

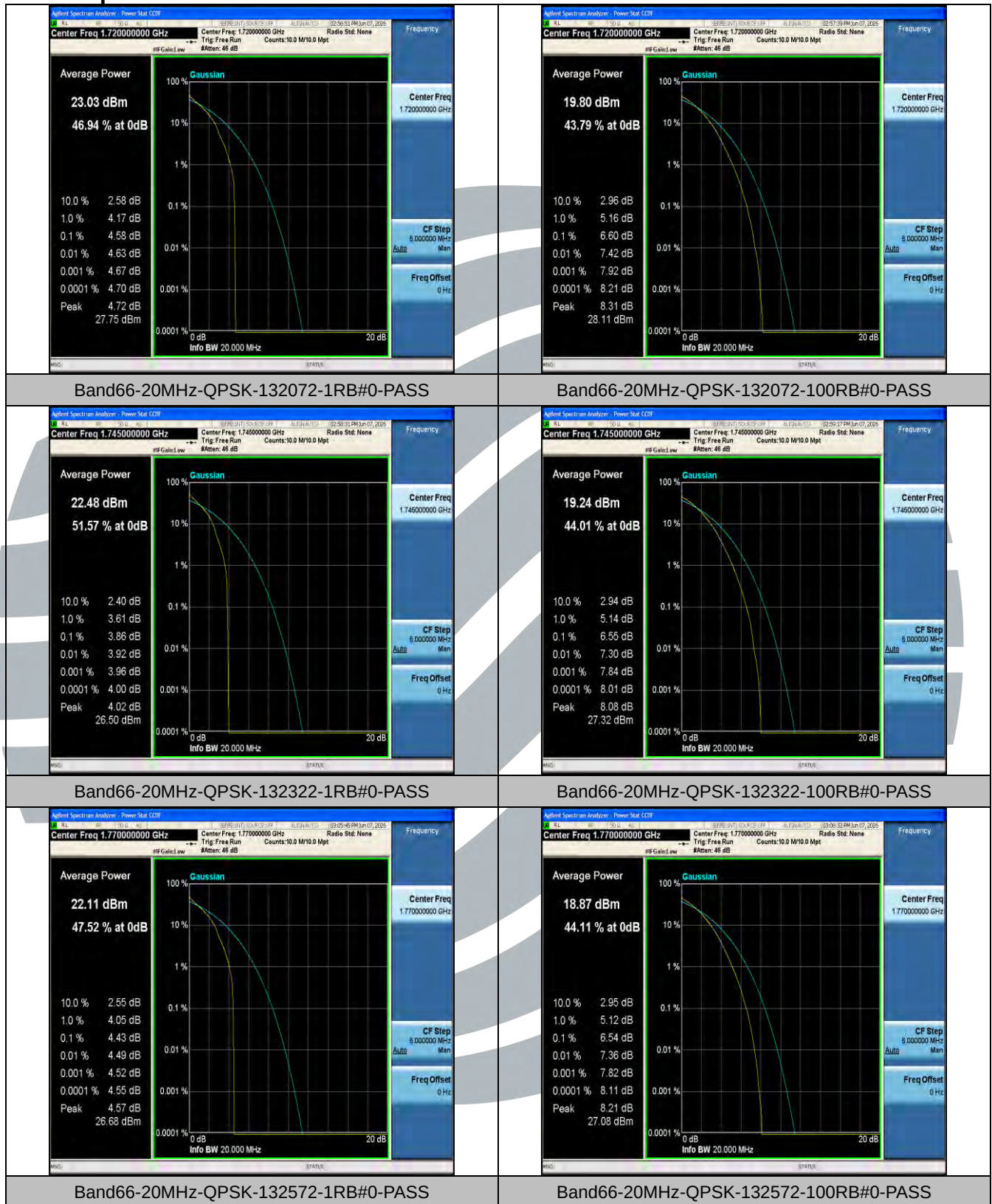
APPENDIX J LTE RF TEST DATA

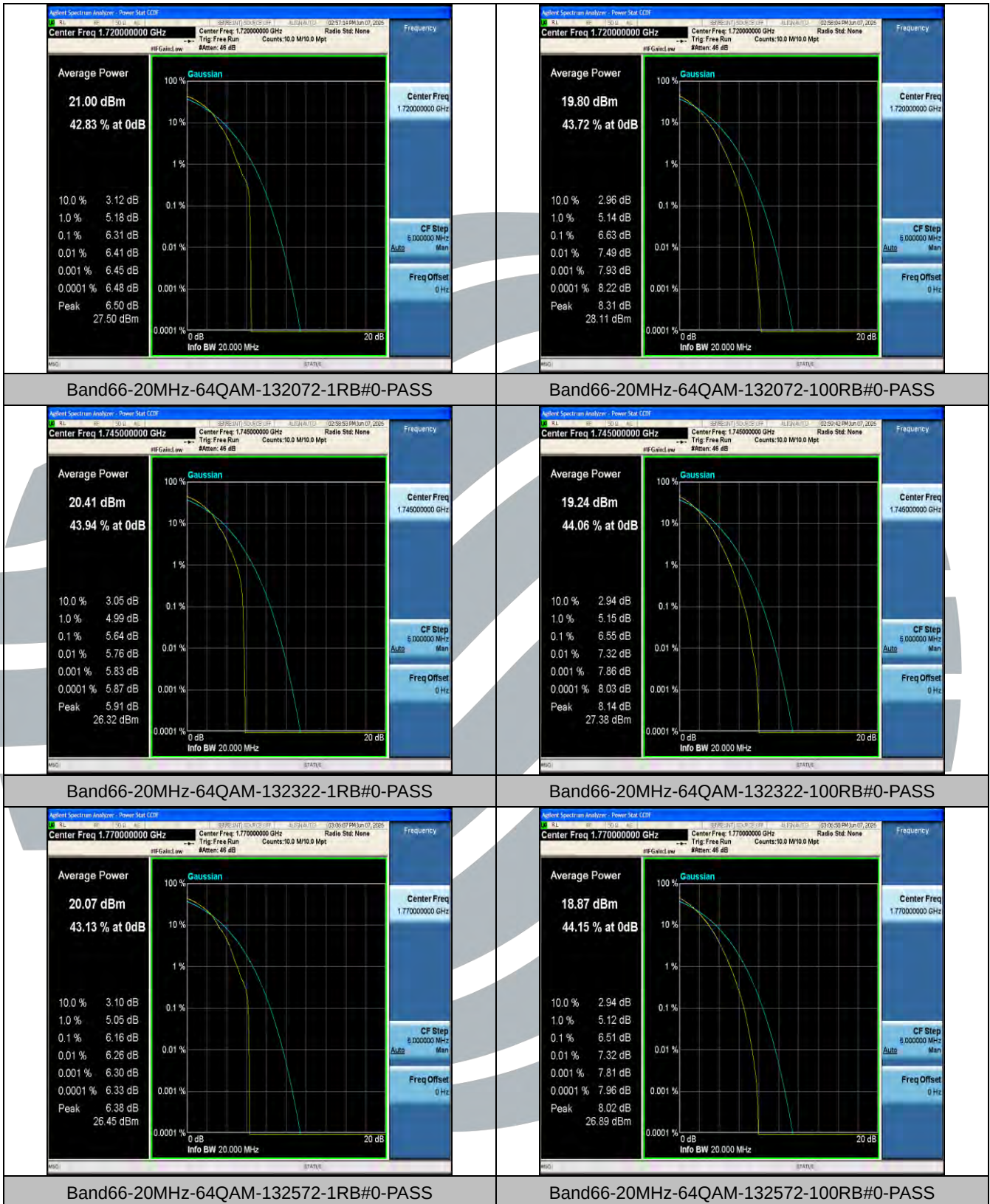
J.1 PEAK-TO-AVERAGE RATIO(CCDF)

