

Appendix-A LTE Band 5

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	23.22	21.37	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	23.14	21.29	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	23.04	21.19	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	22.61	20.76	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	22.97	21.12	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.22	21.37	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.08	21.23	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.5	20.65	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	23.01	21.16	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.1	21.25	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	23.06	21.21	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.5	20.65	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	22.11	20.26	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	22.22	20.37	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	22.35	20.5	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	21.58	19.73	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	22.22	20.37	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	21.81	19.96	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.98	20.13	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	21.59	19.74	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	22.14	20.29	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.05	20.2	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.95	20.1	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.68	19.83	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#0	21.86	20.01	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#2	21.56	19.71	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#5	21.71	19.86	38.45	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	20.55	18.7	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#0	21.82	19.97	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#2	21.53	19.68	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#5	21.78	19.93	38.45	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	20.54	18.69	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#0	21.12	19.27	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#2	21.07	19.22	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#5	21.21	19.36	38.45	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	20.44	18.59	38.45	PASS

Band5	3MHz	QPSK	20415	1RB#0	23.15	21.3	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.04	21.19	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.16	21.31	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.63	20.78	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.06	21.21	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.07	21.22	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.08	21.23	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.59	20.74	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	22.95	21.1	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.02	21.17	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.12	21.27	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.48	20.63	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.2	20.35	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.23	20.38	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.09	20.24	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.64	19.79	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.24	20.39	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	22	20.15	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.18	20.33	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.65	19.8	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	21.87	20.02	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.02	20.17	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.12	20.27	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.51	19.66	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#0	21.75	19.9	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#8	21.76	19.91	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#14	21.71	19.86	38.45	PASS
Band5	3MHz	64QAM	20415	15RB#0	20.66	18.81	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#0	21.8	19.95	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#8	21.16	19.31	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#14	21.32	19.47	38.45	PASS
Band5	3MHz	64QAM	20525	15RB#0	20.68	18.83	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#0	21.22	19.37	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#8	21.08	19.23	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#14	21.23	19.38	38.45	PASS
Band5	3MHz	64QAM	20635	15RB#0	20.53	18.68	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.16	21.31	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.05	21.2	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.99	21.14	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.6	20.75	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	22.89	21.04	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.15	21.3	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.02	21.17	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.62	20.77	38.45	PASS

Band5	5MHz	QPSK	20625	1RB#0	23.14	21.29	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.02	21.17	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.06	21.21	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.5	20.65	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.1	20.25	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.28	20.43	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	22.27	20.42	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	21.56	19.71	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	21.95	20.1	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.04	20.19	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	22.2	20.35	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.6	19.75	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.26	20.41	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.18	20.33	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.2	20.35	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.5	19.65	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#0	21.82	19.97	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#12	21.87	20.02	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#24	21.62	19.77	38.45	PASS
Band5	5MHz	64QAM	20425	25RB#0	20.59	18.74	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#0	21.25	19.4	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#12	21.36	19.51	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#24	21.26	19.41	38.45	PASS
Band5	5MHz	64QAM	20525	25RB#0	20.6	18.75	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#0	21.35	19.5	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#12	21.11	19.26	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#24	21.19	19.34	38.45	PASS
Band5	5MHz	64QAM	20625	25RB#0	20.51	18.66	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.14	21.29	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.13	21.28	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.02	21.17	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.59	20.74	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.06	21.21	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.07	21.22	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	23	21.15	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.61	20.76	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	22.84	20.99	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.04	21.19	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.06	21.21	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.56	20.71	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.27	20.42	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.04	20.19	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.88	20.03	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.58	19.73	38.45	PASS

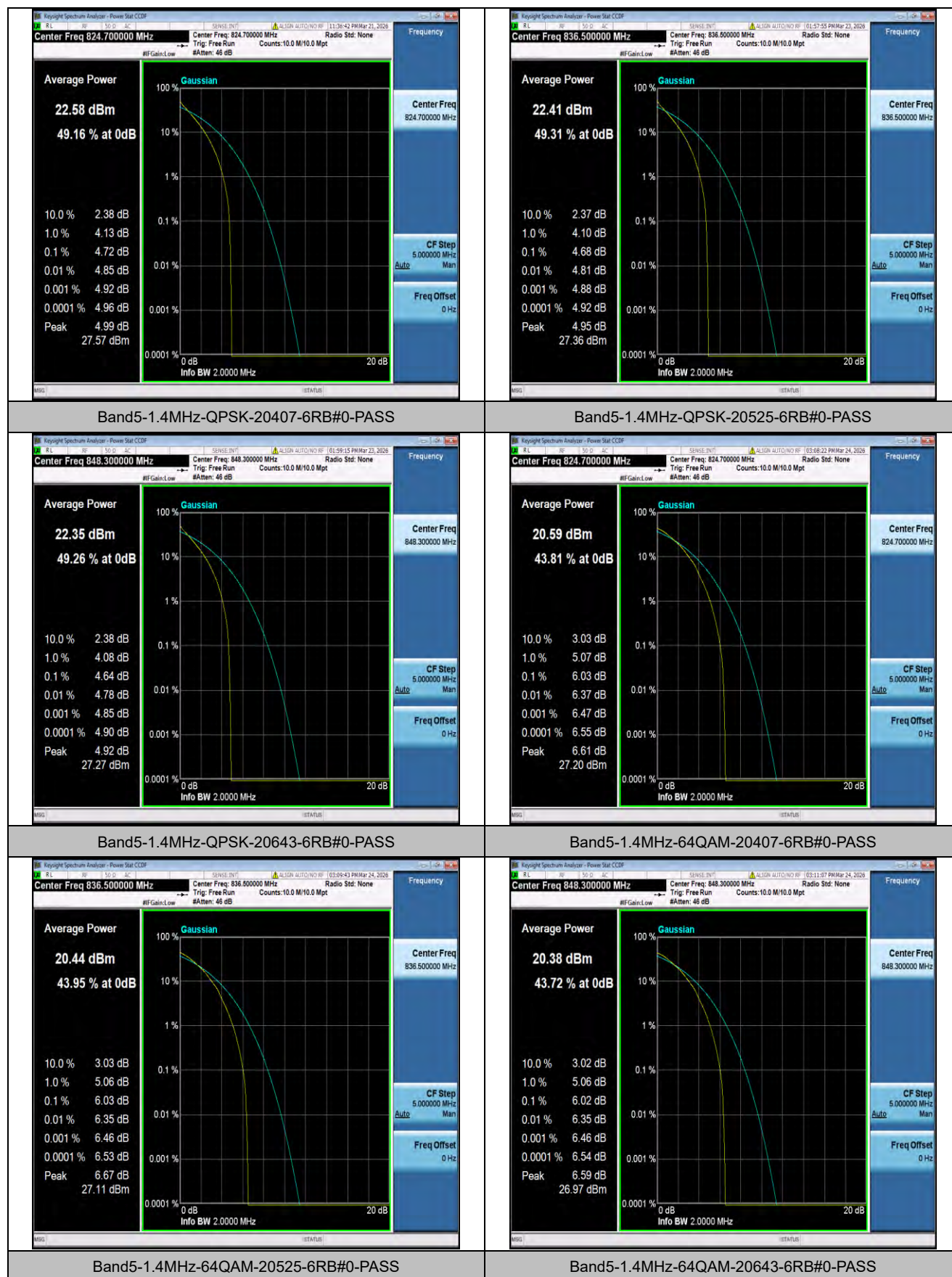
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Band5	10MHz	16QAM	20525	1RB#24	22.34	20.49	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	21.91	20.06	38.45	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.61	19.76	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.04	20.19	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	21.92	20.07	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	22.13	20.28	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.51	19.66	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#0	21.63	19.78	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#24	21.6	19.75	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#49	21.76	19.91	38.45	PASS
Band5	10MHz	64QAM	20450	50RB#0	20.58	18.73	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#0	21.17	19.32	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#24	21.23	19.38	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#49	21.12	19.27	38.45	PASS
Band5	10MHz	64QAM	20525	50RB#0	20.65	18.8	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#0	21.27	19.42	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#24	21.28	19.43	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#49	21.29	19.44	38.45	PASS
Band5	10MHz	64QAM	20600	50RB#0	20.49	18.64	38.45	PASS

