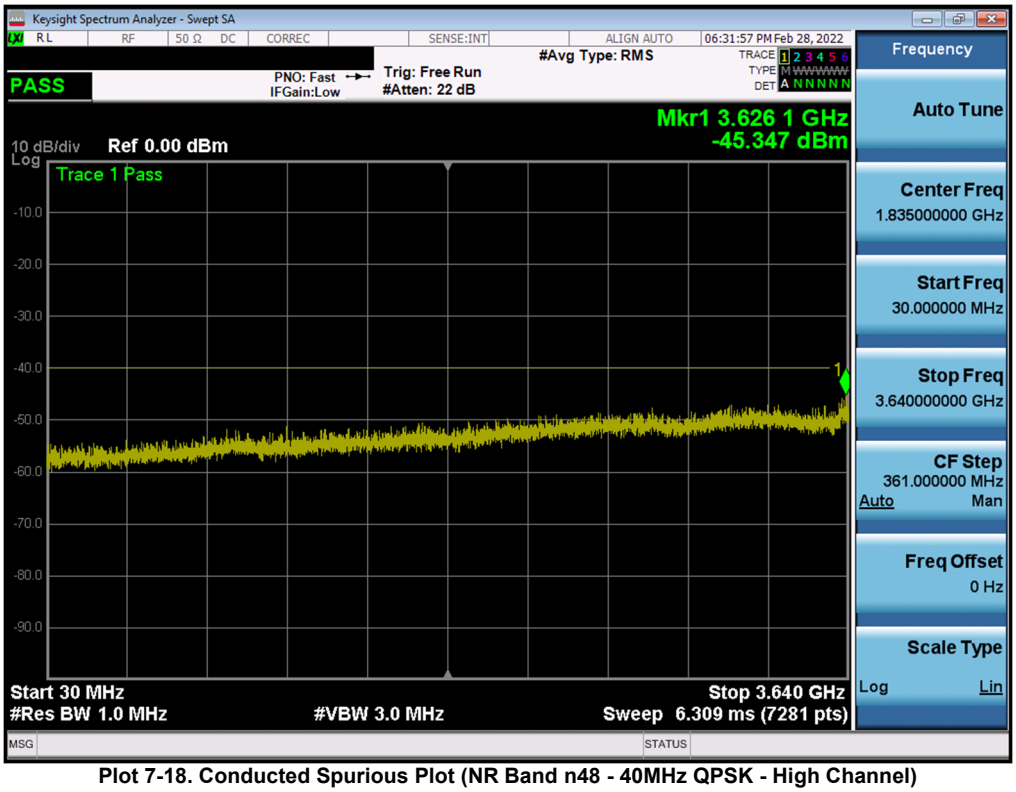
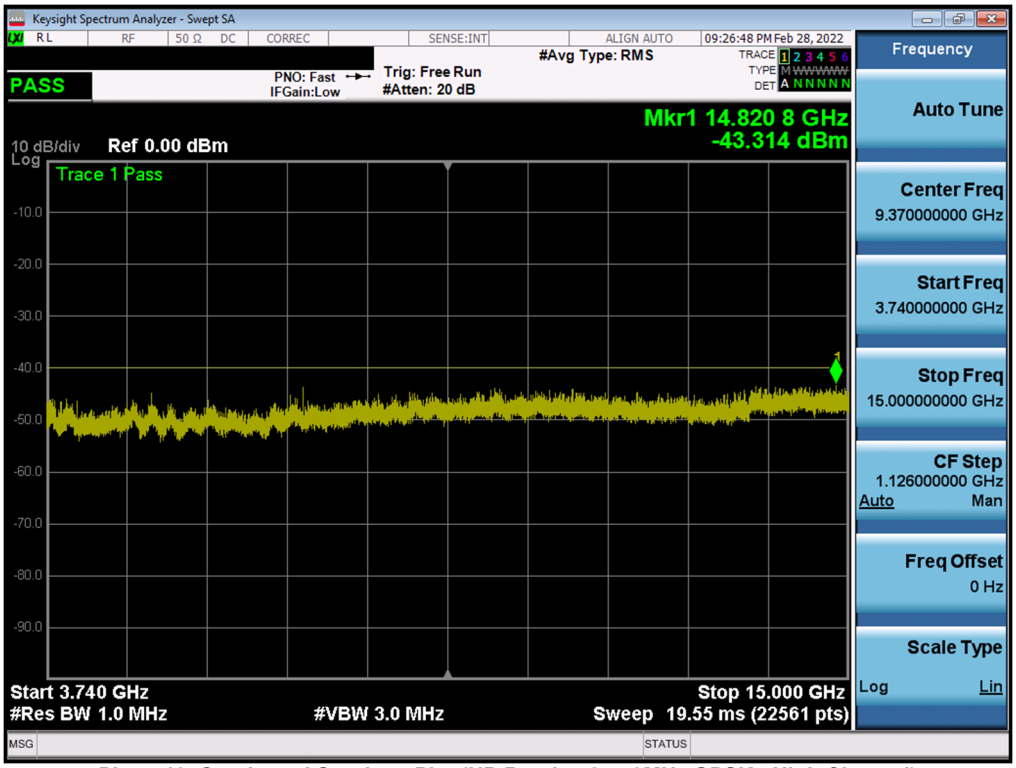
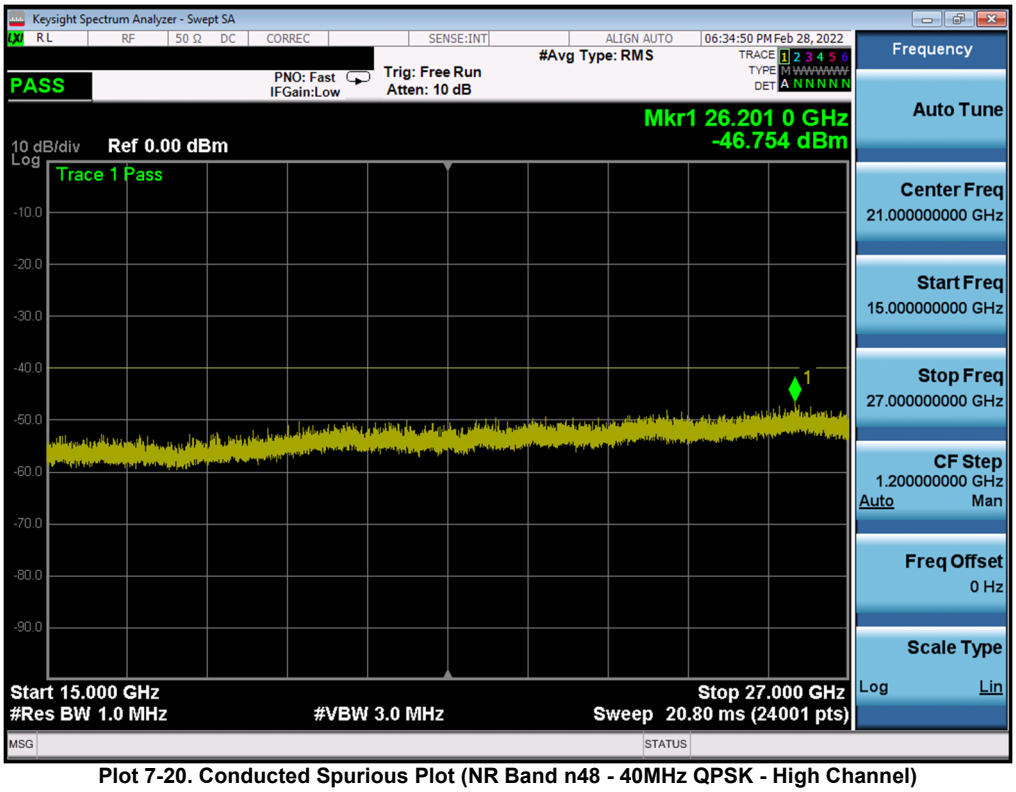


