

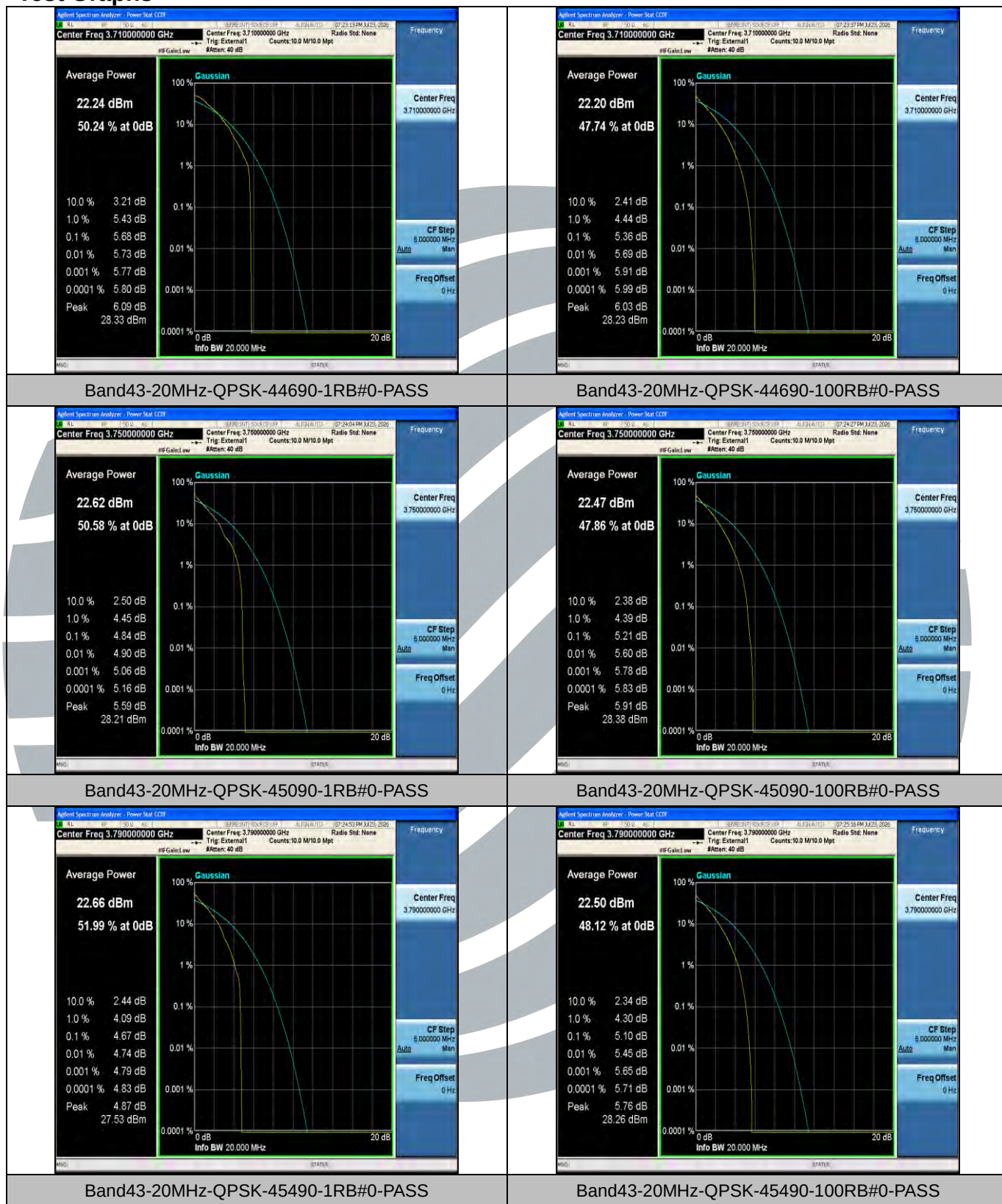
APPENDIX A LTE RF TEST DATA

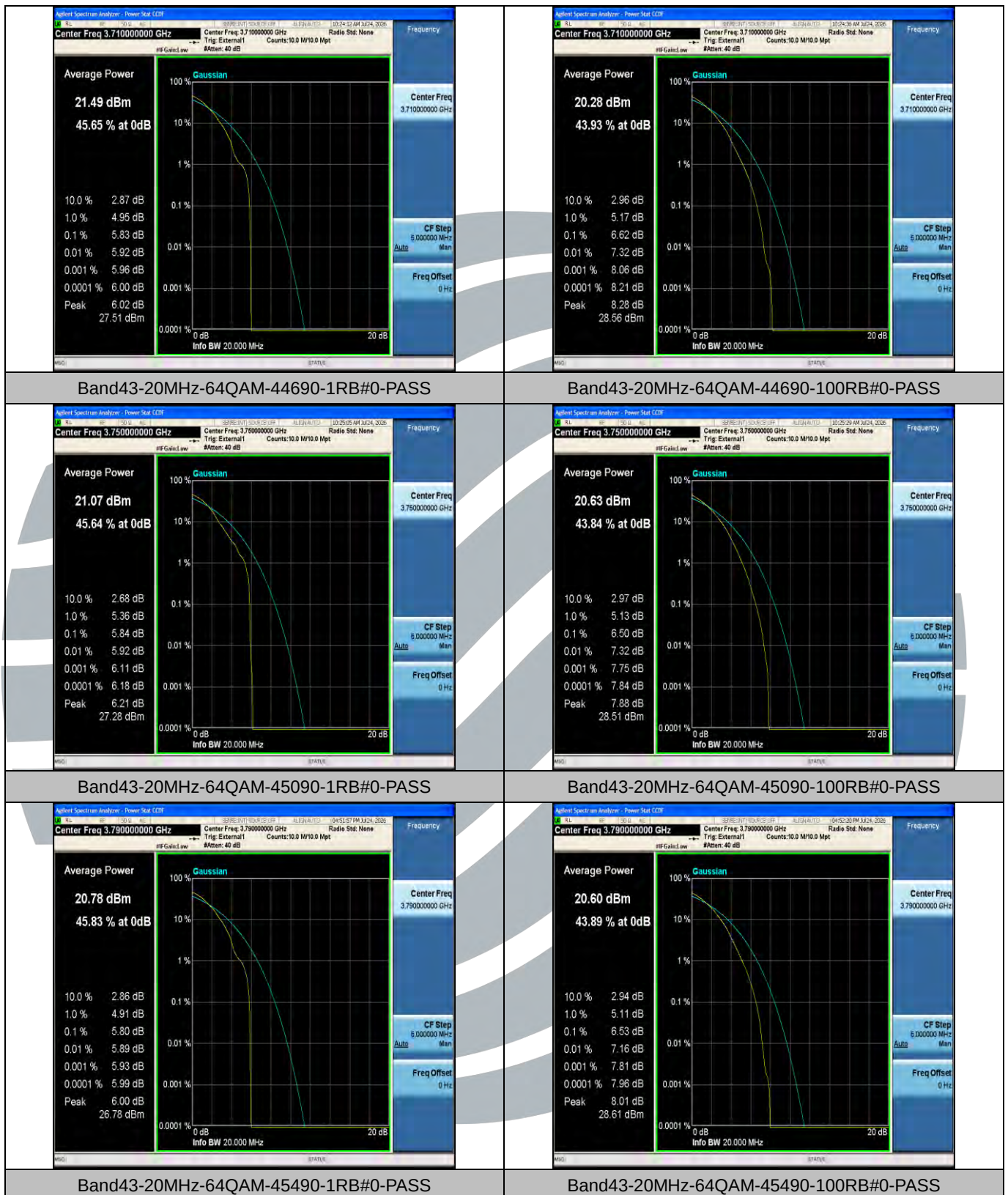
A.1 PEAK-TO-AVERAGE RATIO(CCDF)

