

Appendix-B LTE Band 41

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band41	5MHz	QPSK	39675	1RB#0	24.82	26.53	33.01	PASS
Band41	5MHz	QPSK	39675	25RB#0	24.07	25.78	33.01	PASS
Band41	5MHz	QPSK	39675	1RB#12	24.74	26.45	33.01	PASS
Band41	5MHz	QPSK	39675	1RB#24	24.76	26.47	33.01	PASS
Band41	5MHz	QPSK	40620	1RB#0	24.49	26.20	33.01	PASS
Band41	5MHz	QPSK	40620	25RB#0	23.99	25.70	33.01	PASS
Band41	5MHz	QPSK	40620	1RB#12	24.38	26.09	33.01	PASS
Band41	5MHz	QPSK	40620	1RB#24	24.67	26.38	33.01	PASS
Band41	5MHz	QPSK	41565	1RB#0	24.52	26.23	33.01	PASS
Band41	5MHz	QPSK	41565	25RB#0	23.62	25.33	33.01	PASS
Band41	5MHz	QPSK	41565	1RB#12	24.25	25.96	33.01	PASS
Band41	5MHz	QPSK	41565	1RB#24	24.64	26.35	33.01	PASS
Band41	5MHz	16QAM	39675	1RB#0	24.57	26.28	33.01	PASS
Band41	5MHz	16QAM	39675	25RB#0	23.21	24.92	33.01	PASS
Band41	5MHz	16QAM	39675	1RB#12	24.13	25.84	33.01	PASS
Band41	5MHz	16QAM	39675	1RB#24	24.39	26.10	33.01	PASS
Band41	5MHz	16QAM	40620	1RB#0	23.88	25.59	33.01	PASS
Band41	5MHz	16QAM	40620	25RB#0	23.02	24.73	33.01	PASS
Band41	5MHz	16QAM	40620	1RB#12	23.64	25.35	33.01	PASS
Band41	5MHz	16QAM	40620	1RB#24	23.93	25.64	33.01	PASS
Band41	5MHz	16QAM	41565	1RB#0	23.76	25.47	33.01	PASS
Band41	5MHz	16QAM	41565	25RB#0	22.57	24.28	33.01	PASS
Band41	5MHz	16QAM	41565	1RB#12	23.46	25.17	33.01	PASS
Band41	5MHz	16QAM	41565	1RB#24	23.85	25.56	33.01	PASS
Band41	10MHz	QPSK	39700	1RB#0	24.68	26.39	33.01	PASS
Band41	10MHz	QPSK	39700	50RB#0	24.34	26.05	33.01	PASS
Band41	10MHz	QPSK	39700	1RB#24	24.82	26.53	33.01	PASS
Band41	10MHz	QPSK	39700	1RB#49	24.79	26.50	33.01	PASS
Band41	10MHz	QPSK	40620	1RB#0	24.7	26.41	33.01	PASS
Band41	10MHz	QPSK	40620	50RB#0	23.84	25.55	33.01	PASS
Band41	10MHz	QPSK	40620	1RB#24	24.65	26.36	33.01	PASS
Band41	10MHz	QPSK	40620	1RB#49	24.62	26.33	33.01	PASS
Band41	10MHz	QPSK	41540	1RB#0	24.51	26.22	33.01	PASS
Band41	10MHz	QPSK	41540	50RB#0	23.81	25.52	33.01	PASS
Band41	10MHz	QPSK	41540	1RB#24	24.5	26.21	33.01	PASS
Band41	10MHz	QPSK	41540	1RB#49	24.19	25.90	33.01	PASS

Band41	10MHz	16QAM	39700	1RB#0	24.62	26.33	33.01	PASS
Band41	10MHz	16QAM	39700	27RB#0	23.11	24.82	33.01	PASS
Band41	10MHz	16QAM	39700	1RB#24	24.47	26.18	33.01	PASS
Band41	10MHz	16QAM	39700	1RB#49	24.45	26.16	33.01	PASS
Band41	10MHz	16QAM	40620	1RB#0	24.01	25.72	33.01	PASS
Band41	10MHz	16QAM	40620	27RB#0	22.93	24.64	33.01	PASS
Band41	10MHz	16QAM	40620	1RB#24	23.91	25.62	33.01	PASS
Band41	10MHz	16QAM	40620	1RB#49	23.86	25.57	33.01	PASS
Band41	10MHz	16QAM	41540	1RB#0	23.76	25.47	33.01	PASS
Band41	10MHz	16QAM	41540	27RB#0	23.03	24.74	33.01	PASS
Band41	10MHz	16QAM	41540	1RB#24	23.78	25.49	33.01	PASS
Band41	10MHz	16QAM	41540	1RB#49	23.46	25.17	33.01	PASS
Band41	15MHz	QPSK	39725	1RB#0	24.96	26.67	33.01	PASS
Band41	15MHz	QPSK	39725	75RB#0	24.31	26.02	33.01	PASS
Band41	15MHz	QPSK	39725	1RB#38	24.78	26.49	33.01	PASS
Band41	15MHz	QPSK	39725	1RB#74	24.81	26.52	33.01	PASS
Band41	15MHz	QPSK	40620	1RB#0	24.56	26.27	33.01	PASS
Band41	15MHz	QPSK	40620	75RB#0	23.83	25.54	33.01	PASS
Band41	15MHz	QPSK	40620	1RB#38	24.45	26.16	33.01	PASS
Band41	15MHz	QPSK	40620	1RB#74	24.67	26.38	33.01	PASS
Band41	15MHz	QPSK	41515	1RB#0	24.46	26.17	33.01	PASS
Band41	15MHz	QPSK	41515	75RB#0	23.79	25.50	33.01	PASS
Band41	15MHz	QPSK	41515	1RB#38	24.32	26.03	33.01	PASS
Band41	15MHz	QPSK	41515	1RB#74	24.23	25.94	33.01	PASS
Band41	15MHz	16QAM	39725	1RB#0	24	25.71	33.01	PASS
Band41	15MHz	16QAM	39725	27RB#0	23.12	24.83	33.01	PASS
Band41	15MHz	16QAM	39725	1RB#38	24.04	25.75	33.01	PASS
Band41	15MHz	16QAM	39725	1RB#74	24.22	25.93	33.01	PASS
Band41	15MHz	16QAM	40620	1RB#0	23.72	25.43	33.01	PASS
Band41	15MHz	16QAM	40620	27RB#0	23.53	25.24	33.01	PASS
Band41	15MHz	16QAM	40620	1RB#38	23.69	25.40	33.01	PASS
Band41	15MHz	16QAM	40620	1RB#74	23.91	25.62	33.01	PASS
Band41	15MHz	16QAM	41515	1RB#0	23.68	25.39	33.01	PASS
Band41	15MHz	16QAM	41515	27RB#0	22.95	24.66	33.01	PASS
Band41	15MHz	16QAM	41515	1RB#38	23.53	25.24	33.01	PASS
Band41	15MHz	16QAM	41515	1RB#74	23.42	25.13	33.01	PASS
Band41	20MHz	QPSK	39750	1RB#0	24.93	26.64	33.01	PASS
Band41	20MHz	QPSK	39750	100RB#0	24.36	26.07	33.01	PASS
Band41	20MHz	QPSK	39750	1RB#49	24.94	26.65	33.01	PASS
Band41	20MHz	QPSK	39750	1RB#99	24.59	26.30	33.01	PASS
Band41	20MHz	QPSK	40620	1RB#0	24.69	26.40	33.01	PASS
Band41	20MHz	QPSK	40620	100RB#0	23.83	25.54	33.01	PASS
Band41	20MHz	QPSK	40620	1RB#49	24.64	26.35	33.01	PASS
Band41	20MHz	QPSK	40620	1RB#99	24.58	26.29	33.01	PASS
Band41	20MHz	QPSK	41490	1RB#0	24.37	26.08	33.01	PASS

