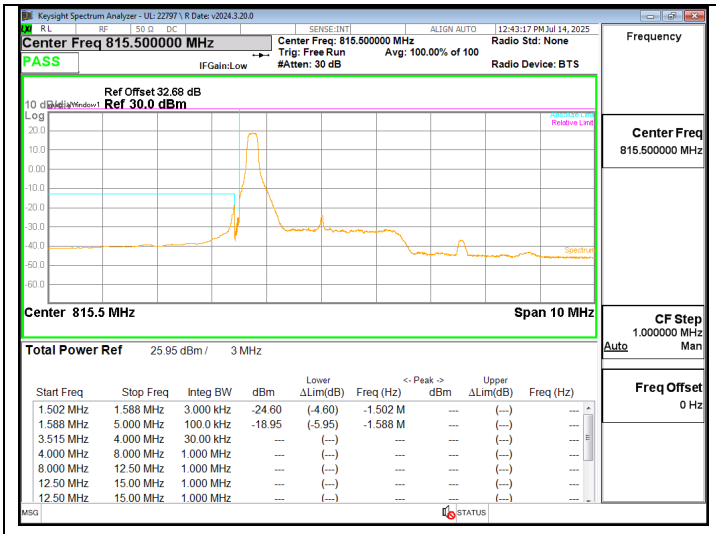
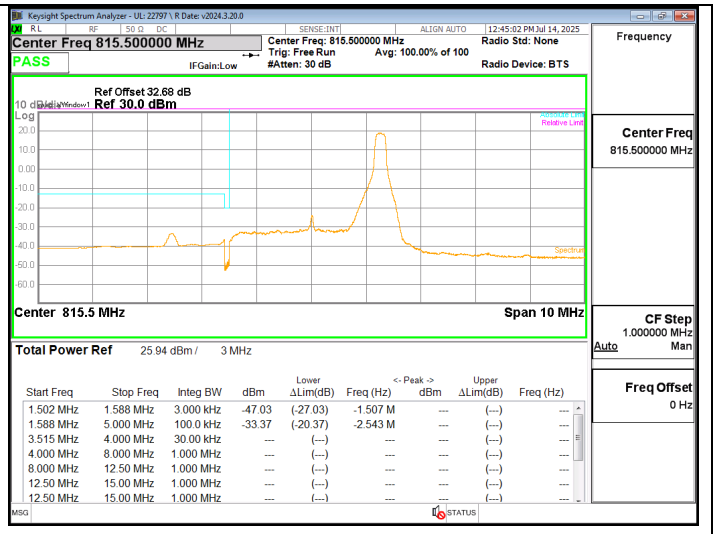
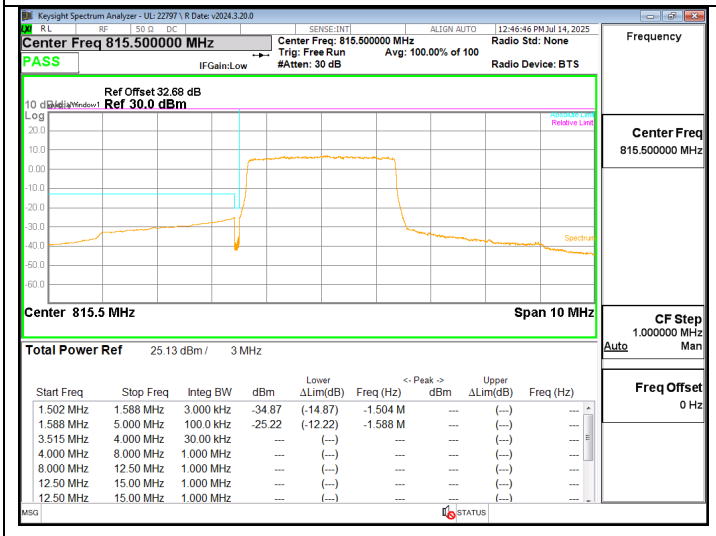


