

Appendix-C LTE Band 5

Effective (Isotropic) Radiated Power Output Data

Test Result

Ant3:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	24.47	17.72	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	24.44	17.69	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	24.29	17.54	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	23.25	16.5	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	23.44	16.69	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	23.39	16.64	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	23.2	16.45	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	22.07	15.32	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#0	22.41	15.66	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#2	22.25	15.5	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#5	22.13	15.38	38.45	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	21.27	14.52	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	24.34	17.59	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	24.29	17.54	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	24.17	17.42	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	23.36	16.61	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	23.2	16.45	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	23.27	16.52	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	23.13	16.38	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	22.25	15.5	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#0	22.46	15.71	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#2	22.42	15.67	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#5	22.16	15.41	38.45	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	21.06	14.31	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.75	17	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.62	16.87	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.71	16.96	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.9	16.15	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	22.98	16.23	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.66	15.91	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	22.86	16.11	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.74	14.99	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#0	22.05	15.3	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#2	22.05	15.3	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#5	22.21	15.46	38.45	PASS

Band5	1.4MHz	64QAM	20643	6RB#0	20.77	14.02	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	24.28	17.53	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	24.46	17.71	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	24.32	17.57	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	23.42	16.67	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	23.53	16.78	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	23.51	16.76	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	23.3	16.55	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	22.4	15.65	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#0	22.19	15.44	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#8	22.03	15.28	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#14	21.99	15.24	38.45	PASS
Band5	3MHz	64QAM	20415	15RB#0	21.37	14.62	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	24.37	17.62	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	24.23	17.48	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	24.13	17.38	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	23.27	16.52	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	23.12	16.37	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	23.34	16.59	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	23.15	16.4	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	22.27	15.52	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#0	22.53	15.78	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#8	22.14	15.39	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#14	22.22	15.47	38.45	PASS
Band5	3MHz	64QAM	20525	15RB#0	21.2	14.45	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	24.05	17.3	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.99	17.24	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.84	17.09	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.98	16.23	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	22.93	16.18	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	23.05	16.3	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	23.06	16.31	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	22.04	15.29	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#0	21.92	15.17	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#8	22.06	15.31	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#14	22.18	15.43	38.45	PASS
Band5	3MHz	64QAM	20635	15RB#0	21.06	14.31	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	24.61	17.86	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	24.46	17.71	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	24.5	17.75	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	23.39	16.64	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	23.35	16.6	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	23.36	16.61	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	23.63	16.88	38.45	PASS

Band5	5MHz	16QAM	20425	25RB#0	22.5	15.75	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#0	22.56	15.81	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#12	22.2	15.45	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#24	21.89	15.14	38.45	PASS
Band5	5MHz	64QAM	20425	25RB#0	21.33	14.58	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	24.24	17.49	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	24.32	17.57	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	24.23	17.48	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	23.27	16.52	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	23.33	16.58	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	23.35	16.6	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	23.17	16.42	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	22.27	15.52	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#0	22.33	15.58	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#12	22.46	15.71	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#24	22.24	15.49	38.45	PASS
Band5	5MHz	64QAM	20525	25RB#0	21.16	14.41	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	24.14	17.39	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	24.03	17.28	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.91	17.16	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	23	16.25	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.97	16.22	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.97	16.22	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	23.13	16.38	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.97	15.22	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#0	22.35	15.6	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#12	22.26	15.51	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#24	22.23	15.48	38.45	PASS
Band5	5MHz	64QAM	20625	25RB#0	20.93	14.18	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	24.28	17.53	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	24.35	17.6	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	24.43	17.68	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	23.49	16.74	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	23.55	16.8	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	23.34	16.59	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	23.22	16.47	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	22.49	15.74	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#0	22.61	15.86	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#24	22.23	15.48	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#49	22.41	15.66	38.45	PASS
Band5	10MHz	64QAM	20450	50RB#0	21.25	14.5	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	24.21	17.46	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	24.25	17.5	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	24.16	17.41	38.45	PASS

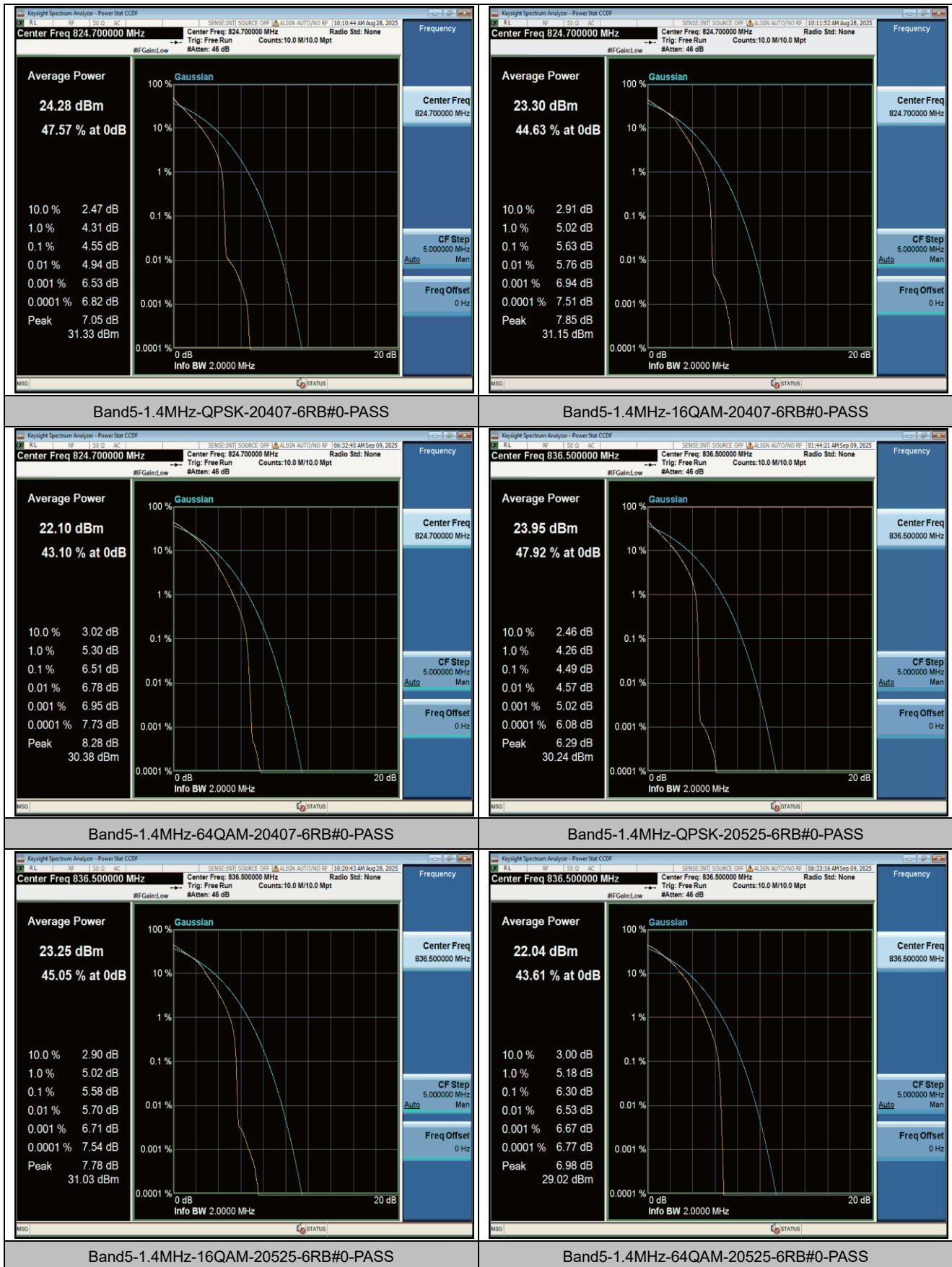
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Band5	10MHz	16QAM	20525	1RB#0	23.07	16.32	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	23.35	16.6	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	23.42	16.67	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	22.23	15.48	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#0	22.52	15.77	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#24	22.29	15.54	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#49	22.23	15.48	38.45	PASS
Band5	10MHz	64QAM	20525	50RB#0	21.13	14.38	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	24.08	17.33	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.98	17.23	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	24.34	17.59	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	23.06	16.31	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	23.05	16.3	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.94	16.19	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	23.07	16.32	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	22.1	15.35	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#0	22.27	15.52	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#24	22.47	15.72	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#49	22.12	15.37	38.45	PASS
Band5	10MHz	64QAM	20600	50RB#0	20.97	14.22	38.45	PASS