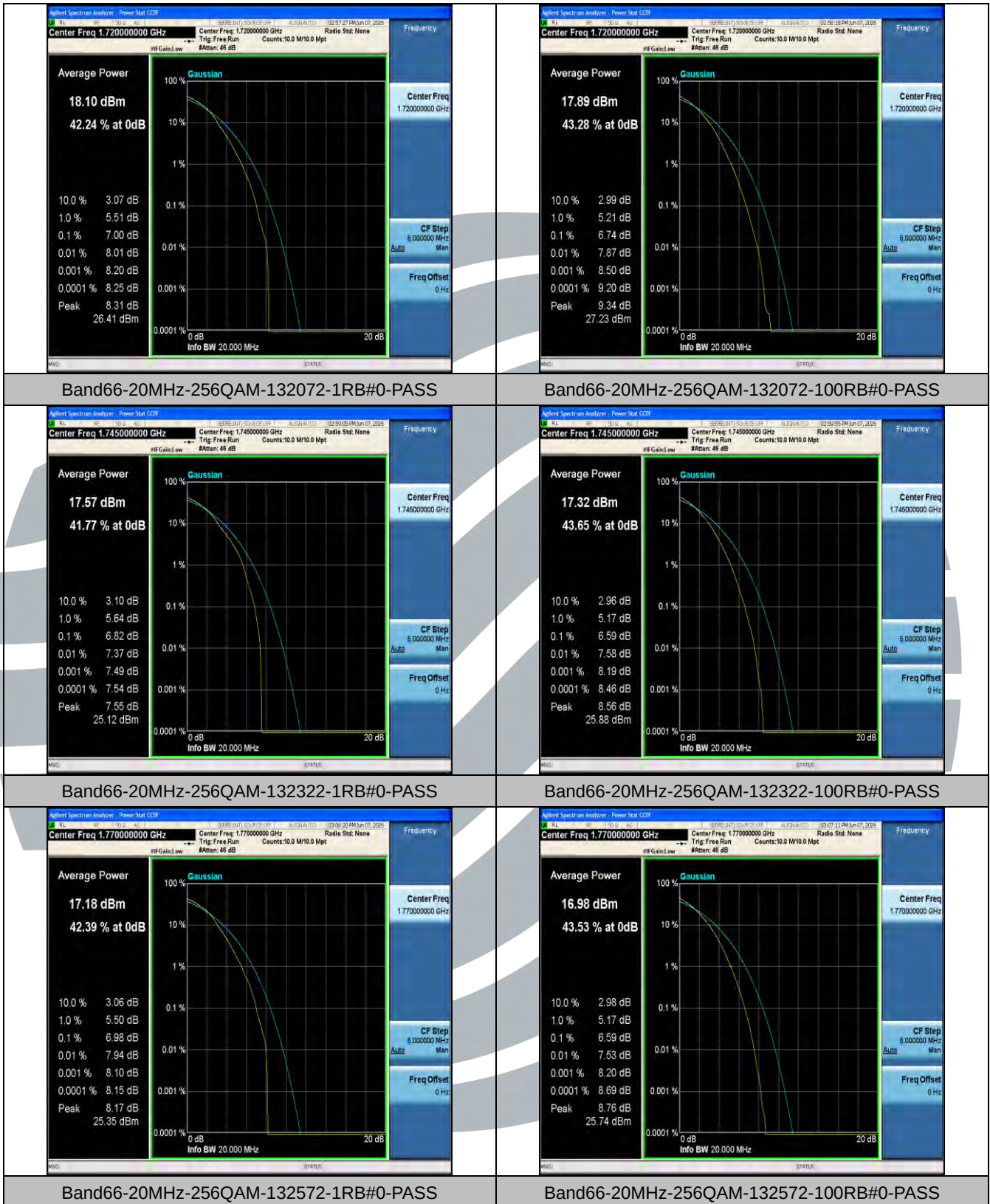
Test Result

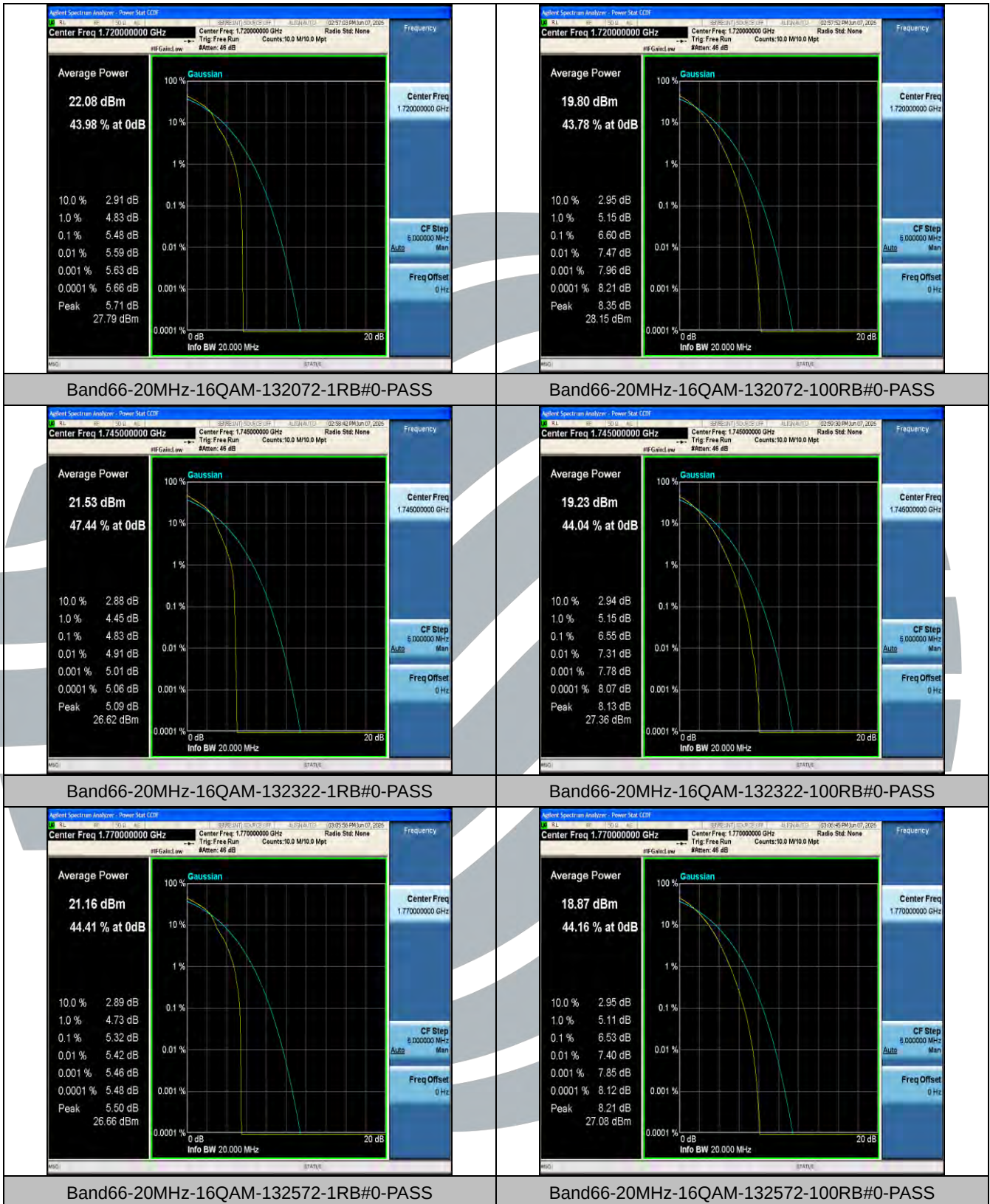
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band66	20MHz	QPSK	132072	1RB#0	4.58	13	PASS
Band66	20MHz	QPSK	132072	100RB#0	6.60	13	PASS
Band66	20MHz	QPSK	132322	1RB#0	3.86	13	PASS
Band66	20MHz	QPSK	132322	100RB#0	6.55	13	PASS
Band66	20MHz	QPSK	132572	1RB#0	4.43	13	PASS
Band66	20MHz	QPSK	132572	100RB#0	6.54	13	PASS
Band66	20MHz	64QAM	132072	1RB#0	6.31	13	PASS
Band66	20MHz	64QAM	132072	100RB#0	6.63	13	PASS
Band66	20MHz	64QAM	132322	1RB#0	5.64	13	PASS
Band66	20MHz	64QAM	132322	100RB#0	6.55	13	PASS
Band66	20MHz	64QAM	132572	1RB#0	6.16	13	PASS
Band66	20MHz	64QAM	132572	100RB#0	6.51	13	PASS
Band66	20MHz	256QAM	132072	1RB#0	7.00	13	PASS
Band66	20MHz	256QAM	132072	100RB#0	6.74	13	PASS
Band66	20MHz	256QAM	132322	1RB#0	6.82	13	PASS
Band66	20MHz	256QAM	132322	100RB#0	6.59	13	PASS
Band66	20MHz	256QAM	132572	1RB#0	6.98	13	PASS
Band66	20MHz	256QAM	132572	100RB#0	6.59	13	PASS
Band66	20MHz	16QAM	132072	1RB#0	5.48	13	PASS
Band66	20MHz	16QAM	132072	100RB#0	6.60	13	PASS
Band66	20MHz	16QAM	132322	1RB#0	4.83	13	PASS
Band66	20MHz	16QAM	132322	100RB#0	6.55	13	PASS
Band66	20MHz	16QAM	132572	1RB#0	5.32	13	PASS
Band66	20MHz	16QAM	132572	100RB#0	6.53	13	PASS

