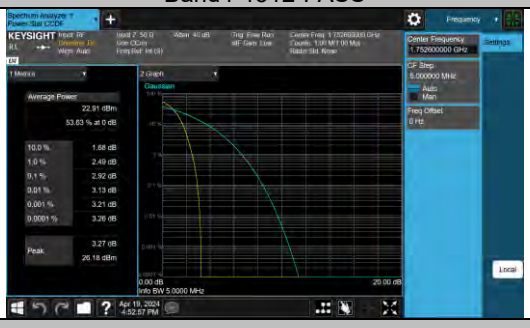
APPENDIX G

WCDMA BAND4

PEAK-TO-AVERAGE RATIO
TEST RESULT

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band4	1312	2.83	13	PASS
Band4	1413	2.83	13	PASS
Band4	1513	2.92	13	PASS

TEST GRAPHS

Band4-1312-PASS	Band4-1413-PASS
	/
Band4-1513-PASS	/

26DB BANDWIDTH AND OCCUPIED BANDWIDTH
TEST RESULT

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(kHz)	Verdict
Band4	1312	4.1474	4.733	---	PASS
Band4	1413	4.1503	4.727	---	PASS
Band4	1513	4.1510	4.730	---	PASS

TEST GRAPHS

Band4-1312-PASS	Band4-1413-PASS
	/
Band4-1513-PASS	/

BAND EDGE
TEST RESULT

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1710.00	-25.83	-13	PASS
Band4	1513	1755.00	-26.75	-13	PASS

TEST GRAPHS

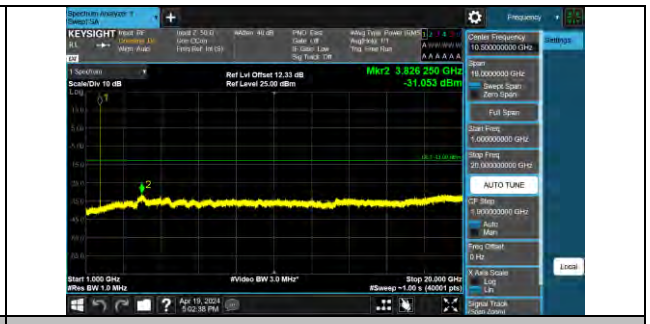
Band4-1312-PASS	Band4-1513-PASS

CONDUCTED SPURIOUS EMISSION
TEST RESULT

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	30~1000MHz	887	-40.91	-13	PASS
Band4	1312	1000~20000MHz	3826.25	-31.05	-13	PASS
Band4	1413	30~1000MHz	896.21	-40.81	-13	PASS
Band4	1413	1000~20000MHz	19317.43	-31.35	-13	PASS
Band4	1513	30~1000MHz	888.94	-40.9	-13	PASS
Band4	1513	1000~20000MHz	19397.23	-30.99	-13	PASS

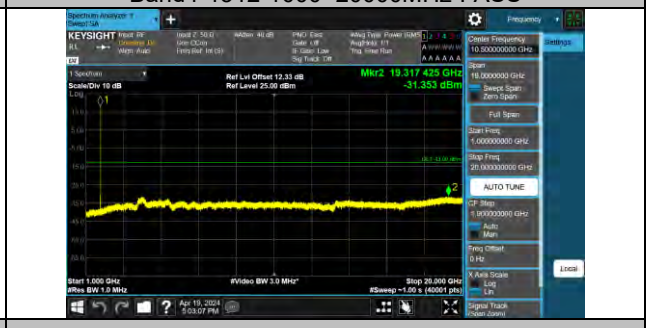
TEST GRAPHS

Band4-1312-30~1000MHz-PASS



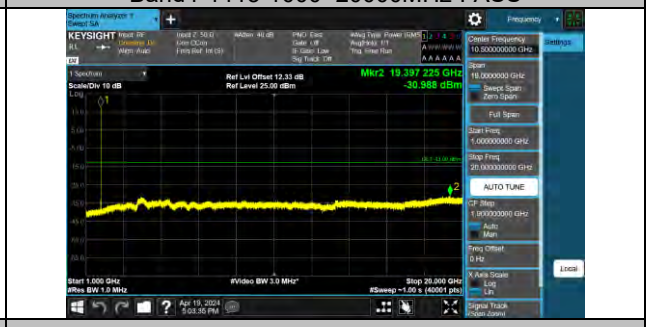
Band4-1312-1000~20000MHz-PASS

Band4-1413-30~1000MHz-PASS



Band4-1413-1000~20000MHz-PASS

Band4-1513-30~1000MHz-PASS



Band4-1513-1000~20000MHz-PASS

FREQUENCY STABILITY
TEST RESULT

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	VN	NT	11.67	0.006815	±2.5	PASS
Band4	1312	VL	NT	11.50	0.006716	±2.5	PASS
Band4	1312	VH	NT	12.40	0.007241	±2.5	PASS
Band4	1413	VN	NT	-3.25	-0.001876	±2.5	PASS
Band4	1413	VL	NT	-3.76	-0.002170	±2.5	PASS
Band4	1413	VH	NT	-3.33	-0.001922	±2.5	PASS
Band4	1513	VN	NT	-13.37	-0.007629	±2.5	PASS
Band4	1513	VL	NT	-12.72	-0.007258	±2.5	PASS
Band4	1513	VH	NT	-13.71	-0.007823	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	11.82	0.006903	±2.5	PASS
Band4	1312	NV	-20	12.22	0.007136	±2.5	PASS
Band4	1312	NV	-10	12.47	0.007282	±2.5	PASS
Band4	1312	NV	0	12.60	0.007358	±2.5	PASS
Band4	1312	NV	10	13.25	0.007738	±2.5	PASS
Band4	1312	NV	20	14.20	0.008292	±2.5	PASS
Band4	1312	NV	30	12.68	0.007405	±2.5	PASS
Band4	1312	NV	40	13.18	0.007697	±2.5	PASS
Band4	1312	NV	50	12.84	0.007498	±2.5	PASS
Band4	1413	NV	-30	-4.14	-0.002389	±2.5	PASS
Band4	1413	NV	-20	-3.55	-0.002049	±2.5	PASS
Band4	1413	NV	-10	-3.06	-0.001766	±2.5	PASS
Band4	1413	NV	0	-3.18	-0.001835	±2.5	PASS
Band4	1413	NV	10	-3.13	-0.001807	±2.5	PASS
Band4	1413	NV	20	-3.83	-0.002211	±2.5	PASS
Band4	1413	NV	30	-4.08	-0.002355	±2.5	PASS
Band4	1413	NV	40	-3.04	-0.001755	±2.5	PASS
Band4	1413	NV	50	-3.42	-0.001974	±2.5	PASS
Band4	1513	NV	-30	-13.27	-0.007572	±2.5	PASS
Band4	1513	NV	-20	-13.10	-0.007475	±2.5	PASS
Band4	1513	NV	-10	-12.47	-0.007115	±2.5	PASS
Band4	1513	NV	0	-12.86	-0.007338	±2.5	PASS
Band4	1513	NV	10	-12.75	-0.007275	±2.5	PASS
Band4	1513	NV	20	-13.23	-0.007549	±2.5	PASS
Band4	1513	NV	30	-13.22	-0.007543	±2.5	PASS
Band4	1513	NV	40	-14.36	-0.008194	±2.5	PASS
Band4	1513	NV	50	-13.20	-0.007532	±2.5	PASS

LTE BAND7

PEAK-TO-AVERAGE RATIO(CCDF)

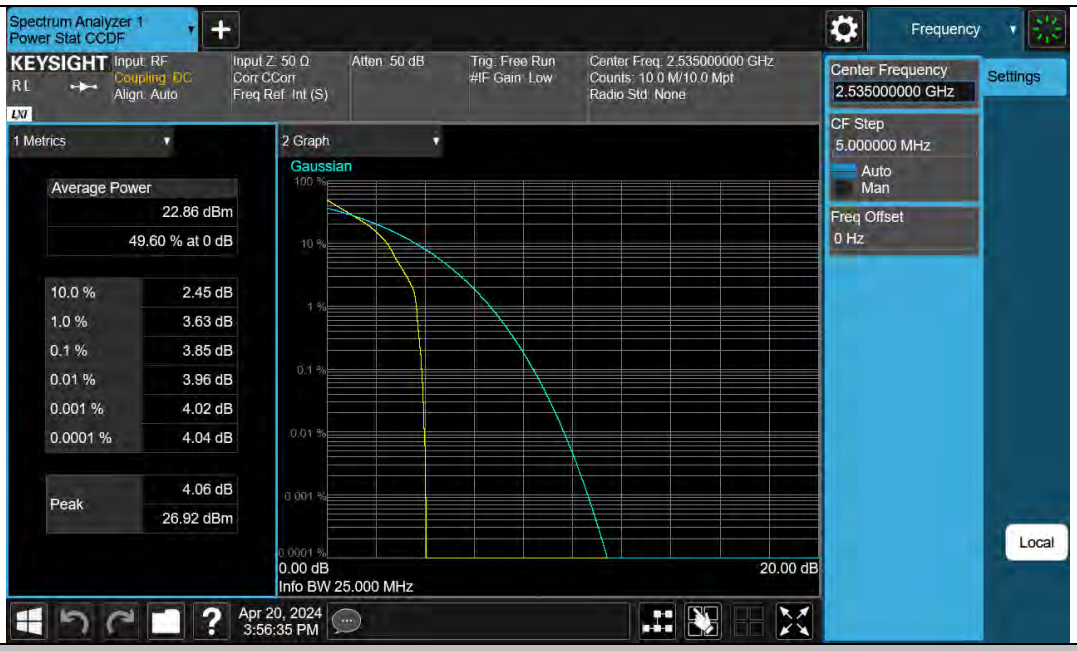
TEST RESULT

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band7	20MHz	QPSK	20850	1RB#0	3.84	13	PASS
Band7	20MHz	QPSK	20850	100RB#0	5.13	13	PASS
Band7	20MHz	QPSK	21100	1RB#0	3.85	13	PASS
Band7	20MHz	QPSK	21100	100RB#0	5.07	13	PASS
Band7	20MHz	QPSK	21350	1RB#0	3.87	13	PASS
Band7	20MHz	QPSK	21350	100RB#0	5.03	13	PASS
Band7	20MHz	16QAM	20850	1RB#0	4.76	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	5.99	13	PASS
Band7	20MHz	16QAM	21100	1RB#0	4.69	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	5.92	13	PASS
Band7	20MHz	16QAM	21350	1RB#0	4.75	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.89	13	PASS

