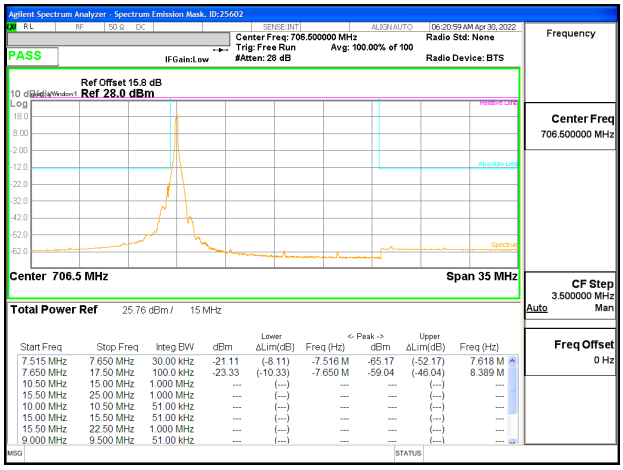
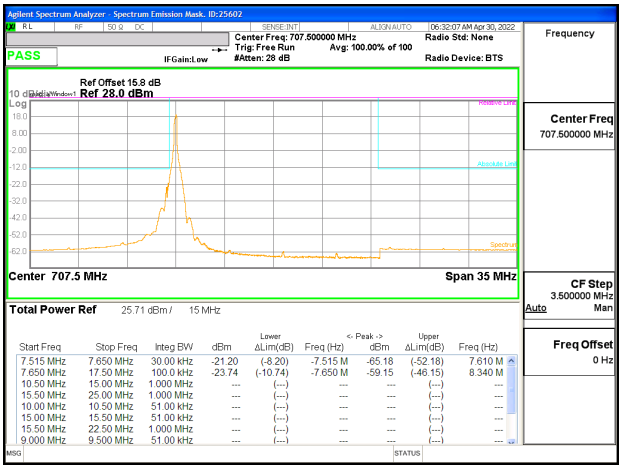
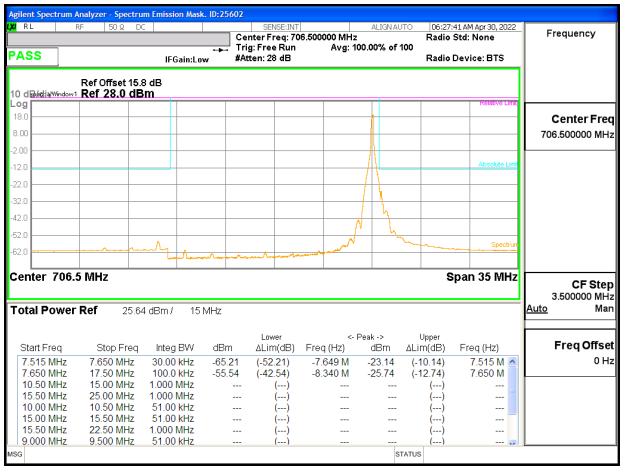


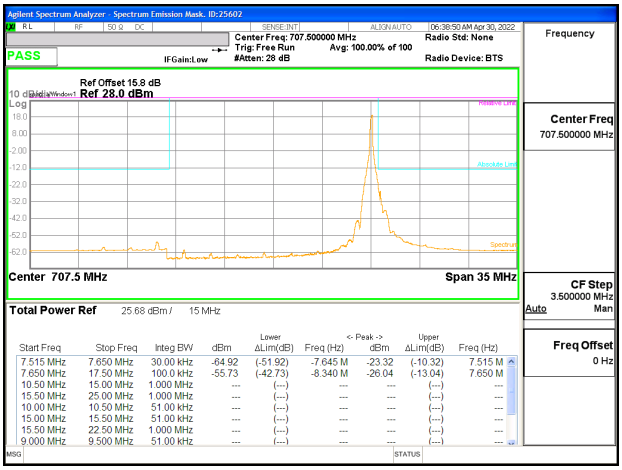
5G NR n12 15MHz BPSK Low Channel RB1-0



5G NR n12 15MHz BPSK Middle Channel RB1-0



5G NR n12 15MHz BPSK Low Channel RB1-78



5G NR n12 15MHz BPSK Middle Channel RB1-78

5G NR n12 15MHz BPSK Low Channel RB75-0

5G NR n12 15MHz BPSK Middle Channel RB75-0

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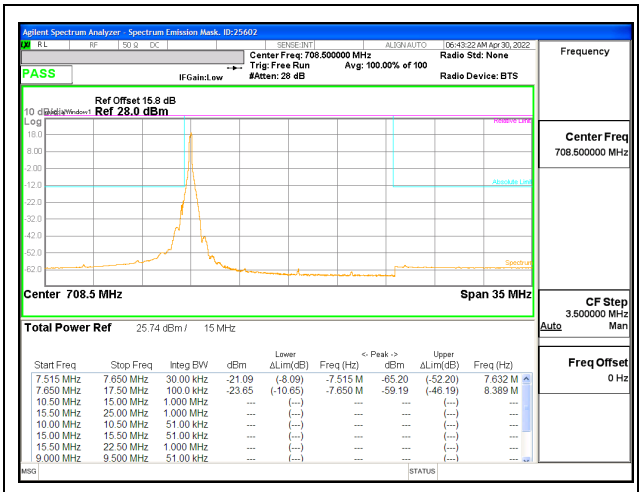
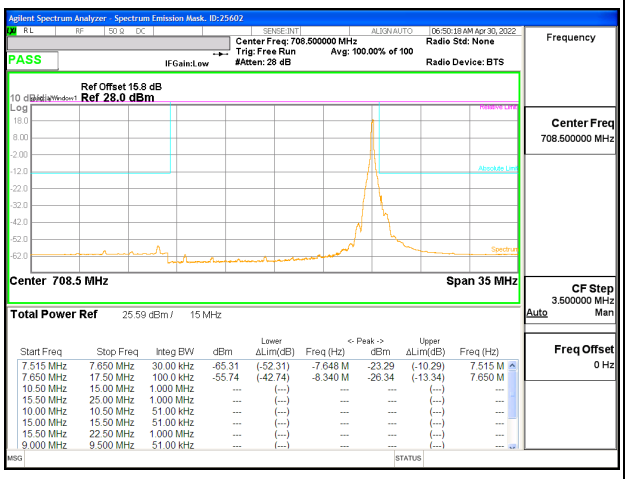


Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
7.515 MHz	7.650 MHz	30.00 kHz	-21.09	(-8.09)	-7.515 M	-65.20	(-52.20)	7.632 M
7.650 MHz	17.50 MHz	100.0 kHz	-23.65	(-10.65)	-7.650 M	-59.19	(-46.19)	8.389 M
10.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
15.50 MHz	25.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
10.00 MHz	10.50 MHz	51.00 kHz	---	(---)	---	---	(---)	---
15.00 MHz	15.50 MHz	51.00 kHz	---	(---)	---	---	(---)	---
15.50 MHz	22.50 MHz	1.000 MHz	---	(---)	---	---	(---)	---
9.000 MHz	9.500 MHz	51.00 kHz	---	(---)	---	---	(---)	---

5G NR n12 15MHz BPSK High Channel RB1-0



Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
7.515 MHz	7.650 MHz	30.00 kHz	-65.31	(-52.31)	-7.648 M	-23.29	(-10.29)	7.515 M
7.650 MHz	17.50 MHz	100.0 kHz	-55.74	(-42.74)	-8.340 M	-26.34	(-13.34)	7.650 M
10.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
15.50 MHz	25.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
10.00 MHz	10.50 MHz	51.00 kHz	---	(---)	---	---	(---)	---
15.00 MHz	15.50 MHz	51.00 kHz	---	(---)	---	---	(---)	---
15.50 MHz	22.50 MHz	1.000 MHz	---	(---)	---	---	(---)	---
9.000 MHz	9.500 MHz	51.00 kHz	---	(---)	---	---	(---)	---

5G NR n12 15MHz BPSK High Channel RB1-78

Start Freq	Stop Freq	Integ BW	dBm	Lower ΔLim(dB)	Freq (Hz)	<- Peak -> dBm	Upper ΔLim(dB)	Freq (Hz)
7.515 MHz	7.650 MHz	30.00 kHz	-33.26	(-20.26)	-7.516 M	-40.06	(-27.06)	7.641 M
7.650 MHz	17.50 MHz	100.0 kHz	-31.27	(-18.27)	-7.650 M	-35.32	(-22.32)	7.650 M
10.50 MHz	15.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
15.50 MHz	25.00 MHz	1.000 MHz	---	(---)	---	---	(---)	---
10.00 MHz	10.50 MHz	51.00 kHz	---	(---)	---	---	(---)	---
15.00 MHz	15.50 MHz	51.00 kHz	---	(---)	---	---	(---)	---
15.50 MHz	22.50 MHz	1.000 MHz	---	(---)	---	---	(---)	---
9.000 MHz	9.500 MHz	51.00 kHz	---	(---)	---	---	(---)	---

5G NR n12 15MHz BPSK High Channel RB75-0

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9.2.4. LTE BAND 13 EMISSION MASK

LIMITS

FCC: §27.53
(c)For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(f) Emissions in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals. (-70 dBW/MHz = -40dBm/MHz).

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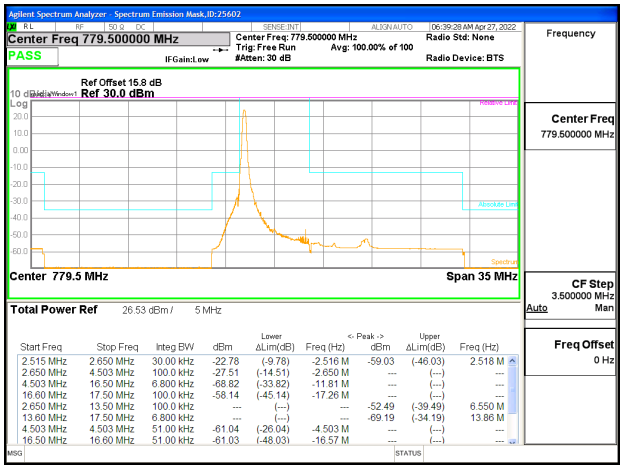
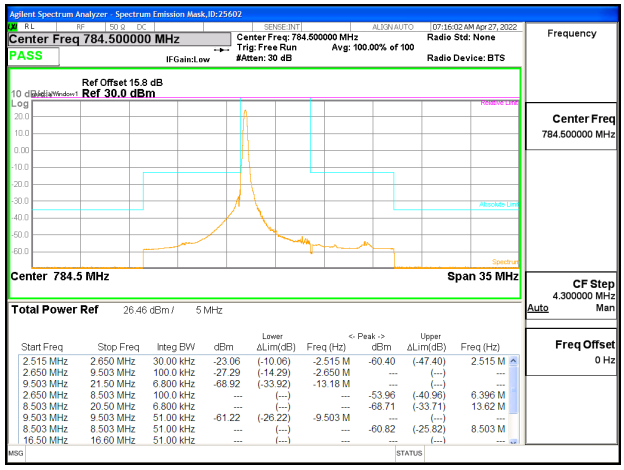
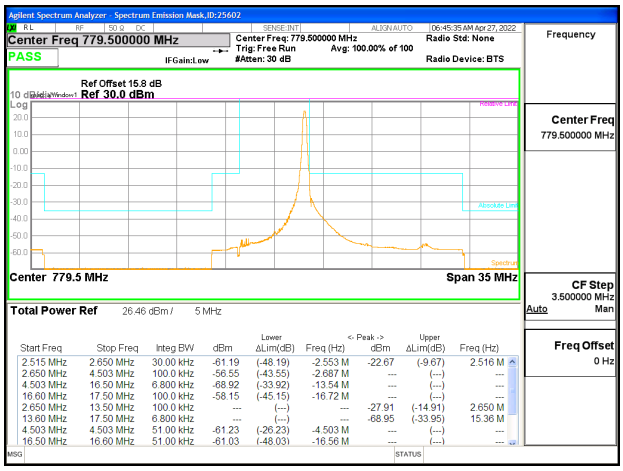