Test Graphs







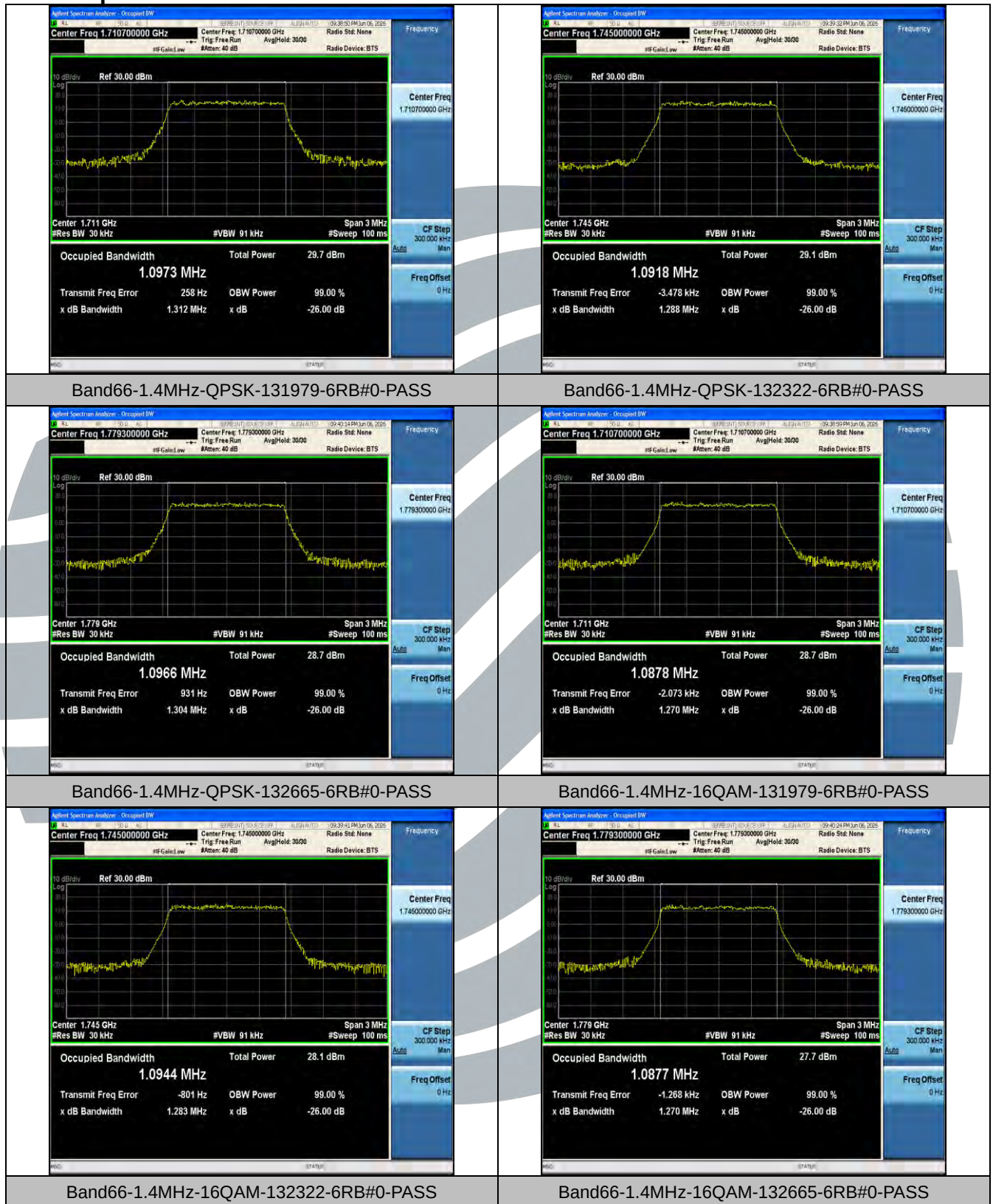


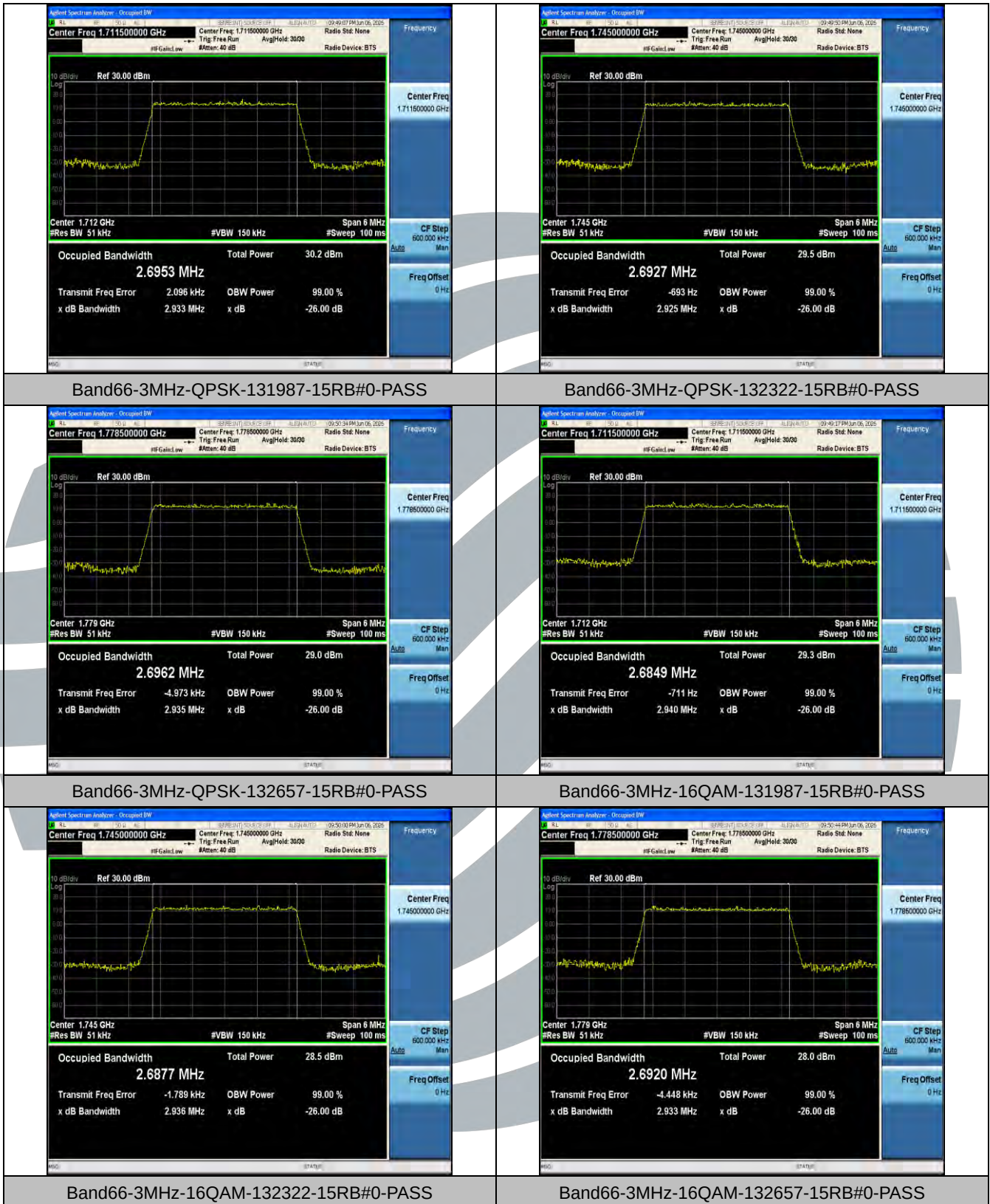
J.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