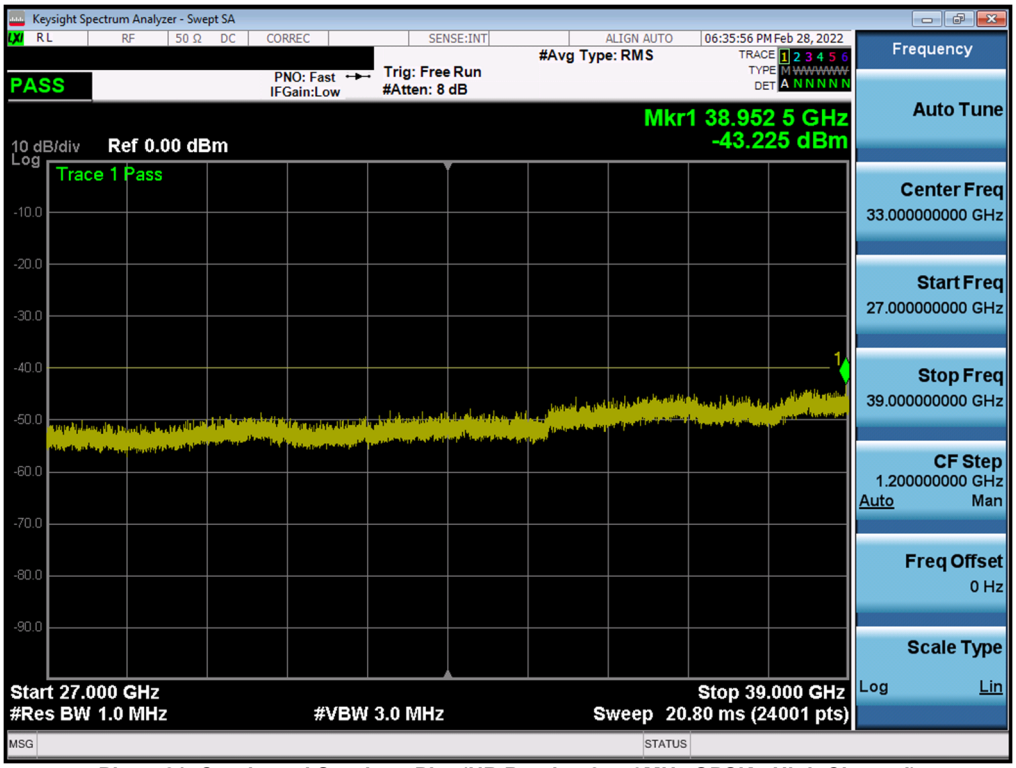
Plot 7-18. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)



Plot 7-19. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)



Plot 7-20. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)



Plot 7-21. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)

7.5 Band Edge Emissions at Antenna Terminal

§2.1051 §96.41(e)(ii)

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed −13 dBm/MHz within 0 to B MHz (where B is the bandwidth in MHz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B MHz below the lower CBSD-assigned channel edge. At all frequencies greater than B MHz above the upper CBSD assigned channel edge and less than B MHz below the lower CBSD-assigned channel edge, the conducted power of any end user device emission shall not exceed −25 dBm/MHz. The conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW ≥ 1% of the emission bandwidth
4. VBW ≥ 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