TEST GRAPHS

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

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



Band7-20MHz-QPSK-21100-1RB#0-PASS

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

Band7-20MHz-QPSK-21350-1RB#0-PASS

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

Band7-20MHz-16QAM-20850-1RB#0-PASS

Band7-20MHz-16QAM-20850-100RB#0-PASS

Band7-20MHz-16QAM-21100-1RB#0-PASS

Band7-20MHz-16QAM-21100-100RB#0-PASS

Band7-20MHz-16QAM-21350-1RB#0-PASS

Band7-20MHz-16QAM-21350-100RB#0-PASS

26DB BANDWIDTH AND OCCUPIED BANDWIDTH
TEST RESULT

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band7	5MHz	QPSK	20775	25RB#0	4.5208	5.234	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.5329	5.200	PASS
Band7	5MHz	QPSK	21425	25RB#0	4.5209	5.180	PASS
Band7	5MHz	16QAM	20775	25RB#0	4.5161	5.146	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.5259	5.203	PASS
Band7	5MHz	16QAM	21425	25RB#0	4.5301	5.160	PASS
Band7	10MHz	QPSK	20800	50RB#0	8.9922	10.11	PASS
Band7	10MHz	QPSK	21100	50RB#0	8.9929	10.16	PASS
Band7	10MHz	QPSK	21400	50RB#0	9.0066	10.09	PASS
Band7	10MHz	16QAM	20800	50RB#0	9.0081	10.05	PASS
Band7	10MHz	16QAM	21100	50RB#0	9.0071	10.05	PASS
Band7	10MHz	16QAM	21400	50RB#0	9.0319	10.10	PASS
Band7	15MHz	QPSK	20825	75RB#0	13.490	15.05	PASS
Band7	15MHz	QPSK	21100	75RB#0	13.501	14.94	PASS
Band7	15MHz	QPSK	21375	75RB#0	13.501	14.84	PASS
Band7	15MHz	16QAM	20825	75RB#0	13.502	14.98	PASS
Band7	15MHz	16QAM	21100	75RB#0	13.495	14.99	PASS
Band7	15MHz	16QAM	21375	75RB#0	13.491	14.86	PASS
Band7	20MHz	QPSK	20850	100RB#0	17.993	19.95	PASS
Band7	20MHz	QPSK	21100	100RB#0	18.018	19.85	PASS
Band7	20MHz	QPSK	21350	100RB#0	17.981	19.85	PASS
Band7	20MHz	16QAM	20850	100RB#0	17.954	19.85	PASS
Band7	20MHz	16QAM	21100	100RB#0	17.979	19.70	PASS
Band7	20MHz	16QAM	21350	100RB#0	17.991	19.77	PASS

TEST GRAPHS

Band7-5MHz-QPSK-20775-25RB#0-PASS

Band7-5MHz-QPSK-21100-25RB#0-PASS

Band7-5MHz-QPSK-21425-25RB#0-PASS

Band7-5MHz-16QAM-20775-25RB#0-PASS

Band7-5MHz-16QAM-21100-25RB#0-PASS

Band7-5MHz-16QAM-21425-25RB#0-PASS

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

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

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

Band7-10MHz-16QAM-20800-50RB#0-PASS

Band7-10MHz-16QAM-21100-50RB#0-PASS

Band7-10MHz-16QAM-21400-50RB#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-20825-75RB#0-PASS

Band7-15MHz-16QAM-21100-75RB#0-PASS

Band7-15MHz-16QAM-21375-75RB#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-20850-100RB#0-PASS

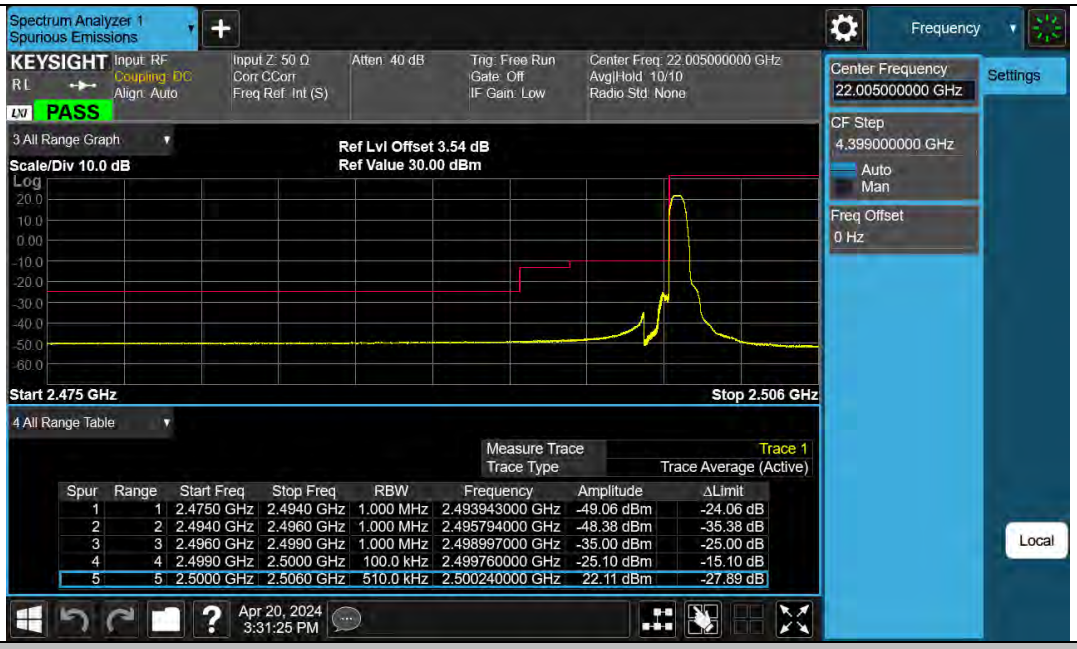
Band7-20MHz-16QAM-21100-100RB#0-PASS

Band7-20MHz-16QAM-21350-100RB#0-PASS

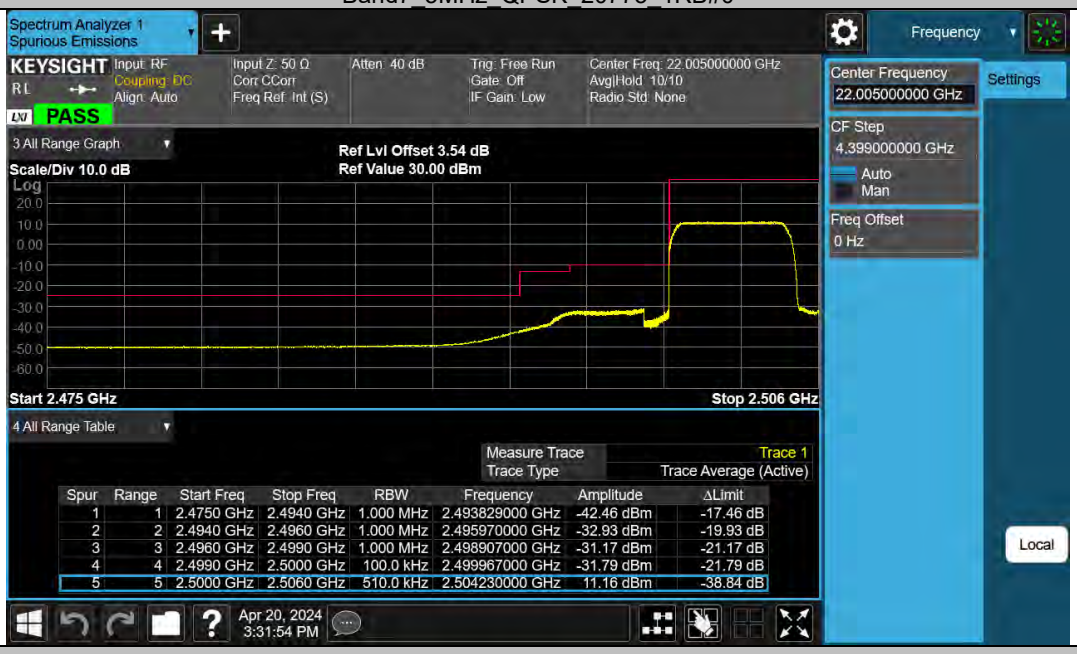
BAND EDGE
TEST RESULT

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	-25.10	PASS
Band7	5MHz	QPSK	20775	25RB#0	-42.46	PASS
Band7	5MHz	QPSK	21425	1RB#24	-23.98	PASS
Band7	5MHz	QPSK	21425	25RB#0	-39.77	PASS
Band7	5MHz	16QAM	20775	1RB#0	-27.02	PASS
Band7	5MHz	16QAM	20775	25RB#0	-44.14	PASS
Band7	5MHz	16QAM	21425	1RB#24	-25.19	PASS
Band7	5MHz	16QAM	21425	25RB#0	-41.82	PASS
Band7	10MHz	QPSK	20800	1RB#0	-23.03	PASS
Band7	10MHz	QPSK	20800	50RB#0	-40.98	PASS
Band7	10MHz	QPSK	21400	1RB#49	-22.84	PASS
Band7	10MHz	QPSK	21400	50RB#0	-40.66	PASS
Band7	10MHz	16QAM	20800	1RB#0	-26.02	PASS
Band7	10MHz	16QAM	20800	50RB#0	-42.54	PASS
Band7	10MHz	16QAM	21400	1RB#49	-24.91	PASS
Band7	10MHz	16QAM	21400	50RB#0	-42.24	PASS
Band7	15MHz	QPSK	20825	1RB#0	-31.52	PASS
Band7	15MHz	QPSK	20825	75RB#0	-35.17	PASS
Band7	15MHz	QPSK	21375	1RB#74	-30.95	PASS
Band7	15MHz	QPSK	21375	75RB#0	-43.96	PASS
Band7	15MHz	16QAM	20825	1RB#0	-33.84	PASS
Band7	15MHz	16QAM	20825	75RB#0	-39.75	PASS
Band7	15MHz	16QAM	21375	1RB#74	-33.12	PASS
Band7	15MHz	16QAM	21375	75RB#0	-45.20	PASS
Band7	20MHz	QPSK	20850	1RB#0	-49.28	PASS
Band7	20MHz	QPSK	20850	100RB#0	-39.21	PASS
Band7	20MHz	QPSK	21350	1RB#99	-49.46	PASS
Band7	20MHz	QPSK	21350	100RB#0	-48.02	PASS
Band7	20MHz	16QAM	20850	1RB#0	-49.18	PASS
Band7	20MHz	16QAM	20850	100RB#0	-40.83	PASS
Band7	20MHz	16QAM	21350	1RB#99	-49.57	PASS
Band7	20MHz	16QAM	21350	100RB#0	-48.39	PASS

