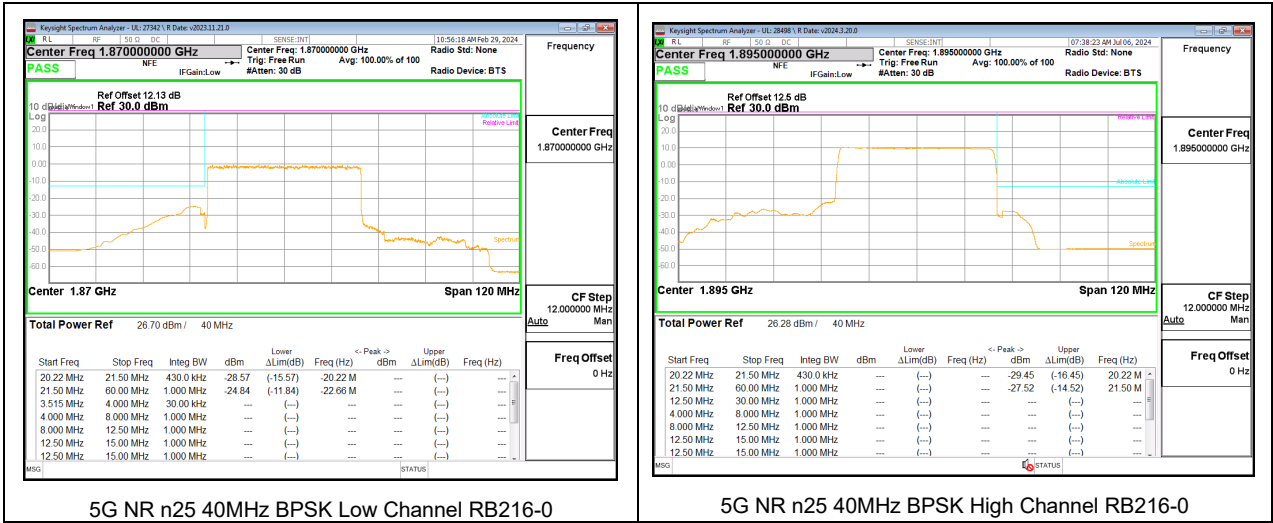






9.2.7. LTE BAND 26 AND 5G NR n26 EMISSION MASK (FCC PART 90S)

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 $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ 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.

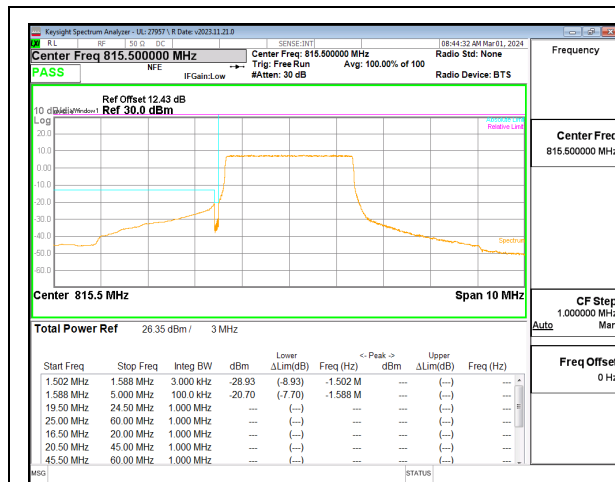
(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency 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):

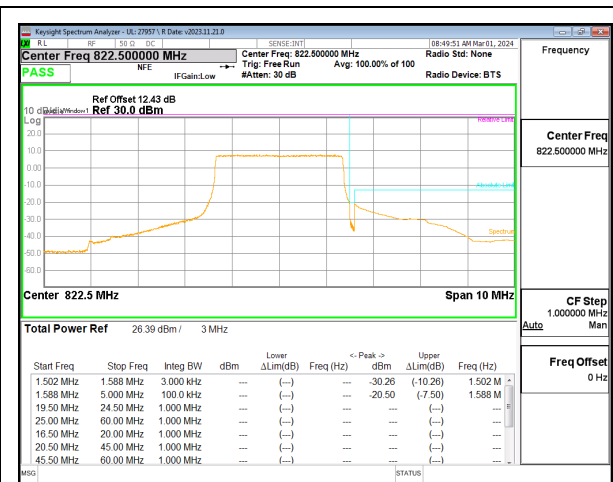
For Section 90.691(a) compliance testing, use RBW = 300 Hz for offsets less than 37.5 kHz from a channel edge; RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.

