

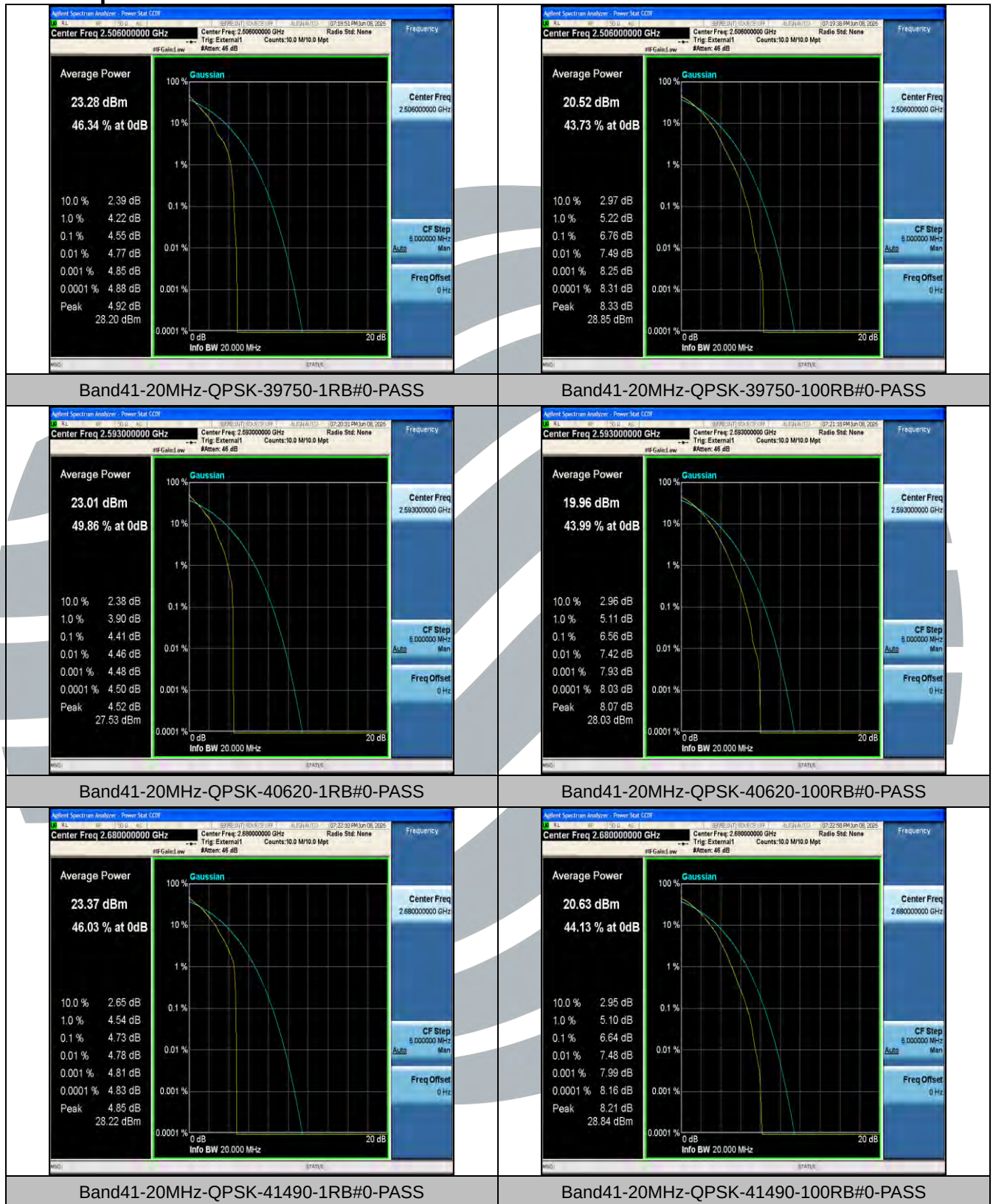
APPENDIX H LTE RF TEST DATA

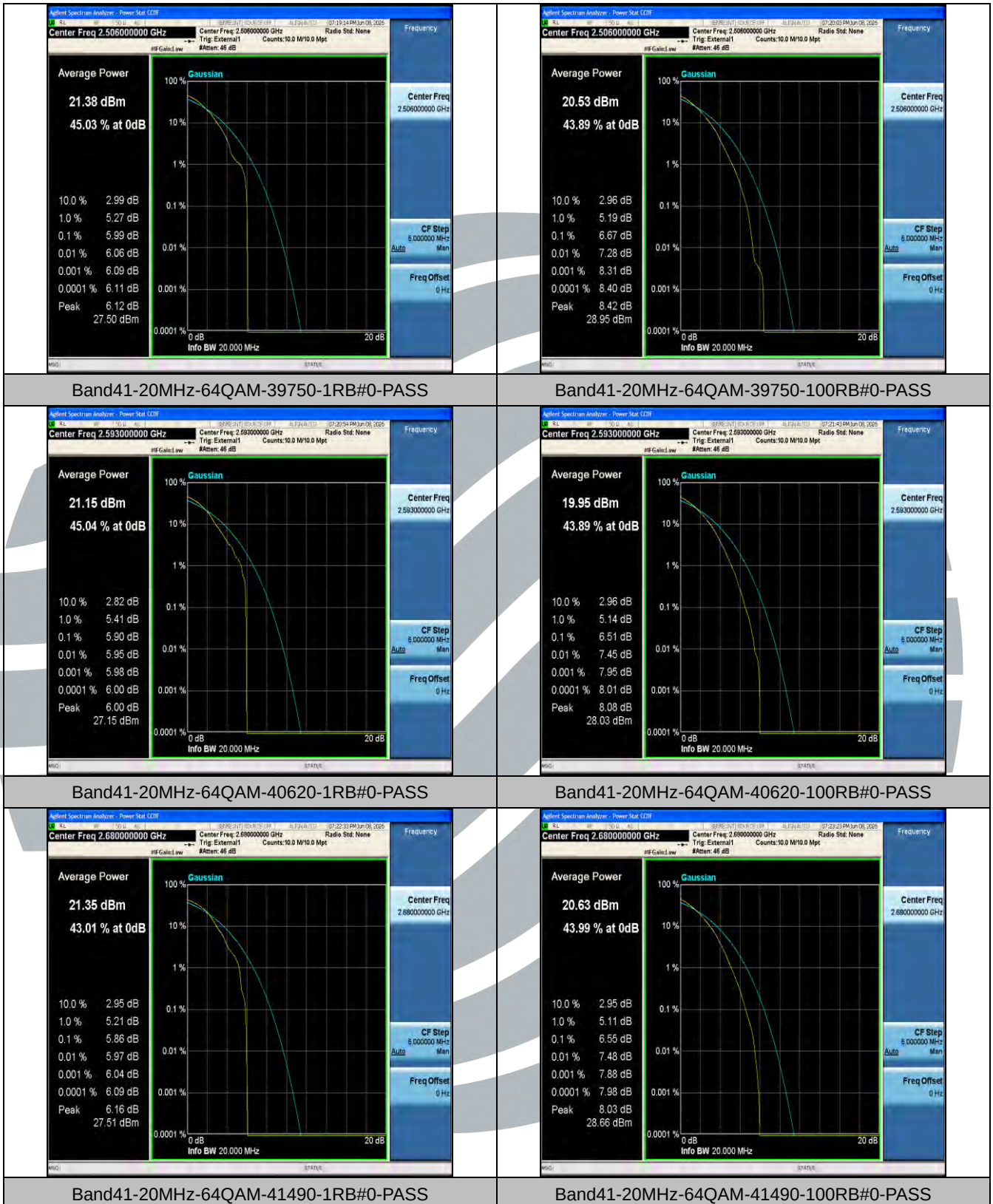
H.1 PEAK-TO-AVERAGE RATIO(CCDF)

