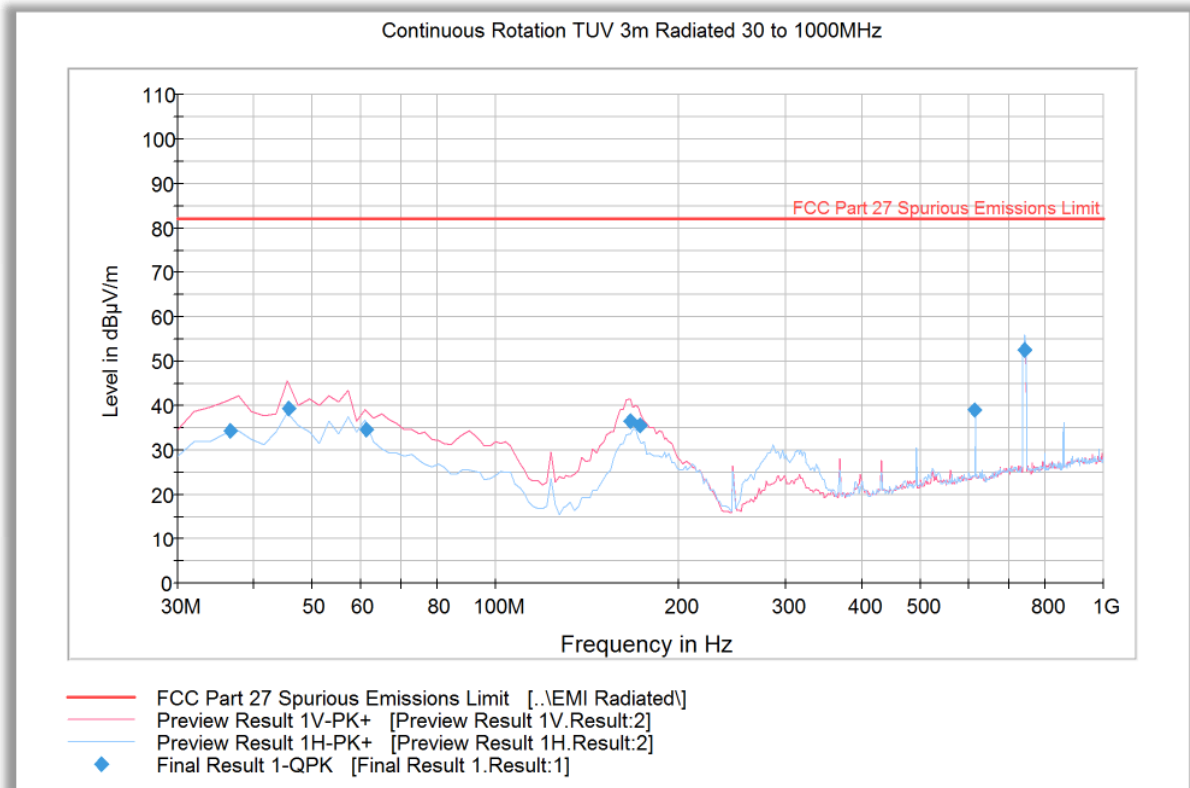


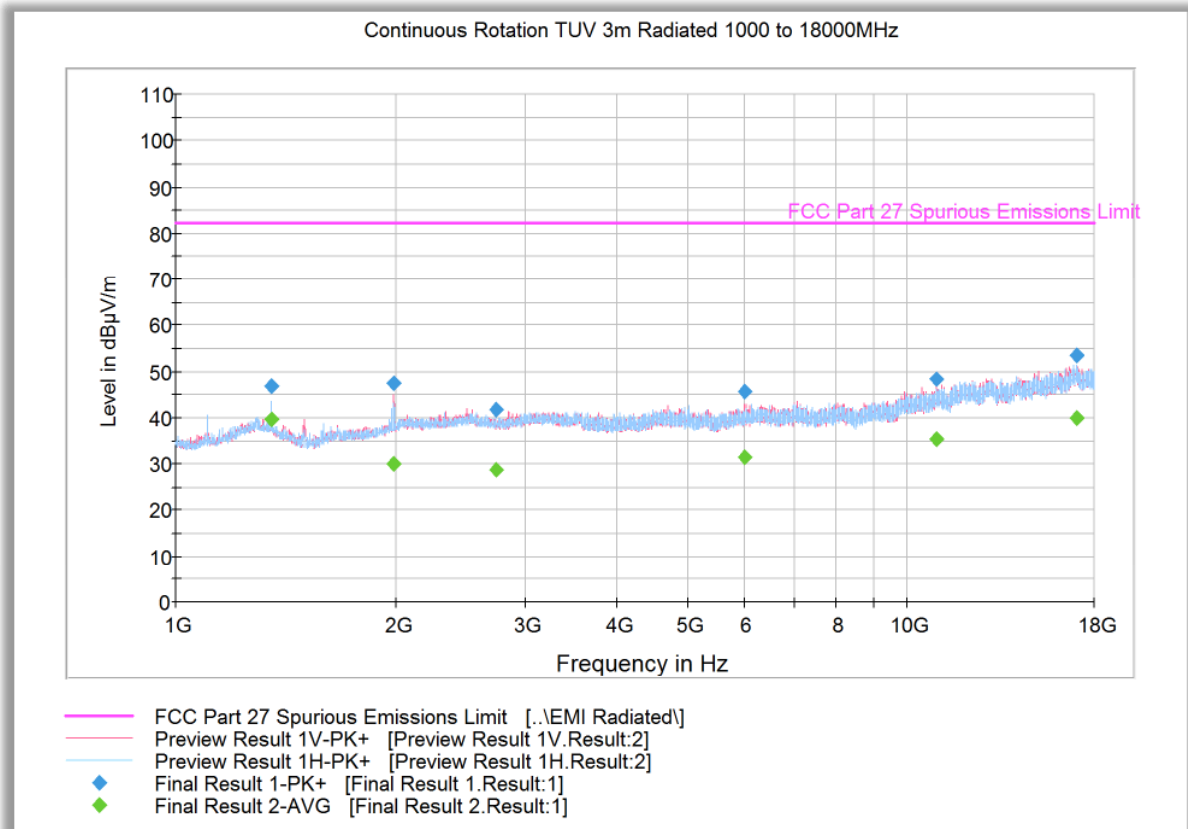
## 2.8.17 Test Results Below 1GHz (LTE Band 12 Downlink Worst Case Configuration) - 10MHz Bandwidth High Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 36.655551       | 34.3               | 1000.0          | 120.000         | 100.0       | V            | 320.0         | -10.6      | 47.9                | 82.2           |
| 45.711102       | 39.2               | 1000.0          | 120.000         | 109.0       | V            | 260.0         | -13.7      | 43.0                | 82.2           |
| 61.462204       | 34.6               | 1000.0          | 120.000         | 155.0       | V            | 166.0         | -16.8      | 47.6                | 82.2           |
| 166.432144      | 36.6               | 1000.0          | 120.000         | 100.0       | V            | 88.0          | -11.8      | 45.6                | 82.2           |
| 172.607695      | 35.5               | 1000.0          | 120.000         | 100.0       | V            | 83.0          | -11.7      | 46.7                | 82.2           |
| 614.390220      | 39.2               | 1000.0          | 120.000         | 160.0       | V            | 198.0         | 0.9        | 43.0                | 82.2           |
| 740.702926      | 52.4               | 1000.0          | 120.000         | 100.0       | H            | 122.0         | 2.6        | Fundamental Carrier |                |

## 2.8.18 Test Results Above 1GHz (LTE Band 12 Downlink Worst Case Configuration) - 10MHz Bandwidth Low Channel



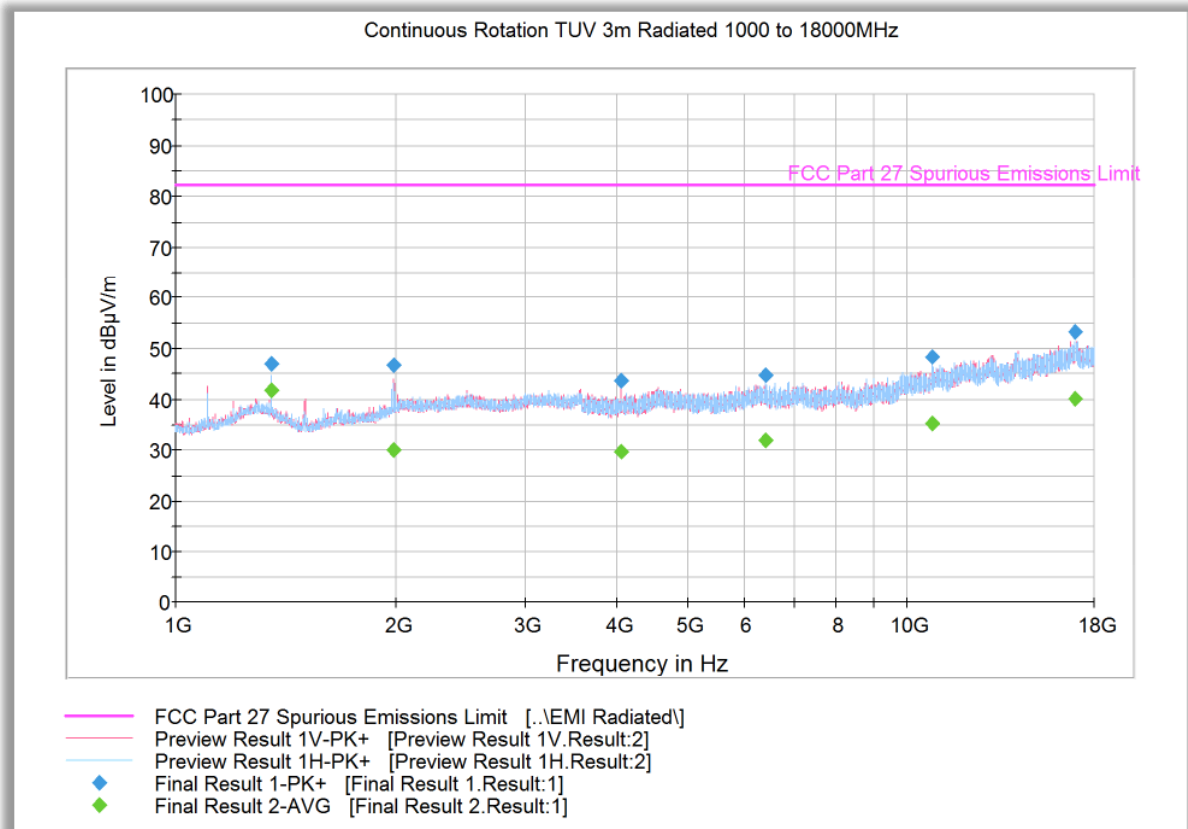
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1351.533333     | 46.8             | 1000.0          | 1000.000        | 151.6       | H            | 1.0           | -5.1       | 35.4        | 82.2           |
| 1986.966667     | 47.3             | 1000.0          | 1000.000        | 245.3       | V            | 186.0         | -2.3       | 34.9        | 82.2           |
| 2737.600000     | 41.8             | 1000.0          | 1000.000        | 250.5       | H            | 228.0         | -0.1       | 40.4        | 82.2           |
| 5991.633333     | 45.6             | 1000.0          | 1000.000        | 252.3       | V            | 53.0          | 5.7        | 36.6        | 82.2           |
| 10960.866667    | 48.5             | 1000.0          | 1000.000        | 139.7       | V            | 18.0          | 11.9       | 33.7        | 82.2           |
| 16972.600000    | 53.4             | 1000.0          | 1000.000        | 252.3       | H            | 34.0          | 17.9       | 28.8        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1351.533333     | 39.6             | 1000.0          | 1000.000        | 151.6       | H            | 1.0           | -5.1       | 42.6        | 82.2           |
| 1986.966667     | 30.2             | 1000.0          | 1000.000        | 245.3       | V            | 186.0         | -2.3       | 52.0        | 82.2           |
| 2737.600000     | 28.8             | 1000.0          | 1000.000        | 250.5       | H            | 228.0         | -0.1       | 53.4        | 82.2           |
| 5991.633333     | 31.4             | 1000.0          | 1000.000        | 252.3       | V            | 53.0          | 5.7        | 50.8        | 82.2           |
| 10960.866667    | 35.4             | 1000.0          | 1000.000        | 139.7       | V            | 18.0          | 11.9       | 46.8        | 82.2           |
| 16972.600000    | 40.1             | 1000.0          | 1000.000        | 252.3       | H            | 34.0          | 17.9       | 42.1        | 82.2           |

## 2.8.19 Test Results Above 1GHz (LTE Band 12 Downlink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



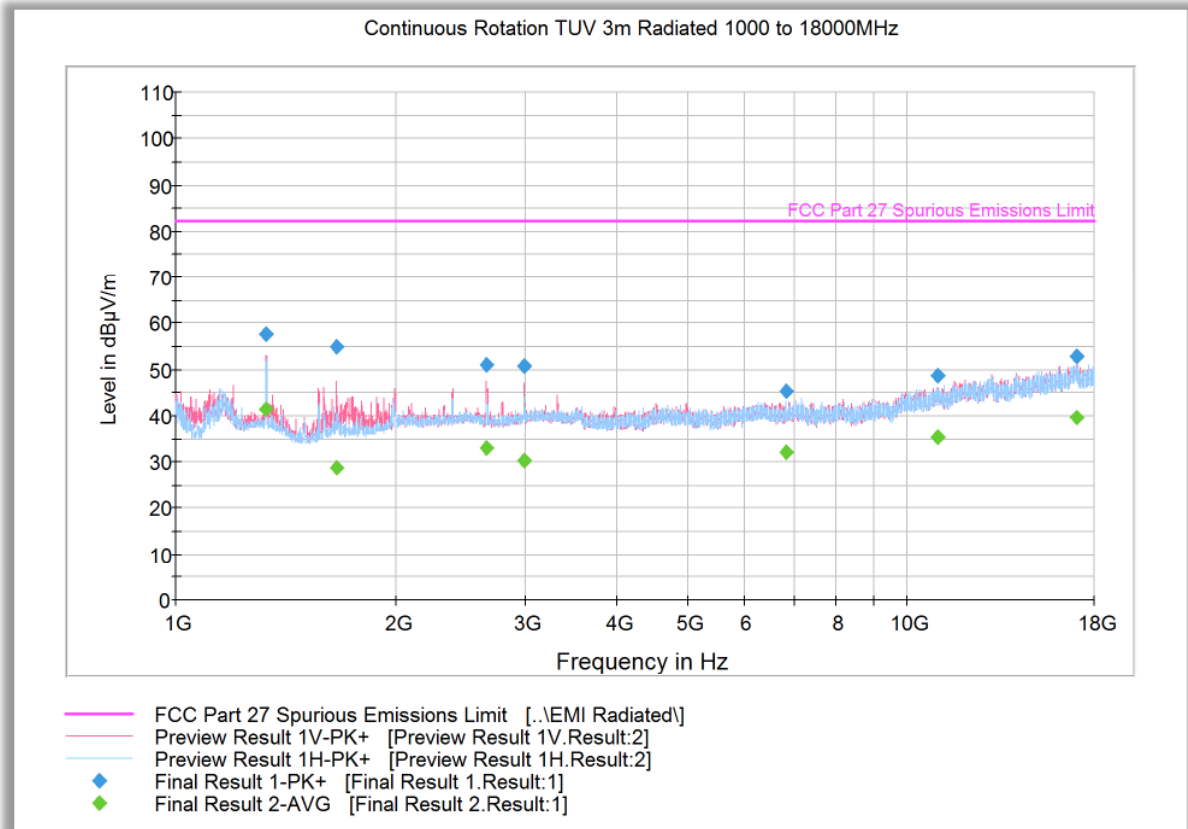
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1351.733333     | 46.9             | 1000.0          | 1000.000        | 198.5       | H            | 3.0           | -5.1       | 35.3        | 82.2           |
| 1987.533333     | 46.6             | 1000.0          | 1000.000        | 241.3       | V            | 116.0         | -2.3       | 35.6        | 82.2           |
| 4066.633333     | 43.8             | 1000.0          | 1000.000        | 103.7       | V            | 103.0         | 2.6        | 38.4        | 82.2           |
| 6393.200000     | 44.7             | 1000.0          | 1000.000        | 352.7       | H            | 160.0         | 6.4        | 37.5        | 82.2           |
| 10817.700000    | 48.5             | 1000.0          | 1000.000        | 317.2       | H            | 80.0          | 11.8       | 33.7        | 82.2           |
| 16946.366667    | 53.2             | 1000.0          | 1000.000        | 295.2       | H            | 295.0         | 18.0       | 29.0        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1351.733333     | 41.7             | 1000.0          | 1000.000        | 198.5       | H            | 3.0           | -5.1       | 40.5        | 82.2           |
| 1987.533333     | 30.0             | 1000.0          | 1000.000        | 241.3       | V            | 116.0         | -2.3       | 52.2        | 82.2           |
| 4066.633333     | 29.8             | 1000.0          | 1000.000        | 103.7       | V            | 103.0         | 2.6        | 52.4        | 82.2           |
| 6393.200000     | 31.9             | 1000.0          | 1000.000        | 352.7       | H            | 160.0         | 6.4        | 50.3        | 82.2           |
| 10817.700000    | 35.3             | 1000.0          | 1000.000        | 317.2       | H            | 80.0          | 11.8       | 46.9        | 82.2           |
| 16946.366667    | 40.1             | 1000.0          | 1000.000        | 295.2       | H            | 295.0         | 18.0       | 42.1        | 82.2           |