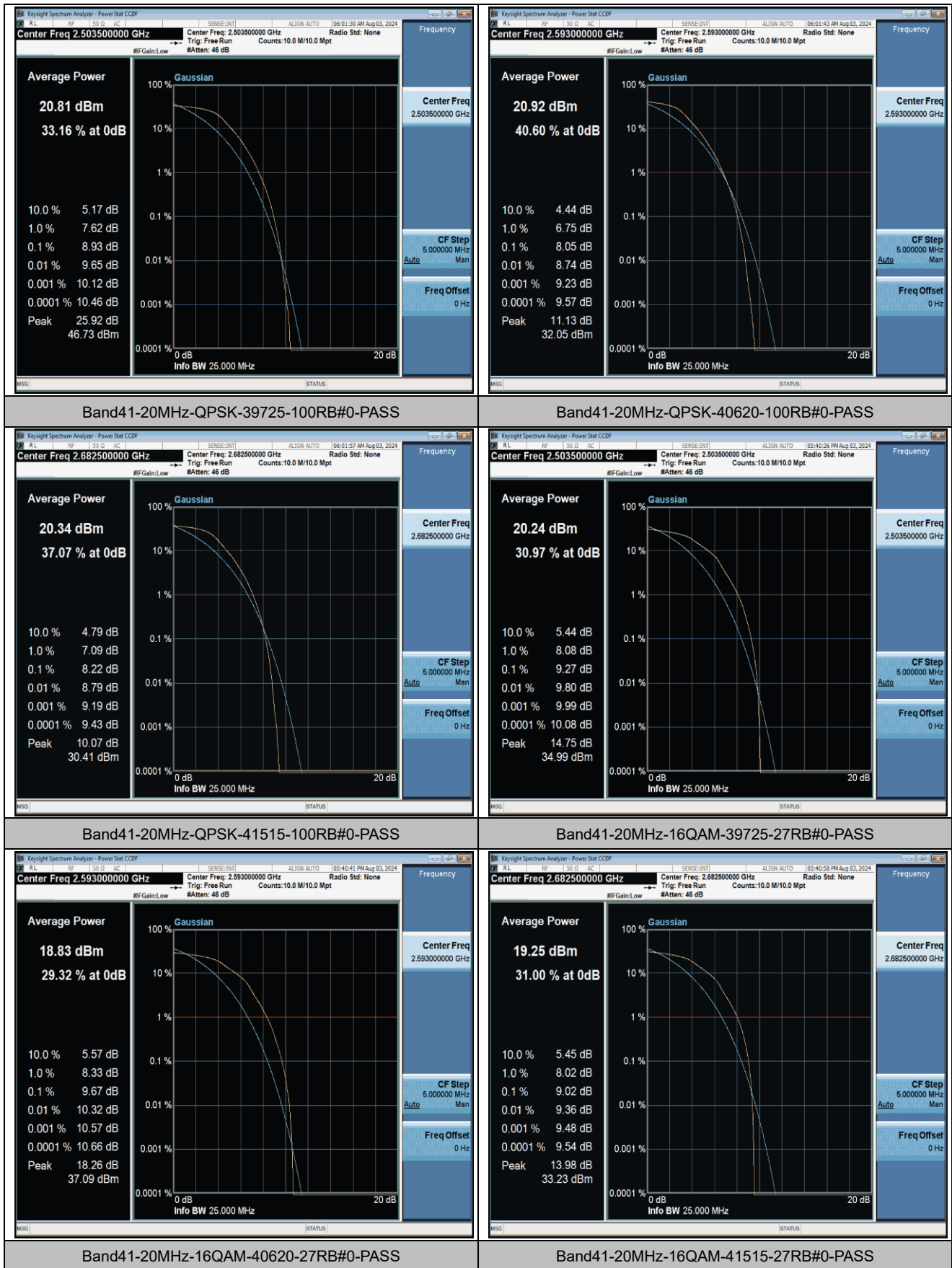
Band41	20MHz	QPSK	41490	100RB#0	23.79	25.50	33.01	PASS
Band41	20MHz	QPSK	41490	1RB#49	24.5	26.21	33.01	PASS
Band41	20MHz	QPSK	41490	1RB#99	24.15	25.86	33.01	PASS
Band41	20MHz	16QAM	39750	1RB#0	24.22	25.93	33.01	PASS
Band41	20MHz	16QAM	39750	27RB#0	23.58	25.29	33.01	PASS
Band41	20MHz	16QAM	39750	1RB#49	24.18	25.89	33.01	PASS
Band41	20MHz	16QAM	39750	1RB#99	24.35	26.06	33.01	PASS
Band41	20MHz	16QAM	40620	1RB#0	24.31	26.02	33.01	PASS
Band41	20MHz	16QAM	40620	27RB#0	22.91	24.62	33.01	PASS
Band41	20MHz	16QAM	40620	1RB#49	23.79	25.50	33.01	PASS
Band41	20MHz	16QAM	40620	1RB#99	23.8	25.51	33.01	PASS
Band41	20MHz	16QAM	41490	1RB#0	23.85	25.56	33.01	PASS
Band41	20MHz	16QAM	41490	27RB#0	22.8	24.51	33.01	PASS
Band41	20MHz	16QAM	41490	1RB#49	23.73	25.44	33.01	PASS
Band41	20MHz	16QAM	41490	1RB#99	23.27	24.98	33.01	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band41	20MHz	QPSK	39725	100RB#0	8.93	13	PASS
Band41	20MHz	QPSK	40620	100RB#0	8.05	13	PASS
Band41	20MHz	QPSK	41515	100RB#0	8.22	13	PASS
Band41	20MHz	16QAM	39725	27RB#0	9.27	13	PASS
Band41	20MHz	16QAM	40620	27RB#0	9.67	13	PASS
Band41	20MHz	16QAM	41515	27RB#0	9.02	13	PASS