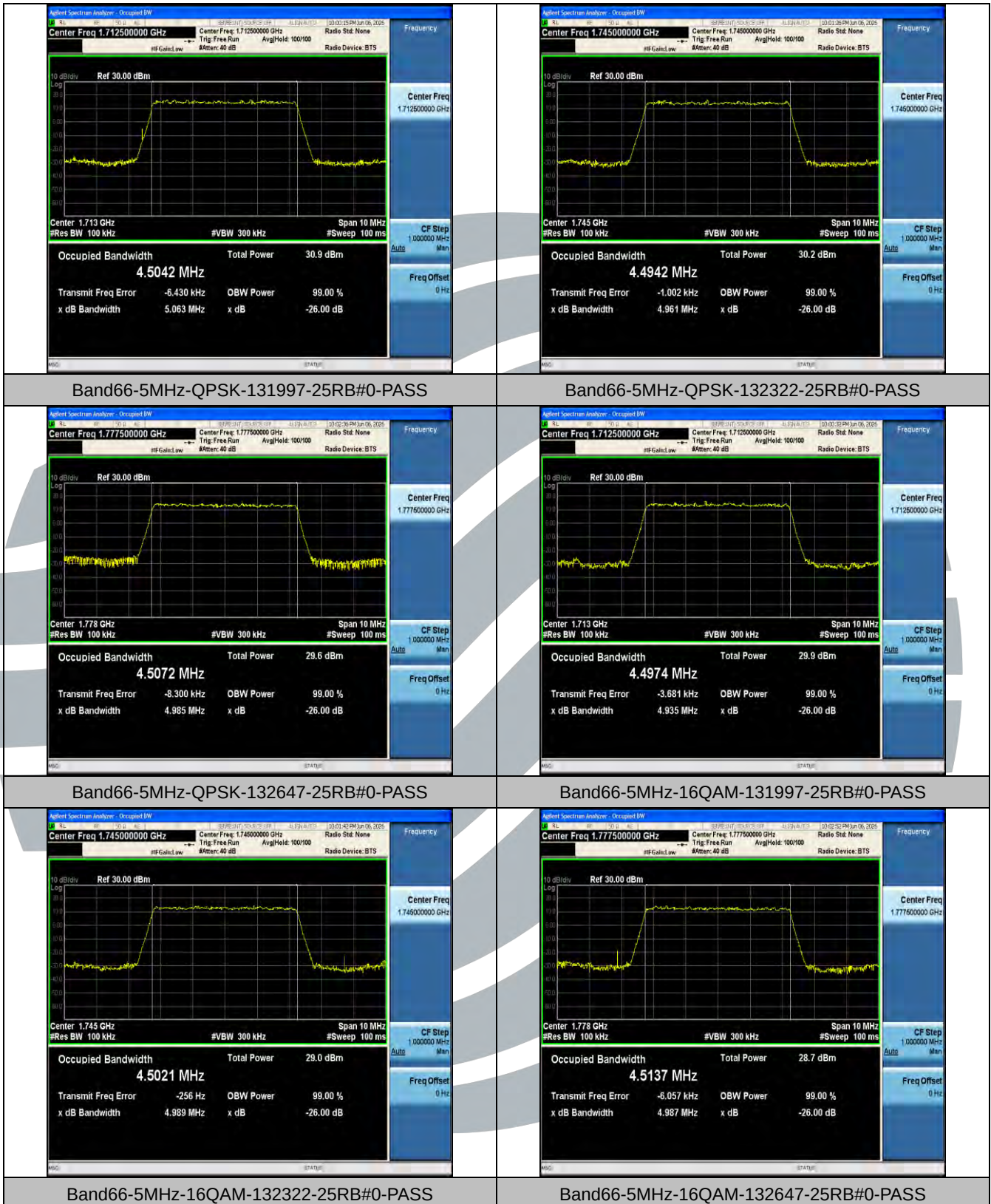
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band66	1.4MHz	QPSK	131979	6RB#0	1.0973	1.312	PASS
Band66	1.4MHz	QPSK	132322	6RB#0	1.0918	1.288	PASS
Band66	1.4MHz	QPSK	132665	6RB#0	1.0966	1.304	PASS
Band66	1.4MHz	16QAM	131979	6RB#0	1.0878	1.270	PASS
Band66	1.4MHz	16QAM	132322	6RB#0	1.0944	1.283	PASS
Band66	1.4MHz	16QAM	132665	6RB#0	1.0877	1.270	PASS
Band66	3MHz	QPSK	131987	15RB#0	2.6953	2.933	PASS
Band66	3MHz	QPSK	132322	15RB#0	2.6927	2.925	PASS
Band66	3MHz	QPSK	132657	15RB#0	2.6962	2.935	PASS
Band66	3MHz	16QAM	131987	15RB#0	2.6849	2.940	PASS
Band66	3MHz	16QAM	132322	15RB#0	2.6877	2.936	PASS
Band66	3MHz	16QAM	132657	15RB#0	2.6920	2.933	PASS
Band66	5MHz	QPSK	131997	25RB#0	4.5042	5.063	PASS
Band66	5MHz	QPSK	132322	25RB#0	4.4942	4.961	PASS
Band66	5MHz	QPSK	132647	25RB#0	4.5072	4.985	PASS
Band66	5MHz	16QAM	131997	25RB#0	4.4974	4.935	PASS
Band66	5MHz	16QAM	132322	25RB#0	4.5021	4.989	PASS
Band66	5MHz	16QAM	132647	25RB#0	4.5137	4.987	PASS
Band66	10MHz	QPSK	132022	50RB#0	8.9855	9.903	PASS
Band66	10MHz	QPSK	132322	50RB#0	8.9846	9.832	PASS
Band66	10MHz	QPSK	132622	50RB#0	8.9641	9.746	PASS
Band66	10MHz	16QAM	132022	50RB#0	8.9782	9.787	PASS
Band66	10MHz	16QAM	132322	50RB#0	8.9670	9.849	PASS
Band66	10MHz	16QAM	132622	50RB#0	8.9698	9.821	PASS
Band66	15MHz	QPSK	132047	75RB#0	13.491	14.77	PASS
Band66	15MHz	QPSK	132322	75RB#0	13.453	14.74	PASS
Band66	15MHz	QPSK	132597	75RB#0	13.461	15.26	PASS
Band66	15MHz	16QAM	132047	75RB#0	13.470	14.67	PASS
Band66	15MHz	16QAM	132322	75RB#0	13.430	14.66	PASS
Band66	15MHz	16QAM	132597	75RB#0	13.465	15.50	PASS
Band66	20MHz	QPSK	132072	100RB#0	17.994	19.49	PASS
Band66	20MHz	QPSK	132322	100RB#0	17.910	19.47	PASS
Band66	20MHz	QPSK	132572	100RB#0	17.879	19.34	PASS
Band66	20MHz	16QAM	132072	100RB#0	18.028	19.36	PASS
Band66	20MHz	16QAM	132322	100RB#0	17.883	19.29	PASS
Band66	20MHz	16QAM	132572	100RB#0	17.917	19.52	PASS