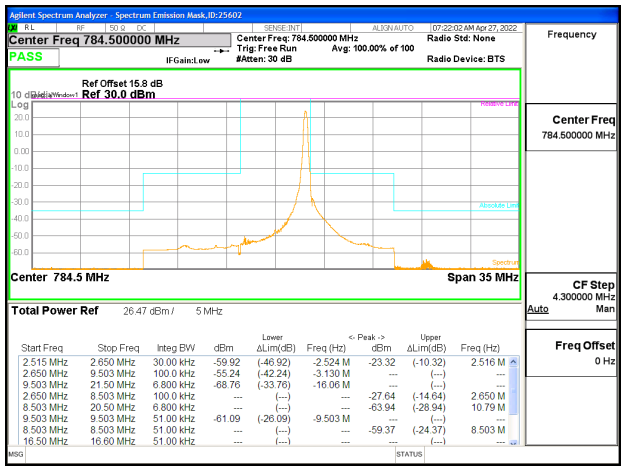
LTE B13 5MHz QPSK Low Channel RB1-0



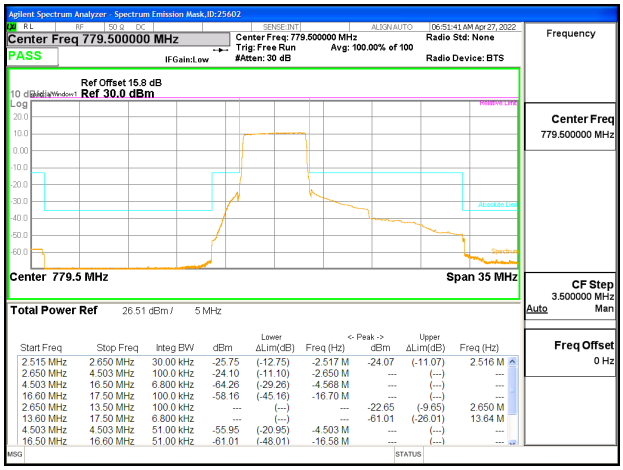
LTE B13 5MHz QPSK High Channel RB1-0



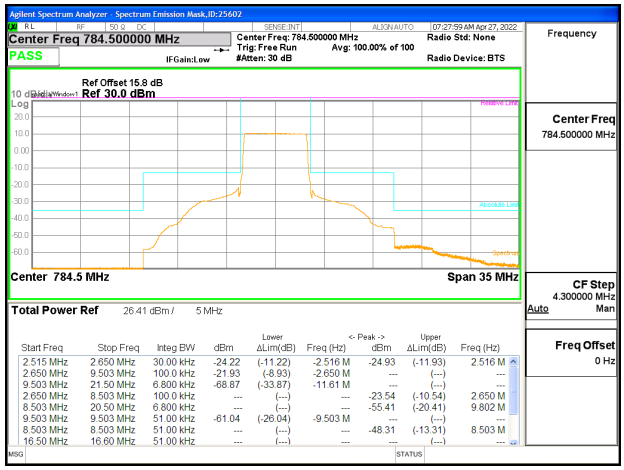
LTE B13 5MHz QPSK Low Channel RB1-24



LTE B13 5MHz QPSK High Channel RB1-24



LTE B13 5MHz QPSK Low Channel RB25-0



LTE B13 5MHz QPSK High Channel RB25-0

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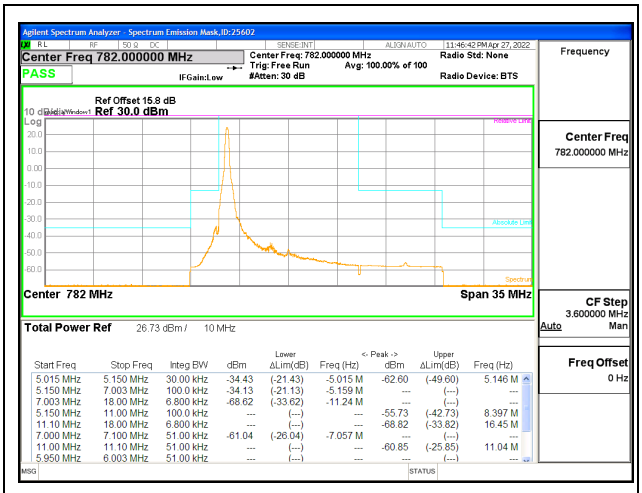
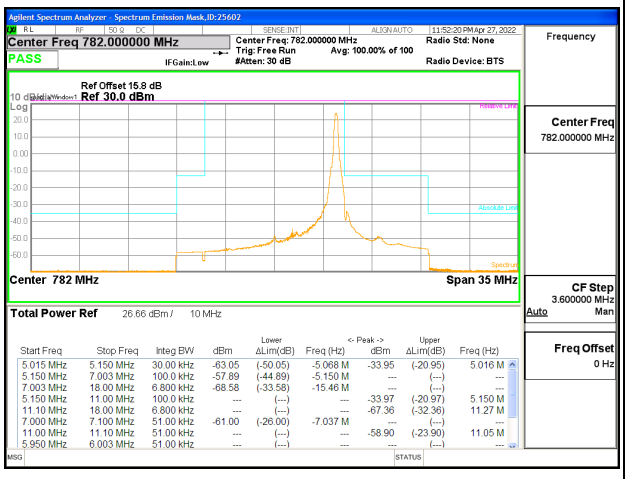
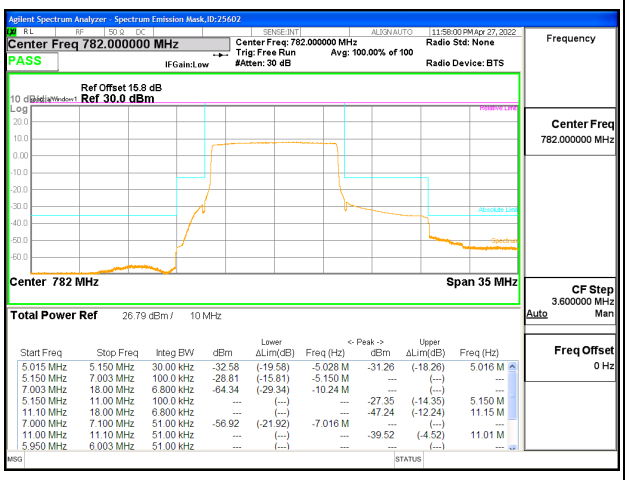


LTE B13 10MHz QPSK Middle Channel RB1-0



LTE B13 10MHz QPSK Middle Channel RB1-49



LTE B13 10MHz QPSK Middle Channel RB50-0

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9.2.5. LTE BAND 14 AND 5G NR n14 EMISSION MASK

LIMITS

FCC: §90.543 Emission Limitations.
(e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

(f) For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

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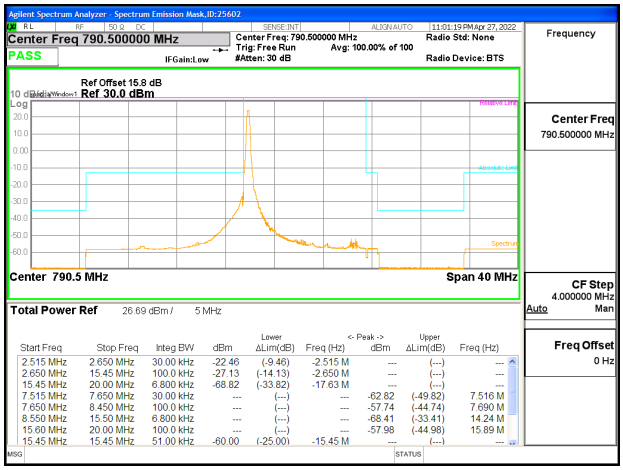
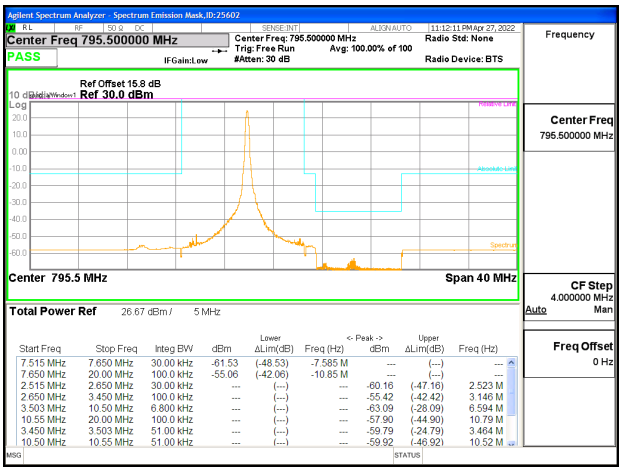
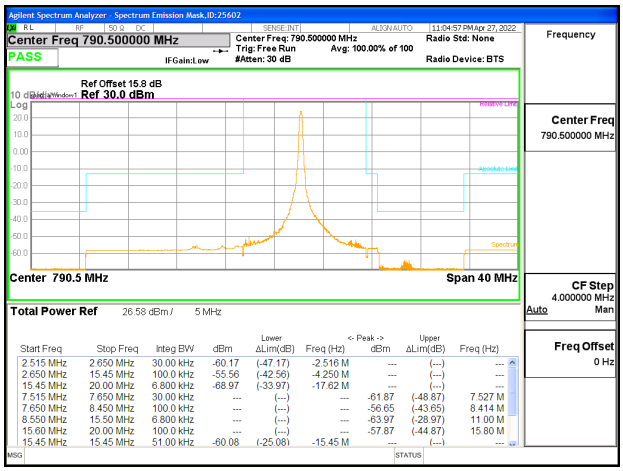
LTE BAND 14 EMISSION MASK



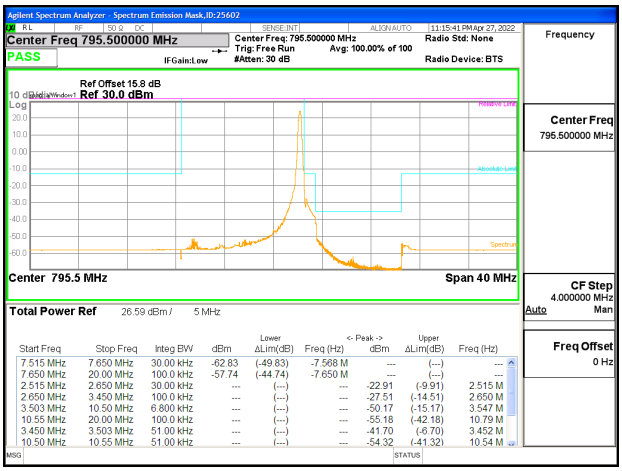
LTE B14 5MHz QPS Low Channel RB1-0



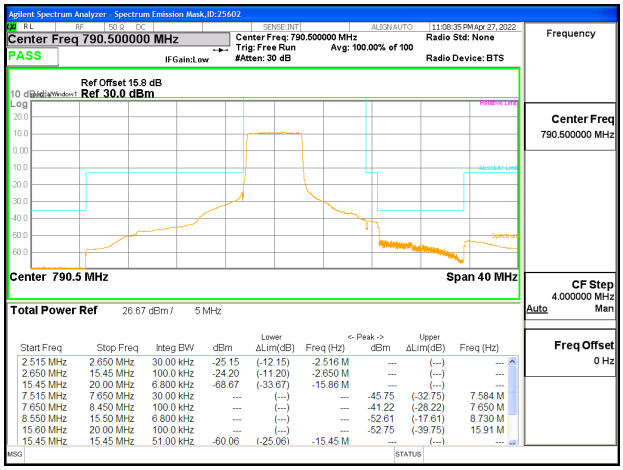
LTE B14 5MHz QPSK High Channel RB1-0



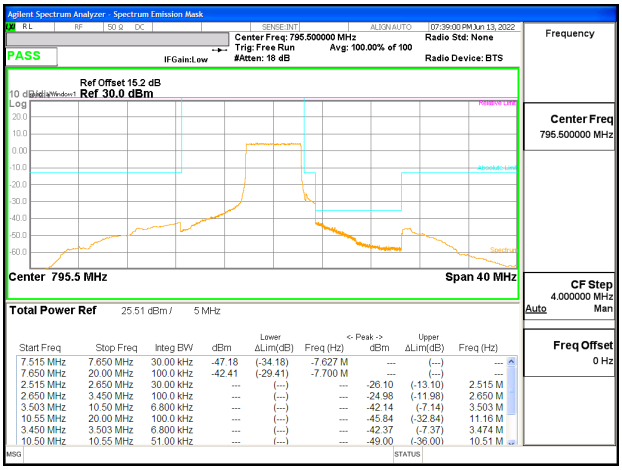
LTE B14 5MHz QPSK Low Channel RB1-24



LTE B14 5MHz QPSK High Channel RB1-24



LTE B14 5MHz QPSK Low Channel RB25-0



LTE B14 5MHz QPSK High Channel RB25-0

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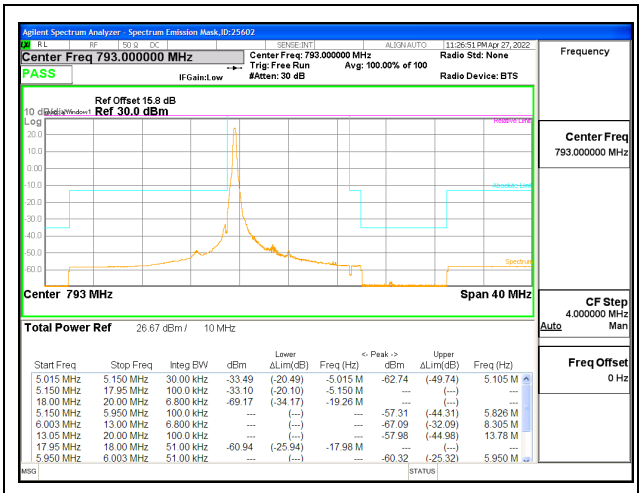
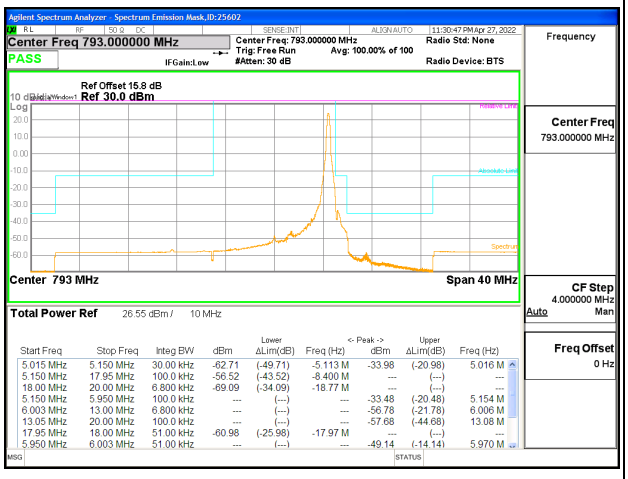
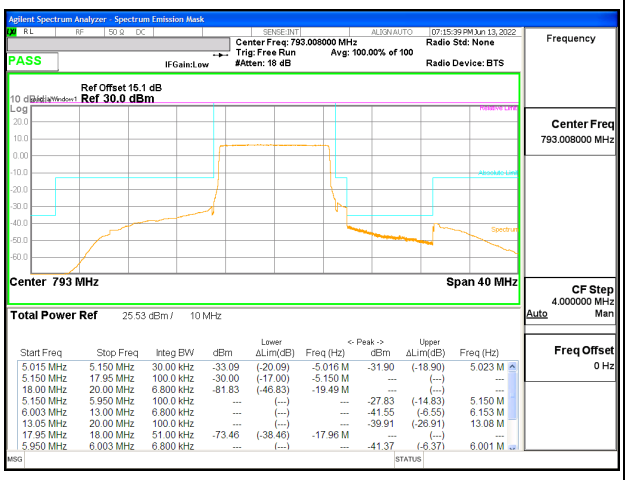


LTE B14 10MHz QPSK Middle Channel RB1-0



LTE B14 10MHz QPSK Middle Channel RB1-49



LTE B14 10MHz QPSK Middle Channel RB50-0, ID:26502

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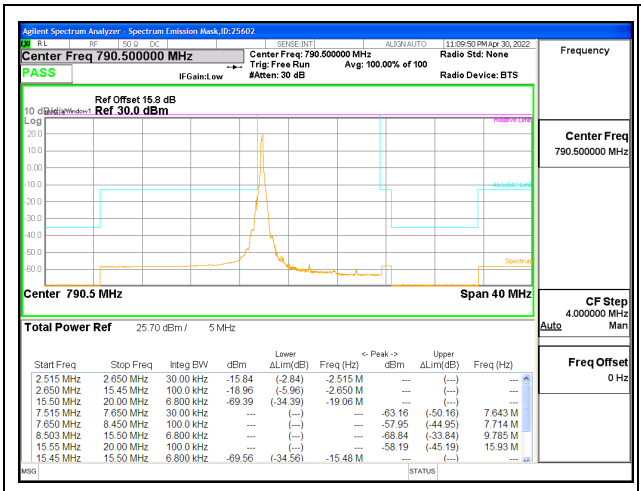
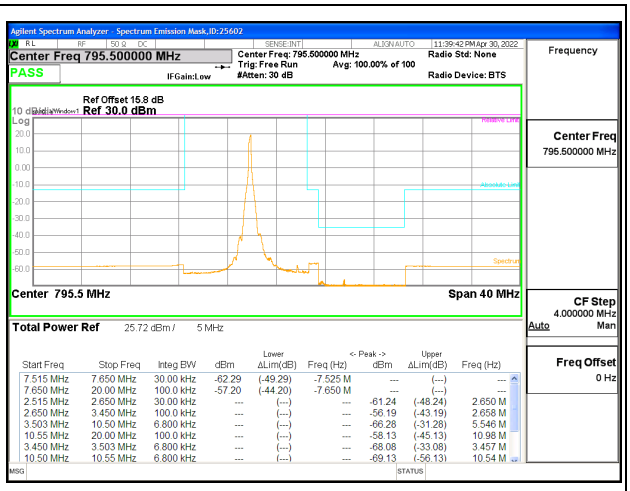
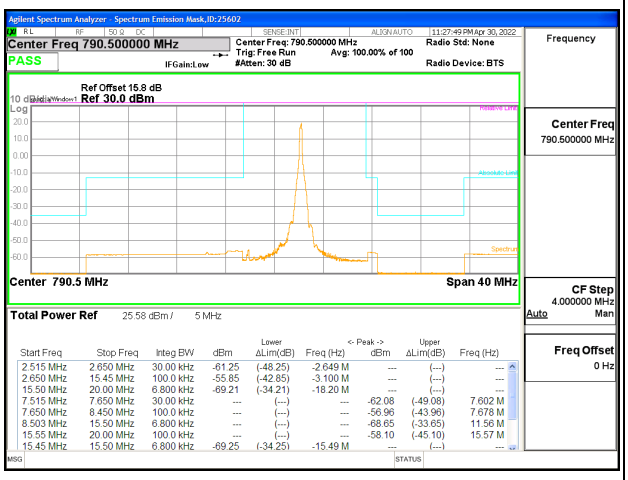
5G NR n14 EMISSION MASK



