

Appendix-A LTE CA_12B

Effective (Isotropic) Radiated Power Output Data

Test Result

Ant8:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
12-12	5MHz-5MHz	QPSK-QPSK	23035-23083	1RB#0-0RB#0	24.13	23.68	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23035-23083	8RB#0-0RB#0	24.09	23.64	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23035-23083	1RB#24-0RB#0	23.9	23.45	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23035-23083	25RB#0-25RB#0	21.34	20.89	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23071-23119	1RB#0-0RB#0	23.93	23.48	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23071-23119	8RB#0-0RB#0	23.99	23.54	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23071-23119	1RB#24-0RB#0	23.75	23.3	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23071-23119	25RB#0-25RB#0	21.36	20.91	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23107-23155	1RB#0-0RB#0	23.87	23.42	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23107-23155	8RB#0-0RB#0	23.96	23.51	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23107-23155	1RB#24-0RB#0	23.86	23.41	34.77	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23107-23155	25RB#0-25RB#0	21.25	20.8	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23035-23083	1RB#0-0RB#0	23.57	23.12	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23035-23083	8RB#0-0RB#0	23.21	22.76	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23035-23083	1RB#24-0RB#0	23.49	23.04	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23035-23083	25RB#0-25RB#0	20.66	20.21	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23071-23119	1RB#0-0RB#0	23.44	22.99	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23071-23119	8RB#0-0RB#0	23.1	22.65	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23071-23119	1RB#24-0RB#0	23.33	22.88	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23071-23119	25RB#0-25RB#0	20.11	19.66	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23107-23155	1RB#0-0RB#0	23.32	22.87	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23107-23155	8RB#0-0RB#0	23.1	22.65	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23107-23155	1RB#24-0RB#0	23.46	23.01	34.77	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23107-23155	25RB#0-25RB#0	20.4	19.95	34.77	PASS

12-12	5MHz-5MHz	64QAM-64QAM	23035-23083	1RB#0-0RB#0	22.4	21.95	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23035-23083	8RB#0-0RB#0	22.2	21.75	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23035-23083	1RB#24-0RB#0	22.16	21.71	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23035-23083	25RB#0-25RB#0	20.02	19.57	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23071-23119	1RB#0-0RB#0	22.28	21.83	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23071-23119	8RB#0-0RB#0	22.1	21.65	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23071-23119	1RB#24-0RB#0	22.26	21.81	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23071-23119	25RB#0-25RB#0	19.72	19.27	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23107-23155	1RB#0-0RB#0	22.22	21.77	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23107-23155	8RB#0-0RB#0	22.07	21.62	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23107-23155	1RB#24-0RB#0	22.28	21.83	34.77	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23107-23155	25RB#0-25RB#0	19.9	19.45	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23035-23083	1RB#0-0RB#0	19.18	18.73	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23035-23083	8RB#0-0RB#0	19.07	18.62	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23035-23083	1RB#24-0RB#0	19.04	18.59	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23035-23083	25RB#0-25RB#0	18.01	17.56	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23071-23119	1RB#0-0RB#0	19.16	18.71	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23071-23119	8RB#0-0RB#0	19.1	18.65	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23071-23119	1RB#24-0RB#0	19.1	18.65	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23071-23119	25RB#0-25RB#0	18.11	17.66	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23107-23155	1RB#0-0RB#0	19.13	18.68	34.77	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23107-23155	8RB#0-0RB#0	18.98	18.53	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23038-23110	1RB#0-0RB#0	24.08	23.63	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23038-23110	8RB#0-0RB#0	24.07	23.62	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23038-23110	1RB#24-0RB#0	23.86	23.41	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23038-23110	25RB#0-50RB#0	21.62	21.17	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	1RB#0-0RB#0	24.06	23.61	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	8RB#0-0RB#0	24.04	23.59	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	1RB#24-0RB#0	23.85	23.4	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	21.42	20.97	34.77	PASS

12-12	5MHz-10MHz	QPSK-QPSK	23058-23130	1RB#0-0RB#0	24.07	23.62	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23058-23130	8RB#0-0RB#0	24.04	23.59	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23058-23130	1RB#24-0RB#0	23.82	23.37	34.77	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23058-23130	25RB#0-50RB#0	21.23	20.78	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23038-23110	1RB#0-0RB#0	23.7	23.25	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23038-23110	8RB#0-0RB#0	23.14	22.69	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23038-23110	1RB#24-0RB#0	23.57	23.12	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23038-23110	25RB#0-50RB#0	20.63	20.18	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23048-23120	1RB#0-0RB#0	23.59	23.14	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23048-23120	8RB#0-0RB#0	23.15	22.7	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23048-23120	1RB#24-0RB#0	23.5	23.05	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23048-23120	25RB#0-50RB#0	20.09	19.64	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23058-23130	1RB#0-0RB#0	23.47	23.02	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23058-23130	8RB#0-0RB#0	23.12	22.67	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23058-23130	1RB#24-0RB#0	23.28	22.83	34.77	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23058-23130	25RB#0-50RB#0	20.04	19.59	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23038-23110	1RB#0-0RB#0	22.32	21.87	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23038-23110	8RB#0-0RB#0	22.12	21.67	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23038-23110	1RB#24-0RB#0	22.18	21.73	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23038-23110	25RB#0-50RB#0	19.79	19.34	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23048-23120	1RB#0-0RB#0	22.36	21.91	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23048-23120	8RB#0-0RB#0	22.1	21.65	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23048-23120	1RB#24-0RB#0	22.2	21.75	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23048-23120	25RB#0-50RB#0	19.98	19.53	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23058-23130	1RB#0-0RB#0	22.29	21.84	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23058-23130	8RB#0-0RB#0	22.06	21.61	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23058-23130	1RB#24-0RB#0	22.13	21.68	34.77	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23058-23130	25RB#0-50RB#0	19.94	19.49	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23038-23110	1RB#0-0RB#0	19.25	18.8	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23038-23110	8RB#0-0RB#0	19.04	18.59	34.77	PASS