LTE BAND 26 EMISSION MASK

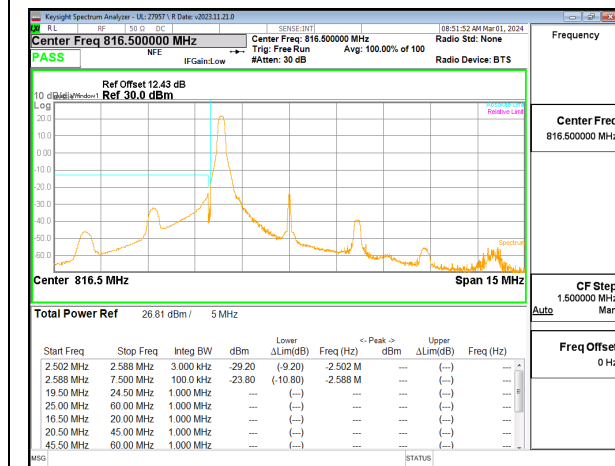




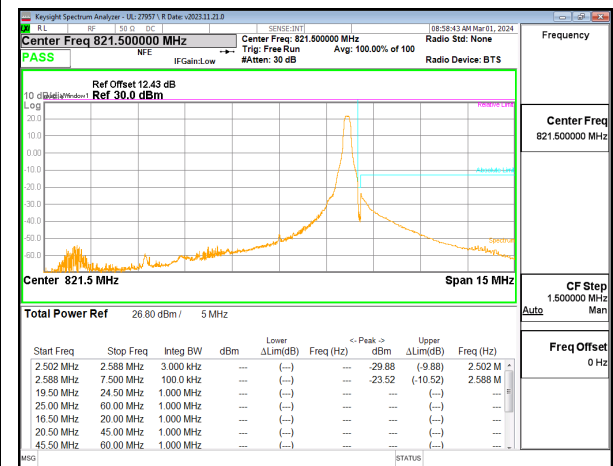
LTE B26 3MHz QPSK Low Channel RB15-0



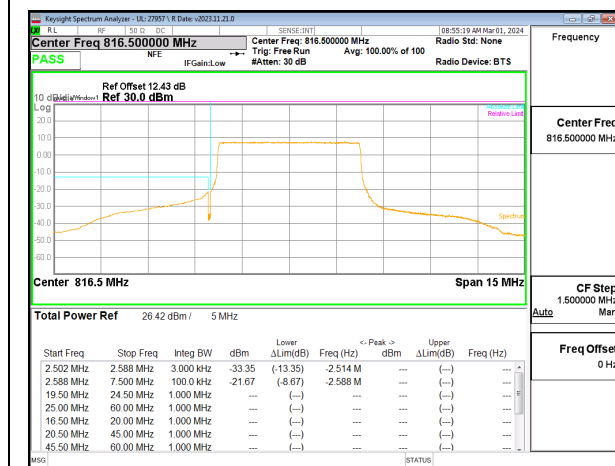
LTE B26 3MHz QPSK High Channel RB15-0



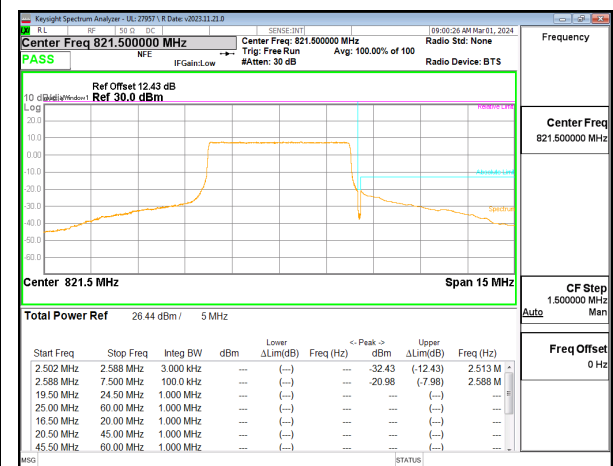
LTE B26 5MHz QPSK Low Channel RB1-0



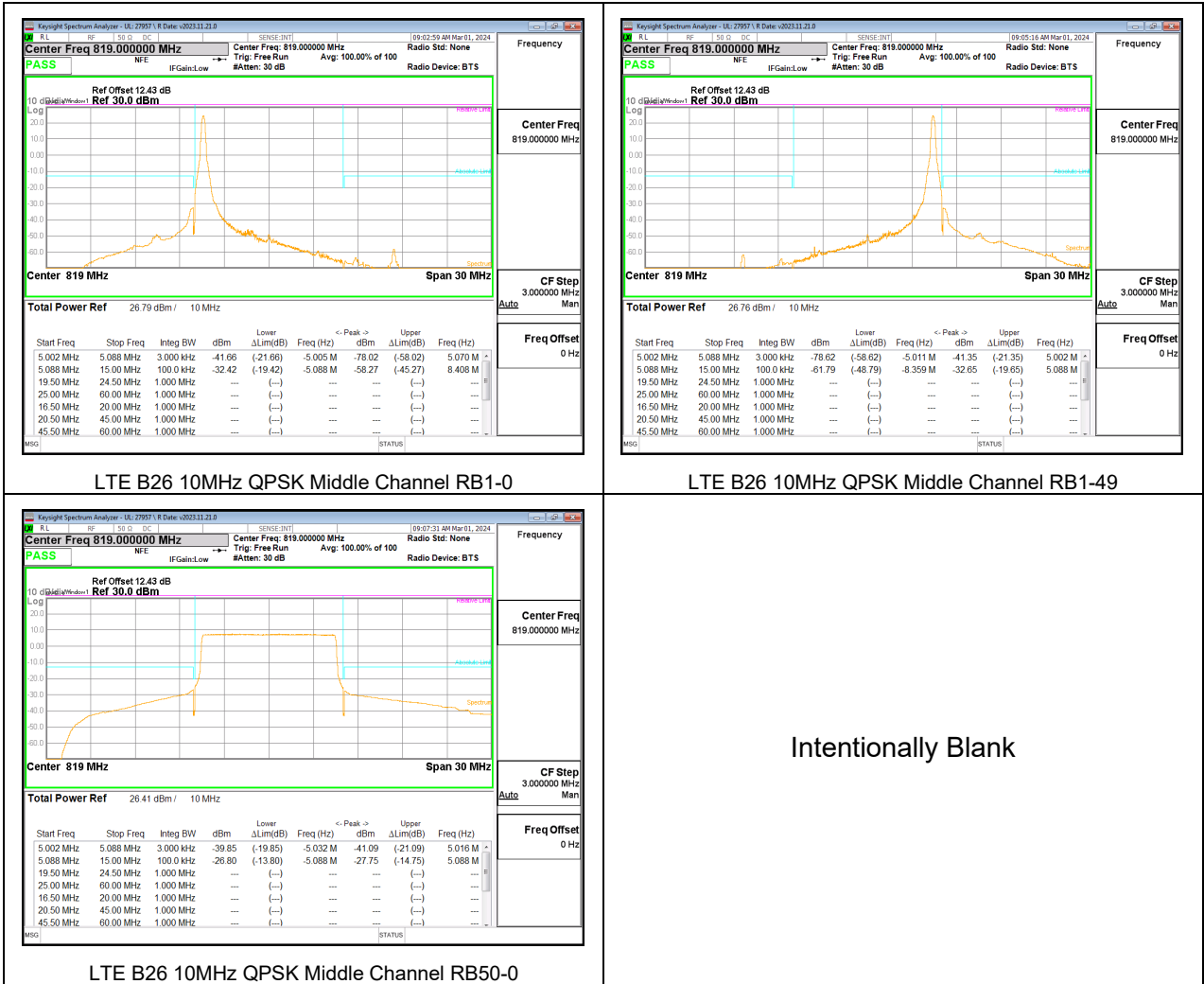
LTE B26 5MHz QPSK High Channel RB1-24



LTE B26 5MHz QPSK Low Channel RB25-0

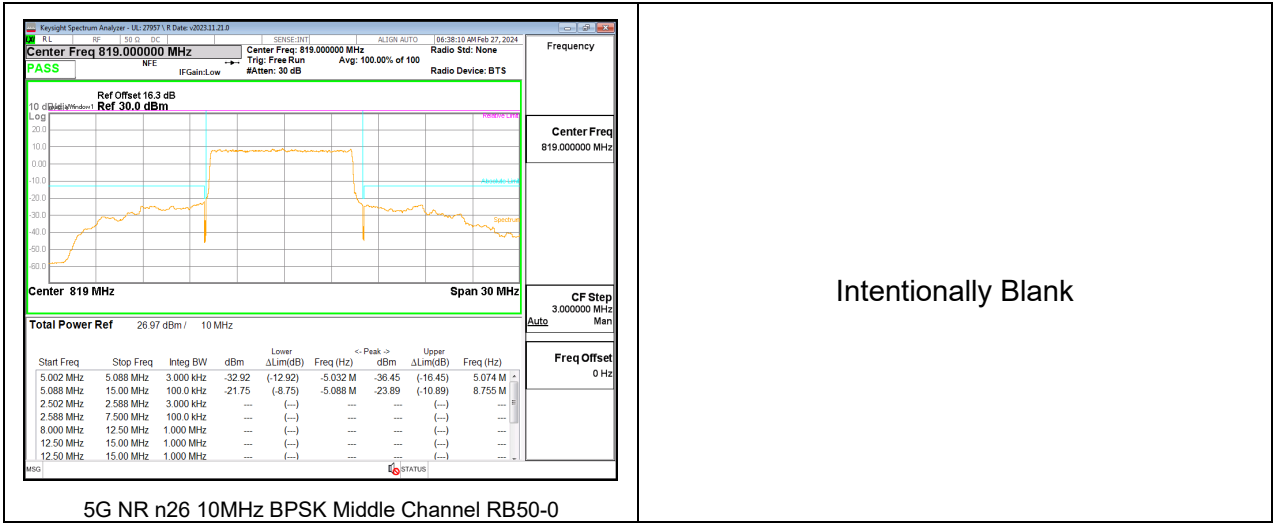


LTE B26 5MHz QPSK High Channel RB25-0



5G NR n26 EMISSION MASK





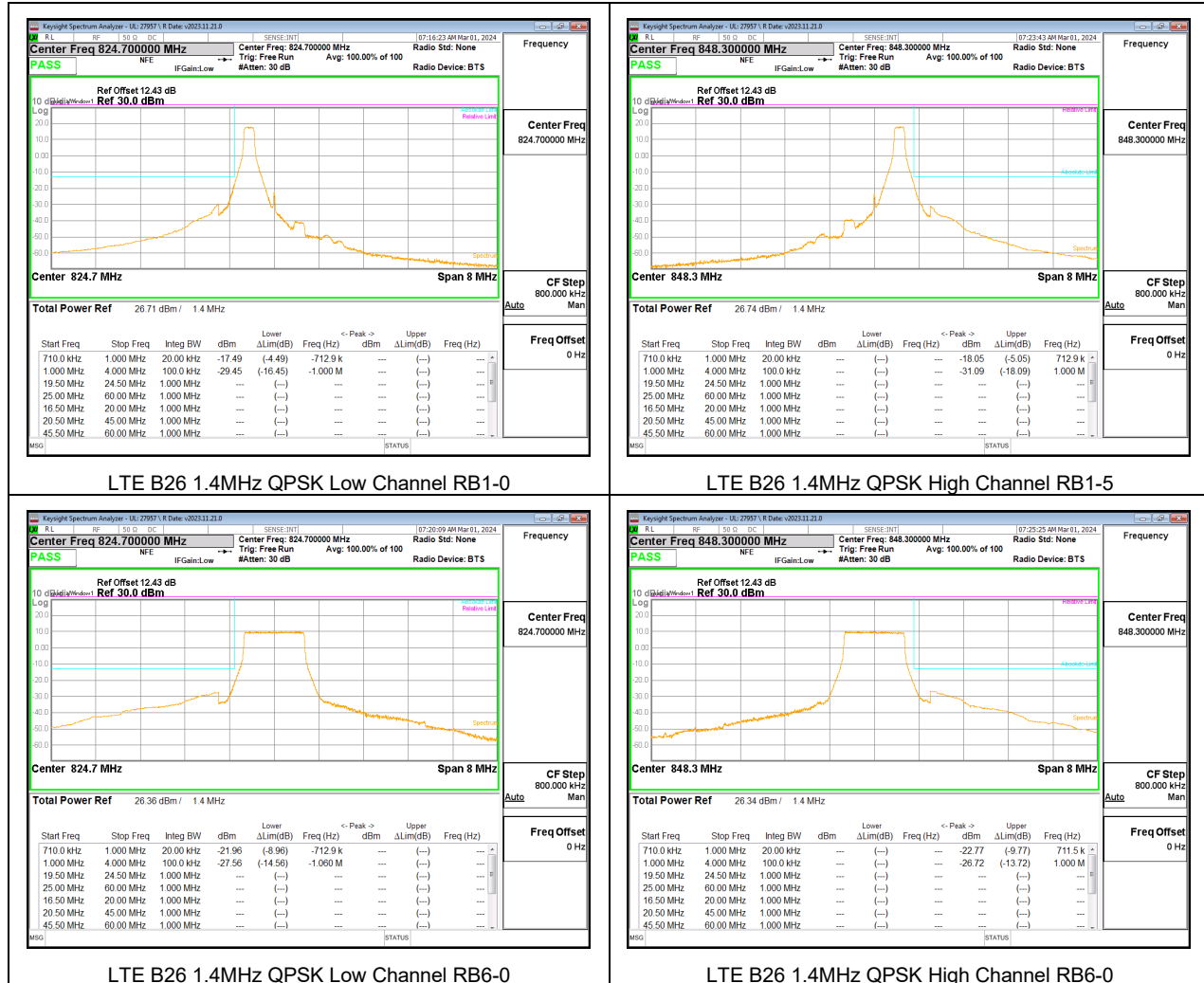
9.2.8. LTE BAND 26 AND 5G NR n26 EMISSION MASK (FCC PART 22)

