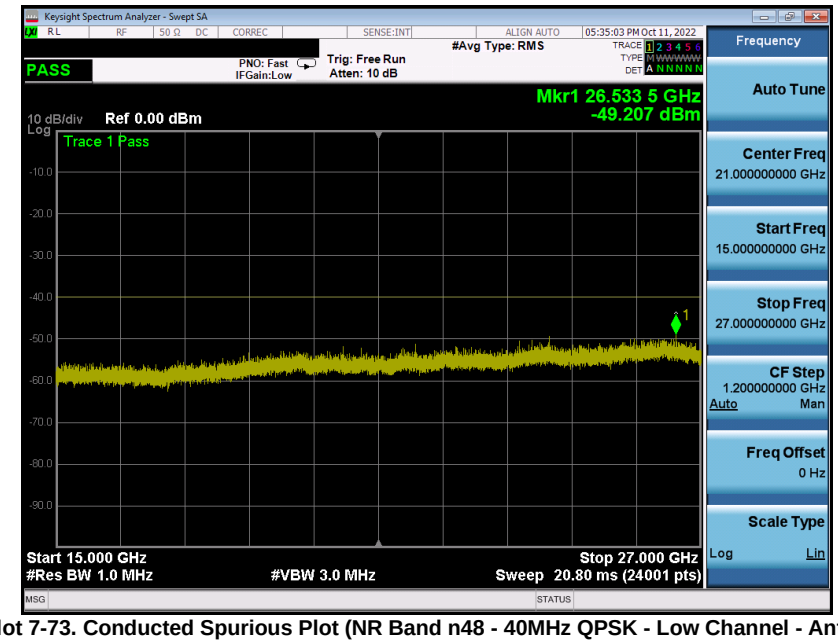
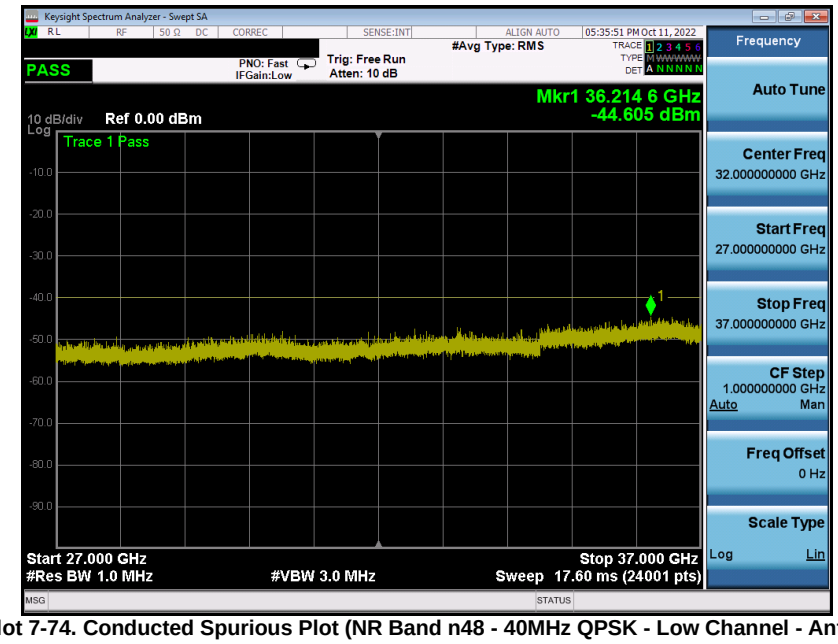
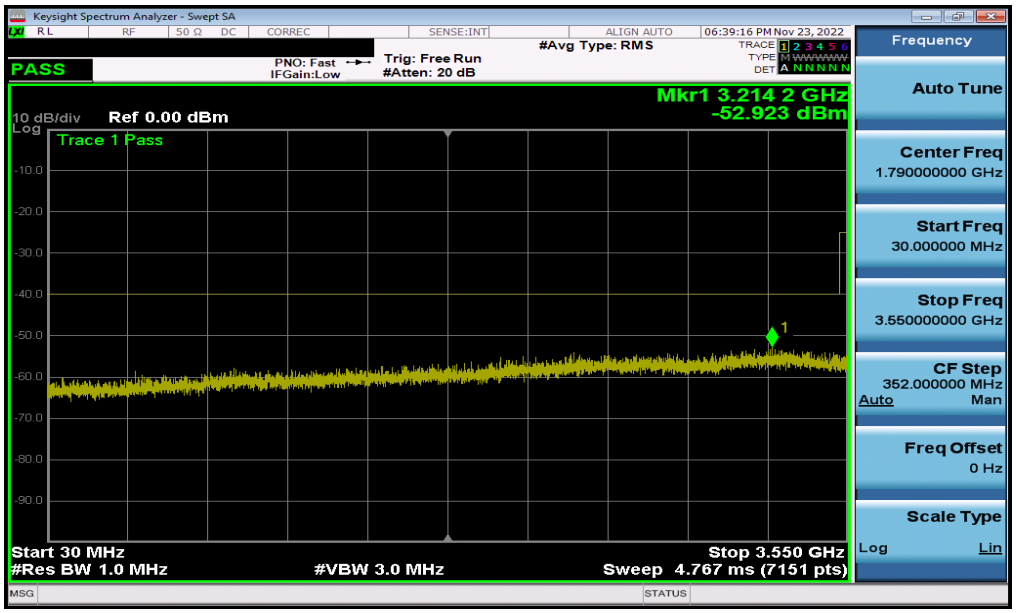


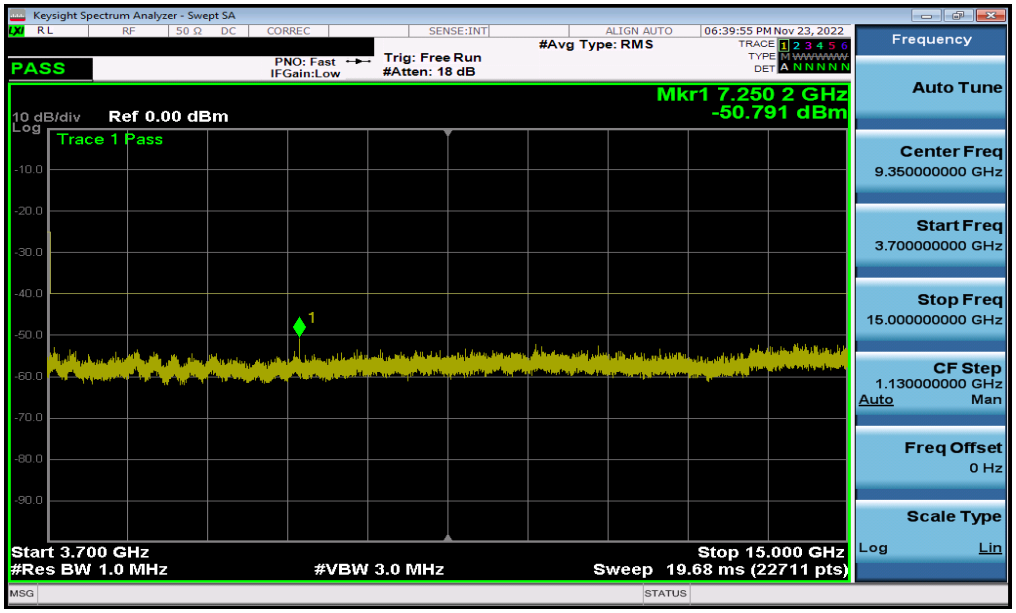
Plot 7-73. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant C)



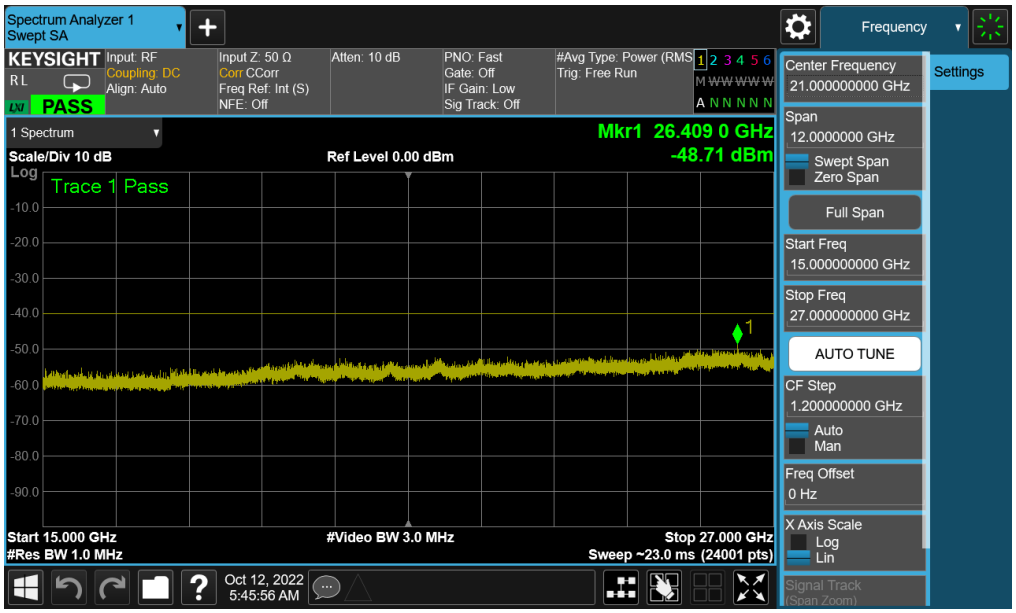
Plot 7-74. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant C)



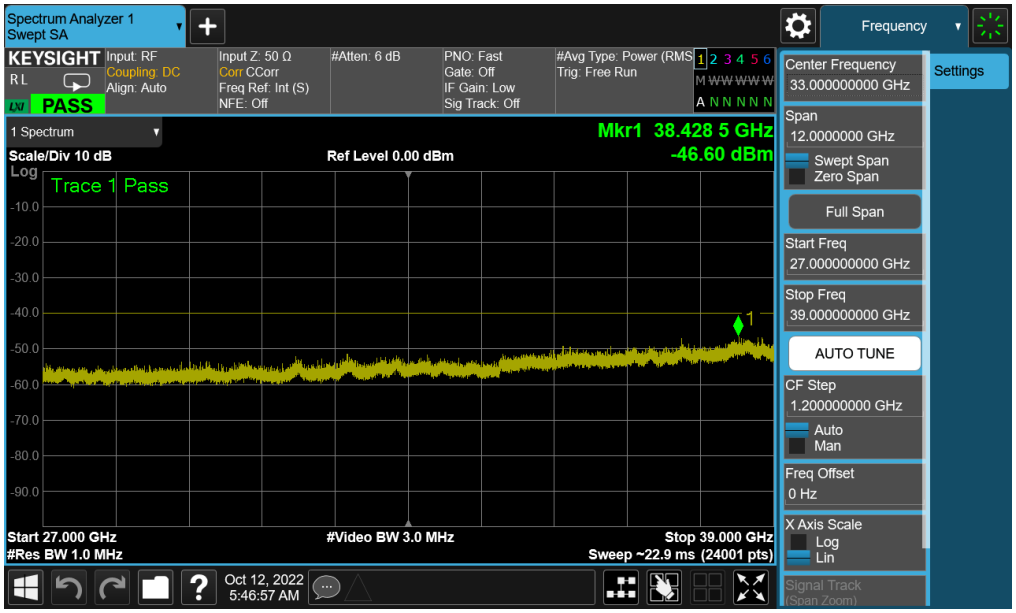
Plot 7-75. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant C)



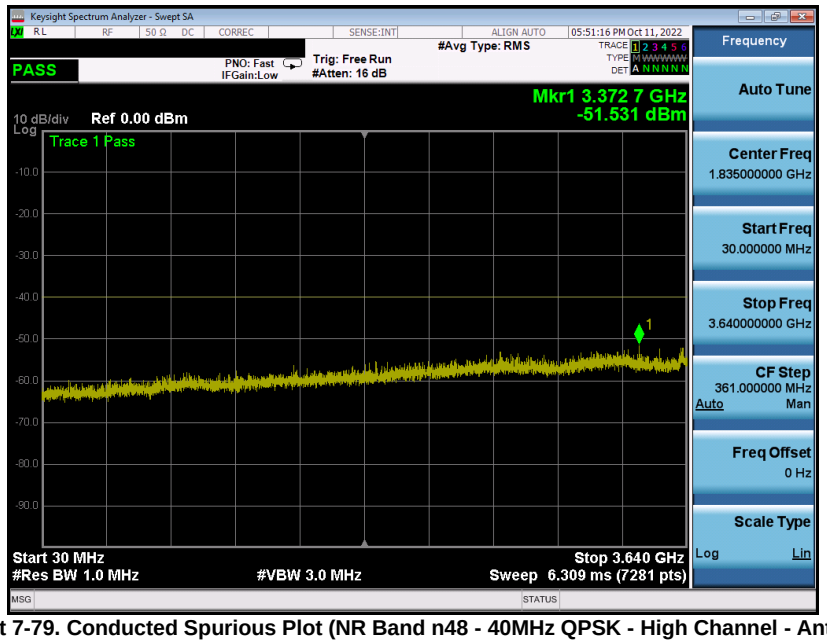
Plot 7-76. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant C)



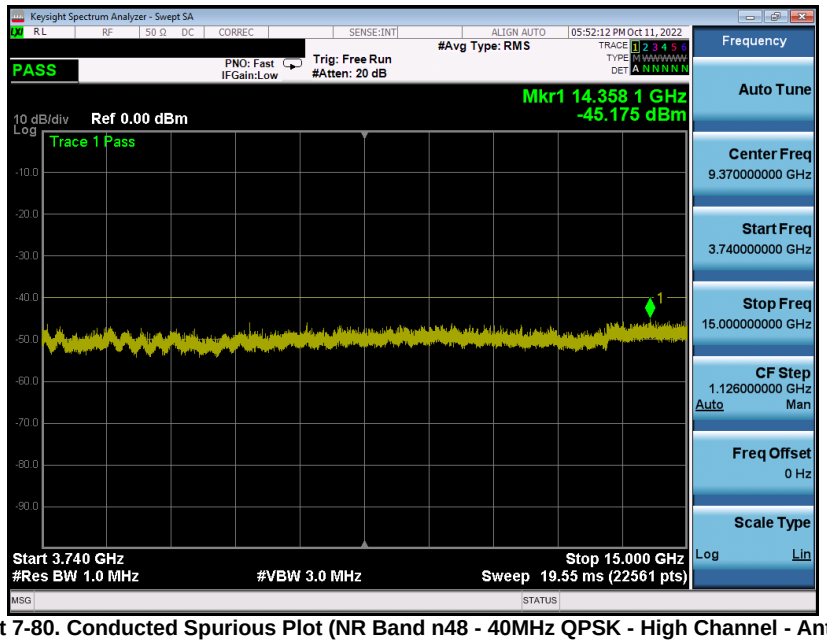
Plot 7-77. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant C)



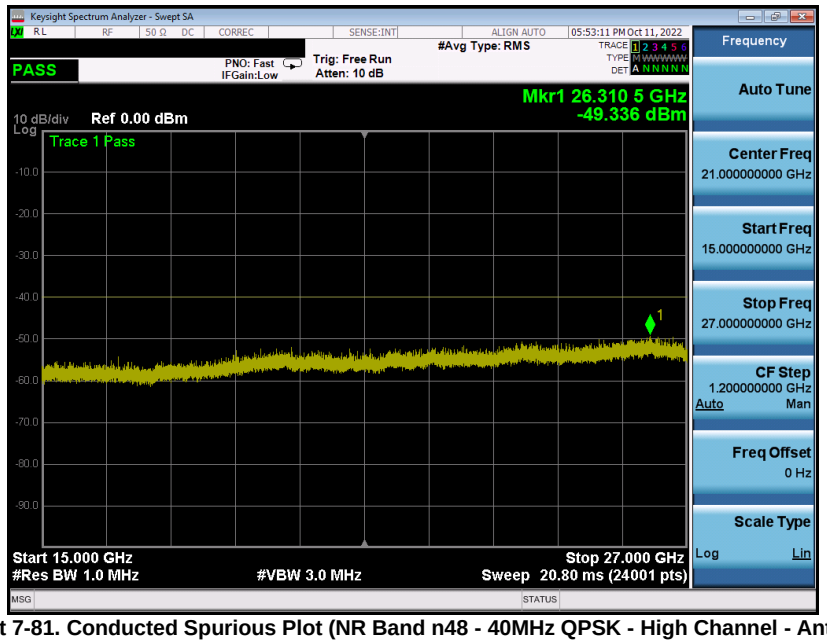
Plot 7-78. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant C)



Plot 7-79. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant C)



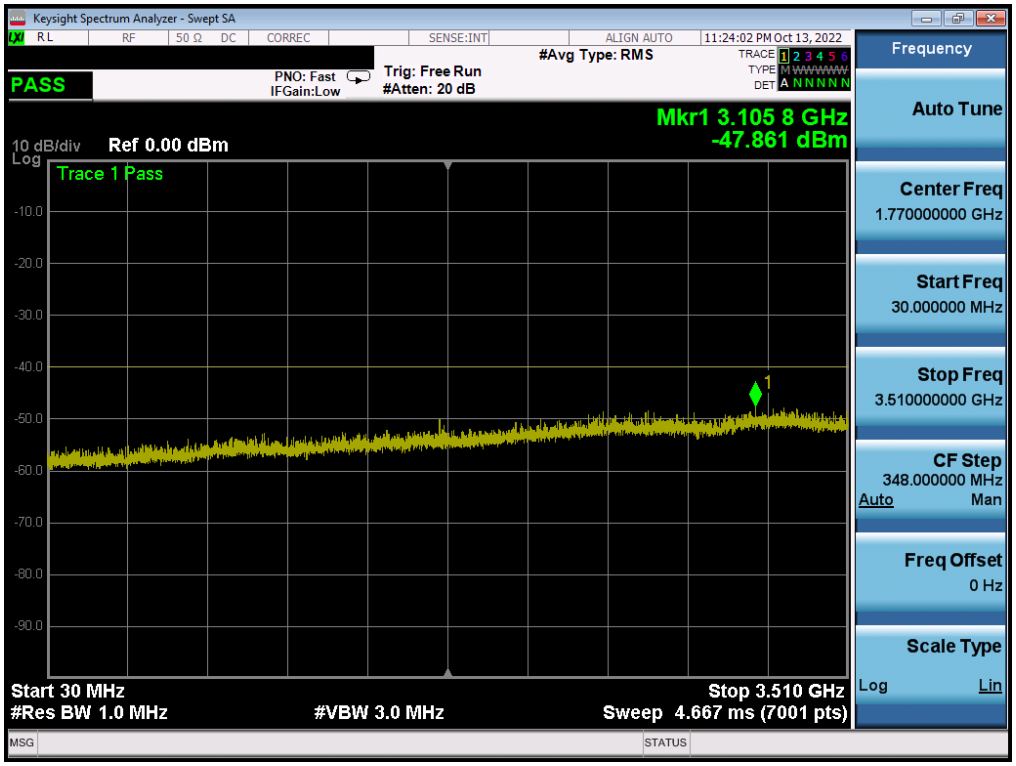
Plot 7-80. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant C)



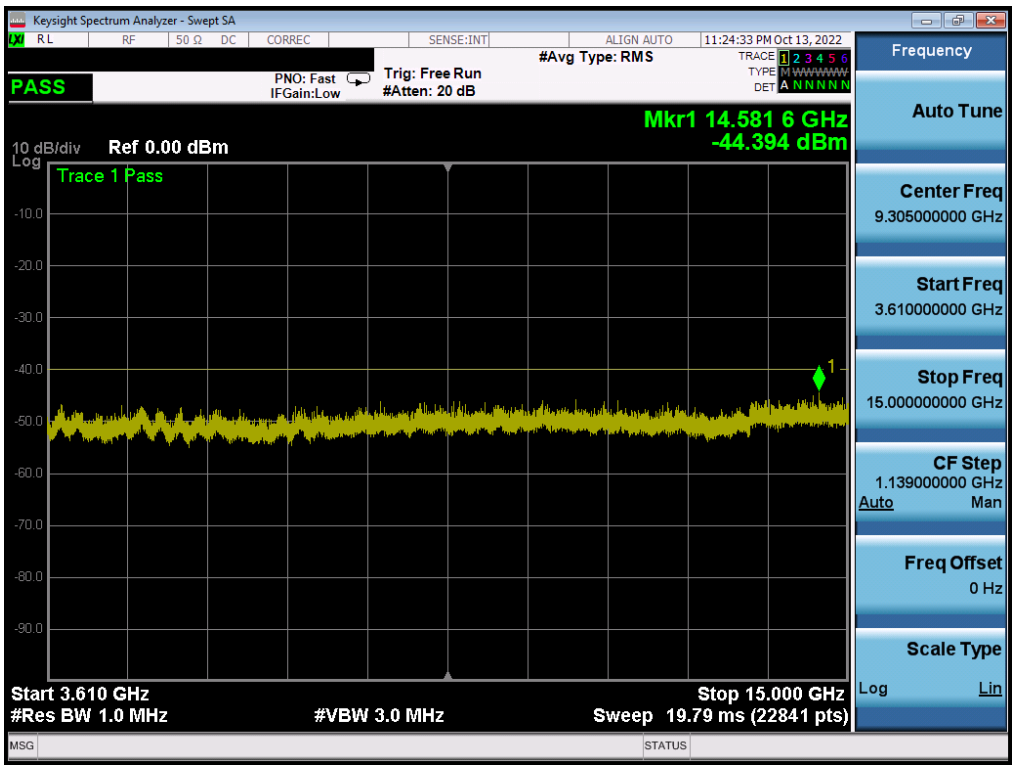
Plot 7-81. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant C)

Plot 7-82. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant C)

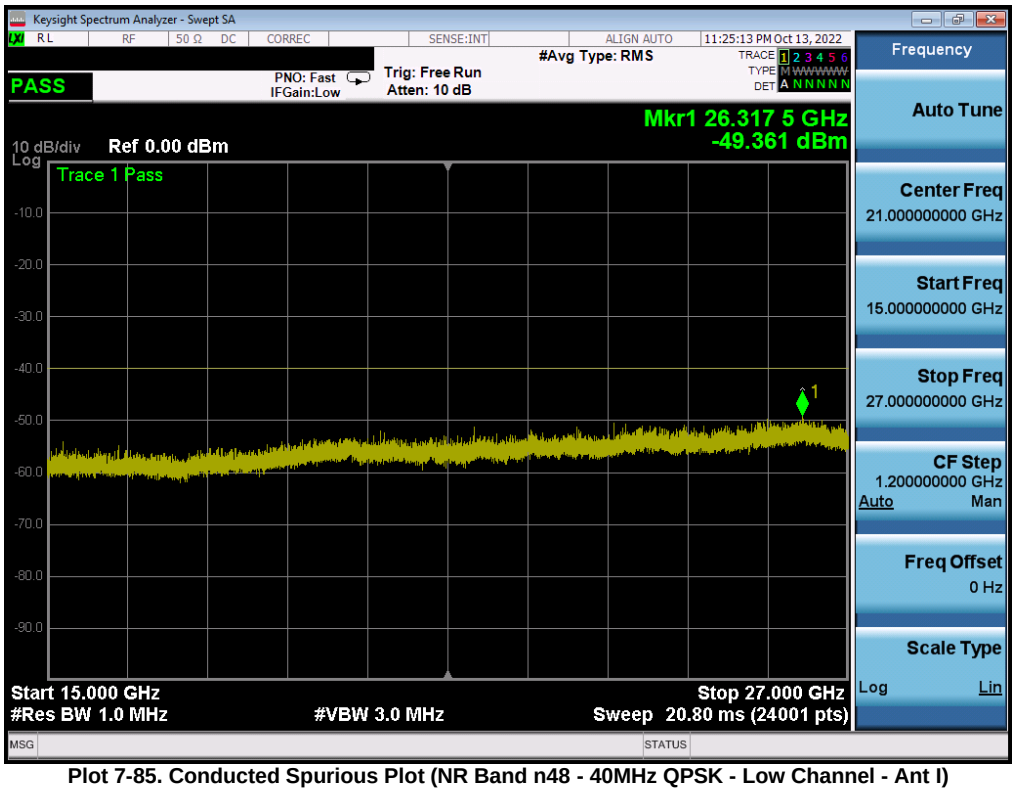
NR Band n48 – Ant I



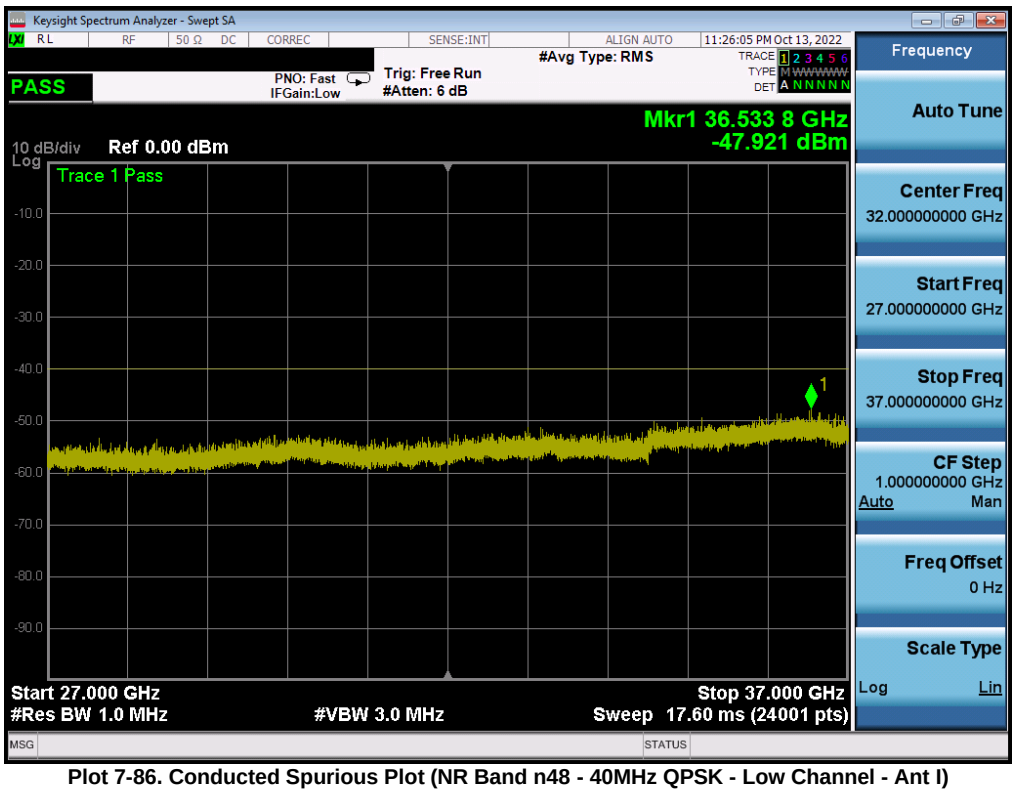
Plot 7-83. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant I)



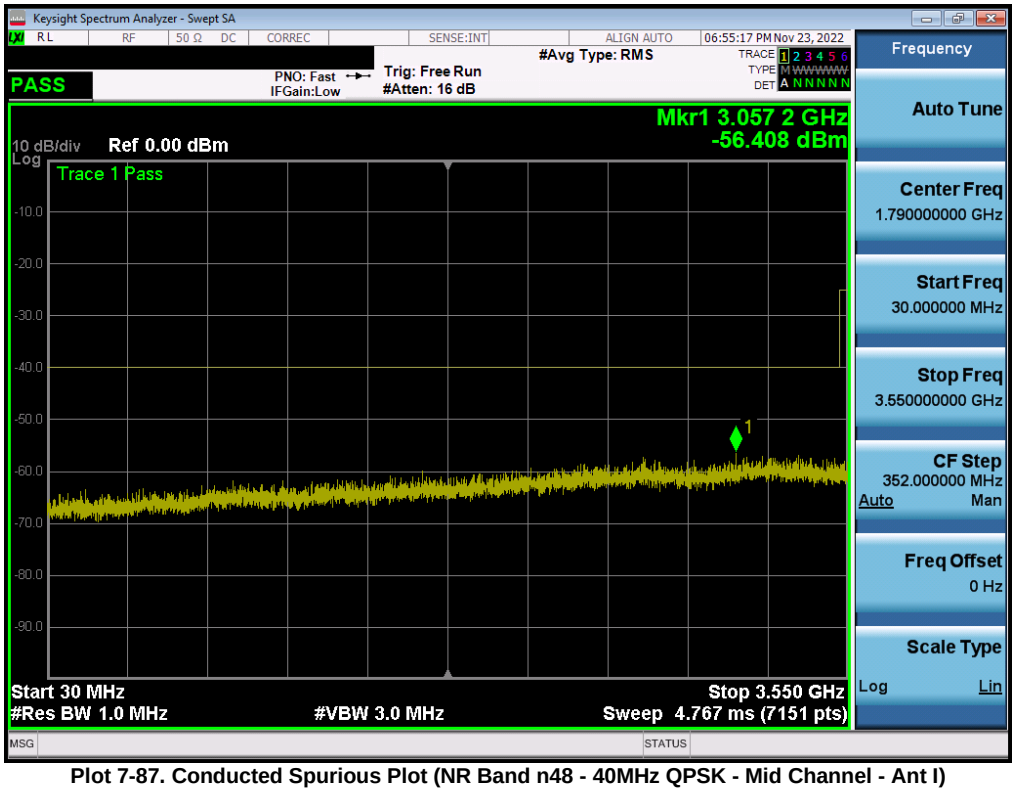
Plot 7-84. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant I)



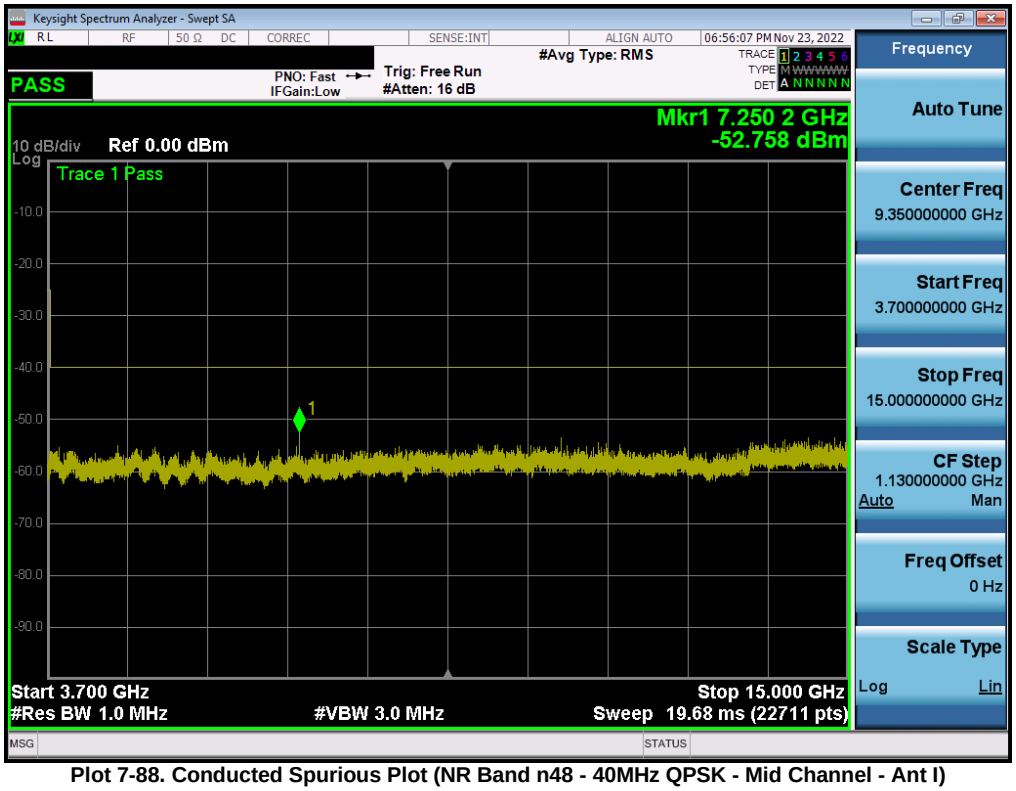
Plot 7-85. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant I)