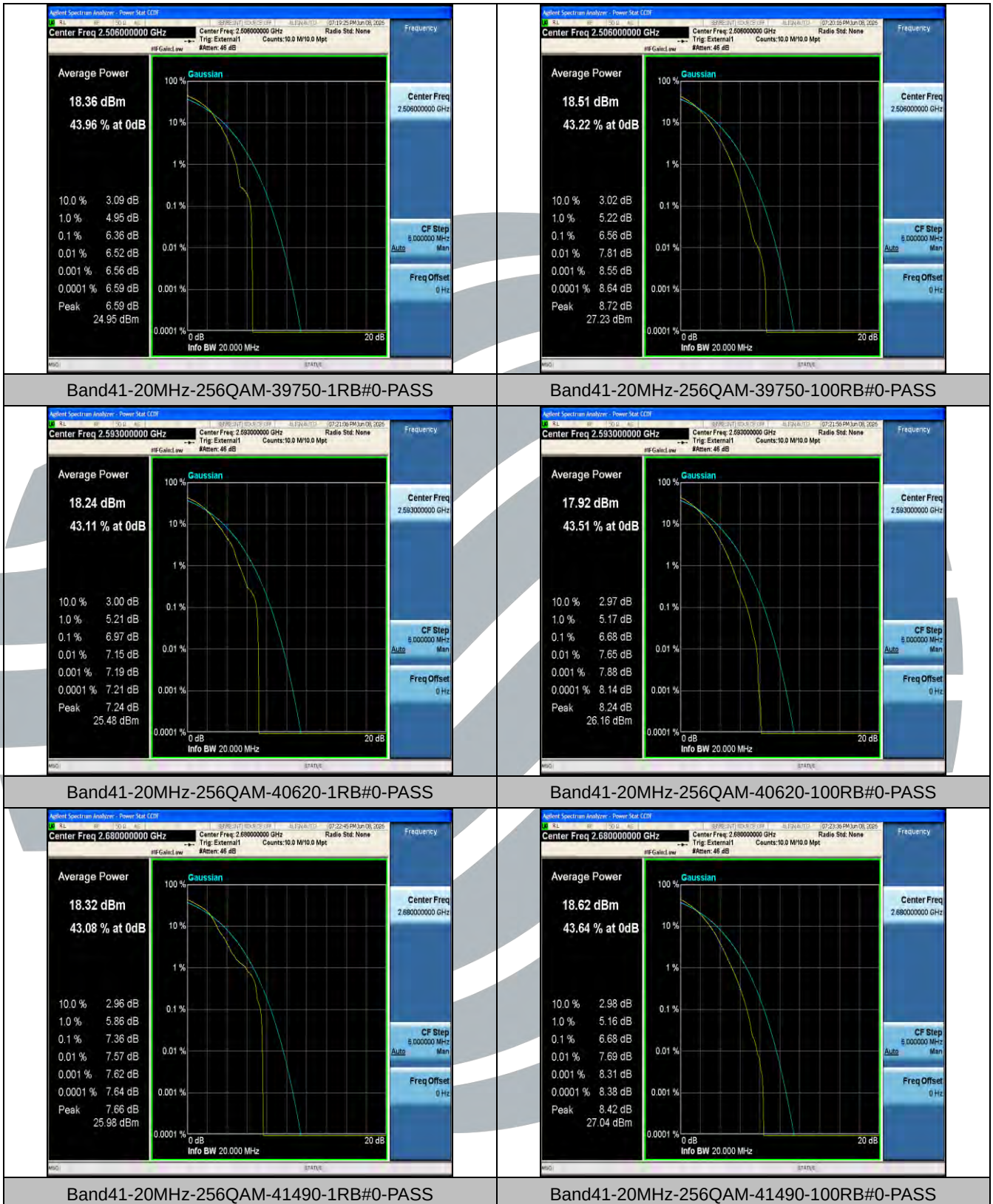
Test Result

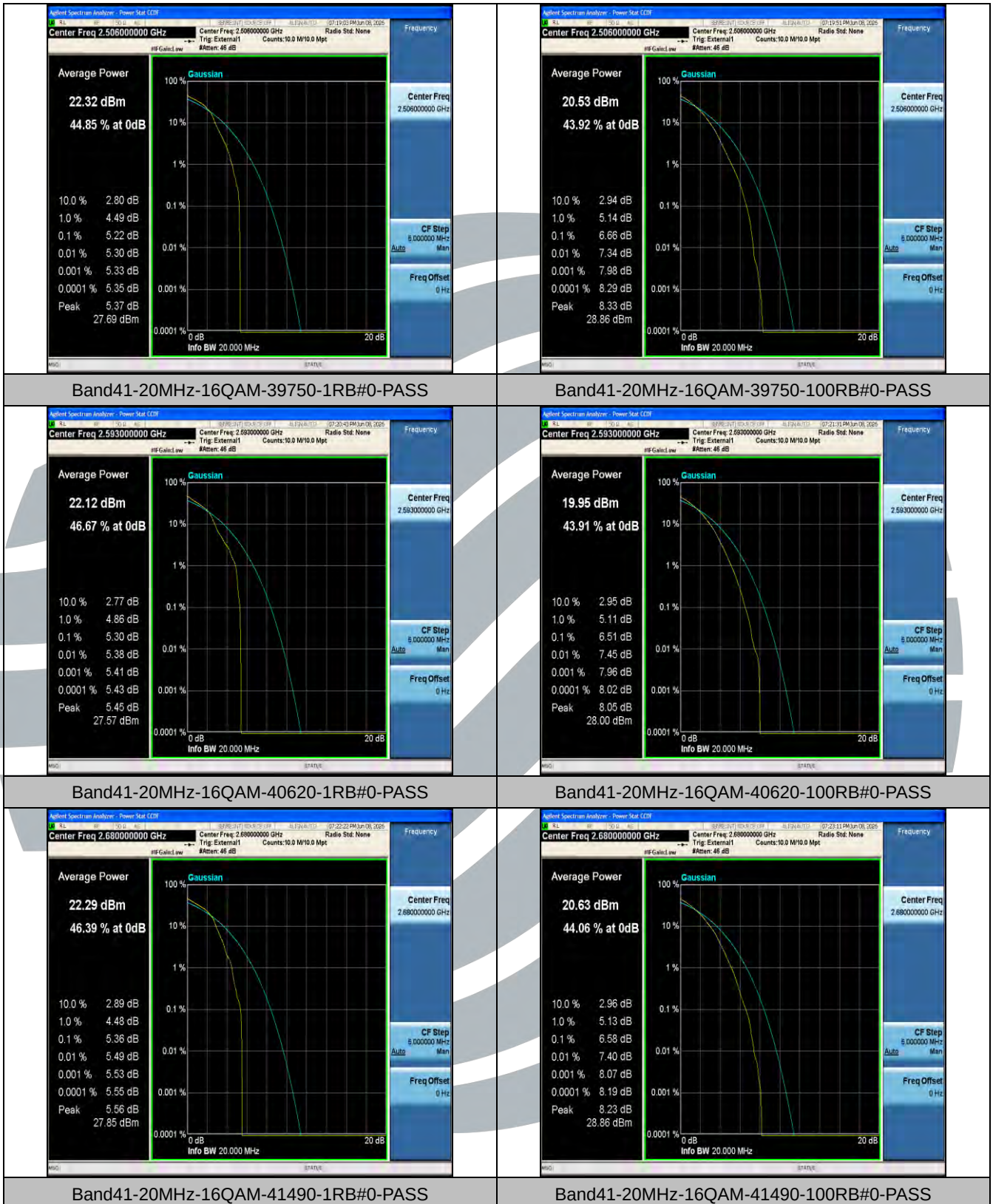
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band41	20MHz	QPSK	39750	1RB#0	4.55	13	PASS
Band41	20MHz	QPSK	39750	100RB#0	6.76	13	PASS
Band41	20MHz	QPSK	40620	1RB#0	4.41	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	6.56	13	PASS
Band41	20MHz	QPSK	41490	1RB#0	4.73	13	PASS
Band41	20MHz	QPSK	41490	100RB#0	6.64	13	PASS
Band41	20MHz	64QAM	39750	1RB#0	5.99	13	PASS
Band41	20MHz	64QAM	39750	100RB#0	6.67	13	PASS
Band41	20MHz	64QAM	40620	1RB#0	5.90	13	PASS
Band41	20MHz	64QAM	40620	100RB#0	6.51	13	PASS
Band41	20MHz	64QAM	41490	1RB#0	5.86	13	PASS
Band41	20MHz	64QAM	41490	100RB#0	6.55	13	PASS
Band41	20MHz	256QAM	39750	1RB#0	6.36	13	PASS
Band41	20MHz	256QAM	39750	100RB#0	6.56	13	PASS
Band41	20MHz	256QAM	40620	1RB#0	6.97	13	PASS
Band41	20MHz	256QAM	40620	100RB#0	6.68	13	PASS
Band41	20MHz	256QAM	41490	1RB#0	7.36	13	PASS
Band41	20MHz	256QAM	41490	100RB#0	6.68	13	PASS
Band41	20MHz	16QAM	39750	1RB#0	5.22	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	6.66	13	PASS
Band41	20MHz	16QAM	40620	1RB#0	5.30	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	6.51	13	PASS
Band41	20MHz	16QAM	41490	1RB#0	5.36	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	6.58	13	PASS