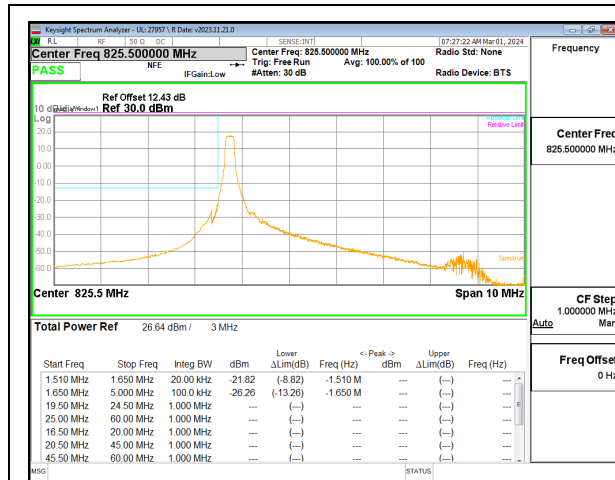
LIMITS

FCC: §22.917 (a)

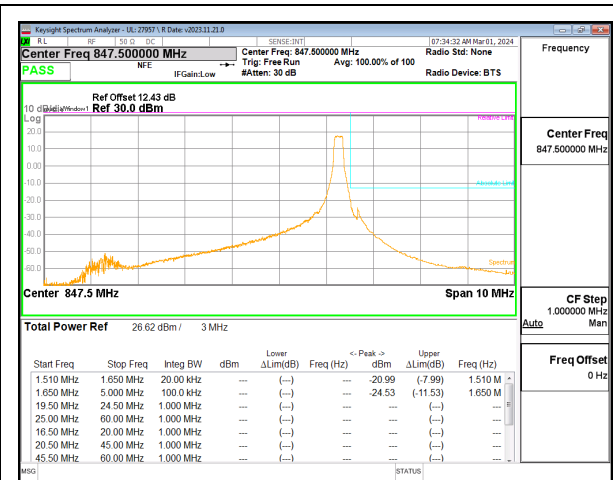
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