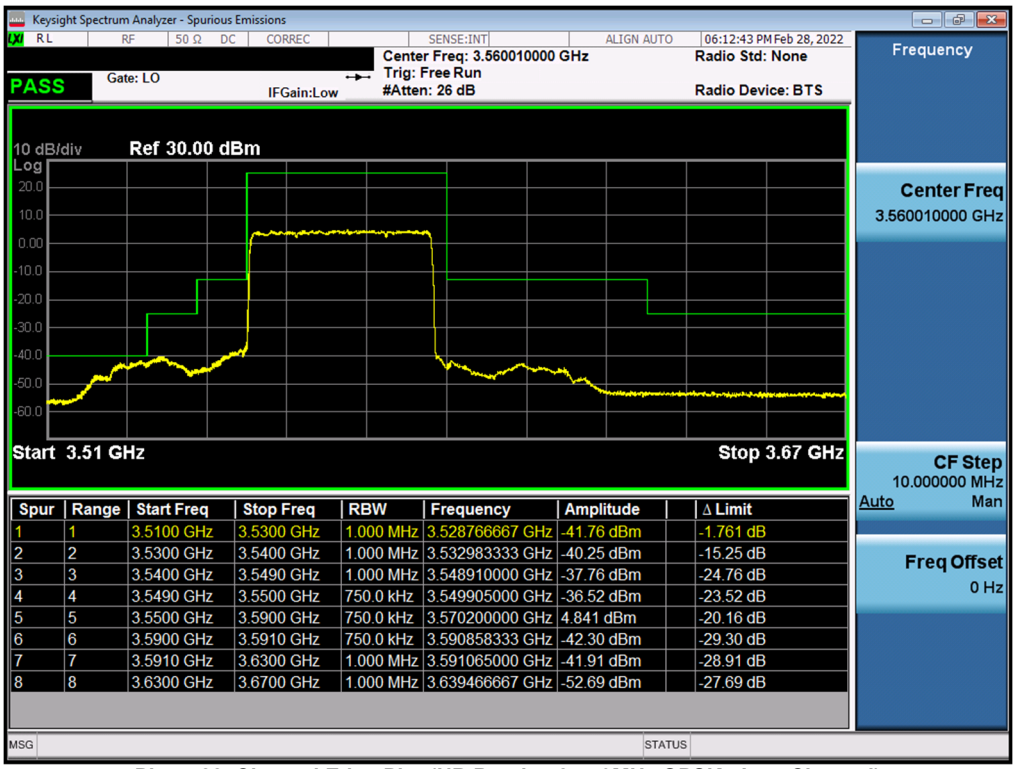
The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-4. Test Instrument & Measurement Setup

Test Notes

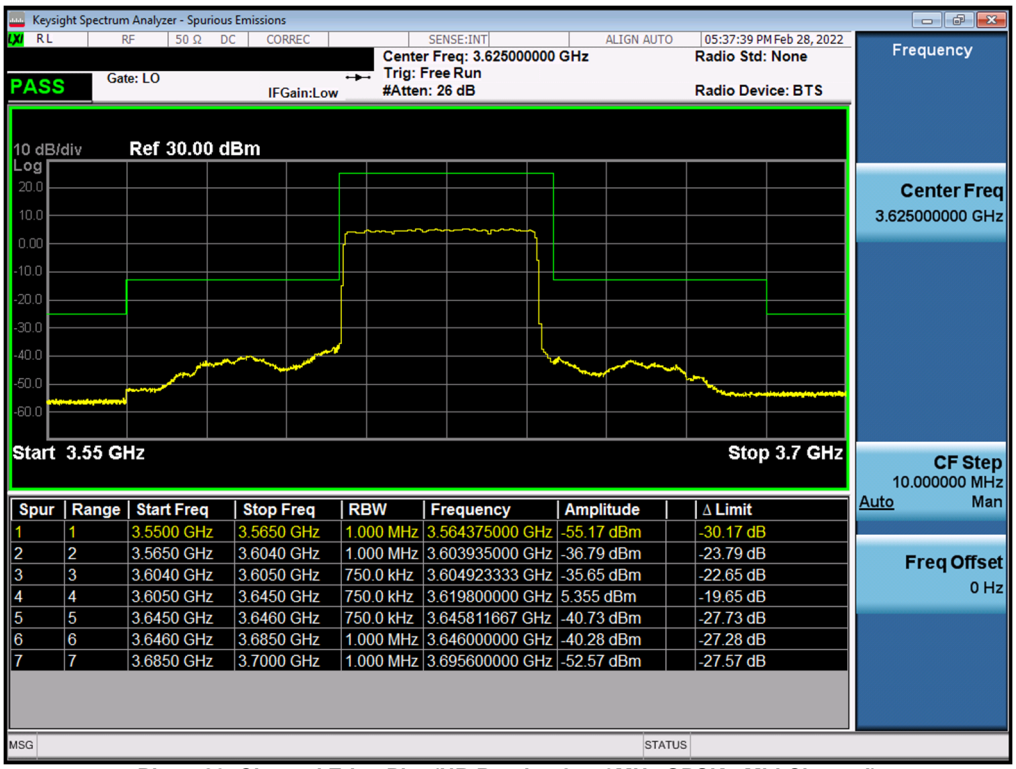
Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed.

