

Appendix-A LTE Band 7

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	23.55	27.55	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	23	27	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	23.12	27.12	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	22.04	26.04	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.12	26.12	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.94	25.94	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.22	26.22	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	21.18	25.18	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	23.58	27.58	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.16	27.16	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	23.18	27.18	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	22.27	26.27	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.37	26.37	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.37	26.37	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.4	26.4	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	21.29	25.29	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	23.55	27.55	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.25	27.25	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.29	27.29	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.41	26.41	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.61	26.61	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.32	26.32	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	22.68	26.68	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.45	25.45	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	23.51	27.51	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	23.06	27.06	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	23.25	27.25	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	22.25	26.25	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.45	26.45	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.36	26.36	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.38	26.38	33.00	PASS
Band7	10MHz	16QAM	20800	27RB#0	21.85	25.85	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.56	27.56	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.1	27.1	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.27	27.27	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	22.19	26.19	33.00	PASS

Band7	10MHz	16QAM	21100	1RB#0	22.08	26.08	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.23	26.23	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.43	26.43	33.00	PASS
Band7	10MHz	16QAM	21100	27RB#0	21.9	25.9	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	23.65	27.65	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.2	27.2	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.36	27.36	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.35	26.35	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.71	26.71	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.29	26.29	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.57	26.57	33.00	PASS
Band7	10MHz	16QAM	21400	27RB#0	21.84	25.84	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	23.25	27.25	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.07	27.07	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	22.86	26.86	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.29	26.29	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	22.03	26.03	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.21	26.21	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22	26	33.00	PASS
Band7	15MHz	16QAM	20825	27RB#0	21.91	25.91	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	23.35	27.35	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.08	27.08	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.05	27.05	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	22.24	26.24	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	22.28	26.28	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.1	26.1	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.32	26.32	33.00	PASS
Band7	15MHz	16QAM	21100	27RB#0	21.98	25.98	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	23.44	27.44	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.14	27.14	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.05	27.05	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	22.24	26.24	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.37	26.37	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	22.12	26.12	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.13	26.13	33.00	PASS
Band7	15MHz	16QAM	21375	27RB#0	21.81	25.81	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	23.47	27.47	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.08	27.08	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.95	26.95	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	22.33	26.33	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	22.35	26.35	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	22.25	26.25	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.04	26.04	33.00	PASS
Band7	20MHz	16QAM	20850	27RB#0	22.03	26.03	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	23.55	27.55	33.00	PASS

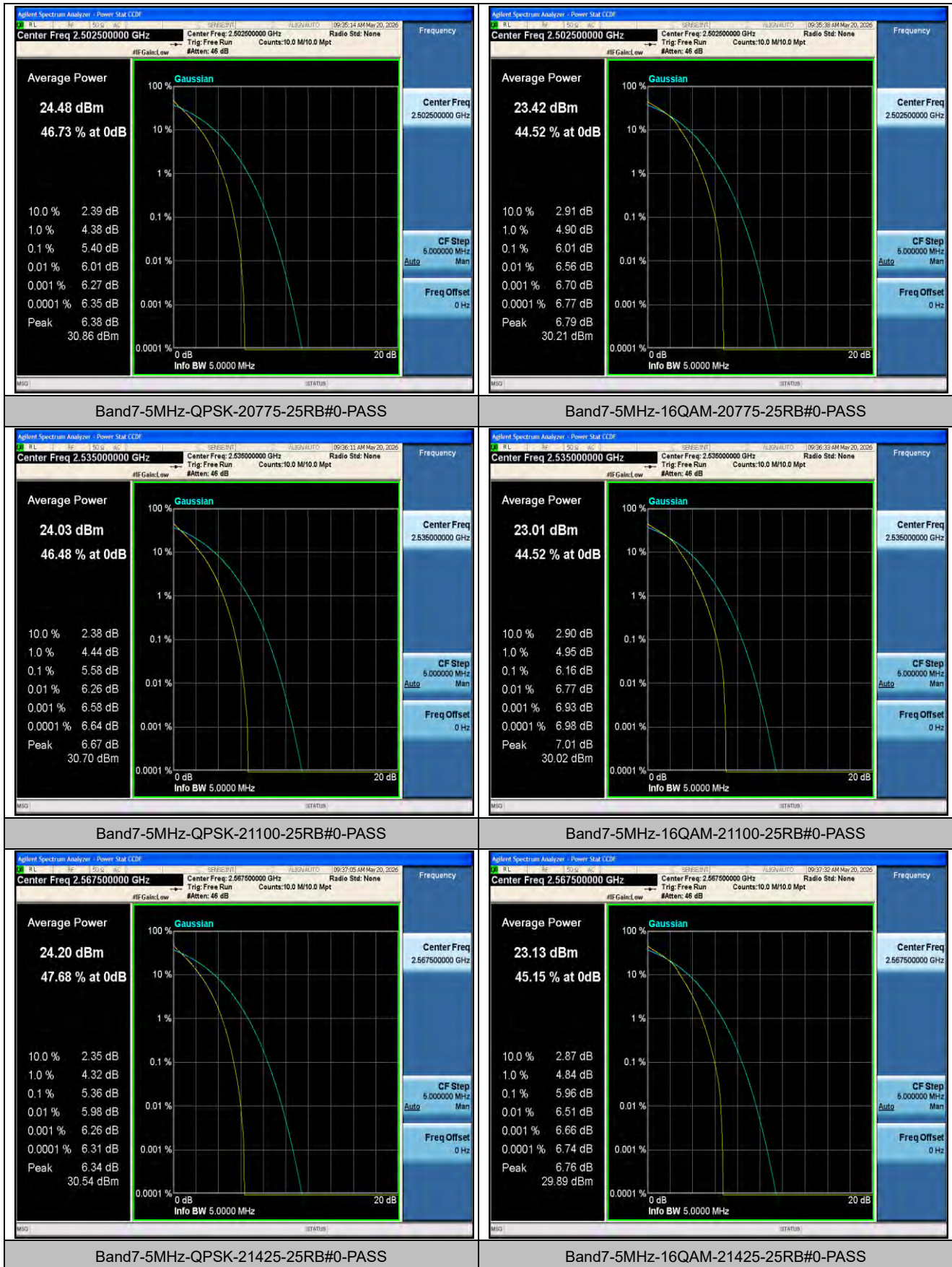
Band7	20MHz	QPSK	21100	1RB#49	23.09	27.09	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	23.1	27.1	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	22.26	26.26	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.12	26.12	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.09	26.09	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.01	26.01	33.00	PASS
Band7	20MHz	16QAM	21100	27RB#0	21.96	25.96	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	23.82	27.82	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.01	27.01	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.06	27.06	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	22.28	26.28	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.54	26.54	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	22.28	26.28	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	22.28	26.28	33.00	PASS
Band7	20MHz	16QAM	21350	27RB#0	21.96	25.96	33.00	PASS

