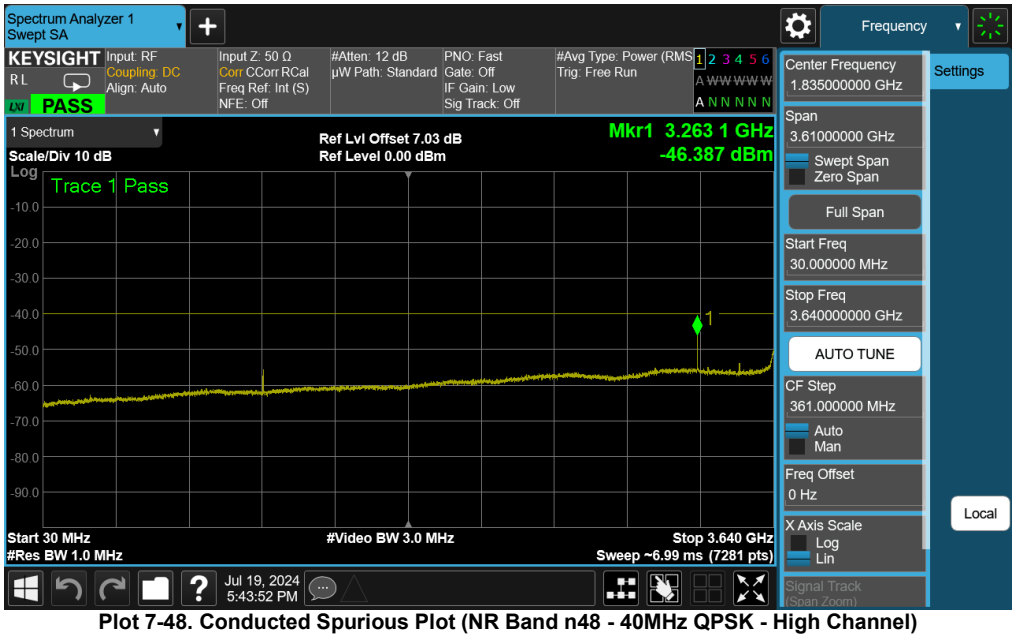
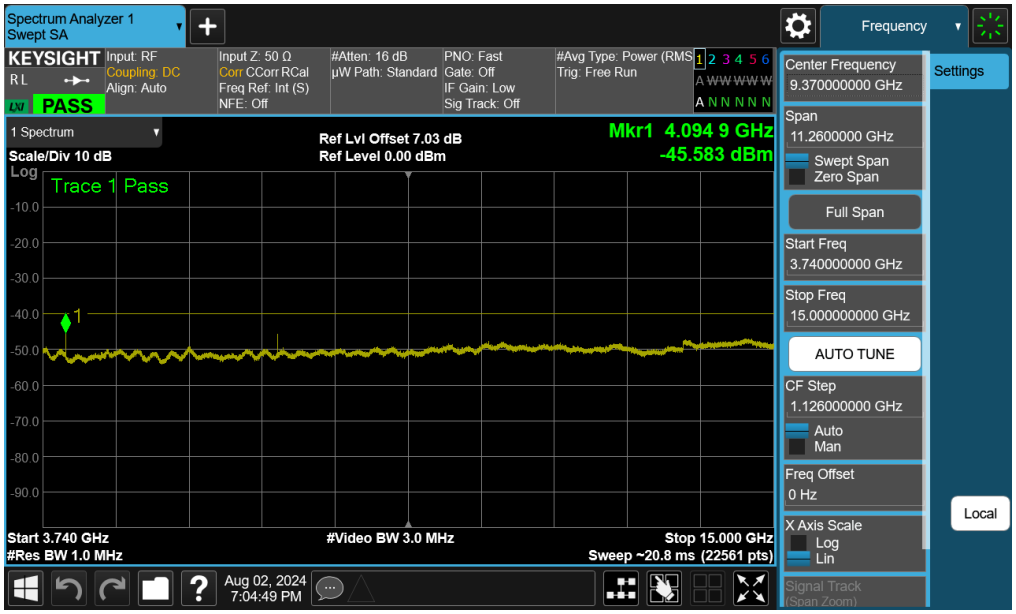
## NR Band n48 – Ant M2

| Mode | Bandwidth | Channel | Range [MHz] | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| NR-n48 | 40MHz | Low | 30.0 - 3510.0 | -54.9 | -40.0 | -14.90 |
| | | Low | 3610.0 - 15000.0 | -47.45 | -40.0 | -7.45 |
| | | Low | 15000.0 - 27000.0 | -59.6 | -40.0 | -19.60 |
| | | Low | 27000.0 - 40000.0 | -53.74 | -40.0 | -13.73 |
| | | Mid | 30.0 - 35750.0 | -46.4 | -40.0 | -6.40 |
| | | Mid | 3675.0 - 15000.0 | -45.67 | -40.0 | -5.67 |
| | | Mid | 15000.0 - 27000.0 | -59.56 | -40.0 | -19.56 |
| | | Mid | 27000.0 - 40000.0 | -52.56 | -40.0 | -12.56 |
| | | High | 30.0 - 3640.0 | -46.39 | -40.0 | -6.39 |
| | | High | 3740.0 - 15000.0 | -45.58 | -40.0 | -5.58 |
| | | High | 15000.0 - 27000.0 | -53.98 | -40.0 | -13.98 |
| | | High | 27000.0 - 40000.0 | -52.59 | -40.0 | -12.59 |

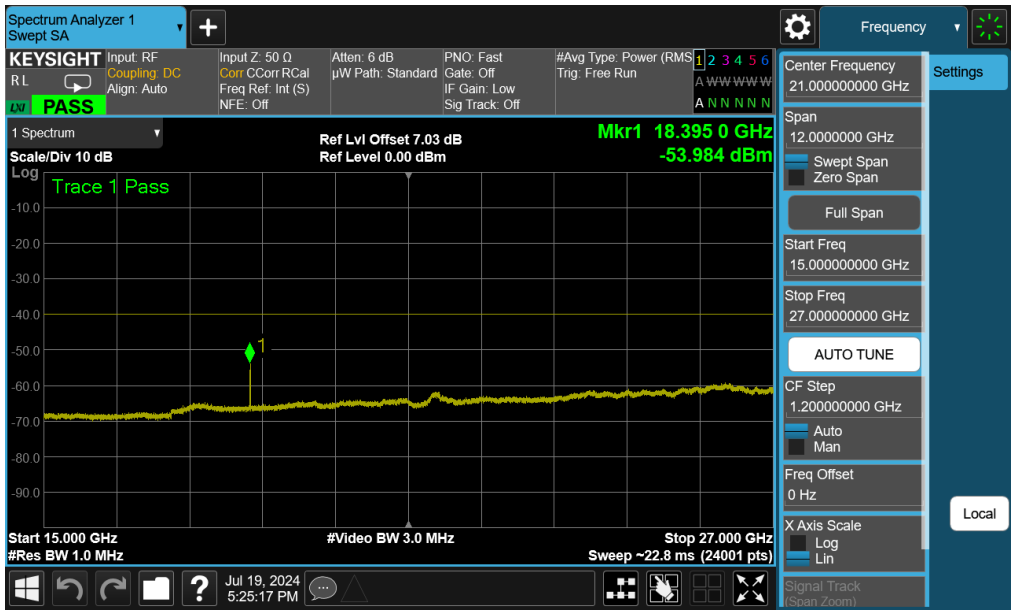
**Table 7-14. Conducted Emission Test Results**



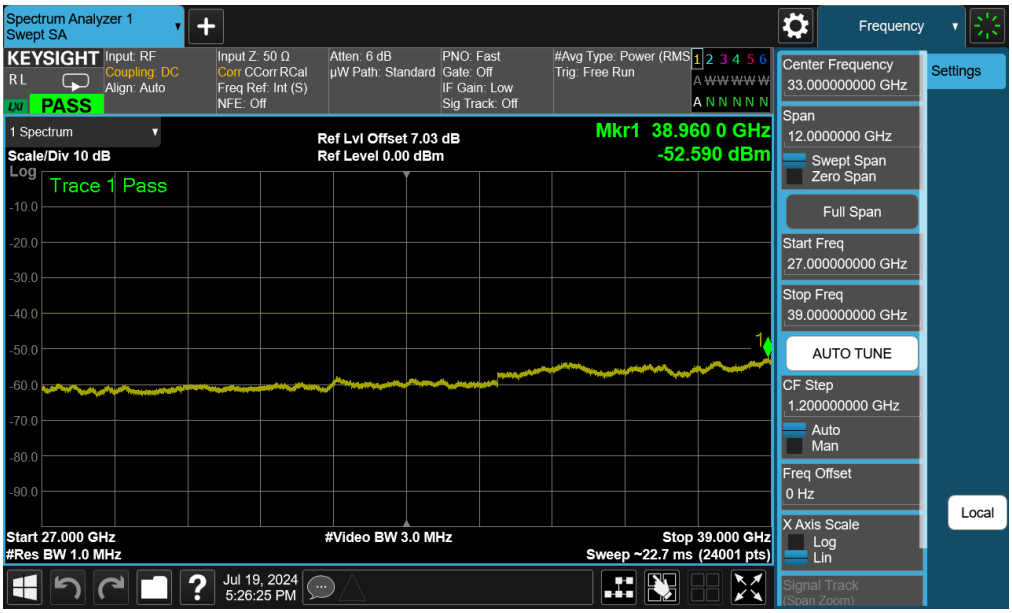

**Plot 7-48. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)**




**Plot 7-49. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)**




**Plot 7-50. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)**

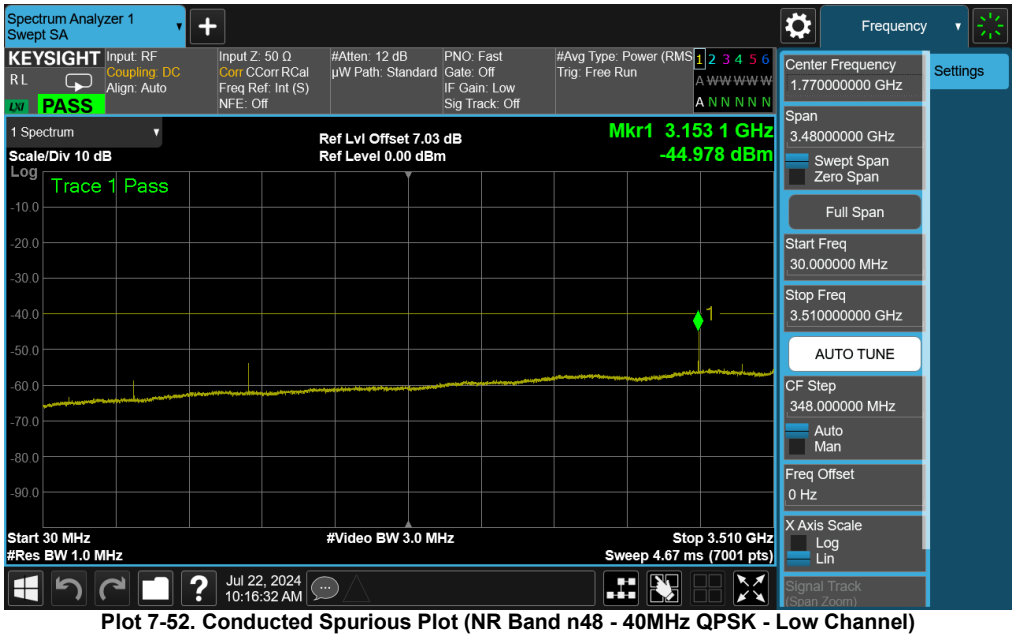



**Plot 7-51. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - High Channel)**

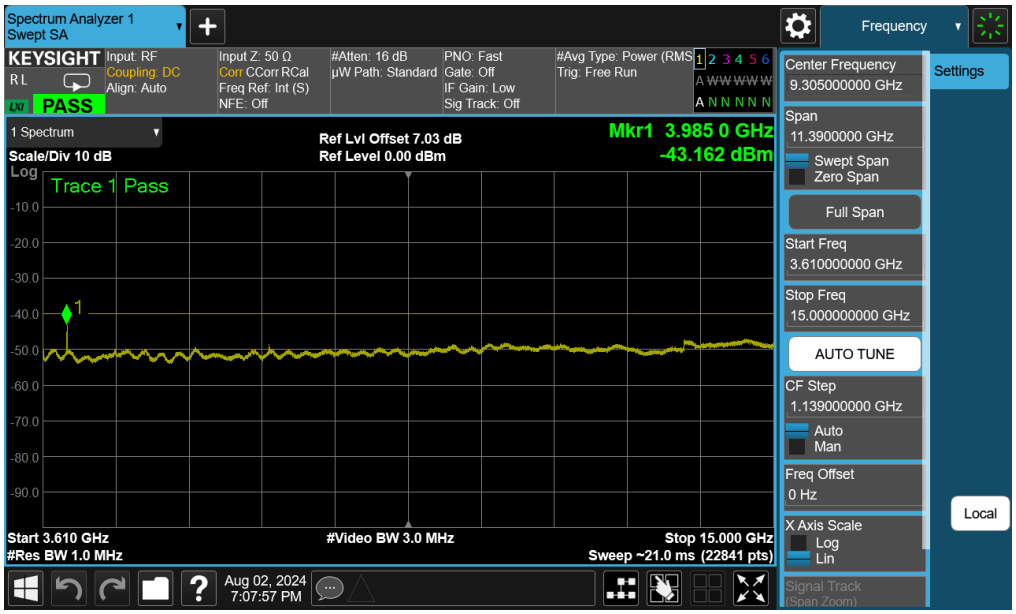
## NR Band n48 – Ant S3

| Mode | Bandwidth | Channel | Range [MHz] | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| NR-n48 | 40MHz | Low | 30.0 - 3510.0 | -44.98 | -40.0 | -4.98 |
| | | Low | 3610.0 - 15000.0 | -43.16 | -40.0 | -3.16 |
| | | Low | 15000.0 - 27000.0 | -60.3 | -40.0 | -20.30 |
| | | Low | 27000.0 - 40000.0 | -54.32 | -40.0 | -14.32 |
| | | Mid | 30.0 - 35750.0 | -44.5 | -40.0 | -4.50 |
| | | Mid | 3675.0 - 15000.0 | -48.66 | -40.0 | -8.66 |
| | | Mid | 15000.0 - 27000.0 | -59.92 | -40.0 | -19.92 |
| | | Mid | 27000.0 - 40000.0 | -53.53 | -40.0 | -13.53 |
| | | High | 30.0 - 3640.0 | -48.44 | -40.0 | -8.44 |
| | | High | 3740.0 - 15000.0 | -44.05 | -40.0 | -4.05 |
| | | High | 15000.0 - 27000.0 | -50.1 | -40.0 | -10.10 |
| | | High | 27000.0 - 40000.0 | -53.54 | -40.0 | -13.54 |

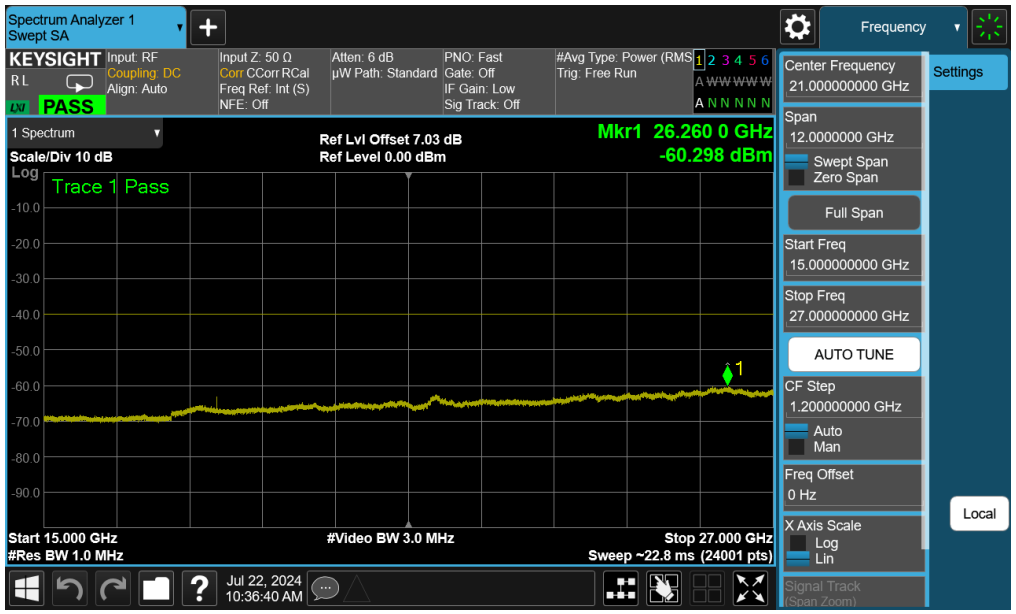
**Table 7-15. Conducted Emission Test Results**