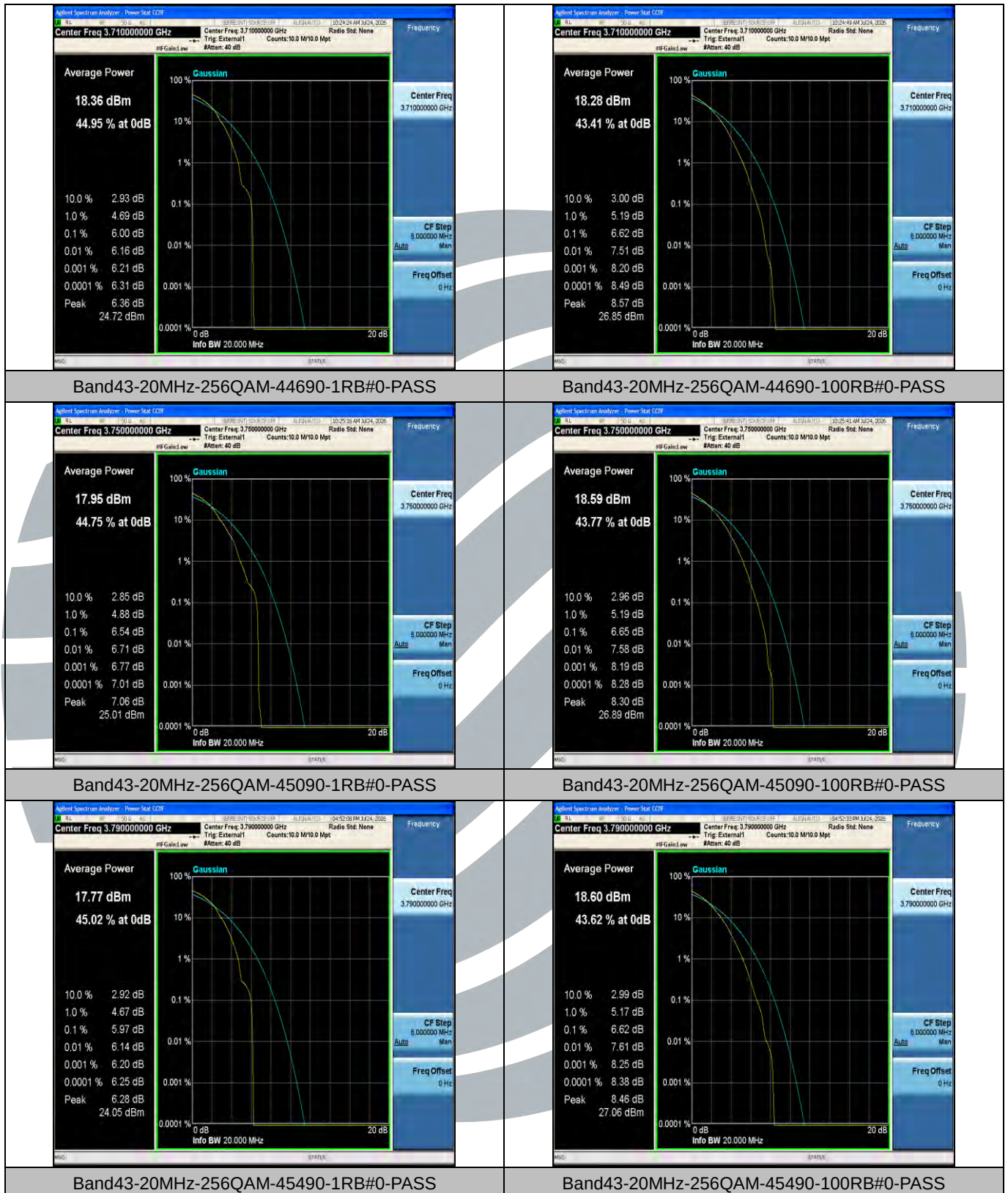
Test Result

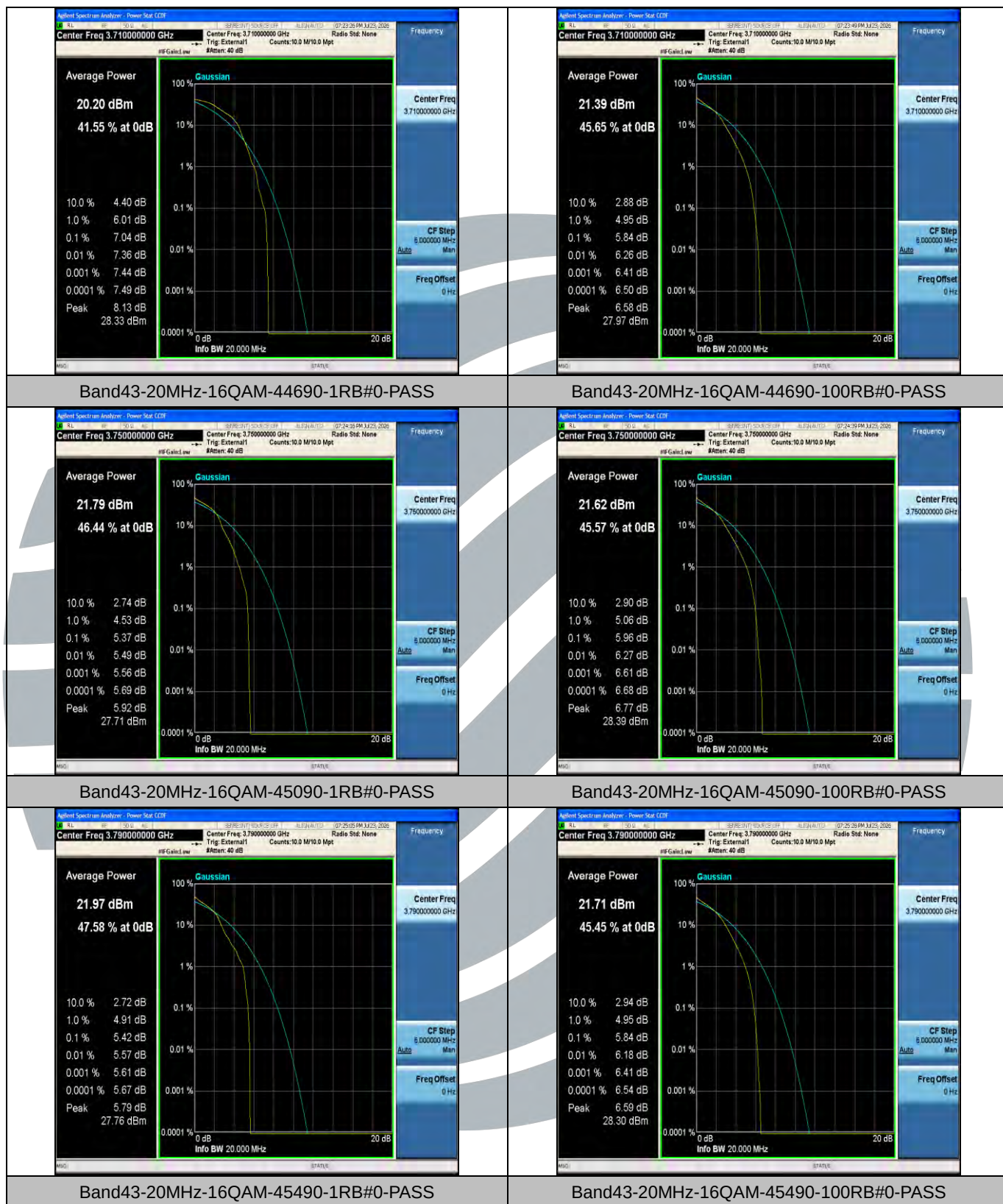
Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band43	20MHz	QPSK	44690	1RB#0	5.68	13	PASS
Band43	20MHz	QPSK	44690	100RB#0	5.36	13	PASS
Band43	20MHz	QPSK	45090	1RB#0	4.84	13	PASS
Band43	20MHz	QPSK	45090	100RB#0	5.21	13	PASS
Band43	20MHz	QPSK	45490	1RB#0	4.67	13	PASS
Band43	20MHz	QPSK	45490	100RB#0	5.10	13	PASS
Band43	20MHz	64QAM	44690	1RB#0	5.83	13	PASS
Band43	20MHz	64QAM	44690	100RB#0	6.62	13	PASS
Band43	20MHz	64QAM	45090	1RB#0	5.84	13	PASS
Band43	20MHz	64QAM	45090	100RB#0	6.50	13	PASS
Band43	20MHz	64QAM	45490	1RB#0	5.80	13	PASS
Band43	20MHz	64QAM	45490	100RB#0	6.53	13	PASS
Band43	20MHz	256QAM	44690	1RB#0	6.00	13	PASS
Band43	20MHz	256QAM	44690	100RB#0	6.62	13	PASS
Band43	20MHz	256QAM	45090	1RB#0	6.54	13	PASS
Band43	20MHz	256QAM	45090	100RB#0	6.65	13	PASS
Band43	20MHz	256QAM	45490	1RB#0	5.97	13	PASS
Band43	20MHz	256QAM	45490	100RB#0	6.62	13	PASS
Band43	20MHz	16QAM	44690	1RB#0	7.04	13	PASS
Band43	20MHz	16QAM	44690	100RB#0	5.84	13	PASS
Band43	20MHz	16QAM	45090	1RB#0	5.37	13	PASS
Band43	20MHz	16QAM	45090	100RB#0	5.96	13	PASS
Band43	20MHz	16QAM	45490	1RB#0	5.42	13	PASS
Band43	20MHz	16QAM	45490	100RB#0	5.84	13	PASS