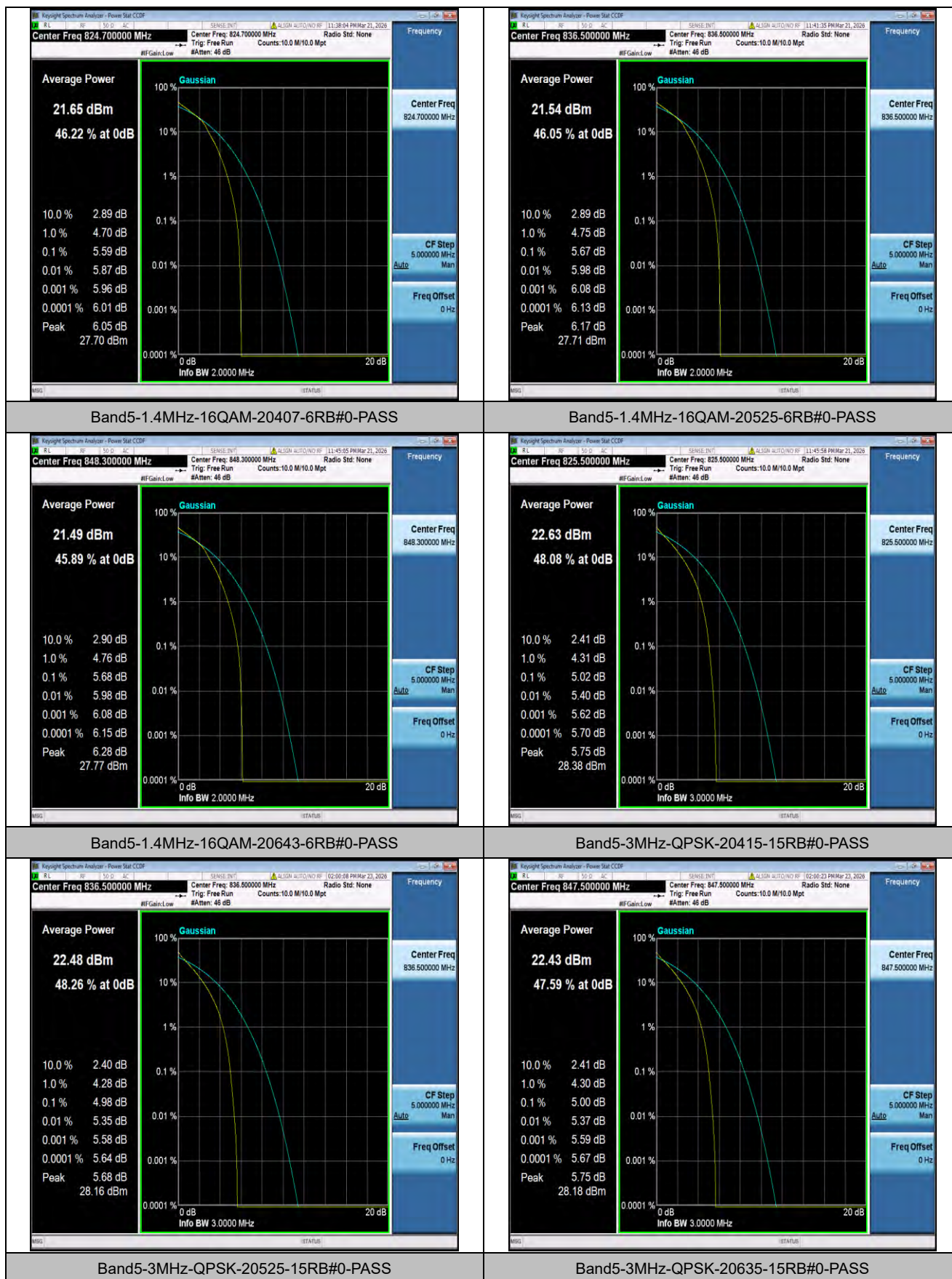
Peak-to-Average Ratio(CCDF)

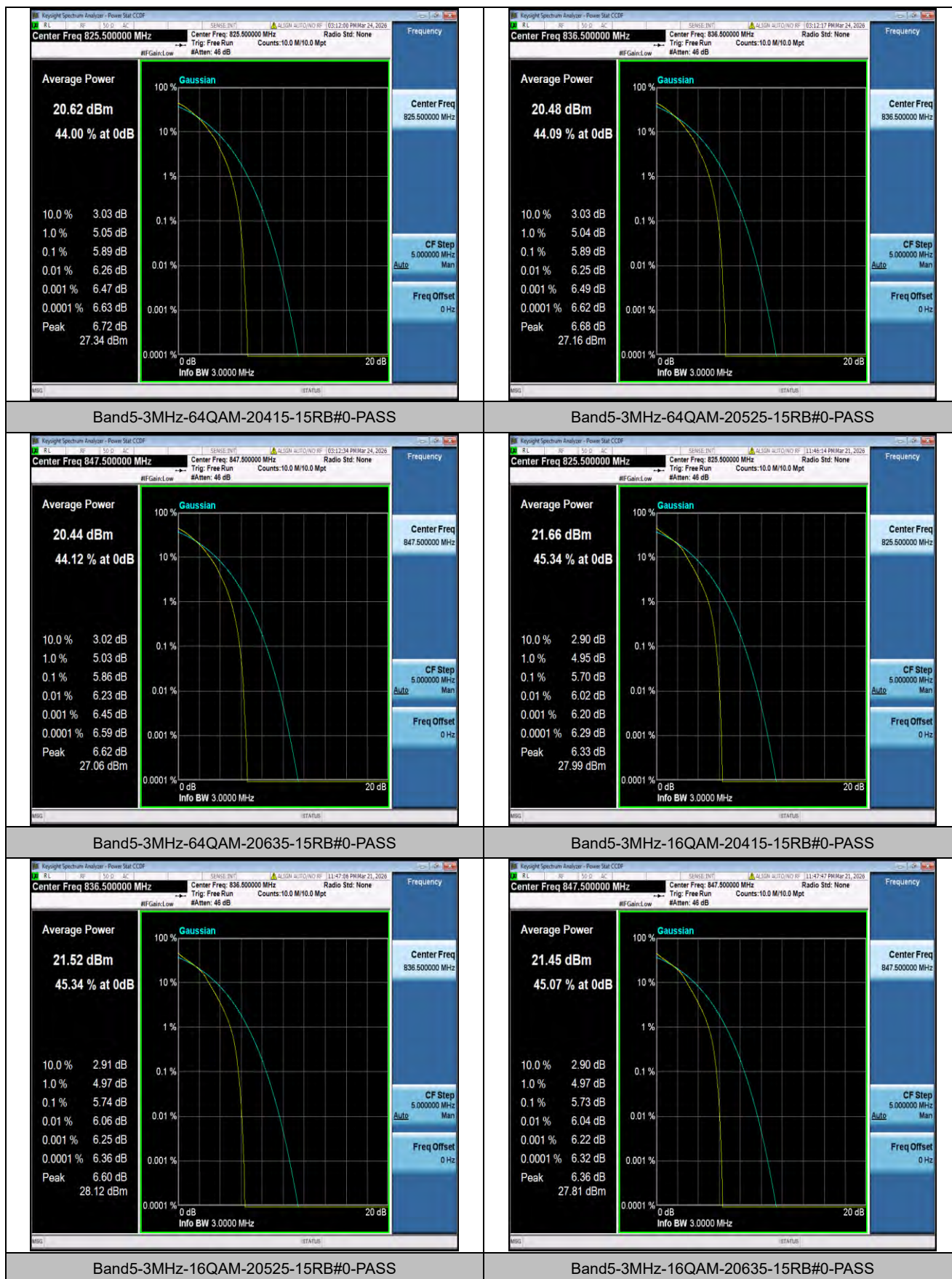
Test Result

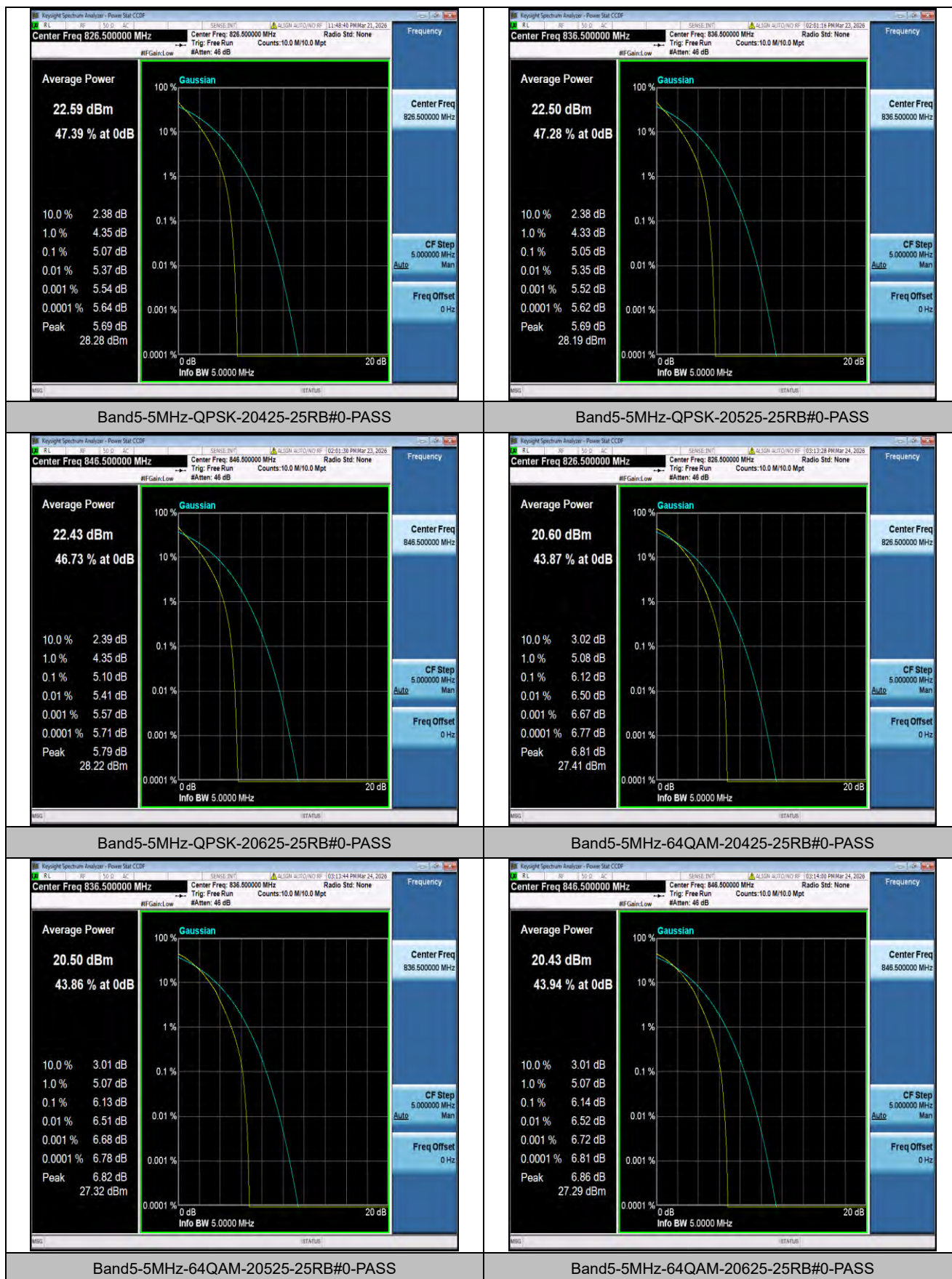
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	4.72	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	4.68	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	4.64	13	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	6.03	13	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	6.03	13	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	6.02	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	5.59	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	5.67	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	5.68	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	5.02	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	4.98	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	5.00	13	PASS
Band5	3MHz	64QAM	20415	15RB#0	5.89	13	PASS
Band5	3MHz	64QAM	20525	15RB#0	5.89	13	PASS
Band5	3MHz	64QAM	20635	15RB#0	5.86	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	5.70	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	5.74	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	5.73	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.07	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	5.05	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	5.10	13	PASS
Band5	5MHz	64QAM	20425	25RB#0	6.12	13	PASS
Band5	5MHz	64QAM	20525	25RB#0	6.13	13	PASS
Band5	5MHz	64QAM	20625	25RB#0	6.14	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	5.69	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	5.72	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	5.75	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	4.99	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	4.98	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.05	13	PASS
Band5	10MHz	64QAM	20450	50RB#0	6.13	13	PASS
Band5	10MHz	64QAM	20525	50RB#0	6.16	13	PASS
Band5	10MHz	64QAM	20600	50RB#0	6.19	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	5.68	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	5.75	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	5.81	13	PASS