LTE BAND 26 EMISSION MASK

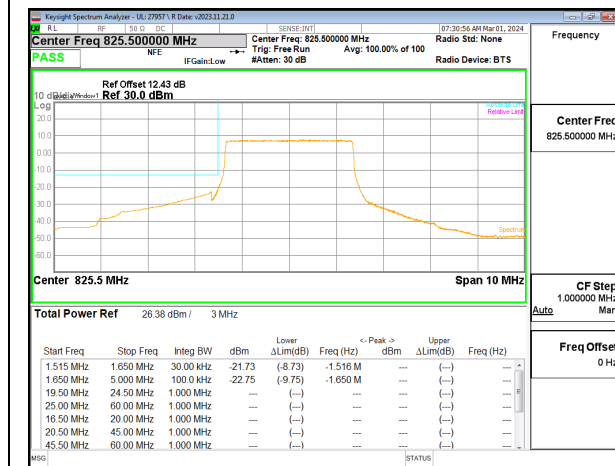




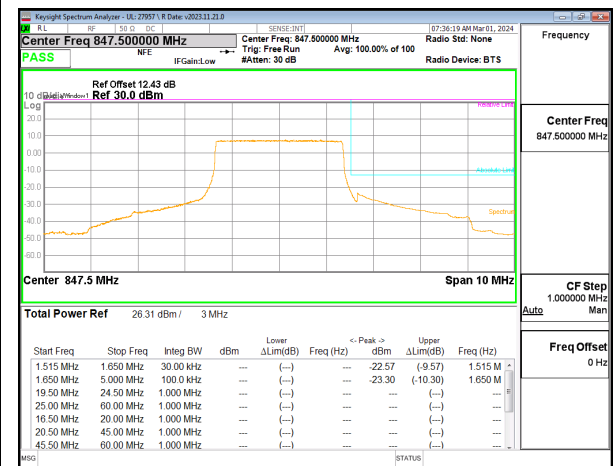
LTE B26 3MHz QPSK Low Channel RB1-0



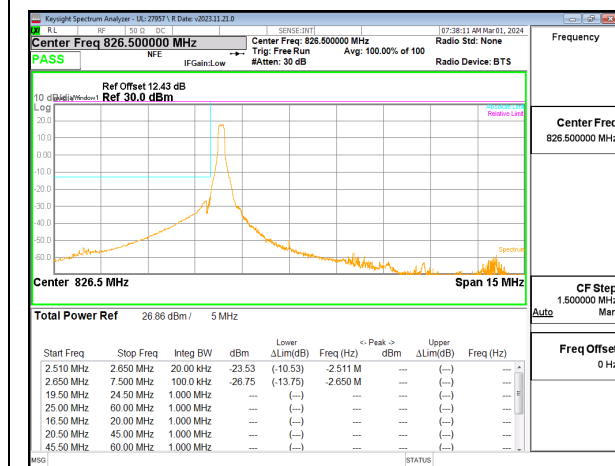
LTE B26 3MHz QPSK High Channel RB1-14



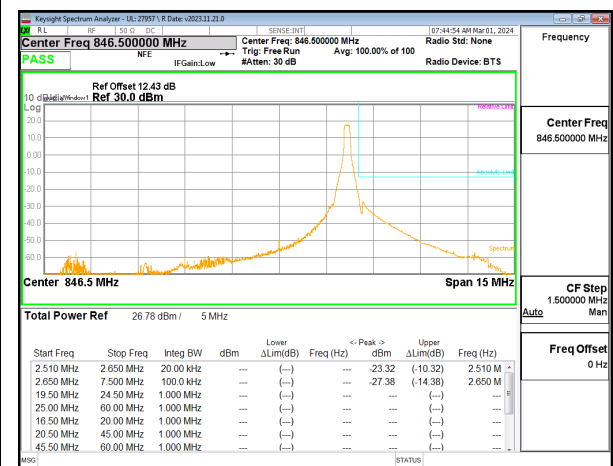
LTE B26 3MHz QPSK Low Channel RB15-0



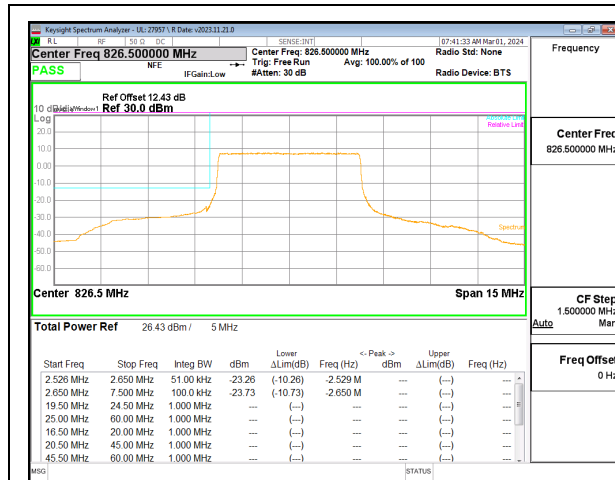
LTE B26 3MHz QPSK High Channel RB15-0



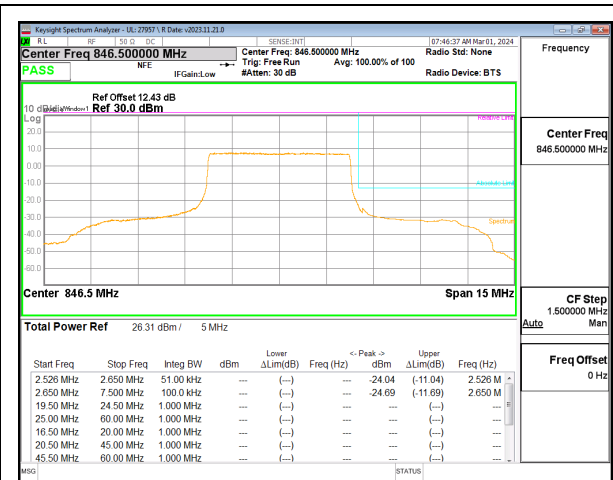
LTE B26 5MHz QPSK Low Channel RB1-0



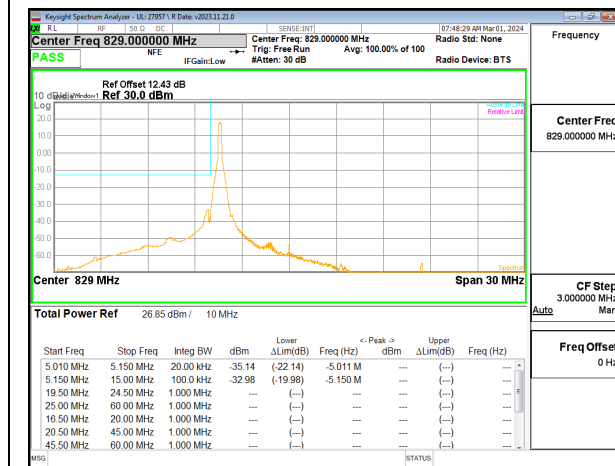
LTE B26 5MHz QPSK High Channel RB1-24



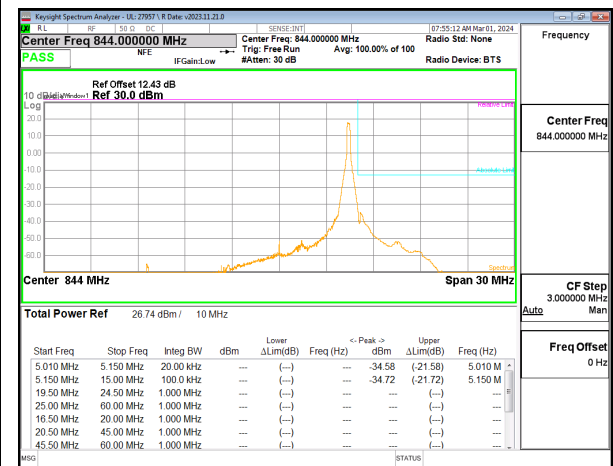
LTE B26 5MHz QPSK Low Channel RB25-0



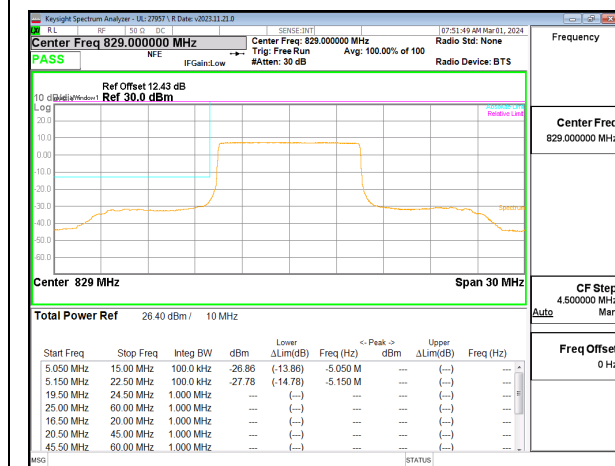
LTE B26 5MHz QPSK High Channel RB25-0



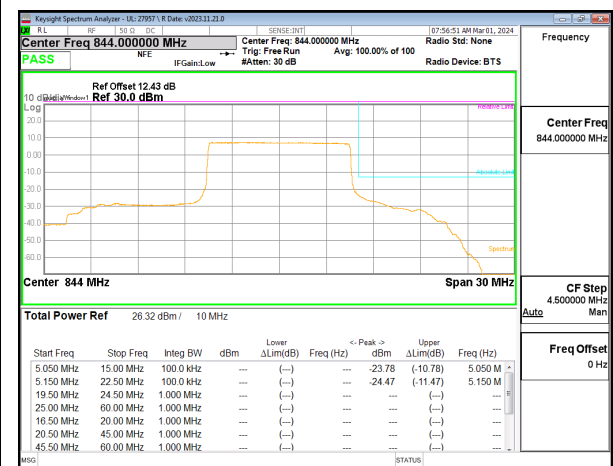
LTE B26 10MHz QPSK Low Channel RB1-0



LTE B26 10MHz QPSK High Channel RB1-49



LTE B26 10MHz QPSK Low Channel RB50-0



LTE B26 10MHz QPSK High Channel RB50-0

5G NR n26 EMISSION MASK







9.2.9. LTE BAND 30 AND 5G NR n30 EMISSION MASK

LIMITS

FCC: §27.53

(a) For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

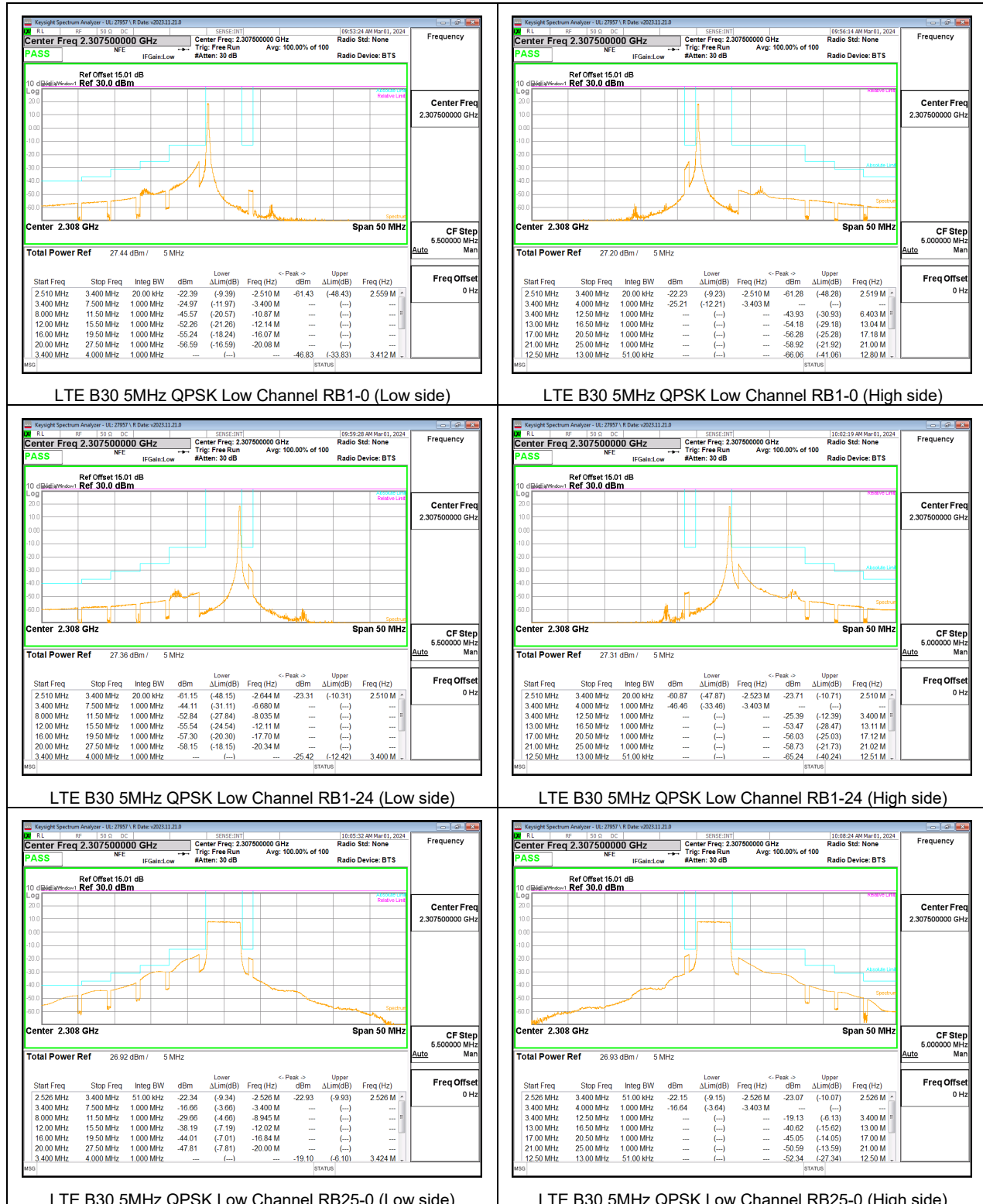
(4) For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

