

Appendix-B LTE Band 7

Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	24.16	26.37	33.01	PASS
Band7	5MHz	QPSK	20775	25RB#0	23.72	25.93	33.01	PASS
Band7	5MHz	QPSK	20775	1RB#12	23.72	25.93	33.01	PASS
Band7	5MHz	QPSK	20775	1RB#24	24.68	26.89	33.01	PASS
Band7	5MHz	QPSK	21100	1RB#0	24.24	26.45	33.01	PASS
Band7	5MHz	QPSK	21100	25RB#0	23.41	25.62	33.01	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.33	25.54	33.01	PASS
Band7	5MHz	QPSK	21100	1RB#24	24.31	26.52	33.01	PASS
Band7	5MHz	QPSK	21425	1RB#0	24.69	26.90	33.01	PASS
Band7	5MHz	QPSK	21425	25RB#0	23.51	25.72	33.01	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.6	25.81	33.01	PASS
Band7	5MHz	QPSK	21425	1RB#24	24.07	26.28	33.01	PASS
Band7	5MHz	16QAM	20775	1RB#0	23.44	25.65	33.01	PASS
Band7	5MHz	16QAM	20775	25RB#0	22.75	24.96	33.01	PASS
Band7	5MHz	16QAM	20775	1RB#12	23.11	25.32	33.01	PASS
Band7	5MHz	16QAM	20775	1RB#24	24	26.21	33.01	PASS
Band7	5MHz	16QAM	21100	1RB#0	23.43	25.64	33.01	PASS
Band7	5MHz	16QAM	21100	25RB#0	22.34	24.55	33.01	PASS
Band7	5MHz	16QAM	21100	1RB#12	22.49	24.70	33.01	PASS
Band7	5MHz	16QAM	21100	1RB#24	23.5	25.71	33.01	PASS
Band7	5MHz	16QAM	21425	1RB#0	23.86	26.07	33.01	PASS
Band7	5MHz	16QAM	21425	25RB#0	22.38	24.59	33.01	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.67	24.88	33.01	PASS
Band7	5MHz	16QAM	21425	1RB#24	23.25	25.46	33.01	PASS
Band7	10MHz	QPSK	20800	1RB#0	24.23	26.44	33.01	PASS
Band7	10MHz	QPSK	20800	50RB#0	23.9	26.11	33.01	PASS
Band7	10MHz	QPSK	20800	1RB#24	24.04	26.25	33.01	PASS
Band7	10MHz	QPSK	20800	1RB#49	24.82	27.03	33.01	PASS
Band7	10MHz	QPSK	21100	1RB#0	24.22	26.43	33.01	PASS
Band7	10MHz	QPSK	21100	50RB#0	23.42	25.63	33.01	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.61	25.82	33.01	PASS
Band7	10MHz	QPSK	21100	1RB#49	24.57	26.78	33.01	PASS
Band7	10MHz	QPSK	21400	1RB#0	24.78	26.99	33.01	PASS
Band7	10MHz	QPSK	21400	50RB#0	23.77	25.98	33.01	PASS
Band7	10MHz	QPSK	21400	1RB#24	23.83	26.04	33.01	PASS
Band7	10MHz	QPSK	21400	1RB#49	24.13	26.34	33.01	PASS

Band7	10MHz	16QAM	20800	1RB#0	23.46	25.67	33.01	PASS
Band7	10MHz	16QAM	20800	27RB#0	22.49	24.70	33.01	PASS
Band7	10MHz	16QAM	20800	1RB#24	23.28	25.49	33.01	PASS
Band7	10MHz	16QAM	20800	1RB#49	23.91	26.12	33.01	PASS
Band7	10MHz	16QAM	21100	1RB#0	23.37	25.58	33.01	PASS
Band7	10MHz	16QAM	21100	27RB#0	21.99	24.20	33.01	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.61	24.82	33.01	PASS
Band7	10MHz	16QAM	21100	1RB#49	23.69	25.90	33.01	PASS
Band7	10MHz	16QAM	21400	1RB#0	23.81	26.02	33.01	PASS
Band7	10MHz	16QAM	21400	27RB#0	22.25	24.46	33.01	PASS
Band7	10MHz	16QAM	21400	1RB#24	22.8	25.01	33.01	PASS
Band7	10MHz	16QAM	21400	1RB#49	23.14	25.35	33.01	PASS
Band7	15MHz	QPSK	20825	1RB#0	24.36	26.57	33.01	PASS
Band7	15MHz	QPSK	20825	75RB#0	23.69	25.90	33.01	PASS
Band7	15MHz	QPSK	20825	1RB#38	23.87	26.08	33.01	PASS
Band7	15MHz	QPSK	20825	1RB#74	24.78	26.99	33.01	PASS
Band7	15MHz	QPSK	21100	1RB#0	24.15	26.36	33.01	PASS
Band7	15MHz	QPSK	21100	75RB#0	23.41	25.62	33.01	PASS
Band7	15MHz	QPSK	21100	1RB#38	23.41	25.62	33.01	PASS
Band7	15MHz	QPSK	21100	1RB#74	24.34	26.55	33.01	PASS
Band7	15MHz	QPSK	21375	1RB#0	24.16	26.37	33.01	PASS
Band7	15MHz	QPSK	21375	75RB#0	23.73	25.94	33.01	PASS
Band7	15MHz	QPSK	21375	1RB#38	23.69	25.90	33.01	PASS
Band7	15MHz	QPSK	21375	1RB#74	24.36	26.57	33.01	PASS
Band7	15MHz	16QAM	20825	1RB#0	23.39	25.60	33.01	PASS
Band7	15MHz	16QAM	20825	27RB#0	23	25.21	33.01	PASS
Band7	15MHz	16QAM	20825	1RB#38	22.9	25.11	33.01	PASS
Band7	15MHz	16QAM	20825	1RB#74	24.03	26.24	33.01	PASS
Band7	15MHz	16QAM	21100	1RB#0	23.54	25.75	33.01	PASS
Band7	15MHz	16QAM	21100	27RB#0	22.16	24.37	33.01	PASS
Band7	15MHz	16QAM	21100	1RB#38	22.8	25.01	33.01	PASS
Band7	15MHz	16QAM	21100	1RB#74	23.42	25.63	33.01	PASS
Band7	15MHz	16QAM	21375	1RB#0	23.62	25.83	33.01	PASS
Band7	15MHz	16QAM	21375	27RB#0	22.44	24.65	33.01	PASS
Band7	15MHz	16QAM	21375	1RB#38	23.14	25.35	33.01	PASS
Band7	15MHz	16QAM	21375	1RB#74	23.47	25.68	33.01	PASS
Band7	20MHz	QPSK	20850	1RB#0	24.46	26.67	33.01	PASS
Band7	20MHz	QPSK	20850	100RB#0	23.7	25.91	33.01	PASS
Band7	20MHz	QPSK	20850	1RB#49	23.94	26.15	33.01	PASS
Band7	20MHz	QPSK	20850	1RB#99	24.96	27.17	33.01	PASS
Band7	20MHz	QPSK	21100	1RB#0	24.37	26.58	33.01	PASS
Band7	20MHz	QPSK	21100	100RB#0	23.49	25.70	33.01	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.52	25.73	33.01	PASS
Band7	20MHz	QPSK	21100	1RB#99	24.57	26.78	33.01	PASS
Band7	20MHz	QPSK	21350	1RB#0	24.25	26.46	33.01	PASS

