

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	22.31	19.87	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	21.99	19.55	38.45	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	21.79	19.35	38.45	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	20.88	18.44	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	21.55	19.11	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	21.72	19.28	38.45	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	21.56	19.12	38.45	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	20.55	18.11	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	21.78	19.34	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	21.81	19.37	38.45	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	21.56	19.12	38.45	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	20.69	18.25	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.2	18.76	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	21.26	18.82	38.45	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.01	18.57	38.45	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	19.93	17.49	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	20.77	18.33	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	20.97	18.53	38.45	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	20.65	18.21	38.45	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	19.66	17.22	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	20.94	18.5	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	21.37	18.93	38.45	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	20.67	18.23	38.45	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	19.6	17.16	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#0	20.84	18.4	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#2	20.98	18.54	38.45	PASS
Band5	1.4MHz	64QAM	20407	1RB#5	21.01	18.57	38.45	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	19.82	17.38	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#0	20.73	18.29	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#2	20.88	18.44	38.45	PASS
Band5	1.4MHz	64QAM	20525	1RB#5	20.61	18.17	38.45	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	19.58	17.14	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#0	21.01	18.57	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#2	21.1	18.66	38.45	PASS
Band5	1.4MHz	64QAM	20643	1RB#5	20.8	18.36	38.45	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	19.74	17.3	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#0	21.83	19.39	38.45	PASS

Band5	3MHz	QPSK	20415	1RB#8	21.9	19.46	38.45	PASS
Band5	3MHz	QPSK	20415	1RB#14	21.87	19.43	38.45	PASS
Band5	3MHz	QPSK	20415	15RB#0	20.86	18.42	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#0	21.69	19.25	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#8	21.62	19.18	38.45	PASS
Band5	3MHz	QPSK	20525	1RB#14	21.6	19.16	38.45	PASS
Band5	3MHz	QPSK	20525	15RB#0	20.57	18.13	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#0	22.04	19.6	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#8	21.82	19.38	38.45	PASS
Band5	3MHz	QPSK	20635	1RB#14	21.52	19.08	38.45	PASS
Band5	3MHz	QPSK	20635	15RB#0	20.83	18.39	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#0	21.06	18.62	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#8	21.18	18.74	38.45	PASS
Band5	3MHz	16QAM	20415	1RB#14	21.09	18.65	38.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	19.86	17.42	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#0	20.89	18.45	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#8	20.89	18.45	38.45	PASS
Band5	3MHz	16QAM	20525	1RB#14	20.75	18.31	38.45	PASS
Band5	3MHz	16QAM	20525	15RB#0	19.65	17.21	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#0	21.2	18.76	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#8	21.3	18.86	38.45	PASS
Band5	3MHz	16QAM	20635	1RB#14	20.68	18.24	38.45	PASS
Band5	3MHz	16QAM	20635	15RB#0	19.77	17.33	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#0	21.01	18.57	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#8	20.98	18.54	38.45	PASS
Band5	3MHz	64QAM	20415	1RB#14	21.12	18.68	38.45	PASS
Band5	3MHz	64QAM	20415	15RB#0	19.78	17.34	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#0	20.95	18.51	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#8	20.72	18.28	38.45	PASS
Band5	3MHz	64QAM	20525	1RB#14	20.78	18.34	38.45	PASS
Band5	3MHz	64QAM	20525	15RB#0	19.55	17.11	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#0	21.09	18.65	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#8	21.01	18.57	38.45	PASS
Band5	3MHz	64QAM	20635	1RB#14	20.73	18.29	38.45	PASS
Band5	3MHz	64QAM	20635	15RB#0	19.96	17.52	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#0	21.87	19.43	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#12	22.27	19.83	38.45	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.11	19.67	38.45	PASS
Band5	5MHz	QPSK	20425	25RB#0	20.9	18.46	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#0	21.85	19.41	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#12	21.65	19.21	38.45	PASS
Band5	5MHz	QPSK	20525	1RB#24	21.59	19.15	38.45	PASS
Band5	5MHz	QPSK	20525	25RB#0	20.74	18.3	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#0	21.85	19.41	38.45	PASS
Band5	5MHz	QPSK	20625	1RB#12	22.24	19.8	38.45	PASS

Band5	5MHz	QPSK	20625	1RB#24	21.54	19.1	38.45	PASS
Band5	5MHz	QPSK	20625	25RB#0	20.88	18.44	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#0	20.92	18.48	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#12	21.59	19.15	38.45	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.17	18.73	38.45	PASS
Band5	5MHz	16QAM	20425	25RB#0	20.01	17.57	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#0	20.87	18.43	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#12	21.17	18.73	38.45	PASS
Band5	5MHz	16QAM	20525	1RB#24	20.63	18.19	38.45	PASS
Band5	5MHz	16QAM	20525	25RB#0	19.78	17.34	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#0	21.09	18.65	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#12	21.61	19.17	38.45	PASS
Band5	5MHz	16QAM	20625	1RB#24	20.77	18.33	38.45	PASS
Band5	5MHz	16QAM	20625	25RB#0	19.88	17.44	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#0	20.94	18.5	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#12	21.22	18.78	38.45	PASS
Band5	5MHz	64QAM	20425	1RB#24	21.08	18.64	38.45	PASS
Band5	5MHz	64QAM	20425	25RB#0	19.85	17.41	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#0	21.03	18.59	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#12	20.81	18.37	38.45	PASS
Band5	5MHz	64QAM	20525	1RB#24	20.66	18.22	38.45	PASS
Band5	5MHz	64QAM	20525	25RB#0	19.68	17.24	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#0	21.01	18.57	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#12	21.56	19.12	38.45	PASS
Band5	5MHz	64QAM	20625	1RB#24	20.77	18.33	38.45	PASS
Band5	5MHz	64QAM	20625	25RB#0	19.93	17.49	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#0	21.9	19.46	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#24	22.32	19.88	38.45	PASS
Band5	10MHz	QPSK	20450	1RB#49	22.05	19.61	38.45	PASS
Band5	10MHz	QPSK	20450	50RB#0	21.15	18.71	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#0	22.22	19.78	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#24	21.78	19.34	38.45	PASS
Band5	10MHz	QPSK	20525	1RB#49	21.7	19.26	38.45	PASS
Band5	10MHz	QPSK	20525	50RB#0	20.9	18.46	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#0	21.65	19.21	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#24	22.02	19.58	38.45	PASS
Band5	10MHz	QPSK	20600	1RB#49	21.61	19.17	38.45	PASS
Band5	10MHz	QPSK	20600	50RB#0	20.67	18.23	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#0	21.12	18.68	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#24	21.61	19.17	38.45	PASS
Band5	10MHz	16QAM	20450	1RB#49	21.28	18.84	38.45	PASS
Band5	10MHz	16QAM	20450	50RB#0	20.15	17.71	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#0	21.36	18.92	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#24	21.06	18.62	38.45	PASS
Band5	10MHz	16QAM	20525	1RB#49	20.89	18.45	38.45	PASS

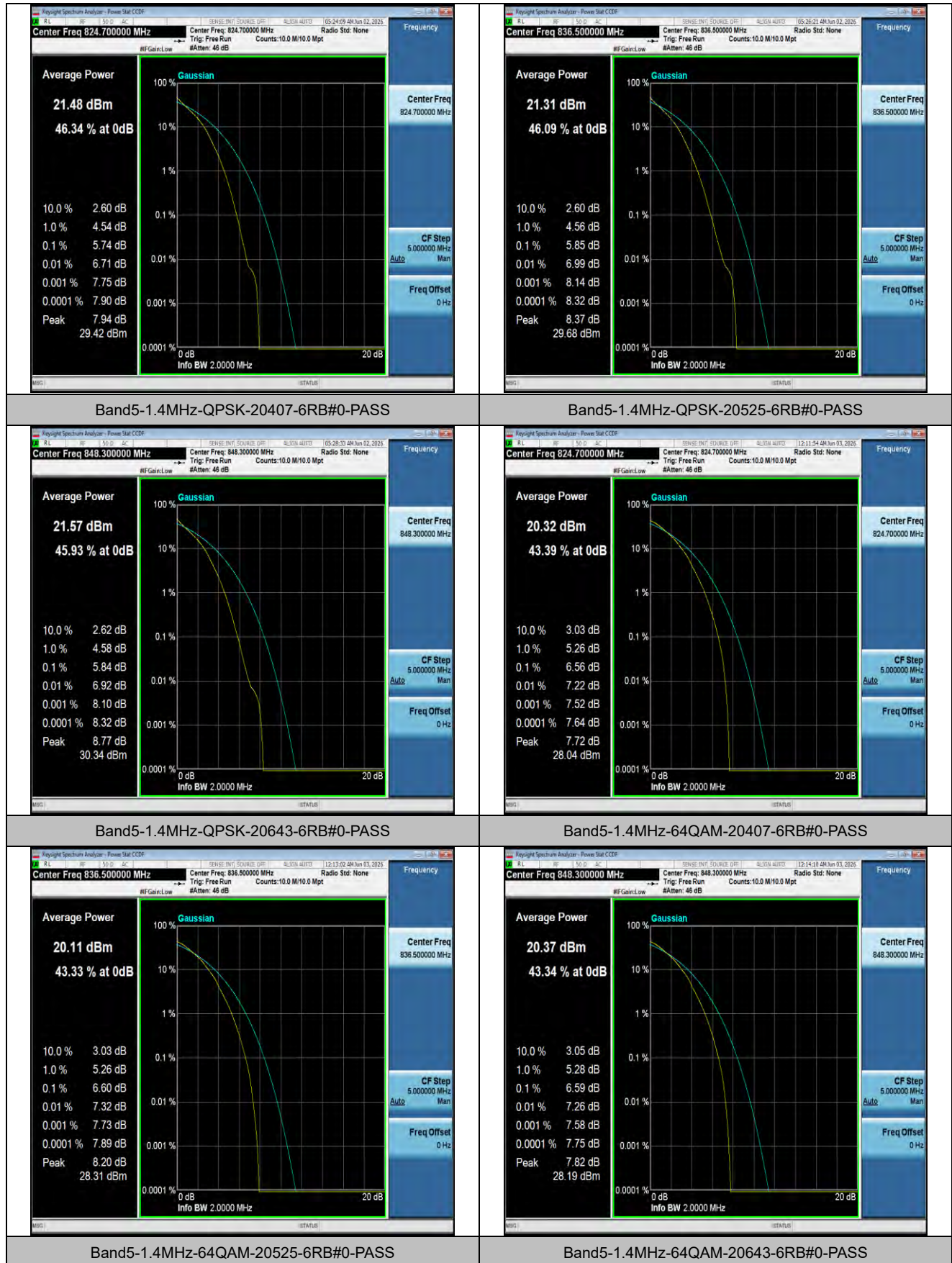
Band5	10MHz	16QAM	20525	50RB#0	19.95	17.51	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#0	20.84	18.4	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#24	21.47	19.03	38.45	PASS
Band5	10MHz	16QAM	20600	1RB#49	20.77	18.33	38.45	PASS
Band5	10MHz	16QAM	20600	50RB#0	19.71	17.27	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#0	20.99	18.55	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#24	21.33	18.89	38.45	PASS
Band5	10MHz	64QAM	20450	1RB#49	21.1	18.66	38.45	PASS
Band5	10MHz	64QAM	20450	50RB#0	19.97	17.53	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#0	21.48	19.04	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#24	20.86	18.42	38.45	PASS
Band5	10MHz	64QAM	20525	1RB#49	20.73	18.29	38.45	PASS
Band5	10MHz	64QAM	20525	50RB#0	19.9	17.46	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#0	20.67	18.23	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#24	21.22	18.78	38.45	PASS
Band5	10MHz	64QAM	20600	1RB#49	21.02	18.58	38.45	PASS
Band5	10MHz	64QAM	20600	50RB#0	19.83	17.39	38.45	PASS