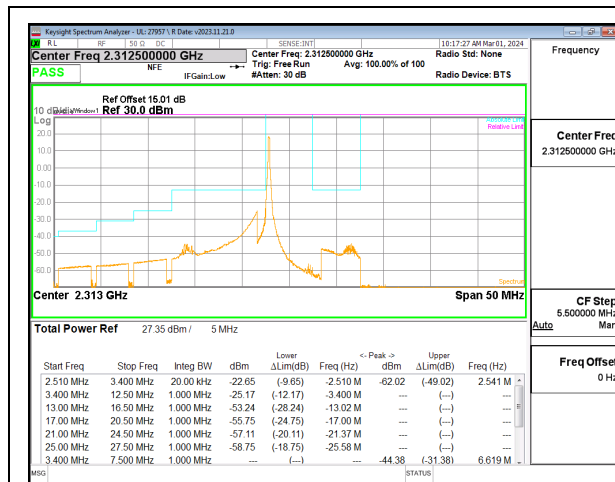
(i) By a factor of not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz;

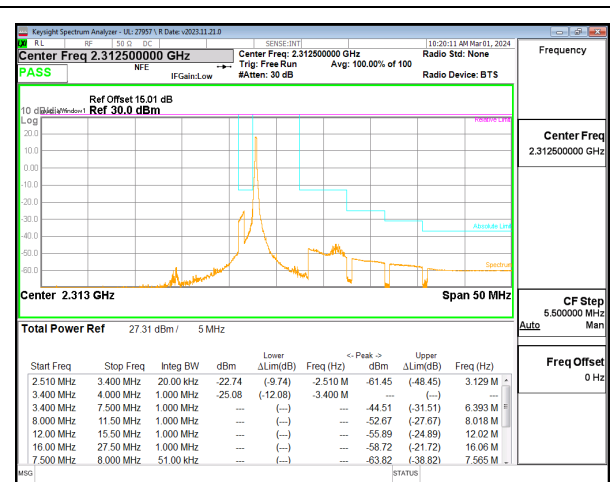
(iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.

LTE BAND 30 EMISSION MASK

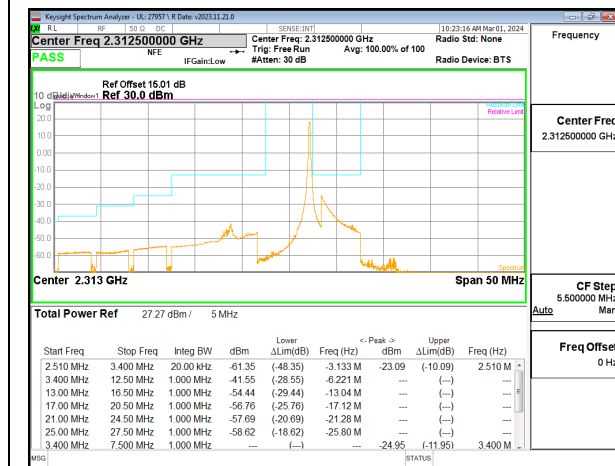




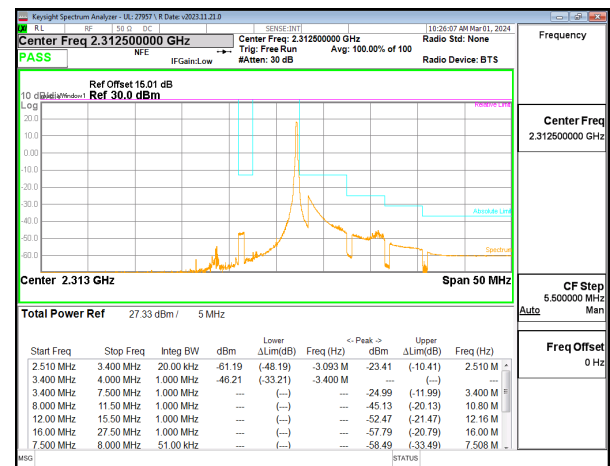
LTE B30 5MHz QPSK High Channel RB1-0 (Low side)



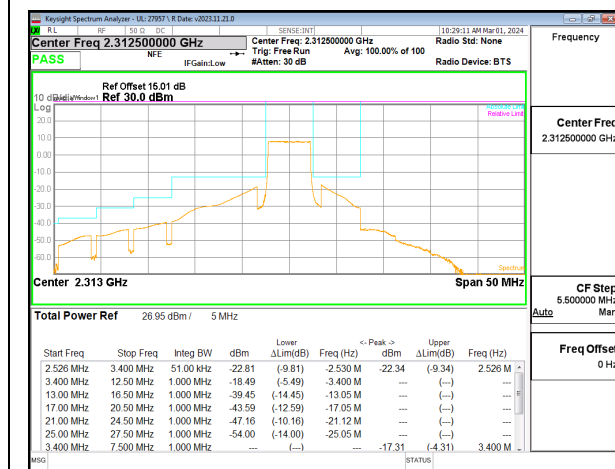
LTE B30 5MHz QPSK High Channel RB1-0 (High side)



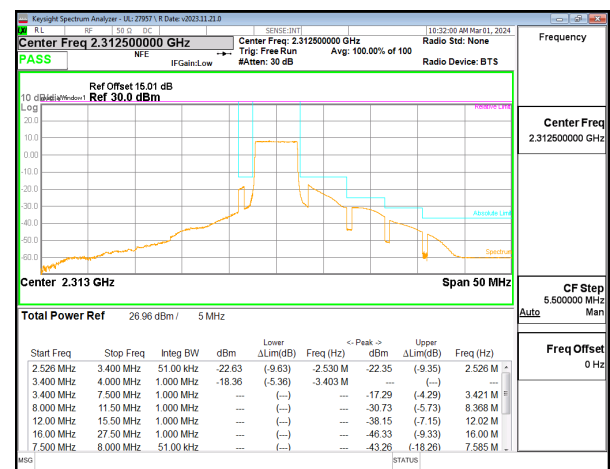
LTE B30 5MHz QPSK High Channel RB1-24 (Low side)



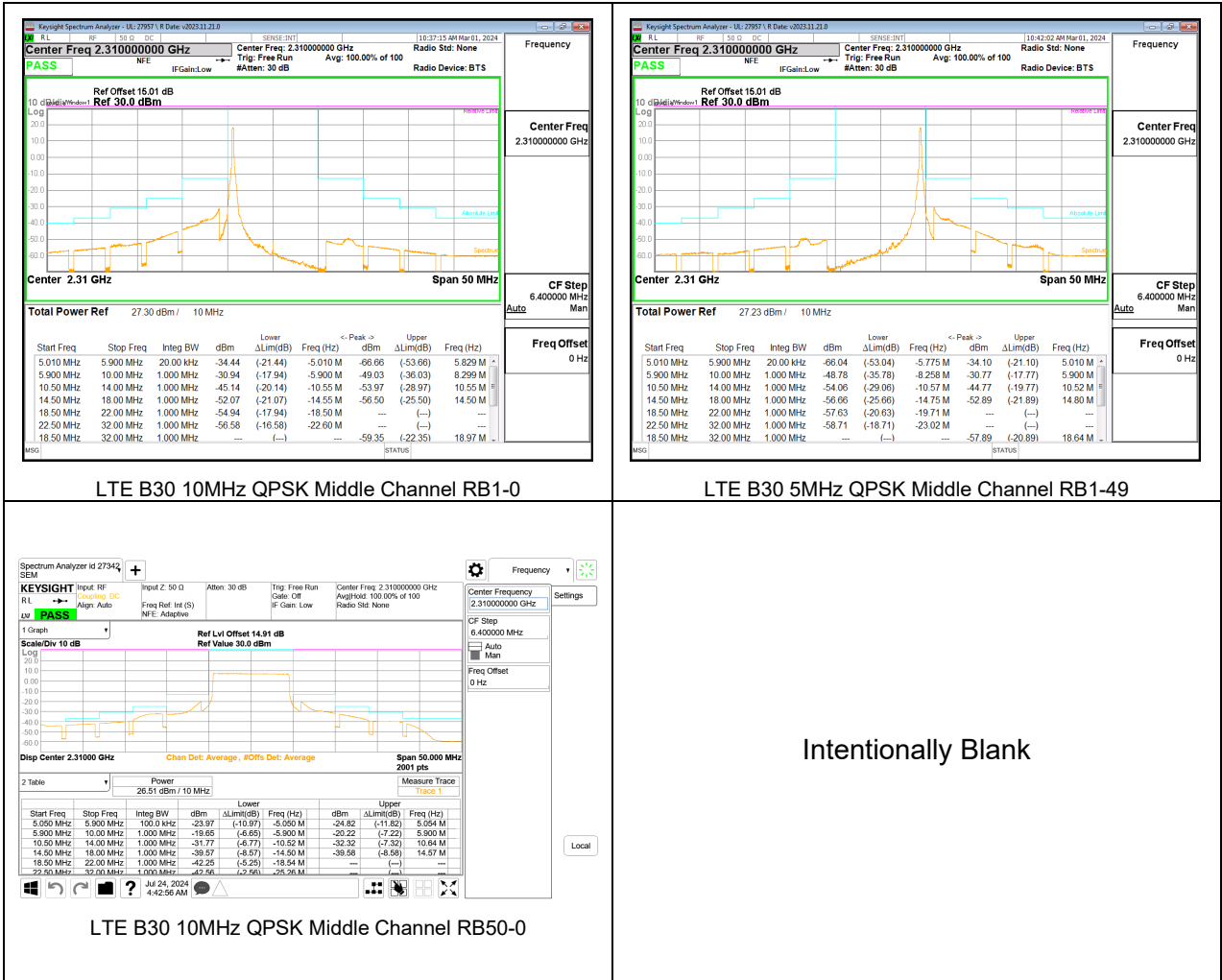
LTE B30 5MHz QPSK High Channel RB1-24 (High side)