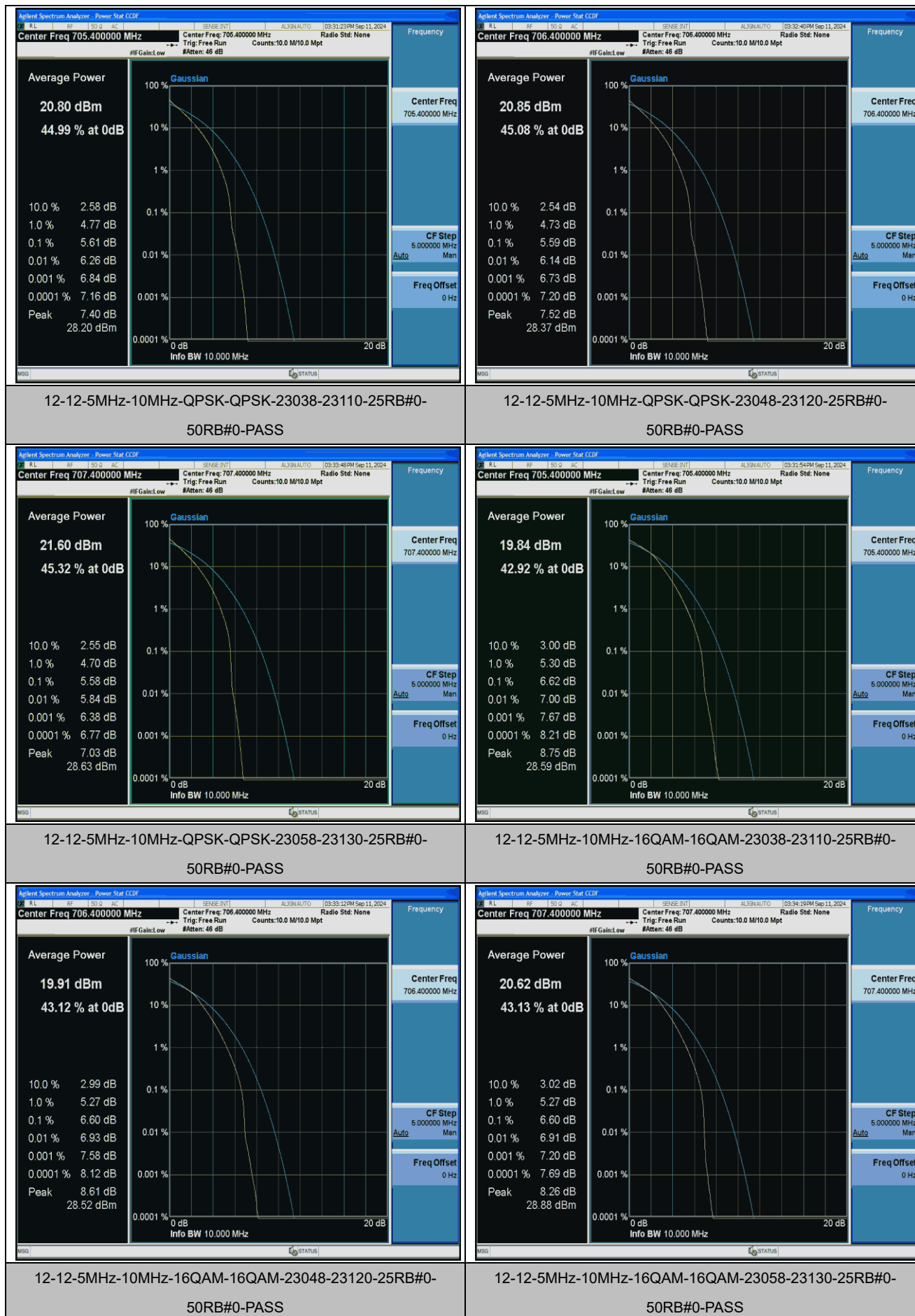
12-12	5MHz-10MHz	256QAM-256QAM	23038-23110	1RB#24-0RB#0	19.02	18.57	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23038-23110	25RB#0-50RB#0	18.6	18.15	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23048-23120	1RB#0-0RB#0	19.27	18.82	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23048-23120	8RB#0-0RB#0	19.02	18.57	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23048-23120	1RB#24-0RB#0	19.15	18.7	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23048-23120	25RB#0-50RB#0	18.24	17.79	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23058-23130	1RB#0-0RB#0	19.16	18.71	34.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23058-23130	8RB#0-0RB#0	19.03	18.58	34.77	PASS

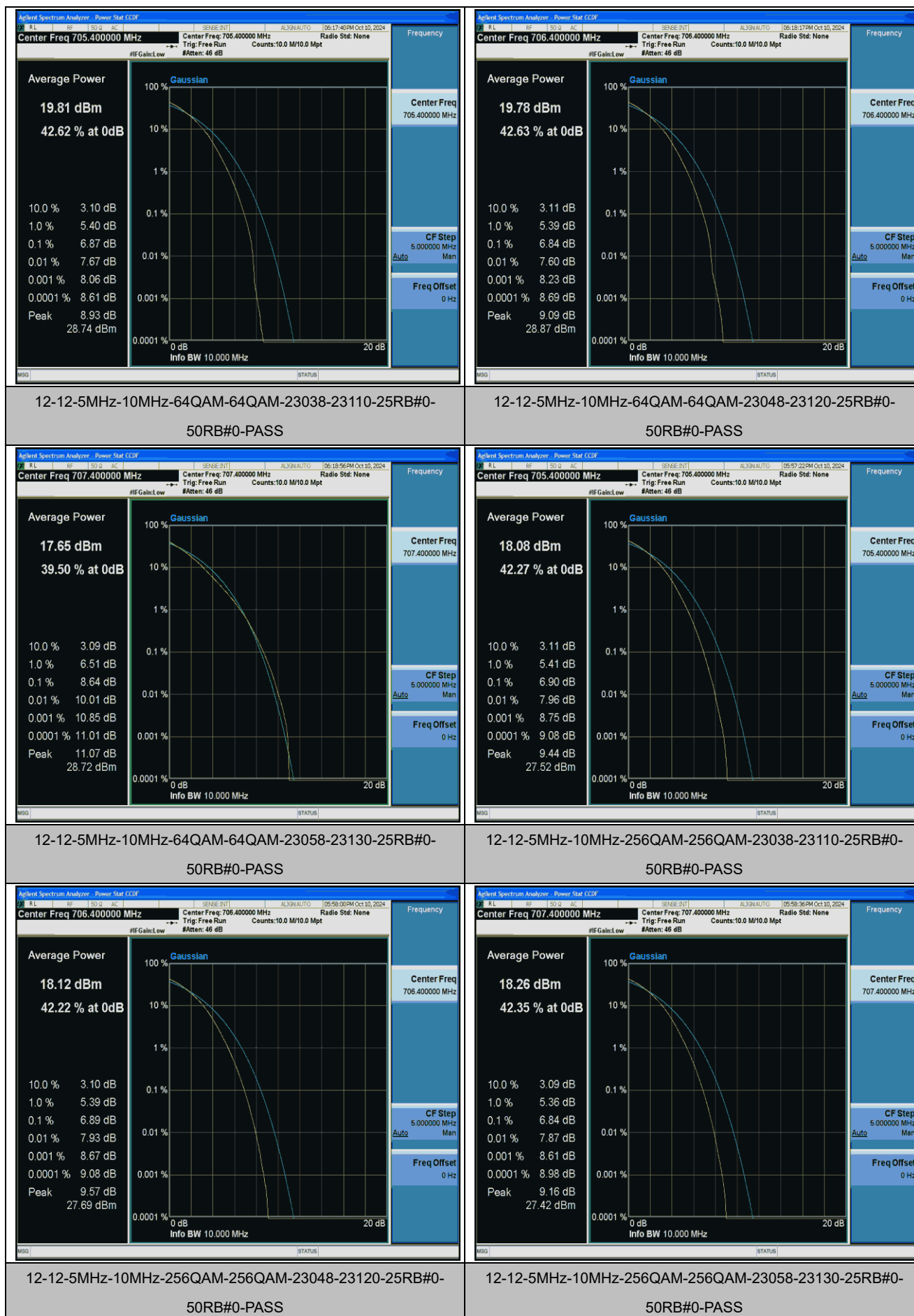
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
12-12	5MHz-10MHz	QPSK-QPSK	23038-23110	25RB#0-50RB#0	5.61	13	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	5.59	13	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23058-23130	25RB#0-50RB#0	5.58	13	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23038-23110	25RB#0-50RB#0	6.62	13	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23048-23120	25RB#0-50RB#0	6.60	13	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23058-23130	25RB#0-50RB#0	6.60	13	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23038-23110	25RB#0-50RB#0	6.87	13	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23048-23120	25RB#0-50RB#0	6.84	13	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23058-23130	25RB#0-50RB#0	8.64	13	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23038-23110	25RB#0-50RB#0	6.90	13	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23048-23120	25RB#0-50RB#0	6.89	13	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23058-23130	25RB#0-50RB#0	6.84	13	PASS