## 2.8.20 Test Results Above 1GHz (LTE Band 12 Downlink Worst Case Configuration) - 10MHz Bandwidth High Channel



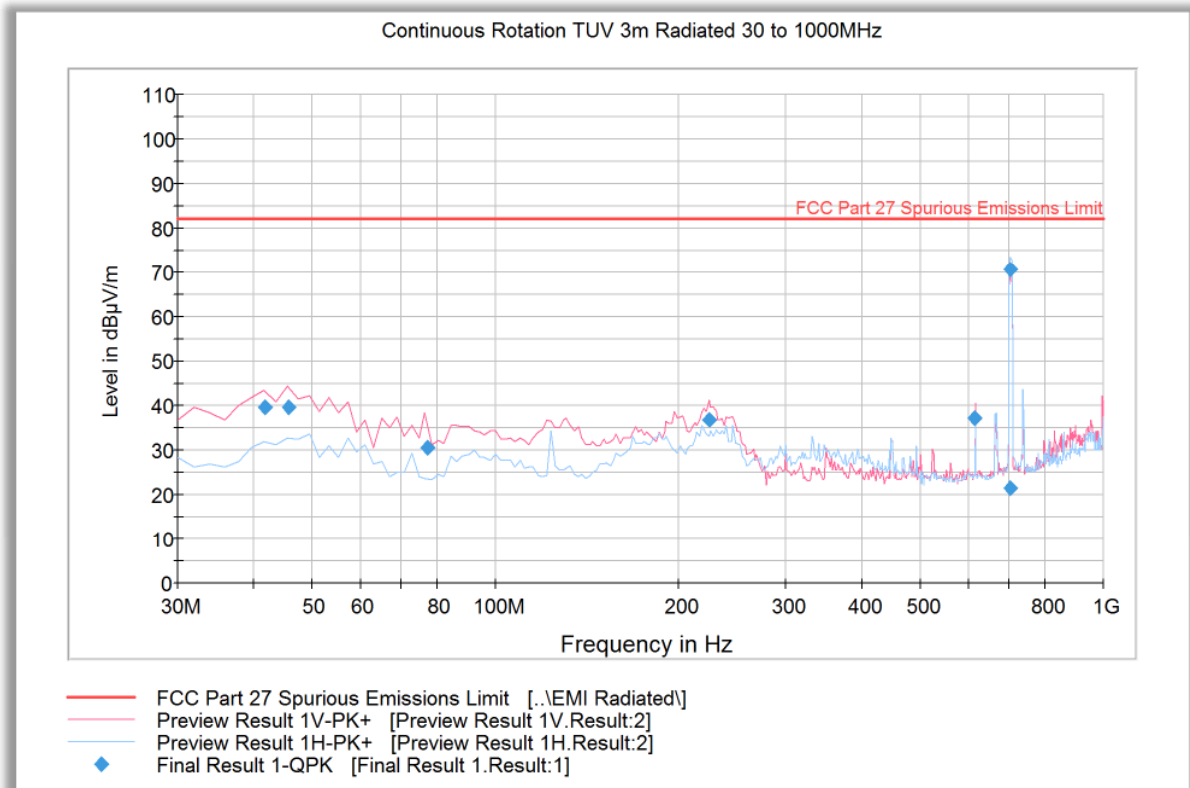
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.333333     | 57.6             | 1000.0          | 1000.000        | 213.4       | V            | 290.0         | -5.1       | 24.6        | 82.2           |
| 1660.166667     | 55.0             | 1000.0          | 1000.000        | 337.1       | V            | 268.0         | -5.2       | 27.2        | 82.2           |
| 2660.566667     | 51.0             | 1000.0          | 1000.000        | 296.2       | V            | 252.0         | -0.2       | 31.2        | 82.2           |
| 2988.566667     | 50.8             | 1000.0          | 1000.000        | 178.6       | V            | 22.0          | 0.7        | 31.4        | 82.2           |
| 6832.900000     | 45.4             | 1000.0          | 1000.000        | 151.2       | H            | 164.0         | 6.6        | 36.8        | 82.2           |
| 10993.533333    | 48.5             | 1000.0          | 1000.000        | 352.7       | V            | 7.0           | 11.8       | 33.7        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.333333     | 41.5             | 1000.0          | 1000.000        | 213.4       | V            | 290.0         | -5.1       | 40.7        | 82.2           |
| 1660.166667     | 28.9             | 1000.0          | 1000.000        | 337.1       | V            | 268.0         | -5.2       | 53.3        | 82.2           |
| 2660.566667     | 33.1             | 1000.0          | 1000.000        | 296.2       | V            | 252.0         | -0.2       | 49.1        | 82.2           |
| 2988.566667     | 30.4             | 1000.0          | 1000.000        | 178.6       | V            | 22.0          | 0.7        | 51.8        | 82.2           |
| 6832.900000     | 32.2             | 1000.0          | 1000.000        | 151.2       | H            | 164.0         | 6.6        | 50.0        | 82.2           |
| 10993.533333    | 35.4             | 1000.0          | 1000.000        | 352.7       | V            | 7.0           | 11.8       | 46.8        | 82.2           |

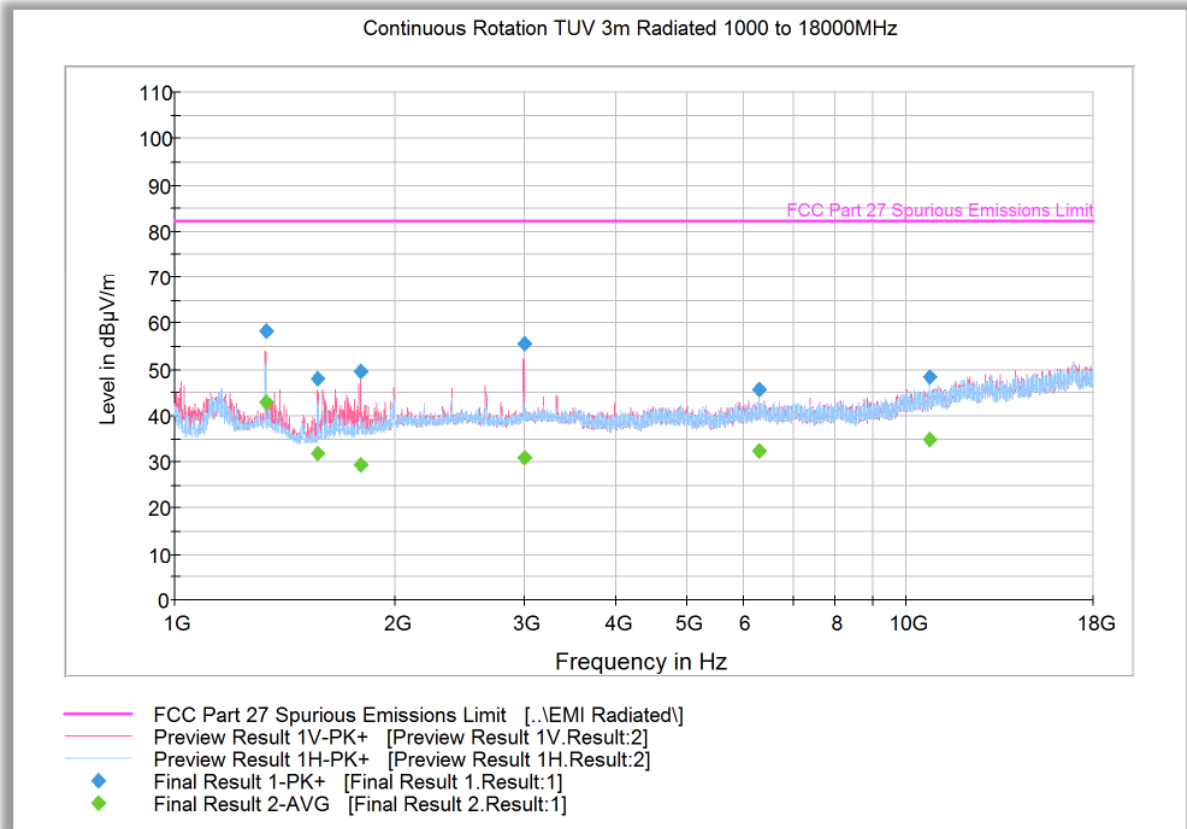
## 2.8.21 Test Results Below 1GHz (LTE Band 12 Uplink Worst Case Configuration) - 10MHz Bandwidth Low Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBµV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 41.743327       | 39.8               | 1000.0          | 120.000         | 100.0       | V            | 307.0         | -12.6      | 42.4                | 82.2           |
| 45.671102       | 39.8               | 1000.0          | 120.000         | 134.0       | V            | 307.0         | -13.7      | 42.4                | 82.2           |
| 77.213307       | 30.7               | 1000.0          | 120.000         | 100.0       | V            | 307.0         | -17.2      | 51.5                | 82.2           |
| 224.148778      | 36.8               | 1000.0          | 120.000         | 100.0       | V            | 216.0         | -9.5       | 45.4                | 82.2           |
| 614.390220      | 37.3               | 1000.0          | 120.000         | 100.0       | V            | 173.0         | 0.9        | 44.9                | 82.2           |
| 703.705170      | 70.5               | 1000.0          | 120.000         | 100.0       | H            | 223.0         | 2.7        | Fundamental Carrier |                |
| 703.729058      | 21.6               | 1000.0          | 120.000         | 100.0       | H            | 225.0         | 2.7        | 60.6                | 82.2           |

## 2.8.22 Test Results Above 1GHz (LTE Band 12 Uplink Worst Case Configuration) - 10MHz Bandwidth Low Channel



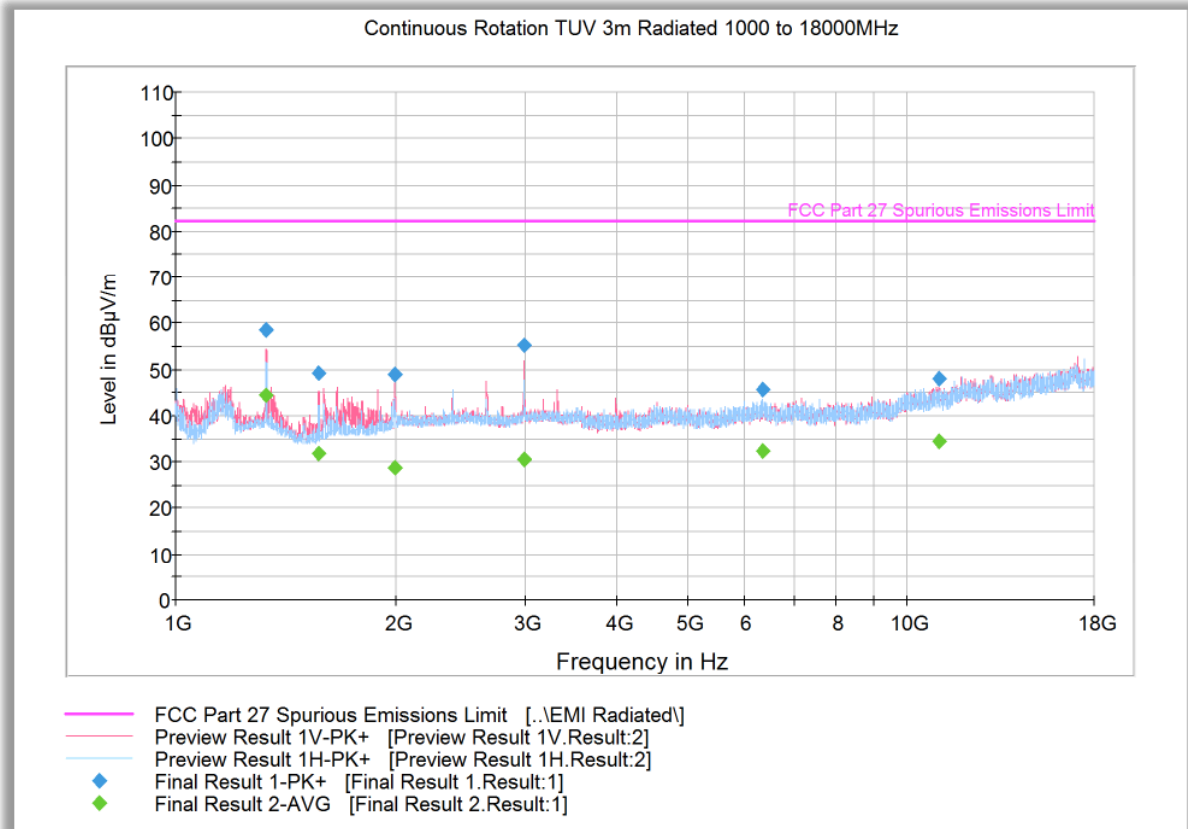
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1331.333333     | 58.4             | 1000.0          | 1000.000        | 231.4       | V            | 287.0         | -5.1       | 23.8        | 82.2           |
| 1570.866667     | 48.0             | 1000.0          | 1000.000        | 152.2       | V            | 290.0         | -5.9       | 34.2        | 82.2           |
| 1792.000000     | 49.5             | 1000.0          | 1000.000        | 252.3       | V            | 293.0         | -3.5       | 32.7        | 82.2           |
| 2998.466667     | 55.7             | 1000.0          | 1000.000        | 232.4       | V            | 269.0         | 0.9        | 26.5        | 82.2           |
| 6288.500000     | 45.6             | 1000.0          | 1000.000        | 132.7       | H            | 240.0         | 6.2        | 36.6        | 82.2           |
| 10759.666667    | 48.3             | 1000.0          | 1000.000        | 318.2       | H            | 145.0         | 11.6       | 33.9        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1331.333333     | 43.0             | 1000.0          | 1000.000        | 231.4       | V            | 287.0         | -5.1       | 39.2        | 82.2           |
| 1570.866667     | 31.8             | 1000.0          | 1000.000        | 152.2       | V            | 290.0         | -5.9       | 50.4        | 82.2           |
| 1792.000000     | 29.4             | 1000.0          | 1000.000        | 252.3       | V            | 293.0         | -3.5       | 52.8        | 82.2           |
| 2998.466667     | 31.0             | 1000.0          | 1000.000        | 232.4       | V            | 269.0         | 0.9        | 51.2        | 82.2           |
| 6288.500000     | 32.5             | 1000.0          | 1000.000        | 132.7       | H            | 240.0         | 6.2        | 49.7        | 82.2           |
| 10759.666667    | 34.9             | 1000.0          | 1000.000        | 318.2       | H            | 145.0         | 11.6       | 47.3        | 82.2           |

## 2.8.23 Test Results Above 1GHz (LTE Band 12 Uplink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



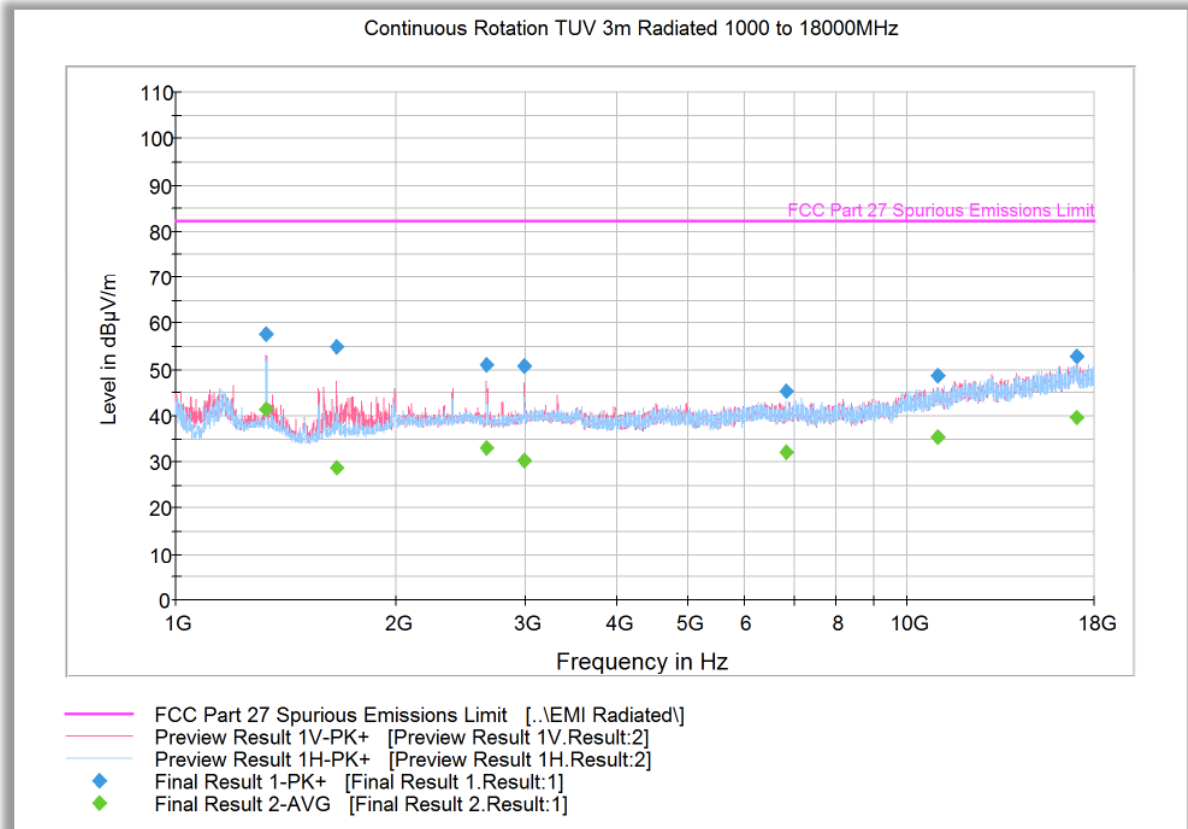
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.933333     | 58.6             | 1000.0          | 1000.000        | 178.6       | V            | 99.0          | -5.1       | 23.6        | 82.2           |
| 1568.200000     | 49.3             | 1000.0          | 1000.000        | 207.5       | V            | 292.0         | -5.9       | 32.9        | 82.2           |
| 1997.566667     | 49.1             | 1000.0          | 1000.000        | 200.5       | V            | 236.0         | -2.2       | 33.1        | 82.2           |
| 2986.866667     | 55.4             | 1000.0          | 1000.000        | 252.3       | V            | 253.0         | 0.7        | 26.8        | 82.2           |
| 6334.833333     | 45.8             | 1000.0          | 1000.000        | 252.3       | H            | 143.0         | 6.3        | 36.4        | 82.2           |
| 11051.933333    | 48.1             | 1000.0          | 1000.000        | 231.4       | V            | 198.0         | 12.0       | 34.1        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.933333     | 44.6             | 1000.0          | 1000.000        | 178.6       | V            | 99.0          | -5.1       | 37.6        | 82.2           |
| 1568.200000     | 31.9             | 1000.0          | 1000.000        | 207.5       | V            | 292.0         | -5.9       | 50.3        | 82.2           |
| 1997.566667     | 29.0             | 1000.0          | 1000.000        | 200.5       | V            | 236.0         | -2.2       | 53.2        | 82.2           |
| 2986.866667     | 30.8             | 1000.0          | 1000.000        | 252.3       | V            | 253.0         | 0.7        | 51.4        | 82.2           |
| 6334.833333     | 32.5             | 1000.0          | 1000.000        | 252.3       | H            | 143.0         | 6.3        | 49.7        | 82.2           |
| 11051.933333    | 34.7             | 1000.0          | 1000.000        | 231.4       | V            | 198.0         | 12.0       | 47.5        | 82.2           |

## 2.8.24 Test Results Above 1GHz (LTE Band 12 Uplink Worst Case Configuration) - 10MHz Bandwidth High Channel



### Peak Data

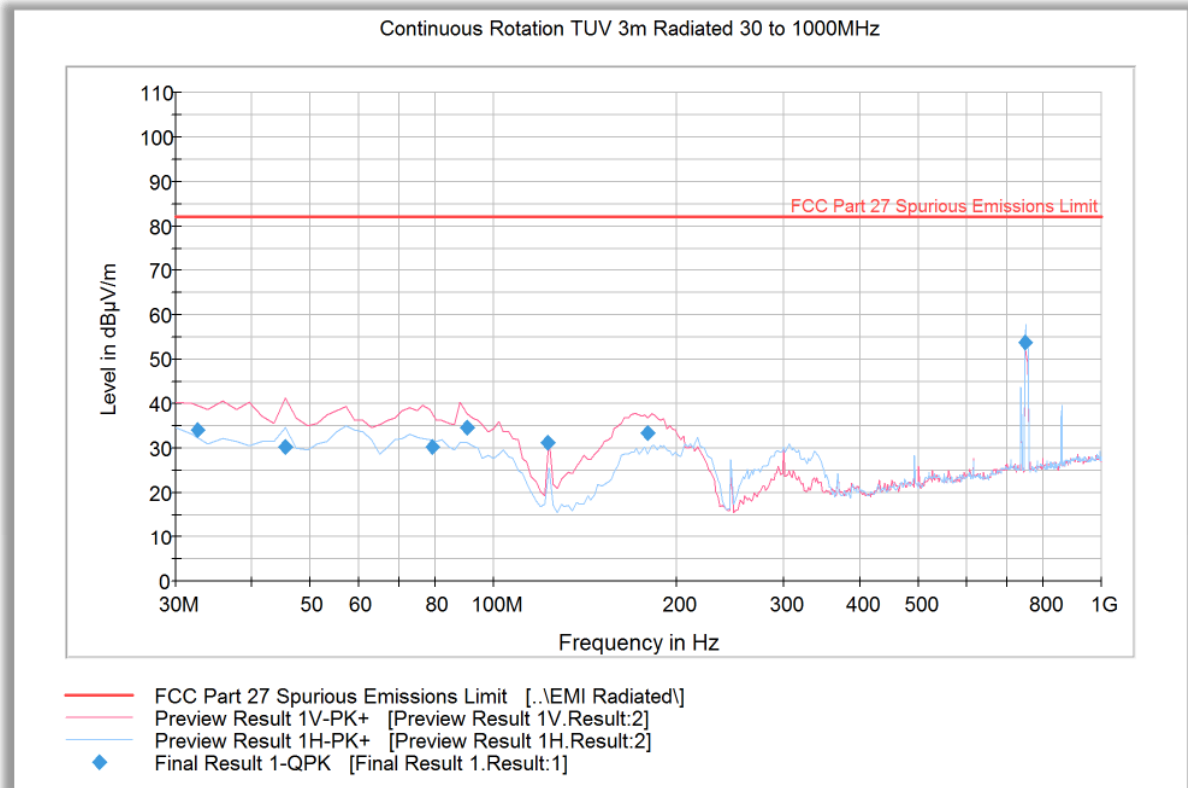
| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.333333     | 57.6             | 1000.0          | 1000.000        | 213.4       | V            | 290.0         | -5.1       | 24.6        | 82.2           |
| 1660.166667     | 55.0             | 1000.0          | 1000.000        | 337.1       | V            | 268.0         | -5.2       | 27.2        | 82.2           |
| 2660.566667     | 51.0             | 1000.0          | 1000.000        | 296.2       | V            | 252.0         | -0.2       | 31.2        | 82.2           |
| 2988.566667     | 50.8             | 1000.0          | 1000.000        | 178.6       | V            | 22.0          | 0.7        | 31.4        | 82.2           |
| 6832.900000     | 45.4             | 1000.0          | 1000.000        | 151.2       | H            | 164.0         | 6.6        | 36.8        | 82.2           |
| 10993.533333    | 48.5             | 1000.0          | 1000.000        | 352.7       | V            | 7.0           | 11.8       | 33.7        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.333333     | 41.5             | 1000.0          | 1000.000        | 213.4       | V            | 290.0         | -5.1       | 40.7        | 82.2           |
| 1660.166667     | 28.9             | 1000.0          | 1000.000        | 337.1       | V            | 268.0         | -5.2       | 53.3        | 82.2           |
| 2660.566667     | 33.1             | 1000.0          | 1000.000        | 296.2       | V            | 252.0         | -0.2       | 49.1        | 82.2           |
| 2988.566667     | 30.4             | 1000.0          | 1000.000        | 178.6       | V            | 22.0          | 0.7        | 51.8        | 82.2           |
| 6832.900000     | 32.2             | 1000.0          | 1000.000        | 151.2       | H            | 164.0         | 6.6        | 50.0        | 82.2           |
| 10993.533333    | 35.4             | 1000.0          | 1000.000        | 352.7       | V            | 7.0           | 11.8       | 46.8        | 82.2           |