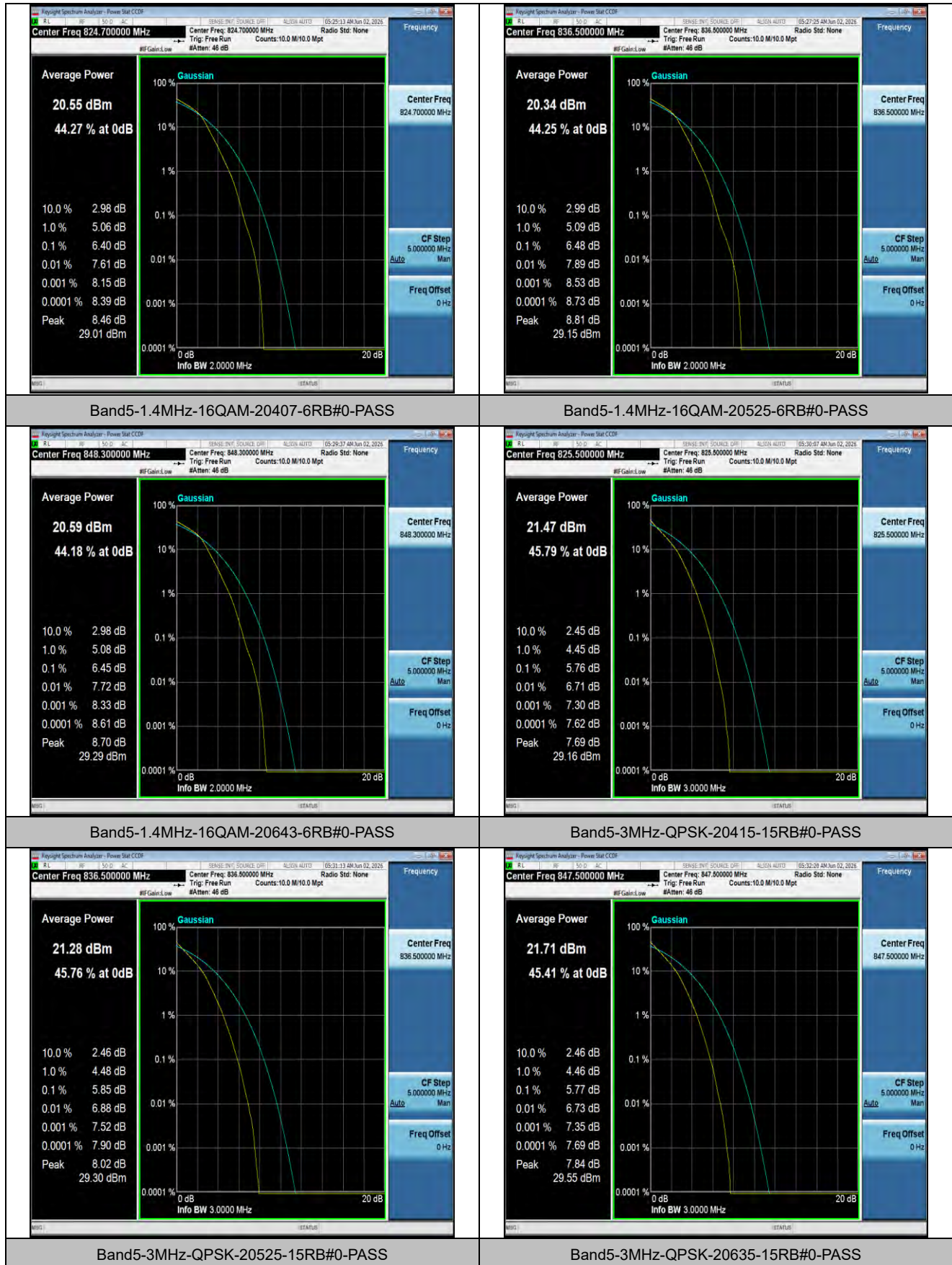
Peak-to-Average Ratio(CCDF)