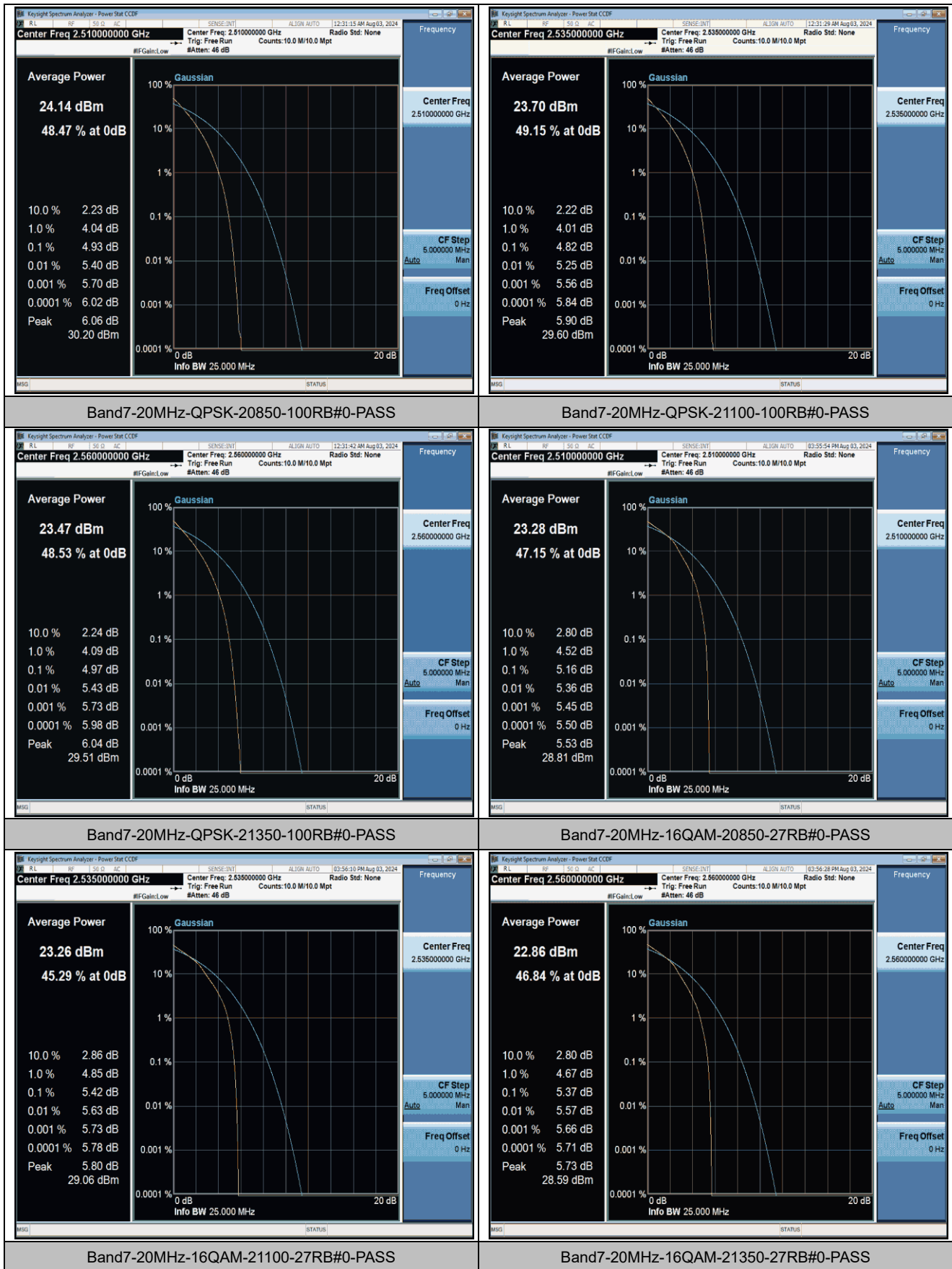
Band7	20MHz	QPSK	21350	100RB#0	23.55	25.76	33.01	PASS
Band7	20MHz	QPSK	21350	1RB#49	23.84	26.05	33.01	PASS
Band7	20MHz	QPSK	21350	1RB#99	24.56	26.77	33.01	PASS
Band7	20MHz	16QAM	20850	1RB#0	23.44	25.65	33.01	PASS
Band7	20MHz	16QAM	20850	27RB#0	22.45	24.66	33.01	PASS
Band7	20MHz	16QAM	20850	1RB#49	23.06	25.27	33.01	PASS
Band7	20MHz	16QAM	20850	1RB#99	24.02	26.23	33.01	PASS
Band7	20MHz	16QAM	21100	1RB#0	23.89	26.10	33.01	PASS
Band7	20MHz	16QAM	21100	27RB#0	22.49	24.70	33.01	PASS
Band7	20MHz	16QAM	21100	1RB#49	23.05	25.26	33.01	PASS
Band7	20MHz	16QAM	21100	1RB#99	23.74	25.95	33.01	PASS
Band7	20MHz	16QAM	21350	1RB#0	23.36	25.57	33.01	PASS
Band7	20MHz	16QAM	21350	27RB#0	22.6	24.81	33.01	PASS
Band7	20MHz	16QAM	21350	1RB#49	23.31	25.52	33.01	PASS
Band7	20MHz	16QAM	21350	1RB#99	23.71	25.92	33.01	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band7	20MHz	QPSK	20850	100RB#0	4.93	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	4.82	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	4.97	13	PASS
Band7	20MHz	16QAM	20850	27RB#0	5.16	13	PASS
Band7	20MHz	16QAM	21100	27RB#0	5.42	13	PASS
Band7	20MHz	16QAM	21350	27RB#0	5.37	13	PASS