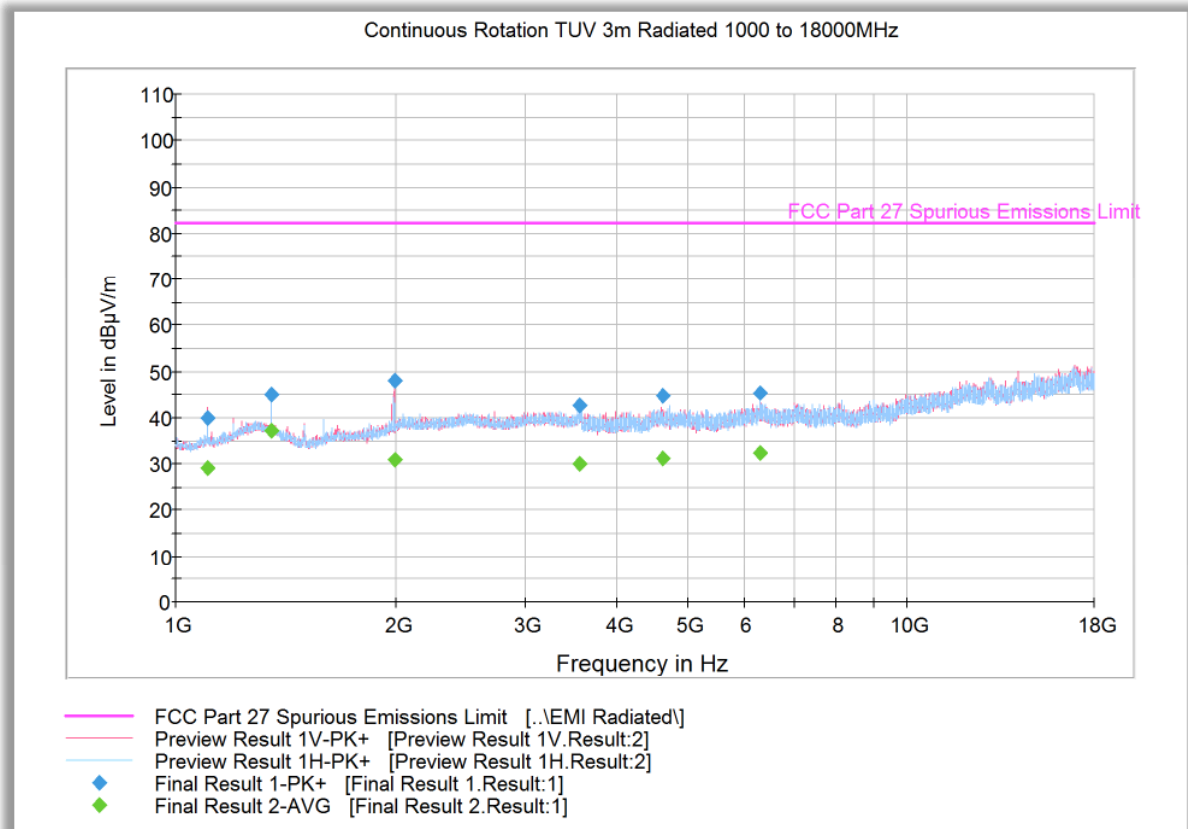
## 2.8.25 Test Results Below 1GHz (LTE Band 13 Downlink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 32.551663       | 34.1               | 1000.0          | 120.000         | 100.0       | V            | 80.0          | -8.9       | 48.1                | 82.2           |
| 45.511102       | 30.2               | 1000.0          | 120.000         | 109.0       | V            | 6.0           | -13.7      | 52.0                | 82.2           |
| 79.493307       | 30.3               | 1000.0          | 120.000         | 109.0       | V            | 14.0          | -17.2      | 51.9                | 82.2           |
| 90.676633       | 34.6               | 1000.0          | 120.000         | 100.0       | V            | 204.0         | -14.9      | 47.6                | 82.2           |
| 122.866613      | 31.1               | 1000.0          | 120.000         | 100.0       | V            | 145.0         | -14.6      | 51.1                | 82.2           |
| 178.983246      | 33.6               | 1000.0          | 120.000         | 105.0       | V            | 51.0          | -11.7      | 48.6                | 82.2           |
| 750.742365      | 53.6               | 1000.0          | 120.000         | 100.0       | H            | 235.0         | 2.6        | Fundamental Carrier |                |

## 2.8.26 Test Results Above 1GHz (LTE Band 13 Downlink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



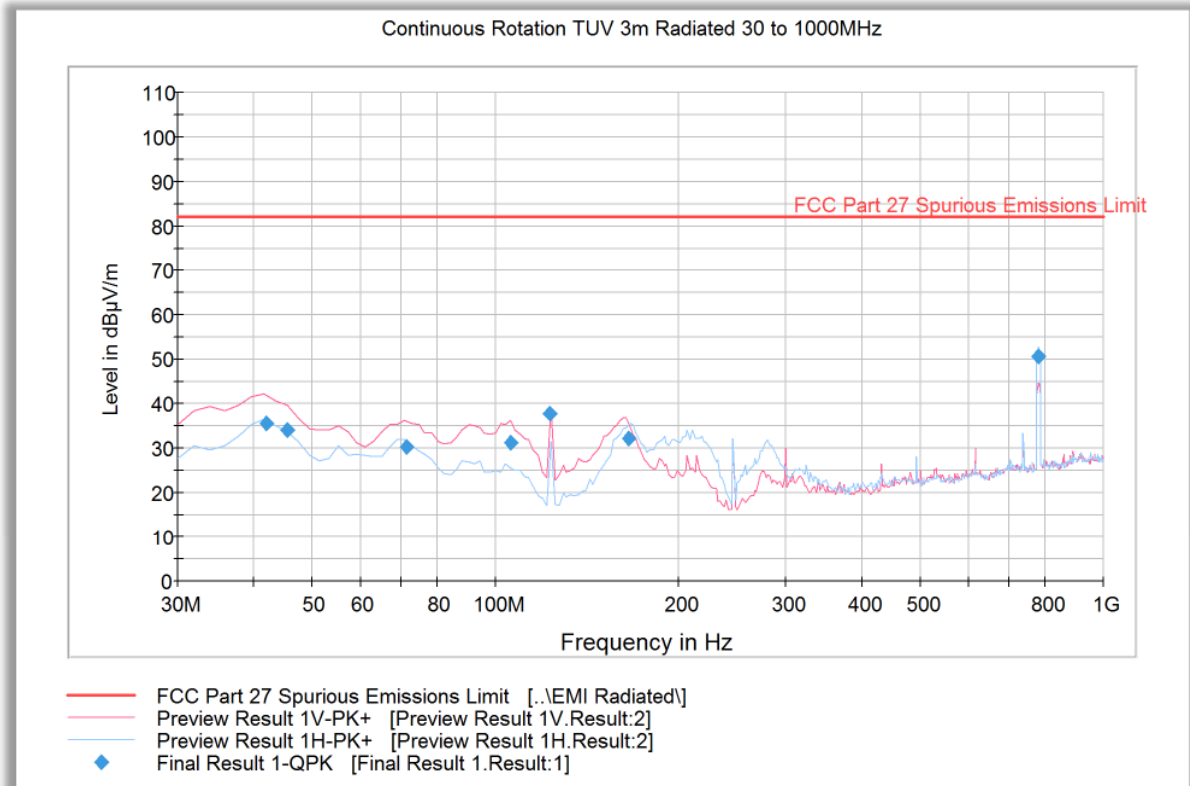
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.766667     | 39.8             | 1000.0          | 1000.000        | 152.2       | V            | 257.0         | -6.9       | 42.4        | 82.2           |
| 1351.733333     | 45.2             | 1000.0          | 1000.000        | 111.7       | H            | -3.0          | -5.1       | 37.0        | 82.2           |
| 1989.800000     | 48.2             | 1000.0          | 1000.000        | 174.6       | V            | 127.0         | -2.3       | 34.0        | 82.2           |
| 3563.566667     | 42.7             | 1000.0          | 1000.000        | 236.4       | V            | 313.0         | 1.7        | 39.5        | 82.2           |
| 4633.266667     | 44.7             | 1000.0          | 1000.000        | 352.6       | V            | 176.0         | 3.6        | 37.5        | 82.2           |
| 6295.900000     | 45.3             | 1000.0          | 1000.000        | 251.4       | H            | 34.0          | 6.2        | 36.9        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.766667     | 29.1             | 1000.0          | 1000.000        | 152.2       | V            | 257.0         | -6.9       | 53.1        | 82.2           |
| 1351.733333     | 37.1             | 1000.0          | 1000.000        | 111.7       | H            | -3.0          | -5.1       | 45.1        | 82.2           |
| 1989.800000     | 30.9             | 1000.0          | 1000.000        | 174.6       | V            | 127.0         | -2.3       | 51.3        | 82.2           |
| 3563.566667     | 29.9             | 1000.0          | 1000.000        | 236.4       | V            | 313.0         | 1.7        | 52.3        | 82.2           |
| 4633.266667     | 31.2             | 1000.0          | 1000.000        | 352.6       | V            | 176.0         | 3.6        | 51.0        | 82.2           |
| 6295.900000     | 32.4             | 1000.0          | 1000.000        | 251.4       | H            | 34.0          | 6.2        | 49.8        | 82.2           |

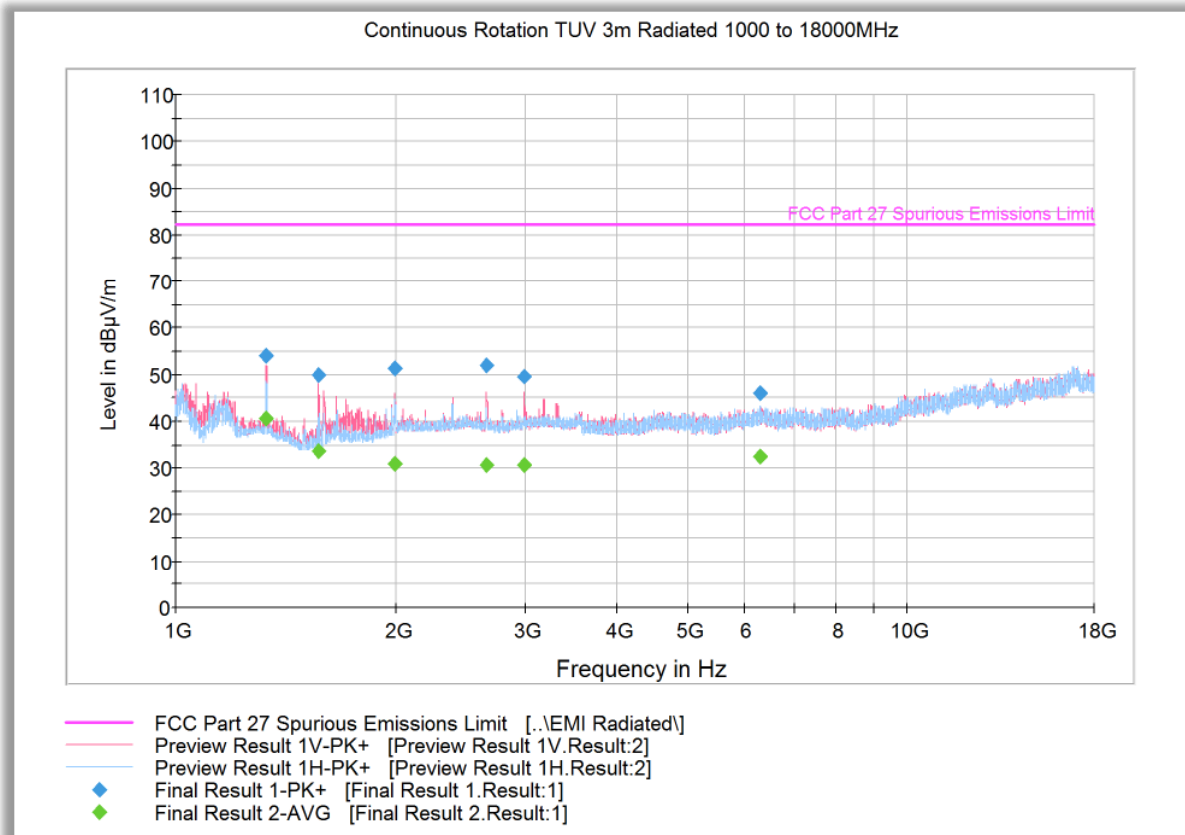
## 2.8.27 Test Results Below 1GHz (LTE Band 13 Uplink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBµV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 42.103327       | 35.5               | 1000.0          | 120.000         | 100.0       | V            | 297.0         | -12.7      | 46.7                | 82.2           |
| 45.527214       | 34.0               | 1000.0          | 120.000         | 109.0       | V            | 315.0         | -13.7      | 48.2                | 82.2           |
| 71.581643       | 30.2               | 1000.0          | 120.000         | 178.0       | V            | 197.0         | -17.2      | 52.0                | 82.2           |
| 105.931623      | 31.4               | 1000.0          | 120.000         | 105.0       | V            | 284.0         | -13.2      | 50.8                | 82.2           |
| 122.866613      | 37.8               | 1000.0          | 120.000         | 115.0       | V            | 191.0         | -14.6      | 44.4                | 82.2           |
| 165.912144      | 32.1               | 1000.0          | 120.000         | 190.0       | H            | 328.0         | -11.8      | 50.1                | 82.2           |
| 781.724569      | 50.5               | 1000.0          | 120.000         | 100.0       | H            | 237.0         | 3.1        | Fundamental Carrier |                |

## 2.8.28 Test Results Above 1GHz (LTE Band 13 Uplink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



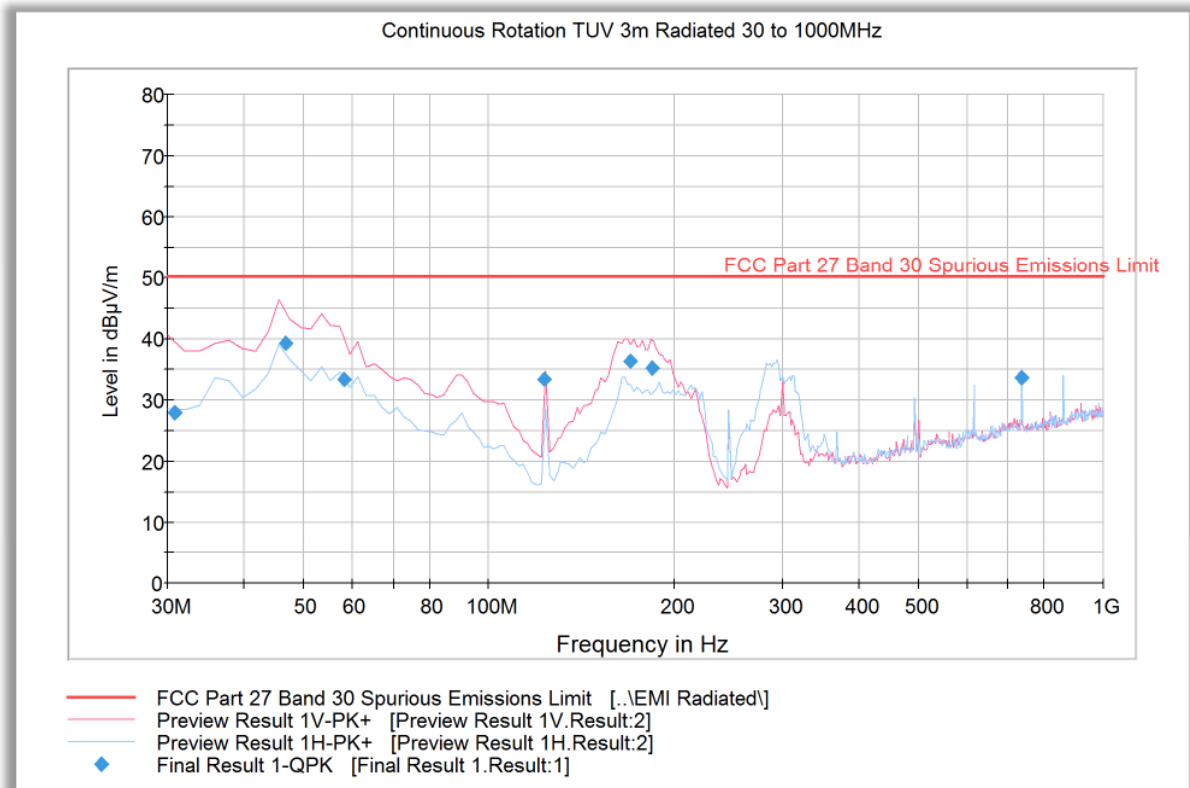
### Peak Data

| Frequency (MHz) | MaxPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.166667     | 54.1             | 1000.0          | 1000.000        | 186.5       | V            | 96.0          | -5.1       | 28.1        | 82.2           |
| 1568.566667     | 50.0             | 1000.0          | 1000.000        | 169.6       | V            | 307.0         | -5.9       | 32.2        | 82.2           |
| 1994.333333     | 51.3             | 1000.0          | 1000.000        | 343.1       | V            | 4.0           | -2.2       | 30.9        | 82.2           |
| 2654.500000     | 52.1             | 1000.0          | 1000.000        | 235.4       | V            | 300.0         | -0.2       | 30.1        | 82.2           |
| 2993.333333     | 49.6             | 1000.0          | 1000.000        | 303.2       | V            | 305.0         | 0.8        | 32.6        | 82.2           |
| 6298.133333     | 45.9             | 1000.0          | 1000.000        | 134.7       | H            | 131.0         | 6.2        | 36.3        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.166667     | 40.7             | 1000.0          | 1000.000        | 186.5       | V            | 96.0          | -5.1       | 41.5        | 82.2           |
| 1568.566667     | 33.7             | 1000.0          | 1000.000        | 169.6       | V            | 307.0         | -5.9       | 48.5        | 82.2           |
| 1994.333333     | 31.0             | 1000.0          | 1000.000        | 343.1       | V            | 4.0           | -2.2       | 51.2        | 82.2           |
| 2654.500000     | 30.7             | 1000.0          | 1000.000        | 235.4       | V            | 300.0         | -0.2       | 51.5        | 82.2           |
| 2993.333333     | 30.6             | 1000.0          | 1000.000        | 303.2       | V            | 305.0         | 0.8        | 51.6        | 82.2           |
| 6298.133333     | 32.4             | 1000.0          | 1000.000        | 134.7       | H            | 131.0         | 6.2        | 49.8        | 82.2           |