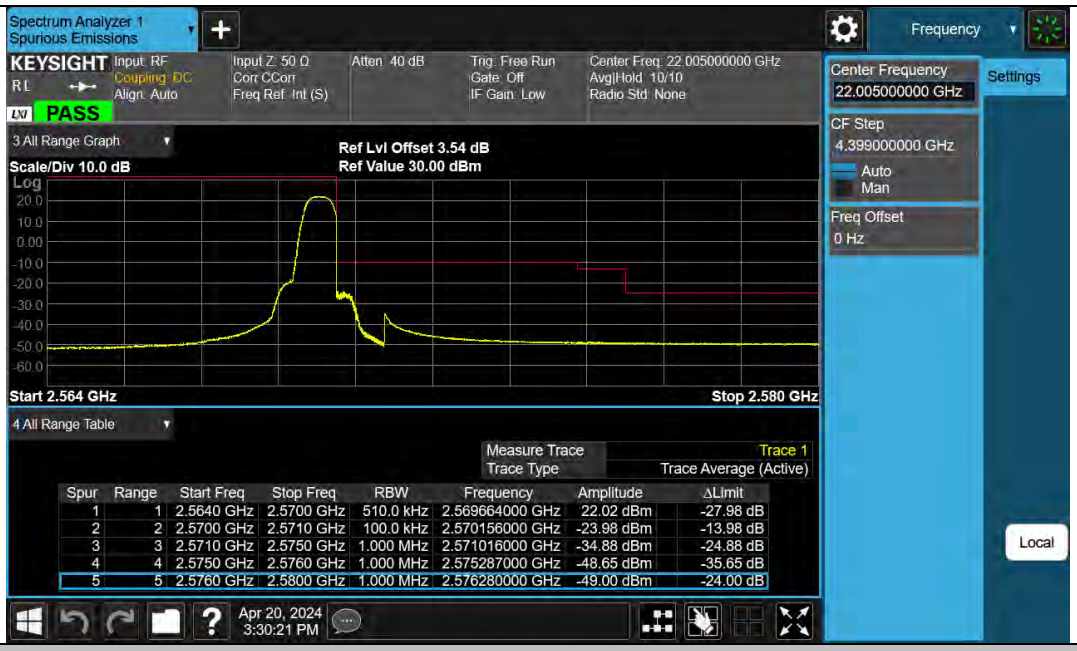
TEST GRAPHS



Band7_5MHz_QPSK_20775_1RB#0

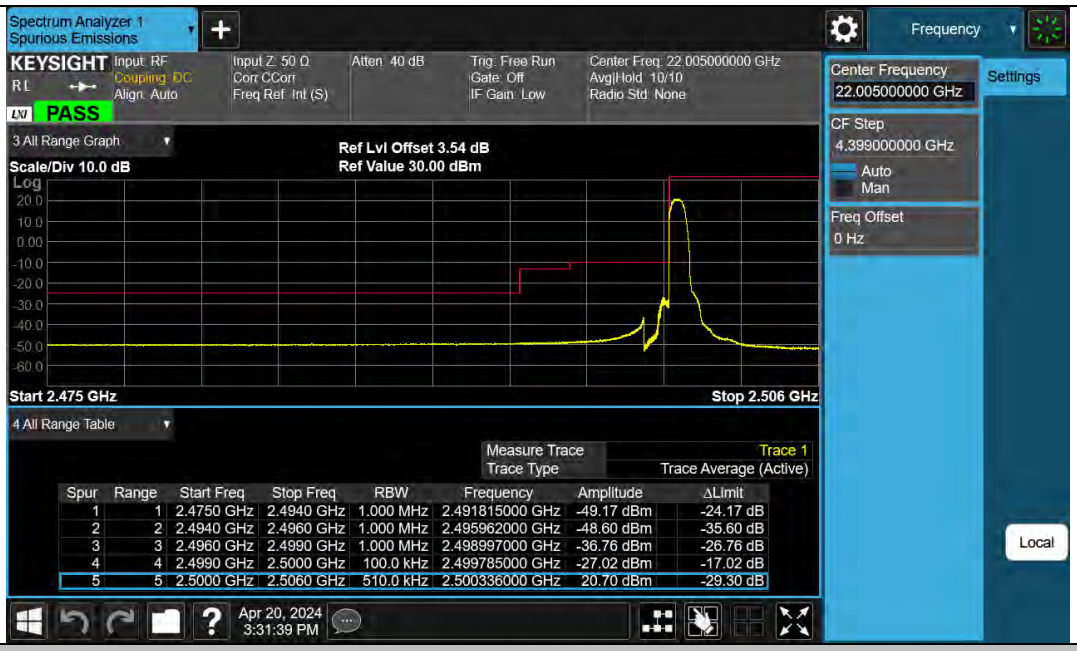


Band7_5MHz_QPSK_20775_25RB#0

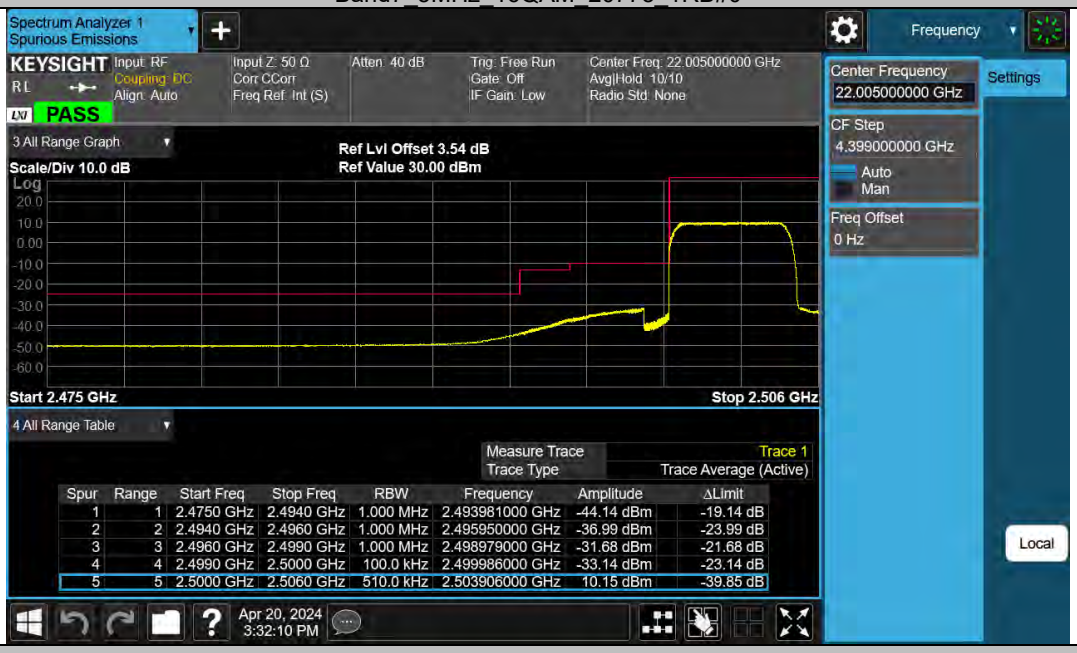


Band7_5MHz_QPSK_21425_1RB#24

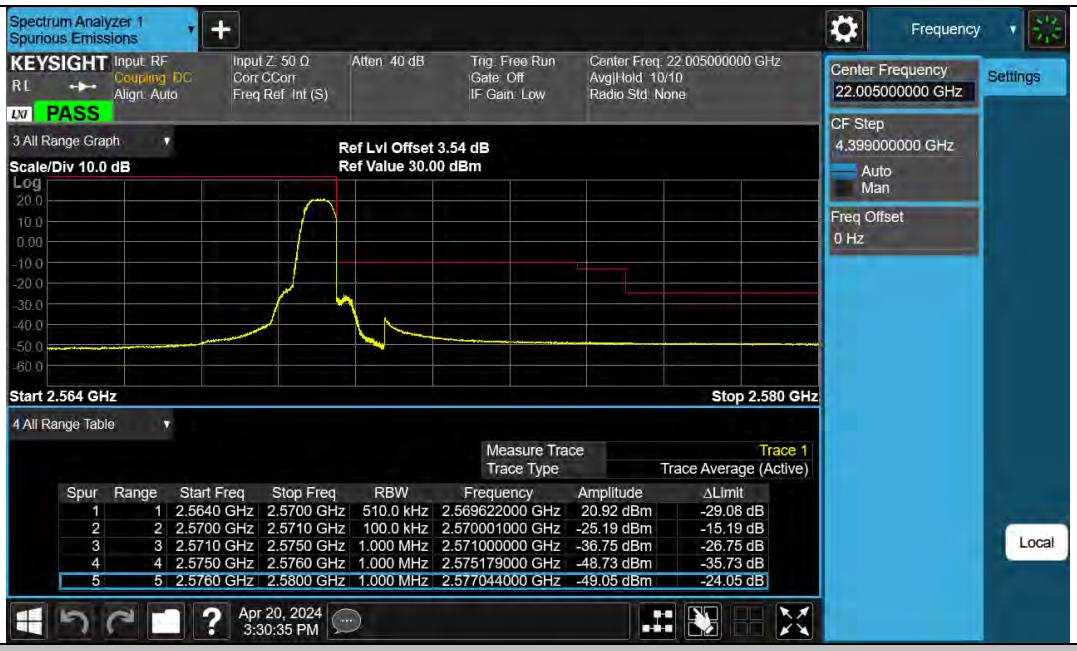
Band7_5MHz_QPSK_21425_25RB#0



Band7_5MHz_16QAM_20775_1RB#0



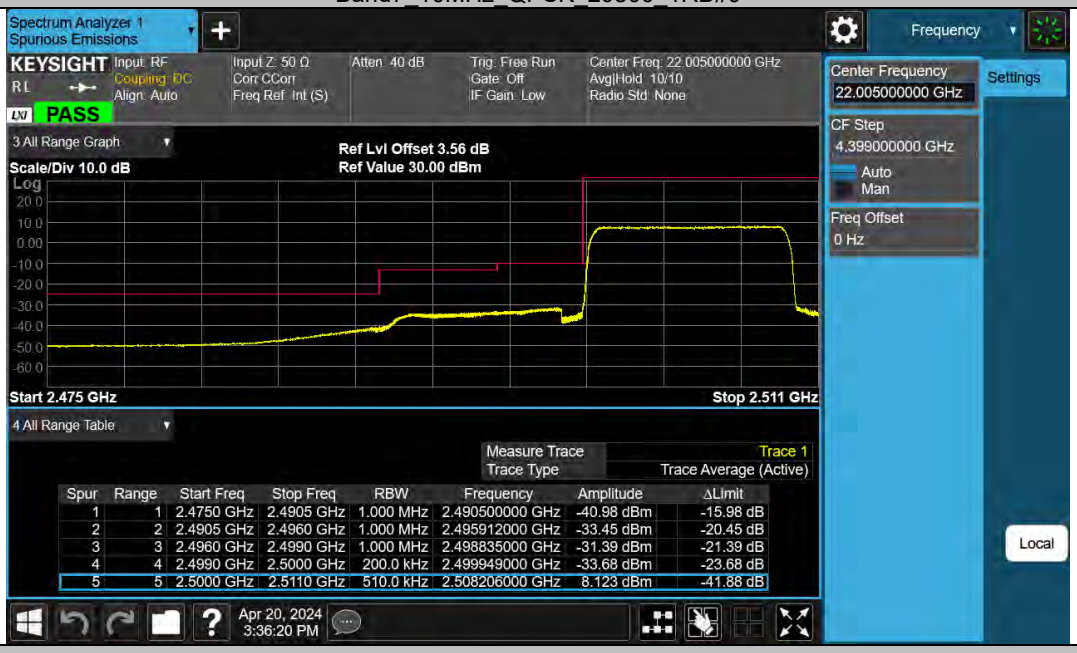