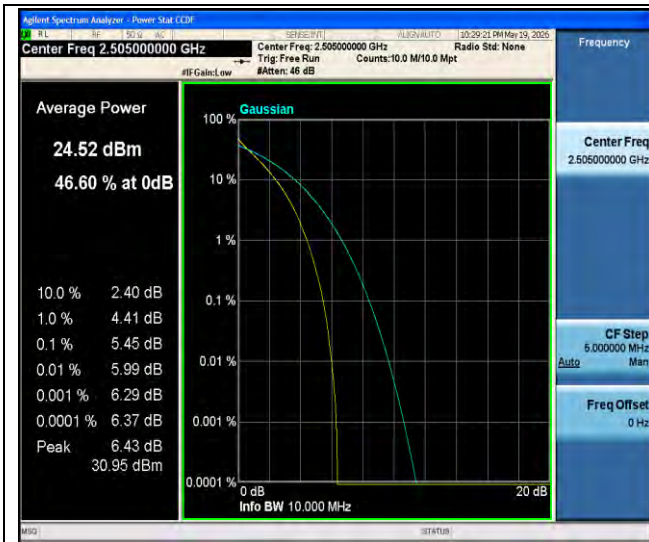
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	5.40	13	PASS
Band7	5MHz	16QAM	20775	25RB#0	6.01	13	PASS
Band7	5MHz	QPSK	21100	25RB#0	5.58	13	PASS
Band7	5MHz	16QAM	21100	25RB#0	6.16	13	PASS
Band7	5MHz	QPSK	21425	25RB#0	5.36	13	PASS
Band7	5MHz	16QAM	21425	25RB#0	5.96	13	PASS
Band7	10MHz	QPSK	20800	50RB#0	5.45	13	PASS
Band7	10MHz	16QAM	20800	27RB#0	5.97	13	PASS
Band7	10MHz	QPSK	21100	50RB#0	5.59	13	PASS
Band7	10MHz	16QAM	21100	27RB#0	8.60	13	PASS
Band7	10MHz	QPSK	21400	50RB#0	5.45	13	PASS
Band7	10MHz	16QAM	21400	27RB#0	8.48	13	PASS
Band7	15MHz	QPSK	20825	75RB#0	5.13	13	PASS
Band7	15MHz	16QAM	20825	27RB#0	5.93	13	PASS
Band7	15MHz	QPSK	21100	75RB#0	5.19	13	PASS
Band7	15MHz	16QAM	21100	27RB#0	7.50	13	PASS
Band7	15MHz	QPSK	21375	75RB#0	5.12	13	PASS
Band7	15MHz	16QAM	21375	27RB#0	6.67	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.37	13	PASS
Band7	20MHz	16QAM	20850	27RB#0	5.87	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.42	13	PASS
Band7	20MHz	16QAM	21100	27RB#0	8.32	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.33	13	PASS
Band7	20MHz	16QAM	21350	27RB#0	9.00	13	PASS