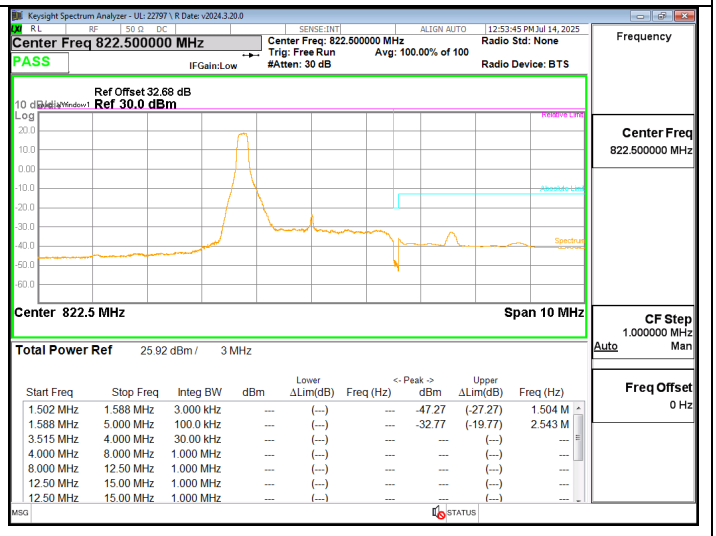
LTE26 3MHz QPSK LOW Ch RB1-0



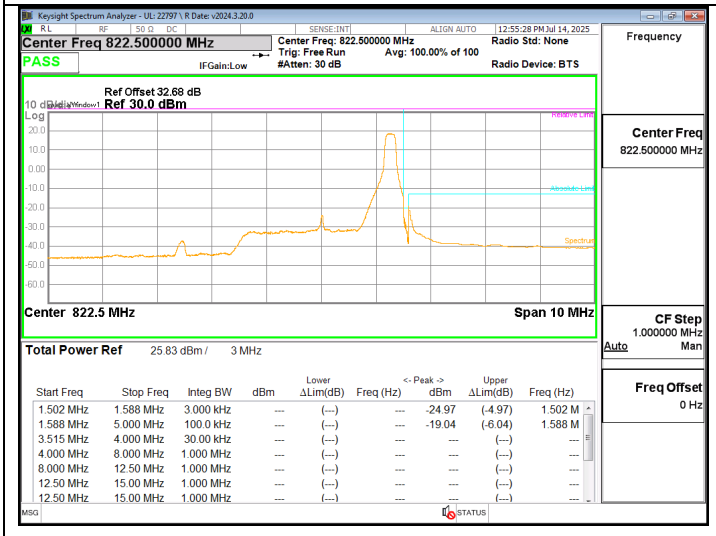
LTE26 3MHz QPSK LOW Ch RB1-14



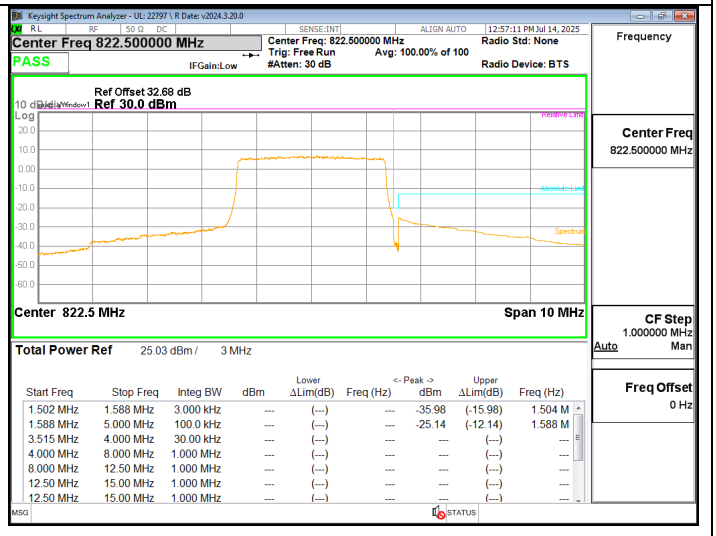
LTE26 3MHz QPSK LOW Ch RB15-0



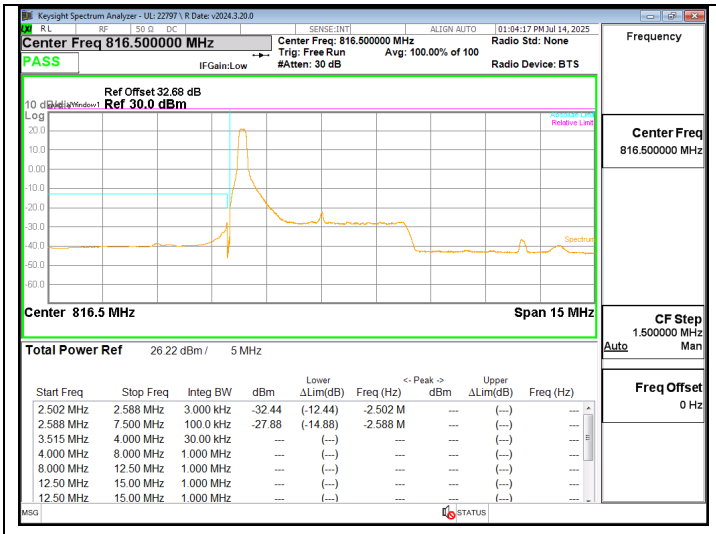
LTE26 3MHz QPSK HIGH Ch RB1-0



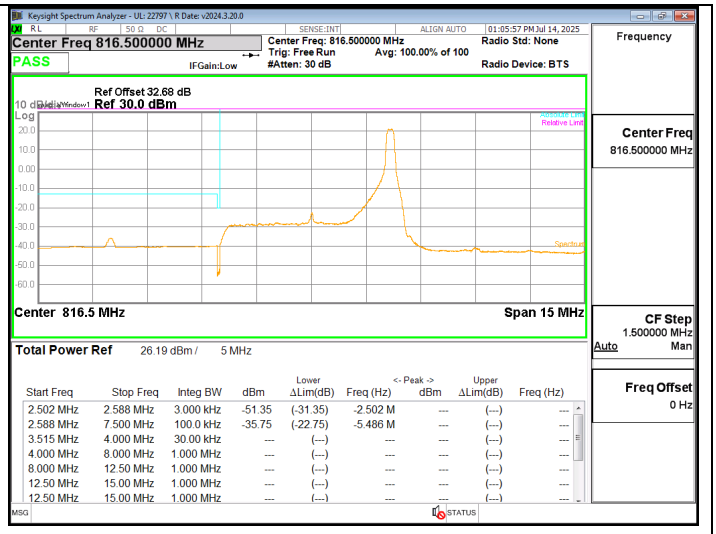
LTE26 3MHz QPSK HIGH Ch RB1-14



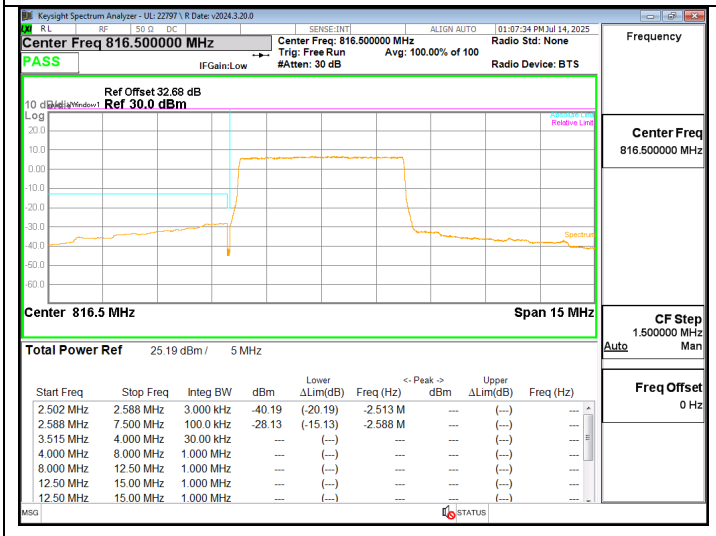
LTE26 3MHz QPSK HIGH Ch RB15-0



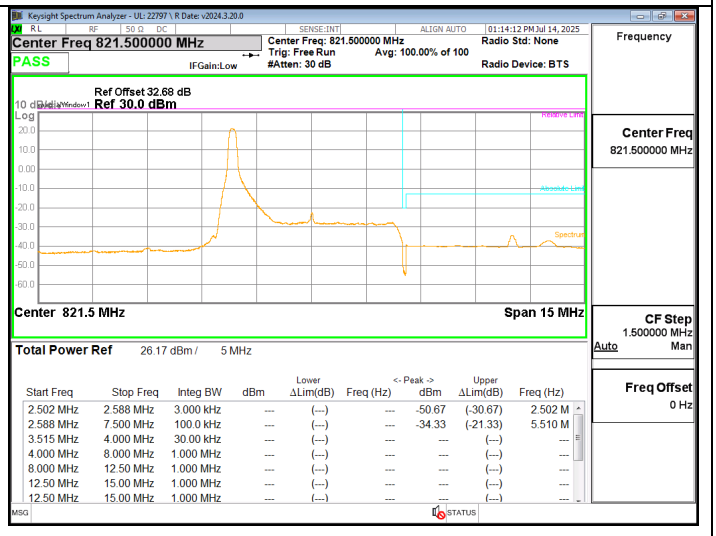
LTE26 5MHz QPSK LOW Ch RB1-0



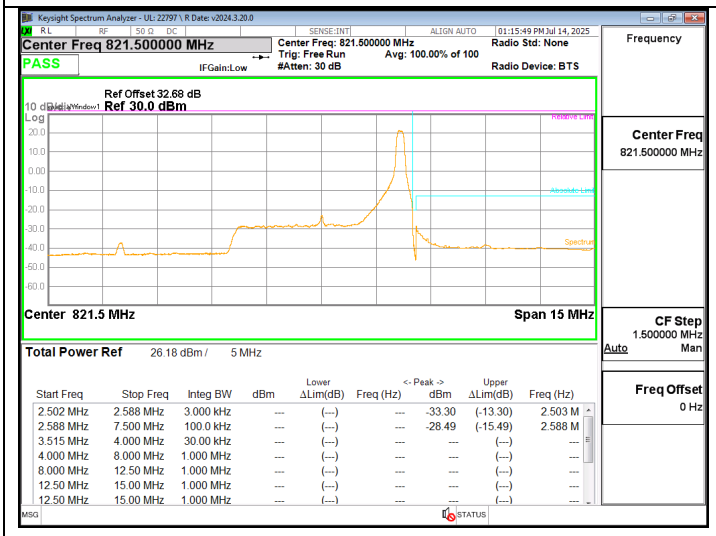
LTE26 5MHz QPSK LOW Ch RB1-24



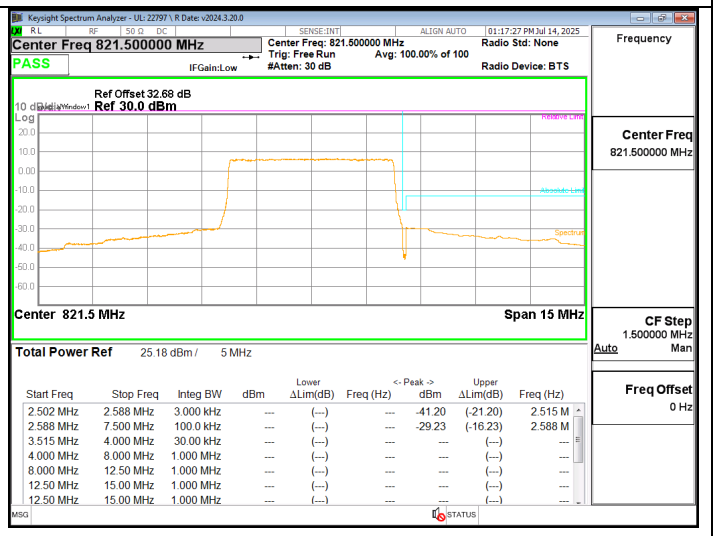
LTE26 5MHz QPSK LOW Ch RB25-0



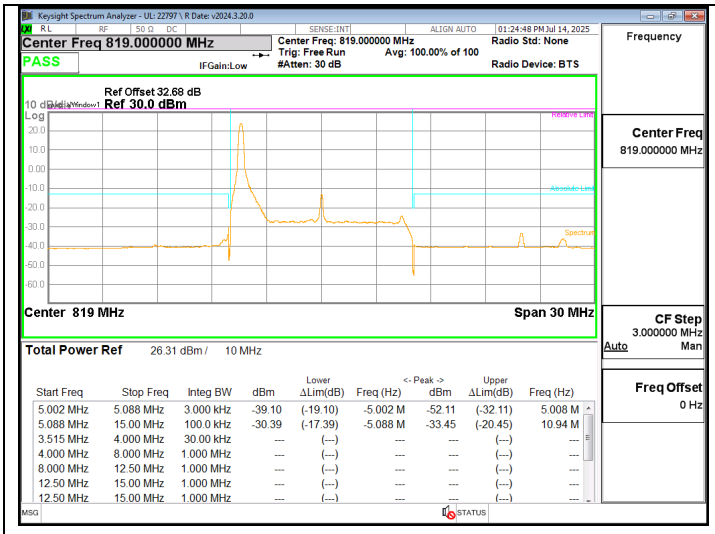
LTE26 5MHz QPSK HIGH Ch RB1-0



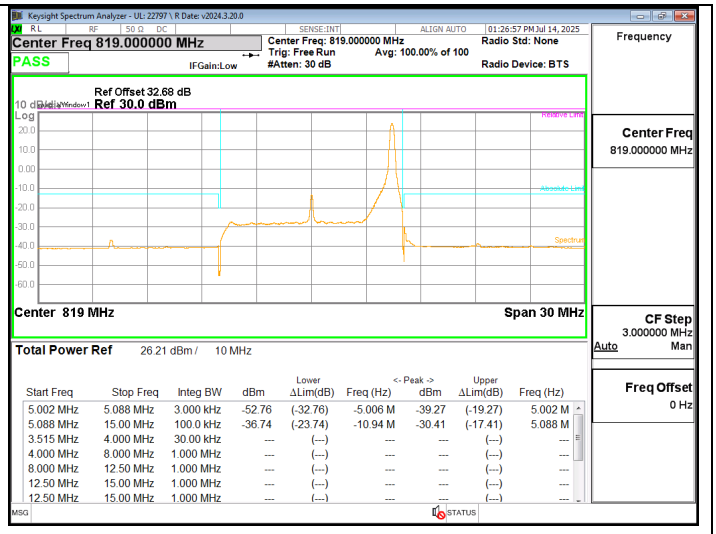
LTE26 5MHz QPSK HIGH Ch RB1-24



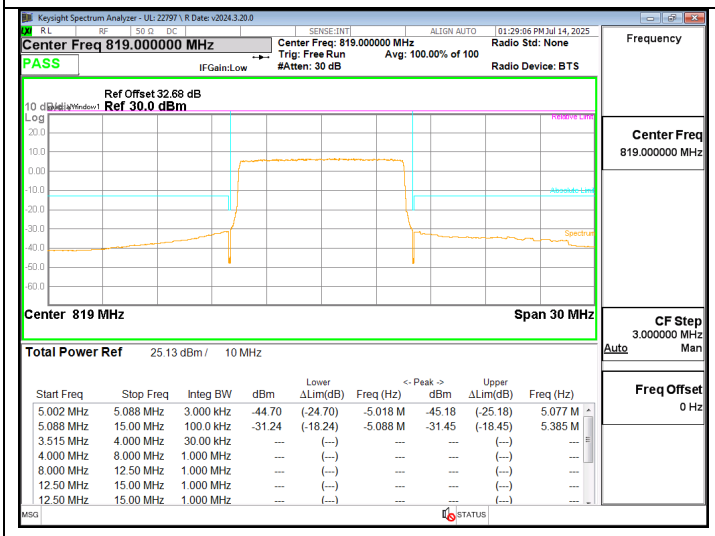
LTE26 5MHz QPSK HIGH Ch RB25-0



LTE26 10MHz QPSK LOW Ch RB1-0



LTE26 10MHz QPSK LOW Ch RB1-49



LTE26 10MHz QPSK LOW Ch RB50-0

9.4.2. LTE BAND 26 (STRADDLE)

LIMITS

FCC: §22.917
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

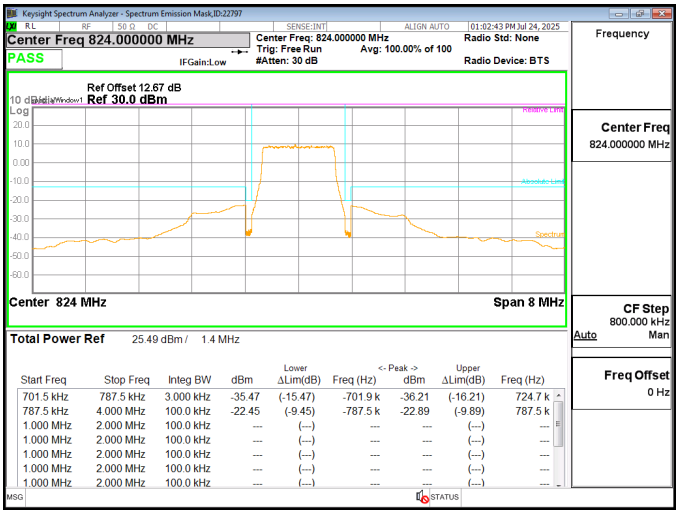
FCC: § 90.691 Emission mask requirements for EA-based systems.

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

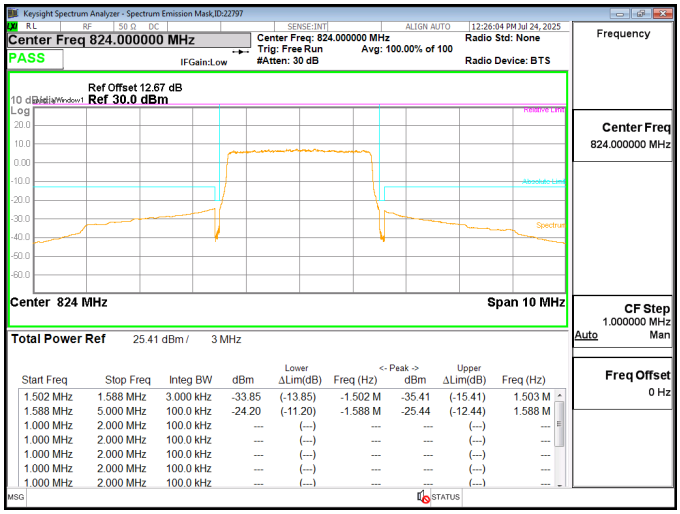
(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz

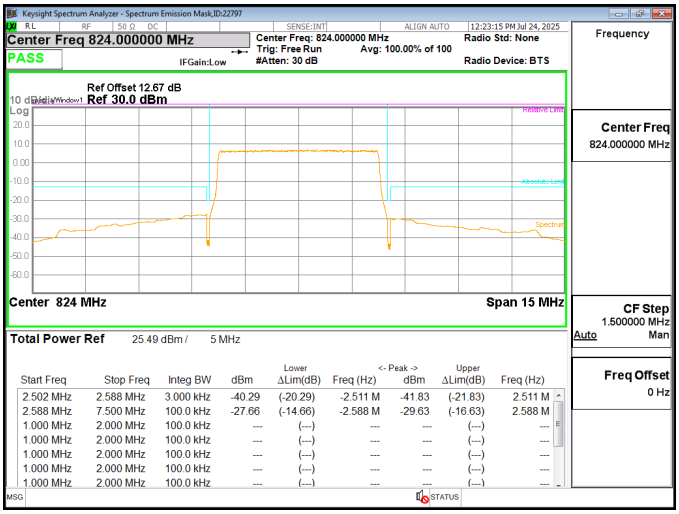
Note: Full RB was tested at all Bandwidths, and the worst-case BW was run at 1RB configuration(s).



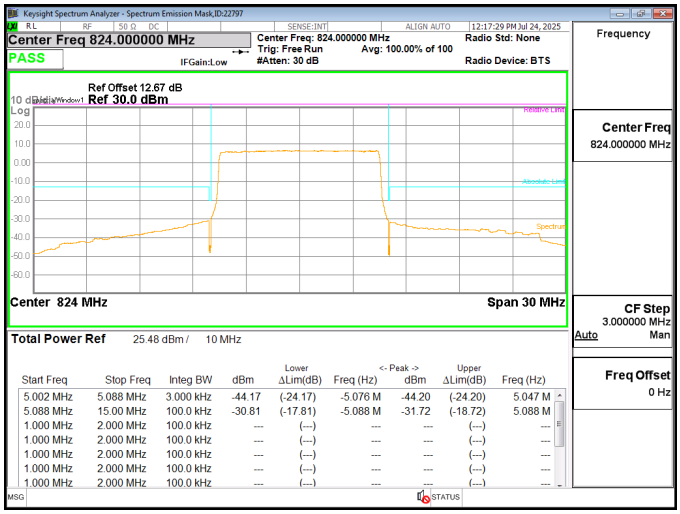
LTE BAND 26 SRADDLE 1.4MHz FRB



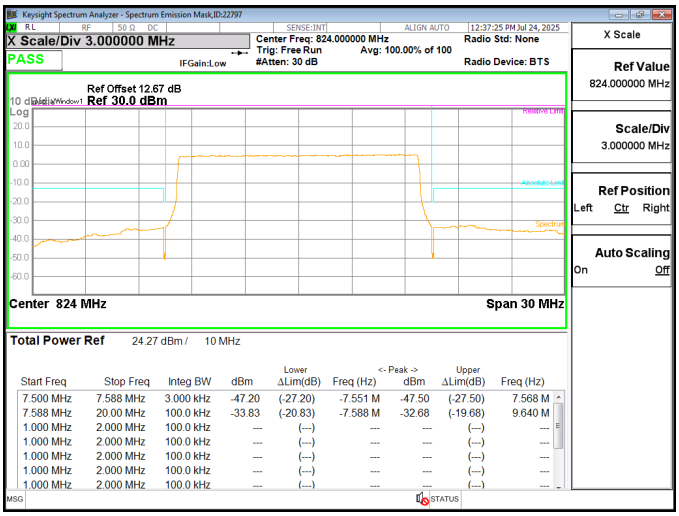
LTE BAND 26 SRADDLE 3MHz FRB



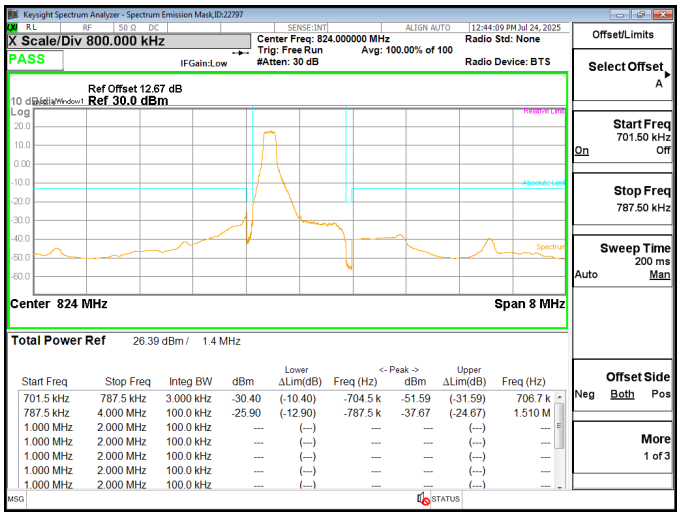
LTE BAND 26 SRADDLE 5MHz FRB



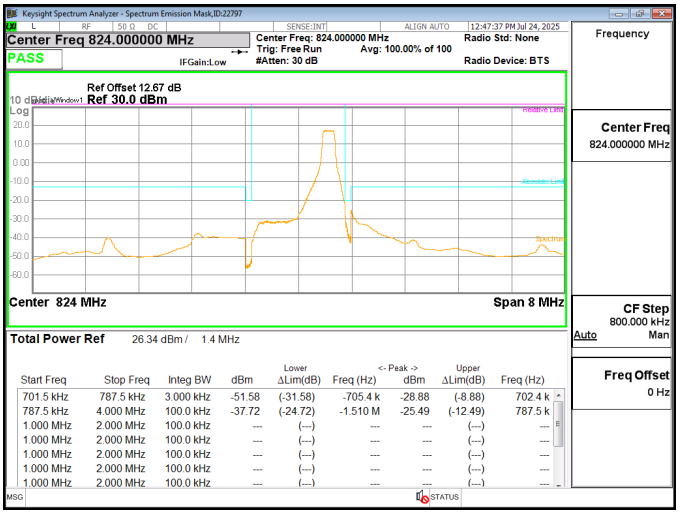
LTE BAND 26 SRADDLE 10MHz FRB



LTE BAND 26 SRADDLE 15MHz FRB



LTE BAND 26 SRADDLE 1.4MHz RB1-0



LTE BAND 26 SRADDLE 1.4MHz RB1-5

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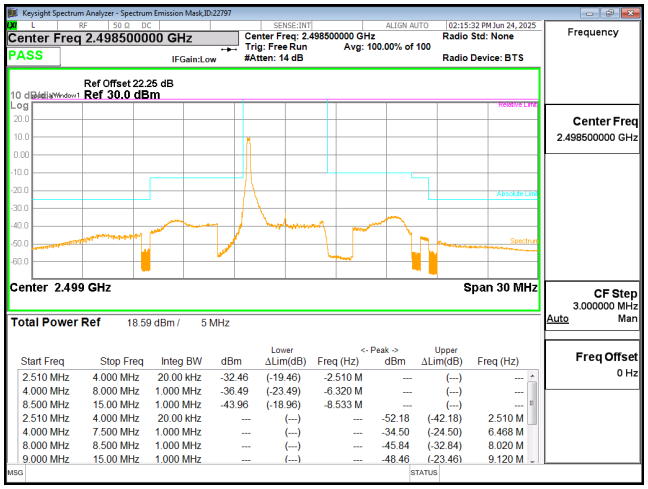
9.4.3. LTE41

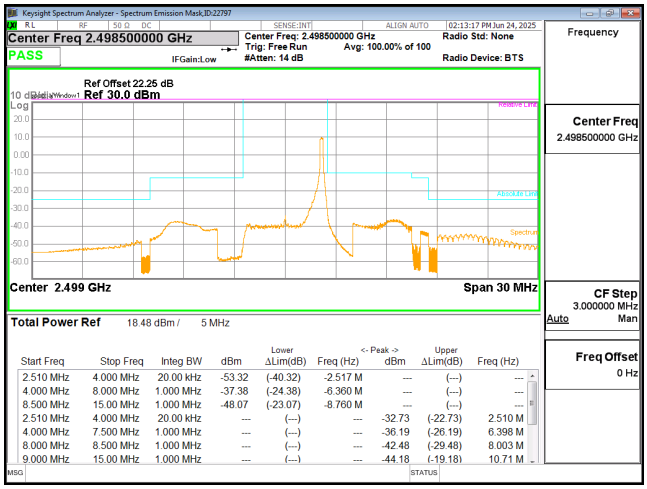
LIMITS

FCC: §27.53
(m)(4) For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

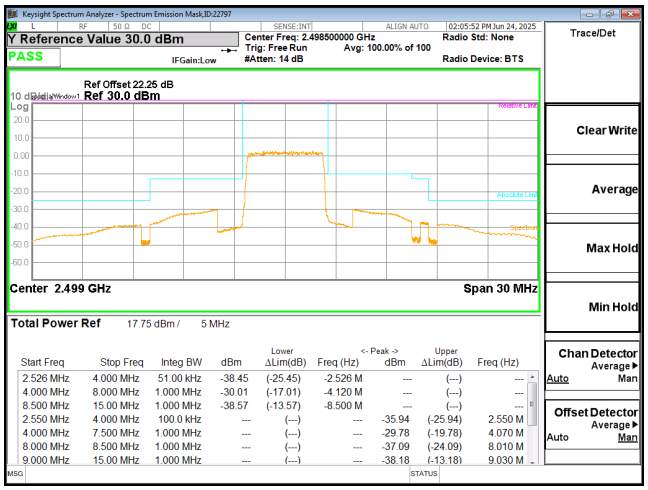
Note – Incorrect transition points were used for the B41 masks. However, the margins are sufficient using the lower bandwidth that, when corrected from ~1% of EBW to the required 500kHz measurement bandwidth (for frequencies offset by between 1 and 1.26 MHz from the channel edge) the levels are still below the limit of -13dBm



