

Appendix-B LTE Cat M1 Band 26

(824-849)

Effective (Isotropic) Radiated Power Output Data for M1

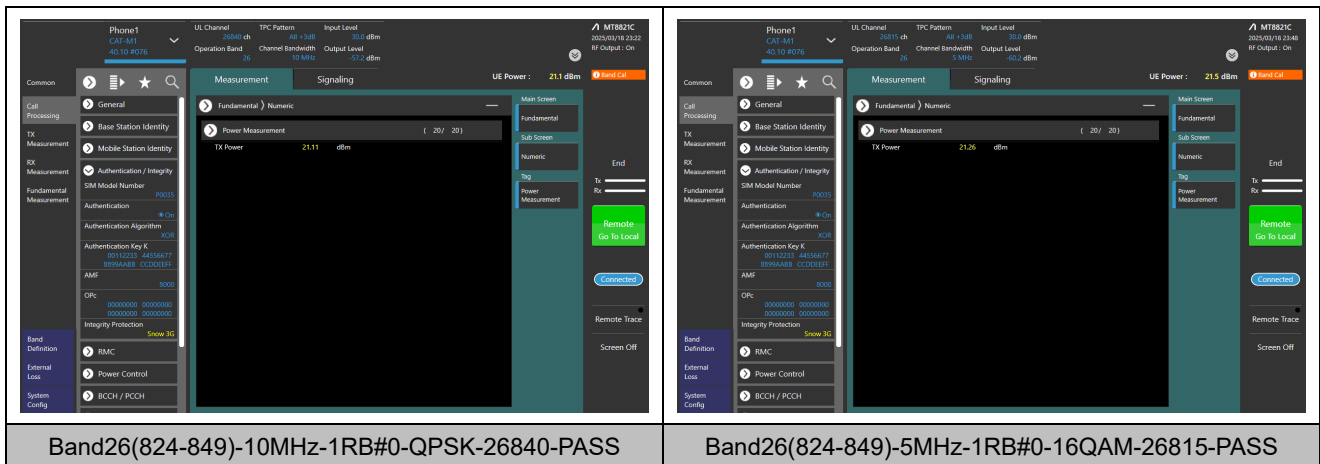
Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Power (dBm)	ERP (dBm)	Limit (dBm)	Verdict
Band26(824-849)	1.4MHz	QPSK	26797	1	0	Low	20.88	21.92	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	26797	1	5	Low	20.85	21.89	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	26797	6	0	Low	20.04	21.08	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	26915	1	0	Low	20.83	21.87	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	26915	1	5	Low	20.73	21.77	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	26915	6	0	Low	20.92	21.96	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	27033	1	0	High	20.46	21.5	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	27033	1	5	High	20.25	21.29	38.45	PASS
Band26(824-849)	1.4MHz	QPSK	27033	6	0	High	20.41	21.45	38.45	PASS
Band26(824-849)	3MHz	QPSK	26805	1	0	Low	20.92	21.96	38.45	PASS
Band26(824-849)	3MHz	QPSK	26805	1	5	Low	20.83	21.87	38.45	PASS
Band26(824-849)	3MHz	QPSK	26805	6	0	Low	20.02	21.06	38.45	PASS
Band26(824-849)	3MHz	QPSK	26915	1	0	Low	20.84	21.88	38.45	PASS
Band26(824-849)	3MHz	QPSK	26915	1	5	Low	20.74	21.78	38.45	PASS
Band26(824-849)	3MHz	QPSK	26915	6	0	Low	20.93	21.97	38.45	PASS
Band26(824-849)	3MHz	QPSK	27025	1	0	High	20.52	21.56	38.45	PASS
Band26(824-849)	3MHz	QPSK	27025	1	5	High	20.35	21.39	38.45	PASS
Band26(824-849)	3MHz	QPSK	27025	6	0	High	20.53	21.57	38.45	PASS
Band26(824-849)	5MHz	QPSK	26815	1	0	Low	21.05	22.09	38.45	PASS
Band26(824-849)	5MHz	QPSK	26815	1	5	Low	20.87	21.91	38.45	PASS
Band26(824-849)	5MHz	QPSK	26815	6	0	Low	20.04	21.08	38.45	PASS
Band26(824-849)	5MHz	QPSK	26915	1	0	Low	21.05	22.09	38.45	PASS
Band26(824-849)	5MHz	QPSK	26915	1	5	Low	20.85	21.89	38.45	PASS
Band26(824-849)	5MHz	QPSK	26915	6	0	Low	20.03	21.07	38.45	PASS
Band26(824-849)	5MHz	QPSK	27015	1	0	High	20.61	21.65	38.45	PASS
Band26(824-849)	5MHz	QPSK	27015	1	5	High	20.45	21.49	38.45	PASS
Band26(824-849)	5MHz	QPSK	27015	6	0	High	20.57	21.61	38.45	PASS
Band26(824-849)	10MHz	QPSK	26840	1	0	Low	21.11	22.15	38.45	PASS
Band26(824-849)	10MHz	QPSK	26840	1	5	Low	20.9	21.94	38.45	PASS
Band26(824-849)	10MHz	QPSK	26840	6	0	Low	20.01	21.05	38.45	PASS
Band26(824-849)	10MHz	QPSK	26915	1	0	Low	21.11	22.15	38.45	PASS
Band26(824-849)	10MHz	QPSK	26915	1	5	Low	20.83	21.87	38.45	PASS
Band26(824-849)	10MHz	QPSK	26915	6	0	Low	20.02	21.06	38.45	PASS
Band26(824-849)	10MHz	QPSK	26990	1	0	High	20.65	21.69	38.45	PASS

Band26(824-849)	10MHz	QPSK	26990	1	5	High	20.39	21.43	38.45	PASS
Band26(824-849)	10MHz	QPSK	26990	6	0	High	20.55	21.59	38.45	PASS
Band26(824-849)	15MHz	QPSK	26865	1	0	Low	21.01	22.05	38.45	PASS
Band26(824-849)	15MHz	QPSK	26865	1	5	Low	20.84	21.88	38.45	PASS
Band26(824-849)	15MHz	QPSK	26865	6	0	Low	21.04	22.08	38.45	PASS
Band26(824-849)	15MHz	QPSK	26915	1	0	Low	20.94	21.98	38.45	PASS
Band26(824-849)	15MHz	QPSK	26915	1	5	Low	20.76	21.8	38.45	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	20.95	21.99	38.45	PASS
Band26(824-849)	15MHz	QPSK	26965	1	0	High	20.83	21.87	38.45	PASS
Band26(824-849)	15MHz	QPSK	26965	1	5	High	20.58	21.62	38.45	PASS
Band26(824-849)	15MHz	QPSK	26965	6	0	High	20.76	21.8	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	26797	1	0	Low	20.8	21.84	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	26797	1	5	Low	20.79	21.83	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	26797	5	0	Low	20.93	21.97	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	26915	1	0	Low	20.78	21.82	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	26915	1	5	Low	20.74	21.78	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	26915	5	0	Low	20.95	21.99	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	27033	1	0	High	20.37	21.41	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	27033	1	5	High	20.19	21.23	38.45	PASS
Band26(824-849)	1.4MHz	16QAM	27033	5	0	High	20.48	21.52	38.45	PASS
Band26(824-849)	3MHz	16QAM	26805	1	0	Low	20.79	21.83	38.45	PASS
Band26(824-849)	3MHz	16QAM	26805	1	5	Low	20.84	21.88	38.45	PASS
Band26(824-849)	3MHz	16QAM	26805	5	0	Low	20.97	22.01	38.45	PASS
Band26(824-849)	3MHz	16QAM	26915	1	0	Low	20.83	21.87	38.45	PASS
Band26(824-849)	3MHz	16QAM	26915	1	5	Low	20.73	21.77	38.45	PASS
Band26(824-849)	3MHz	16QAM	26915	5	0	Low	20.97	22.01	38.45	PASS
Band26(824-849)	3MHz	16QAM	27025	1	0	High	20.33	21.37	38.45	PASS
Band26(824-849)	3MHz	16QAM	27025	1	5	High	20.3	21.34	38.45	PASS
Band26(824-849)	3MHz	16QAM	27025	5	0	High	20.55	21.59	38.45	PASS
Band26(824-849)	5MHz	16QAM	26815	1	0	Low	21.26	22.3	38.45	PASS
Band26(824-849)	5MHz	16QAM	26815	1	5	Low	20.94	21.98	38.45	PASS
Band26(824-849)	5MHz	16QAM	26815	5	0	Low	20.83	21.87	38.45	PASS
Band26(824-849)	5MHz	16QAM	26915	1	0	Low	21.18	22.22	38.45	PASS
Band26(824-849)	5MHz	16QAM	26915	1	5	Low	20.85	21.89	38.45	PASS
Band26(824-849)	5MHz	16QAM	26915	5	0	Low	20.77	21.81	38.45	PASS
Band26(824-849)	5MHz	16QAM	27015	1	0	High	20.69	21.73	38.45	PASS
Band26(824-849)	5MHz	16QAM	27015	1	5	High	20.41	21.45	38.45	PASS
Band26(824-849)	5MHz	16QAM	27015	5	0	High	20.37	21.41	38.45	PASS
Band26(824-849)	10MHz	16QAM	26840	1	0	Low	21.04	22.08	38.45	PASS
Band26(824-849)	10MHz	16QAM	26840	1	5	Low	20.95	21.99	38.45	PASS
Band26(824-849)	10MHz	16QAM	26840	5	0	Low	20.87	21.91	38.45	PASS
Band26(824-849)	10MHz	16QAM	26915	1	0	Low	21.14	22.18	38.45	PASS
Band26(824-849)	10MHz	16QAM	26915	1	5	Low	20.83	21.87	38.45	PASS
Band26(824-849)	10MHz	16QAM	26915	5	0	Low	20.93	21.97	38.45	PASS

Band26(824-849)	10MHz	16QAM	26990	1	0	High	20.67	21.71	38.45	PASS
Band26(824-849)	10MHz	16QAM	26990	1	5	High	20.44	21.48	38.45	PASS
Band26(824-849)	10MHz	16QAM	26990	5	0	High	20.57	21.61	38.45	PASS
Band26(824-849)	15MHz	16QAM	26865	1	0	Low	21.14	22.18	38.45	PASS
Band26(824-849)	15MHz	16QAM	26865	1	5	Low	20.76	21.8	38.45	PASS
Band26(824-849)	15MHz	16QAM	26865	5	0	Low	20.94	21.98	38.45	PASS
Band26(824-849)	15MHz	16QAM	26915	1	0	Low	20.98	22.02	38.45	PASS
Band26(824-849)	15MHz	16QAM	26915	1	5	Low	20.86	21.9	38.45	PASS
Band26(824-849)	15MHz	16QAM	26915	5	0	Low	20.91	21.95	38.45	PASS
Band26(824-849)	15MHz	16QAM	26965	1	0	High	20.71	21.75	38.45	PASS
Band26(824-849)	15MHz	16QAM	26965	1	5	High	20.45	21.49	38.45	PASS
Band26(824-849)	15MHz	16QAM	26965	5	0	High	20.6	21.64	38.45	PASS