Band7_5MHz_16QAM_20775_25RB#0



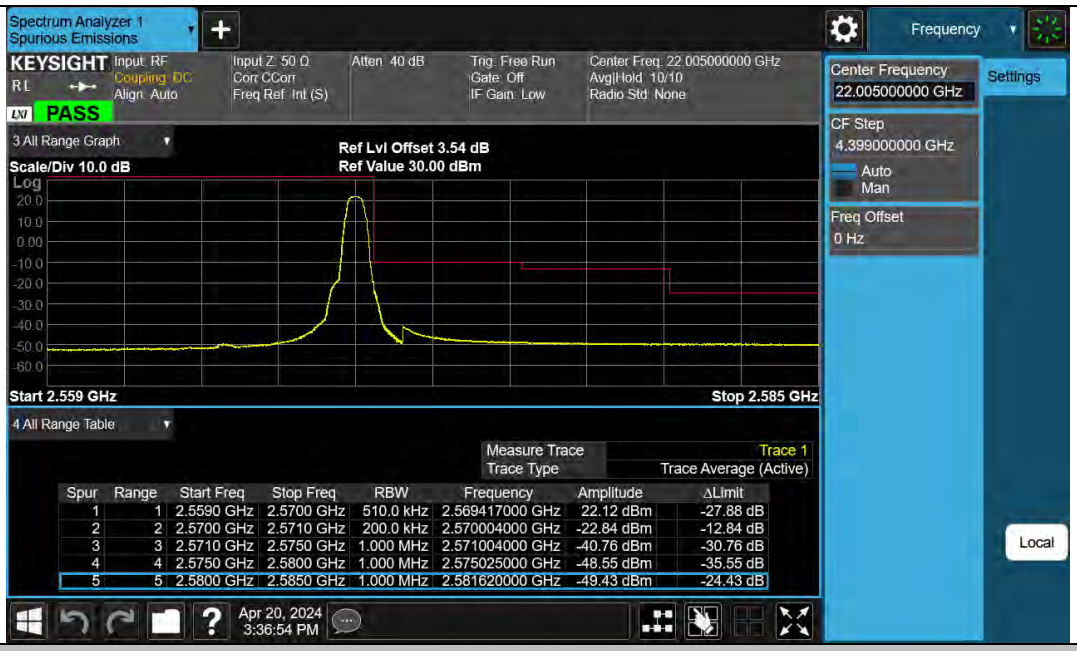
Band7_5MHz_16QAM_21425_1RB#24

Band7_5MHz_16QAM_21425_25RB#0

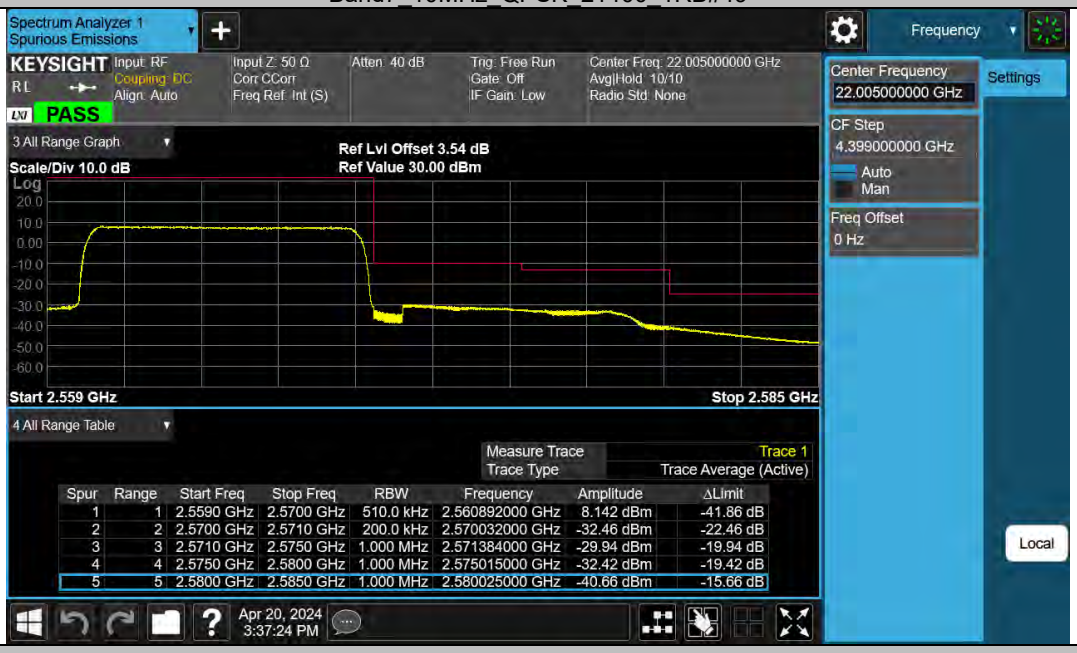
Band7_10MHz_QPSK_20800_1RB#0



Band7_10MHz_QPSK_20800_50RB#0



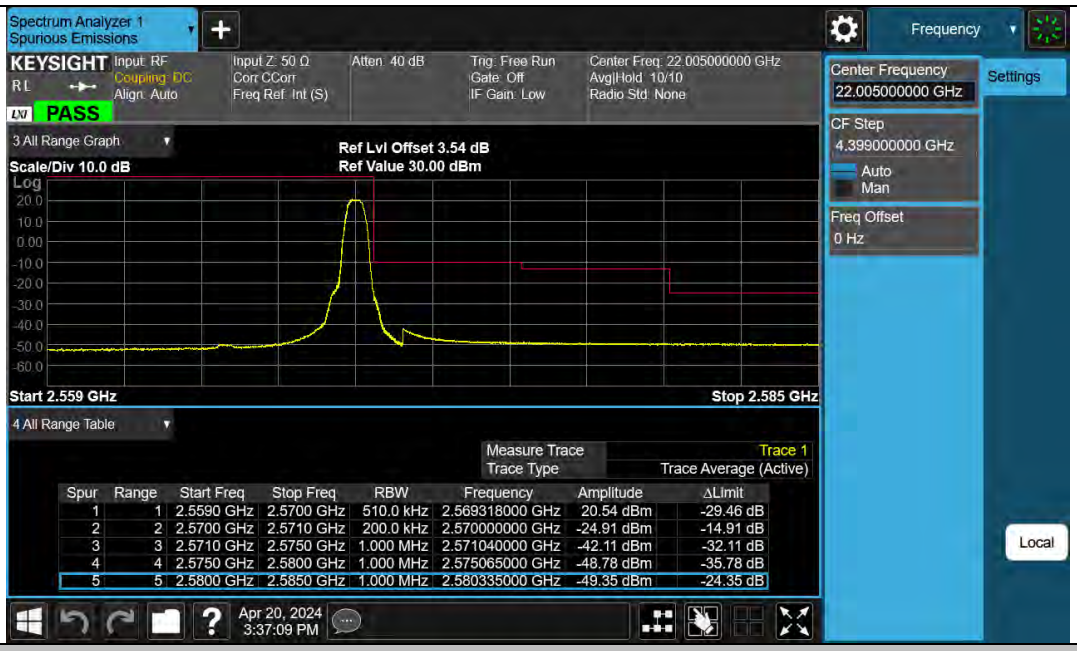
Band7_10MHz_QPSK_21400_1RB#49



Band7_10MHz_QPSK_21400_50RB#0

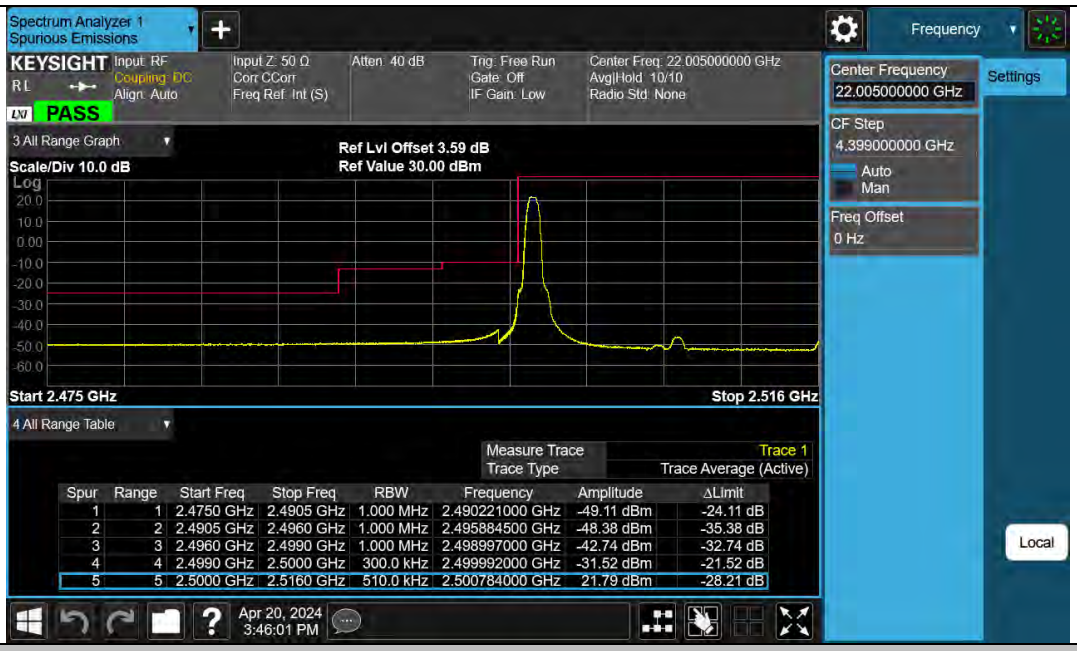