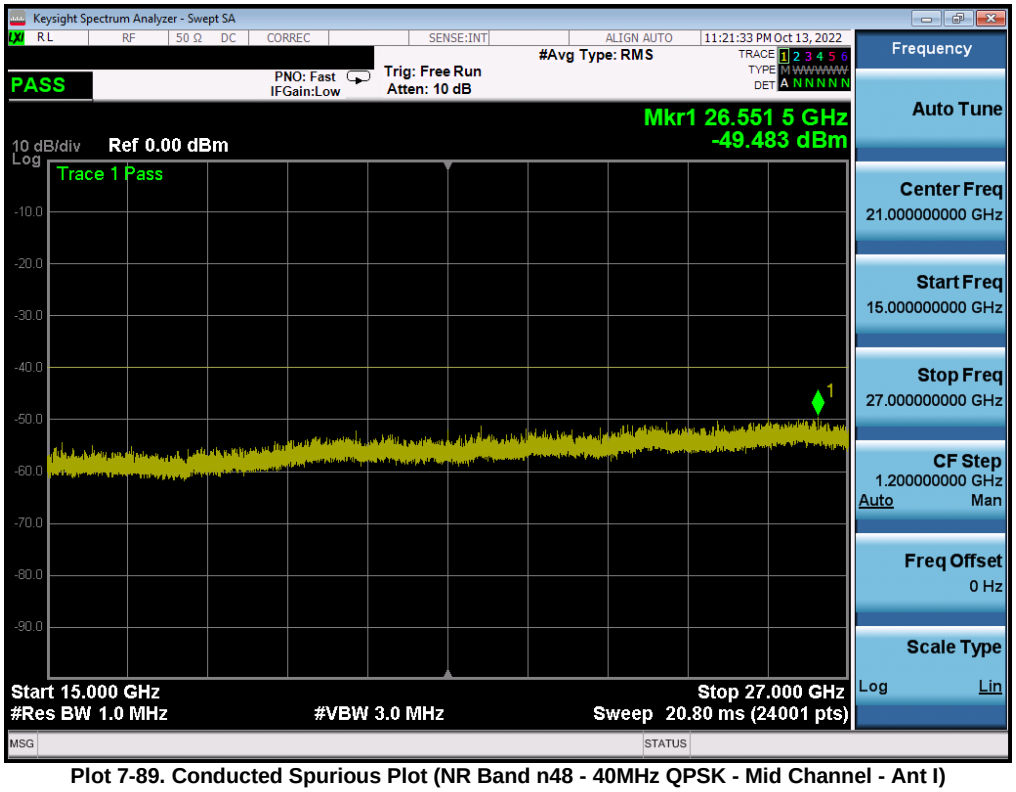
Plot 7-86. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant I)



Plot 7-87. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant I)

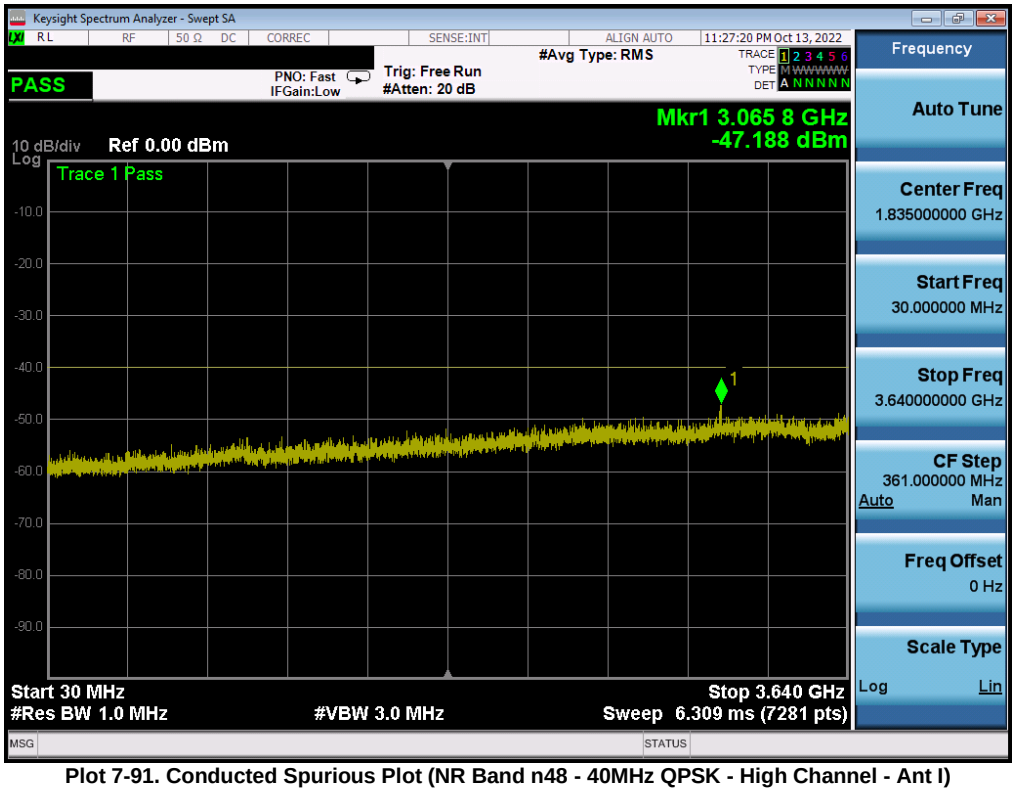


Plot 7-88. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant I)

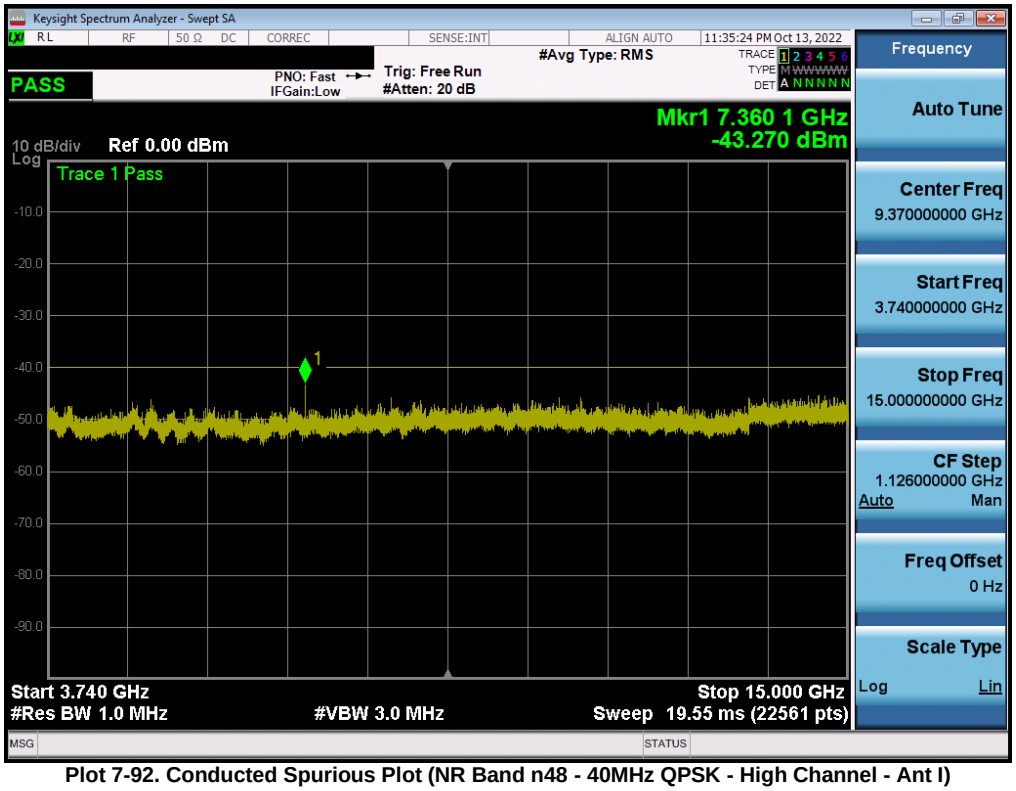


Plot 7-89. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant I)

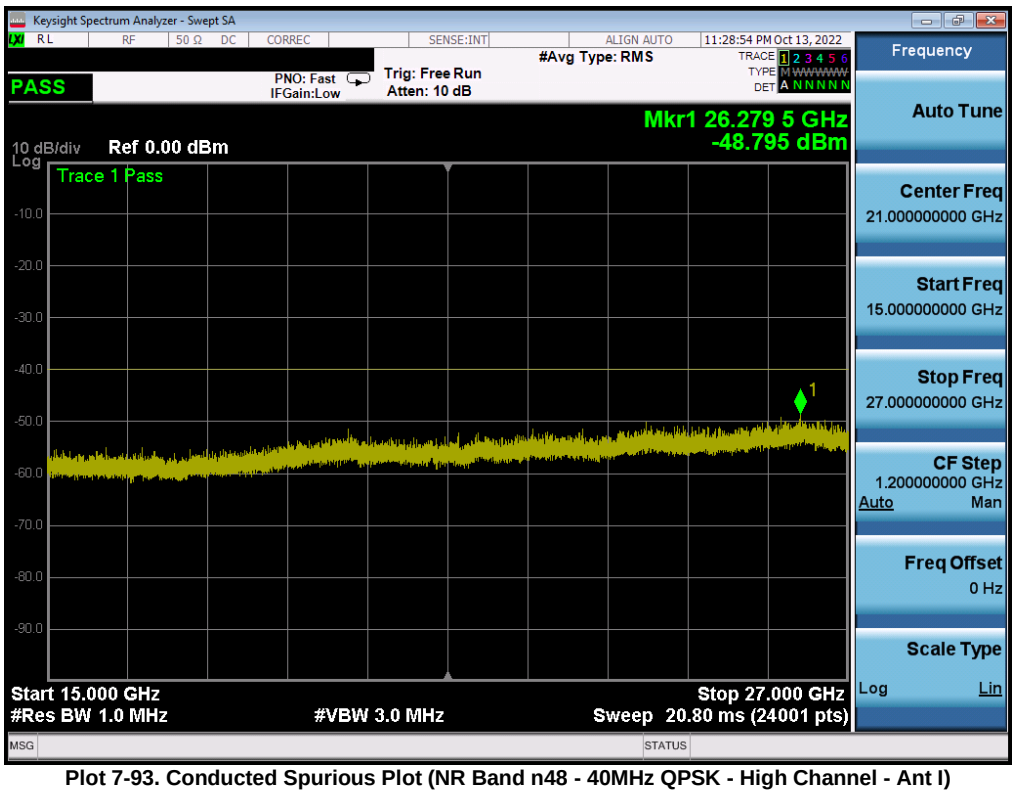
Plot 7-90. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant I)



Plot 7-91. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant I)



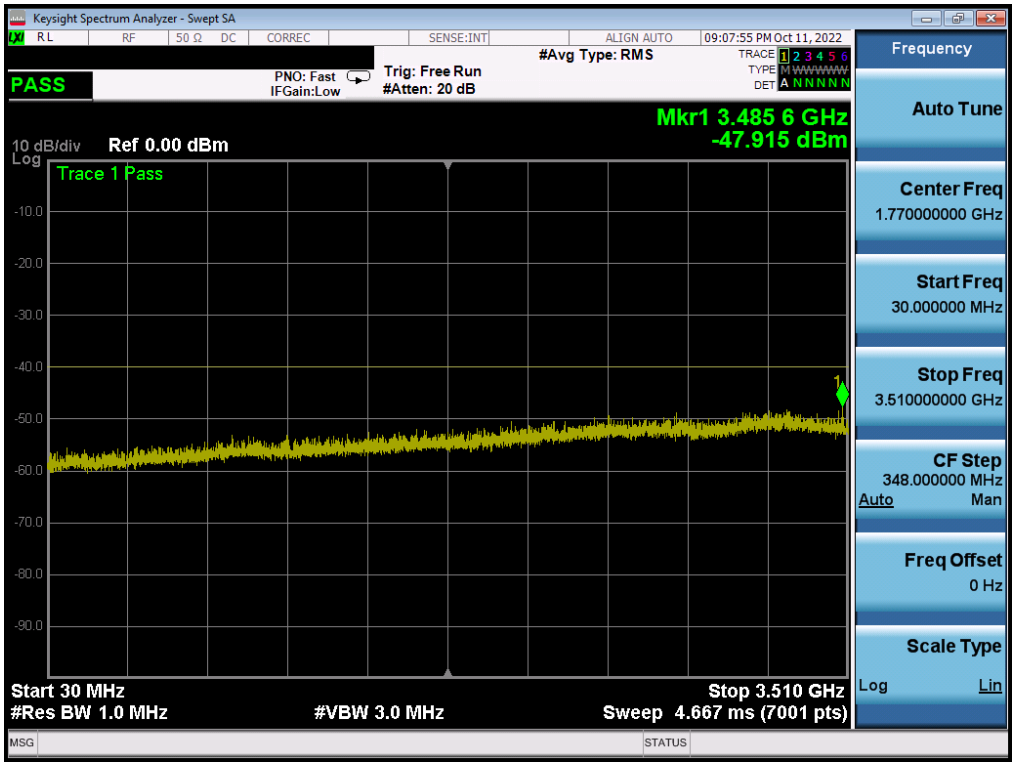
Plot 7-92. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant I)



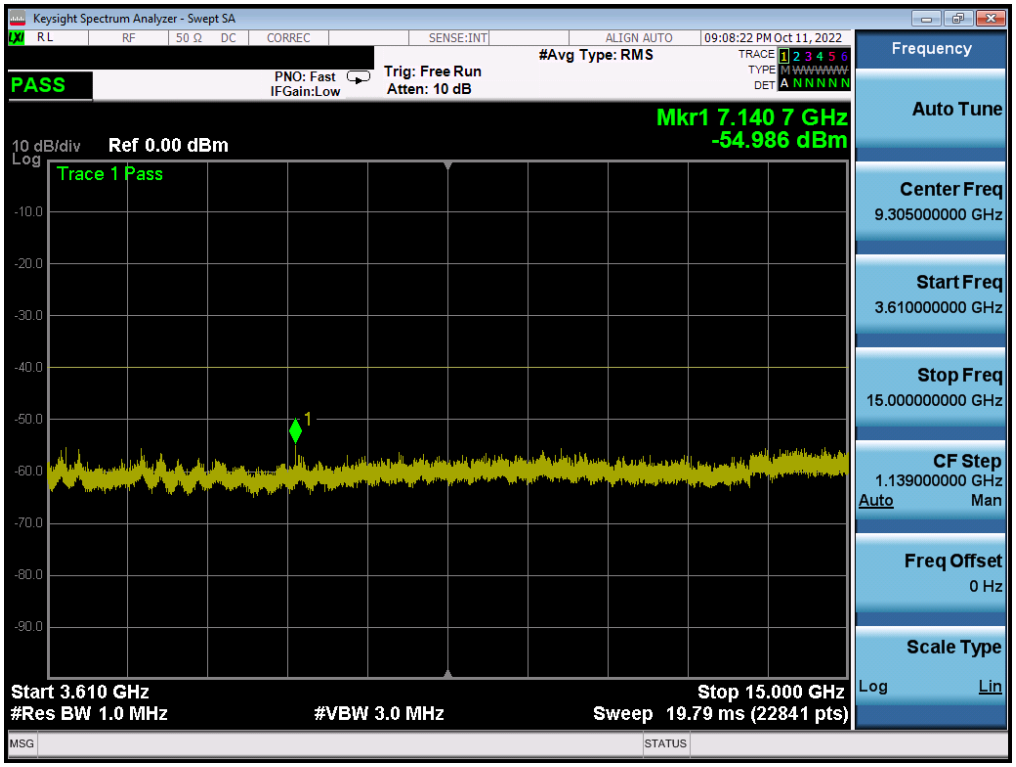
Plot 7-93. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant I)

Plot 7-94. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant I)

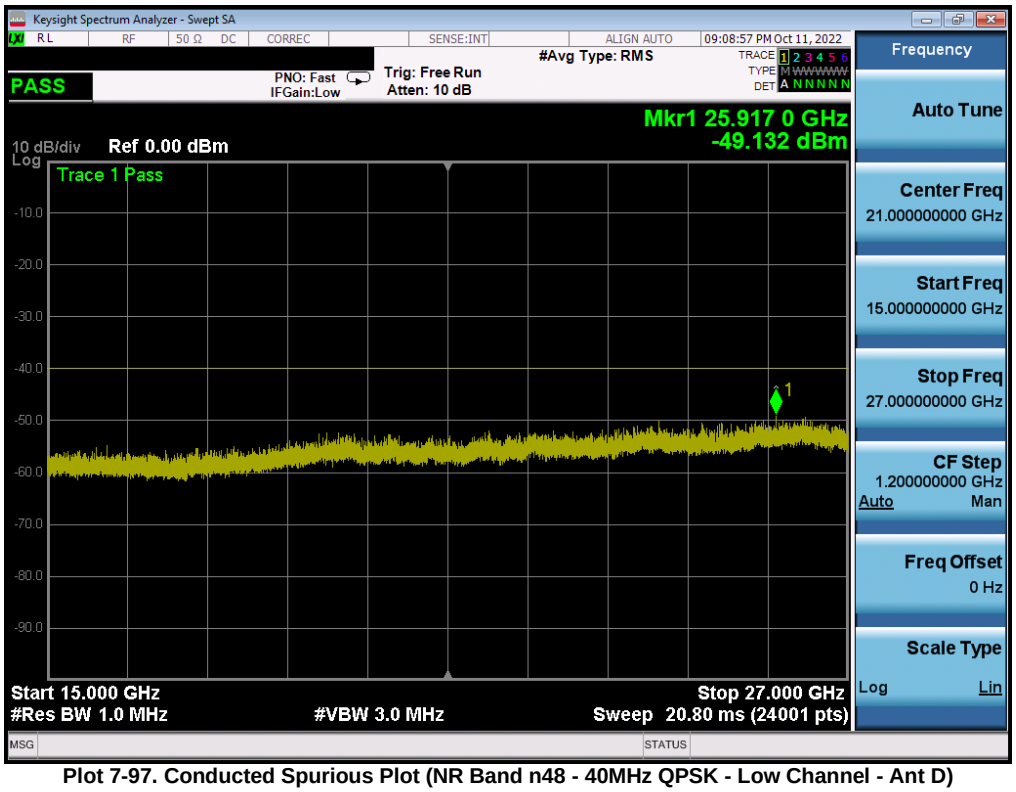
NR Band n48 – Ant D



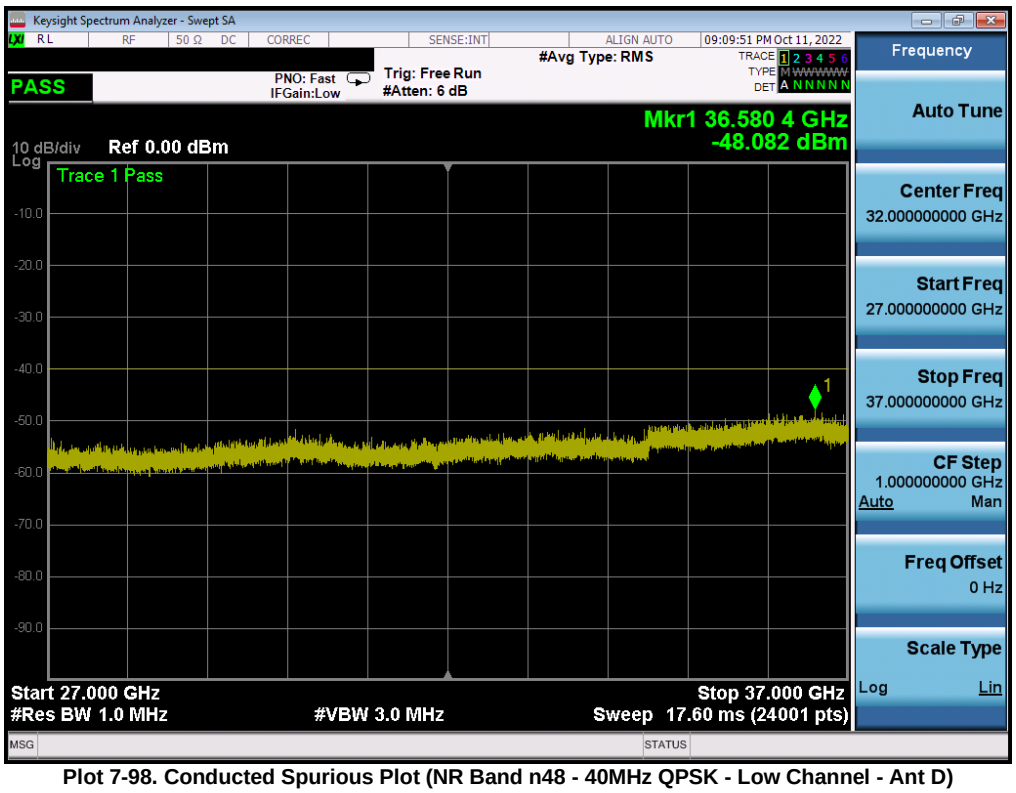
Plot 7-95. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant D)



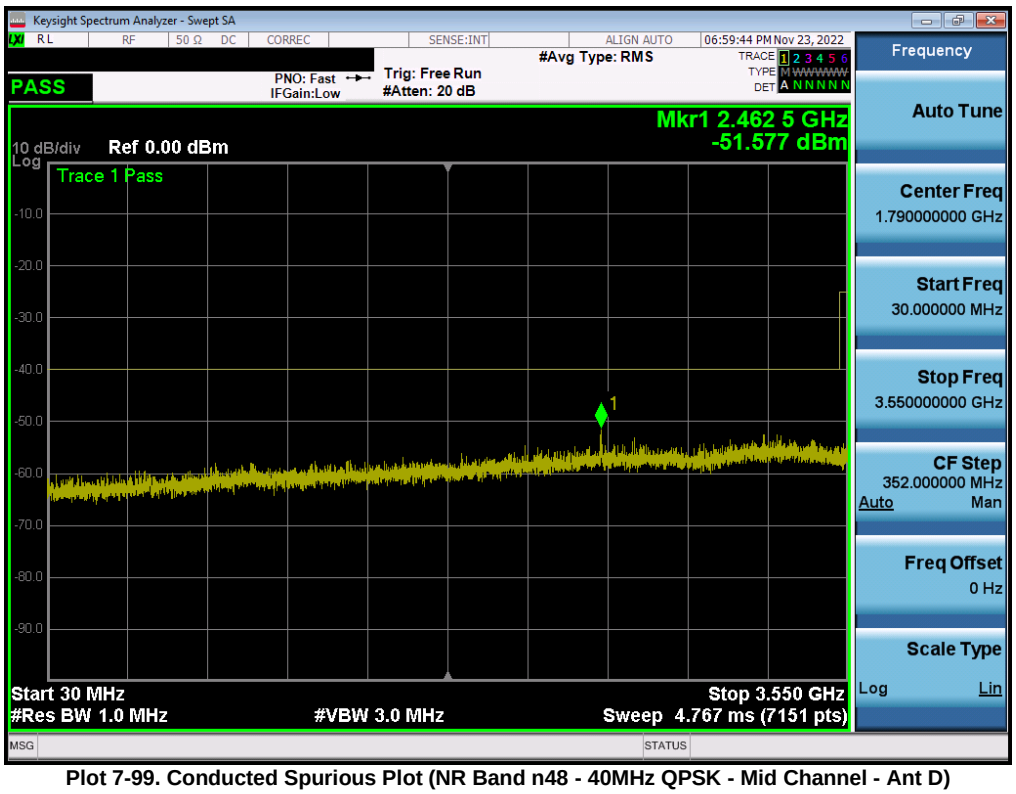
Plot 7-96. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant D)



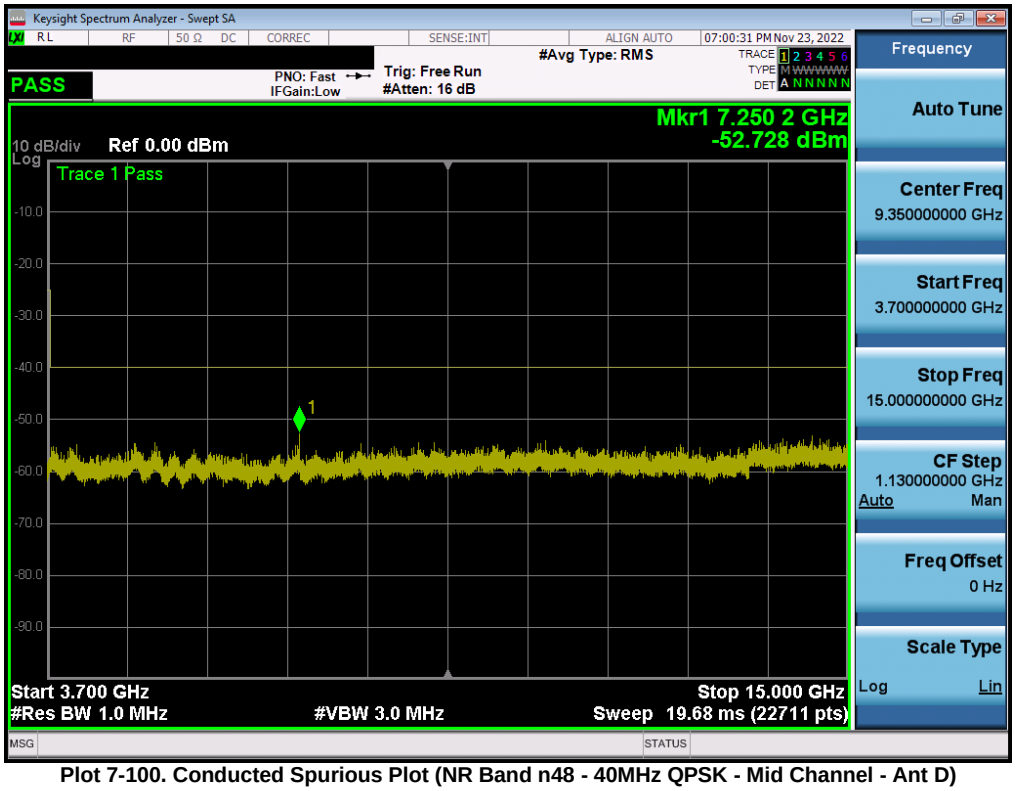
Plot 7-97. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant D)



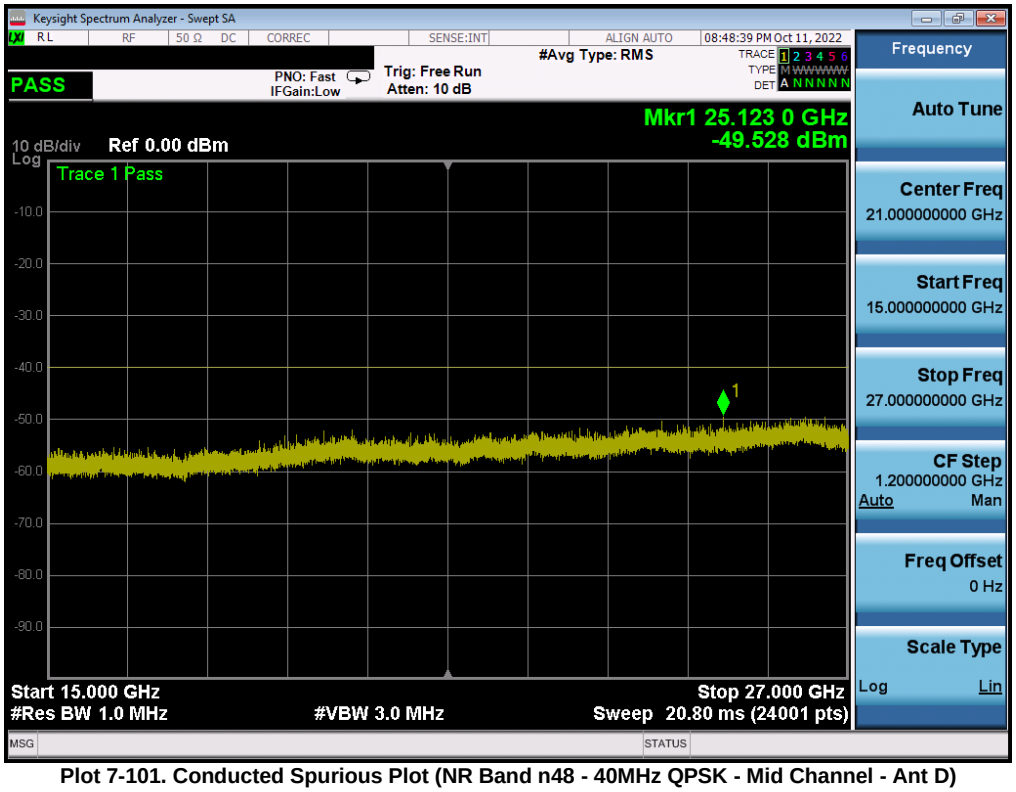
Plot 7-98. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant D)