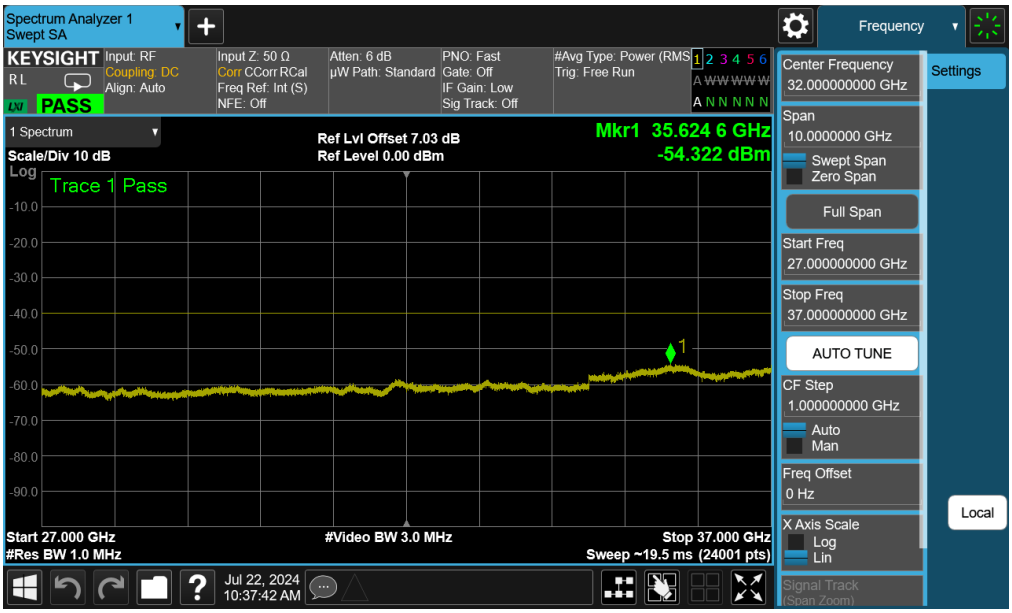

**Plot 7-52. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel)**




**Plot 7-53. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel)**




**Plot 7-54. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel)**




**Plot 7-55. Conducted Spurious Plot (NR Band n48 - 40MHz QPSK - Low Channel)**

## 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.

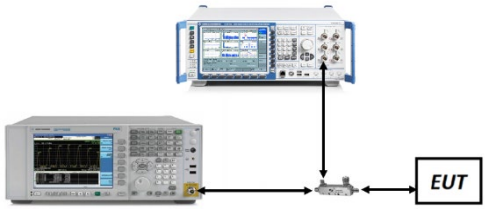



**Figure 7-4. Test Instrument & Measurement Setup**

## Test Notes

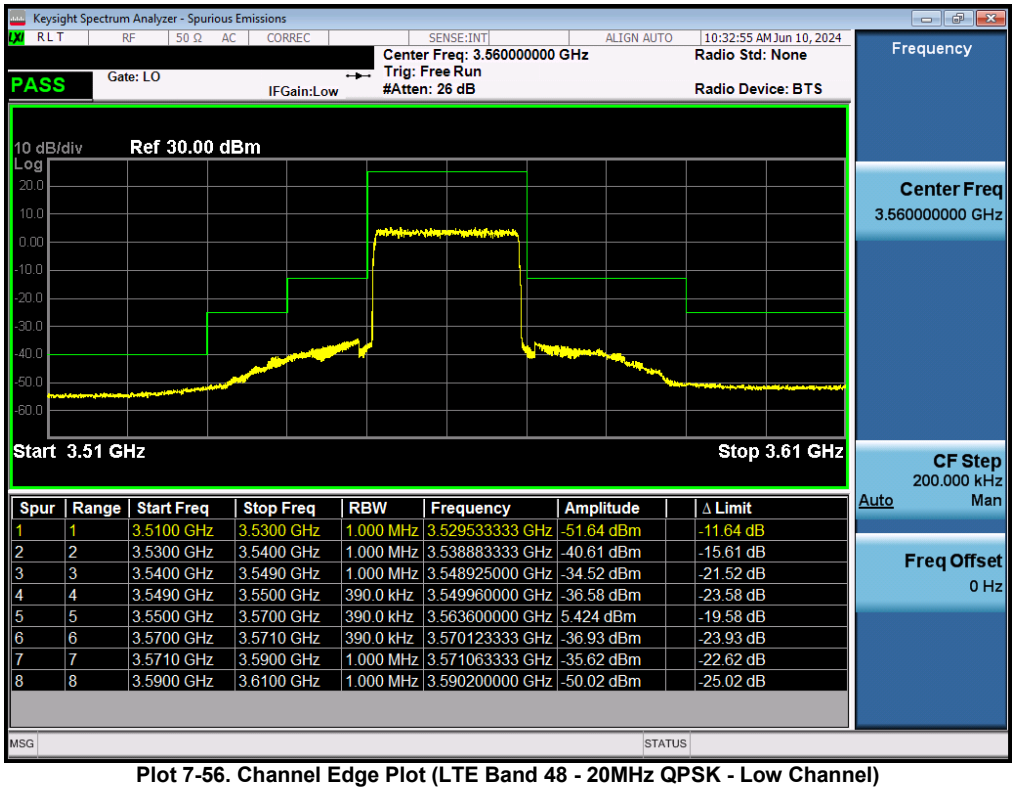
1. Per 96.41(e)(3)(i), compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth 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

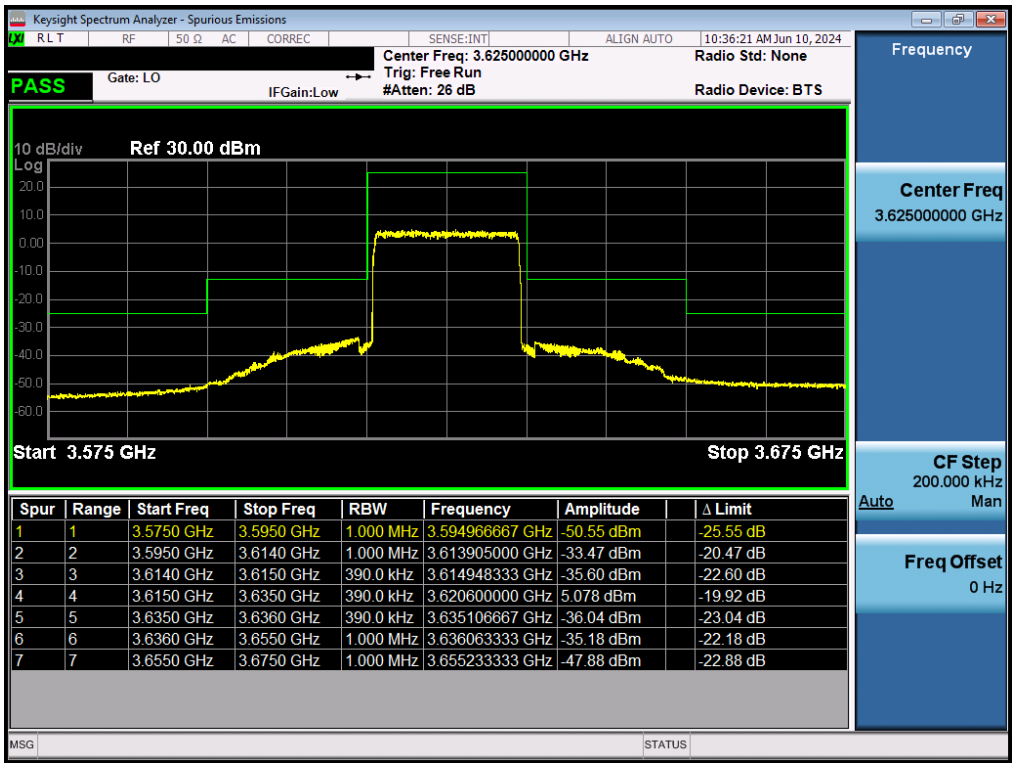
| Mode | Bandwidth | Channel | Test Case | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| LTE-B48 | 20 MHz | Low | Band Edge | -51.64 | -40 | -11.64 |
| | | Mid | Band Edge | -33.47 | -13 | -20.47 |
| | | High | Band Edge | -48.02 | -40 | -8.02 |
| | 15 MHz | Low | Band Edge | -51.02 | -40 | -11.02 |
| | | Mid | Band Edge | -30.72 | -13 | -17.72 |
| | | High | Band Edge | -48.95 | -40 | -8.95 |
| | 10 MHz | Low | Band Edge | -53.54 | -40 | -13.54 |
| | | Mid | Band Edge | -31.65 | -13 | -18.65 |
| | | High | Band Edge | -50.40 | -40 | -10.40 |
| | 5 MHz | Low | Band Edge | -53.96 | -40 | -13.96 |
| | | Mid | Band Edge | -30.22 | -13 | -17.22 |
| | | High | Band Edge | -50.32 | -40 | -10.32 |

**Table 7-16. Conducted Band Edge Test Results**



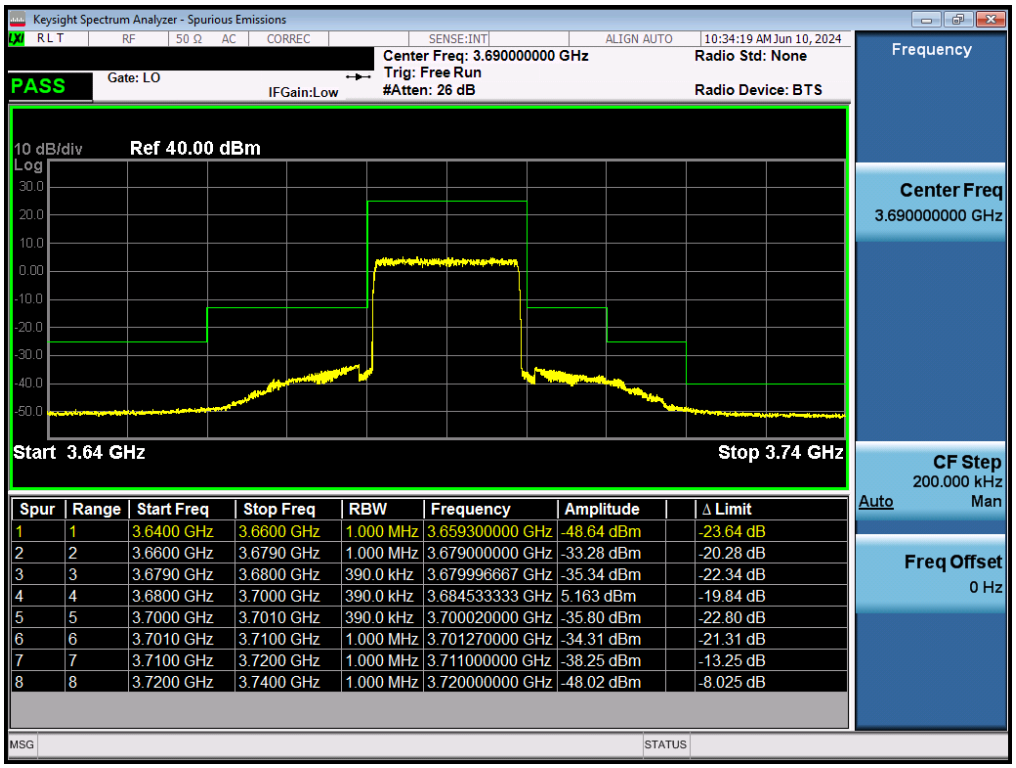

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5100 GHz | 3.5300 GHz | 1.000 MHz | 3.529533333 GHz | -51.64 dBm | -11.64 dB |
| 2 | 2 | 3.5300 GHz | 3.5400 GHz | 1.000 MHz | 3.538883333 GHz | -40.61 dBm | -15.61 dB |
| 3 | 3 | 3.5400 GHz | 3.5490 GHz | 1.000 MHz | 3.548925000 GHz | -34.52 dBm | -21.52 dB |
| 4 | 4 | 3.5490 GHz | 3.5500 GHz | 390.0 kHz | 3.549960000 GHz | -36.58 dBm | -23.58 dB |
| 5 | 5 | 3.5500 GHz | 3.5700 GHz | 390.0 kHz | 3.563600000 GHz | 5.424 dBm | -19.58 dB |
| 6 | 6 | 3.5700 GHz | 3.5710 GHz | 390.0 kHz | 3.570123333 GHz | -36.93 dBm | -23.93 dB |
| 7 | 7 | 3.5710 GHz | 3.5900 GHz | 1.000 MHz | 3.571063333 GHz | -35.62 dBm | -22.62 dB |
| 8 | 8 | 3.5900 GHz | 3.6100 GHz | 1.000 MHz | 3.590200000 GHz | -50.02 dBm | -25.02 dB |

**Plot 7-56. 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 | 3.5950 GHz | 1.000 MHz | 3.594966667 GHz | -50.55 dBm | -25.55 dB |
| 2 | 2 | 3.5950 GHz | 3.6140 GHz | 1.000 MHz | 3.613905000 GHz | -33.47 dBm | -20.47 dB |
| 3 | 3 | 3.6140 GHz | 3.6150 GHz | 390.0 kHz | 3.614948333 GHz | -35.60 dBm | -22.60 dB |
| 4 | 4 | 3.6150 GHz | 3.6350 GHz | 390.0 kHz | 3.620600000 GHz | 5.078 dBm | -19.92 dB |
| 5 | 5 | 3.6350 GHz | 3.6360 GHz | 390.0 kHz | 3.635106667 GHz | -36.04 dBm | -23.04 dB |
| 6 | 6 | 3.6360 GHz | 3.6550 GHz | 1.000 MHz | 3.636063333 GHz | -35.18 dBm | -22.18 dB |
| 7 | 7 | 3.6550 GHz | 3.6750 GHz | 1.000 MHz | 3.655233333 GHz | -47.88 dBm | -22.88 dB |

**Plot 7-57. 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 | 3.6600 GHz | 1.000 MHz | 3.659300000 GHz | -48.64 dBm | -23.64 dB |
| 2 | 2 | 3.6600 GHz | 3.6790 GHz | 1.000 MHz | 3.679000000 GHz | -33.28 dBm | -20.28 dB |
| 3 | 3 | 3.6790 GHz | 3.6800 GHz | 390.0 kHz | 3.679996667 GHz | -35.34 dBm | -22.34 dB |
| 4 | 4 | 3.6800 GHz | 3.7000 GHz | 390.0 kHz | 3.684533333 GHz | 5.163 dBm | -19.84 dB |
| 5 | 5 | 3.7000 GHz | 3.7010 GHz | 390.0 kHz | 3.700020000 GHz | -35.80 dBm | -22.80 dB |
| 6 | 6 | 3.7010 GHz | 3.7100 GHz | 1.000 MHz | 3.701270000 GHz | -34.31 dBm | -21.31 dB |
| 7 | 7 | 3.7100 GHz | 3.7200 GHz | 1.000 MHz | 3.711000000 GHz | -38.25 dBm | -13.25 dB |
| 8 | 8 | 3.7200 GHz | 3.7400 GHz | 1.000 MHz | 3.720000000 GHz | -48.02 dBm | -8.025 dB |

**Plot 7-58. Channel Edge Plot (LTE Band 48 - 20MHz QPSK - High Channel)**

## ULCA LB48

| Mode | Bandwidth | Channel | Test Case | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| ULCA LB48 | 20+20MHz | Low | Band Edge | -43.98 | -40 | -3.98 |
| | | Mid | Band Edge | -39.46 | -25 | -14.46 |
| | | High | Band Edge | -41.64 | -40 | -1.64 |

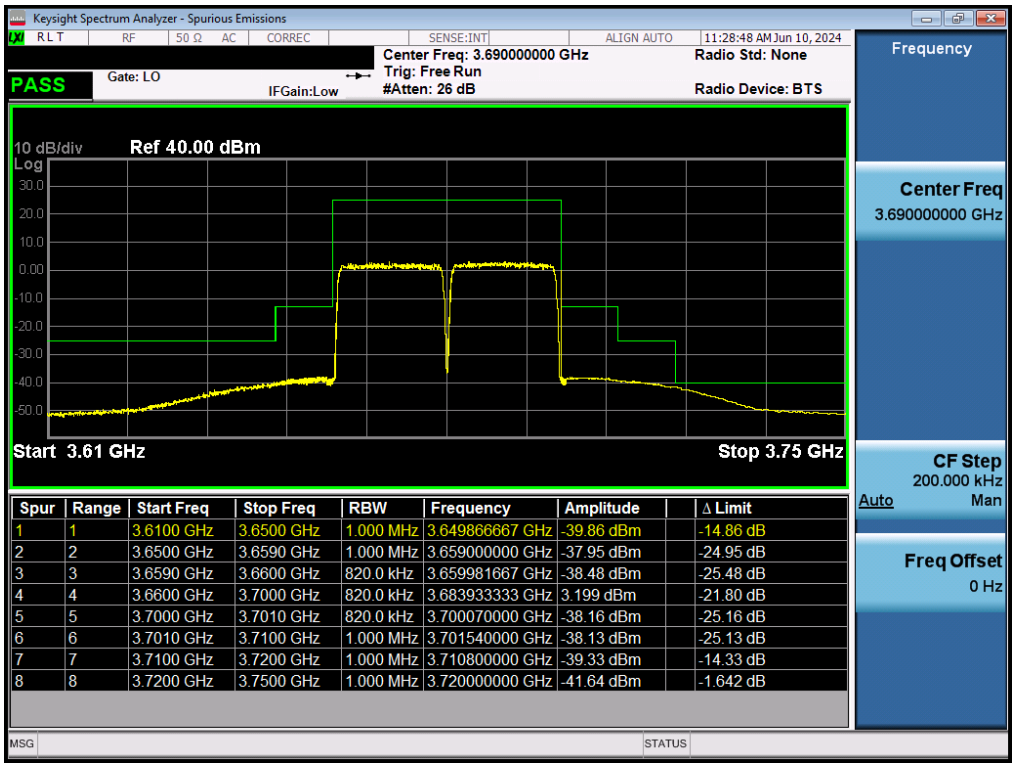
**Table 7-17. Conducted Band Edge Test Results**


| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5000 GHz | 3.5300 GHz | 1.000 MHz | 3.529700000 GHz | -43.98 dBm | -3.980 dB |
| 2 | 2 | 3.5300 GHz | 3.5400 GHz | 1.000 MHz | 3.539183333 GHz | -40.97 dBm | -15.97 dB |
| 3 | 3 | 3.5400 GHz | 3.5490 GHz | 1.000 MHz | 3.548700000 GHz | -38.83 dBm | -25.83 dB |
| 4 | 4 | 3.5490 GHz | 3.5500 GHz | 820.0 kHz | 3.549970000 GHz | -39.09 dBm | -26.09 dB |
| 5 | 5 | 3.5500 GHz | 3.5900 GHz | 820.0 kHz | 3.557200000 GHz | 3.166 dBm | -21.83 dB |
| 6 | 6 | 3.5900 GHz | 3.5910 GHz | 820.0 kHz | 3.590010000 GHz | -39.75 dBm | -26.75 dB |
| 7 | 7 | 3.5910 GHz | 3.6000 GHz | 1.000 MHz | 3.591540000 GHz | -38.91 dBm | -25.91 dB |
| 8 | 8 | 3.6000 GHz | 3.6400 GHz | 1.000 MHz | 3.600000000 GHz | -40.35 dBm | -15.35 dB |