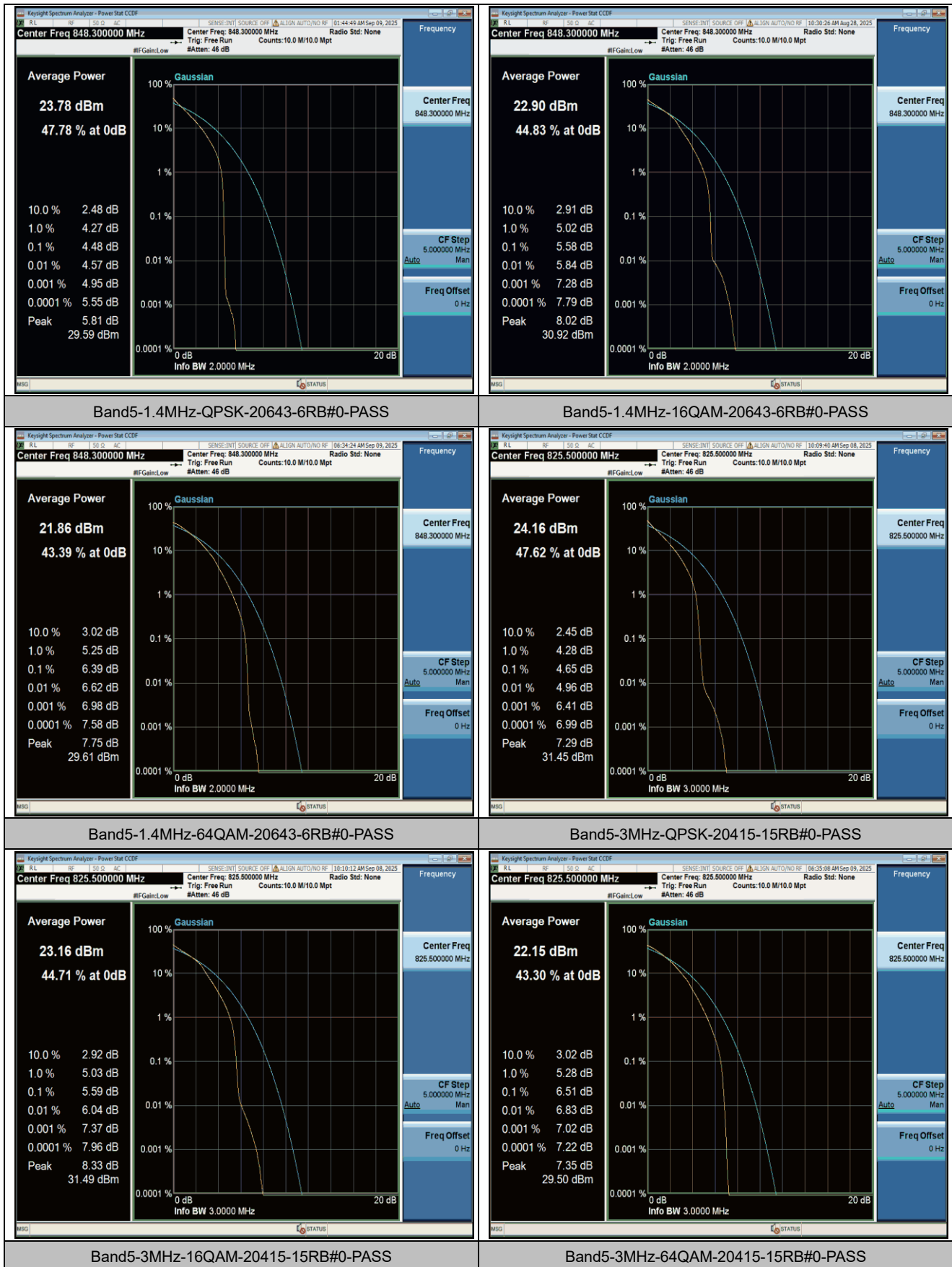
Peak-to-Average Ratio(CCDF)