Band7_10MHz_16QAM_20800_1RB#0

Band7_10MHz_16QAM_20800_50RB#0

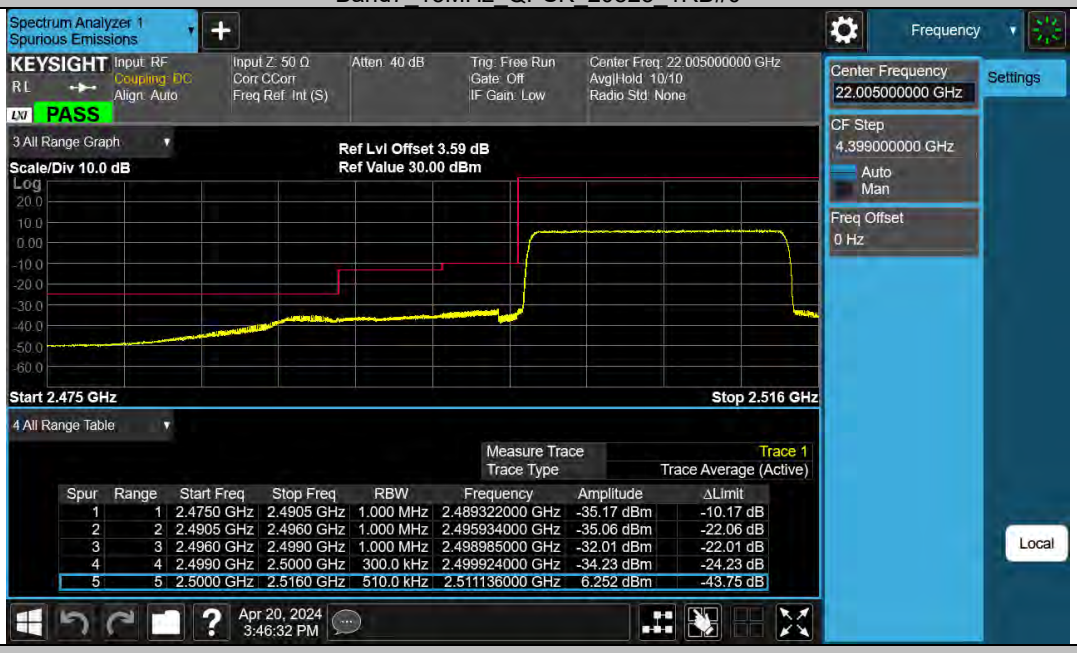


Band7_10MHz_16QAM_21400_1RB#49

Band7_10MHz_16QAM_21400_50RB#0



Band7_15MHz_QPSK_20825_1RB#0



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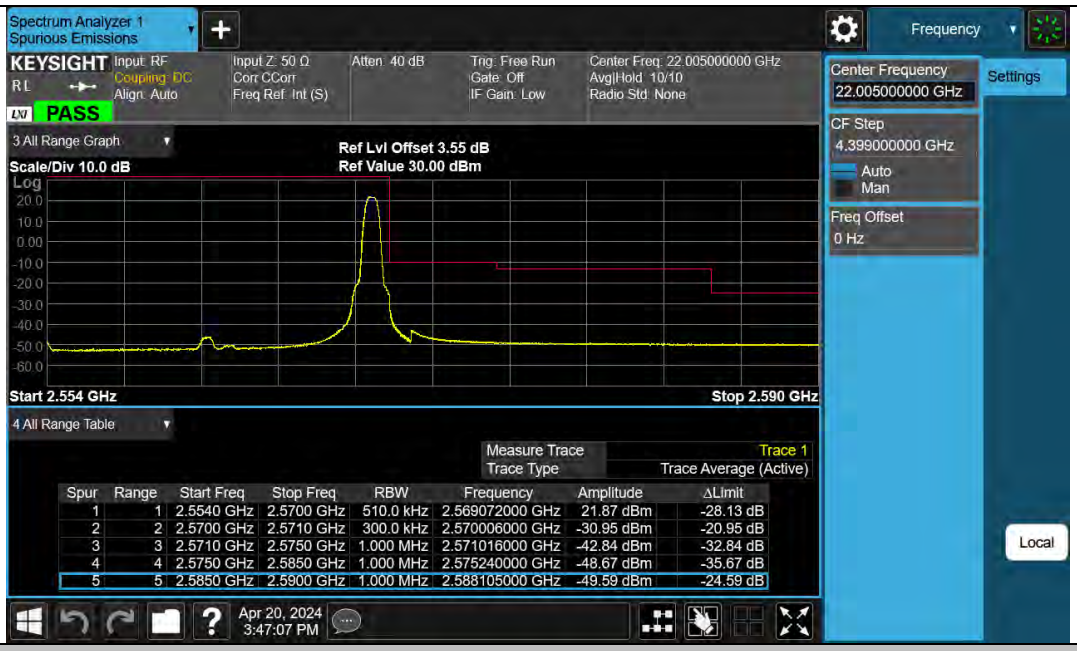
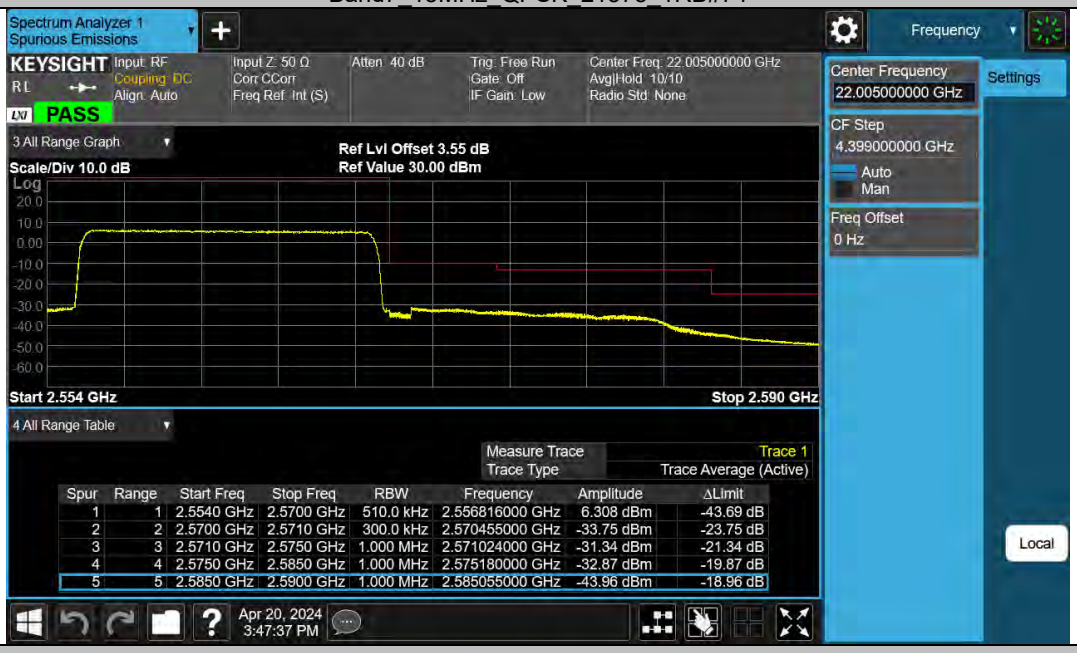
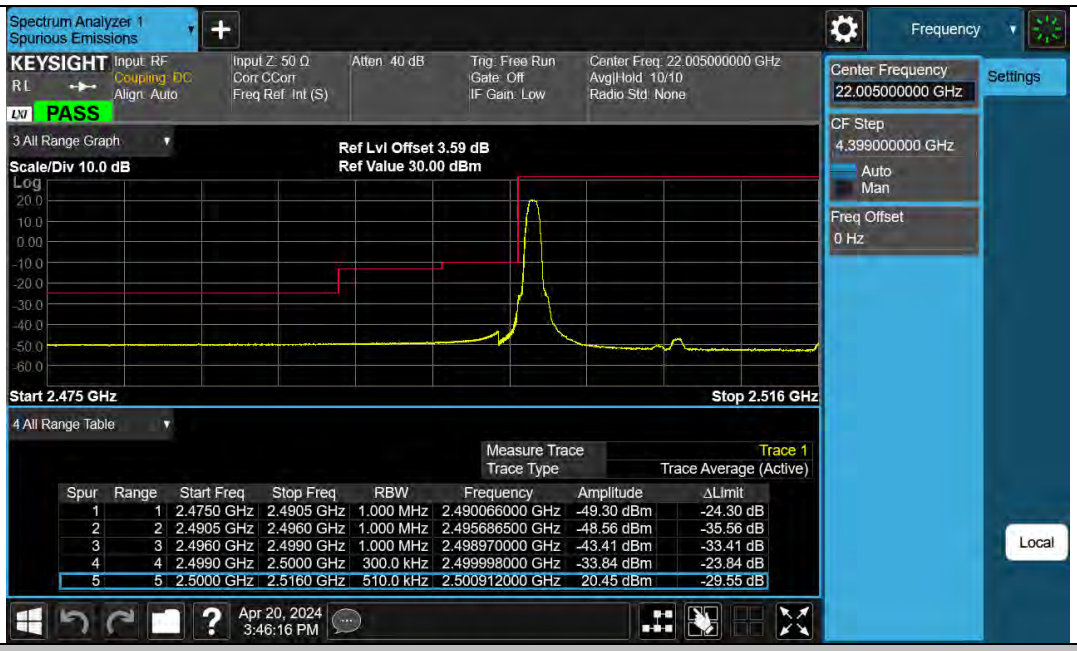