**Plot 7-59. Channel Edge Plot (ULCA LB48 – 20+20MHz QPSK - Low Channel)**


| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5650 GHz | 3.6050 GHz | 1.000 MHz | 3.604933333 GHz | -40.03 dBm | -15.03 dB |
| 2 | 2 | 3.6050 GHz | 3.6140 GHz | 1.000 MHz | 3.612845000 GHz | -38.41 dBm | -25.41 dB |
| 3 | 3 | 3.6140 GHz | 3.6150 GHz | 820.0 kHz | 3.614998333 GHz | -38.95 dBm | -25.95 dB |
| 4 | 4 | 3.6150 GHz | 3.6550 GHz | 820.0 kHz | 3.650266667 GHz | 2.622 dBm | -22.38 dB |
| 5 | 5 | 3.6550 GHz | 3.6560 GHz | 820.0 kHz | 3.655183333 GHz | -38.50 dBm | -25.50 dB |
| 6 | 6 | 3.6560 GHz | 3.6650 GHz | 1.000 MHz | 3.656990000 GHz | -38.33 dBm | -25.33 dB |
| 7 | 7 | 3.6650 GHz | 3.7050 GHz | 1.000 MHz | 3.665400000 GHz | -39.46 dBm | -14.46 dB |

**Plot 7-60. Channel Edge Plot (ULCA LB48 – 20+20MHz QPSK - Mid Channel)**



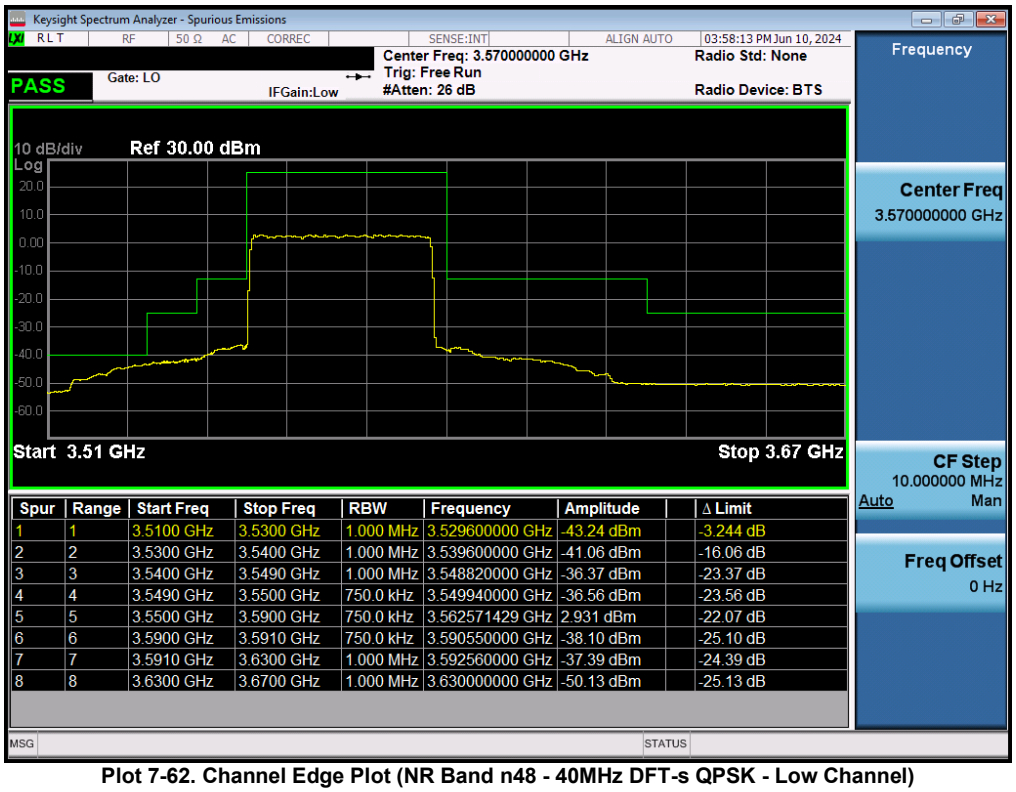

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.6100 GHz | 3.6500 GHz | 1.000 MHz | 3.649866667 GHz | -39.86 dBm | -14.86 dB |
| 2 | 2 | 3.6500 GHz | 3.6590 GHz | 1.000 MHz | 3.659000000 GHz | -37.95 dBm | -24.95 dB |
| 3 | 3 | 3.6590 GHz | 3.6600 GHz | 820.0 kHz | 3.659981667 GHz | -38.48 dBm | -25.48 dB |
| 4 | 4 | 3.6600 GHz | 3.7000 GHz | 820.0 kHz | 3.683933333 GHz | 3.199 dBm | -21.80 dB |
| 5 | 5 | 3.7000 GHz | 3.7010 GHz | 820.0 kHz | 3.700070000 GHz | -38.16 dBm | -25.16 dB |
| 6 | 6 | 3.7010 GHz | 3.7100 GHz | 1.000 MHz | 3.701540000 GHz | -38.13 dBm | -25.13 dB |
| 7 | 7 | 3.7100 GHz | 3.7200 GHz | 1.000 MHz | 3.710800000 GHz | -39.33 dBm | -14.33 dB |
| 8 | 8 | 3.7200 GHz | 3.7500 GHz | 1.000 MHz | 3.720000000 GHz | -41.64 dBm | -1.642 dB |

**Plot 7-61. Channel Edge Plot (ULCA LB48 – 20+20MHz QPSK - High Channel)**

## NR Band n48 – Ant S4

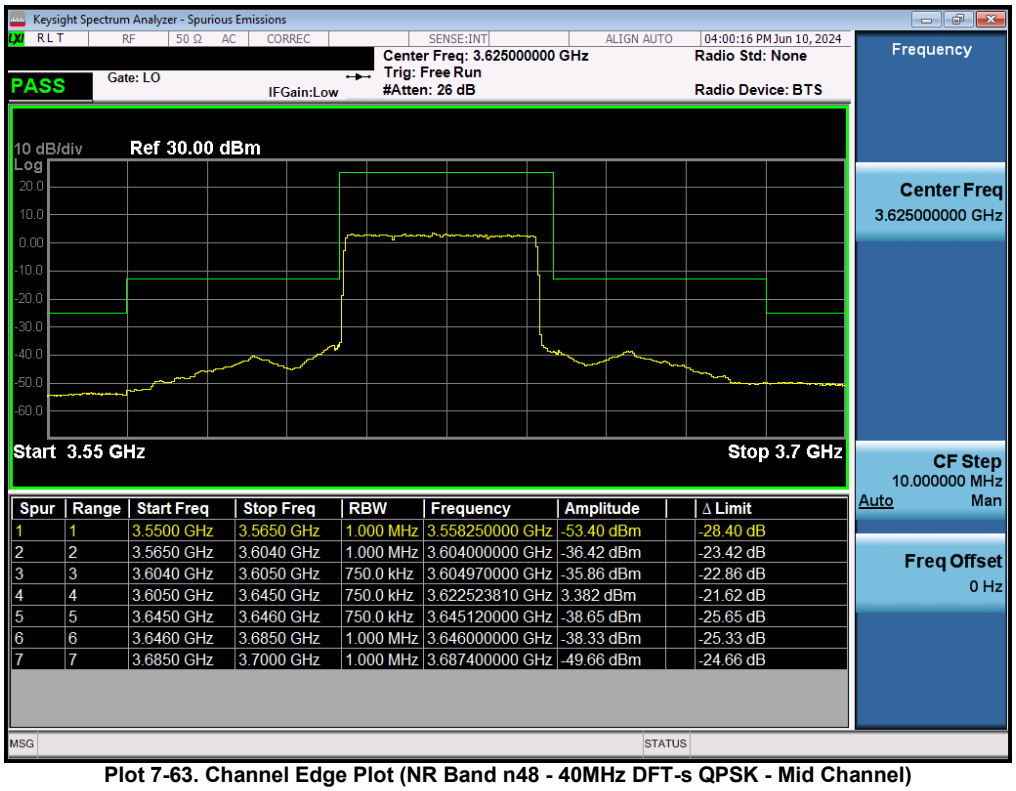
| Mode | Bandwidth | Channel | Test Case | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| NR-n48 | 40MHz | Low | Band Edge | -43.24 | -40 | -3.24 |
| | | Mid | Band Edge | -35.86 | -13 | -22.86 |
| | | High | Band Edge | -41.54 | -40 | -1.54 |
| | 30MHz | Low | Band Edge | -42.98 | -40 | -2.98 |
| | | Mid | Band Edge | -33.93 | -13 | -20.93 |
| | | High | Band Edge | -41.90 | -40 | -1.90 |
| | 20MHz | Low | Band Edge | -51.21 | -40 | -11.21 |
| | | Mid | Band Edge | -31.60 | -13 | -18.60 |
| | | High | Band Edge | -48.18 | -40 | -8.18 |
| | 15MHz | Low | Band Edge | -51.47 | -40 | -11.47 |
| | | Mid | Band Edge | -30.59 | -13 | -17.59 |
| | | High | Band Edge | -49.10 | -40 | -9.10 |
| | 10MHz | Low | Band Edge | -53.68 | -40 | -13.68 |
| | | Mid | Band Edge | -30.67 | -13 | -17.67 |
| | | High | Band Edge | -50.27 | -40 | -10.27 |

**Table 7-18. Conducted Band Edge Test Results**



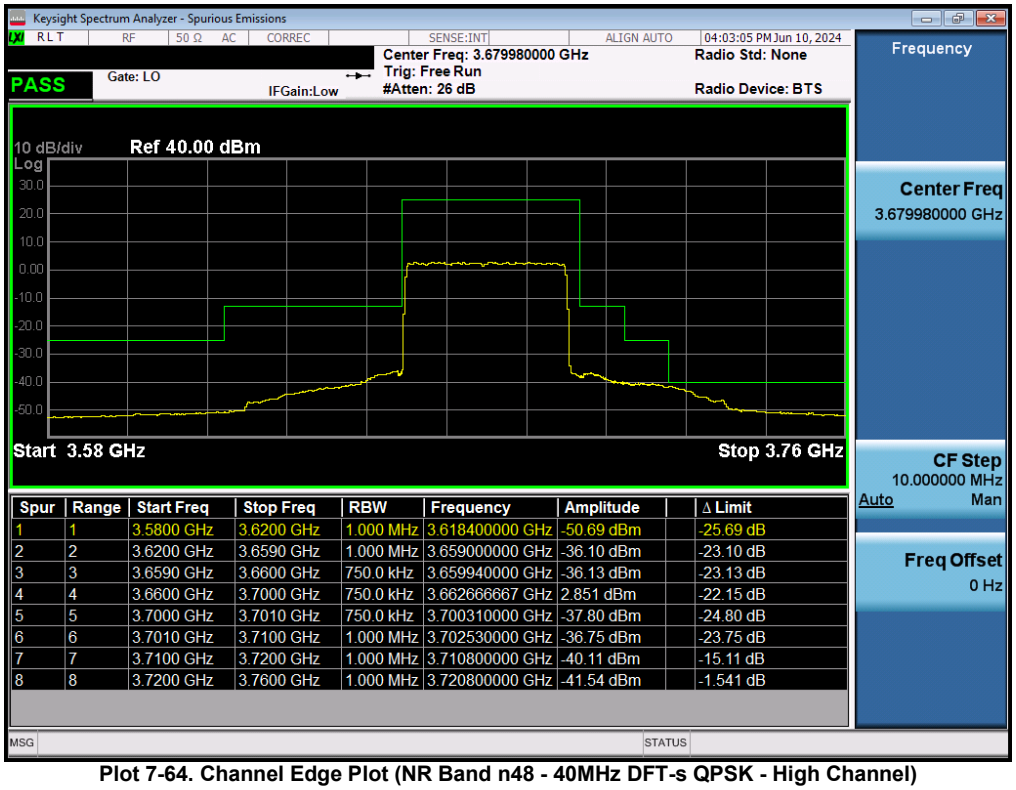

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5100 GHz | 3.5300 GHz | 1.000 MHz | 3.529600000 GHz | -43.24 dBm | -3.244 dB |
| 2 | 2 | 3.5300 GHz | 3.5400 GHz | 1.000 MHz | 3.539600000 GHz | -41.06 dBm | -16.06 dB |
| 3 | 3 | 3.5400 GHz | 3.5490 GHz | 1.000 MHz | 3.548820000 GHz | -36.37 dBm | -23.37 dB |
| 4 | 4 | 3.5490 GHz | 3.5500 GHz | 750.0 kHz | 3.549940000 GHz | -36.56 dBm | -23.56 dB |
| 5 | 5 | 3.5500 GHz | 3.5900 GHz | 750.0 kHz | 3.562571429 GHz | 2.931 dBm | -22.07 dB |
| 6 | 6 | 3.5900 GHz | 3.5910 GHz | 750.0 kHz | 3.590550000 GHz | -38.10 dBm | -25.10 dB |
| 7 | 7 | 3.5910 GHz | 3.6300 GHz | 1.000 MHz | 3.592560000 GHz | -37.39 dBm | -24.39 dB |
| 8 | 8 | 3.6300 GHz | 3.6700 GHz | 1.000 MHz | 3.630000000 GHz | -50.13 dBm | -25.13 dB |

**Plot 7-62. Channel Edge Plot (NR Band n48 - 40MHz DFT-s 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 | 3.558250000 GHz | -53.40 dBm | -28.40 dB |
| 2 | 2 | 3.5650 GHz | 3.6040 GHz | 1.000 MHz | 3.604000000 GHz | -36.42 dBm | -23.42 dB |
| 3 | 3 | 3.6040 GHz | 3.6050 GHz | 750.0 kHz | 3.604970000 GHz | -35.86 dBm | -22.86 dB |
| 4 | 4 | 3.6050 GHz | 3.6450 GHz | 750.0 kHz | 3.622523810 GHz | 3.382 dBm | -21.62 dB |
| 5 | 5 | 3.6450 GHz | 3.6460 GHz | 750.0 kHz | 3.645120000 GHz | -38.65 dBm | -25.65 dB |
| 6 | 6 | 3.6460 GHz | 3.6850 GHz | 1.000 MHz | 3.646000000 GHz | -38.33 dBm | -25.33 dB |
| 7 | 7 | 3.6850 GHz | 3.7000 GHz | 1.000 MHz | 3.687400000 GHz | -49.66 dBm | -24.66 dB |