Test Graphs







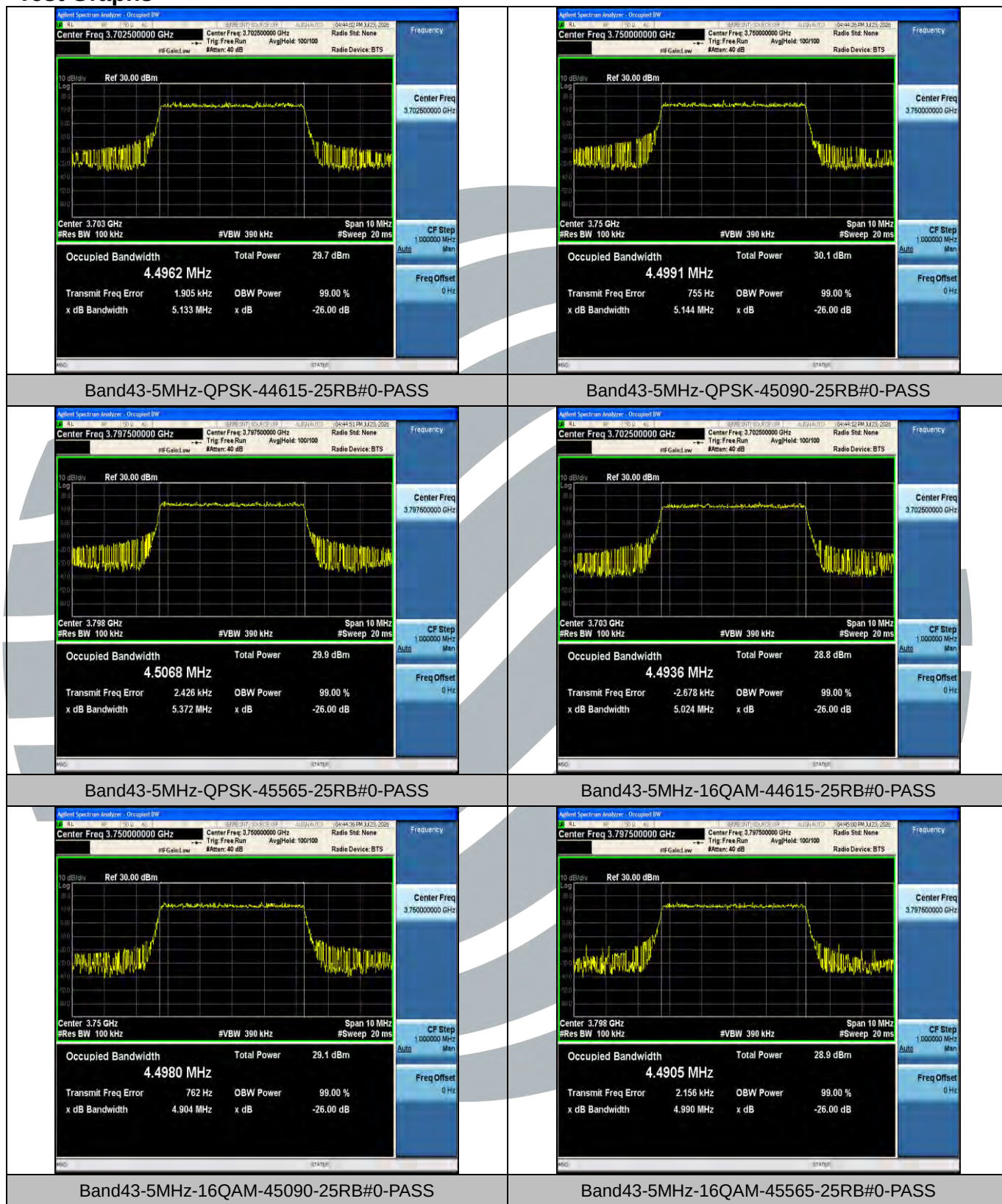


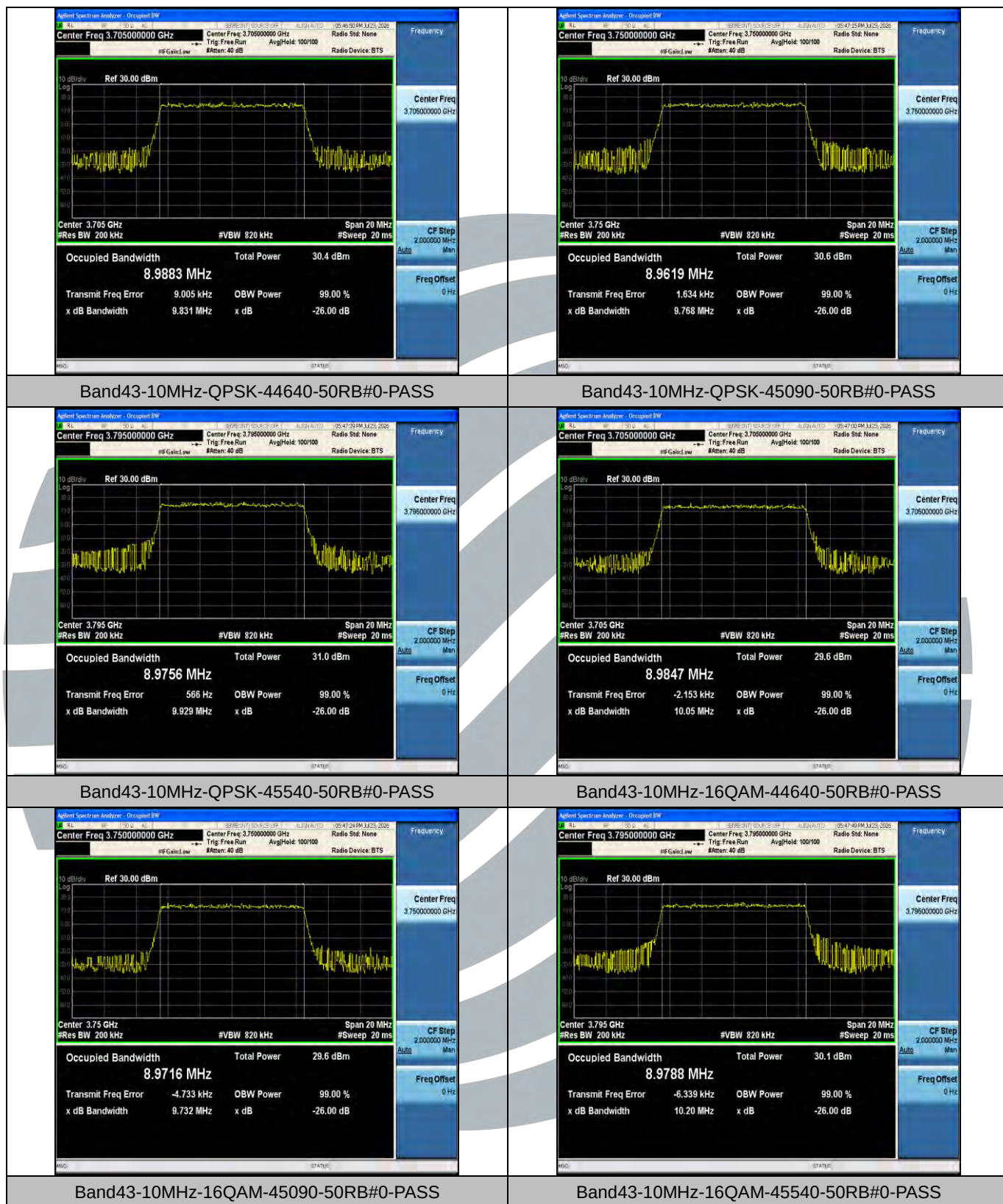
A.2 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