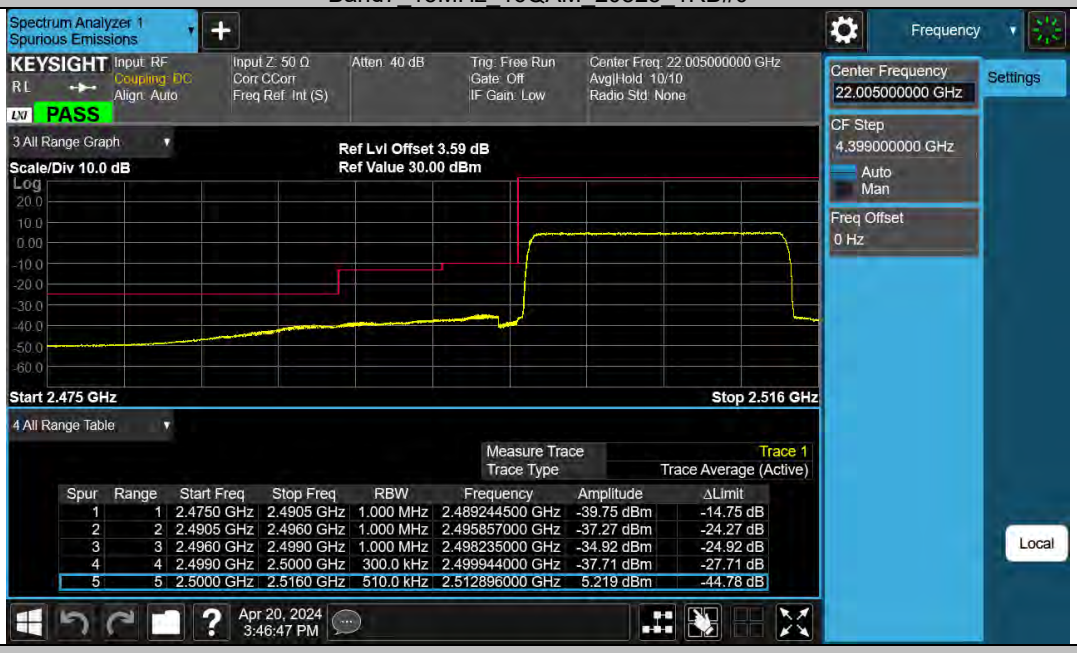
Band7_15MHz_QPSK_21375_1RB#74



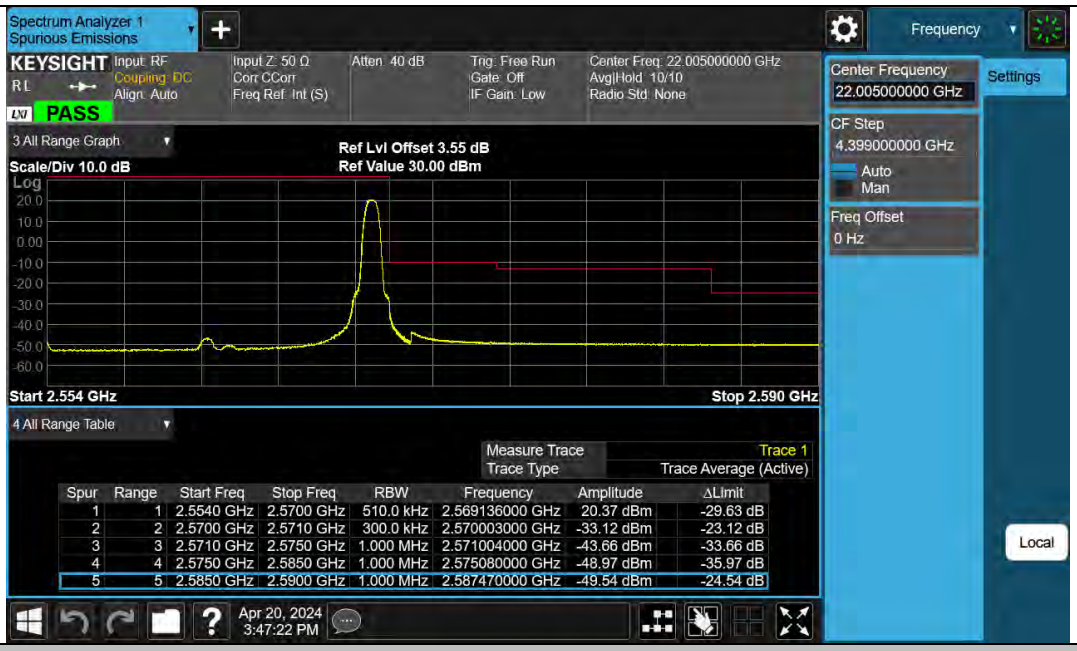
Band7_15MHz_QPSK_21375_75RB#0



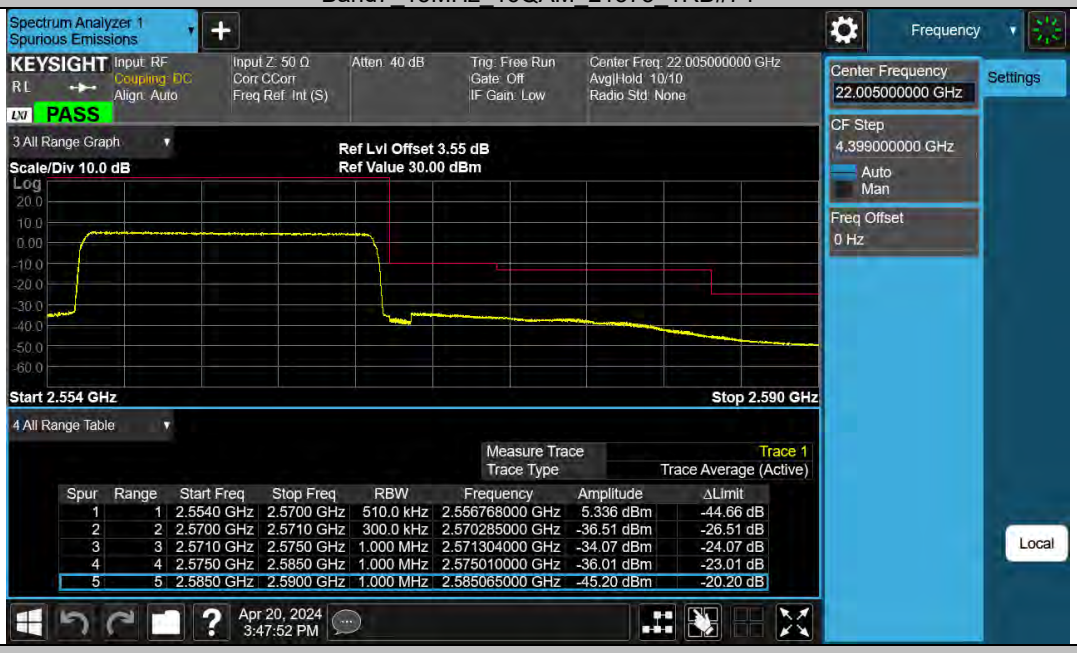
Band7_15MHz_16QAM_20825_1RB#0



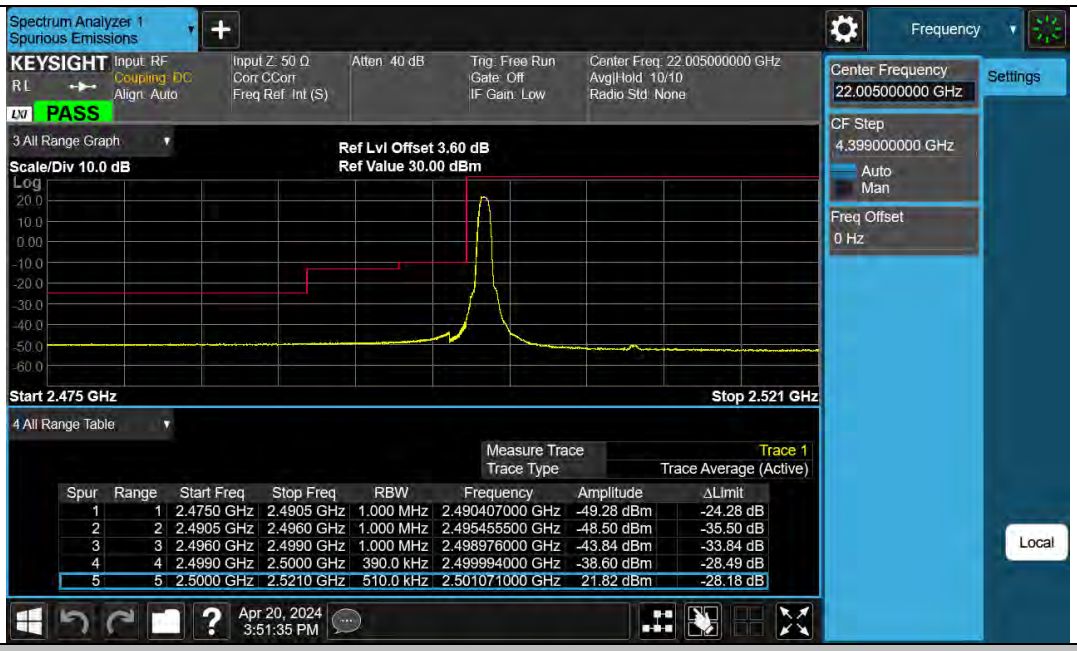
Band7_15MHz_16QAM_20825_75RB#0



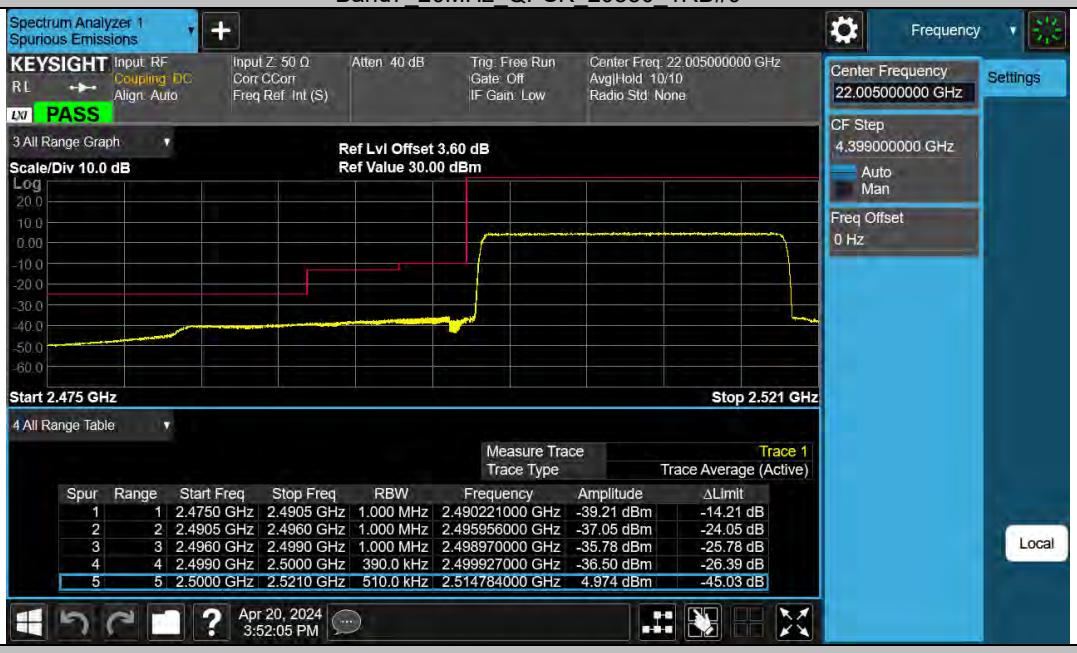
Band7_15MHz_16QAM_21375_1RB#74



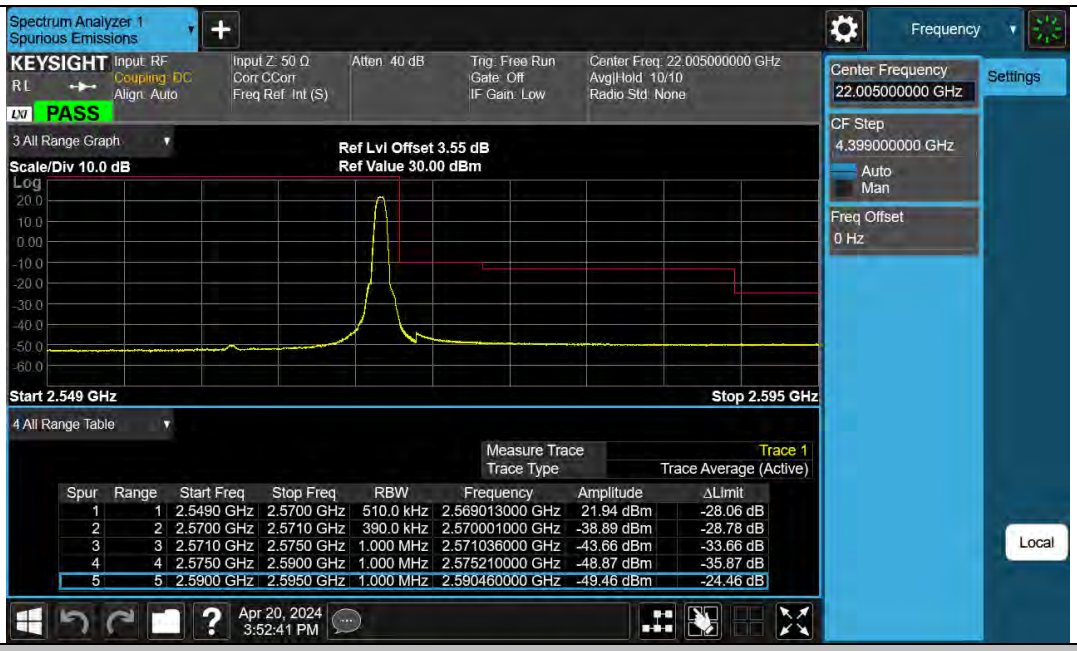
Band7_15MHz_16QAM_21375_75RB#0



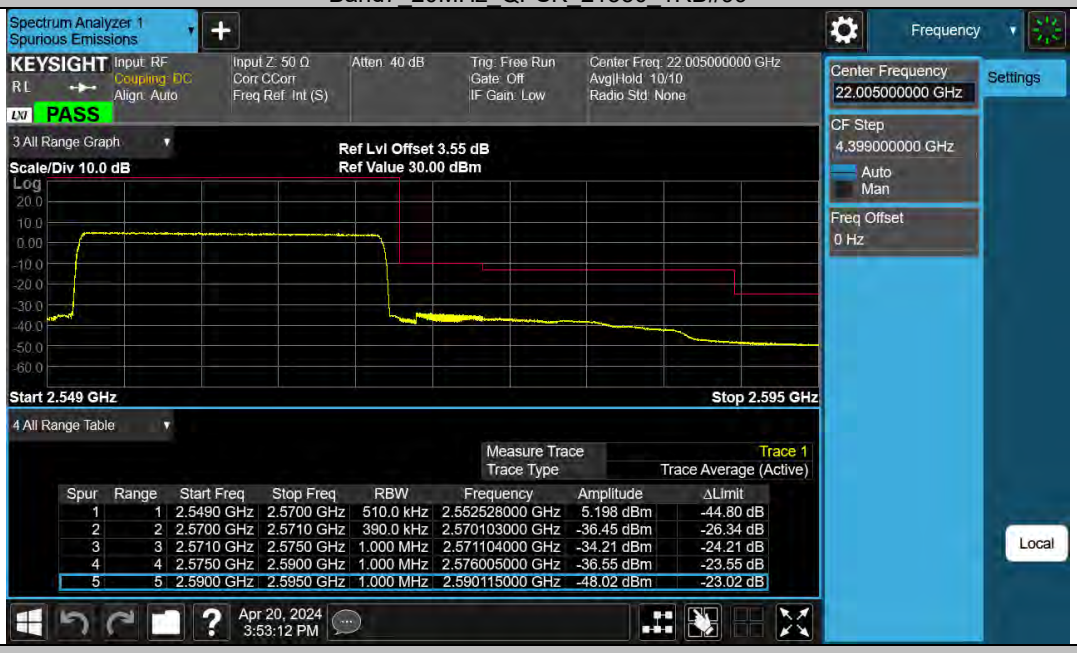
Band7_20MHz_QPSK_20850_1RB#0



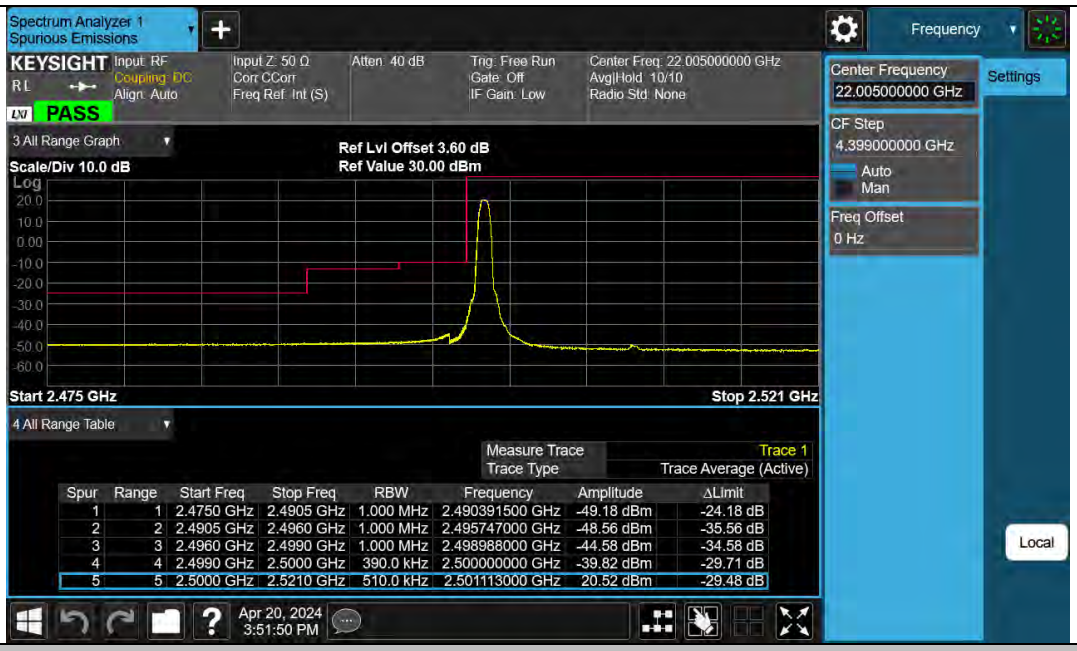
Band7_20MHz_QPSK_20850_100RB#0



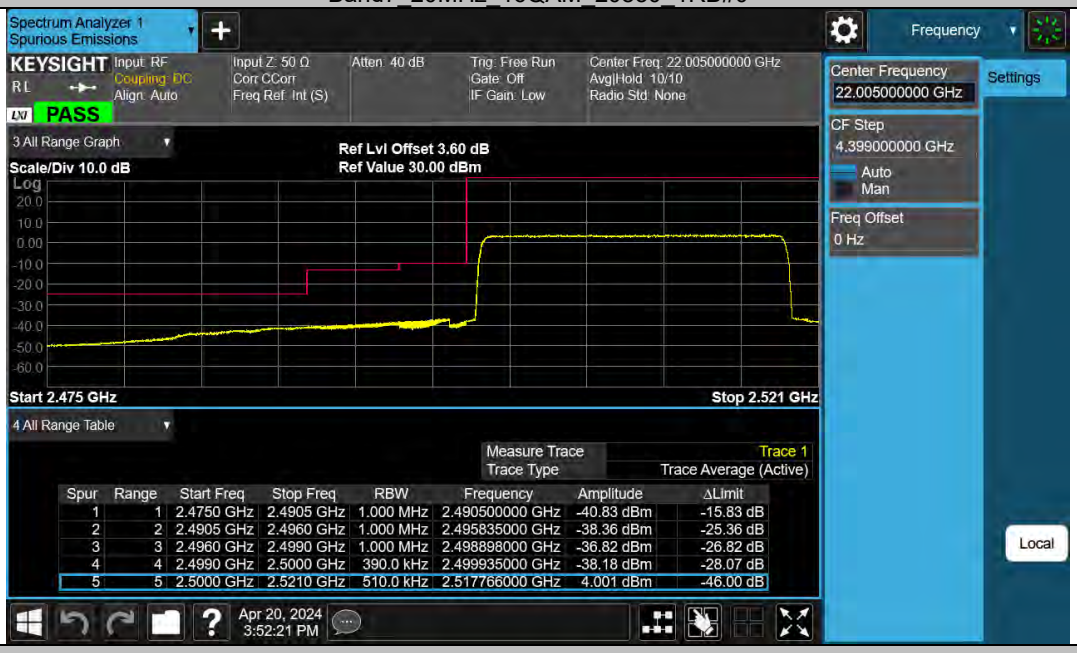
Band7_20MHz_QPSK_21350_1RB#99



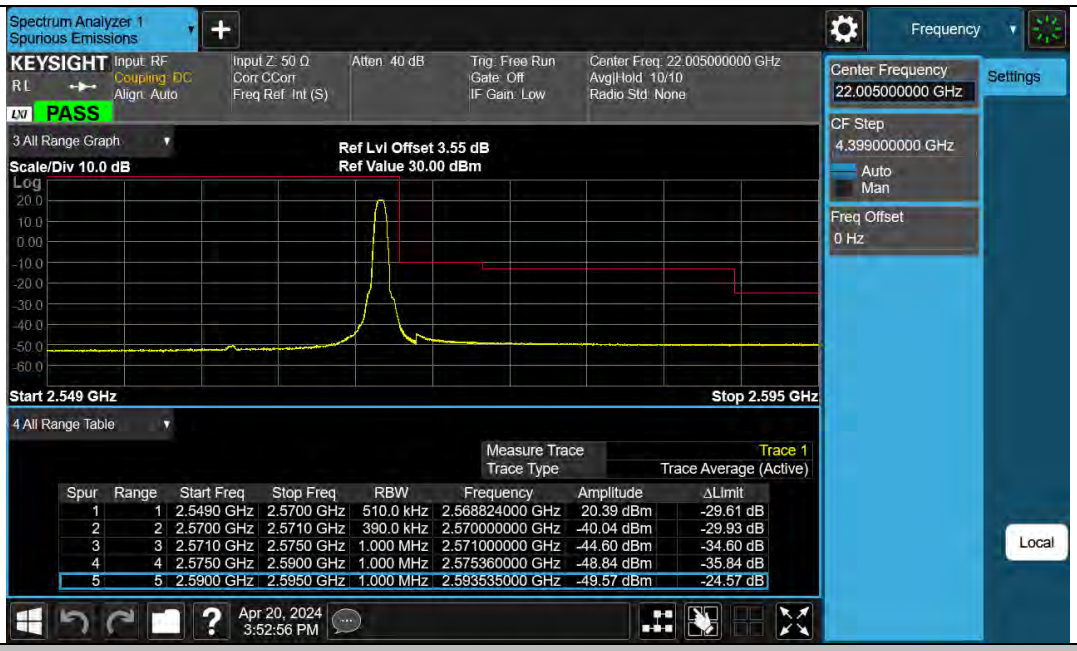
Band7_20MHz_QPSK_21350_100RB#0



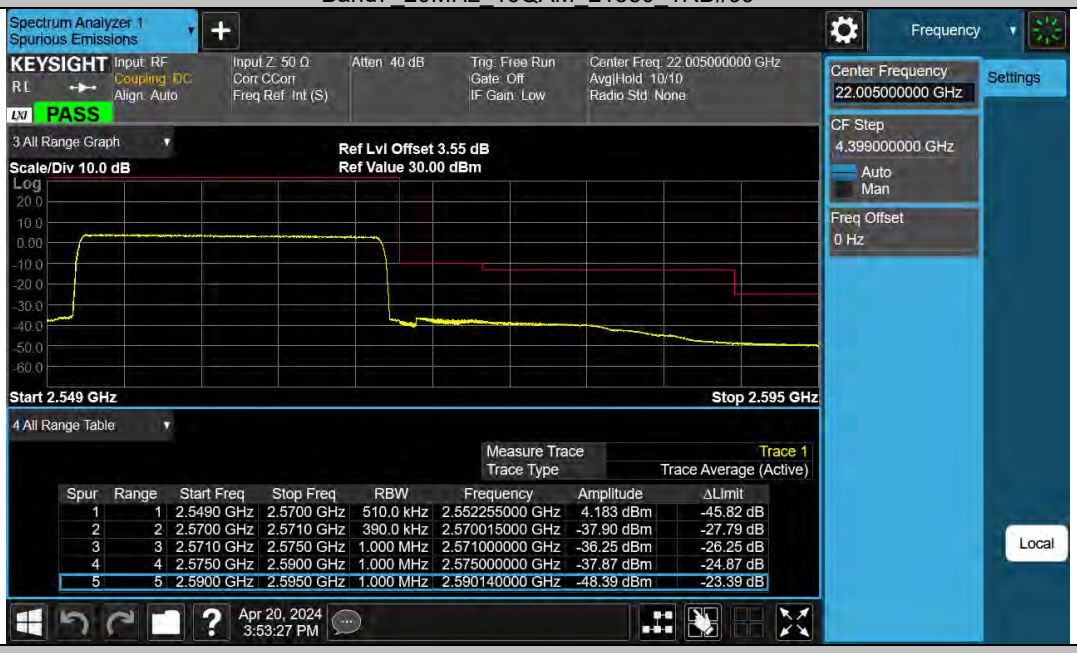
Band7_20MHz_16QAM_20850_1RB#0



Band7_20MHz_16QAM_20850_100RB#0



Band7_20MHz_16QAM_21350_1RB#99



Band7_20MHz_16QAM_21350_100RB#0

CONDUCTED SPURIOUS EMISSION
TEST RESULT

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	30~1000	-59.44	PASS
Band7	5MHz	QPSK	20775	1RB#0	1000~27000	-42.38	PASS