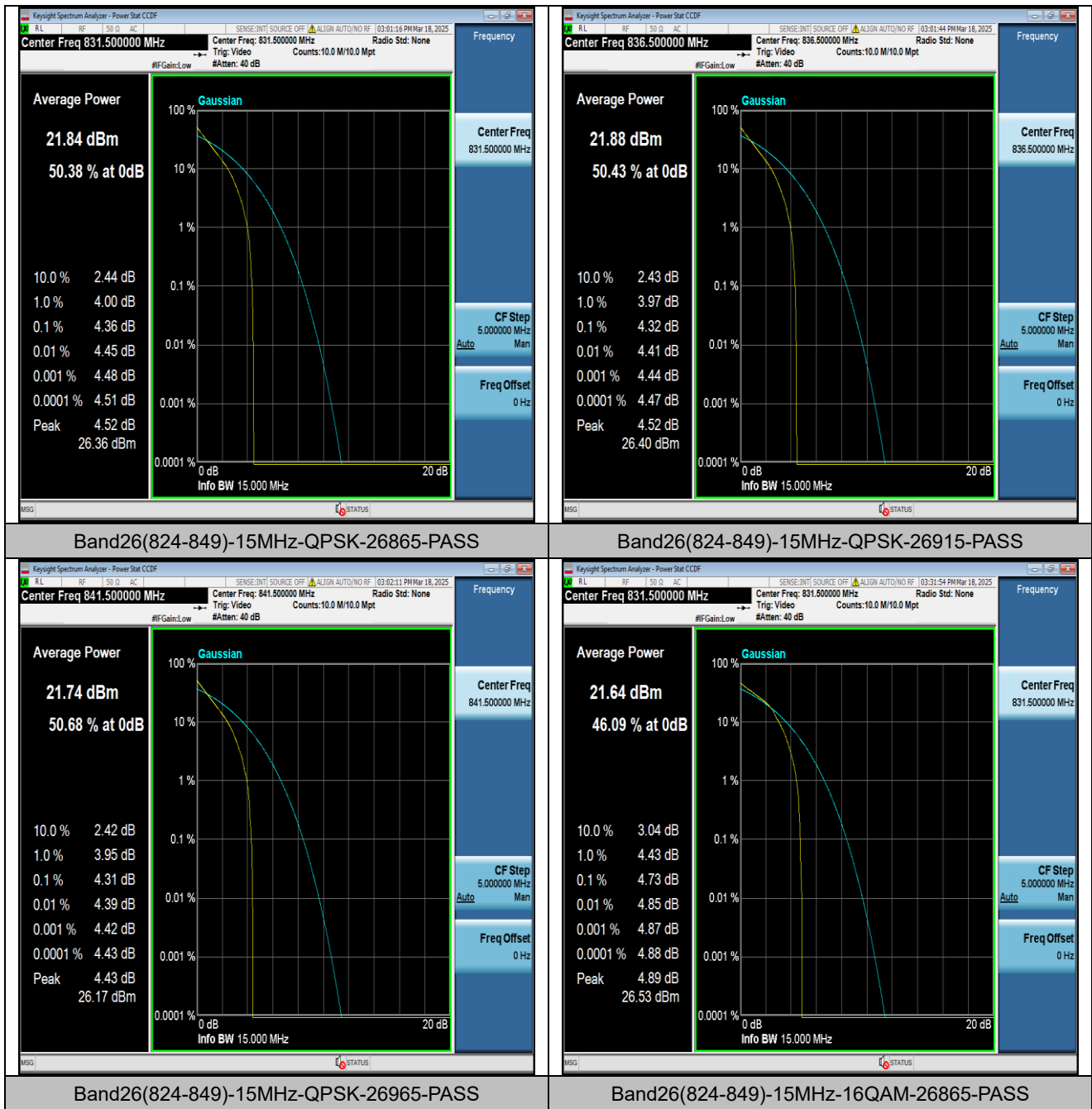
Test Graphs

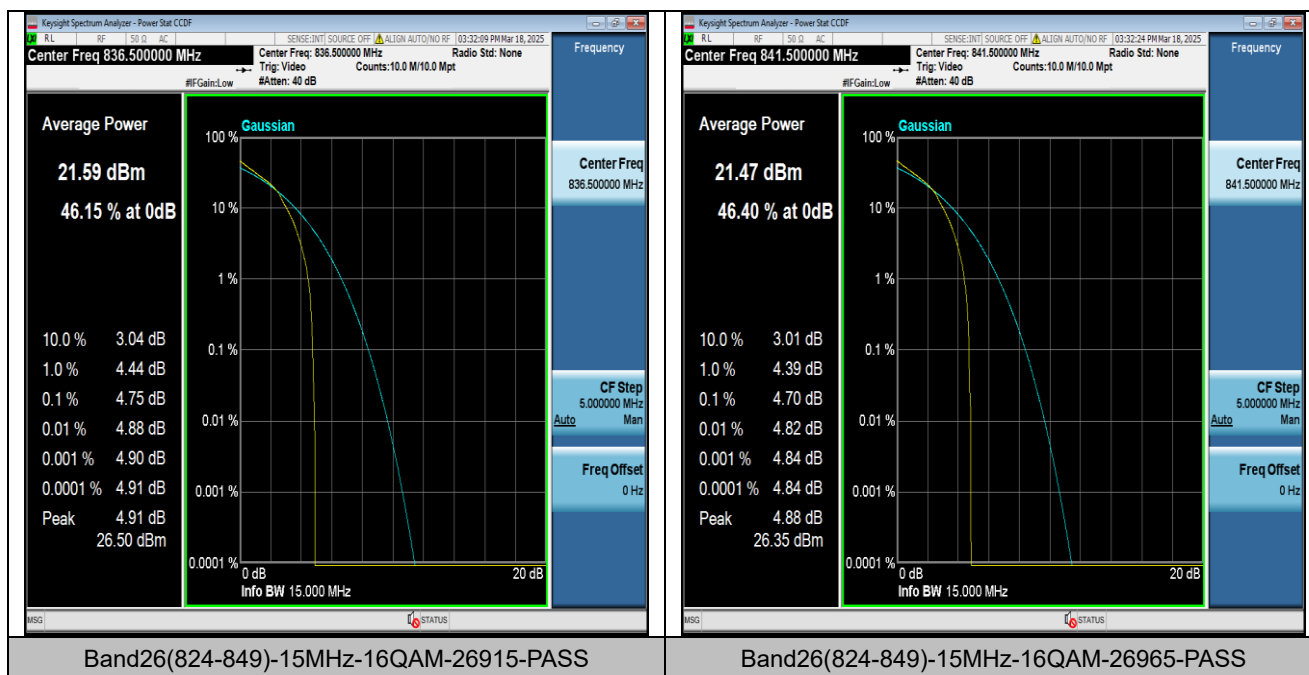


Peak-to-Average Ratio(CCDF) for M1**Test Result**

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band26(824-849)	15MHz	QPSK	26865	6	0	Low	4.36	<=13	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	4.32	<=13	PASS
Band26(824-849)	15MHz	QPSK	26965	6	0	High	4.31	<=13	PASS
Band26(824-849)	15MHz	16QAM	26865	5	0	Low	4.73	<=13	PASS
Band26(824-849)	15MHz	16QAM	26915	5	0	Low	4.75	<=13	PASS
Band26(824-849)	15MHz	16QAM	26965	5	0	High	4.70	<=13	PASS