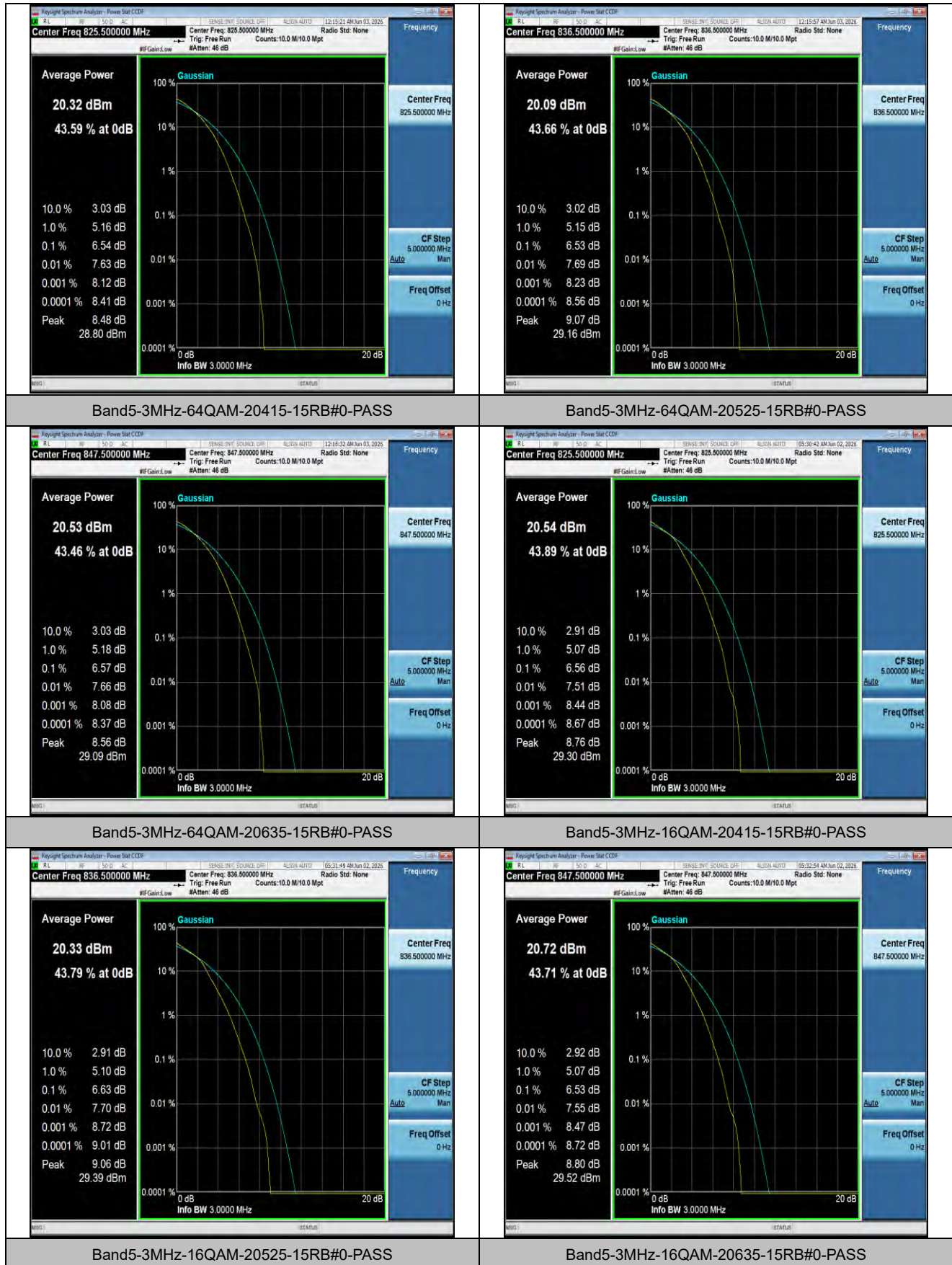
Test Result

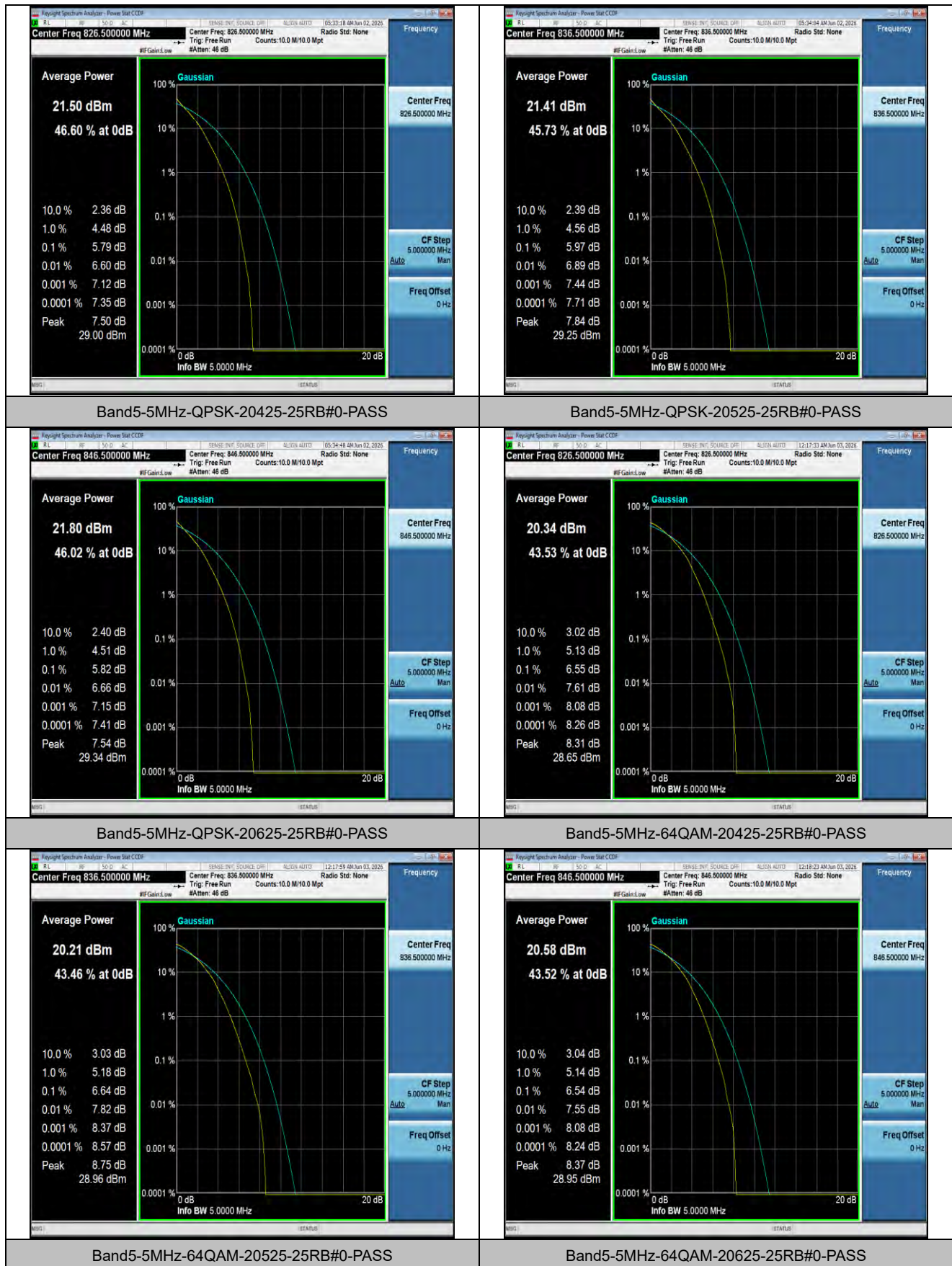
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	5.74	13	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	5.85	13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	5.84	13	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	6.56	13	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	6.60	13	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	6.59	13	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	6.40	13	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	6.48	13	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	6.45	13	PASS
Band5	3MHz	QPSK	20415	15RB#0	5.76	13	PASS
Band5	3MHz	QPSK	20525	15RB#0	5.85	13	PASS
Band5	3MHz	QPSK	20635	15RB#0	5.77	13	PASS
Band5	3MHz	64QAM	20415	15RB#0	6.54	13	PASS
Band5	3MHz	64QAM	20525	15RB#0	6.53	13	PASS
Band5	3MHz	64QAM	20635	15RB#0	6.57	13	PASS
Band5	3MHz	16QAM	20415	15RB#0	6.56	13	PASS
Band5	3MHz	16QAM	20525	15RB#0	6.63	13	PASS
Band5	3MHz	16QAM	20635	15RB#0	6.53	13	PASS
Band5	5MHz	QPSK	20425	25RB#0	5.79	13	PASS
Band5	5MHz	QPSK	20525	25RB#0	5.97	13	PASS
Band5	5MHz	QPSK	20625	25RB#0	5.82	13	PASS
Band5	5MHz	64QAM	20425	25RB#0	6.55	13	PASS
Band5	5MHz	64QAM	20525	25RB#0	6.64	13	PASS
Band5	5MHz	64QAM	20625	25RB#0	6.54	13	PASS
Band5	5MHz	16QAM	20425	25RB#0	6.42	13	PASS
Band5	5MHz	16QAM	20525	25RB#0	6.54	13	PASS
Band5	5MHz	16QAM	20625	25RB#0	6.44	13	PASS
Band5	10MHz	QPSK	20450	50RB#0	5.84	13	PASS
Band5	10MHz	QPSK	20525	50RB#0	6.12	13	PASS
Band5	10MHz	QPSK	20600	50RB#0	5.56	13	PASS
Band5	10MHz	64QAM	20450	50RB#0	6.53	13	PASS
Band5	10MHz	64QAM	20525	50RB#0	6.74	13	PASS
Band5	10MHz	64QAM	20600	50RB#0	6.43	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.56	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.70	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.40	13	PASS

