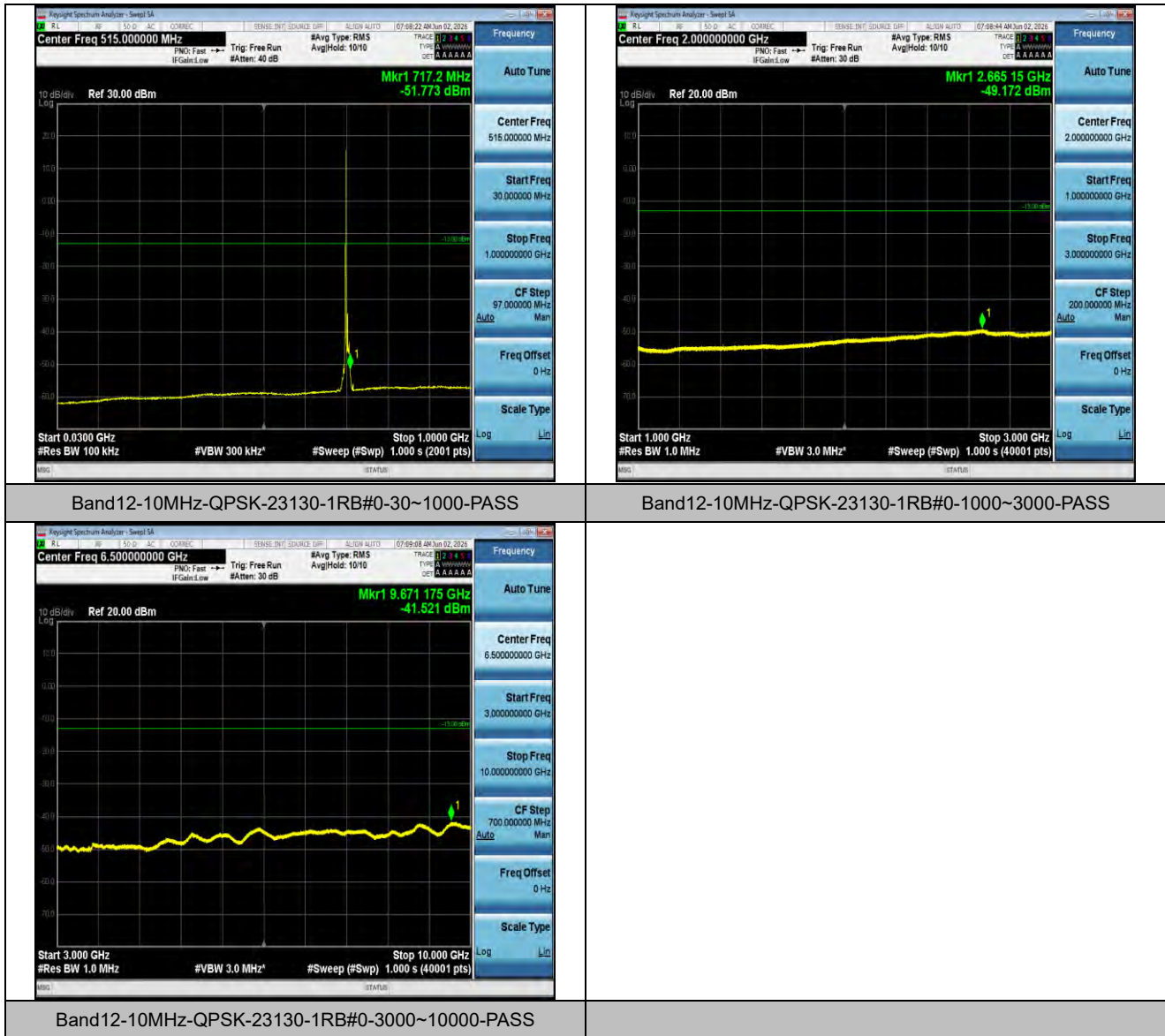
Band12-10MHz-QPSK-23130-50RB#0-PASS

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	-8.24	-0.011647	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	-3.42	-0.004834	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	-7.93	-0.011208	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	-2.76	-0.003901	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	-10.21	-0.014431	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-10	-6.61	-0.009343	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	-4.36	-0.006163	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-9.20	-0.013004	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	-5.75	-0.008127	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	-8.27	-0.011689	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	-5.02	-0.007095	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	-13.07	-0.018473	PASS

~The End~