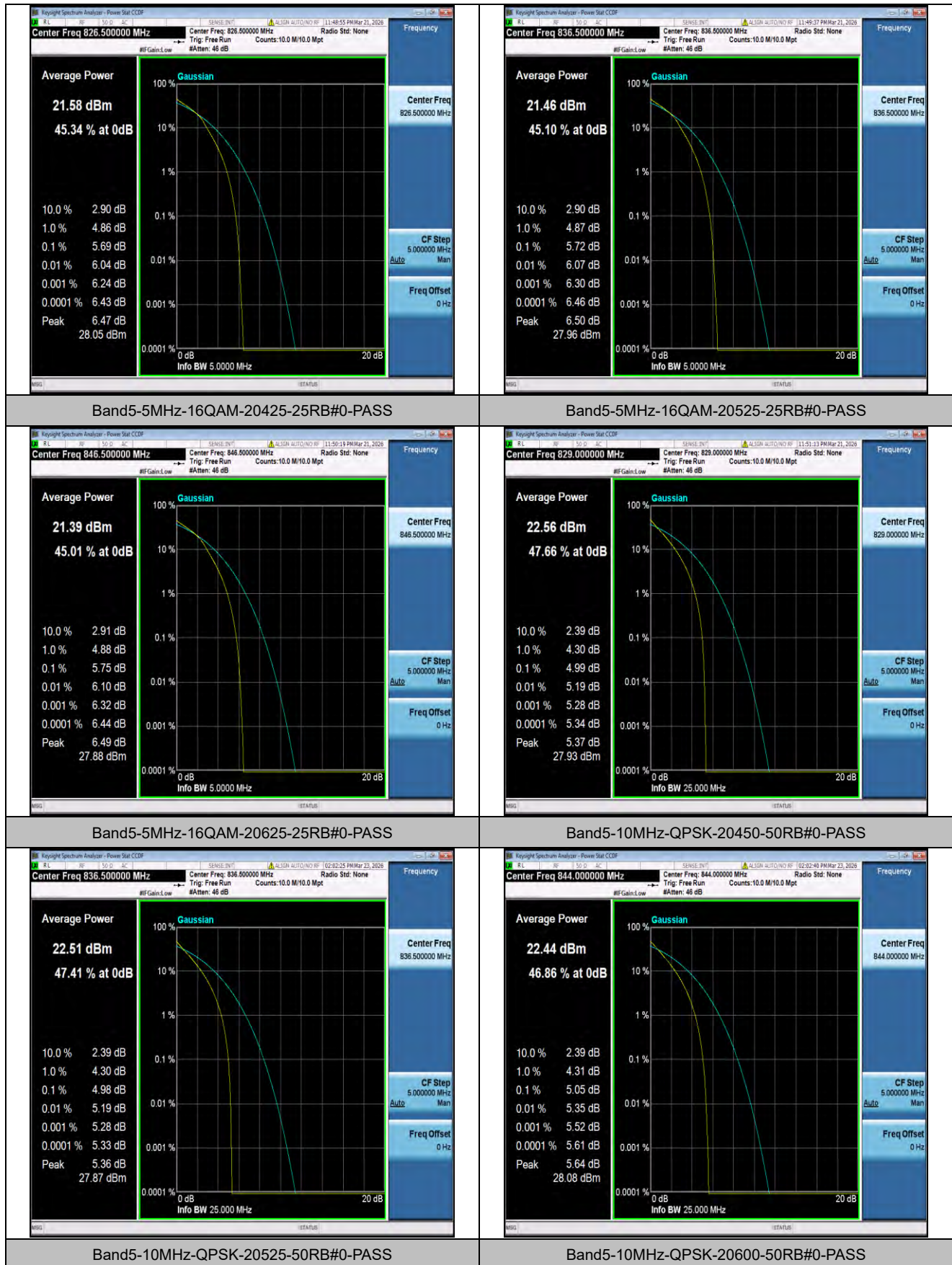
Test Graphs

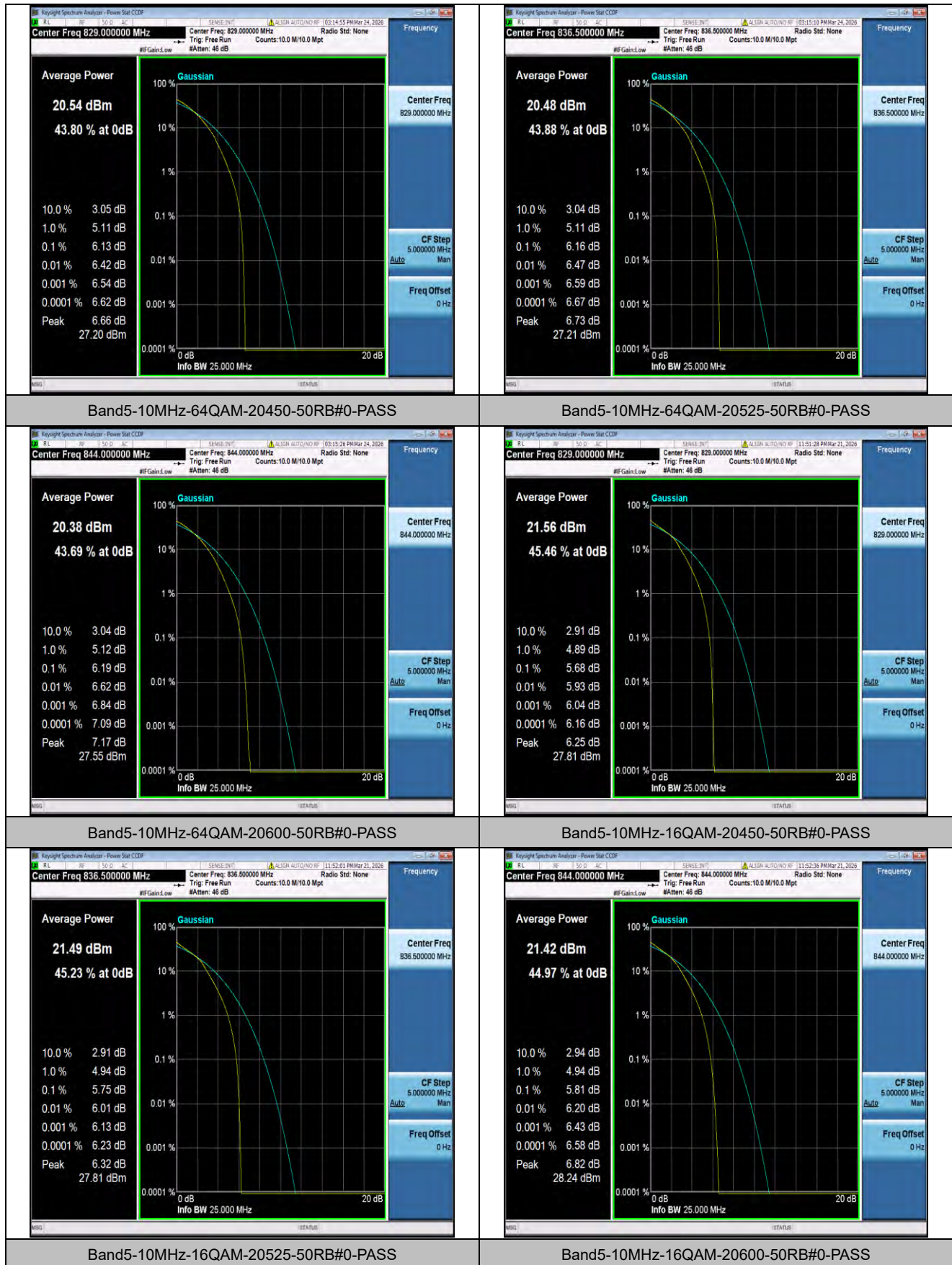










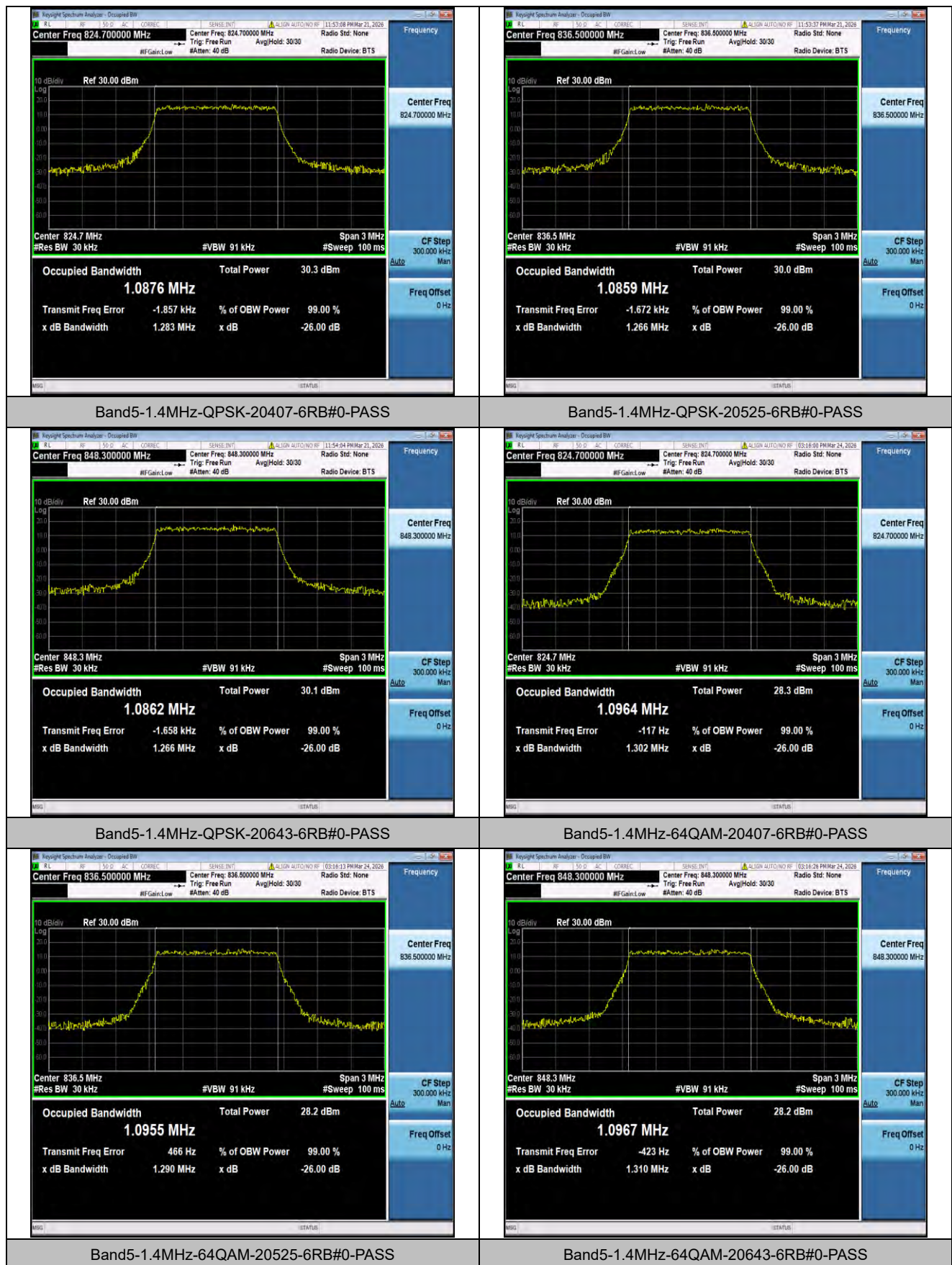


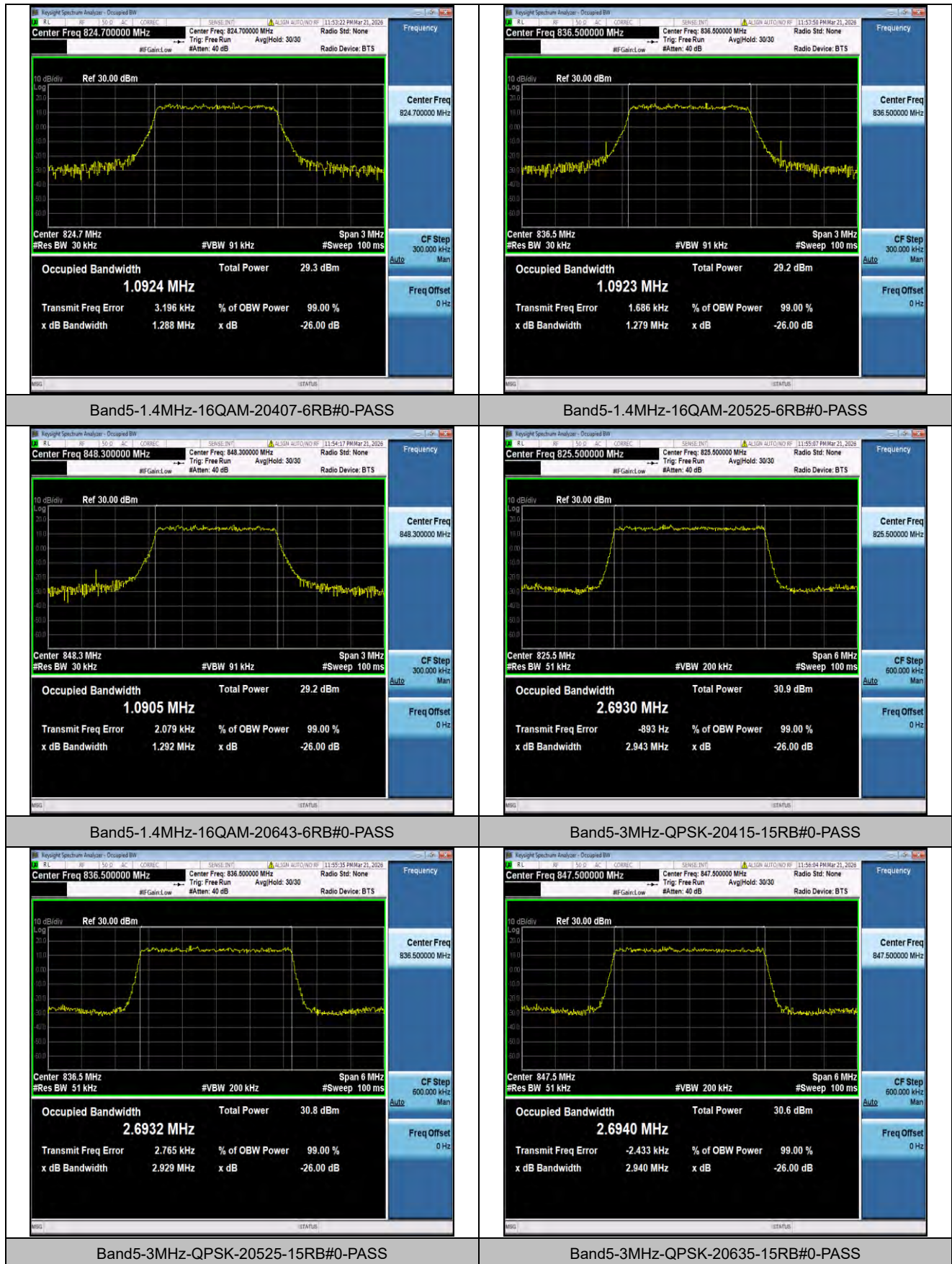
26dB Bandwidth and Occupied Bandwidth

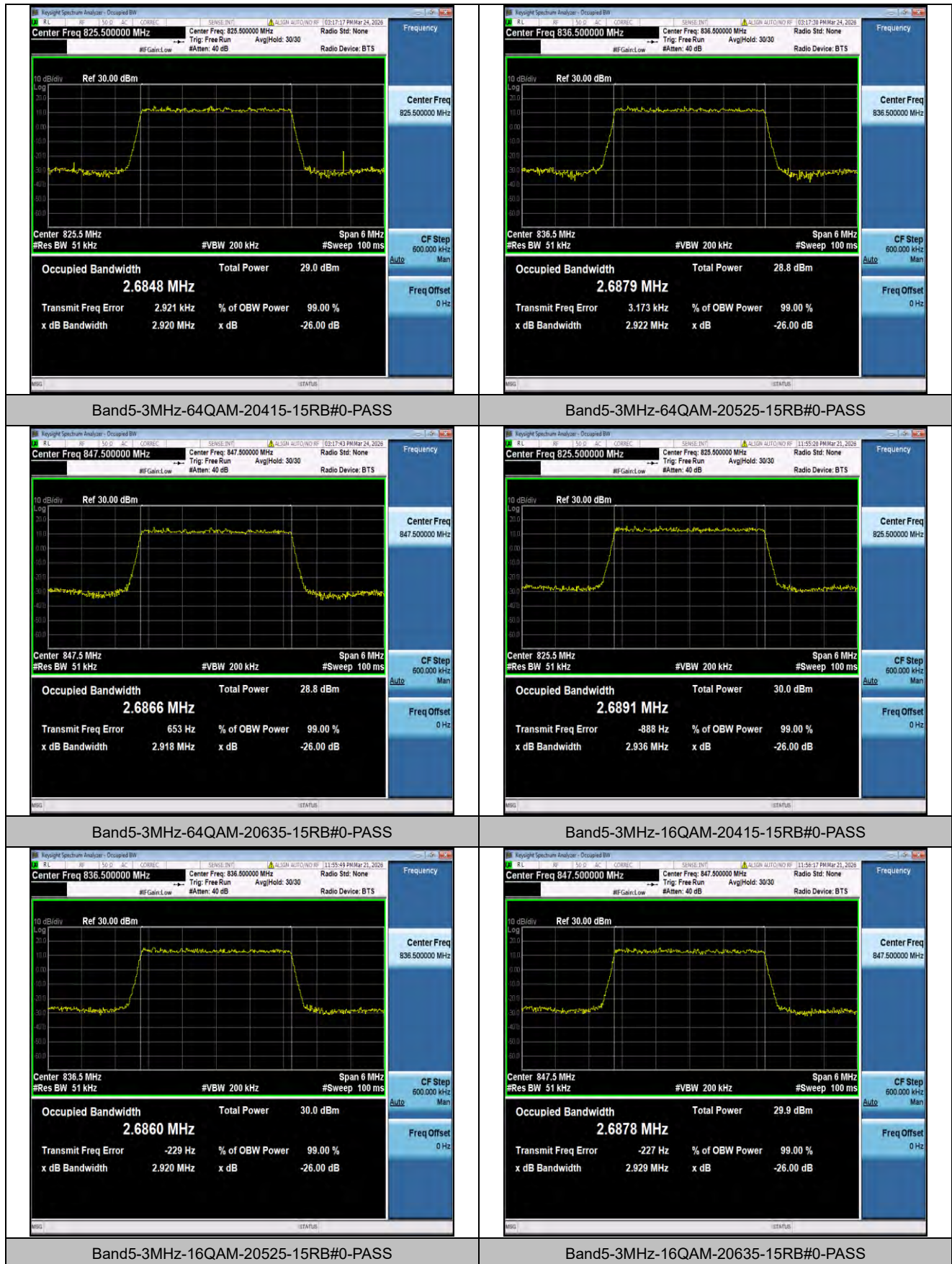
Test Result

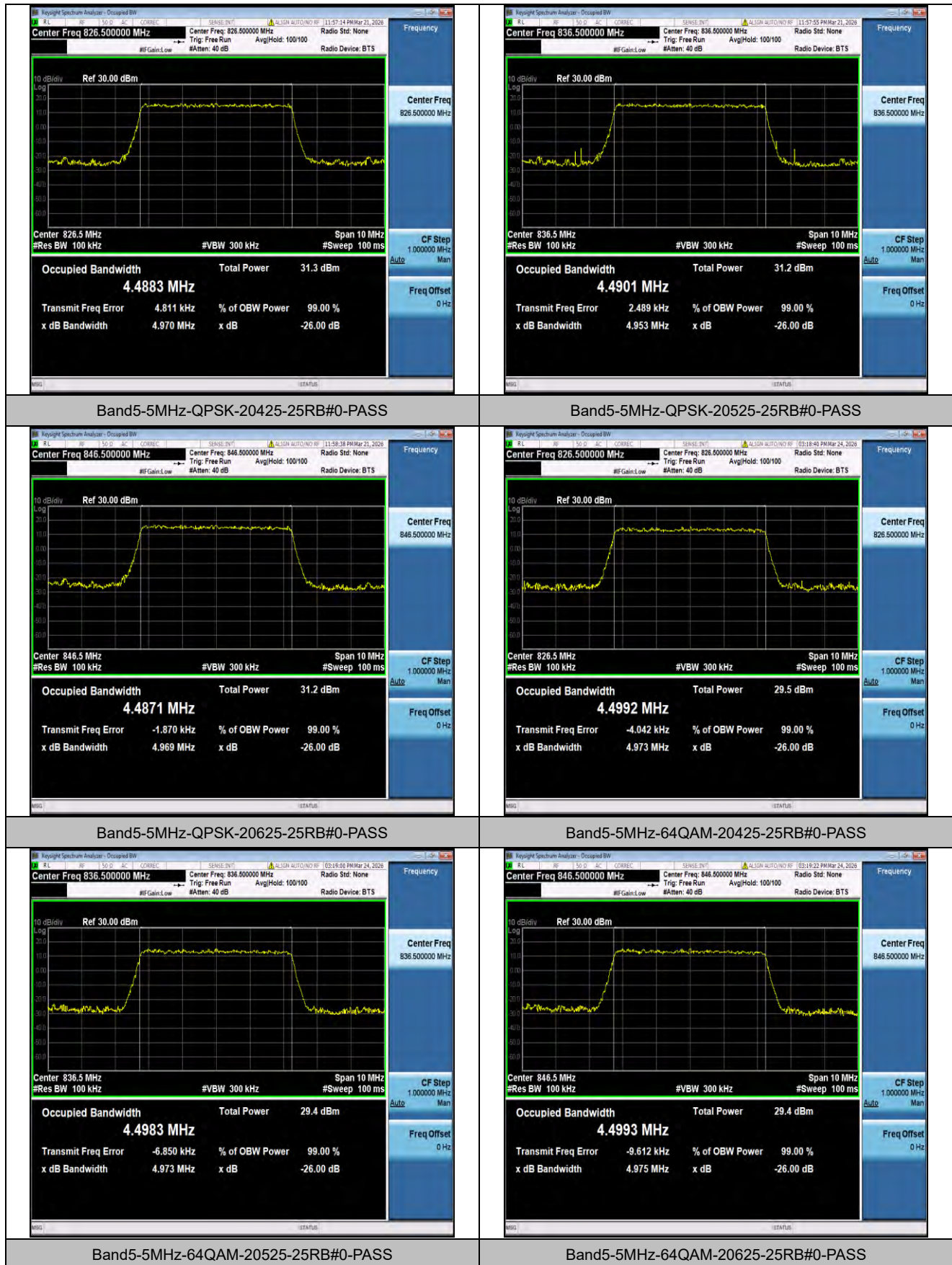
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.0876	1.283	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.0859	1.266	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.0862	1.266	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	1.0964	1.302	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	1.0955	1.290	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	1.0967	1.310	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.0924	1.288	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.0923	