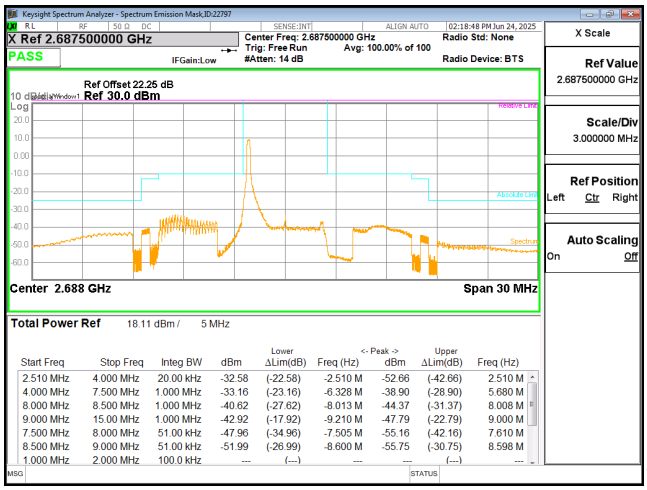
LTE41 5MHz QPSK LOW Ch RB1-0



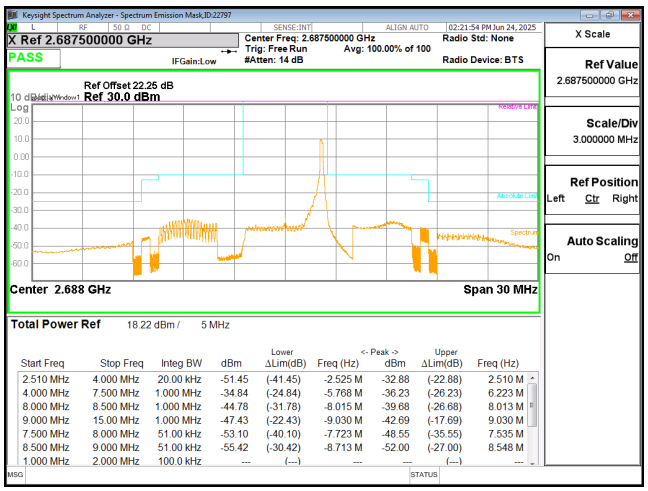
LTE41 5MHz QPSK LOW Ch RB1-24



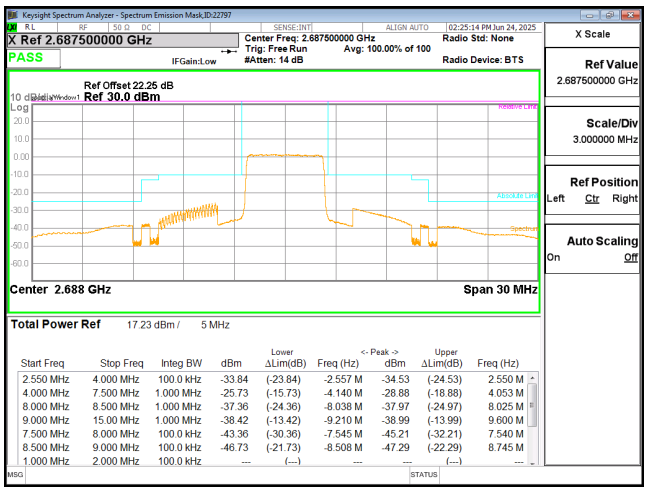
LTE41 5MHz QPSK LOW Ch RB25-0



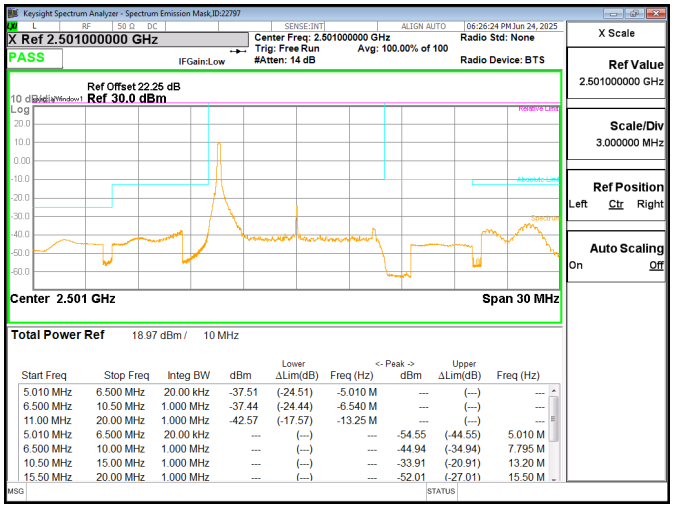
LTE41 5MHz QPSK HIGH Ch RB1-0



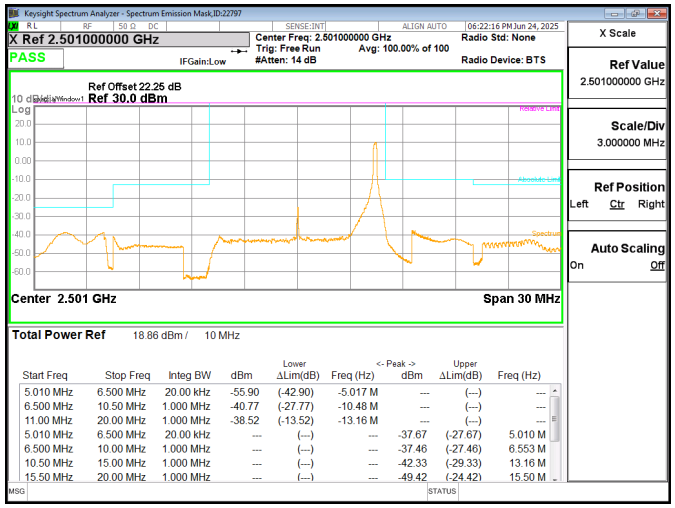
LTE41 5MHz QPSK HIGH Ch RB1-24



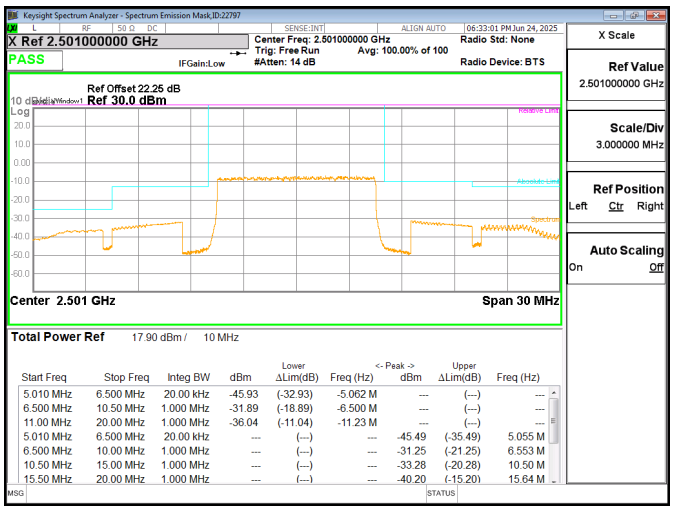
LTE41 5MHz QPSK HIGH Ch RB25-0



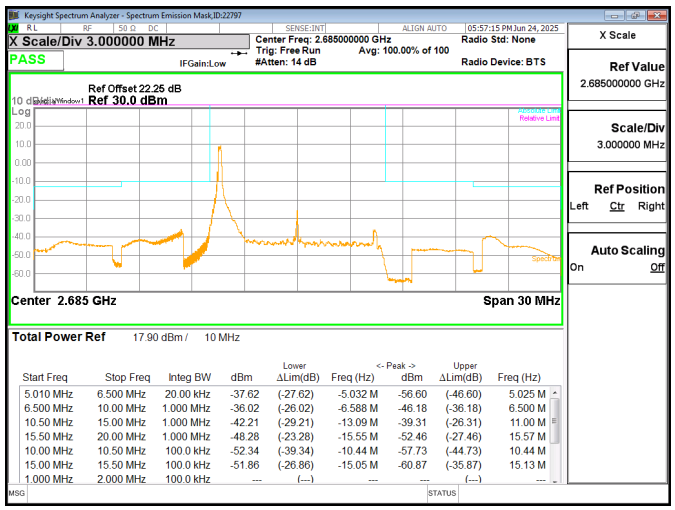
LTE41 10MHz QPSK LOW Ch RB1-0



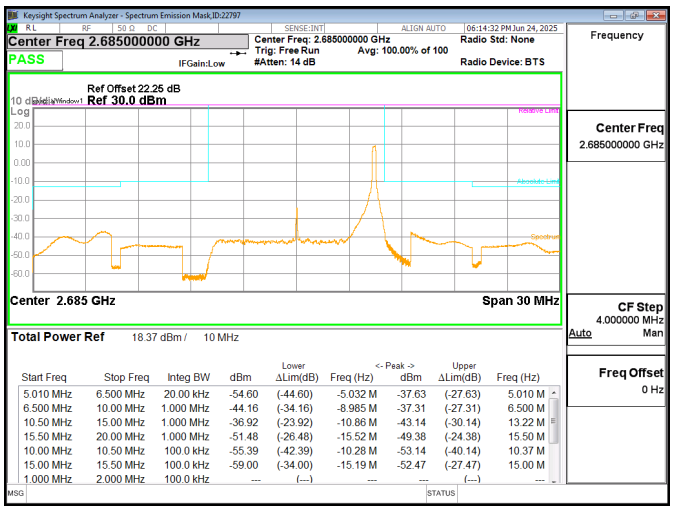
LTE41 10MHz QPSK LOW Ch RB1-49



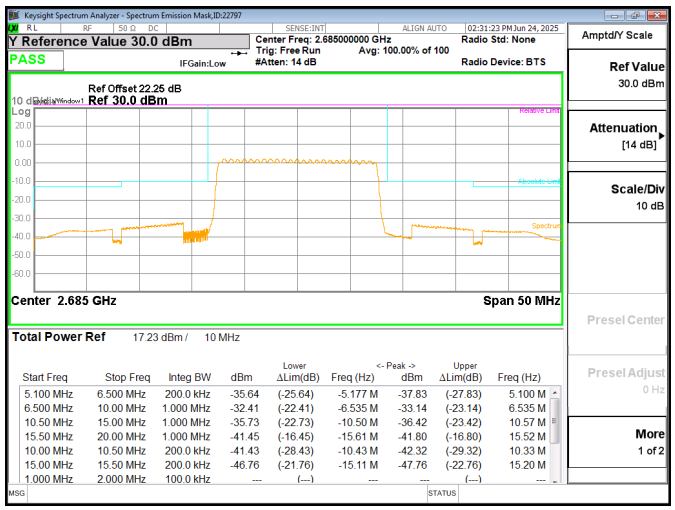
LTE41 10MHz QPSK LOW Ch RB50-0



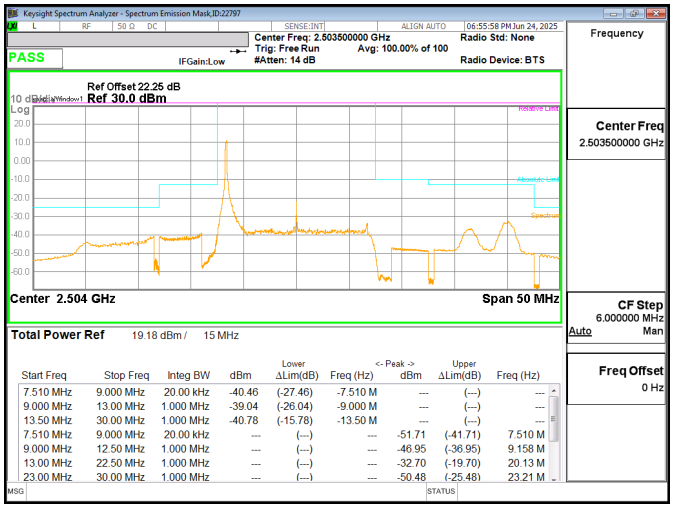
LTE41 10MHz QPSK HIGH Ch RB1-0



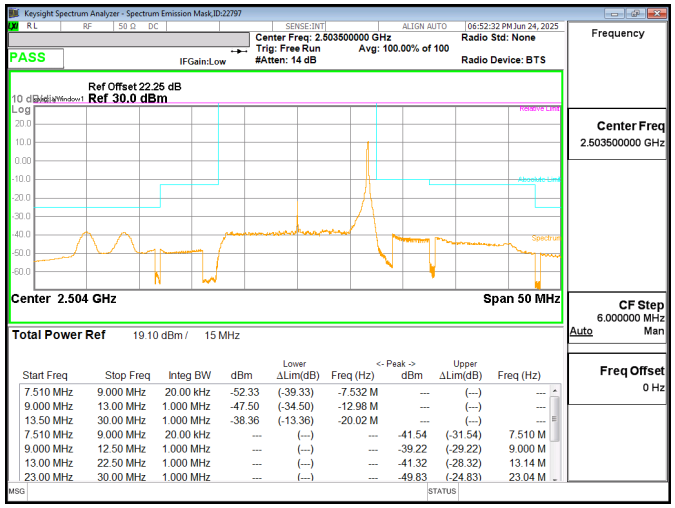
LTE41 10MHz QPSK HIGH Ch RB1-49



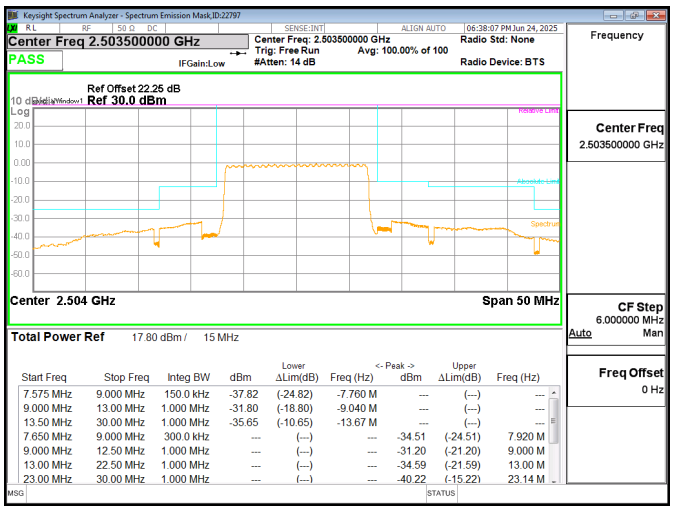
LTE41 10MHz QPSK HIGH Ch RB50-0



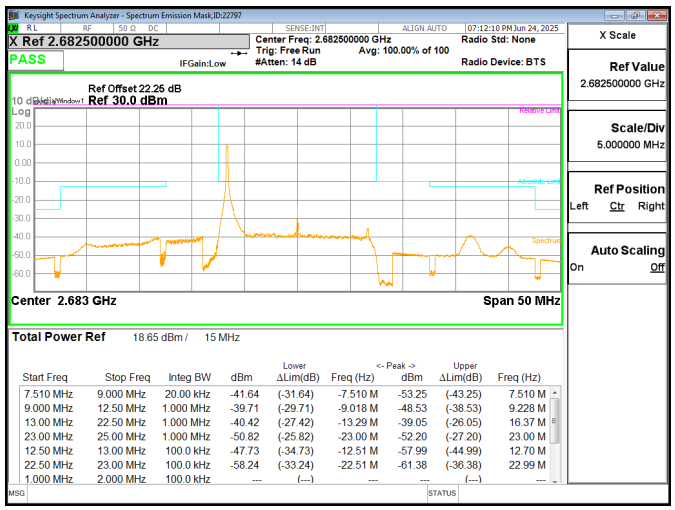
LTE41 15MHz QPSK LOW Ch RB1-0



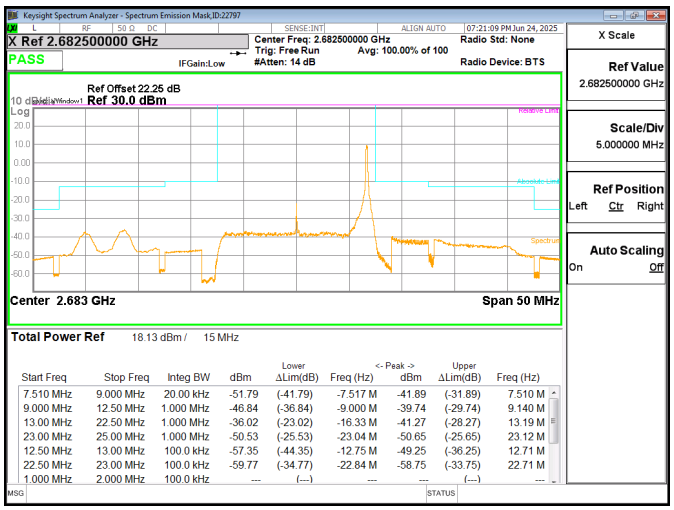
LTE41 15MHz QPSK LOW Ch RB1-74



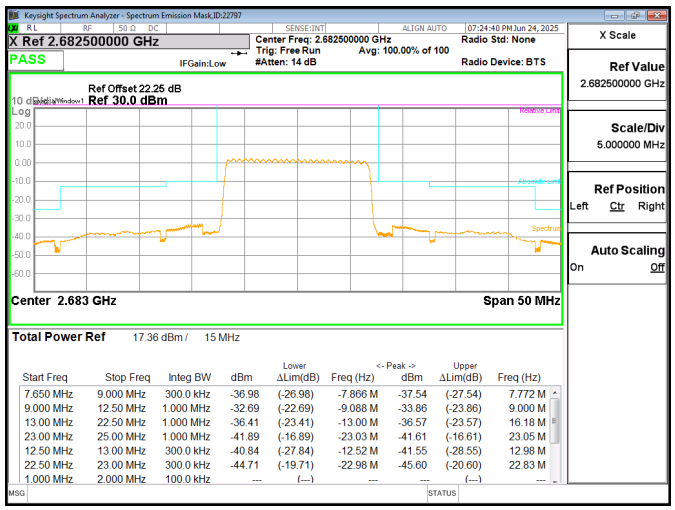
LTE41 15MHz QPSK LOW Ch RB75-0



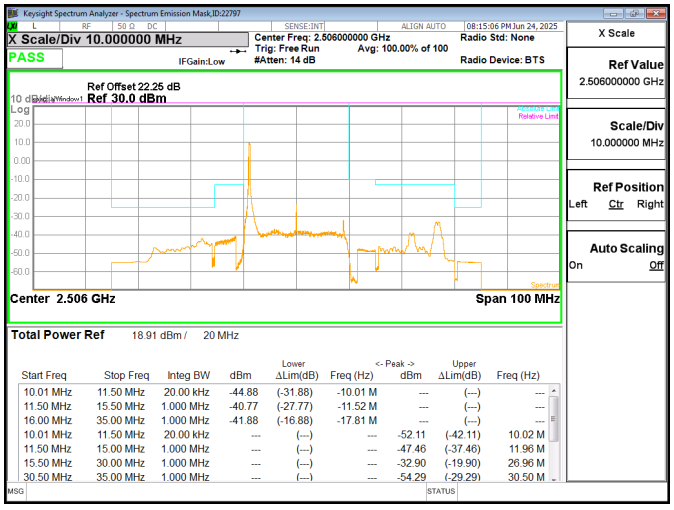
LTE41 15MHz QPSK HIGH Ch RB1-0



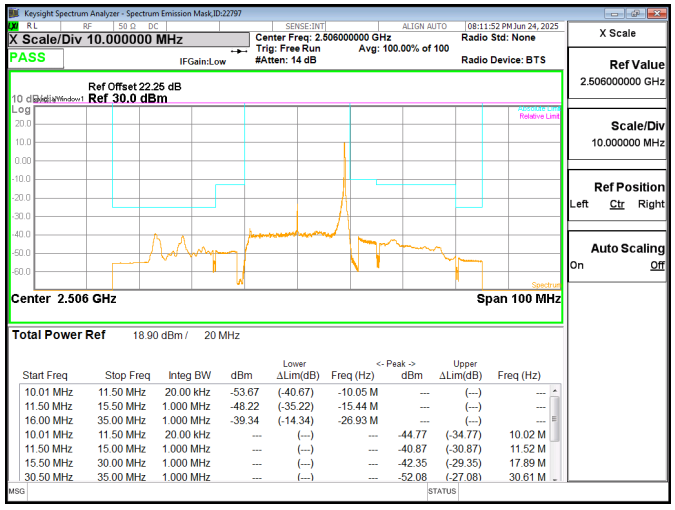
LTE41 15MHz QPSK HIGH Ch RB1-74



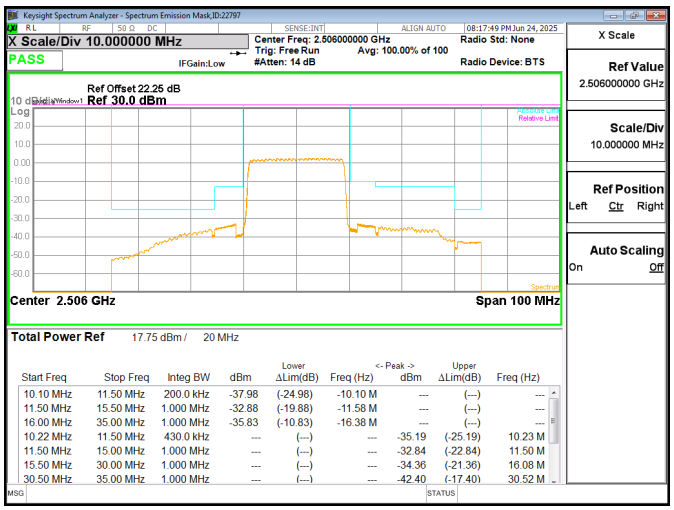