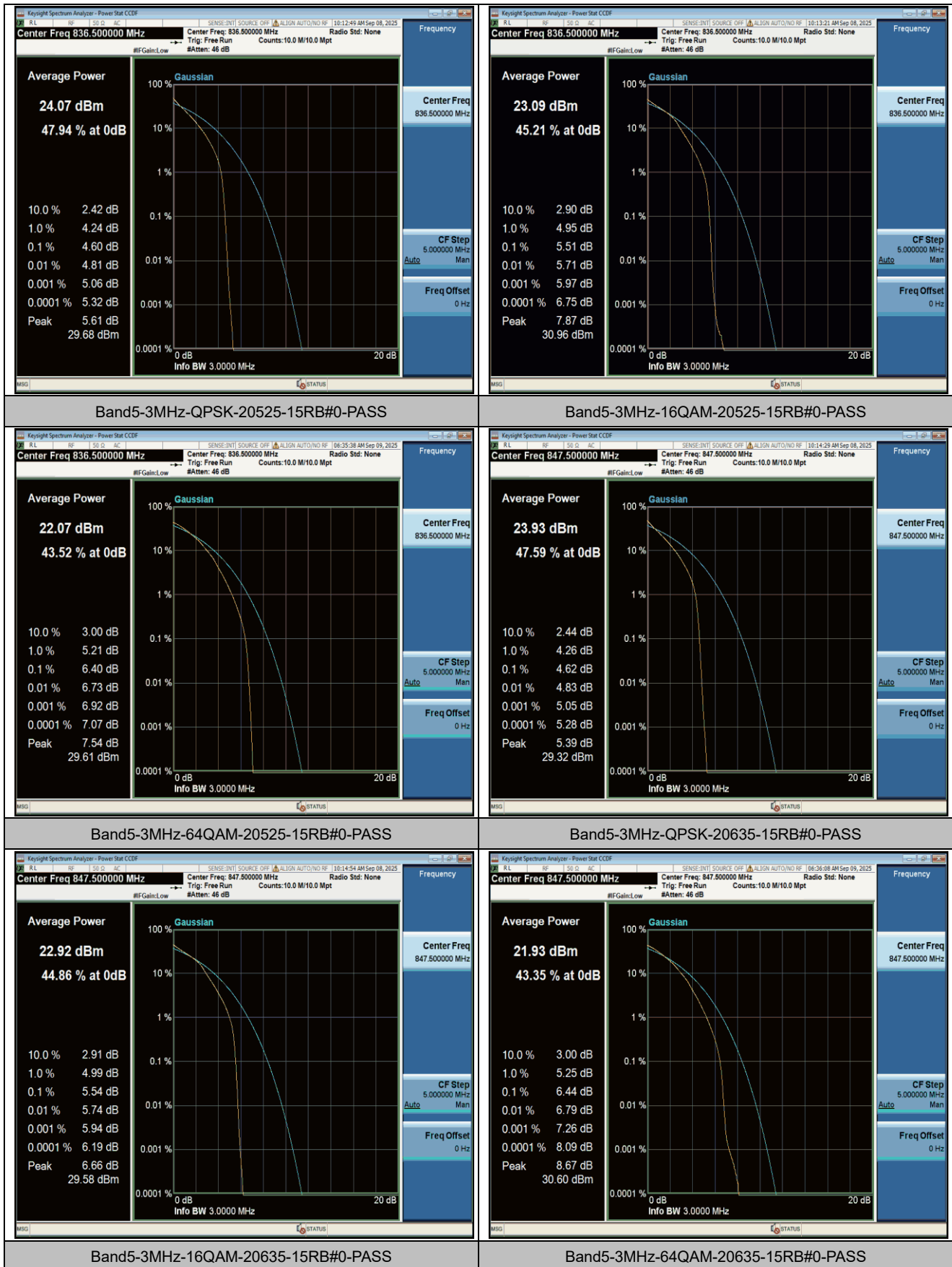
Test Result

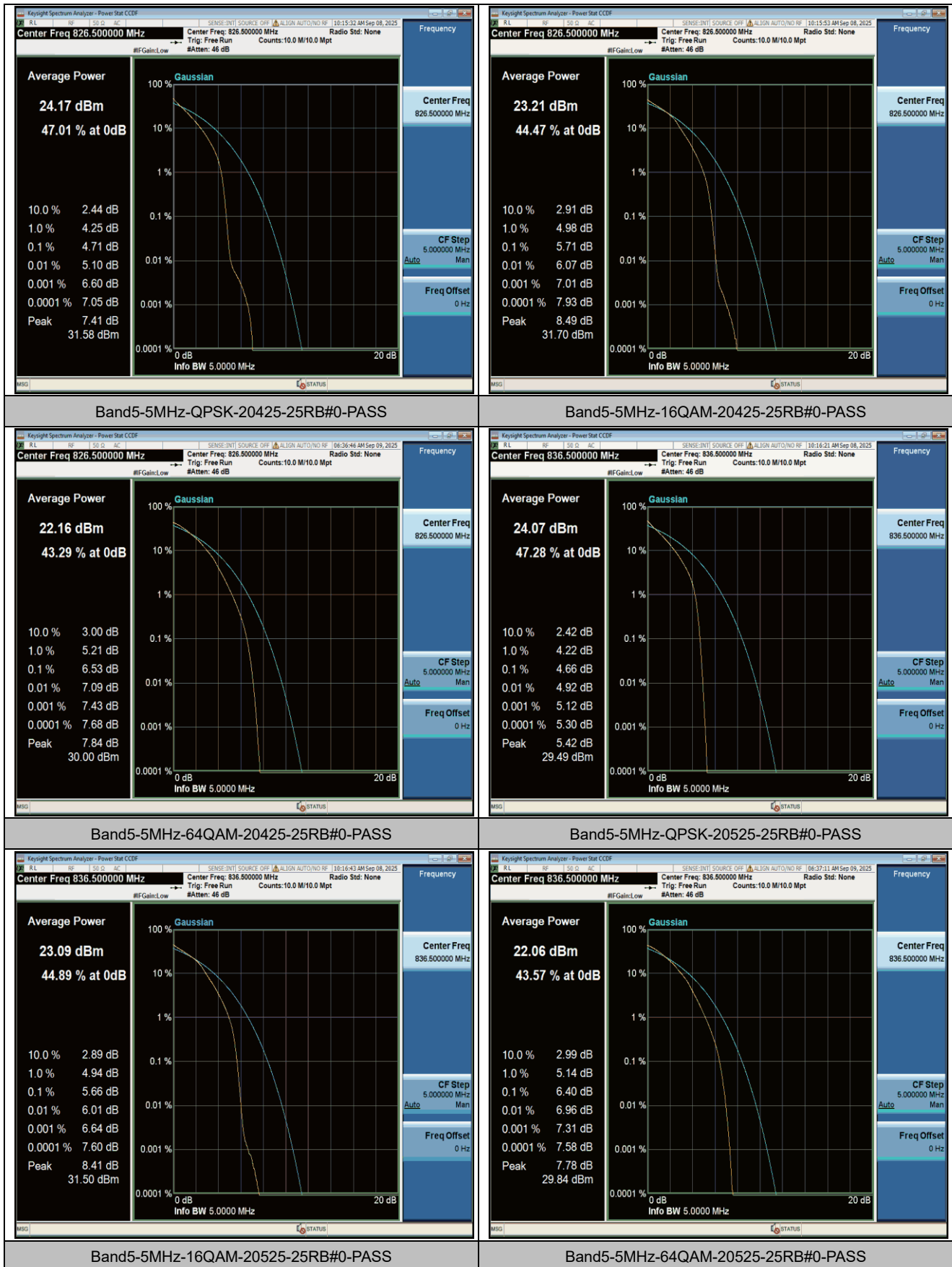
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	4.55	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	5.63	13	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	6.51	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	4.49	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	5.58	13	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	6.30	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	4.48	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	5.58	13	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	6.39	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	4.65	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	5.59	13	PASS
Band5	3MHz	64QAM	20415	15RB#0	6.51	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	4.60	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	5.51	13	PASS
Band5	3MHz	64QAM	20525	15RB#0	6.40	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	4.62	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	5.54	13	PASS
Band5	3MHz	64QAM	20635	15RB#0	6.44	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.71	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	5.71	13	PASS
Band5	5MHz	64QAM	20425	25RB#0	6.53	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.66	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	5.66	13	PASS
Band5	5MHz	64QAM	20525	25RB#0	6.40	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.69	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	5.70	13	PASS
Band5	5MHz	64QAM	20625	25RB#0	6.46	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	4.52	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	4.83	13	PASS
Band5	10MHz	64QAM	20450	50RB#0	6.47	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	5.02	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.43	13	PASS
Band5	10MHz	64QAM	20525	50RB#0	6.40	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	4.54	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.49	13	PASS
Band5	10MHz	64QAM	20600	50RB#0	6.33	13	PASS