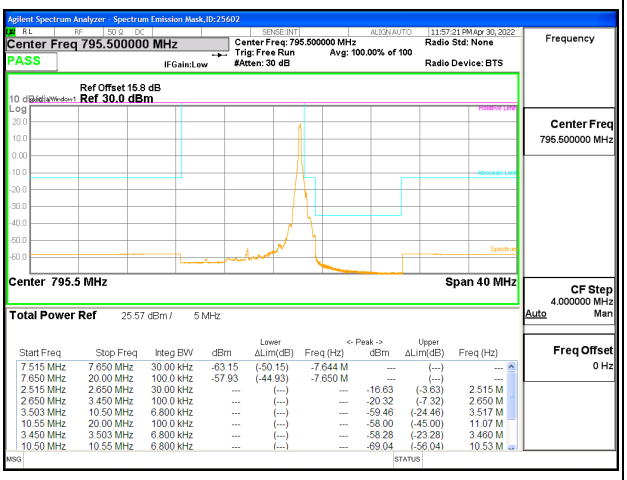
5G NR n14 5MHz BPSK Low Channel RB1-0



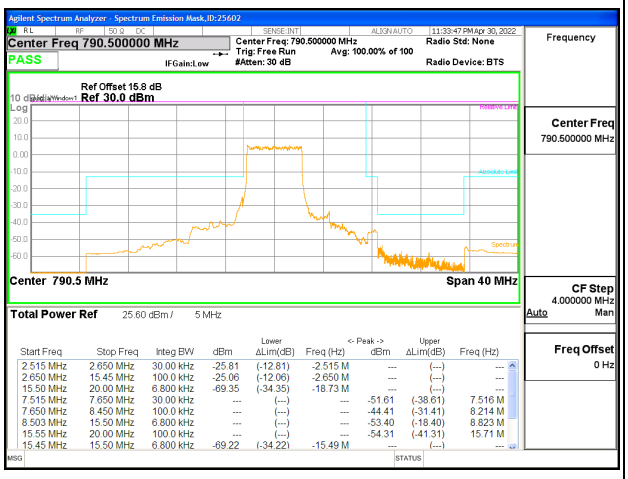
5G NR n14 5MHz BPSK High Channel RB1-0



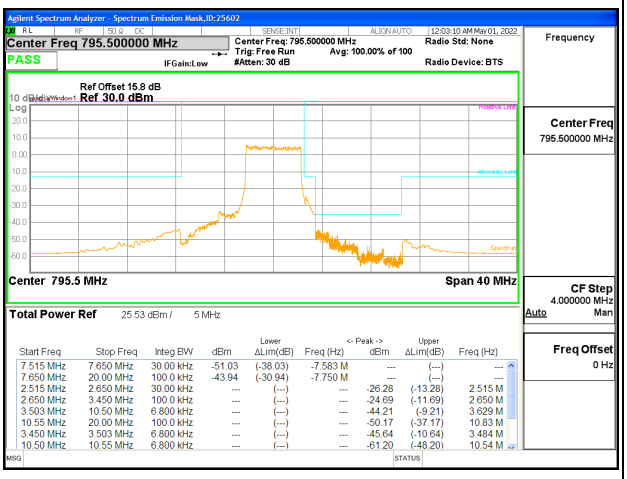
5G NR n14 5MHz BPSK Low Channel RB1-24



5G NR n14 5MHz BPSK High Channel RB1-24



5G NR n14 5MHz BPSK Low Channel RB25-0



5G NR n14 5MHz BPSK High Channel RB25-0

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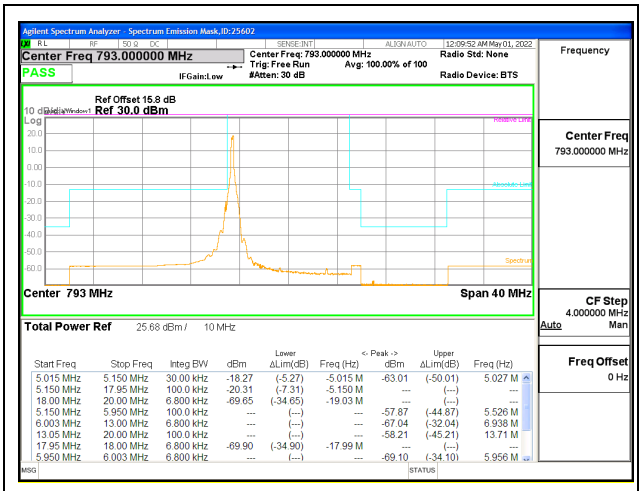
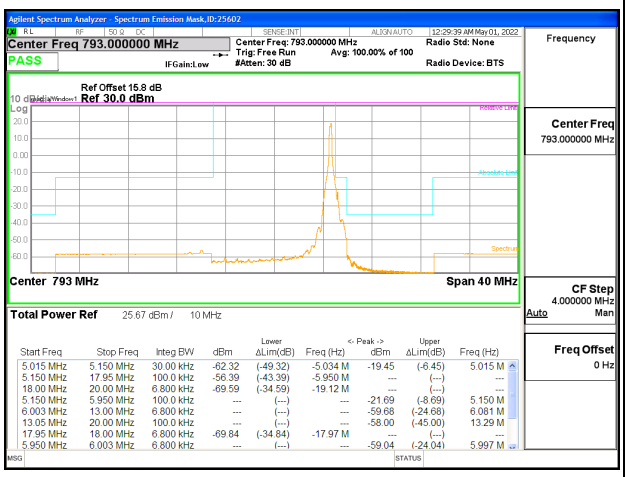
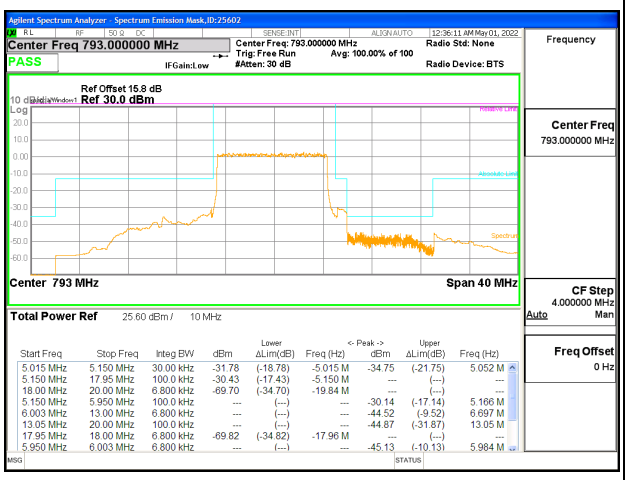


5G NR n14 10MHz QPSK Middle Channel RB1-0



5G NR n14 10MHz QPSK Middle Channel RB1-49



5G NR n14 10MHz QPSK Middle Channel RB50-0

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9.2.6. LTE BAND 17 EMISSION MASK

LIMITS

FCC: §27.53
(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

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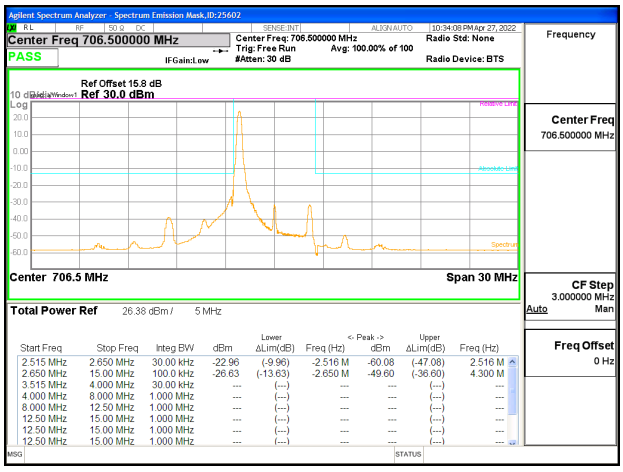
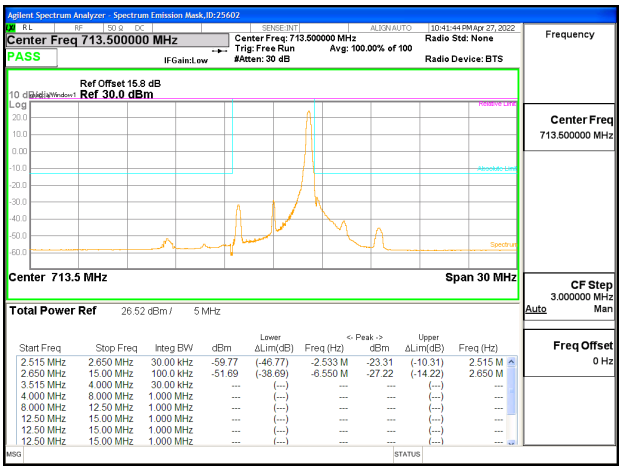
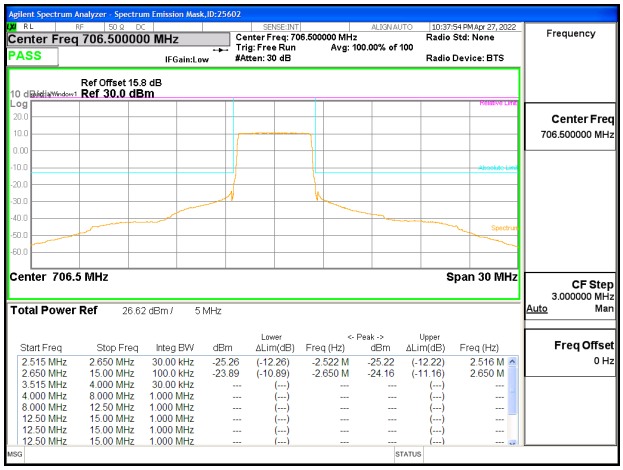


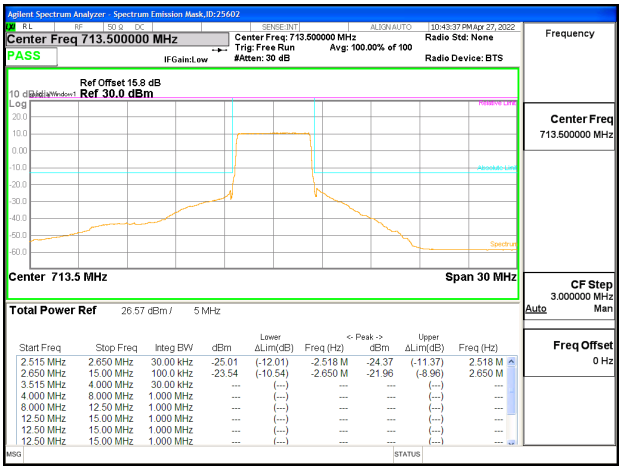
LTE B17 5MHz QPSK Low Channel RB1-0



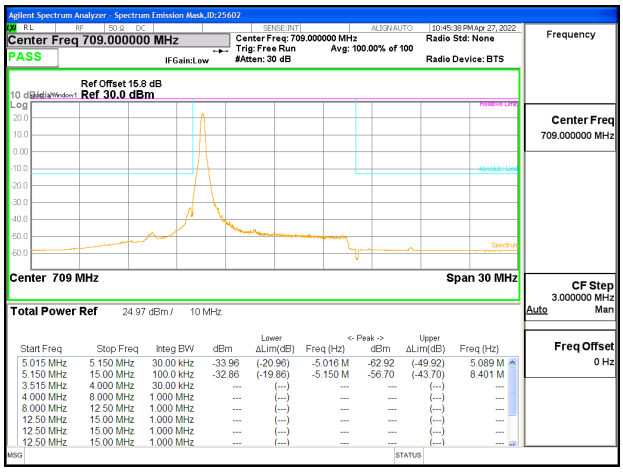
LTE B17 5MHz QPSK High Channel RB1-24



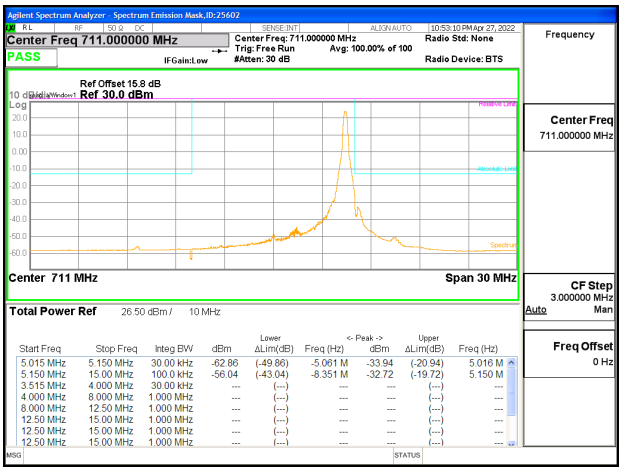
LTE B17 5MHz QPSK Low Channel RB25-0



LTE B17 5MHz QPSK High Channel RB25-0



LTE B17 10MHz QPSK Low Channel RB1-0



LTE B17 10MHz QPSK High Channel RB1-49

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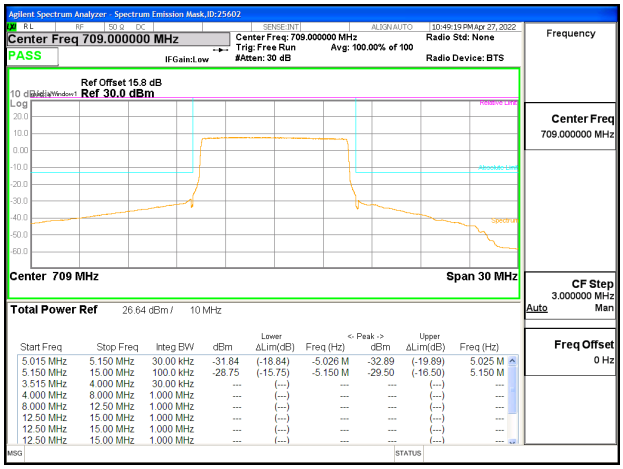
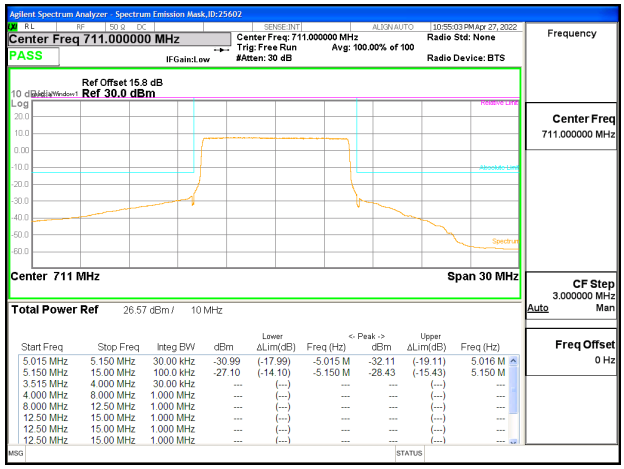


LTE B17 10MHz QPSK Low Channel RB50-0



LTE B17 10MHz QPSK High Channel RB50-0

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9.2.7. LTE BAND 25 AND 5G NR n25 EMISSION MASK

LIMITS

FCC: §24.238 (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.