NR Band n48



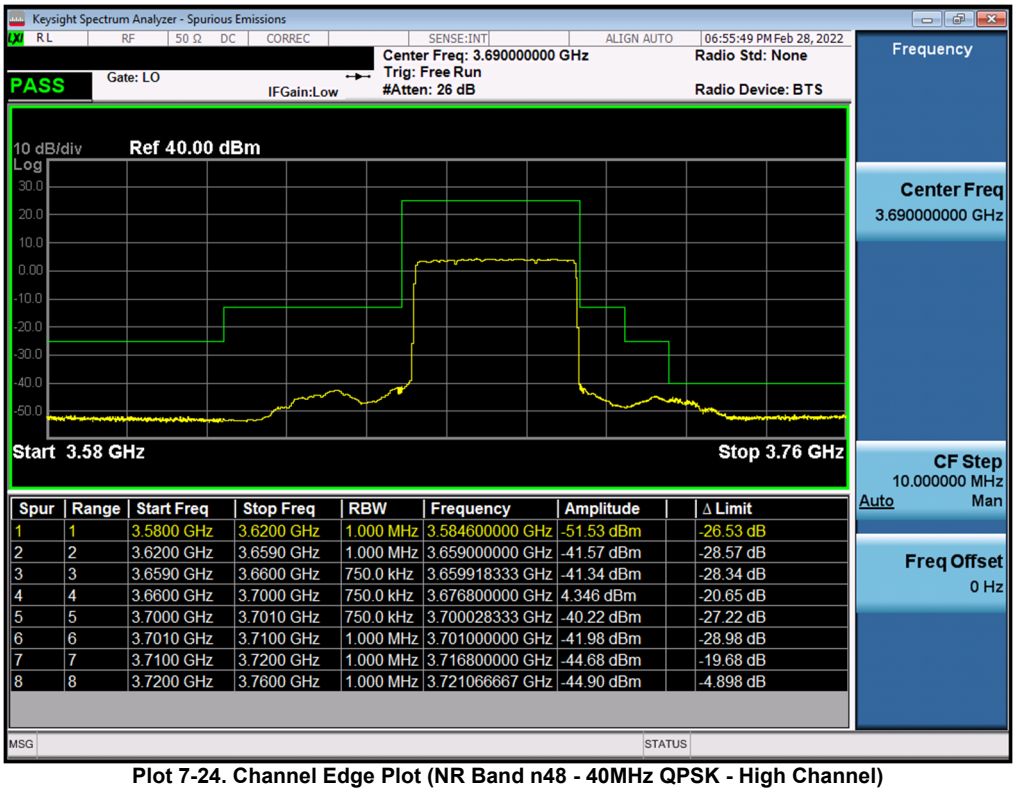
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.528766667 GHz	-41.76 dBm	-1.761 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.532983333 GHz	-40.25 dBm	-15.25 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548910000 GHz	-37.76 dBm	-24.76 dB
4	4	3.5490 GHz	3.5500 GHz	750.0 kHz	3.549905000 GHz	-36.52 dBm	-23.52 dB
5	5	3.5500 GHz	3.5900 GHz	750.0 kHz	3.570200000 GHz	4.841 dBm	-20.16 dB
6	6	3.5900 GHz	3.5910 GHz	750.0 kHz	3.590858333 GHz	-42.30 dBm	-29.30 dB
7	7	3.5910 GHz	3.6300 GHz	1.000 MHz	3.591065000 GHz	-41.91 dBm	-28.91 dB
8	8	3.6300 GHz	3.6700 GHz	1.000 MHz	3.639466667 GHz	-52.69 dBm	-27.69 dB

Plot 7-22. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Low Channel)



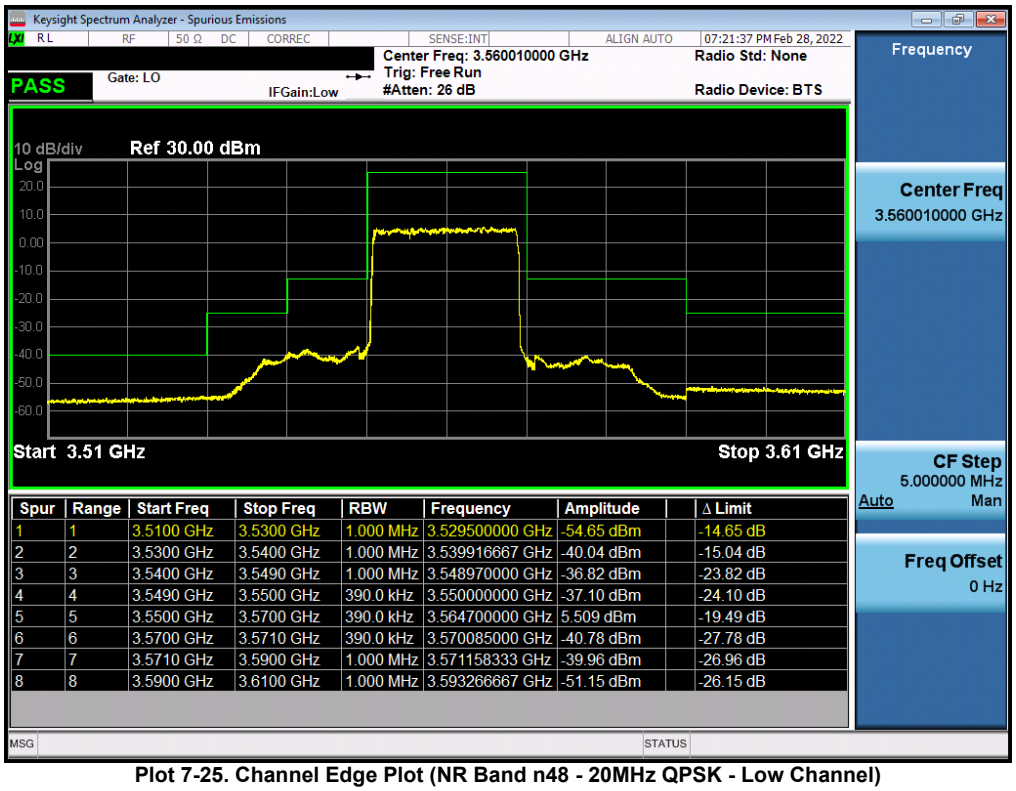
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5500 GHz	3.5650 GHz	1.000 MHz	3.564375000 GHz	-55.17 dBm	-30.17 dB
2	2	3.5650 GHz	3.6040 GHz	1.000 MHz	3.603935000 GHz	-36.79 dBm	-23.79 dB
3	3	3.6040 GHz	3.6050 GHz	750.0 kHz	3.604923333 GHz	-35.65 dBm	-22.65 dB
4	4	3.6050 GHz	3.6450 GHz	750.0 kHz	3.619800000 GHz	5.355 dBm	-19.65 dB
5	5	3.6450 GHz	3.6460 GHz	750.0 kHz	3.645811667 GHz	-40.73 dBm	-27.73 dB
6	6	3.6460 GHz	3.6850 GHz	1.000 MHz	3.646000000 GHz	-40.28 dBm	-27.28 dB
7	7	3.6850 GHz	3.7000 GHz	1.000 MHz	3.695600000 GHz	-52.57 dBm	-27.57 dB