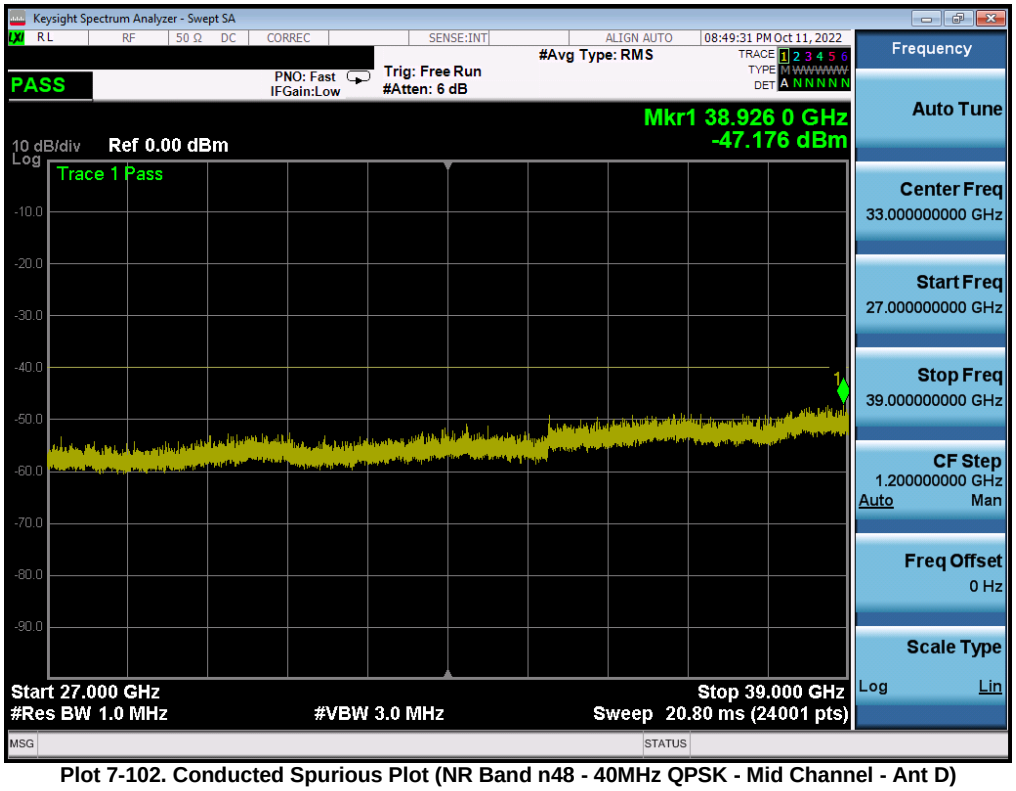
Plot 7-99. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant D)



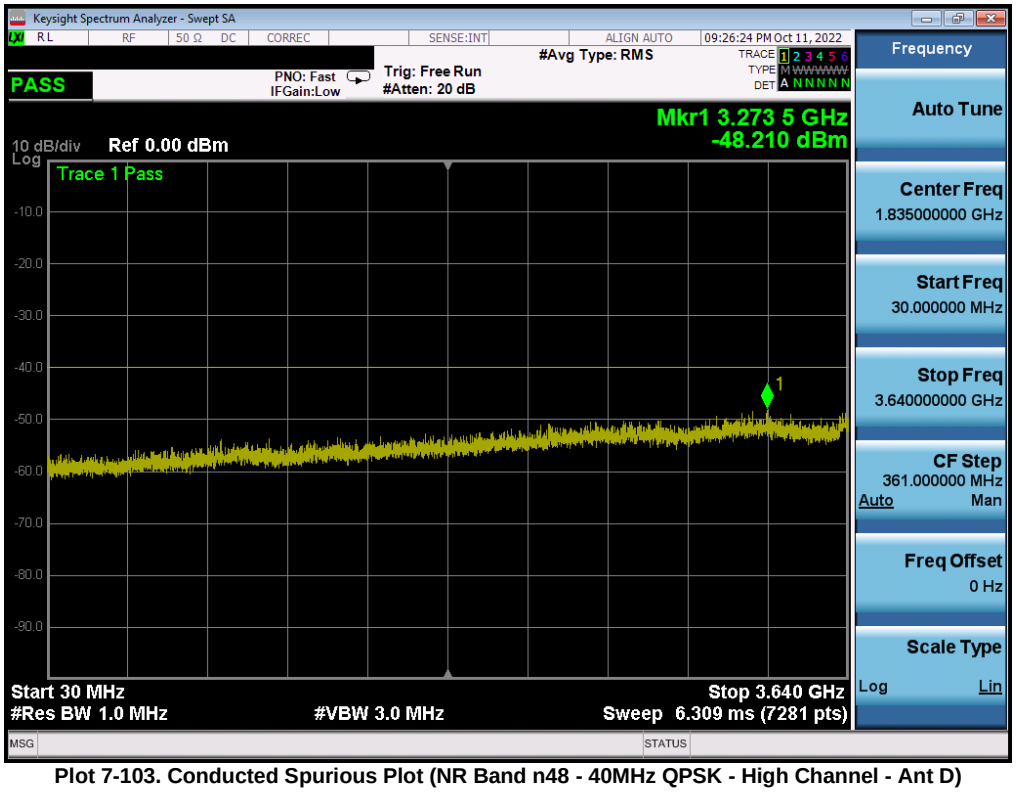
Plot 7-100. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant D)



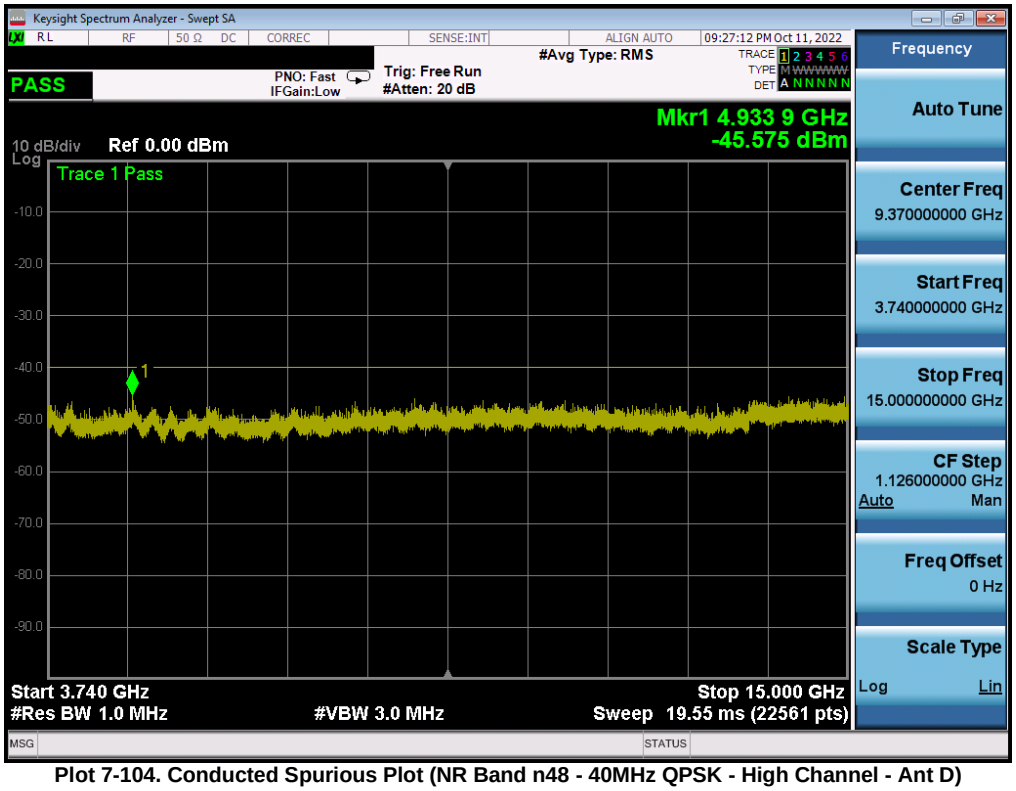
Plot 7-101. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant D)



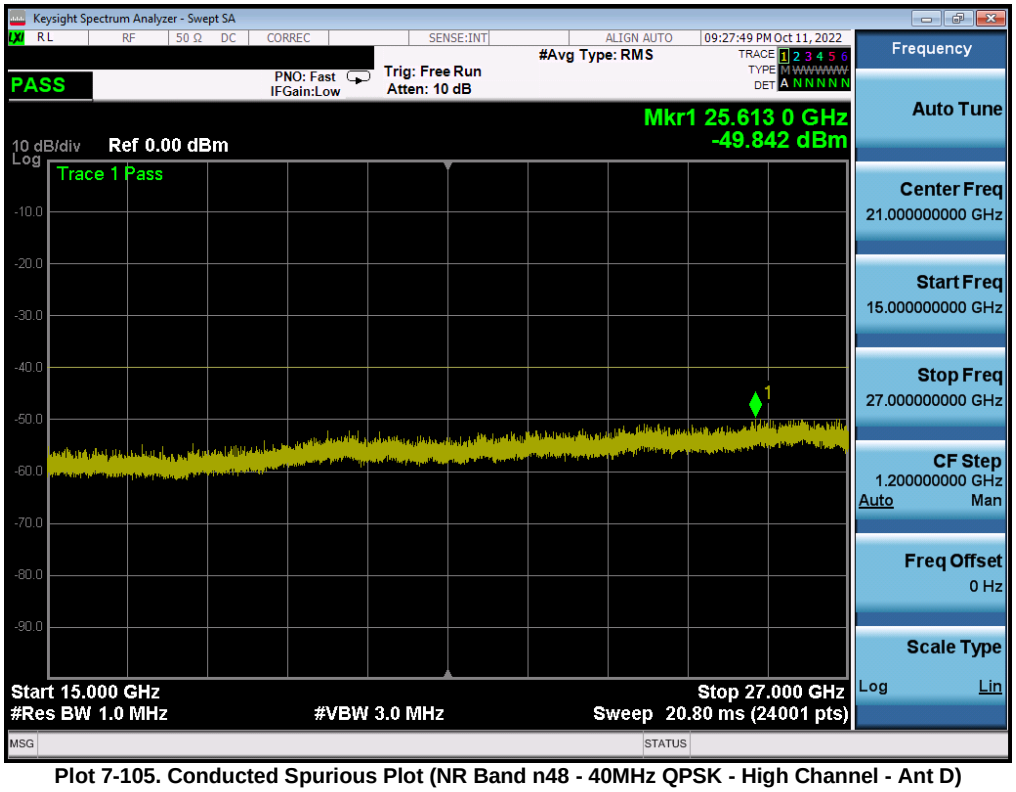
Plot 7-102. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant D)



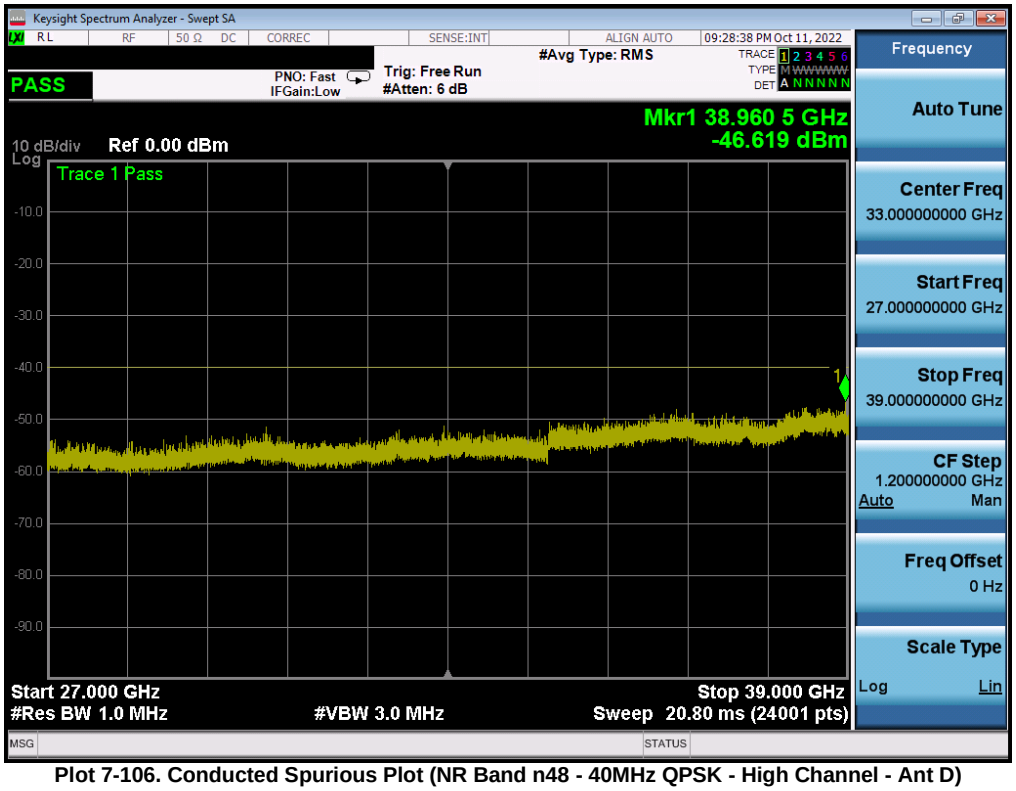
Plot 7-103. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant D)



Plot 7-104. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant D)



Plot 7-105. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant D)



Plot 7-106. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant D)

7.5 Band Edge Emissions at Antenna Terminal

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.

For an End User Device, 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

ANSI C63.26-2015 – Section 5.7.3

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.

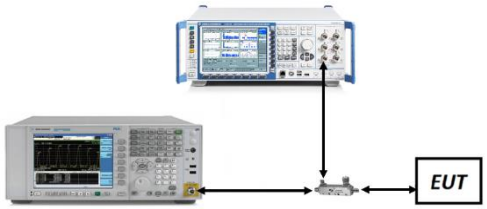


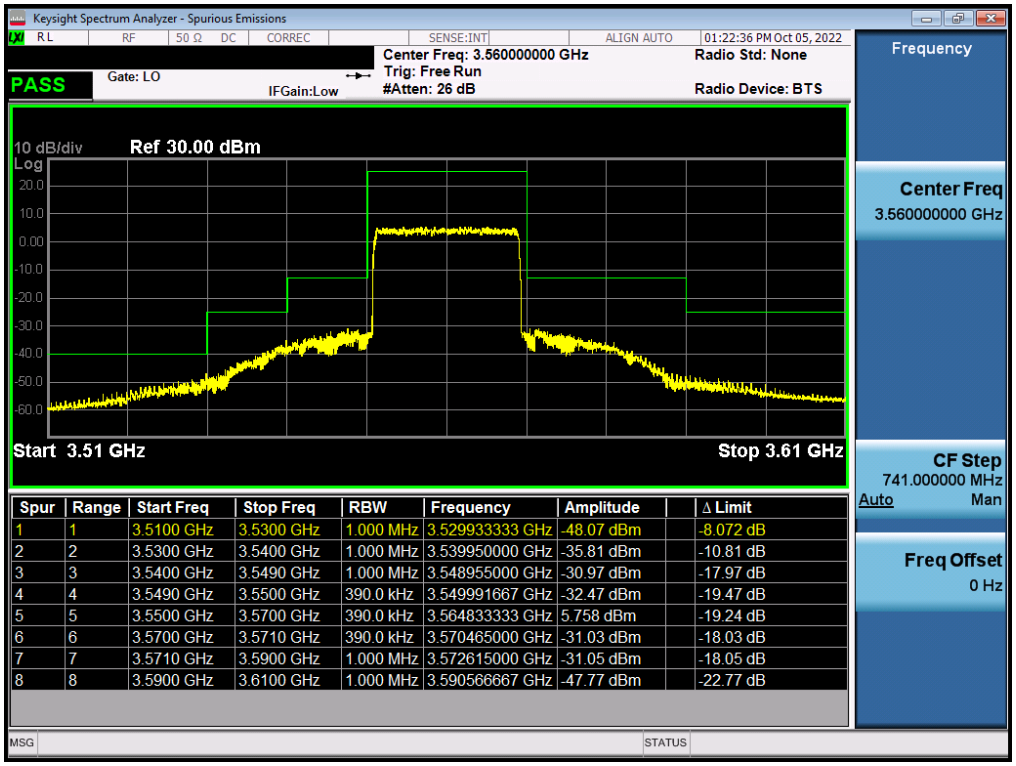
Figure 7-4. Test Instrument & Measurement Setup

Test Notes

1. Per 96.41(e)(3)(i), 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. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The fundamental emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

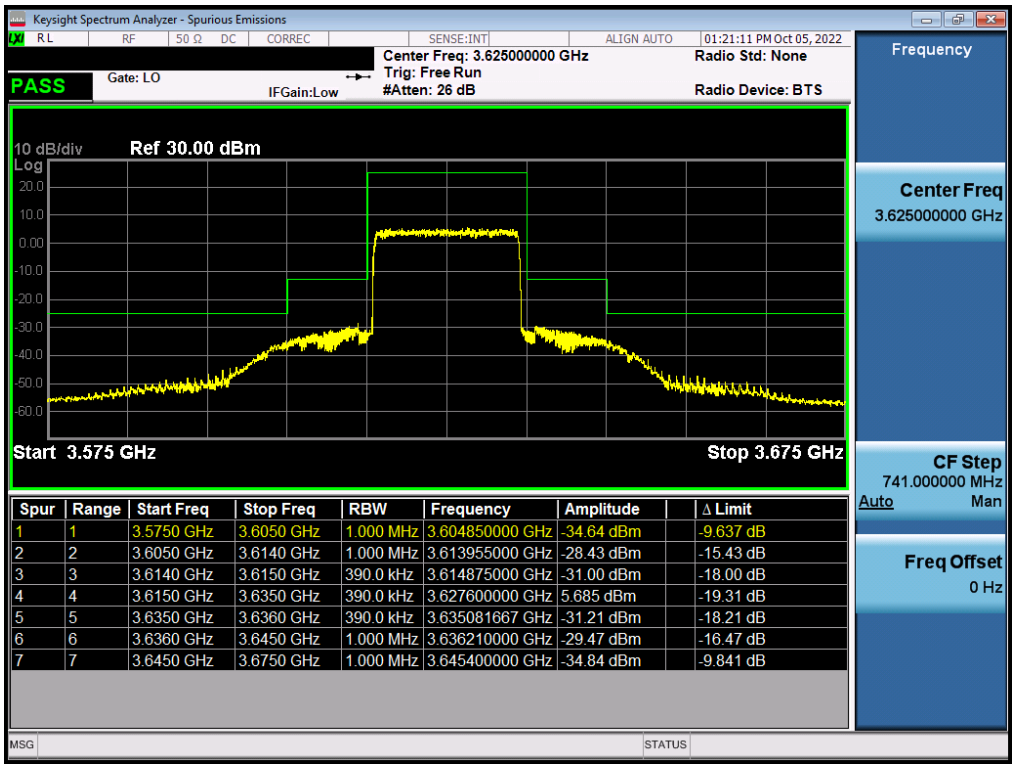
2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

LTE Band 48



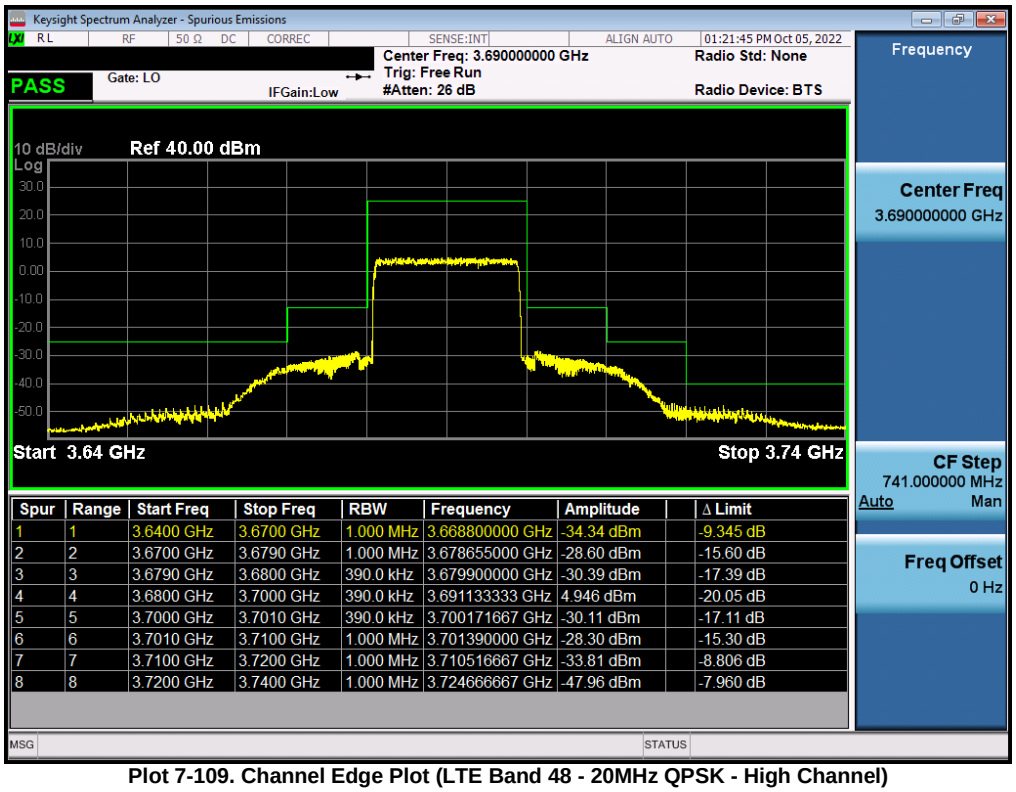
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.529933333 GHz	-48.07 dBm	-8.072 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.539950000 GHz	-35.81 dBm	-10.81 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548955000 GHz	-30.97 dBm	-17.97 dB
4	4	3.5490 GHz	3.5500 GHz	390.0 kHz	3.549991667 GHz	-32.47 dBm	-19.47 dB
5	5	3.5500 GHz	3.5700 GHz	390.0 kHz	3.564833333 GHz	5.758 dBm	-19.24 dB
6	6	3.5700 GHz	3.5710 GHz	390.0 kHz	3.570465000 GHz	-31.03 dBm	-18.03 dB
7	7	3.5710 GHz	3.5900 GHz	1.000 MHz	3.572615000 GHz	-31.05 dBm	-18.05 dB
8	8	3.5900 GHz	3.6100 GHz	1.000 MHz	3.590566667 GHz	-47.77 dBm	-22.77 dB

Plot 7-107. Channel Edge Plot (LTE Band 48 - 20MHz QPSK - Low Channel)



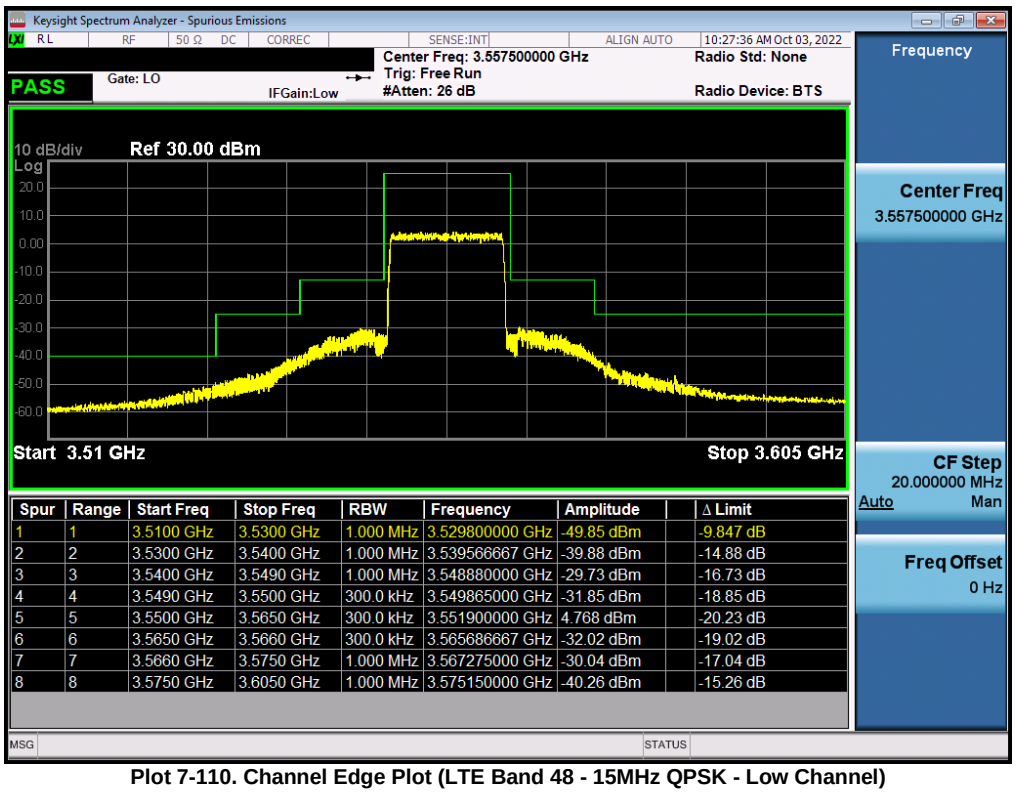
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5750 GHz	3.6050 GHz	1.000 MHz	3.604850000 GHz	-34.64 dBm	-9.637 dB
2	2	3.6050 GHz	3.6140 GHz	1.000 MHz	3.613955000 GHz	-28.43 dBm	-15.43 dB
3	3	3.6140 GHz	3.6150 GHz	390.0 kHz	3.614875000 GHz	-31.00 dBm	-18.00 dB
4	4	3.6150 GHz	3.6350 GHz	390.0 kHz	3.627600000 GHz	5.685 dBm	-19.31 dB
5	5	3.6350 GHz	3.6360 GHz	390.0 kHz	3.635081667 GHz	-31.21 dBm	-18.21 dB
6	6	3.6360 GHz	3.6450 GHz	1.000 MHz	3.636210000 GHz	-29.47 dBm	-16.47 dB
7	7	3.6450 GHz	3.6750 GHz	1.000 MHz	3.645400000 GHz	-34.84 dBm	-9.841 dB

Plot 7-108. Channel Edge Plot (LTE Band 48 - 20MHz QPSK - Mid Channel)



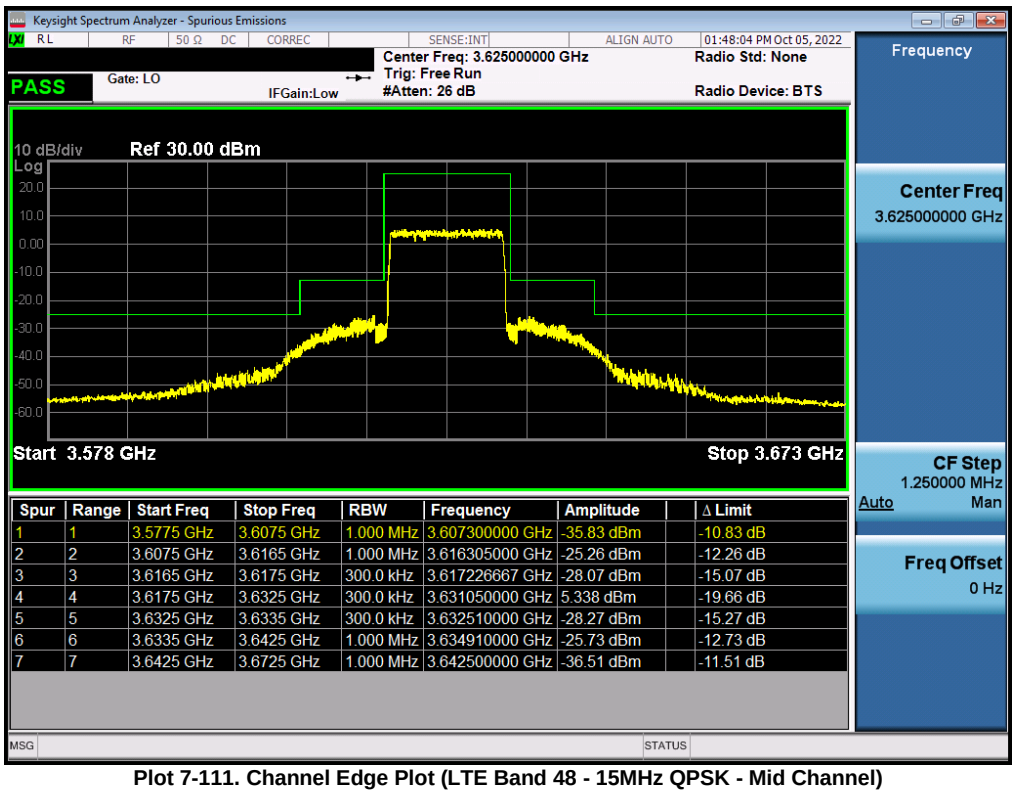
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6400 GHz	3.6700 GHz	1.000 MHz	3.668800000 GHz	-34.34 dBm	-9.345 dB
2	2	3.6700 GHz	3.6790 GHz	1.000 MHz	3.678655000 GHz	-28.60 dBm	-15.60 dB
3	3	3.6790 GHz	3.6800 GHz	390.0 kHz	3.679900000 GHz	-30.39 dBm	-17.39 dB
4	4	3.6800 GHz	3.7000 GHz	390.0 kHz	3.691133333 GHz	4.946 dBm	-20.05 dB
5	5	3.7000 GHz	3.7010 GHz	390.0 kHz	3.700171667 GHz	-30.11 dBm	-17.11 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701390000 GHz	-28.30 dBm	-15.30 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.710516667 GHz	-33.81 dBm	-8.806 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.724666667 GHz	-47.96 dBm	-7.960 dB

Plot 7-109. Channel Edge Plot (LTE Band 48 - 20MHz QPSK - High Channel)



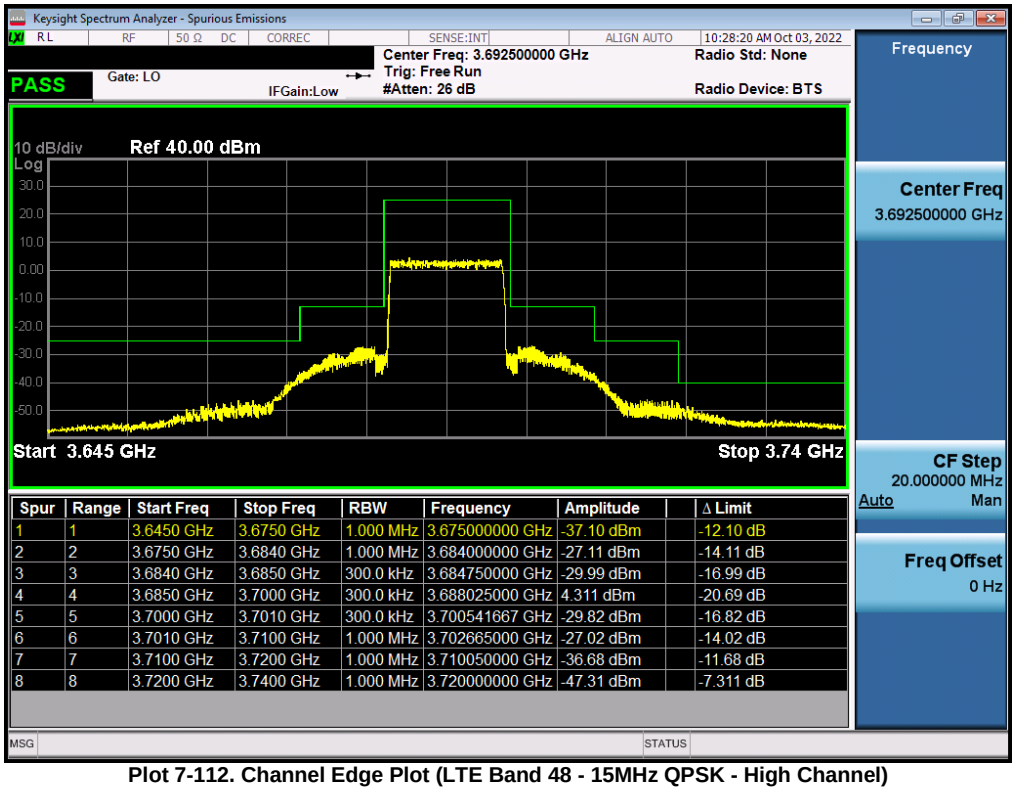
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.529800000 GHz	-49.85 dBm	-9.847 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.539566667 GHz	-39.88 dBm	-14.88 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548880000 GHz	-29.73 dBm	-16.73 dB
4	4	3.5490 GHz	3.5500 GHz	300.0 kHz	3.549865000 GHz	-31.85 dBm	-18.85 dB
5	5	3.5500 GHz	3.5650 GHz	300.0 kHz	3.551900000 GHz	4.768 dBm	-20.23 dB
6	6	3.5650 GHz	3.5660 GHz	300.0 kHz	3.565686667 GHz	-32.02 dBm	-19.02 dB
7	7	3.5660 GHz	3.5750 GHz	1.000 MHz	3.567275000 GHz	-30.04 dBm	-17.04 dB
8	8	3.5750 GHz	3.6050 GHz	1.000 MHz	3.575150000 GHz	-40.26 dBm	-15.26 dB