Test Graphs



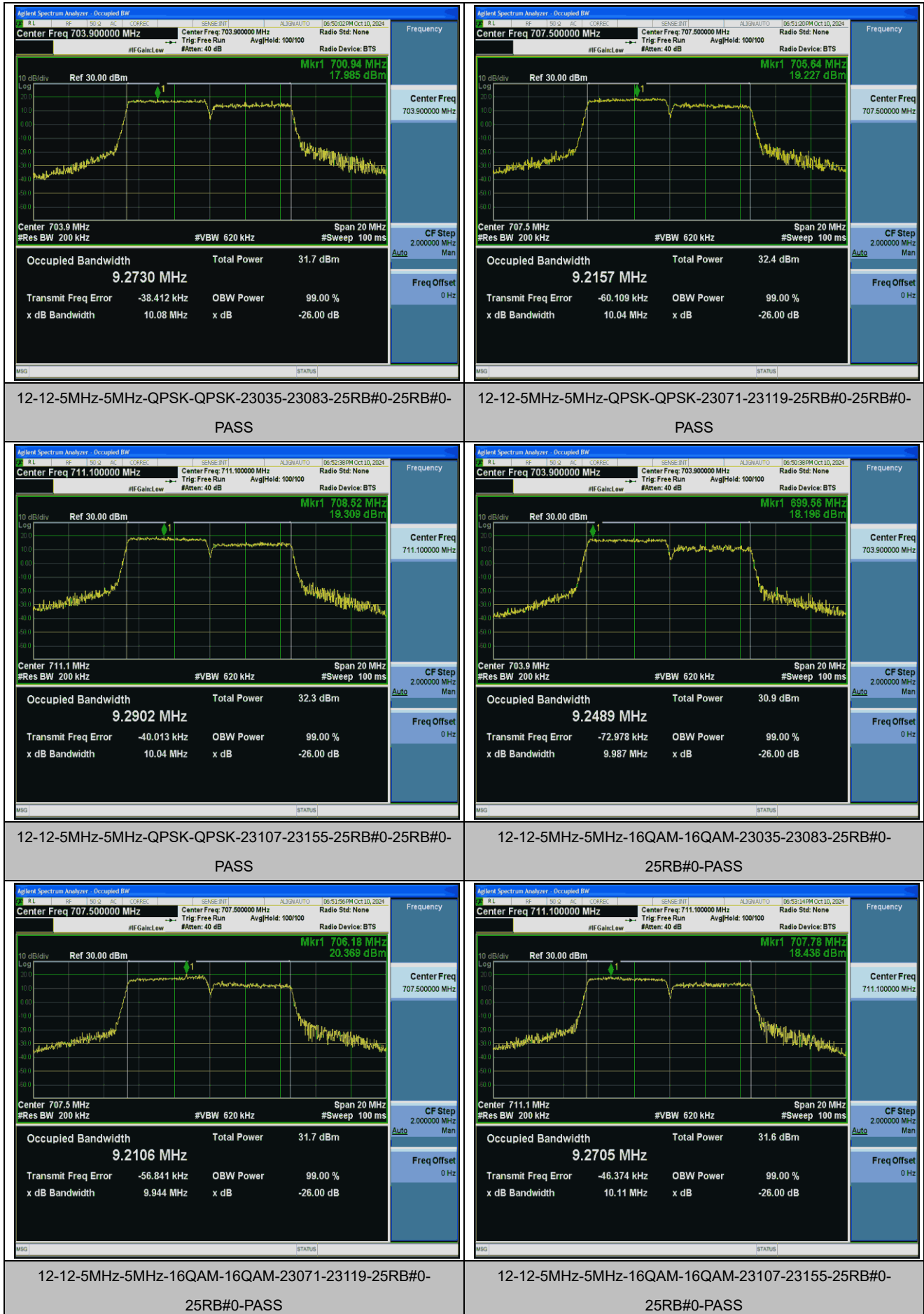


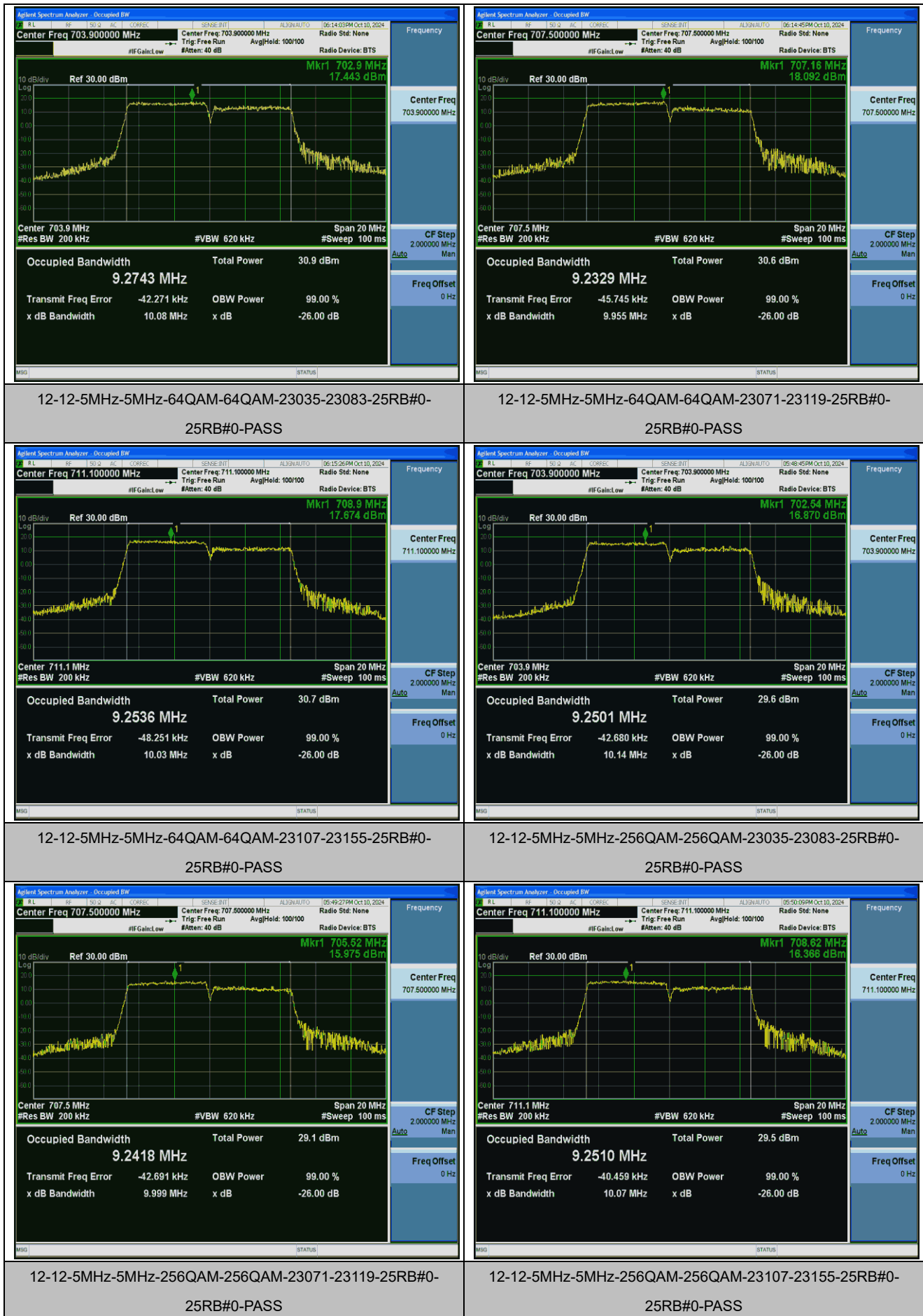
26dB Bandwidth and Occupied Bandwidth

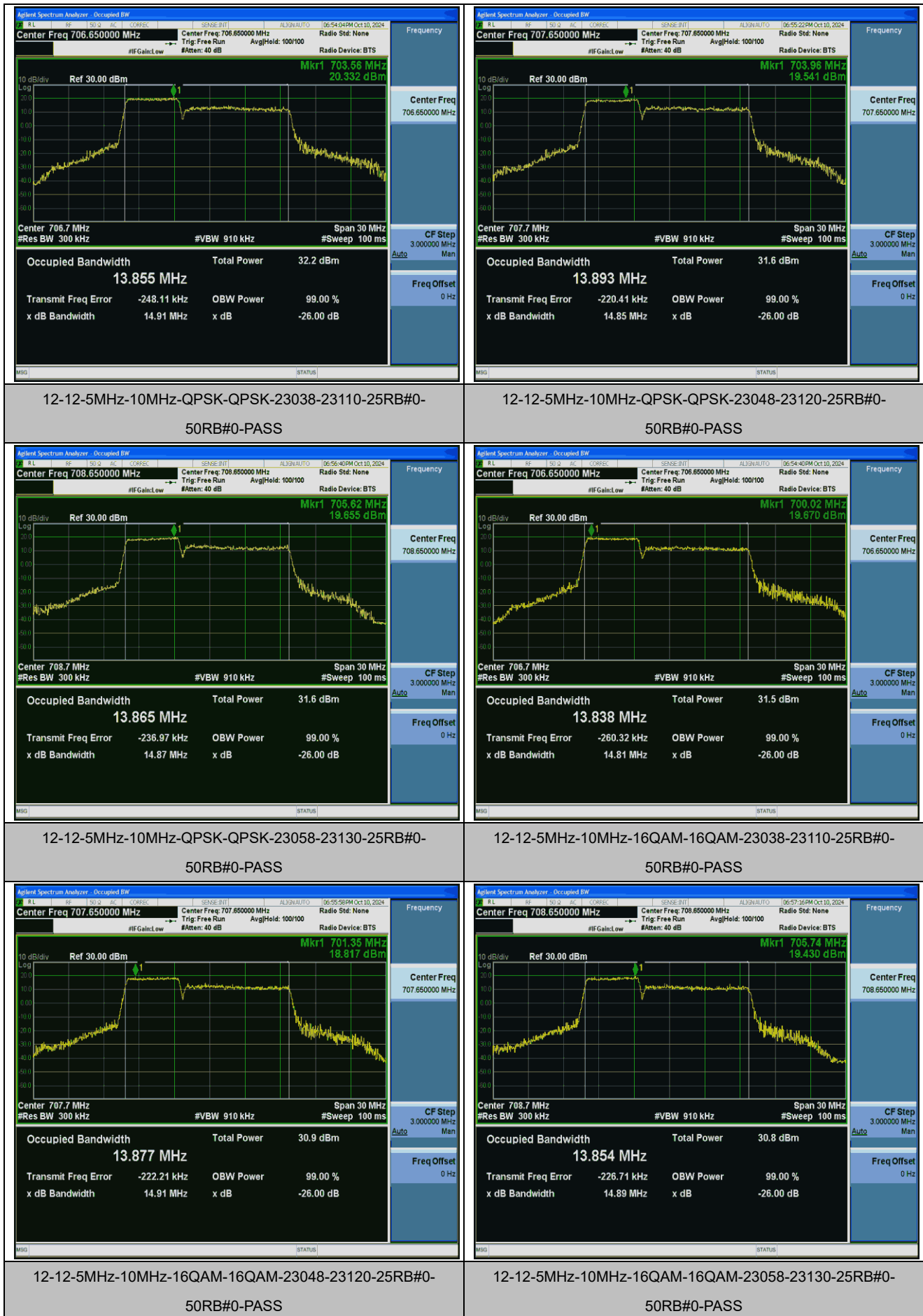
Test Result

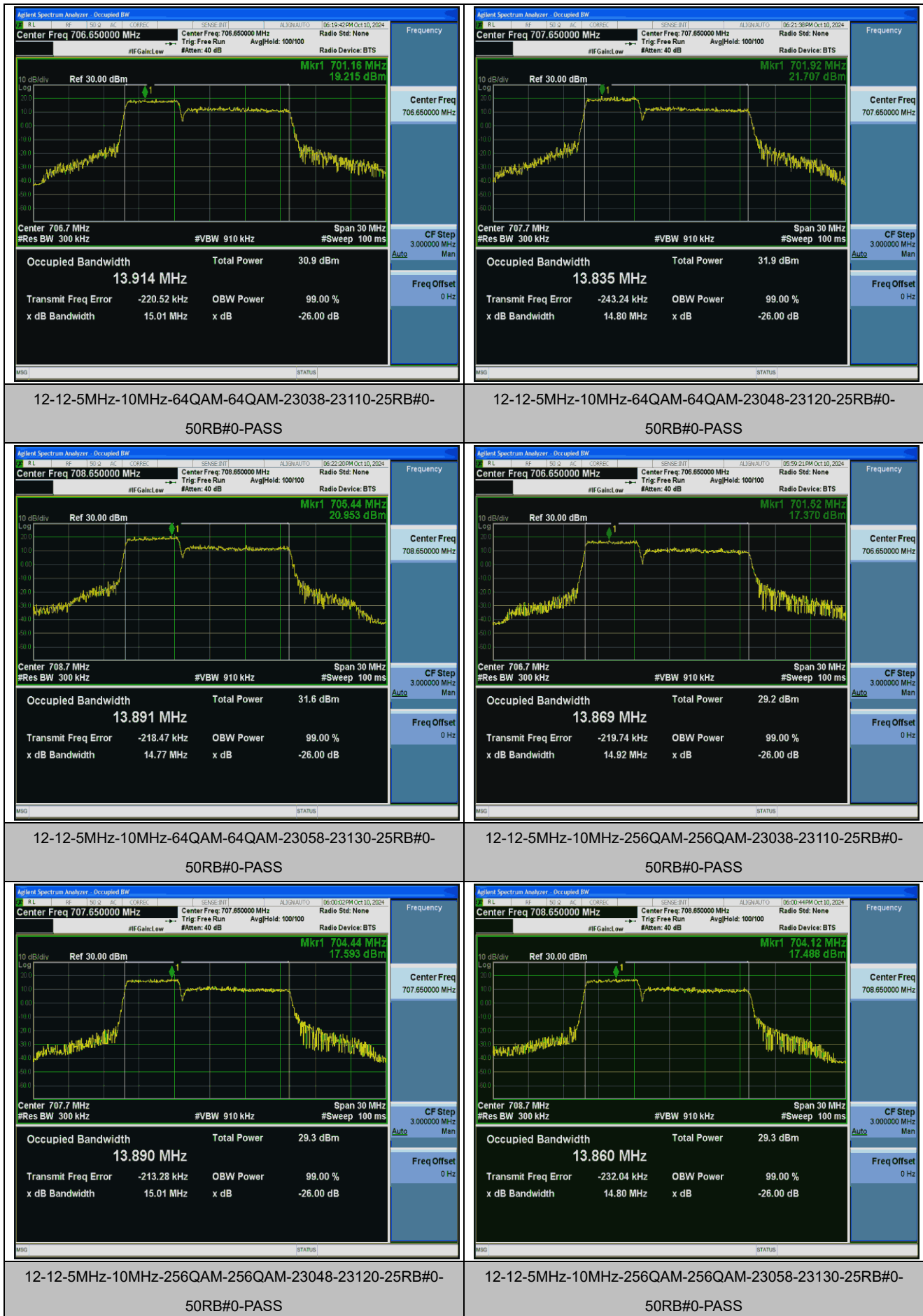
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
12-12	5MHz-5MHz	QPSK-QPSK	23035-23083	25RB#0-25RB#0	9.2730	10.08	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23071-23119	25RB#0-25RB#0	9.2157	10.04	PASS
12-12	5MHz-5MHz	QPSK-QPSK	23107-23155	25RB#0-25RB#0	9.2902	10.04	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23035-23083	25RB#0-25RB#0	9.2489	9.987	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23071-23119	25RB#0-25RB#0	9.2106	9.944	PASS
12-12	5MHz-5MHz	16QAM-16QAM	23107-23155	25RB#0-25RB#0	9.2705	10.11	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23035-23083	25RB#0-25RB#0	9.2743	10.08	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23071-23119	25RB#0-25RB#0	9.2329	9.955	PASS
12-12	5MHz-5MHz	64QAM-64QAM	23107-23155	25RB#0-25RB#0	9.2536	10.03	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23035-23083	25RB#0-25RB#0	9.2501	10.14	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23071-23119	25RB#0-25RB#0	9.2418	9.999	PASS
12-12	5MHz-5MHz	256QAM-256QAM	23107-23155	25RB#0-25RB#0	9.2510	10.07	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23038-23110	25RB#0-50RB#0	13.855	14.91	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	13.893	14.85	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23058-23130	25RB#0-50RB#0	13.865	14.87	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23038-23110	25RB#0-50RB#0	13.838	14.81	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23048-23120	25RB#0-50RB#0	13.877	14.91	PASS
12-12	5MHz-10MHz	16QAM-16QAM	23058-23130	25RB#0-50RB#0	13.854	14.89	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23038-23110	25RB#0-50RB#0	13.914	15.01	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23048-23120	25RB#0-50RB#0	13.835	14.80	PASS
12-12	5MHz-10MHz	64QAM-64QAM	23058-23130	25RB#0-50RB#0	13.891	14.77	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23038-23110	25RB#0-50RB#0	13.869	14.92	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23048-23120	25RB#0-50RB#0	13.890	15.01	PASS
12-12	5MHz-10MHz	256QAM-256QAM	23058-23130	25RB#0-50RB#0	13.860	14.80	PASS