Test Graphs







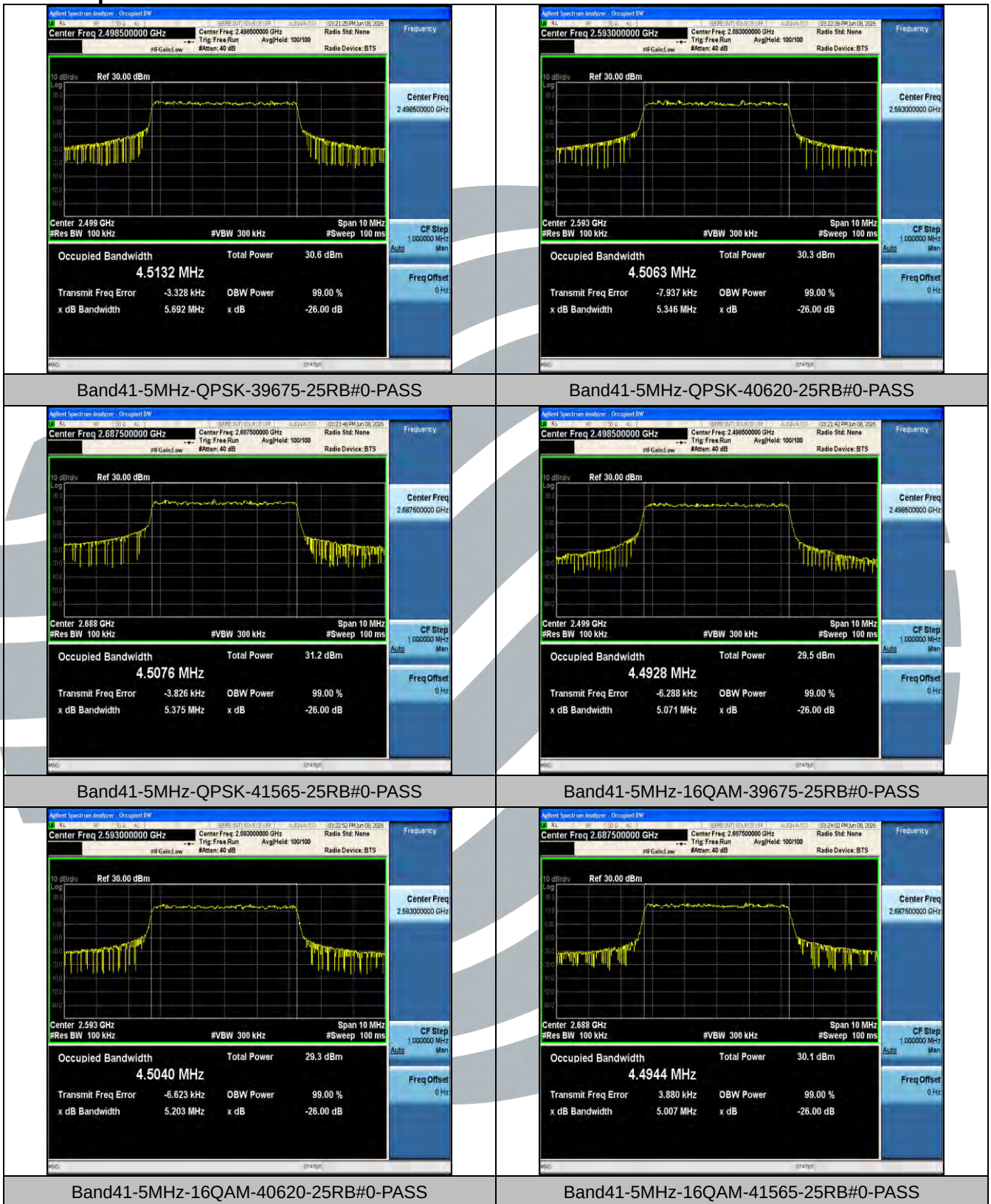


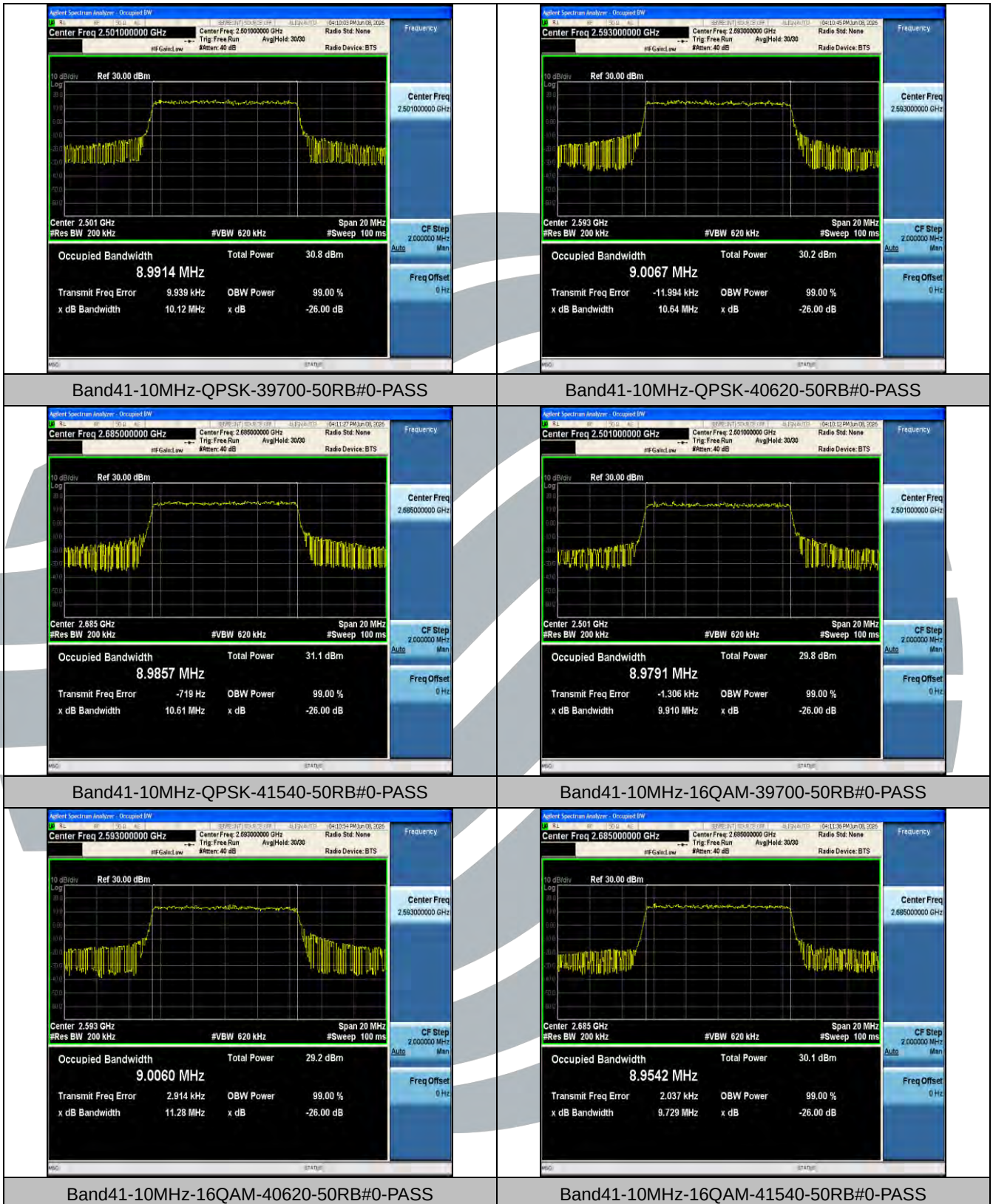
H.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