Test Graphs

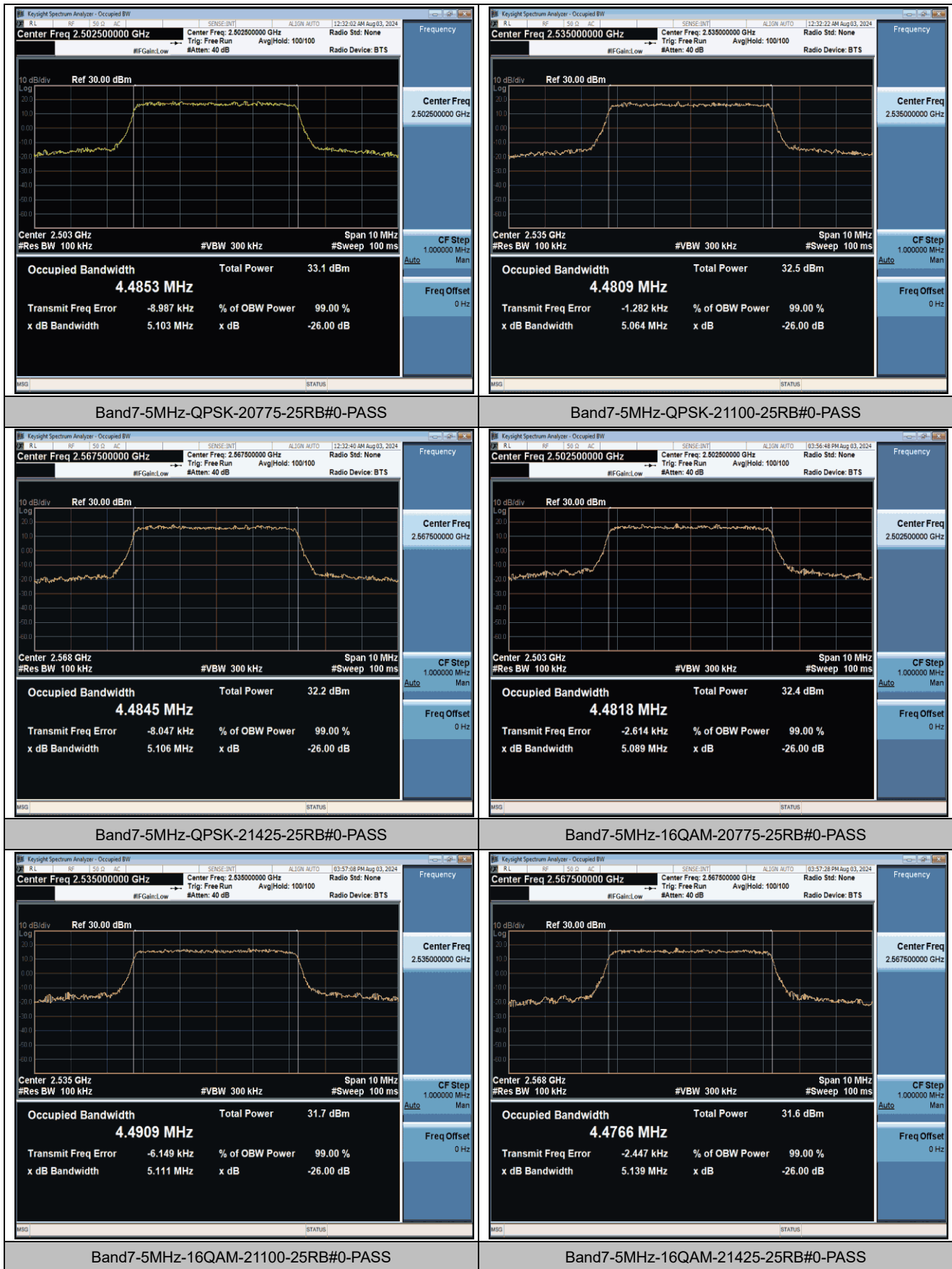


26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4853	5.103	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4809	5.064	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4845	5.106	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.4818	5.089	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.4909	5.111	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4766	5.139	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9189	9.686	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9312	9.698	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9444	9.714	PASS
Band7	10MHz	16QAM	20800	27RB#0	5.1769	7.938	PASS
Band7	10MHz	16QAM	21100	27RB#0	5.2632	8.201	PASS
Band7	10MHz	16QAM	21400	27RB#0	5.1593	7.979	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.544	16.46	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.566	16.91	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.558	16.61	PASS
Band7	15MHz	16QAM	20825	27RB#0	5.8429	9.158	PASS
Band7	15MHz	16QAM	21100	27RB#0	5.7396	8.331	PASS
Band7	15MHz	16QAM	21375	27RB#0	5.7610	8.824	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.981	21.04	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.993	21.26	PASS
Band7	20MHz	QPSK	21350	100RB#0	18.016	21.23	PASS
Band7	20MHz	16QAM	20850	27RB#0	7.0125	10.28	PASS
Band7	20MHz	16QAM	21100	27RB#0	7.2945	13.24	PASS
Band7	20MHz	16QAM	21350	27RB#0	6.8994	10.79	PASS