**Plot 7-63. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - Mid Channel)**



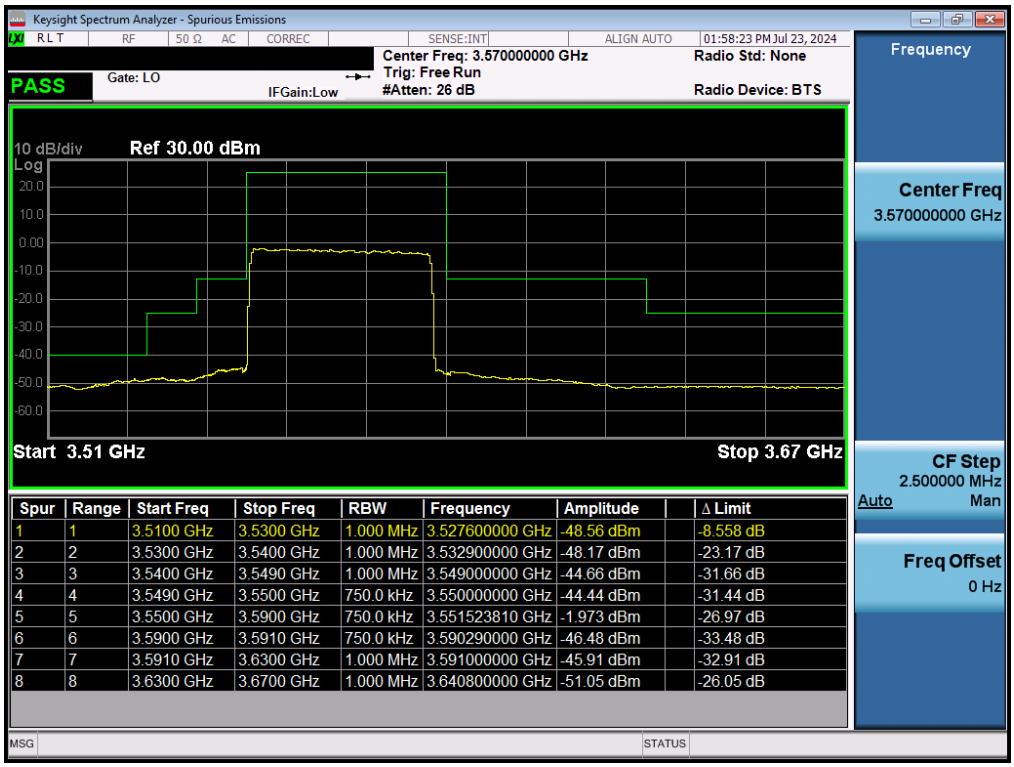

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5800 GHz | 3.6200 GHz | 1.000 MHz | 3.618400000 GHz | -50.69 dBm | -25.69 dB |
| 2 | 2 | 3.6200 GHz | 3.6590 GHz | 1.000 MHz | 3.659000000 GHz | -36.10 dBm | -23.10 dB |
| 3 | 3 | 3.6590 GHz | 3.6600 GHz | 750.0 kHz | 3.659940000 GHz | -36.13 dBm | -23.13 dB |
| 4 | 4 | 3.6600 GHz | 3.7000 GHz | 750.0 kHz | 3.662666667 GHz | 2.851 dBm | -22.15 dB |
| 5 | 5 | 3.7000 GHz | 3.7010 GHz | 750.0 kHz | 3.700310000 GHz | -37.80 dBm | -24.80 dB |
| 6 | 6 | 3.7010 GHz | 3.7100 GHz | 1.000 MHz | 3.702530000 GHz | -36.75 dBm | -23.75 dB |
| 7 | 7 | 3.7100 GHz | 3.7200 GHz | 1.000 MHz | 3.710800000 GHz | -40.11 dBm | -15.11 dB |
| 8 | 8 | 3.7200 GHz | 3.7600 GHz | 1.000 MHz | 3.720800000 GHz | -41.54 dBm | -1.541 dB |

**Plot 7-64. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - High Channel)**

## NR Band n48 – Ant S2

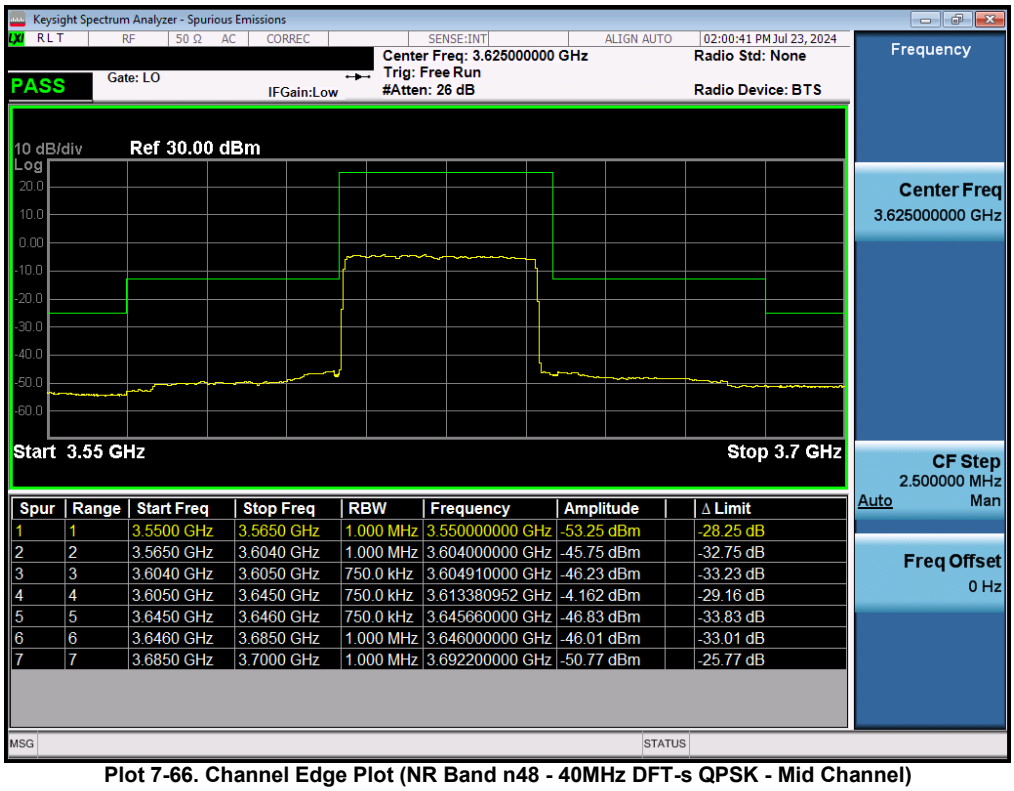
| Mode | Bandwidth | Channel | Test Case | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| NR-n48 | 40MHz | Low | Band Edge | -48.56 | -40 | -8.56 |
| | | Mid | Band Edge | -50.77 | -25 | -25.77 |
| | | High | Band Edge | -47.35 | -40 | -7.35 |

**Table 7-19. Conducted Band Edge Test Results**



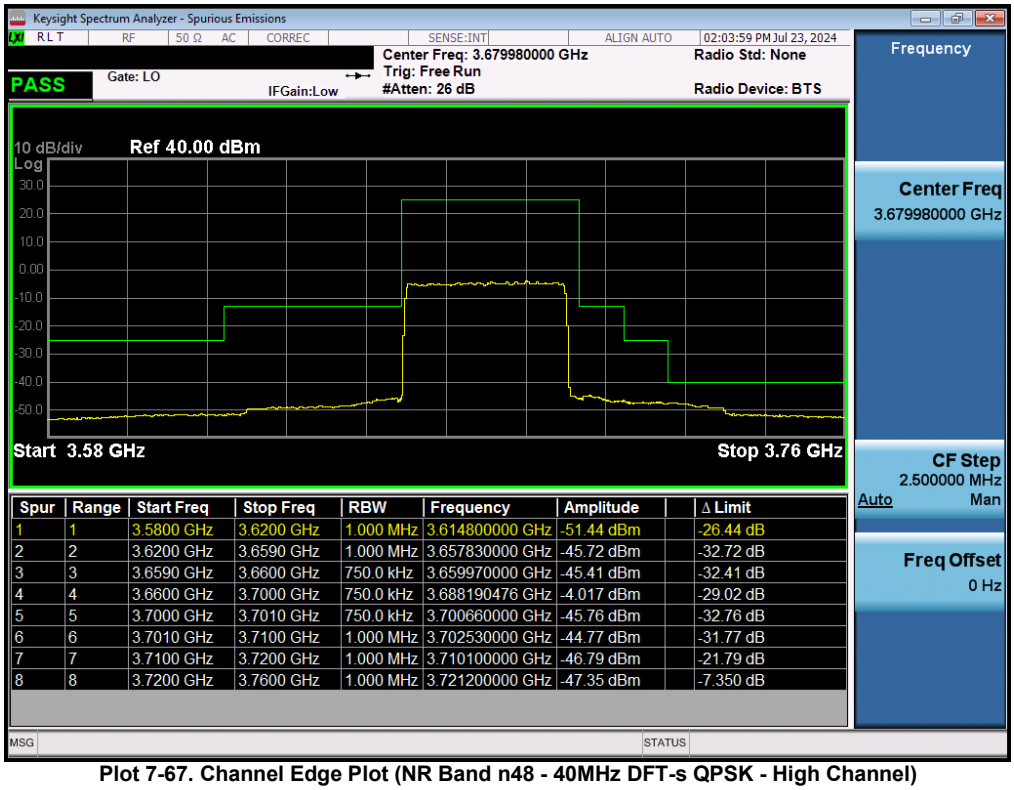

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5100 GHz | 3.5300 GHz | 1.000 MHz | 3.527600000 GHz | -48.56 dBm | -8.558 dB |
| 2 | 2 | 3.5300 GHz | 3.5400 GHz | 1.000 MHz | 3.532900000 GHz | -48.17 dBm | -23.17 dB |
| 3 | 3 | 3.5400 GHz | 3.5490 GHz | 1.000 MHz | 3.549000000 GHz | -44.66 dBm | -31.66 dB |
| 4 | 4 | 3.5490 GHz | 3.5500 GHz | 750.0 kHz | 3.550000000 GHz | -44.44 dBm | -31.44 dB |
| 5 | 5 | 3.5500 GHz | 3.5900 GHz | 750.0 kHz | 3.551523810 GHz | -1.973 dBm | -26.97 dB |
| 6 | 6 | 3.5900 GHz | 3.5910 GHz | 750.0 kHz | 3.590290000 GHz | -46.48 dBm | -33.48 dB |
| 7 | 7 | 3.5910 GHz | 3.6300 GHz | 1.000 MHz | 3.591000000 GHz | -45.91 dBm | -32.91 dB |
| 8 | 8 | 3.6300 GHz | 3.6700 GHz | 1.000 MHz | 3.640800000 GHz | -51.05 dBm | -26.05 dB |

**Plot 7-65. Channel Edge Plot (NR Band n48 - 40MHz DFT-s 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 | 3.550000000 GHz | -53.25 dBm | -28.25 dB |
| 2 | 2 | 3.5650 GHz | 3.6040 GHz | 1.000 MHz | 3.604000000 GHz | -45.75 dBm | -32.75 dB |
| 3 | 3 | 3.6040 GHz | 3.6050 GHz | 750.0 kHz | 3.604910000 GHz | -46.23 dBm | -33.23 dB |
| 4 | 4 | 3.6050 GHz | 3.6450 GHz | 750.0 kHz | 3.613380952 GHz | -4.162 dBm | -29.16 dB |
| 5 | 5 | 3.6450 GHz | 3.6460 GHz | 750.0 kHz | 3.645660000 GHz | -46.83 dBm | -33.83 dB |
| 6 | 6 | 3.6460 GHz | 3.6850 GHz | 1.000 MHz | 3.646000000 GHz | -46.01 dBm | -33.01 dB |
| 7 | 7 | 3.6850 GHz | 3.7000 GHz | 1.000 MHz | 3.692200000 GHz | -50.77 dBm | -25.77 dB |

**Plot 7-66. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - Mid Channel)**



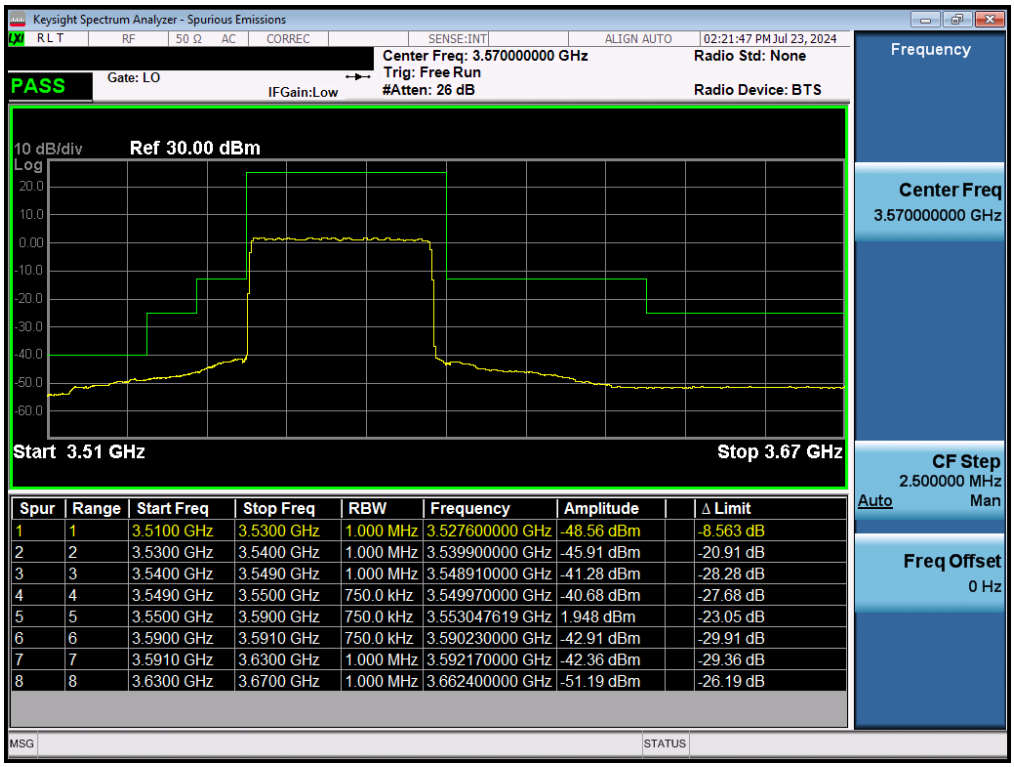

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5800 GHz | 3.6200 GHz | 1.000 MHz | 3.614800000 GHz | -51.44 dBm | -26.44 dB |
| 2 | 2 | 3.6200 GHz | 3.6590 GHz | 1.000 MHz | 3.657830000 GHz | -45.72 dBm | -32.72 dB |
| 3 | 3 | 3.6590 GHz | 3.6600 GHz | 750.0 kHz | 3.659970000 GHz | -45.41 dBm | -32.41 dB |
| 4 | 4 | 3.6600 GHz | 3.7000 GHz | 750.0 kHz | 3.688190476 GHz | -4.017 dBm | -29.02 dB |
| 5 | 5 | 3.7000 GHz | 3.7010 GHz | 750.0 kHz | 3.700660000 GHz | -45.76 dBm | -32.76 dB |
| 6 | 6 | 3.7010 GHz | 3.7100 GHz | 1.000 MHz | 3.702530000 GHz | -44.77 dBm | -31.77 dB |
| 7 | 7 | 3.7100 GHz | 3.7200 GHz | 1.000 MHz | 3.710100000 GHz | -46.79 dBm | -21.79 dB |
| 8 | 8 | 3.7200 GHz | 3.7600 GHz | 1.000 MHz | 3.721200000 GHz | -47.35 dBm | -7.350 dB |

**Plot 7-67. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - High Channel)**

## NR Band n48 – Ant M2

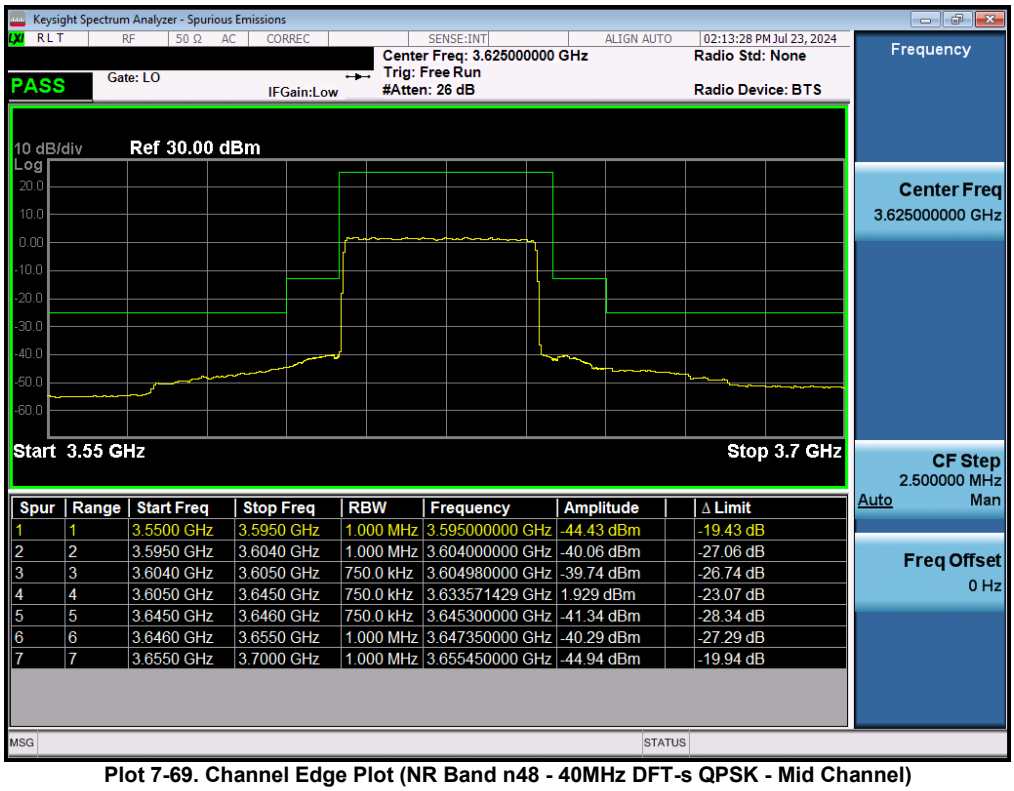
| Mode | Bandwidth | Channel | Test Case | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| NR-n48 | 40MHz | Low | Band Edge | -48.56 | -40 | -8.56 |
| | | Mid | Band Edge | -44.43 | -25 | -19.43 |
| | | High | Band Edge | -42.87 | -40 | -2.87 |