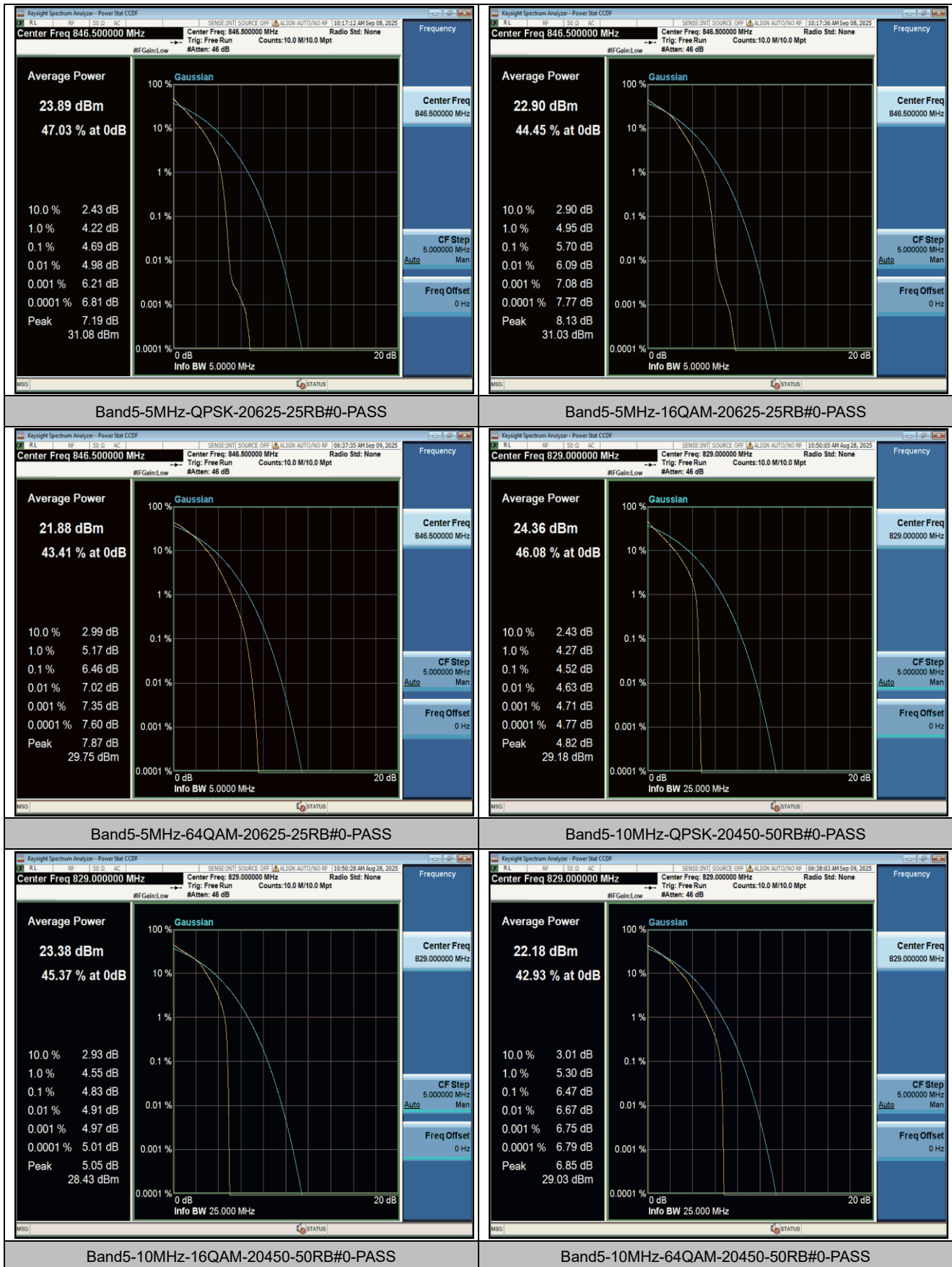
Test Graphs

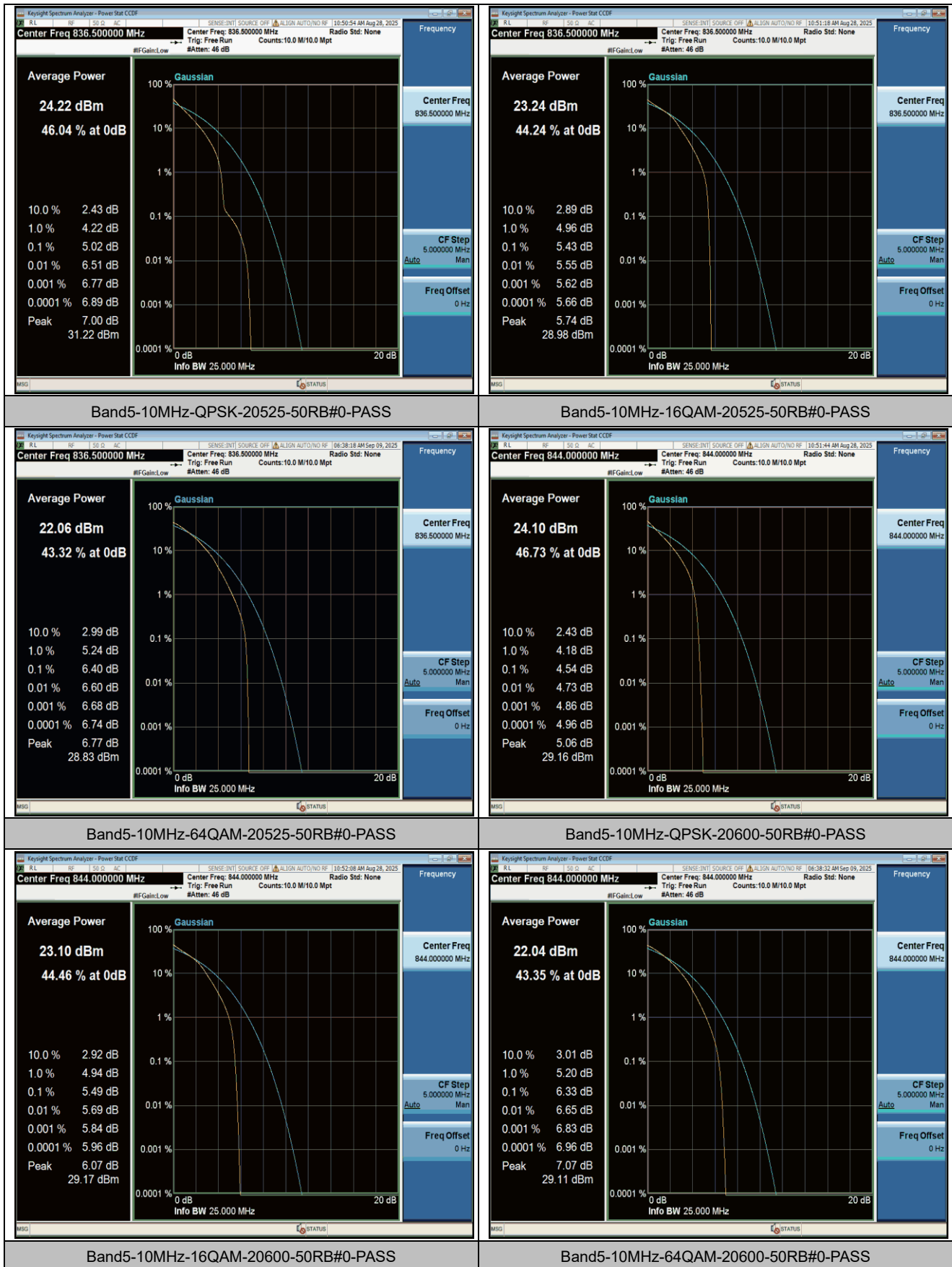










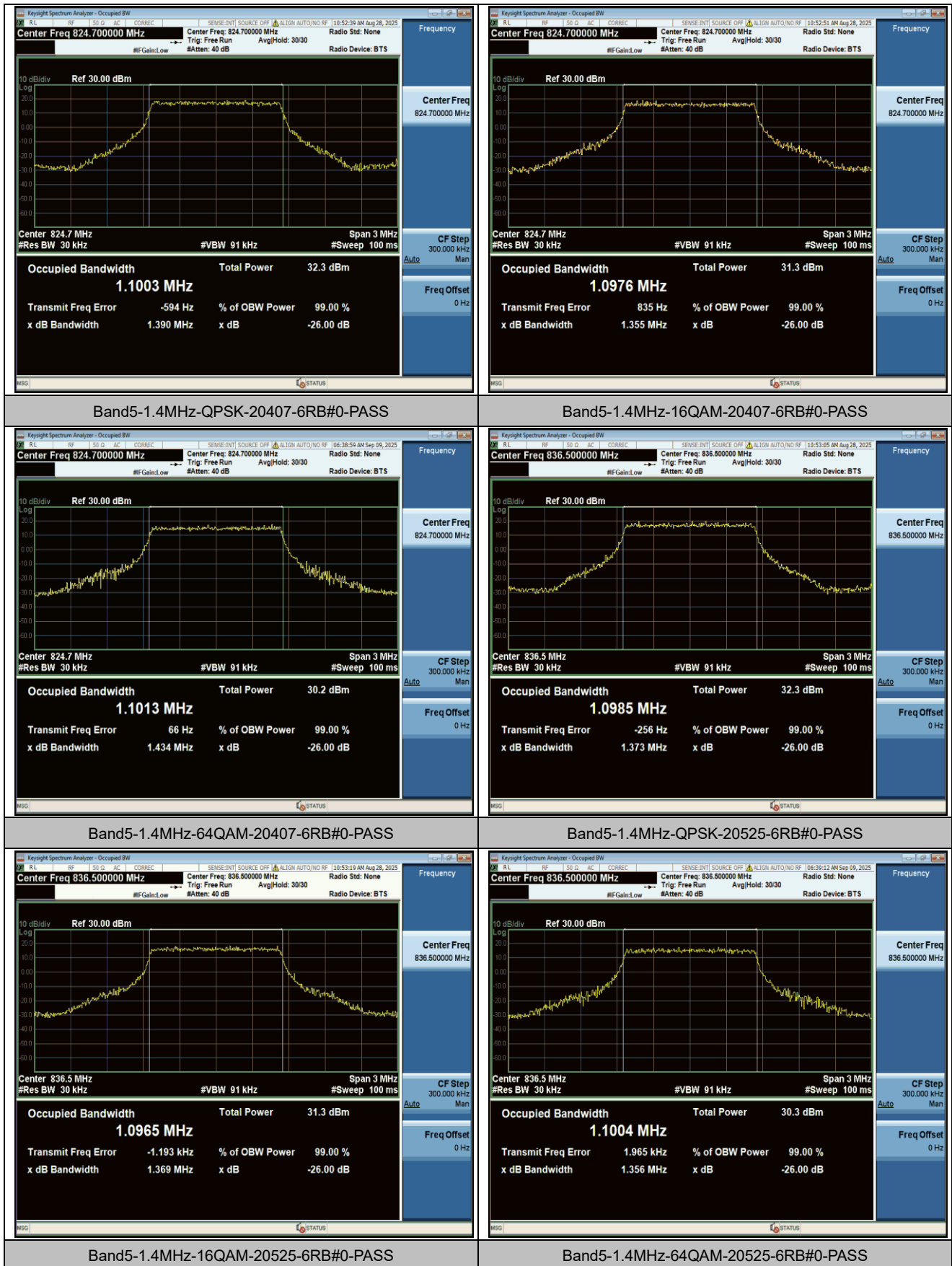


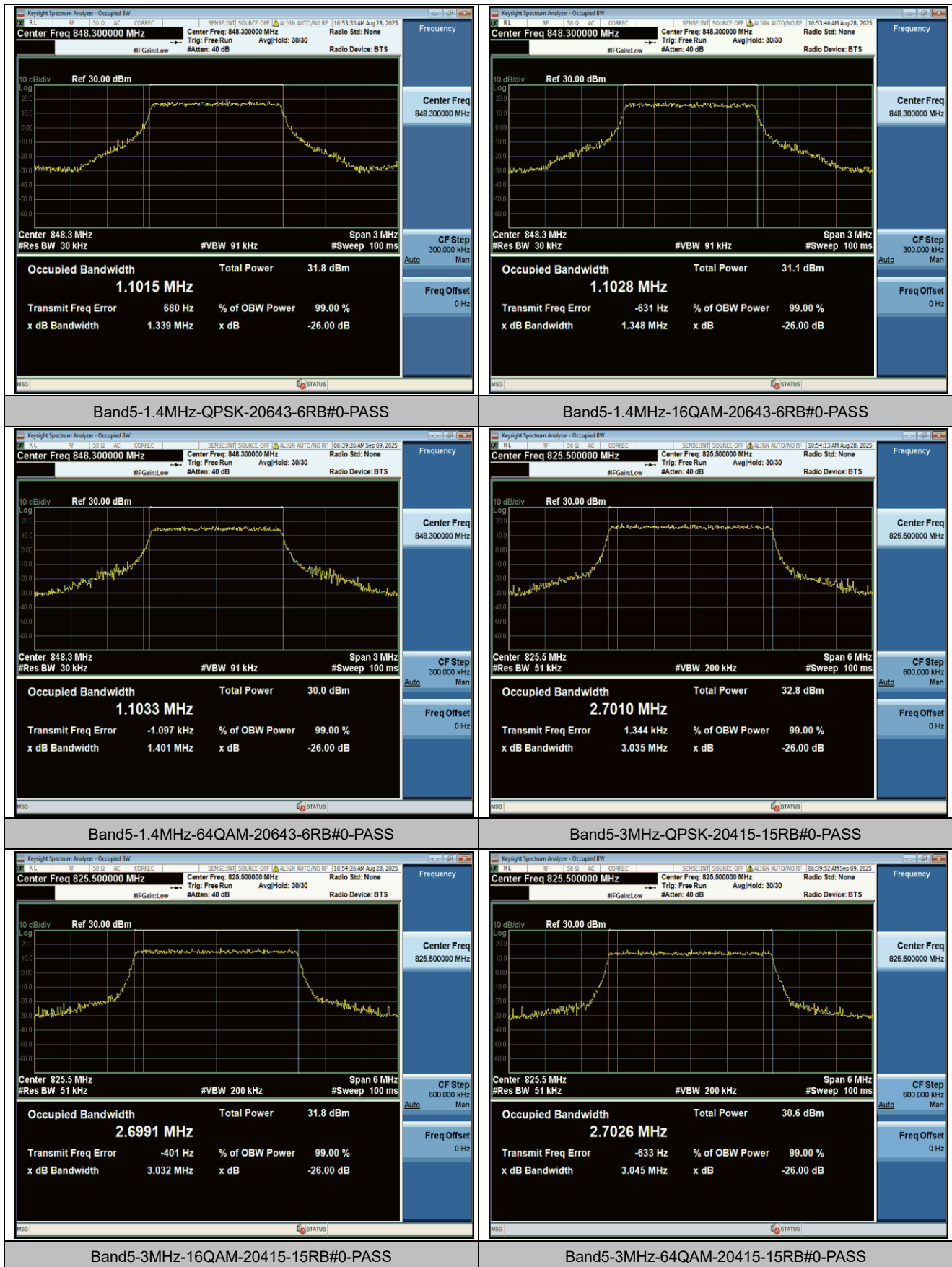
26dB Bandwidth and Occupied Bandwidth

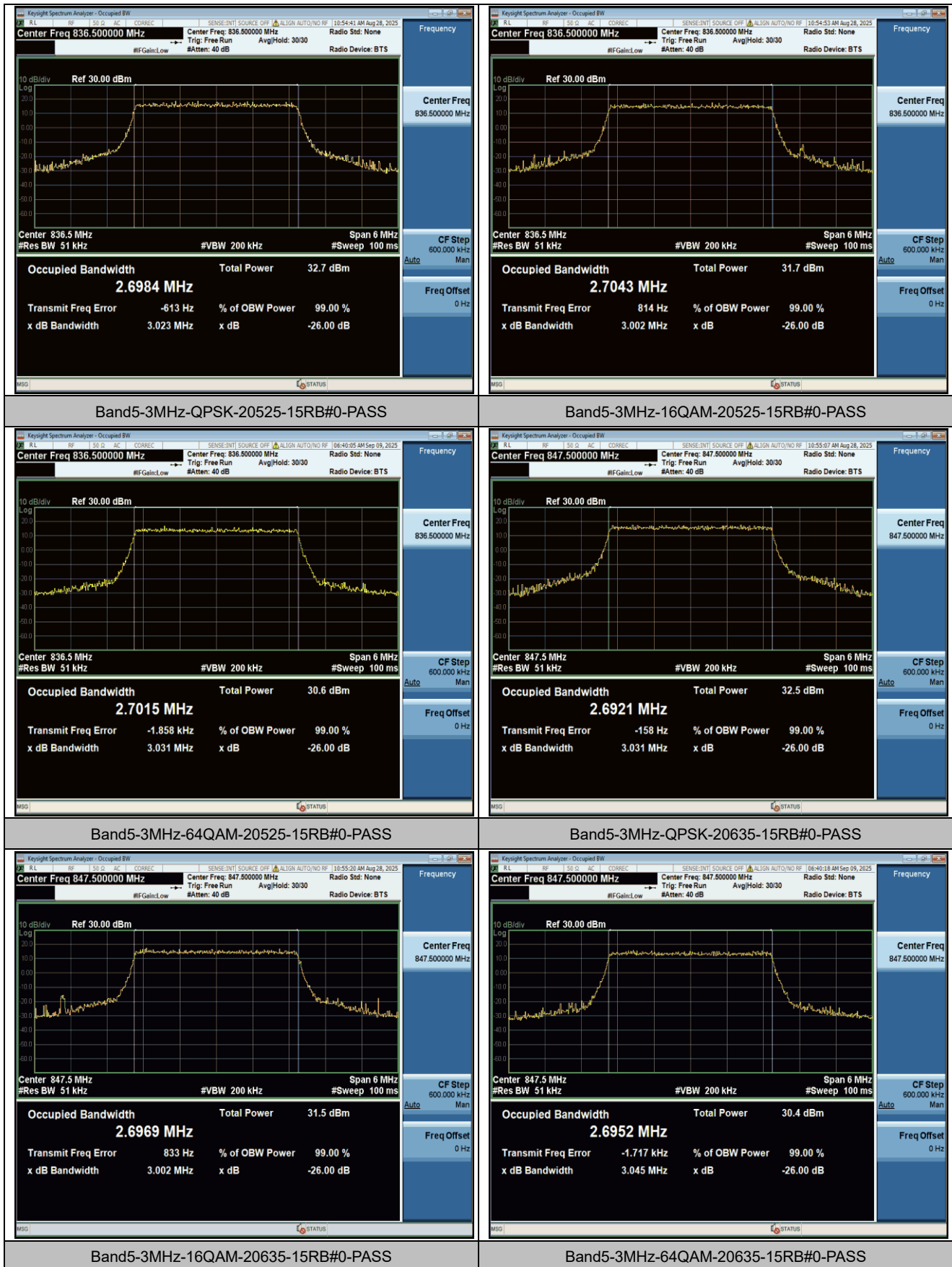
Test Result

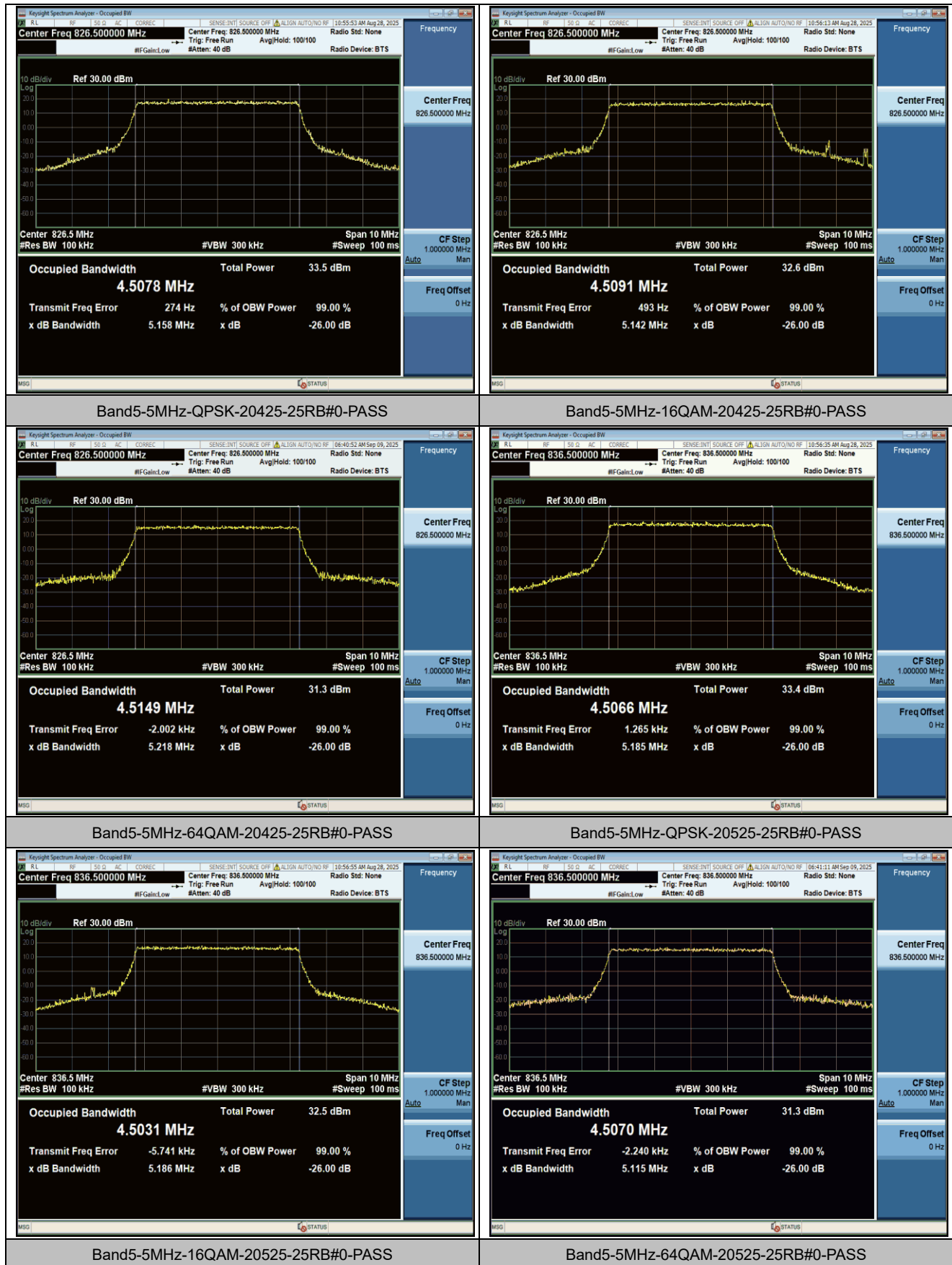
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.1003	1.390	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.0976	1.355	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	1.1013	1.434	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.0985	1.373	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.0965	1.369	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	1.1004	1.356	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.1015	1.339	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.1028	1.348	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	1.1033	1.401	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.7010	3.035	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.6991	3.032	PASS
Band5	3MHz	64QAM	20415	15RB#0	2.7026	3.045	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.6984	3.023	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.7043	3.002	PASS
Band5	3MHz	64QAM	20525	15RB#0	2.7015	3.031	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.6921	3.031	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.6969	3.002	PASS
Band5	3MHz	64QAM	20635	15RB#0	2.6952	3.045	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.5078	5.158	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.5091	5.142	PASS
Band5	5MHz	64QAM	20425	25RB#0	4.5149	5.218	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.5066	5.185	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.5031	5.186	PASS
Band5	5MHz	64QAM	20525	25RB#0	4.5070	5.115	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.5125	5.154	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.5176	5.158	PASS
Band5	5MHz	64QAM	20625	25RB#0	4.5094	5.141	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9962	10.90	PASS
Band5	10MHz	16QAM	20450	50RB#0	9.0025	10.06	PASS
Band5	10MHz	64QAM	20450	50RB#0	9.0158	10.11	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.9993	10.10	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.9949	10.00	PASS
Band5	10MHz	64QAM	20525	50RB#0	8.9963	10.07	PASS
Band5	10MHz	QPSK	20600	50RB#0	9.0005	10.15	PASS
Band5	10MHz	16QAM	20600	50RB#0	9.0101	10.15	PASS
Band5	10MHz	64QAM	20600	50RB#0	9.0116	9.998	PASS

