

Appendix-B LTE Band7

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	22.36	24.57	33.00	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.86	24.07	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#12	21.94	24.15	33.00	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.81	25.02	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.86	25.07	33.00	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.84	24.05	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#12	21.75	23.96	33.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.81	25.02	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.83	25.04	33.00	PASS
Band7	5MHz	QPSK	21425	25RB#0	21.58	23.79	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#12	21.76	23.97	33.00	PASS
Band7	5MHz	QPSK	21425	1RB#24	22.05	24.26	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#0	22.01	24.22	33.00	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.99	23.2	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.20	23.41	33.00	PASS
Band7	5MHz	16QAM	20775	1RB#24	22.09	24.3	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#0	22.16	24.37	33.00	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.94	23.15	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.05	23.26	33.00	PASS
Band7	5MHz	16QAM	21100	1RB#24	22.11	24.32	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#0	22.21	24.42	33.00	PASS
Band7	5MHz	16QAM	21425	25RB#0	20.70	22.91	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#12	21.10	23.31	33.00	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.44	23.65	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.66	24.87	33.00	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.89	24.1	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.11	24.32	33.00	PASS
Band7	10MHz	QPSK	20800	1RB#49	22.93	25.14	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#0	23.01	25.22	33.00	PASS
Band7	10MHz	QPSK	21100	50RB#0	21.88	24.09	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#24	22.07	24.28	33.00	PASS
Band7	10MHz	QPSK	21100	1RB#49	23.22	25.43	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#0	22.99	25.2	33.00	PASS
Band7	10MHz	QPSK	21400	50RB#0	21.96	24.17	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#24	21.92	24.13	33.00	PASS
Band7	10MHz	QPSK	21400	1RB#49	22.11	24.32	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#0	22.16	24.37	33.00	PASS

Band7	10MHz	16QAM	20800	27RB#0	20.63	22.84	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#24	21.34	23.55	33.00	PASS
Band7	10MHz	16QAM	20800	1RB#49	22.39	24.6	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	22.35	24.56	33.00	PASS
Band7	10MHz	16QAM	21100	27RB#0	20.71	22.92	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#24	21.36	23.57	33.00	PASS
Band7	10MHz	16QAM	21100	1RB#49	22.62	24.83	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#0	22.36	24.57	33.00	PASS
Band7	10MHz	16QAM	21400	27RB#0	20.69	22.9	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.29	23.5	33.00	PASS
Band7	10MHz	16QAM	21400	1RB#49	21.54	23.75	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.68	24.89	33.00	PASS
Band7	15MHz	QPSK	20825	75RB#0	21.75	23.96	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#38	21.81	24.02	33.00	PASS
Band7	15MHz	QPSK	20825	1RB#74	23.21	25.42	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.90	25.11	33.00	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.80	24.01	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#38	21.86	24.07	33.00	PASS
Band7	15MHz	QPSK	21100	1RB#74	23.13	25.34	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#0	22.36	24.57	33.00	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.83	24.04	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#38	21.79	24	33.00	PASS
Band7	15MHz	QPSK	21375	1RB#74	22.46	24.67	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.81	24.02	33.00	PASS
Band7	15MHz	16QAM	20825	27RB#0	21.11	23.32	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#38	21.05	23.26	33.00	PASS
Band7	15MHz	16QAM	20825	1RB#74	22.32	24.53	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#0	-41.29	-39.08	33.00	PASS
Band7	15MHz	16QAM	21100	27RB#0	21.02	23.23	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.33	23.54	33.00	PASS
Band7	15MHz	16QAM	21100	1RB#74	22.41	24.62	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#0	22.60	24.81	33.00	PASS
Band7	15MHz	16QAM	21375	27RB#0	20.86	23.07	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#38	21.34	23.55	33.00	PASS
Band7	15MHz	16QAM	21375	1RB#74	21.72	23.93	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.00	24.21	33.00	PASS
Band7	20MHz	QPSK	20850	100RB#0	21.61	23.82	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#49	21.89	24.1	33.00	PASS
Band7	20MHz	QPSK	20850	1RB#99	22.78	24.99	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.63	24.84	33.00	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.84	24.05	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#49	22.04	24.25	33.00	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.95	25.16	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#0	22.08	24.29	33.00	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.50	23.71	33.00	PASS

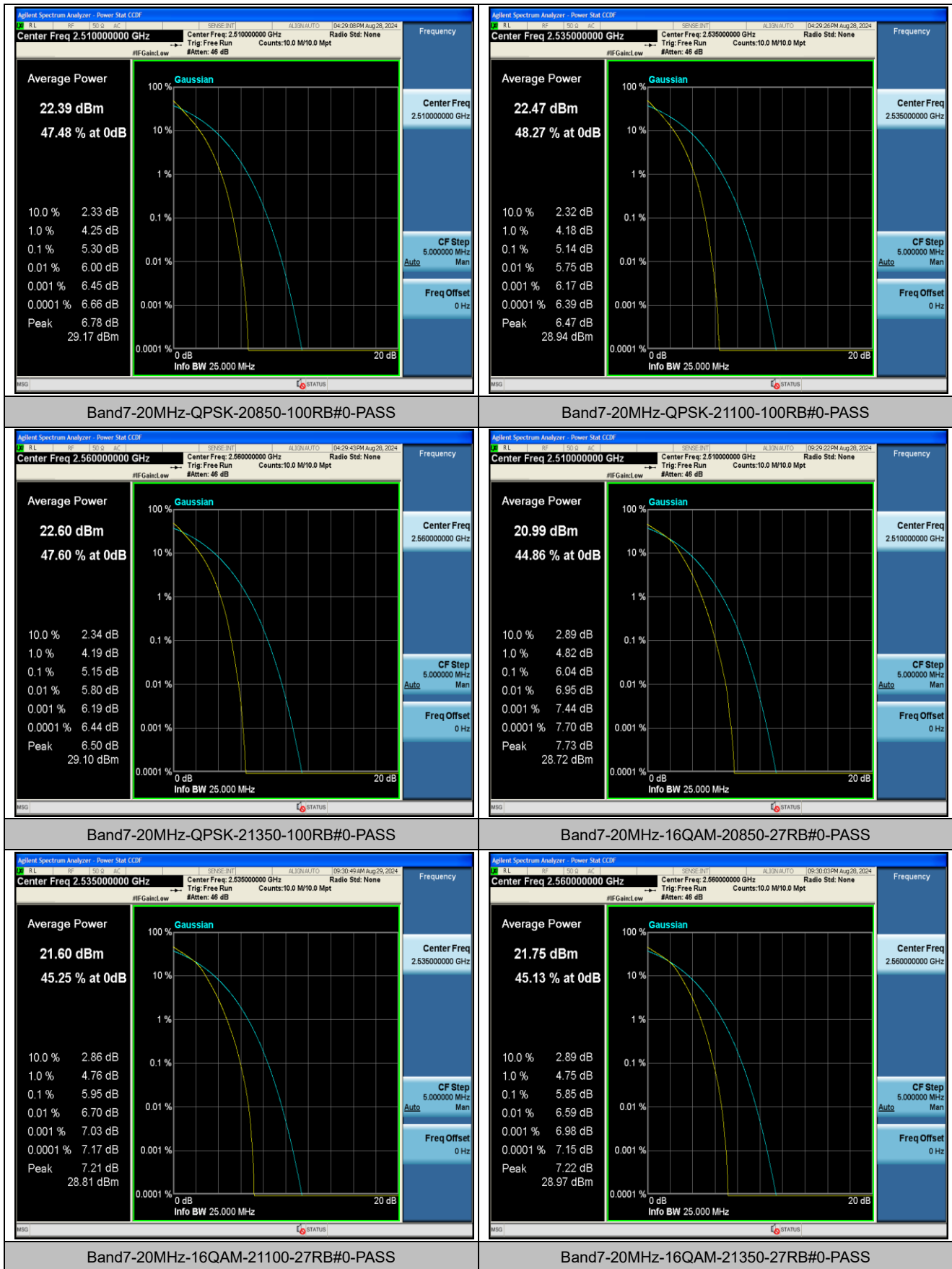
Band7	20MHz	QPSK	21350	1RB#49	22.08	24.29	33.00	PASS
Band7	20MHz	QPSK	21350	1RB#99	22.12	24.33	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.50	23.71	33.00	PASS
Band7	20MHz	16QAM	20850	27RB#0	20.33	22.54	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#49	21.15	23.36	33.00	PASS
Band7	20MHz	16QAM	20850	1RB#99	22.02	24.23	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#0	22.10	24.31	33.00	PASS
Band7	20MHz	16QAM	21100	27RB#0	21.21	23.42	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#49	21.56	23.77	33.00	PASS
Band7	20MHz	16QAM	21100	1RB#99	22.16	24.37	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#0	22.40	24.61	33.00	PASS
Band7	20MHz	16QAM	21350	27RB#0	20.87	23.08	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#49	21.64	23.85	33.00	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.35	23.56	33.00	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	5.30	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.14	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.15	13	PASS
Band7	20MHz	16QAM	20850	27RB#0	6.04	13	PASS
Band7	20MHz	16QAM	21100	27RB#0	5.95	13	PASS
Band7	20MHz	16QAM	21350	27RB#0	5.85	13	PASS