LTE41 15MHz QPSK HIGH Ch RB75-0



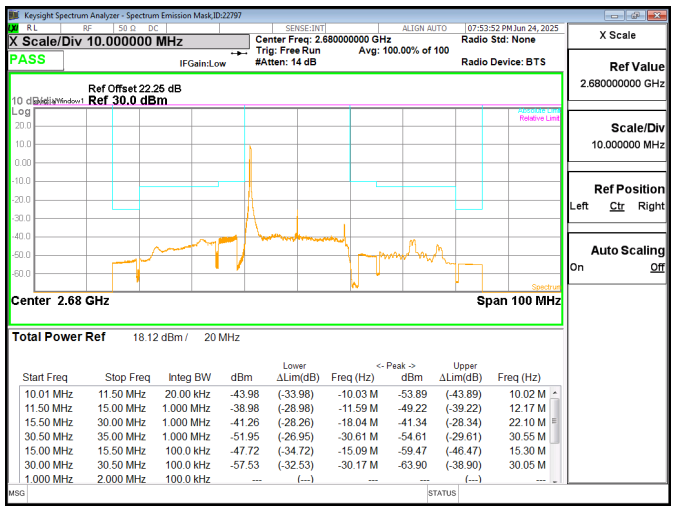
LTE41 20MHz QPSK LOW Ch RB1-0



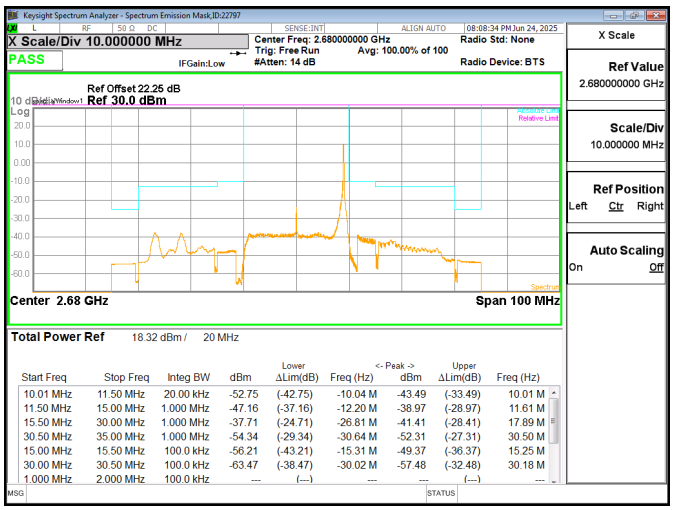
LTE41 20MHz QPSK LOW Ch RB1-99



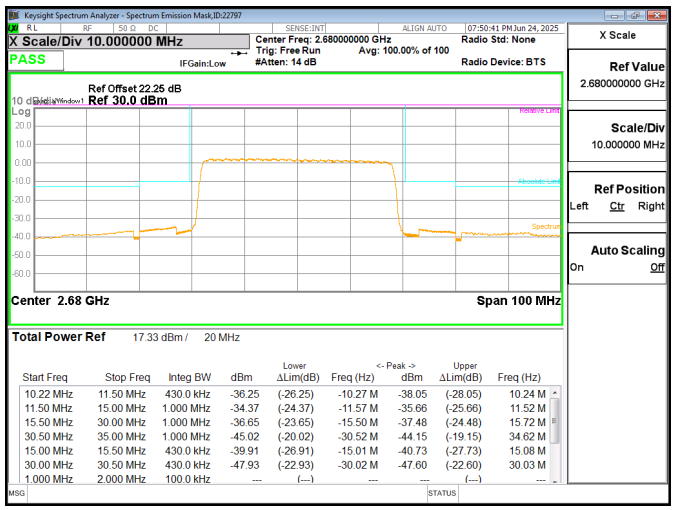
LTE41 20MHz QPSK LOW Ch RB100-0



LTE41 20MHz QPSK HIGH Ch RB1-0



LTE41 20MHz QPSK HIGH Ch RB1-99



LTE41 20MHz QPSK HIGH Ch RB100-0

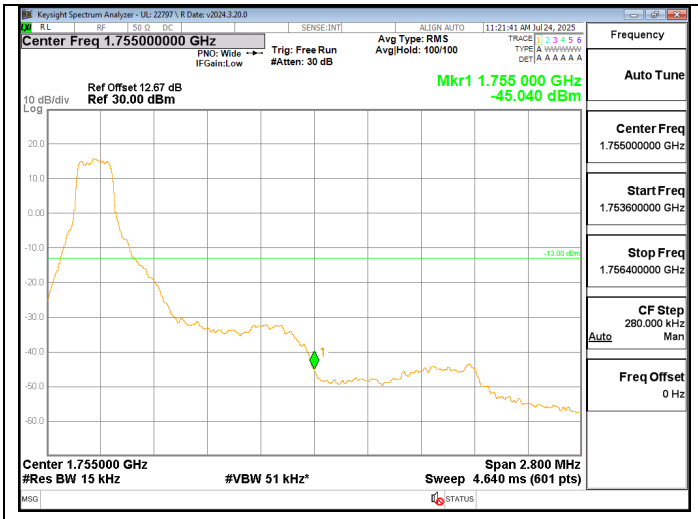
9.4.4. LTE4 & LTE66

LIMITS

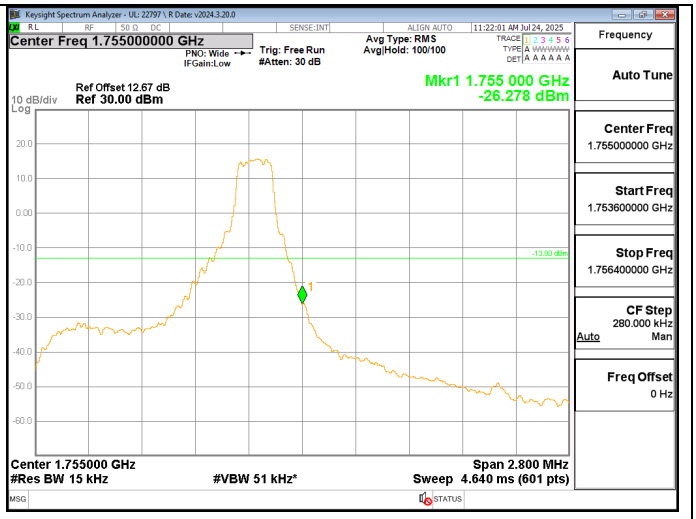
FCC: §27.53(h)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

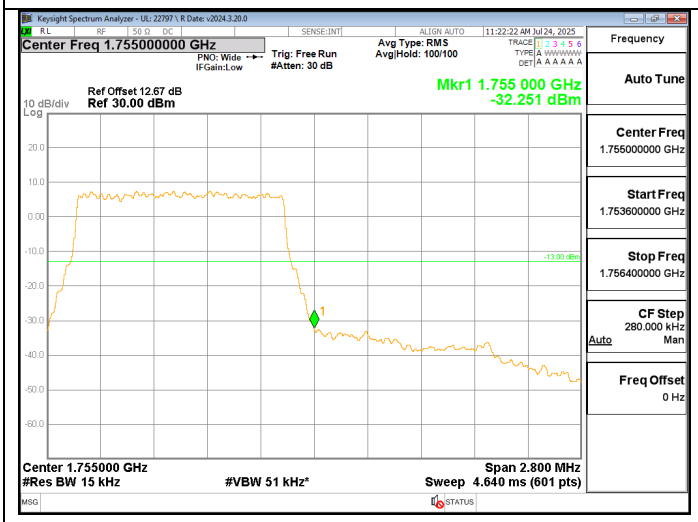
LTE BAND 4 (HIGH CHANNEL)



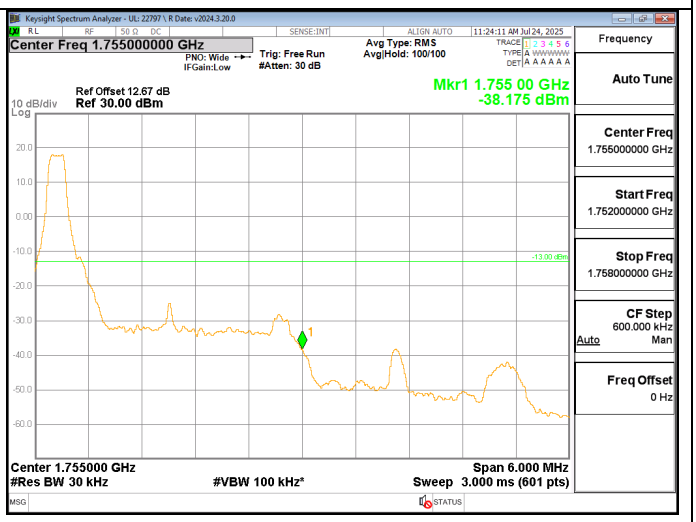
LTE4 1.4MHz QPSK HIGH Ch RB1-0



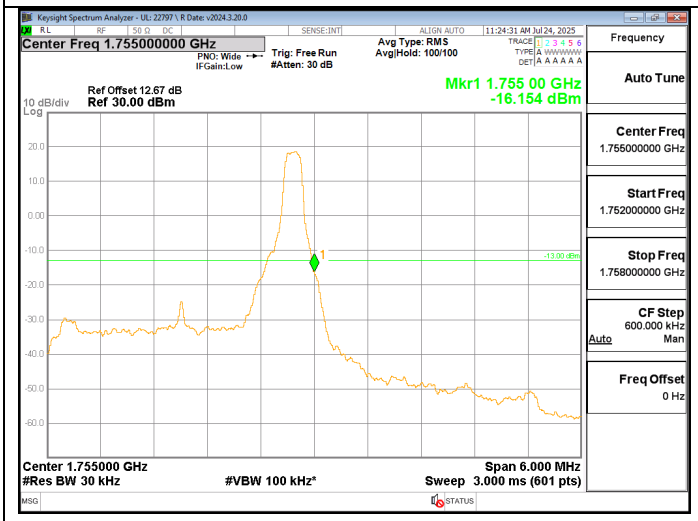
LTE4 1.4MHz QPSK HIGH Ch RB1-5



LTE4 1.4MHz QPSK HIGH Ch RB6-0



LTE4 3MHz QPSK HIGH Ch RB1-0



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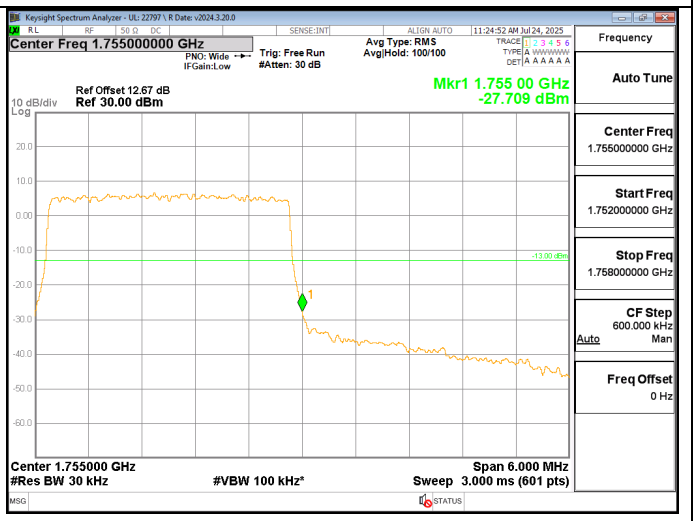

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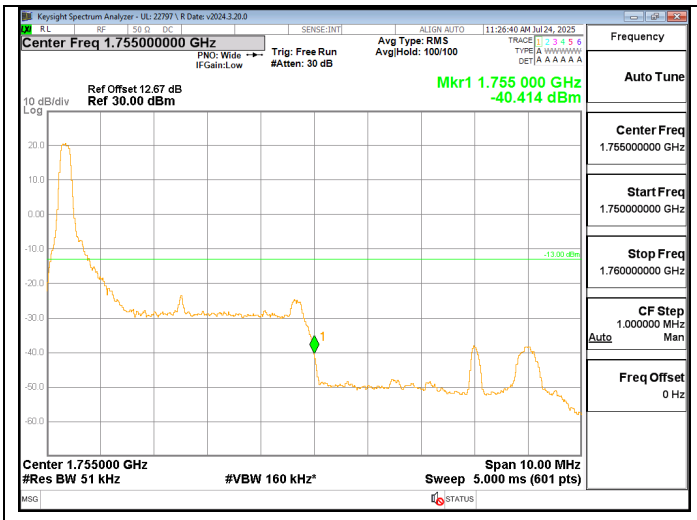
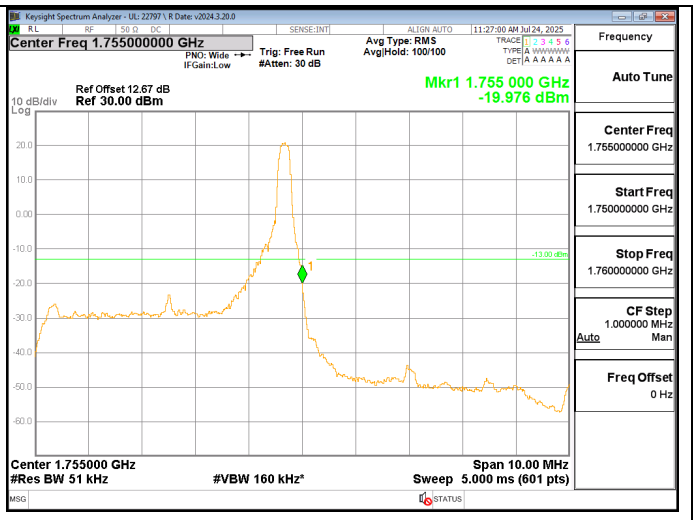


LTE4 5MHz QPSK HIGH Ch RB1-0



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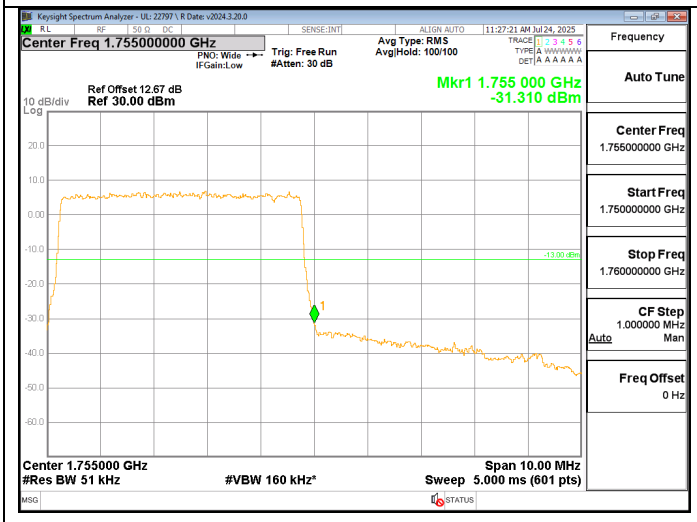

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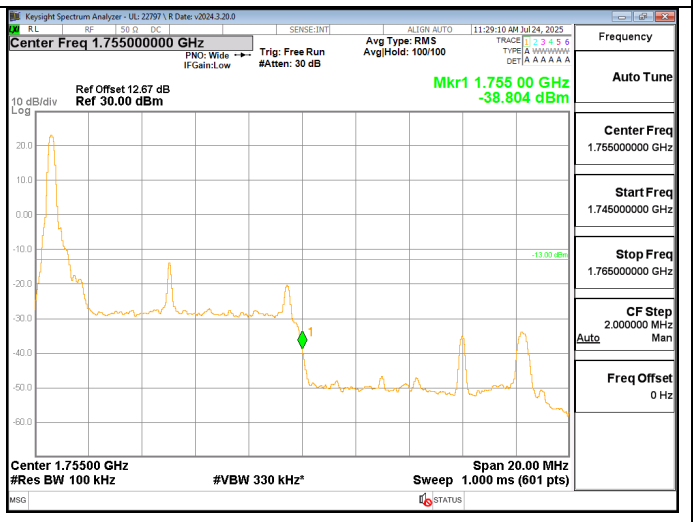
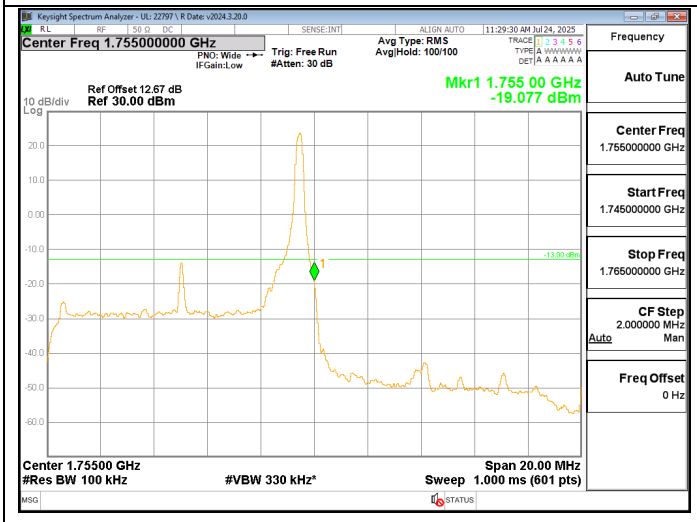