**Table 7-20. Conducted Band Edge Test Results**



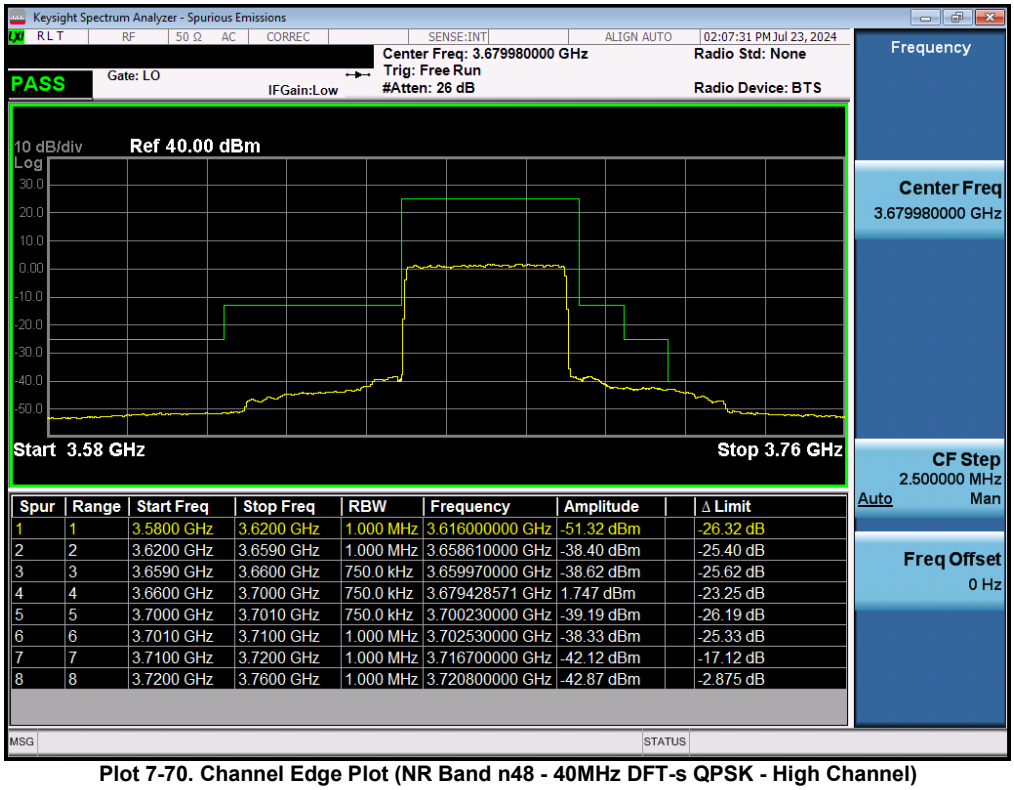

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5100 GHz | 3.5300 GHz | 1.000 MHz | 3.527600000 GHz | -48.56 dBm | -8.563 dB |
| 2 | 2 | 3.5300 GHz | 3.5400 GHz | 1.000 MHz | 3.539900000 GHz | -45.91 dBm | -20.91 dB |
| 3 | 3 | 3.5400 GHz | 3.5490 GHz | 1.000 MHz | 3.548910000 GHz | -41.28 dBm | -28.28 dB |
| 4 | 4 | 3.5490 GHz | 3.5500 GHz | 750.0 kHz | 3.549970000 GHz | -40.68 dBm | -27.68 dB |
| 5 | 5 | 3.5500 GHz | 3.5900 GHz | 750.0 kHz | 3.553047619 GHz | 1.948 dBm | -23.05 dB |
| 6 | 6 | 3.5900 GHz | 3.5910 GHz | 750.0 kHz | 3.590230000 GHz | -42.91 dBm | -29.91 dB |
| 7 | 7 | 3.5910 GHz | 3.6300 GHz | 1.000 MHz | 3.592170000 GHz | -42.36 dBm | -29.36 dB |
| 8 | 8 | 3.6300 GHz | 3.6700 GHz | 1.000 MHz | 3.662400000 GHz | -51.19 dBm | -26.19 dB |

**Plot 7-68. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - Low Channel)**




| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5500 GHz | 3.5950 GHz | 1.000 MHz | 3.595000000 GHz | -44.43 dBm | -19.43 dB |
| 2 | 2 | 3.5950 GHz | 3.6040 GHz | 1.000 MHz | 3.604000000 GHz | -40.06 dBm | -27.06 dB |
| 3 | 3 | 3.6040 GHz | 3.6050 GHz | 750.0 kHz | 3.604980000 GHz | -39.74 dBm | -26.74 dB |
| 4 | 4 | 3.6050 GHz | 3.6450 GHz | 750.0 kHz | 3.633571429 GHz | 1.929 dBm | -23.07 dB |
| 5 | 5 | 3.6450 GHz | 3.6460 GHz | 750.0 kHz | 3.645300000 GHz | -41.34 dBm | -28.34 dB |
| 6 | 6 | 3.6460 GHz | 3.6550 GHz | 1.000 MHz | 3.647350000 GHz | -40.29 dBm | -27.29 dB |
| 7 | 7 | 3.6550 GHz | 3.7000 GHz | 1.000 MHz | 3.655450000 GHz | -44.94 dBm | -19.94 dB |

**Plot 7-69. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - Mid Channel)**



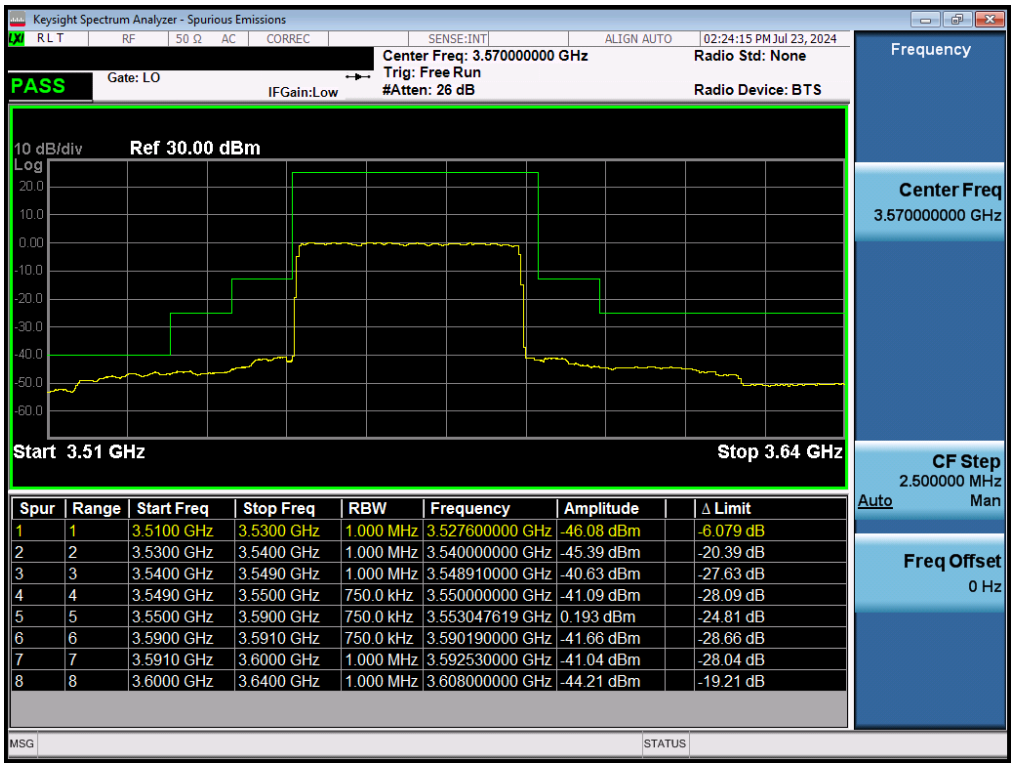

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5800 GHz | 3.6200 GHz | 1.000 MHz | 3.616000000 GHz | -51.32 dBm | -26.32 dB |
| 2 | 2 | 3.6200 GHz | 3.6590 GHz | 1.000 MHz | 3.658610000 GHz | -38.40 dBm | -25.40 dB |
| 3 | 3 | 3.6590 GHz | 3.6600 GHz | 750.0 kHz | 3.659970000 GHz | -38.62 dBm | -25.62 dB |
| 4 | 4 | 3.6600 GHz | 3.7000 GHz | 750.0 kHz | 3.679428571 GHz | 1.747 dBm | -23.25 dB |
| 5 | 5 | 3.7000 GHz | 3.7010 GHz | 750.0 kHz | 3.700230000 GHz | -39.19 dBm | -26.19 dB |
| 6 | 6 | 3.7010 GHz | 3.7100 GHz | 1.000 MHz | 3.702530000 GHz | -38.33 dBm | -25.33 dB |
| 7 | 7 | 3.7100 GHz | 3.7200 GHz | 1.000 MHz | 3.716700000 GHz | -42.12 dBm | -17.12 dB |
| 8 | 8 | 3.7200 GHz | 3.7600 GHz | 1.000 MHz | 3.720800000 GHz | -42.87 dBm | -2.875 dB |

**Plot 7-70. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - High Channel)**

## NR Band n48 – Ant S3

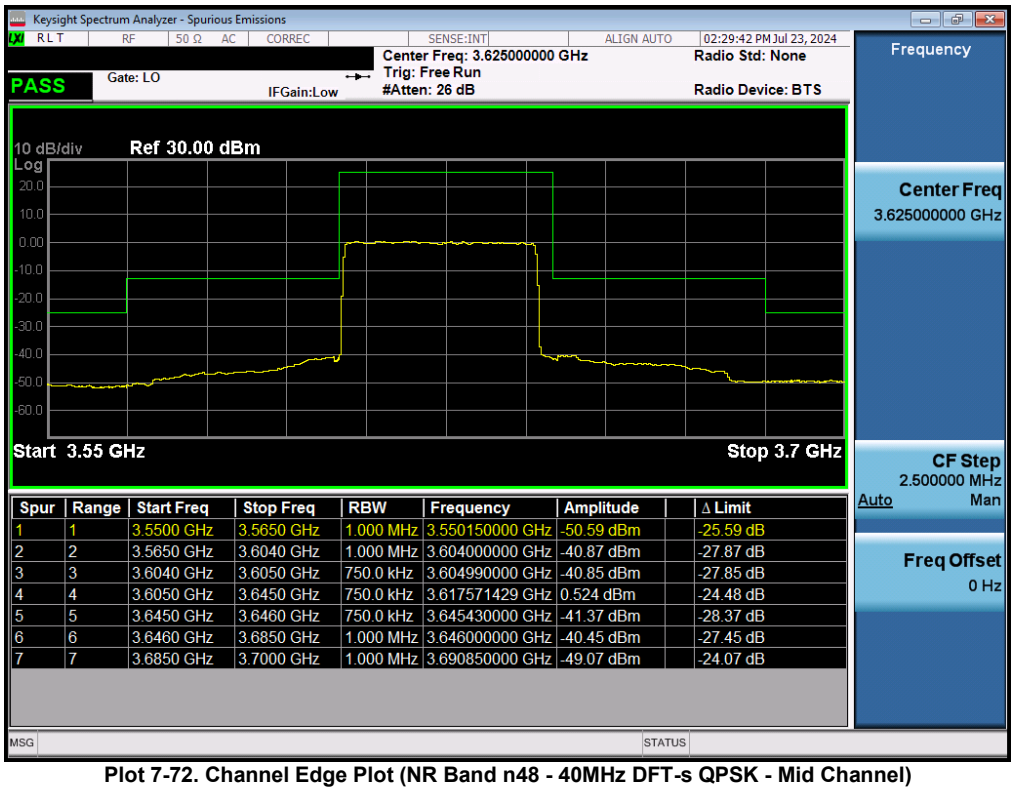
| Mode | Bandwidth | Channel | Test Case | Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|
| NR-n48 | 40MHz | Low | Band Edge | -46.08 | -40 | -6.08 |
| | | Mid | Band Edge | -49.07 | -25 | -24.07 |
| | | High | Band Edge | -43.04 | -40 | -3.04 |

**Table 7-21. Conducted Band Edge Test Results**



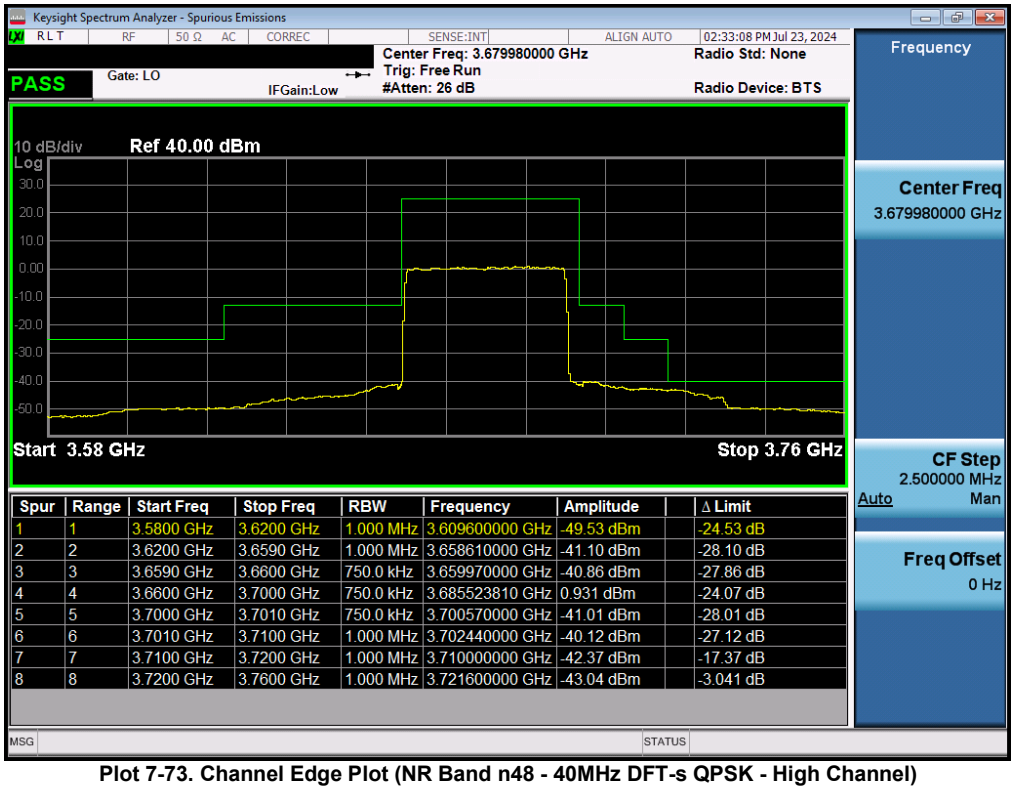

| Spur | Range | Start Freq | Stop Freq | RBW | Frequency | Amplitude | Δ Limit |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 3.5100 GHz | 3.5300 GHz | 1.000 MHz | 3.527600000 GHz | -46.08 dBm | -6.079 dB |
| 2 | 2 | 3.5300 GHz | 3.5400 GHz | 1.000 MHz | 3.540000000 GHz | -45.39 dBm | -20.39 dB |
| 3 | 3 | 3.5400 GHz | 3.5490 GHz | 1.000 MHz | 3.548910000 GHz | -40.63 dBm | -27.63 dB |
| 4 | 4 | 3.5490 GHz | 3.5500 GHz | 750.0 kHz | 3.550000000 GHz | -41.09 dBm | -28.09 dB |
| 5 | 5 | 3.5500 GHz | 3.5900 GHz | 750.0 kHz | 3.553047619 GHz | 0.193 dBm | -24.81 dB |
| 6 | 6 | 3.5900 GHz | 3.5910 GHz | 750.0 kHz | 3.590190000 GHz | -41.66 dBm | -28.66 dB |
| 7 | 7 | 3.5910 GHz | 3.6000 GHz | 1.000 MHz | 3.592530000 GHz | -41.04 dBm | -28.04 dB |
| 8 | 8 | 3.6000 GHz | 3.6400 GHz | 1.000 MHz | 3.608000000 GHz | -44.21 dBm | -19.21 dB |