Test Graphs



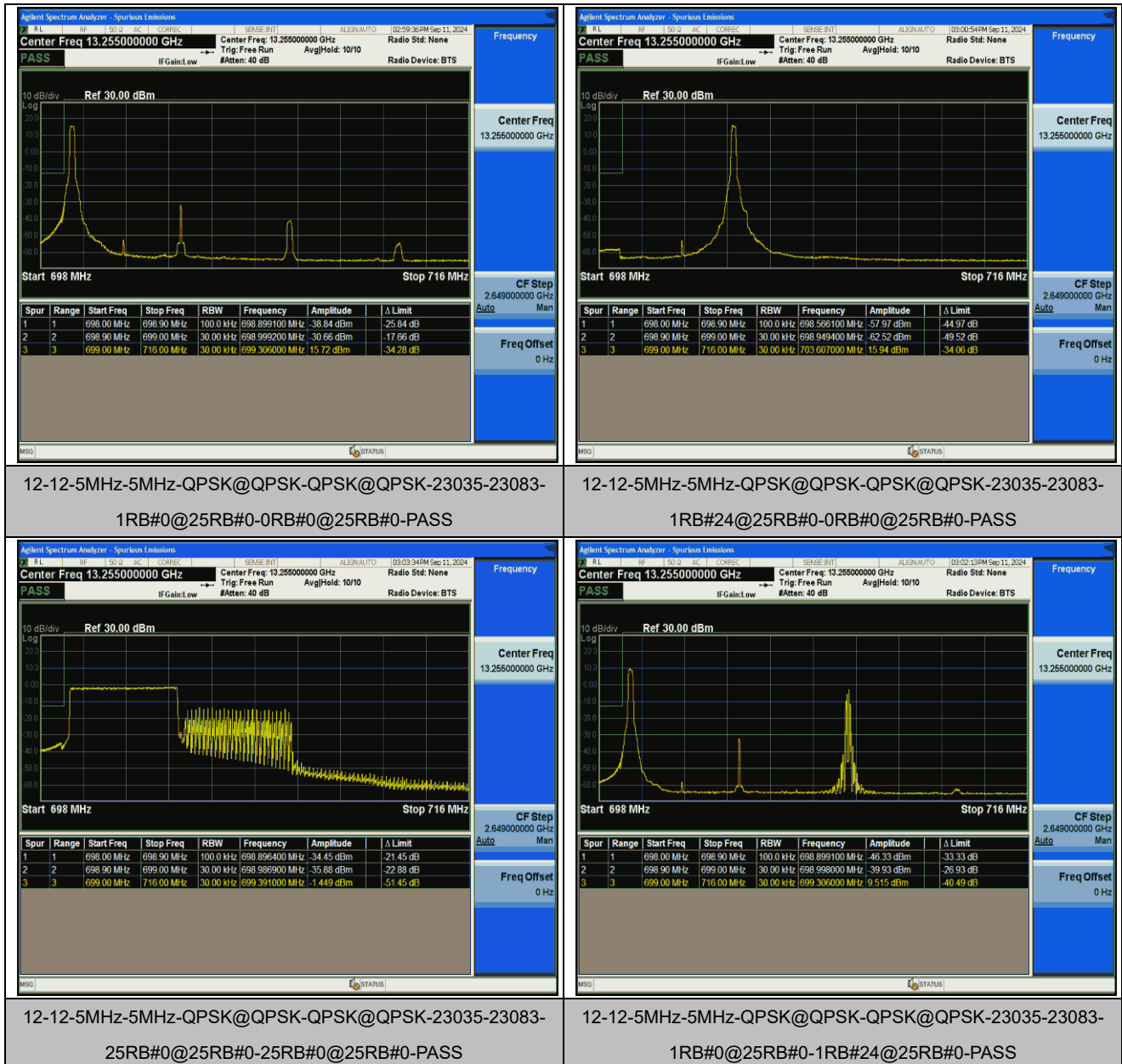


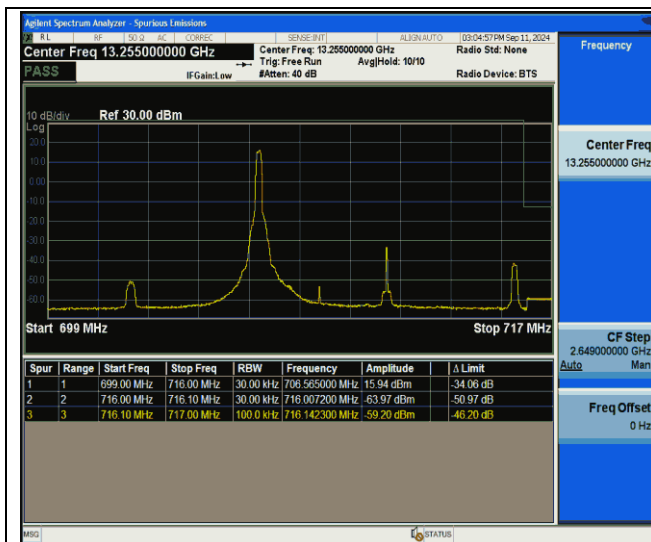




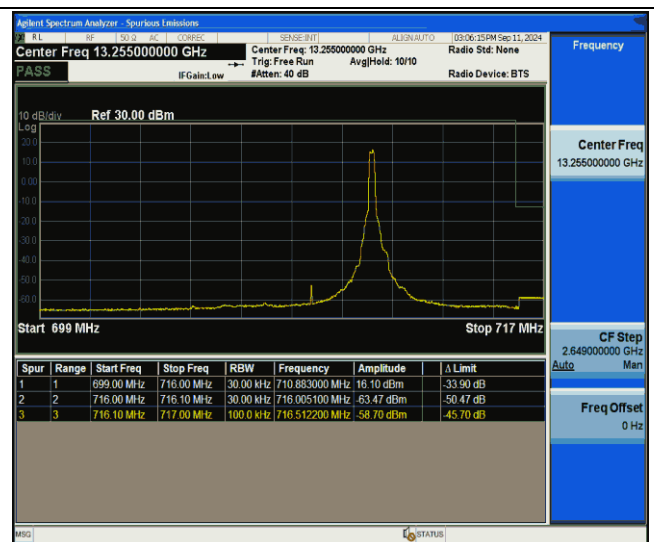
Band Edge

Test Graphs

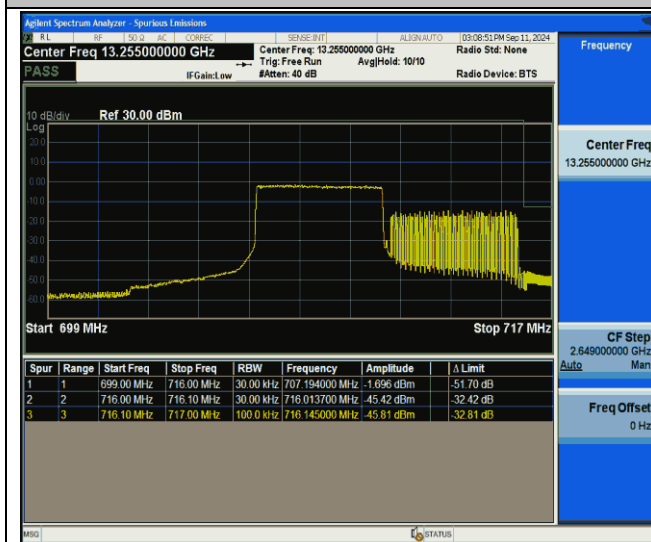




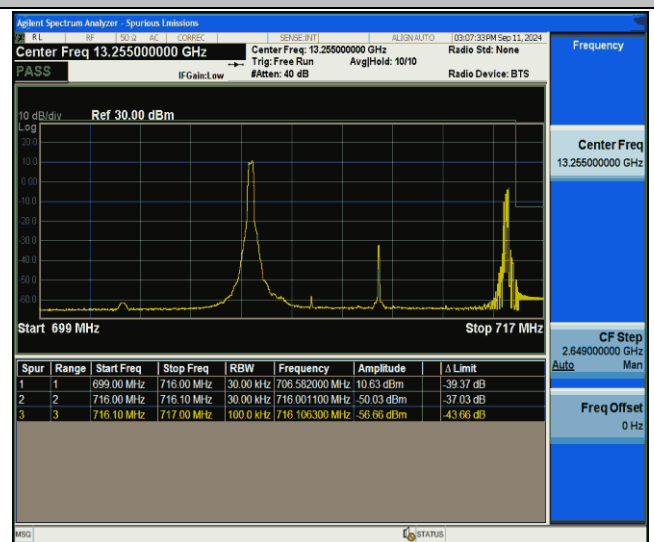
12-12-5MHz-5MHz-QPSK@QPSK-QPSK@QPSK-23107-23155-
1RB#0@25RB#0-0RB#0@25RB#0-PASS