Test Graphs



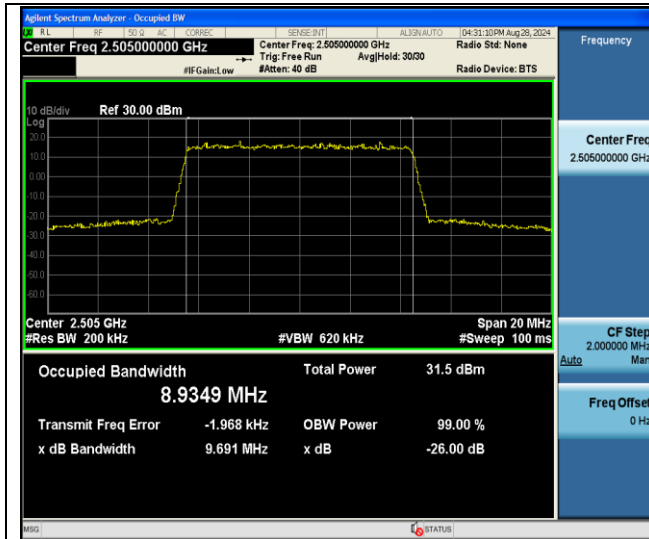
26dB Bandwidth and Occupied Bandwidth

Test Result

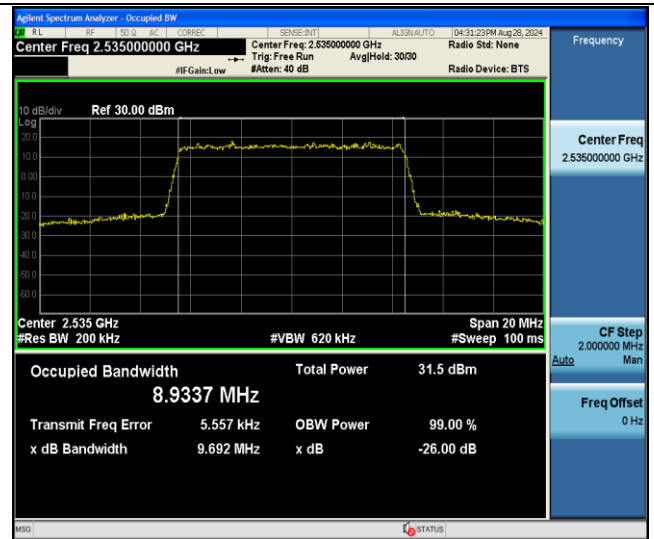
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.4683	5.098	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.4691	5.091	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.4705	5.102	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.4690	5.118	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.4674	5.131	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.4707	5.119	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9349	9.691	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9337	9.692	PASS
Band7	10MHz	QPSK	21400	50RB#0	8.9347	9.612	PASS
Band7	10MHz	16QAM	20800	27RB#0	5.0927	7.424	PASS
Band7	10MHz	16QAM	21100	27RB#0	5.1031	7.398	PASS
Band7	10MHz	16QAM	21400	27RB#0	5.0880	7.374	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.526	16.44	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.544	16.59	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.521	16.41	PASS
Band7	15MHz	16QAM	20825	27RB#0	6.1072	10.17	PASS
Band7	15MHz	16QAM	21100	27RB#0	6.1971	9.676	PASS
Band7	15MHz	16QAM	21375	27RB#0	6.0166	9.691	PASS
Band7	20MHz	QPSK	20850	100RB#0	18.008	21.07	PASS
Band7	20MHz	QPSK	21100	100RB#0	17.963	21.15	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.989	20.88	PASS
Band7	20MHz	16QAM	20850	27RB#0	6.5927	10.45	PASS
Band7	20MHz	16QAM	21100	27RB#0	6.9914	10.57	PASS
Band7	20MHz	16QAM	21350	27RB#0	6.6479	10.52	PASS