Test Graphs

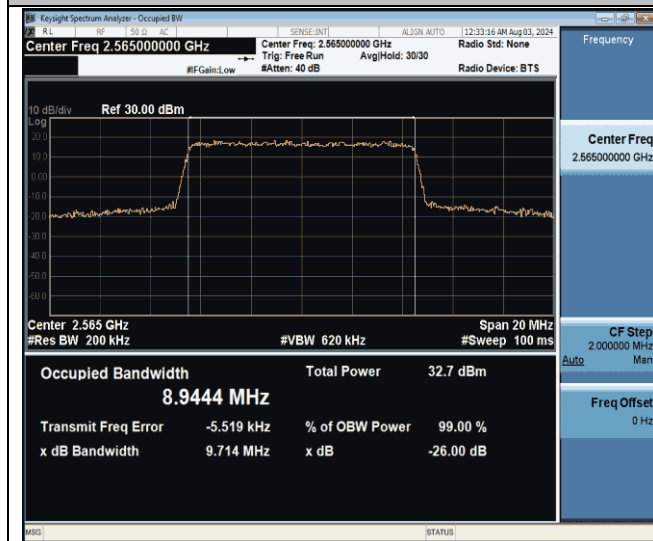




Band7-10MHz-QPSK-20800-50RB#0-PASS



Band7-10MHz-QPSK-21100-50RB#0-PASS



Band7-10MHz-QPSK-21400-50RB#0-PASS



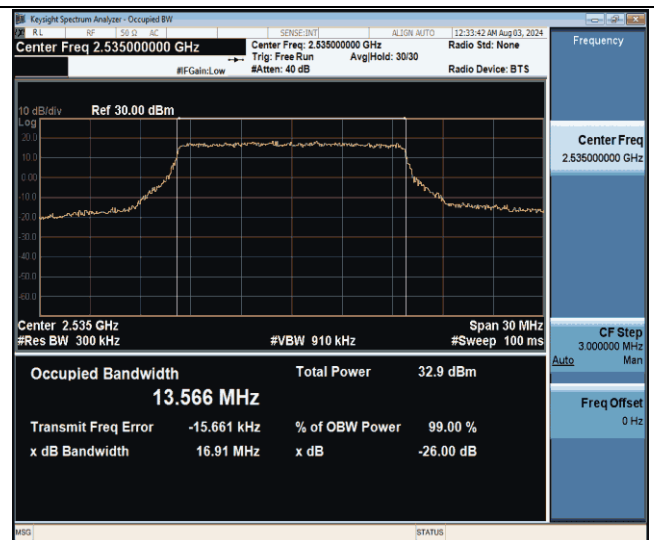
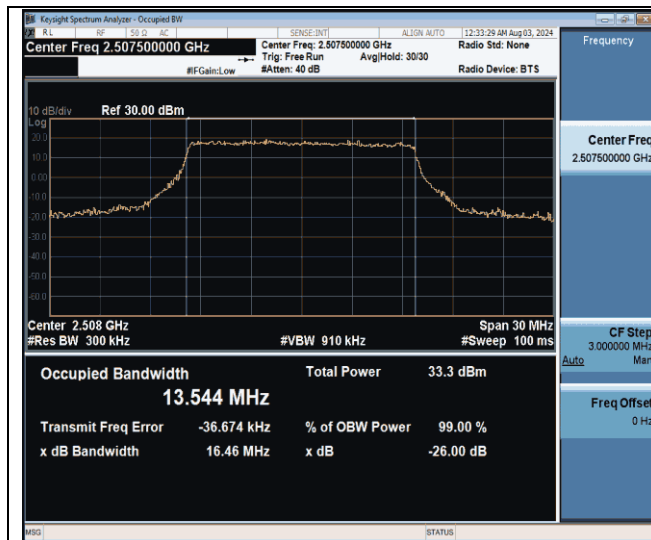
Band7-10MHz-16QAM-20800-27RB#0-PASS