Plot 7-110. Channel Edge Plot (LTE Band 48 - 15MHz QPSK - Low Channel)



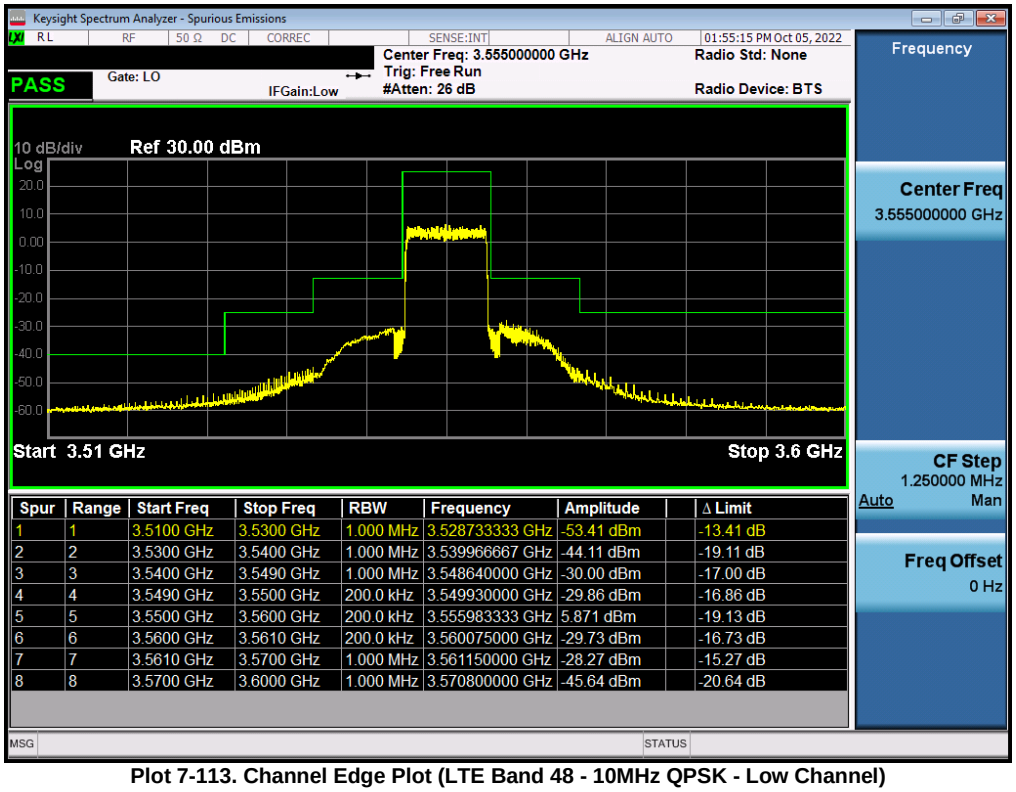
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5775 GHz	3.6075 GHz	1.000 MHz	3.607300000 GHz	-35.83 dBm	-10.83 dB
2	2	3.6075 GHz	3.6165 GHz	1.000 MHz	3.616305000 GHz	-25.26 dBm	-12.26 dB
3	3	3.6165 GHz	3.6175 GHz	300.0 kHz	3.617226667 GHz	-28.07 dBm	-15.07 dB
4	4	3.6175 GHz	3.6325 GHz	300.0 kHz	3.631050000 GHz	5.338 dBm	-19.66 dB
5	5	3.6325 GHz	3.6335 GHz	300.0 kHz	3.632510000 GHz	-28.27 dBm	-15.27 dB
6	6	3.6335 GHz	3.6425 GHz	1.000 MHz	3.634910000 GHz	-25.73 dBm	-12.73 dB
7	7	3.6425 GHz	3.6725 GHz	1.000 MHz	3.642500000 GHz	-36.51 dBm	-11.51 dB

Plot 7-111. Channel Edge Plot (LTE Band 48 - 15MHz QPSK - Mid Channel)



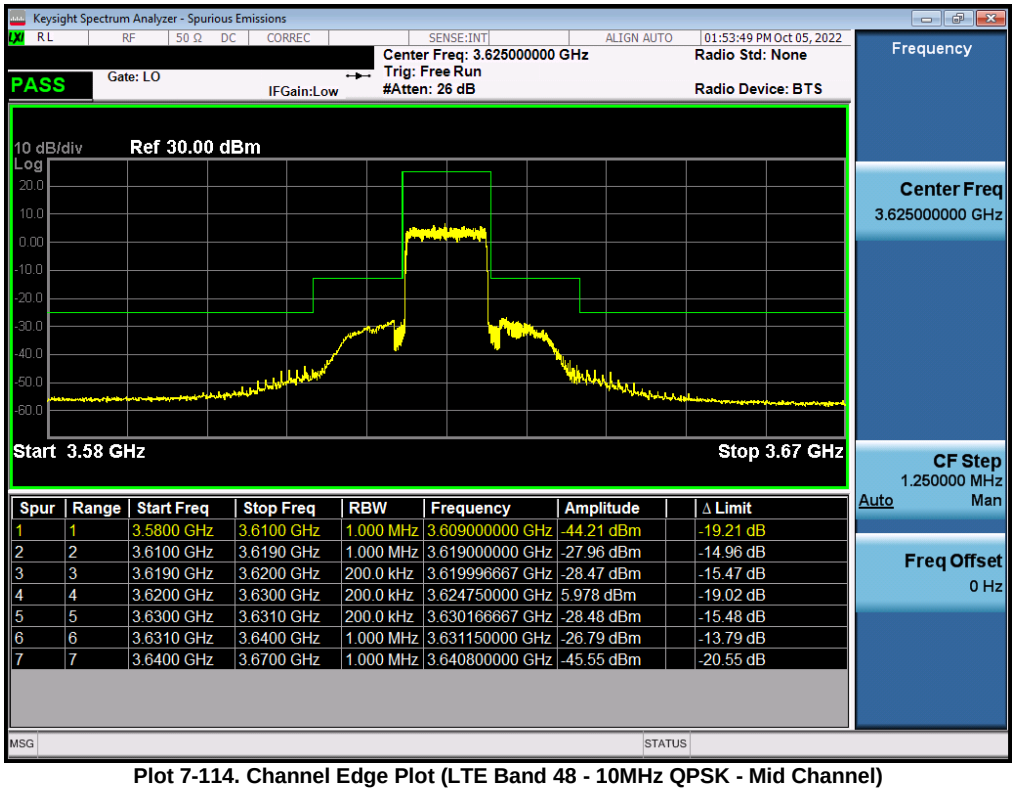
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6450 GHz	3.6750 GHz	1.000 MHz	3.675000000 GHz	-37.10 dBm	-12.10 dB
2	2	3.6750 GHz	3.6840 GHz	1.000 MHz	3.684000000 GHz	-27.11 dBm	-14.11 dB
3	3	3.6840 GHz	3.6850 GHz	300.0 kHz	3.684750000 GHz	-29.99 dBm	-16.99 dB
4	4	3.6850 GHz	3.7000 GHz	300.0 kHz	3.688025000 GHz	4.311 dBm	-20.69 dB
5	5	3.7000 GHz	3.7010 GHz	300.0 kHz	3.700541667 GHz	-29.82 dBm	-16.82 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.702665000 GHz	-27.02 dBm	-14.02 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.710050000 GHz	-36.68 dBm	-11.68 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.720000000 GHz	-47.31 dBm	-7.311 dB

Plot 7-112. Channel Edge Plot (LTE Band 48 - 15MHz QPSK - High Channel)



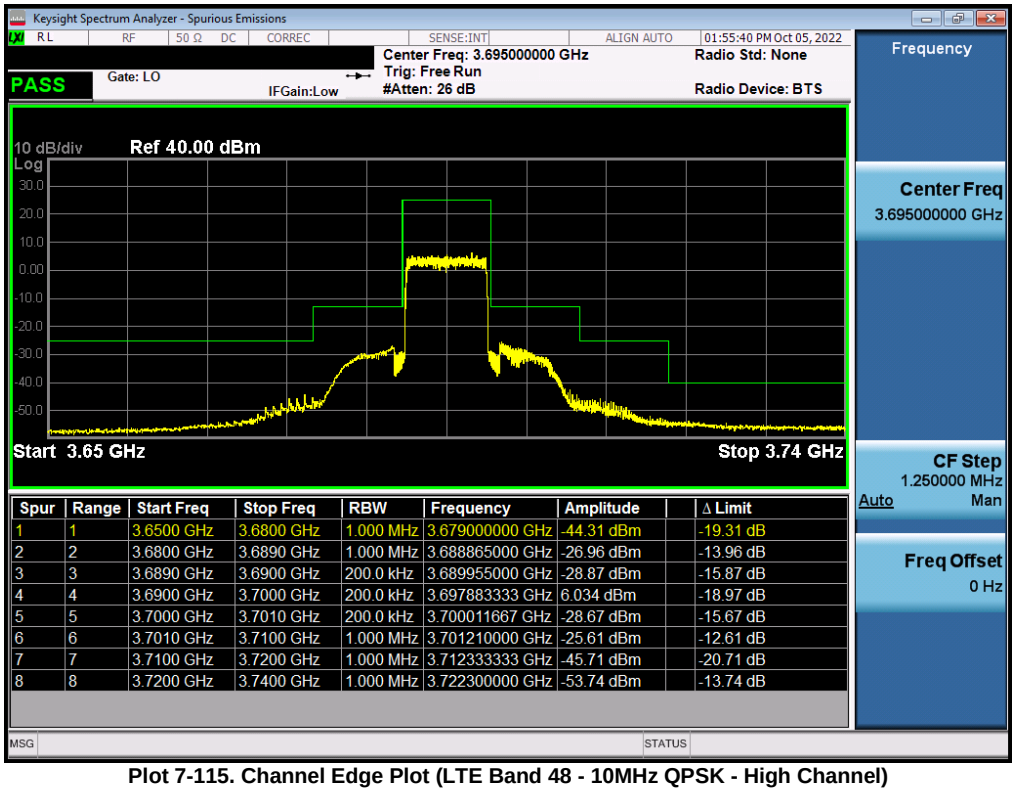
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.528733333 GHz	-53.41 dBm	-13.41 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.539966667 GHz	-44.11 dBm	-19.11 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548640000 GHz	-30.00 dBm	-17.00 dB
4	4	3.5490 GHz	3.5500 GHz	200.0 kHz	3.549930000 GHz	-29.86 dBm	-16.86 dB
5	5	3.5500 GHz	3.5600 GHz	200.0 kHz	3.555983333 GHz	5.871 dBm	-19.13 dB
6	6	3.5600 GHz	3.5610 GHz	200.0 kHz	3.560075000 GHz	-29.73 dBm	-16.73 dB
7	7	3.5610 GHz	3.5700 GHz	1.000 MHz	3.561150000 GHz	-28.27 dBm	-15.27 dB
8	8	3.5700 GHz	3.6000 GHz	1.000 MHz	3.570800000 GHz	-45.64 dBm	-20.64 dB

Plot 7-113. Channel Edge Plot (LTE Band 48 - 10MHz QPSK - Low Channel)



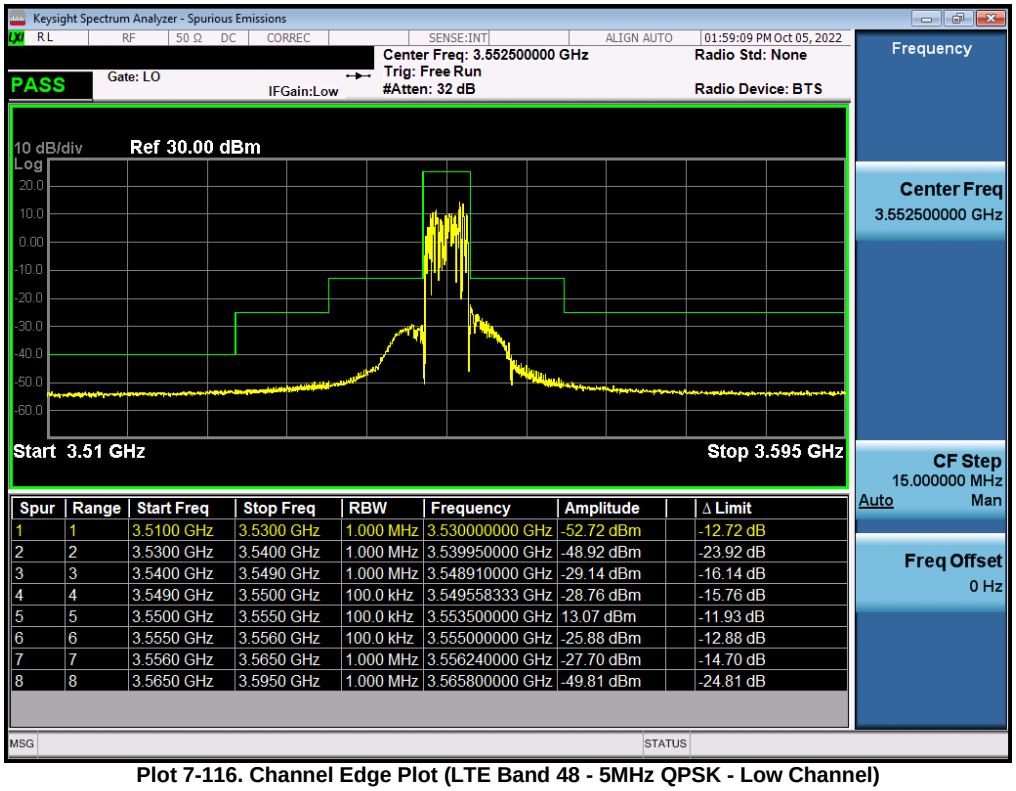
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5800 GHz	3.6100 GHz	1.000 MHz	3.609000000 GHz	-44.21 dBm	-19.21 dB
2	2	3.6100 GHz	3.6190 GHz	1.000 MHz	3.619000000 GHz	-27.96 dBm	-14.96 dB
3	3	3.6190 GHz	3.6200 GHz	200.0 kHz	3.619996667 GHz	-28.47 dBm	-15.47 dB
4	4	3.6200 GHz	3.6300 GHz	200.0 kHz	3.624750000 GHz	5.978 dBm	-19.02 dB
5	5	3.6300 GHz	3.6310 GHz	200.0 kHz	3.630166667 GHz	-28.48 dBm	-15.48 dB
6	6	3.6310 GHz	3.6400 GHz	1.000 MHz	3.631150000 GHz	-26.79 dBm	-13.79 dB
7	7	3.6400 GHz	3.6700 GHz	1.000 MHz	3.640800000 GHz	-45.55 dBm	-20.55 dB

Plot 7-114. Channel Edge Plot (LTE Band 48 - 10MHz QPSK - Mid Channel)



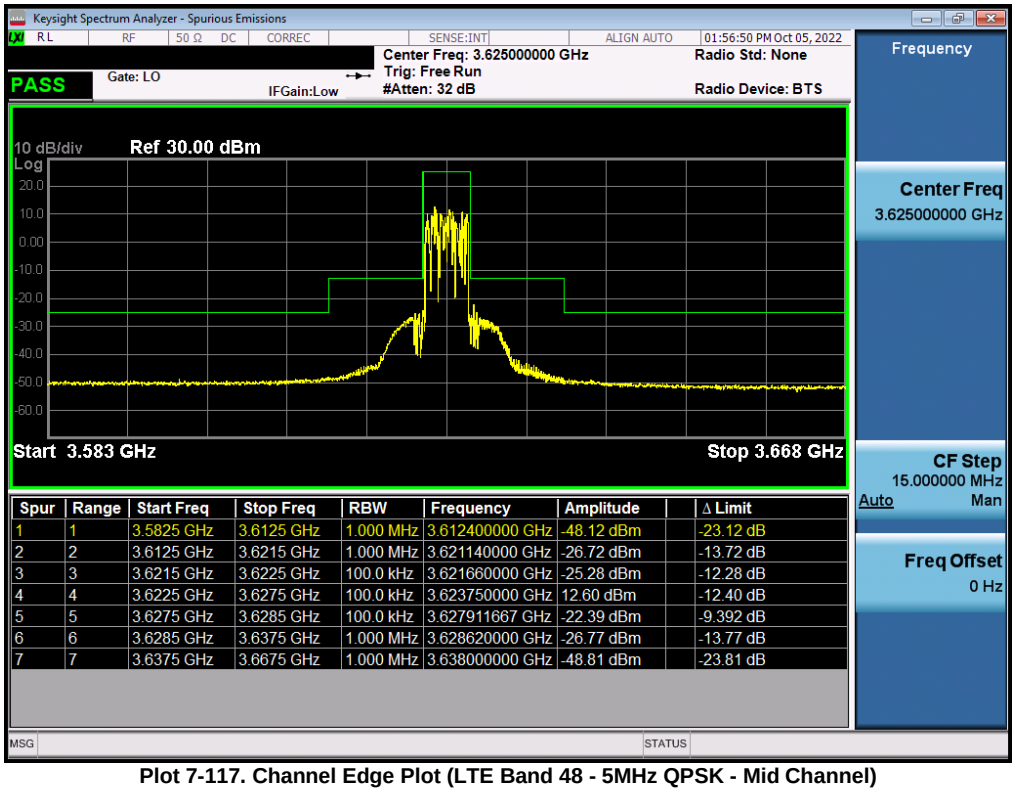
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6500 GHz	3.6800 GHz	1.000 MHz	3.679000000 GHz	-44.31 dBm	-19.31 dB
2	2	3.6800 GHz	3.6890 GHz	1.000 MHz	3.688865000 GHz	-26.96 dBm	-13.96 dB
3	3	3.6890 GHz	3.6900 GHz	200.0 kHz	3.689955000 GHz	-28.87 dBm	-15.87 dB
4	4	3.6900 GHz	3.7000 GHz	200.0 kHz	3.697883333 GHz	6.034 dBm	-18.97 dB
5	5	3.7000 GHz	3.7010 GHz	200.0 kHz	3.700011667 GHz	-28.67 dBm	-15.67 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701210000 GHz	-25.61 dBm	-12.61 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.712333333 GHz	-45.71 dBm	-20.71 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.722300000 GHz	-53.74 dBm	-13.74 dB

Plot 7-115. Channel Edge Plot (LTE Band 48 - 10MHz QPSK - High Channel)



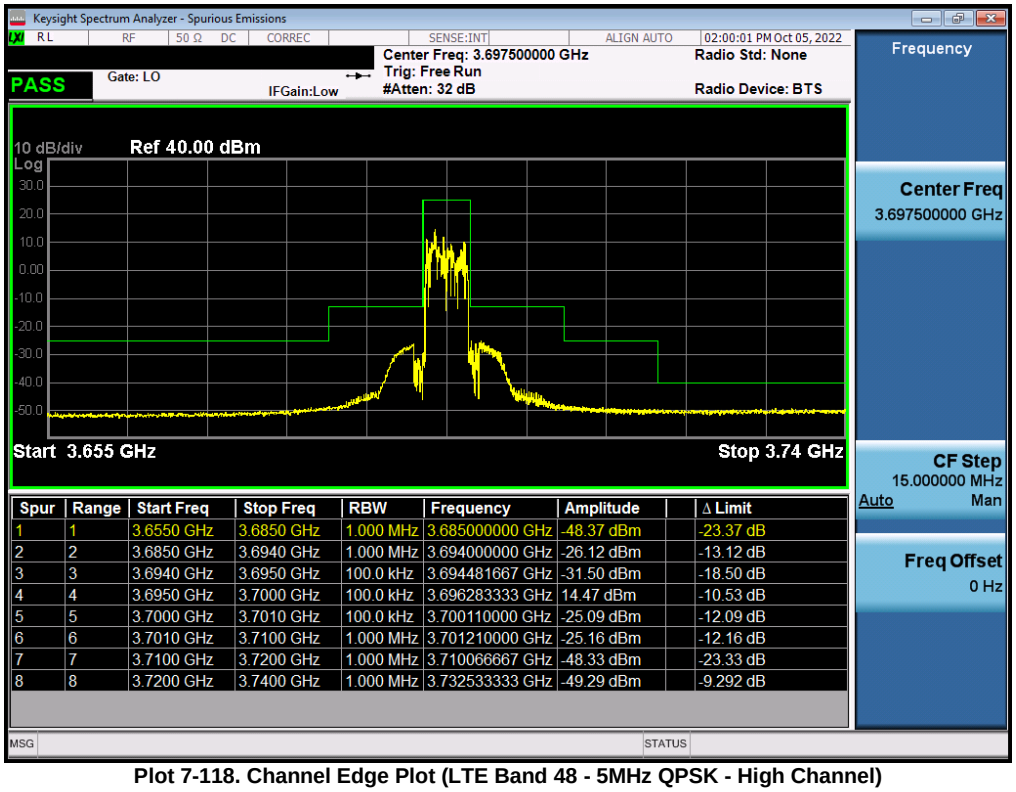
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.530000000 GHz	-52.72 dBm	-12.72 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.539950000 GHz	-48.92 dBm	-23.92 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548910000 GHz	-29.14 dBm	-16.14 dB
4	4	3.5490 GHz	3.5500 GHz	100.0 kHz	3.549558333 GHz	-28.76 dBm	-15.76 dB
5	5	3.5500 GHz	3.5550 GHz	100.0 kHz	3.553500000 GHz	13.07 dBm	-11.93 dB
6	6	3.5550 GHz	3.5560 GHz	100.0 kHz	3.555000000 GHz	-25.88 dBm	-12.88 dB
7	7	3.5560 GHz	3.5650 GHz	1.000 MHz	3.556240000 GHz	-27.70 dBm	-14.70 dB
8	8	3.5650 GHz	3.5950 GHz	1.000 MHz	3.565800000 GHz	-49.81 dBm	-24.81 dB

Plot 7-116. Channel Edge Plot (LTE Band 48 - 5MHz QPSK - Low Channel)



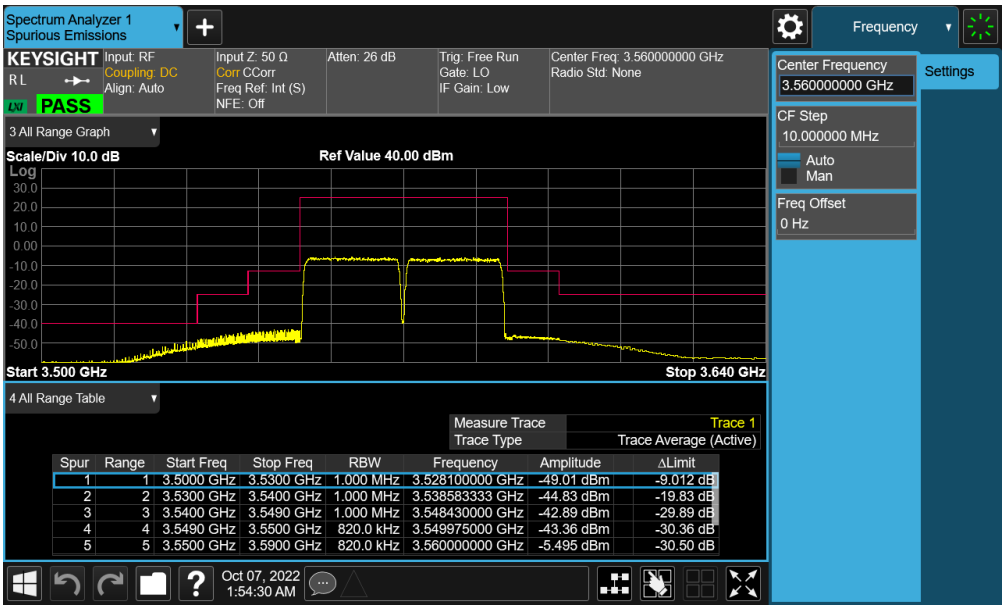
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5825 GHz	3.6125 GHz	1.000 MHz	3.612400000 GHz	-48.12 dBm	-23.12 dB
2	2	3.6125 GHz	3.6215 GHz	1.000 MHz	3.621140000 GHz	-26.72 dBm	-13.72 dB
3	3	3.6215 GHz	3.6225 GHz	100.0 kHz	3.621660000 GHz	-25.28 dBm	-12.28 dB
4	4	3.6225 GHz	3.6275 GHz	100.0 kHz	3.623750000 GHz	12.60 dBm	-12.40 dB
5	5	3.6275 GHz	3.6285 GHz	100.0 kHz	3.627911667 GHz	-22.39 dBm	-9.392 dB
6	6	3.6285 GHz	3.6375 GHz	1.000 MHz	3.628620000 GHz	-26.77 dBm	-13.77 dB
7	7	3.6375 GHz	3.6675 GHz	1.000 MHz	3.638000000 GHz	-48.81 dBm	-23.81 dB

Plot 7-117. Channel Edge Plot (LTE Band 48 - 5MHz QPSK - Mid Channel)

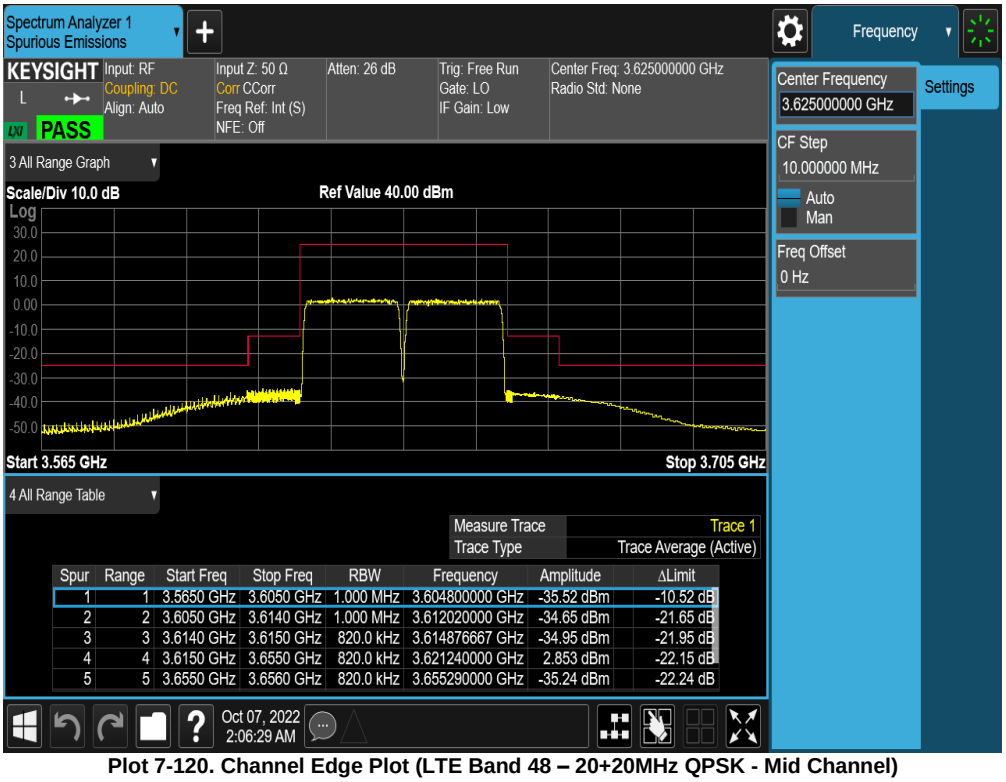


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6550 GHz	3.6850 GHz	1.000 MHz	3.685000000 GHz	-48.37 dBm	-23.37 dB
2	2	3.6850 GHz	3.6940 GHz	1.000 MHz	3.694000000 GHz	-26.12 dBm	-13.12 dB
3	3	3.6940 GHz	3.6950 GHz	100.0 kHz	3.694481667 GHz	-31.50 dBm	-18.50 dB
4	4	3.6950 GHz	3.7000 GHz	100.0 kHz	3.696283333 GHz	14.47 dBm	-10.53 dB
5	5	3.7000 GHz	3.7010 GHz	100.0 kHz	3.700110000 GHz	-25.09 dBm	-12.09 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701210000 GHz	-25.16 dBm	-12.16 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.710066667 GHz	-48.33 dBm	-23.33 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.732533333 GHz	-49.29 dBm	-9.292 dB

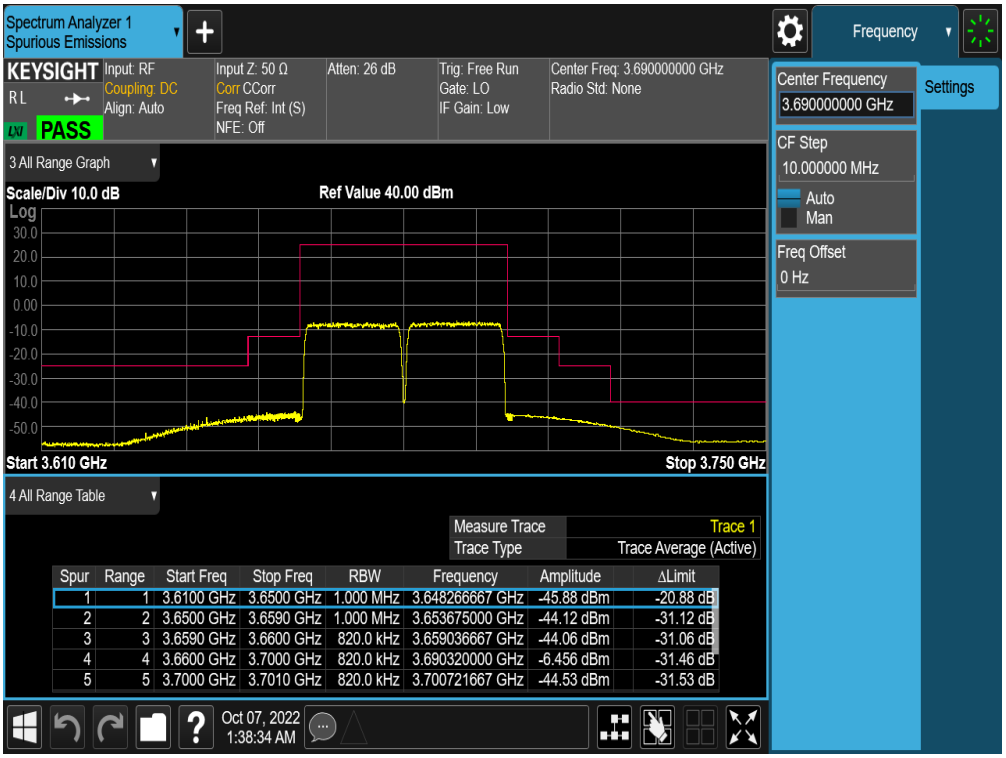
Plot 7-118. Channel Edge Plot (LTE Band 48 - 5MHz QPSK - High Channel)