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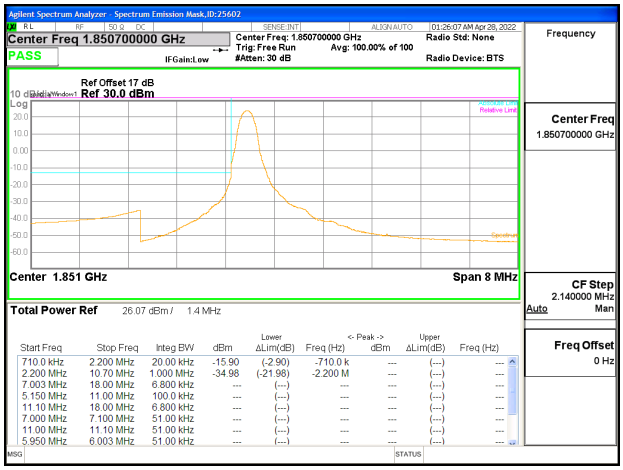
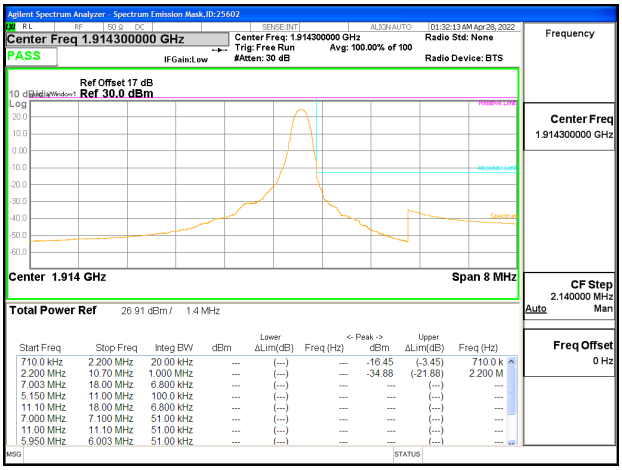
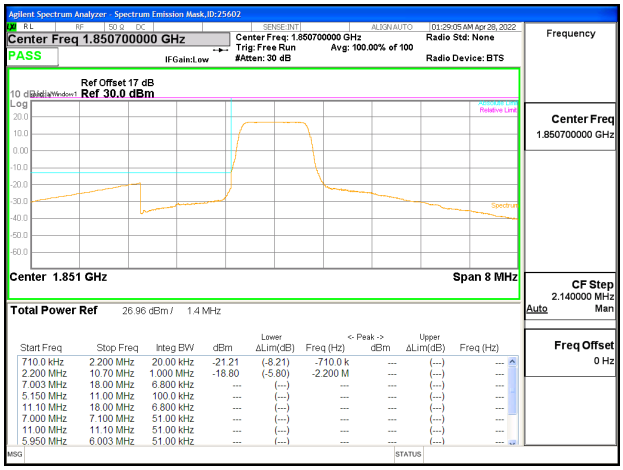
LTE BAND 25 EMISSION MASK



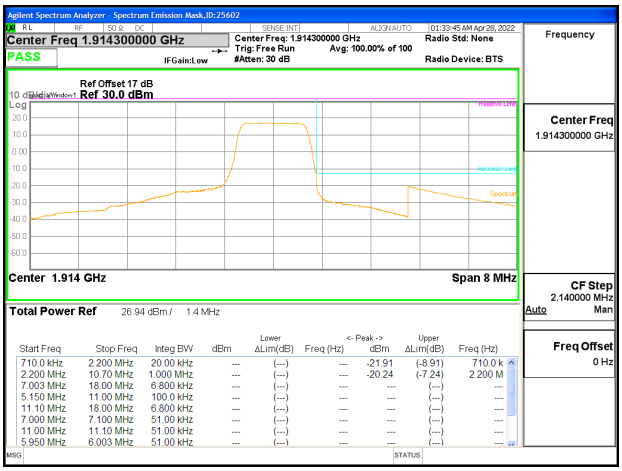
LTE B25 1.4MHz QPSK Low Channel RB1-0



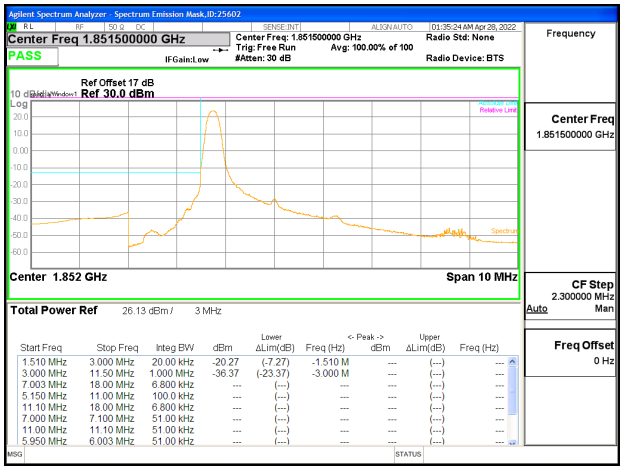
LTE B25 1.4MHz QPSK High Channel RB1-5



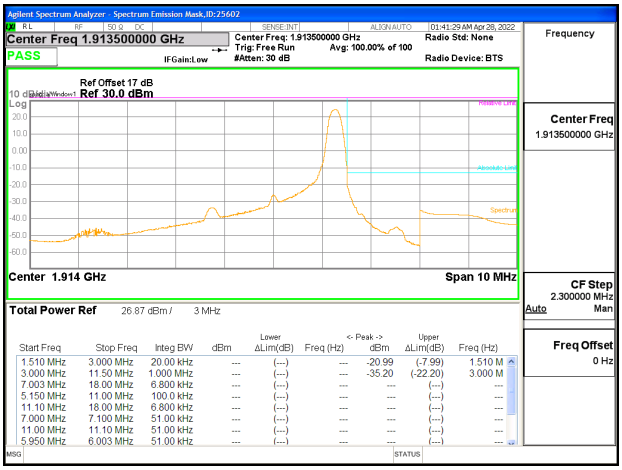
LTE B25 1.4MHz QPSK Low Channel RB6-0



LTE B25 1.4MHz QPSK High Channel RB6-0



LTE B25 3MHz QPSK Low Channel RB1-0



LTE B25 3MHz QPSK High Channel RB1-14

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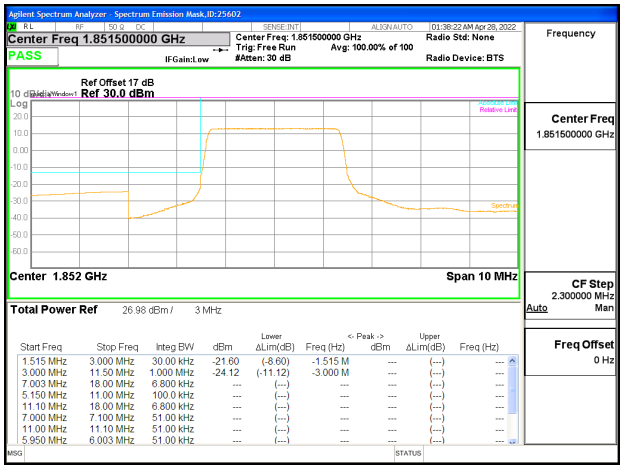
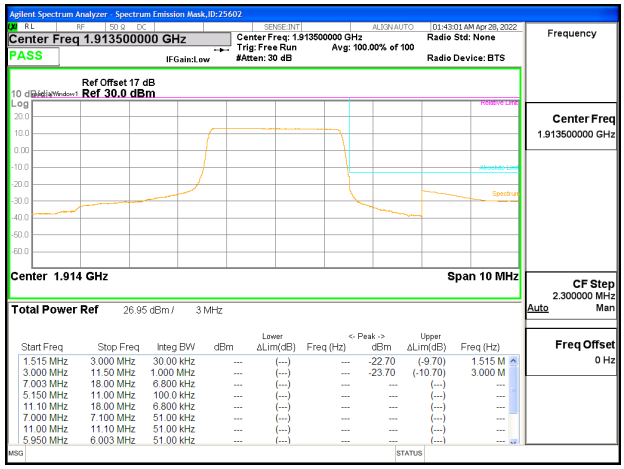
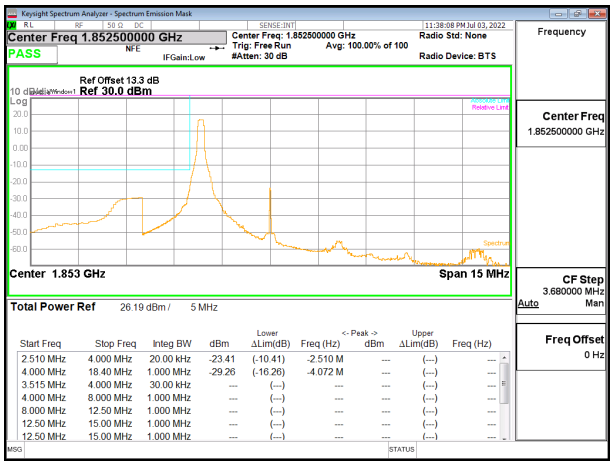


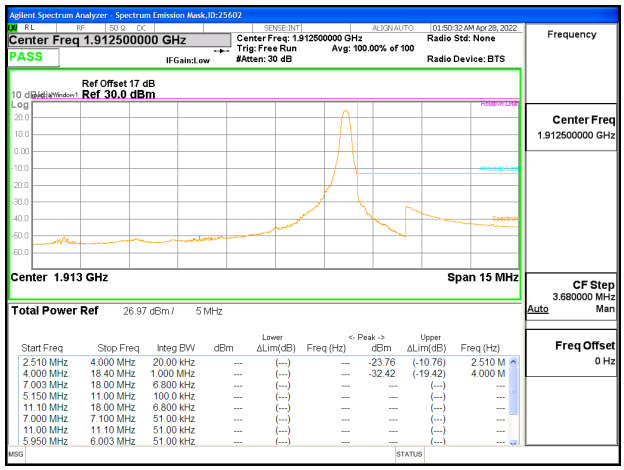
LTE B25 3MHz QPSK Low Channel RB15-0



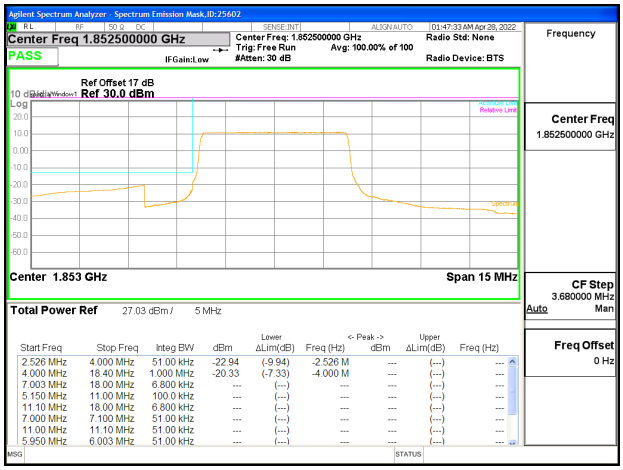
LTE B25 3MHz QPSK High Channel RB15-0



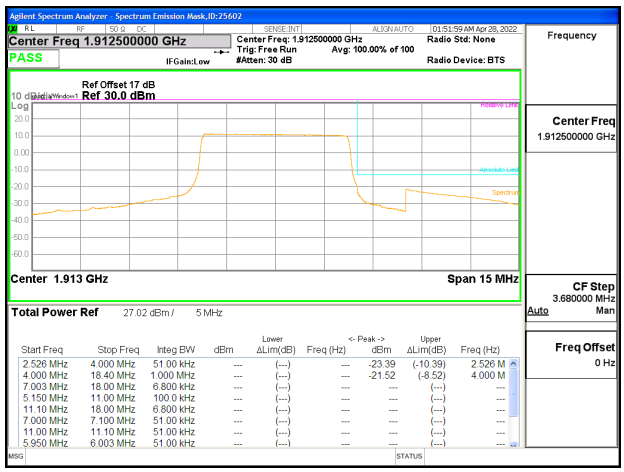
LTE B25 5MHz QPSK Low Channel RB1-0, ID:25602



LTE B25 5MHz QPSK High Channel RB1-24



LTE B25 5MHz QPSK Low Channel RB25-0



LTE B25 5MHz QPSK High Channel RB25-0

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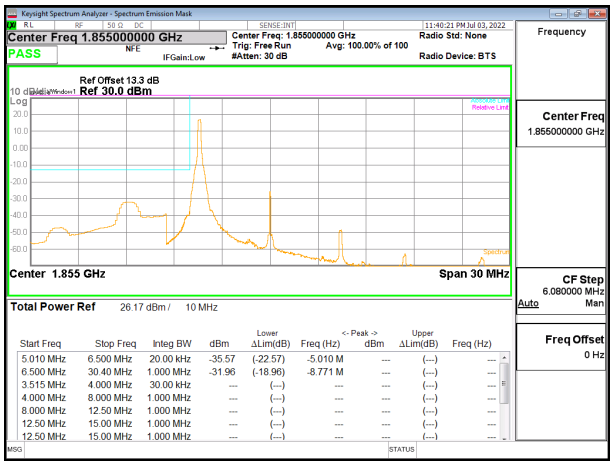
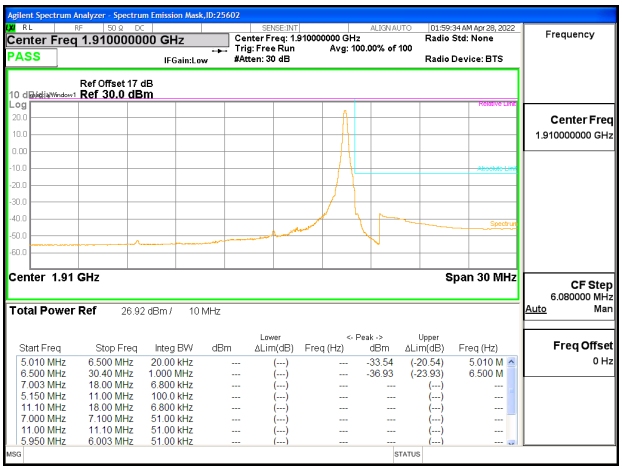
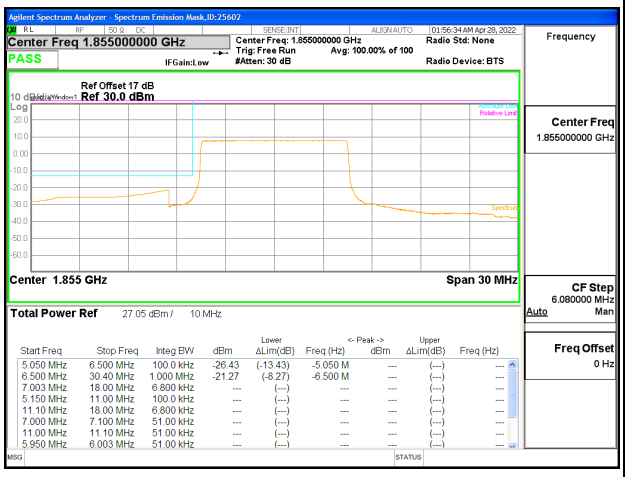