Band7-10MHz-16QAM-21100-27RB#0-PASS



Band7-10MHz-16QAM-21400-27RB#0-PASS



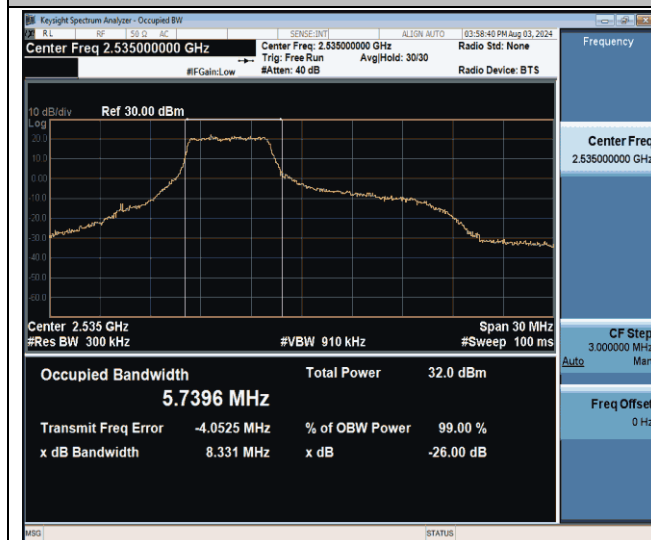
Band7-15MHz-QPSK-20825-75RB#0-PASS

Band7-15MHz-QPSK-21100-75RB#0-PASS



Band7-15MHz-QPSK-21375-75RB#0-PASS

Band7-15MHz-16QAM-20825-27RB#0-PASS



Band7-15MHz-16QAM-21100-27RB#0-PASS

Band7-15MHz-16QAM-21375-27RB#0-PASS



Band7-20MHz-QPSK-20850-100RB#0-PASS



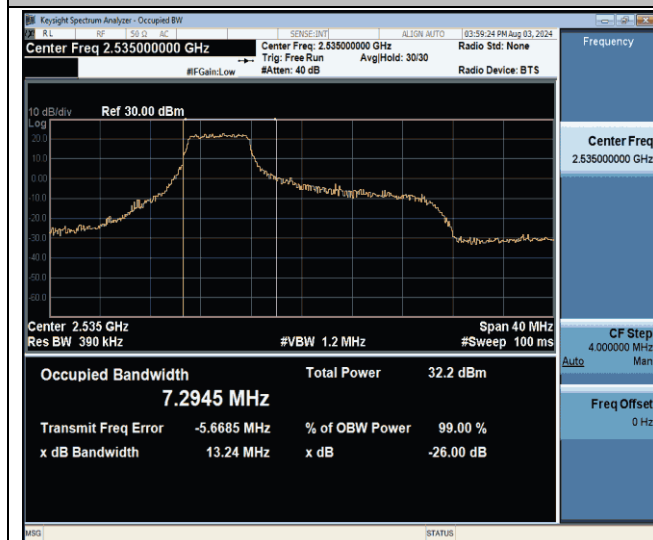
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Band7-20MHz-QPSK-21350-100RB#0-PASS



Band7-20MHz-16QAM-20850-27RB#0-PASS



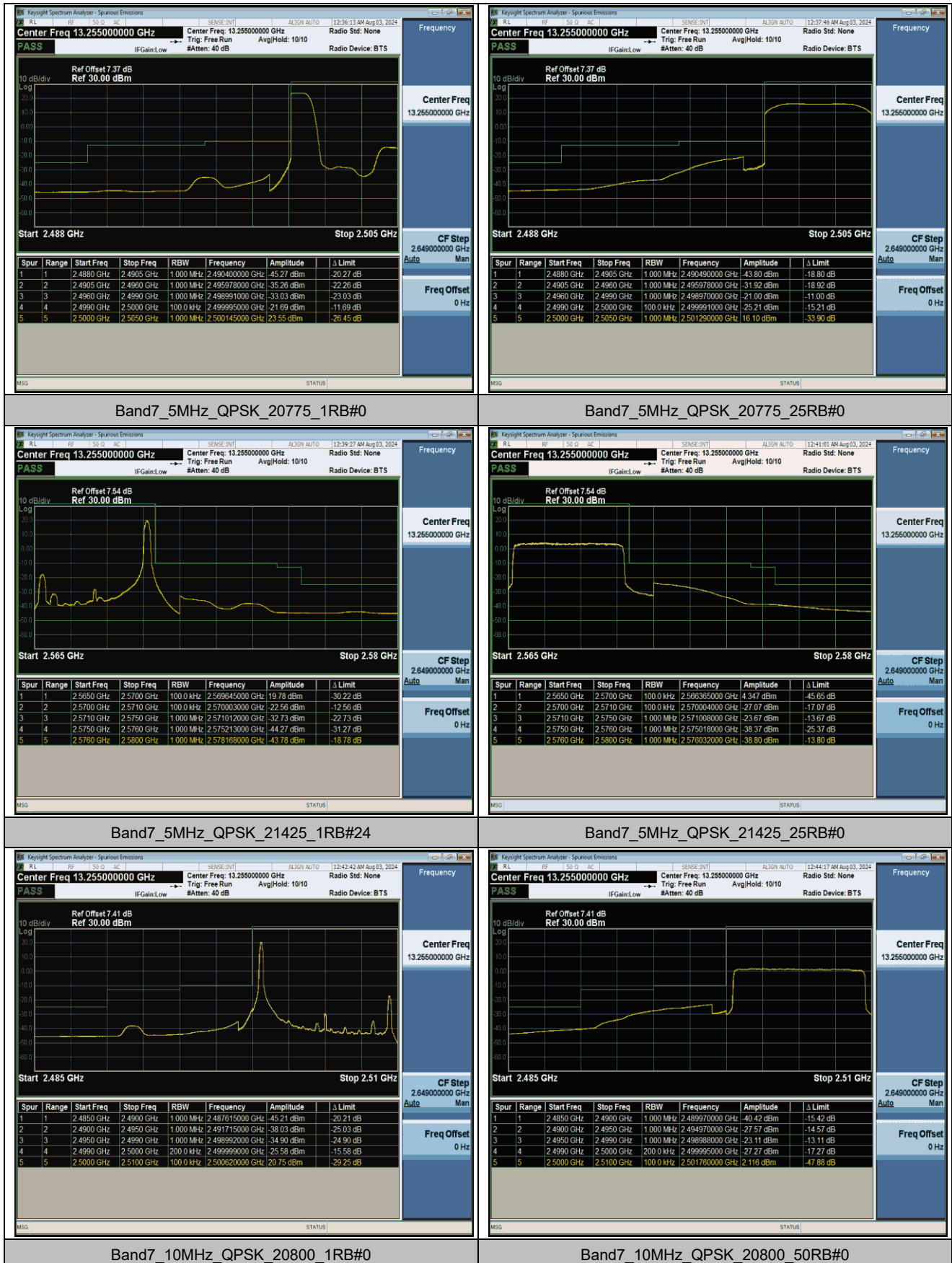
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Band Edge