Test Graphs

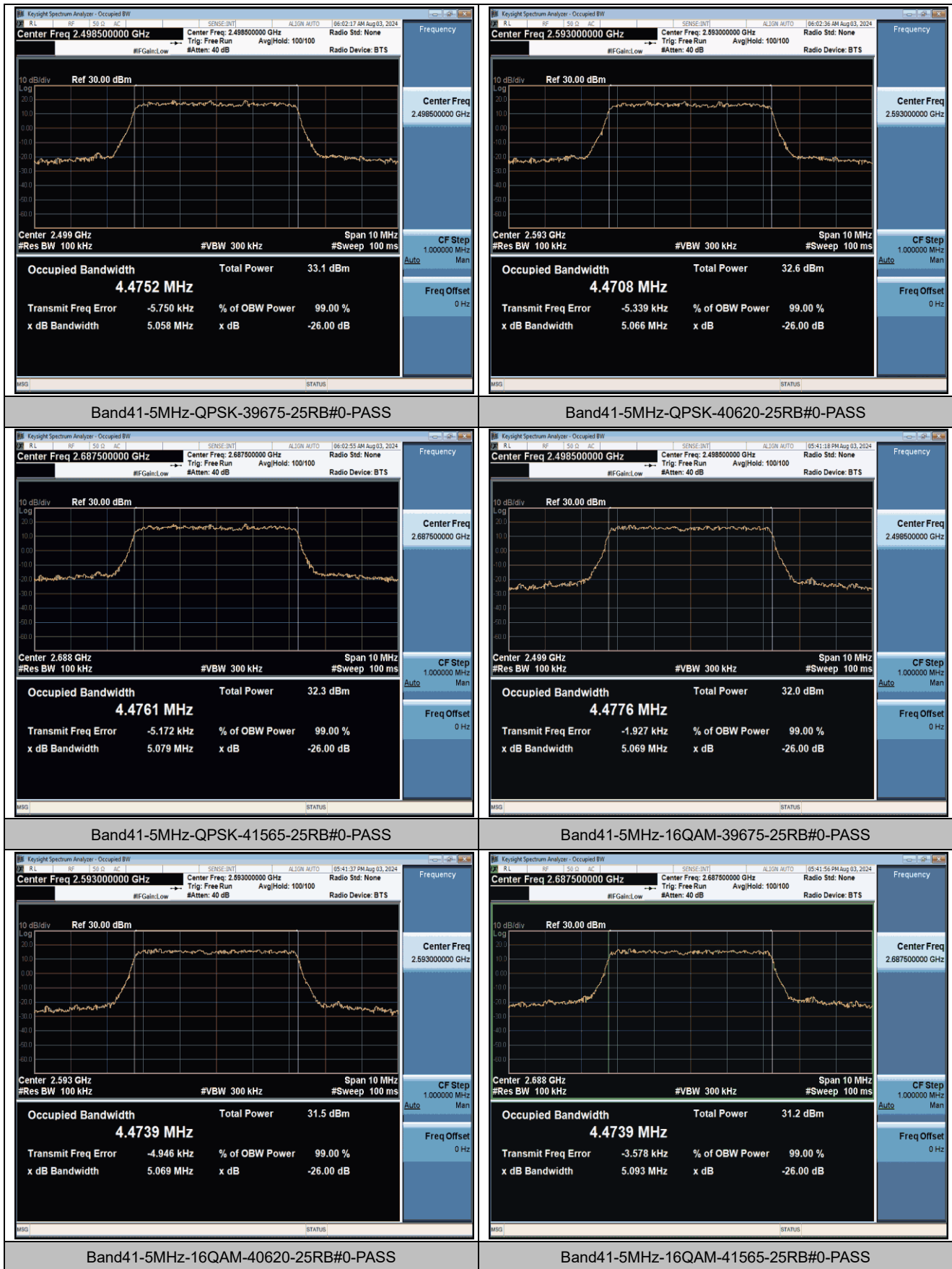


26dB Bandwidth and Occupied Bandwidth

Test Result

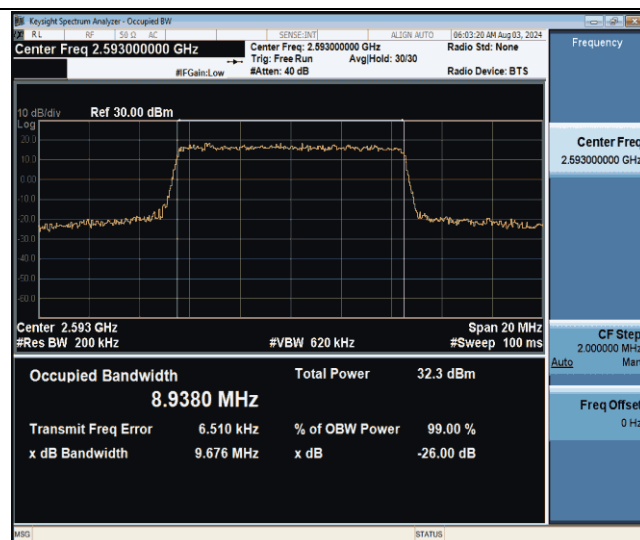
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band41	5MHz	QPSK	39675	25RB#0	4.4752	5.058	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.4708	5.066	PASS
Band41	5MHz	QPSK	41565	25RB#0	4.4761	5.079	PASS
Band41	5MHz	16QAM	39675	25RB#0	4.4776	5.069	PASS
Band41	5MHz	16QAM	40620	25RB#0	4.4739	5.069	PASS
Band41	5MHz	16QAM	41565	25RB#0	4.4739	5.093	PASS
Band41	10MHz	QPSK	39700	50RB#0	8.9328	9.679	PASS
Band41	10MHz	QPSK	40620	50RB#0	8.9380	9.676	PASS
Band41	10MHz	QPSK	41540	50RB#0	8.9457	9.631	PASS
Band41	10MHz	16QAM	39700	27RB#0	5.1925	7.542	PASS
Band41	10MHz	16QAM	40620	27RB#0	5.1804	7.623	PASS
Band41	10MHz	16QAM	41540	27RB#0	5.1798	7.481	PASS
Band41	15MHz	QPSK	39725	75RB#0	13.506	16.22	PASS
Band41	15MHz	QPSK	40620	75RB#0	13.519	16.21	PASS
Band41	15MHz	QPSK	41515	75RB#0	13.530	16.20	PASS
Band41	15MHz	16QAM	39725	27RB#0	5.7216	8.962	PASS
Band41	15MHz	16QAM	40620	27RB#0	5.7974	9.465	PASS
Band41	15MHz	16QAM	41515	27RB#0	5.7752	8.814	PASS
Band41	20MHz	QPSK	39750	100RB#0	17.989	20.97	PASS
Band41	20MHz	QPSK	40620	100RB#0	17.981	21.01	PASS
Band41	20MHz	QPSK	41490	100RB#0	17.987	21.22	PASS
Band41	20MHz	16QAM	39750	27RB#0	6.3268	10.12	PASS
Band41	20MHz	16QAM	40620	27RB#0	6.3600	10.38	PASS
Band41	20MHz	16QAM	41490	27RB#0	6.2670	10.36	PASS