Test Graphs



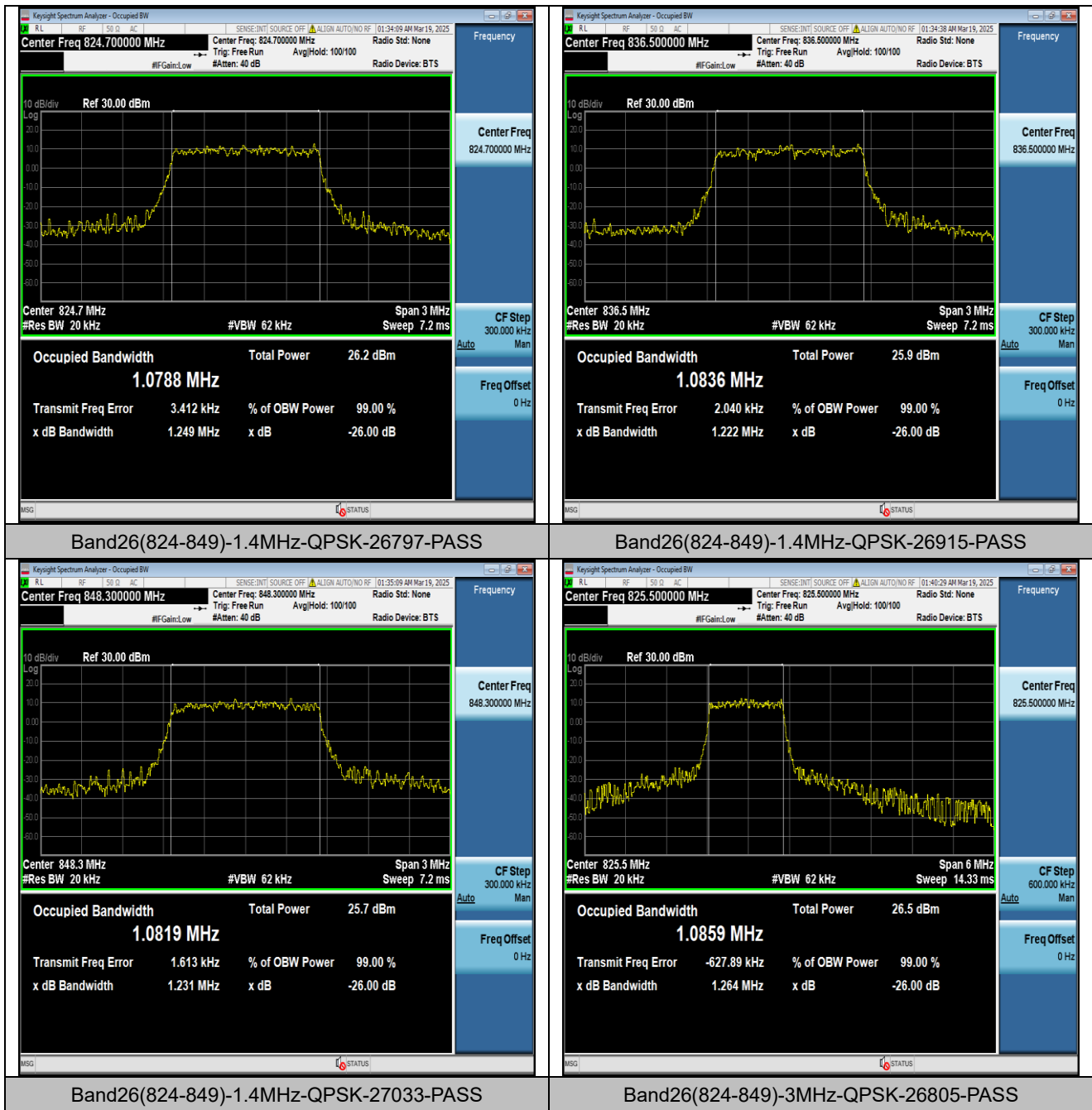


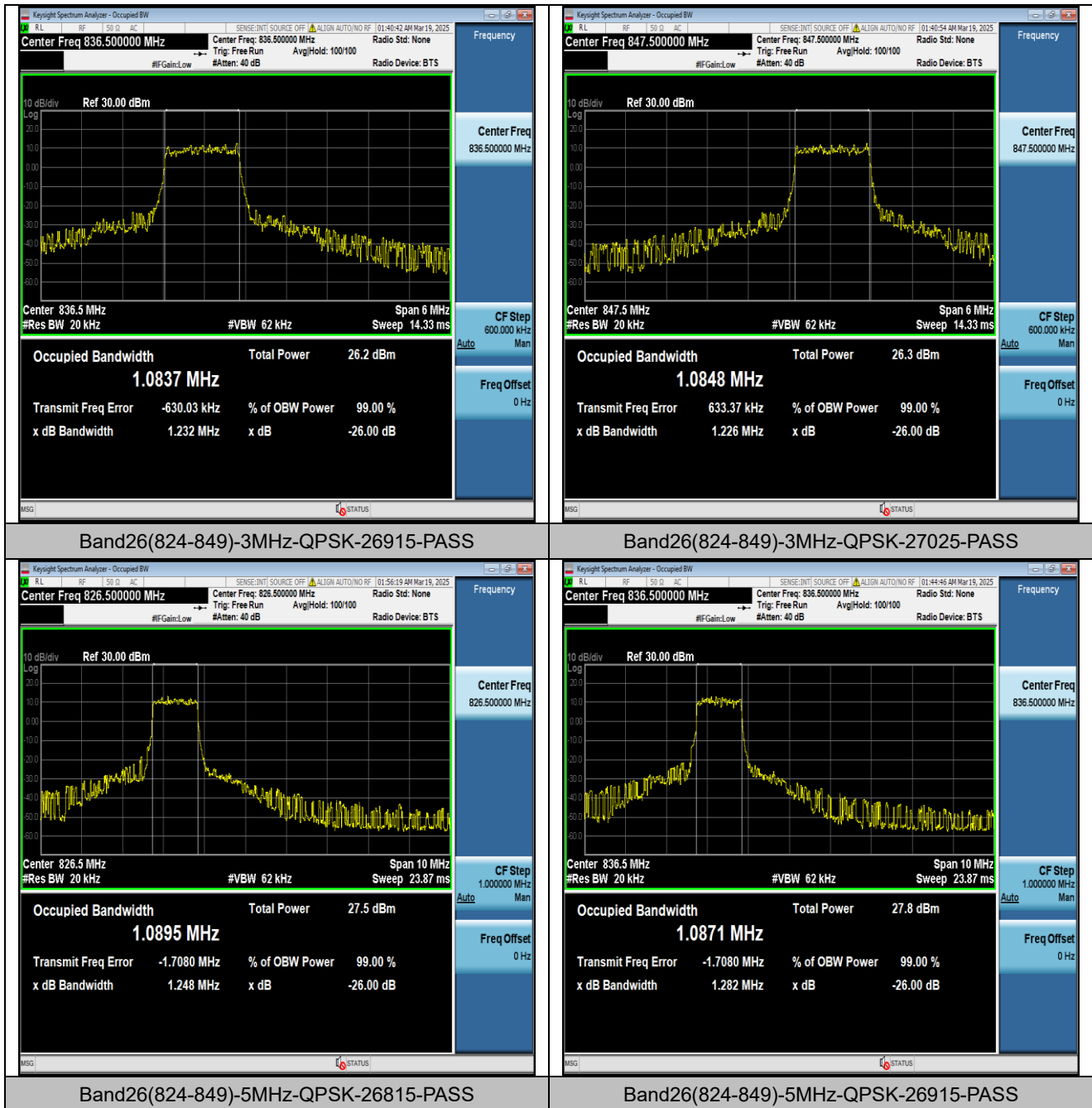
26dB Bandwidth and Occupied Bandwidth for M1