LTE4 10MHz QPSK HIGH Ch RB1-0



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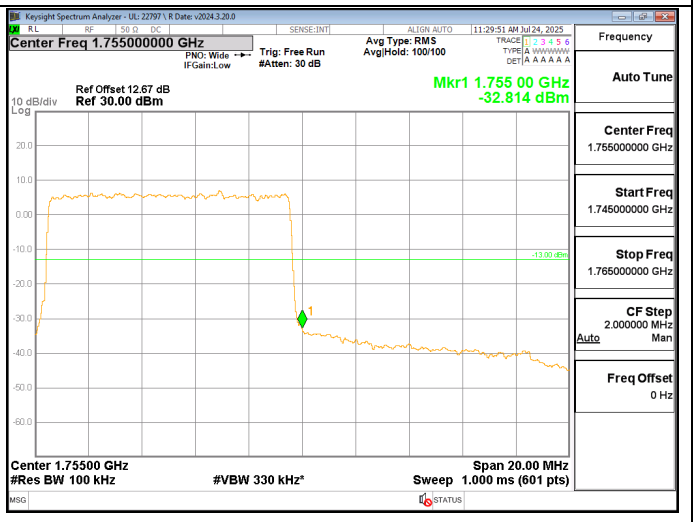

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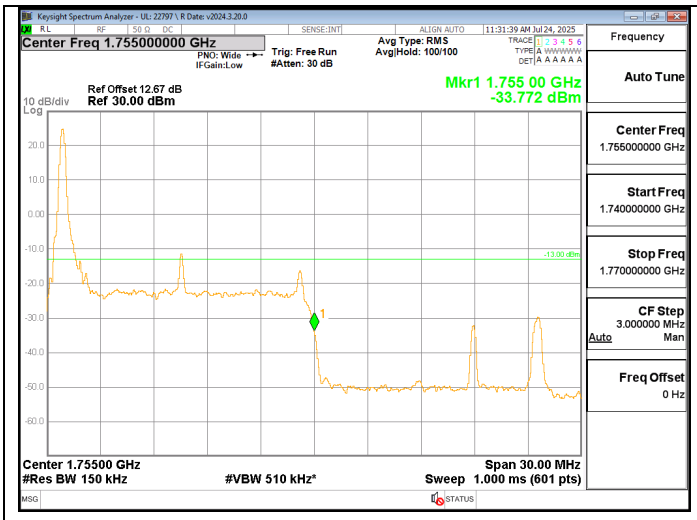
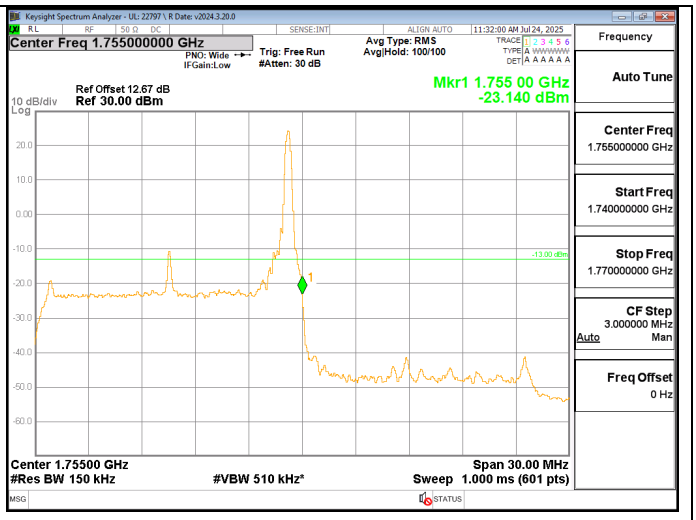


LTE4 15MHz QPSK HIGH Ch RB1-0



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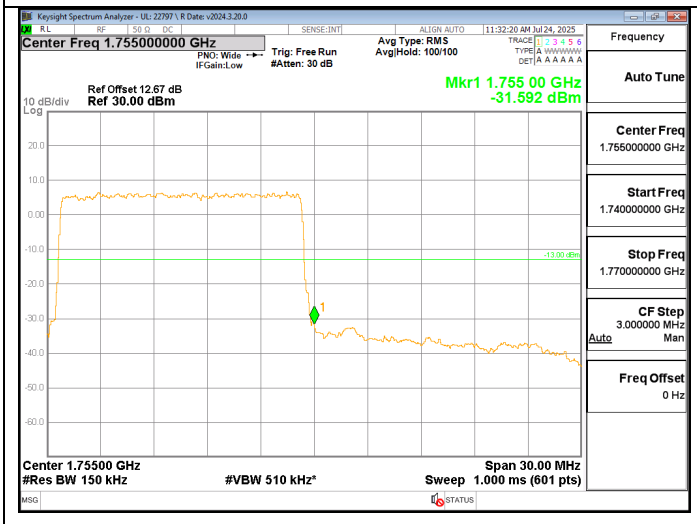
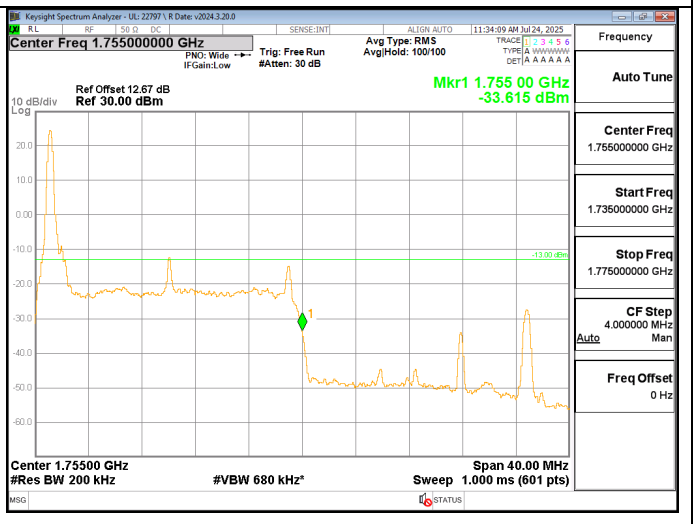
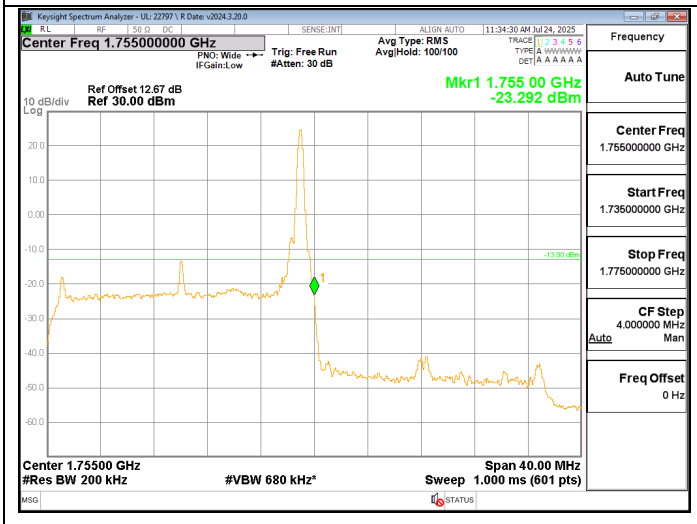


LTE4 15MHz QPSK HIGH Ch RB75-0



LTE4 20MHz QPSK HIGH Ch RB1-0



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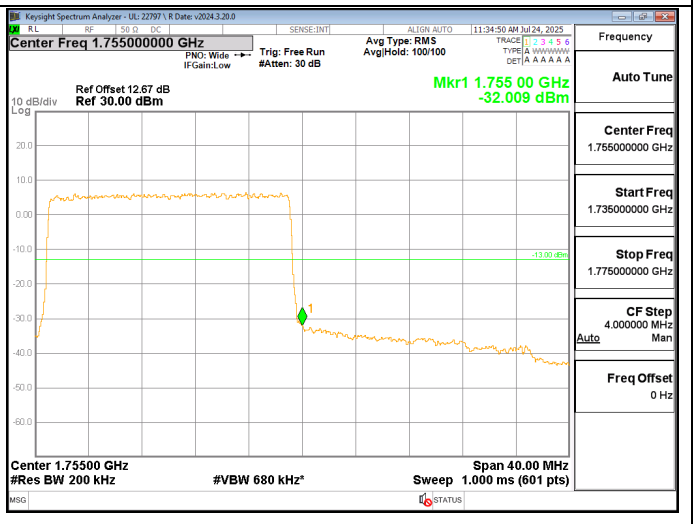
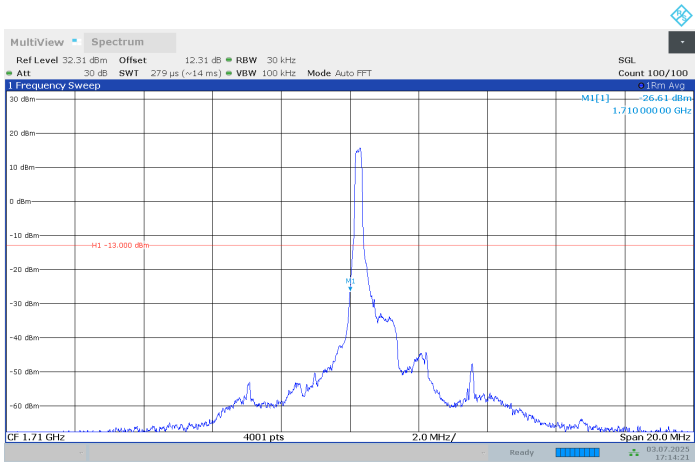
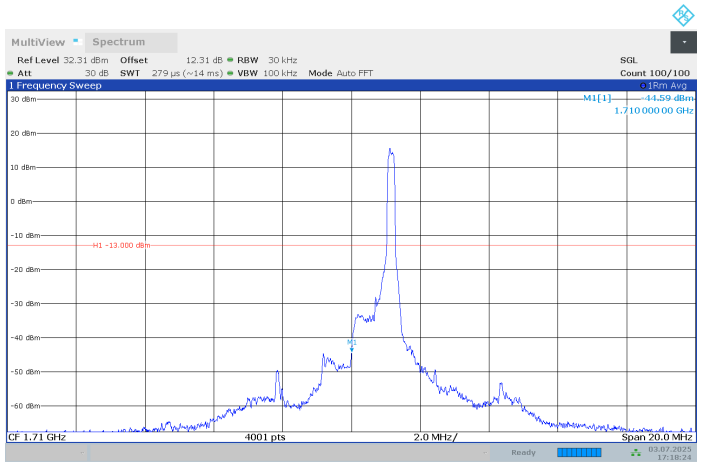


LTE4 20MHz QPSK HIGH Ch RB100-0

LTE BAND 66



LTE66 1.4MHz QPSK LOW Ch RB1-0



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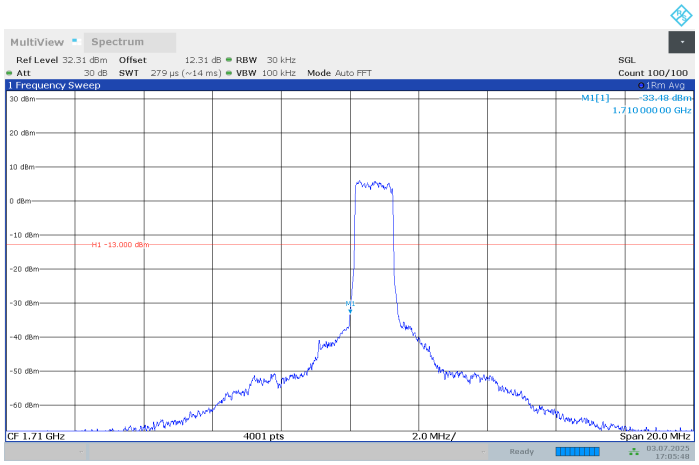
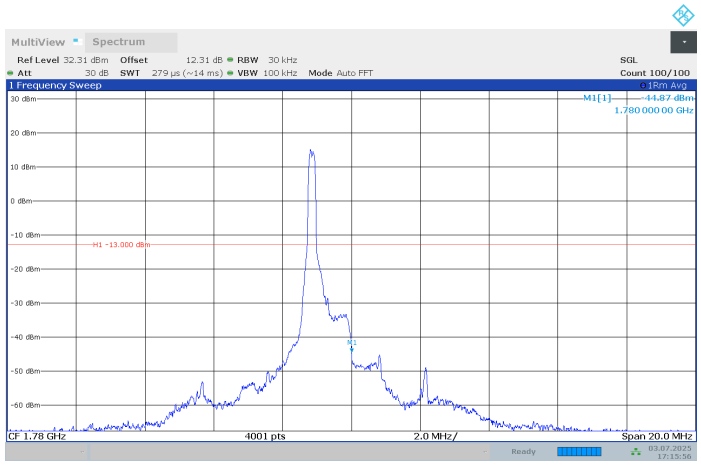
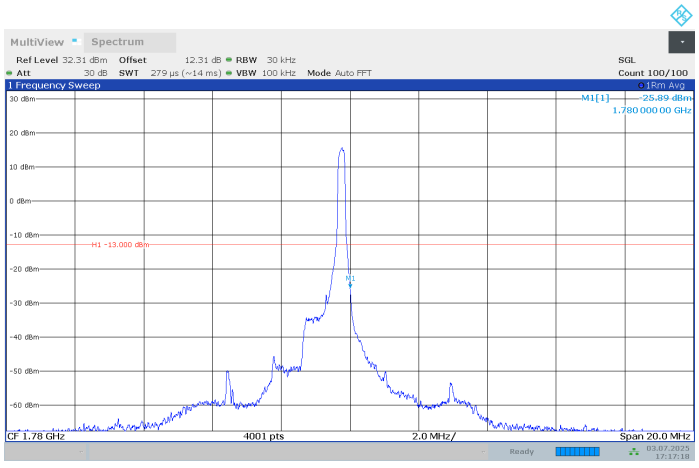


LTE66 1.4MHz QPSK LOW Ch RB6-0



LTE66 1.4MHz QPSK HIGH Ch RB1-0



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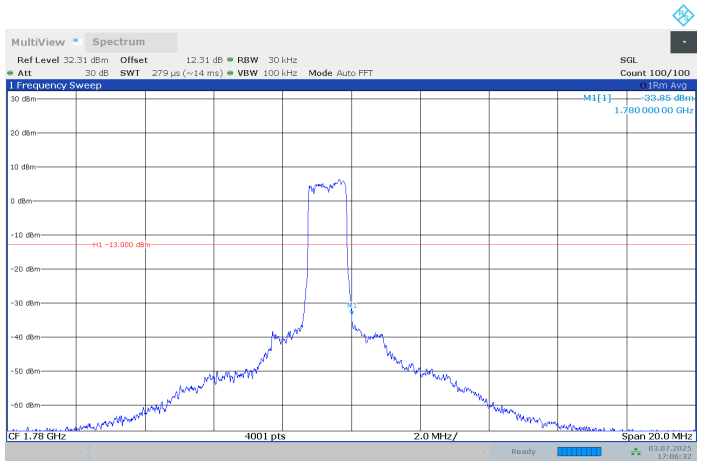
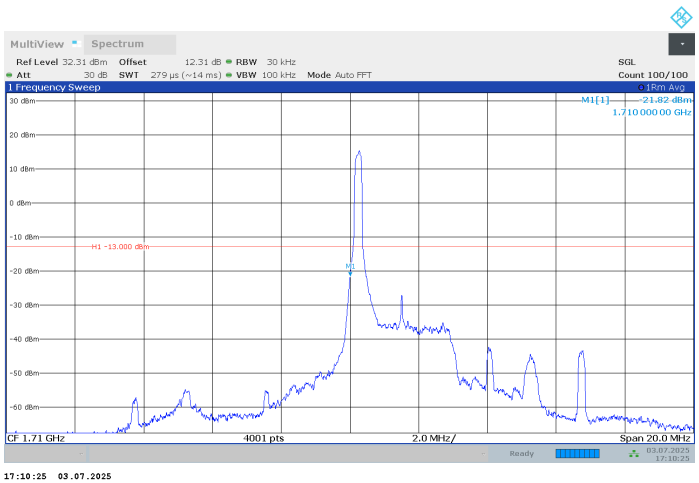


LTE66 1.4MHz QPSK HIGH Ch RB6-0



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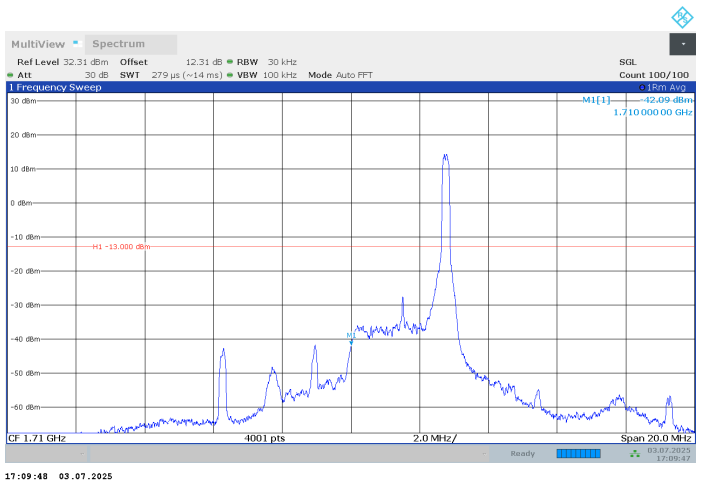