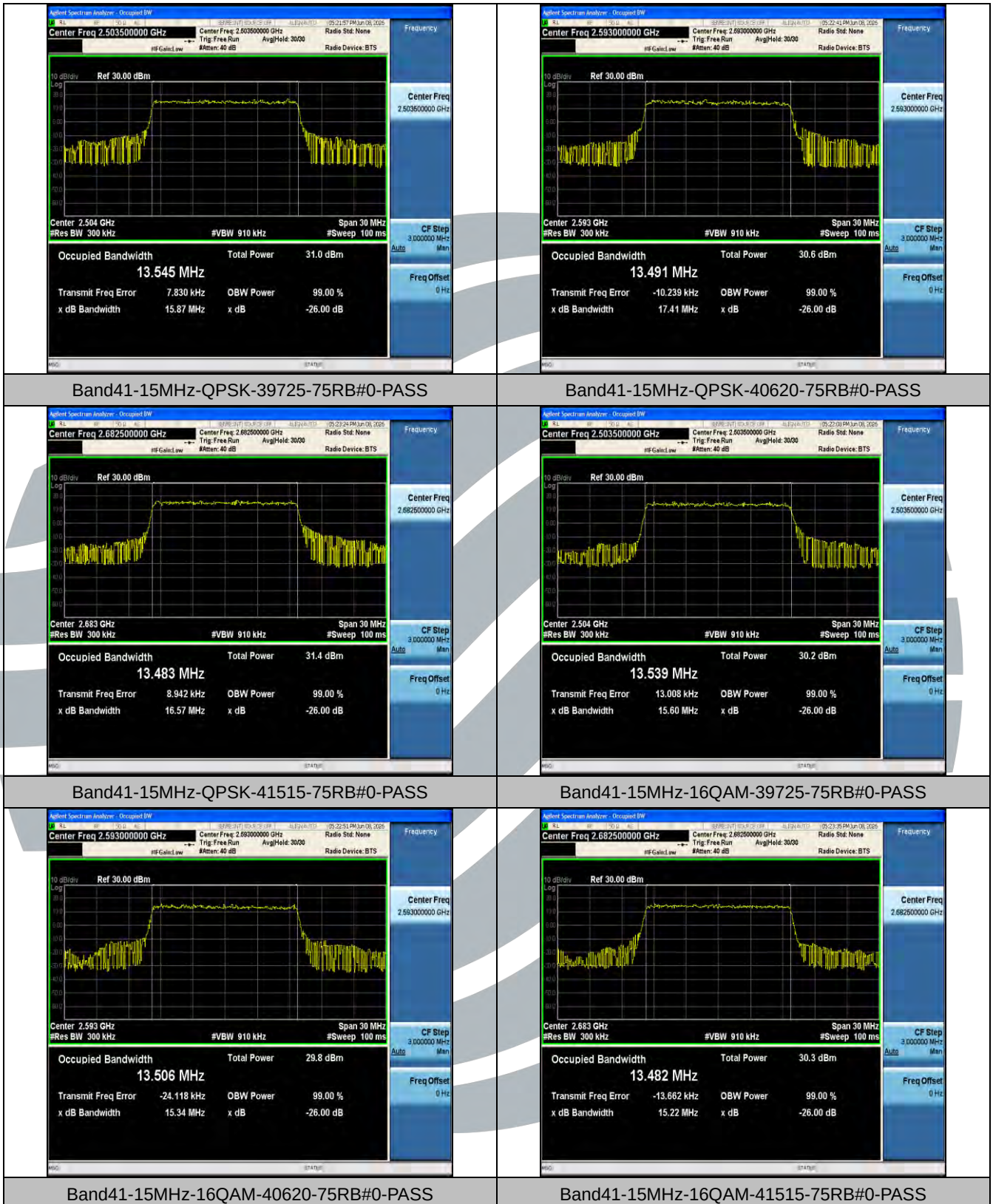
Test Result

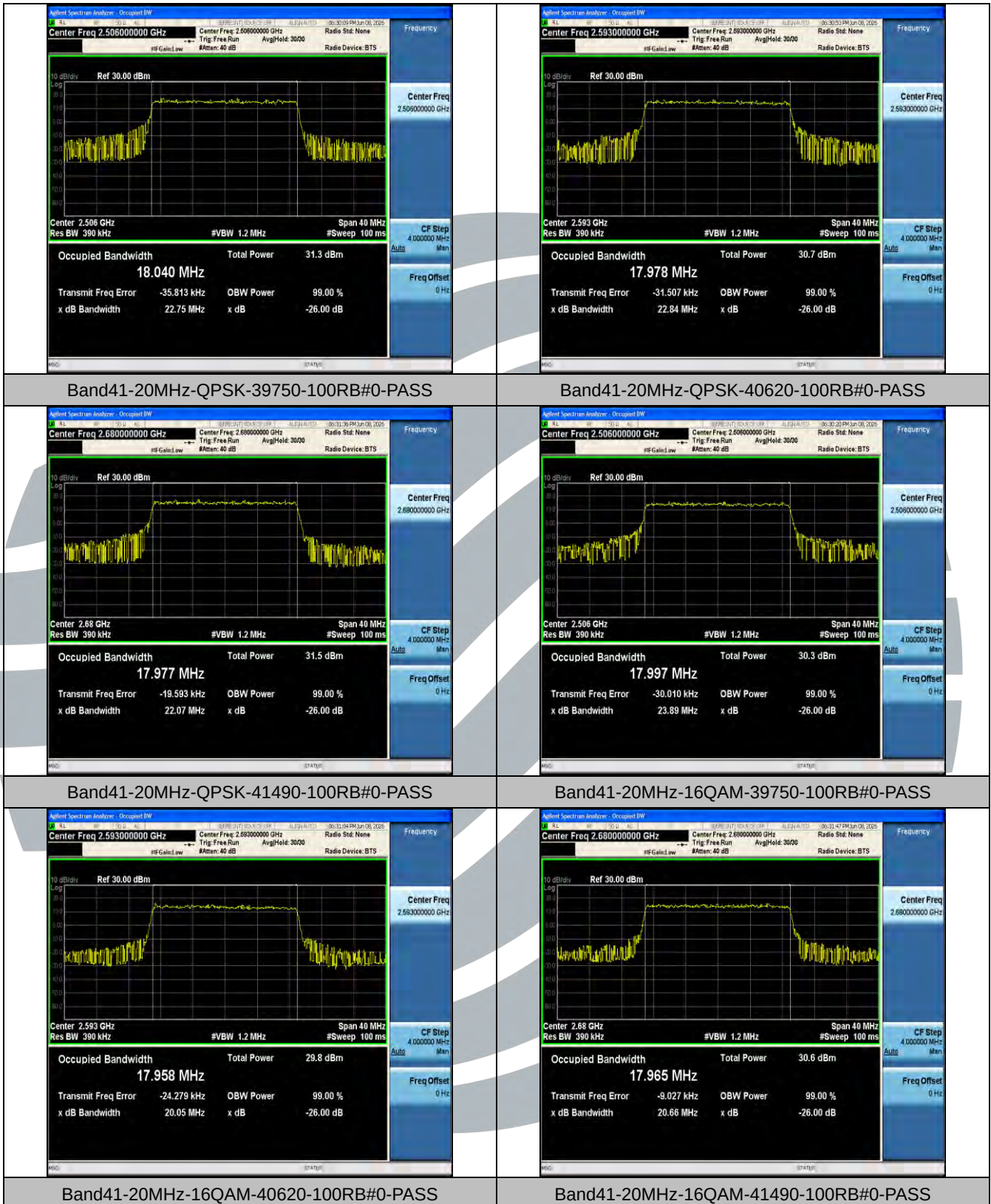
Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.5132	5.692	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.5063	5.346	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.5076	5.375	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.4928	5.071	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.5040	5.203	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4944	5.007	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9914	10.12	PASS
Band41	10MHz	QPSK	40620	50RB#0	9.0067	10.64	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9857	10.61	PASS
Band41	10MHz	16QAM	39700	50RB#0	8.9791	9.910	PASS
Band41	10MHz	16QAM	40620	50RB#0	9.0060	11.28	PASS
Band41	10MHz	16QAM	41540	50RB#0	8.9542	9.729	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.545	15.87	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.491	17.41	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.483	16.57	PASS
Band41	15MHz	16QAM	39725	75RB#0	13.539	15.60	PASS
Band41	15MHz	16QAM	40620	75RB#0	13.506	15.34	PASS
Band41	15MHz	16QAM	41515	75RB#0	13.482	15.22	PASS
Band41	20MHz	QPSK	39750	100RB#0	18.040	22.75	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.978	22.84	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.977	22.07	PASS
Band41	20MHz	16QAM	39750	100RB#0	17.997	23.89	PASS
Band41	20MHz	16QAM	40620	100RB#0	17.958	20.05	PASS
Band41	20MHz	16QAM	41490	100RB#0	17.965	20.66	PASS