1.279	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.0905	1.292	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.6930	2.943	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.6932	2.929	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.6940	2.940	PASS
Band5	3MHz	64QAM	20415	15RB#0	2.6848	2.920	PASS
Band5	3MHz	64QAM	20525	15RB#0	2.6879	2.922	PASS
Band5	3MHz	64QAM	20635	15RB#0	2.6866	2.918	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.6891	2.936	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.6860	2.920	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.6878	2.929	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.4883	4.970	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.4901	4.953	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.4871	4.969	PASS
Band5	5MHz	64QAM	20425	25RB#0	4.4992	4.973	PASS
Band5	5MHz	64QAM	20525	25RB#0	4.4983	4.973	PASS
Band5	5MHz	64QAM	20625	25RB#0	4.4993	4.975	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.4907	5.177	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.4904	4.974	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.4874	4.953	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9918	9.812	PASS
Band5	10MHz	QPSK	20525	50RB#0	8.9933	9.813	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.9751	9.807	PASS
Band5	10MHz	64QAM	20450	50RB#0	8.9736	9.846	PASS
Band5	10MHz	64QAM	20525	50RB#0	8.9876	9.831	PASS
Band5	10MHz	64QAM	20600	50RB#0	8.9814	9.773	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.9578	9.764	PASS
Band5	10MHz	16QAM	20525	50RB#0	8.9601	9.727	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.9541	9.748	PASS