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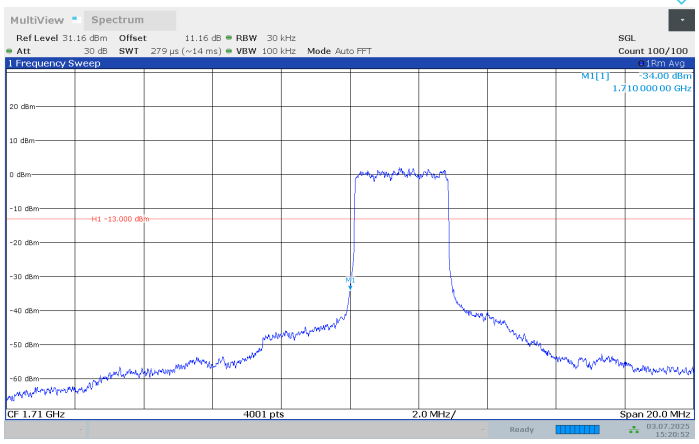

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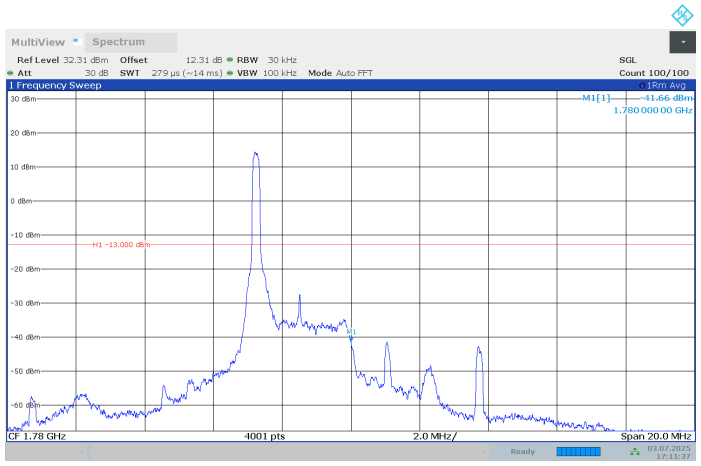
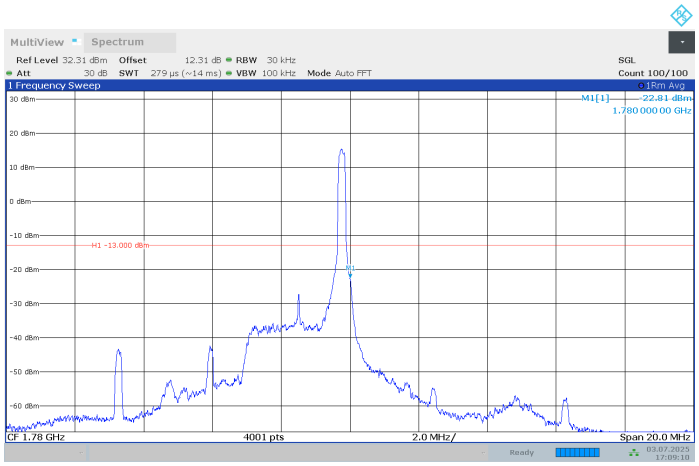
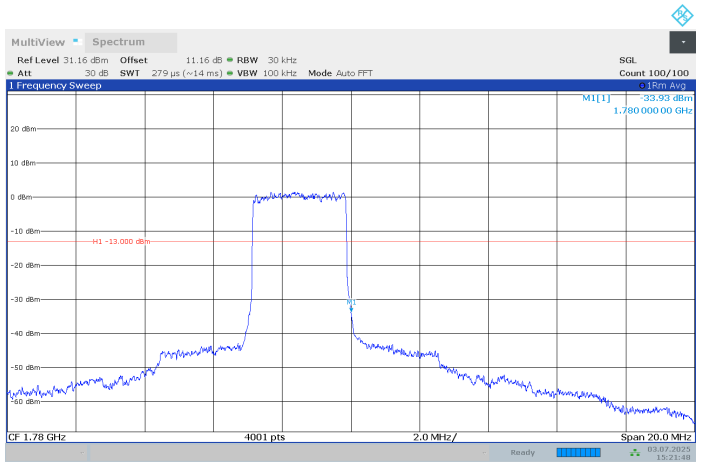


LTE66 3MHz QPSK HIGH Ch RB1-0



LTE66 3MHz QPSK HIGH Ch RB1-14



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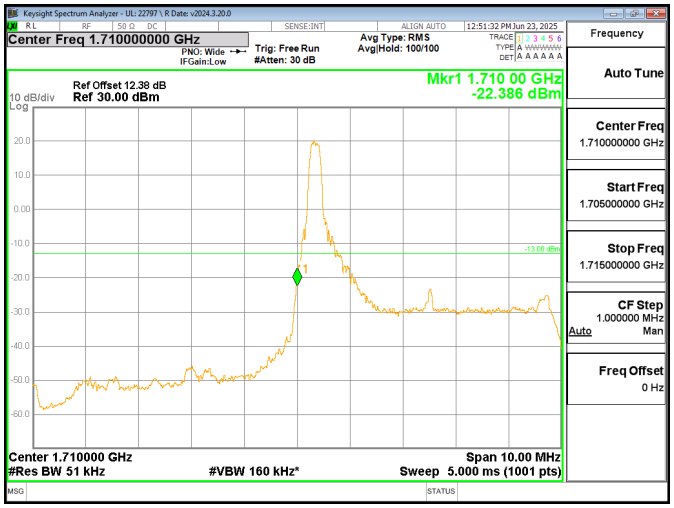
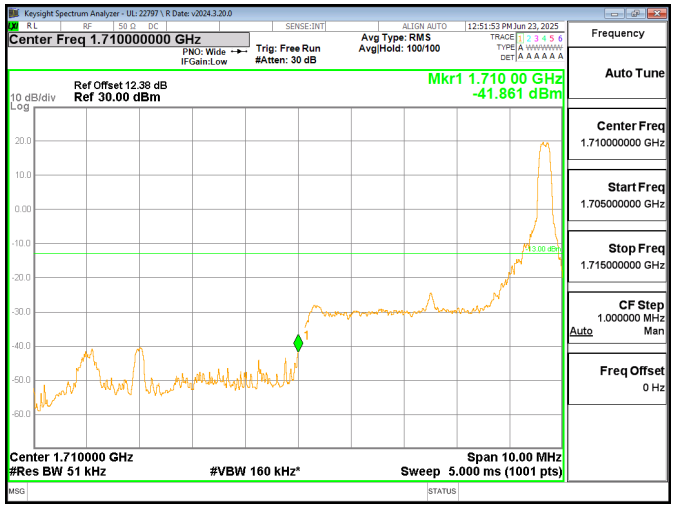
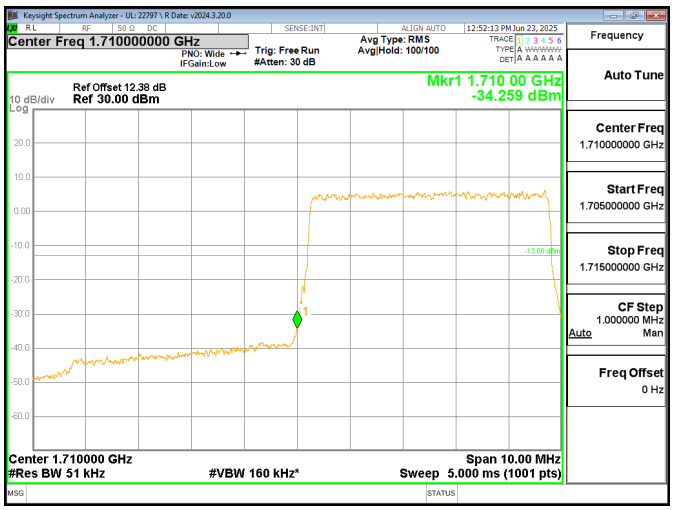


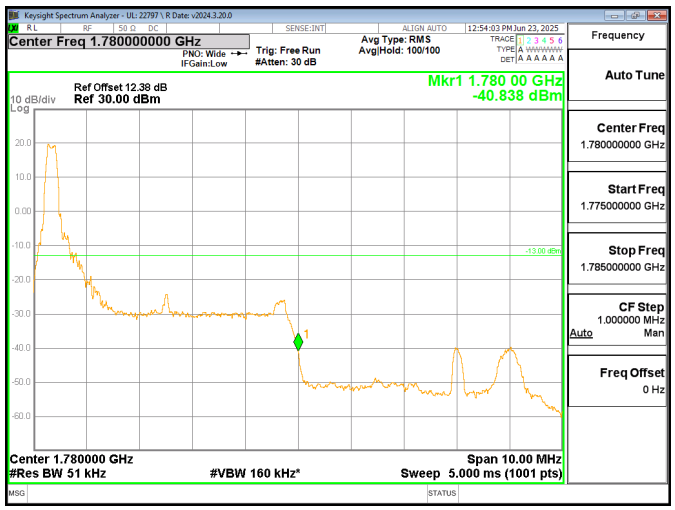
LTE66 5MHz QPSK LOW Ch RB1-0



LTE66 5MHz QPSK LOW Ch RB1-24



LTE66 5MHz QPSK LOW Ch RB25-0



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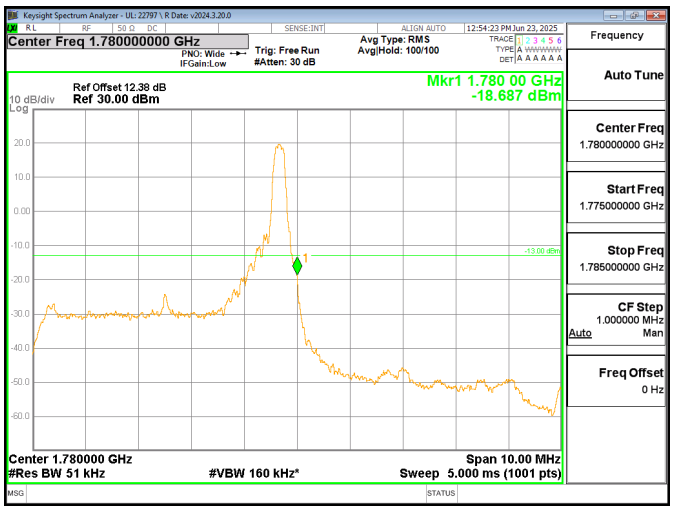
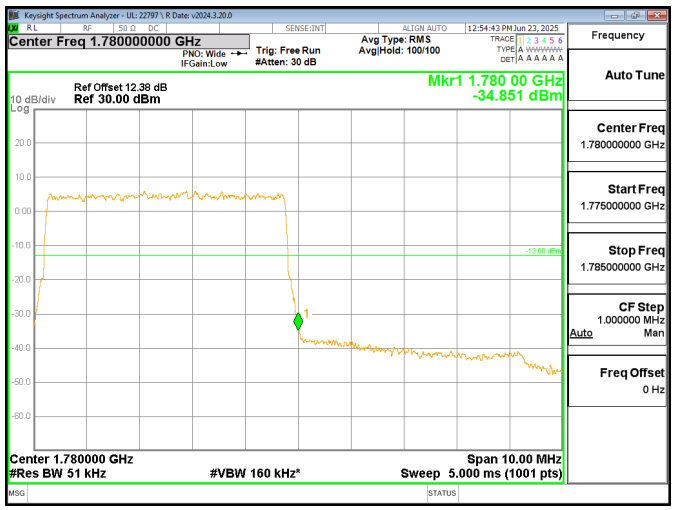


LTE66 5MHz QPSK HIGH Ch RB1-24



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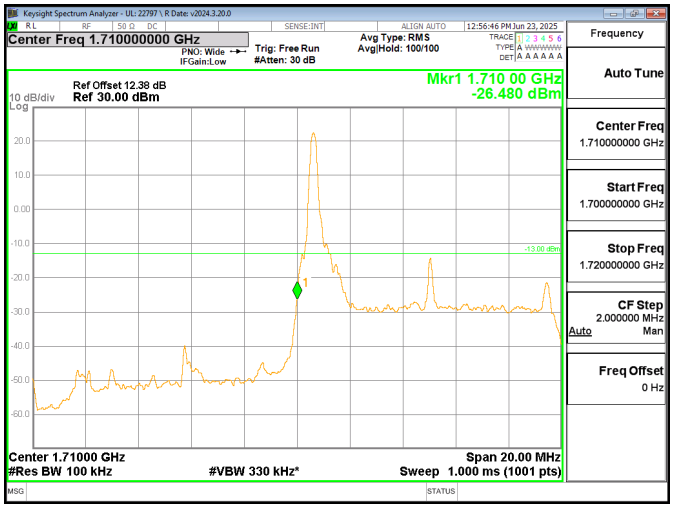
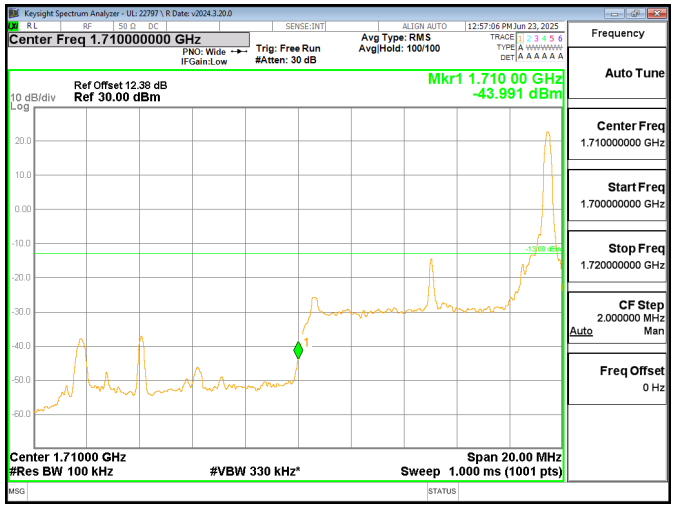
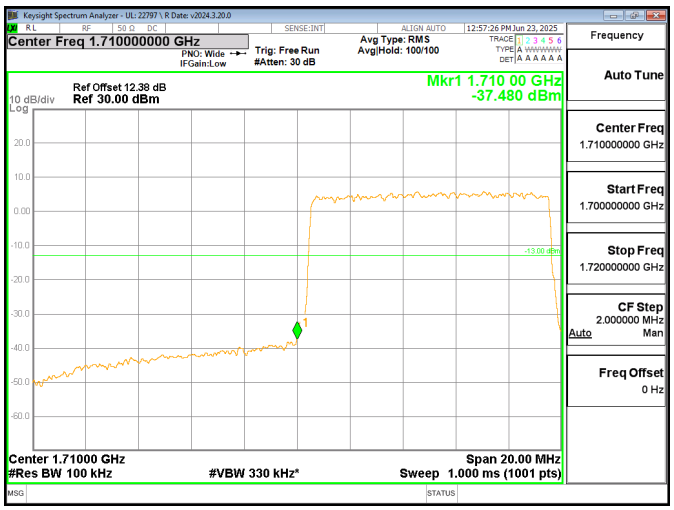