Test Graphs





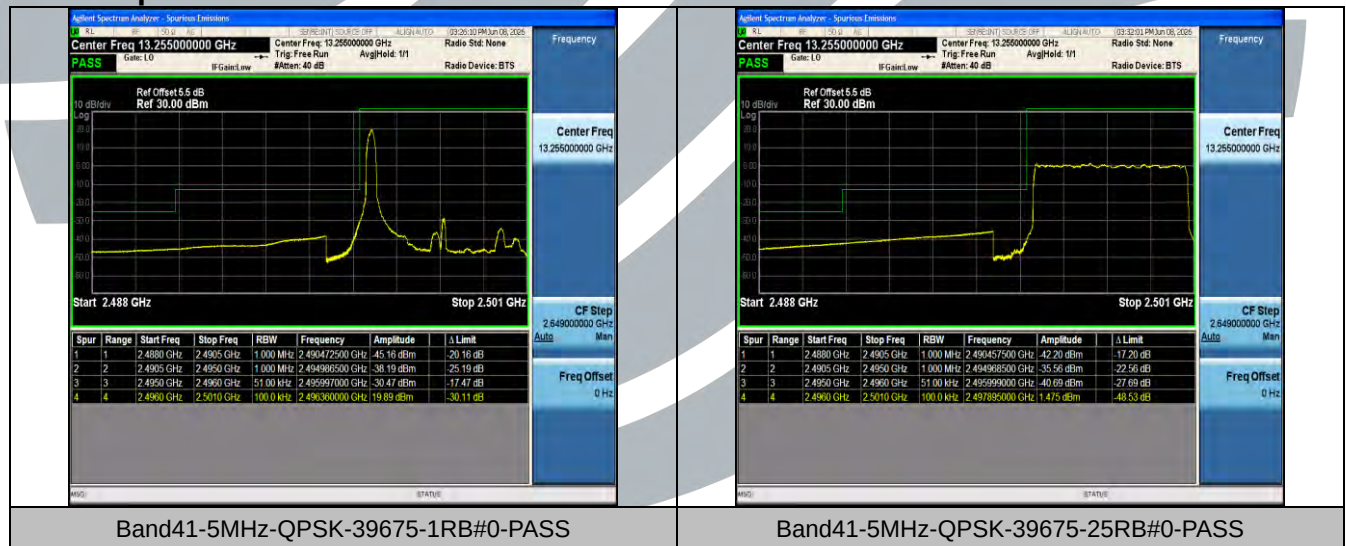


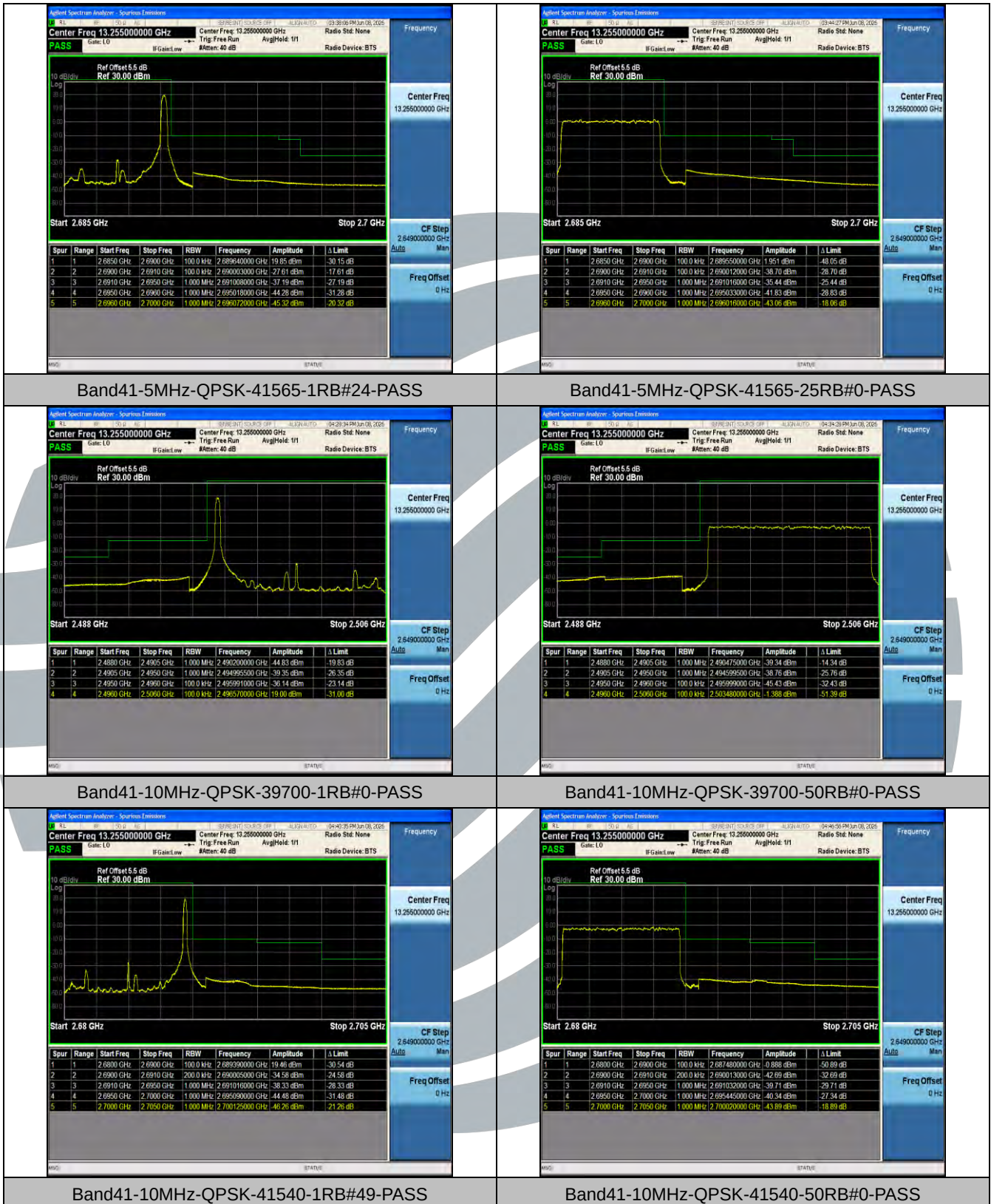


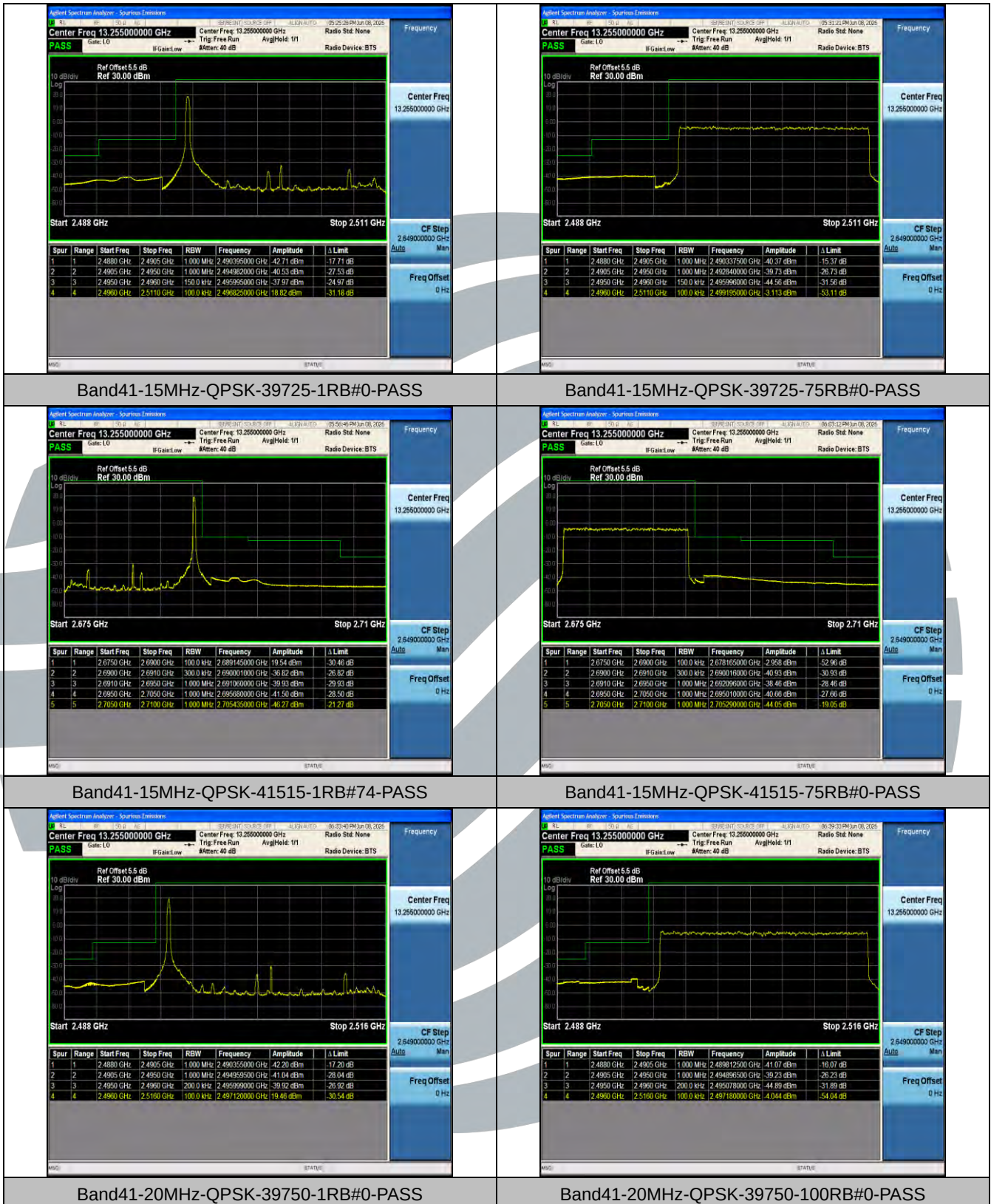
H.3 BAND EDGE Test Result

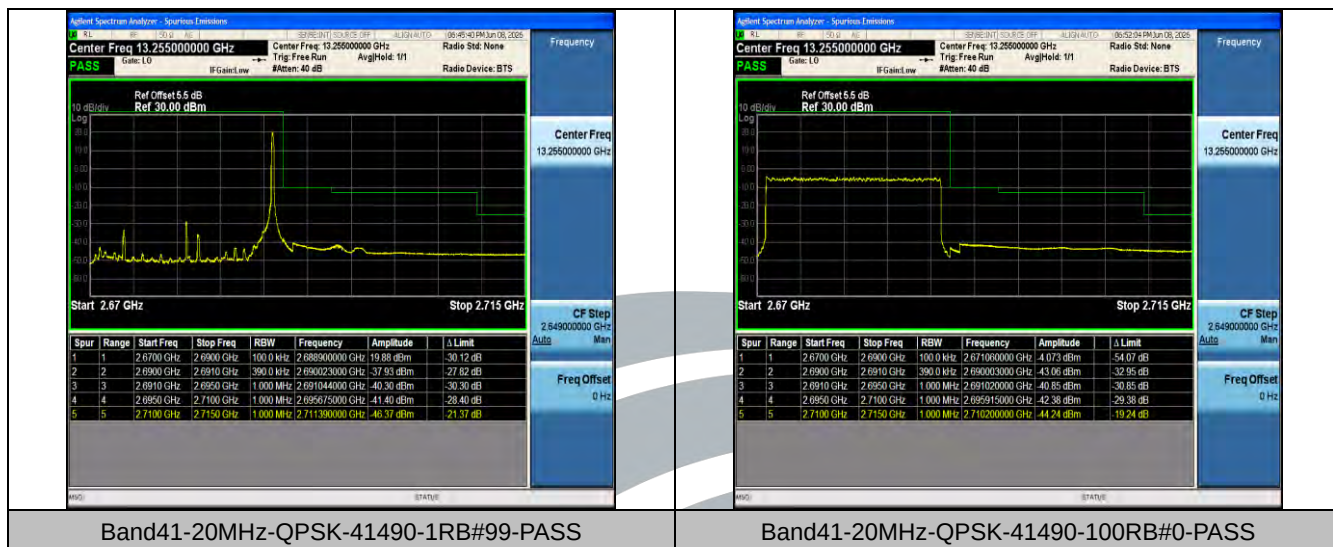
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	-30.47	PASS
Band41	5MHz	QPSK	39675	25RB#0	-42.20	PASS
Band41	5MHz	QPSK	41565	1RB#24	-27.61	PASS
Band41	5MHz	QPSK	41565	25RB#0	-43.06	PASS
Band41	10MHz	QPSK	39700	1RB#0	-44.83	PASS
Band41	10MHz	QPSK	39700	50RB#0	-39.34	PASS
Band41	10MHz	QPSK	41540	1RB#49	-46.26	PASS
Band41	10MHz	QPSK	41540	50RB#0	-43.89	PASS
Band41	15MHz	QPSK	39725	1RB#0	-42.71	PASS
Band41	15MHz	QPSK	39725	75RB#0	-40.37	PASS
Band41	15MHz	QPSK	41515	1RB#74	-46.27	PASS
Band41	15MHz	QPSK	41515	75RB#0	-44.05	PASS
Band41	20MHz	QPSK	39750	1RB#0	-42.20	PASS
Band41	20MHz	QPSK	39750	100RB#0	-41.07	PASS
Band41	20MHz	QPSK	41490	1RB#99	-46.37	PASS
Band41	20MHz	QPSK	41490	100RB#0	-44.24	PASS