Test Graphs

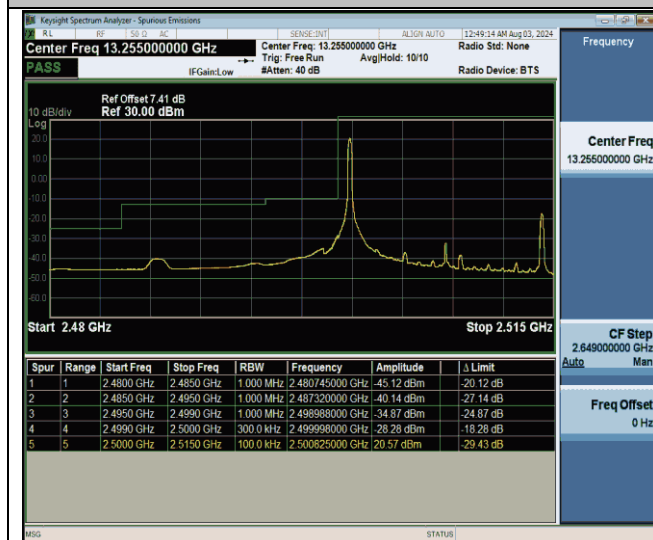




Band7_10MHz_QPSK_21400_1RB#49



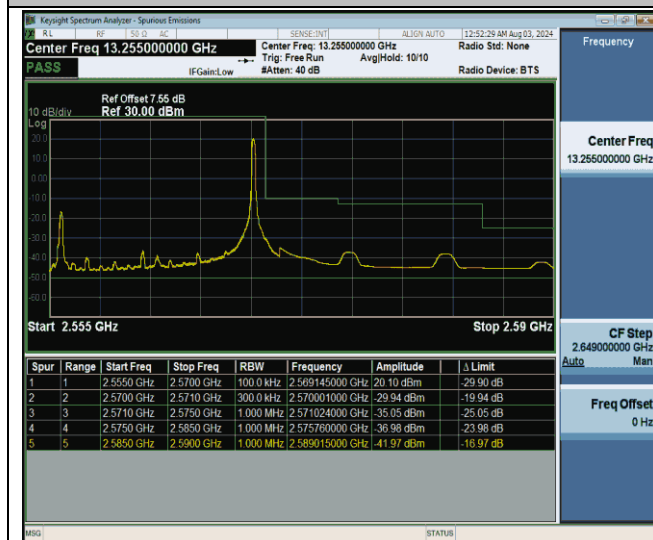
Band7_10MHz_QPSK_21400_50RB#0



Band7_15MHz_QPSK_20825_1RB#0



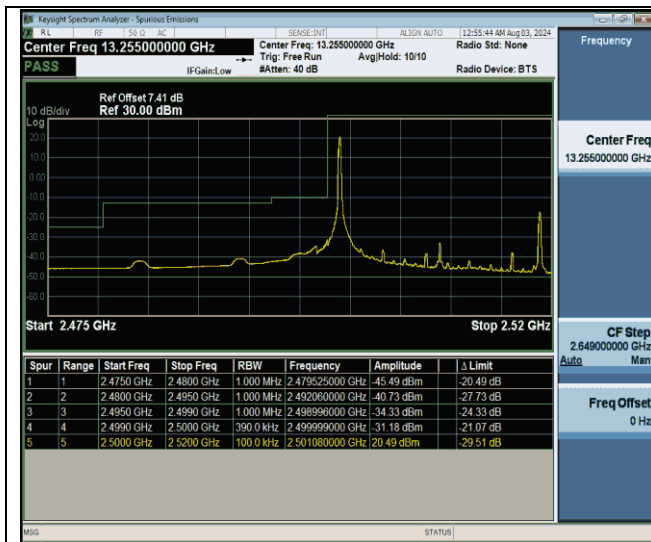
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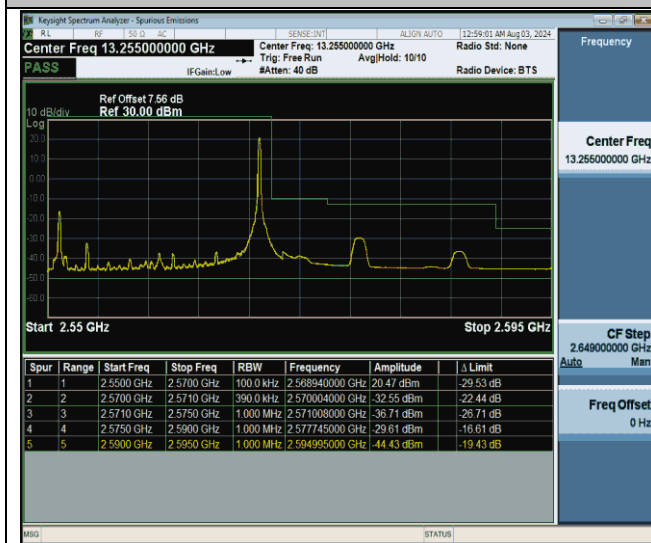
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Band7_20MHz_QPSK_20850_1RB#0