Test Graphs

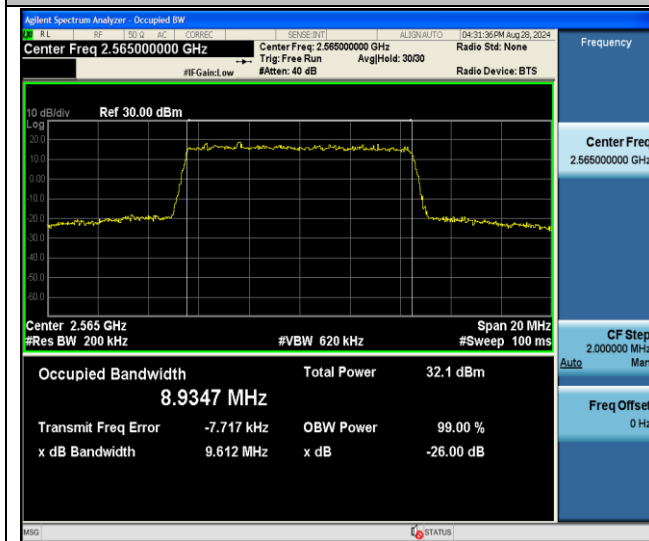




Band7-10MHz-QPSK-20800-50RB#0-PASS



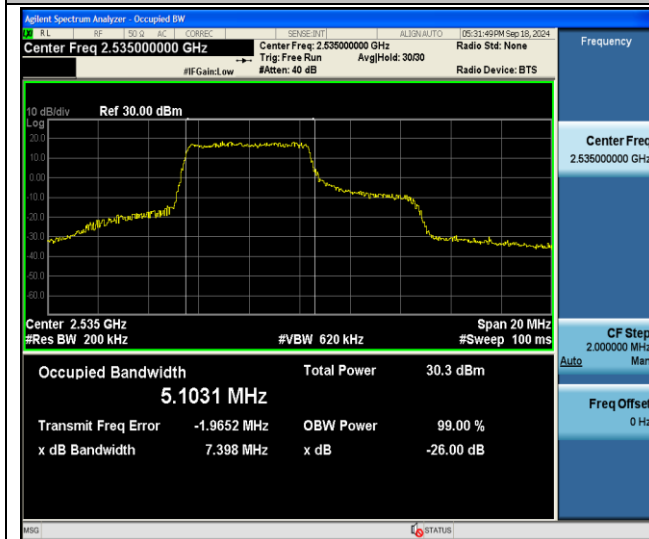
Band7-10MHz-QPSK-21100-50RB#0-PASS



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



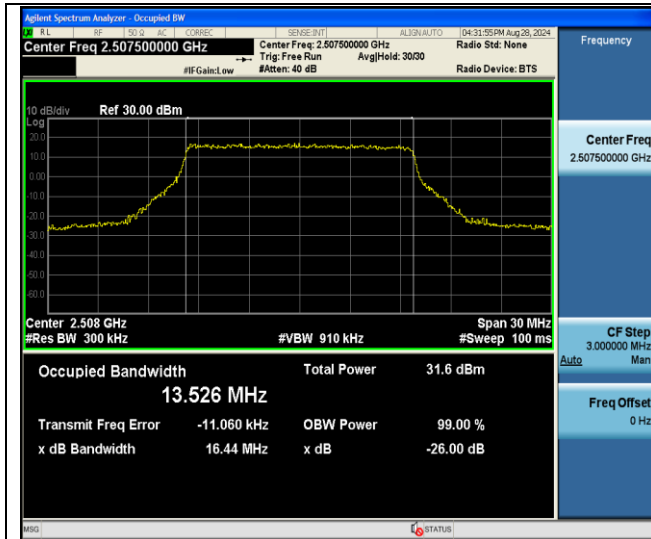
Band7-10MHz-16QAM-20800-27RB#0-PASS



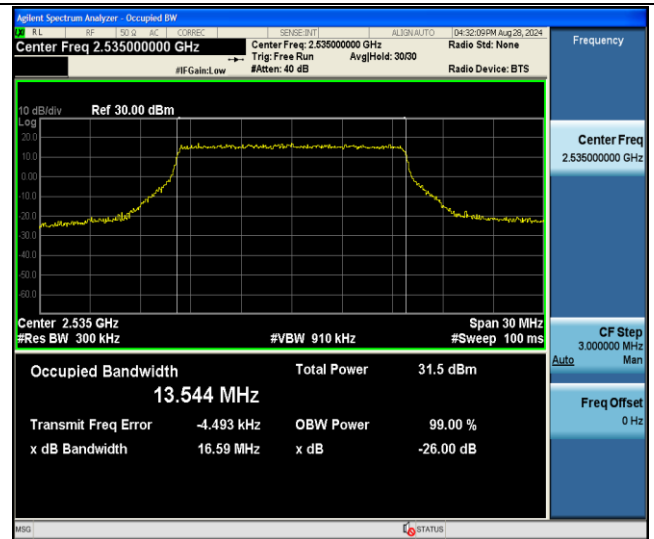
Band7-10MHz-16QAM-21100-27RB#0-PASS



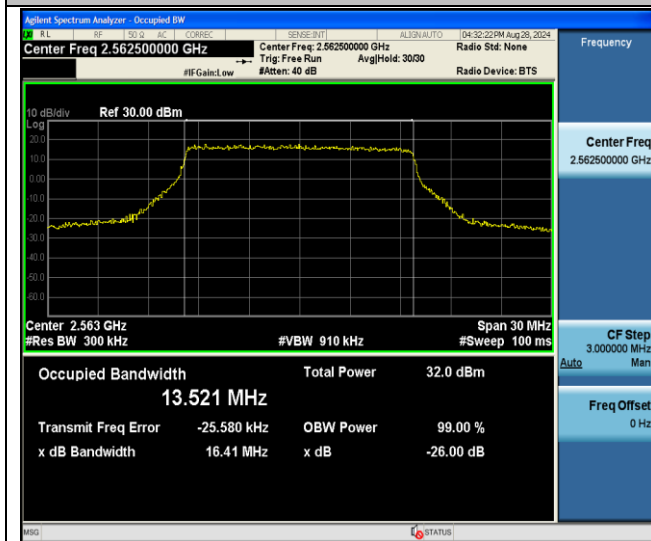
Band7-10MHz-16QAM-21400-27RB#0-PASS