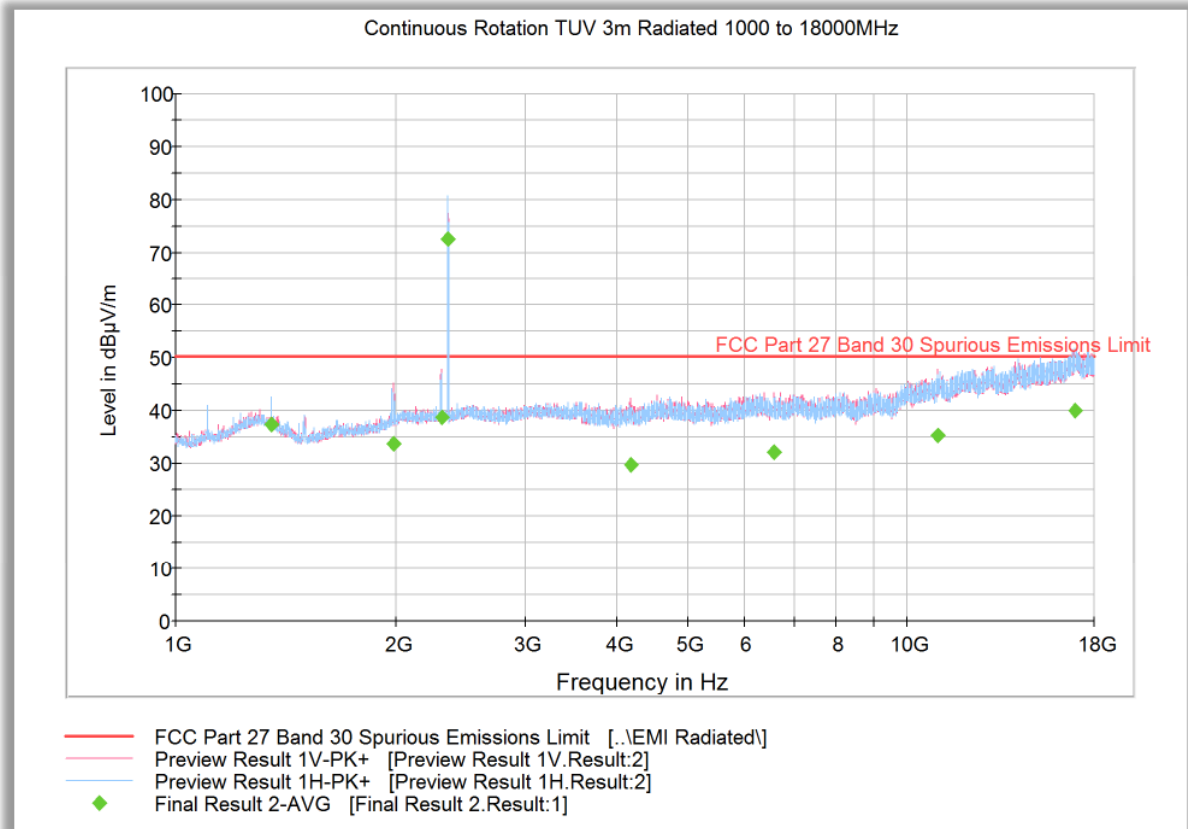
## 2.8.29 Test Results Below 1GHz (LTE Band 30 Downlink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 30.720000       | 28.0               | 1000.0          | 120.000         | 100.0       | V            | 202.0         | -8.2       | 22.2        | 50.2           |
| 46.711102       | 39.4               | 1000.0          | 120.000         | 100.0       | V            | 295.0         | -14.1      | 10.8        | 50.2           |
| 57.942204       | 33.4               | 1000.0          | 120.000         | 150.0       | V            | 1.0           | -16.3      | 16.8        | 50.2           |
| 122.866613      | 33.5               | 1000.0          | 120.000         | 110.0       | V            | 202.0         | -14.6      | 16.8        | 50.2           |
| 169.943808      | 36.3               | 1000.0          | 120.000         | 100.0       | V            | 70.0          | -11.7      | 13.9        | 50.2           |
| 184.327134      | 35.2               | 1000.0          | 120.000         | 105.0       | V            | 54.0          | -11.4      | 15.1        | 50.2           |
| 737.295150      | 33.6               | 1000.0          | 120.000         | 100.0       | H            | 246.0         | 2.7        | 16.6        | 50.2           |

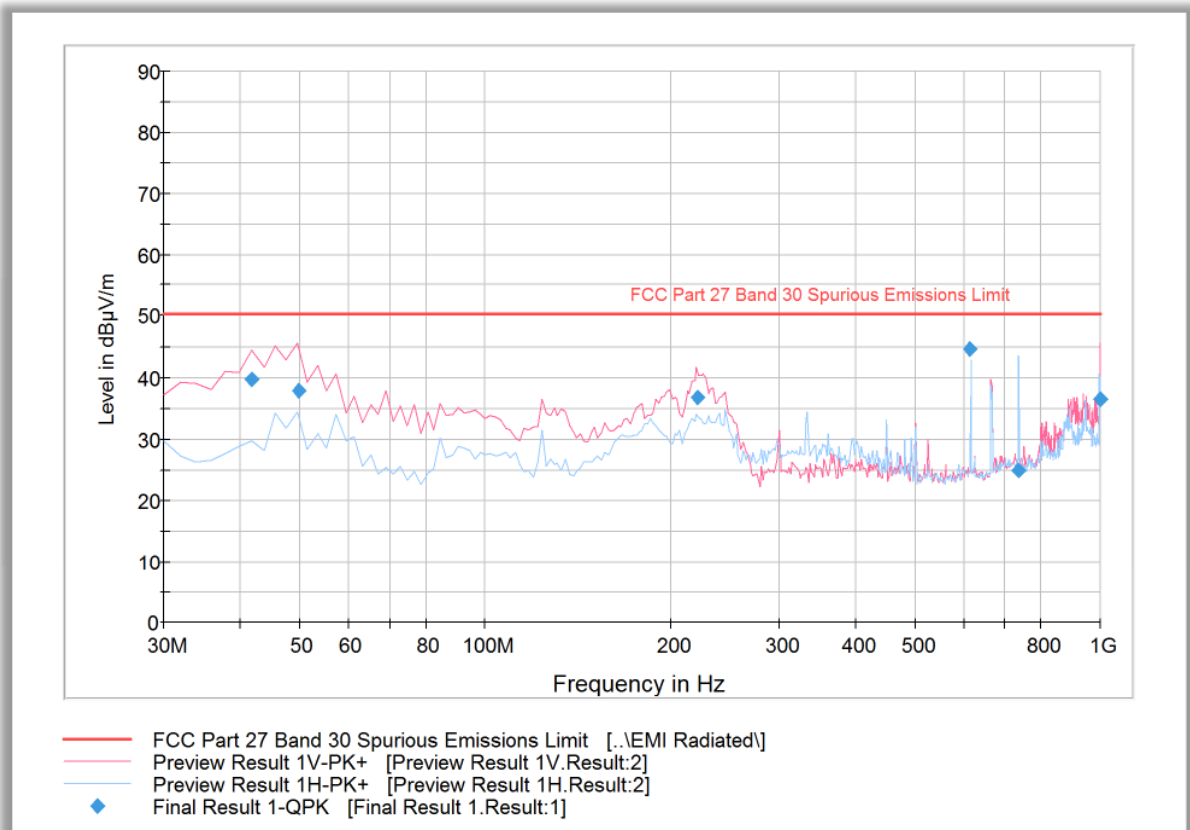
## 2.8.30 Test Results Above 1GHz (LTE Band 30 Downlink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 1351.933333     | 37.4             | 1000.0          | 1000.000        | 195.5       | H            | -4.0          | -5.1       | 12.8                | 50.2           |
| 1986.433333     | 33.8             | 1000.0          | 1000.000        | 209.4       | V            | 292.0         | -2.3       | 16.4                | 50.2           |
| 2312.766667     | 38.7             | 1000.0          | 1000.000        | 103.7       | V            | 348.0         | -1.2       | 11.5                | 50.2           |
| 2352.500000     | 72.5             | 1000.0          | 1000.000        | 241.3       | H            | 119.0         | -1.0       | Fundamental Carrier |                |
| 4184.666667     | 29.8             | 1000.0          | 1000.000        | 124.7       | V            | 324.0         | 2.7        | 20.4                | 50.2           |
| 6556.600000     | 32.1             | 1000.0          | 1000.000        | 151.6       | V            | 55.0          | 6.6        | 18.1                | 50.2           |
| 10991.133333    | 35.3             | 1000.0          | 1000.000        | 151.6       | V            | 36.0          | 11.8       | 14.9                | 50.2           |
| 16940.900000    | 39.9             | 1000.0          | 1000.000        | 198.5       | H            | 203.0         | 18.0       | 10.3                | 50.2           |

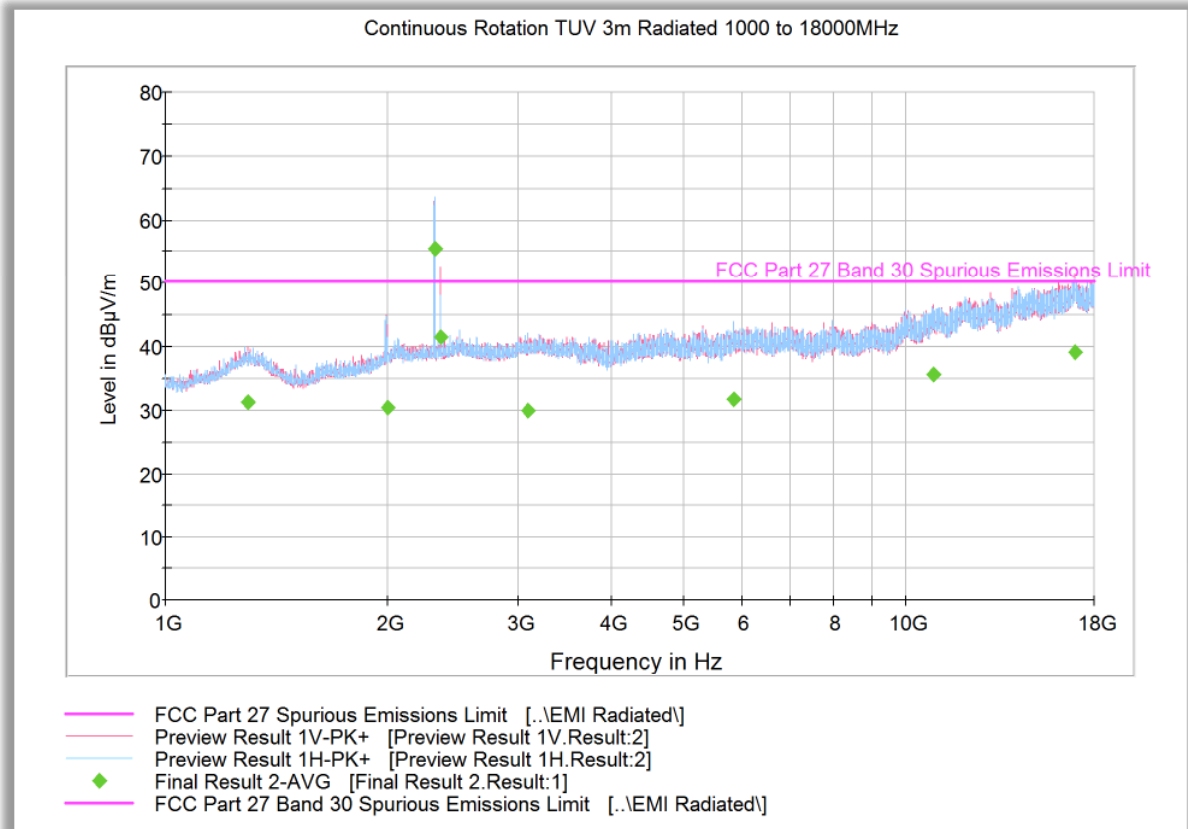
## 2.8.31 Test Results Below 1GHz (LTE Band 30 Uplink Worst Case Configuration) - 5MHz Bandwidth High Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 41.743327       | 39.7               | 1000.0          | 120.000         | 100.0       | V            | 237.0         | -12.6      | 10.5        | 50.2           |
| 49.598878       | 37.9               | 1000.0          | 120.000         | 115.0       | V            | 13.0          | -15.1      | 12.3        | 50.2           |
| 220.661002      | 36.8               | 1000.0          | 120.000         | 100.0       | V            | 210.0         | -9.8       | 13.4        | 50.2           |
| 614.390220      | 44.6               | 1000.0          | 120.000         | 122.0       | H            | 304.0         | 0.9        | 5.6         | 50.2           |
| 737.295150      | 24.9               | 1000.0          | 120.000         | 100.0       | H            | 280.0         | 2.7        | 25.3        | 50.2           |
| 999.120000      | 36.4               | 1000.0          | 120.000         | 100.0       | V            | 243.0         | 6.0        | 13.8        | 50.2           |

## 2.8.32 Test Results Above 1GHz (LTE Band 30 Uplink Worst Case Configuration) - 5MHz Bandwidth Low Channel

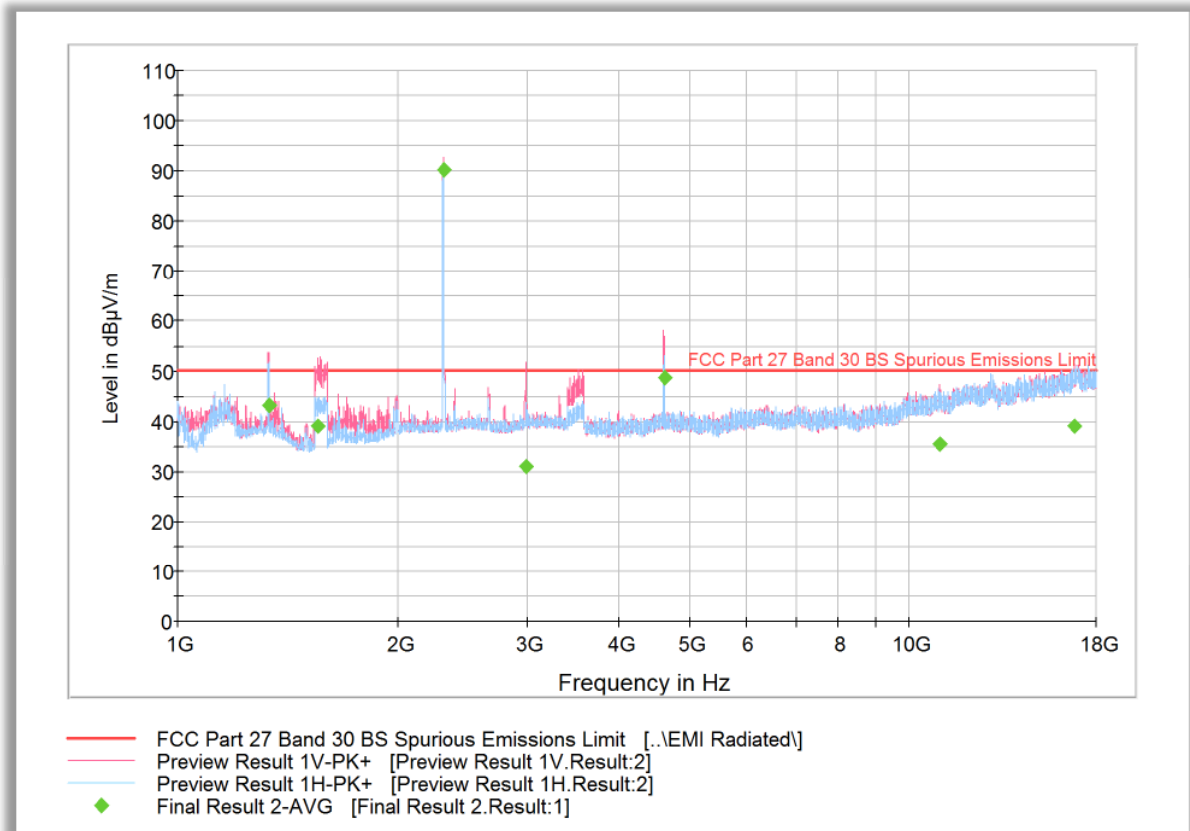


### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 1290.566667     | 31.2             | 1000.0          | 1000.000        | 151.6       | V            | 282.0         | -5.3       | 19.0                | 50.2           |
| 1992.766667     | 30.4             | 1000.0          | 1000.000        | 275.3       | V            | 241.0         | -2.2       | 19.8                | 50.2           |
| 2307.500000     | 55.6             | 1000.0          | 1000.000        | 194.5       | H            | 117.0         | -1.2       | Fundamental Carrier |                |
| 2352.033333     | 41.6             | 1000.0          | 1000.000        | 307.2       | V            | 255.0         | -1.0       | 8.6                 | 50.2           |
| 3085.366667     | 29.9             | 1000.0          | 1000.000        | 352.7       | H            | 282.0         | 0.9        | 20.3                | 50.2           |
| 5850.633333     | 31.7             | 1000.0          | 1000.000        | 151.2       | H            | 103.0         | 5.6        | 18.5                | 50.2           |
| 10913.100000    | 35.7             | 1000.0          | 1000.000        | 216.4       | V            | 5.0           | 11.9       | 14.5                | 50.2           |
| 16925.733333    | 39.1             | 1000.0          | 1000.000        | 112.7       | V            | -10.0         | 18.0       | 11.1                | 50.2           |