Plot 7-119. Channel Edge Plot (LTE Band 48 – 20+20MHz QPSK - Low Channel)

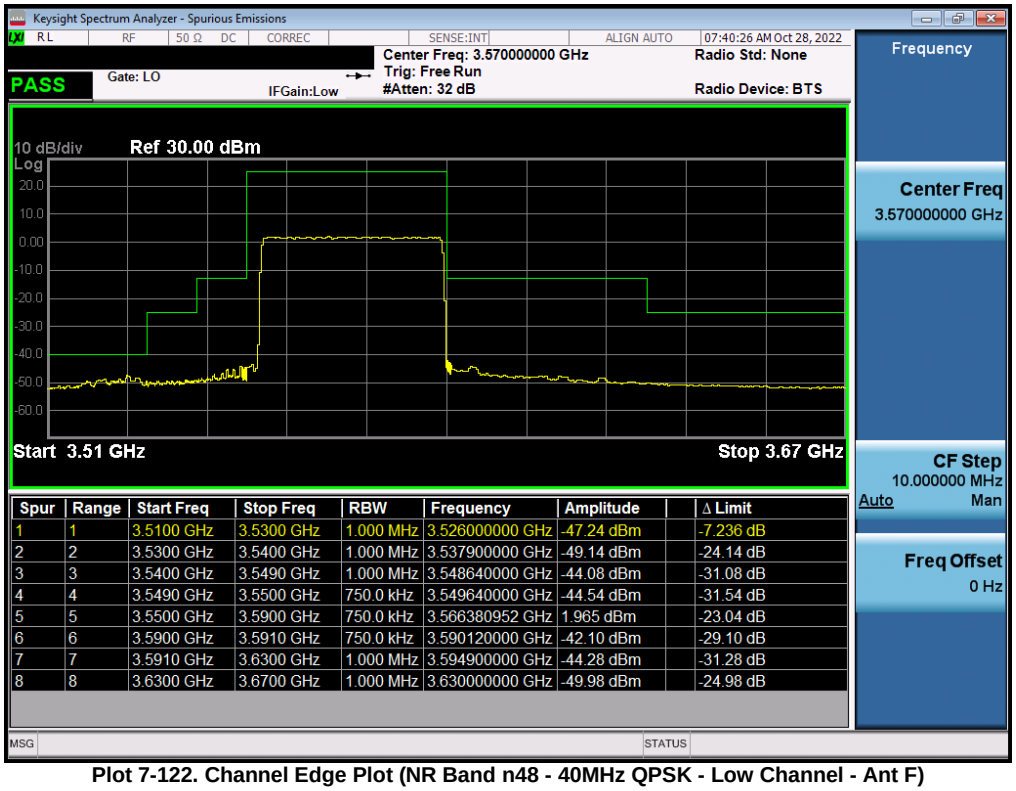


Plot 7-120. Channel Edge Plot (LTE Band 48 – 20+20MHz QPSK - Mid Channel)



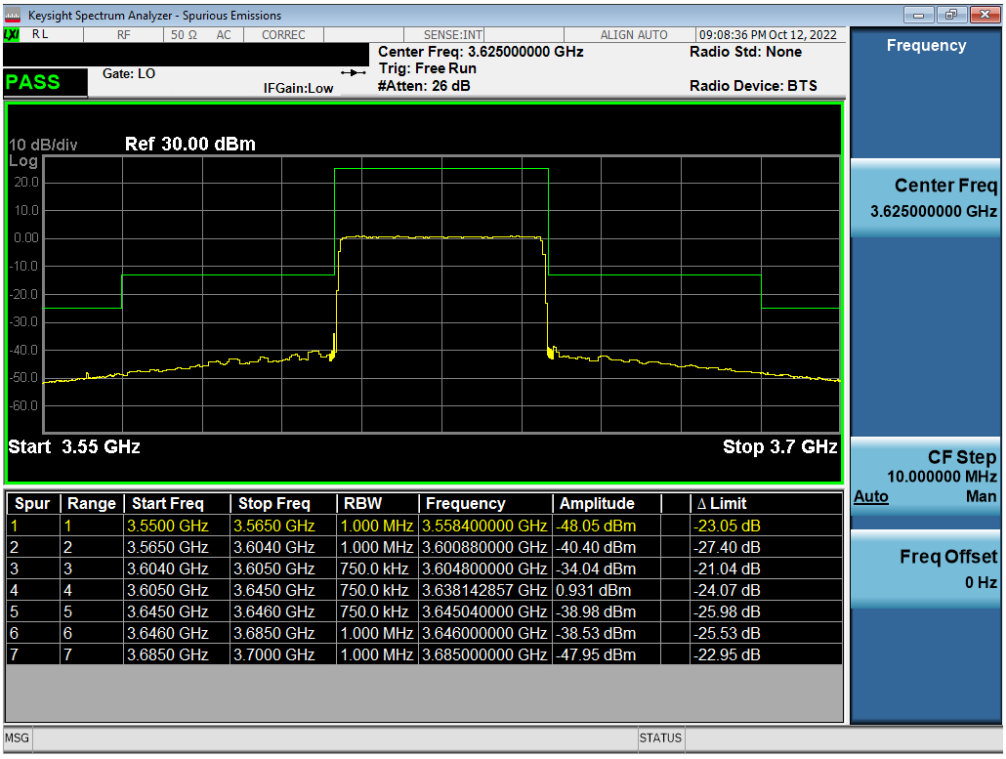
Plot 7-121. Channel Edge Plot (LTE Band 48 – 20+20MHz QPSK - High Channel)

NR Band n48 – Ant F



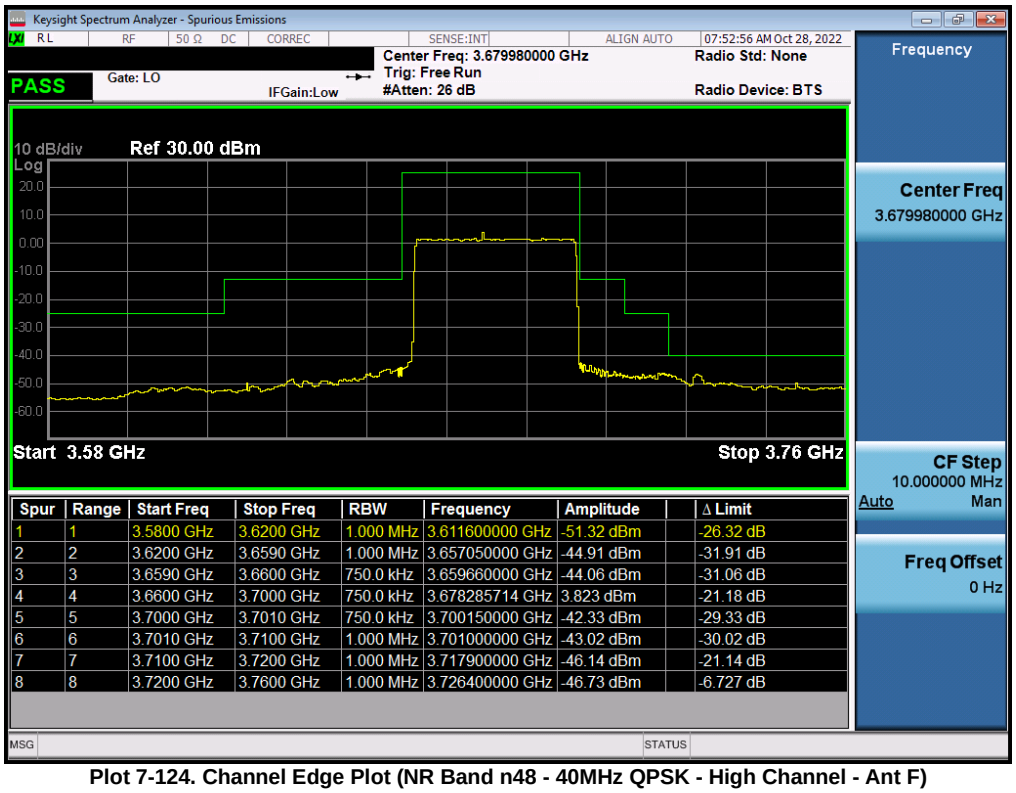
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.526000000 GHz	-47.24 dBm	-7.236 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.537900000 GHz	-49.14 dBm	-24.14 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548640000 GHz	-44.08 dBm	-31.08 dB
4	4	3.5490 GHz	3.5500 GHz	750.0 kHz	3.549640000 GHz	-44.54 dBm	-31.54 dB
5	5	3.5500 GHz	3.5900 GHz	750.0 kHz	3.566380952 GHz	1.965 dBm	-23.04 dB
6	6	3.5900 GHz	3.5910 GHz	750.0 kHz	3.590120000 GHz	-42.10 dBm	-29.10 dB
7	7	3.5910 GHz	3.6300 GHz	1.000 MHz	3.594900000 GHz	-44.28 dBm	-31.28 dB
8	8	3.6300 GHz	3.6700 GHz	1.000 MHz	3.630000000 GHz	-49.98 dBm	-24.98 dB

Plot 7-122. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant F)



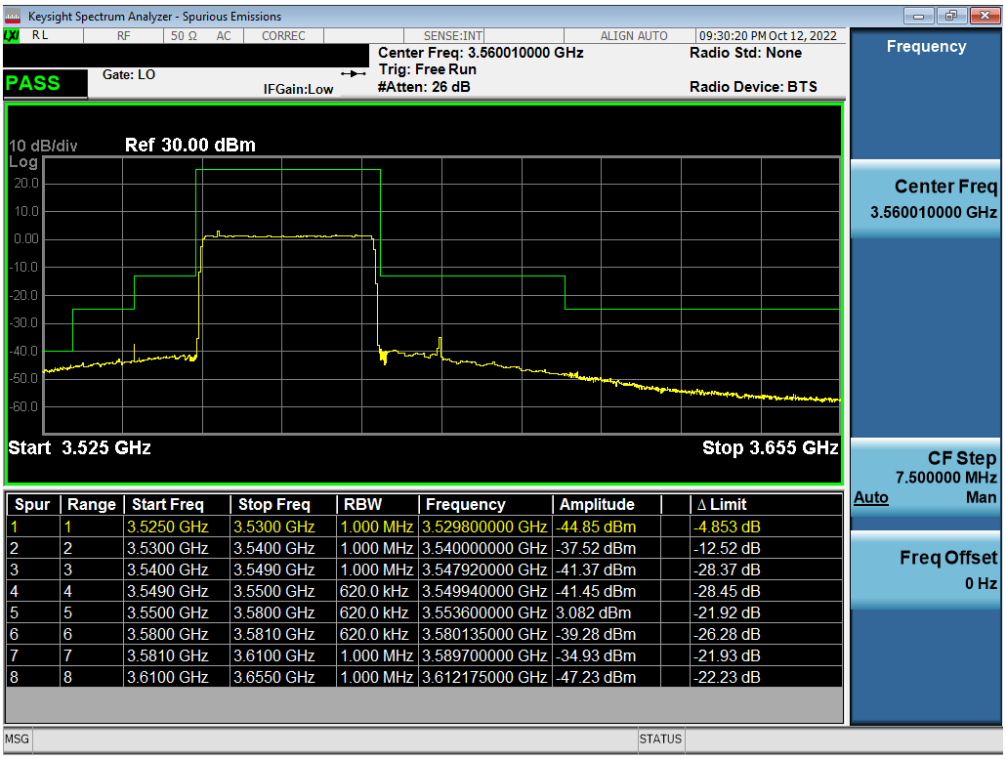
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5500 GHz	3.5650 GHz	1.000 MHz	3.558400000 GHz	-48.05 dBm	-23.05 dB
2	2	3.5650 GHz	3.6040 GHz	1.000 MHz	3.600880000 GHz	-40.40 dBm	-27.40 dB
3	3	3.6040 GHz	3.6050 GHz	750.0 kHz	3.604800000 GHz	-34.04 dBm	-21.04 dB
4	4	3.6050 GHz	3.6450 GHz	750.0 kHz	3.638142857 GHz	0.931 dBm	-24.07 dB
5	5	3.6450 GHz	3.6460 GHz	750.0 kHz	3.645040000 GHz	-38.98 dBm	-25.98 dB
6	6	3.6460 GHz	3.6850 GHz	1.000 MHz	3.646000000 GHz	-38.53 dBm	-25.53 dB
7	7	3.6850 GHz	3.7000 GHz	1.000 MHz	3.685000000 GHz	-47.95 dBm	-22.95 dB

Plot 7-123. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant F)



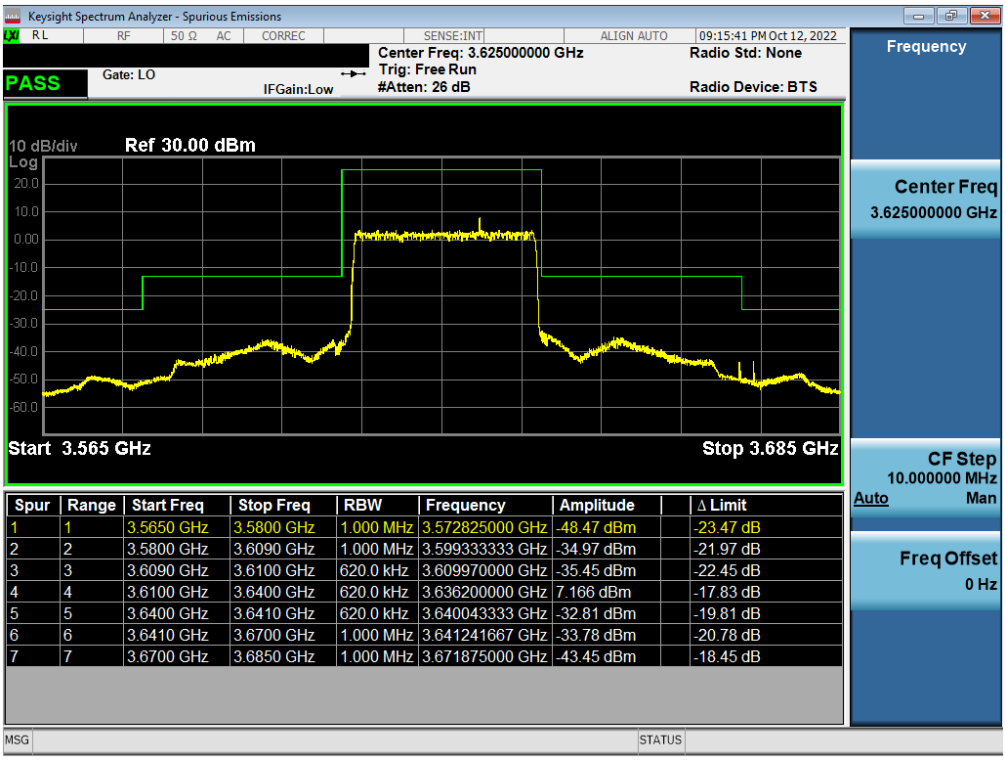
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5800 GHz	3.6200 GHz	1.000 MHz	3.611600000 GHz	-51.32 dBm	-26.32 dB
2	2	3.6200 GHz	3.6590 GHz	1.000 MHz	3.657050000 GHz	-44.91 dBm	-31.91 dB
3	3	3.6590 GHz	3.6600 GHz	750.0 kHz	3.659660000 GHz	-44.06 dBm	-31.06 dB
4	4	3.6600 GHz	3.7000 GHz	750.0 kHz	3.678285714 GHz	3.823 dBm	-21.18 dB
5	5	3.7000 GHz	3.7010 GHz	750.0 kHz	3.700150000 GHz	-42.33 dBm	-29.33 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701000000 GHz	-43.02 dBm	-30.02 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.717900000 GHz	-46.14 dBm	-21.14 dB
8	8	3.7200 GHz	3.7600 GHz	1.000 MHz	3.726400000 GHz	-46.73 dBm	-6.727 dB

Plot 7-124. Channel Edge Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant F)



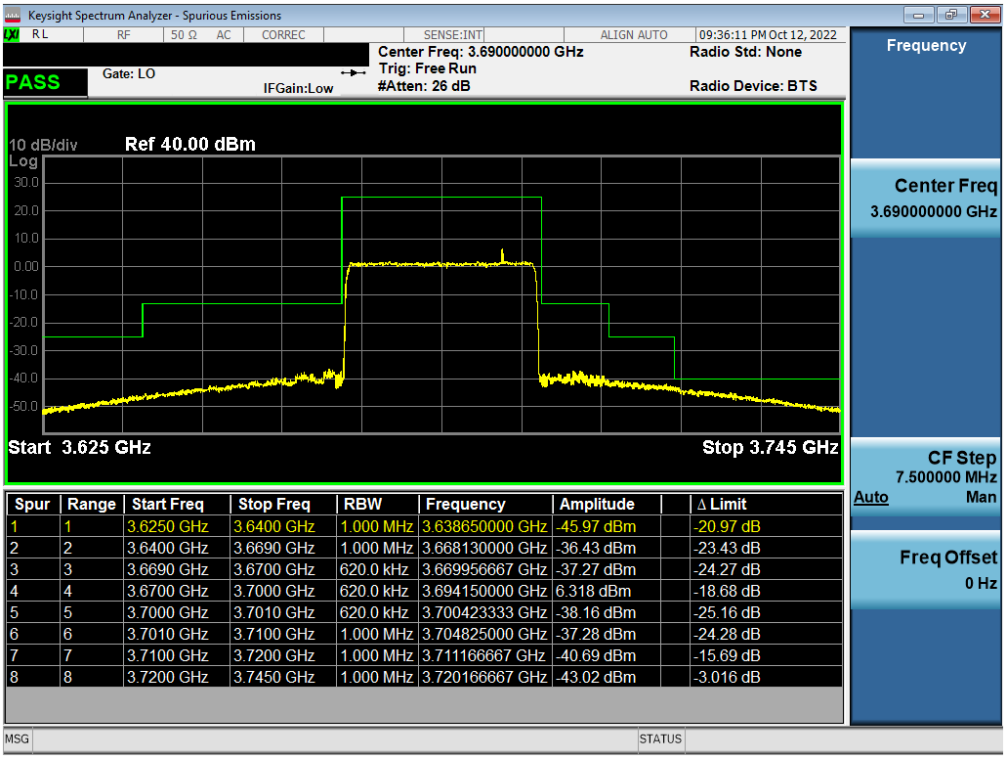
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5250 GHz	3.5300 GHz	1.000 MHz	3.529800000 GHz	-44.85 dBm	-4.853 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.540000000 GHz	-37.52 dBm	-12.52 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.547920000 GHz	-41.37 dBm	-28.37 dB
4	4	3.5490 GHz	3.5500 GHz	620.0 kHz	3.549940000 GHz	-41.45 dBm	-28.45 dB
5	5	3.5500 GHz	3.5800 GHz	620.0 kHz	3.553600000 GHz	3.082 dBm	-21.92 dB
6	6	3.5800 GHz	3.5810 GHz	620.0 kHz	3.580135000 GHz	-39.28 dBm	-26.28 dB
7	7	3.5810 GHz	3.6100 GHz	1.000 MHz	3.589700000 GHz	-34.93 dBm	-21.93 dB
8	8	3.6100 GHz	3.6550 GHz	1.000 MHz	3.612175000 GHz	-47.23 dBm	-22.23 dB

Plot 7-125. Channel Edge Plot (NR Band n48 - 30MHz QPSK - Low Channel - Ant F)



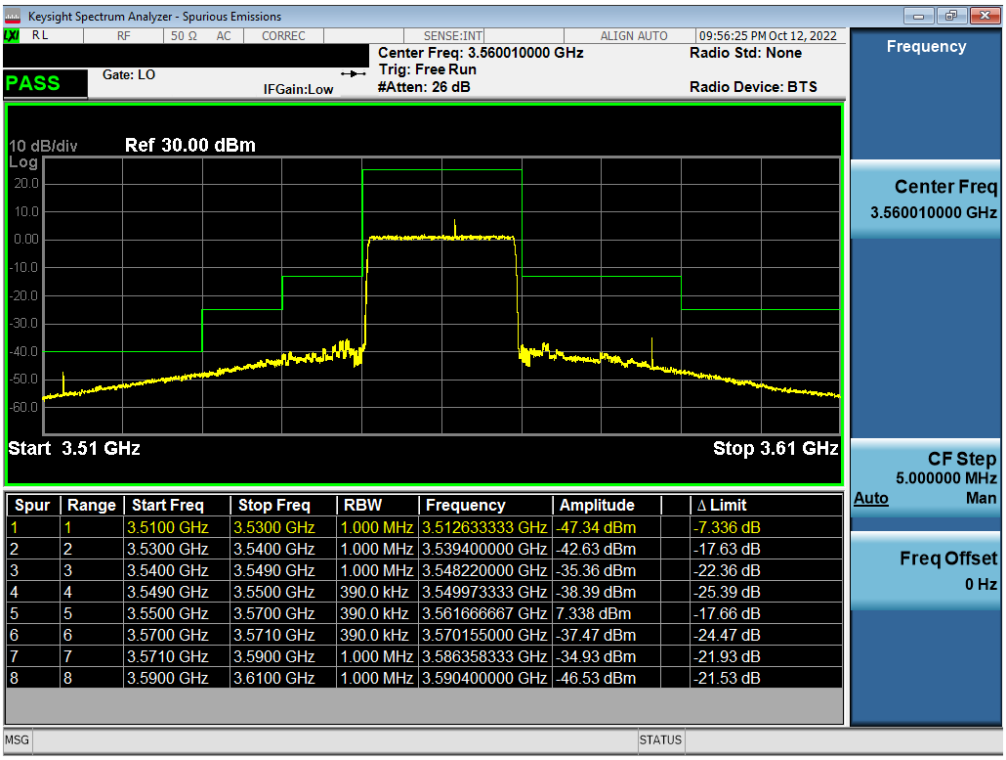
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5650 GHz	3.5800 GHz	1.000 MHz	3.572825000 GHz	-48.47 dBm	-23.47 dB
2	2	3.5800 GHz	3.6090 GHz	1.000 MHz	3.599333333 GHz	-34.97 dBm	-21.97 dB
3	3	3.6090 GHz	3.6100 GHz	620.0 kHz	3.609970000 GHz	-35.45 dBm	-22.45 dB
4	4	3.6100 GHz	3.6400 GHz	620.0 kHz	3.636200000 GHz	7.166 dBm	-17.83 dB
5	5	3.6400 GHz	3.6410 GHz	620.0 kHz	3.640043333 GHz	-32.81 dBm	-19.81 dB
6	6	3.6410 GHz	3.6700 GHz	1.000 MHz	3.641241667 GHz	-33.78 dBm	-20.78 dB
7	7	3.6700 GHz	3.6850 GHz	1.000 MHz	3.671875000 GHz	-43.45 dBm	-18.45 dB

Plot 7-126. Channel Edge Plot (NR Band n48 - 30MHz QPSK - Mid Channel - Ant F)



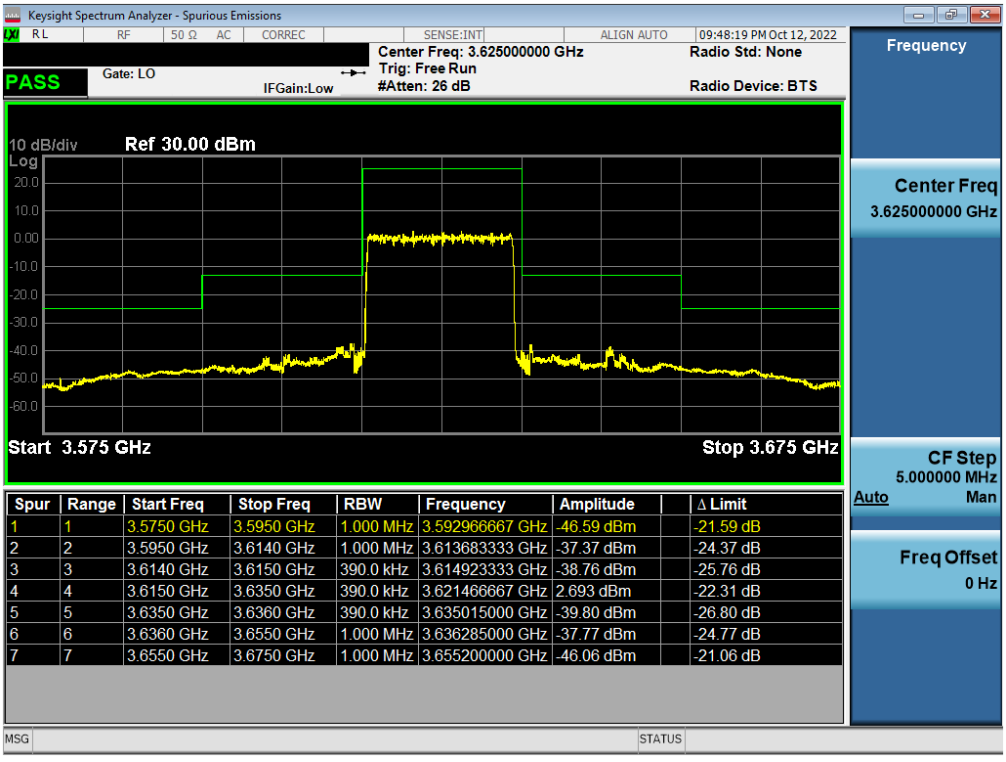
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6250 GHz	3.6400 GHz	1.000 MHz	3.638650000 GHz	-45.97 dBm	-20.97 dB
2	2	3.6400 GHz	3.6690 GHz	1.000 MHz	3.668130000 GHz	-36.43 dBm	-23.43 dB
3	3	3.6690 GHz	3.6700 GHz	620.0 kHz	3.669956667 GHz	-37.27 dBm	-24.27 dB
4	4	3.6700 GHz	3.7000 GHz	620.0 kHz	3.694150000 GHz	6.318 dBm	-18.68 dB
5	5	3.7000 GHz	3.7010 GHz	620.0 kHz	3.700423333 GHz	-38.16 dBm	-25.16 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.704825000 GHz	-37.28 dBm	-24.28 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.711166667 GHz	-40.69 dBm	-15.69 dB
8	8	3.7200 GHz	3.7450 GHz	1.000 MHz	3.720166667 GHz	-43.02 dBm	-3.016 dB

Plot 7-127. Channel Edge Plot (NR Band n48 - 30MHz QPSK - High Channel - Ant F)



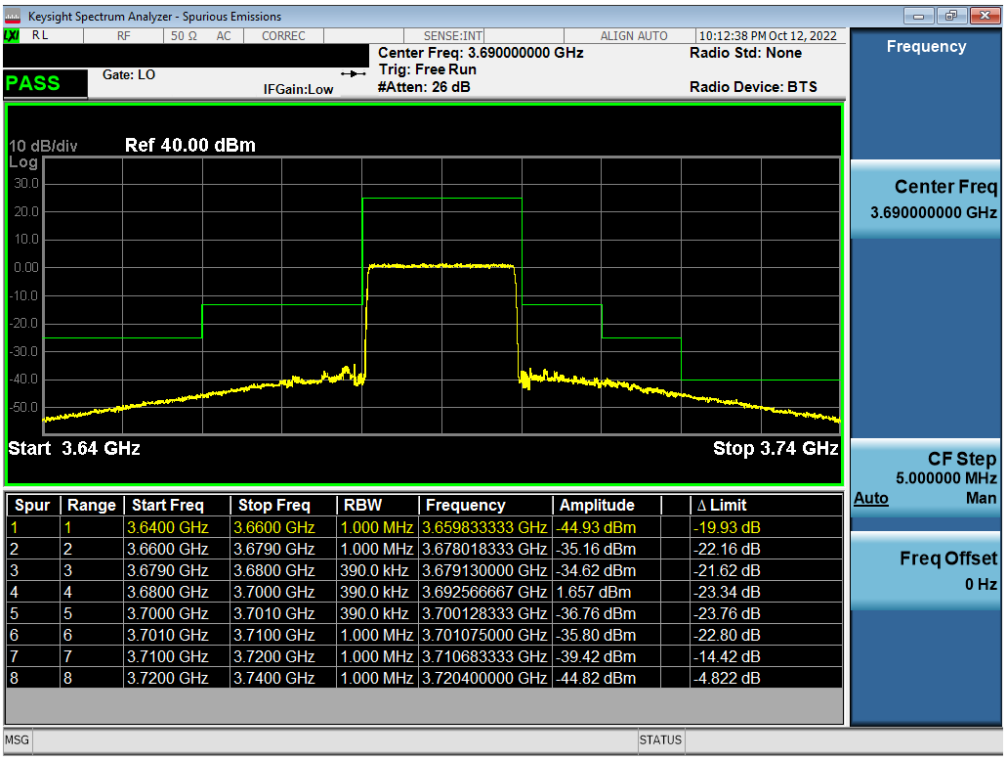
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.512633333 GHz	-47.34 dBm	-7.336 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.539400000 GHz	-42.63 dBm	-17.63 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548220000 GHz	-35.36 dBm	-22.36 dB
4	4	3.5490 GHz	3.5500 GHz	390.0 kHz	3.549973333 GHz	-38.39 dBm	-25.39 dB
5	5	3.5500 GHz	3.5700 GHz	390.0 kHz	3.561666667 GHz	7.338 dBm	-17.66 dB
6	6	3.5700 GHz	3.5710 GHz	390.0 kHz	3.570155000 GHz	-37.47 dBm	-24.47 dB
7	7	3.5710 GHz	3.5900 GHz	1.000 MHz	3.586358333 GHz	-34.93 dBm	-21.93 dB
8	8	3.5900 GHz	3.6100 GHz	1.000 MHz	3.590400000 GHz	-46.53 dBm	-21.53 dB

Plot 7-128. Channel Edge Plot (NR Band n48 - 20MHz QPSK - Low Channel - Ant F)