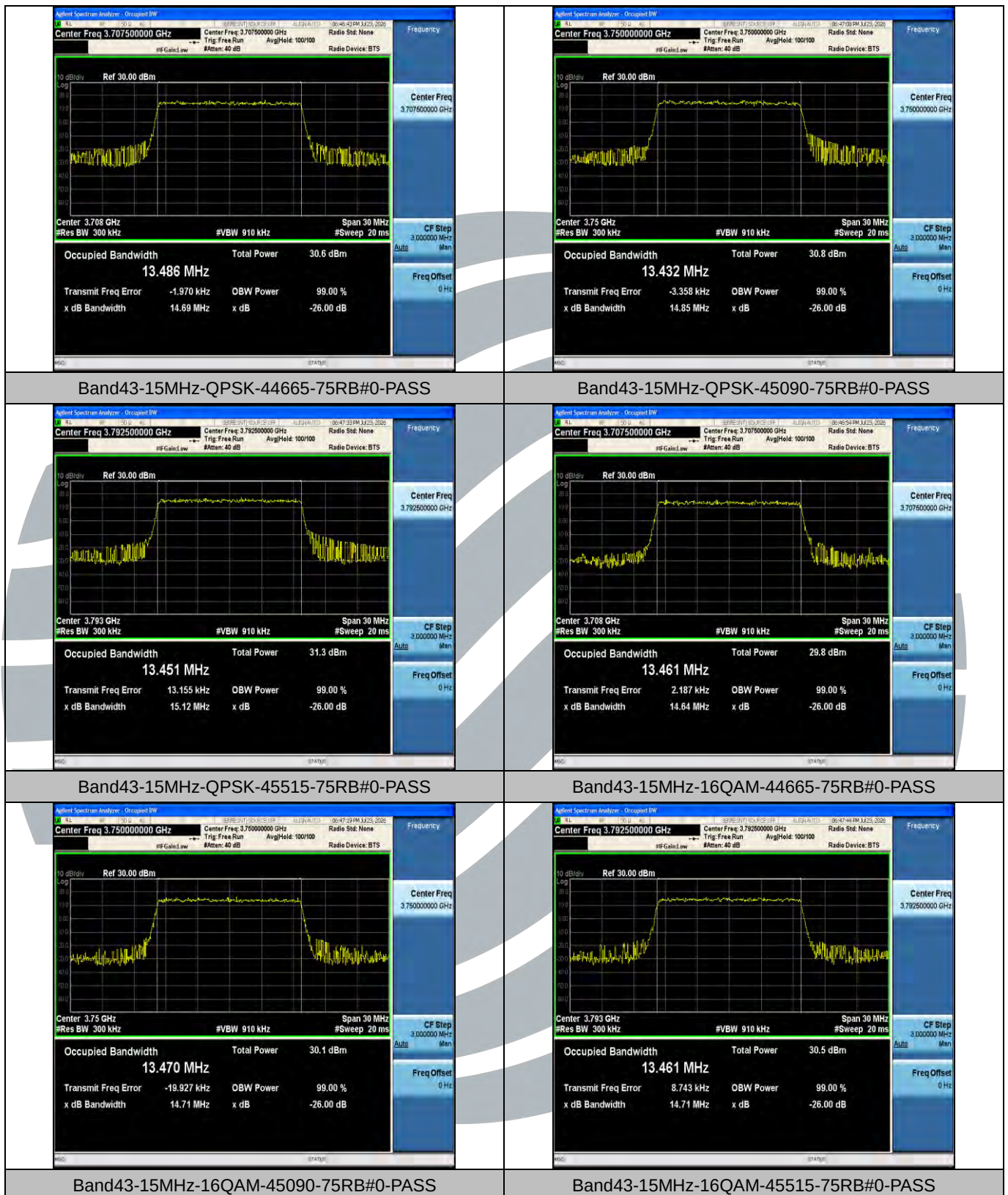
Test Result

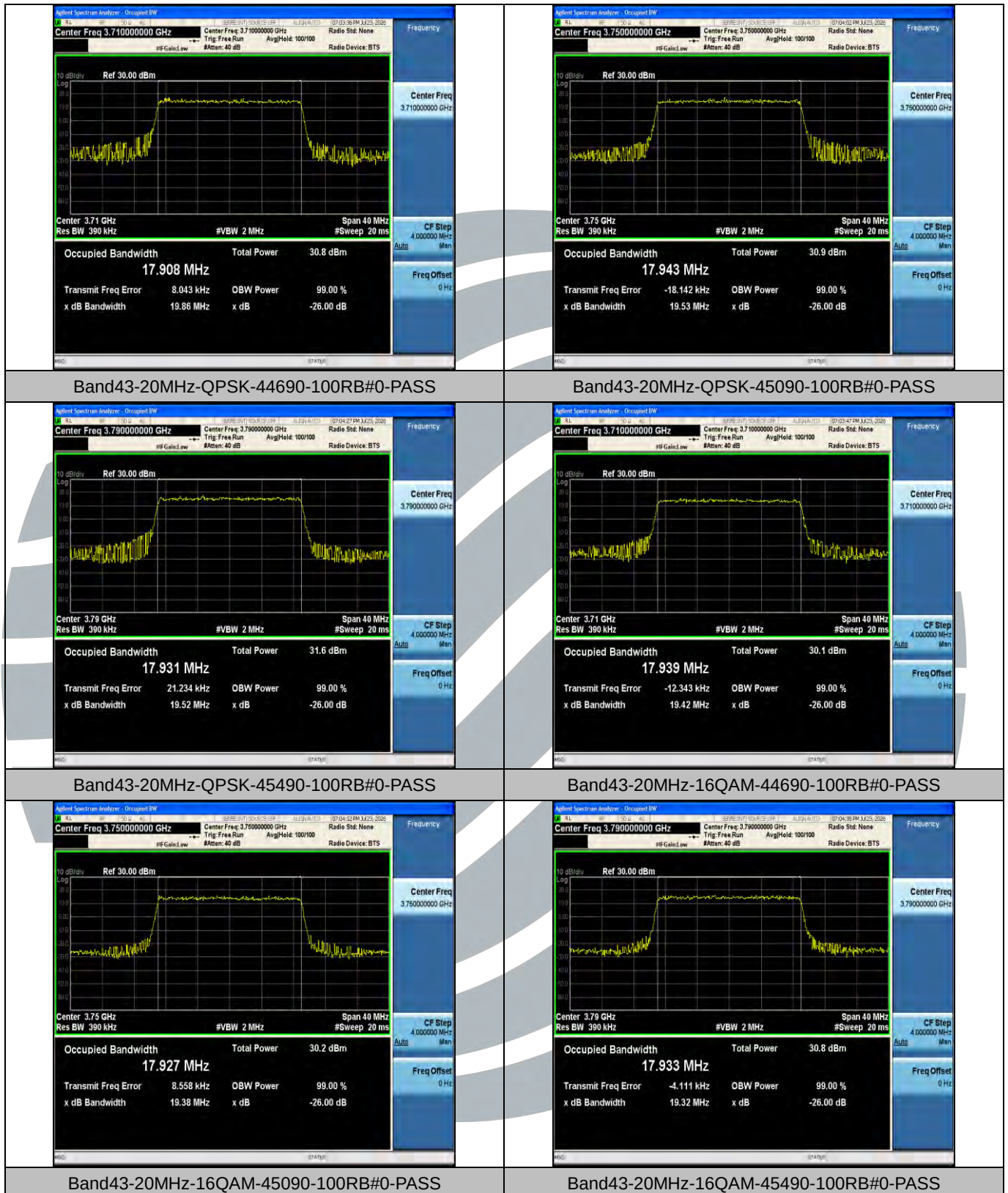
Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band43	5MHz	QPSK	44615	25RB#0	4.4962	5.133	PASS
Band43	5MHz	QPSK	45090	25RB#0	4.4991	5.144	PASS
Band43	5MHz	QPSK	45565	25RB#0	4.5068	5.372	PASS
Band43	5MHz	16QAM	44615	25RB#0	4.4936	5.024	PASS
Band43	5MHz	16QAM	45090	25RB#0	4.4980	4.904	PASS
Band43	5MHz	16QAM	45565	25RB#0	4.4905	4.990	PASS
Band43	10MHz	QPSK	44640	50RB#0	8.9883	9.831	PASS
Band43	10MHz	QPSK	45090	50RB#0	8.9619	9.768	PASS
Band43	10MHz	QPSK	45540	50RB#0	8.9756	9.929	PASS
Band43	10MHz	16QAM	44640	50RB#0	8.9847	10.05	PASS
Band43	10MHz	16QAM	45090	50RB#0	8.9716	9.732	PASS
Band43	10MHz	16QAM	45540	50RB#0	8.9788	10.20	PASS
Band43	15MHz	QPSK	44665	75RB#0	13.486	14.69	PASS
Band43	15MHz	QPSK	45090	75RB#0	13.432	14.85	PASS
Band43	15MHz	QPSK	45515	75RB#0	13.451	15.12	PASS
Band43	15MHz	16QAM	44665	75RB#0	13.461	14.64	PASS
Band43	15MHz	16QAM	45090	75RB#0	13.470	14.71	PASS
Band43	15MHz	16QAM	45515	75RB#0	13.461	14.71	PASS
Band43	20MHz	QPSK	44690	100RB#0	17.908	19.86	PASS
Band43	20MHz	QPSK	45090	100RB#0	17.943	19.53	PASS
Band43	20MHz	QPSK	45490	100RB#0	17.931	19.52	PASS
Band43	20MHz	16QAM	44690	100RB#0	17.939	19.42	PASS
Band43	20MHz	16QAM	45090	100RB#0	17.927	19.38	PASS
Band43	20MHz	16QAM	45490	100RB#0	17.933	19.32	PASS