Plot 7-23. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Mid Channel)



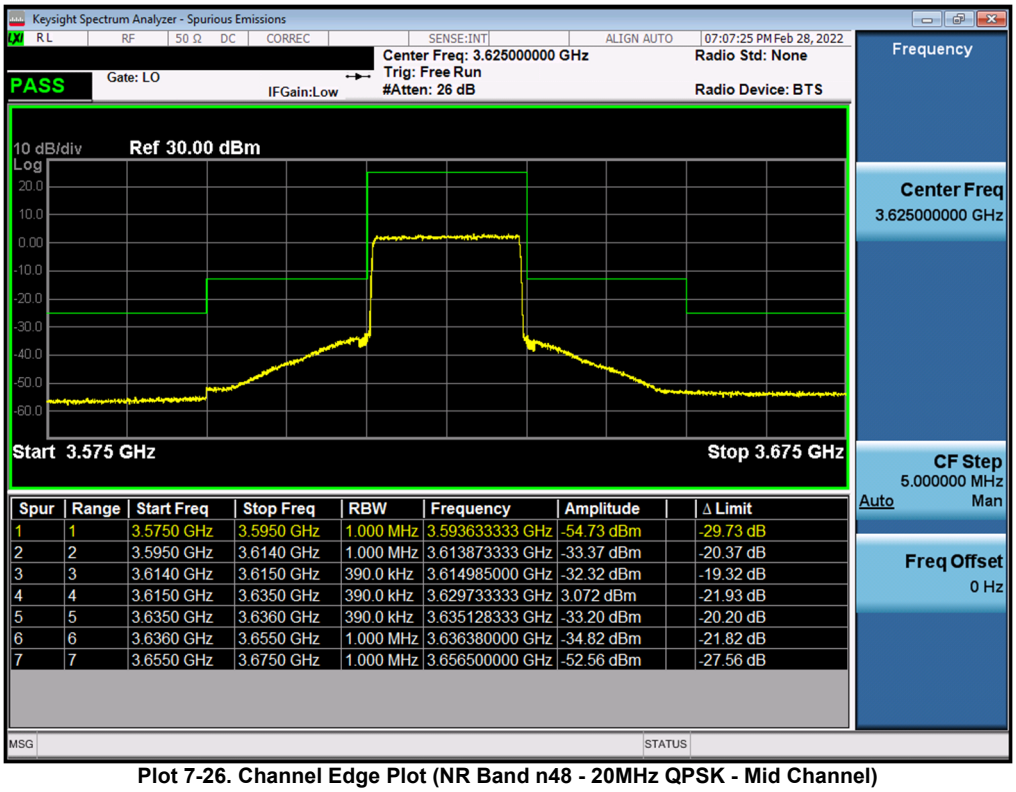
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5800 GHz	3.6200 GHz	1.000 MHz	3.584600000 GHz	-51.53 dBm	-26.53 dB
2	2	3.6200 GHz	3.6590 GHz	1.000 MHz	3.659000000 GHz	-41.57 dBm	-28.57 dB
3	3	3.6590 GHz	3.6600 GHz	750.0 kHz	3.659918333 GHz	-41.34 dBm	-28.34 dB
4	4	3.6600 GHz	3.7000 GHz	750.0 kHz	3.676800000 GHz	4.346 dBm	-20.65 dB
5	5	3.7000 GHz	3.7010 GHz	750.0 kHz	3.700028333 GHz	-40.22 dBm	-27.22 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701000000 GHz	-41.98 dBm	-28.98 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.716800000 GHz	-44.68 dBm	-19.68 dB
8	8	3.7200 GHz	3.7600 GHz	1.000 MHz	3.721066667 GHz	-44.90 dBm	-4.898 dB

Plot 7-24. Channel Edge Plot (NR Band n48 - 40MHz QPSK - High Channel)