Test Graphs

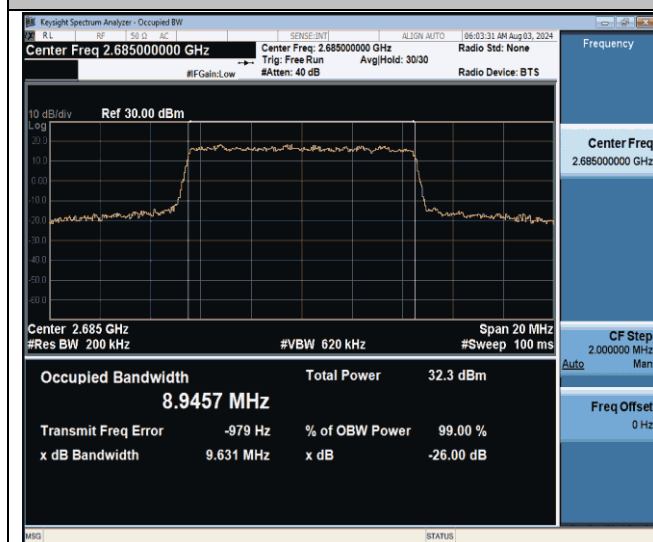




Band41-10MHz-QPSK-39700-50RB#0-PASS



Band41-10MHz-QPSK-40620-50RB#0-PASS



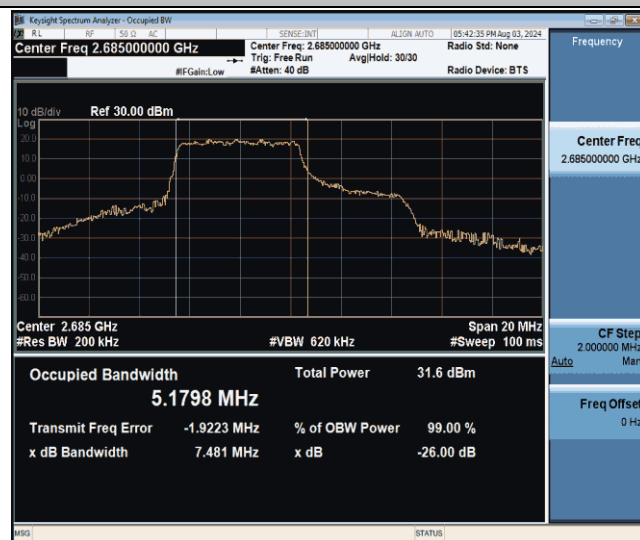
Band41-10MHz-QPSK-41540-50RB#0-PASS



Band41-10MHz-16QAM-39700-27RB#0-PASS



Band41-10MHz-16QAM-40620-27RB#0-PASS



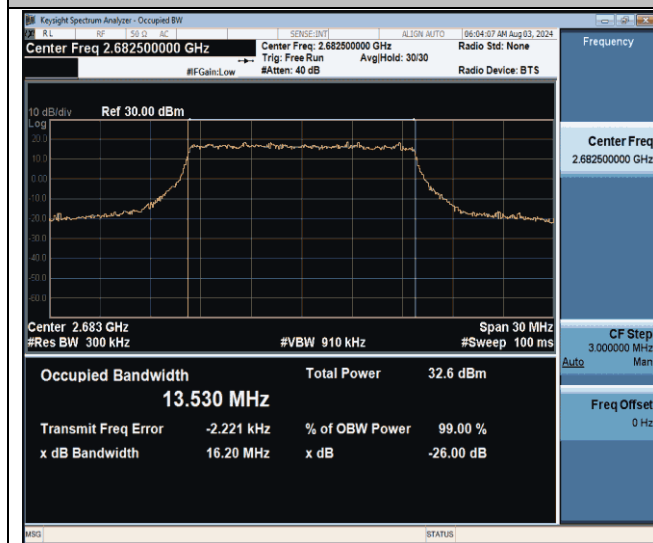
Band41-10MHz-16QAM-41540-27RB#0-PASS



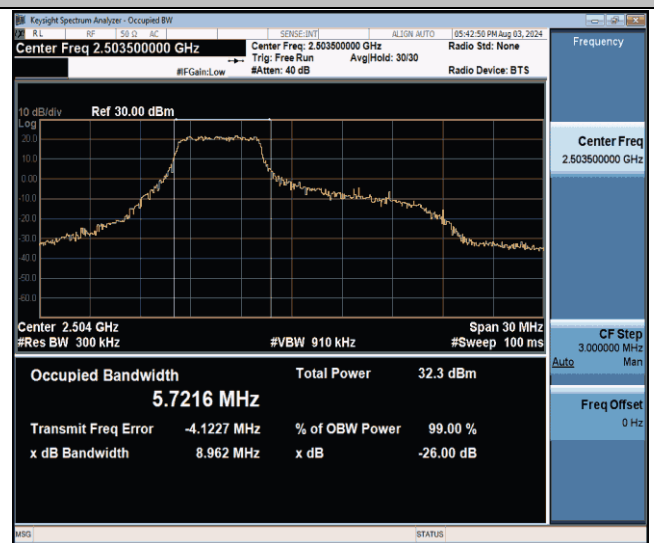
Band41-15MHz-QPSK-39725-75RB#0-PASS



Band41-15MHz-QPSK-40620-75RB#0-PASS



Band41-15MHz-QPSK-41515-75RB#0-PASS



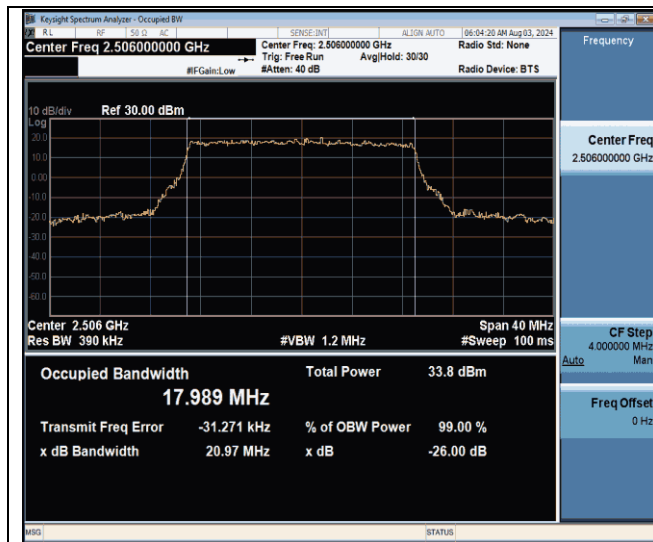