Test Graphs







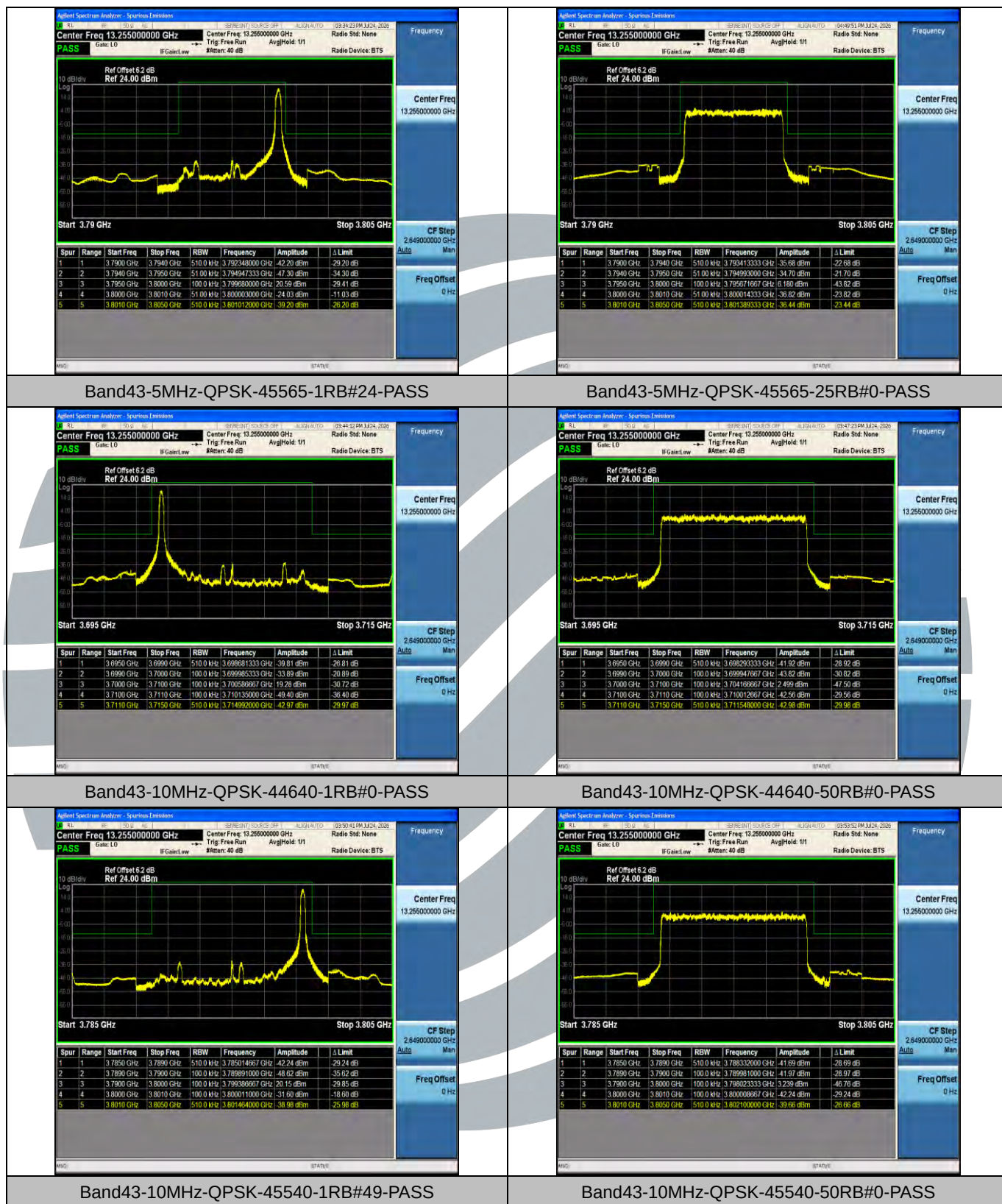


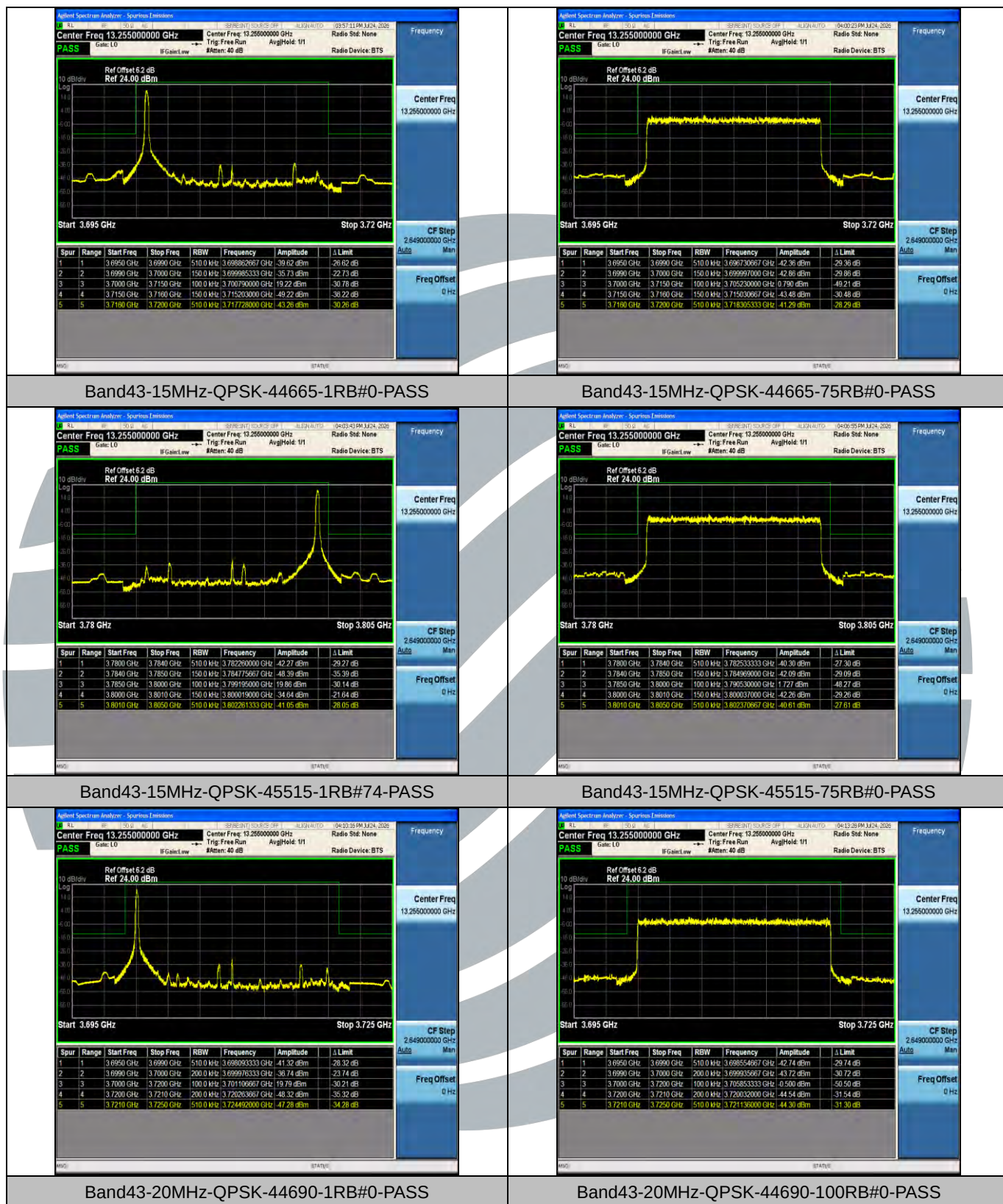
A.3 BAND EDGE Test Result

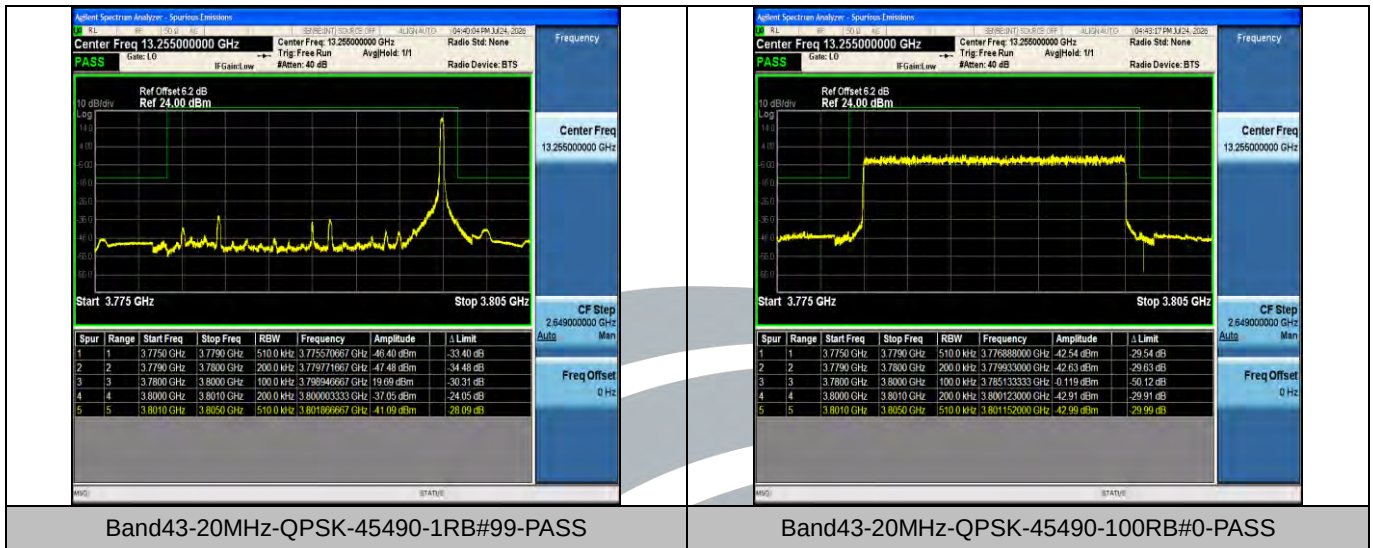
Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Result (dBm)	Verdict
Band43	5MHz	QPSK	44615	1RB#0	-28.42	PASS
Band43	5MHz	QPSK	44615	25RB#0	-36.70	PASS
Band43	5MHz	QPSK	45565	1RB#24	-24.03	PASS
Band43	5MHz	QPSK	45565	25RB#0	-34.70	PASS
Band43	10MHz	QPSK	44640	1RB#0	-33.89	PASS
Band43	10MHz	QPSK	44640	50RB#0	-41.92	PASS
Band43	10MHz	QPSK	45540	1RB#49	-31.60	PASS
Band43	10MHz	QPSK	45540	50RB#0	-39.66	PASS
Band43	15MHz	QPSK	44665	1RB#0	-35.73	PASS
Band43	15MHz	QPSK	44665	75RB#0	-41.29	PASS
Band43	15MHz	QPSK	45515	1RB#74	-34.64	PASS
Band43	15MHz	QPSK	45515	75RB#0	-40.30	PASS
Band43	20MHz	QPSK	44690	1RB#0	-36.74	PASS
Band43	20MHz	QPSK	44690	100RB#0	-42.74	PASS
Band43	20MHz	QPSK	45490	1RB#99	-37.05	PASS
Band43	20MHz	QPSK	45490	100RB#0	-42.54	PASS