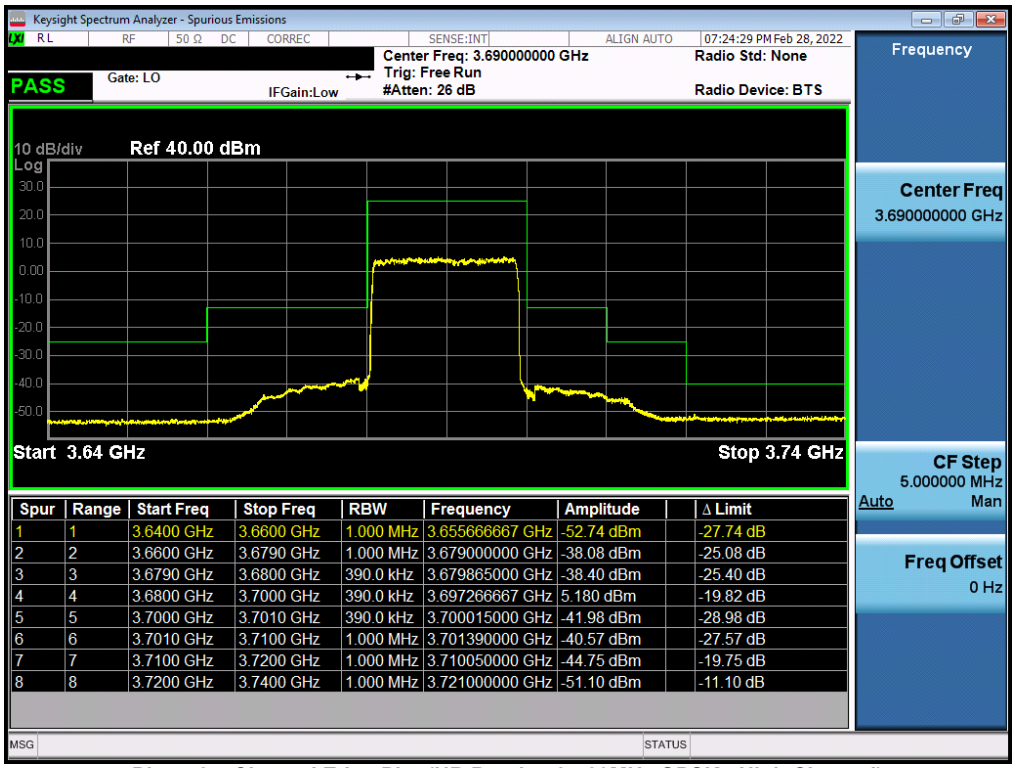
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.529500000 GHz	-54.65 dBm	-14.65 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.539916667 GHz	-40.04 dBm	-15.04 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548970000 GHz	-36.82 dBm	-23.82 dB
4	4	3.5490 GHz	3.5500 GHz	390.0 kHz	3.550000000 GHz	-37.10 dBm	-24.10 dB
5	5	3.5500 GHz	3.5700 GHz	390.0 kHz	3.564700000 GHz	5.509 dBm	-19.49 dB
6	6	3.5700 GHz	3.5710 GHz	390.0 kHz	3.570085000 GHz	-40.78 dBm	-27.78 dB
7	7	3.5710 GHz	3.5900 GHz	1.000 MHz	3.571158333 GHz	-39.96 dBm	-26.96 dB
8	8	3.5900 GHz	3.6100 GHz	1.000 MHz	3.593266667 GHz	-51.15 dBm	-26.15 dB

Plot 7-25. Channel Edge Plot (NR Band n48 - 20MHz QPSK - Low Channel)



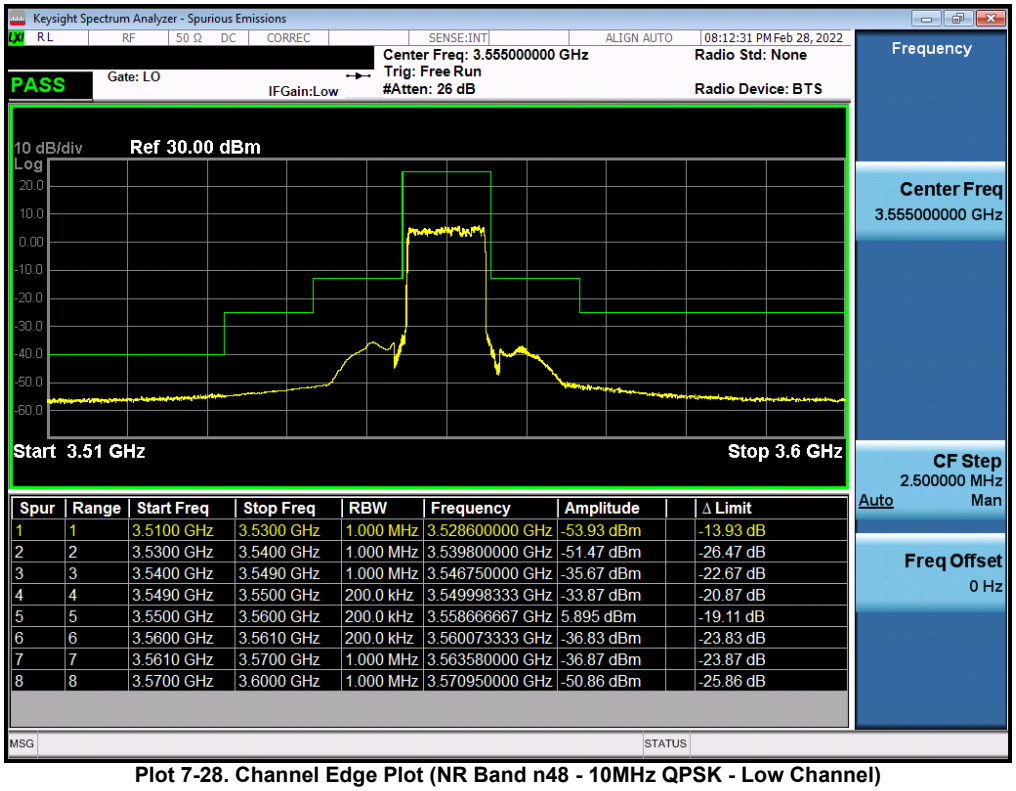
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5750 GHz	3.5950 GHz	1.000 MHz	3.593633333 GHz	-54.73 dBm	-29.73 dB
2	2	3.5950 GHz	3.6140 GHz	1.000 MHz	3.613873333 GHz	-33.37 dBm	-20.37 dB
3	3	3.6140 GHz	3.6150 GHz	390.0 kHz	3.614985000 GHz	-32.32 dBm	-19.32 dB
4	4	3.6150 GHz	3.6350 GHz	390.0 kHz	3.629733333 GHz	3.072 dBm	-21.93 dB
5	5	3.6350 GHz	3.6360 GHz	390.0 kHz	3.635128333 GHz	-33.20 dBm	-20.20 dB
6	6	3.6360 GHz	3.6550 GHz	1.000 MHz	3.636380000 GHz	-34.82 dBm	-21.82 dB
7	7	3.6550 GHz	3.6750 GHz	1.000 MHz	3.656500000 GHz	-52.56 dBm	-27.56 dB