Band41-15MHz-16QAM-39725-27RB#0-PASS



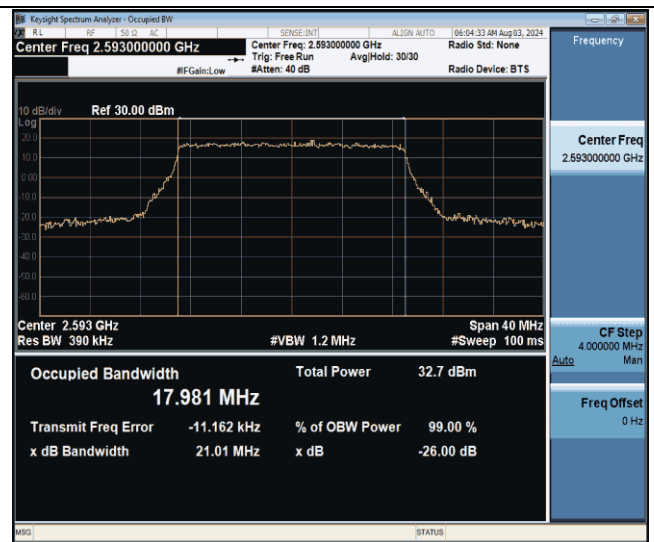
Band41-15MHz-16QAM-40620-27RB#0-PASS



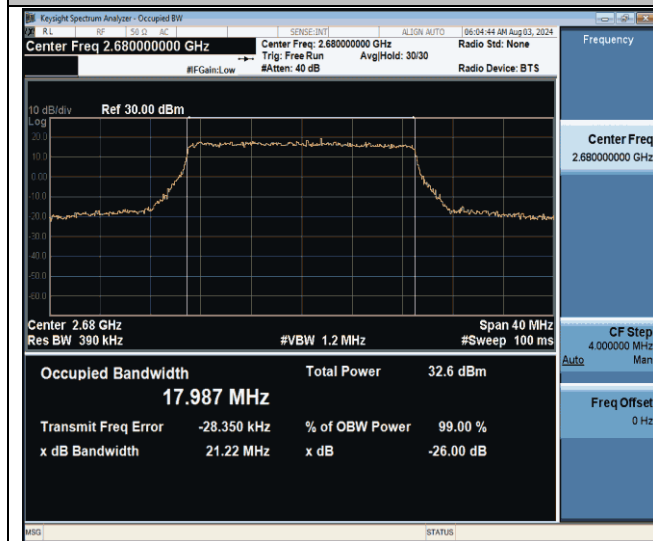
Band41-15MHz-16QAM-41515-27RB#0-PASS



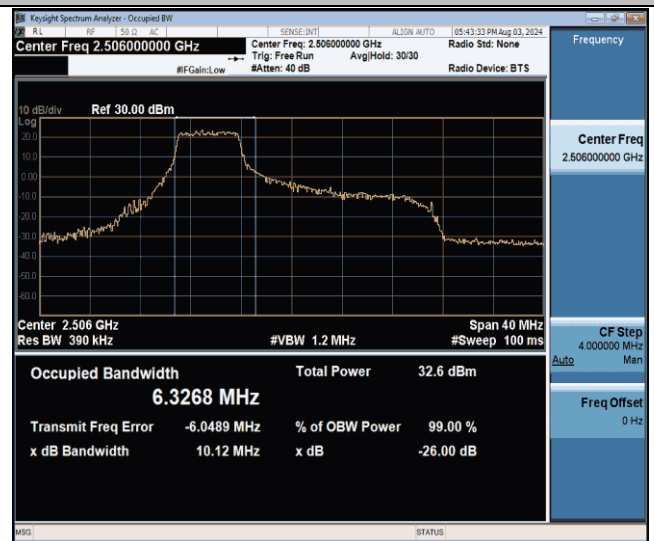
Band41-20MHz-QPSK-39750-100RB#0-PASS



Band41-20MHz-QPSK-40620-100RB#0-PASS



Band41-20MHz-QPSK-41490-100RB#0-PASS



Band41-20MHz-16QAM-39750-27RB#0-PASS



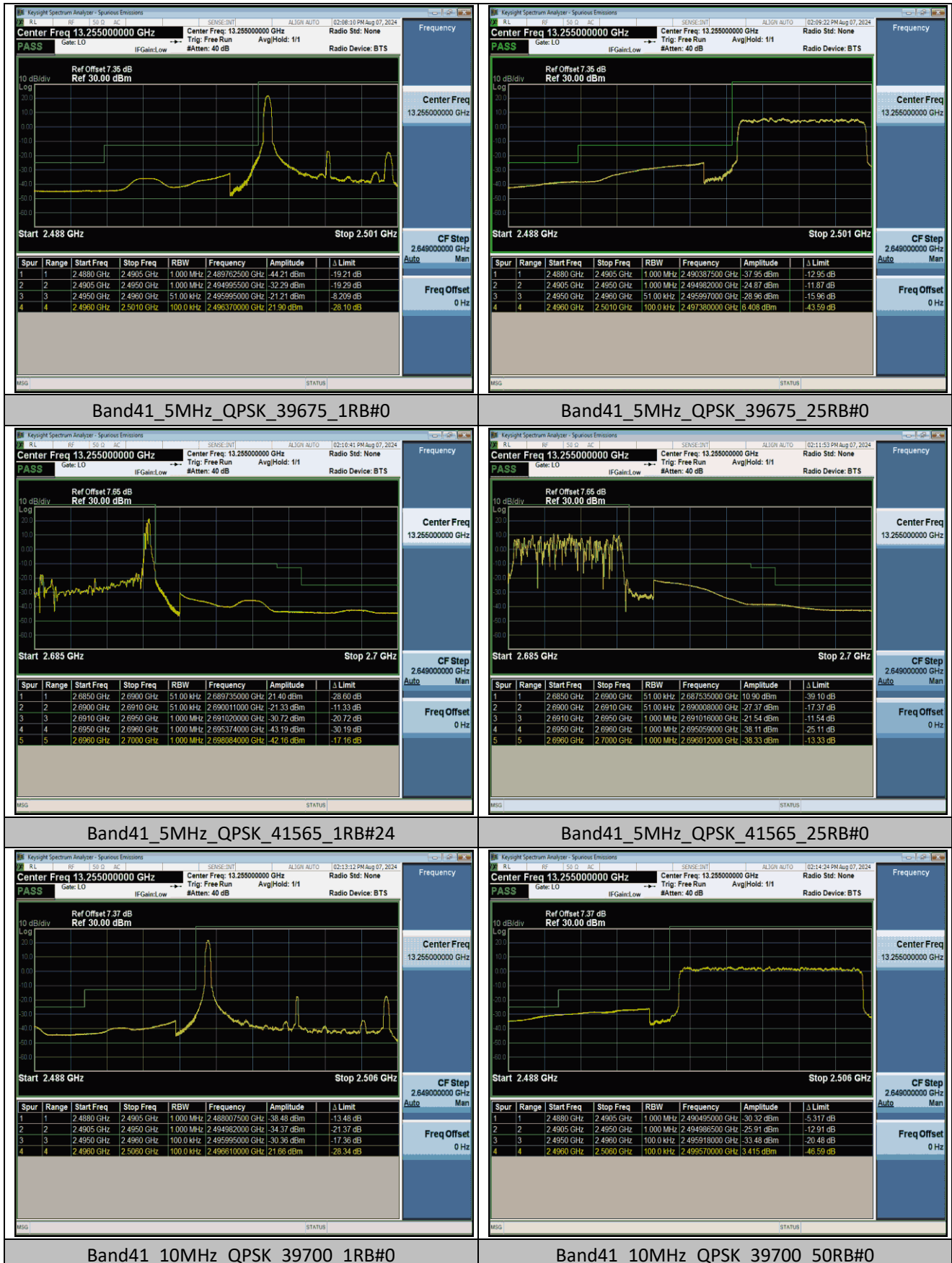
Band41-20MHz-16QAM-40620-27RB#0-PASS

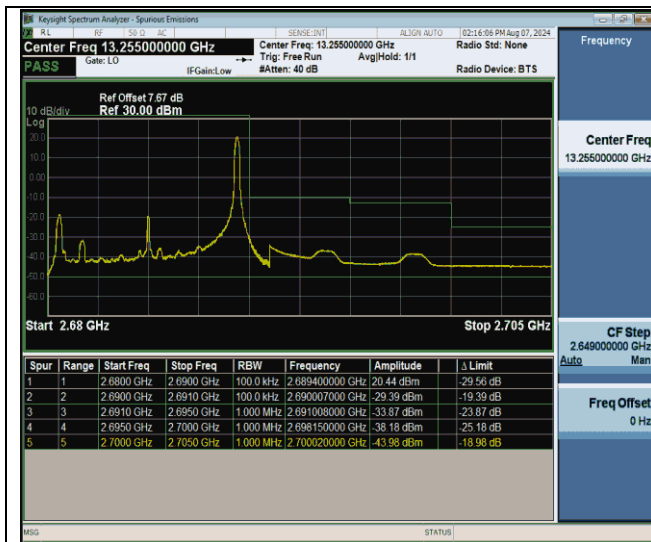


Band41-20MHz-16QAM-41490-27RB#0-PASS