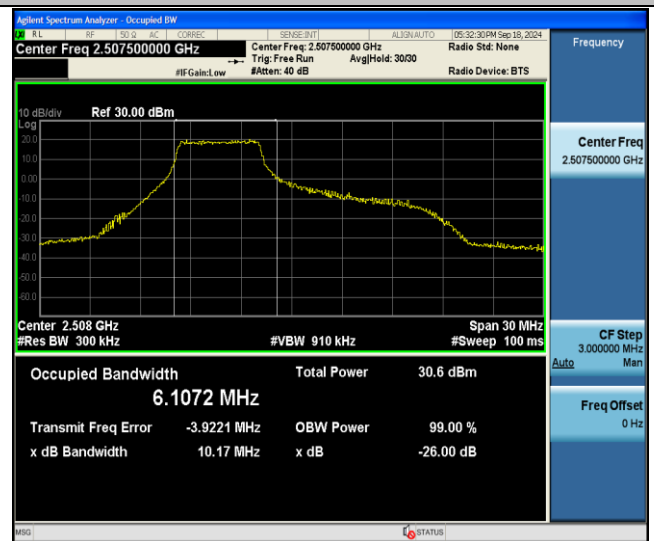
Band7-15MHz-QPSK-20825-75RB#0-PASS



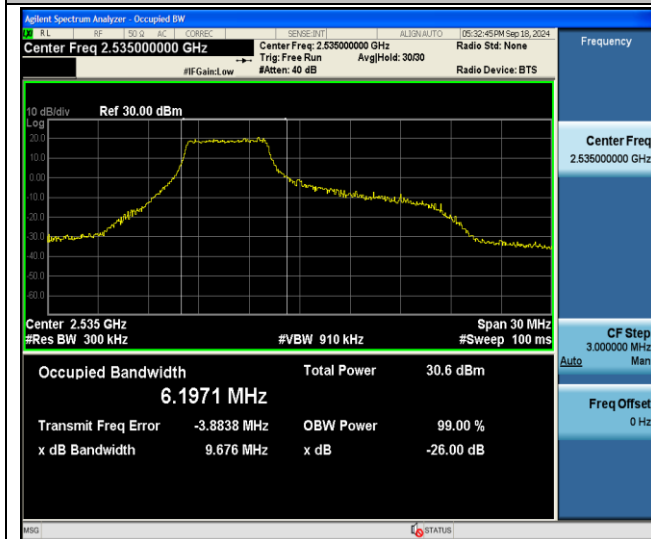
Band7-15MHz-QPSK-21100-75RB#0-PASS



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



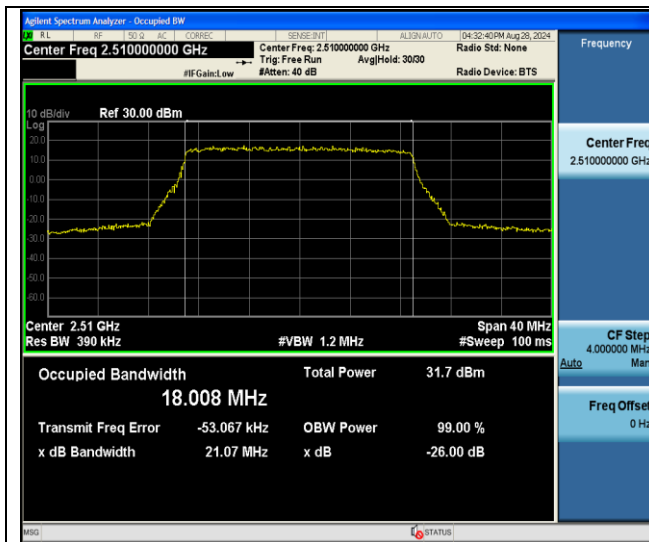
Band7-15MHz-16QAM-20825-27RB#0-PASS



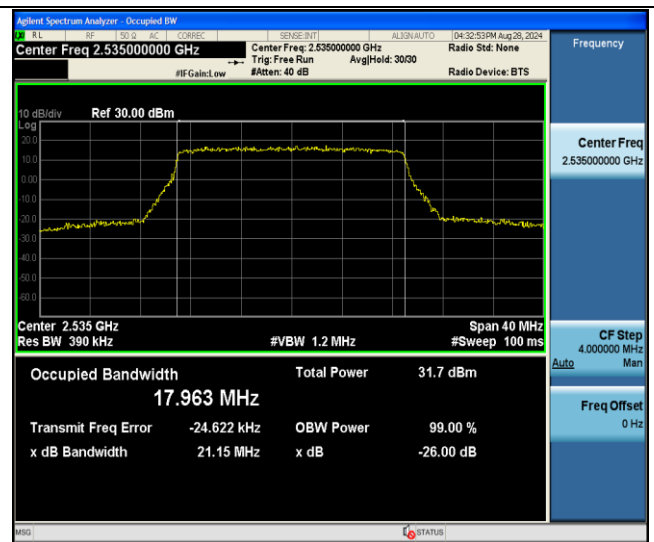
Band7-15MHz-16QAM-21100-27RB#0-PASS



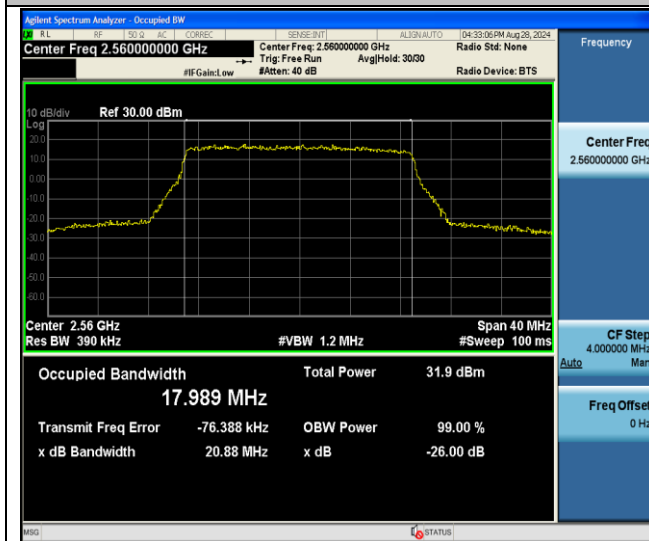
Band7-15MHz-16QAM-21375-27RB#0-PASS



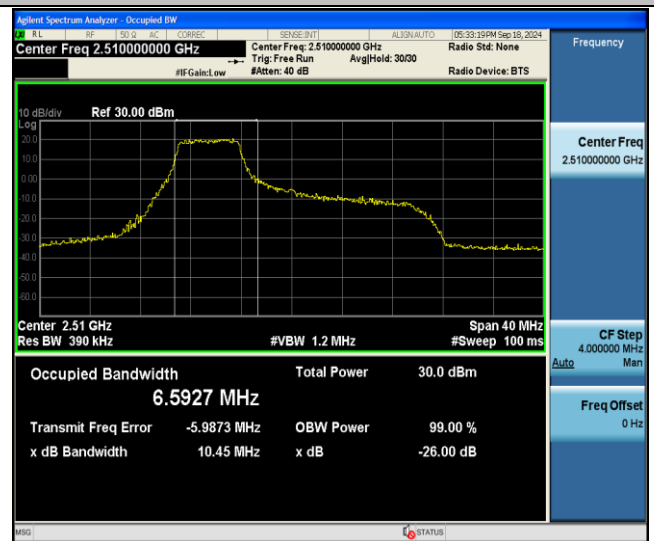