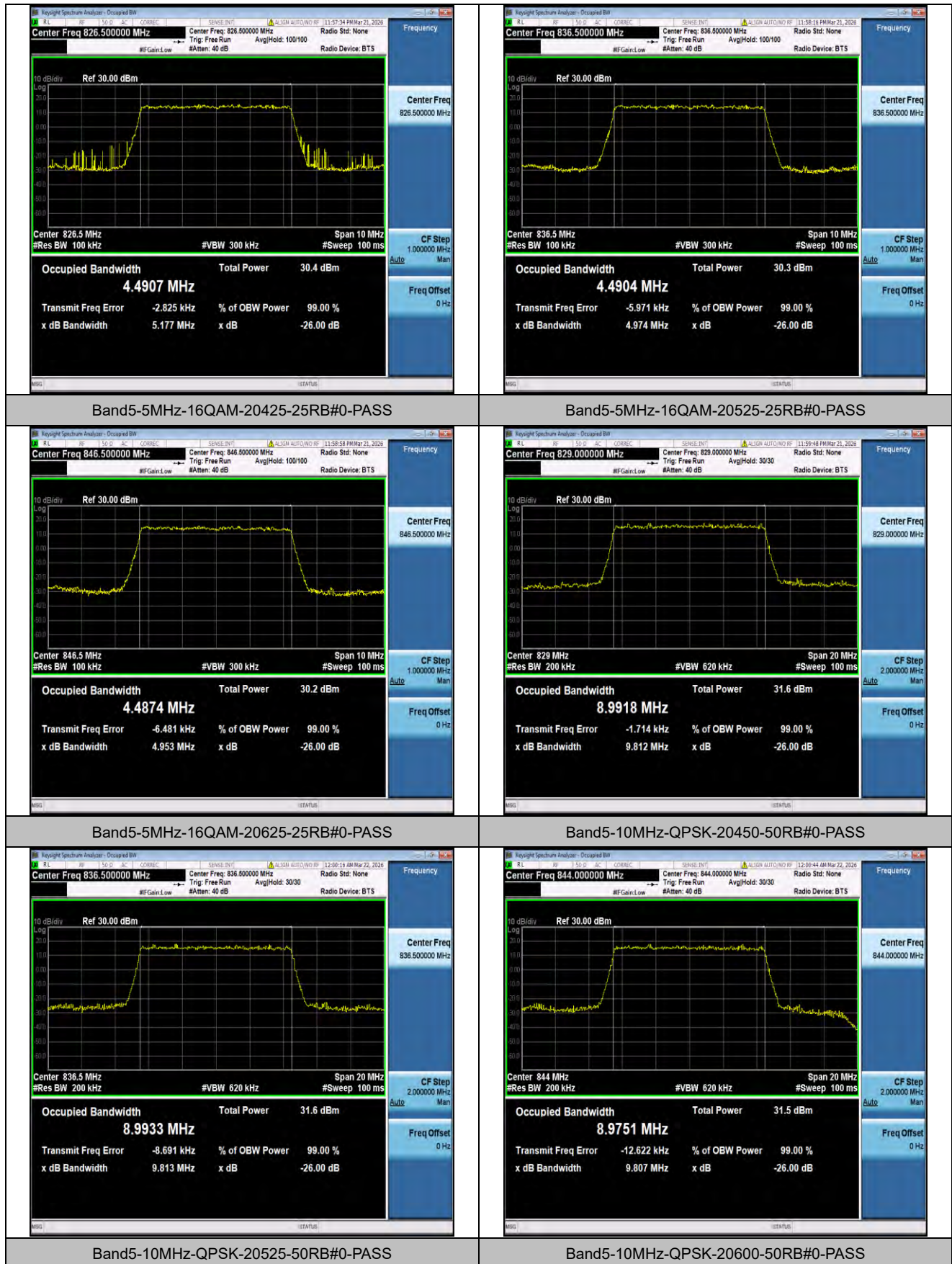
Test Graphs

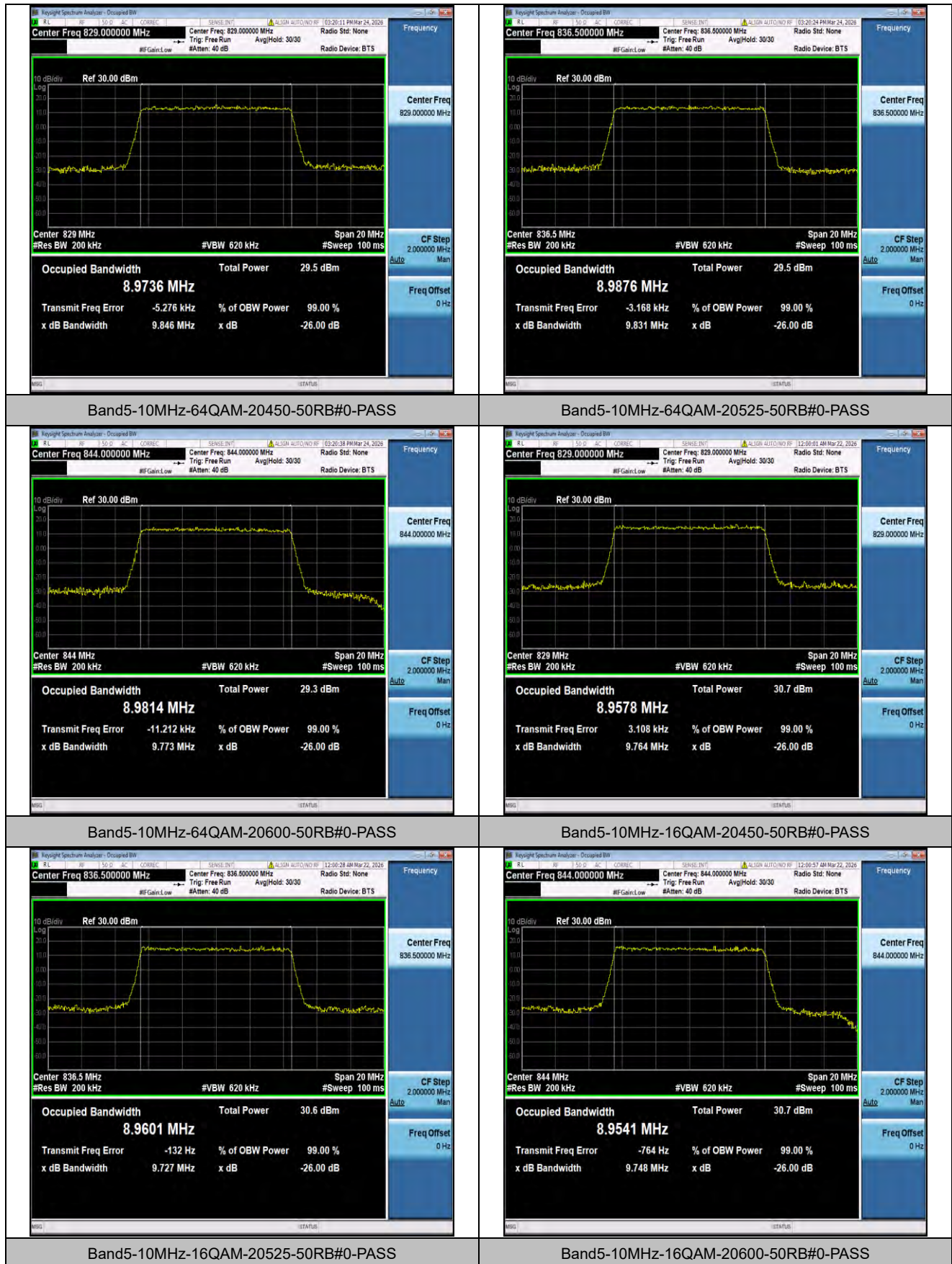






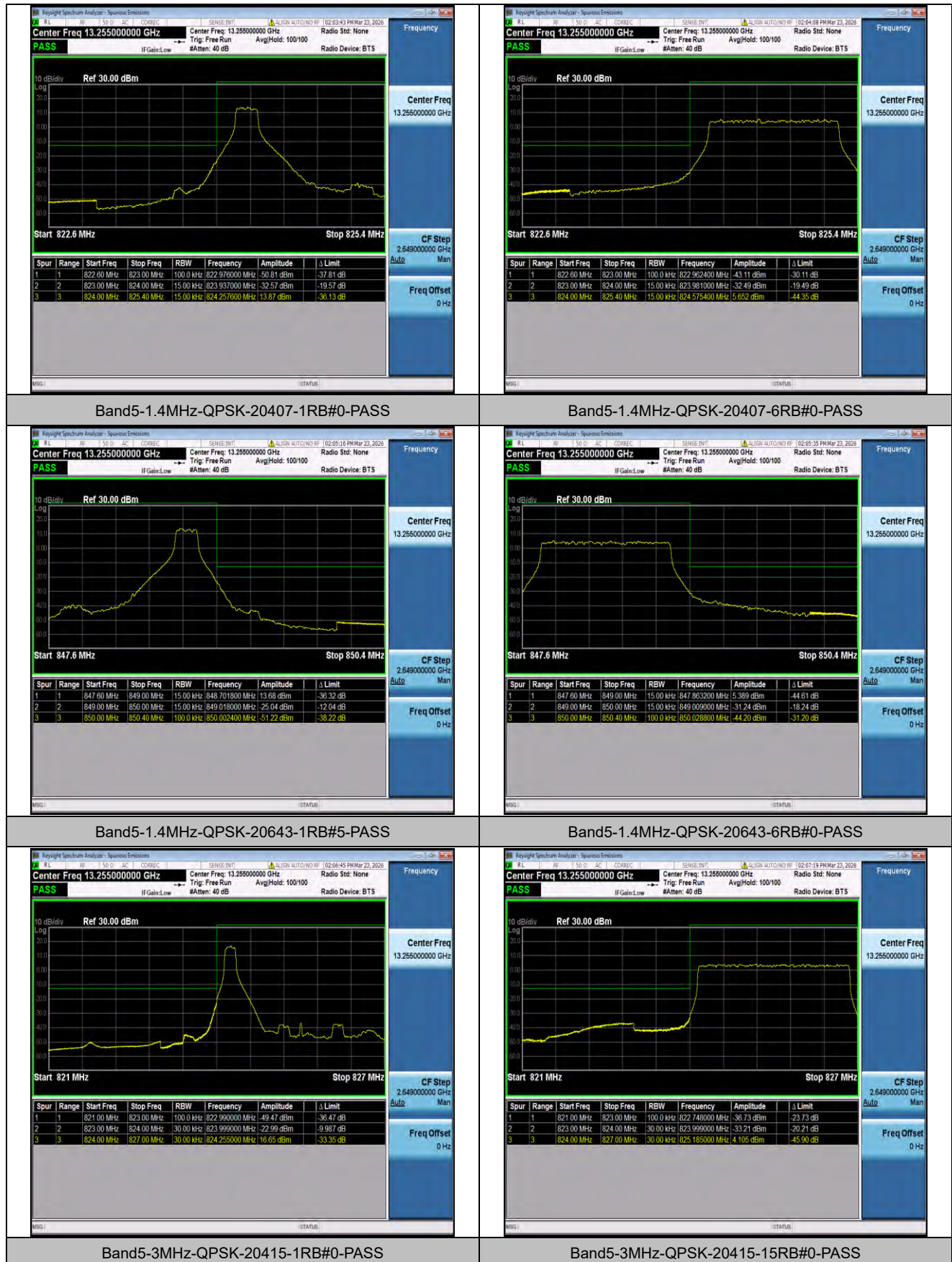


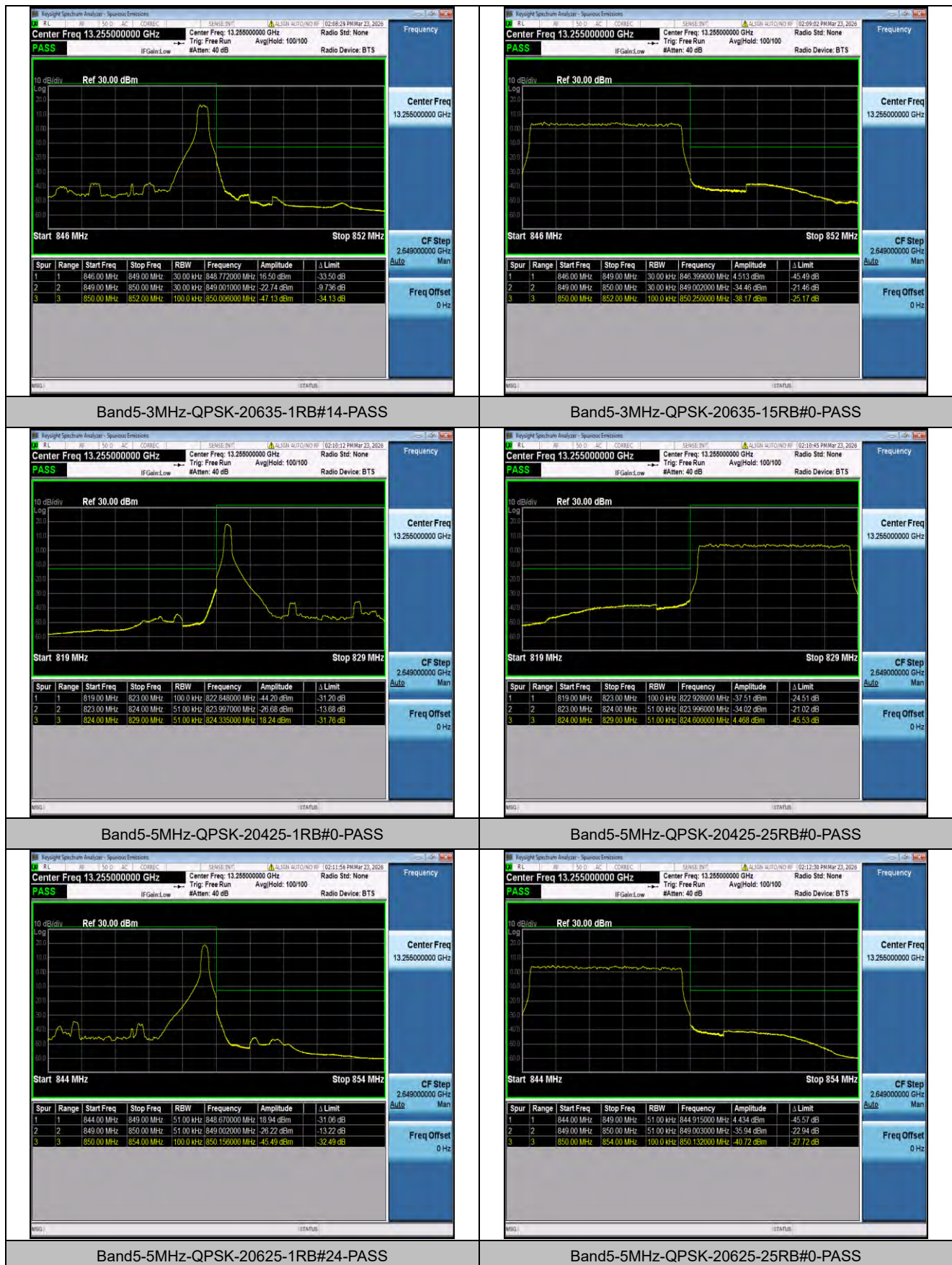


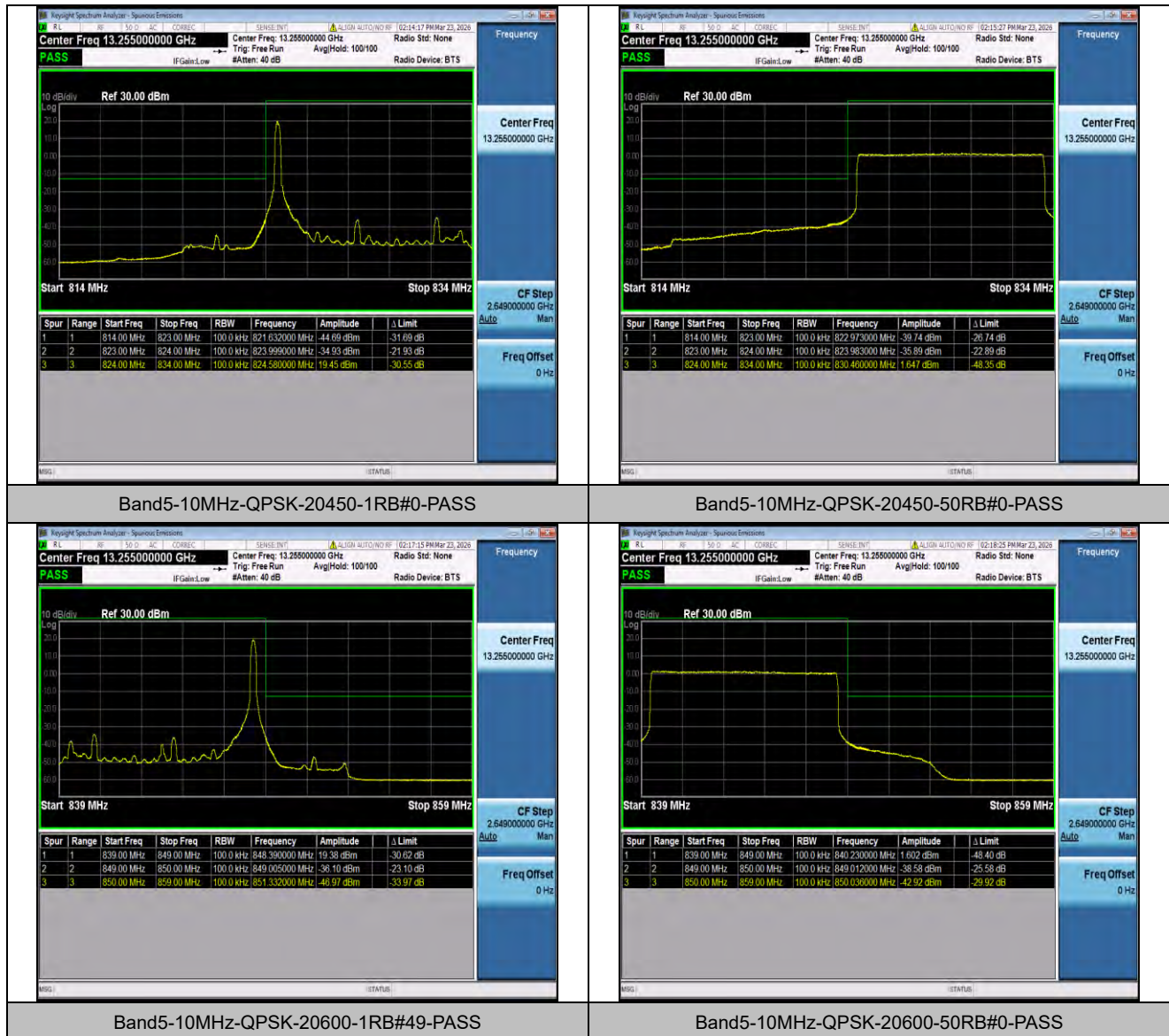


Band Edge

Test Graphs

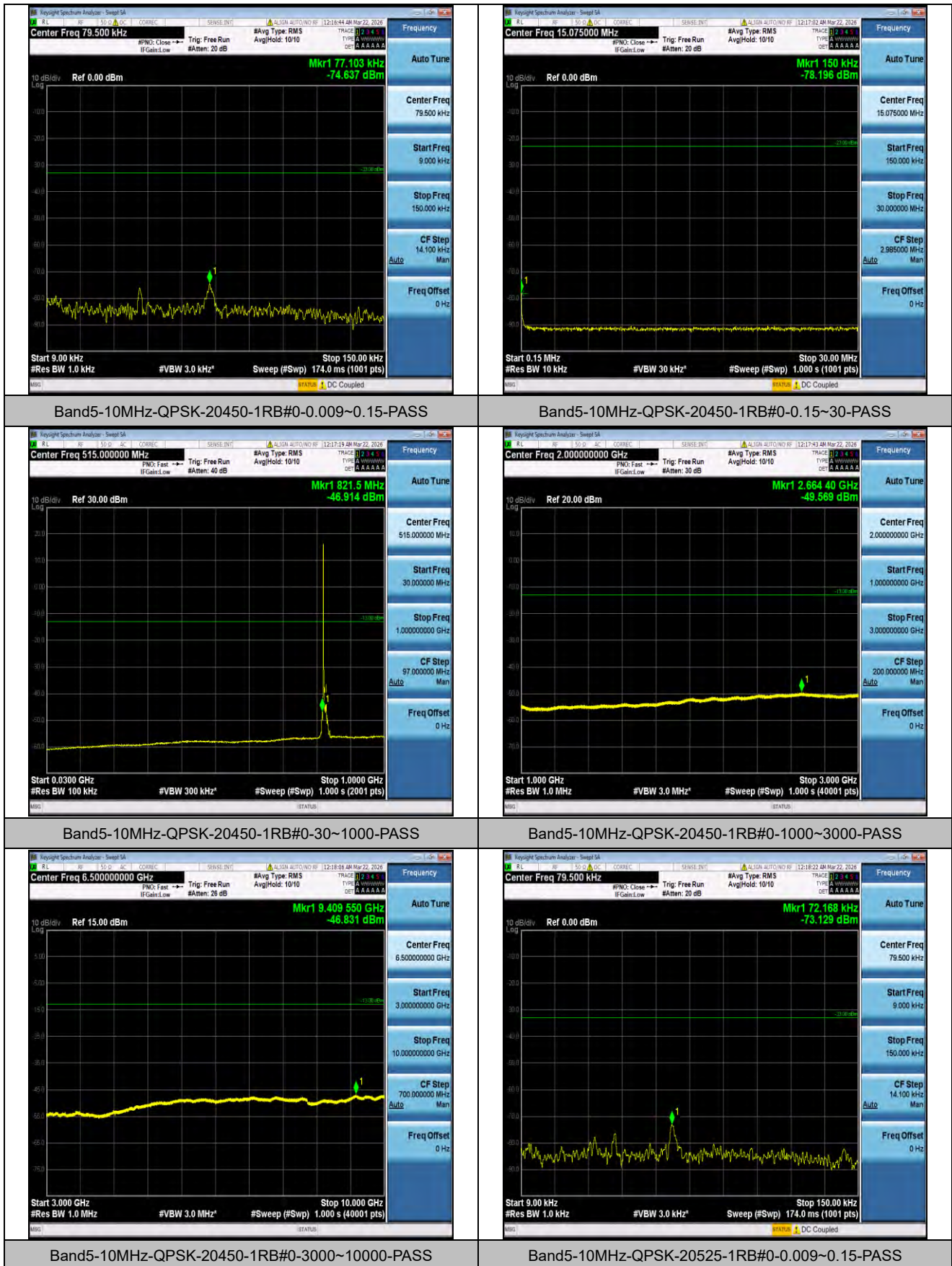


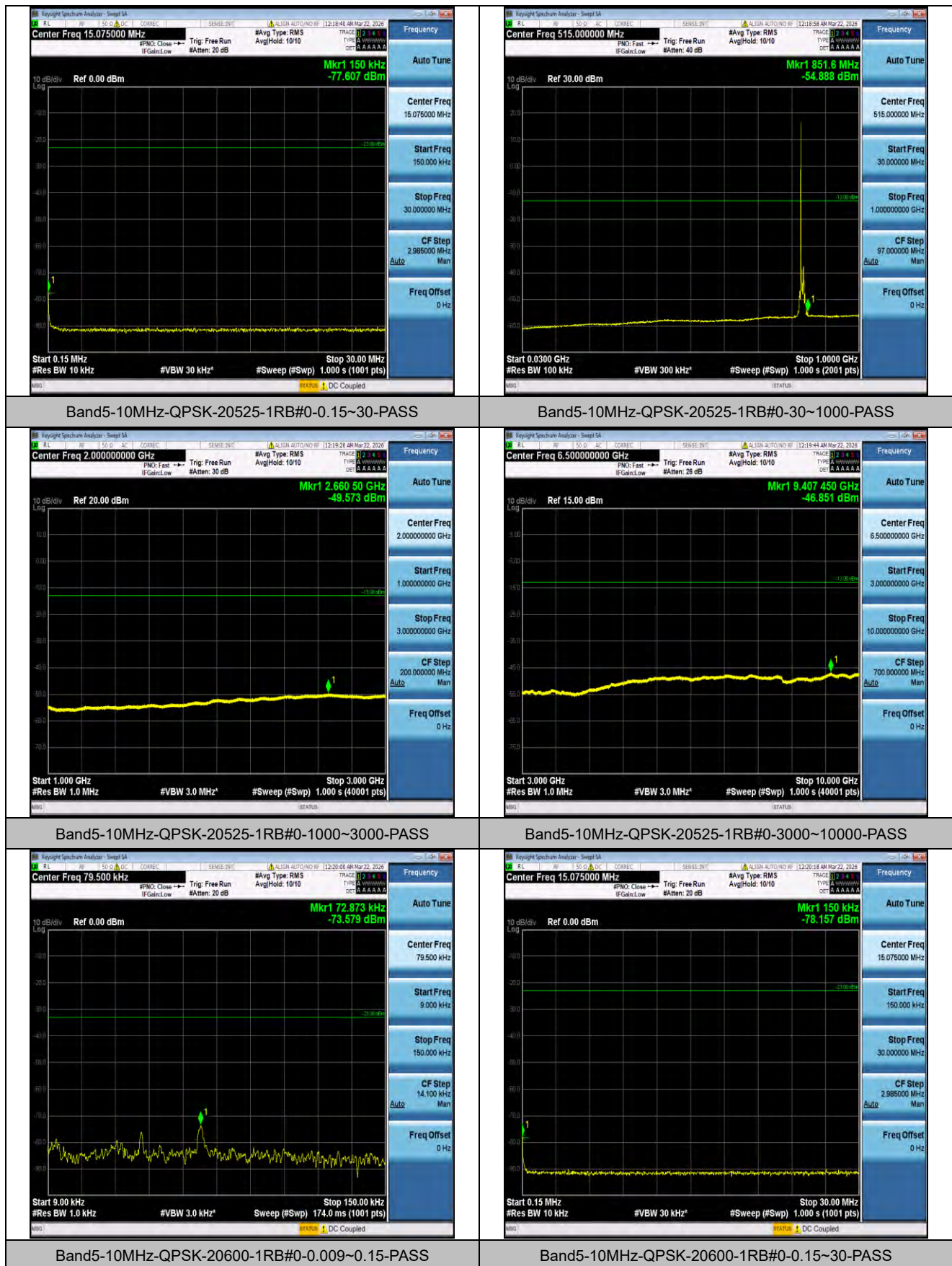


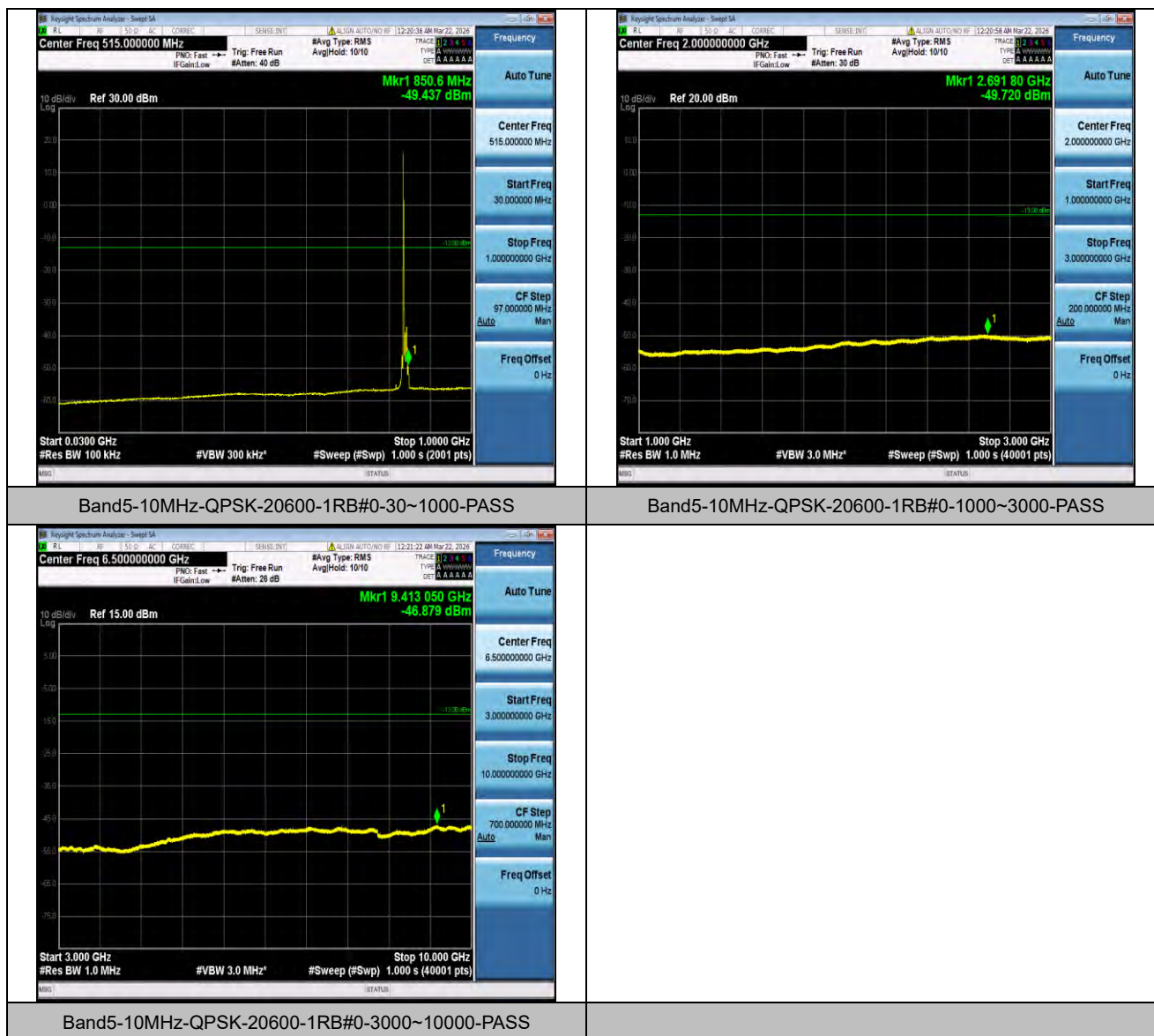


Conducted Spurious Emission

Test Graphs







Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-16.10	-0.019247	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-10.30	-0.012313	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-7.90	-0.009444	±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	1.40	0.001674	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	3.20	0.003825	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-10	-9.50	-0.011357	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-8.00	-0.009564	±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	-4.40	-0.005260	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-7.80	-0.009325	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-9.00	-0.010759	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	2.70	0.003228	±2.5	PASS

~The End~