Test Graphs





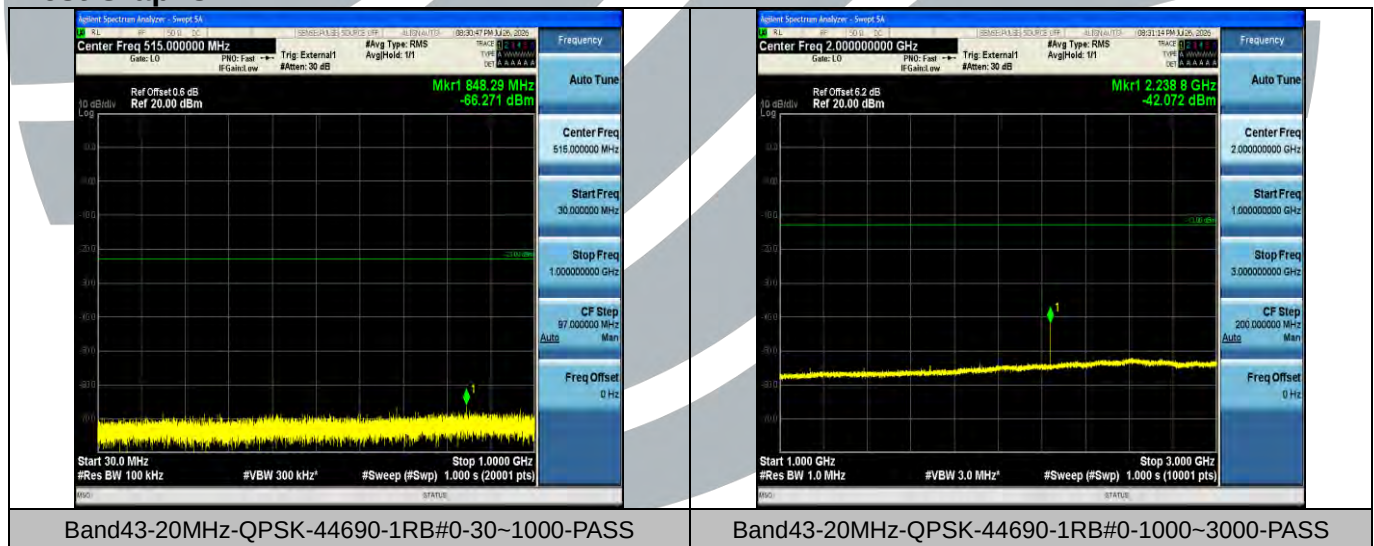




A.4 CONDUCTED SPURIOUS EMISSION Test Result

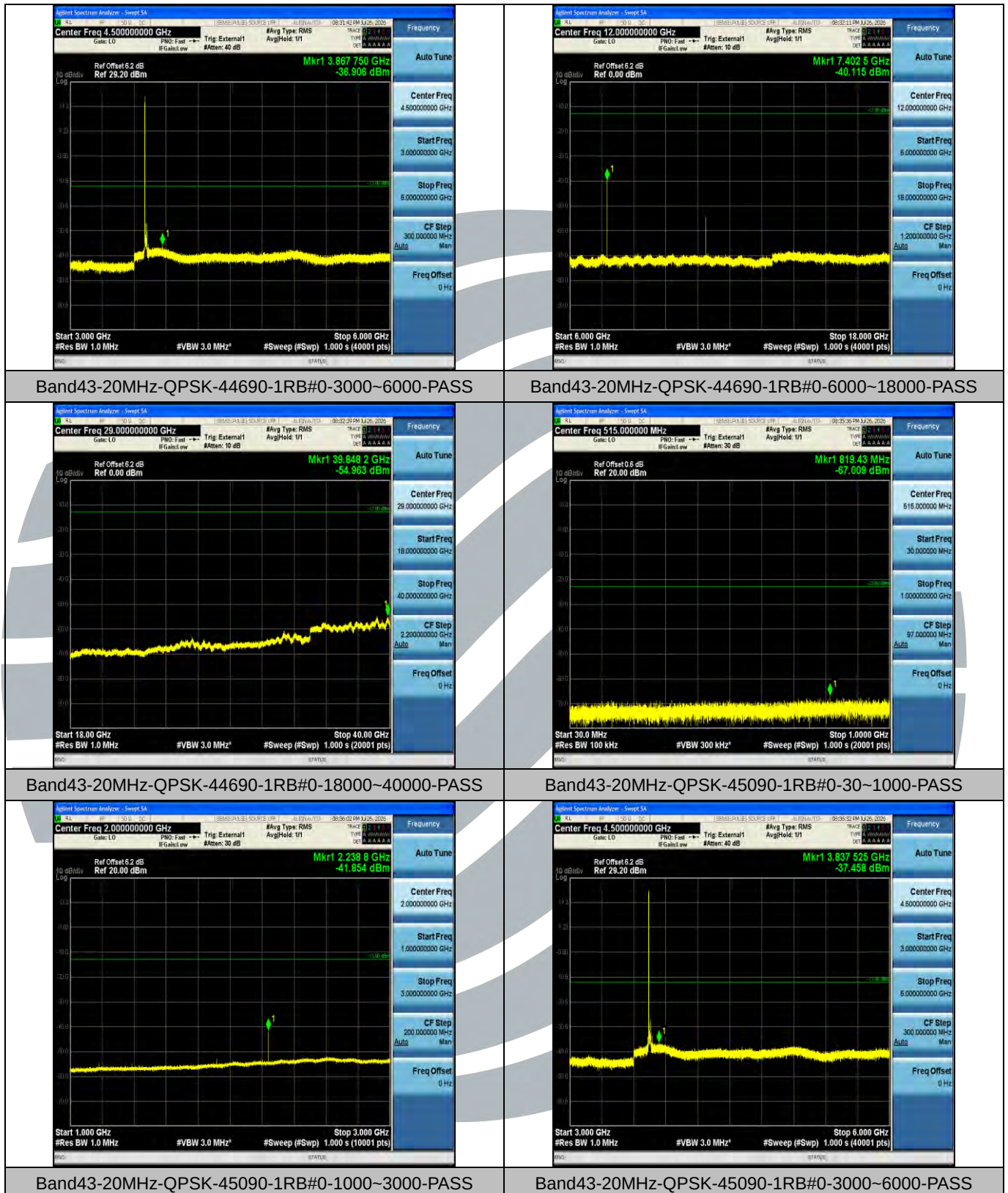
Band	Bandwidth (MHz)	Modulation	Channel	RB Configuration	Frequency Range (MHz)	Result (dBm)	Verdict
Band43	20MHz	QPSK	44690	1RB#0	30~1000	-66.27	PASS
Band43	20MHz	QPSK	44690	1RB#0	1000~3000	-42.07	PASS
Band43	20MHz	QPSK	44690	1RB#0	3000~6000	-36.91	PASS
Band43	20MHz	QPSK	44690	1RB#0	6000~18000	-40.12	PASS
Band43	20MHz	QPSK	44690	1RB#0	18000~40000	-54.96	PASS
Band43	20MHz	QPSK	45090	1RB#0	30~1000	-67.01	PASS
Band43	20MHz	QPSK	45090	1RB#0	1000~3000	-41.85	PASS
Band43	20MHz	QPSK	45090	1RB#0	3000~6000	-37.46	PASS
Band43	20MHz	QPSK	45090	1RB#0	6000~18000	-40.33	PASS
Band43	20MHz	QPSK	45090	1RB#0	18000~40000	-55.00	PASS
Band43	20MHz	QPSK	45490	1RB#0	30~1000	-67.37	PASS
Band43	20MHz	QPSK	45490	1RB#0	1000~3000	-41.95	PASS
Band43	20MHz	QPSK	45490	1RB#0	3000~6000	-34.80	PASS
Band43	20MHz	QPSK	45490	1RB#0	6000~18000	-39.35	PASS
Band43	20MHz	QPSK	45490	1RB#0	18000~40000	-55.07	PASS