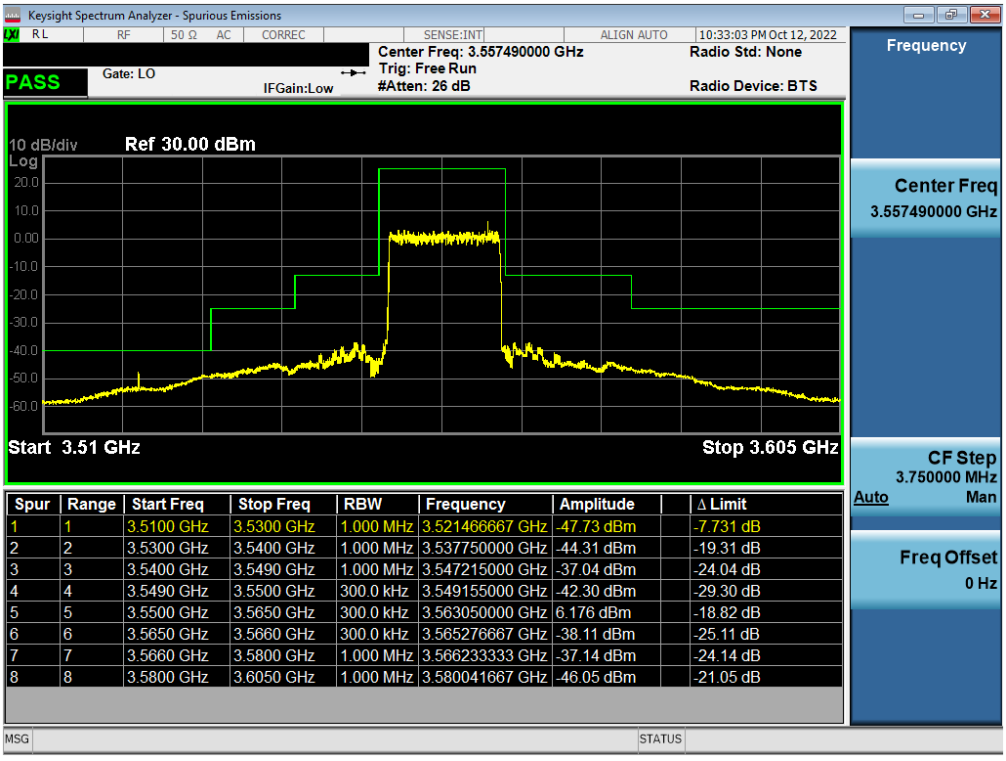
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5750 GHz	3.5950 GHz	1.000 MHz	3.592966667 GHz	-46.59 dBm	-21.59 dB
2	2	3.5950 GHz	3.6140 GHz	1.000 MHz	3.613683333 GHz	-37.37 dBm	-24.37 dB
3	3	3.6140 GHz	3.6150 GHz	390.0 kHz	3.614923333 GHz	-38.76 dBm	-25.76 dB
4	4	3.6150 GHz	3.6350 GHz	390.0 kHz	3.621466667 GHz	2.693 dBm	-22.31 dB
5	5	3.6350 GHz	3.6360 GHz	390.0 kHz	3.635015000 GHz	-39.80 dBm	-26.80 dB
6	6	3.6360 GHz	3.6550 GHz	1.000 MHz	3.636285000 GHz	-37.77 dBm	-24.77 dB
7	7	3.6550 GHz	3.6750 GHz	1.000 MHz	3.655200000 GHz	-46.06 dBm	-21.06 dB

Plot 7-129. Channel Edge Plot (NR Band n48 - 20MHz QPSK - Mid Channel - Ant F)



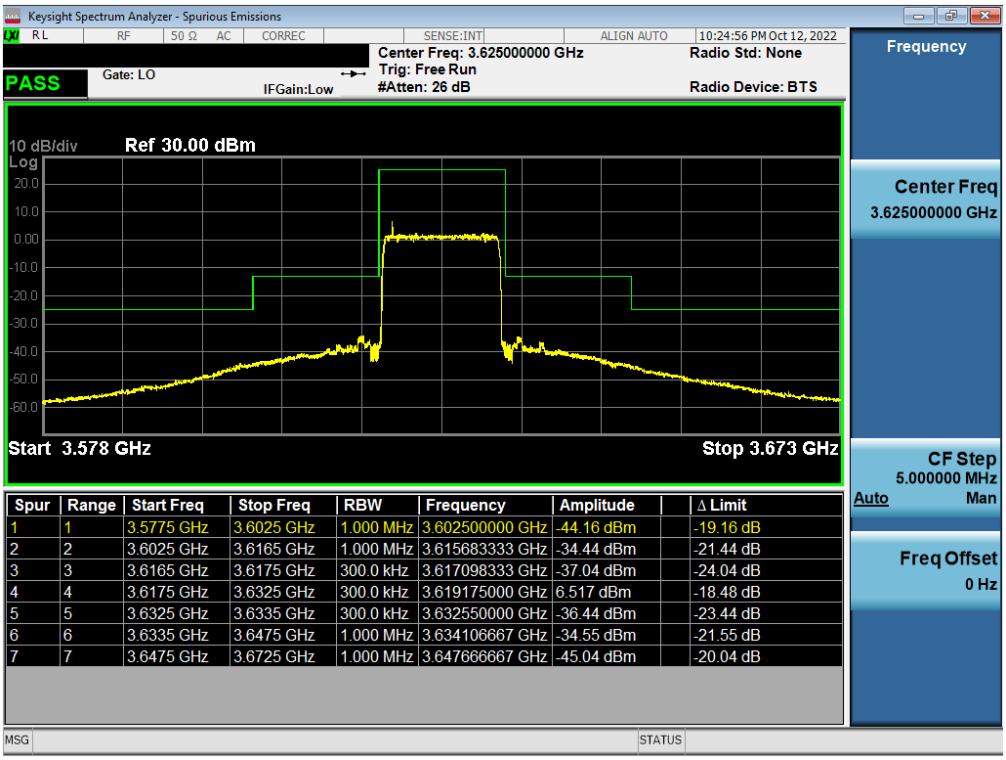
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6400 GHz	3.6600 GHz	1.000 MHz	3.659833333 GHz	-44.93 dBm	-19.93 dB
2	2	3.6600 GHz	3.6790 GHz	1.000 MHz	3.678018333 GHz	-35.16 dBm	-22.16 dB
3	3	3.6790 GHz	3.6800 GHz	390.0 kHz	3.679130000 GHz	-34.62 dBm	-21.62 dB
4	4	3.6800 GHz	3.7000 GHz	390.0 kHz	3.692566667 GHz	1.657 dBm	-23.34 dB
5	5	3.7000 GHz	3.7010 GHz	390.0 kHz	3.700128333 GHz	-36.76 dBm	-23.76 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701075000 GHz	-35.80 dBm	-22.80 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.710683333 GHz	-39.42 dBm	-14.42 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.720400000 GHz	-44.82 dBm	-4.822 dB

Plot 7-130. Channel Edge Plot (NR Band n48 - 20MHz QPSK - High Channel - Ant F)



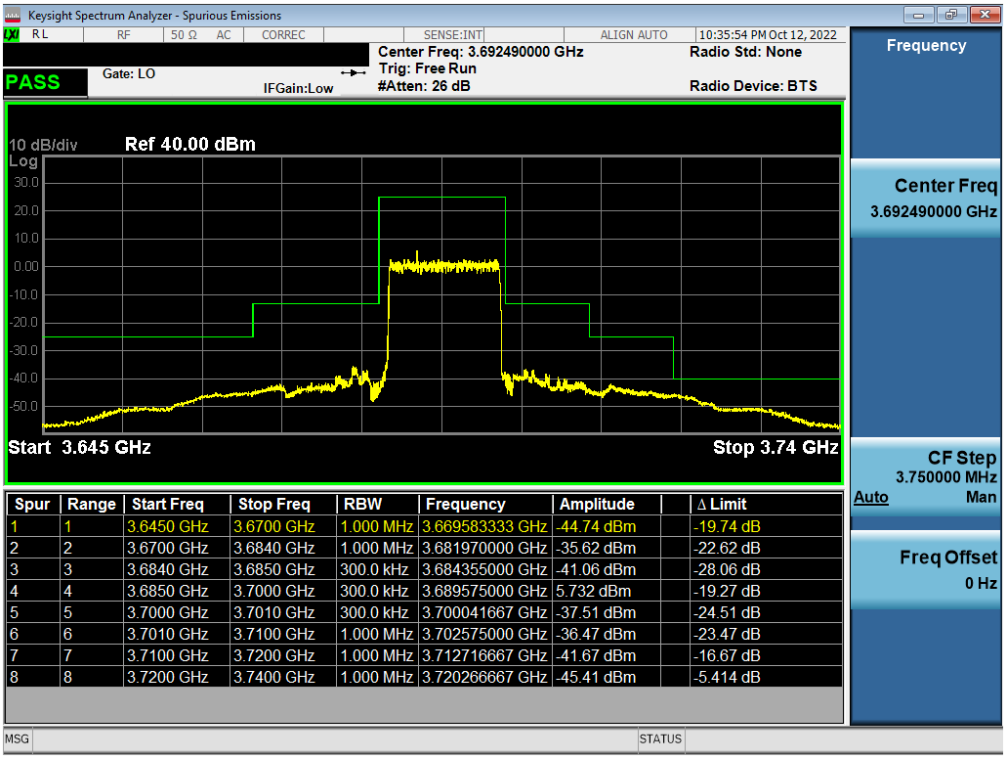
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.521466667 GHz	-47.73 dBm	-7.731 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.537750000 GHz	-44.31 dBm	-19.31 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.547215000 GHz	-37.04 dBm	-24.04 dB
4	4	3.5490 GHz	3.5500 GHz	300.0 kHz	3.549155000 GHz	-42.30 dBm	-29.30 dB
5	5	3.5500 GHz	3.5650 GHz	300.0 kHz	3.563050000 GHz	6.176 dBm	-18.82 dB
6	6	3.5650 GHz	3.5660 GHz	300.0 kHz	3.565276667 GHz	-38.11 dBm	-25.11 dB
7	7	3.5660 GHz	3.5800 GHz	1.000 MHz	3.566233333 GHz	-37.14 dBm	-24.14 dB
8	8	3.5800 GHz	3.6050 GHz	1.000 MHz	3.580041667 GHz	-46.05 dBm	-21.05 dB

Plot 7-131. Channel Edge Plot (NR Band n48 - 15MHz QPSK - Low Channel - Ant F)



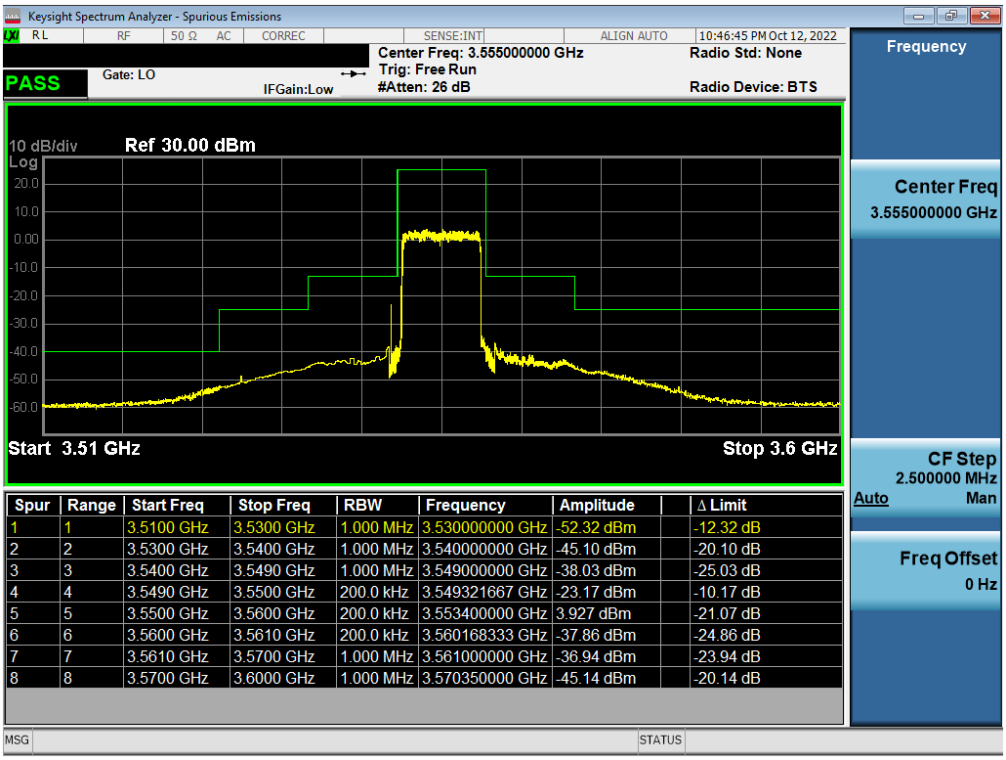
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5775 GHz	3.6025 GHz	1.000 MHz	3.602500000 GHz	-44.16 dBm	-19.16 dB
2	2	3.6025 GHz	3.6165 GHz	1.000 MHz	3.615683333 GHz	-34.44 dBm	-21.44 dB
3	3	3.6165 GHz	3.6175 GHz	300.0 kHz	3.617098333 GHz	-37.04 dBm	-24.04 dB
4	4	3.6175 GHz	3.6325 GHz	300.0 kHz	3.619175000 GHz	6.517 dBm	-18.48 dB
5	5	3.6325 GHz	3.6335 GHz	300.0 kHz	3.632550000 GHz	-36.44 dBm	-23.44 dB
6	6	3.6335 GHz	3.6475 GHz	1.000 MHz	3.634106667 GHz	-34.55 dBm	-21.55 dB
7	7	3.6475 GHz	3.6725 GHz	1.000 MHz	3.647666667 GHz	-45.04 dBm	-20.04 dB

Plot 7-132. Channel Edge Plot (NR Band n48 - 15MHz QPSK - Mid Channel - Ant F)



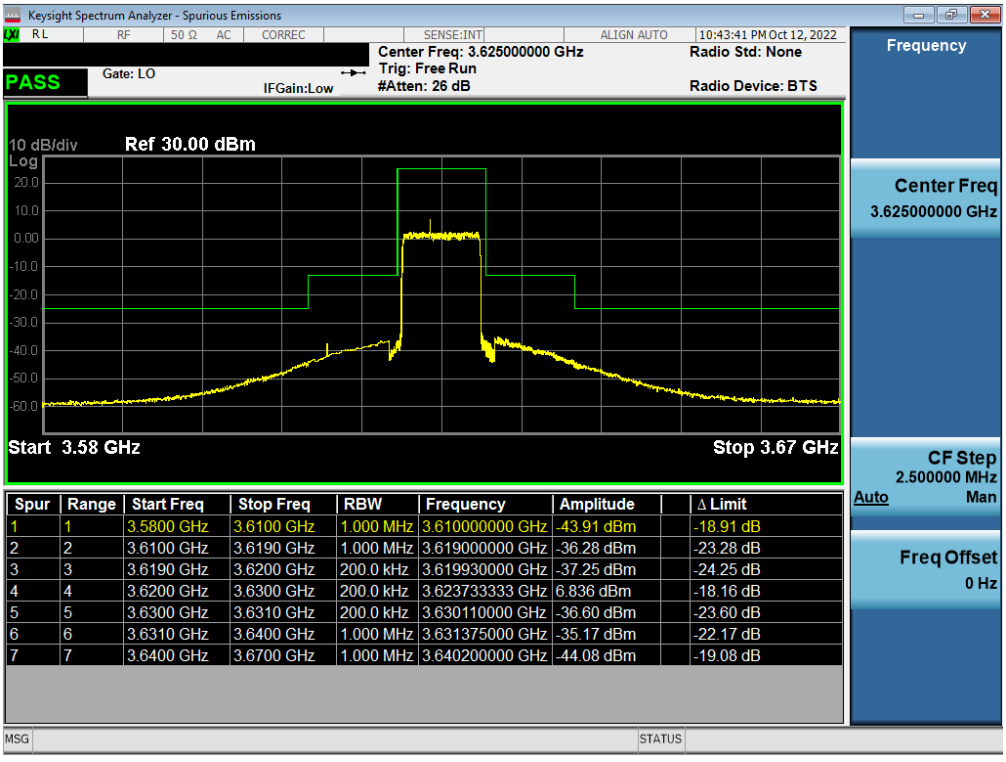
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6450 GHz	3.6700 GHz	1.000 MHz	3.669583333 GHz	-44.74 dBm	-19.74 dB
2	2	3.6700 GHz	3.6840 GHz	1.000 MHz	3.681970000 GHz	-35.62 dBm	-22.62 dB
3	3	3.6840 GHz	3.6850 GHz	300.0 kHz	3.684355000 GHz	-41.06 dBm	-28.06 dB
4	4	3.6850 GHz	3.7000 GHz	300.0 kHz	3.689575000 GHz	5.732 dBm	-19.27 dB
5	5	3.7000 GHz	3.7010 GHz	300.0 kHz	3.700041667 GHz	-37.51 dBm	-24.51 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.702575000 GHz	-36.47 dBm	-23.47 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.712716667 GHz	-41.67 dBm	-16.67 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.720266667 GHz	-45.41 dBm	-5.414 dB

Plot 7-133. Channel Edge Plot (NR Band n48 - 15MHz QPSK - High Channel - Ant F)



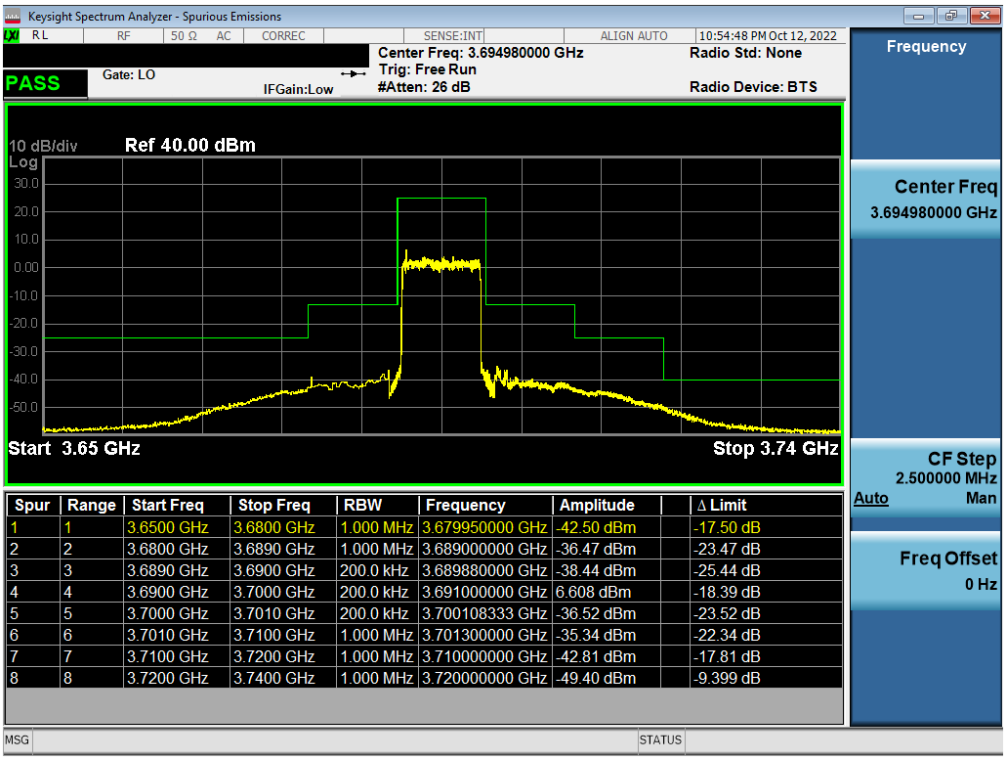
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.530000000 GHz	-52.32 dBm	-12.32 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.540000000 GHz	-45.10 dBm	-20.10 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.549000000 GHz	-38.03 dBm	-25.03 dB
4	4	3.5490 GHz	3.5500 GHz	200.0 kHz	3.549321667 GHz	-23.17 dBm	-10.17 dB
5	5	3.5500 GHz	3.5600 GHz	200.0 kHz	3.553400000 GHz	3.927 dBm	-21.07 dB
6	6	3.5600 GHz	3.5610 GHz	200.0 kHz	3.560168333 GHz	-37.86 dBm	-24.86 dB
7	7	3.5610 GHz	3.5700 GHz	1.000 MHz	3.561000000 GHz	-36.94 dBm	-23.94 dB
8	8	3.5700 GHz	3.6000 GHz	1.000 MHz	3.570350000 GHz	-45.14 dBm	-20.14 dB

Plot 7-134. Channel Edge Plot (NR Band n48 - 10MHz QPSK - Low Channel - Ant F)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5800 GHz	3.6100 GHz	1.000 MHz	3.610000000 GHz	-43.91 dBm	-18.91 dB
2	2	3.6100 GHz	3.6190 GHz	1.000 MHz	3.619000000 GHz	-36.28 dBm	-23.28 dB
3	3	3.6190 GHz	3.6200 GHz	200.0 kHz	3.619930000 GHz	-37.25 dBm	-24.25 dB
4	4	3.6200 GHz	3.6300 GHz	200.0 kHz	3.623733333 GHz	6.836 dBm	-18.16 dB
5	5	3.6300 GHz	3.6310 GHz	200.0 kHz	3.630110000 GHz	-36.60 dBm	-23.60 dB
6	6	3.6310 GHz	3.6400 GHz	1.000 MHz	3.631375000 GHz	-35.17 dBm	-22.17 dB
7	7	3.6400 GHz	3.6700 GHz	1.000 MHz	3.640200000 GHz	-44.08 dBm	-19.08 dB

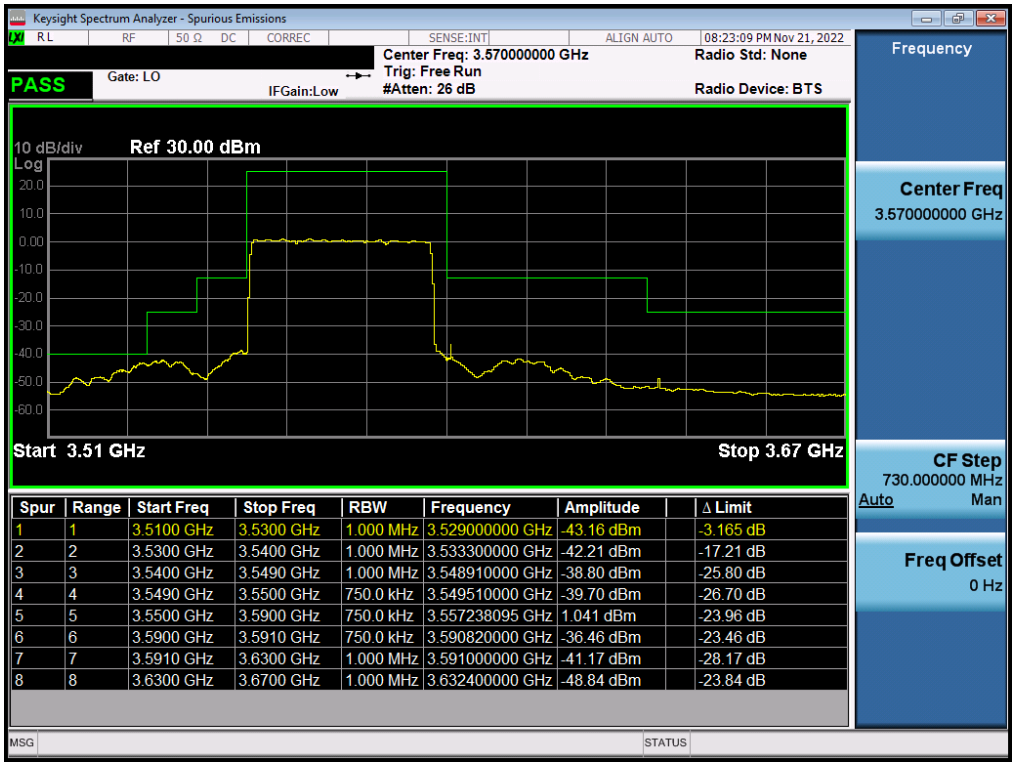
Plot 7-135. Channel Edge Plot (NR Band n48 - 10MHz QPSK - Mid Channel - Ant F)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.6500 GHz	3.6800 GHz	1.000 MHz	3.679950000 GHz	-42.50 dBm	-17.50 dB
2	2	3.6800 GHz	3.6890 GHz	1.000 MHz	3.689000000 GHz	-36.47 dBm	-23.47 dB
3	3	3.6890 GHz	3.6900 GHz	200.0 kHz	3.689880000 GHz	-38.44 dBm	-25.44 dB
4	4	3.6900 GHz	3.7000 GHz	200.0 kHz	3.691000000 GHz	6.608 dBm	-18.39 dB
5	5	3.7000 GHz	3.7010 GHz	200.0 kHz	3.700108333 GHz	-36.52 dBm	-23.52 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701300000 GHz	-35.34 dBm	-22.34 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.710000000 GHz	-42.81 dBm	-17.81 dB
8	8	3.7200 GHz	3.7400 GHz	1.000 MHz	3.720000000 GHz	-49.40 dBm	-9.399 dB

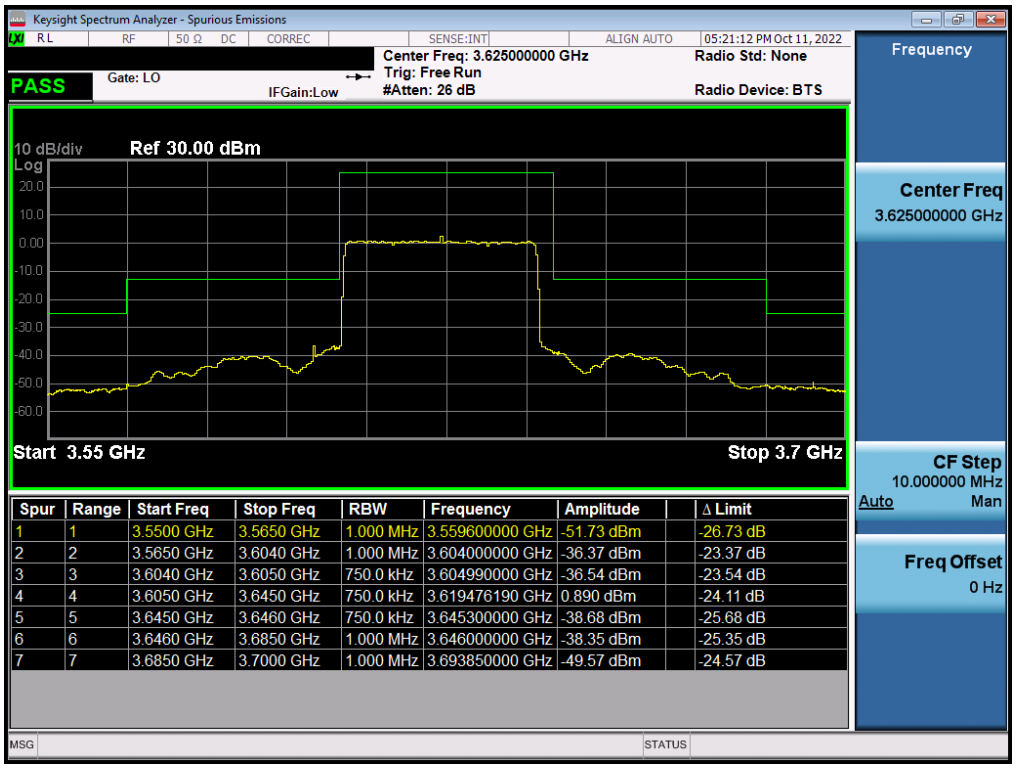
Plot 7-136. Channel Edge Plot (NR Band n48 - 10MHz QPSK - High Channel - Ant F)

NR Band n48 – Ant C



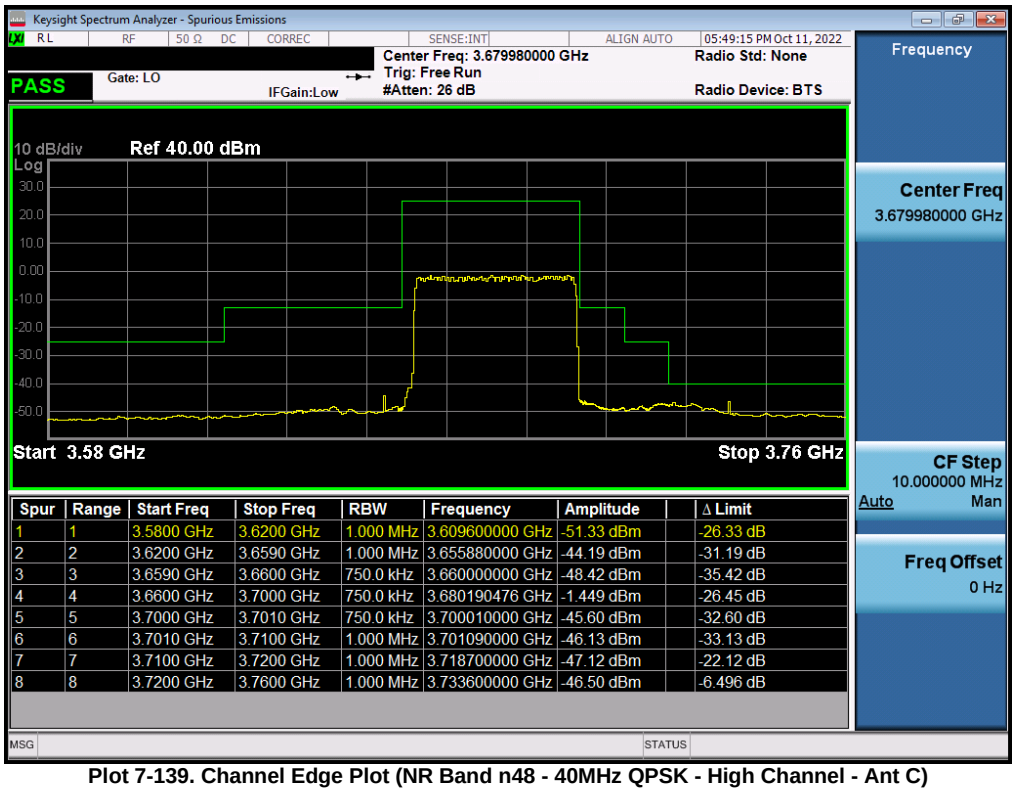
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.529000000 GHz	-43.16 dBm	-3.165 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.533300000 GHz	-42.21 dBm	-17.21 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.548910000 GHz	-38.80 dBm	-25.80 dB
4	4	3.5490 GHz	3.5500 GHz	750.0 kHz	3.549510000 GHz	-39.70 dBm	-26.70 dB
5	5	3.5500 GHz	3.5900 GHz	750.0 kHz	3.557238095 GHz	1.041 dBm	-23.96 dB
6	6	3.5900 GHz	3.5910 GHz	750.0 kHz	3.590820000 GHz	-36.46 dBm	-23.46 dB
7	7	3.5910 GHz	3.6300 GHz	1.000 MHz	3.591000000 GHz	-41.17 dBm	-28.17 dB
8	8	3.6300 GHz	3.6700 GHz	1.000 MHz	3.632400000 GHz	-48.84 dBm	-23.84 dB

Plot 7-137. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant C)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5500 GHz	3.5650 GHz	1.000 MHz	3.559600000 GHz	-51.73 dBm	-26.73 dB
2	2	3.5650 GHz	3.6040 GHz	1.000 MHz	3.604000000 GHz	-36.37 dBm	-23.37 dB
3	3	3.6040 GHz	3.6050 GHz	750.0 kHz	3.604990000 GHz	-36.54 dBm	-23.54 dB
4	4	3.6050 GHz	3.6450 GHz	750.0 kHz	3.619476190 GHz	0.890 dBm	-24.11 dB
5	5	3.6450 GHz	3.6460 GHz	750.0 kHz	3.645300000 GHz	-38.68 dBm	-25.68 dB
6	6	3.6460 GHz	3.6850 GHz	1.000 MHz	3.646000000 GHz	-38.35 dBm	-25.35 dB
7	7	3.6850 GHz	3.7000 GHz	1.000 MHz	3.693850000 GHz	-49.57 dBm	-24.57 dB