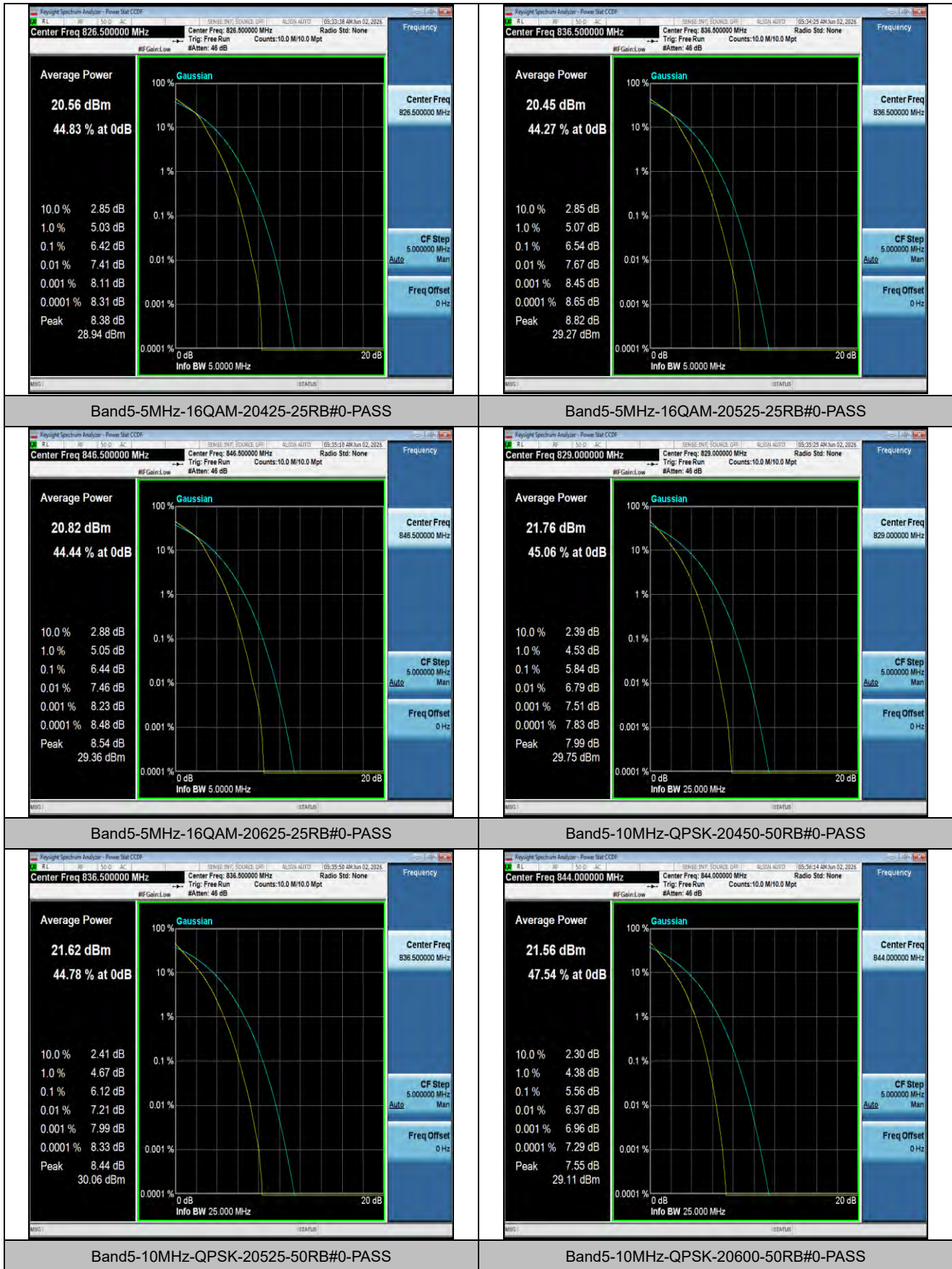
Test Graphs





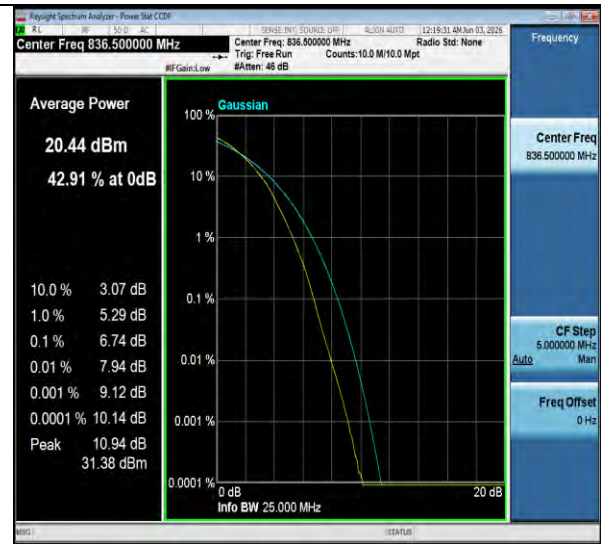








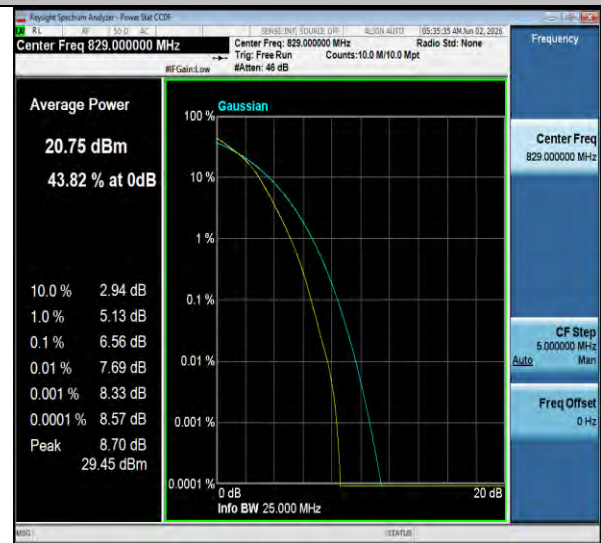
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Band5-10MHz-64QAM-20525-50RB#0-PASS