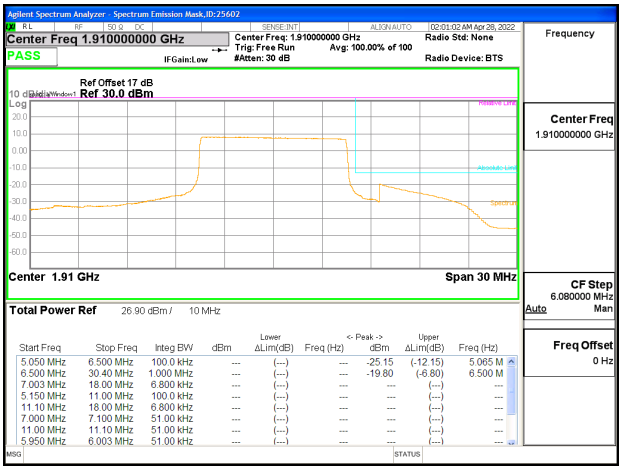
LTE B25 10MHz QPSK Low Channel RB1-0, ID:25602



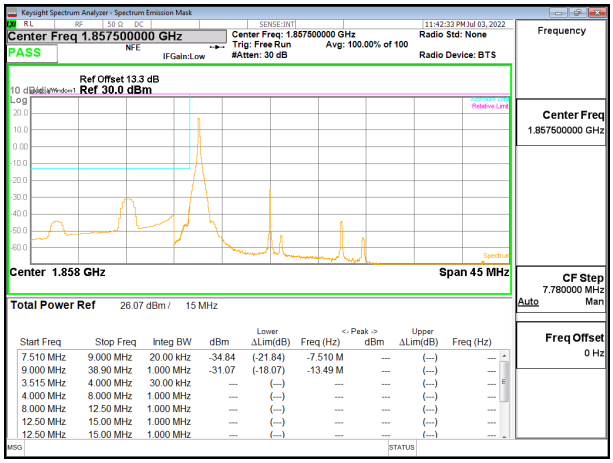
LTE B25 10MHz QPSK High Channel RB1-49



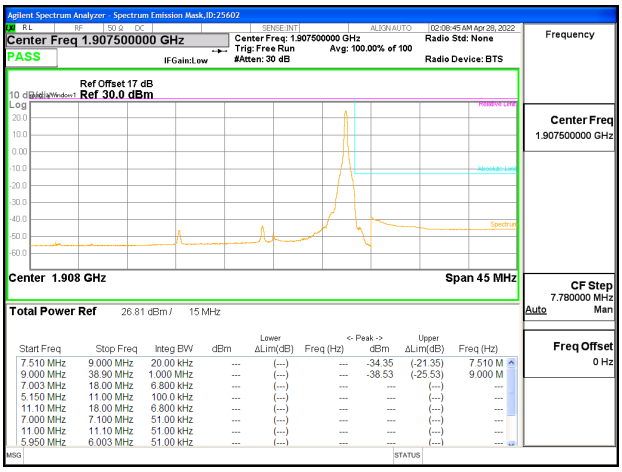
LTE B25 10MHz QPSK Low Channel RB50-0



LTE B25 10MHz QPSK High Channel RB50-0



LTE B25 15MHz QPSK Low Channel RB1-0, ID:25602



LTE B25 15MHz QPSK High Channel RB1-74

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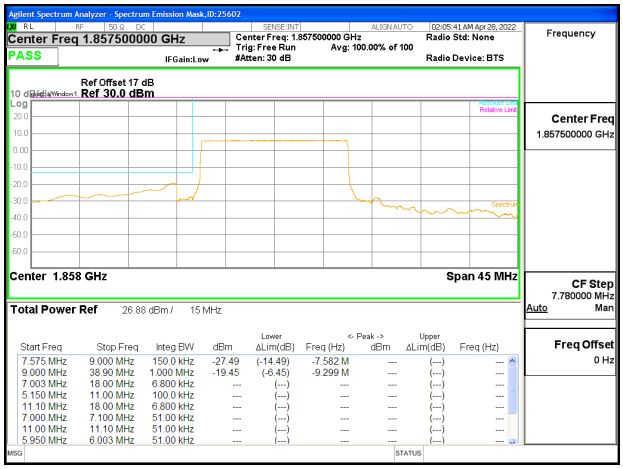
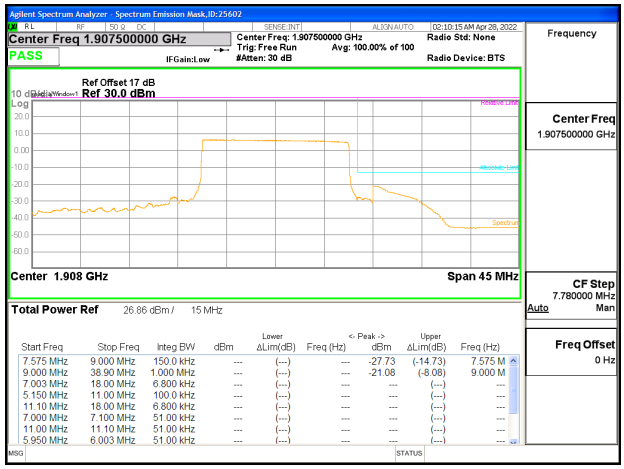
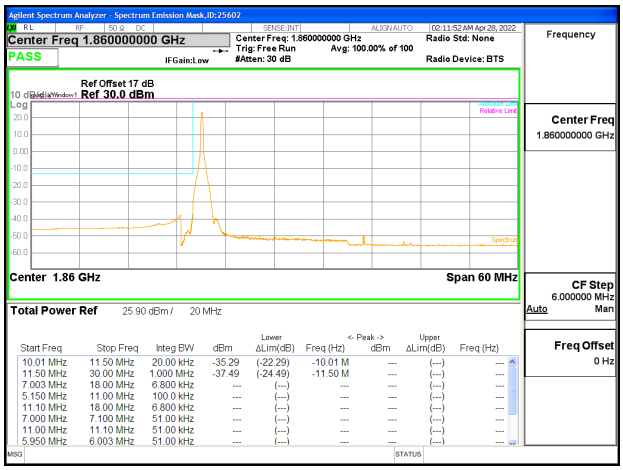


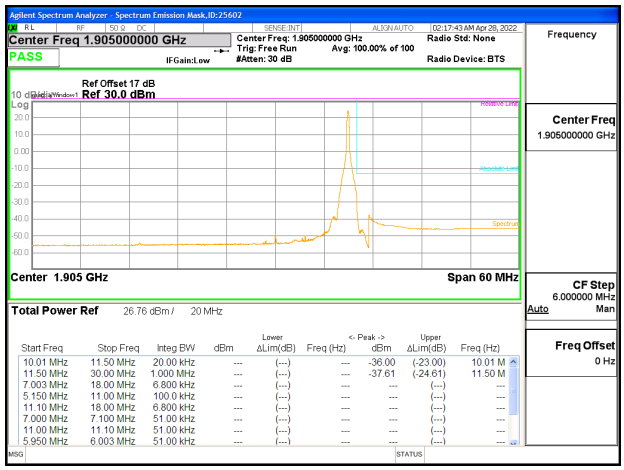
LTE B25 15MHz QPSK Low Channel RB75-0



LTE B25 15MHz QPSK High Channel RB75-0



LTE B25 20MHz QPSK Low Channel RB1-0: ID



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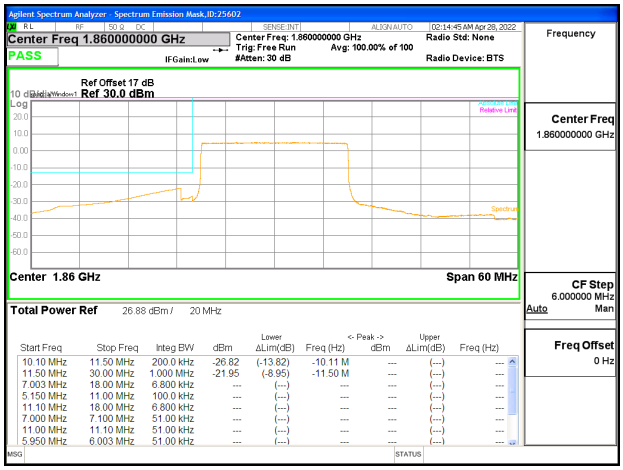
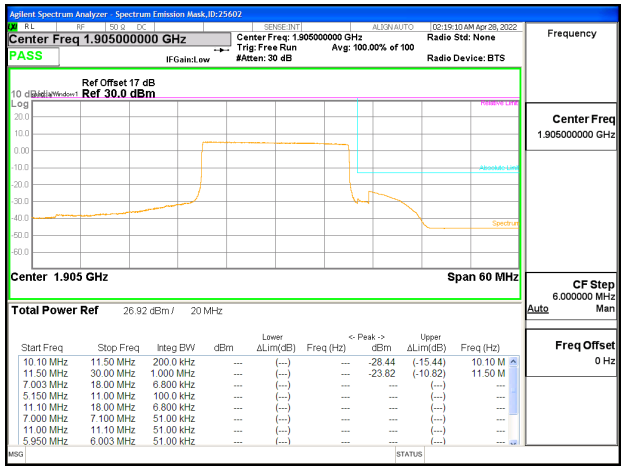


LTE B25 20MHz QPSK Low Channel RB100-0



LTE B25 20MHz QPSK High Channel RB100-0

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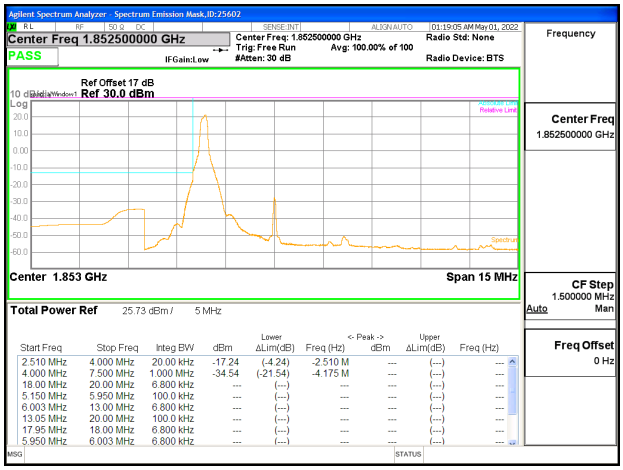
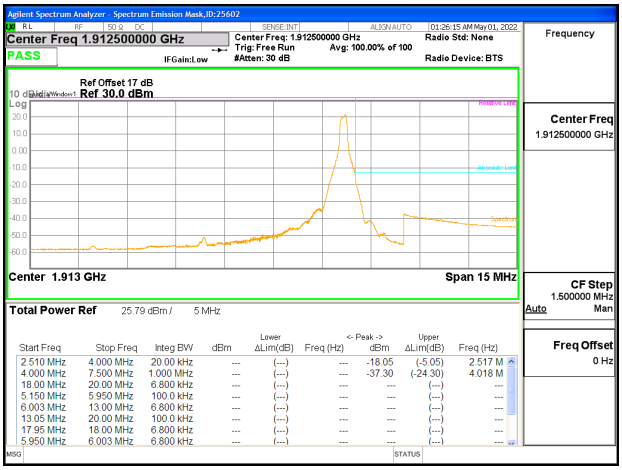
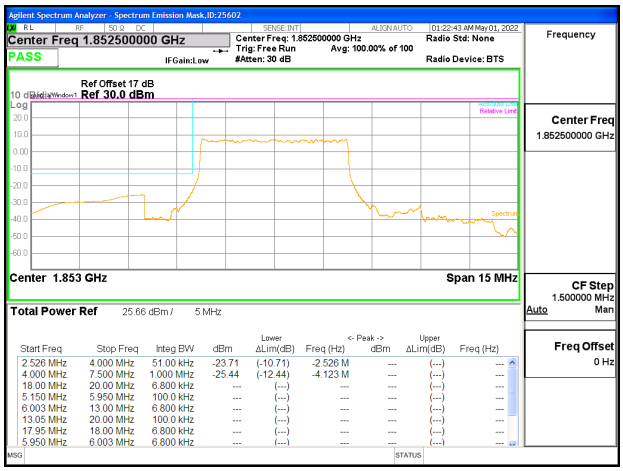
5G NR n25 EMISSION MASK