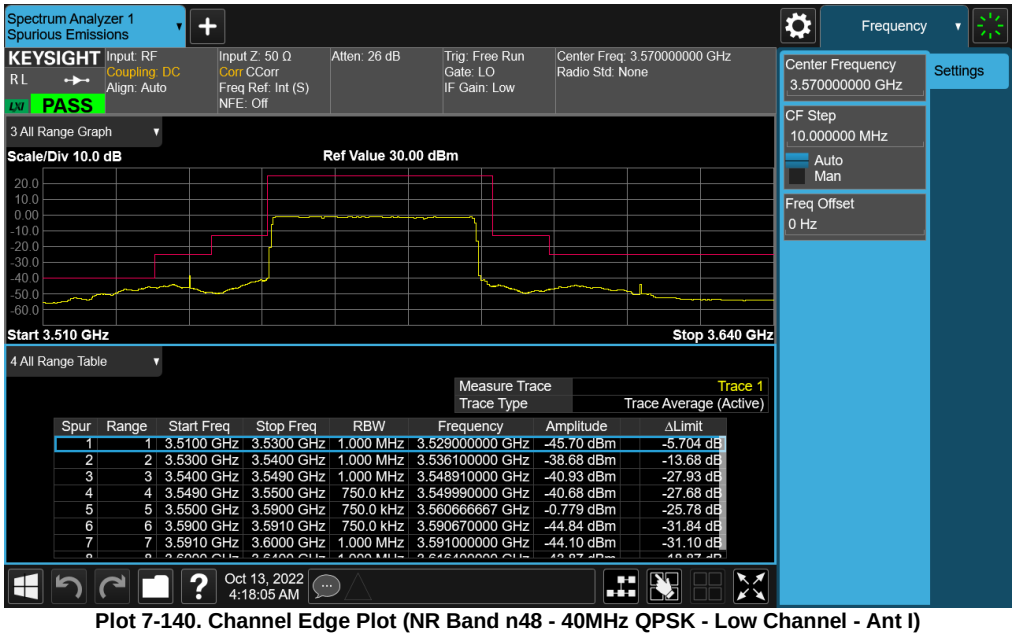
Plot 7-138. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant C)



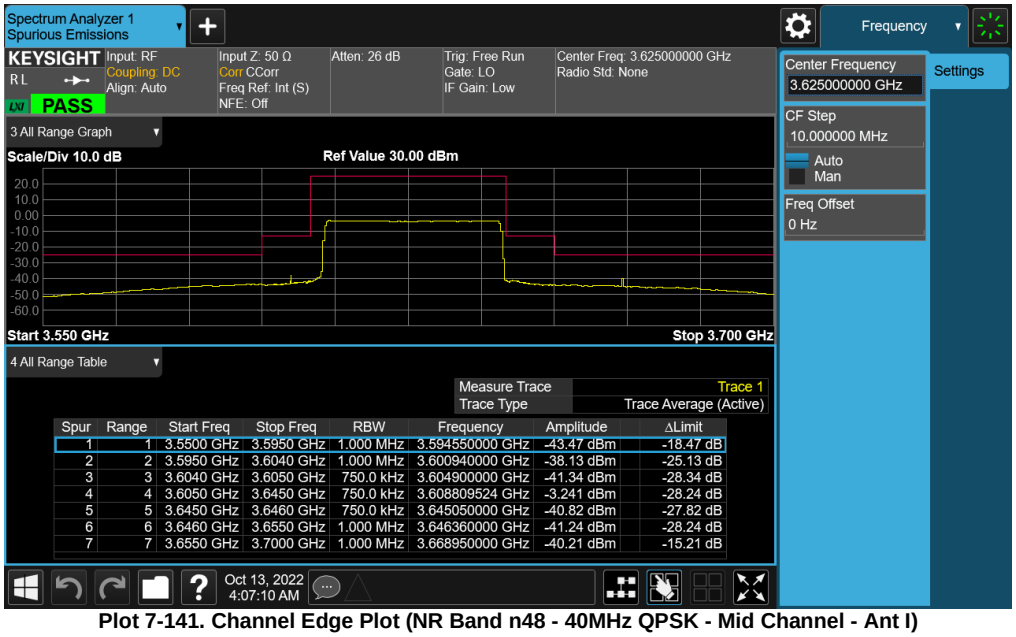
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5800 GHz	3.6200 GHz	1.000 MHz	3.609600000 GHz	-51.33 dBm	-26.33 dB
2	2	3.6200 GHz	3.6590 GHz	1.000 MHz	3.655880000 GHz	-44.19 dBm	-31.19 dB
3	3	3.6590 GHz	3.6600 GHz	750.0 kHz	3.660000000 GHz	-48.42 dBm	-35.42 dB
4	4	3.6600 GHz	3.7000 GHz	750.0 kHz	3.680190476 GHz	-1.449 dBm	-26.45 dB
5	5	3.7000 GHz	3.7010 GHz	750.0 kHz	3.700010000 GHz	-45.60 dBm	-32.60 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701090000 GHz	-46.13 dBm	-33.13 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.718700000 GHz	-47.12 dBm	-22.12 dB
8	8	3.7200 GHz	3.7600 GHz	1.000 MHz	3.733600000 GHz	-46.50 dBm	-6.496 dB

Plot 7-139. Channel Edge Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant C)

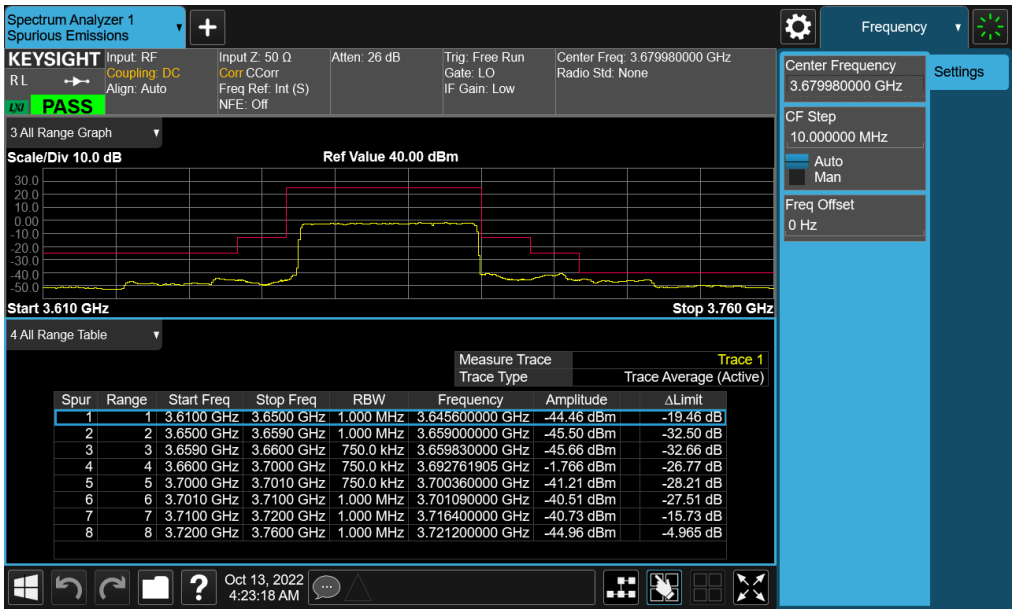
NR Band n48 – Ant I



Plot 7-140. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant I)

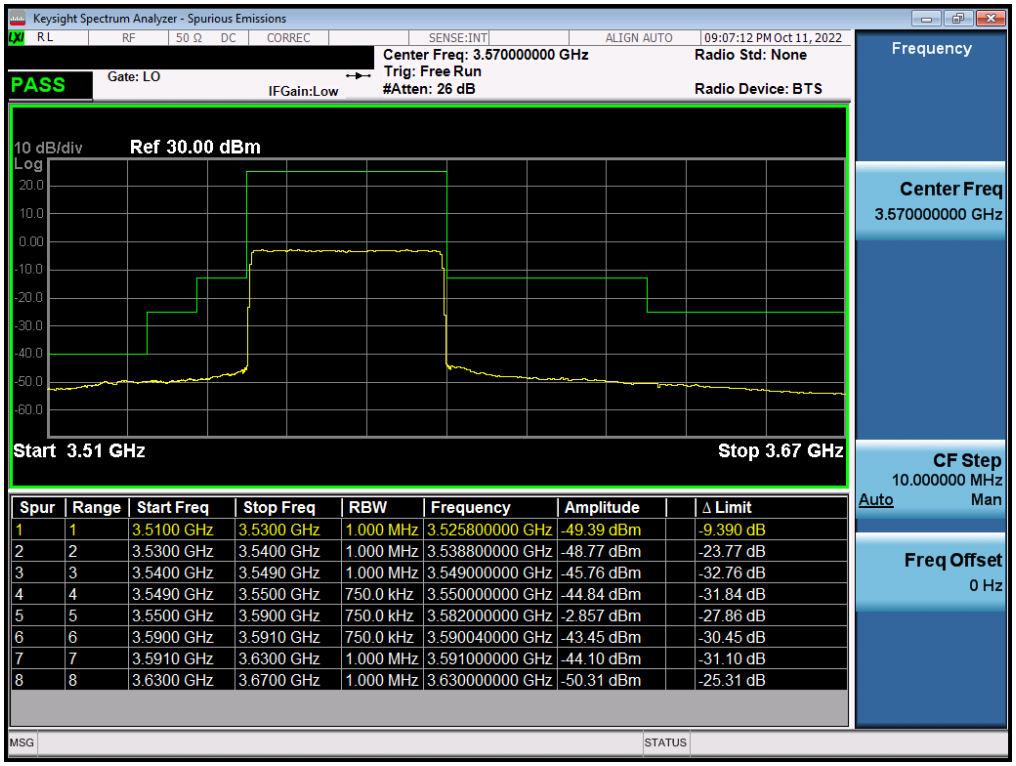


Plot 7-141. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Mid Channel - Ant I)



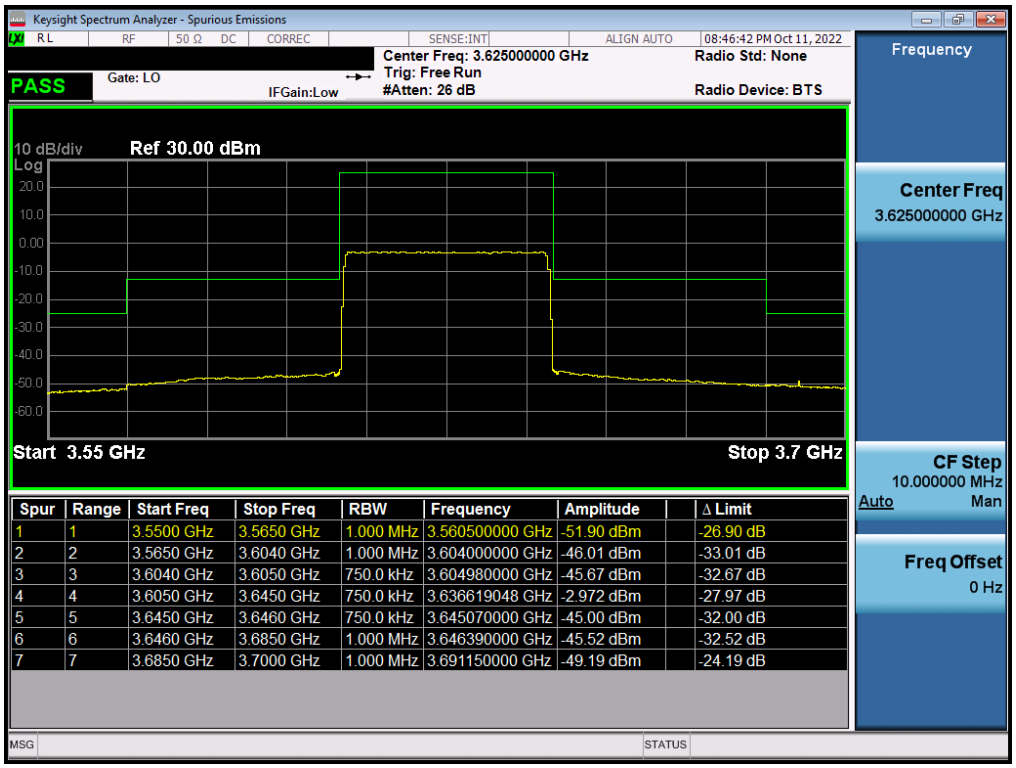
Plot 7-142. Channel Edge Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant I)

NR Band n48 – Ant D



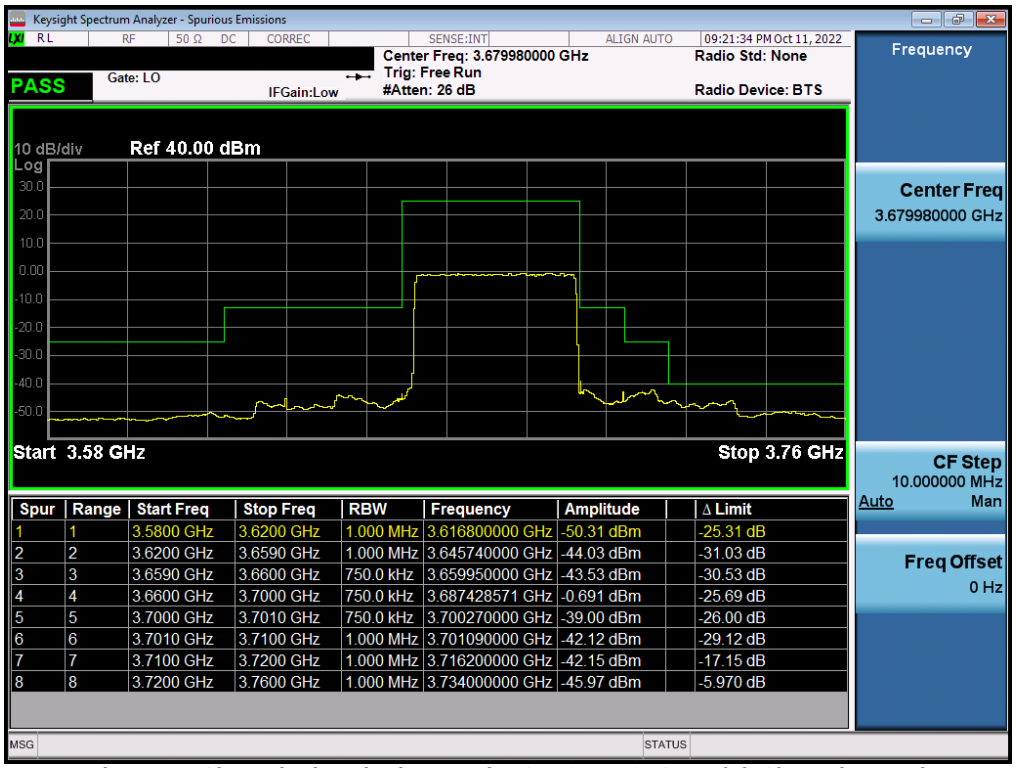
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5100 GHz	3.5300 GHz	1.000 MHz	3.525800000 GHz	-49.39 dBm	-9.390 dB
2	2	3.5300 GHz	3.5400 GHz	1.000 MHz	3.538800000 GHz	-48.77 dBm	-23.77 dB
3	3	3.5400 GHz	3.5490 GHz	1.000 MHz	3.549000000 GHz	-45.76 dBm	-32.76 dB
4	4	3.5490 GHz	3.5500 GHz	750.0 kHz	3.550000000 GHz	-44.84 dBm	-31.84 dB
5	5	3.5500 GHz	3.5900 GHz	750.0 kHz	3.582000000 GHz	-2.857 dBm	-27.86 dB
6	6	3.5900 GHz	3.5910 GHz	750.0 kHz	3.590040000 GHz	-43.45 dBm	-30.45 dB
7	7	3.5910 GHz	3.6300 GHz	1.000 MHz	3.591000000 GHz	-44.10 dBm	-31.10 dB
8	8	3.6300 GHz	3.6700 GHz	1.000 MHz	3.630000000 GHz	-50.31 dBm	-25.31 dB

Plot 7-143. Channel Edge Plot (NR Band n48 - 40MHz QPSK - Low Channel - Ant D)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5500 GHz	3.5650 GHz	1.000 MHz	3.560500000 GHz	-51.90 dBm	-26.90 dB
2	2	3.5650 GHz	3.6040 GHz	1.000 MHz	3.604000000 GHz	-46.01 dBm	-33.01 dB
3	3	3.6040 GHz	3.6050 GHz	750.0 kHz	3.604980000 GHz	-45.67 dBm	-32.67 dB
4	4	3.6050 GHz	3.6450 GHz	750.0 kHz	3.636619048 GHz	-2.972 dBm	-27.97 dB
5	5	3.6450 GHz	3.6460 GHz	750.0 kHz	3.645070000 GHz	-45.00 dBm	-32.00 dB
6	6	3.6460 GHz	3.6850 GHz	1.000 MHz	3.646390000 GHz	-45.52 dBm	-32.52 dB
7	7	3.6850 GHz	3.7000 GHz	1.000 MHz	3.691150000 GHz	-49.19 dBm	-24.19 dB

Plot 7-144. Channel Edge Plot (NR Band n48 - 40MHz QPSK – Mid Channel - Ant D)



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	3.5800 GHz	3.6200 GHz	1.000 MHz	3.616800000 GHz	-50.31 dBm	-25.31 dB
2	2	3.6200 GHz	3.6590 GHz	1.000 MHz	3.645740000 GHz	-44.03 dBm	-31.03 dB
3	3	3.6590 GHz	3.6600 GHz	750.0 kHz	3.659950000 GHz	-43.53 dBm	-30.53 dB
4	4	3.6600 GHz	3.7000 GHz	750.0 kHz	3.687428571 GHz	-0.691 dBm	-25.69 dB
5	5	3.7000 GHz	3.7010 GHz	750.0 kHz	3.700270000 GHz	-39.00 dBm	-26.00 dB
6	6	3.7010 GHz	3.7100 GHz	1.000 MHz	3.701090000 GHz	-42.12 dBm	-29.12 dB
7	7	3.7100 GHz	3.7200 GHz	1.000 MHz	3.716200000 GHz	-42.15 dBm	-17.15 dB
8	8	3.7200 GHz	3.7600 GHz	1.000 MHz	3.734000000 GHz	-45.97 dBm	-5.970 dB

Plot 7-145. Channel Edge Plot (NR Band n48 - 40MHz QPSK - High Channel - Ant D)

7.6 Radiated Power (EIRP)

Test Overview

Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.2.4.4

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5% of the expected OBW
3. VBW ≥ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points ≥ 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration.
8. The integration bandwidth was set equal to 10MHz. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize.

Test Setup

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

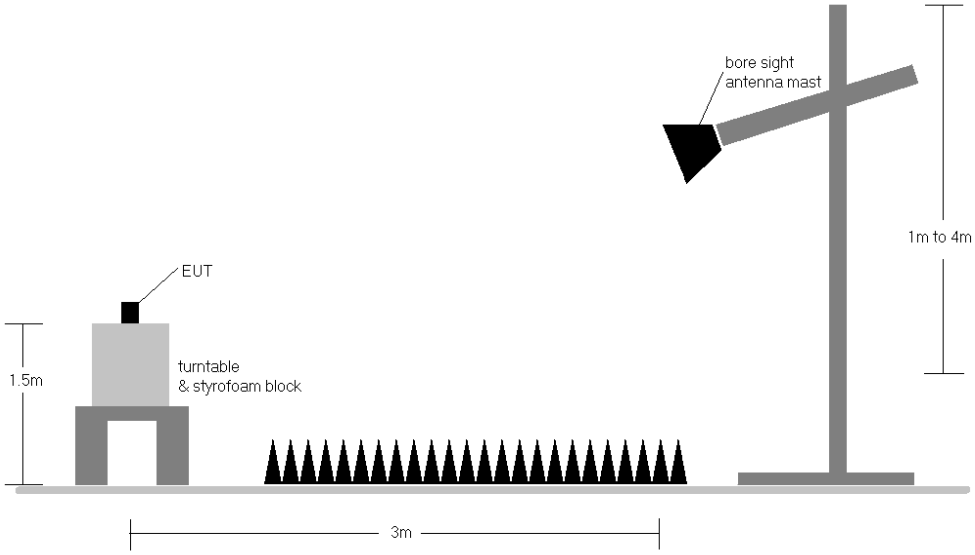


Figure 7-5. Radiated Test Setup >1GHz

Test Notes

1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

2) This unit was tested with its standard battery.

3) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.

4) The worst case EIRP shown in this section is found with LTE operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for LTE Band 48 (i.e. 5, 10, 15, 20MHz).

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
20 MHz	QPSK	3560.00	H	231	339	7.37	1 / 50	13.07	20.44	0.111	23.00	-2.56
	QPSK	3625.00	H	195	342	6.77	1 / 50	13.97	**20.74**	**0.119**	23.00	-2.26
	QPSK	3690.00	H	234	331	6.15	1 / 50	13.41	19.56	0.090	23.00	-3.44
	16-QAM	3625.00	H	195	342	6.77	1 / 50	12.70	19.47	0.088	23.00	-3.53
15 MHz	QPSK	3557.50	H	231	339	7.40	1 / 74	12.48	19.88	0.097	23.00	-3.12
	QPSK	3625.00	H	195	342	6.77	1 / 37	13.98	**20.75**	**0.119**	23.00	-2.25
	QPSK	3692.50	H	234	331	6.12	1 / 37	13.52	19.63	0.092	23.00	-3.37
	16-QAM	3625.00	H	195	342	6.77	1 / 74	13.36	20.13	0.103	23.00	-2.87
10 MHz	QPSK	3555.00	H	231	339	7.43	1 / 25	12.51	19.94	0.099	23.00	-3.06
	QPSK	3625.00	H	195	342	6.77	1 / 25	14.14	**20.91**	**0.123**	23.00	-2.09
	QPSK	3695.00	H	234	331	6.09	1 / 25	13.62	19.71	0.094	23.00	-3.29
	16-QAM	3625.00	H	195	342	6.77	1 / 49	13.60	20.37	0.109	23.00	-2.63
5 MHz	QPSK	3552.50	H	231	339	7.45	1 / 12	12.59	20.05	0.101	23.00	-2.95
	QPSK	3625.00	H	195	342	6.77	1 / 12	14.08	**20.85**	**0.122**	23.00	-2.15
	QPSK	3697.50	H	234	331	6.06	1 / 12	13.81	19.87	0.097	23.00	-3.13
	16-QAM	3625.00	H	195	342	6.77	1 / 12	13.58	20.35	0.108	23.00	-2.65
20 MHz	QPSK (Opposite Pol.)	3625.00	V	115	35	6.91	1 / 50	12.69	**19.60**	**0.091**	23.00	-3.40
	QPSK (WCP)	3625.00	H	195	343	6.77	1 / 50	12.79	19.56	0.090	23.00	-3.44

Table 7-10. EIRP Data (LTE Band 48)

Bandwidth	Modulation	PCC			SCC			Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degrees]	Ant. Gain [dBi]	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
		Bandwidth [MHz]	Frequency [MHz]	RB / Offset	Bandwidth [MHz]	Frequency [MHz]	RB / Offset									
40 MHz	QPSK	20	3560.0	1 / 99	20	3579.8	1 / 0	H	209	329	7.14	13.14	20.28	0.107	23.00	-2.72
		20	3625.0	1 / 99	20	3644.8	1 / 0	H	191	343	6.83	13.65	20.48	0.112	23.00	-2.52
		20	3690.0	1 / 0	20	3670.2	1 / 99	H	238	335	6.63	13.00	19.63	0.092	23.00	-3.37
	16-QAM	20	3560.0	1 / 99	20	3579.8	1 / 0	H	209	329	7.14	12.30	19.44	0.088	23.00	-3.56
		20	3625.0	1 / 99	20	3644.8	1 / 0	H	191	343	6.83	12.84	19.67	0.093	23.00	-3.33
		20	3690.0	1 / 0	20	3670.2	1 / 99	H	238	335	6.63	12.23	18.86	0.077	23.00	-4.14
35 MHz	QPSK	20	3557.5	1 / 99	15	3577.1	1 / 0	H	209	329	7.15	13.08	20.22	0.105	23.00	-2.78
		20	3625.0	1 / 99	15	3642.1	1 / 0	H	191	343	6.84	13.59	20.43	0.110	23.00	-2.57
		20	3692.5	1 / 0	15	3672.9	1 / 74	H	238	335	6.62	13.00	19.62	0.092	23.00	-3.38
	16-QAM	20	3557.5	1 / 99	15	3577.1	1 / 0	H	209	329	7.15	12.26	19.40	0.087	23.00	-3.60
		20	3625.0	1 / 99	15	3642.1	1 / 0	H	191	343	6.84	12.73	19.57	0.091	23.00	-3.43
		20	3692.5	1 / 0	15	3672.9	1 / 74	H	238	335	6.62	12.22	18.84	0.077	23.00	-4.16
30 MHz	QPSK	20	3555.0	1 / 99	10	3574.4	1 / 0	H	209	329	7.15	13.01	20.15	0.104	23.00	-2.85
		20	3625.0	1 / 99	10	3639.4	1 / 0	H	191	343	6.85	13.51	20.36	0.109	23.00	-2.64
		20	3695.0	1 / 0	10	3678.3	1 / 49	H	238	335	6.61	13.10	19.71	0.094	23.00	-3.29
	16-QAM	20	3555.0	1 / 99	10	3574.4	1 / 0	H	209	329	7.15	12.35	19.49	0.089	23.00	-3.51
		20	3625.0	1 / 99	10	3639.4	1 / 0	H	191	343	6.85	12.58	19.43	0.088	23.00	-3.57
		20	3695.0	1 / 0	10	3678.3	1 / 49	H	238	335	6.61	12.10	18.71	0.074	23.00	-4.29
25 MHz	QPSK	20	3552.5	1 / 99	5	3571.7	1 / 0	H	209	329	7.15	13.12	20.27	0.106	23.00	-2.73
		20	3625.0	1 / 99	5	3636.7	1 / 0	H	191	343	6.86	13.63	20.49	0.112	23.00	-2.51
		20	3697.5	1 / 0	5	3678.3	1 / 24	H	238	335	6.61	12.83	19.44	0.088	23.00	-3.56
	16-QAM	20	3552.5	1 / 99	5	3571.7	1 / 0	H	209	329	7.15	12.22	19.37	0.087	23.00	-3.63
		20	3625.0	1 / 99	5	3636.7	1 / 0	H	191	343	6.86	12.44	19.30	0.085	23.00	-3.70
		20	3697.5	1 / 0	5	3678.3	1 / 24	H	238	335	6.61	12.15	18.76	0.075	23.00	-4.24

Table 7-11. EIRP Data (ULCA Band 48)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	π/2 BPSK	3570.00	H	201	339	7.27	1 / 79	11.59	18.86	0.077	23.00	-4.14
	π/2 BPSK	3625.00	H	221	347	6.77	1 / 79	11.88	18.65	0.073	23.00	-4.35
	π/2 BPSK	3680.00	H	209	347	6.25	1 / 79	12.25	18.50	0.071	23.00	-4.50
	QPSK	3570.00	H	201	339	7.27	1 / 79	11.29	18.56	0.072	23.00	-4.44
	QPSK	3625.00	H	221	347	6.77	1 / 53	12.11	18.88	**0.077**	23.00	-4.12
	QPSK	3680.00	H	209	347	6.25	1 / 53	12.17	18.42	0.070	23.00	-4.58
	16-QAM	3625.00	H	221	347	6.77	1 / 26	10.69	17.46	0.056	23.00	-5.54
30 MHz	π/2 BPSK	3565.00	H	201	339	7.32	1 / 39	11.44	18.77	0.075	23.00	-4.23
	π/2 BPSK	3625.00	H	221	347	6.77	1 / 39	11.50	18.27	0.067	23.00	-4.73
	π/2 BPSK	3685.00	H	209	347	6.20	1 / 39	12.28	18.48	0.070	23.00	-4.52
	QPSK	3565.00	H	201	339	7.32	1 / 39	11.47	18.79	**0.076**	23.00	-4.21
	QPSK	3625.00	H	221	347	6.77	1 / 39	11.89	18.66	0.073	23.00	-4.34
	QPSK	3685.00	H	209	347	6.20	1 / 39	12.50	18.70	0.074	23.00	-4.30
	16-QAM	3565.00	H	201	339	7.32	1 / 39	7.22	14.54	0.028	23.00	-8.46
20 MHz	π/2 BPSK	3560.00	H	201	339	7.37	1 / 37	11.72	19.09	0.081	23.00	-3.91
	π/2 BPSK	3625.00	H	221	347	6.77	1 / 37	12.09	18.86	0.077	23.00	-4.14
	π/2 BPSK	3690.00	H	209	347	6.15	1 / 13	12.04	18.19	0.066	23.00	-4.81
	QPSK	3560.00	H	201	339	7.37	1 / 37	10.84	18.21	0.066	23.00	-4.79
	QPSK	3625.00	H	221	347	6.77	1 / 37	12.42	19.19	**0.083**	23.00	-3.81
	QPSK	3690.00	H	209	347	6.15	1 / 13	11.57	17.71	0.059	23.00	-5.29
	16-QAM	3690.00	H	209	347	6.15	1 / 13	9.77	15.92	0.039	23.00	-7.08
15 MHz	π/2 BPSK	3557.50	H	201	339	7.40	1 / 19	11.83	**19.23**	**0.084**	23.00	-3.77
	π/2 BPSK	3625.00	H	221	347	6.77	1 / 19	12.17	18.93	0.078	23.00	-4.07
	π/2 BPSK	3692.50	H	209	347	6.12	1 / 19	12.83	18.95	0.078	23.00	-4.05
	QPSK	3557.50	H	201	339	7.40	1 / 19	10.92	18.32	0.068	23.00	-4.68
	QPSK	3625.00	H	221	347	6.77	1 / 19	11.66	18.43	0.070	23.00	-4.57
	QPSK	3692.50	H	209	347	6.12	1 / 19	11.97	18.09	0.064	23.00	-4.91
	16-QAM	3692.50	H	209	347	6.12	1 / 19	10.71	16.83	0.048	23.00	-6.17
10 MHz	π/2 BPSK	3555.00	H	201	339	7.43	1 / 17	11.00	18.42	0.070	23.00	-4.58
	π/2 BPSK	3625.00	H	221	347	6.77	1 / 12	11.50	18.27	0.067	23.00	-4.73
	π/2 BPSK	3695.00	H	209	347	6.09	1 / 17	12.92	**19.01**	**0.080**	23.00	-3.99
	QPSK	3555.00	H	201	339	7.43	1 / 17	10.25	17.68	0.059	23.00	-5.32
	QPSK	3625.00	H	221	347	6.77	1 / 12	11.64	18.41	0.069	23.00	-4.59
	QPSK	3695.00	H	209	347	6.09	1 / 17	11.76	17.85	0.061	23.00	-5.15
	16-QAM	3625.00	H	221	347	6.77	1 / 12	9.08	15.85	0.038	23.00	-7.15
40 MHz	QPSK (CP-OFDM)	3625.00	H	221	340	6.77	1 / 79	10.38	17.15	0.052	23.00	-5.85
	QPSK (Opposite Pol.)	3625.00	V	115	33	6.77	1 / 53	11.23	**18.00**	**0.063**	23.00	-5.00
	QPSK (WCP)	3625.00	H	153	329	6.77	1 / 53	8.43	15.20	0.033	23.00	-7.80