Band7	5MHz	QPSK	21100	1RB#0	30~1000	-59.46	PASS
Band7	5MHz	QPSK	21100	1RB#0	1000~27000	-42.50	PASS
Band7	5MHz	QPSK	21425	1RB#0	30~1000	-59.42	PASS
Band7	5MHz	QPSK	21425	1RB#0	1000~27000	-42.54	PASS
Band7	10MHz	QPSK	20800	1RB#0	30~1000	-59.42	PASS
Band7	10MHz	QPSK	20800	1RB#0	1000~27000	-42.46	PASS
Band7	10MHz	QPSK	21100	1RB#0	30~1000	-59.37	PASS
Band7	10MHz	QPSK	21100	1RB#0	1000~27000	-42.46	PASS
Band7	10MHz	QPSK	21400	1RB#0	30~1000	-59.40	PASS
Band7	10MHz	QPSK	21400	1RB#0	1000~27000	-42.38	PASS
Band7	15MHz	QPSK	20825	1RB#0	30~1000	-59.42	PASS
Band7	15MHz	QPSK	20825	1RB#0	1000~27000	-42.49	PASS
Band7	15MHz	QPSK	21100	1RB#0	30~1000	-59.41	PASS
Band7	15MHz	QPSK	21100	1RB#0	1000~27000	-42.24	PASS
Band7	15MHz	QPSK	21375	1RB#0	30~1000	-59.44	PASS
Band7	15MHz	QPSK	21375	1RB#0	1000~27000	-42.39	PASS
Band7	20MHz	QPSK	20850	1RB#0	30~1000	-59.39	PASS
Band7	20MHz	QPSK	20850	1RB#0	1000~27000	-42.43	PASS
Band7	20MHz	QPSK	21100	1RB#0	30~1000	-59.43	PASS
Band7	20MHz	QPSK	21100	1RB#0	1000~27000	-42.48	PASS
Band7	20MHz	QPSK	21350	1RB#0	30~1000	-59.46	PASS
Band7	20MHz	QPSK	21350	1RB#0	1000~27000	-42.40	PASS

TEST GRAPHS