**Plot 7-71. Channel Edge Plot (NR Band n48 - 40MHz DFT-s 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 | 3.550150000 GHz | -50.59 dBm | -25.59 dB |
| 2 | 2 | 3.5650 GHz | 3.6040 GHz | 1.000 MHz | 3.604000000 GHz | -40.87 dBm | -27.87 dB |
| 3 | 3 | 3.6040 GHz | 3.6050 GHz | 750.0 kHz | 3.604990000 GHz | -40.85 dBm | -27.85 dB |
| 4 | 4 | 3.6050 GHz | 3.6450 GHz | 750.0 kHz | 3.617571429 GHz | 0.524 dBm | -24.48 dB |
| 5 | 5 | 3.6450 GHz | 3.6460 GHz | 750.0 kHz | 3.645430000 GHz | -41.37 dBm | -28.37 dB |
| 6 | 6 | 3.6460 GHz | 3.6850 GHz | 1.000 MHz | 3.646000000 GHz | -40.45 dBm | -27.45 dB |
| 7 | 7 | 3.6850 GHz | 3.7000 GHz | 1.000 MHz | 3.690850000 GHz | -49.07 dBm | -24.07 dB |

**Plot 7-72. Channel Edge Plot (NR Band n48 - 40MHz DFT-s 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 | 3.609600000 GHz | -49.53 dBm | -24.53 dB |
| 2 | 2 | 3.6200 GHz | 3.6590 GHz | 1.000 MHz | 3.658610000 GHz | -41.10 dBm | -28.10 dB |
| 3 | 3 | 3.6590 GHz | 3.6600 GHz | 750.0 kHz | 3.659970000 GHz | -40.86 dBm | -27.86 dB |
| 4 | 4 | 3.6600 GHz | 3.7000 GHz | 750.0 kHz | 3.685523810 GHz | 0.931 dBm | -24.07 dB |
| 5 | 5 | 3.7000 GHz | 3.7010 GHz | 750.0 kHz | 3.700570000 GHz | -41.01 dBm | -28.01 dB |
| 6 | 6 | 3.7010 GHz | 3.7100 GHz | 1.000 MHz | 3.702440000 GHz | -40.12 dBm | -27.12 dB |
| 7 | 7 | 3.7100 GHz | 3.7200 GHz | 1.000 MHz | 3.710000000 GHz | -42.37 dBm | -17.37 dB |
| 8 | 8 | 3.7200 GHz | 3.7600 GHz | 1.000 MHz | 3.721600000 GHz | -43.04 dBm | -3.041 dB |

**Plot 7-73. Channel Edge Plot (NR Band n48 - 40MHz DFT-s QPSK - High Channel)**

## 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.

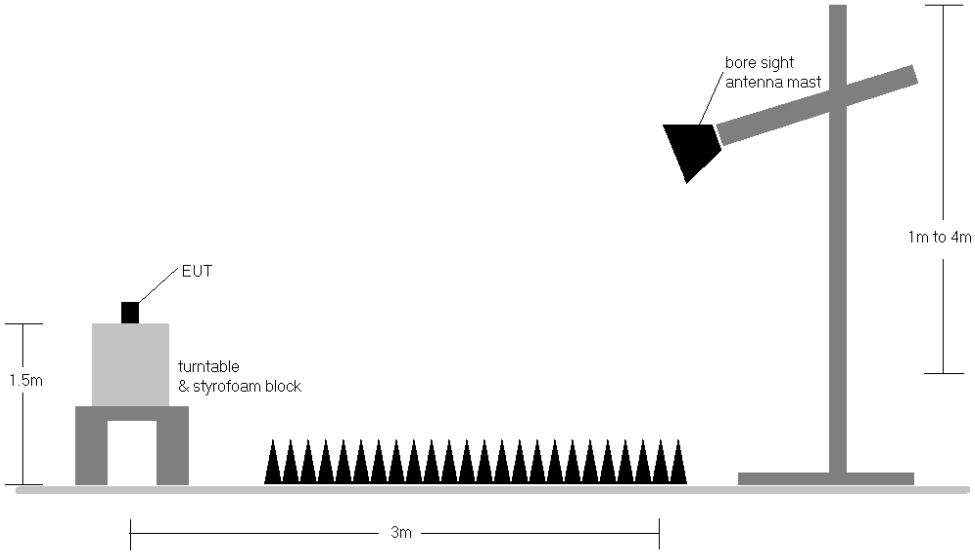



**Figure 7-5. Radiated Test Setup >1GHz**

## 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 | 117 | 320 | 9.69 | 1 / 50 | 11.32 | 21.01 | 0.126 | 23.00 | -1.99 |
| | QPSK | 3625.00 | H | 100 | 324 | 9.67 | 1 / 99 | 12.16 | **21.83** | **0.153** | 23.00 | -1.17 |
| | QPSK | 3690.00 | H | 117 | 325 | 9.66 | 1 / 50 | 11.54 | 21.20 | 0.132 | 23.00 | -1.80 |
| | 16-QAM | 3625.00 | H | 100 | 324 | 9.67 | 1 / 99 | 11.81 | 21.48 | 0.141 | 23.00 | -1.52 |
| 15 MHz | QPSK | 3557.50 | H | 117 | 320 | 9.69 | 1 / 36 | 11.12 | 20.81 | 0.121 | 23.00 | -2.19 |
| | QPSK | 3625.00 | H | 100 | 324 | 9.67 | 1 / 19 | 12.17 | **21.84** | **0.153** | 23.00 | -1.16 |
| | QPSK | 3692.50 | H | 117 | 325 | 9.65 | 1 / 36 | 11.52 | 21.18 | 0.131 | 23.00 | -1.82 |
| | 16-QAM | 3625.00 | H | 100 | 324 | 9.67 | 1 / 19 | 11.81 | 21.48 | 0.141 | 23.00 | -1.52 |
| 10 MHz | QPSK | 3555.00 | H | 117 | 320 | 9.69 | 1 / 22 | 11.06 | 20.75 | 0.119 | 23.00 | -2.25 |
| | QPSK | 3625.00 | H | 100 | 324 | 9.67 | 1 / 12 | 12.17 | **21.84** | **0.153** | 23.00 | -1.16 |
| | QPSK | 3695.00 | H | 117 | 325 | 9.65 | 1 / 12 | 11.63 | 21.29 | 0.134 | 23.00 | -1.71 |
| | 16-QAM | 3625.00 | H | 100 | 324 | 9.67 | 1 / 12 | 11.79 | 21.46 | 0.140 | 23.00 | -1.54 |
| 5 MHz | QPSK | 3552.50 | H | 117 | 320 | 9.70 | 1 / 5 | 10.96 | 20.65 | 0.116 | 23.00 | -2.35 |
| | QPSK | 3625.00 | H | 100 | 324 | 9.67 | 1 / 9 | 12.17 | **21.84** | **0.153** | 23.00 | -1.16 |
| | QPSK | 3697.50 | H | 117 | 325 | 9.65 | 1 / 9 | 11.52 | 21.18 | 0.131 | 23.00 | -1.82 |
| | 16-QAM | 3625.00 | H | 100 | 324 | 9.67 | 1 / 9 | 11.73 | 21.40 | 0.138 | 23.00 | -1.60 |
| 20 MHz | QPSK (Opposite Pol.) | 3625.00 | V | 114 | 261 | 9.67 | 1 / 0 | 8.43 | **18.10** | **0.065** | 23.00 | -4.90 |

**Table 7-22. 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 | 149 | 323 | 9.69 | 10.07 | 19.76 | 0.095 | 23.00 | -3.24 |
| | | 20 | 3625.0 | 1 / 99 | 20 | 3644.8 | 1 / 0 | H | 149 | 325 | 9.67 | 10.43 | 20.10 | 0.102 | 23.00 | -2.90 |
| | | 20 | 3690.0 | 1 / 0 | 20 | 3670.2 | 1 / 99 | H | 149 | 324 | 9.66 | 9.94 | 19.60 | 0.091 | 23.00 | -3.40 |
| | 16-QAM | 20 | 3560.0 | 1 / 99 | 20 | 3579.8 | 1 / 0 | H | 149 | 323 | 9.69 | 8.98 | 18.67 | 0.074 | 23.00 | -4.33 |
| 35 MHz | QPSK | 20 | 3557.5 | 1 / 99 | 15 | 3577.1 | 1 / 0 | H | 149 | 323 | 9.69 | 10.66 | 20.35 | 0.108 | 23.00 | -2.65 |
| | | 20 | 3625.0 | 1 / 99 | 15 | 3642.1 | 1 / 0 | H | 149 | 325 | 9.67 | 10.60 | 20.27 | 0.107 | 23.00 | -2.73 |
| | | 20 | 3692.5 | 1 / 0 | 15 | 3672.9 | 1 / 74 | H | 149 | 324 | 9.65 | 9.62 | 19.28 | 0.085 | 23.00 | -3.72 |
| | 16-QAM | 20 | 3557.5 | 1 / 99 | 15 | 3577.1 | 1 / 0 | H | 149 | 323 | 9.69 | 8.97 | 18.66 | 0.073 | 23.00 | -4.34 |
| 30 MHz | QPSK | 20 | 3555.0 | 1 / 99 | 10 | 3574.4 | 1 / 0 | H | 149 | 323 | 9.69 | 10.56 | 20.25 | 0.106 | 23.00 | -2.75 |
| | | 20 | 3625.0 | 1 / 99 | 10 | 3639.4 | 1 / 0 | H | 149 | 325 | 9.67 | 10.48 | 20.15 | 0.104 | 23.00 | -2.85 |
| | | 20 | 3695.0 | 1 / 0 | 10 | 3678.3 | 1 / 49 | H | 149 | 324 | 9.65 | 10.26 | 19.92 | 0.098 | 23.00 | -3.08 |
| | 16-QAM | 20 | 3555.0 | 1 / 99 | 10 | 3574.4 | 1 / 0 | H | 149 | 323 | 9.69 | 9.06 | 18.75 | 0.075 | 23.00 | -4.25 |
| 25 MHz | QPSK | 20 | 3552.5 | 1 / 99 | 5 | 3571.7 | 1 / 0 | H | 149 | 323 | 9.70 | 11.27 | 20.96 | 0.125 | 23.00 | -2.04 |
| | | 20 | 3625.0 | 1 / 99 | 5 | 3636.7 | 1 / 0 | H | 149 | 325 | 9.67 | 10.88 | 20.55 | 0.114 | 23.00 | -2.45 |
| | | 20 | 3697.5 | 1 / 0 | 5 | 3678.3 | 1 / 24 | H | 149 | 324 | 9.65 | 10.68 | 20.34 | 0.108 | 23.00 | -2.66 |
| | 16-QAM | 20 | 3552.5 | 1 / 99 | 5 | 3571.7 | 1 / 0 | H | 149 | 323 | 9.70 | 9.98 | 19.67 | 0.093 | 23.00 | -3.33 |

**Table 7-23. EIRP Data (ULCA LB48)**

| 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 | 112 | 37 | 9.69 | 1 / 104 | 11.49 | 21.18 | 0.131 | 23.00 | -1.82 |
| | π/2 BPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 104 | 11.60 | 21.27 | 0.134 | 23.00 | -1.73 |
| | π/2 BPSK | 3680.00 | H | 111 | 34 | 9.66 | 1 / 53 | 12.02 | 21.68 | **0.147** | 23.00 | -1.32 |
| | QPSK | 3570.00 | H | 112 | 37 | 9.69 | 1 / 104 | 11.28 | 20.97 | 0.125 | 23.00 | -2.03 |
| | QPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 104 | 11.40 | 21.07 | 0.128 | 23.00 | -1.93 |
| | QPSK | 3680.00 | H | 111 | 34 | 9.66 | 1 / 53 | 11.58 | 21.24 | 0.133 | 23.00 | -1.76 |
| | 16-QAM | 3680.00 | H | 111 | 34 | 9.66 | 1 / 53 | 10.91 | 20.57 | 0.114 | 23.00 | -2.43 |
| 30 MHz | π/2 BPSK | 3565.00 | H | 112 | 37 | 9.69 | 1 / 76 | 11.66 | 21.35 | 0.136 | 23.00 | -1.65 |
| | π/2 BPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 39 | 11.64 | 21.31 | 0.135 | 23.00 | -1.69 |
| | π/2 BPSK | 3685.00 | H | 111 | 34 | 9.66 | 1 / 76 | 12.17 | **21.83** | **0.152** | 23.00 | -1.17 |
| | QPSK | 3565.00 | H | 112 | 37 | 9.69 | 1 / 76 | 11.51 | 21.20 | 0.132 | 23.00 | -1.80 |
| | QPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 39 | 11.40 | 21.07 | 0.128 | 23.00 | -1.93 |
| | QPSK | 3685.00 | H | 111 | 34 | 9.66 | 1 / 76 | 11.69 | 21.35 | 0.136 | 23.00 | -1.65 |
| | 16-QAM | 3685.00 | H | 111 | 34 | 9.66 | 1 / 76 | 11.01 | 20.67 | 0.117 | 23.00 | -2.33 |
| 20 MHz | π/2 BPSK | 3560.00 | H | 112 | 37 | 9.69 | 1 / 49 | 11.64 | 21.33 | 0.136 | 23.00 | -1.67 |
| | π/2 BPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 25 | 11.80 | 21.47 | 0.140 | 23.00 | -1.53 |
| | π/2 BPSK | 3690.00 | H | 111 | 34 | 9.66 | 1 / 49 | 12.13 | 21.79 | **0.151** | 23.00 | -1.21 |
| | QPSK | 3560.00 | H | 112 | 37 | 9.69 | 1 / 49 | 11.52 | 21.21 | 0.132 | 23.00 | -1.79 |
| | QPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 25 | 11.63 | 21.30 | 0.135 | 23.00 | -1.70 |
| | QPSK | 3690.00 | H | 111 | 34 | 9.66 | 1 / 49 | 11.64 | 21.30 | 0.135 | 23.00 | -1.70 |
| | 16-QAM | 3690.00 | H | 111 | 34 | 9.66 | 1 / 49 | 10.98 | 20.64 | 0.116 | 23.00 | -2.36 |
| 15 MHz | π/2 BPSK | 3557.50 | H | 112 | 37 | 9.69 | 1 / 36 | 11.58 | 21.27 | 0.134 | 23.00 | -1.73 |
| | π/2 BPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 19 | 11.70 | 21.37 | 0.137 | 23.00 | -1.63 |
| | π/2 BPSK | 3692.50 | H | 111 | 34 | 9.65 | 1 / 36 | 12.08 | 21.74 | **0.149** | 23.00 | -1.26 |
| | QPSK | 3557.50 | H | 112 | 37 | 9.69 | 1 / 36 | 11.44 | 21.13 | 0.130 | 23.00 | -1.87 |
| | QPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 19 | 11.54 | 21.21 | 0.132 | 23.00 | -1.79 |
| | QPSK | 3692.50 | H | 111 | 34 | 9.65 | 1 / 36 | 11.62 | 21.28 | 0.134 | 23.00 | -1.72 |
| | 16-QAM | 3692.50 | H | 111 | 34 | 9.65 | 1 / 36 | 10.95 | 20.61 | 0.115 | 23.00 | -2.39 |
| 10 MHz | π/2 BPSK | 3555.00 | H | 112 | 37 | 9.69 | 1 / 22 | 11.53 | 21.22 | 0.132 | 23.00 | -1.78 |
| | π/2 BPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 12 | 11.71 | 21.38 | 0.138 | 23.00 | -1.62 |
| | π/2 BPSK | 3695.00 | H | 111 | 34 | 9.65 | 1 / 22 | 12.03 | **21.69** | **0.147** | 23.00 | -1.31 |
| | QPSK | 3555.00 | H | 112 | 37 | 9.69 | 1 / 22 | 11.39 | 21.08 | 0.128 | 23.00 | -1.92 |
| | QPSK | 3625.00 | H | 111 | 36 | 9.67 | 1 / 12 | 11.52 | 21.19 | 0.132 | 23.00 | -1.81 |
| | QPSK | 3695.00 | H | 111 | 34 | 9.65 | 1 / 22 | 11.54 | 21.20 | 0.132 | 23.00 | -1.80 |
| | 16-QAM | 3695.00 | H | 111 | 34 | 9.65 | 1 / 22 | 10.92 | 20.58 | 0.114 | 23.00 | -2.42 |
| 40 MHz | QPSK (CP-OFDM) | 3680.00 | H | 110 | 36 | 9.66 | 1 / 53 | 11.88 | **21.54** | **0.142** | 23.00 | -1.46 |
| | QPSK (Opposite Pol.) | 3680.00 | V | 115 | 269 | 9.66 | 1 / 1 | 10.10 | 19.76 | 0.095 | 23.00 | -3.24 |

**Table 7-24. EIRP Data (NR Band n48 – Ant S4)**

| 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 | 185 | 224 | 9.69 | 1 / 1 | 8.22 | **17.91** | **0.062** | 23.00 | -5.09 |
| | π/2 BPSK | 3625.00 | H | 185 | 245 | 9.67 | 1 / 1 | 7.14 | 16.81 | 0.048 | 23.00 | -6.19 |
| | π/2 BPSK | 3680.00 | H | 185 | 247 | 9.66 | 1 / 1 | 6.89 | 16.55 | 0.045 | 23.00 | -6.45 |
| | QPSK | 3570.00 | H | 185 | 224 | 9.69 | 1 / 1 | 8.22 | **17.91** | **0.062** | 23.00 | -5.09 |
| | QPSK | 3625.00 | H | 185 | 245 | 9.67 | 1 / 1 | 7.25 | 16.92 | 0.049 | 23.00 | -6.08 |
| | QPSK | 3680.00 | H | 185 | 247 | 9.66 | 1 / 1 | 6.92 | 16.58 | 0.045 | 23.00 | -6.42 |
| | 16-QAM | 3570.00 | H | 185 | 224 | 9.69 | 1 / 1 | 8.07 | **17.76** | 0.060 | 23.00 | -5.24 |
| 40 MHz | QPSK (CP-OFDM) | 3570.00 | H | 185 | 224 | 9.69 | 1 / 1 | 8.19 | **17.88** | **0.061** | 23.00 | -5.12 |
| | QPSK (Opposite Pol.) | 3570.00 | V | 182 | 274 | 9.69 | 1 / 1 | 6.75 | 16.44 | 0.044 | 23.00 | -6.56 |