Band Edge

Test Graphs

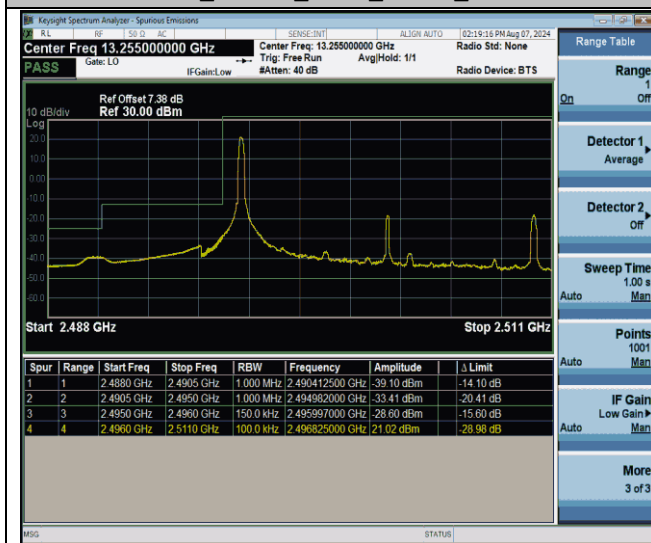




Band41_10MHz_QPSK_41540_1RB#49



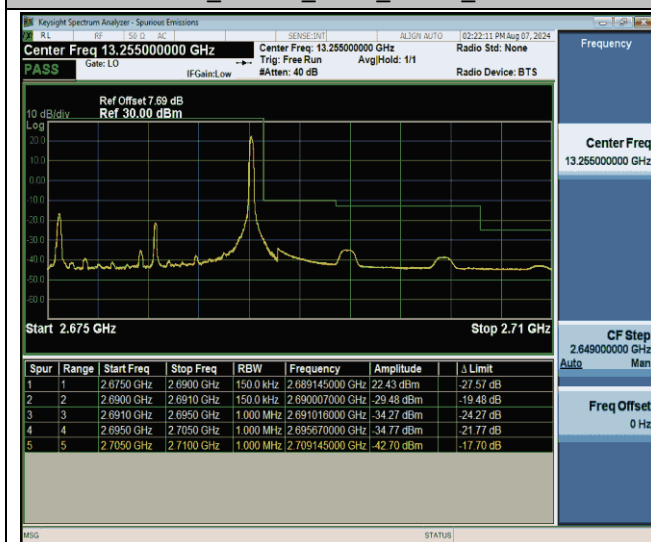
Band41_10MHz_QPSK_41540_50RB#0



Band41_15MHz_QPSK_39725_1RB#0



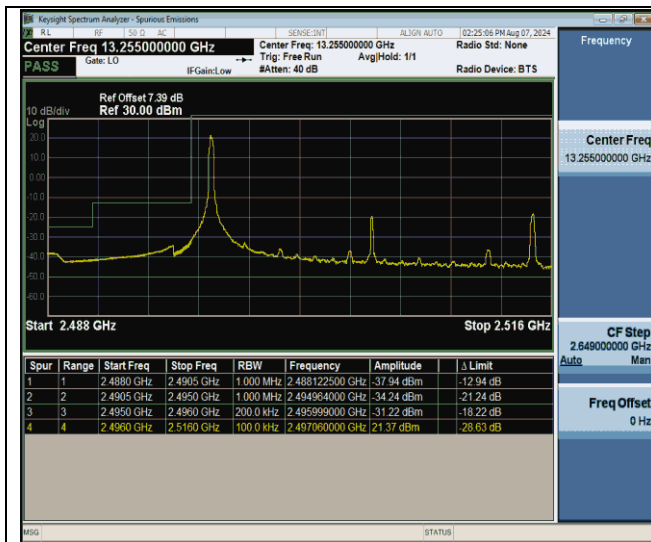
Band41_15MHz_QPSK_39725_75RB#0



Band41_15MHz_QPSK_41515_1RB#74



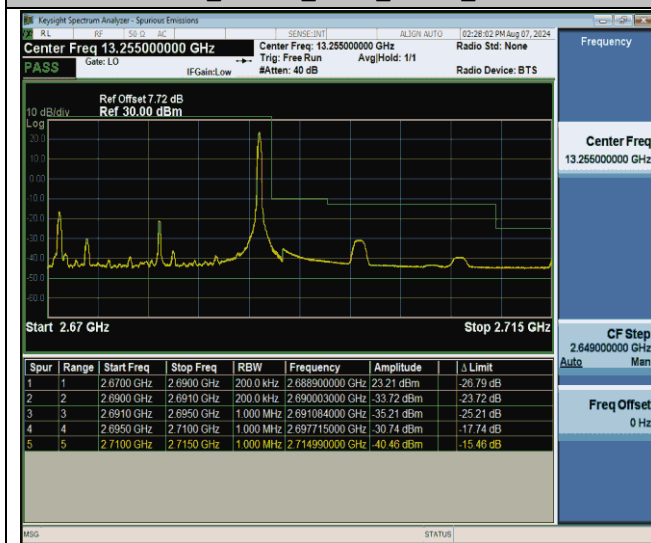
Band41_15MHz_QPSK_41515_75RB#0



Band41_20MHz_QPSK_39750_1RB#0



Band41_20MHz_QPSK_39750_100RB#0



Band41_20MHz_QPSK_41490_1RB#99

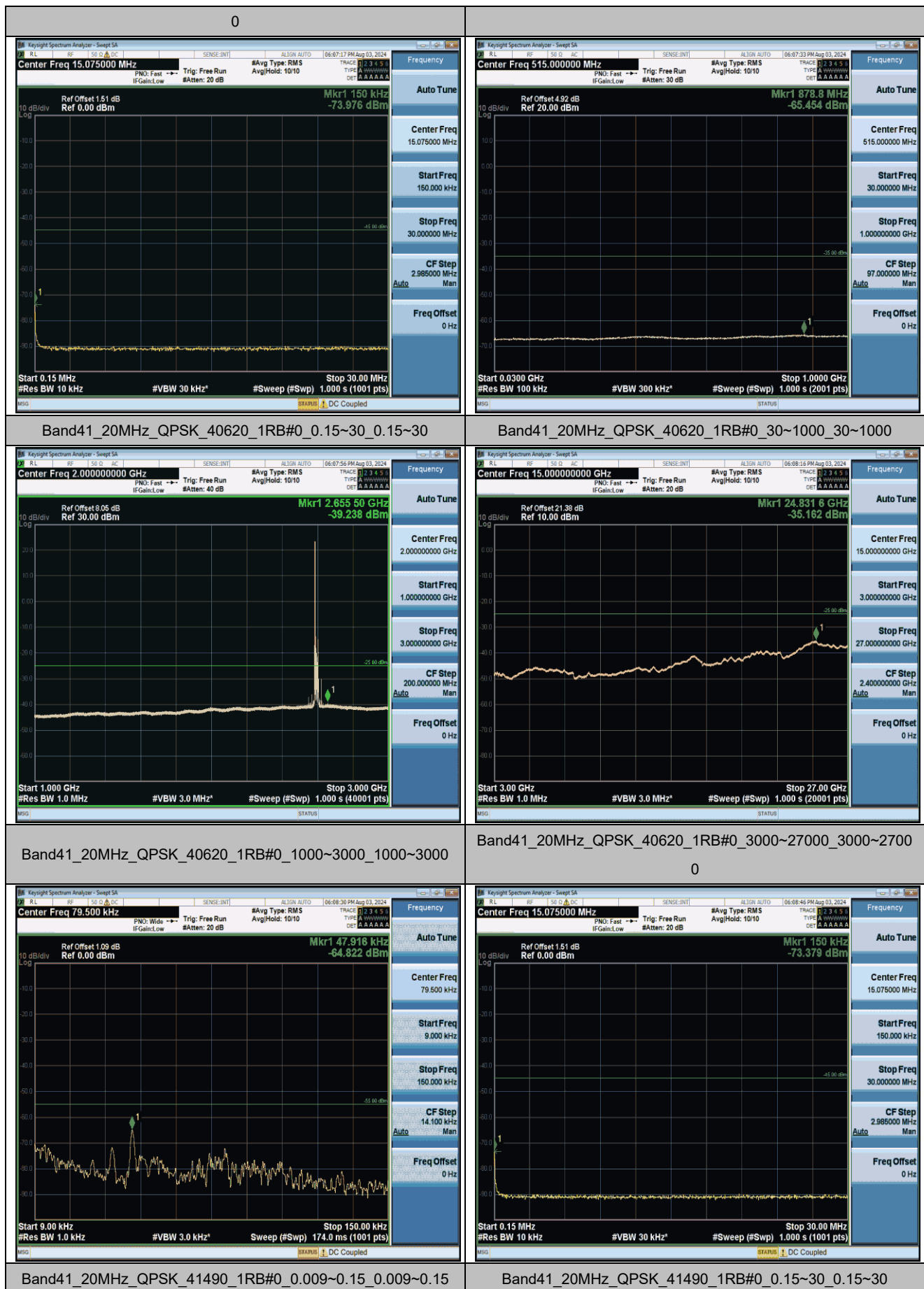


Band41_20MHz_QPSK_41490_100RB#0

Conducted Spurious Emission

Test Graphs







Band41_20MHz_QPSK_41490_1RB#0_30~1000_30~1000



Band41_20MHz_QPSK_41490_1RB#0_1000~3000_1000~3000



Band41_20MHz_QPSK_41490_1RB#0_3000~27000_3000~2700

0

Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band41	20MHz	QPSK	40620	100RB#0	VN	NT	-20.59	-0.007941	PASS
Band41	20MHz	QPSK	40620	100RB#0	VL	NT	-8.03	-0.003097	PASS
Band41	20MHz	QPSK	40620	100RB#0	VH	NT	-12.67	-0.004886	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band41	20MHz	QPSK	40620	100RB#0	NV	-30	-13.02	-0.005021	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-20	-16.54	-0.006379	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	-10	-13.62	-0.005253	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	0	18.18	0.007011	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	10	-13.28	-0.005121	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	20	-15.59	-0.006012	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	30	-7.81	-0.003012	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	40	-12.57	-0.004848	PASS
Band41	20MHz	QPSK	40620	100RB#0	NV	50	-7.61	-0.002935	PASS