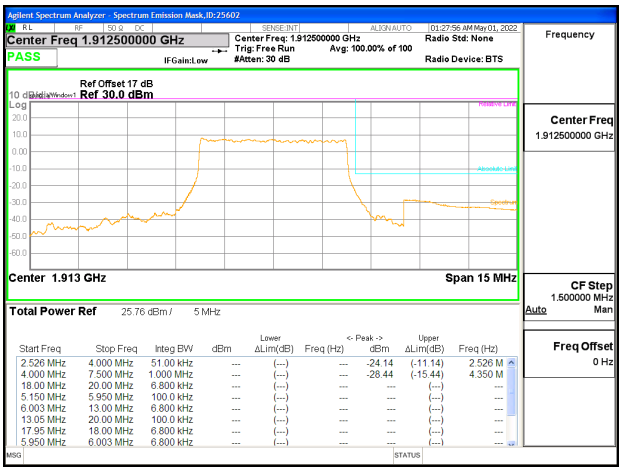
5G NR n25 5MHz BPSK Low Channel RB1-0



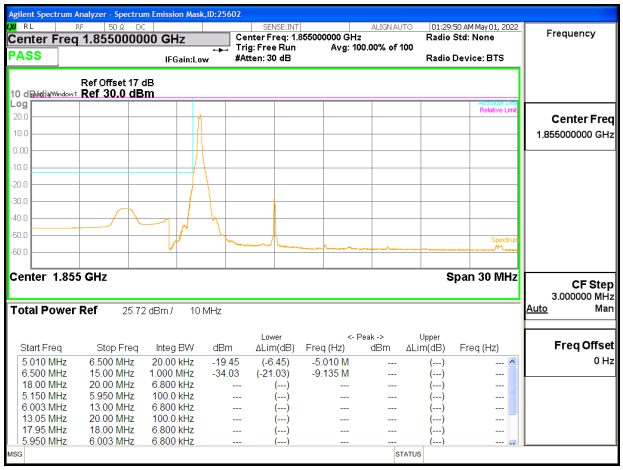
5G NR n25 5MHz BPSK High Channel RB1-24



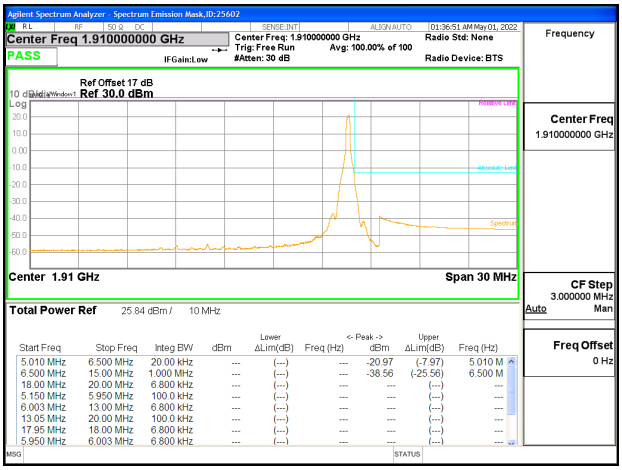
5G NR n25 5MHz BPSK Low Channel RB25-0



5G NR n25 5MHz BPSK High Channel RB25-0



5G NR n25 10MHz BPSK Low Channel RB1-0



5G NR n25 10MHz BPSK High Channel RB1-51

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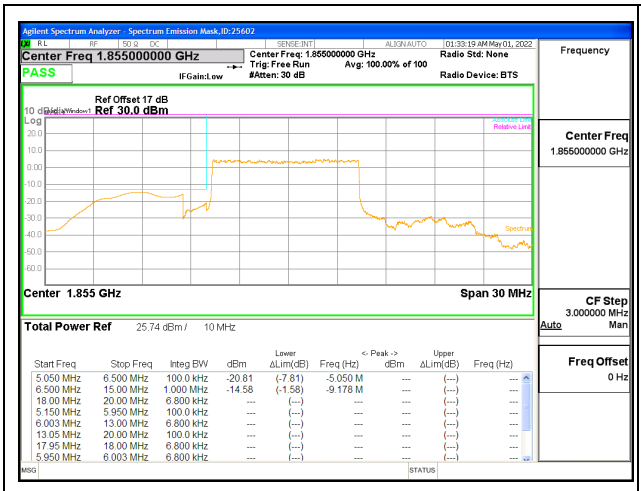
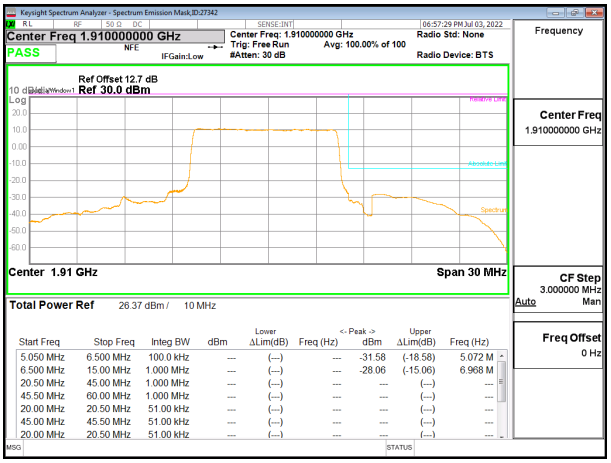
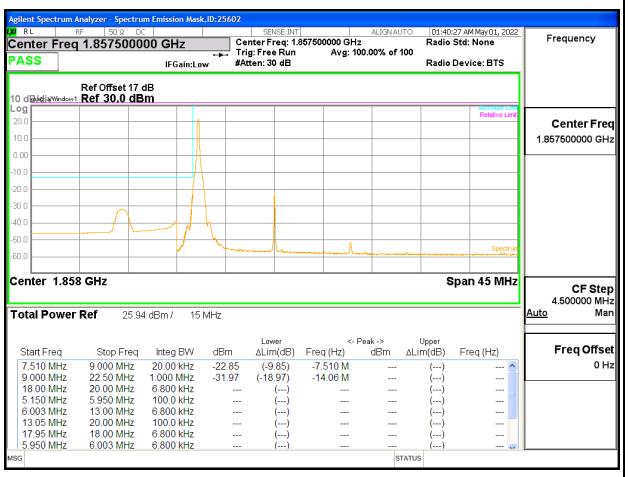


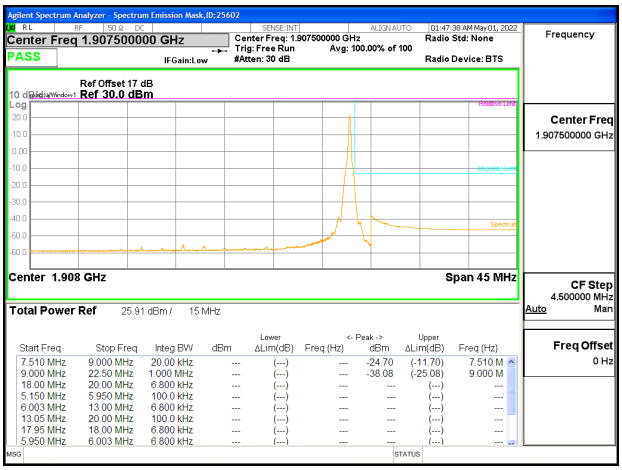
5G NR n25 10MHz BPSK Low Channel RB50-0



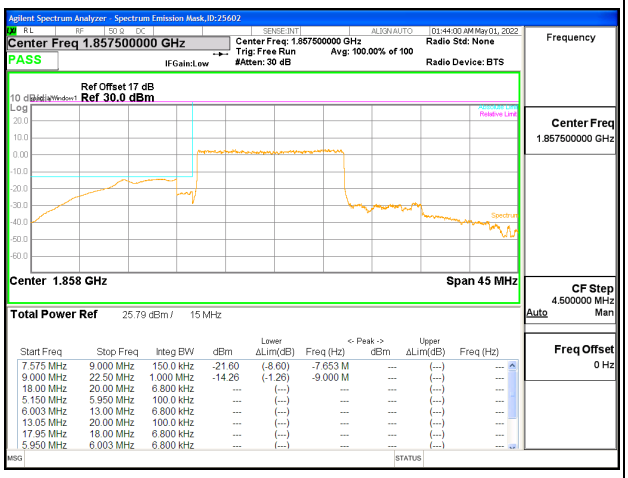
5G NR n25 10MHz BPSK High Channel RB50-0



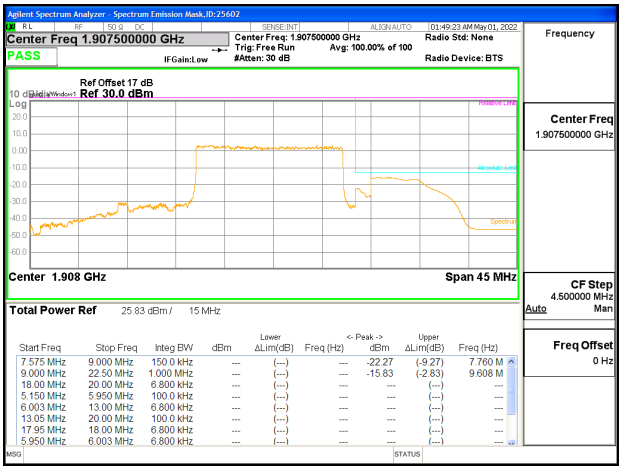
5G NR n25 15MHz BPSK Low Channel RB1-0



5G NR n25 15MHz BPSK High Channel RB1-78



5G NR n25 15MHz BPSK Low Channel RB75-0



5G NR n25 15MHz BPSK High Channel RB75-0

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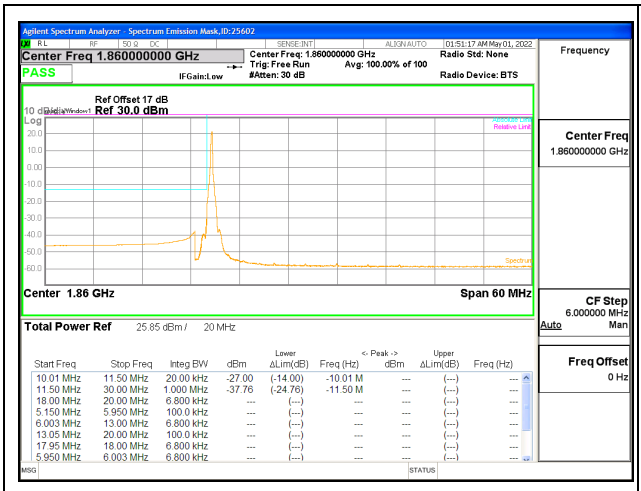
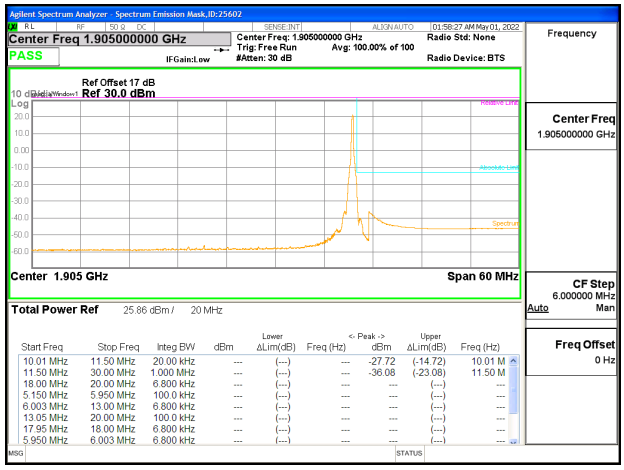
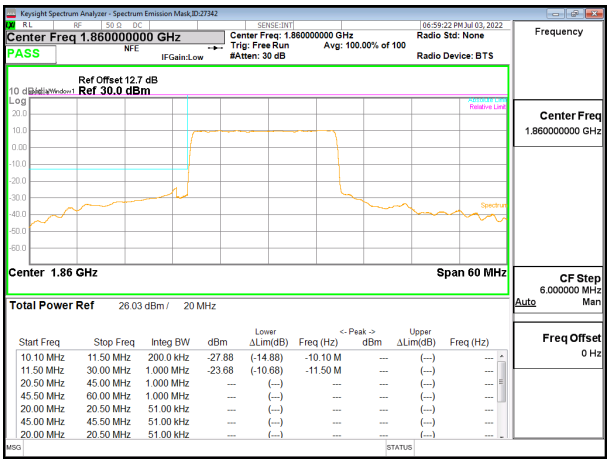


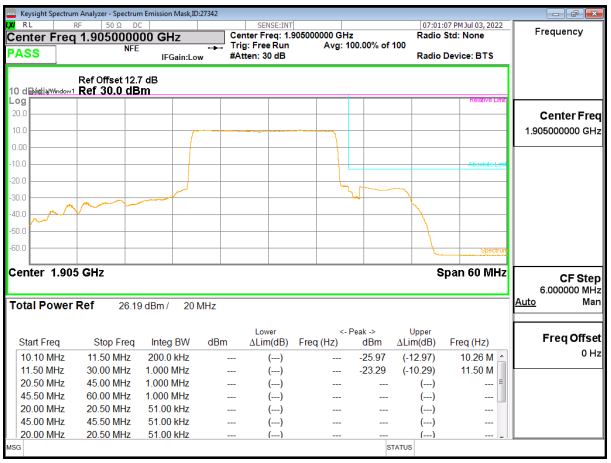
5G NR n25 20MHz BPSK Low Channel RB1-0



5G NR n25 20MHz BPSK High Channel RB1-105

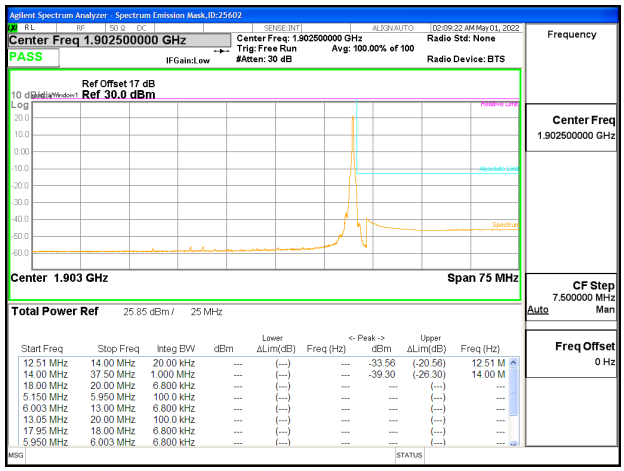


5G NR n25 20MHz BPSK Low Channel RB100-0



5G NR n25 20MHz BPSK High Channel RB100-0

5G NR n25 25MHz BPSK Low Channel RB1-0



5G NR n25 25MHz BPSK High Channel RB1-132

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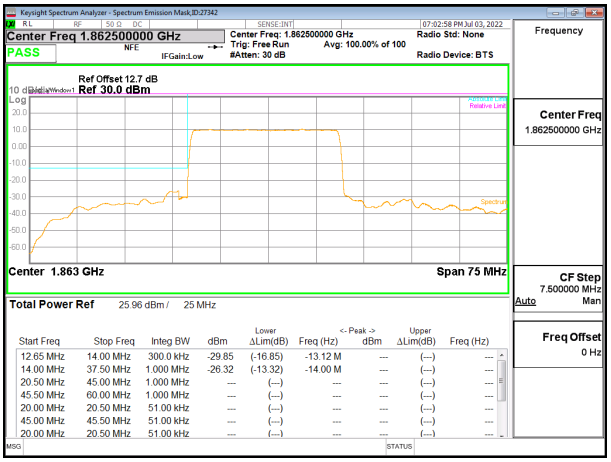