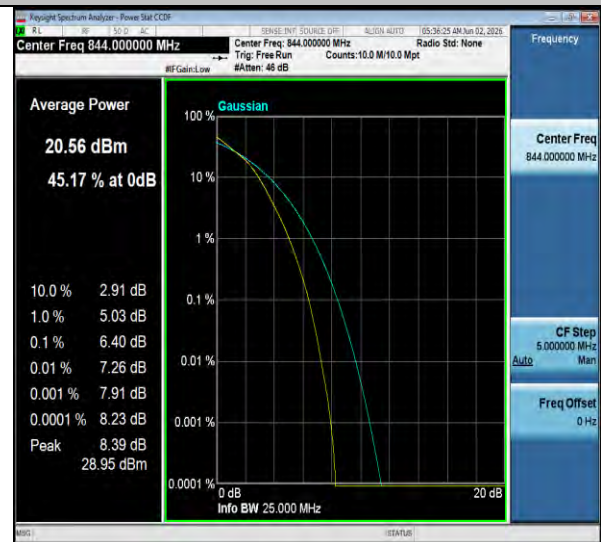
Band5-10MHz-64QAM-20600-50RB#0-PASS



Band5-10MHz-16QAM-20450-50RB#0-PASS



Band5-10MHz-16QAM-20525-50RB#0-PASS



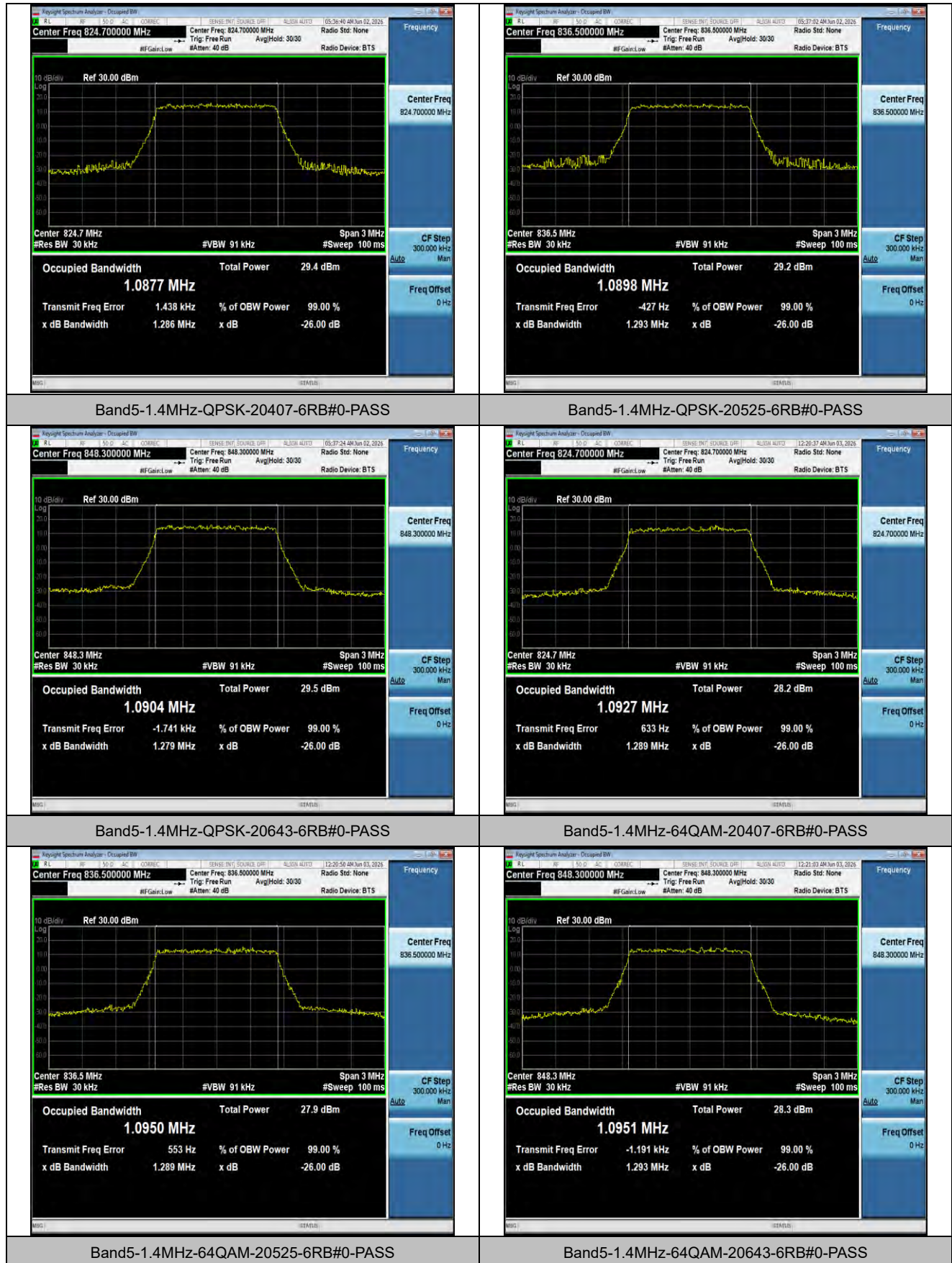
Band5-10MHz-16QAM-20600-50RB#0-PASS

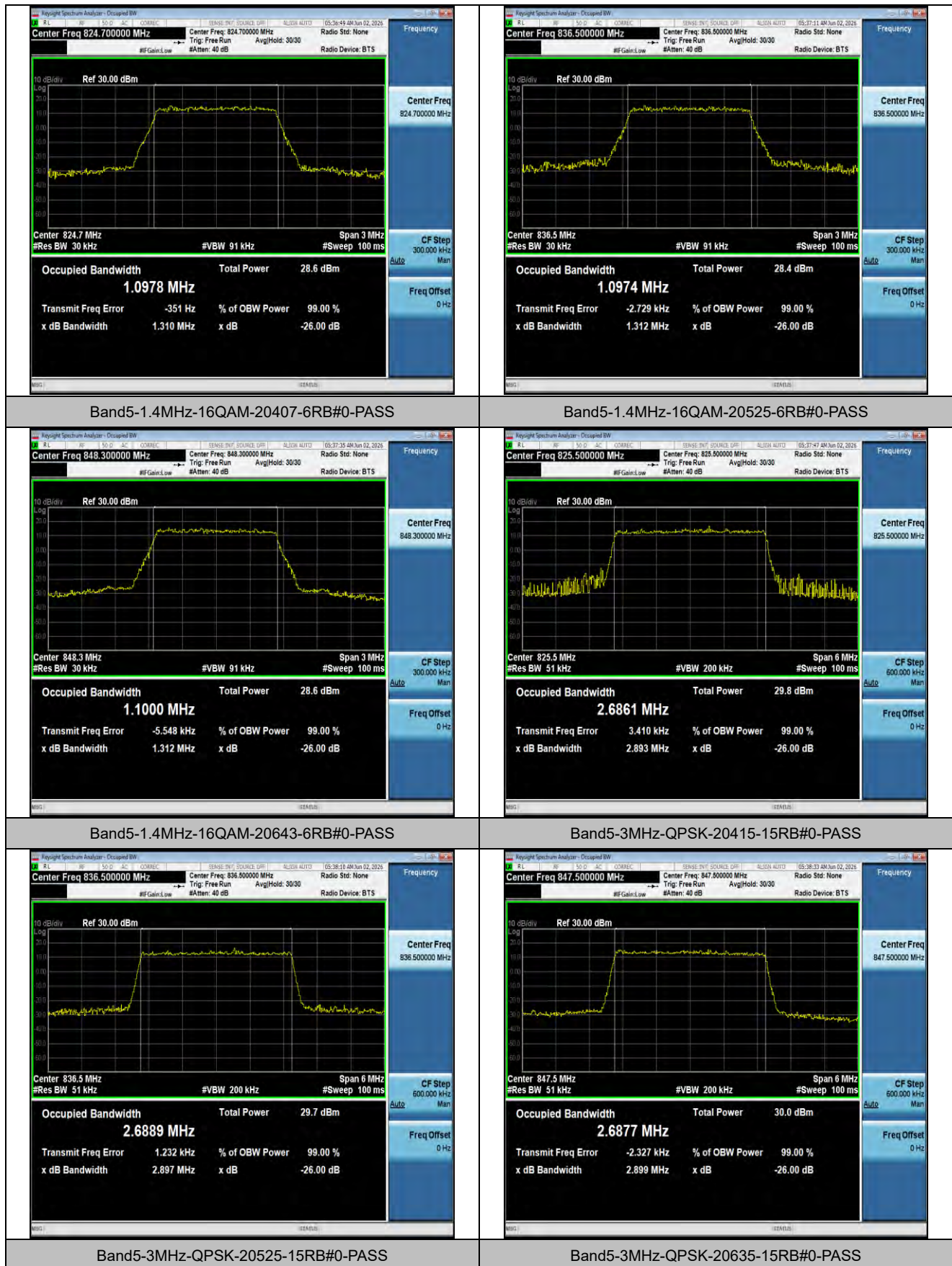
26dB Bandwidth and Occupied Bandwidth

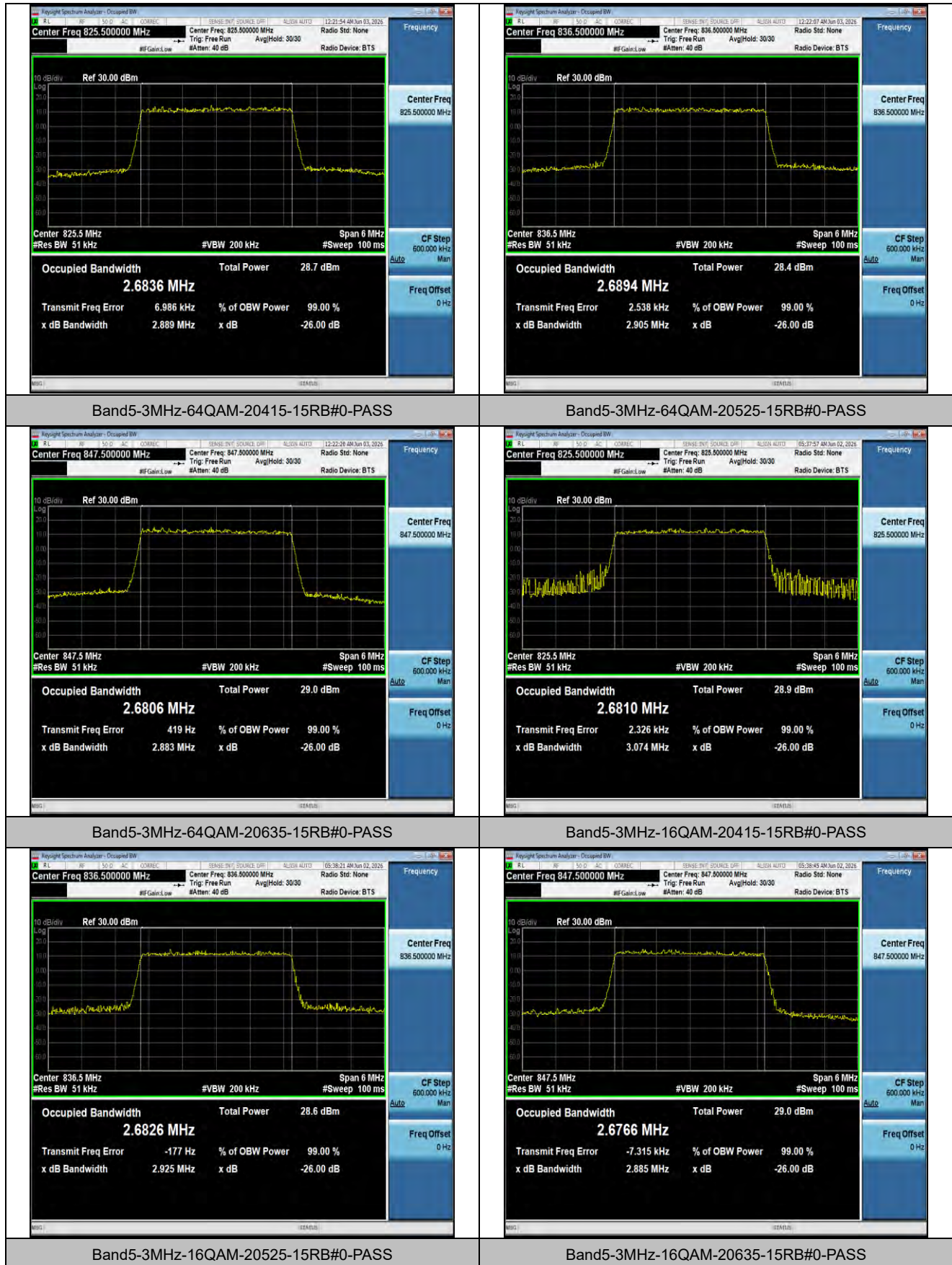
Test Result

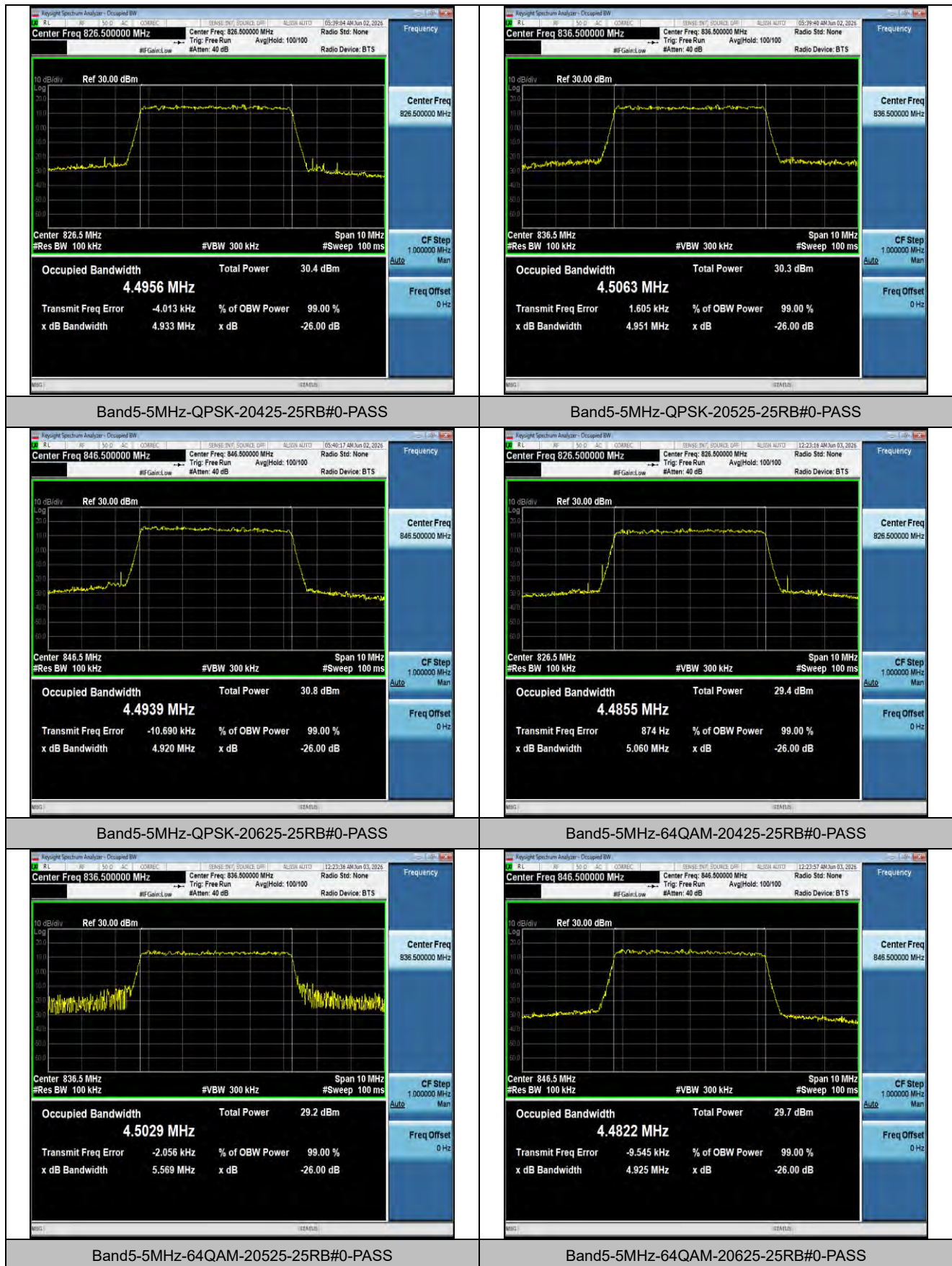
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band5	1.4MHz	QPSK	20407	6RB#0	1.0877	1.286	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.0898	1.293	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	1.0904	1.279	PASS
Band5	1.4MHz	64QAM	20407	6RB#0	1.0927	1.289	PASS
Band5	1.4MHz	64QAM	20525	6RB#0	1.0950	1.289	PASS
Band5	1.4MHz	64QAM	20643	6RB#0	1.0951	1.293	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	1.0978	1.310	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.0974	1.312	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	1.1000	1.312	PASS
Band5	3MHz	QPSK	20415	15RB#0	2.6861	2.893	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.6889	2.897	PASS
Band5	3MHz	QPSK	20635	15RB#0	2.6877	2.899	PASS
Band5	3MHz	64QAM	20415	15RB#0	2.6836	2.889	PASS