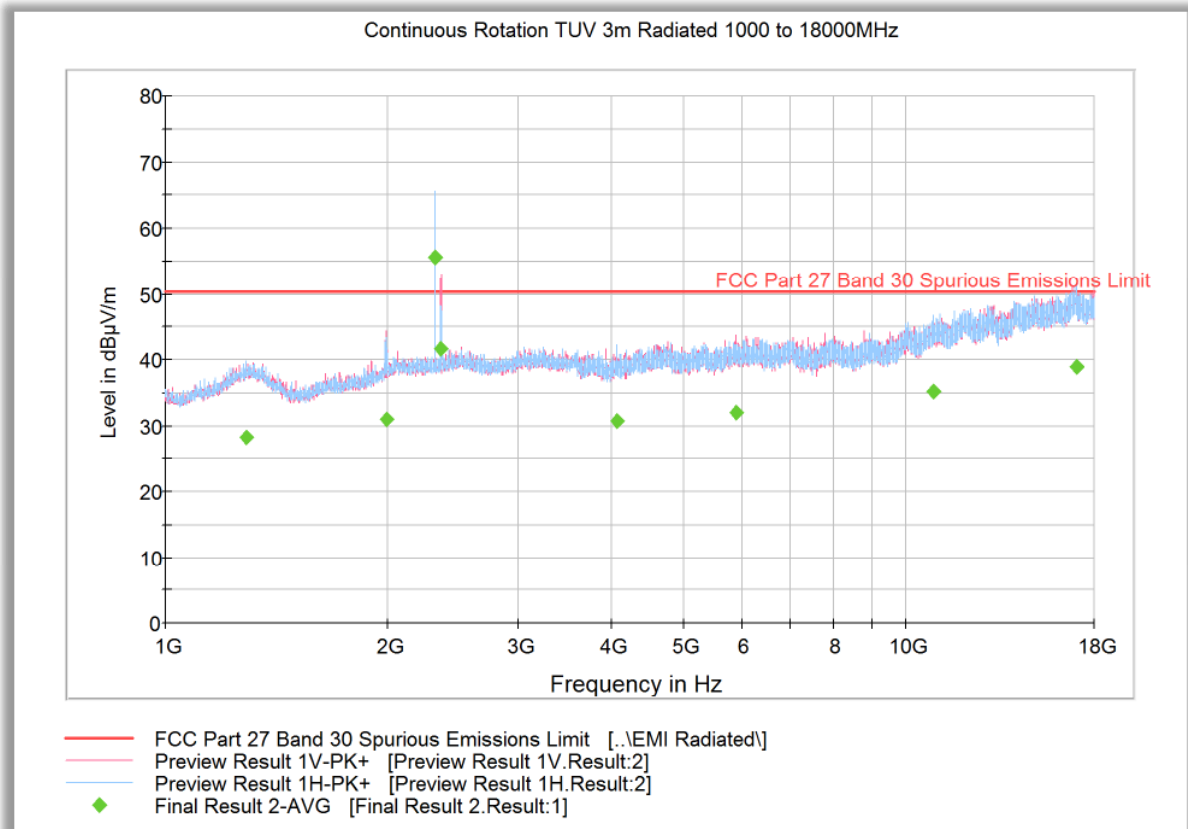
### 2.8.33 Test Results Above 1GHz (LTE Band 30 Uplink Worst Case Configuration) - 5MHz Bandwidth Middle Channel



### Average Data

| Frequency (MHz) | Average (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBμV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 1331.733333     | 43.3             | 1000.0          | 1000.000        | 203.5       | V            | 287.0         | -5.1       | 6.9                 | 50.2           |
| 1556.466667     | 39.1             | 1000.0          | 1000.000        | 203.5       | V            | 193.0         | -5.9       | 11.1                | 50.2           |
| 2310.000000     | 90.3             | 1000.0          | 1000.000        | 194.5       | V            | 178.0         | -1.1       | Fundamental Carrier |                |
| 2991.066667     | 31.2             | 1000.0          | 1000.000        | 207.5       | V            | 245.0         | 0.8        | 19.0                | 50.2           |
| 4619.733333     | 48.9             | 1000.0          | 1000.000        | 203.5       | V            | 173.0         | 3.6        | 1.3                 | 50.2           |
| 11002.233333    | 35.5             | 1000.0          | 1000.000        | 321.1       | V            | 265.0         | 11.8       | 14.7                | 50.2           |
| 16759.366667    | 39.1             | 1000.0          | 1000.000        | 111.7       | V            | 134.0         | 17.8       | 11.1                | 50.2           |

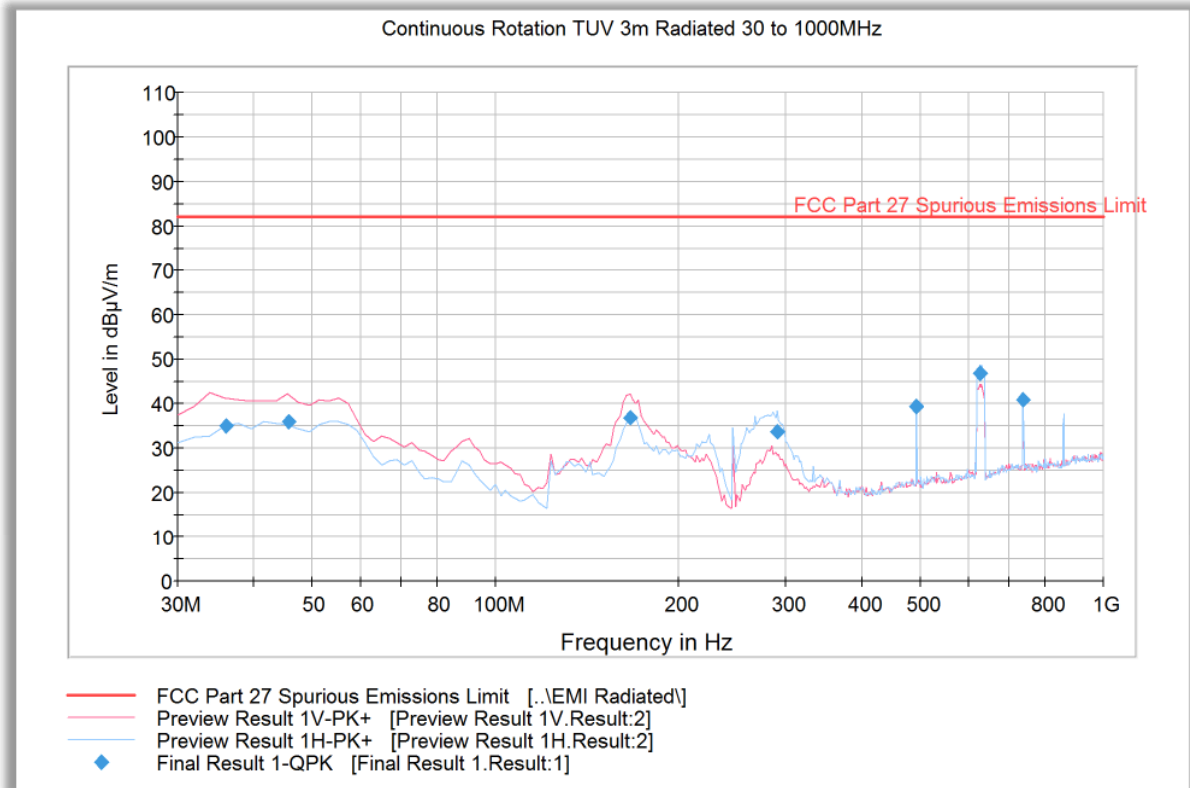
## 2.8.34 Test Results Above 1GHz (LTE Band 30 Uplink Worst Case Configuration) - 5MHz Bandwidth High Channel



### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 1282.600000     | 28.3             | 1000.0          | 1000.000        | 152.2       | H            | 166.0         | -5.3       | 213.9               | 50.2           |
| 1986.800000     | 31.0             | 1000.0          | 1000.000        | 212.4       | V            | 266.0         | -2.3       | 19.2                | 50.2           |
| 2313.333333     | 55.6             | 1000.0          | 1000.000        | 195.5       | H            | 116.0         | -1.2       | Fundamental Carrier |                |
| 2356.433333     | 41.6             | 1000.0          | 1000.000        | 186.5       | V            | 209.0         | -1.0       | 8.6                 | 50.2           |
| 4074.700000     | 30.8             | 1000.0          | 1000.000        | 103.7       | H            | 322.0         | 2.6        | 19.4                | 50.2           |
| 5895.833333     | 31.9             | 1000.0          | 1000.000        | 352.7       | V            | 35.0          | 5.7        | 18.3                | 50.2           |
| 10900.833333    | 35.2             | 1000.0          | 1000.000        | 303.2       | H            | 253.0         | 11.9       | 15.0                | 50.2           |
| 17007.066667    | 39.0             | 1000.0          | 1000.000        | 145.7       | H            | 16.0          | 17.8       | 11.2                | 82.2           |

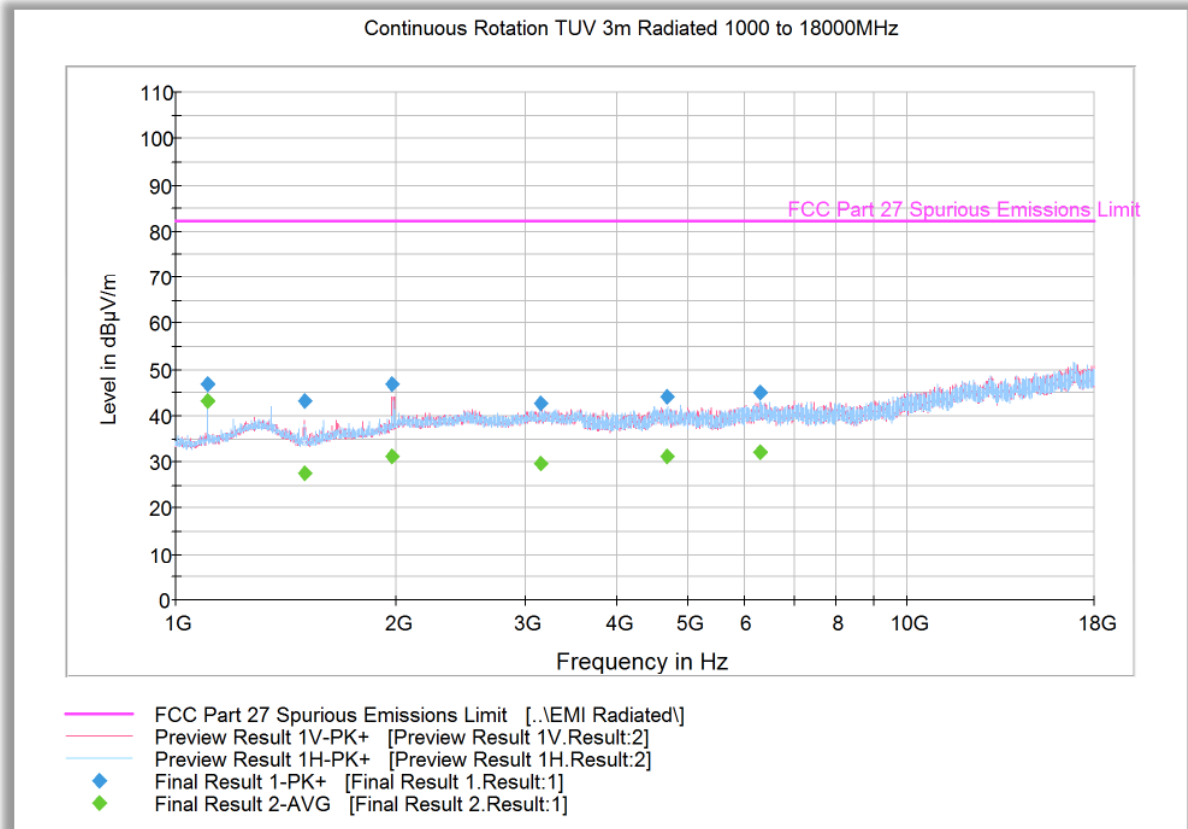
## 2.8.35 Test Results Below 1GHz (LTE Band 71 Downlink Worst Case Configuration) - 20MHz Bandwidth Low Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 36.127776       | 34.9               | 1000.0          | 120.000         | 105.0       | V            | 211.0         | -10.4      | 47.3                | 82.2           |
| 45.751102       | 36.1               | 1000.0          | 120.000         | 114.0       | V            | 310.0         | -13.7      | 46.1                | 82.2           |
| 166.592144      | 36.8               | 1000.0          | 120.000         | 106.0       | V            | 240.0         | -11.8      | 45.4                | 82.2           |
| 290.000962      | 33.8               | 1000.0          | 120.000         | 100.0       | H            | 10.0          | -7.7       | 48.4                | 82.2           |
| 491.525291      | 39.5               | 1000.0          | 120.000         | 171.0       | H            | 87.0          | -2.0       | 42.7                | 82.2           |
| 627.693547      | 46.9               | 1000.0          | 120.000         | 115.0       | H            | 244.0         | 0.7        | Fundamental Carrier |                |
| 737.295150      | 41.0               | 1000.0          | 120.000         | 100.0       | H            | 264.0         | 2.7        | 41.2                | 82.2           |

## 2.8.36 Test Results Above 1GHz (LTE Band 71 Downlink Worst Case Configuration) - 20MHz Bandwidth Low Channel



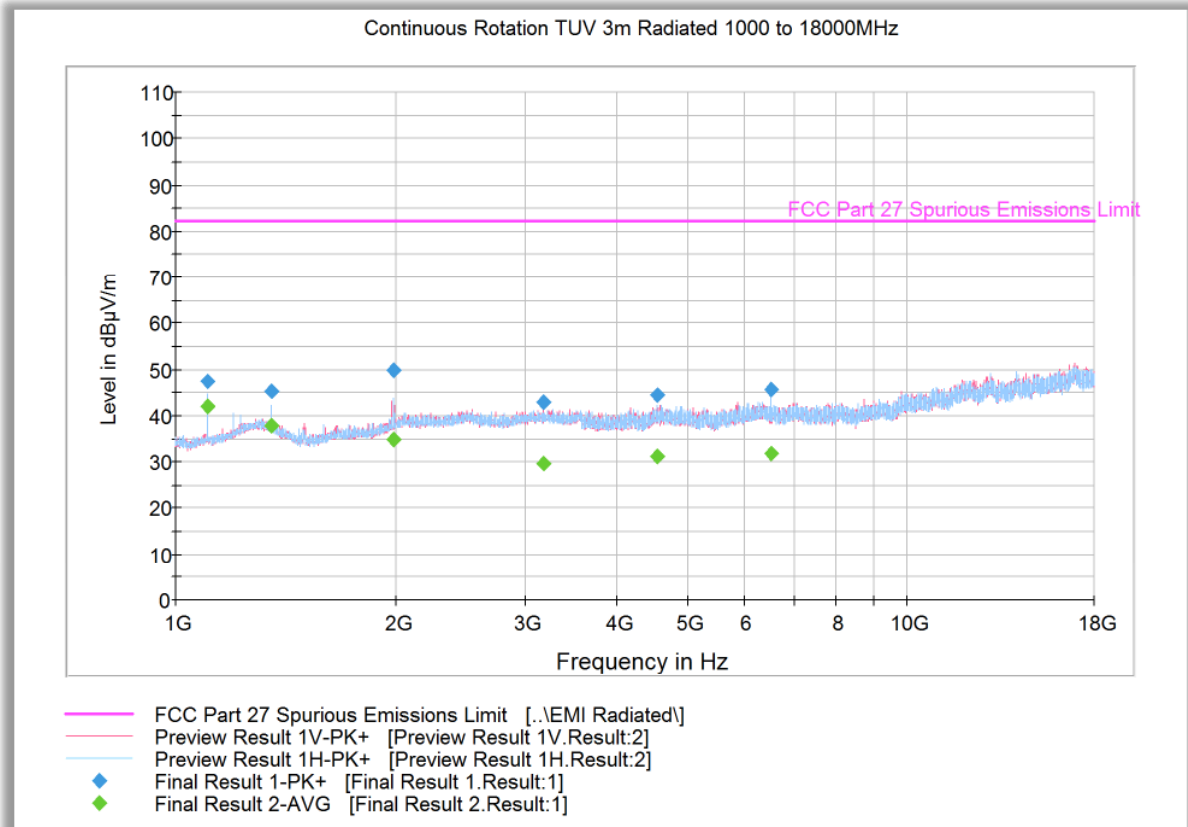
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.800000     | 46.9             | 1000.0          | 1000.000        | 139.7       | H            | 248.0         | -6.9       | 35.3        | 82.2           |
| 1499.200000     | 43.3             | 1000.0          | 1000.000        | 195.5       | V            | -4.0          | -6.1       | 38.9        | 82.2           |
| 1976.766667     | 46.8             | 1000.0          | 1000.000        | 103.7       | V            | 60.0          | -2.3       | 35.4        | 82.2           |
| 3150.700000     | 42.7             | 1000.0          | 1000.000        | 252.3       | V            | 79.0          | 1.1        | 39.5        | 82.2           |
| 4688.800000     | 44.2             | 1000.0          | 1000.000        | 231.4       | H            | 14.0          | 3.7        | 38.0        | 82.2           |
| 6290.433333     | 45.0             | 1000.0          | 1000.000        | 147.7       | H            | 185.0         | 6.2        | 37.2        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.800000     | 43.2             | 1000.0          | 1000.000        | 139.7       | H            | 248.0         | -6.9       | 39.0        | 82.2           |
| 1499.200000     | 27.6             | 1000.0          | 1000.000        | 195.5       | V            | -4.0          | -6.1       | 54.6        | 82.2           |
| 1976.766667     | 31.4             | 1000.0          | 1000.000        | 103.7       | V            | 60.0          | -2.3       | 50.8        | 82.2           |
| 3150.700000     | 29.9             | 1000.0          | 1000.000        | 252.3       | V            | 79.0          | 1.1        | 52.3        | 82.2           |
| 4688.800000     | 31.2             | 1000.0          | 1000.000        | 231.4       | H            | 14.0          | 3.7        | 51.0        | 82.2           |
| 6290.433333     | 32.2             | 1000.0          | 1000.000        | 147.7       | H            | 185.0         | 6.2        | 50.0        | 82.2           |

## 2.8.37 Test Results Above 1GHz (LTE Band 71 Downlink Worst Case Configuration) - 20MHz Bandwidth Middle Channel



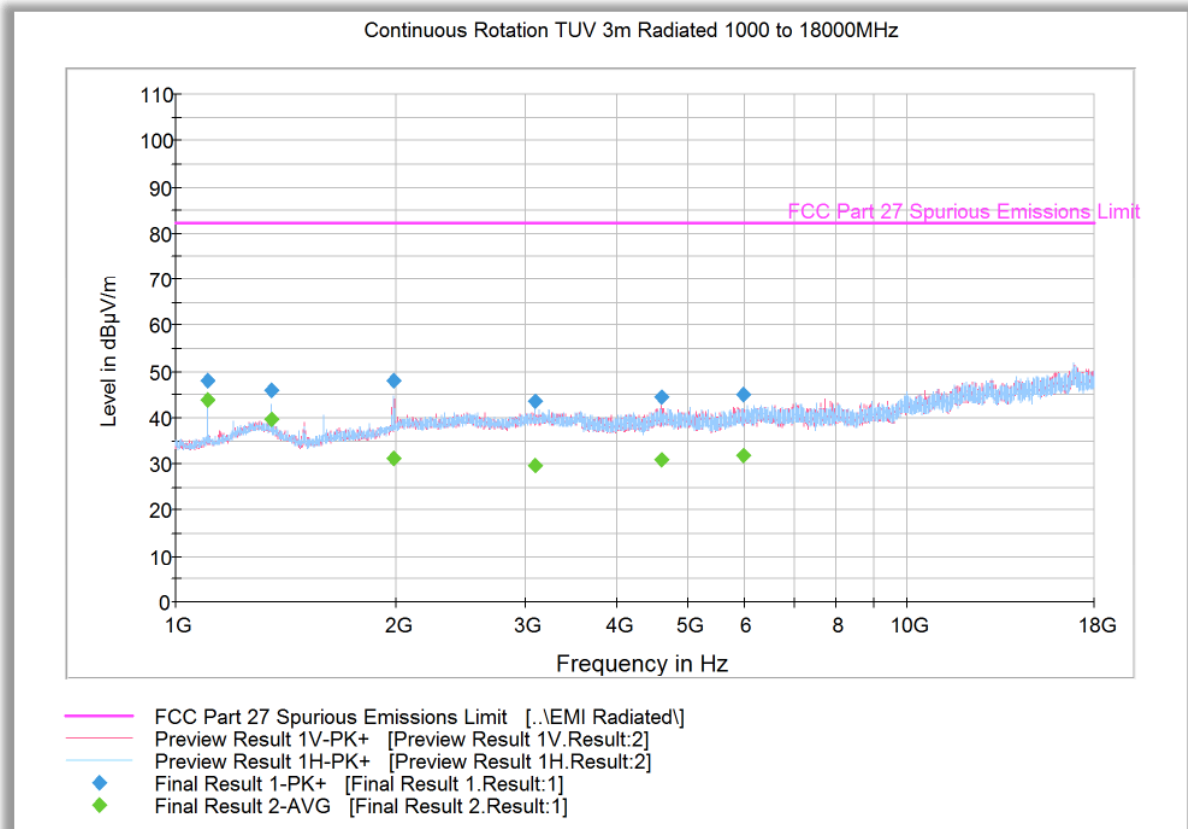
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.766667     | 47.4             | 1000.0          | 1000.000        | 103.7       | H            | 241.0         | -6.9       | 34.8        | 82.2           |
| 1351.766667     | 45.4             | 1000.0          | 1000.000        | 152.2       | H            | 246.0         | -5.1       | 36.8        | 82.2           |
| 1986.966667     | 50.0             | 1000.0          | 1000.000        | 103.7       | V            | 131.0         | -2.3       | 32.2        | 82.2           |
| 3186.166667     | 42.8             | 1000.0          | 1000.000        | 290.3       | V            | 123.0         | 1.0        | 39.4        | 82.2           |
| 4555.833333     | 44.4             | 1000.0          | 1000.000        | 285.3       | H            | 35.0          | 3.7        | 37.8        | 82.2           |
| 6498.366667     | 45.6             | 1000.0          | 1000.000        | 252.4       | H            | 26.0          | 6.2        | 36.6        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.766667     | 42.2             | 1000.0          | 1000.000        | 103.7       | H            | 241.0         | -6.9       | 40.0        | 82.2           |
| 1351.766667     | 37.9             | 1000.0          | 1000.000        | 152.2       | H            | 246.0         | -5.1       | 44.3        | 82.2           |
| 1986.966667     | 35.0             | 1000.0          | 1000.000        | 103.7       | V            | 131.0         | -2.3       | 47.2        | 82.2           |
| 3186.166667     | 29.8             | 1000.0          | 1000.000        | 290.3       | V            | 123.0         | 1.0        | 52.4        | 82.2           |
| 4555.833333     | 31.2             | 1000.0          | 1000.000        | 285.3       | H            | 35.0          | 3.7        | 51.0        | 82.2           |
| 6498.366667     | 31.7             | 1000.0          | 1000.000        | 252.4       | H            | 26.0          | 6.2        | 50.5        | 82.2           |