Band7-20MHz-QPSK-20850-100RB#0-PASS



Band7-20MHz-QPSK-21100-100RB#0-PASS



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



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



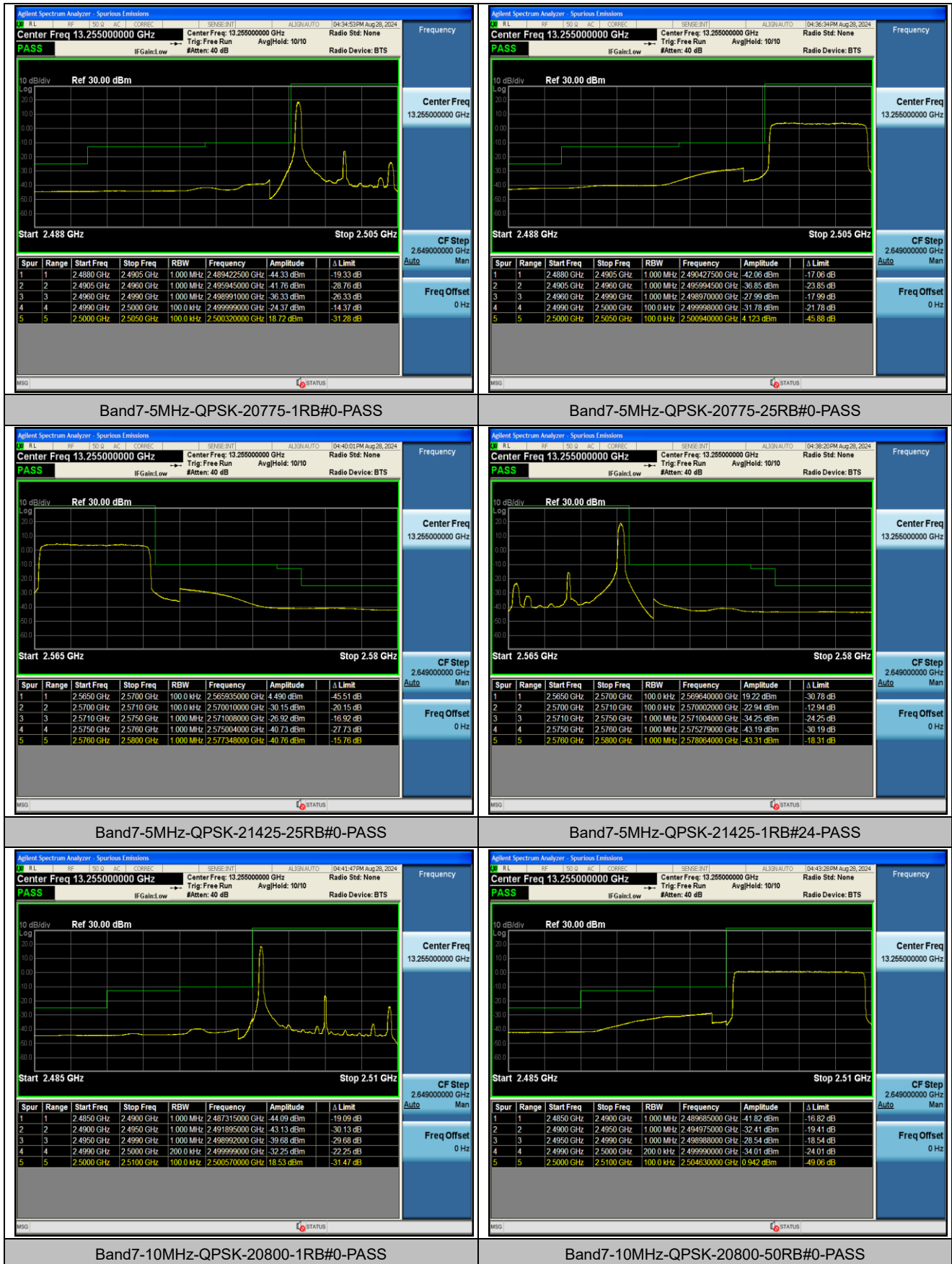
Band7-20MHz-16QAM-21100-27RB#0-PASS

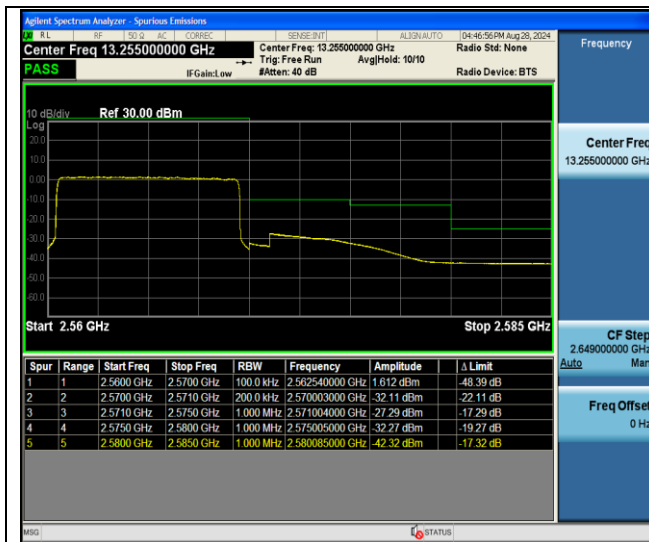


Band7-20MHz-16QAM-21350-27RB#0-PASS

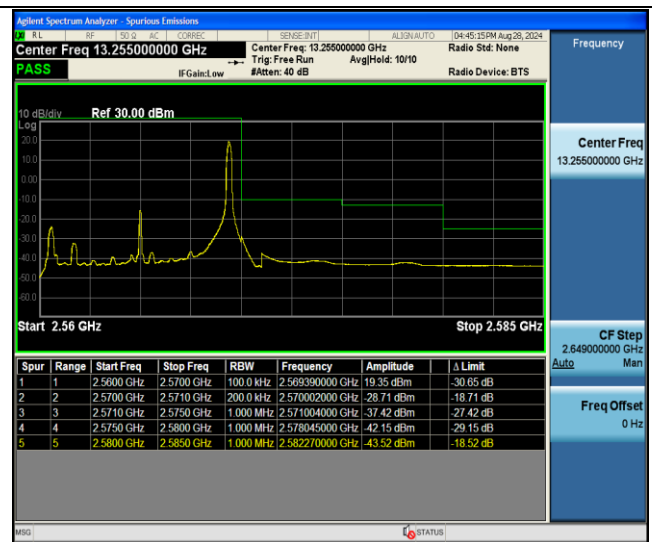
Band Edge

Test Graphs

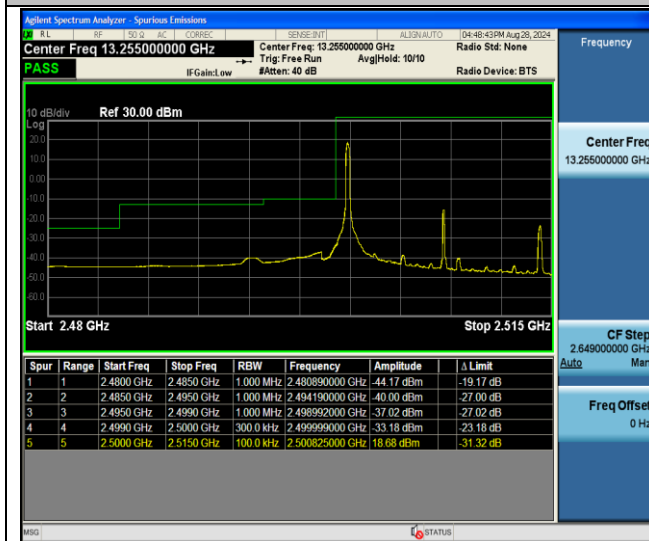