Test Graphs





Band7-10MHz-QPSK-20800-50RB#0-PASS



Band7-10MHz-16QAM-20800-27RB#0-PASS



Band7-10MHz-QPSK-21100-50RB#0-PASS



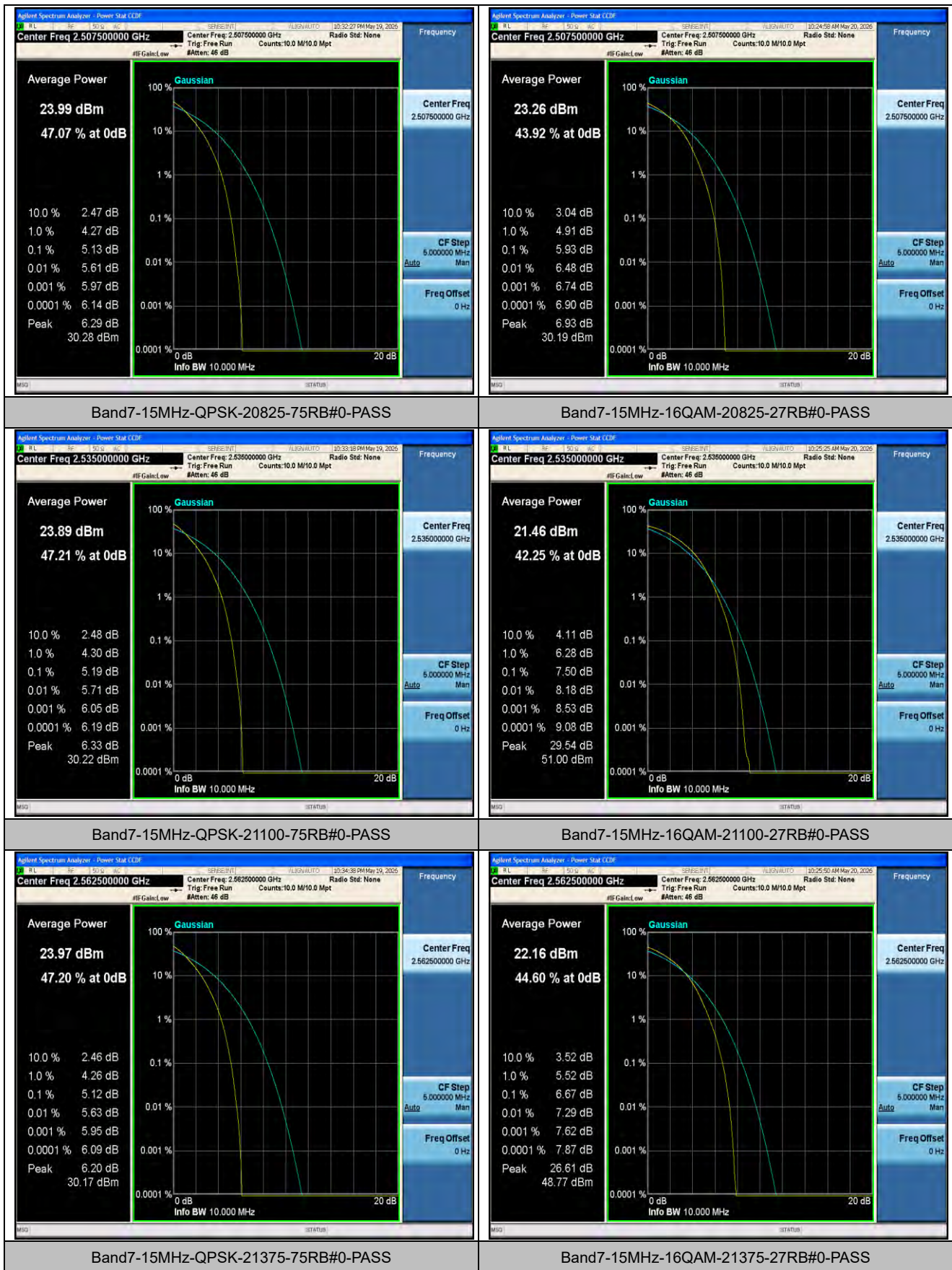
Band7-10MHz-16QAM-21100-27RB#0-PASS

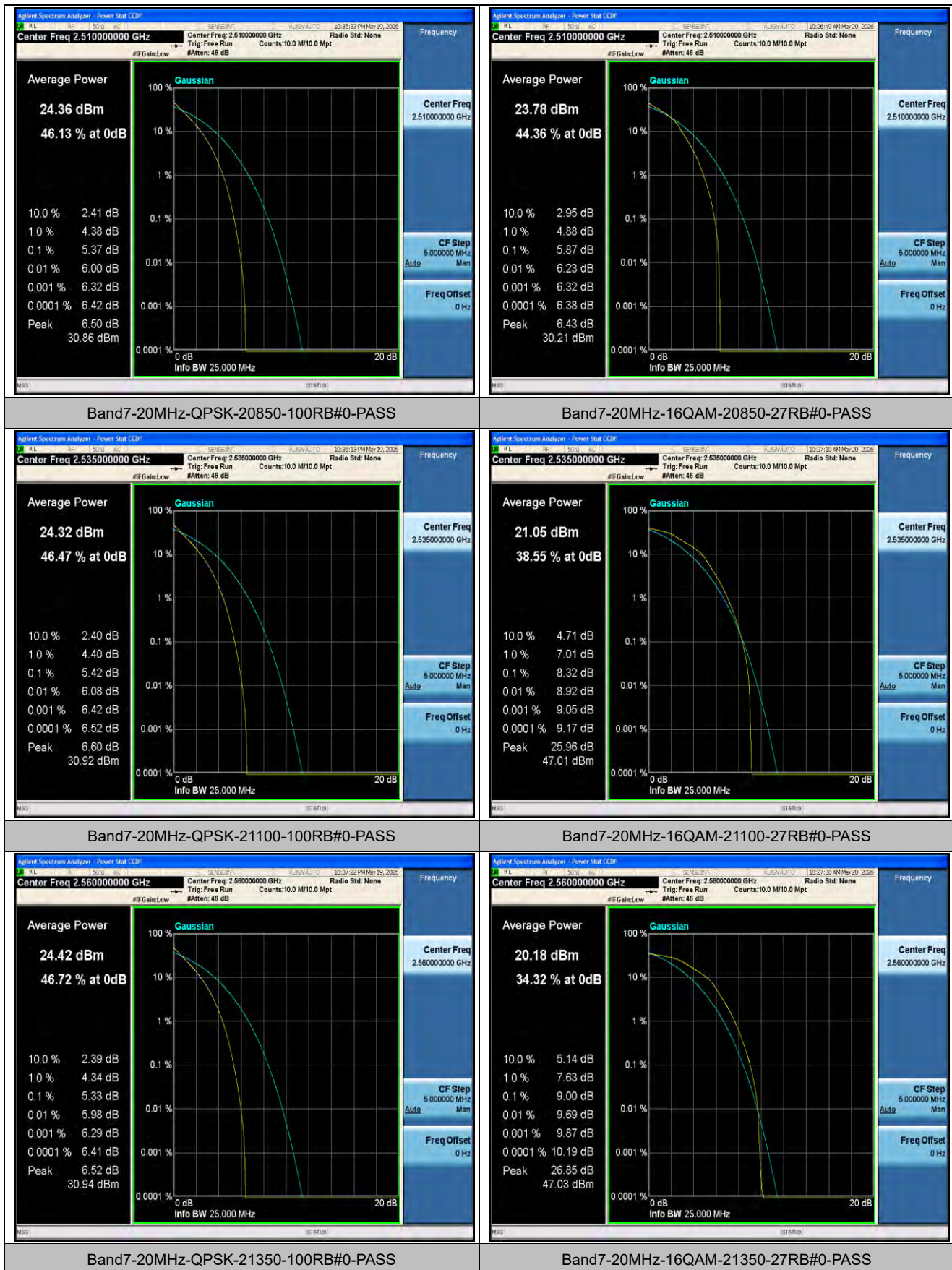


Band7-10MHz-QPSK-21400-50RB#0-PASS



Band7-10MHz-16QAM-21400-27RB#0-PASS





26dB Bandwidth and Occupied Bandwidth

Test Result

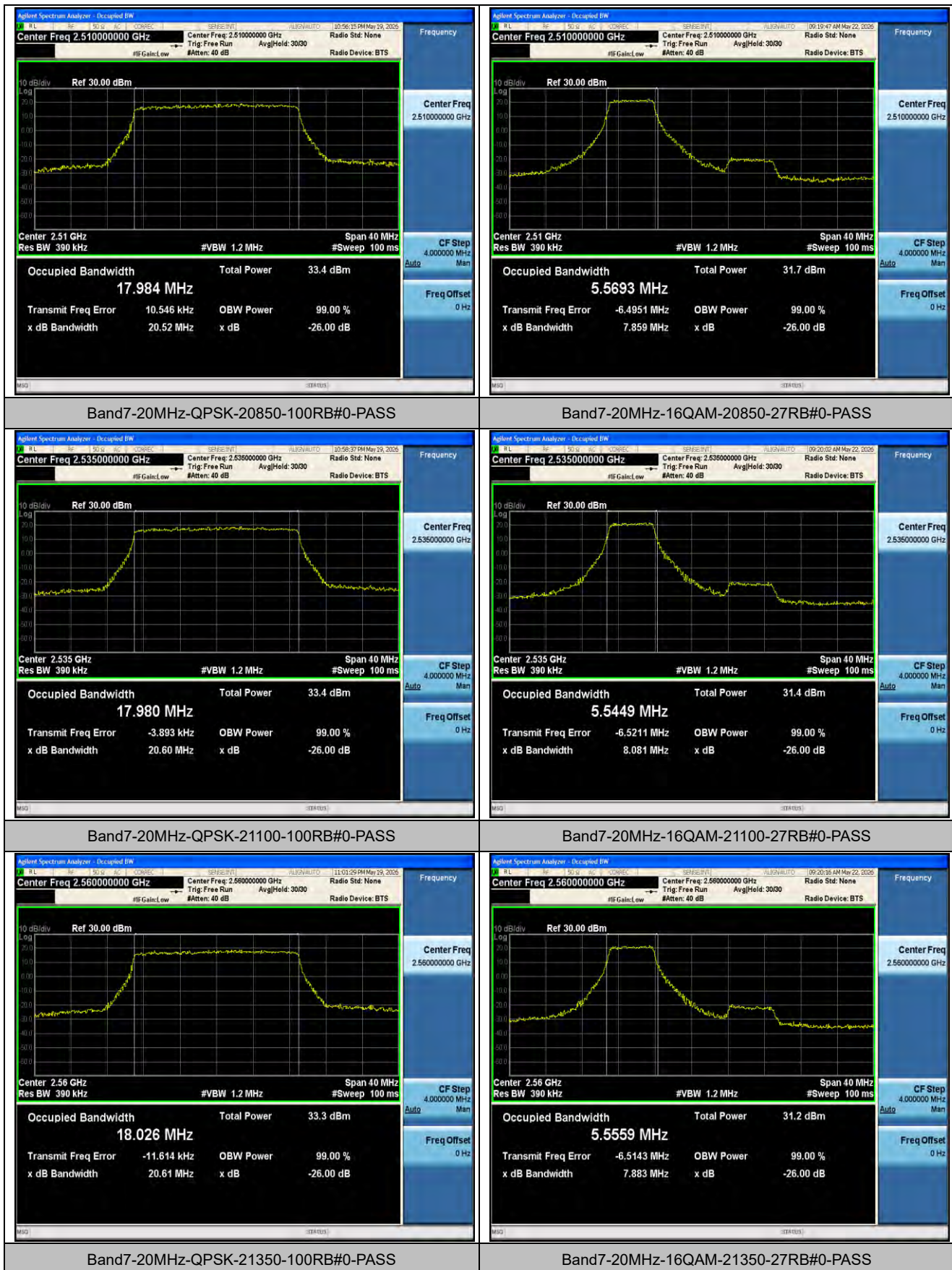
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.5132	5.627	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.5184	5.532	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.5120	5.581	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5200	5.573	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.5137	5.648	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.5152	5.568	PASS
Band7	10MHz	QPSK	20800	50RB#0	9.0214	10.38	PASS
Band7	10MHz	16QAM	20800	27RB#0	5.0383	6.454	PASS
Band7	10MHz	QPSK	21100	50RB#0	9.0188	10.34	PASS
Band7	10MHz	16QAM	21100	27RB#0	5.0301	6.480	PASS
Band7	10MHz	QPSK	21400	50RB#0	9.0370	10.49	PASS
Band7	10MHz	16QAM	21400	27RB#0	5.0157	6.476	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.508	15.88	PASS
Band7	15MHz	16QAM	20825	27RB#0	5.3894	7.829	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.511	15.80	PASS
Band7	15MHz	16QAM	21100	27RB#0	5.3821	7.798	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.500	15.93	PASS
Band7	15MHz	16QAM	21375	27RB#0	5.3726	7.754	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.984	20.52	PASS
Band7	20MHz	16QAM	20850	27RB#0	5.5693	7.859	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.980	20.60	PASS
Band7	20MHz	16QAM	21100	27RB#0	5.5449	8.081	PASS
Band7	20MHz	QPSK	21350	100RB#0	18.026	20.61	PASS
Band7	20MHz	16QAM	21350	27RB#0	5.5559	7.883	PASS