Test Graphs







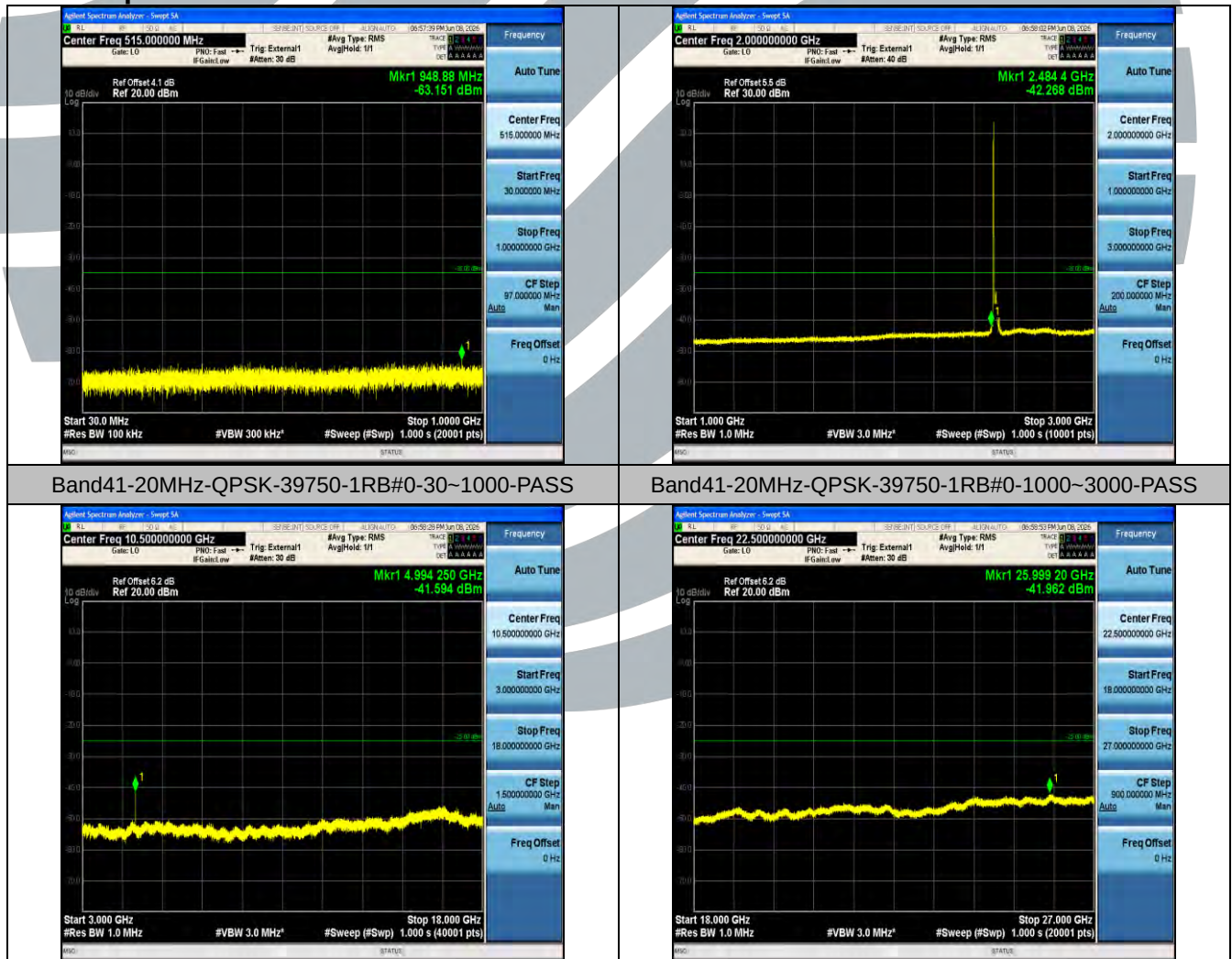


H.4 CONDUCTED SPURIOUS EMISSION

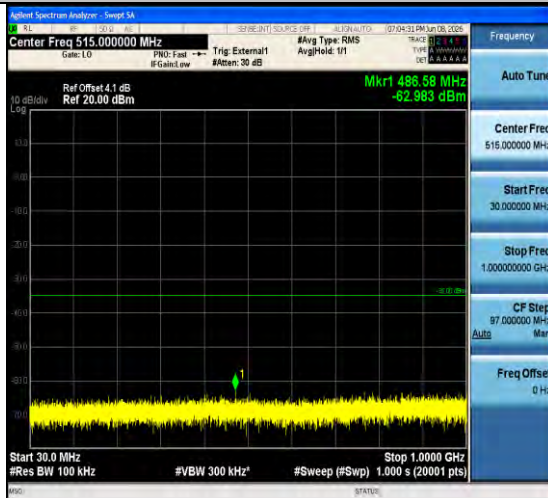
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range (MHz)	Result (dBm)	Verdict
Band41	20MHz	QPSK	39750	1RB#0	30~1000	-63.15	PASS
Band41	20MHz	QPSK	39750	1RB#0	1000~3000	-42.27	PASS
Band41	20MHz	QPSK	39750	1RB#0	3000~18000	-41.59	PASS
Band41	20MHz	QPSK	39750	1RB#0	18000~27000	-41.96	PASS
Band41	20MHz	QPSK	40620	1RB#0	30~1000	-62.98	PASS
Band41	20MHz	QPSK	40620	1RB#0	1000~3000	-42.51	PASS
Band41	20MHz	QPSK	40620	1RB#0	3000~18000	-45.88	PASS
Band41	20MHz	QPSK	40620	1RB#0	18000~27000	-42.19	PASS
Band41	20MHz	QPSK	41490	1RB#0	30~1000	-55.79	PASS
Band41	20MHz	QPSK	41490	1RB#0	1000~3000	-42.32	PASS
Band41	20MHz	QPSK	41490	1RB#0	3000~18000	-46.13	PASS
Band41	20MHz	QPSK	41490	1RB#0	18000~27000	-41.88	PASS

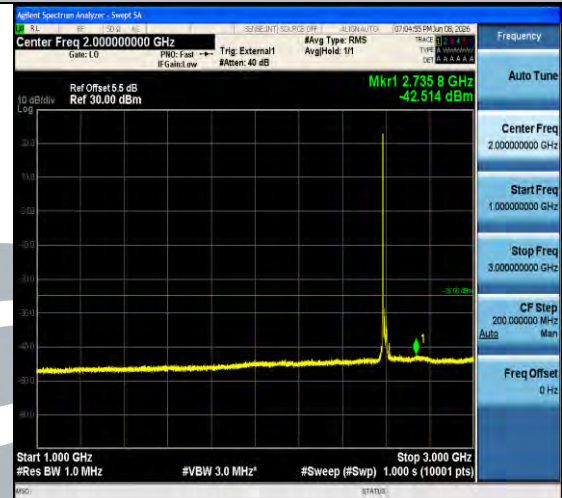
Test Graphs



Band41-20MHz-QPSK-39750-1RB#0-3000~18000-PASS



Band41-20MHz-QPSK-39750-1RB#0-18000~27000-PASS



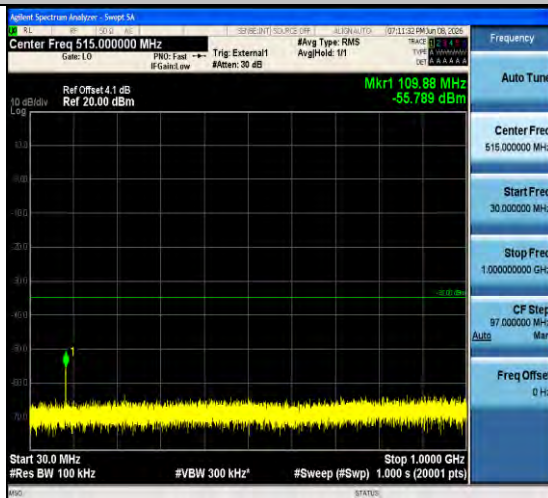
Band41-20MHz-QPSK-40620-1RB#0-30~1000-PASS



Band41-20MHz-QPSK-40620-1RB#0-1000~3000-PASS



Band41-20MHz-QPSK-40620-1RB#0-3000~18000-PASS

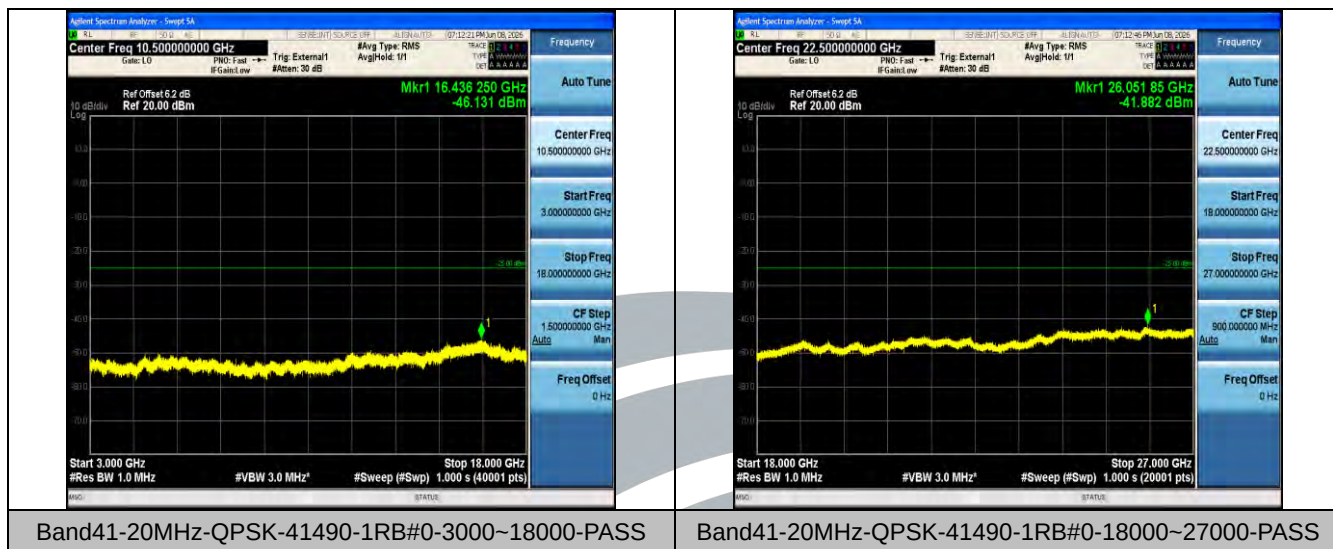


Band41-20MHz-QPSK-40620-1RB#0-18000~27000-PASS



Band41-20MHz-QPSK-41490-1RB#0-30~1000-PASS

Band41-20MHz-QPSK-41490-1RB#0-1000~3000-PASS



H.5 FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Ch.	RB Configure	Voltage [Vdc]	Temp. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band41	20MHz	QPSK	40620	100RB#0	VN	NT	-21.46	-0.008276	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	VL	NT	-15.21	-0.005866	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	VH	NT	10.41	0.004015	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Ch.	RB Configure	Voltage [Vdc]	Temp. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band41	20MHz	QPSK	40620	100RB#0	NV	-30	-16.37	-0.006313	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-20	-10.34	-0.003988	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-10	-12.80	-0.004936	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	0	-15.29	-0.005897	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	10	-10.99	-0.004238	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	20	-11.79	-0.004547	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	30	-10.44	-0.004026	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	40	-16.02	-0.006178	±2.5	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	50	-14.62	-0.005638	±2.5	PASS