## 2.8.38 Test Results Above 1GHz (LTE Band 71 Downlink Worst Case Configuration) - 20MHz Bandwidth High Channel



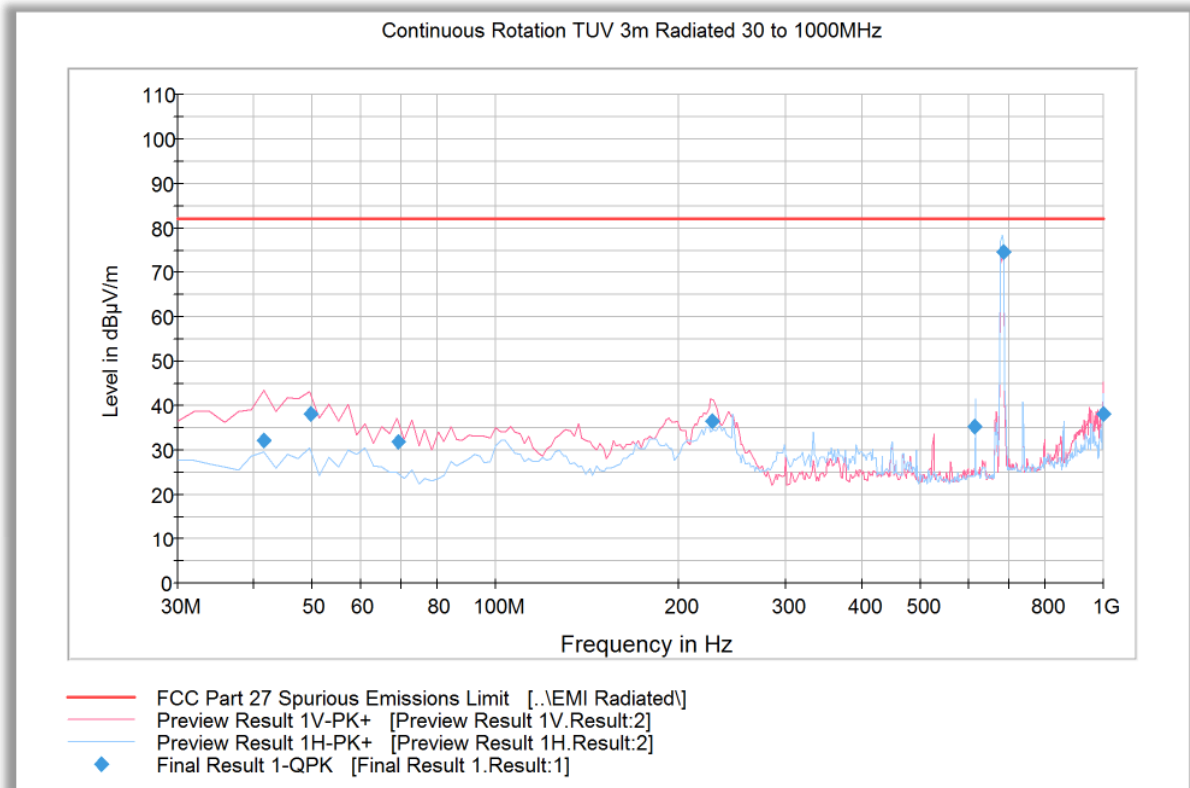
### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.800000     | 48.2             | 1000.0          | 1000.000        | 103.7       | H            | 243.0         | -6.9       | 34.0        | 82.2           |
| 1351.533333     | 46.0             | 1000.0          | 1000.000        | 112.7       | H            | 34.0          | -5.1       | 36.2        | 82.2           |
| 1986.533333     | 48.0             | 1000.0          | 1000.000        | 252.3       | H            | 328.0         | -2.3       | 34.2        | 82.2           |
| 3093.866667     | 43.7             | 1000.0          | 1000.000        | 312.2       | H            | 209.0         | 0.9        | 38.5        | 82.2           |
| 4615.700000     | 44.6             | 1000.0          | 1000.000        | 116.7       | V            | 80.0          | 3.6        | 37.6        | 82.2           |
| 5972.733333     | 45.1             | 1000.0          | 1000.000        | 151.2       | H            | 151.0         | 5.7        | 37.1        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1105.800000     | 43.9             | 1000.0          | 1000.000        | 103.7       | H            | 243.0         | -6.9       | 38.3        | 82.2           |
| 1351.533333     | 39.6             | 1000.0          | 1000.000        | 112.7       | H            | 34.0          | -5.1       | 42.6        | 82.2           |
| 1986.533333     | 31.3             | 1000.0          | 1000.000        | 252.3       | H            | 328.0         | -2.3       | 51.0        | 82.2           |
| 3093.866667     | 29.8             | 1000.0          | 1000.000        | 312.2       | H            | 209.0         | 0.9        | 52.4        | 82.2           |
| 4615.700000     | 31.1             | 1000.0          | 1000.000        | 116.7       | V            | 80.0          | 3.6        | 51.1        | 82.2           |
| 5972.733333     | 31.8             | 1000.0          | 1000.000        | 151.2       | H            | 151.0         | 5.7        | 50.4        | 82.2           |

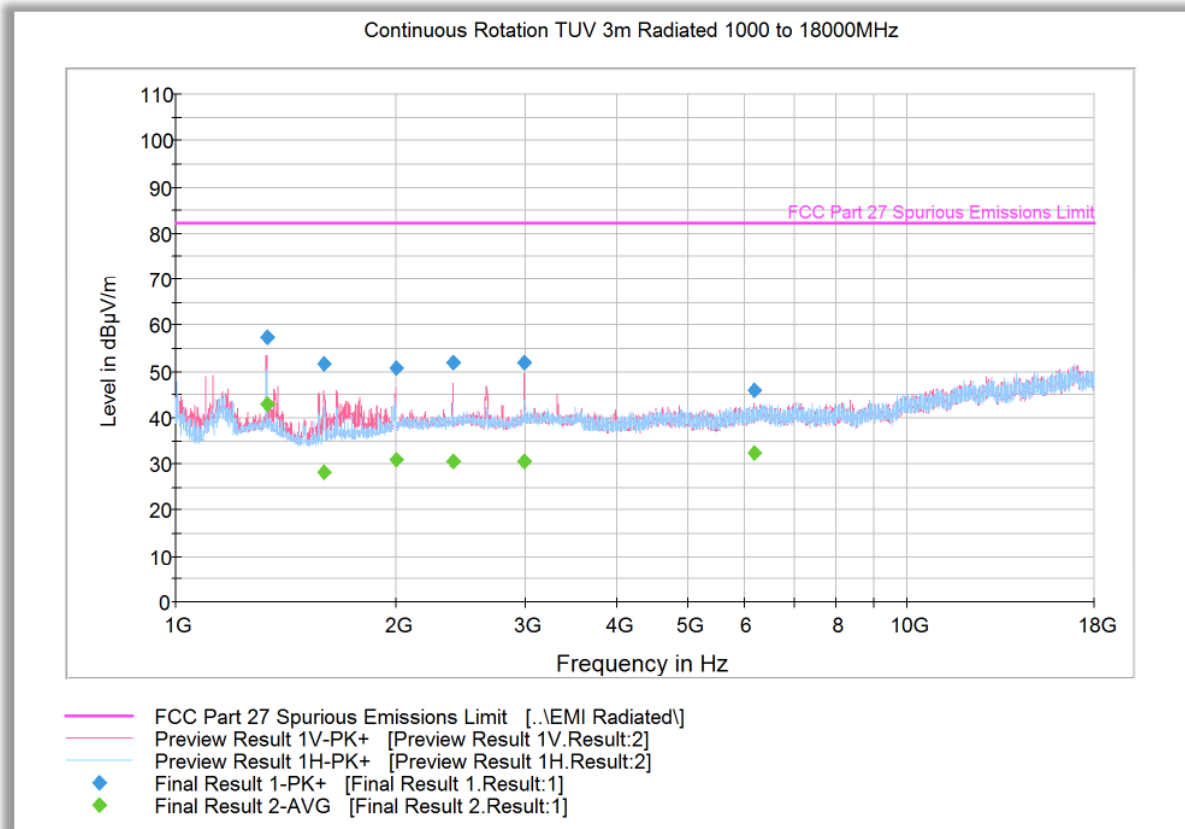
## 2.8.39 Test Results Below 1GHz (LTE Band 71 Uplink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 41.583327       | 32.0               | 1000.0          | 120.000         | 114.0       | V            | -13.0         | -12.5      | 50.2                | 82.2           |
| 49.598878       | 38.0               | 1000.0          | 120.000         | 100.0       | V            | 230.0         | -15.1      | 44.2                | 82.2           |
| 69.317756       | 31.7               | 1000.0          | 120.000         | 150.0       | V            | 129.0         | -17.1      | 50.5                | 82.2           |
| 227.252665      | 36.6               | 1000.0          | 120.000         | 100.0       | V            | 205.0         | -9.3       | 45.6                | 82.2           |
| 614.390220      | 35.4               | 1000.0          | 120.000         | 127.0       | H            | 303.0         | 0.9        | 46.8                | 82.2           |
| 683.442405      | 74.5               | 1000.0          | 120.000         | 105.0       | H            | 145.0         | 2.1        | Fundamental Carrier |                |
| 998.280000      | 38.3               | 1000.0          | 120.000         | 100.0       | V            | 249.0         | 6.0        | 43.9                | 82.2           |

## 2.8.40 Test Results Above 1GHz (LTE Band 71 Uplink Worst Case Configuration) - 10MHz Bandwidth Low Channel



### Peak Data

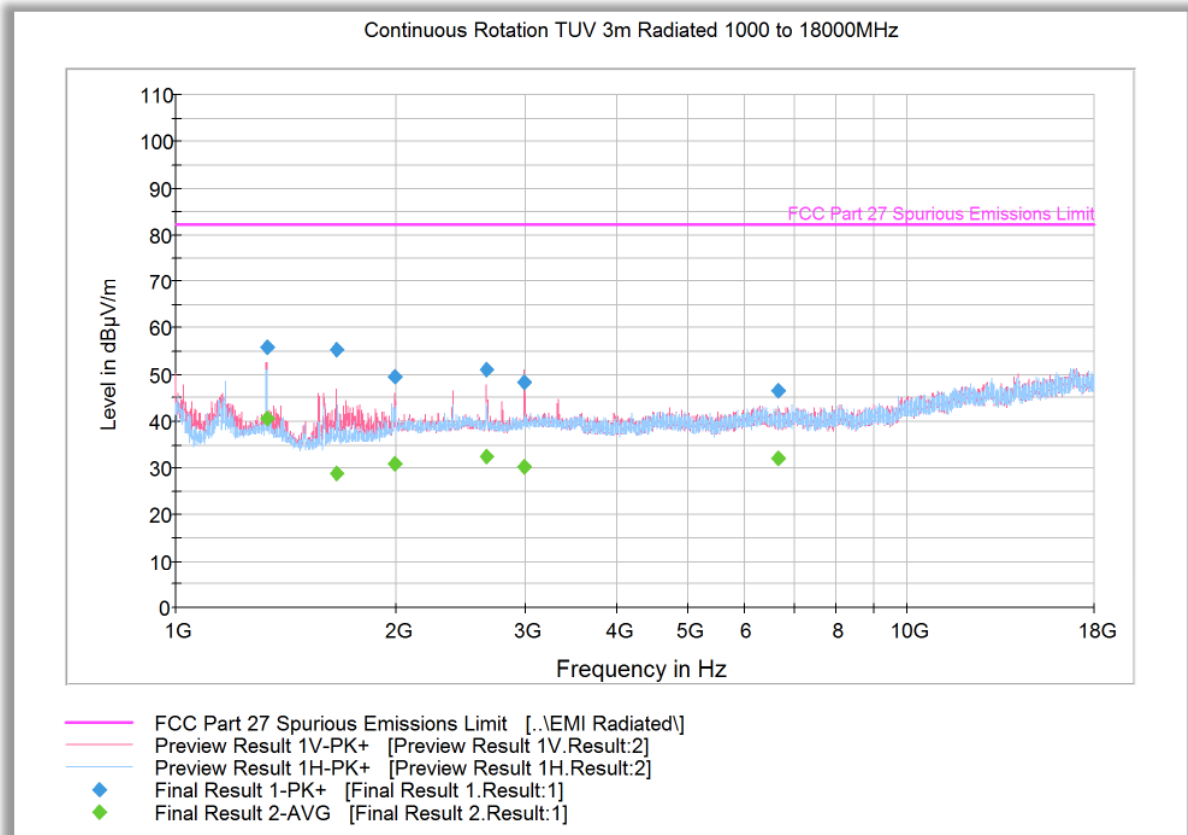
| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1331.900000     | 57.5             | 1000.0          | 1000.000        | 222.4       | V            | 282.0         | -5.1       | 24.7        | 82.2           |
| 1593.133333     | 51.7             | 1000.0          | 1000.000        | 103.7       | V            | 269.0         | -5.8       | 30.5        | 82.2           |
| 1998.300000     | 50.8             | 1000.0          | 1000.000        | 352.7       | V            | 3.0           | -2.2       | 31.4        | 82.2           |
| 2390.633333     | 52.0             | 1000.0          | 1000.000        | 250.5       | V            | 198.0         | -1.0       | 30.2        | 82.2           |
| 2990.500000     | 51.9             | 1000.0          | 1000.000        | 317.2       | V            | 304.0         | 0.8        | 30.3        | 82.2           |
| 6183.666667     | 46.0             | 1000.0          | 1000.000        | 161.6       | V            | 190.0         | 6.1        | 36.2        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1331.900000     | 43.1             | 1000.0          | 1000.000        | 222.4       | V            | 282.0         | -5.1       | 39.1        | 82.2           |
| 1593.133333     | 28.3             | 1000.0          | 1000.000        | 103.7       | V            | 269.0         | -5.8       | 53.9        | 82.2           |
| 1998.300000     | 30.8             | 1000.0          | 1000.000        | 352.7       | V            | 3.0           | -2.2       | 51.4        | 82.2           |
| 2390.633333     | 30.5             | 1000.0          | 1000.000        | 250.5       | V            | 198.0         | -1.0       | 51.7        | 82.2           |
| 2990.500000     | 30.7             | 1000.0          | 1000.000        | 317.2       | V            | 304.0         | 0.8        | 51.5        | 82.2           |
| 6183.666667     | 32.6             | 1000.0          | 1000.000        | 161.6       | V            | 190.0         | 6.1        | 49.6        | 82.2           |



## 2.8.41 Test Results Above 1GHz (LTE Band 71 Uplink Worst Case Configuration) - 10MHz Bandwidth Middle Channel



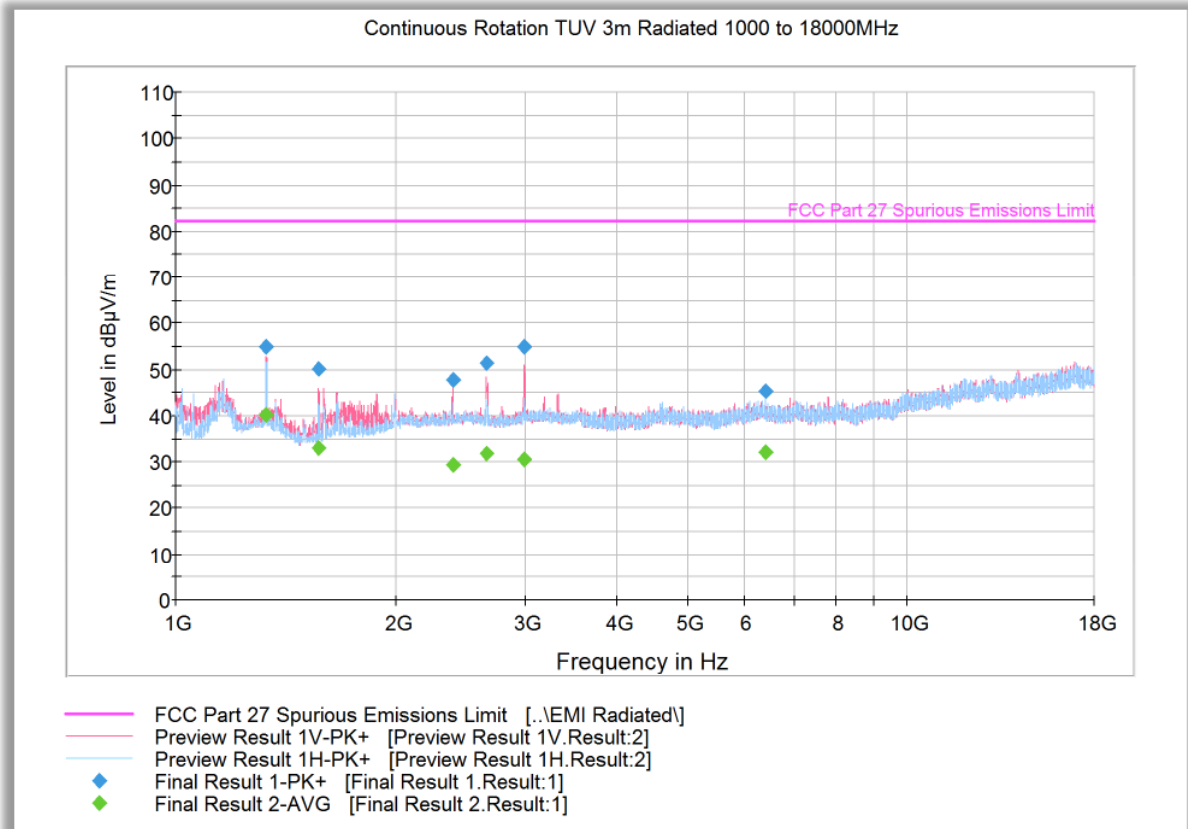
### Peak Data

| Frequency (MHz) | MaxPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1332.066667     | 56.0             | 1000.0          | 1000.000        | 217.4       | V            | 287.0         | -5.1       | 26.2        | 82.2           |
| 1659.566667     | 55.2             | 1000.0          | 1000.000        | 352.7       | V            | 271.0         | -5.2       | 27.0        | 82.2           |
| 1991.800000     | 49.6             | 1000.0          | 1000.000        | 240.4       | V            | 290.0         | -2.2       | 32.6        | 82.2           |
| 2662.266667     | 51.1             | 1000.0          | 1000.000        | 285.3       | V            | 253.0         | -0.2       | 31.1        | 82.2           |
| 2991.833333     | 48.5             | 1000.0          | 1000.000        | 252.4       | V            | 262.0         | 0.8        | 33.7        | 82.2           |
| 6663.100000     | 46.7             | 1000.0          | 1000.000        | 252.4       | H            | 97.0          | 6.4        | 35.5        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBμV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1332.066667     | 40.4             | 1000.0          | 1000.000        | 217.4       | V            | 287.0         | -5.1       | 41.8        | 82.2           |
| 1659.566667     | 28.7             | 1000.0          | 1000.000        | 352.7       | V            | 271.0         | -5.2       | 53.5        | 82.2           |
| 1991.800000     | 30.9             | 1000.0          | 1000.000        | 240.4       | V            | 290.0         | -2.2       | 51.3        | 82.2           |
| 2662.266667     | 32.4             | 1000.0          | 1000.000        | 285.3       | V            | 253.0         | -0.2       | 49.8        | 82.2           |
| 2991.833333     | 30.3             | 1000.0          | 1000.000        | 252.4       | V            | 262.0         | 0.8        | 51.9        | 82.2           |
| 6663.100000     | 32.1             | 1000.0          | 1000.000        | 252.4       | H            | 97.0          | 6.4        | 50.1        | 82.2           |