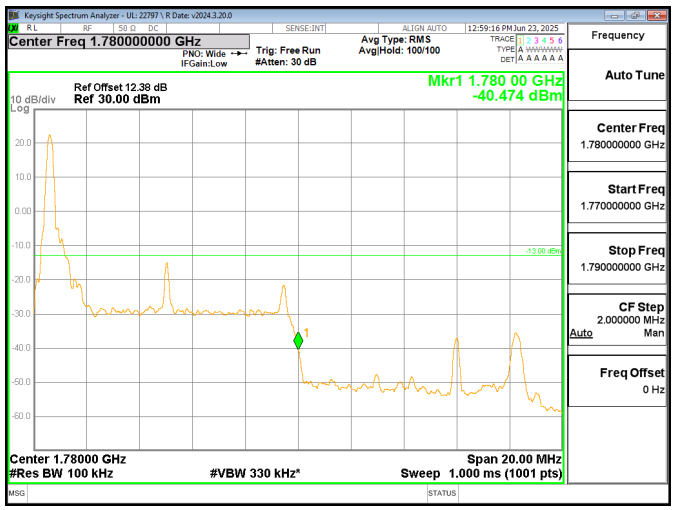
LTE66 10MHz QPSK LOW Ch RB1-0



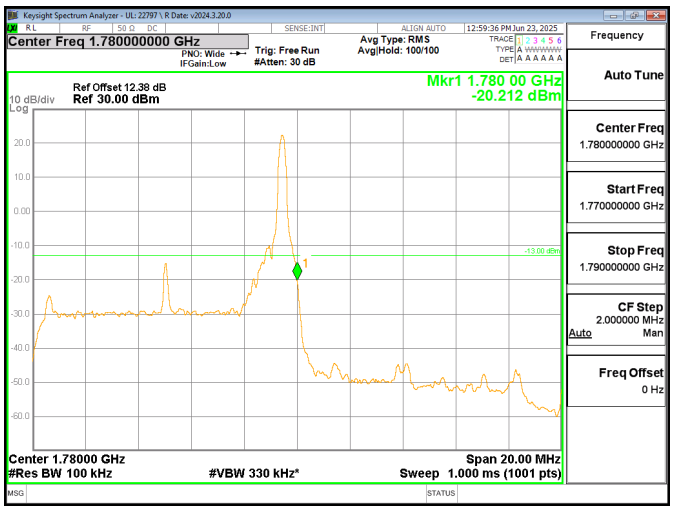
LTE66 10MHz QPSK LOW Ch RB1-49



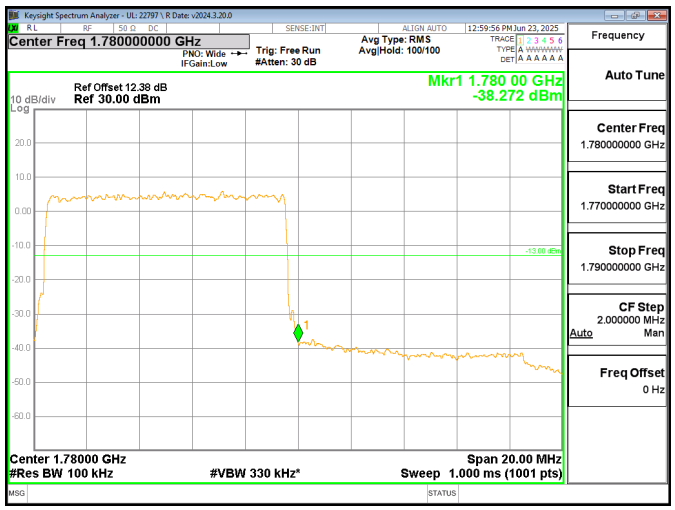
LTE66 10MHz QPSK LOW Ch RB50-0



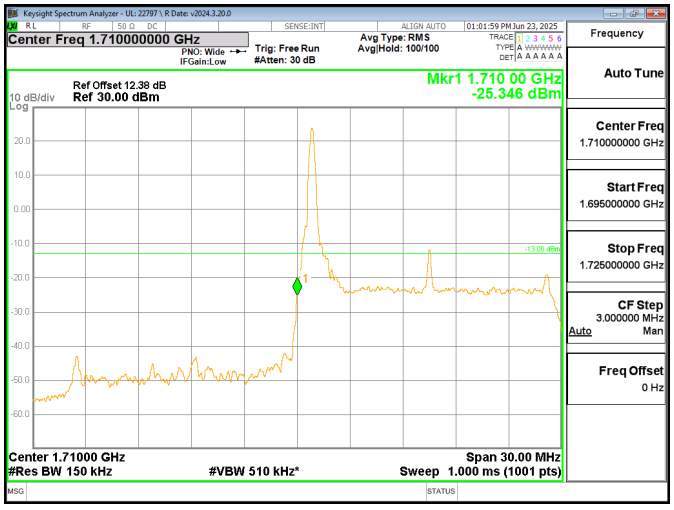
LTE66 10MHz QPSK HIGH Ch RB1-0



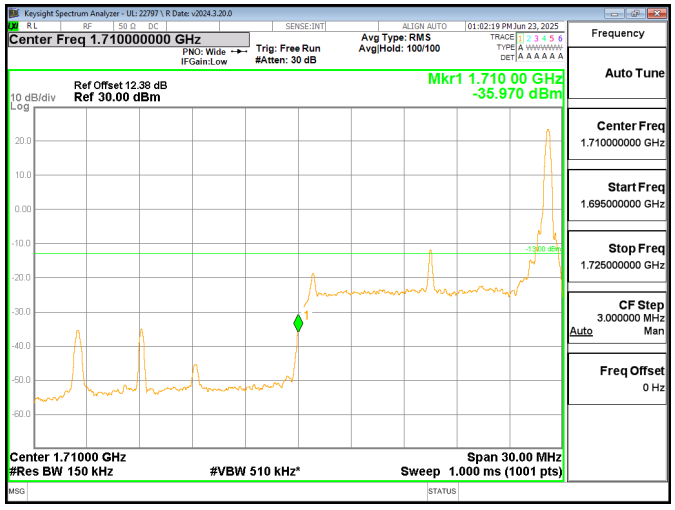
LTE66 10MHz QPSK HIGH Ch RB1-49



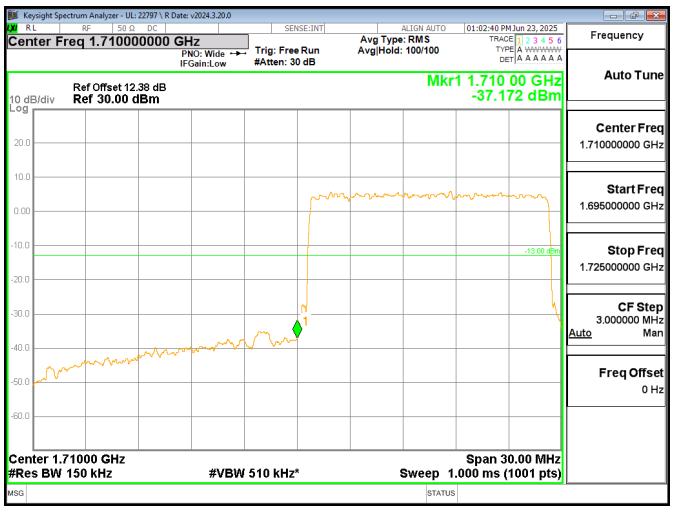
LTE66 10MHz QPSK HIGH Ch RB50-0



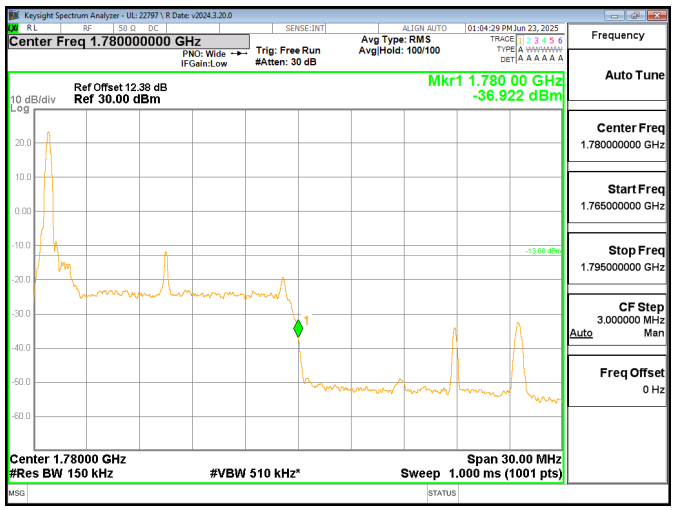
LTE66 15MHz QPSK LOW Ch RB1-0



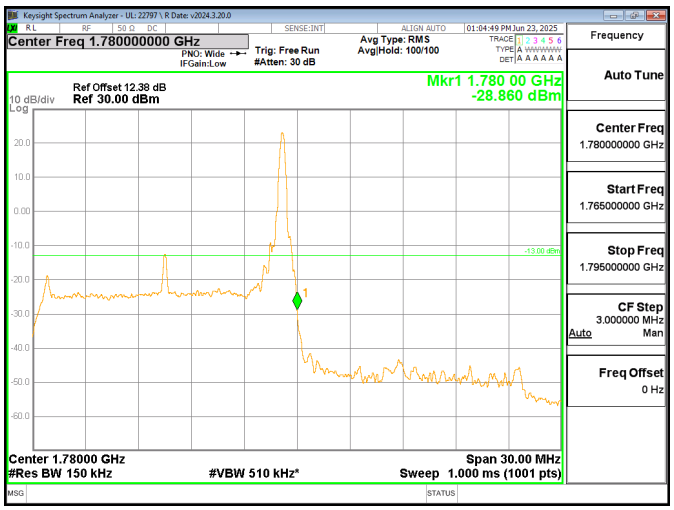
LTE66 15MHz QPSK LOW Ch RB1-74



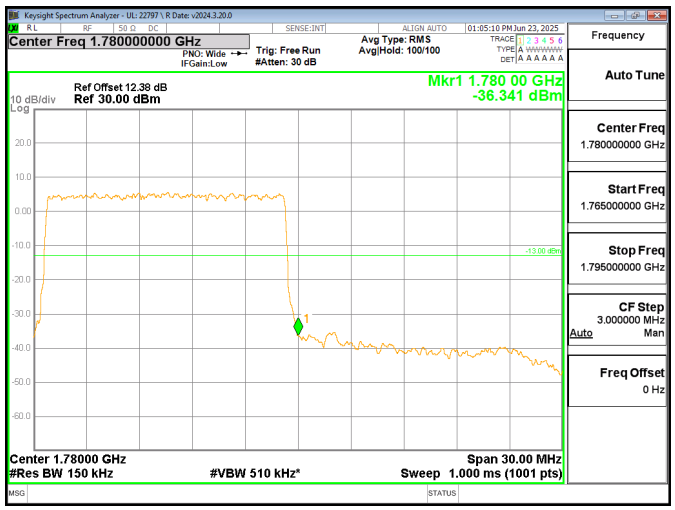
LTE66 15MHz QPSK LOW Ch RB75-0



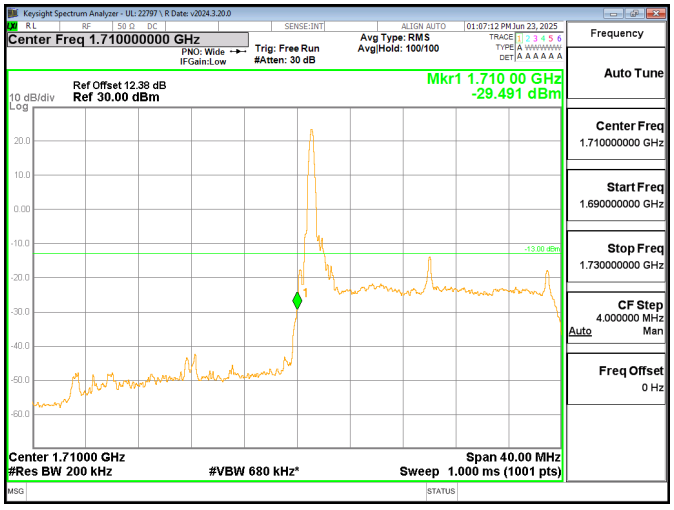
LTE66 15MHz QPSK HIGH Ch RB1-0



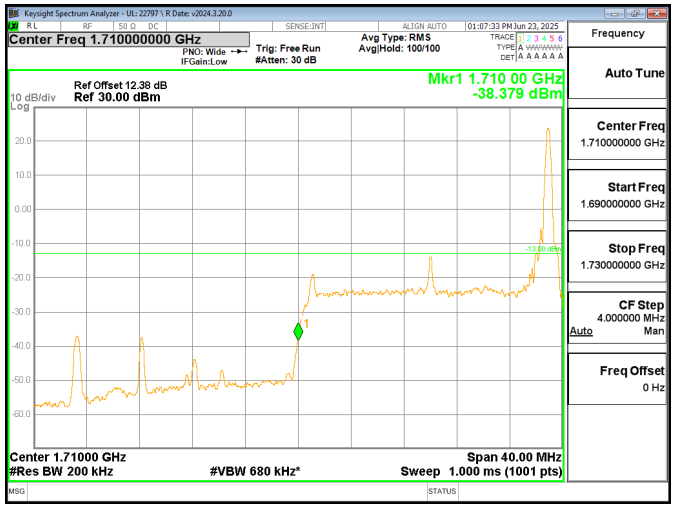
LTE66 15MHz QPSK HIGH Ch RB1-74



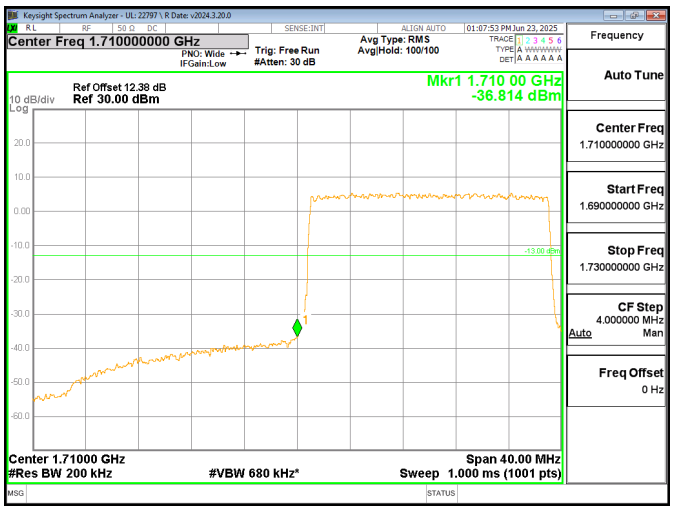
LTE66 15MHz QPSK HIGH Ch RB75-0



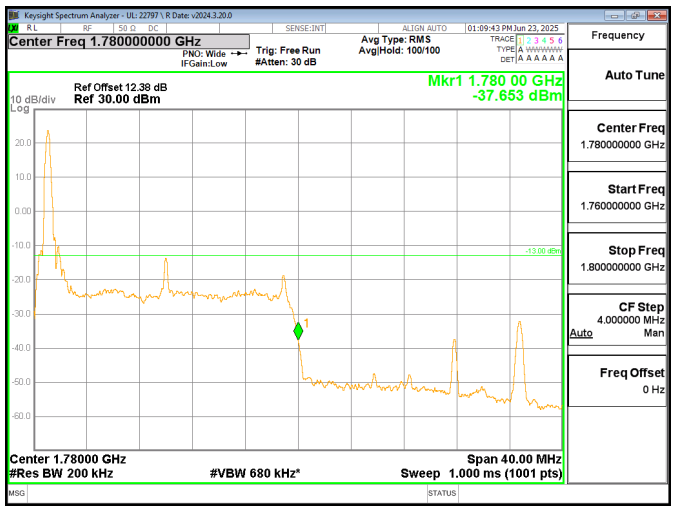
LTE66 20MHz QPSK LOW Ch RB1-0



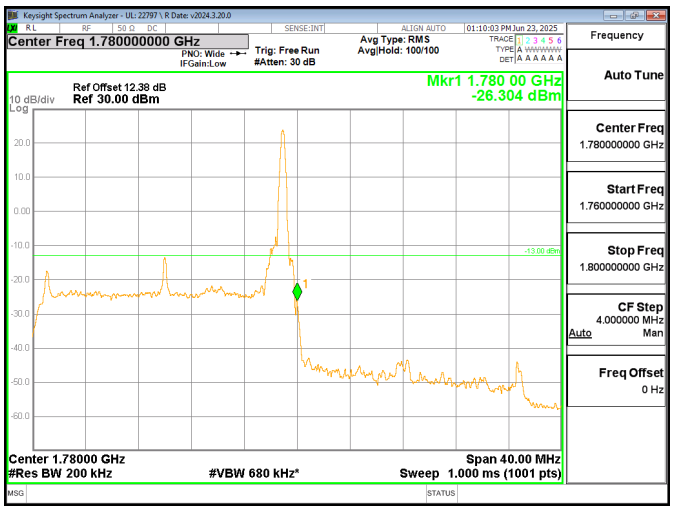
LTE66 20MHz QPSK LOW Ch RB1-99



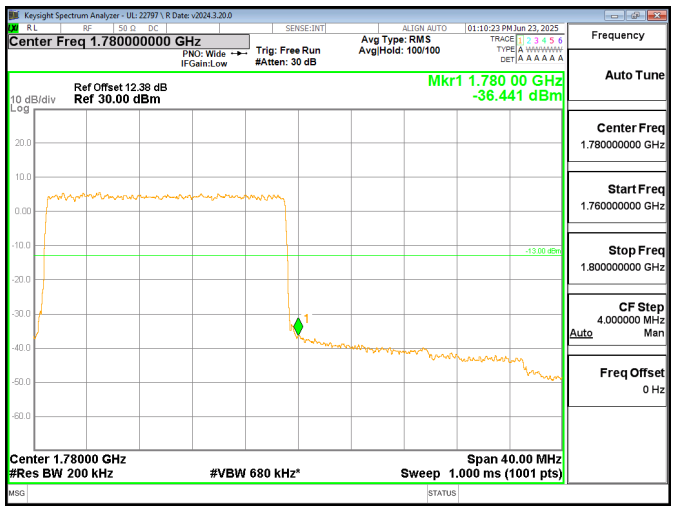
LTE66 20MHz QPSK LOW Ch RB100-0



LTE66 20MHz QPSK HIGH Ch RB1-0



LTE66 20MHz QPSK HIGH Ch RB1-99



LTE66 20MHz QPSK HIGH Ch RB100-0

9.5. FREQUENCY STABILITY

TEST PROCEDURE

Use CMW 500 with Frequency Error measurement capability.

(vii) Temp. = −30°C to +50°C
(viii) Voltage = (85% - 100%)
Normal, 3.89VDC
End Voltage, 3.69VDC.

Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20ºC and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize, and soak, and then the measurement is repeated. This is repeated until +50ºC is reached.

Frequency Stability vs Voltage:

FCC 2.1055 (d)(2):
For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

LIMITS

FCC: §22.355 - Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

FCC: §27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

FCC: §24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

RESULTS

The peak frequency error is recorded (worst-case).