**Table 7-25. EIRP Data (NR Band n48 – Ant S2)**

| 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 | 106 | 297 | 9.69 | 1 / 104 | 11.60 | 21.29 | 0.135 | 23.00 | -1.71 |
| | π/2 BPSK | 3625.00 | H | 106 | 298 | 9.67 | 1 / 104 | 11.88 | 21.55 | 0.143 | 23.00 | -1.45 |
| | π/2 BPSK | 3680.00 | H | 106 | 299 | 9.66 | 1 / 1 | 12.04 | 21.70 | 0.148 | 23.00 | -1.30 |
| | QPSK | 3570.00 | H | 106 | 297 | 9.69 | 1 / 104 | 11.59 | 21.28 | 0.134 | 23.00 | -1.72 |
| | QPSK | 3625.00 | H | 106 | 298 | 9.67 | 1 / 104 | 11.85 | 21.52 | 0.142 | 23.00 | -1.48 |
| | QPSK | 3680.00 | H | 106 | 299 | 9.66 | 1 / 1 | 12.01 | 21.67 | 0.147 | 23.00 | -1.33 |
| | 16-QAM | 3680.00 | H | 106 | 299 | 9.66 | 1 / 1 | 11.65 | 21.31 | 0.135 | 23.00 | -1.69 |
| 40 MHz | QPSK (CP-OFDM) | 3680.00 | H | 106 | 299 | 9.69 | 1 / 1 | 10.96 | 20.65 | 0.116 | 23.00 | -2.35 |
| | QPSK (Opposite Pol.) | 3680.00 | V | 284 | 251 | 9.69 | 1 / 1 | 11.58 | **21.27** | **0.134** | 23.00 | -1.73 |

**Table 7-26. EIRP Data (NR Band n48 – Ant M2)**

| 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 | 108 | 65 | 9.69 | 1 / 104 | 11.93 | **21.62** | **0.145** | 23.00 | -1.38 |
| | π/2 BPSK | 3625.00 | H | 108 | 66 | 9.67 | 1 / 1 | 11.94 | 21.61 | 0.145 | 23.00 | -1.39 |
| | π/2 BPSK | 3680.00 | H | 108 | 67 | 9.66 | 1 / 1 | 10.14 | 19.80 | 0.095 | 23.00 | -3.20 |
| | QPSK | 3570.00 | H | 108 | 65 | 9.69 | 1 / 104 | 11.89 | 21.58 | 0.144 | 23.00 | -1.42 |
| | QPSK | 3625.00 | H | 108 | 66 | 9.67 | 1 / 1 | 11.90 | 21.57 | 0.144 | 23.00 | -1.43 |
| | QPSK | 3680.00 | H | 108 | 67 | 9.66 | 1 / 1 | 10.54 | 20.20 | 0.105 | 23.00 | -2.80 |
| | 16-QAM | 3625.00 | H | 108 | 66 | 9.67 | 1 / 1 | 11.14 | 20.81 | 0.121 | 23.00 | -2.19 |
| 40 MHz | QPSK (CP-OFDM) | 3570.00 | H | 108 | 65 | 9.69 | 1 / 104 | 10.88 | 20.57 | 0.114 | 23.00 | -2.43 |
| | QPSK (Opposite Pol.) | 3570.00 | V | 104 | 76 | 9.69 | 1 / 104 | 11.44 | **21.13** | **0.130** | 23.00 | -1.87 |

**Table 7-27. EIRP Data (NR Band n48 – Ant S3)**

## 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.

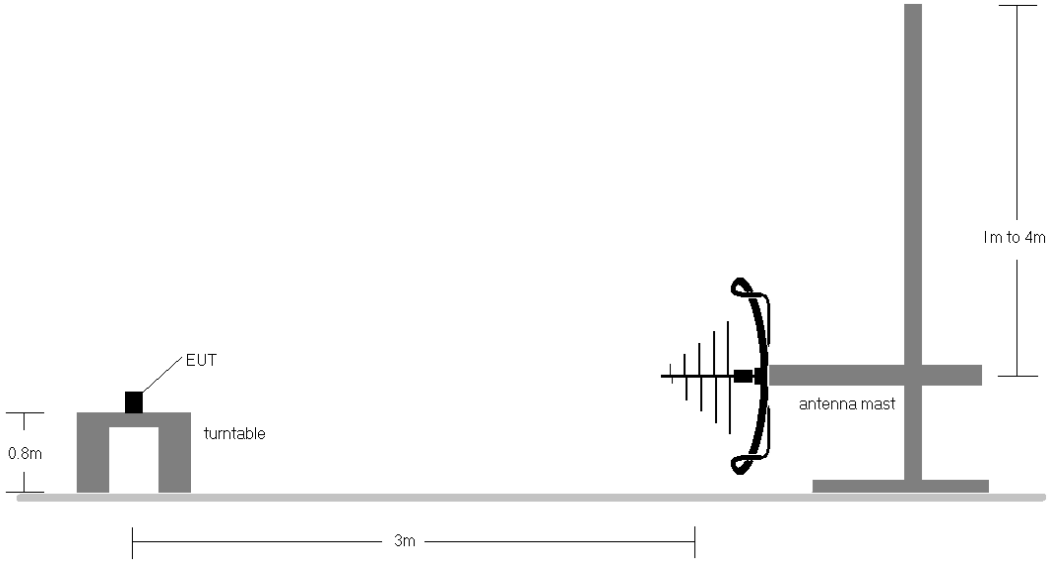



**Figure 7-6. Test Instrument & Measurement Setup < 1GHz**

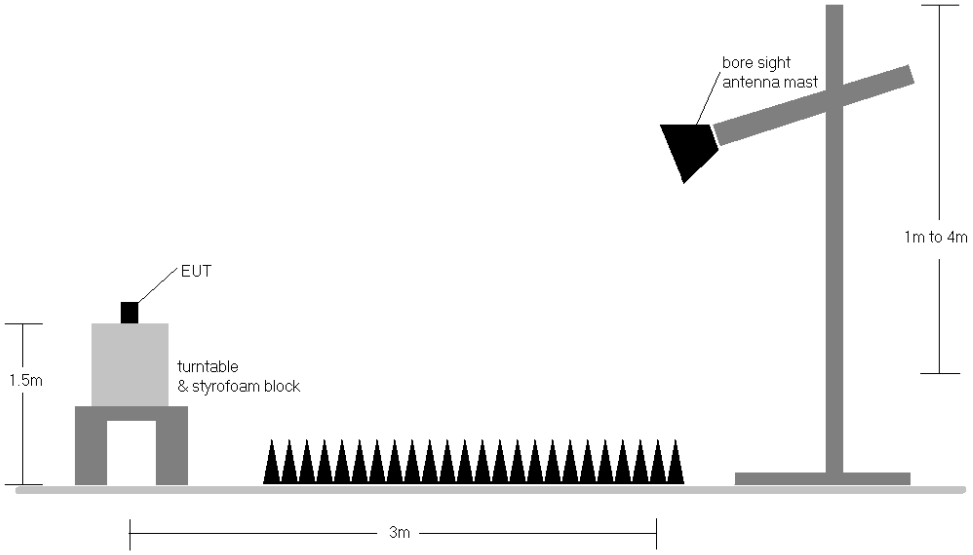



**Figure 7-7. Test Instrument & Measurement Setup >1 GHz**

## 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.

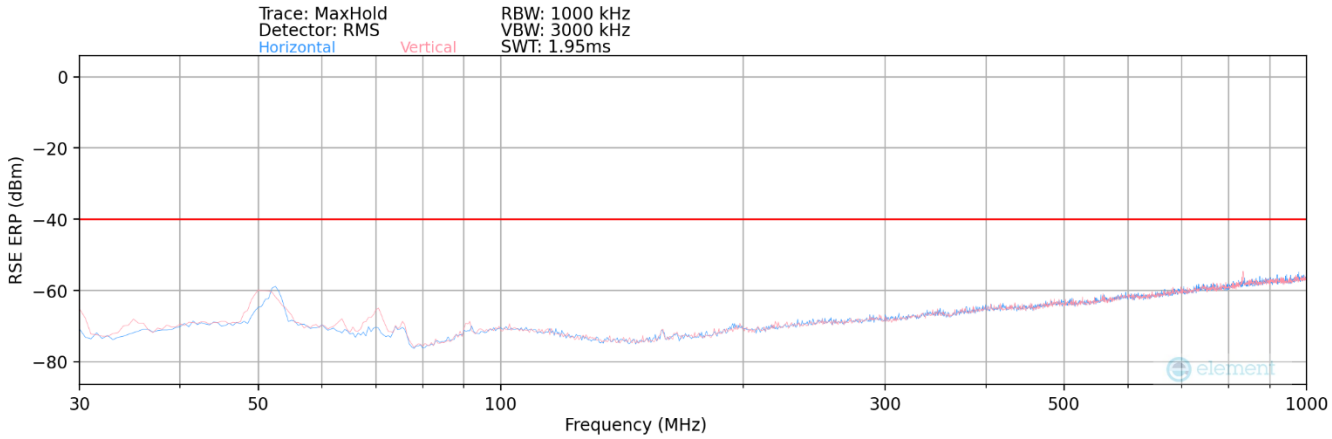
5) Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.

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 emission in EN-DC Operating mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor) has been checked and was found to not to be the worst case. 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.

## LTE Band 48

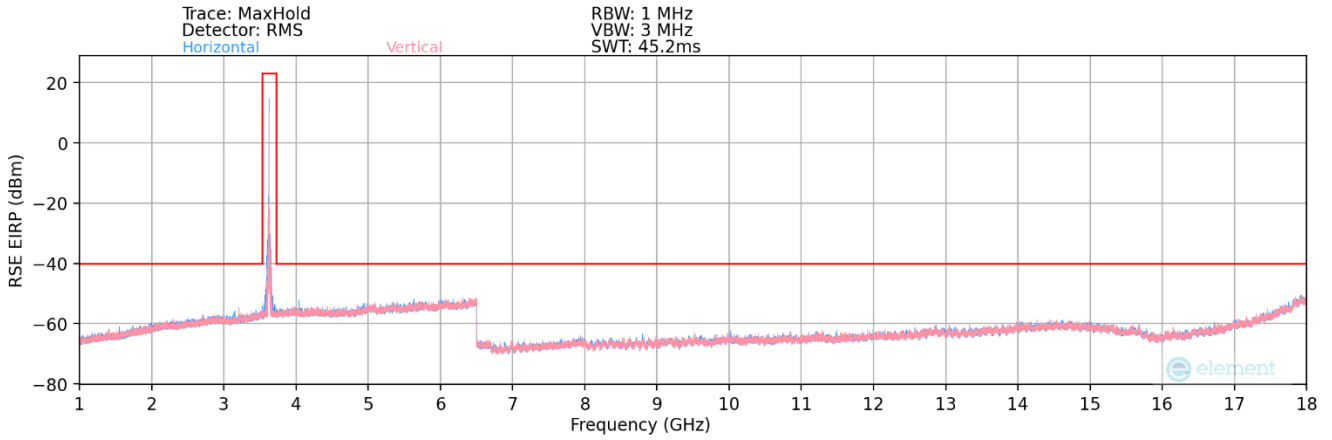



**Plot 7-74. Radiated Spurious Plot – Below 1GHz (LTE Band 48)**

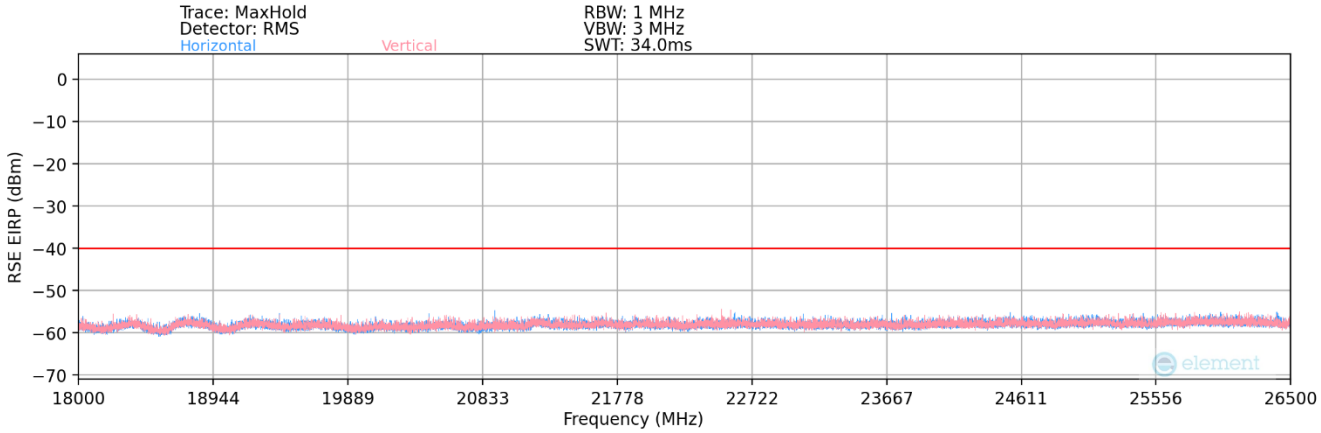
| | |
|---|---|
| **Bandwidth (MHz):** | 20 |
| **Frequency (MHz):** | 3625.0 |
| **Modulation Signal:** | QPSK |
| **RB Config (Size / Offset):** | 1 / 50 |

| Frequency [MHz] | Ant. Pol. [H/V] | Antenna Height [cm] | Turntable Azimuth [degree] | Analyzer Level [dBm] | AFCL [dB/m] | Field Strength [dBµV/m] | ERP Spurious Emission Level [dBm] | Limit [dBm] | Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|
| 51.71 | V | 100 | 35 | -88.65 | 20.59 | 38.94 | -58.47 | -40.00 | -18.47 |
| 70.45 | V | 100 | 194 | -88.16 | 16.05 | 34.89 | -62.51 | -40.00 | -22.51 |
| 834.13 | V | 110 | 351 | -95.49 | 29.89 | 41.40 | -56.01 | -40.00 | -16.01 |

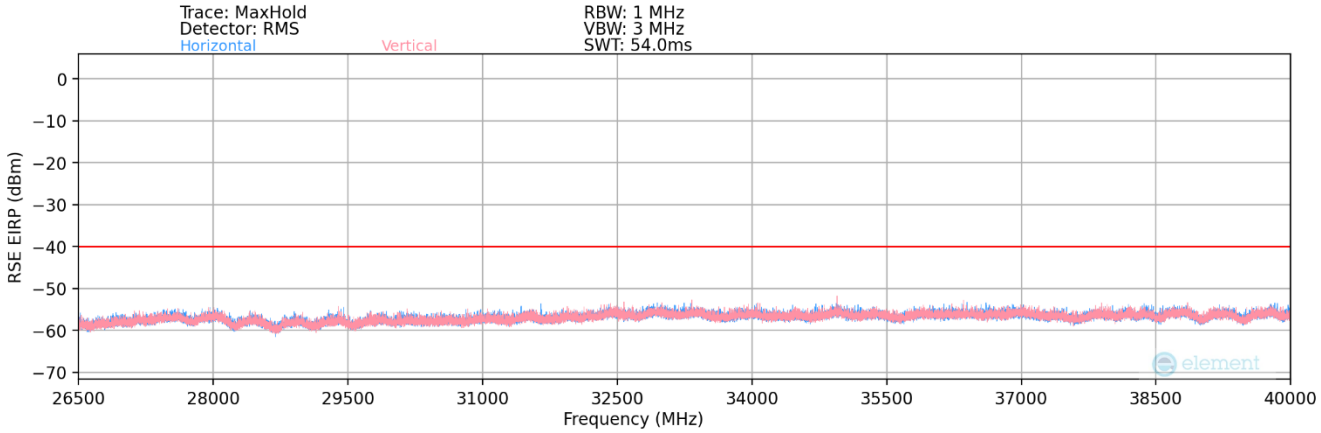
**Table 7-28. Radiated Spurious Data – Below 1GHz (LTE Band 48)**




**Plot 7-75. Radiated Spurious Plot – 1GHz – 18GHz (LTE Band 48)**




**Plot 7-76. Radiated Spurious Plot – 18GHz – 26.5GHz (LTE Band 48)**




**Plot 7-77. Radiated Spurious Plot – 26.5GHz – 40GHz (LTE Band 48)**

| | |
|---|---|
| **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 | - | - | -72.28 | -7.86 | 26.86 | -68.39 | -40.00 | -28.39 |
| 10680.00 | H | - | - | -71.23 | -3.76 | 32.01 | -63.25 | -40.00 | -23.25 |
| 14240.00 | H | - | - | -72.15 | 1.03 | 35.88 | -59.37 | -40.00 | -19.37 |
| 17800.00 | H | - | - | -73.54 | 8.82 | 42.28 | -52.98 | -40.00 | -12.98 |