Test Graphs



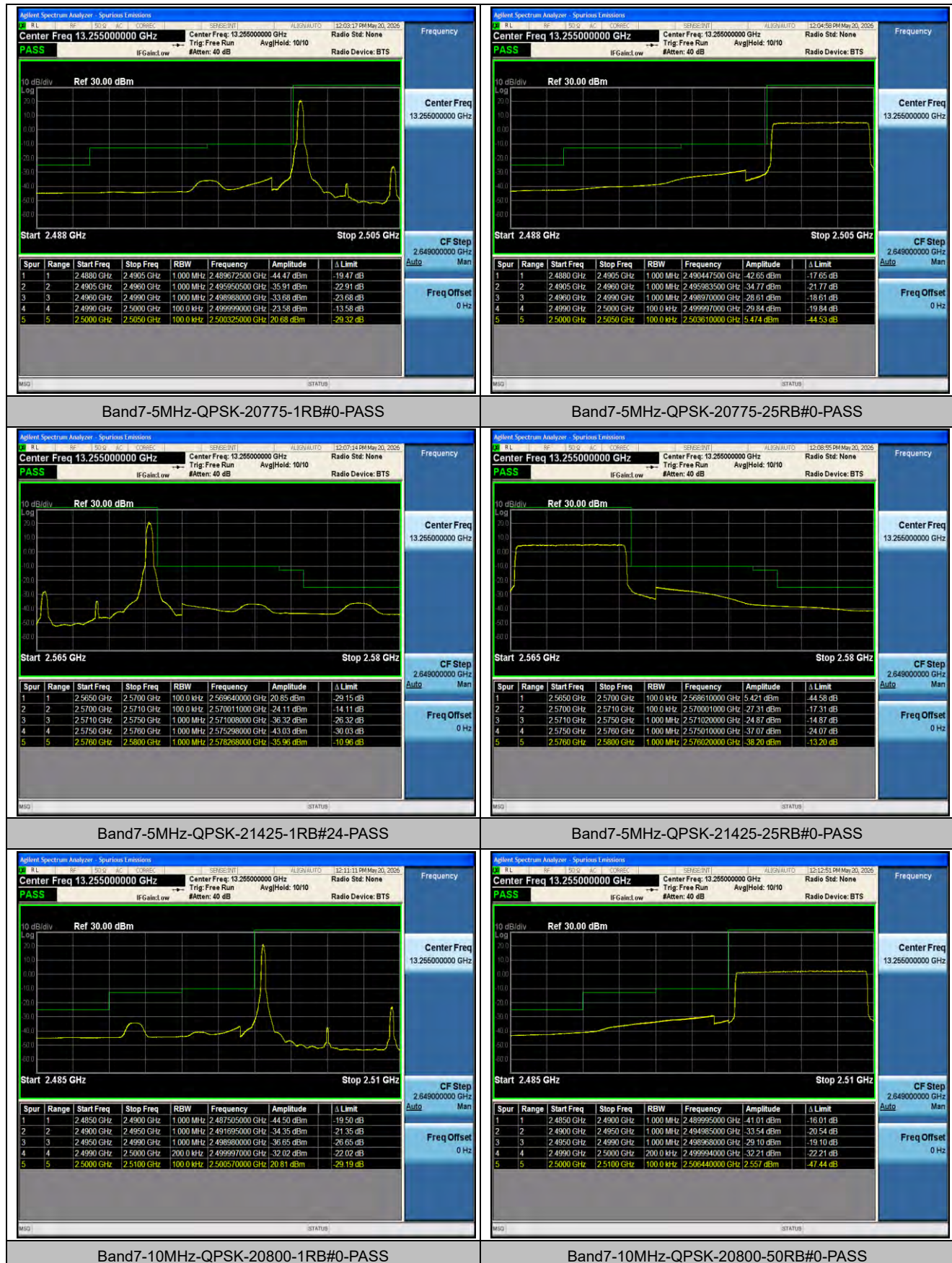


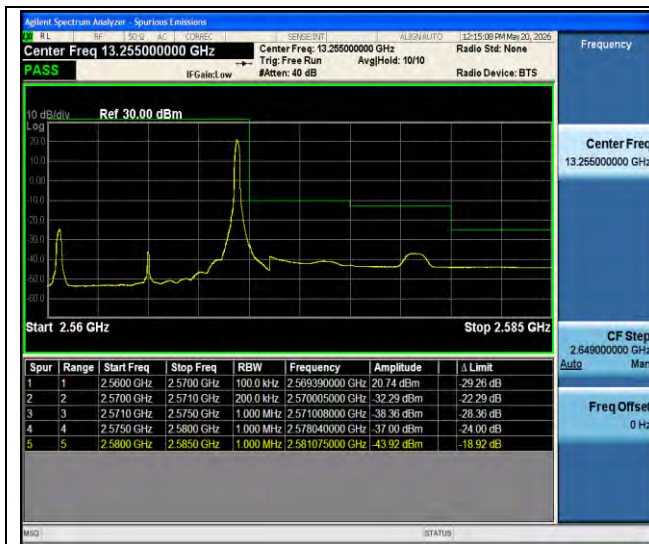




Band Edge

Test Graphs

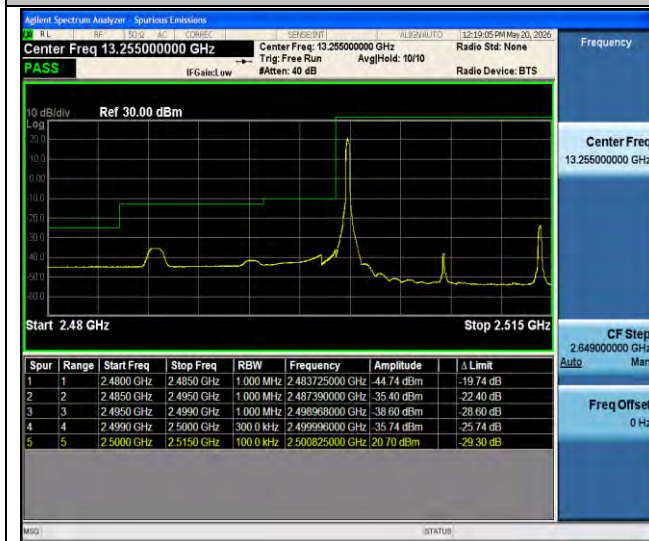




Band7-10MHz-QPSK-21400-1RB#49-PASS



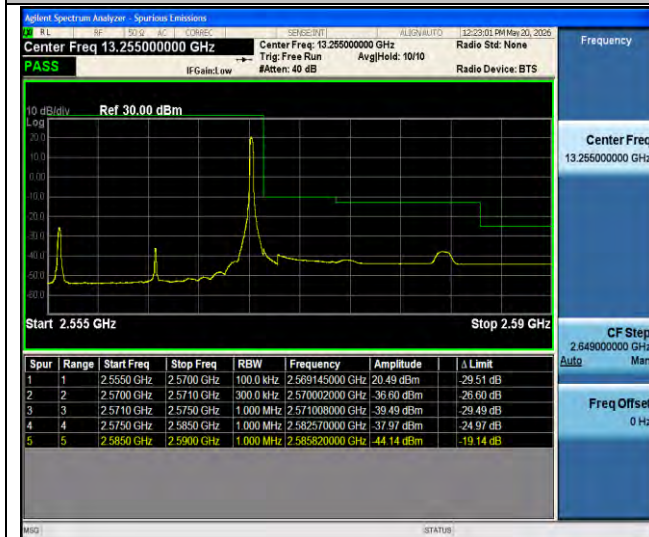
Band7-10MHz-QPSK-21400-50RB#0-PASS



Band7-15MHz-QPSK-20825-1RB#0-PASS



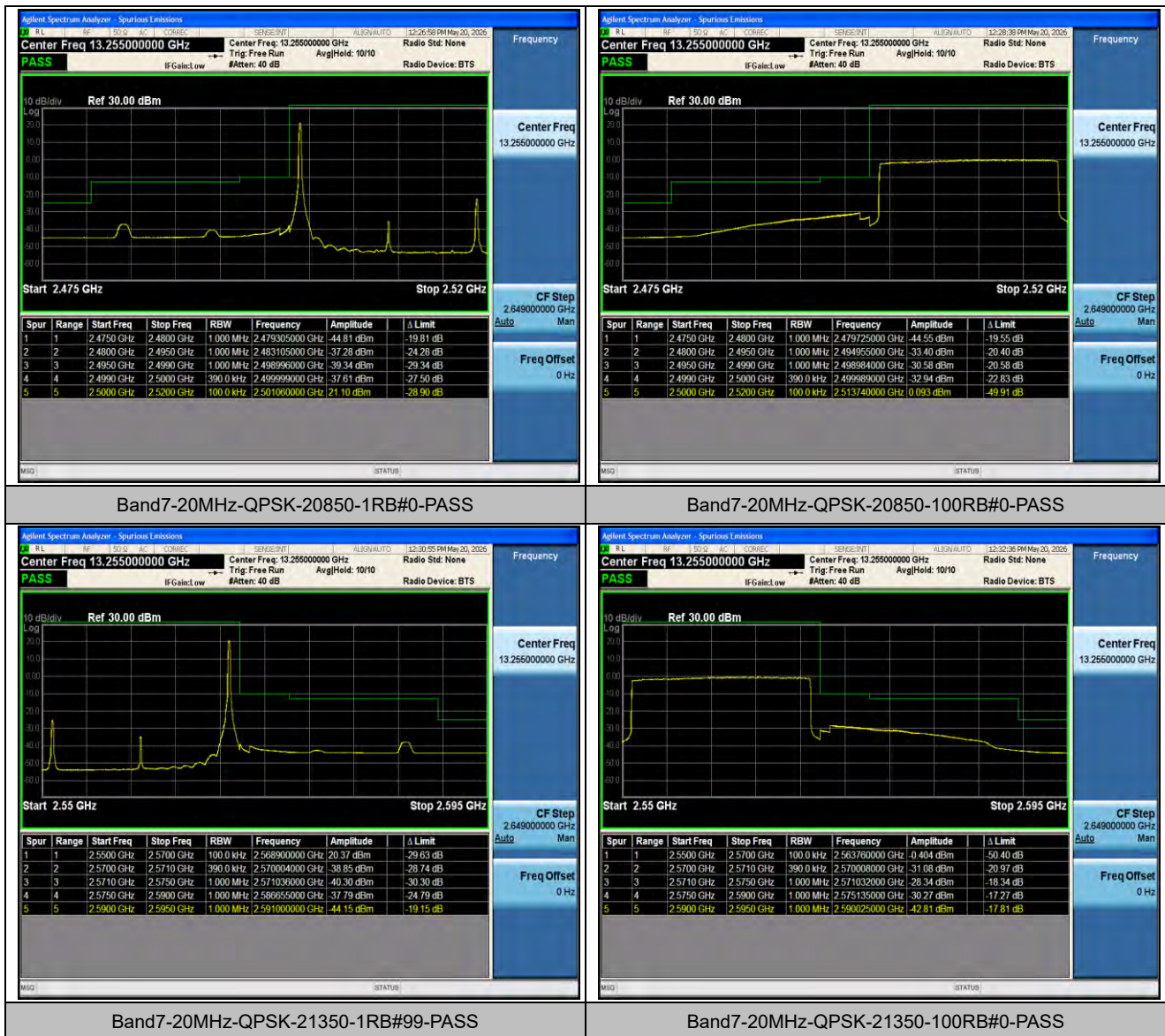
Band7-15MHz-QPSK-20825-75RB#0-PASS