Band5	3MHz	64QAM	20525	15RB#0	2.6894	2.905	PASS
Band5	3MHz	64QAM	20635	15RB#0	2.6806	2.883	PASS
Band5	3MHz	16QAM	20415	15RB#0	2.6810	3.074	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.6826	2.925	PASS
Band5	3MHz	16QAM	20635	15RB#0	2.6766	2.885	PASS
Band5	5MHz	QPSK	20425	25RB#0	4.4956	4.933	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.5063	4.951	PASS
Band5	5MHz	QPSK	20625	25RB#0	4.4939	4.920	PASS
Band5	5MHz	64QAM	20425	25RB#0	4.4855	5.060	PASS
Band5	5MHz	64QAM	20525	25RB#0	4.5029	5.569	PASS
Band5	5MHz	64QAM	20625	25RB#0	4.4822	4.925	PASS
Band5	5MHz	16QAM	20425	25RB#0	4.4764	4.861	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.4908	4.908	PASS
Band5	5MHz	16QAM	20625	25RB#0	4.4831	4.901	PASS
Band5	10MHz	QPSK	20450	50RB#0	8.9817	9.986	PASS
Band5	10MHz	QPSK	20525	50RB#0	9.0134	9.794	PASS
Band5	10MHz	QPSK	20600	50RB#0	8.9403	9.754	PASS
Band5	10MHz	64QAM	20450	50RB#0	8.9627	9.761	PASS
Band5	10MHz	64QAM	20525	50RB#0	9.0007	9.823	PASS
Band5	10MHz	64QAM	20600	50RB#0	8.9446	9.707	PASS
Band5	10MHz	16QAM	20450	50RB#0	8.9636	9.697	PASS
Band5	10MHz	16QAM	20525	50RB#0	9.0094	9.761	PASS
Band5	10MHz	16QAM	20600	50RB#0	8.9478	9.735	PASS