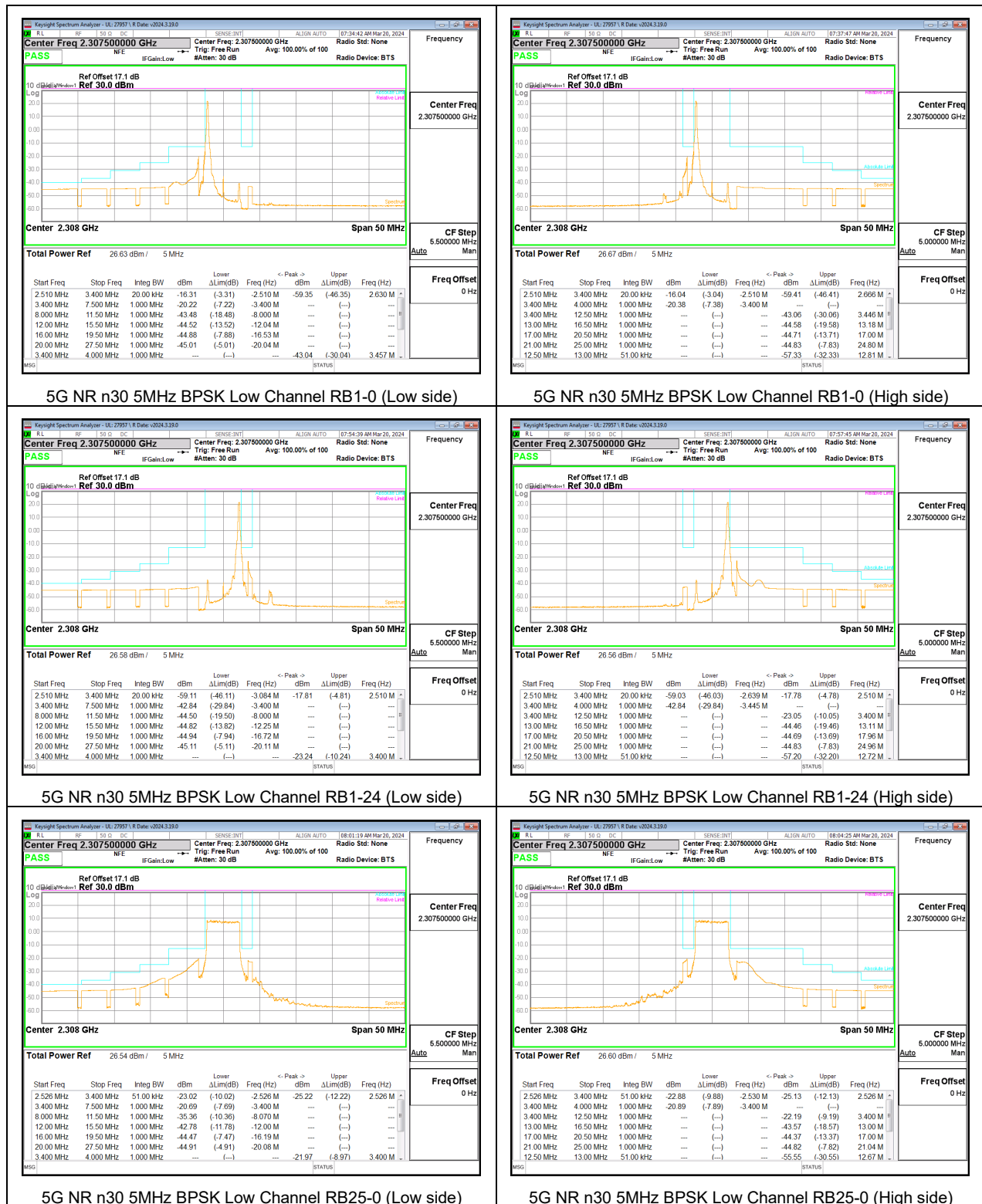
LTE B30 5MHz QPSK High Channel RB25-0 (Low side)

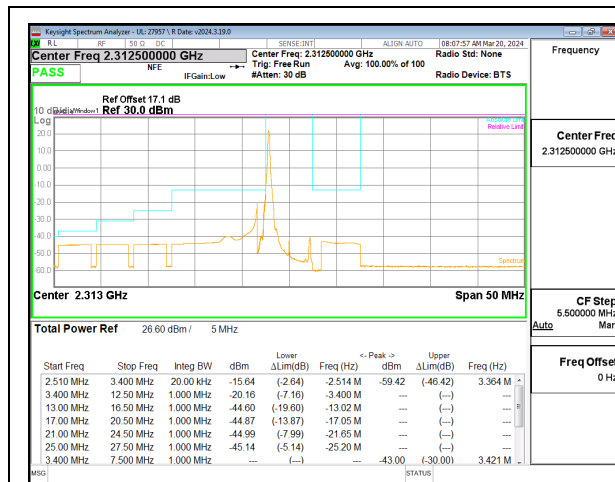


LTE B30 5MHz QPSK High Channel RB25-0 (High side)

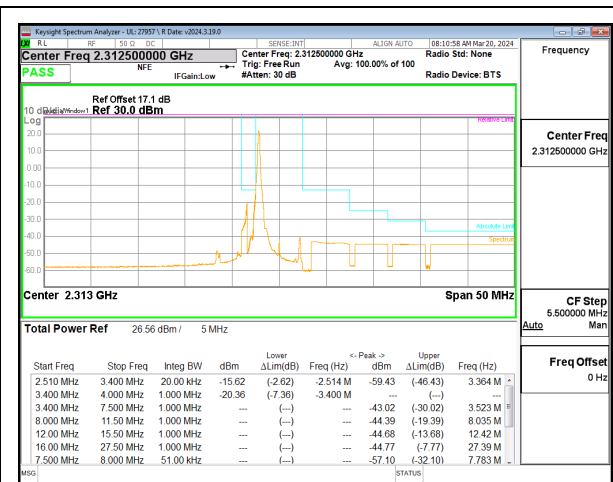


5G NR n30 EMISSION MASK

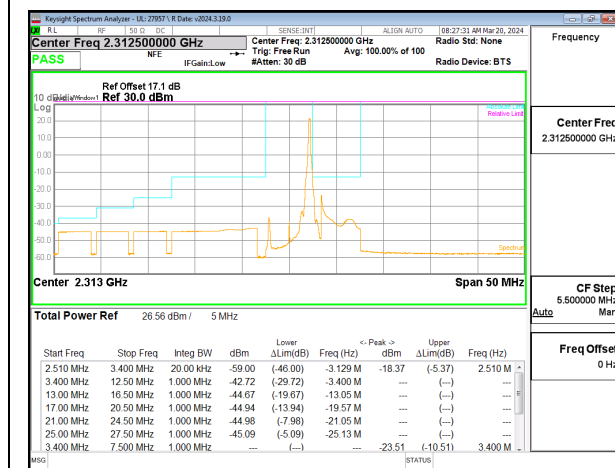




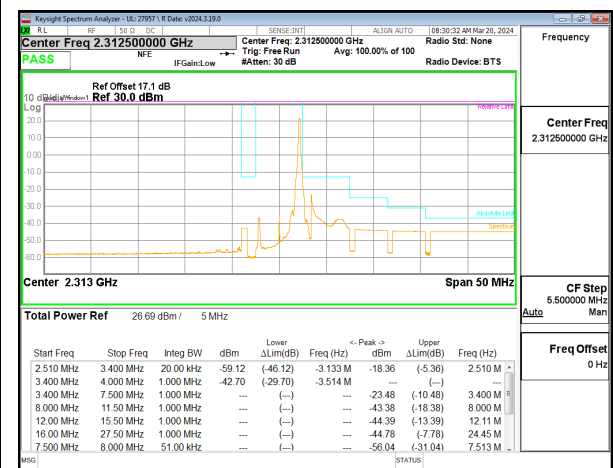
5G NR n30 5MHz BPSK High Channel RB1-0 (Low side)