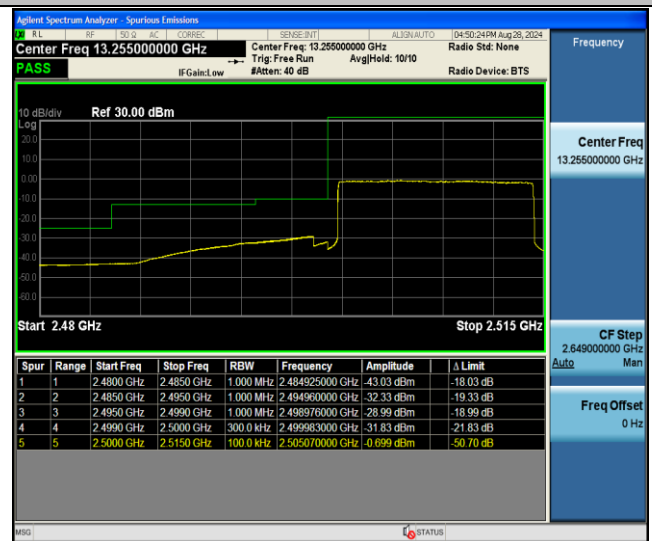
Band7-10MHz-QPSK-21400-50RB#0-PASS



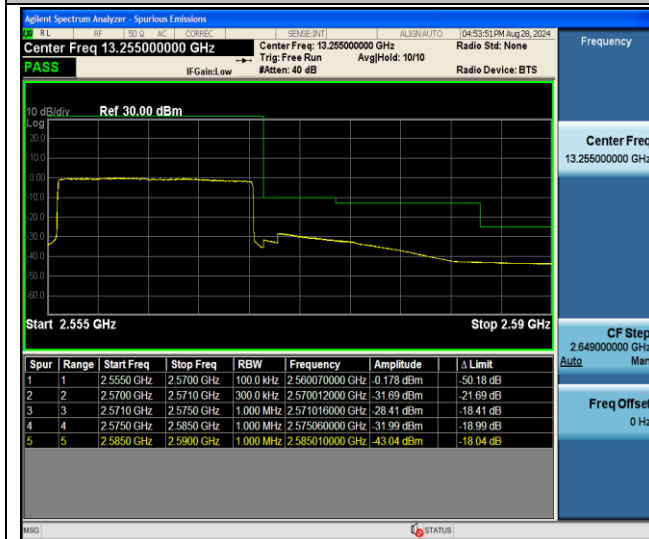
Band7-10MHz-QPSK-21400-1RB#49-PASS



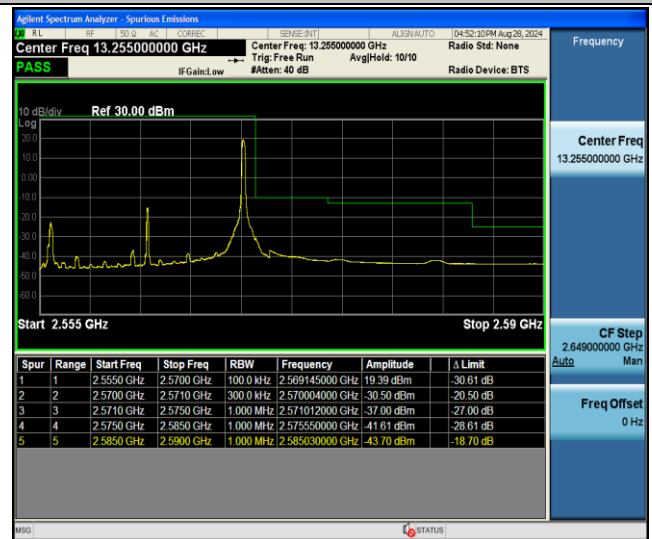
Band7-15MHz-QPSK-20825-1RB#0-PASS



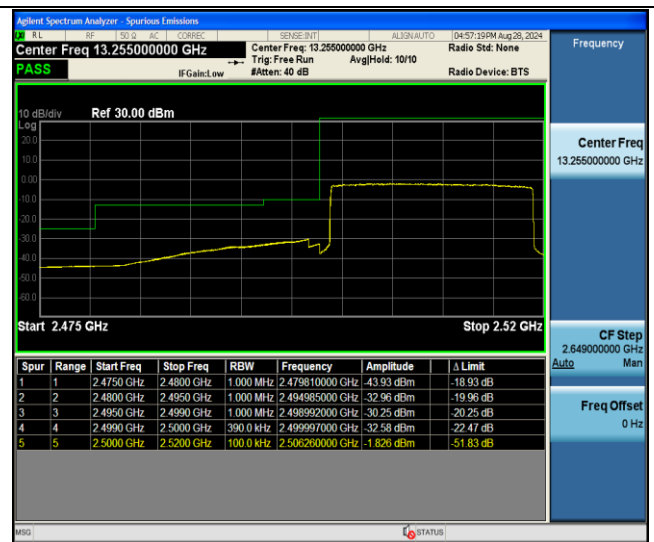
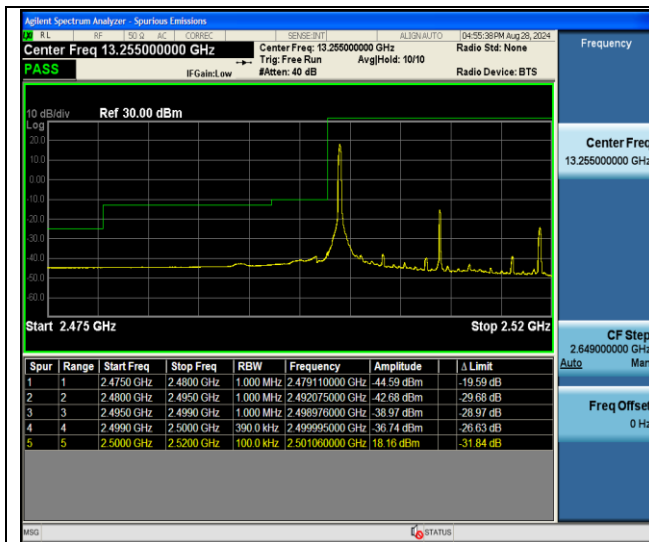
Band7-15MHz-QPSK-20825-75RB#0-PASS



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

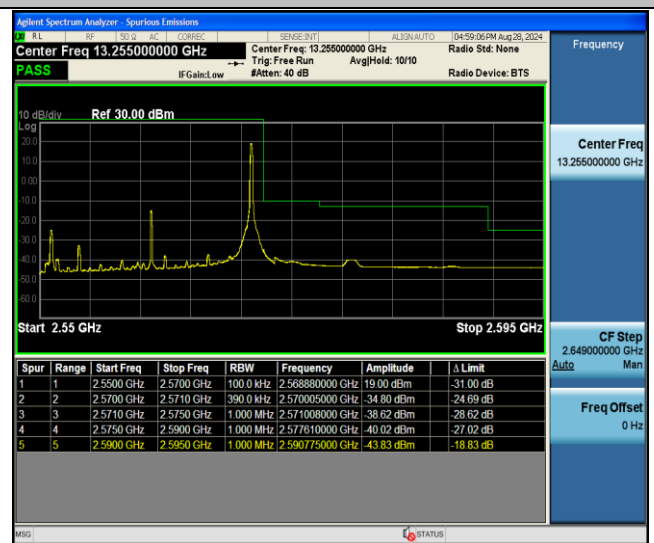
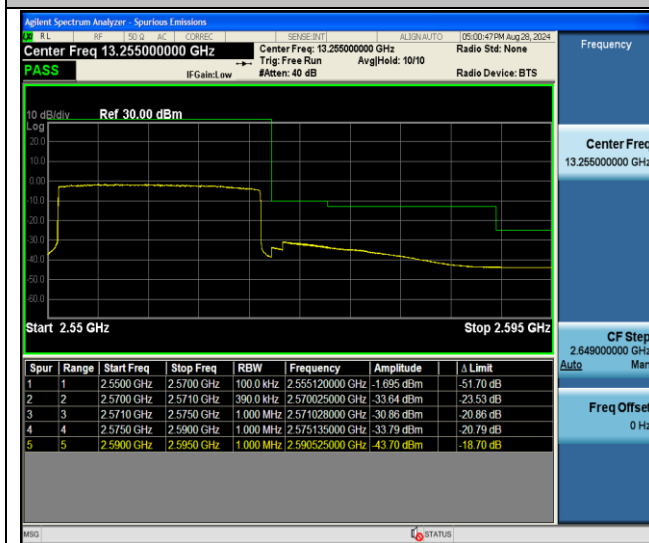