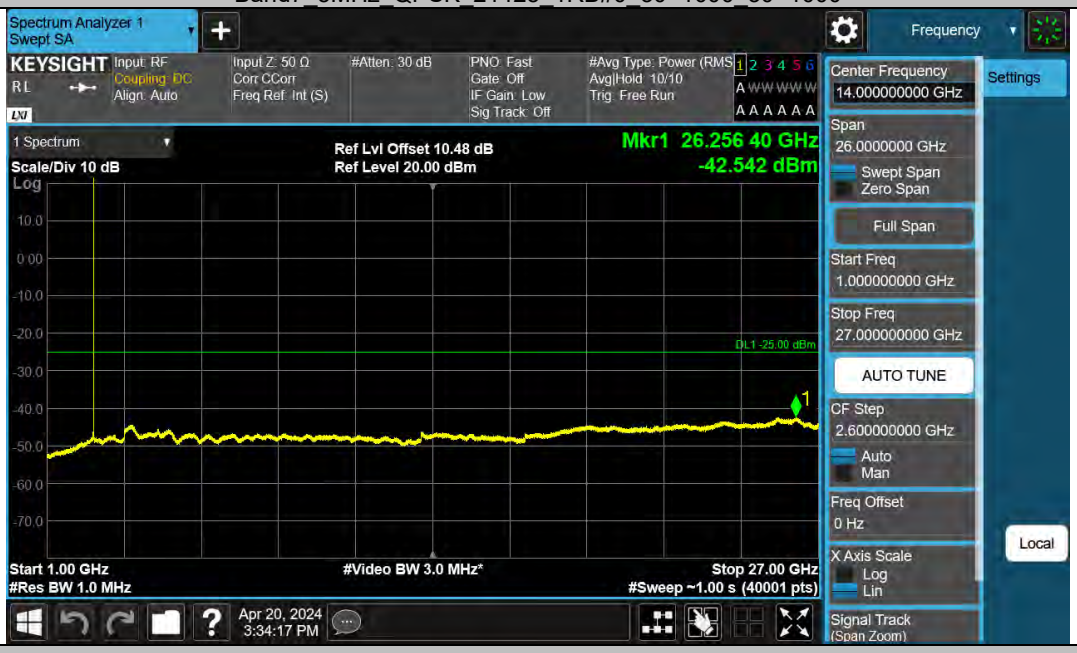
Band7_5MHz_QPSK_20775_1RB#0_30~1000_30~1000

Band7_5MHz_QPSK_20775_1RB#0_1000~27000_1000~27000

Band7_5MHz_QPSK_21100_1RB#0_30~1000_30~1000

Band7_5MHz_QPSK_21100_1RB#0_1000~27000_1000~27000

Band7_5MHz_QPSK_21425_1RB#0_30~1000_30~1000



Band7_5MHz_QPSK_21425_1RB#0_1000~27000_1000~27000

Band7_10MHz_QPSK_20800_1RB#0_30~1000_30~1000

Band7_10MHz_QPSK_20800_1RB#0_1000~27000_1000~27000

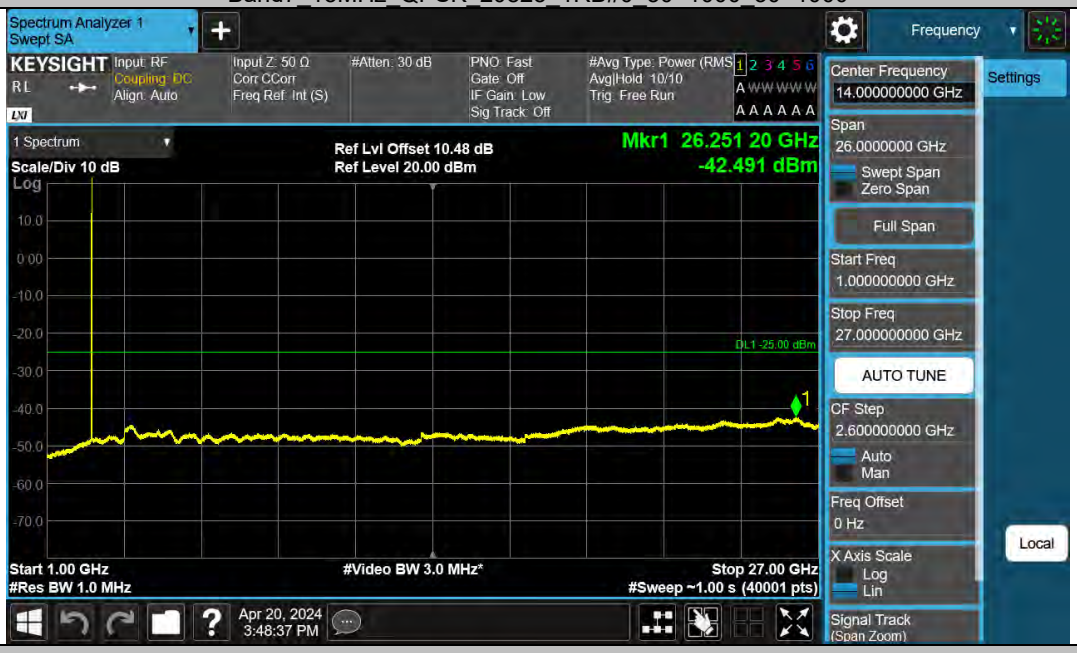
Band7_10MHz_QPSK_21100_1RB#0_30~1000_30~1000

Band7_10MHz_QPSK_21100_1RB#0_1000~27000_1000~27000

Band7_10MHz_QPSK_21400_1RB#0_30~1000_30~1000

Band7_10MHz_QPSK_21400_1RB#0_1000~27000_1000~27000

Band7_15MHz_QPSK_20825_1RB#0_30~1000_30~1000

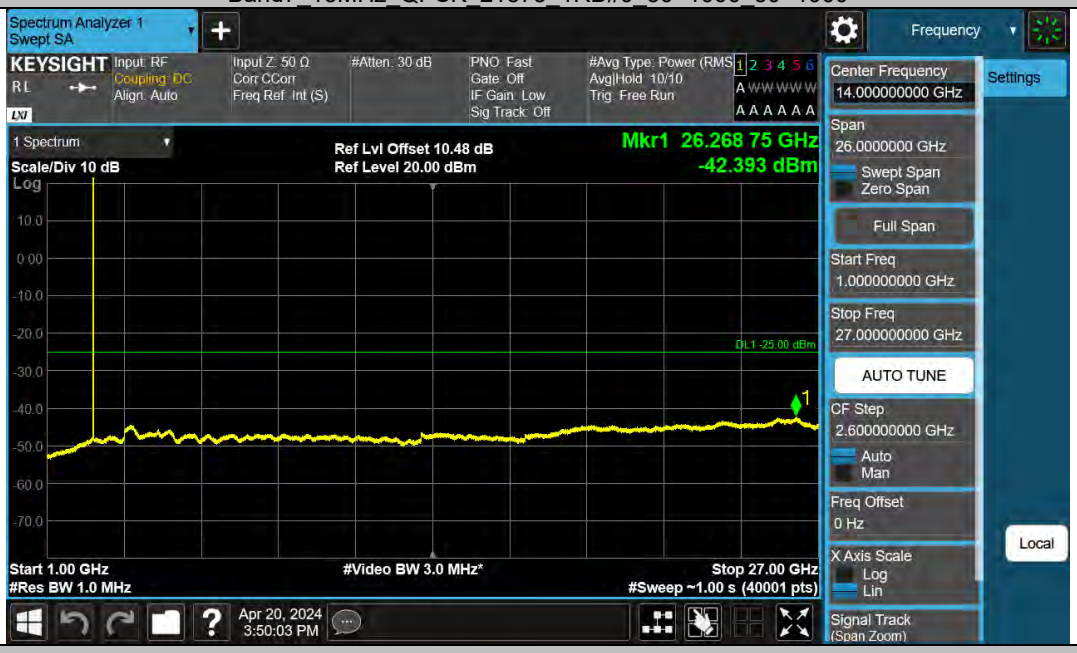


Band7_15MHz_QPSK_20825_1RB#0_1000~27000_1000~27000

Band7_15MHz_QPSK_21100_1RB#0_30~1000_30~1000

Band7_15MHz_QPSK_21100_1RB#0_1000~27000_1000~27000

Band7_15MHz_QPSK_21375_1RB#0_30~1000_30~1000



Band7_15MHz_QPSK_21375_1RB#0_1000~27000_1000~27000

Band7_20MHz_QPSK_20850_1RB#0_30~1000_30~1000

Band7_20MHz_QPSK_20850_1RB#0_1000~27000_1000~27000