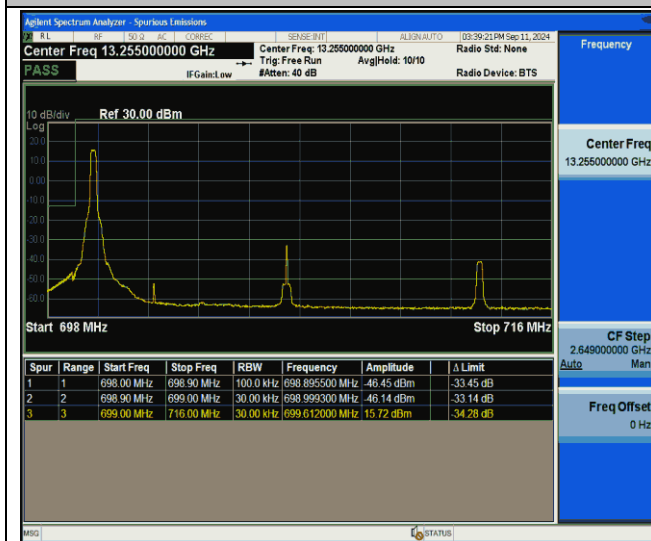
12-12-5MHz-5MHz-QPSK@QPSK-QPSK@QPSK-23107-23155-
1RB#24@25RB#0-0RB#0@25RB#0-PASS



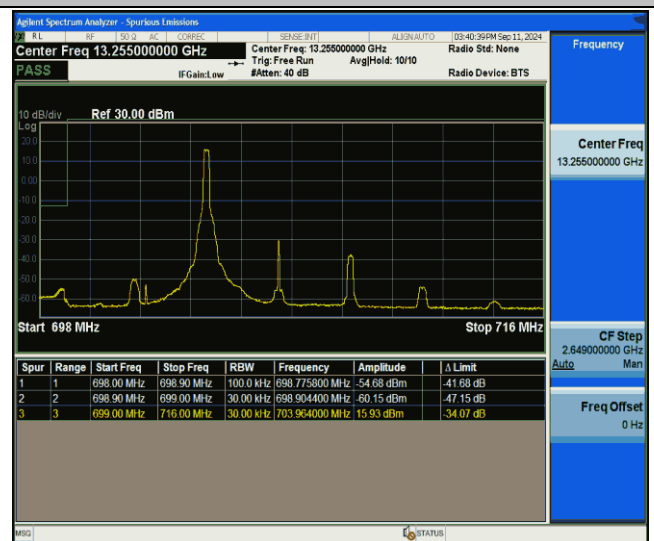
12-12-5MHz-5MHz-QPSK@QPSK-QPSK@QPSK-23107-23155-
25RB#0@25RB#0-25RB#0@25RB#0-PASS



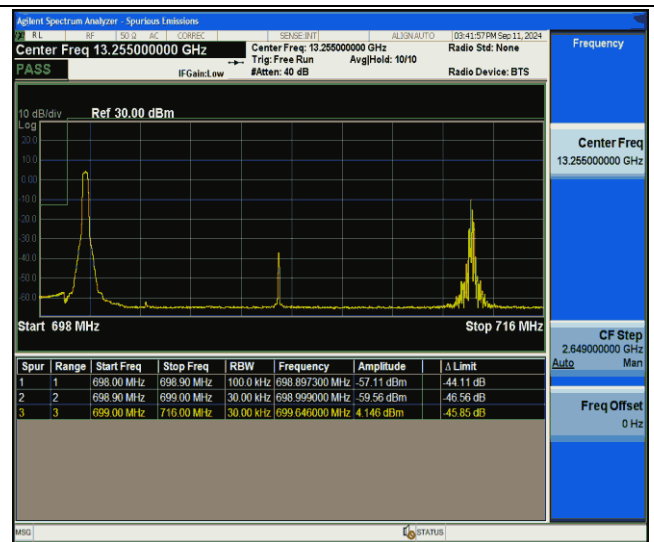
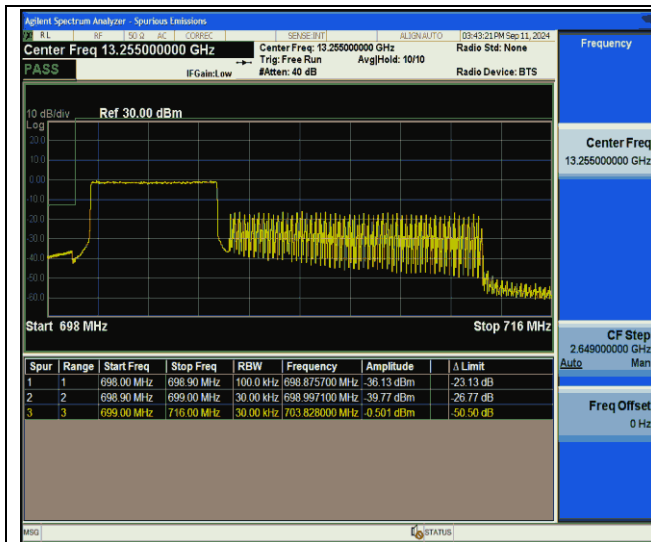
12-12-5MHz-5MHz-QPSK@QPSK-QPSK@QPSK-23107-23155-
1RB#0@25RB#0-1RB#24@25RB#0-PASS



12-12-5MHz-10MHz-QPSK@QPSK-QPSK@QPSK-23038-23110-
1RB#0@25RB#0-0RB#0@50RB#0-PASS

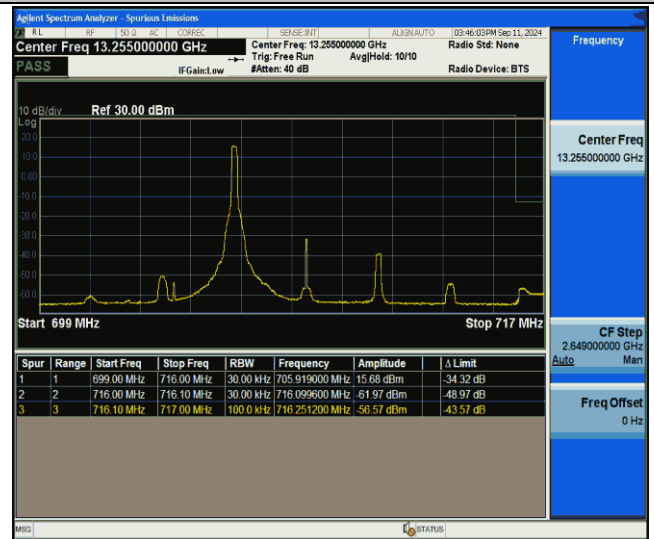
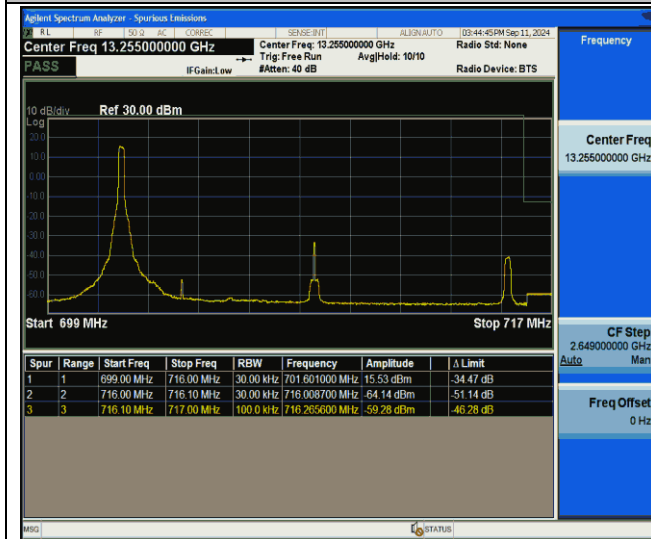