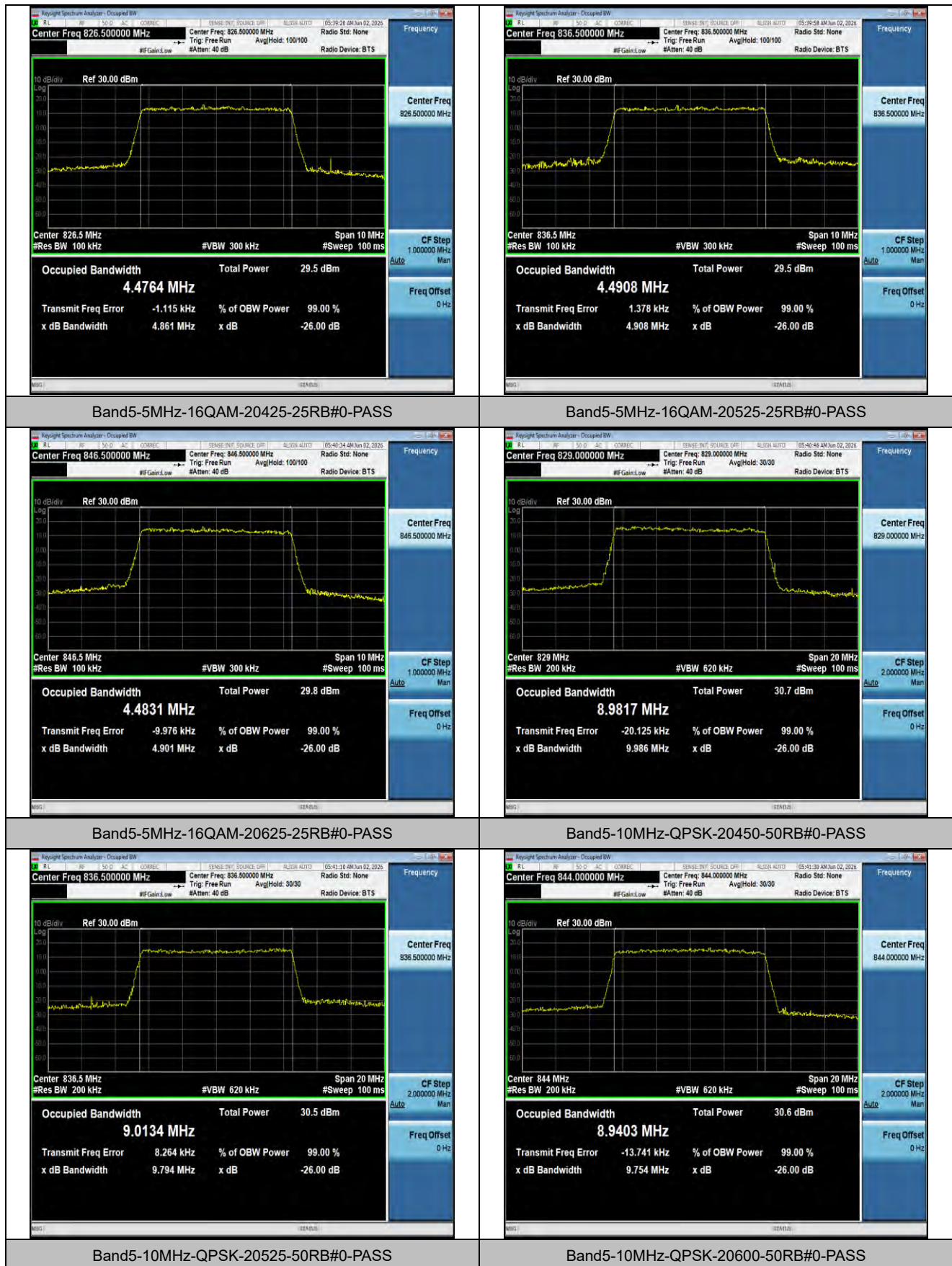
Test Graphs

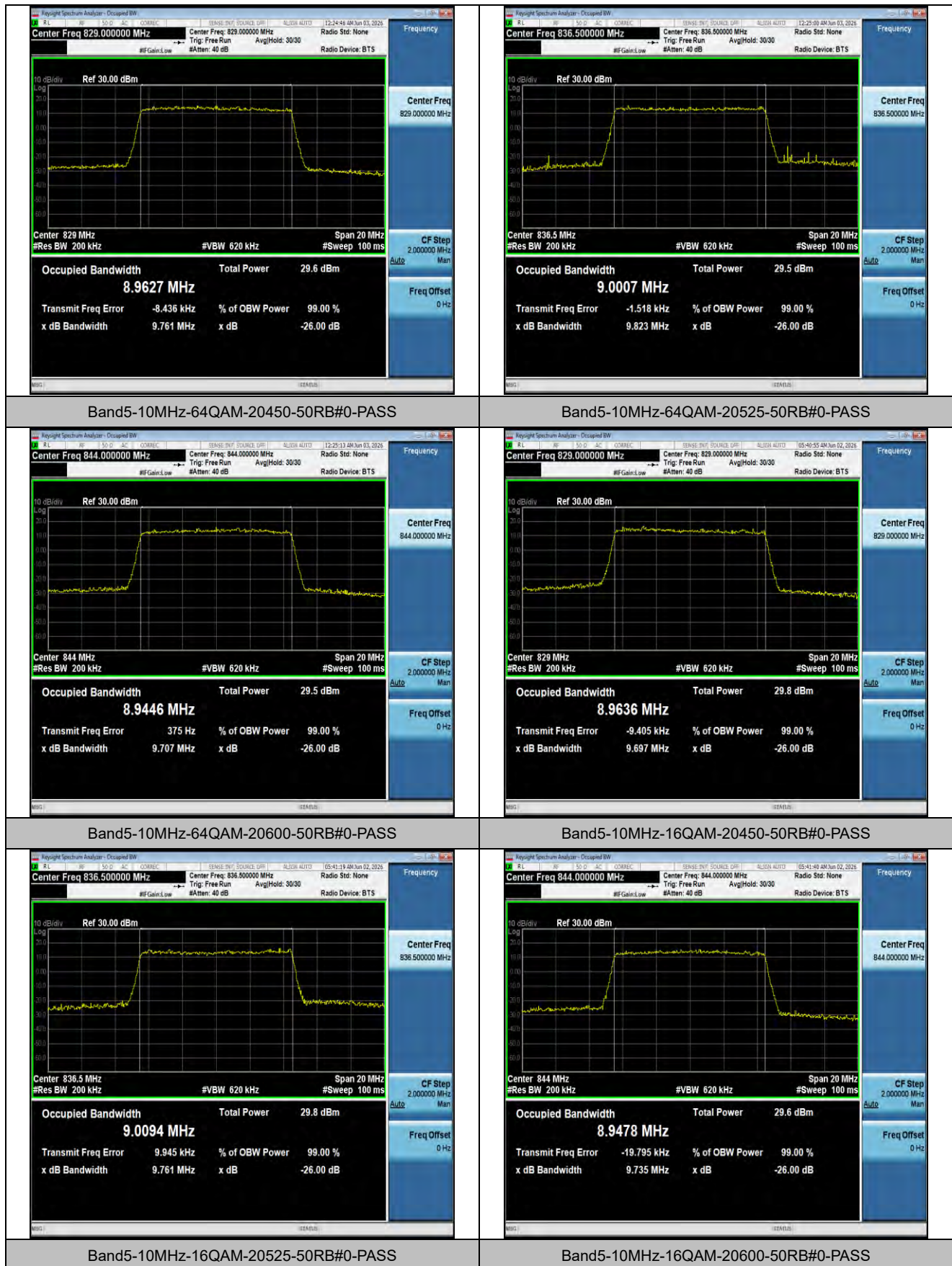






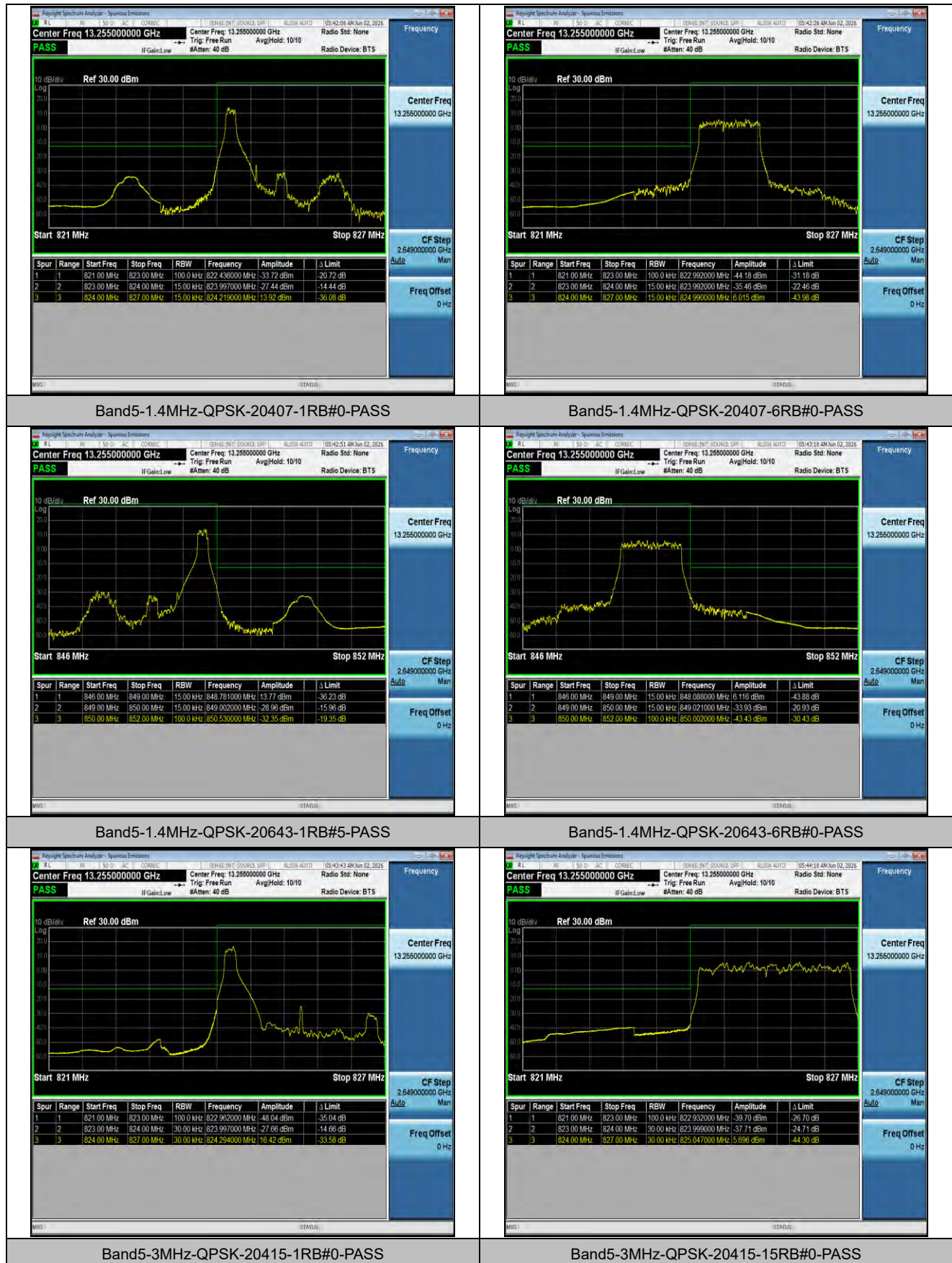






Band Edge

Test Graphs





Band5-3MHz-QPSK-20635-1RB#14-PASS



Band5-3MHz-QPSK-20635-15RB#0-PASS



Band5-5MHz-QPSK-20425-1RB#0-PASS



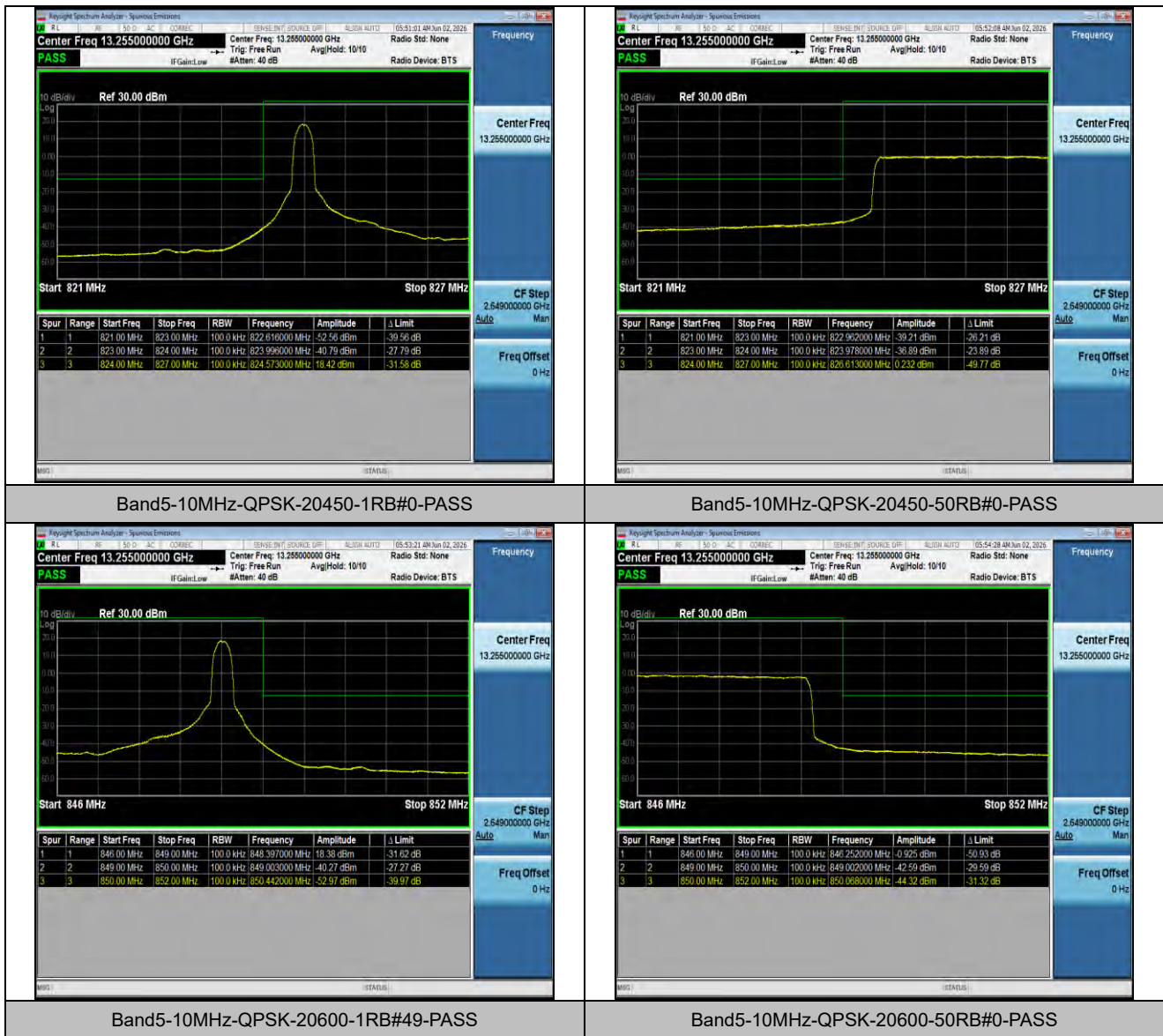
Band5-5MHz-QPSK-20425-25RB#0-PASS



Band5-5MHz-QPSK-20625-1RB#24-PASS

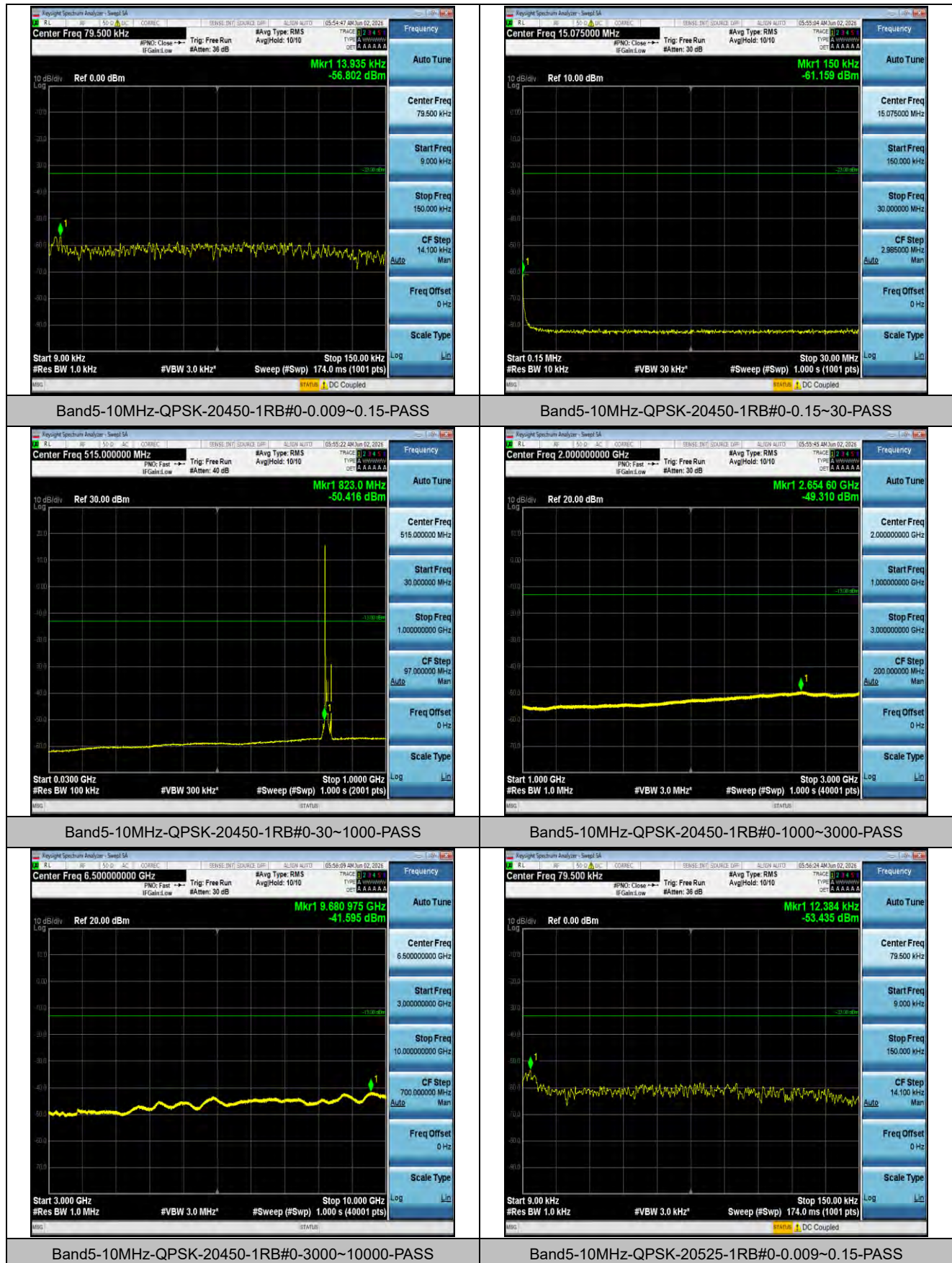


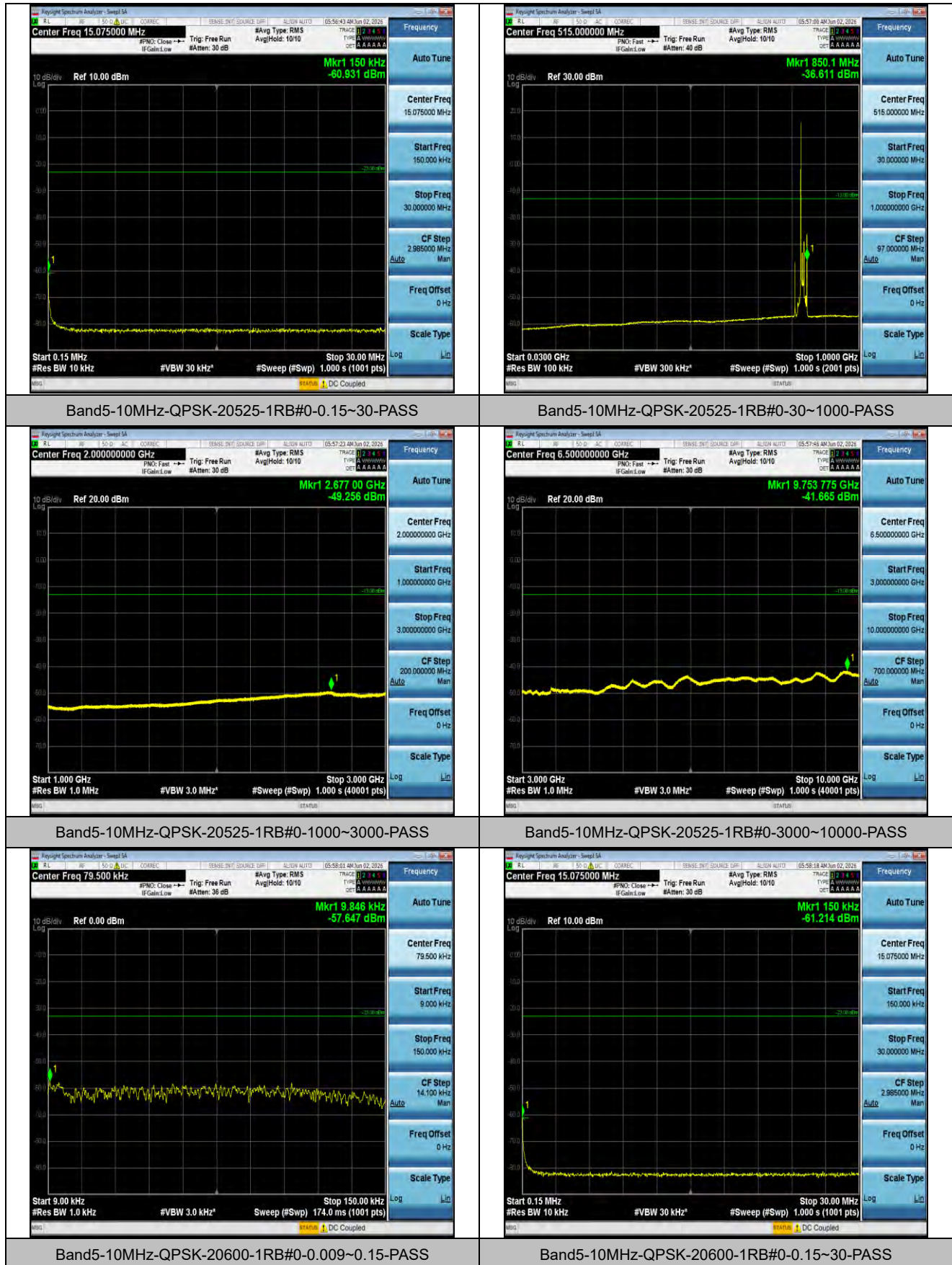
Band5-5MHz-QPSK-20625-25RB#0-PASS

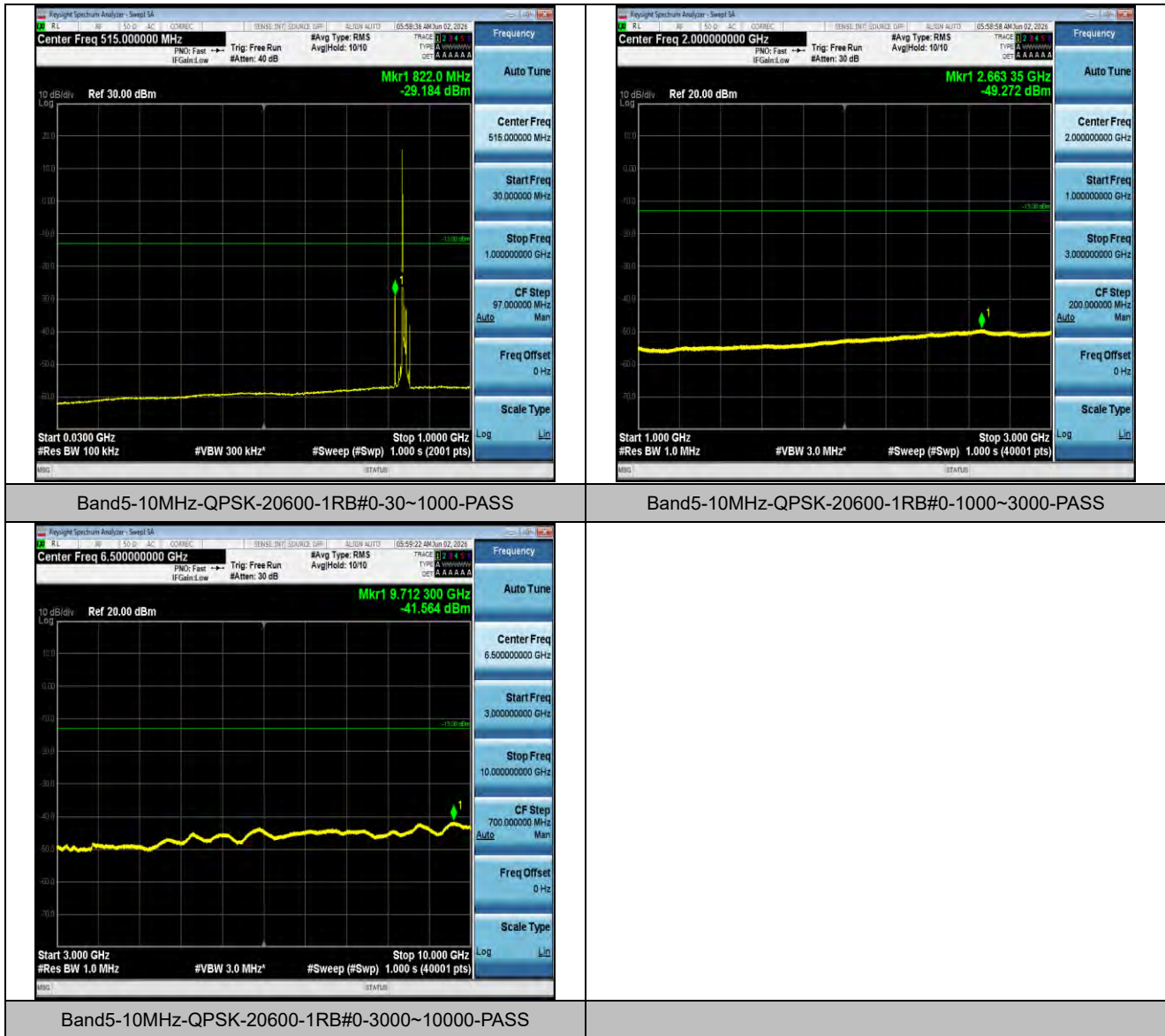


Conducted Spurious Emission

Test Graphs







Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band5	10MHz	QPSK	20525	50RB#0	VN	NT	-12.92	-0.015445	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VL	NT	-13.12	-0.015684	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	VH	NT	-9.83	-0.011751	±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	-9.86	-0.011787	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-20	-7.98	-0.009540	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	-10	-8.18	-0.009779	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	0	-11.42	-0.013652	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	10	-11.42	-0.013652	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	20	-7.40	-0.008846	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	30	-5.72	-0.006838	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	40	-8.34	-0.009970	±2.5	PASS
Band5	10MHz	QPSK	20525	50RB#0	NV	50	-9.80	-0.011715	±2.5	PASS

~The End~