9.5.1. GSM850

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/8/25

Band	5	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		824	849		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	824.19968	848.80032			
Extreme (50°C)		824.19967	848.80030	-18.89	-0.023	Yes
Extreme (40°C)		824.19967	848.80030	-12.69	-0.015	Yes
Extreme (30°C)		824.19967	848.80030	-12.36	-0.015	Yes
Extreme (10°C)		824.19967	848.80030	-11.26	-0.013	Yes
Extreme (0°C)		824.19967	848.80031	-10.04	-0.012	Yes
Extreme (-10°C)		824.19968	848.80031	-8.1	-0.010	Yes
Extreme (-20°C)		824.19968	848.80031	-7.89	-0.009	Yes
Extreme (-30°C)		824.19968	848.80031	-9.79	-0.012	Yes
20°C	End Point Voltage	824.1997	848.8004	47.77	0.057	Yes

9.5.2. GSM1900

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	2	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1850	1910		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	1850.19968	1909.80032			
Extreme (50°C)		1850.19966	1909.80031	-11.78	-0.006	Yes
Extreme (40°C)		1850.19964	1909.80028	-38.97	-0.021	Yes
Extreme (30°C)		1850.19965	1909.80029	-30.29	-0.016	Yes
Extreme (10°C)		1850.19966	1909.80031	-12.34	-0.007	Yes
Extreme (0°C)		1850.19967	1909.80031	-10.31	-0.005	Yes
Extreme (-10°C)		1850.19966	1909.80031	-15.24	-0.008	Yes
Extreme (-20°C)		1850.19967	1909.80031	-10.46	-0.006	Yes
Extreme (-30°C)		1850.19967	1909.80031	-10.6	-0.006	Yes
20°C	End Point Voltage	1850.1997	1909.8003	15.45	0.008	Yes

9.5.3. WCDMA BAND 2

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	2	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1850	1910		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	1850.08000	1909.92000			
Extreme (50°C)		1850.07999	1909.91999	-8.81	-0.005	Yes
Extreme (40°C)		1850.07999	1909.91999	-8.78	-0.005	Yes
Extreme (30°C)		1850.07999	1909.91999	-6.84	-0.004	Yes
Extreme (10°C)		1850.07999	1909.91999	-6.04	-0.003	Yes
Extreme (0°C)		1850.08001	1909.92001	7.27	0.004	Yes
Extreme (-10°C)		1850.07999	1909.91999	-6.82	-0.004	Yes
Extreme (-20°C)		1850.08001	1909.92001	7.14	0.004	Yes
Extreme (-30°C)		1850.07999	1909.91999	-5.11	-0.003	Yes
20°C	End Point Voltage	1850.0800	1909.9200	-21.77	-0.012	Yes

9.5.4. WCDMA BAND 4

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	4	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1710	1755			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	1710.06050	1754.92000			
Extreme (50°C)		1710.06049	1754.91999	-6.32	-0.004	Yes
Extreme (40°C)		1710.06049	1754.91999	-7.15	-0.004	Yes
Extreme (30°C)		1710.06049	1754.91999	-7.94	-0.005	Yes
Extreme (10°C)		1710.06049	1754.91999	-6.45	-0.004	Yes
Extreme (0°C)		1710.06051	1754.92001	6.41	0.004	Yes
Extreme (-10°C)		1710.06051	1754.92001	6.26	0.004	Yes
Extreme (-20°C)		1710.06051	1754.92001	8.7	0.005	Yes
Extreme (-30°C)		1710.06051	1754.92001	6.67	0.004	Yes
20°C	End Point Voltage	1710.0605	1754.9200	-12.34	-0.007	Yes

9.5.5. WCDMA BAND 5

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	5	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		824	849		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	824.07150	848.92850			
Extreme (50°C)		824.07149	848.92849	-10.1	-0.012	Yes
Extreme (40°C)		824.07149	848.92849	-7.76	-0.009	Yes
Extreme (30°C)		824.07149	848.92849	-6.29	-0.008	Yes
Extreme (10°C)		824.07149	848.92849	-8.71	-0.010	Yes
Extreme (0°C)		824.07149	848.92849	-11.55	-0.014	Yes
Extreme (-10°C)		824.07149	848.92849	-7.4	-0.009	Yes
Extreme (-20°C)		824.07149	848.92849	-11.81	-0.014	Yes
Extreme (-30°C)		824.07149	848.92849	-6.12	-0.007	Yes
20°C	End Point Voltage	824.0715	848.9285	-13.5	-0.016	Yes

9.5.6. LTE2

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	2	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1850	1910		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	1850.8100	1909.1000			
Extreme (50°C)		1850.8100	1909.1000	-21.69	-0.012	Yes
Extreme (40°C)		1850.8100	1909.1000	9.28	0.005	Yes
Extreme (30°C)		1850.8100	1909.1000	9.32	0.005	Yes
Extreme (10°C)		1850.8100	1909.1000	18	0.010	Yes
Extreme (0°C)		1850.8100	1909.1000	-20.81	-0.011	Yes
Extreme (-10°C)		1850.8100	1909.1000	-31.16	-0.017	Yes
Extreme (-20°C)		1850.8100	1909.1000	25.97	0.014	Yes
Extreme (-30°C)		1850.8100	1909.1000	-18.55	-0.010	Yes
20°C	End Point Voltage	1850.8100	1909.1000	-8	-0.004	Yes

9.5.7. LTE12

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	12	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		699	716			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	699.0800	715.5200			
Extreme (50°C)		699.0800	715.5200	-9.24	-0.013	Yes
Extreme (40°C)		699.0800	715.5200	-8.35	-0.012	Yes
Extreme (30°C)		699.0800	715.5200	-5.77	-0.008	Yes
Extreme (10°C)		699.0800	715.5200	7.97	0.011	Yes
Extreme (0°C)		699.0800	715.5200	-13.5	-0.019	Yes
Extreme (-10°C)		699.0800	715.5200	-11.26	-0.016	Yes
Extreme (-20°C)		699.0800	715.5200	-10.69	-0.015	Yes
Extreme (-30°C)		699.0800	715.5200	-9.98	-0.014	Yes
20°C	End Point Voltage	699.0800	715.5200	-0.612	-0.001	Yes

9.5.8. LTE13

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	13	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		777	787			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	777.4900	786.5200			
Extreme (50°C)		777.4900	786.5200	-11.91	-0.015	Yes
Extreme (40°C)		777.4900	786.5200	-6.53	-0.008	Yes
Extreme (30°C)		777.4900	786.5200	-6.09	-0.008	Yes
Extreme (10°C)		777.4900	786.5200	-10.93	-0.014	Yes
Extreme (0°C)		777.4900	786.5200	-12.74	-0.016	Yes
Extreme (-10°C)		777.4900	786.5200	9.58	0.012	Yes
Extreme (-20°C)		777.4900	786.5200	-10	-0.013	Yes
Extreme (-30°C)		777.4900	786.5200	-10.31	-0.013	Yes
20°C	End Point Voltage	777.4900	786.5200	-8.55	-0.011	Yes

9.5.9. LTE26

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	26	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		814	849		2.5	
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	814.7300	848.2700			
Extreme (50°C)		814.7300	848.2700	-15.53	-0.019	Yes
Extreme (40°C)		814.7300	848.2700	-7.48	-0.009	Yes
Extreme (30°C)		814.7300	848.2700	-9.08	-0.011	Yes
Extreme (10°C)		814.7300	848.2700	-9.06	-0.011	Yes
Extreme (0°C)		814.7300	848.2700	-10.56	-0.013	Yes
Extreme (-10°C)		814.7300	848.2700	-16.78	-0.020	Yes
Extreme (-20°C)		814.7300	848.2700	-13	-0.016	Yes
Extreme (-30°C)		814.7300	848.2700	-12.34	-0.015	Yes
20°C	End Point Voltage	814.7300	848.2700	-7.84	-0.009	Yes

9.5.10. LTE41

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	41	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		2496	2690			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	2496.81000	2689.19000			
Extreme (50°C)		2496.81002	2689.19002	16.18	0.006	Yes
Extreme (40°C)		2496.80998	2689.18998	-15.26	-0.006	Yes
Extreme (30°C)		2496.81002	2689.19002	15.35	0.006	Yes
Extreme (10°C)		2496.80997	2689.18997	-25.62	-0.010	Yes
Extreme (0°C)		2496.80996	2689.18996	-37.51	-0.014	Yes
Extreme (-10°C)		2496.80997	2689.18997	-32.19	-0.012	Yes
Extreme (-20°C)		2496.80997	2689.18997	-31.53	-0.012	Yes
Extreme (-30°C)		2496.80996	2689.18996	-37.04	-0.014	Yes
20°C	End Point Voltage	2496.8100	2689.1900	-13.45	-0.005	Yes

9.5.11. LTE66

Test Engineer ID:	33499/85502	Test Date:	6/30/25 – 7/3/25

Band	66	Frequency Range		Frequency Error Reading (Hz)	Limit	
Condition		1710	1780			
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)		Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)
Normal (20°C)	Normal	1710.9900	1779.0100			
Extreme (50°C)		1710.9900	1779.0100	15.79	0.009	Yes
Extreme (40°C)		1710.9900	1779.0100	-12.33	-0.007	Yes
Extreme (30°C)		1710.9900	1779.0100	9.63	0.006	Yes
Extreme (10°C)		1710.9900	1779.0100	13.92	0.008	Yes
Extreme (0°C)		1710.9900	1779.0100	-20.24	-0.012	Yes
Extreme (-10°C)		1710.9900	1779.0100	22.97	0.013	Yes
Extreme (-20°C)		1710.9900	1779.0100	-25.96	-0.015	Yes
Extreme (-30°C)		1710.9900	1779.0100	22.65	0.013	Yes
20°C	End Point Voltage	1710.9900	1779.0100	-8.21	-0.005	Yes

10. RADIATED TEST RESULTS

Radiated measurement using the Field Strength Method

Using the test configuration shown in Figure 6 below, We measure the radiated emissions directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits. As stated in 5.5.1 of ANSI C63.26-2015, the field strength measurement method using a test site validated to the requirements of ANSI C63.4 is an alternative to the substitution measurement method.

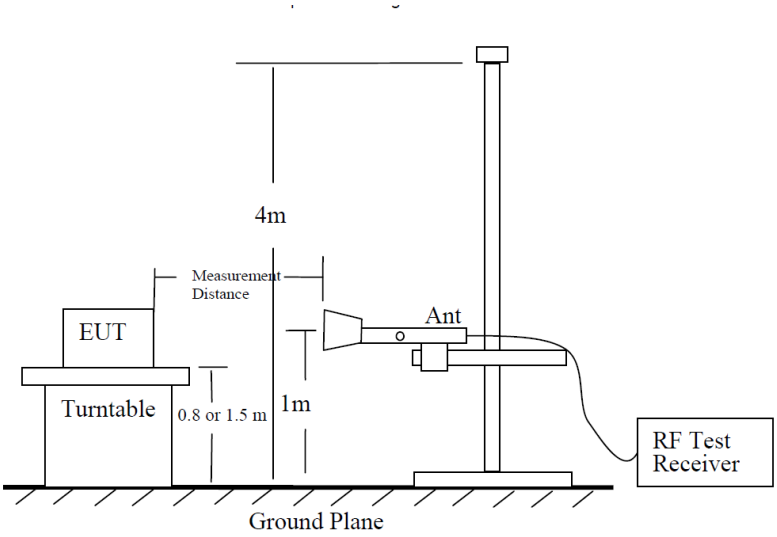


Figure 6—Test site-up for radiated ERP and/or EIRP measurements

Radiated Power Measurement Calculation According to ANSI C63.26-2015

a) E (dBμV/m) = Measured amplitude level (dBμV) + Cable Loss (dB) + Antenna Factor (dB/m).

b) E (dBμV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m).

c) E (dBμV/m) = EIRP (dBm) − 20log(D) + 104.8; where D is the measurement distance (in the far field region) in m.

d) EIRP (dBm) = E (dBμV/m) + 20log(D) − 104.8; where D is the measurement distance (in the far field region) in m.

So, from d)

The measuring distance is usually at 3m, then 20*Log(3)=9.5424

Then, EIRP (dBm) = E (dBμV/m) + 9.5424 − 104.8 = E (dBμV/m) – 95.2576

Note: Confidence check of each chamber is performed daily to see if any degradation from expected/normal reading reference data. Ambient check of each chamber is performed monthly.

10.1. FIELD STRENGTH OF SPURIOUS RADIATION, ABOVE 1GHz

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01
All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz

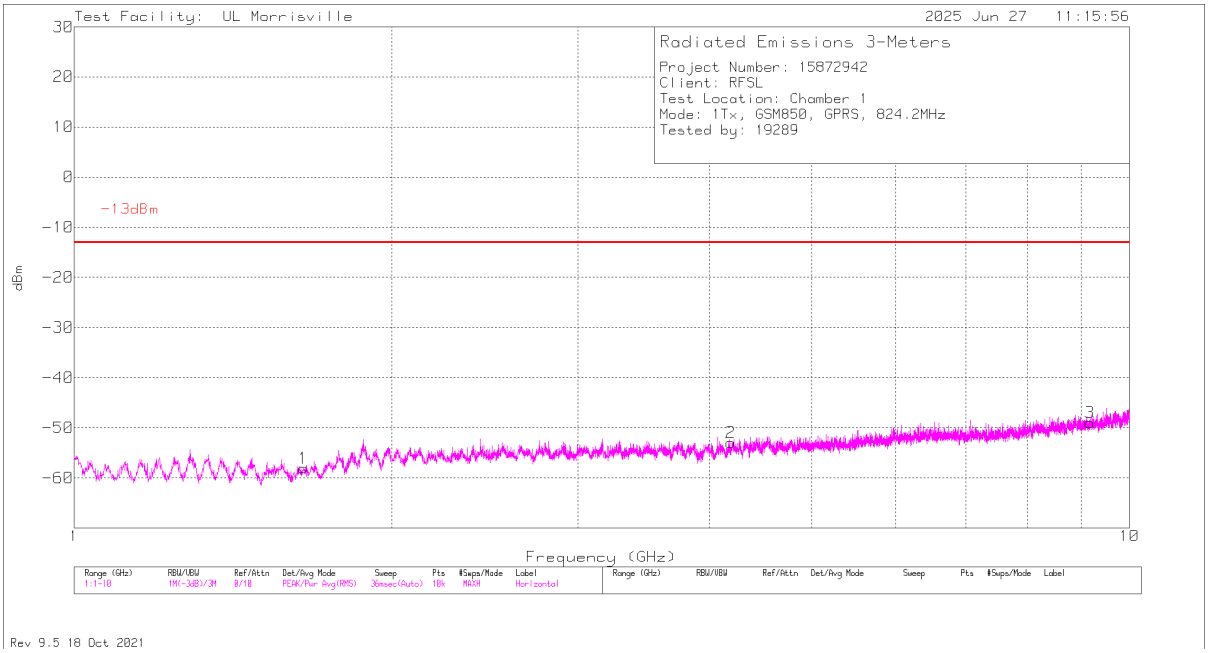
RESULTS

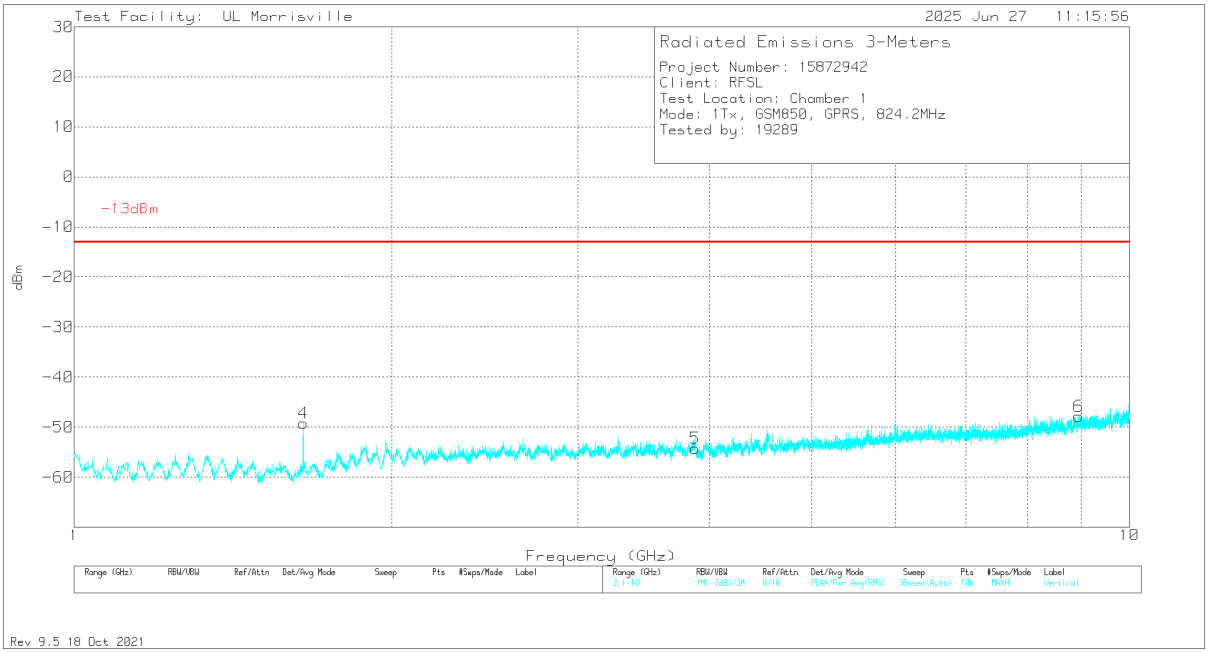
10.1.1. GSM850

LIMITS

FCC: §22.917 (a)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

GPRS Low Channel





Marker	Frequency (GHz)	Meter Reading (dBm)	Det	135143 (dB/m)	Gain/Loss (dB)	Filter (dB)	CF (dB)	Corrected Reading dBm	-13dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.648	-41.63	Pk	28.3	-48.1	.4	11.8	-49.23	-13	-36.23	0-360	101	V
1	1.6489	-50.46	Pk	28.3	-48.1	.4	11.8	-58.06	-13	-45.06	0-360	199	H
5	3.8773	-54.3	Pk	32.9	-45	.4	11.8	-54.2	-13	-41.2	0-360	300	V
2	4.1887	-52.16	Pk	33.5	-46.2	.1	11.8	-52.96	-13	-39.96	0-360	299	H
6	8.9461	-55.39	Pk	35.8	-40.4	.3	11.8	-47.89	-13	-34.89	0-360	300	V
3	9.172	-56.23	Pk	36	-41	.5	11.8	-48.93	-13	-35.93	0-360	199	H

Pk - Peak detector