Test Graphs

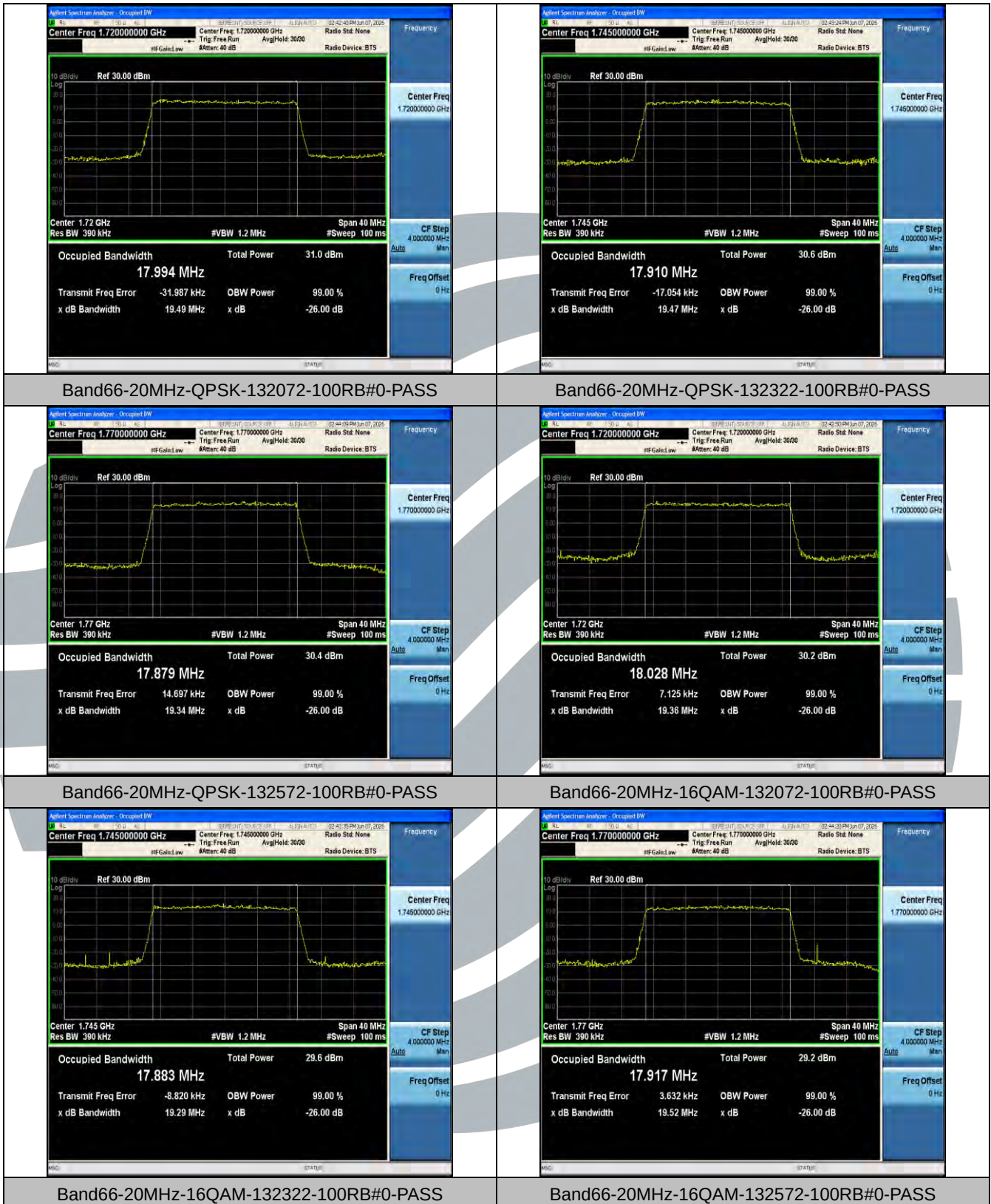








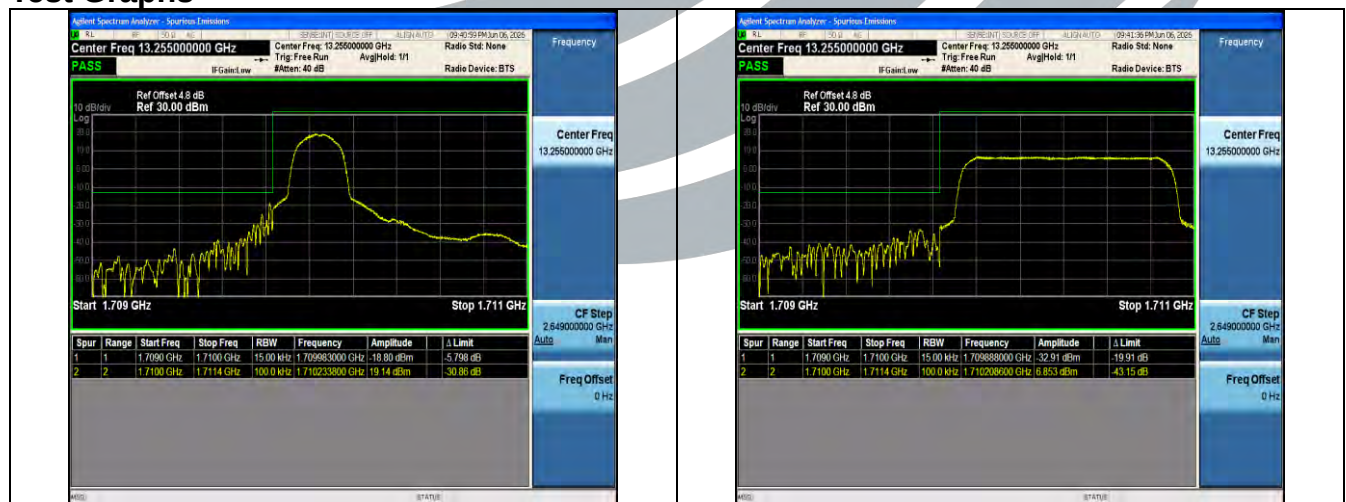


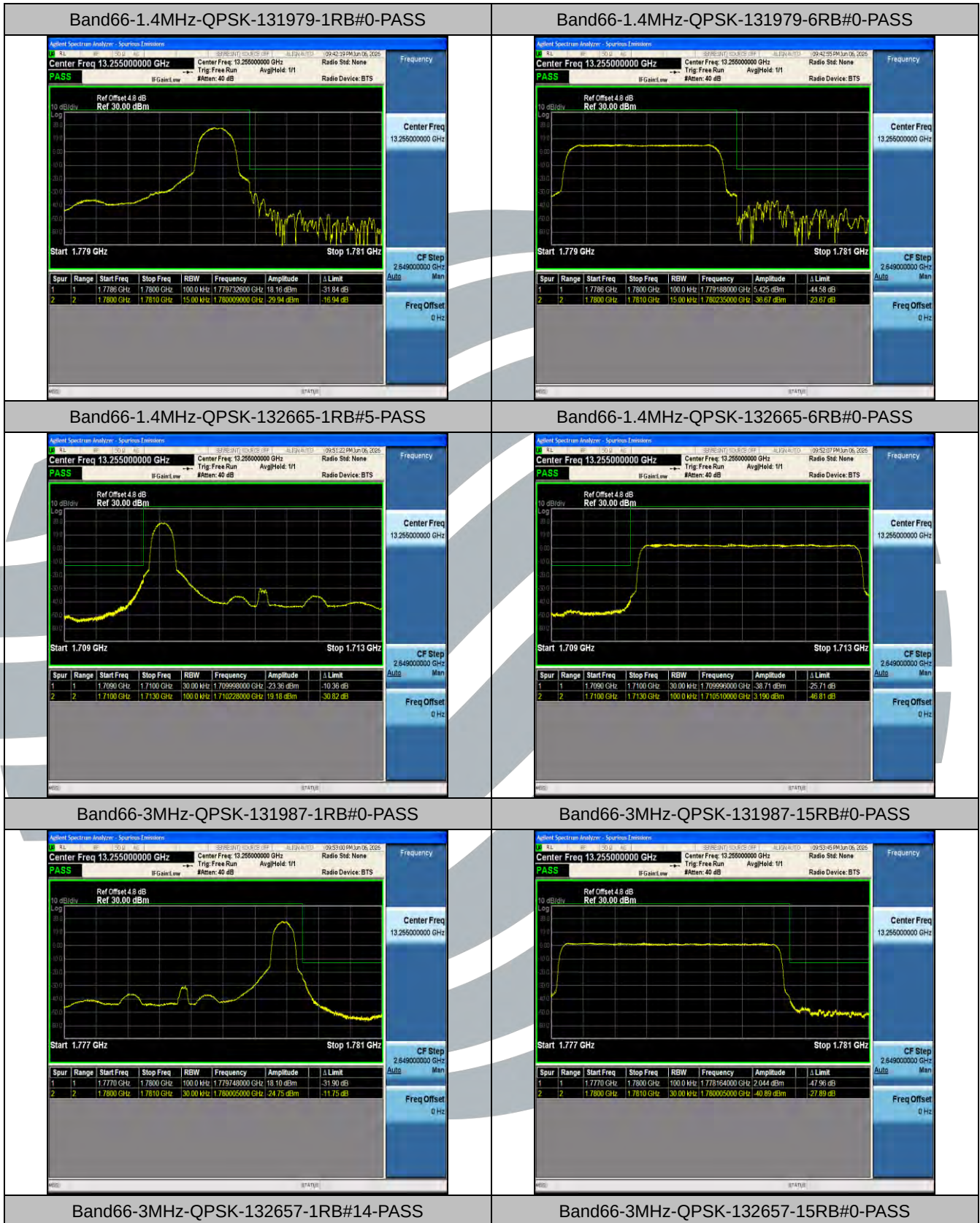


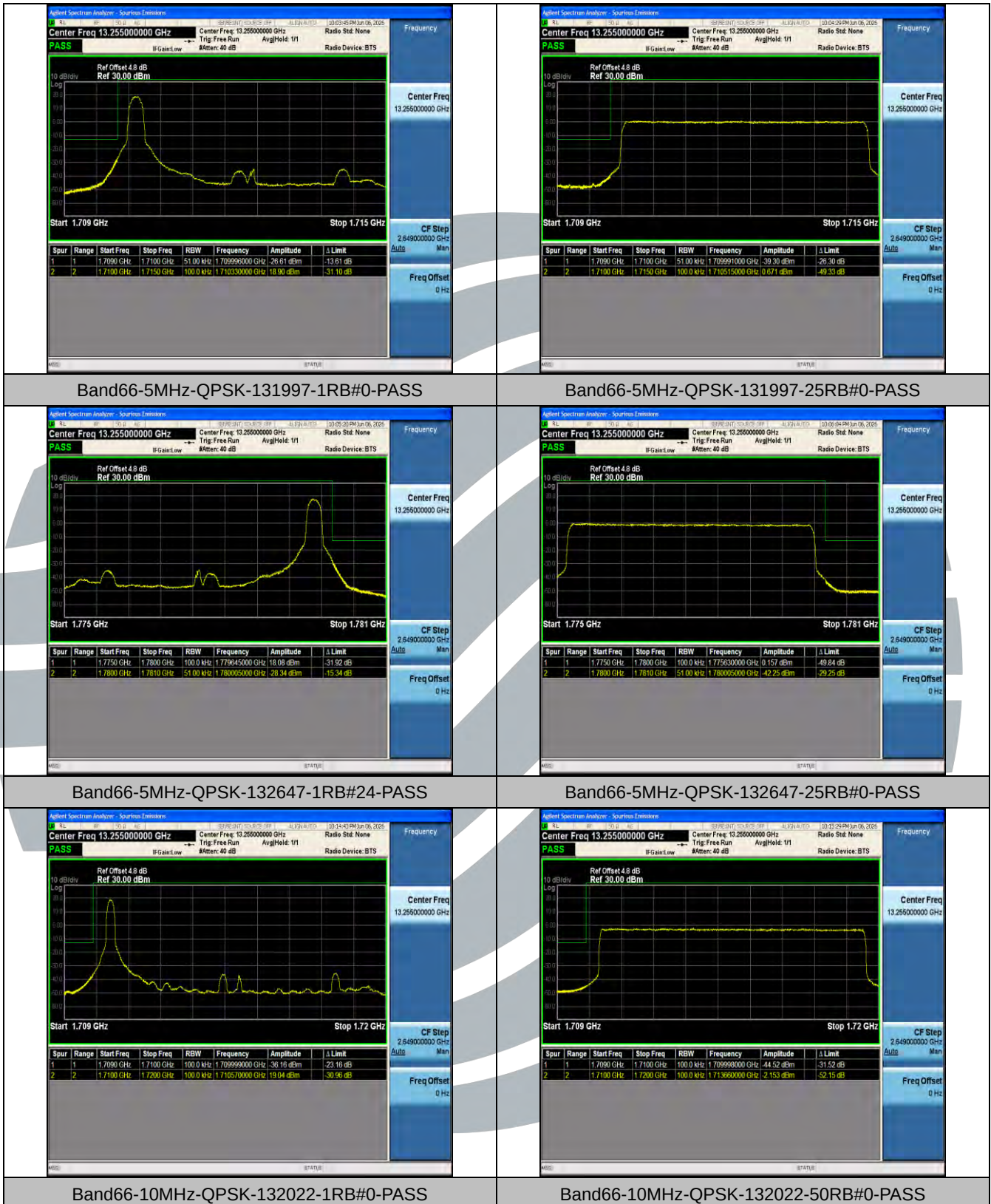
J.3 BAND EDGE Test Result

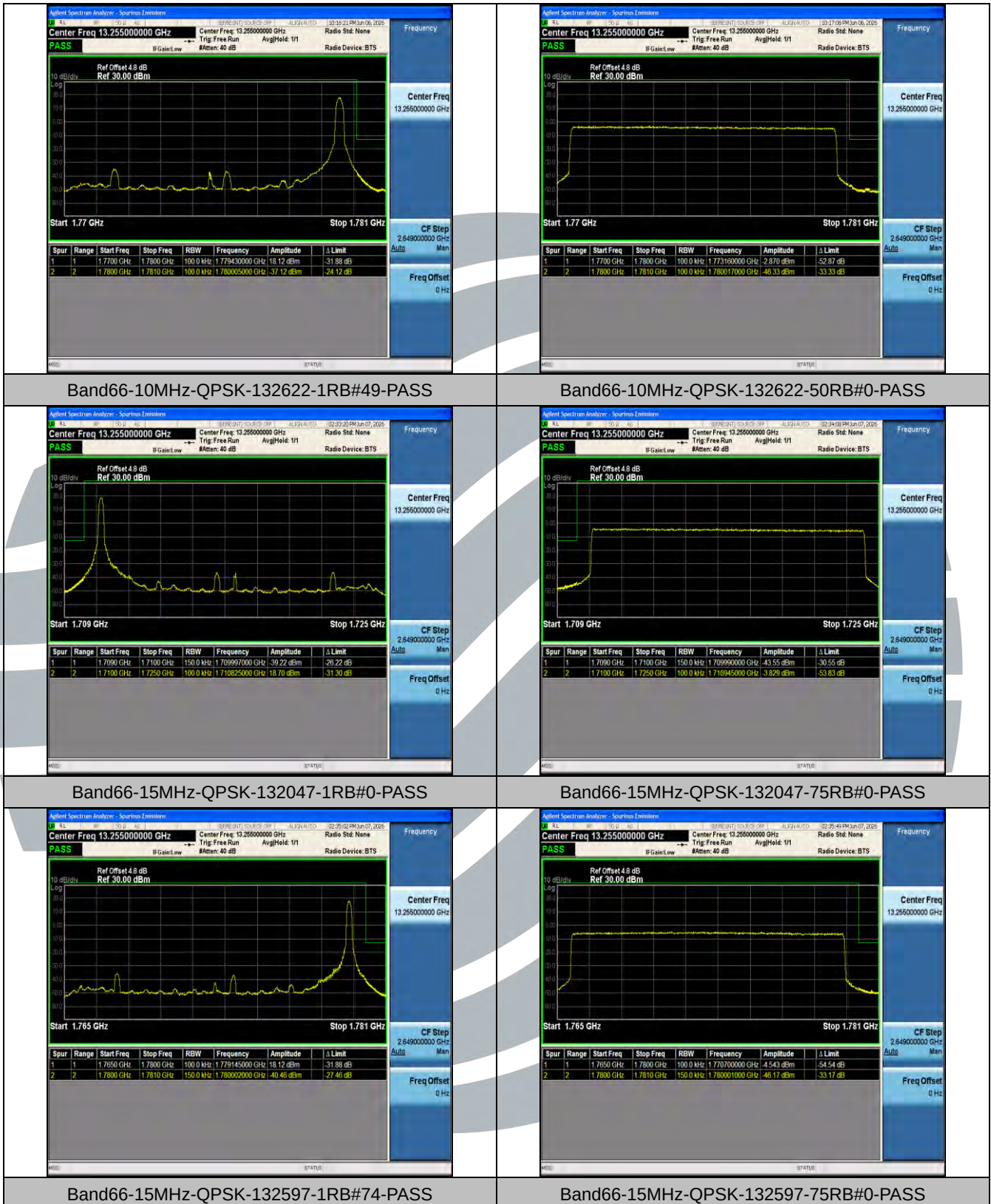
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	Verdict
Band66	1.4MHz	QPSK	131979	1RB#0	-18.80	PASS
Band66	1.4MHz	QPSK	131979	6RB#0	-32.91	PASS
Band66	1.4MHz	QPSK	132665	1RB#5	-29.94	PASS
Band66	1.4MHz	QPSK	132665	6RB#0	-36.67	PASS
Band66	3MHz	QPSK	131987	1RB#0	-23.36	PASS
Band66	3MHz	QPSK	131987	15RB#0	-38.71	PASS
Band66	3MHz	QPSK	132657	1RB#14	-24.75	PASS
Band66	3MHz	QPSK	132657	15RB#0	-40.89	PASS