Plot 7-26. Channel Edge Plot (NR Band n48 - 20MHz QPSK - Mid Channel)



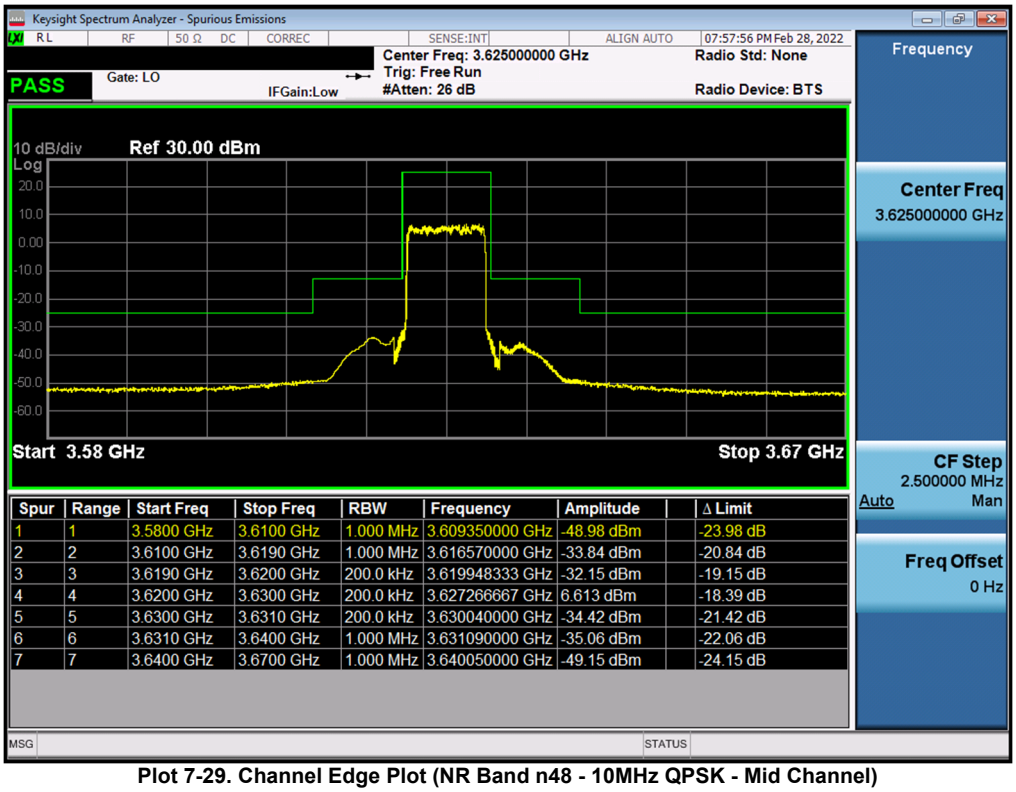
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6400 GHz	3.6600 GHz	1.000 MHz	3.655666667 GHz	-52.74 dBm	-27.74 dB
2	2	3.6600 GHz	3.6790 GHz	1.000 MHz	3.679000000 GHz	-38.08 dBm	-25.08 dB
3	3	3.6790 GHz	3.6800 GHz	390.0 kHz	3.679865000 GHz	-38.40 dBm	-25.40 dB
4	4	3.6800 GHz	3.7000 GHz	390.0 kHz	3.697266667 GHz	5.180 dBm	-19.82 dB
5	5	3.7000 GHz	3.7010 GHz	390.0 kHz	3.700015000 GHz	-41.98 dBm	-28.98 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701390000 GHz	-40.57 dBm	-27.57 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.710050000 GHz	-44.75 dBm	-19.75 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.721000000 GHz	-51.10 dBm	-11.10 dB

Plot 7-27. Channel Edge Plot (NR Band n48 - 20MHz QPSK - High Channel)