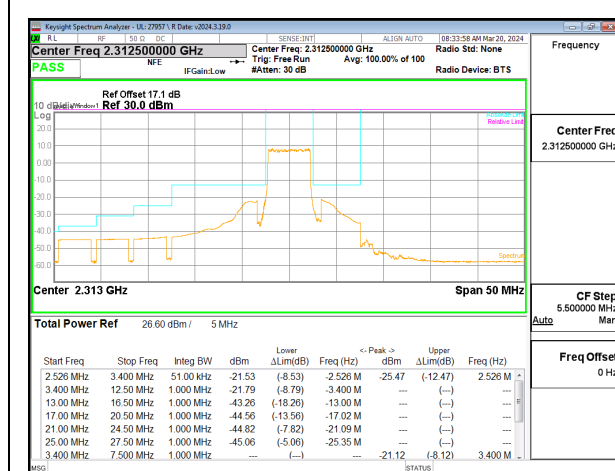
5G NR n30 5MHz BPSK High Channel RB1-0 (High side)



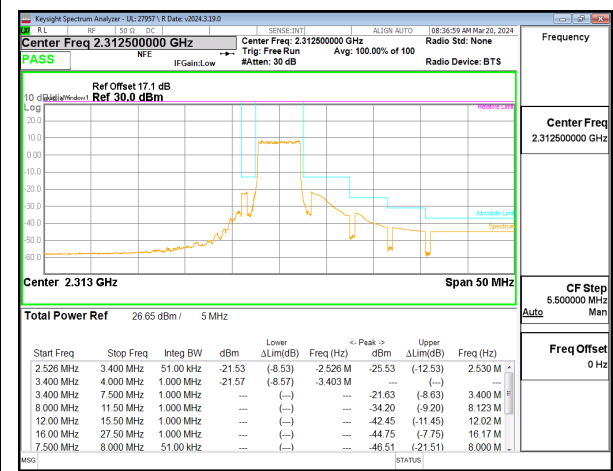
5G NR n30 5MHz BPSK High Channel RB1-24 (Low side)



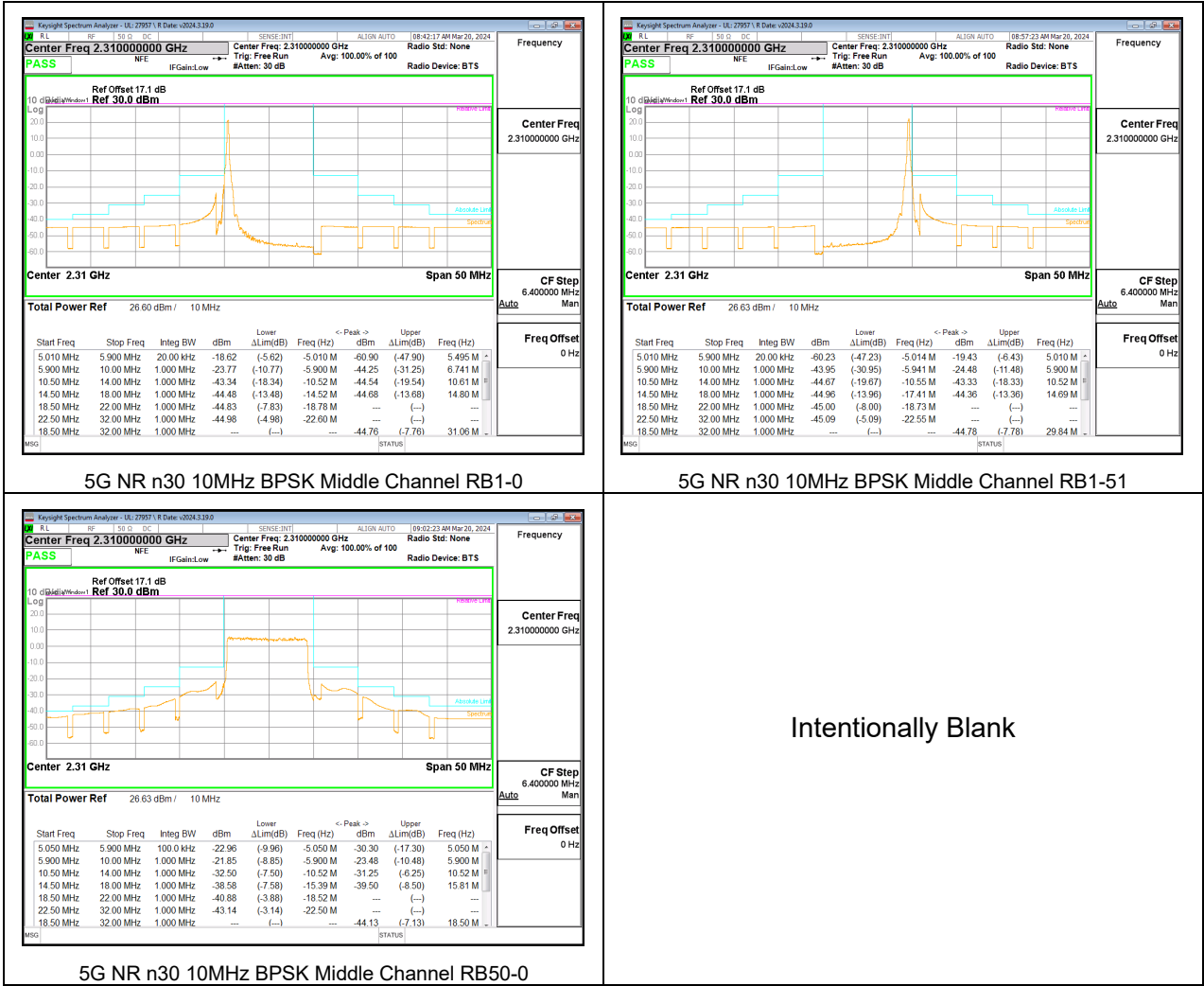
5G NR n30 5MHz BPSK High Channel RB1-24 (High side)



5G NR n30 5MHz BPSK High Channel RB25-0 (Low side)



5G NR n30 5MHz BPSK High Channel RB25-0 (High side)