**Table 7-29. Radiated Spurious Data (LTE Band 48 – Low Channel)**

| | |
|---|---|
| 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 | - | - | -72.39 | -7.55 | 27.06 | -68.20 | -40.00 | -28.20 |
| 10875.00 | H | - | - | -71.15 | -4.02 | 31.83 | -63.43 | -40.00 | -23.43 |
| 14500.00 | H | - | - | -72.06 | 2.22 | 37.16 | -58.10 | -40.00 | -18.10 |
| 18125.00 | H | - | - | -55.12 | -3.22 | 48.66 | -56.14 | -40.00 | -16.14 |

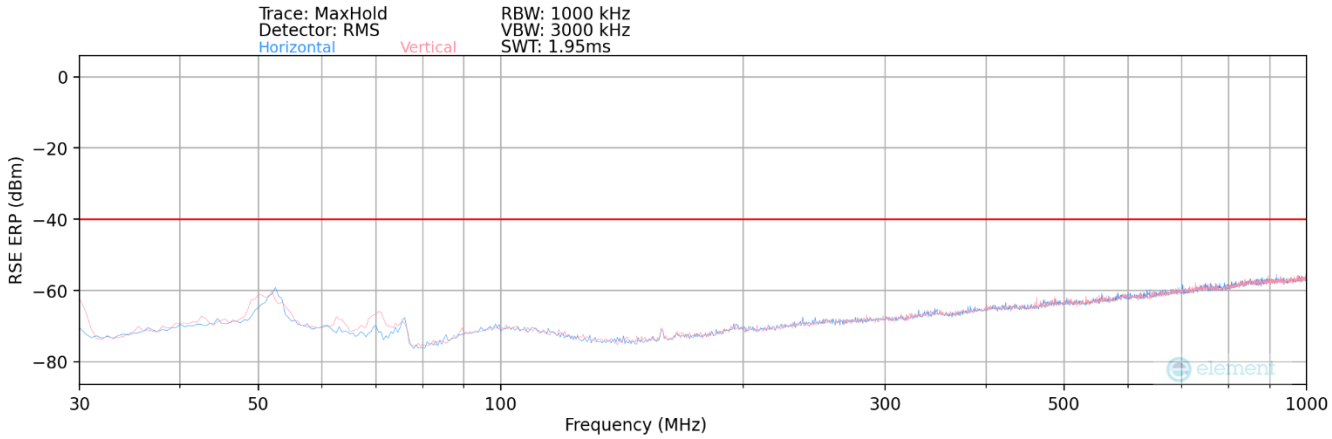
**Table 7-30. Radiated Spurious Data (LTE Band 48 – Mid Channel)**

| | |
|---|---|
| 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 | - | - | -72.36 | -7.10 | 27.54 | -67.72 | -40.00 | -27.72 |
| 11070.00 | H | - | - | -71.45 | -2.84 | 32.71 | -62.55 | -40.00 | -22.55 |
| 14760.00 | H | - | - | -72.15 | 2.81 | 37.66 | -57.60 | -40.00 | -17.60 |
| 18450.00 | H | - | - | -55.49 | -3.35 | 48.16 | -56.64 | -40.00 | -16.64 |

**Table 7-31. Radiated Spurious Data (LTE Band 48 – High Channel)**

## ULCA LTE Band 48

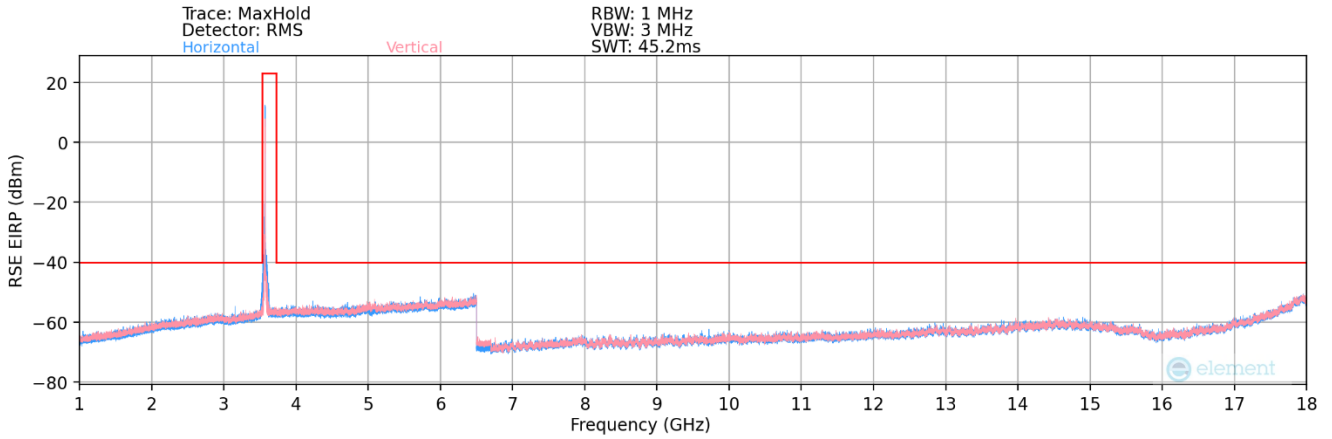



**Plot 7-78. Radiated Spurious Plot – Below 1GHz (ULCA LTE Band 48)**

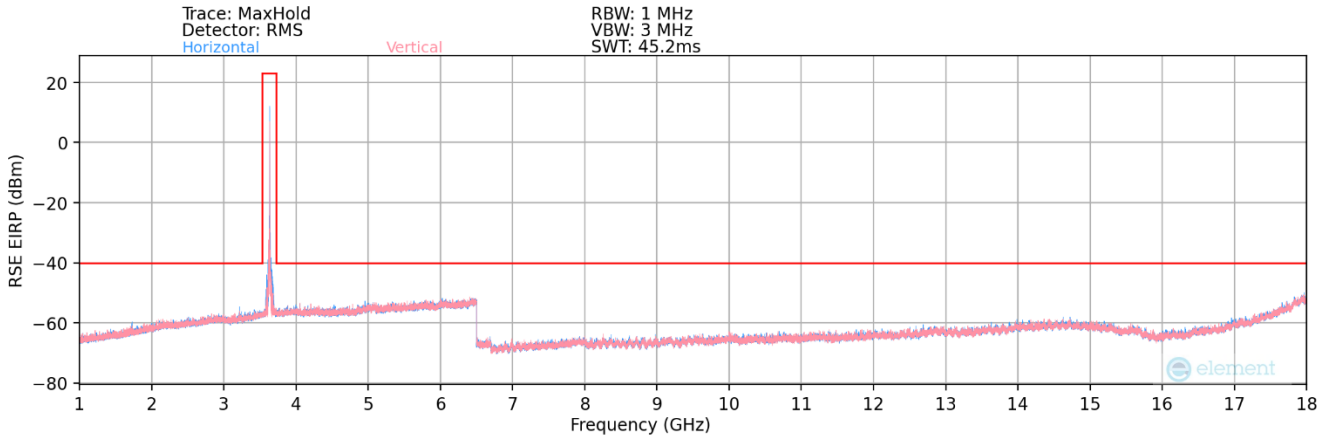
| | |
|---|---|
| **PCC Bandwidth (MHz):** | 20 |
| **PCC Frequency (MHz):** | 3625.0 |
| **PCC RB / Offset:** | 1/99 |
| **SCC Bandwidth (MHz):** | 20 |
| **SCC Frequency (MHz):** | 3644.8 |
| **SCC RB / Offset:** | 1/0 |

| 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] |
|---|---|---|---|---|---|---|---|---|---|
| 52.27 | H | 100 | 33 | -87.71 | 20.50 | 39.79 | -57.61 | -40.00 | -17.61 |
| 75.72 | H | 100 | 279 | -91.79 | 14.18 | 29.39 | -68.02 | -40.00 | -28.02 |

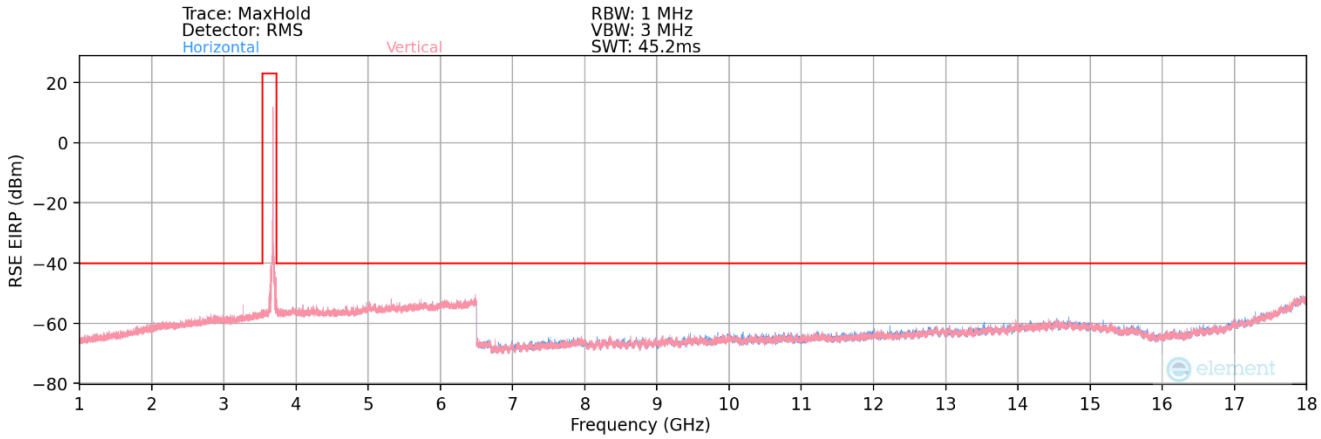
**Table 7-32. Radiated Spurious Data – Below 1GHz (ULCA LTE Band 48)**



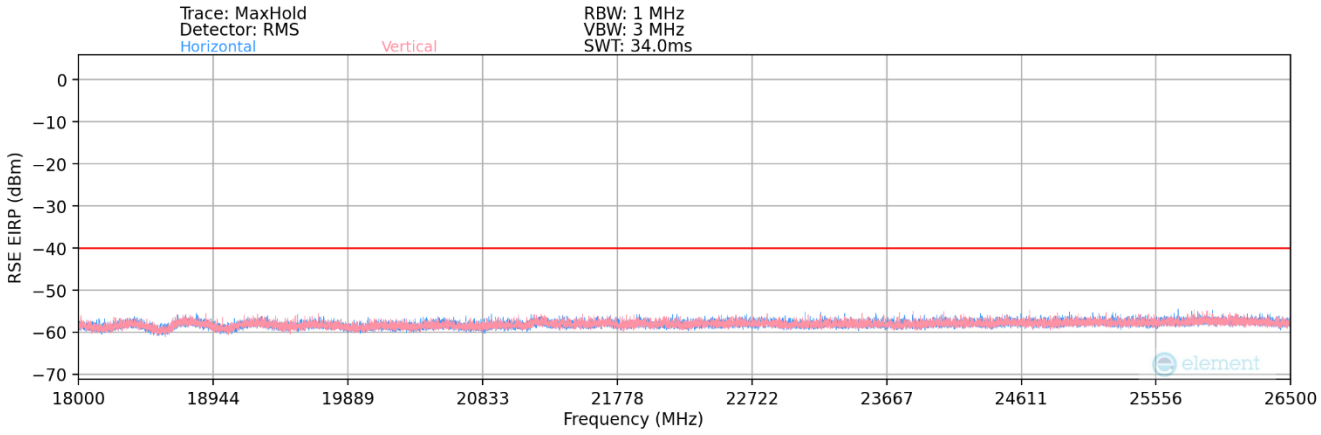

**Plot 7-79. Radiated Spurious Plot – 1GHz – 18GHz (ULCA LTE Band 48 – Low Channel)**



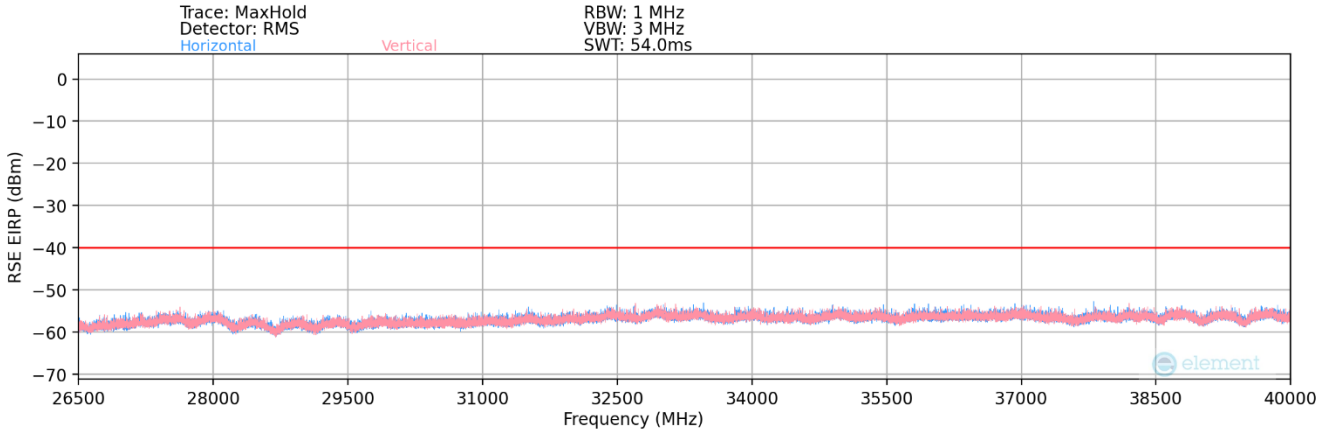

**Plot 7-80. Radiated Spurious Plot – 1GHz – 18GHz (ULCA LTE Band 48 – Mid Channel)**




**Plot 7-81. Radiated Spurious Plot – 1GHz – 18GHz (ULCA LTE Band 48 – High Channel)**




**Plot 7-82. Radiated Spurious Plot – 18GHz – 26.5GHz (ULCA LTE Band 48)**




**Plot 7-83. Radiated Spurious Plot – 26.5GHz – 40GHz (LTE Band 48)**

| | |
|---|---|
| **PCC Bandwidth (MHz):** | 20 |
| **PCC Frequency (MHz):** | 3560.0 |
| **PCC RB / Offset:** | 1 / 99 |
| **SCC Bandwidth (MHz):** | 20 |
| **SCC Frequency (MHz):** | 3579.8 |
| **SCC RB / Offset:** | 1 / 0 |

| 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 | - | - | -72.43 | -7.86 | 26.71 | -68.54 | -40.00 | -28.54 |
| 10680.00 | H | - | - | -71.29 | -3.76 | 31.95 | -63.31 | -40.00 | -23.31 |
| 14240.00 | H | - | - | -71.89 | 1.03 | 36.14 | -59.11 | -40.00 | -19.11 |
| 17800.00 | H | - | - | -70.68 | 8.82 | 45.14 | -50.12 | -40.00 | -10.12 |

**Table 7-33. Radiated Spurious Data (LTE Band 48 – Low Channel)**

| | |
|---|---|
| **PCC Bandwidth (MHz):** | 20 |
| **PCC Frequency (MHz):** | 3625.0 |
| **PCC RB / Offset:** | 1 / 99 |
| **SCC Bandwidth (MHz):** | 20 |
| **SCC Frequency (MHz):** | 3644.8 |
| **SCC RB / Offset:** | 1 / 0 |

| 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 | - | - | -72.39 | -7.55 | 27.06 | -68.20 | -40.00 | -28.20 |
| 10875.00 | H | - | - | -71.15 | -4.02 | 31.83 | -63.43 | -40.00 | -23.43 |
| 14500.00 | H | - | - | -72.06 | 2.22 | 37.16 | -58.10 | -40.00 | -18.10 |
| 18125.00 | H | - | - | -55.49 | -3.22 | 48.29 | -56.51 | -40.00 | -16.51 |

**Table 7-34. Radiated Spurious Data (LTE Band 48 – Mid Channel)**

| | |
|---|---|
| PCC Bandwidth (MHz): | 20 |
| PCC Frequency (MHz): | 3690.0 |
| PCC RB / Offset: | 1 / 99 |
| SCC Bandwidth (MHz): | 20 |
| SCC Frequency (MHz): | 3670.2 |
| SCC RB / Offset: | 1 / 0 |

| 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 | - | - | -72.27 | -7.10 | 27.63 | -67.63 | -40.00 | -27.63 |
| 11070.00 | H | - | - | -71.20 | -2.84 | 32.96 | -62.30 | -40.00 | -22.30 |
| 14760.00 | H | - | - | -72.14 | 2.81 | 37.67 | -57.59 | -40.00 | -17.59 |
| 18450.00 | H | - | - | -55.63 | -3.35 | 48.02 | -56.78 | -40.00 | -16.78 |

**Table 7-35. Radiated Spurious Data (LTE Band 48 – High Channel)**