Band66	5MHz	QPSK	131997	1RB#0	-26.61	PASS
Band66	5MHz	QPSK	131997	25RB#0	-39.30	PASS
Band66	5MHz	QPSK	132647	1RB#24	-28.34	PASS
Band66	5MHz	QPSK	132647	25RB#0	-42.25	PASS
Band66	10MHz	QPSK	132022	1RB#0	-36.16	PASS
Band66	10MHz	QPSK	132022	50RB#0	-44.52	PASS
Band66	10MHz	QPSK	132622	1RB#49	-37.12	PASS
Band66	10MHz	QPSK	132622	50RB#0	-46.33	PASS
Band66	15MHz	QPSK	132047	1RB#0	-39.22	PASS
Band66	15MHz	QPSK	132047	75RB#0	-43.55	PASS
Band66	15MHz	QPSK	132597	1RB#74	-40.46	PASS
Band66	15MHz	QPSK	132597	75RB#0	-46.17	PASS
Band66	20MHz	QPSK	132072	1RB#0	-41.15	PASS
Band66	20MHz	QPSK	132072	100RB#0	-42.29	PASS
Band66	20MHz	QPSK	132572	1RB#99	-42.56	PASS
Band66	20MHz	QPSK	132572	100RB#0	-45.68	PASS