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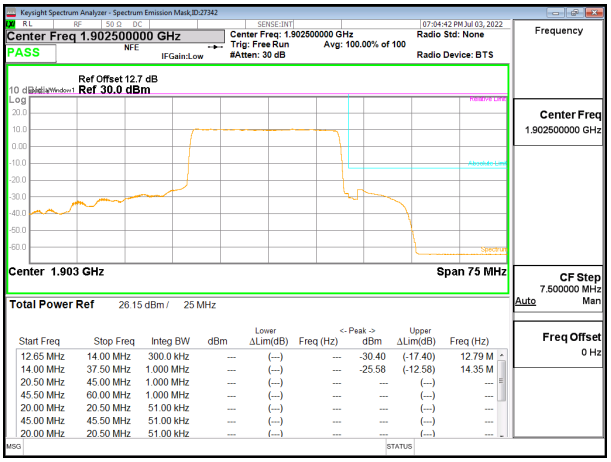
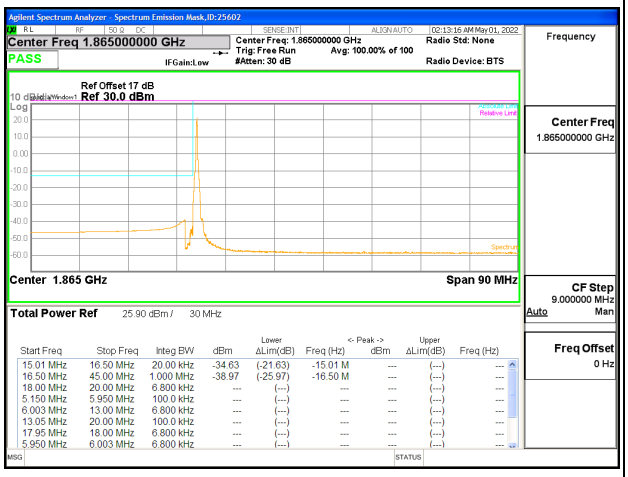
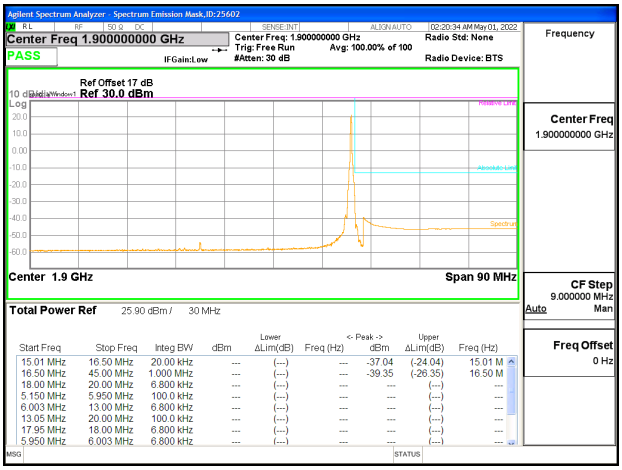


5G NR n25 25MHz BPSK High Channel RB128-0



5G NR n25 30MHz BPSK Low Channel RB1-0



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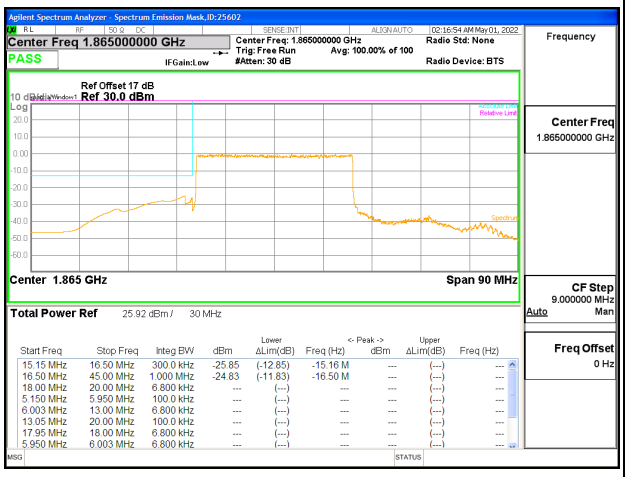
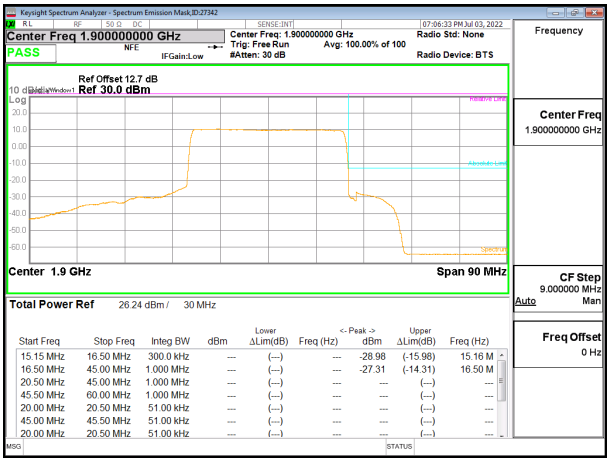


5G NR n25 30MHz BPSK Low Channel RB160-0



5G NR n25 30MHz BPSK High Channel RB160-0

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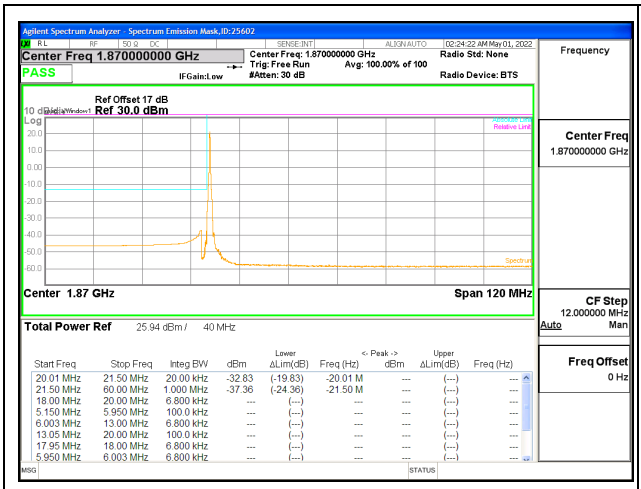
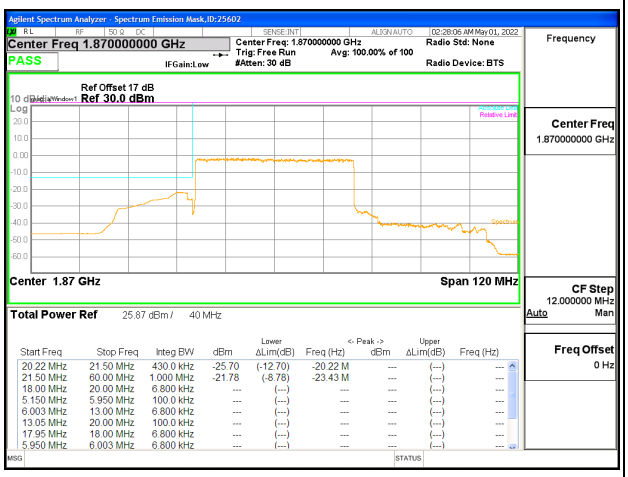
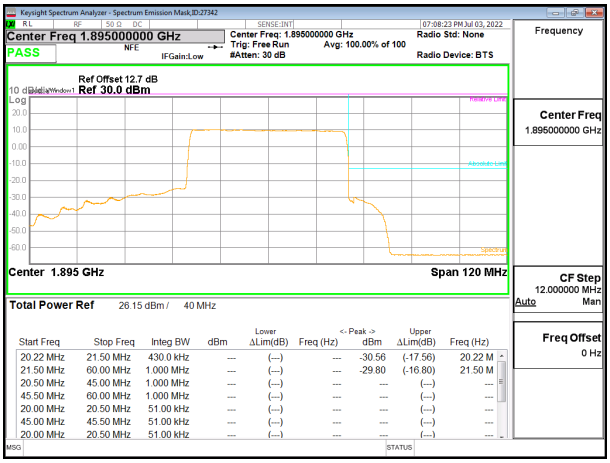


5G NR n25 40MHz BPSK Low Channel RB1-0

5G NR n25 40MHz BPSK High Channel RB1-215



5G NR n25 40MHz BPSK Low Channel RB216-0



5G NR n25 40MHz BPSK High Channel RB216-0

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9.2.8. LTE BAND 26 EMISSION MASK (FCC PART 90S)

LIMITS

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: According to 971168 D02 Misc Rev Approv License Devices v02r01, Section VIII (c):
For Section 90.691(a) compliance testing, use RBW = 300 Hz for offsets less than 37.5 kHz from a channel edge; RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.

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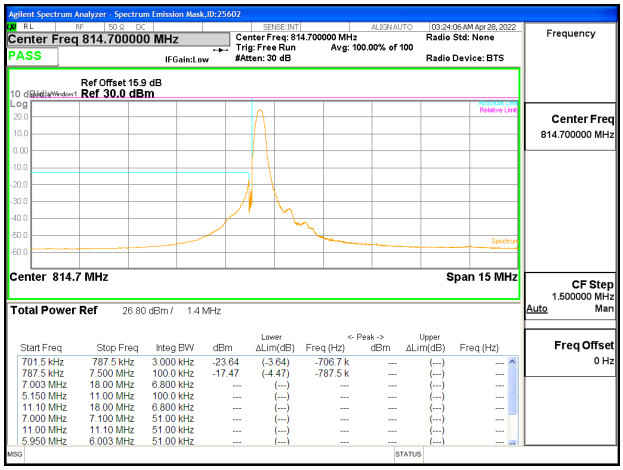
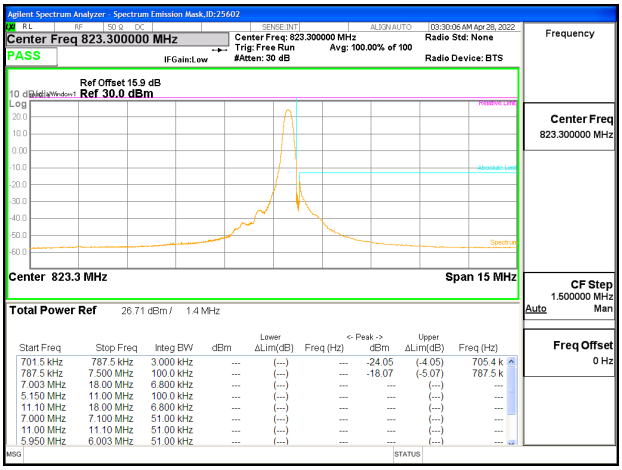
LTE BAND 26 EMISSION MASK

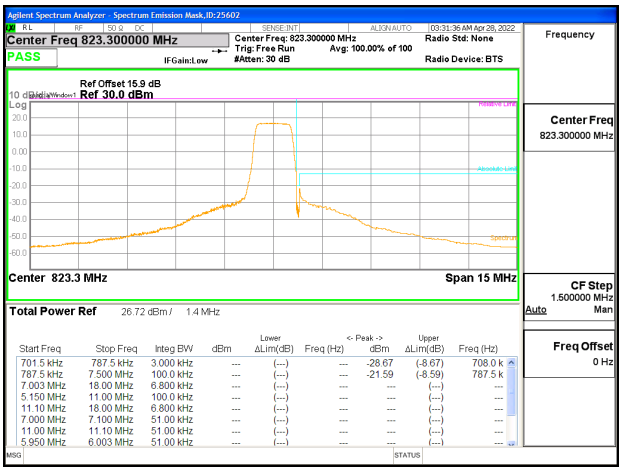


LTE B26 1.4MHz QPSK Low Channel RB1-0



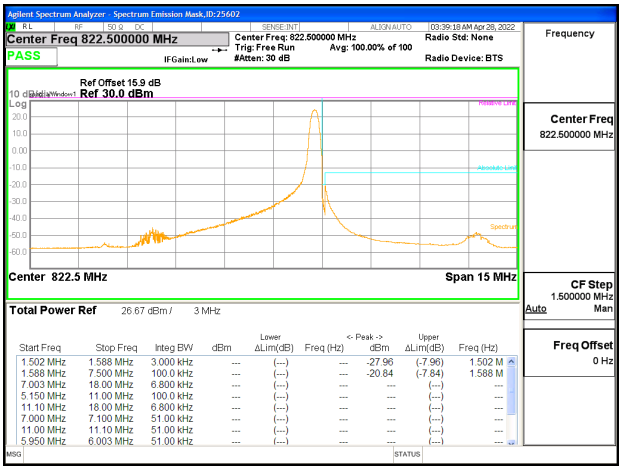
LTE B26 1.4MHz QPSK High Channel RB1-5

LTE B26 1.4MHz QPSK Low Channel RB6-0



LTE B26 1.4MHz QPSK High Channel RB6-0

LTE B26 3MHz QPSK Low Channel RB1-0



LTE B26 3MHz QPSK High Channel RB1-14

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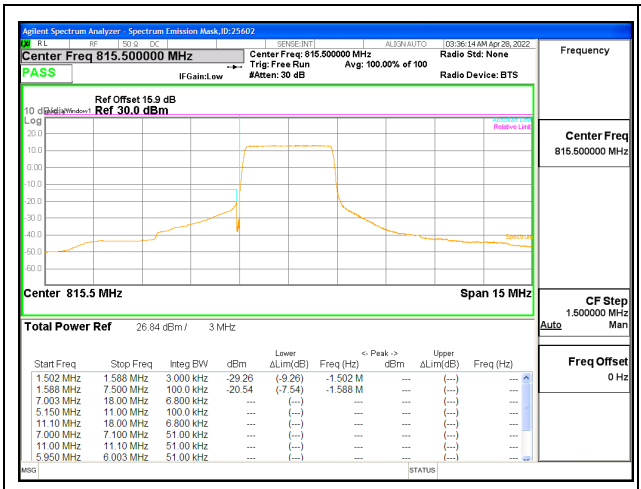
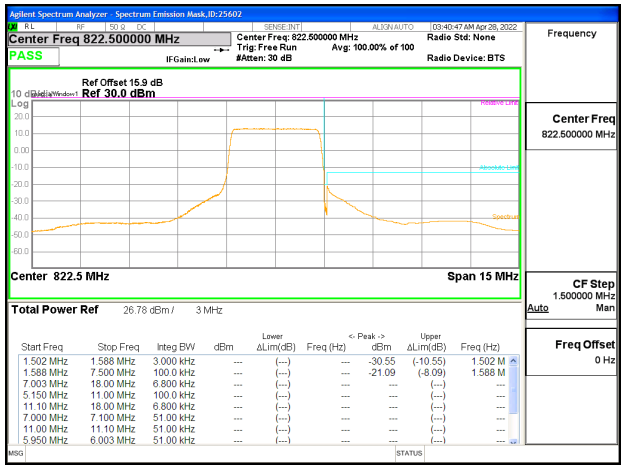
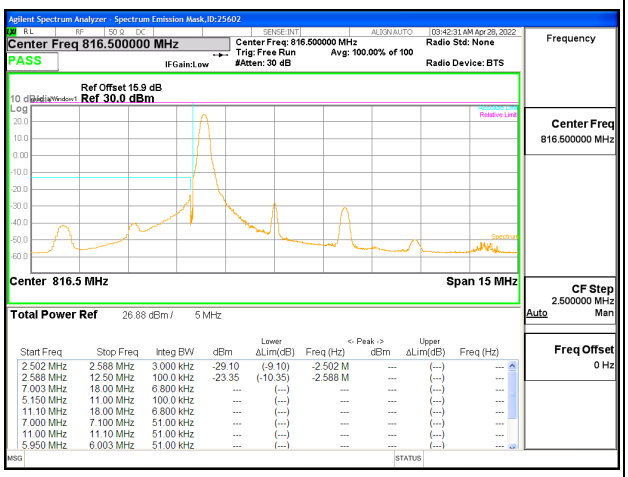