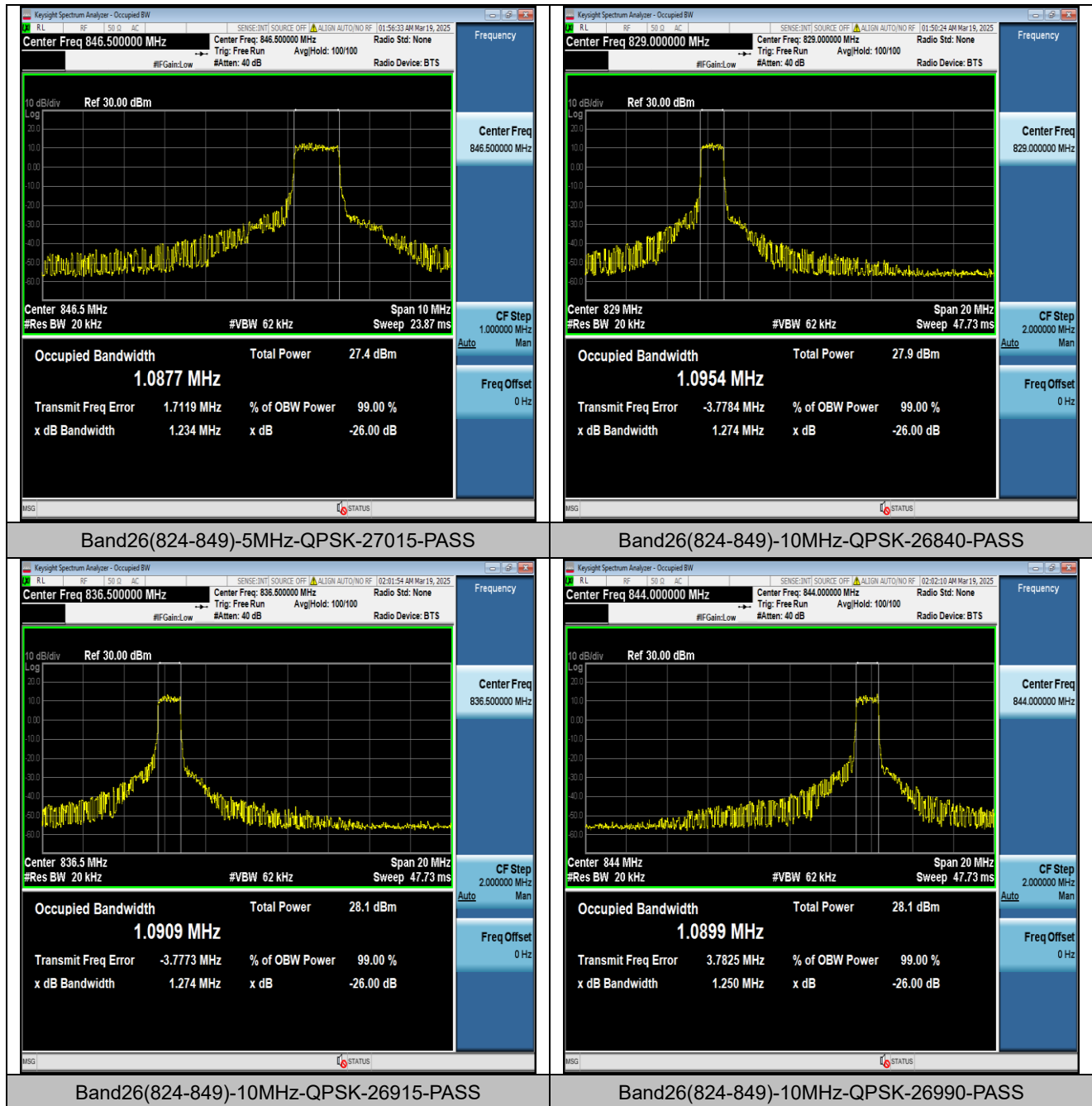
Test Result

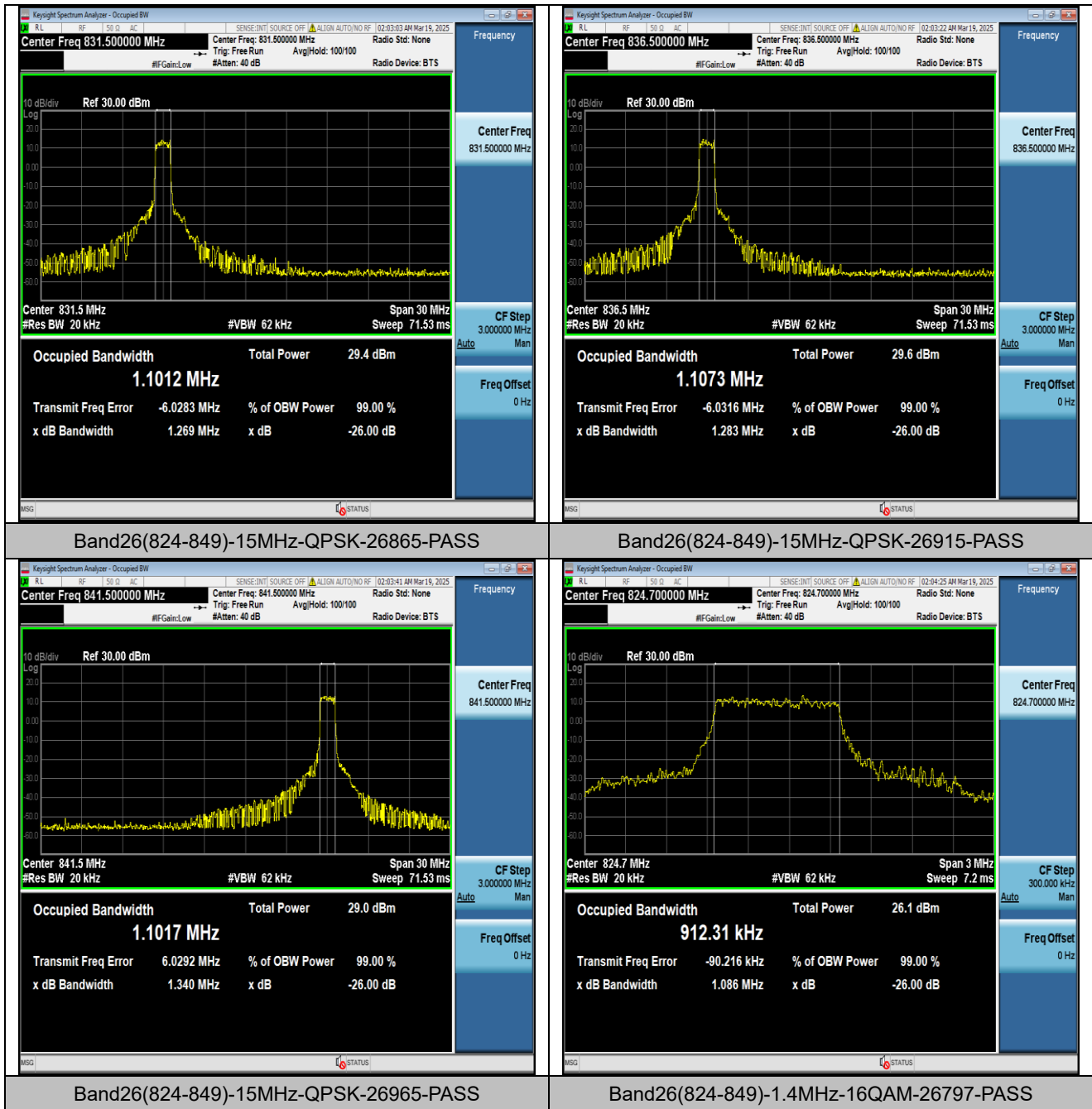
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band26(824-849)	1.4MHz	QPSK	26797	6	0	Low	1.0788	1.249	PASS
Band26(824-849)	1.4MHz	QPSK	26915	6	0	Low	1.0836	1.222	PASS
Band26(824-849)	1.4MHz	QPSK	27033	6	0	High	1.0819	1.231	PASS
Band26(824-849)	3MHz	QPSK	26805	6	0	Low	1.0859	1.264	PASS
Band26(824-849)	3MHz	QPSK	26915	6	0	Low	1.0837	1.232	PASS
Band26(824-849)	3MHz	QPSK	27025	6	0	High	1.0848	1.226	PASS
Band26(824-849)	5MHz	QPSK	26815	6	0	Low	1.0895	1.248	PASS
Band26(824-849)	5MHz	QPSK	26915	6	0	Low	1.0871	1.282	PASS
Band26(824-849)	5MHz	QPSK	27015	6	0	High	1.0877	1.234	PASS
Band26(824-849)	10MHz	QPSK	26840	6	0	Low	1.0954	1.274	PASS
Band26(824-849)	10MHz	QPSK	26915	6	0	Low	1.0909	1.274	PASS
Band26(824-849)	10MHz	QPSK	26990	6	0	High	1.0899	1.250	PASS
Band26(824-849)	15MHz	QPSK	26865	6	0	Low	1.1012	1.269	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	1.1073	1.283	PASS
Band26(824-849)	15MHz	QPSK	26965	6	0	High	1.1017	1.340	PASS
Band26(824-849)	1.4MHz	16QAM	26797	5	0	Low	0.91231	1.086	PASS
Band26(824-849)	1.4MHz	16QAM	26915	5	0	Low	0.91378	1.065	PASS
Band26(824-849)	1.4MHz	16QAM	27033	5	0	High	0.91543	1.070	PASS
Band26(824-849)	3MHz	16QAM	26805	5	0	Low	0.91401	1.076	PASS
Band26(824-849)	3MHz	16QAM	26915	5	0	Low	0.91257	1.085	PASS
Band26(824-849)	3MHz	16QAM	27025	5	0	High	0.91196	1.097	PASS
Band26(824-849)	5MHz	16QAM	26815	5	0	Low	0.91702	1.092	PASS
Band26(824-849)	5MHz	16QAM	26915	5	0	Low	0.92095	1.082	PASS
Band26(824-849)	5MHz	16QAM	27015	5	0	High	0.91000	1.087	PASS
Band26(824-849)	10MHz	16QAM	26840	5	0	Low	0.93125	1.097	PASS
Band26(824-849)	10MHz	16QAM	26915	5	0	Low	0.93166	1.138	PASS
Band26(824-849)	10MHz	16QAM	26990	5	0	High	0.92878	1.112	PASS
Band26(824-849)	15MHz	16QAM	26865	5	0	Low	0.93411	1.108	PASS
Band26(824-849)	15MHz	16QAM	26915	5	0	Low	0.92692	1.102	PASS
Band26(824-849)	15MHz	16QAM	26965	5	0	High	0.94099	1.103	PASS