Band7-15MHz-QPSK-21375-1RB#74-PASS



Band7-20MHz-QPSK-20850-1RB#0-PASS

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

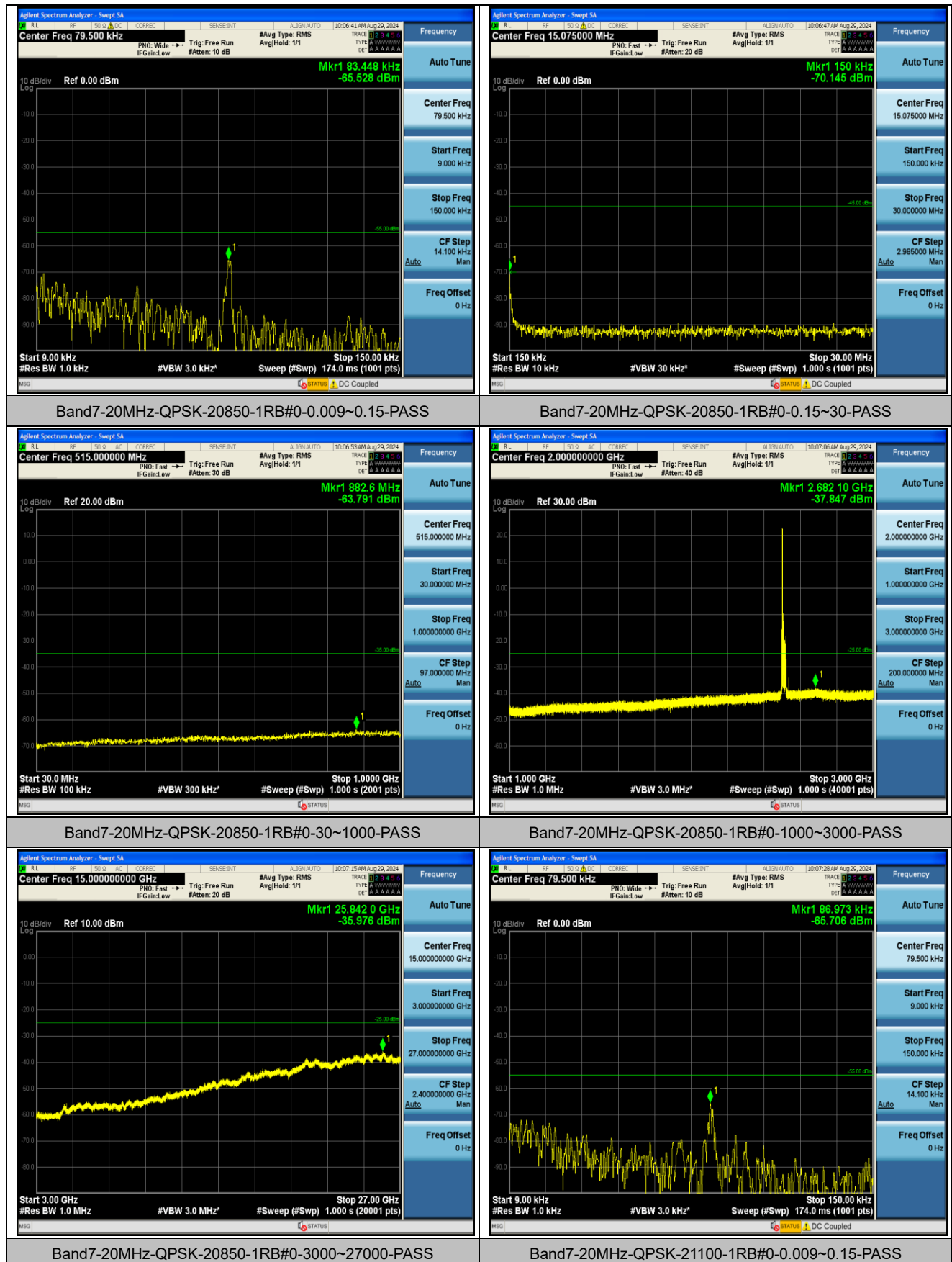


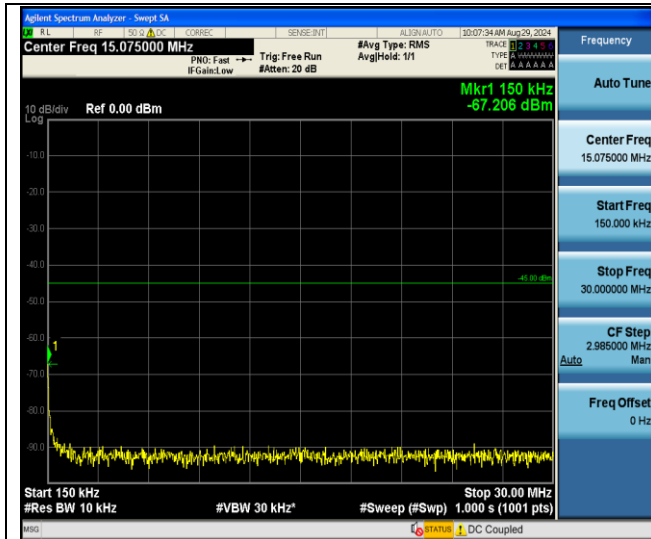
Band7-20MHz-QPSK-21350-100RB#0-PASS

Band7-20MHz-QPSK-21350-1RB#99-PASS

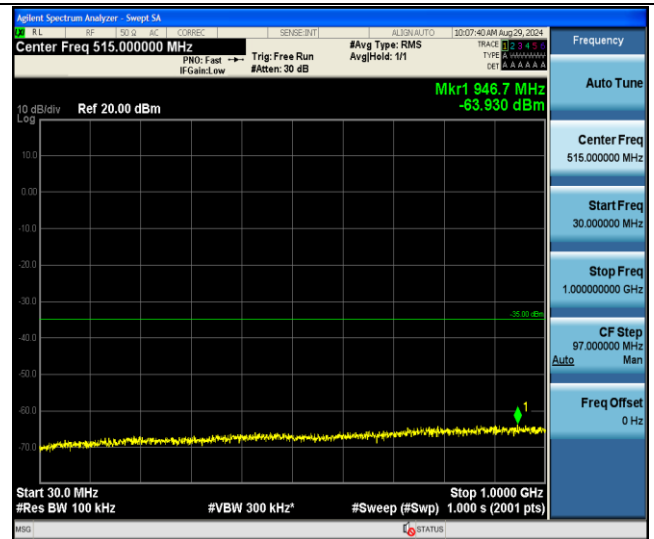
Appendix E: Conducted Spurious Emission

Test Graphs

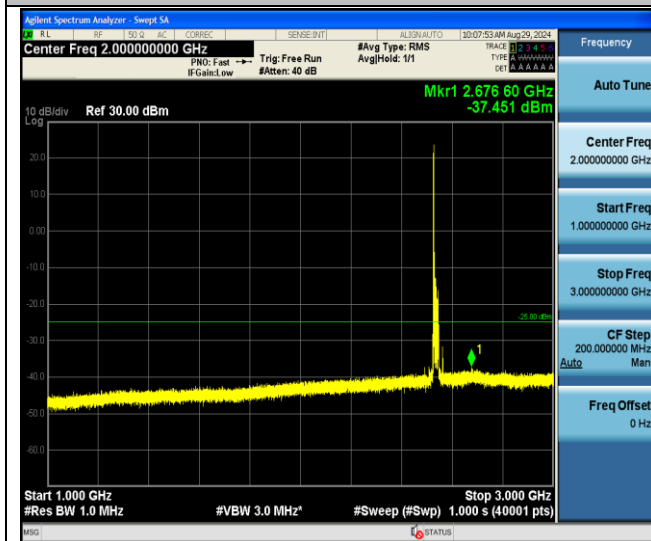




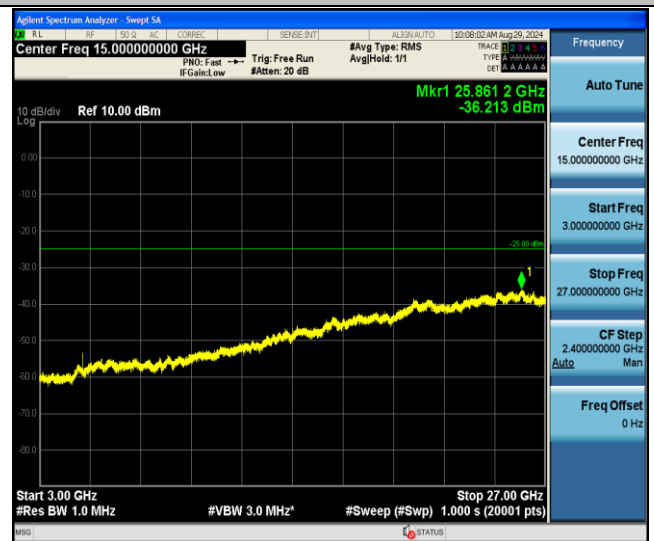
Band7-20MHz-QPSK-21100-1RB#0-0.15~30-PASS



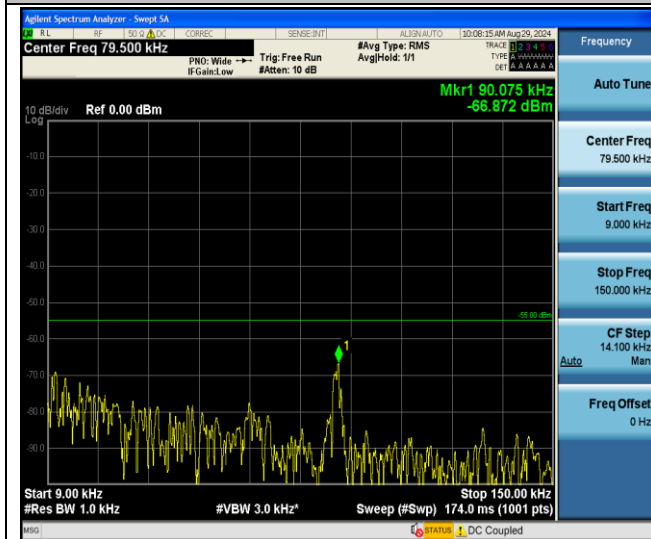
Band7-20MHz-QPSK-21100-1RB#0-30~1000-PASS