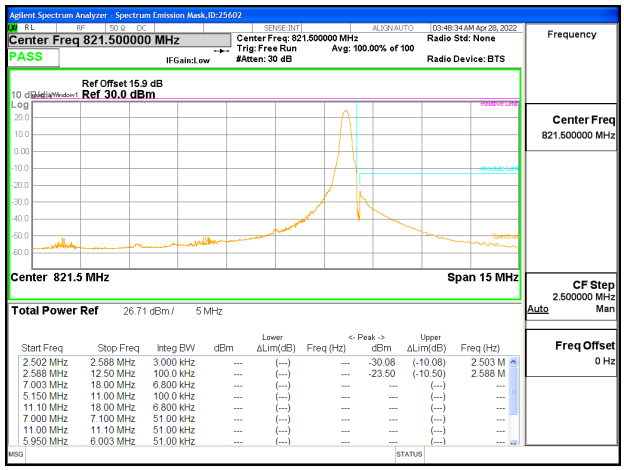
LTE B26 3MHz QPSK Low Channel RB15-0



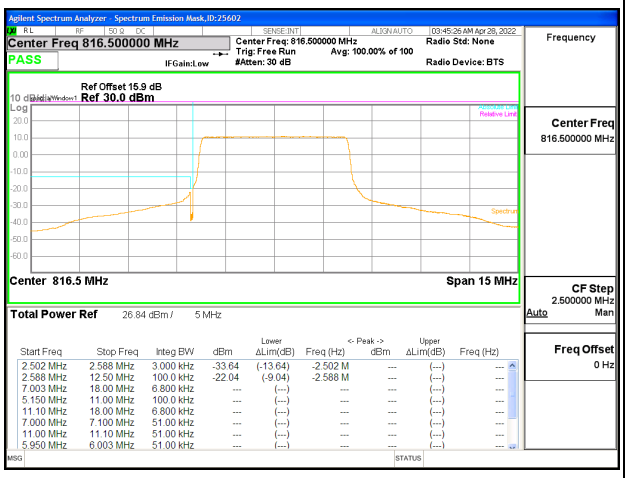
LTE B26 3MHz QPSK High Channel RB15-0



LTE B26 5MHz QPSK Low Channel RB1-0



LTE B26 5MHz QPSK High Channel RB1-24



LTE B26 5MHz QPSK Low Channel RB25-0

LTE B26 5MHz QPSK High Channel RB25-0

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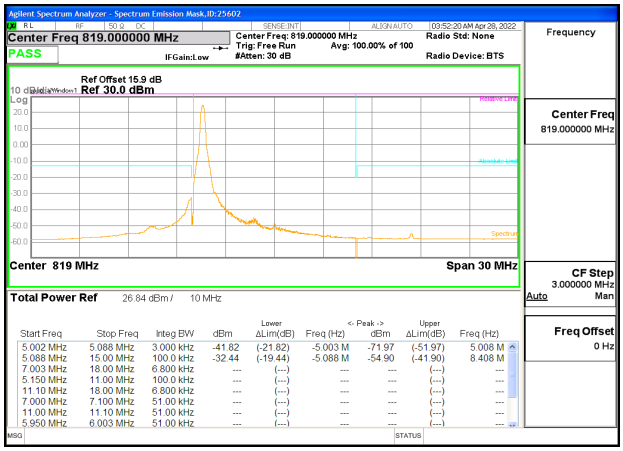
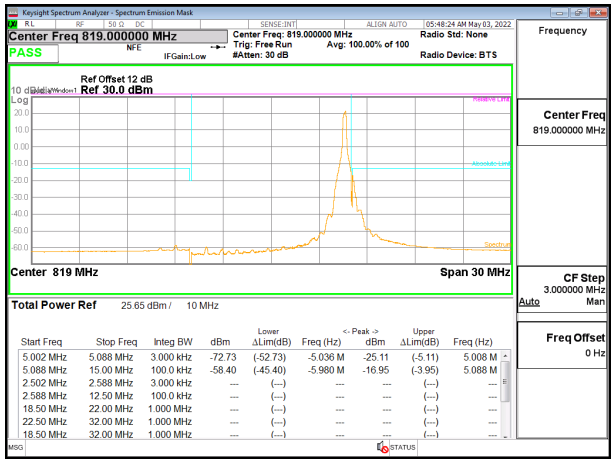


LTE B26 10MHz QPSK Middle Channel RB1-0



LTE B26 10MHz QPSK Middle Channel RB1-49, ID:25602

LTE B26 10MHz QPSK Middle Channel RB50-0

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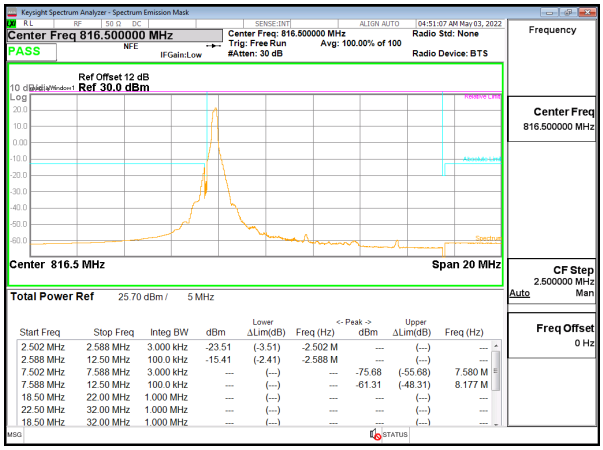
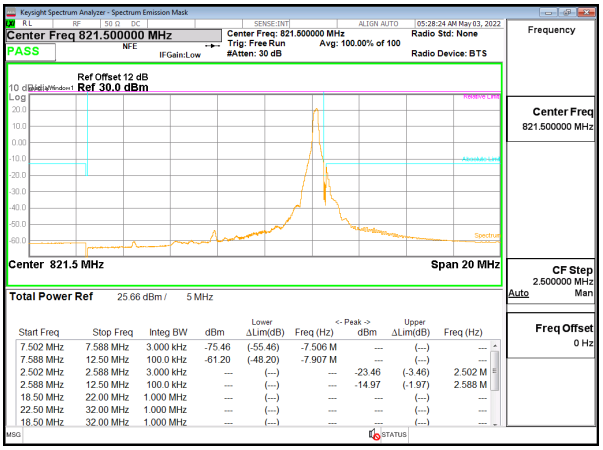
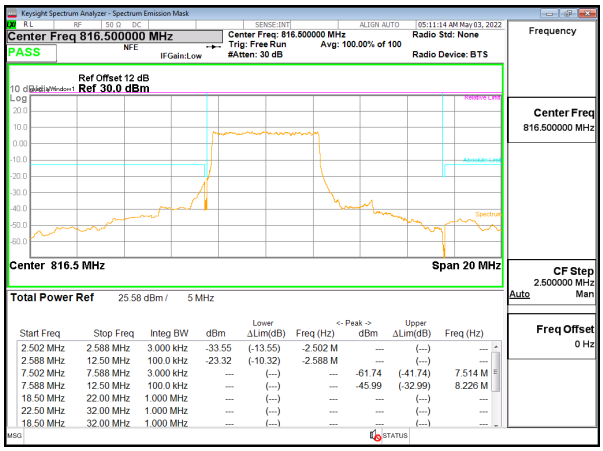
5G NR n26 EMISSION MASK



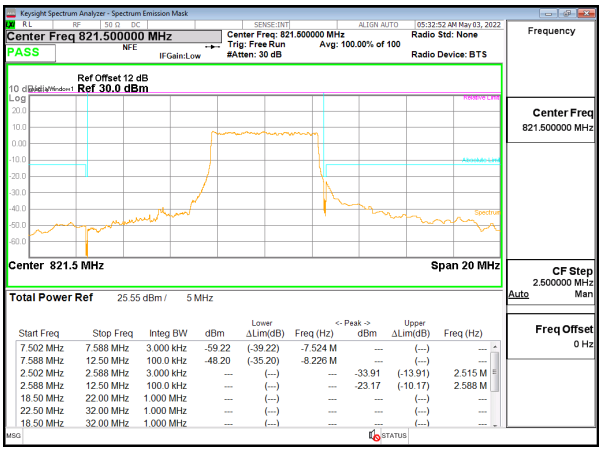
5G NR n26 5MHz BPSK Low Channel RB1-0, ID:25602



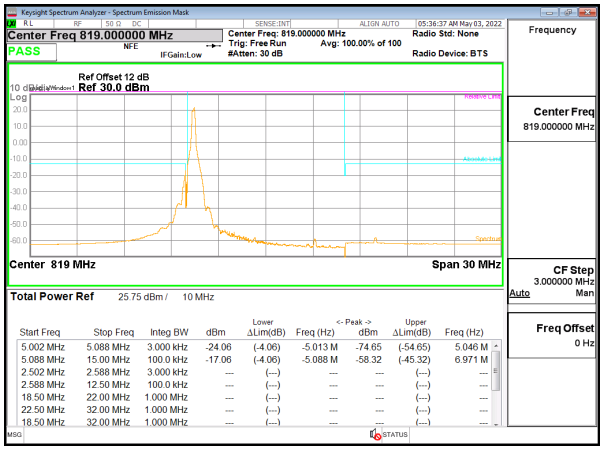
5G NR n26 5MHzz BPSK High Channel RB1-24, ID:25602



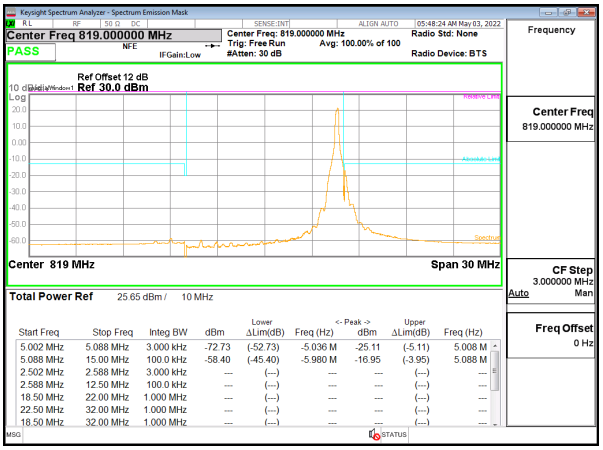
5G NR n26 5MHz BPSK Low Channel RB25-0, ID:25602



5G NR n26 5MHz BPSK High Channel RB25-0, ID:25602



5G NR n26 10MHz BPSK Middle Channel RB1-0, ID:25602



5G NR n26 10MHz BPSK Middle Channel RB1-49, ID:25602

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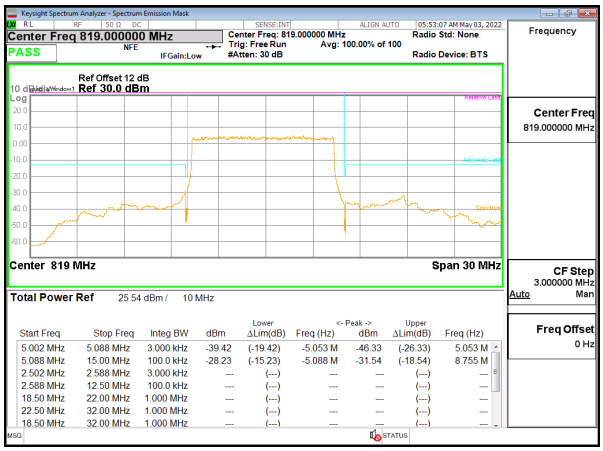

5G NR n26 10MHz BPSK Middle Channel RB50-0, ID:25602

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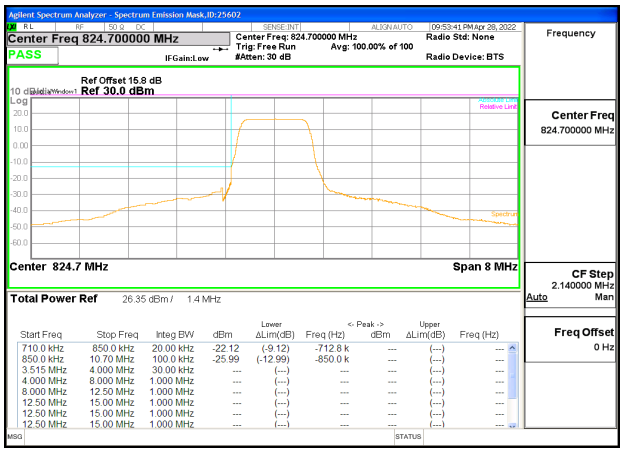
9.2.9. LTE BAND 26 EMISSION MASK (FCC PART 22)

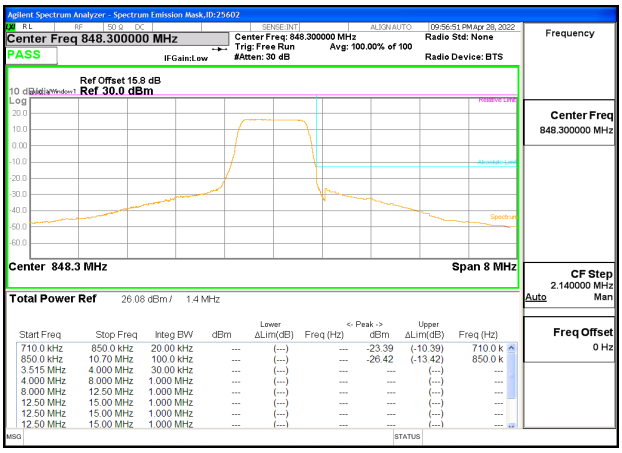
LIMITS

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.

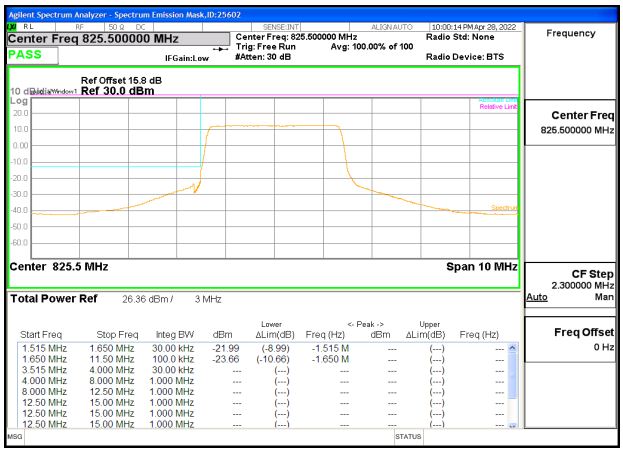
LTE BAND 26 EMISSION MASK



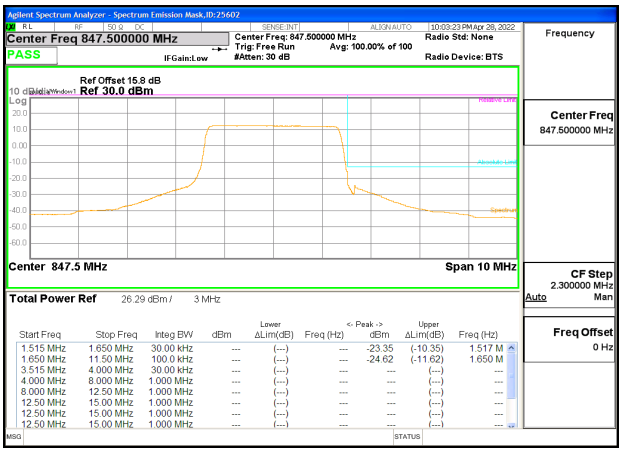
LTE B26 1.4MHz QPSK Low Channel RB6-0



LTE B26 1.4MHz QPSK High Channel RB6-0



LTE B26 3MHz QPSK Low Channel RB15-0



LTE B26 3MHz QPSK High Channel RB15-0

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