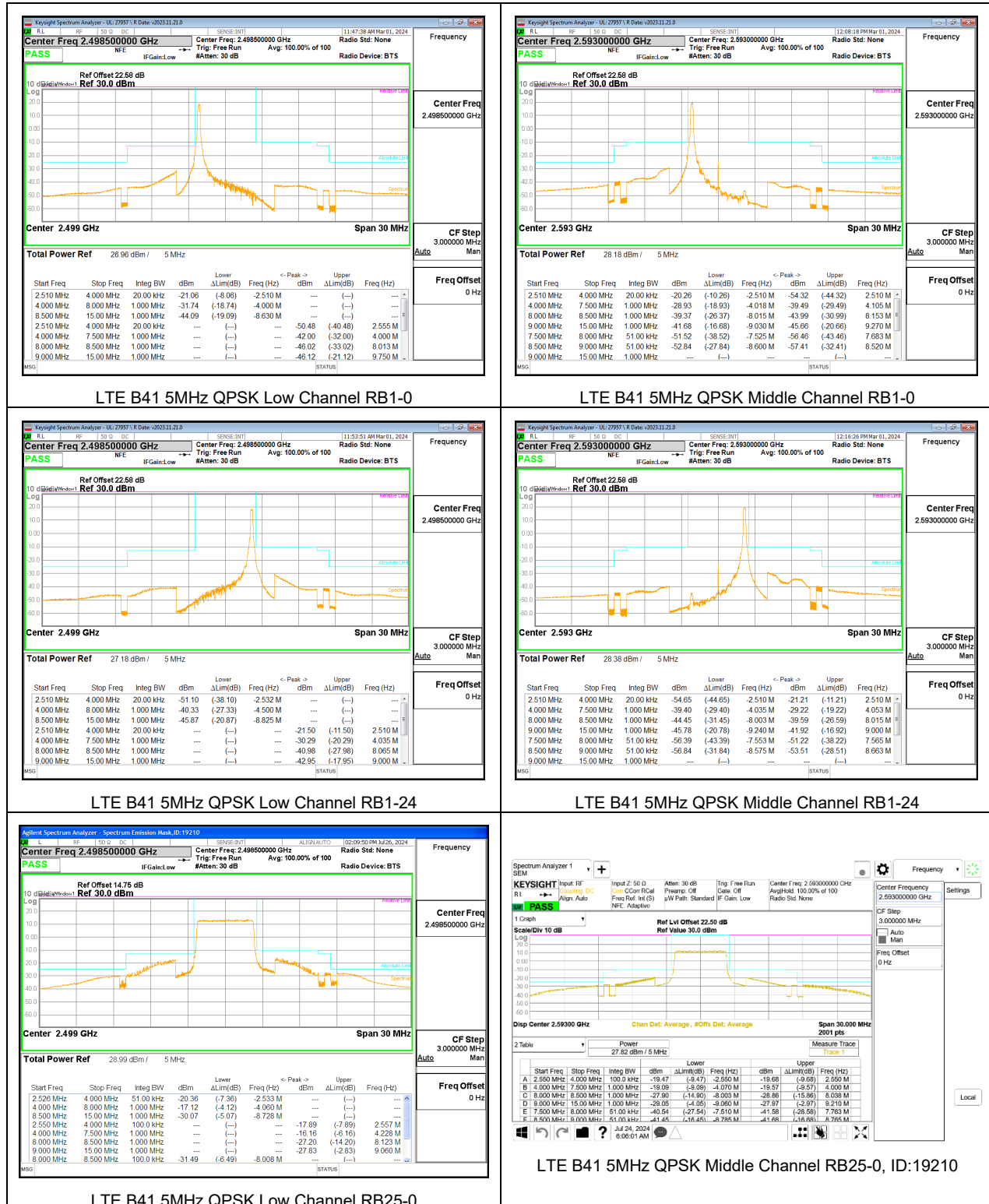
9.2.10. LTE BAND 41 AND 5G NR n41 EMISSION MASK

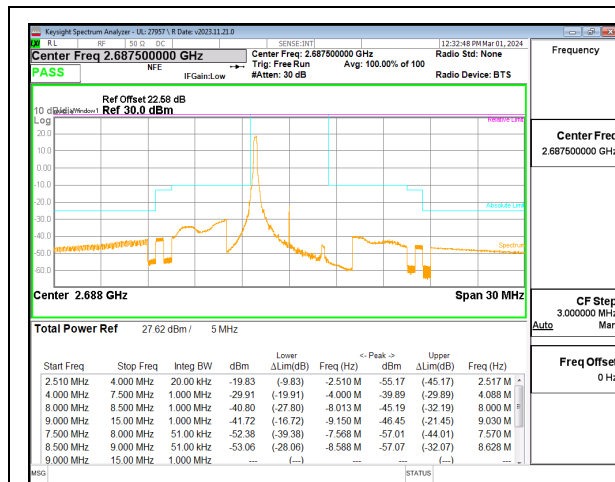
LIMITS

FCC: §27.53

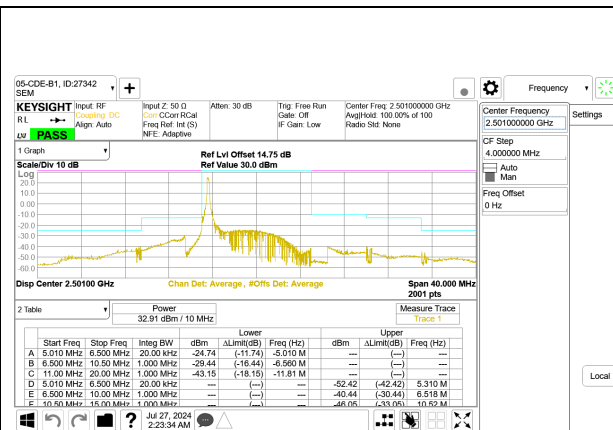
(m)(4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ 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 than $43 + 10 \log (P)$ 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.

LTE BAND 41 EMISSION MASK (FCC)

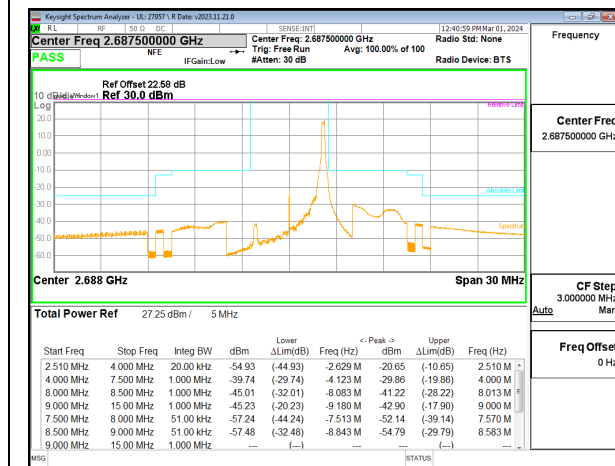




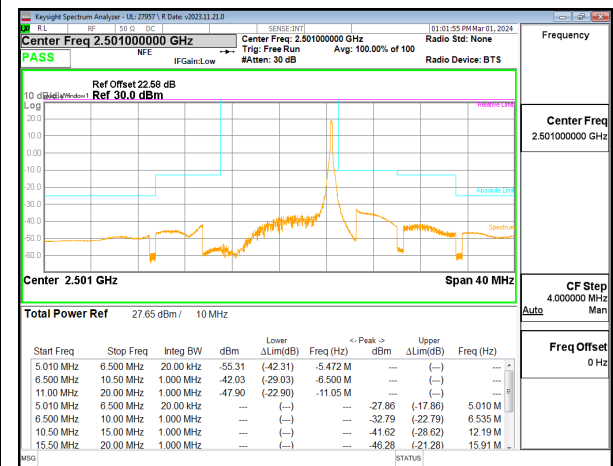
LTE B41 5MHz QPSK High Channel RB1-0



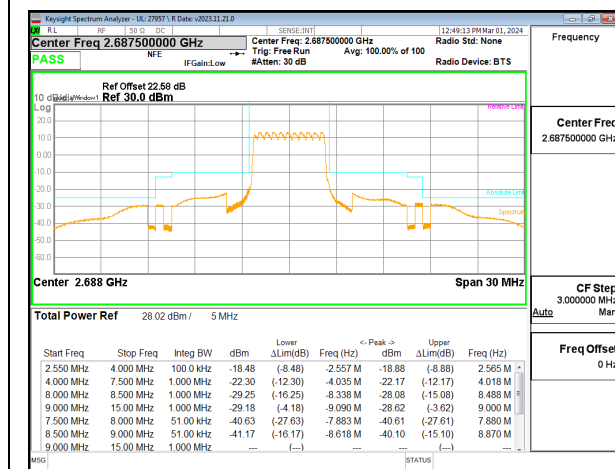
LTE B41 10MHz QPSK Low Channel RB1-0



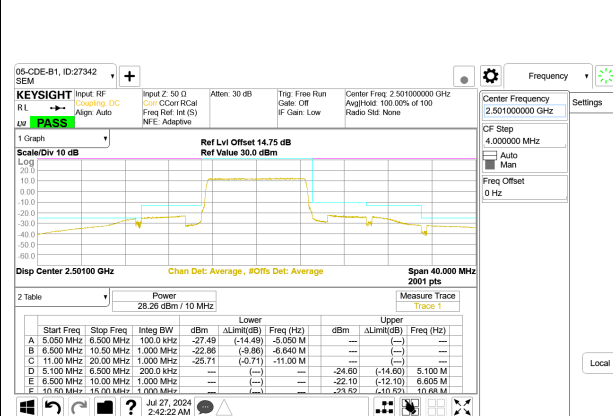
LTE B41 5MHz QPSK High Channel RB1-24



LTE B41 10MHz QPSK Low Channel RB1-49



LTE B41 5MHz QPSK High Channel RB25-0



LTE B41 10MHz QPSK Low Channel RB50-0