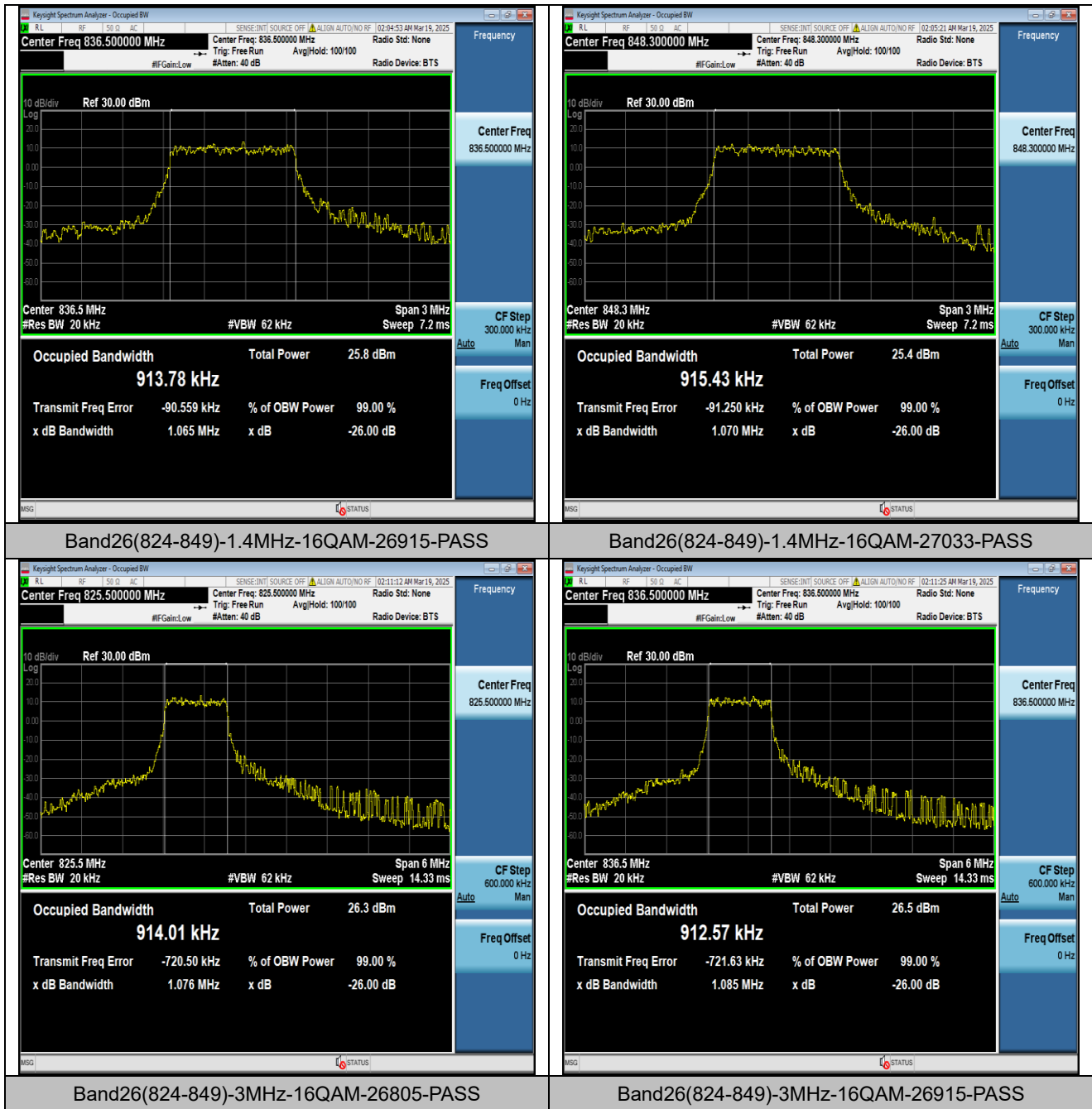
Test Graphs

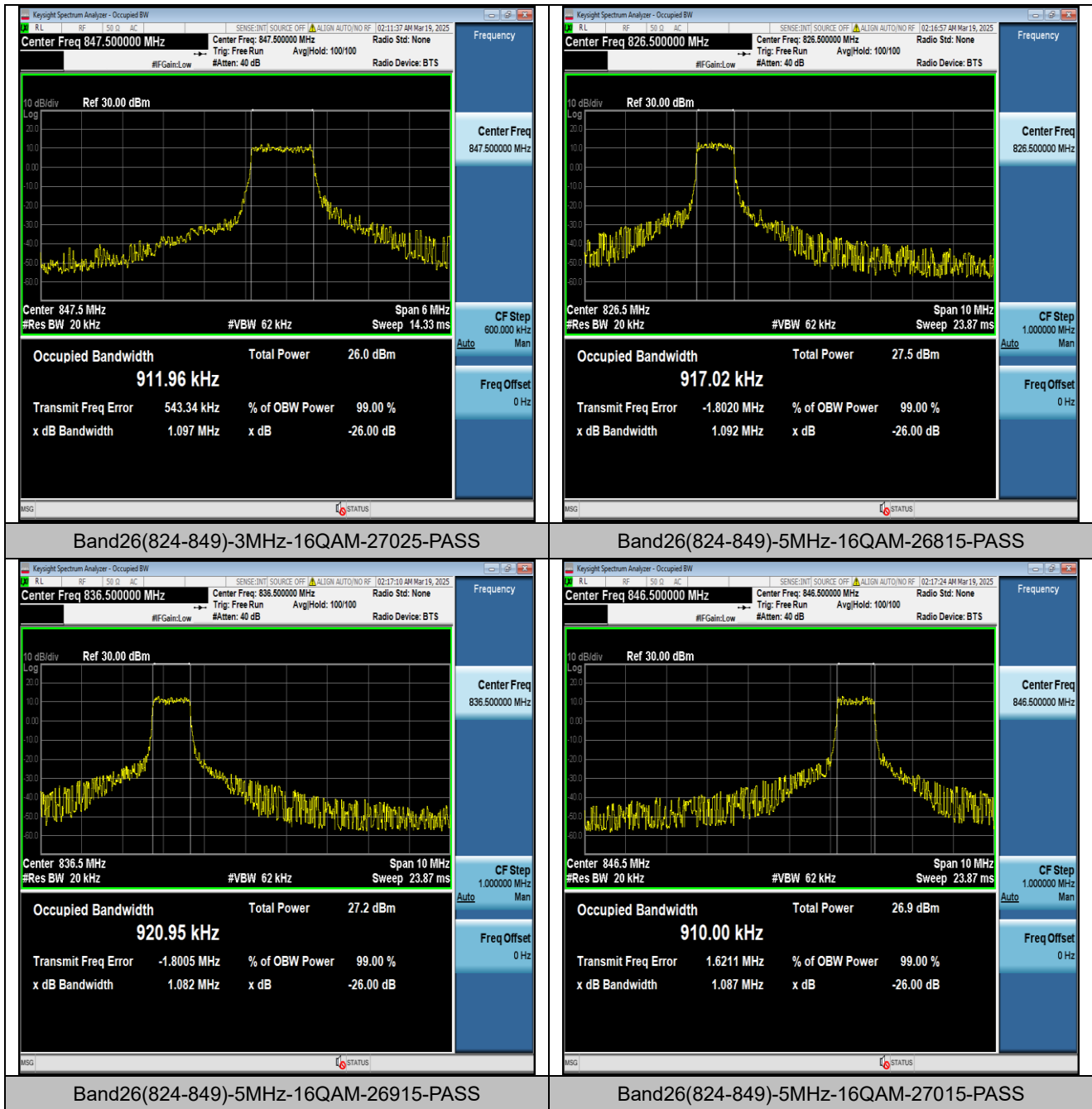


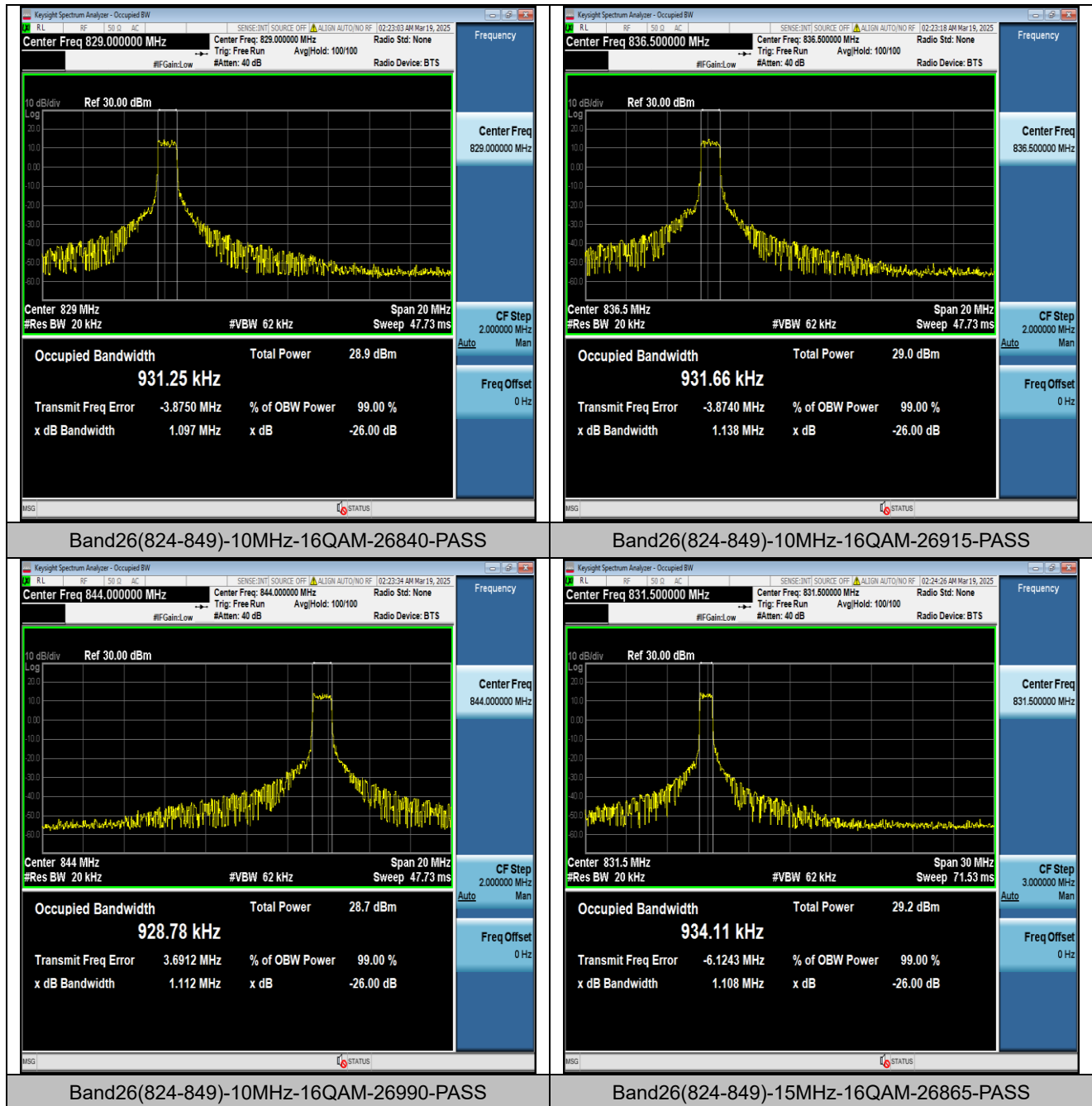


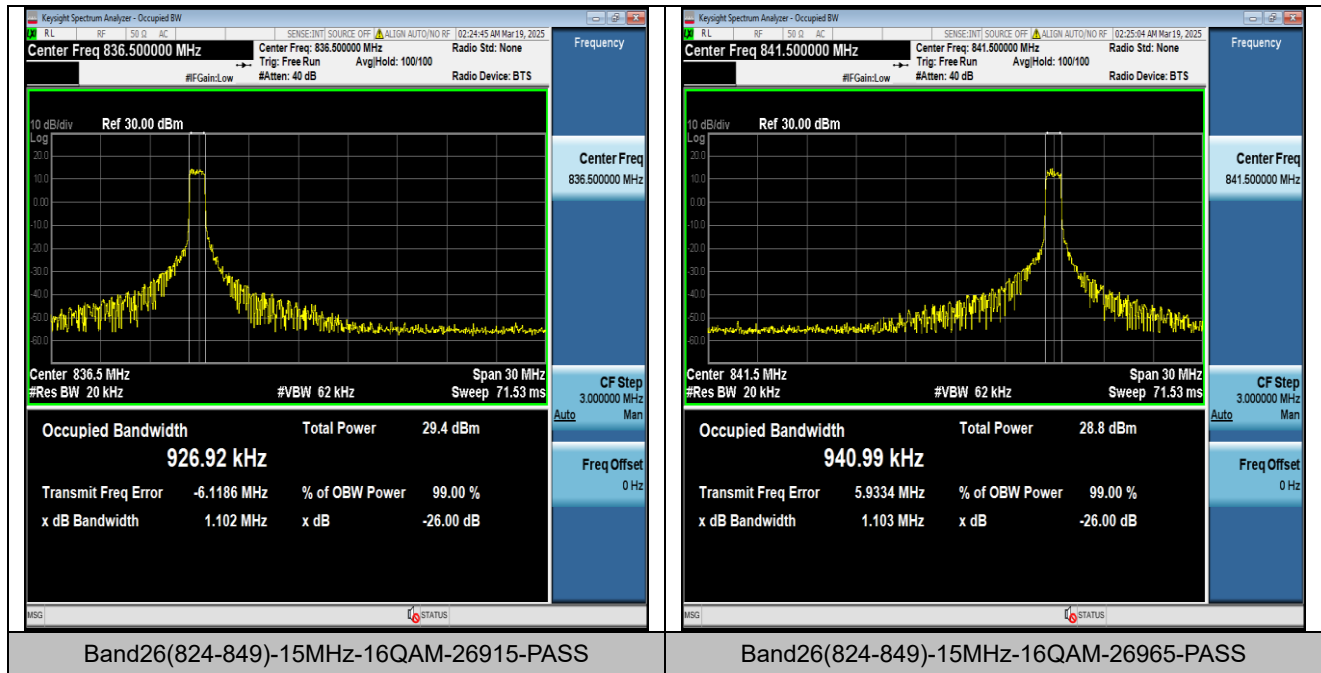






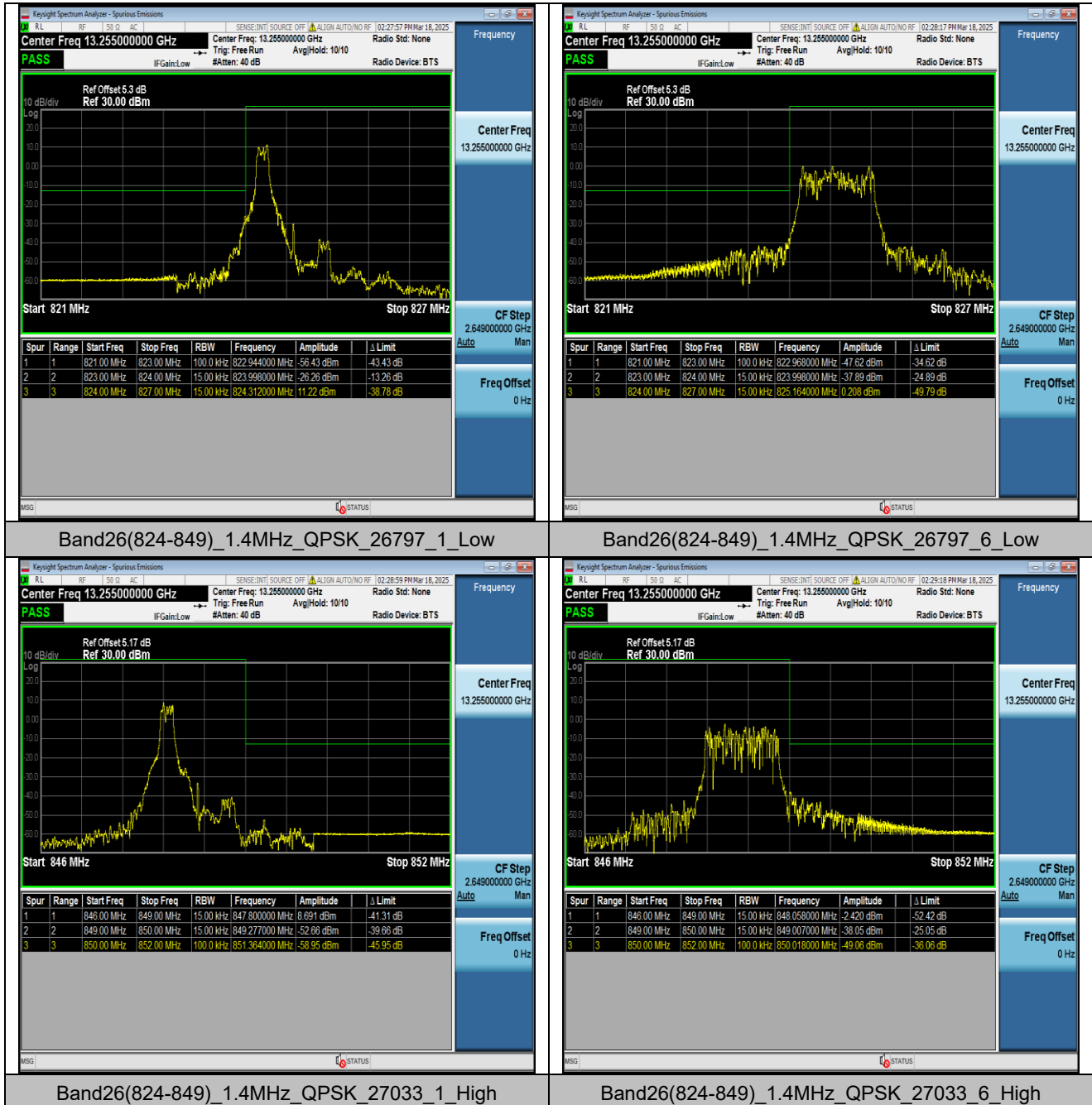