## 2.8.42 Test Results Above 1GHz (LTE Band 71 Uplink Worst Case Configuration) - 10MHz Bandwidth High Channel



### Peak Data

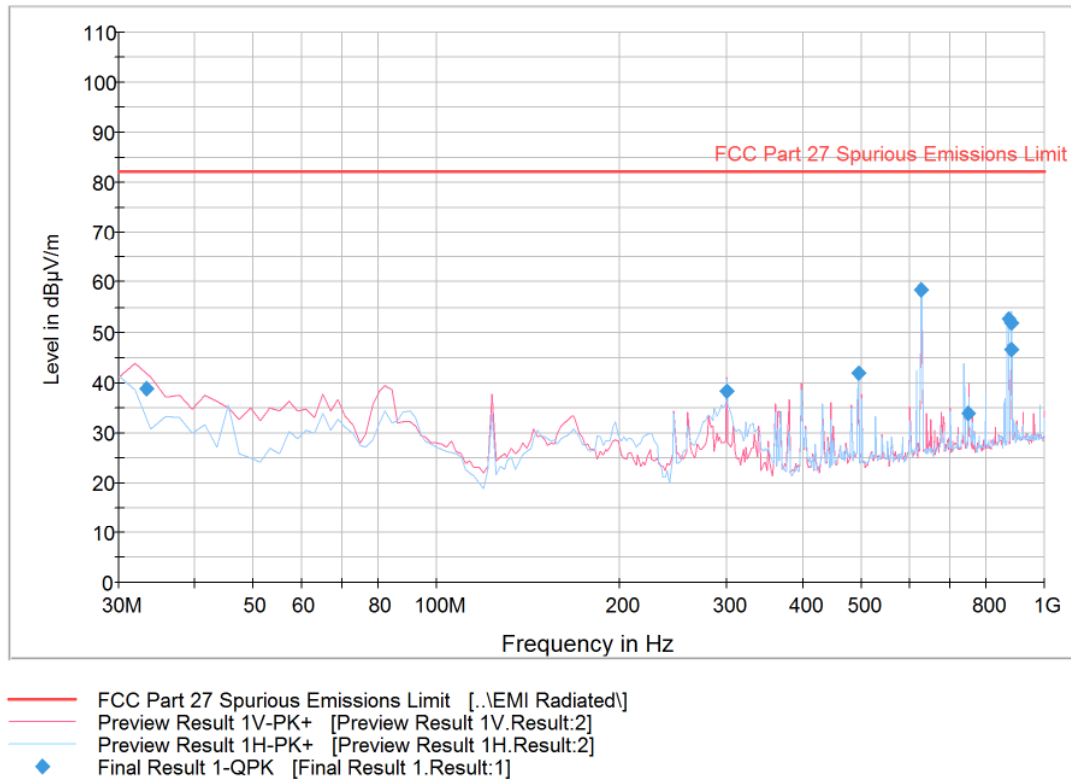
| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.800000     | 55.0             | 1000.0          | 1000.000        | 327.2       | V            | 303.0         | -5.1       | 27.2        | 82.2           |
| 1570.300000     | 50.2             | 1000.0          | 1000.000        | 190.5       | V            | 290.0         | -5.9       | 32.0        | 82.2           |
| 2395.933333     | 47.8             | 1000.0          | 1000.000        | 102.7       | V            | 187.0         | -1.1       | 34.4        | 82.2           |
| 2655.066667     | 51.4             | 1000.0          | 1000.000        | 252.3       | V            | 303.0         | -0.2       | 30.8        | 82.2           |
| 2995.933333     | 55.0             | 1000.0          | 1000.000        | 306.2       | V            | 263.0         | 0.9        | 27.2        | 82.2           |
| 6382.433333     | 45.3             | 1000.0          | 1000.000        | 127.7       | H            | 189.0         | 6.4        | 36.9        | 82.2           |

### Average Data

| Frequency (MHz) | Average (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB) | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|-------------|----------------|
| 1330.800000     | 40.2             | 1000.0          | 1000.000        | 327.2       | V            | 303.0         | -5.1       | 42.0        | 82.2           |
| 1570.300000     | 33.1             | 1000.0          | 1000.000        | 190.5       | V            | 290.0         | -5.9       | 49.1        | 82.2           |
| 2395.933333     | 29.3             | 1000.0          | 1000.000        | 102.7       | V            | 187.0         | -1.1       | 52.9        | 82.2           |
| 2655.066667     | 31.9             | 1000.0          | 1000.000        | 252.3       | V            | 303.0         | -0.2       | 50.3        | 82.2           |
| 2995.933333     | 30.7             | 1000.0          | 1000.000        | 306.2       | V            | 263.0         | 0.9        | 51.5        | 82.2           |
| 6382.433333     | 32.2             | 1000.0          | 1000.000        | 127.7       | H            | 189.0         | 6.4        | 50.0        | 82.2           |

## 2.8.43 Intermodulation Test Results Below 1GHz (8 Bands on CU port Downlink and Modem Worst Case Configuration)

WCDMA Band 5 15MHz BW Low Ch & LTE Band 30 10MHz BW Mid Ch inject on NU port A  
LTE Band 25 20MHz BW Mid Ch & LTE Band 71 20MHz BW Low Ch inject on NU Port B  
LTE Band 13 10MHz BW Mid Ch & LTE Band 4 20MHz BW High Ch inject on NU Port C  
LTE Band 5 5MHz BW High Ch & LTE Band 25 20MHz BW Low Ch inject on NU Port D

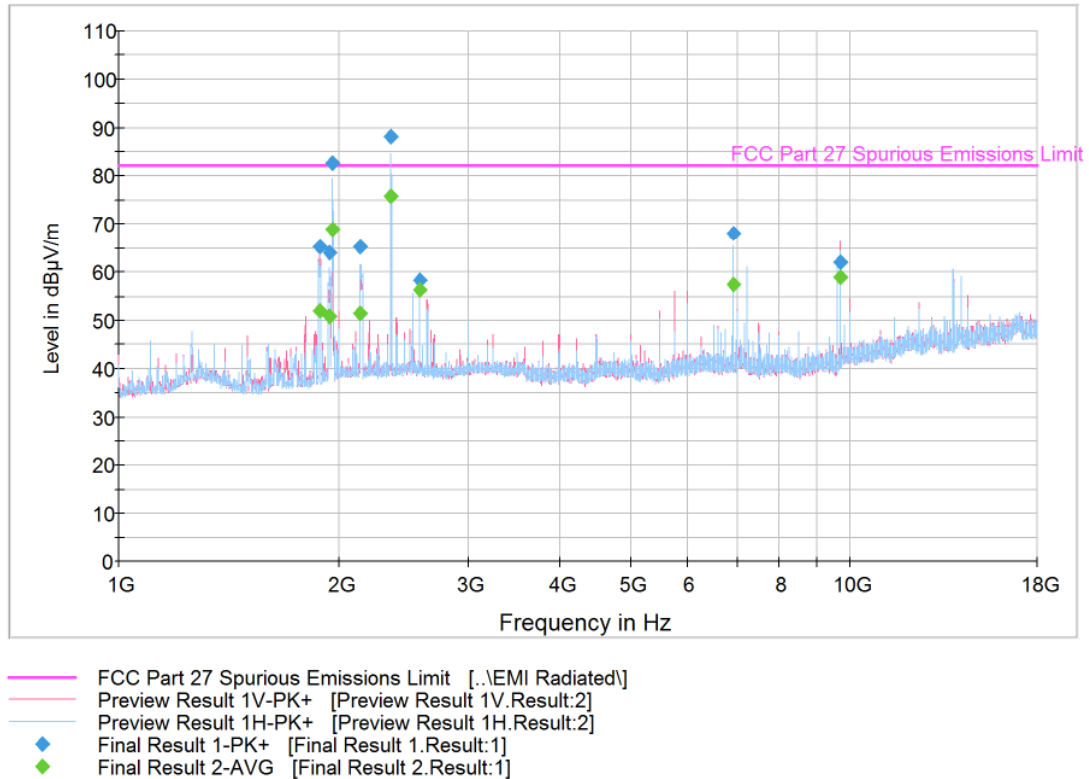


### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)          | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|----------------------|----------------|
| 33.360000       | 38.9               | 1000.0          | 120.000         | 100.0       | V            | 277.0         | -10.9      | 43.3                 | 82.2           |
| 300.000401      | 38.1               | 1000.0          | 120.000         | 150.0       | V            | 106.0         | -7.8       | 44.1                 | 82.2           |
| 494.989178      | 41.9               | 1000.0          | 120.000         | 121.0       | H            | 222.0         | -2.8       | 40.3                 | 82.2           |
| 625.573547      | 58.4               | 1000.0          | 120.000         | 116.0       | H            | 17.0          | -0.3       | LTE B71 Fundamental  |                |
| 749.982365      | 33.7               | 1000.0          | 120.000         | 135.0       | H            | -3.0          | 1.6        | LTE B13 Fundamental  |                |
| 872.143407      | 52.7               | 1000.0          | 120.000         | 100.0       | H            | 42.0          | 3.5        | WCDMA B5 Fundamental |                |
| 881.726733      | 51.7               | 1000.0          | 120.000         | 100.0       | H            | 264.0         | 3.9        | WCDMA B5 Fundamental |                |
| 882.030621      | 46.5               | 1000.0          | 120.000         | 150.0       | V            | 274.0         | 3.9        | LTE B5 Fundamental   |                |

## 2.8.44 Intermodulation Test Results Above 1GHz (8 Bands on CU port Downlink and Modem Worst Case Configuration)

WCDMA Band 5 15MHz BW Low Ch & LTE Band 30 10MHz BW Mid Ch inject on NU port A  
LTE Band 25 20MHz BW Mid Ch & LTE Band 71 20MHz BW Low Ch inject on NU Port B  
LTE Band 13 10MHz BW Mid Ch & LTE Band 4 20MHz BW High Ch inject on NU Port C  
LTE Band 5 5MHz BW High Ch & LTE Band 25 20MHz BW Low Ch inject on NU Port D



### Peak Data

| Frequency (MHz) | MaxPeak (dBµV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBµV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 1882.666667     | 65.2             | 1000.0          | 1000.000        | 143.7       | V            | 239.0         | -2.7       | 17.0                | 82.2           |
| 1940.900000     | 64.0             | 1000.0          | 1000.000        | 191.5       | H            | 121.0         | -2.4       | LTE B25 Fundamental |                |
| 1957.533333     | 82.6             | 1000.0          | 1000.000        | 102.8       | H            | 100.0         | -2.3       | LTE B25 Fundamental |                |
| 2141.800000     | 65.1             | 1000.0          | 1000.000        | 290.3       | H            | 253.0         | -2.2       | LTE B4 Fundamental  |                |
| 2354.733333     | 88.2             | 1000.0          | 1000.000        | 290.3       | H            | 129.0         | -1.0       | LTE B30 Fundamental |                |
| 2580.266667     | 58.3             | 1000.0          | 1000.000        | 103.7       | V            | 355.0         | -0.3       | 23.9                | 82.2           |
| 6909.966667     | 68.2             | 1000.0          | 1000.000        | 138.7       | H            | 11.0          | 6.7        | 14.0                | 82.2           |
| 9701.300000     | 62.2             | 1000.0          | 1000.000        | 252.4       | V            | -3.0          | 8.9        | 20.0                | 82.2           |

FCC ID: NU: YETQ44-1234CNU  
 CU: YETQ41-5ECU  
 IC: NU: 9298A-Q441234CNU  
 CU: 9298A-Q415ECU  
 Report No. 72146075B

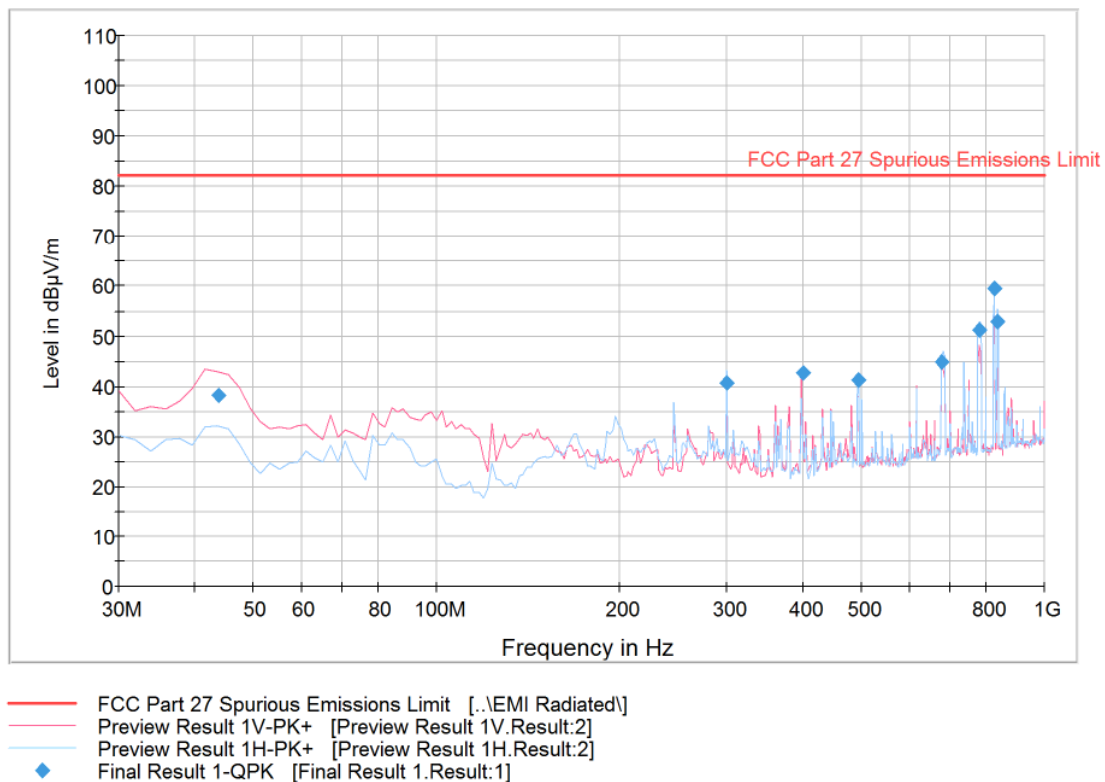


### Average Data

| Frequency (MHz) | Average (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)         | Limit (dBμV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|---------------------|----------------|
| 1882.666667     | 52.0             | 1000.0          | 1000.000        | 143.7       | V            | 239.0         | -2.7       | 30.2                | 82.2           |
| 1940.900000     | 51.0             | 1000.0          | 1000.000        | 191.5       | H            | 121.0         | -2.4       | LTE B25 Fundamental |                |
| 1957.533333     | 68.8             | 1000.0          | 1000.000        | 102.8       | H            | 100.0         | -2.3       | LTE B25 Fundamental |                |
| 2141.800000     | 51.5             | 1000.0          | 1000.000        | 290.3       | H            | 253.0         | -2.2       | LTE B4 Fundamental  |                |
| 2354.733333     | 75.9             | 1000.0          | 1000.000        | 290.3       | H            | 129.0         | -1.0       | LTE B30 Fundamental |                |
| 2580.266667     | 56.3             | 1000.0          | 1000.000        | 103.7       | V            | 355.0         | -0.3       | 25.9                | 82.2           |
| 6909.966667     | 57.4             | 1000.0          | 1000.000        | 138.7       | H            | 11.0          | 6.7        | 24.8                | 82.2           |
| 9701.300000     | 58.8             | 1000.0          | 1000.000        | 252.4       | V            | -3.0          | 8.9        | 23.4                | 82.2           |

## 2.8.45 Intermodulation Test Results Below 1GHz (2 Bands per port on 4 NU ports Uplink Worst Case Configuration)

WCDMA Band 5 5MHz BW Mid Ch & LTE Band 30 5MHz BW High Ch transmit on NU port A  
LTE Band 25 20MHz BW High Ch & LTE Band 71 10MHz BW Mid Ch transmit on NU Port B  
LTE Band 13 10MHz BW Mid Ch & LTE Band 4 15MHz BW Low Ch transmit on NU Port C  
LTE Band 5 5MHz BW Low Ch & LTE Band 25 20MHz BW Low Ch transmit on NU Port D  
LTE Modem transmit LTE Band 2 Middle Channel