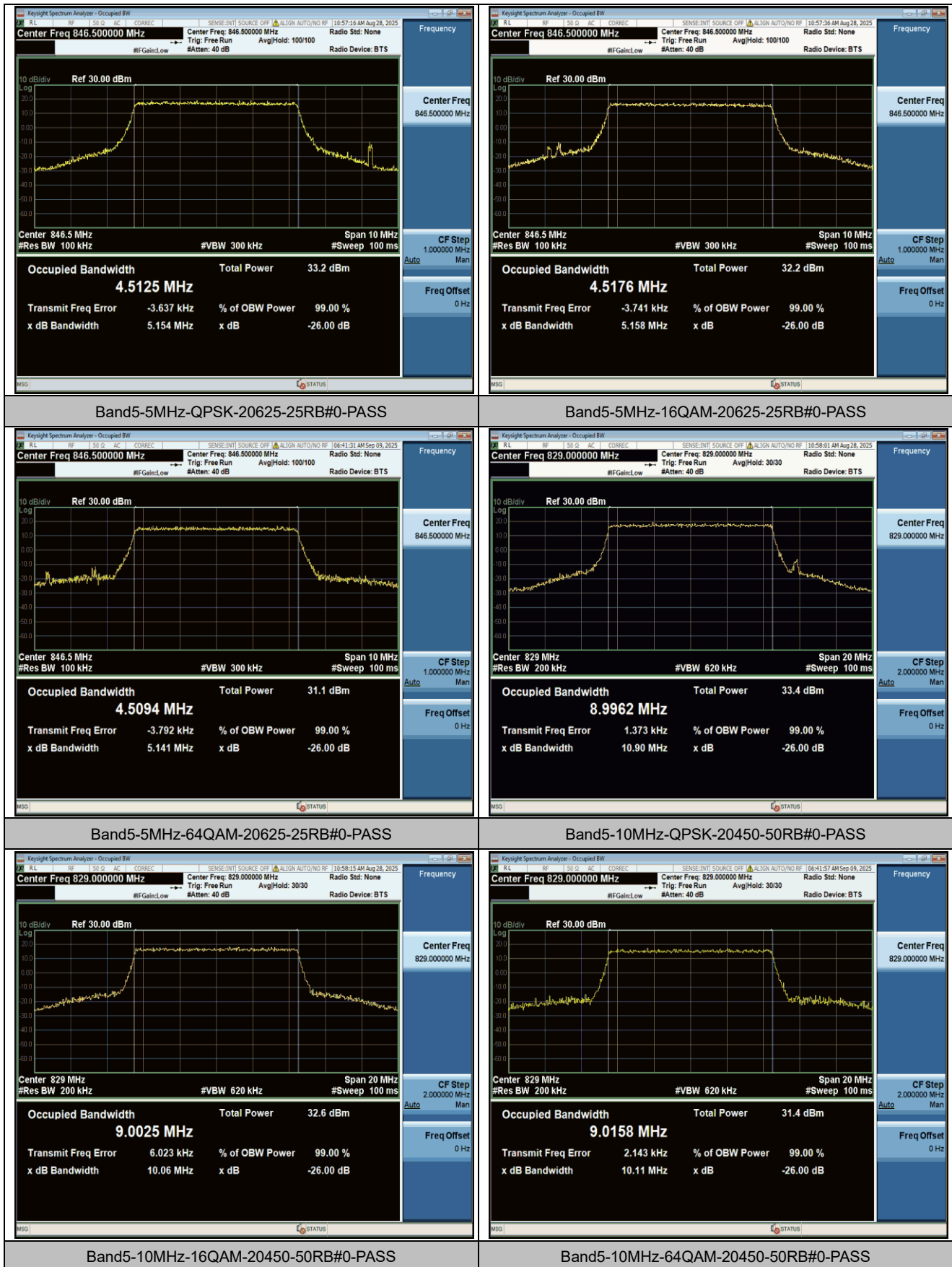
Test Graphs

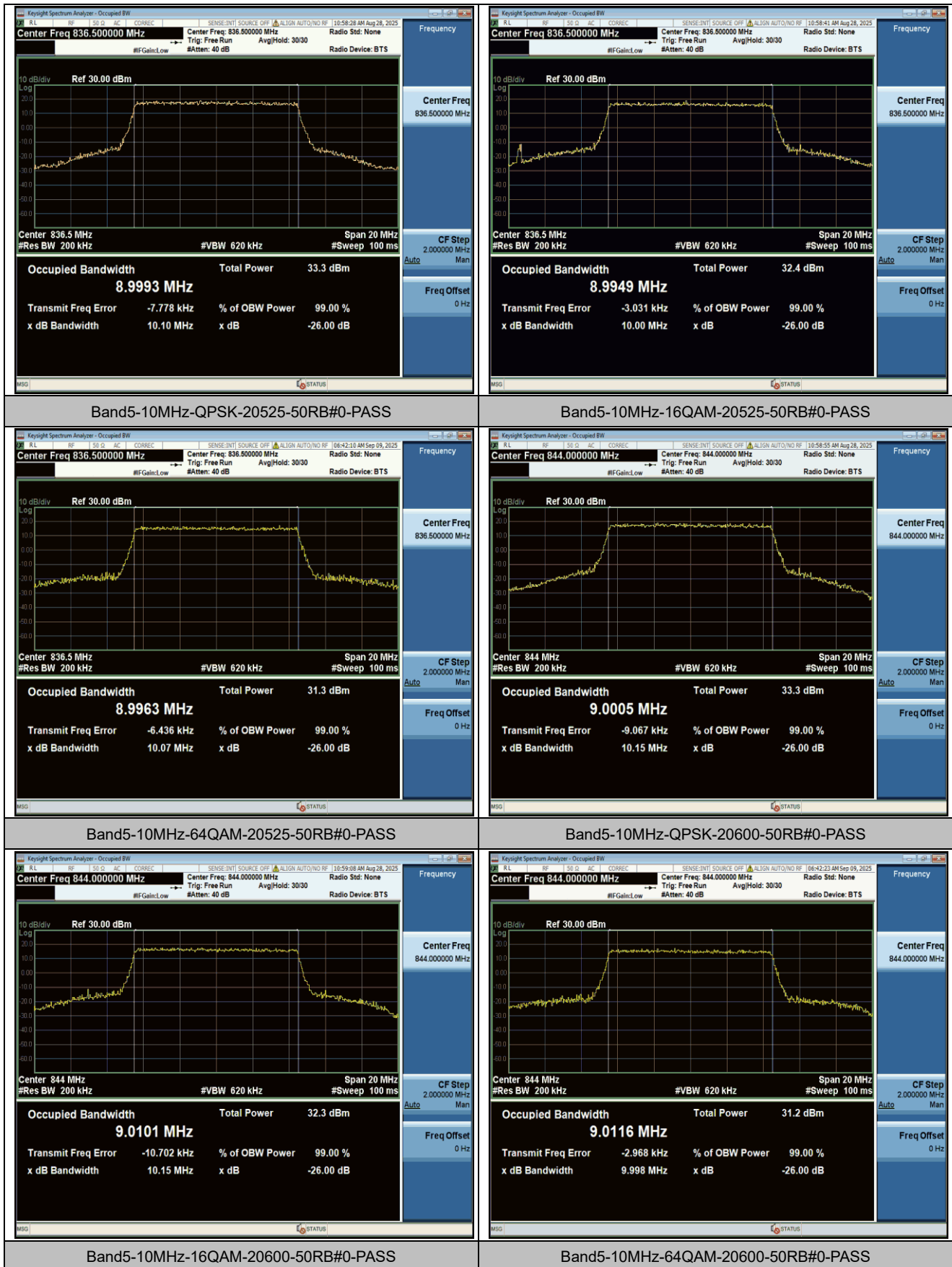






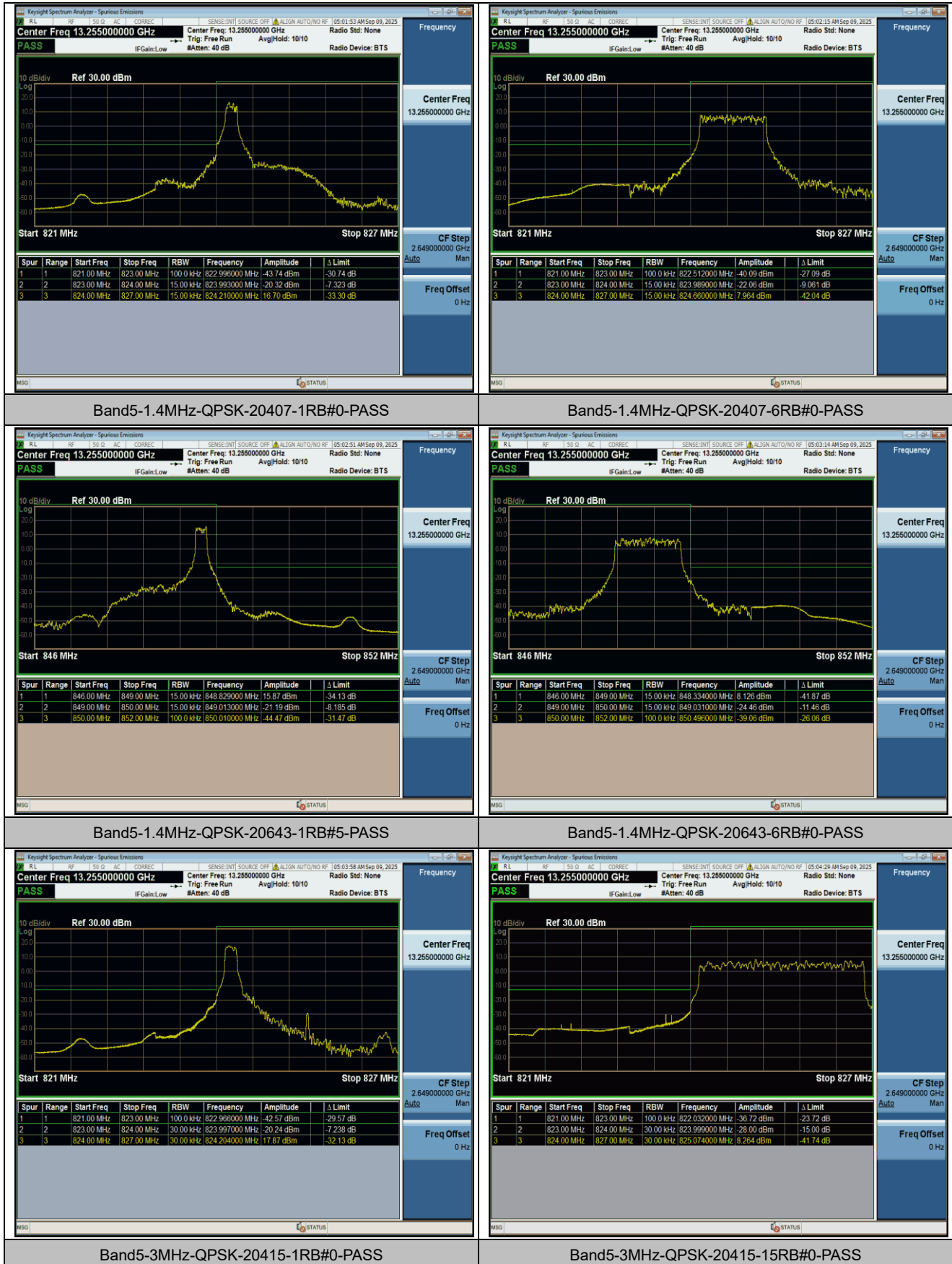


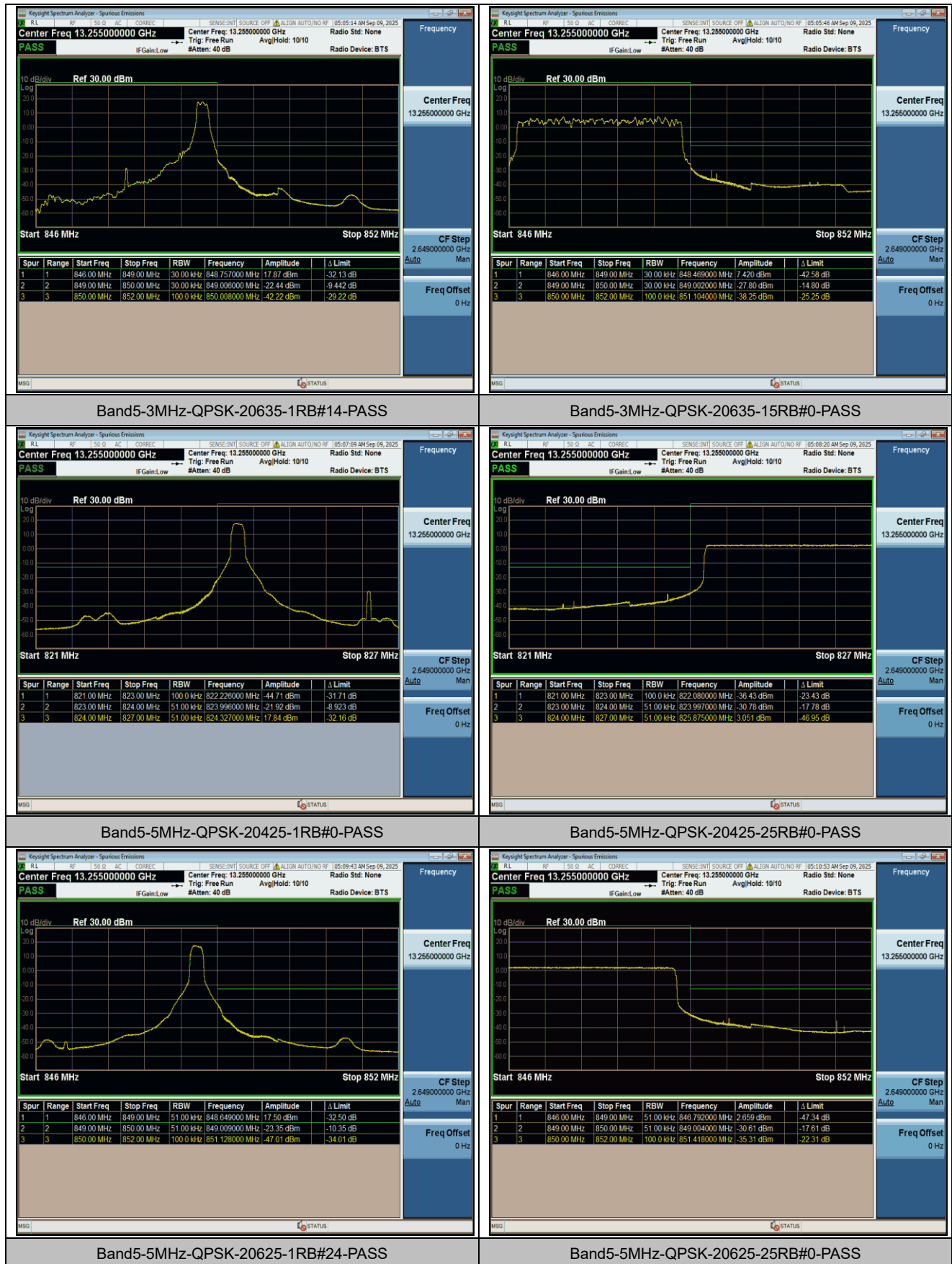


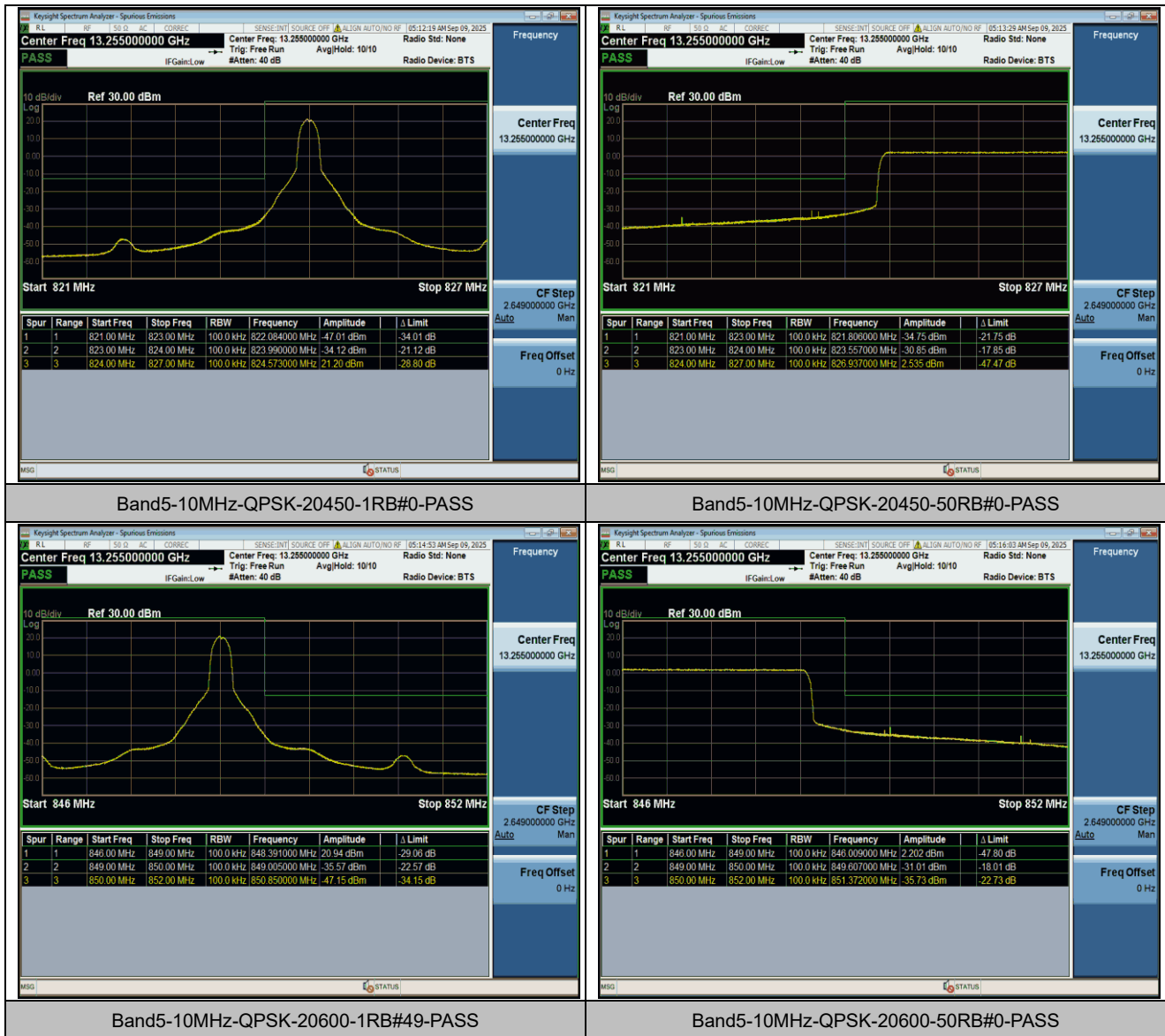


Band Edge

Test Graphs

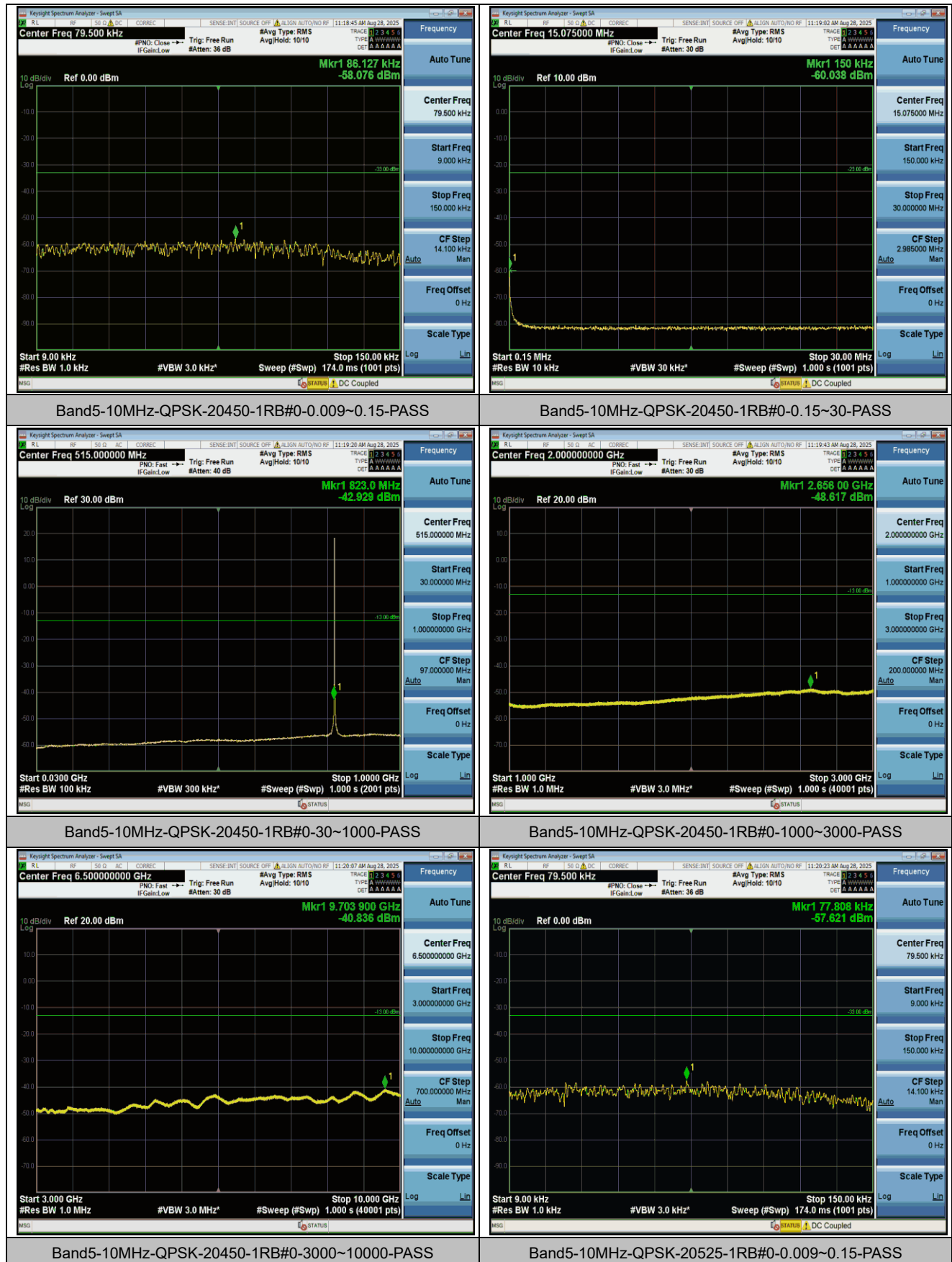


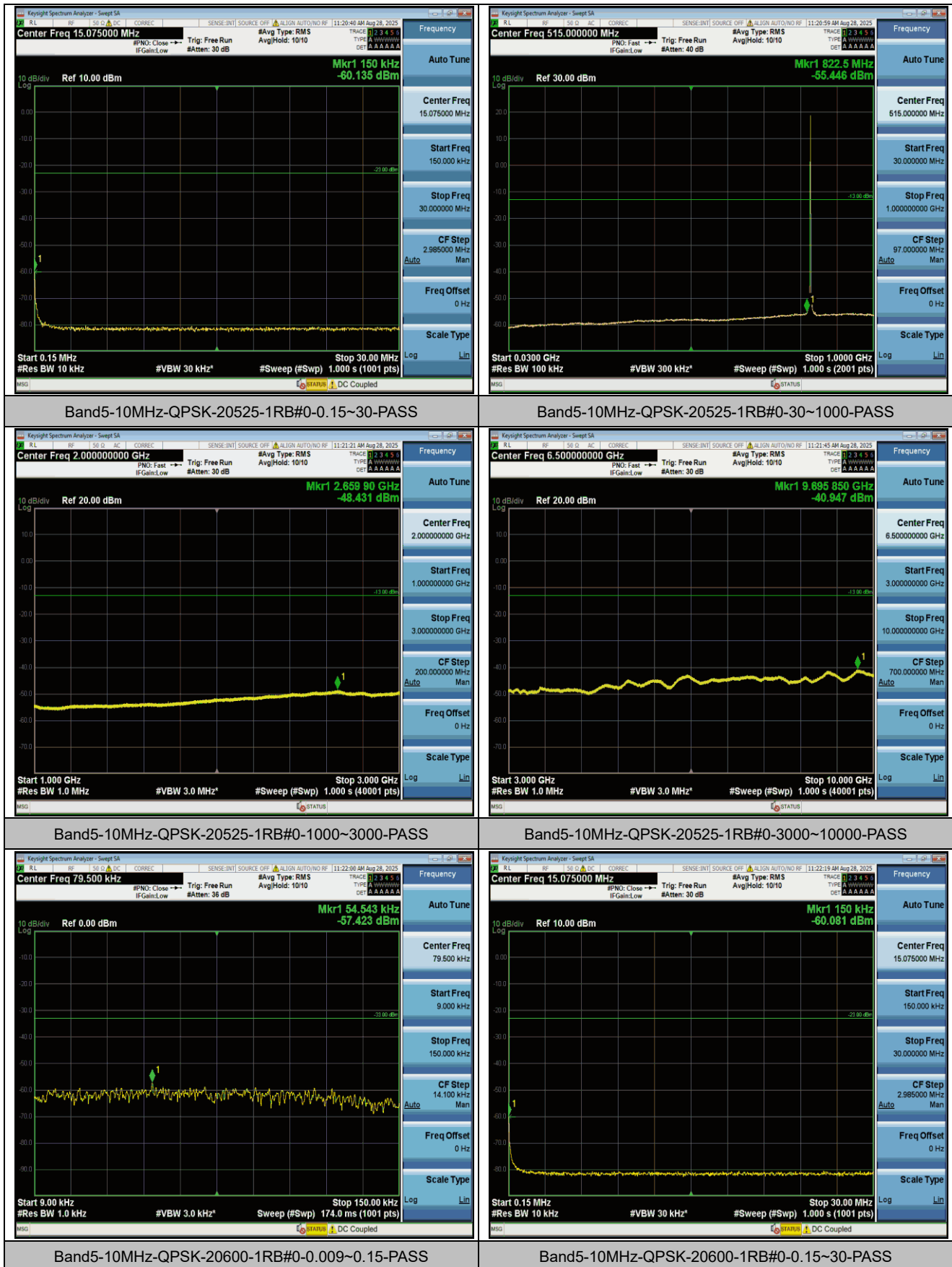




Conducted Spurious Emission

Test Graphs



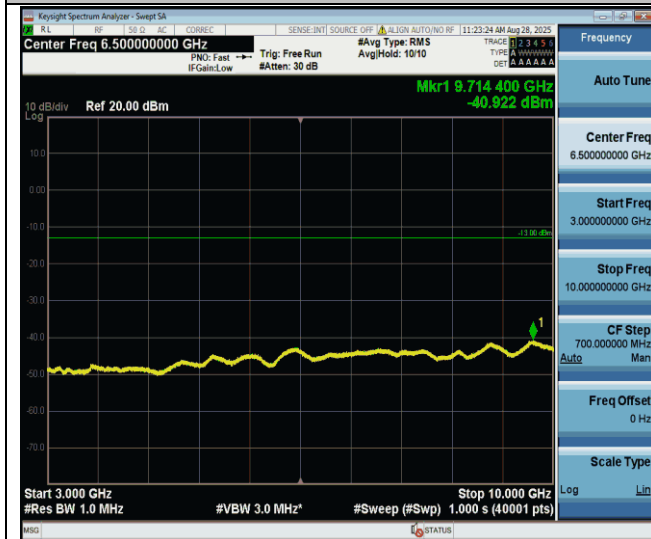




Band5-10MHz-QPSK-20600-1RB#0-30~1000-PASS



Band5-10MHz-QPSK-20600-1RB#0-1000~3000-PASS



Band5-10MHz-QPSK-20600-1RB#0-3000~10000-PASS

Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-0.20	-0.000239	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-2.90	-0.003467	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-1.70	-0.002032	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20525	50RB#0	NV	-30	-1.60	-0.001913	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-1.90	-0.002271	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-10	-0.70	-0.000837	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-1.80	-0.002152	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-1.90	-0.002271	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-0.70	-0.000837	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	0.20	0.000239	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-1.60	-0.001913	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-2.10	-0.002510	±2.5	PASS

~The End~