Band7_20MHz_QPSK_20850_100RB#0



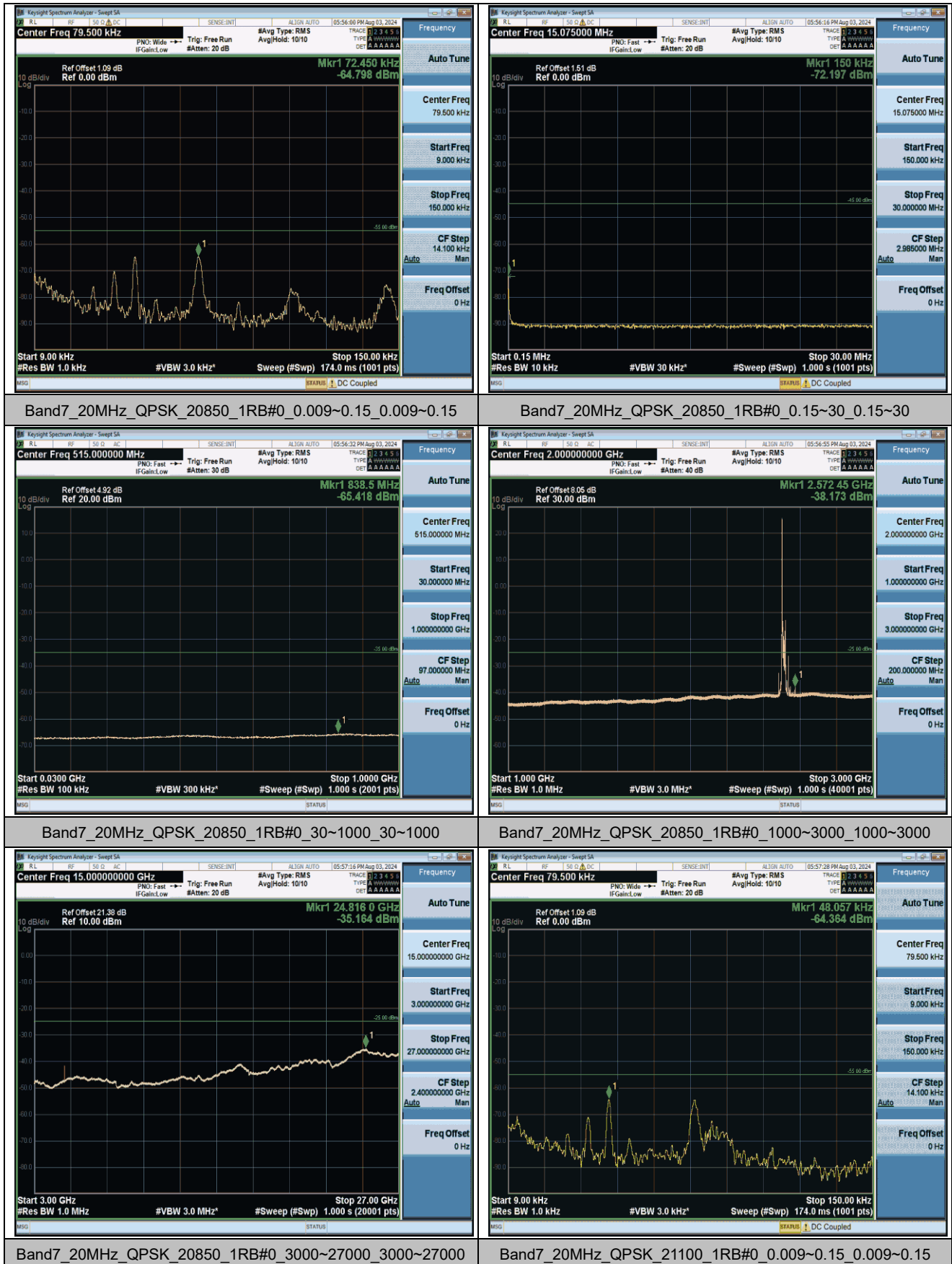
Band7_20MHz_QPSK_21350_1RB#99

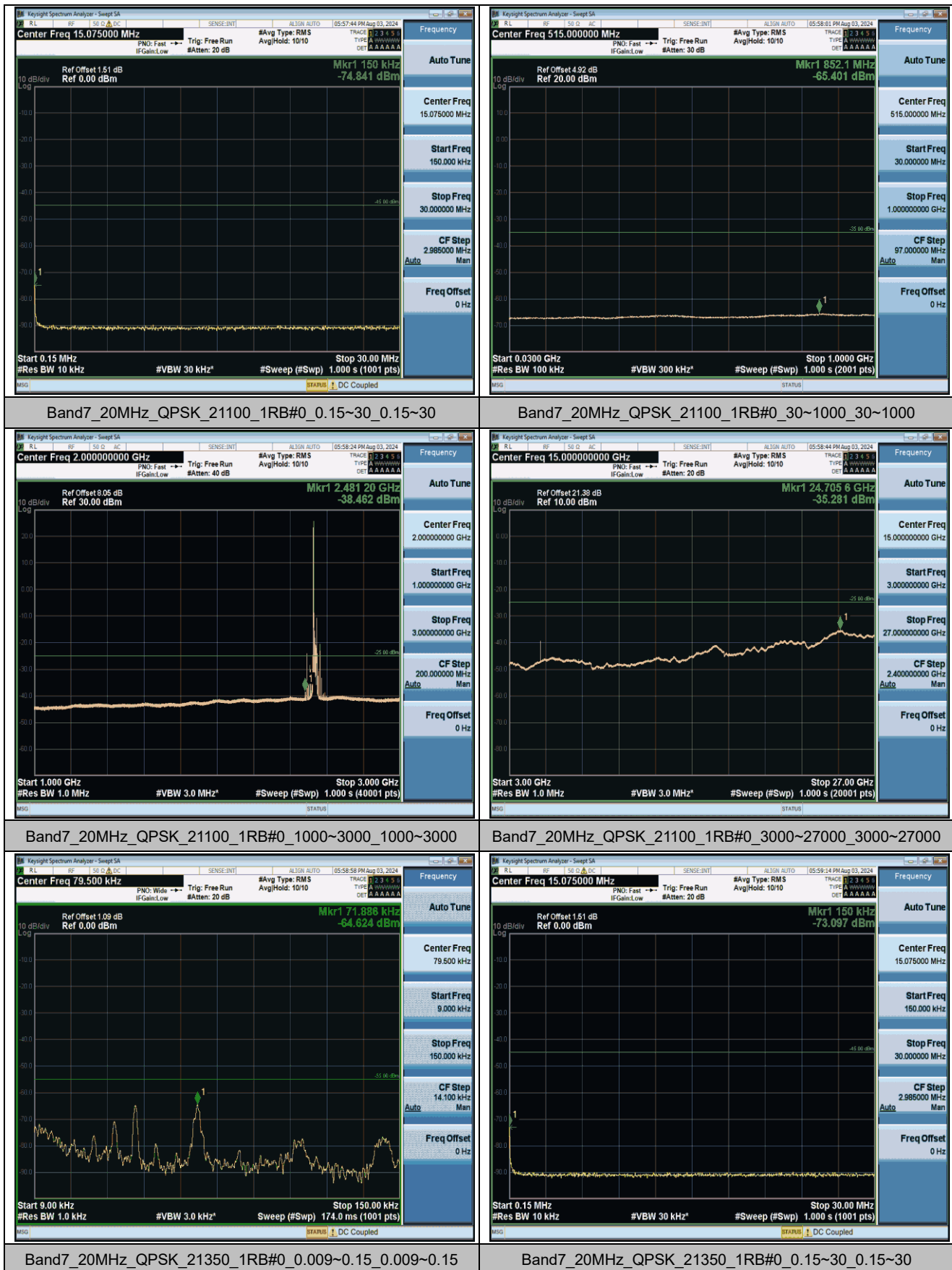


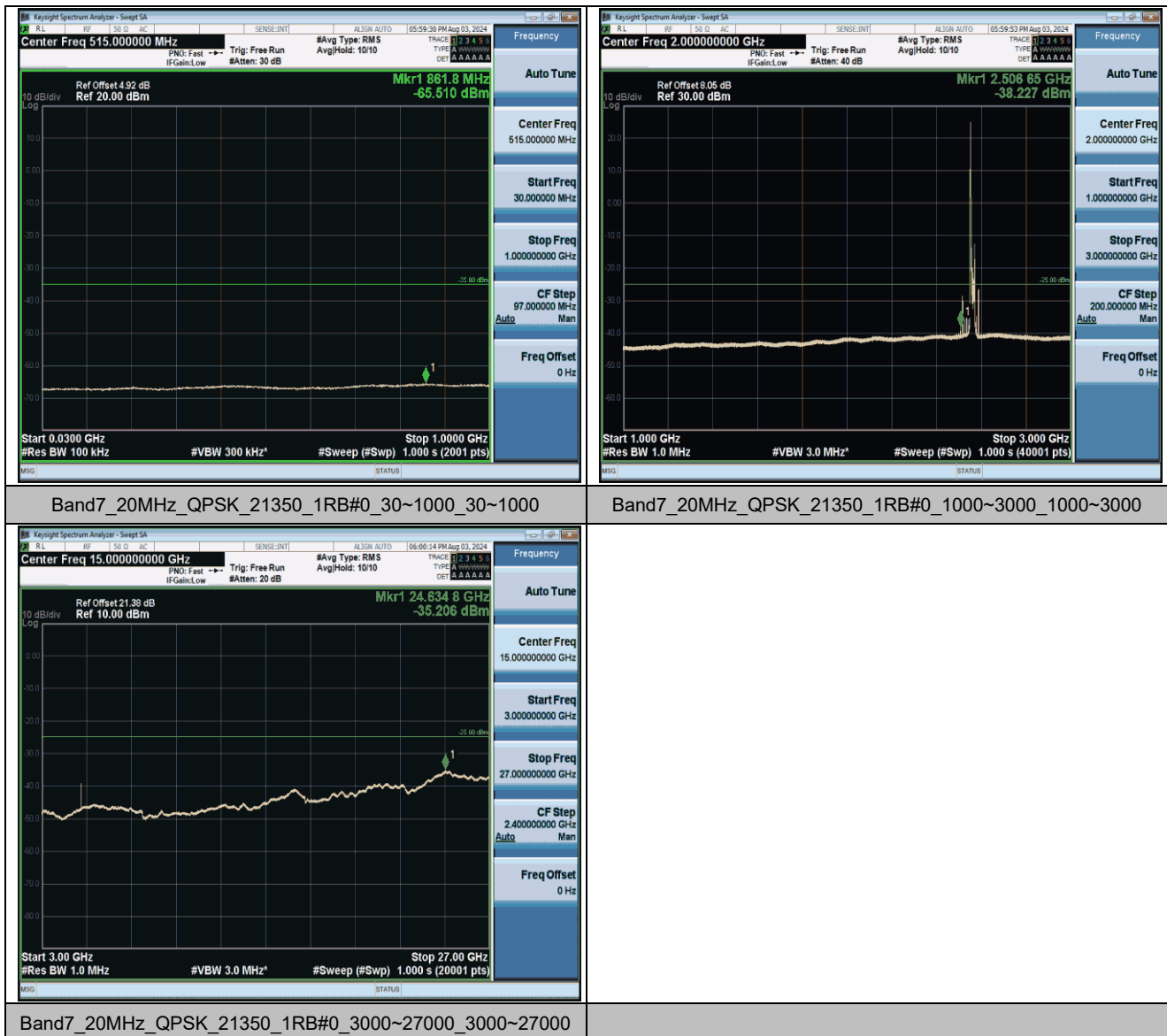
Band7_20MHz_QPSK_21350_100RB#0

Conducted Spurious Emission

Test Graphs







Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band7	20MHz	QPSK	21100	100RB#0	VN	NT	-16.01	-0.006316	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-13.75	-0.005424	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-12.53	-0.004943	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band7	20MHz	QPSK	21100	100RB#0	NV	-30	-9.70	-0.003826	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-7.25	-0.002860	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-10	-9.61	-0.003791	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-8.38	-0.003306	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-10.81	-0.004264	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-13.80	-0.005444	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-10.87	-0.004288	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-6.91	-0.002726	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-10.47	-0.004130	PASS