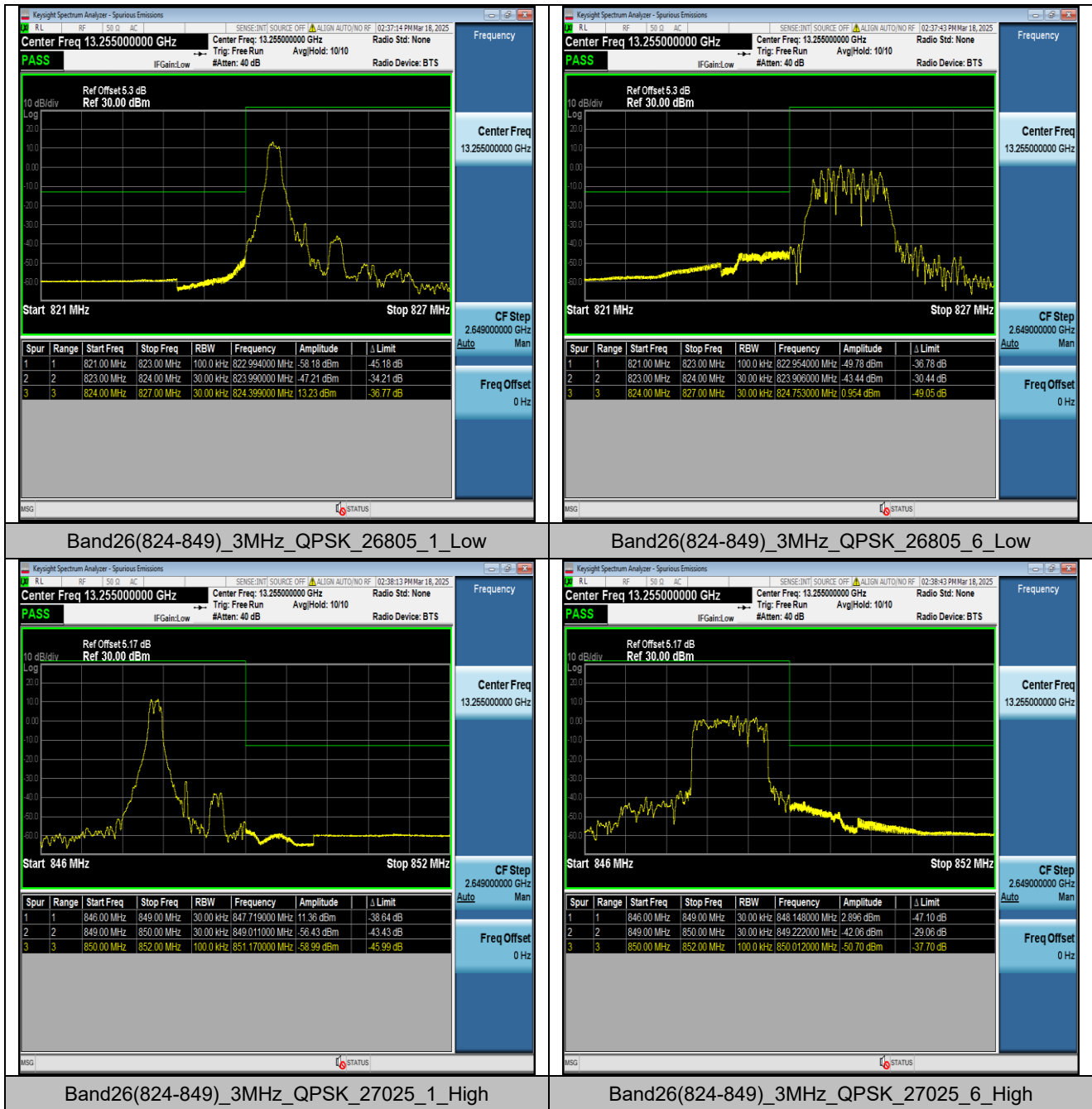


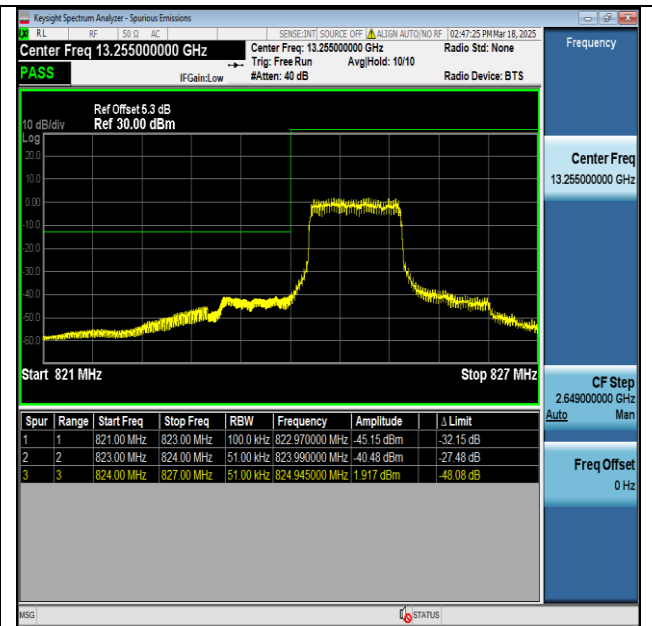
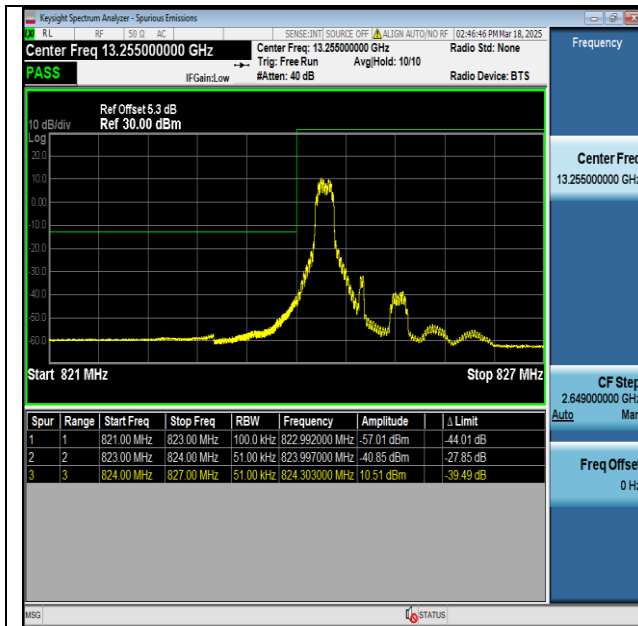


Band Edge for M1

Test Graphs

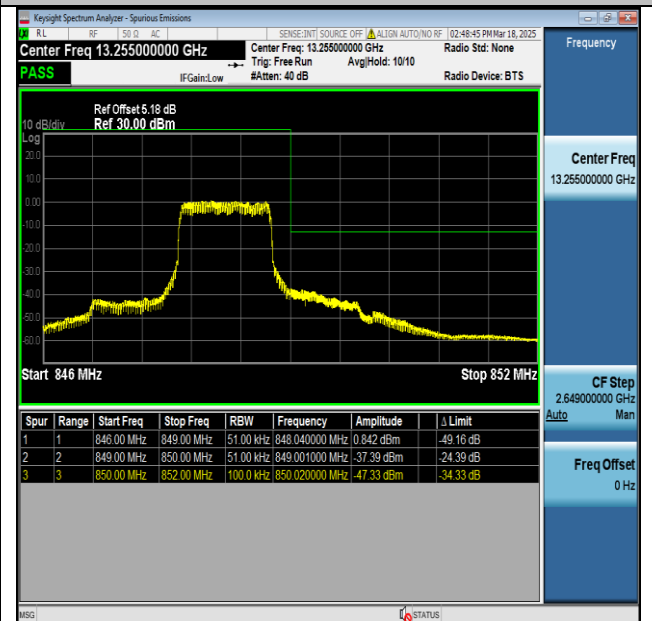
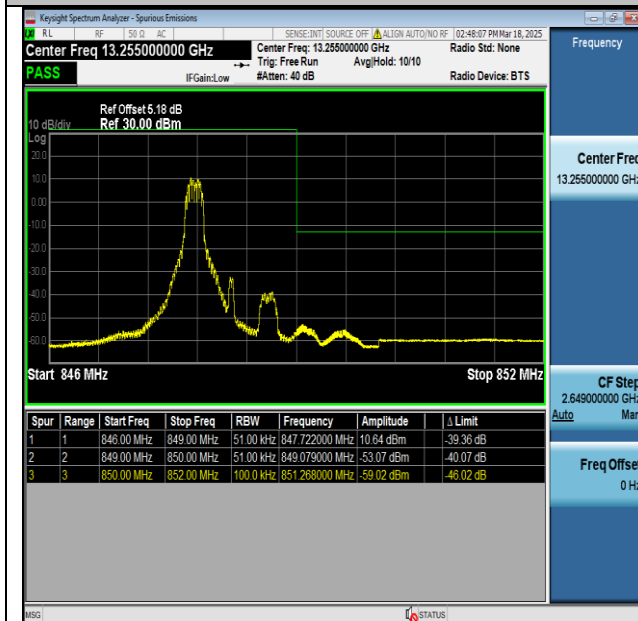