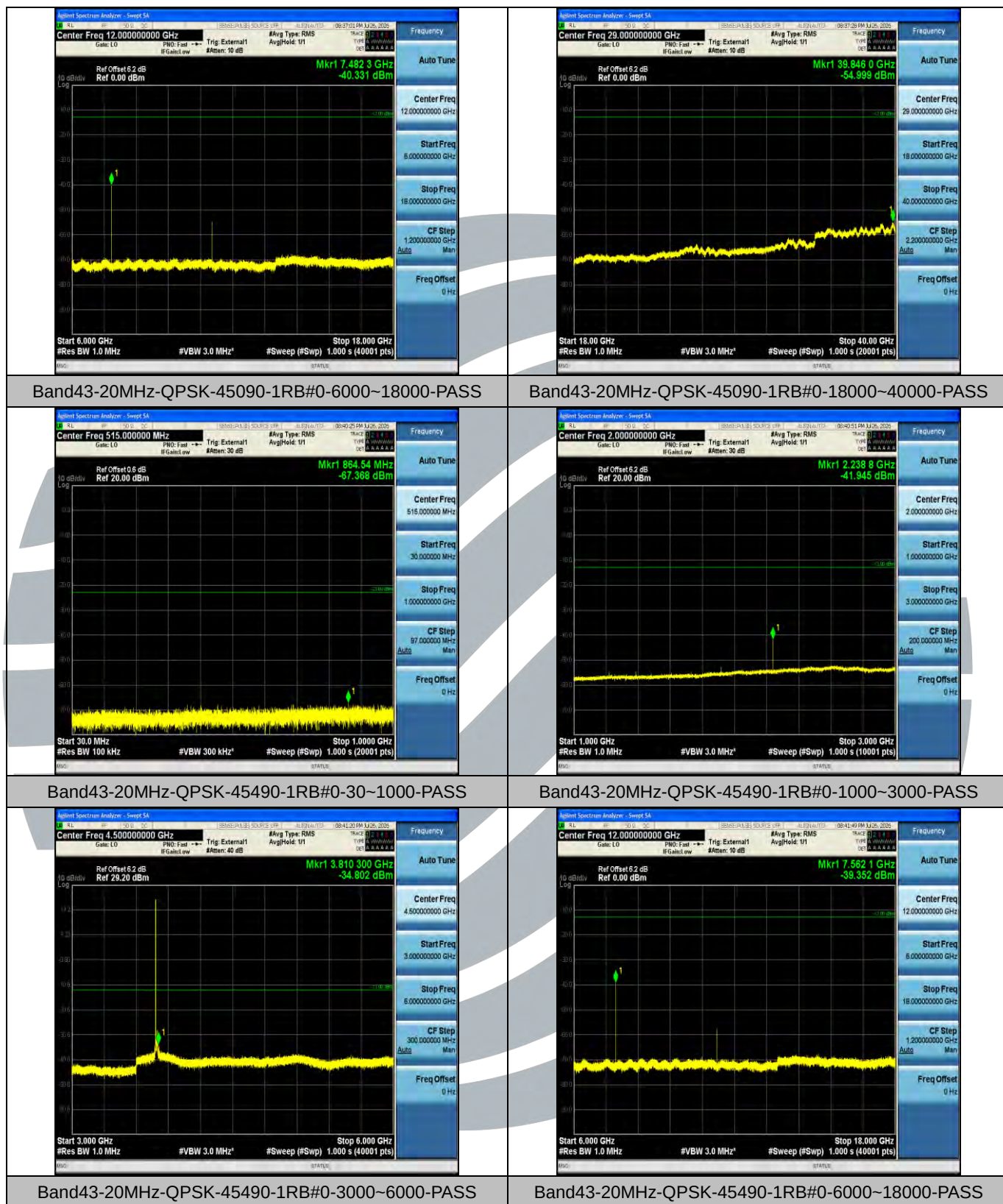
Test Graphs

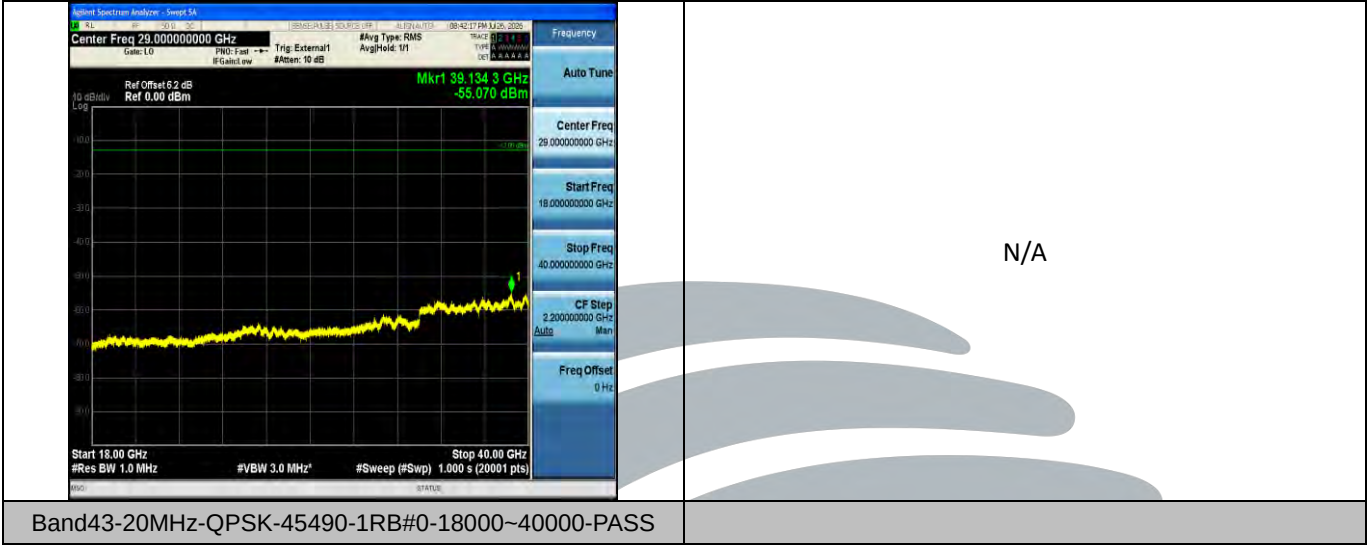


Band43-20MHz-QPSK-44690-1RB#0-30~1000-PASS

Band43-20MHz-QPSK-44690-1RB#0-1000~3000-PASS







A.5 FREQUENCY STABILITY

Test Result

Voltage										
Band	Bandwidth (MHz)	Modulation	Channel	RB Configure	Voltage [Vdc]	Temp. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band43	20MHz	QPSK	45090	100RB#0	VN	NT	-26.24	-0.006997	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	VL	NT	-19.84	-0.005291	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	VH	NT	-16.62	-0.004432	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	VN	NT	-16.34	-0.004357	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	VL	NT	14.08	0.003755	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	VH	NT	16.58	0.004421	±2.5	PASS

Temperature										
Band	Bandwidth (MHz)	Modulation	Channel	RB Configure	Voltage [Vdc]	Temp. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band43	20MHz	QPSK	45090	100RB#0	NV	-30	-21.62	-0.005765	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	-20	-13.72	-0.003659	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	-10	-13.76	-0.003669	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	0	-14.10	-0.003760	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	10	-14.89	-0.003971	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	20	18.64	0.004971	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	30	-16.29	-0.004344	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	40	-20.89	-0.005571	±2.5	PASS
Band43	20MHz	QPSK	45090	100RB#0	NV	50	-21.03	-0.005608	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	-30	-18.84	-0.005024	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	-20	21.67	0.005779	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	-10	-20.74	-0.005531	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	0	-16.38	-0.004368	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	10	-24.98	-0.006661	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	20	-22.89	-0.006104	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	30	-13.62	-0.003632	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	40	-16.12	-0.004299	±2.5	PASS
Band43	20MHz	16QAM	45090	100RB#0	NV	50	-12.06	-0.003216	±2.5	PASS