12-12-5MHz-10MHz-QPSK@QPSK-QPSK@QPSK-23038-23110-
1RB#24@25RB#0-0RB#0@50RB#0-PASS



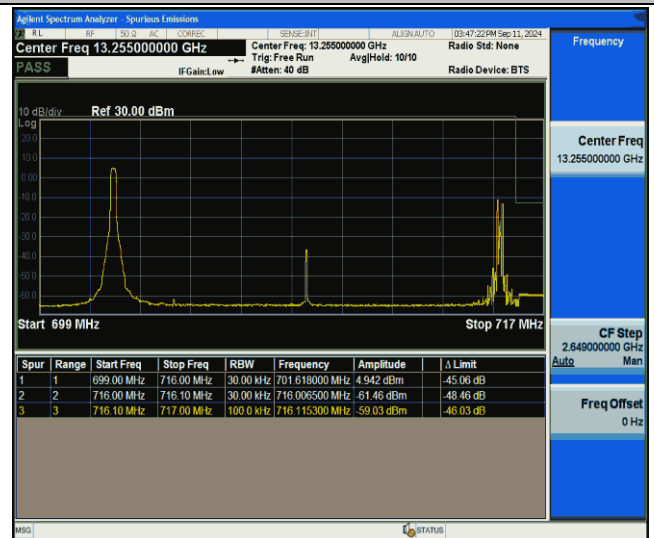
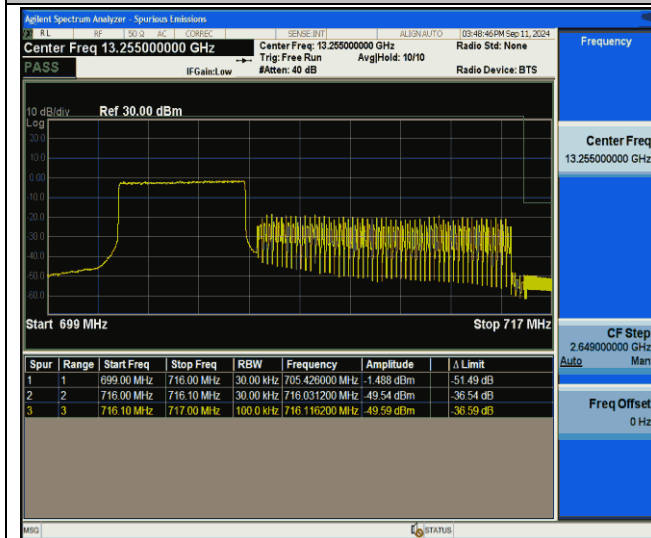
12-12-5MHz-10MHz-QPSK@QPSK-QPSK@QPSK-23038-23110-
25RB#0@25RB#0-50RB#0@50RB#0-PASS