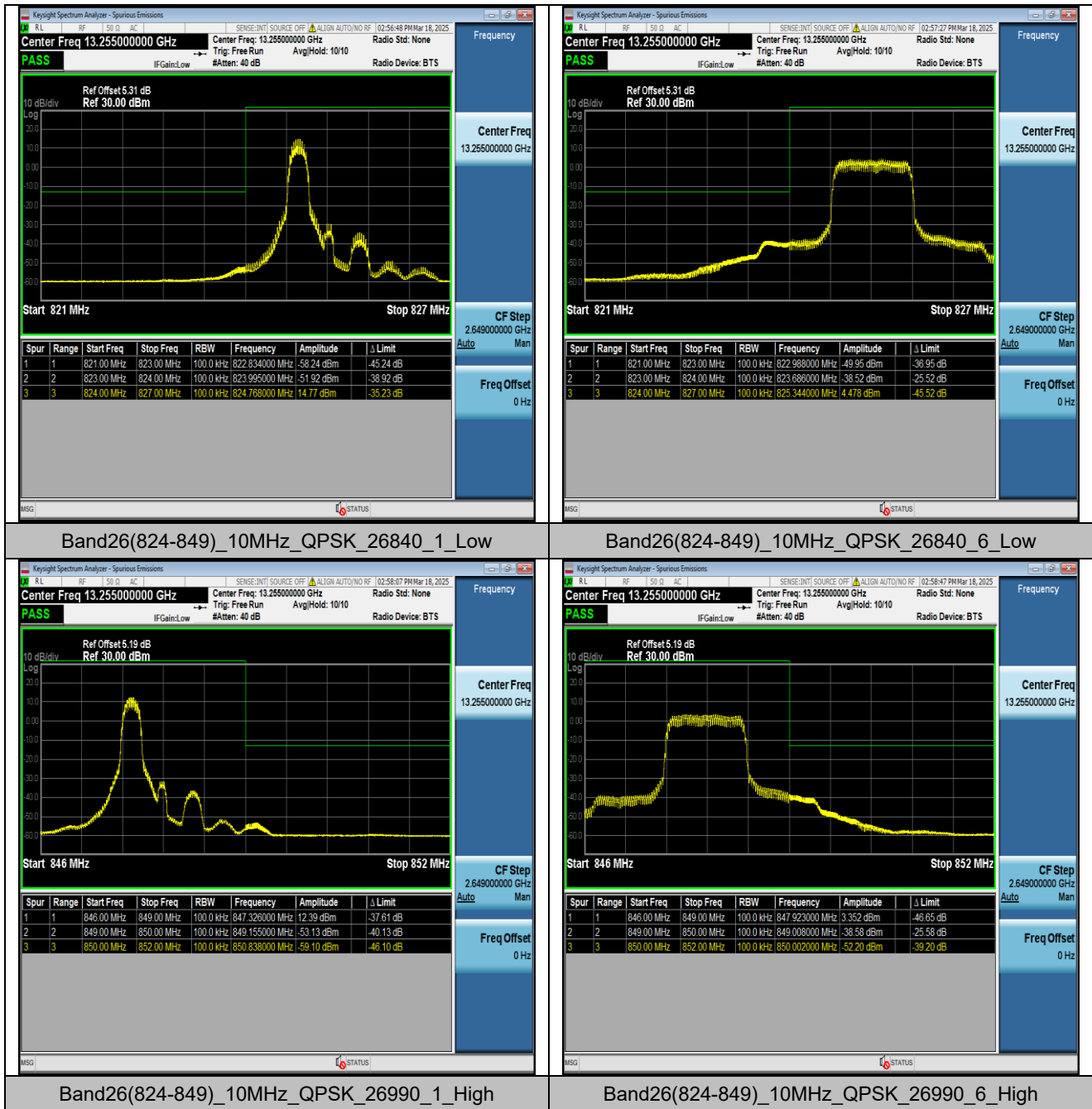
Band26(824-849)_5MHz_QPSK_26815_1_Low

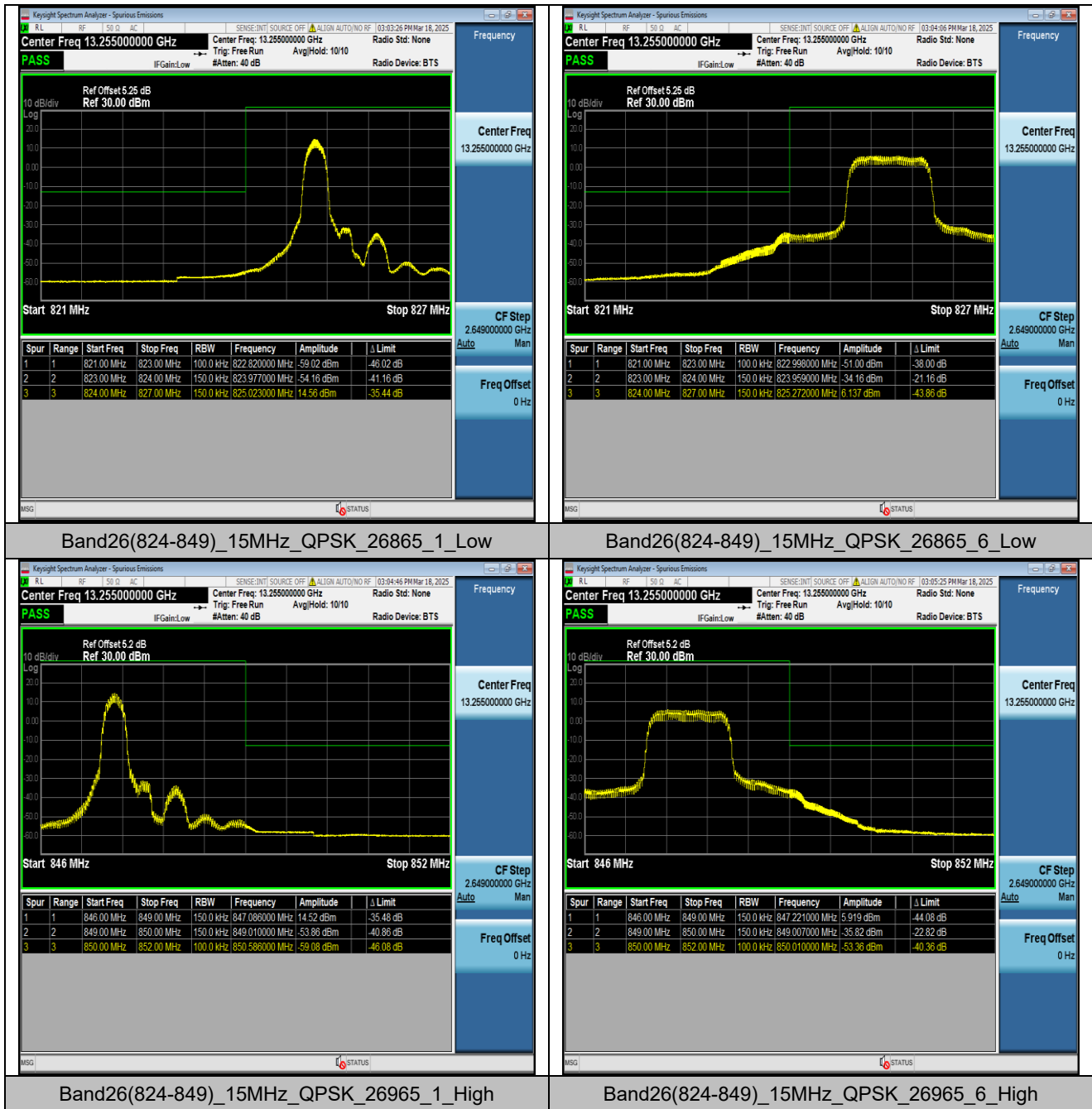
Band26(824-849)_5MHz_QPSK_26815_6_Low



Band26(824-849)_5MHz_QPSK_27015_1_High

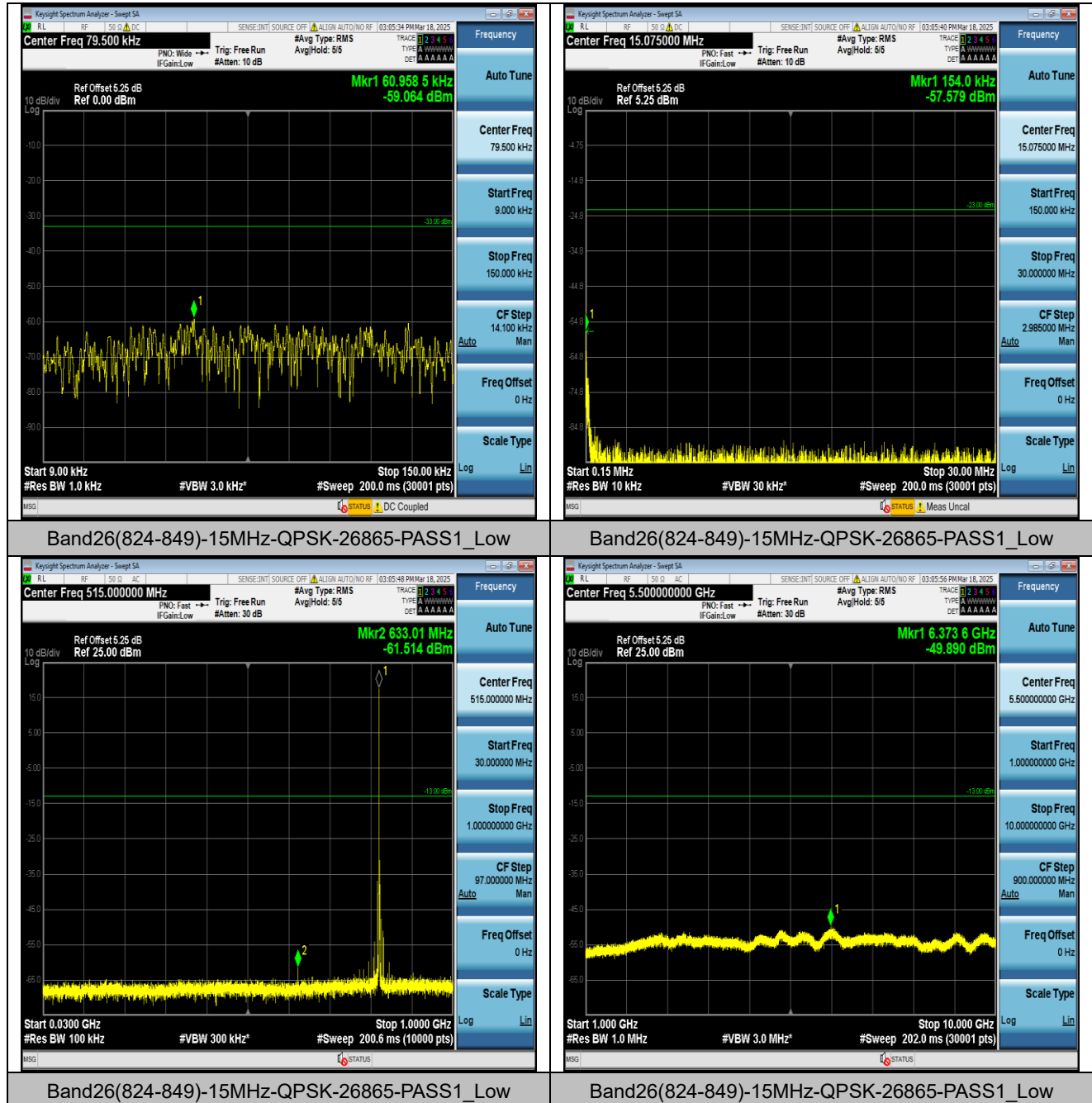
Band26(824-849)_5MHz_QPSK_27015_6_High

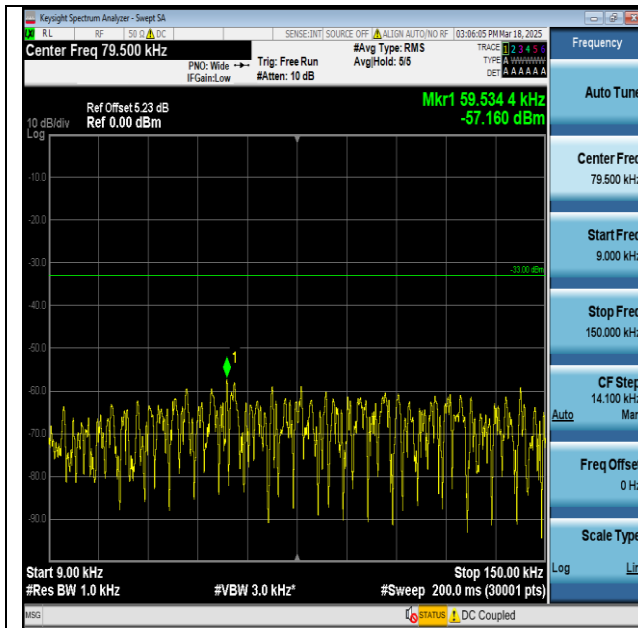




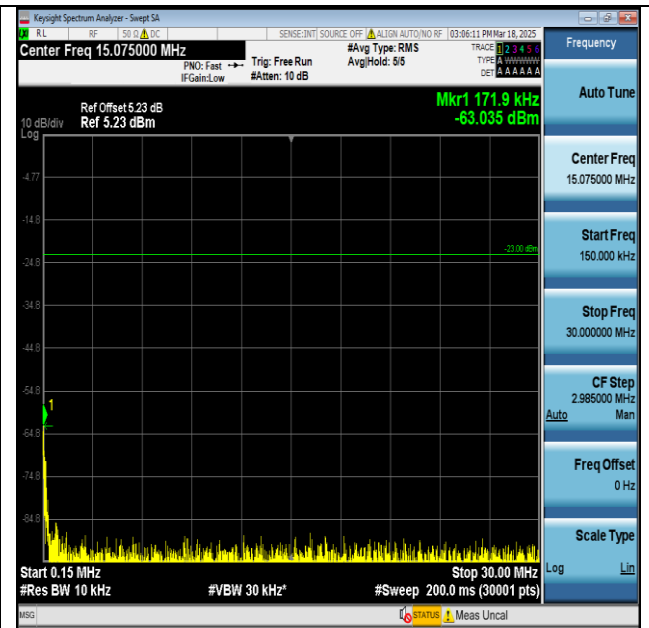
Conducted Spurious Emission for M1

Test Graphs

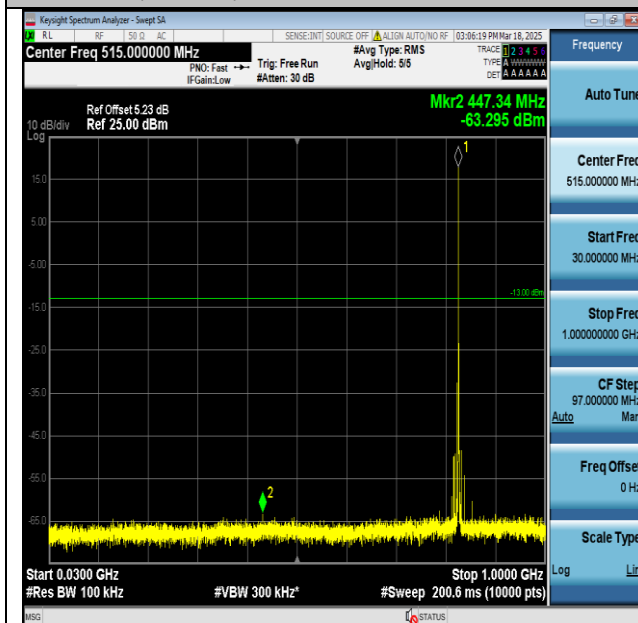




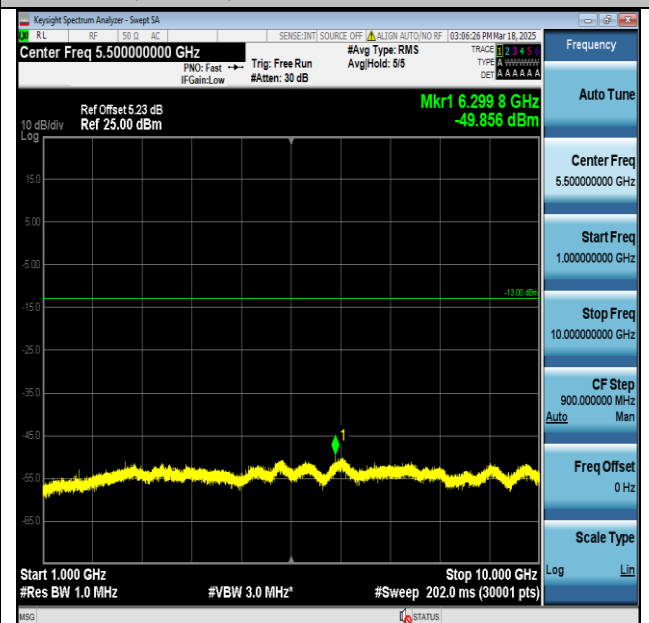
Band26(824-849)-15MHz-QPSK-26915-PASS1_Low



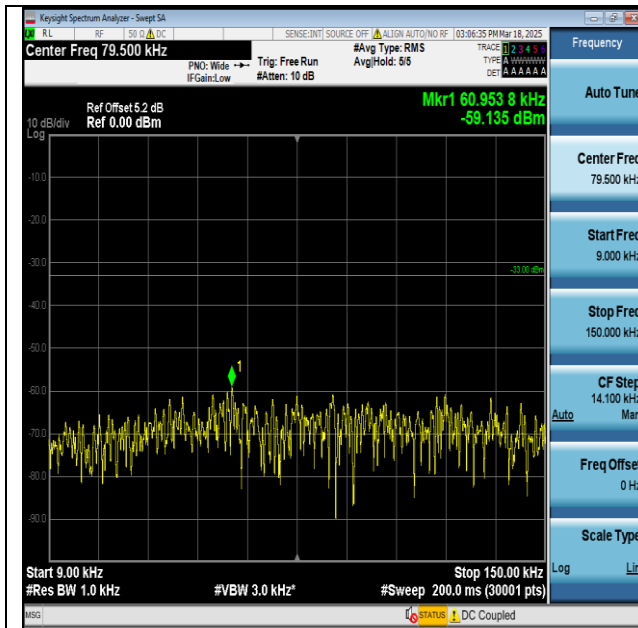
Band26(824-849)-15MHz-QPSK-26915-PASS1_Low



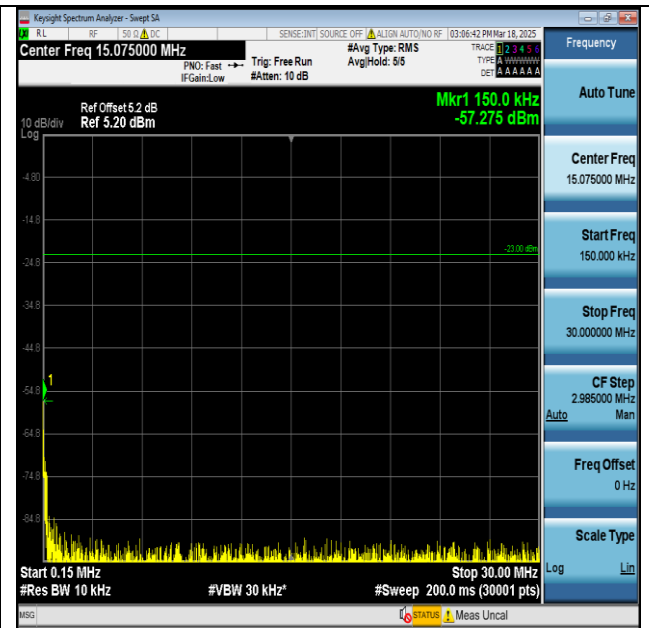
Band26(824-849)-15MHz-QPSK-26915-PASS1_Low



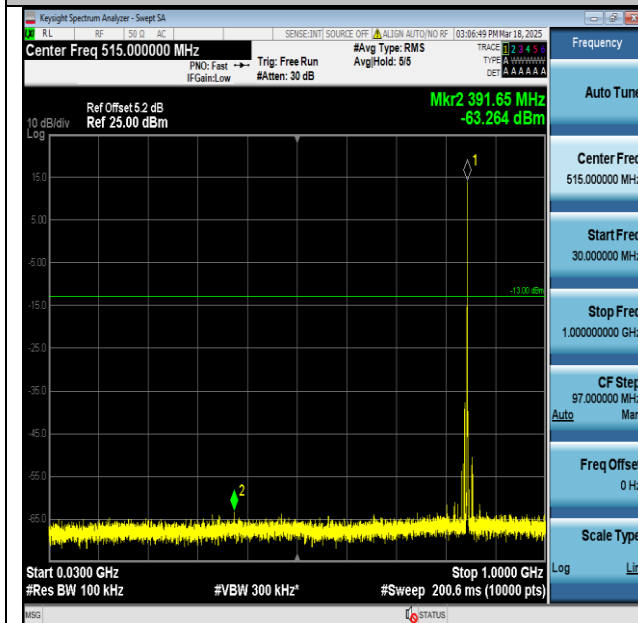
Band26(824-849)-15MHz-QPSK-26915-PASS1_Low



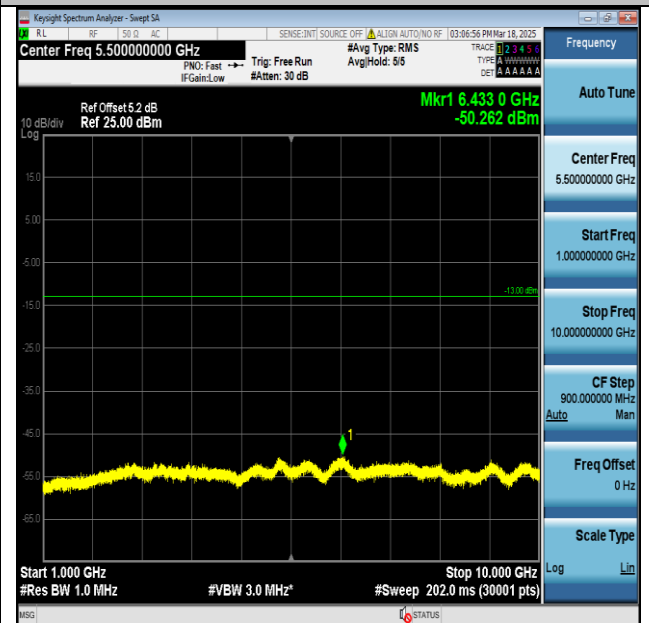
Band26(824-849)-15MHz-QPSK-26965-PASS_1_High



Band26(824-849)-15MHz-QPSK-26965-PASS_1_High



Band26(824-849)-15MHz-QPSK-26965-PASS_1_High



Band26(824-849)-15MHz-QPSK-26965-PASS_1_High

Frequency Stability for M1

Test Result

Voltage												
Band	Band width	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	VN	NT	-2.80	-0.003347	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	VL	NT	-4.10	-0.004901	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	VH	NT	-5.30	-0.006336	±2.5	PASS

Temperature												
Band	Band width	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	-30	-3.90	-0.004662	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	-20	-4.00	-0.004782	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	-10	-4.10	-0.004901	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	0	-2.70	-0.003228	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	10	-2.20	-0.002630	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	20	-2.30	-0.002750	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	30	-2.90	-0.003467	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	40	-2.30	-0.002750	±2.5	PASS
Band26(824-849)	15MHz	QPSK	26915	6	0	Low	NV	50	-3.80	-0.004543	±2.5	PASS

~The End~