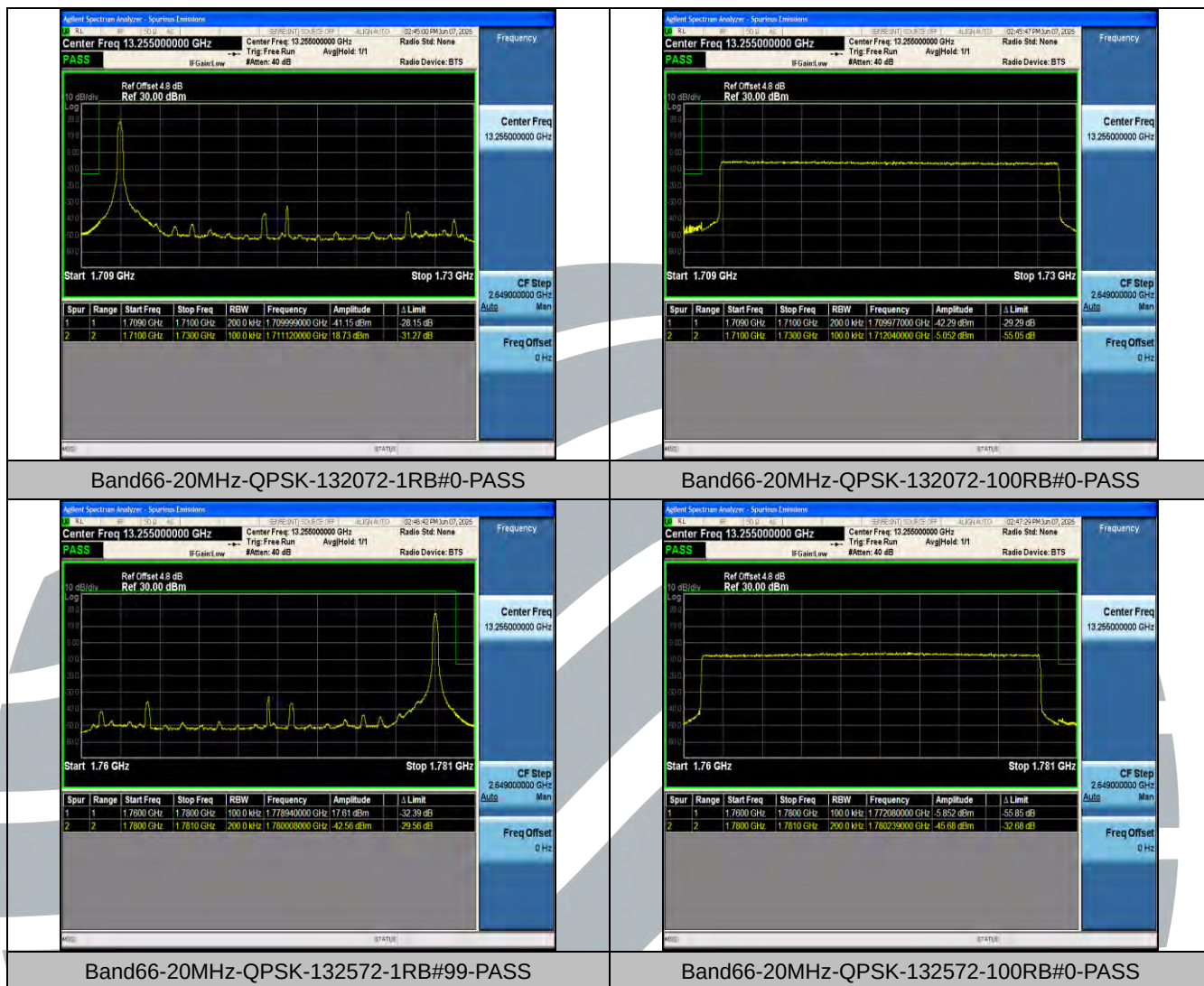
Test Graphs









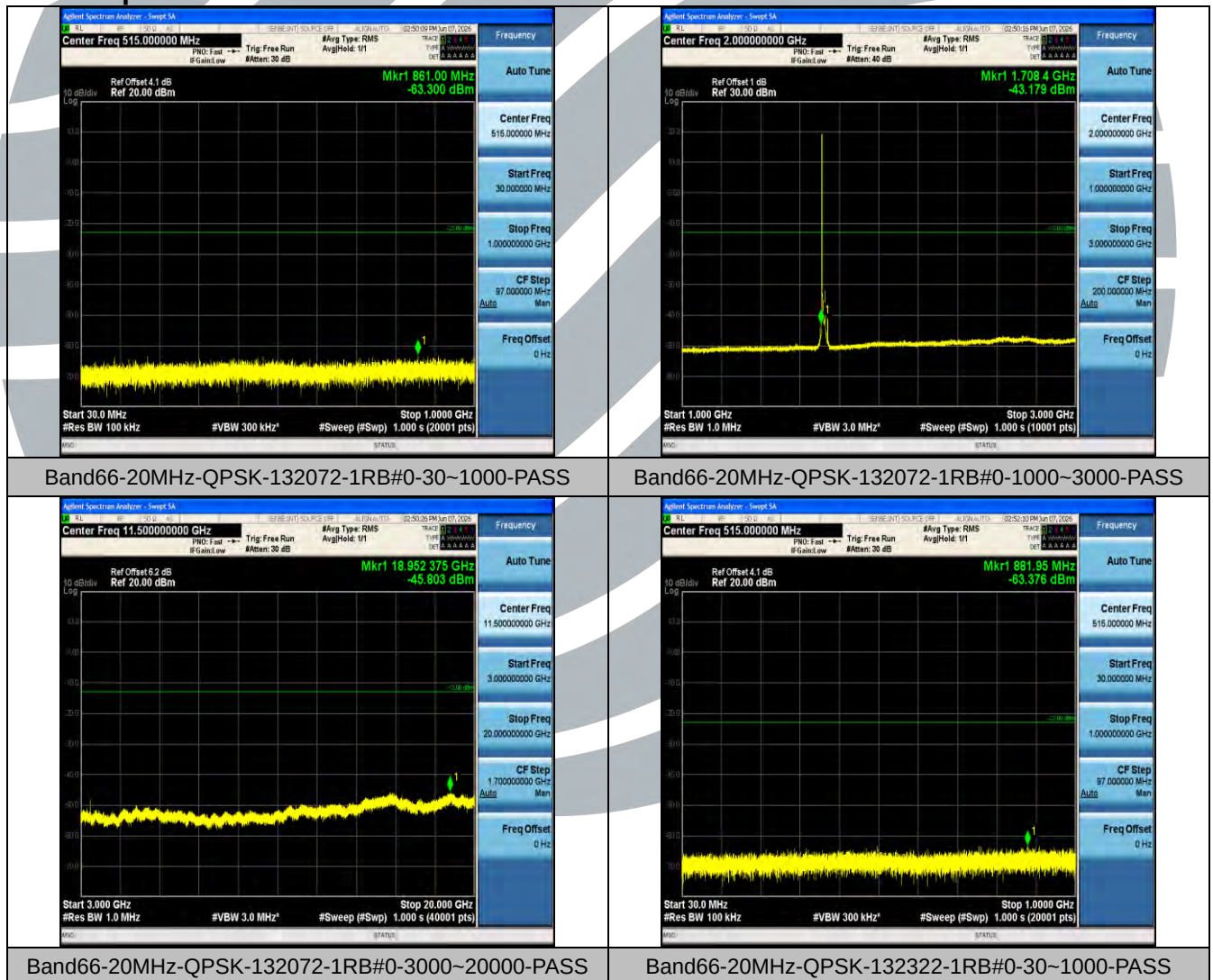


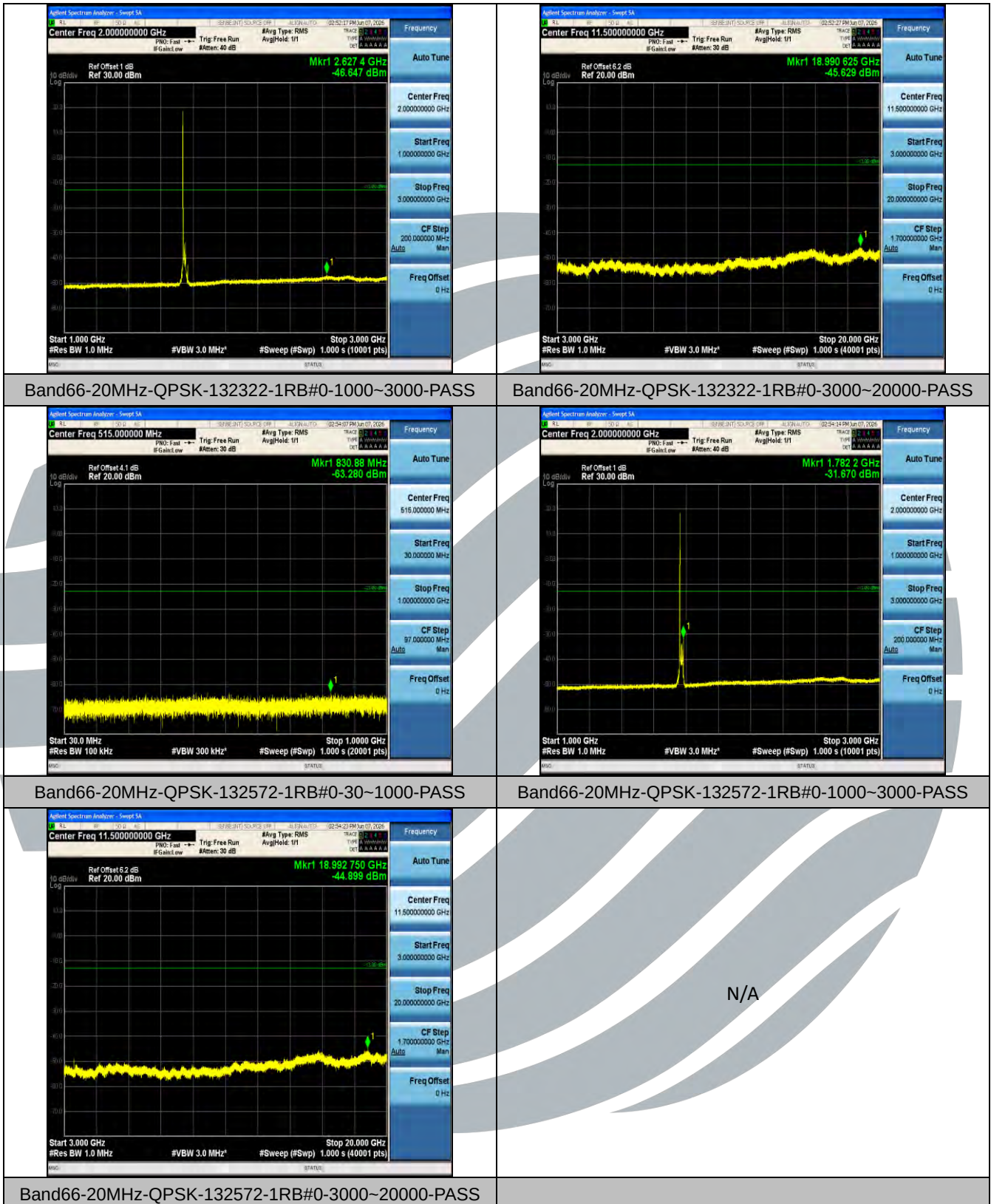
J.4 CONDUCTED SPURIOUS EMISSION

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band66	20MHz	QPSK	132072	1RB#0	30~1000	-63.30	PASS
Band66	20MHz	QPSK	132072	1RB#0	1000~3000	-43.18	PASS
Band66	20MHz	QPSK	132072	1RB#0	3000~20000	-45.80	PASS
Band66	20MHz	QPSK	132322	1RB#0	30~1000	-63.38	PASS
Band66	20MHz	QPSK	132322	1RB#0	1000~3000	-46.65	PASS
Band66	20MHz	QPSK	132322	1RB#0	3000~20000	-45.63	PASS
Band66	20MHz	QPSK	132572	1RB#0	30~1000	-63.28	PASS
Band66	20MHz	QPSK	132572	1RB#0	1000~3000	-31.67	PASS
Band66	20MHz	QPSK	132572	1RB#0	3000~20000	-44.90	PASS

Test Graphs





J.5 FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temp. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	20MHz	QPSK	132322	100RB#0	VN	NT	4.43	0.002539	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VL	NT	-5.97	-0.003421	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	VH	NT	7.08	0.004057	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temp. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band66	20MHz	QPSK	132322	100RB#0	NV	-30	3.98	0.002281	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	-20	3.43	0.001966	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	-10	4.68	0.002682	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	0	4.65	0.002665	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	10	6.55	0.003754	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	20	5.84	0.003347	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	30	6.42	0.003679	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	40	5.21	0.002986	±2.5	PASS
Band66	20MHz	QPSK	132322	100RB#0	NV	50	4.35	0.002493	±2.5	PASS