Band7-15MHz-QPSK-21375-1RB#74-PASS

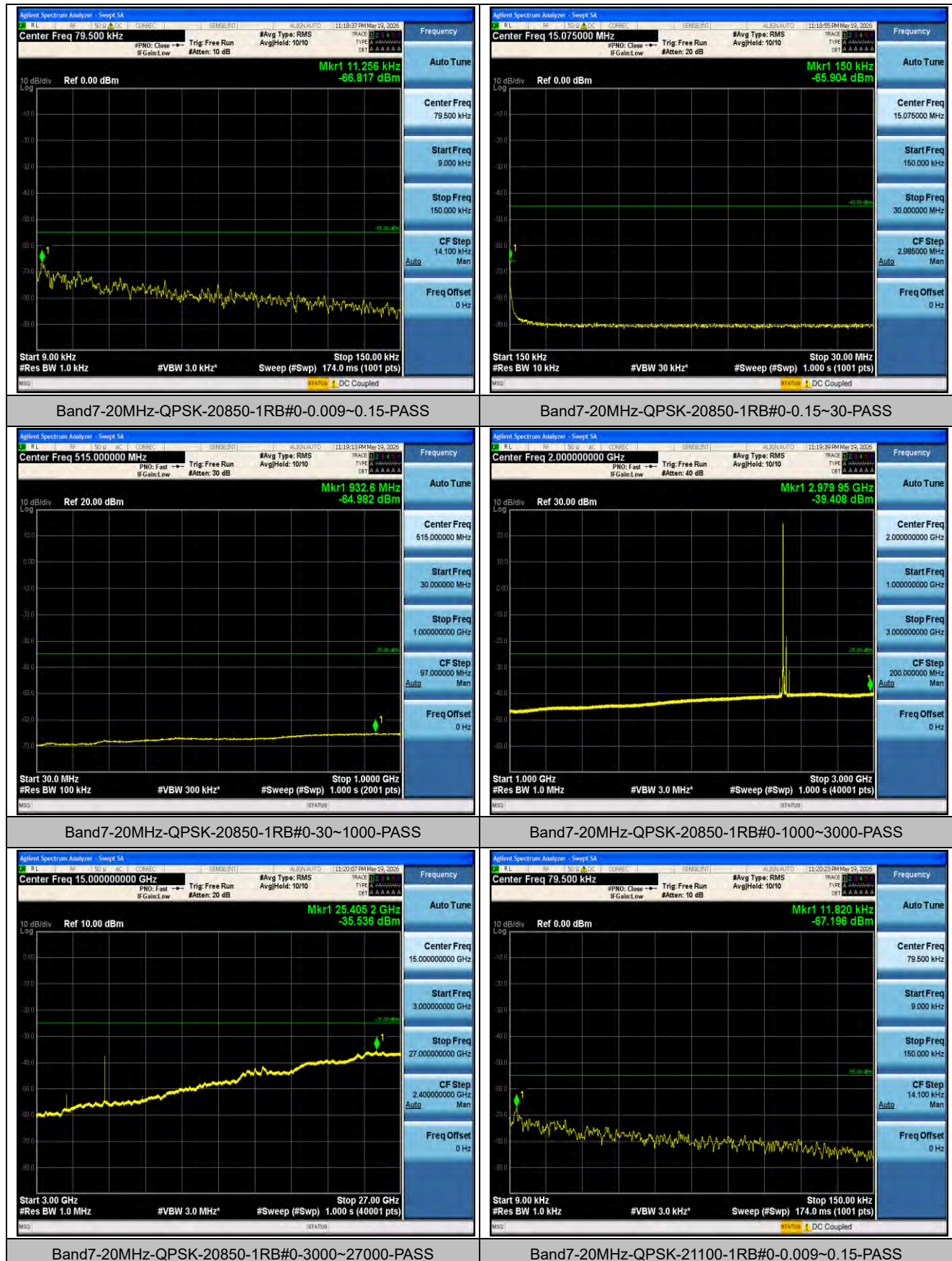


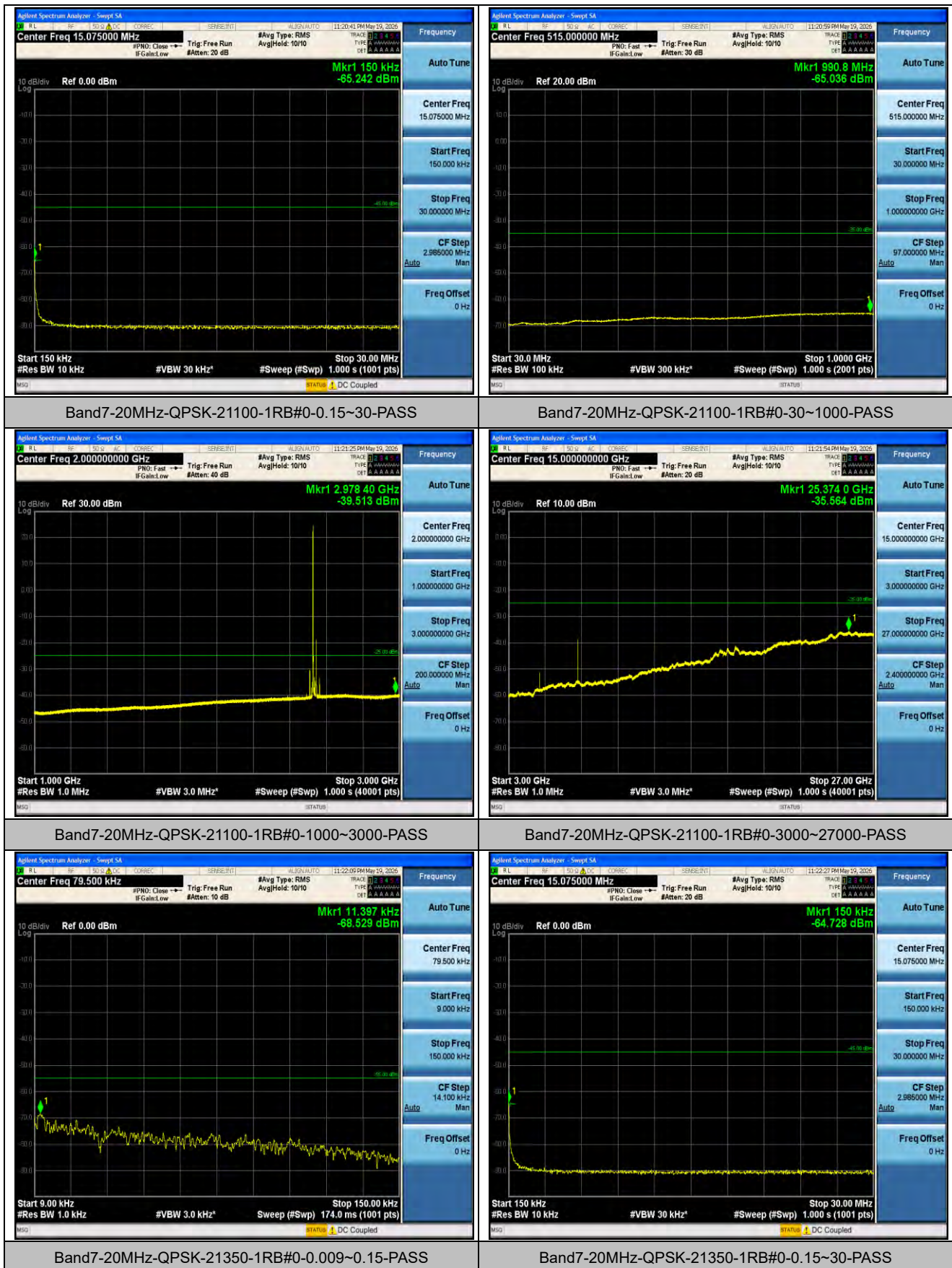
Band7-15MHz-QPSK-21375-75RB#0-PASS

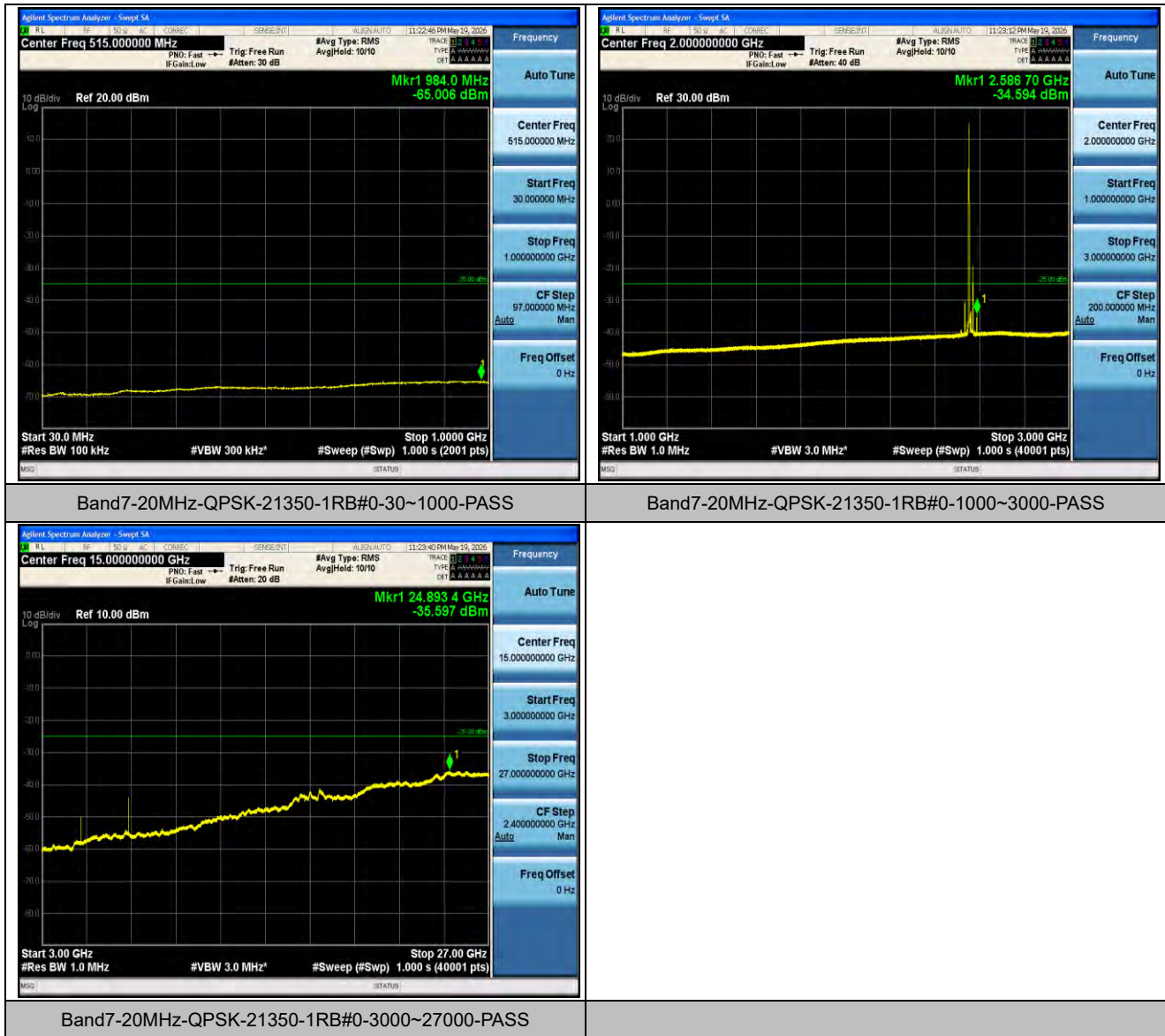


Conducted Spurious Emission

Test Graphs







Band7-20MHz-QPSK-21350-1RB#0-30~1000-PASS

Band7-20MHz-QPSK-21350-1RB#0-1000~3000-PASS

Band7-20MHz-QPSK-21350-1RB#0-3000~27000-PASS

Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-4.80	-0.001893	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-9.40	-0.003708	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-6.00	-0.002367	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-3.20	-0.001262	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-1.00	-0.000394	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-10	0.10	0.000039	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-3.90	-0.001538	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	1.60	0.000631	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-4.20	-0.001657	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-3.40	-0.001341	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	3.60	0.001420	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-0.70	-0.000276	PASS

~The End~