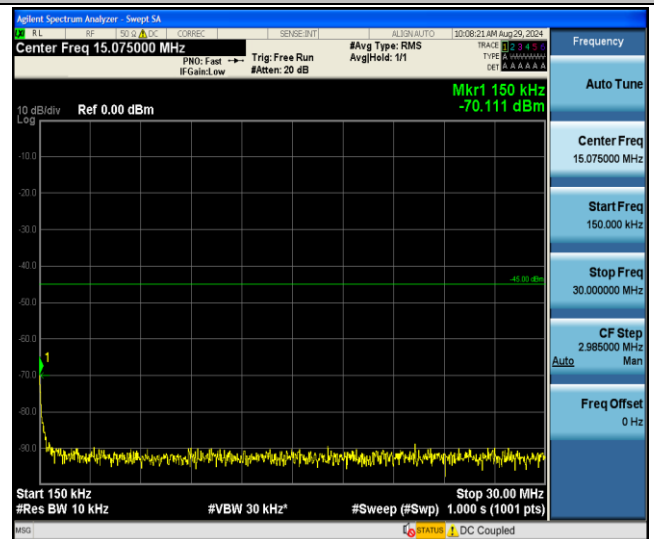
Band7-20MHz-QPSK-21100-1RB#0-1000~3000-PASS



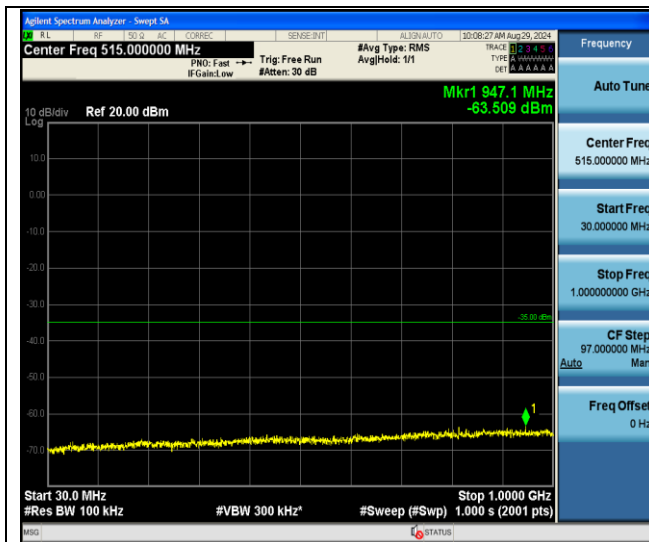
Band7-20MHz-QPSK-21100-1RB#0-3000~27000-PASS



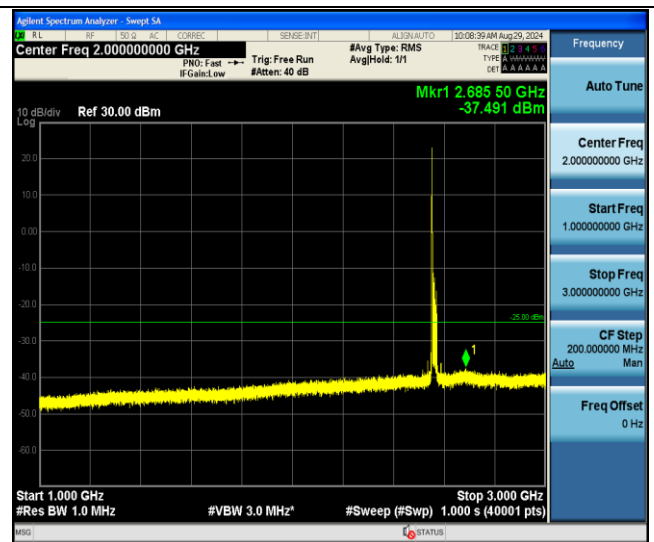
Band7-20MHz-QPSK-21350-1RB#0-0.009~0.15-PASS



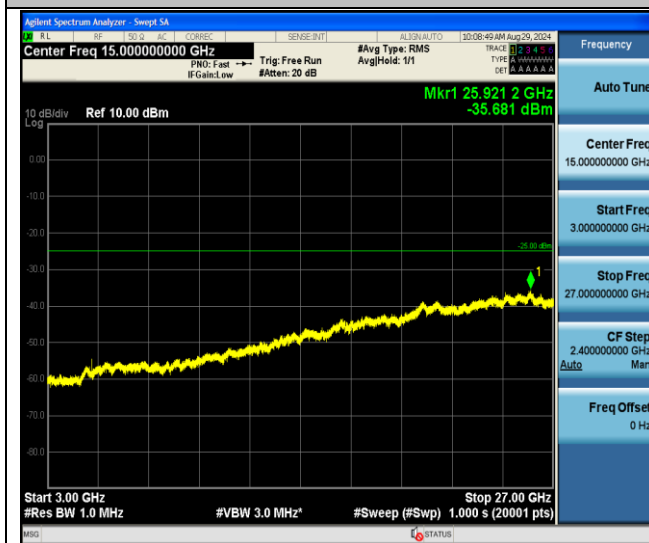
Band7-20MHz-QPSK-21350-1RB#0-0.15~30-PASS



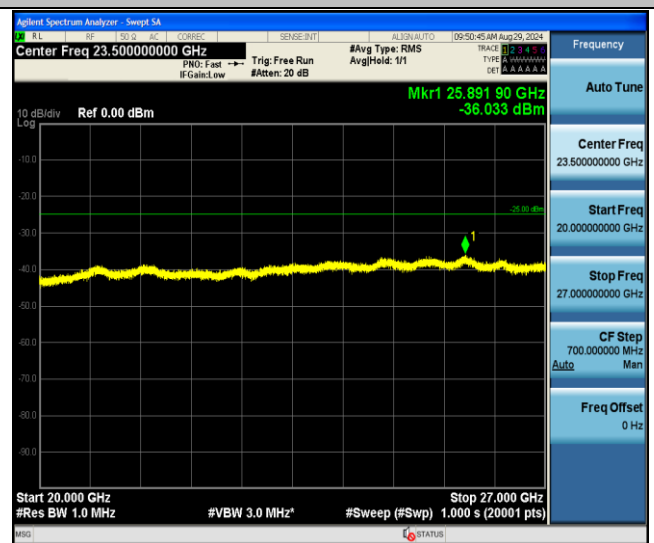
Band7-20MHz-QPSK-21350-1RB#0-30~1000-PASS



Band7-20MHz-QPSK-21350-1RB#0-1000~3000-PASS



Band7-20MHz-QPSK-21350-1RB#0-3000~27000-PASS



Band7-20MHz-QPSK-21350-1RB#0-20000~27000-PASS

Appendix F: 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	-11.90	-0.004694	PASS
Band7	20MHz	QPSK	21100	100RB#0	VL	NT	-5.50	-0.002170	PASS
Band7	20MHz	QPSK	21100	100RB#0	VH	NT	-7.80	-0.003077	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	-10.40	-0.004103	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-20	-5.90	-0.002327	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	-10	-10.50	-0.004142	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	0	-7.70	-0.003037	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	10	-6.30	-0.002485	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	20	-2.80	-0.001105	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	30	-3.80	-0.001499	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	40	-5.10	-0.002012	PASS
Band7	20MHz	QPSK	21100	100RB#0	NV	50	-9.40	-0.003708	PASS