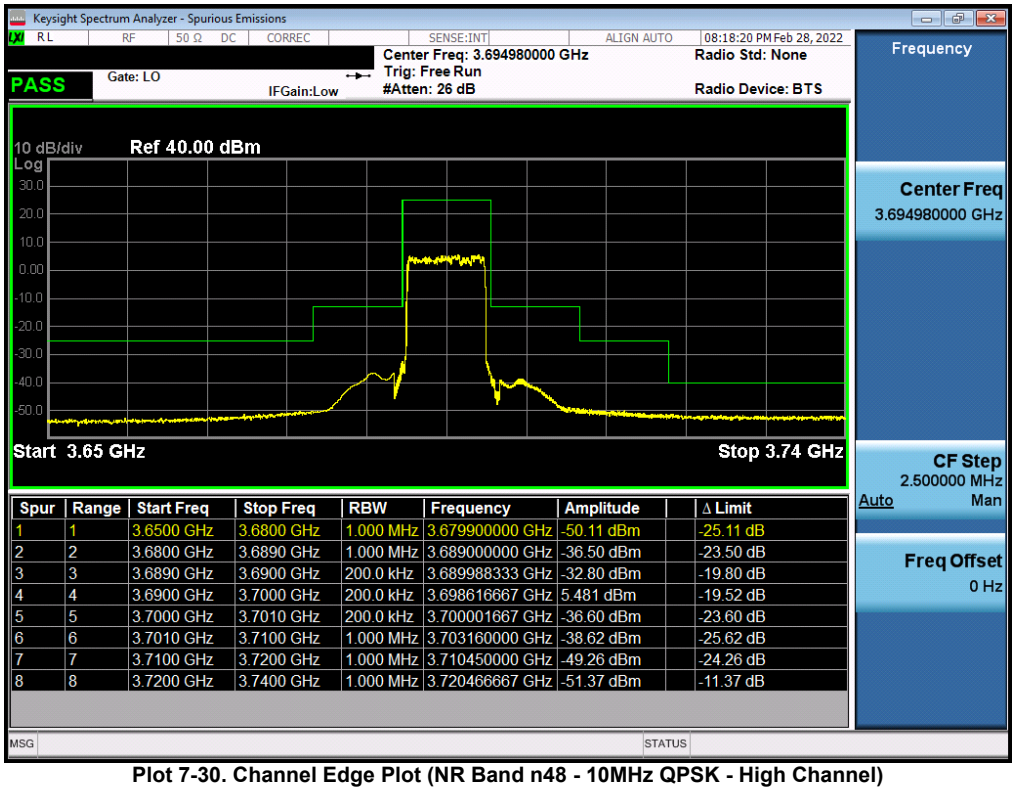
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.528600000 GHz	-53.93 dBm	-13.93 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.539800000 GHz	-51.47 dBm	-26.47 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.546750000 GHz	-35.67 dBm	-22.67 dB
4	4	3.5490 GHz	3.5500 GHz	200.0 kHz	3.549998333 GHz	-33.87 dBm	-20.87 dB
5	5	3.5500 GHz	3.5600 GHz	200.0 kHz	3.558666667 GHz	5.895 dBm	-19.11 dB
6	6	3.5600 GHz	3.5610 GHz	200.0 kHz	3.560073333 GHz	-36.83 dBm	-23.83 dB
7	7	3.5610 GHz	3.5700 GHz	1.000 MHz	3.563580000 GHz	-36.87 dBm	-23.87 dB
8	8	3.5700 GHz	3.6000 GHz	1.000 MHz	3.570950000 GHz	-50.86 dBm	-25.86 dB

Plot 7-28. Channel Edge Plot (NR Band n48 - 10MHz QPSK - Low Channel)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5800 GHz	3.6100 GHz	1.000 MHz	3.609350000 GHz	-48.98 dBm	-23.98 dB
2	2	3.6100 GHz	3.6190 GHz	1.000 MHz	3.616570000 GHz	-33.84 dBm	-20.84 dB
3	3	3.6190 GHz	3.6200 GHz	200.0 kHz	3.619948333 GHz	-32.15 dBm	-19.15 dB
4	4	3.6200 GHz	3.6300 GHz	200.0 kHz	3.627266667 GHz	6.613 dBm	-18.39 dB
5	5	3.6300 GHz	3.6310 GHz	200.0 kHz	3.630040000 GHz	-34.42 dBm	-21.42 dB
6	6	3.6310 GHz	3.6400 GHz	1.000 MHz	3.631090000 GHz	-35.06 dBm	-22.06 dB
7	7	3.6400 GHz	3.6700 GHz	1.000 MHz	3.640050000 GHz	-49.15 dBm	-24.15 dB

Plot 7-29. Channel Edge Plot (NR Band n48 - 10MHz QPSK - Mid Channel)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6500 GHz	3.6800 GHz	1.000 MHz	3.679900000 GHz	-50.11 dBm	-25.11 dB
2	2	3.6800 GHz	3.6890 GHz	1.000 MHz	3.689000000 GHz	-36.50 dBm	-23.50 dB
3	3	3.6890 GHz	3.6900 GHz	200.0 kHz	3.689988333 GHz	-32.80 dBm	-19.80 dB
4	4	3.6900 GHz	3.7000 GHz	200.0 kHz	3.698616667 GHz	5.481 dBm	-19.52 dB
5	5	3.7000 GHz	3.7010 GHz	200.0 kHz	3.700001667 GHz	-36.60 dBm	-23.60 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.703160000 GHz	-38.62 dBm	-25.62 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.710450000 GHz	-49.26 dBm	-24.26 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.720466667 GHz	-51.37 dBm	-11.37 dB

Plot 7-30. Channel Edge Plot (NR Band n48 - 10MHz QPSK - High Channel)