12-12-5MHz-10MHz-QPSK@QPSK-QPSK@QPSK-23038-23110-
1RB#0@25RB#0-1RB#49@50RB#0-PASS



12-12-5MHz-10MHz-QPSK@QPSK-QPSK@QPSK-23058-23130-
1RB#0@25RB#0-0RB#0@50RB#0-PASS

12-12-5MHz-10MHz-QPSK@QPSK-QPSK@QPSK-23058-23130-
1RB#24@25RB#0-0RB#0@50RB#0-PASS

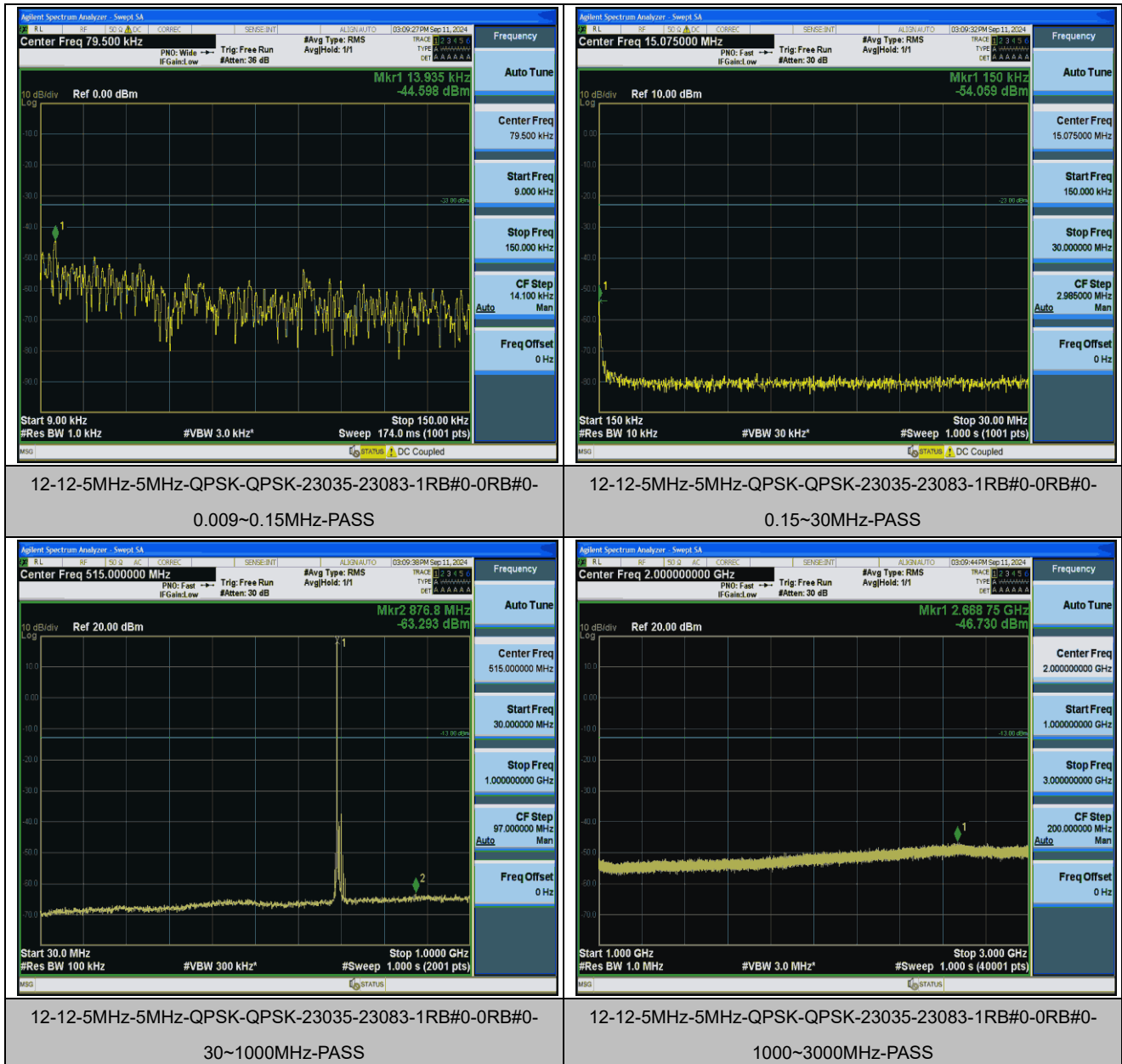


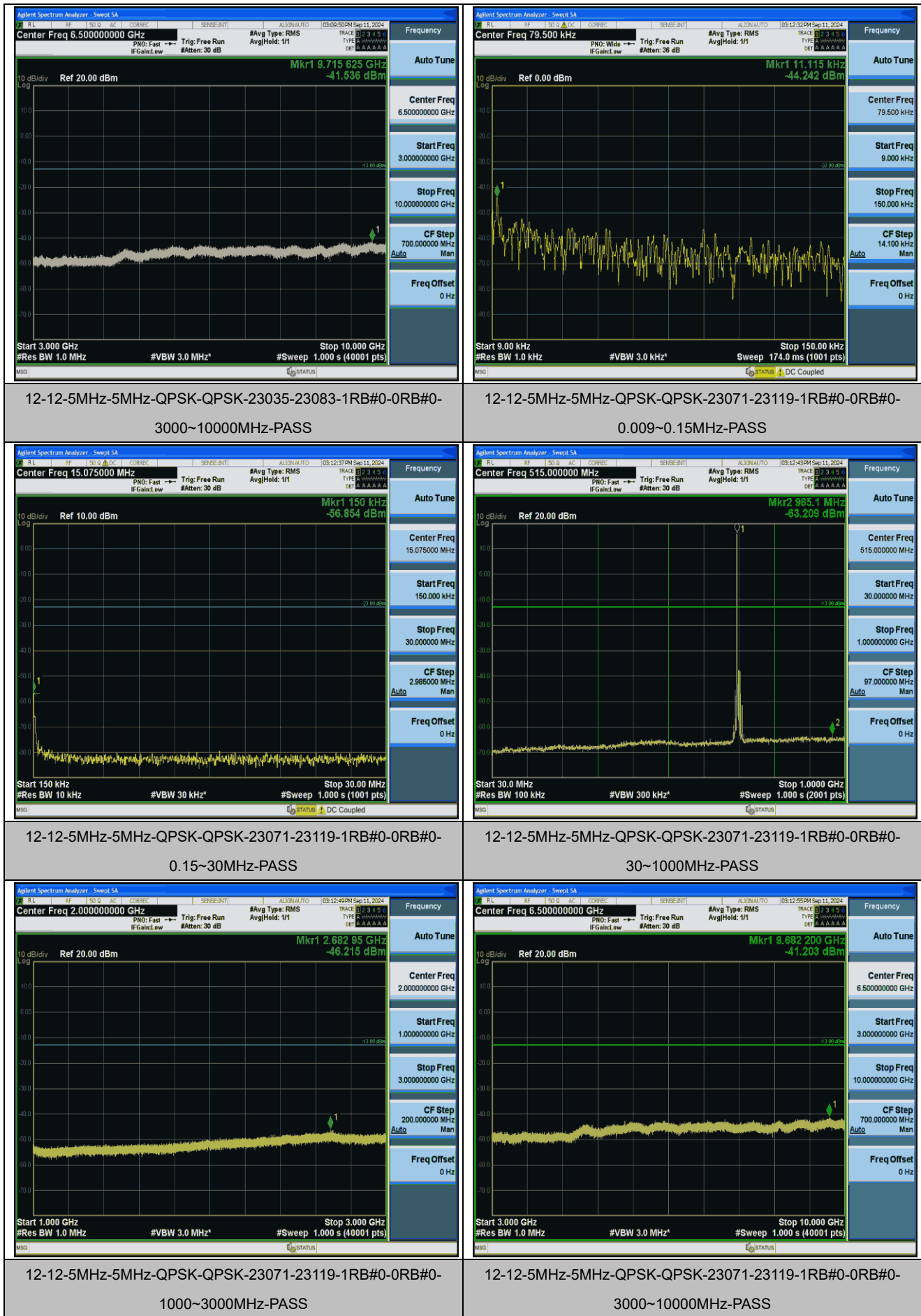
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25RB#0@25RB#0-50RB#0@50RB#0-PASS

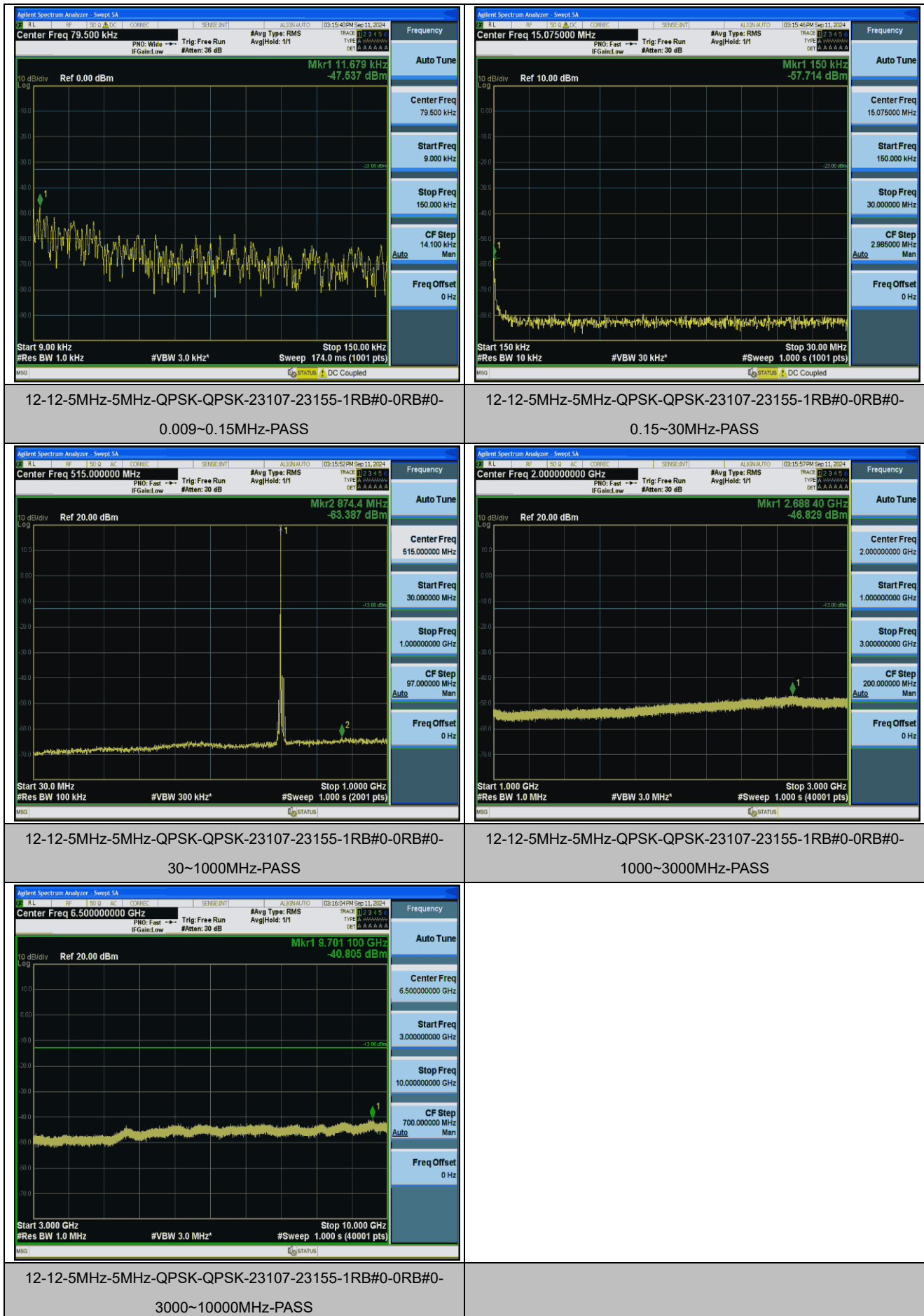
12-12-5MHz-10MHz-QPSK@QPSK-QPSK@QPSK-23058-23130-
1RB#0@25RB#0-1RB#49@50RB#0-PASS

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
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	VN	NT	0.47	0.000567	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	VL	NT	0.27	0.000326	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	VH	NT	0.52	0.000627	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	-30	0.32	0.000386	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	-20	0.64	0.000772	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	-10	0.44	0.000531	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	0	0.60	0.000724	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	10	0.76	0.000917	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	20	0.12	0.000145	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	30	0.28	0.000338	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	40	0.28	0.000338	PASS
12-12	5MHz-10MHz	QPSK-QPSK	23048-23120	25RB#0-50RB#0	NV	50	0.63	0.000760	PASS

~The End~