Table 7-12. EIRP Data (NR Band n48 – Ant F)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	π/2 BPSK	3570.00	H	121	39	7.27	1 / 26	5.52	**12.79**	**0.019**	23.00	-10.21
	π/2 BPSK	3625.00	H	125	35	6.77	1 / 53	4.95	11.72	0.015	23.00	-11.28
	π/2 BPSK	3680.00	H	108	37	6.25	1 / 53	4.29	10.54	0.011	23.00	-12.46
	QPSK	3570.00	H	121	39	7.27	1 / 26	5.46	12.73	0.019	23.00	-10.27
	QPSK	3625.00	H	125	35	6.77	1 / 53	4.82	11.59	0.014	23.00	-11.41
	QPSK	3680.00	H	108	37	6.25	1 / 26	4.50	10.75	0.012	23.00	-12.25
	16-QAM	3570.00	H	121	39	7.27	1 / 26	5.14	12.41	0.017	23.00	-10.59
40 MHz	QPSK (CP-OFDM)	3570.00	H	123	39	7.27	1 / 26	4.38	**11.65**	**0.015**	23.00	-11.35
	QPSK (Opposite Pol.)	3570.00	V	137	51	7.14	1 / 53	3.63	10.77	0.012	23.00	-12.23

Table 7-13. EIRP Data (NR Band n48 – Ant C)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	π/2 BPSK	3570.00	H	159	327	7.27	1 / 79	7.81	15.08	0.032	23.00	-7.92
	π/2 BPSK	3625.00	H	283	316	6.77	1 / 26	8.65	15.42	0.035	23.00	-7.58
	π/2 BPSK	3680.00	H	228	321	6.25	1 / 26	10.35	**16.60**	**0.046**	23.00	-6.40
	QPSK	3570.00	H	159	327	7.27	1 / 79	7.82	15.09	0.032	23.00	-7.91
	QPSK	3625.00	H	283	316	6.77	1 / 79	9.23	16.00	0.040	23.00	-7.00
	QPSK	3680.00	H	228	321	6.25	1 / 79	10.04	16.29	0.043	23.00	-6.71
	16-QAM	3680.00	H	228	321	6.25	1 / 53	9.50	15.75	0.038	23.00	-7.25
40 MHz	QPSK (CP-OFDM)	3680.00	H	228	321	6.25	1 / 26	9.39	**15.64**	**0.037**	23.00	-7.36
	QPSK (Opposite Pol.)	3680.00	V	392	6	6.77	1 / 53	6.78	13.55	0.023	23.00	-9.45

Table 7-14. EIRP Data (NR Band n48 – Ant I)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm/10MHz]	EIRP [Watts/10MHz]	EIRP Limit [dBm/10MHz]	Margin [dB]
40 MHz	π/2 BPSK	3570.00	V	146	335	7.14	1 / 26	3.90	11.04	0.013	23.00	-11.96
	π/2 BPSK	3625.00	V	120	337	6.91	1 / 53	3.26	10.17	0.010	23.00	-12.83
	π/2 BPSK	3680.00	V	113	339	6.63	1 / 26	3.12	9.75	0.009	23.00	-13.25
	QPSK	3570.00	V	146	335	7.14	1 / 26	3.97	**11.11**	**0.013**	23.00	-11.89
	QPSK	3625.00	V	120	337	6.91	1 / 26	3.25	10.16	0.010	23.00	-12.84
	QPSK	3680.00	V	113	339	6.63	1 / 26	3.04	9.67	0.009	23.00	-13.33
	16-QAM	3570.00	V	146	335	7.14	1 / 26	3.30	10.44	0.011	23.00	-12.56
	16-QAM	3625.00	V	120	337	6.91	1 / 53	3.38	10.29	0.011	23.00	-12.71
	16-QAM	3680.00	V	113	339	6.63	1 / 26	2.95	9.58	0.009	23.00	-13.42
40 MHz	QPSK (CP-OFDM)	3570.00	V	149	343	7.14	1 / 26	3.58	**10.72**	**0.012**	23.00	-12.28
	QPSK (Opposite Pol.)	3570.00	H	113	29	7.27	1 / 26	3.12	10.39	0.011	23.00	-12.61

Table 7-15. EIRP Data (NR Band n48 – Ant D)

7.7 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using hybrid (biconical/log) antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.5.4

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW ≥ 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points ≥ 2 x span / RBW
5. Detector = RMS
6. Trace mode = Max Hold (In cases where the level is within 2dB of the limit, the final measurement is taken using triggering/gating and trace averaging.)
7. The trace was allowed to stabilize

Test Setup

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

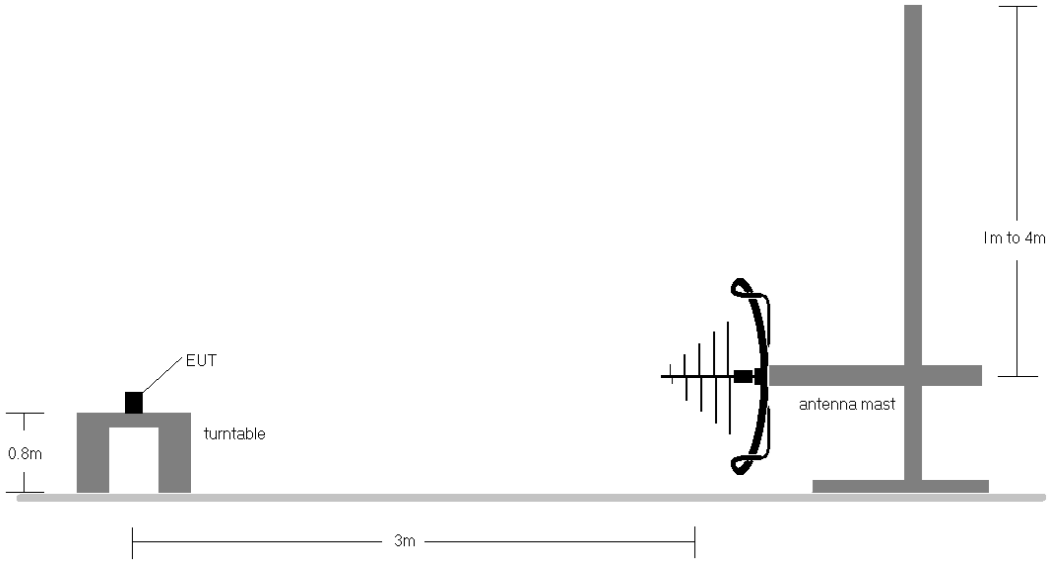


Figure 7-6. Test Instrument & Measurement Setup < 1GHz

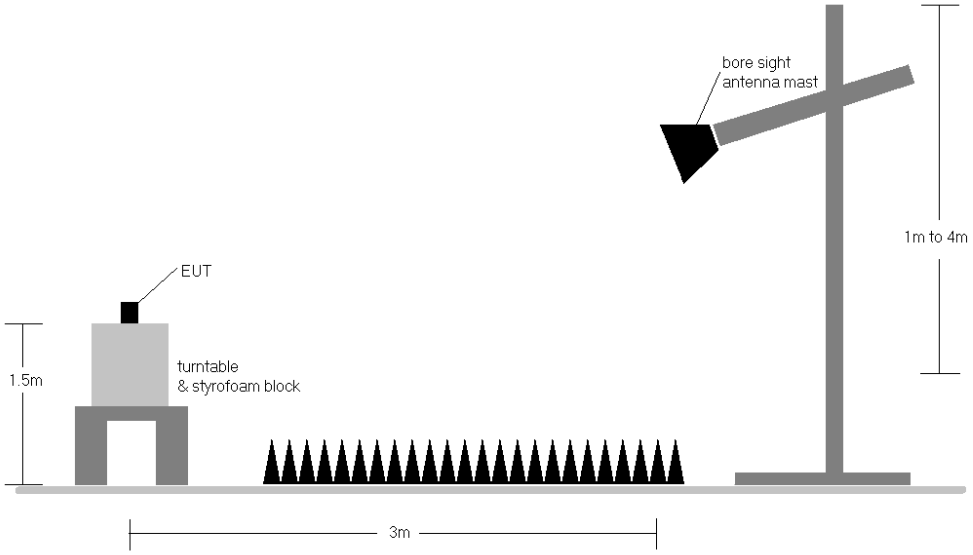


Figure 7-7. Test Instrument & Measurement Setup >1 GHz

Test Notes

1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
   a) E(dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)
   b) EIRP (dBm) = E(dBµV/m) + 20logD – 104.8; where D is the measurement distance in meters.

2) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

3) This unit was tested with its standard battery.

4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.

5) Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.

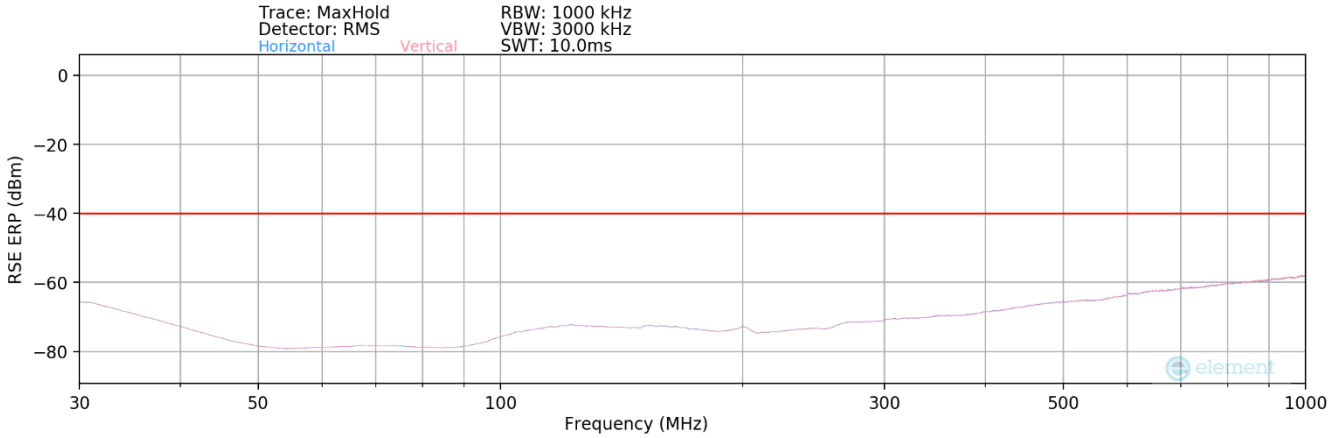
6) The "-" shown in the following RSE tables are used to denote a noise floor measurement.

7) For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.

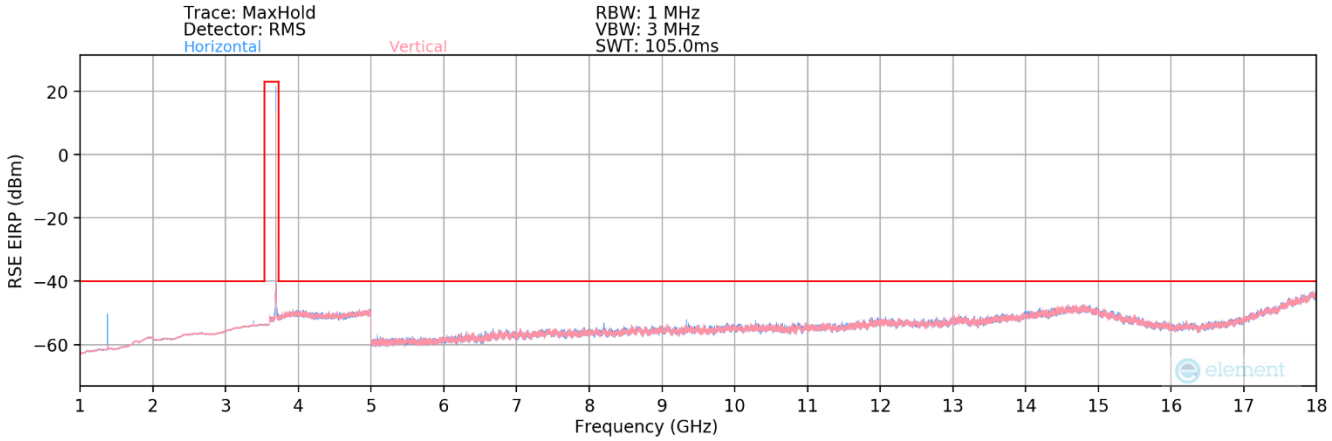
8) Spurious emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device are subject to the rules under which the NR carrier operates. Spurious emissions caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

9) Spurious emissions with the device transmitting in EN-DC mode were investigated with the NR carrier set to transmit from the worst case antenna in standalone mode (Ant F)

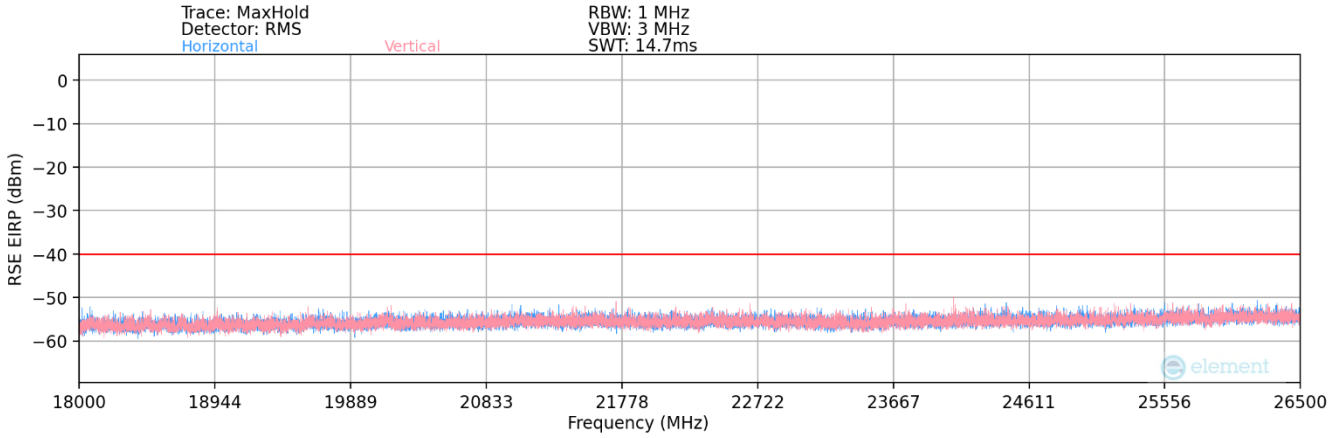
LTE Band 48 – Ant F



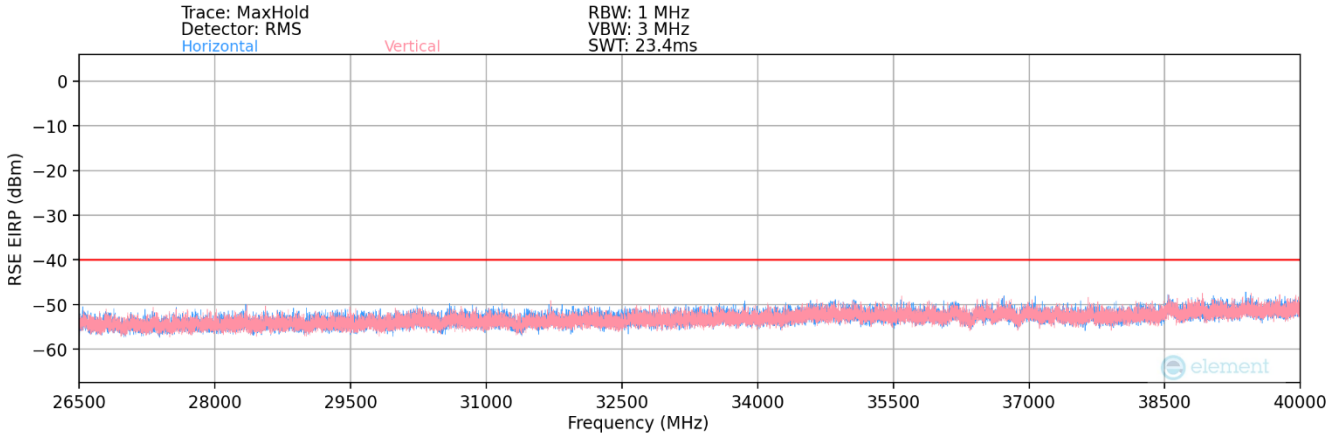
Plot 7-146. Radiated Spurious Plot 30MHz - 1GHz (LTE Band 48 – Ant F)



Plot 7-147. Radiated Spurious Plot (LTE Band 48 – Ant F)



Plot 7-148. Radiated Spurious Plot (LTE Band 48 – Ant F)



Plot 7-149. Radiated Spurious Plot (LTE Band 48 – Ant F)

Bandwidth (MHz):	20
Frequency (MHz):	3560.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
116.58	H	-	-	-82.88	19.99	44.11	-53.30	-40.00	-13.30
284.21	H	-	-	-81.87	20.71	45.84	-51.57	-40.00	-11.57
483.81	H	-	-	-82.41	25.35	49.94	-47.47	-40.00	-7.47

Table 7-16. Radiated Spurious Data (LTE Band 48 - Ant F)

Bandwidth (MHz):	20
Frequency (MHz):	3560.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7120.00	H	212	19	-63.24	4.24	48.00	-47.26	-40.00	-7.26
10680.00	H	276	64	-71.22	7.93	43.71	-51.55	-40.00	-11.55
14240.00	H	-	-	-76.24	12.65	43.41	-51.85	-40.00	-11.85
17800.00	H	-	-	-74.57	16.07	48.50	-46.76	-40.00	-6.76
21360.00	H	-	-	-55.64	3.81	55.17	-49.63	-40.00	-9.63

Table 7-17. Radiated Spurious Data (LTE Band 48 – Low Channel - Ant F)

Bandwidth (MHz):	20
Frequency (MHz):	3625.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7250.00	H	335	46	-71.02	3.95	39.93	-55.32	-40.00	-15.32
10875.00	H	310	69	-75.52	8.62	40.10	-55.16	-40.00	-15.16
14500.00	H	-	-	-76.27	13.66	44.39	-50.87	-40.00	-10.87
18125.00	H	-	-	-54.17	1.42	54.25	-50.55	-40.00	-10.55
21750.00	H	-	-	-54.90	3.83	55.93	-48.87	-40.00	-8.87

Table 7-18. Radiated Spurious Data (LTE Band 48 – Mid Channel - Ant F)

Bandwidth (MHz):	20
Frequency (MHz):	3690.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 50

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7380.00	H	220	71	-67.06	4.52	44.46	-50.80	-40.00	-10.80
11070.00	H	169	131	-75.27	8.63	40.36	-54.89	-40.00	-14.89
14760.00	H	-	-	-76.72	13.94	44.22	-51.03	-40.00	-11.03
18450.00	H	-	-	-54.61	1.74	54.13	-50.67	-40.00	-10.67
22140.00	H	-	-	-55.23	3.71	55.48	-49.32	-40.00	-9.32

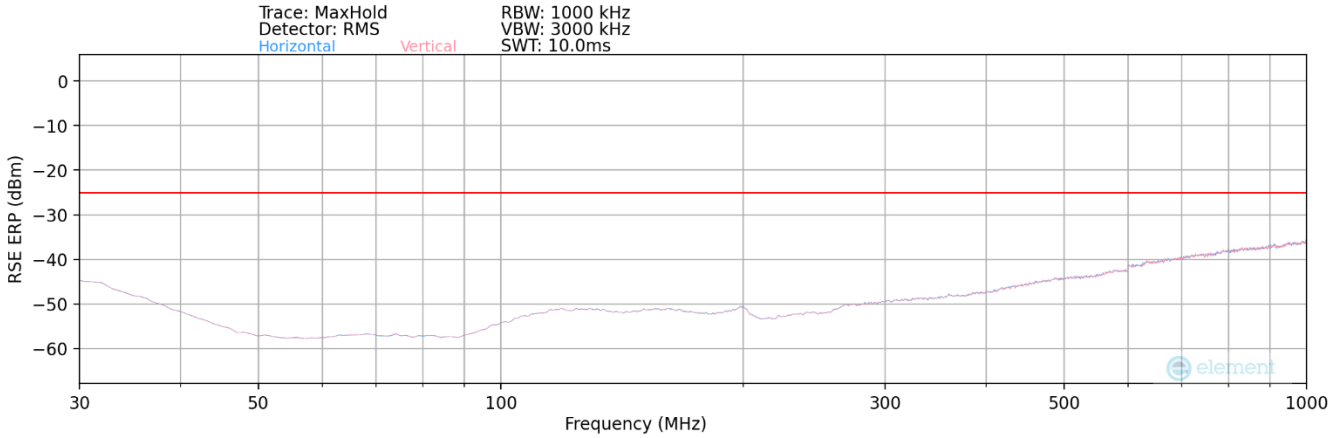
Table 7-19. Radiated Spurious Data (LTE Band 48 – High Channel - Ant F)

Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	20
Frequency (MHz):	3560.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 50

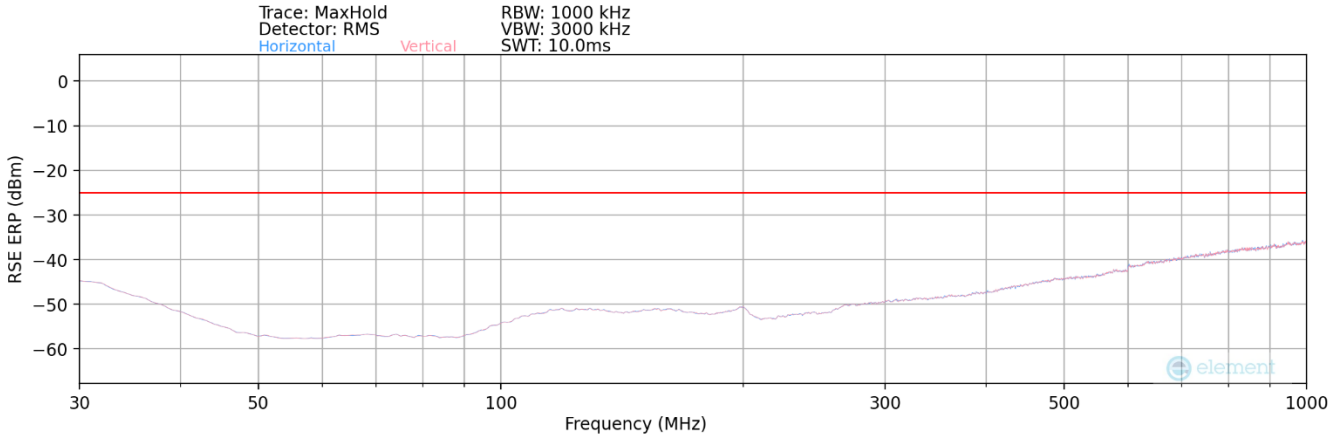
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7120.00	H	177	82	-72.09	8.09	43.00	-52.26	-40.00	-12.26
10680.00	H	153	363	-76.60	12.21	42.61	-52.65	-40.00	-12.65
14240.00	H	-	-	-79.47	14.87	42.40	-52.86	-40.00	-12.86
17800.00	H	-	-	-79.65	17.58	44.93	-50.32	-40.00	-10.32

Table 7-20. Radiated Spurious Data with WCP (LTE Band 48)

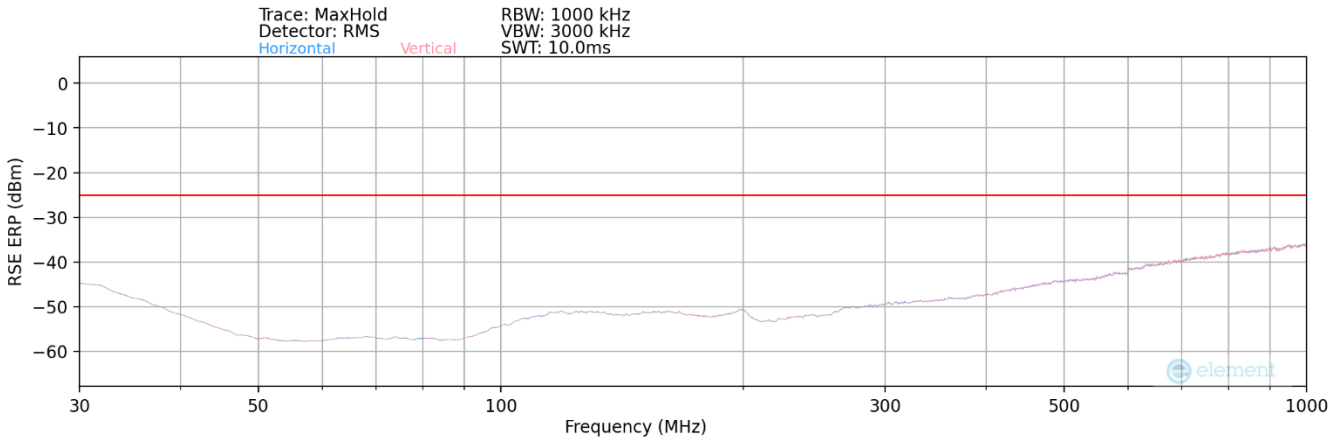
ULCA LB48



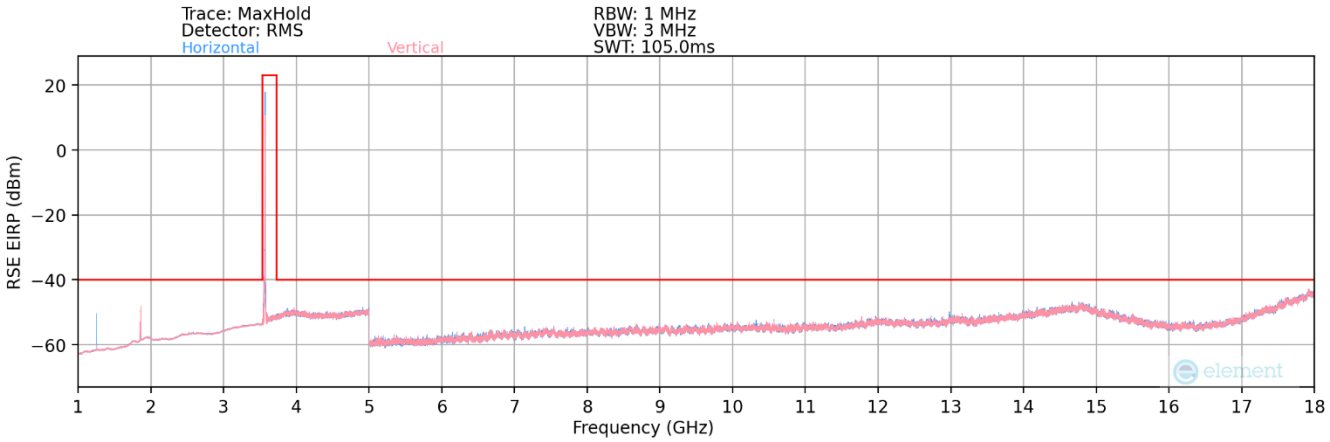
Plot 7-150. Radiated Spurious Plot – 30MHz-1GHz (ULCA LB48 – Low Channel)



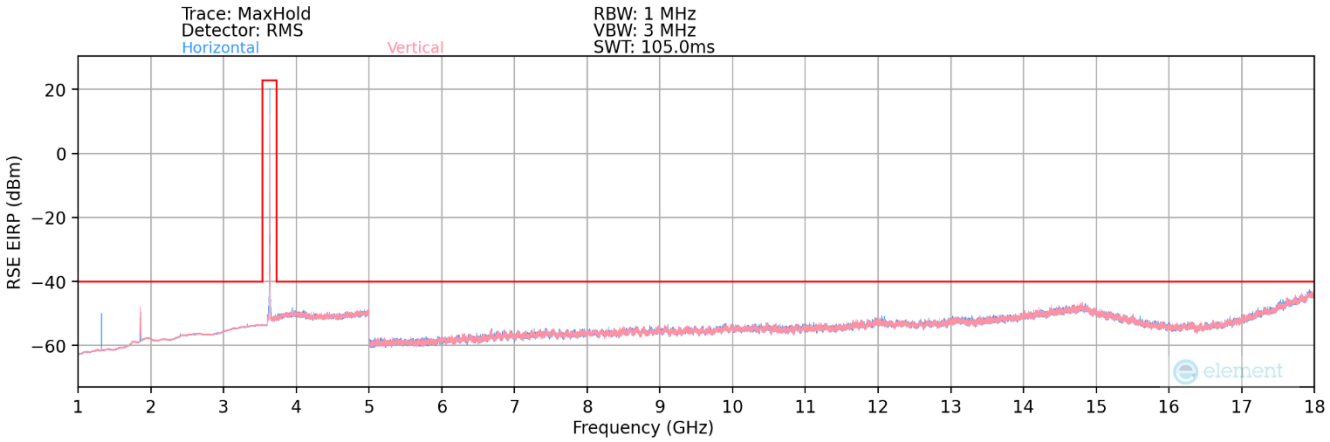
Plot 7-151. Radiated Spurious Plot – 30MHz-1GHz (ULCA LB48 – Mid Channel)



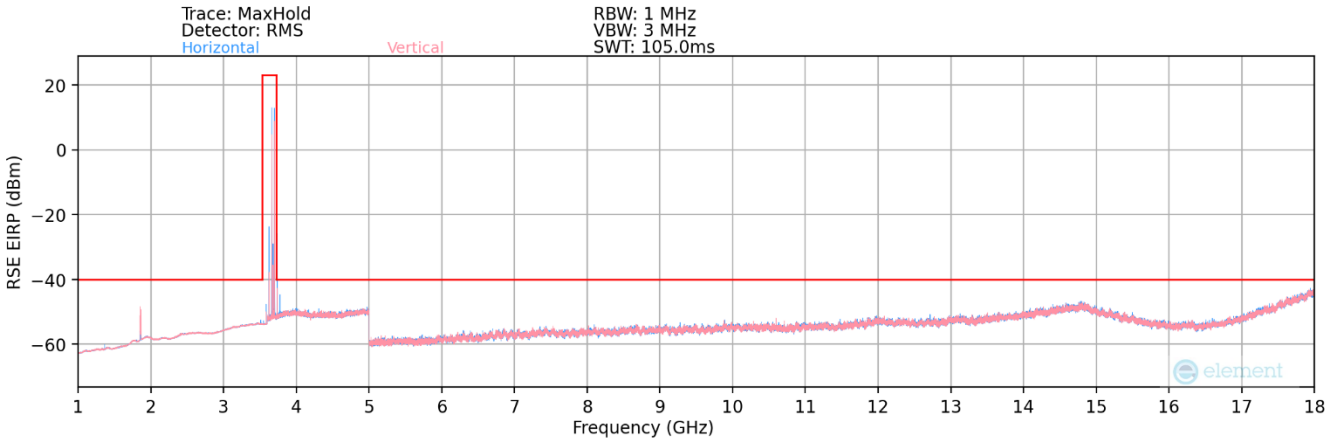
Plot 7-152. Radiated Spurious Plot – 30MHz-1GHz (ULCA LB48 – High Channel)



Plot 7-153. Radiated Spurious Plot – 1-18 GHz (ULCA LB48 – Low Channel)



Plot 7-154. Radiated Spurious Plot – 1-18 GHz (ULCA LB48 – Mid Channel)



Plot 7-155. Radiated Spurious Plot – 1-18 GHz (ULCA LB48 – High Channel)