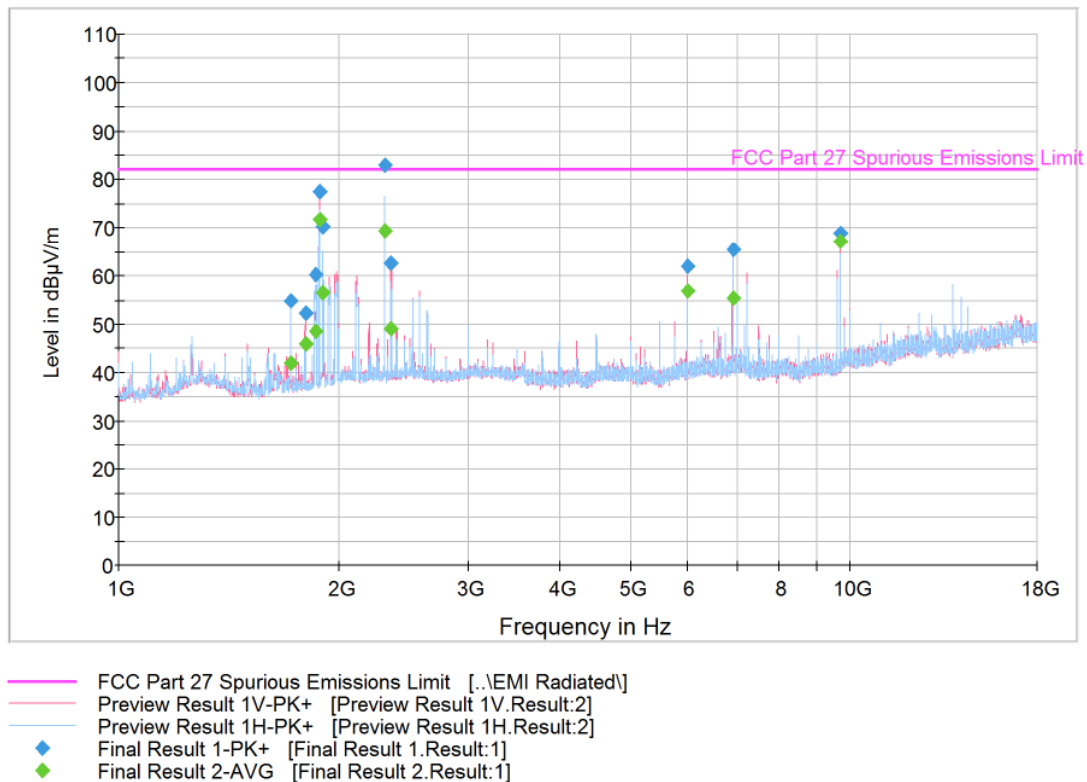


### Quasi Peak Data

| Frequency (MHz) | QuasiPeak (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)          | Limit (dBμV/m) |
|-----------------|--------------------|-----------------|-----------------|-------------|--------------|---------------|------------|----------------------|----------------|
| 43.703327       | 38.2               | 1000.0          | 120.000         | 100.0       | V            | 23.0          | -14.8      | 44.0                 | 82.2           |
| 300.000401      | 40.6               | 1000.0          | 120.000         | 100.0       | H            | 107.0         | -7.8       | 41.6                 | 82.2           |
| 399.978677      | 42.6               | 1000.0          | 120.000         | 115.0       | V            | 338.0         | -5.5       | 39.6                 | 82.2           |
| 494.965291      | 41.4               | 1000.0          | 120.000         | 150.0       | H            | 335.0         | -2.8       | 40.8                 | 82.2           |
| 679.362405      | 44.8               | 1000.0          | 120.000         | 105.0       | H            | 101.0         | 1.2        | LTE B71 Fundamental  |                |
| 781.684569      | 51.3               | 1000.0          | 120.000         | 100.0       | H            | 27.0          | 2.3        | LTE B13 Fundamental  |                |
| 826.473988      | 59.5               | 1000.0          | 120.000         | 100.0       | H            | 271.0         | 3.0        | LTE B5 Fundamental   |                |
| 835.393427      | 53.0               | 1000.0          | 120.000         | 100.0       | H            | 82.0          | 3.2        | WCDMA B5 Fundamental |                |

## 2.8.46 Intermodulation Test Results Below 1GHz (2 Bands per port on 4 NU ports Uplink Worst Case Configuration)

WCDMA Band 5 5MHz BW Mid Ch & LTE Band 30 5MHz BW High Ch transmit on NU port A  
LTE Band 25 20MHz BW High Ch & LTE Band 71 10MHz BW Mid Ch transmit on NU Port B  
LTE Band 13 10MHz BW Mid Ch & LTE Band 4 15MHz BW Low Ch transmit on NU Port C  
LTE Band 5 5MHz BW Low Ch & LTE Band 25 20MHz BW Low Ch transmit on NU Port D  
LTE Modem transmit LTE Band 2 Middle Channel



### Peak Data

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)              | Limit (dB $\mu$ V/m) |
|-----------------|------------------------|-----------------|-----------------|-------------|--------------|---------------|------------|--------------------------|----------------------|
| 1720.433333     | 54.7                   | 1000.0          | 1000.000        | 116.7       | V            | 14.0          | -4.8       | LTE B4 Fundamental       |                      |
| 1799.966667     | 52.4                   | 1000.0          | 1000.000        | 204.5       | V            | 356.0         | -3.4       | 29.8                     | 82.2                 |
| 1859.600000     | 60.4                   | 1000.0          | 1000.000        | 102.8       | H            | 142.0         | -2.8       | LTE B25 Fundamental      |                      |
| 1880.233333     | 77.5                   | 1000.0          | 1000.000        | 200.5       | V            | 25.0          | -2.7       | Modem LTE B2 Fundamental |                      |
| 1901.800000     | 70.4                   | 1000.0          | 1000.000        | 152.7       | H            | 227.0         | -2.5       | LTE B25 Fundamental      |                      |
| 2312.600000     | 83.0                   | 1000.0          | 1000.000        | 137.7       | H            | 126.0         | -1.2       | LTE B30 Fundamental      |                      |
| 2356.233333     | 62.7                   | 1000.0          | 1000.000        | 103.7       | V            | 14.0          | -1.0       | 19.5                     | 82.2                 |
| 6000.100000     | 62.1                   | 1000.0          | 1000.000        | 103.7       | V            | 321.0         | 5.7        | 20.1                     | 82.2                 |
| 6907.066667     | 65.5                   | 1000.0          | 1000.000        | 142.7       | H            | 331.0         | 6.8        | 16.7                     | 82.2                 |
| 9695.466667     | 69.0                   | 1000.0          | 1000.000        | 252.4       | V            | 0.0           | 8.8        | 13.2                     | 82.2                 |

# Average Data

| Frequency (MHz) | Average (dBμV/m) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Polarization | Azimuth (deg) | Corr. (dB) | Margin (dB)              | Limit (dBμV/m) |
|-----------------|------------------|-----------------|-----------------|-------------|--------------|---------------|------------|--------------------------|----------------|
| 1720.433333     | 41.9             | 1000.0          | 1000.000        | 116.7       | V            | 14.0          | -4.8       | LTE B4 Fundamental       |                |
| 1799.966667     | 45.9             | 1000.0          | 1000.000        | 204.5       | V            | 356.0         | -3.4       | 36.3                     | 82.2           |
| 1859.600000     | 48.4             | 1000.0          | 1000.000        | 102.8       | H            | 142.0         | -2.8       | LTE B25 Fundamental      |                |
| 1880.233333     | 71.7             | 1000.0          | 1000.000        | 200.5       | V            | 25.0          | -2.7       | Modem LTE B2 Fundamental |                |
| 1901.800000     | 56.5             | 1000.0          | 1000.000        | 152.7       | H            | 227.0         | -2.5       | LTE B25 Fundamental      |                |
| 2312.600000     | 69.6             | 1000.0          | 1000.000        | 137.7       | H            | 126.0         | -1.2       | LTE B30 Fundamental      |                |
| 2356.233333     | 49.1             | 1000.0          | 1000.000        | 103.7       | V            | 14.0          | -1.0       | 33.1                     | 82.2           |
| 6000.100000     | 56.9             | 1000.0          | 1000.000        | 103.7       | V            | 321.0         | 5.7        | 25.3                     | 82.2           |
| 6907.066667     | 55.4             | 1000.0          | 1000.000        | 142.7       | H            | 331.0         | 6.8        | 26.8                     | 82.2           |
| 9695.466667     | 67.3             | 1000.0          | 1000.000        | 252.4       | V            | 0.0           | 8.8        | 14.9                     | 82.2           |



## **2.9 FREQUENCY STABILITY**

### **2.9.1 Specification Reference**

FCC 47 CFR Part 2, Clause 2.1055  
FCC 47 CFR Part 27, Clause 27.54  
RSS-139, Clause 6.4  
RSS-130, Clause 4.5  
RSS-195, Clause 5.4

### **2.9.2 Standard Applicable**

FCC 47 CFR Part 27, Clause 27.54:

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

RSS-139, Clause 6.4, RSS-130, Clause 4.5 and RSS-195, Clause 5.4:

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

### **2.9.3 Equipment Under Test and Modification State**

Serial No: 370920000139 (NU) and 371929000156 (CU) / Test Configuration A and B

### **2.9.4 Date of Test/Initial of test personnel who performed the test**

August 20 and 21, 2019/XYZ

### **2.9.5 Test Equipment Used**

The major items of test equipment used for the above tests are identified in Section 3.1.

### **2.9.6 Environmental Conditions**

Test performed at TÜV SÜD America Inc. Rancho Bernardo facility.

|                     |                |
|---------------------|----------------|
| Ambient Temperature | 25.0 - 25.2°C  |
| Relative Humidity   | 43.8 - 47.3%   |
| ATM Pressure        | 98.8 - 98.9kPa |

#### **2.9.7 Additional Observations**

- This is a conducted test.
- The EUT was operated at 120.0VAC nominal voltage and was placed in the temperature chamber for the series of evaluations performed.
- Test performed in 5 MHz Bandwidth Middle channel as the representative configuration.
- Input Type "Tones" was selected and the EUT was injected a CW signal from a Signal Generator and maximum frequency error was monitored using the spectrum analyzer.
- The Temperature was reduced to -30°C and allowed to sit for 1 hour to allow the equipment and chamber temperature to stabilize. The measurements on both downlink and uplink were then performed. The temperature was then increased by 10°C steps and allowed to settle before taking the next set of measurements. The EUT was tested over the temperature -30°C to +50°C.
- Voltage variation was also performed at 85% and 115% of the nominal voltage.

## 2.9.8 Test Results Summary

| LTE B4 Downlink – 5 MHz BW Middle Channel 2132.5 MHz |                  |                      |                       |             |
|------------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                        | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                  | -30              | 0                    | 0                     | -           |
|                                                      | -20              | 0                    | 0                     | -           |
|                                                      | -10              | 0                    | 0                     | -           |
|                                                      | 0                | 0                    | 0                     | -           |
|                                                      | +10              | 0                    | 0                     | -           |
|                                                      | +20              | 0                    | 0                     | -           |
|                                                      | +30              | 0                    | 0                     | -           |
|                                                      | +40              | 0                    | 0                     | -           |
|                                                      | +50              | 0                    | 0                     | -           |
| 102                                                  | +20              | 0                    | 0                     | -           |
| 138                                                  |                  | 0                    | 0                     | -           |

| LTE B4 Downlink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|--------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                    | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                                | -30              | 120           | 2110.2727            | -                    | >2110       |
|                                            | +20              | 102           | 2110.2769            | -                    |             |
|                                            |                  | 120           | 2110.2703            | -                    |             |
|                                            |                  | 138           | 2110.2748            | -                    |             |
|                                            | +50              | 120           | 2110.2738            | -                    |             |
| High Channel                               | -30              | 120           | -                    | 2154.7176            | <2155       |
|                                            | +20              | 102           | -                    | 2154.7200            |             |
|                                            |                  | 120           | -                    | 2154.7161            |             |
|                                            |                  | 138           | -                    | 2154.7172            |             |
|                                            | +50              | 120           | -                    | 2154.7164            |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B4 Uplink – 5 MHz BW Middle Channel 1732.5 MHz |                  |                      |                       |             |
|----------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                      | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                | -30              | 0                    | 0                     | -           |
|                                                    | -20              | 0                    | 0                     | -           |
|                                                    | -10              | 0                    | 0                     | -           |
|                                                    | 0                | 0                    | 0                     | -           |
|                                                    | +10              | 0                    | 0                     | -           |
|                                                    | +20              | 0                    | 0                     | -           |
|                                                    | +30              | 0                    | 0                     | -           |
|                                                    | +40              | 0                    | 0                     | -           |
|                                                    | +50              | 0                    | 0                     | -           |
| 102                                                | +20              | 0                    | 0                     | -           |
| 138                                                |                  | 0                    | 0                     | -           |

| LTE B4 Uplink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                  | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                              | -30              | 120           | 1710.2729            | -                    | >1710       |
|                                          | +20              | 102           | 1710.2753            | -                    |             |
|                                          |                  | 120           | 1710.2731            | -                    |             |
|                                          |                  | 138           | 1710.2745            | -                    |             |
|                                          | +50              | 120           | 1710.2737            | -                    |             |
| High Channel                             | -30              | 120           | -                    | 1754.7082            | <1755       |
|                                          | +20              | 102           | -                    | 1754.7048            |             |
|                                          |                  | 120           | -                    | 1754.7065            |             |
|                                          |                  | 138           | -                    | 1754.7053            |             |
|                                          | +50              | 120           | -                    | 1754.7074            |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B12 Downlink – 5 MHz BW Middle Channel 737.5 MHz |                  |                      |                       |             |
|------------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                        | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                  | -30              | 0                    | 0                     | -           |
|                                                      | -20              | 0                    | 0                     | -           |
|                                                      | -10              | 0                    | 0                     | -           |
|                                                      | 0                | 0                    | 0                     | -           |
|                                                      | +10              | 0                    | 0                     | -           |
|                                                      | +20              | 0                    | 0                     | -           |
|                                                      | +30              | 0                    | 0                     | -           |
|                                                      | +40              | 0                    | 0                     | -           |
|                                                      | +50              | 0                    | 0                     | -           |
| 102                                                  | +20              | 0                    | 0                     | -           |
| 138                                                  |                  | 0                    | 0                     | -           |

| LTE B12 Downlink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|---------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                     | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                                 | -30              | 120           | 729.3126             | -                    | >729        |
|                                             | +20              | 102           | 729.3133             | -                    |             |
|                                             |                  | 120           | 729.3139             | -                    |             |
|                                             |                  | 138           | 729.3142             | -                    |             |
|                                             | +50              | 120           | 729.3097             | -                    |             |
| High Channel                                | -30              | 120           | -                    | 745.7382             | <746        |
|                                             | +20              | 102           | -                    | 745.7384             |             |
|                                             |                  | 120           | -                    | 745.7381             |             |
|                                             |                  | 138           | -                    | 745.7324             |             |
|                                             | +50              | 120           | -                    | 745.7376             |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B12 Uplink – 5 MHz BW Middle Channel 707.5 MHz |                  |                      |                       |             |
|----------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                      | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                | -30              | 0                    | 0                     | -           |
|                                                    | -20              | 0                    | 0                     | -           |
|                                                    | -10              | 0                    | 0                     | -           |
|                                                    | 0                | 0                    | 0                     | -           |
|                                                    | +10              | 0                    | 0                     | -           |
|                                                    | +20              | 0                    | 0                     | -           |
|                                                    | +30              | 0                    | 0                     | -           |
|                                                    | +40              | 0                    | 0                     | -           |
|                                                    | +50              | 0                    | 0                     | -           |
| 102                                                | +20              | 0                    | 0                     | -           |
| 138                                                |                  | 0                    | 0                     | -           |

| LTE B12 Uplink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|-------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                   | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                               | -30              | 120           | 699.2950             | -                    | >699        |
|                                           | +20              | 102           | 699.2989             | -                    |             |
|                                           |                  | 120           | 699.2970             | -                    |             |
|                                           |                  | 138           | 699.2978             | -                    |             |
|                                           | +50              | 120           | 699.2958             | -                    |             |
| High Channel                              | -30              | 120           | -                    | 715.7062             | <716        |
|                                           | +20              | 102           | -                    | 715.7116             |             |
|                                           |                  | 120           | -                    | 715.7077             |             |
|                                           |                  | 138           | -                    | 715.7104             |             |
|                                           | +50              | 120           | -                    | 715.7125             |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B13 Downlink – 5 MHz BW Middle Channel 751 MHz |                  |                      |                       |             |
|----------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                      | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                | -30              | 0                    | 0                     | -           |
|                                                    | -20              | 0                    | 0                     | -           |
|                                                    | -10              | 0                    | 0                     | -           |
|                                                    | 0                | 0                    | 0                     | -           |
|                                                    | +10              | 0                    | 0                     | -           |
|                                                    | +20              | 0                    | 0                     | -           |
|                                                    | +30              | 0                    | 0                     | -           |
|                                                    | +40              | 0                    | 0                     | -           |
|                                                    | +50              | 0                    | 0                     | -           |
| 102                                                | +20              | 0                    | 0                     | -           |
| 138                                                |                  | 0                    | 0                     | -           |

| LTE B13 Downlink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|---------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                     | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                                 | -30              | 120           | 748.7471             | -                    | >746        |
|                                             | +20              | 102           | 748.7488             | -                    |             |
|                                             |                  | 120           | 748.7451             | -                    |             |
|                                             |                  | 138           | 748.7468             | -                    |             |
|                                             | +50              | 120           | 748.7474             | -                    |             |
| High Channel                                | -30              | 120           | -                    | 755.6972             | <756        |
|                                             | +20              | 102           | -                    | 755.6964             |             |
|                                             |                  | 120           | -                    | 755.6992             |             |
|                                             |                  | 138           | -                    | 755.6970             |             |
|                                             | +50              | 120           | -                    | 755.7047             |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B13 Uplink – 5 MHz BW Middle Channel 782 MHz |                  |                      |                       |             |
|--------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                    | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                              | -30              | 0                    | 0                     | -           |
|                                                  | -20              | 0                    | 0                     | -           |
|                                                  | -10              | 0                    | 0                     | -           |
|                                                  | 0                | 0                    | 0                     | -           |
|                                                  | +10              | 0                    | 0                     | -           |
|                                                  | +20              | 0                    | 0                     | -           |
|                                                  | +30              | 0                    | 0                     | -           |
|                                                  | +40              | 0                    | 0                     | -           |
|                                                  | +50              | 0                    | 0                     | -           |
| 102                                              | +20              | 0                    | 0                     | -           |
| 138                                              |                  | 0                    | 0                     | -           |

| LTE B13 Uplink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|-------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                   | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                               | -30              | 120           | 777.2857             | -                    | >777        |
|                                           | +20              | 102           | 777.2876             | -                    |             |
|                                           |                  | 120           | 777.2863             | -                    |             |
|                                           |                  | 138           | 777.2871             | -                    |             |
|                                           | +50              | 120           | 777.2876             | -                    |             |
| High Channel                              | -30              | 120           | -                    | 786.7098             | <787        |
|                                           | +20              | 102           | -                    | 786.7099             |             |
|                                           |                  | 120           | -                    | 786.7078             |             |
|                                           |                  | 138           | -                    | 786.7100             |             |
|                                           | +50              | 120           | -                    | 786.7096             |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.



| LTE B30 Downlink – 5 MHz BW Middle Channel 2355 MHz |                  |                      |                       |             |
|-----------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                       | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                 | -30              | 0                    | 0                     | -           |
|                                                     | -20              | 0                    | 0                     | -           |
|                                                     | -10              | 0                    | 0                     | -           |
|                                                     | 0                | 0                    | 0                     | -           |
|                                                     | +10              | 0                    | 0                     | -           |
|                                                     | +20              | 0                    | 0                     | -           |
|                                                     | +30              | 0                    | 0                     | -           |
|                                                     | +40              | 0                    | 0                     | -           |
|                                                     | +50              | 0                    | 0                     | -           |
| 102                                                 | +20              | 0                    | 0                     | -           |
| 138                                                 |                  | 0                    | 0                     | -           |

| LTE B30 Downlink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|---------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                     | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                                 | -30              | 120           | 2354.7049            | -                    | >2350       |
|                                             | +20              | 102           | 2354.7062            | -                    |             |
|                                             |                  | 120           | 2354.7089            | -                    |             |
|                                             |                  | 138           | 2354.7145            | -                    |             |
|                                             | +50              | 120           | 2354.7071            | -                    |             |
| High Channel                                | -30              | 120           | -                    | 2359.6993            | <2360       |
|                                             | +20              | 102           | -                    | 2359.6968            |             |
|                                             |                  | 120           | -                    | 2359.6987            |             |
|                                             |                  | 138           | -                    | 2359.7008            |             |
|                                             | +50              | 120           | -                    | 2359.7011            |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B30 Uplink – 5 MHz BW Middle Channel 2310 MHz |                  |                      |                       |             |
|---------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                     | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                               | -30              | 0                    | 0                     | -           |
|                                                   | -20              | 0                    | 0                     | -           |
|                                                   | -10              | 0                    | 0                     | -           |
|                                                   | 0                | 0                    | 0                     | -           |
|                                                   | +10              | 0                    | 0                     | -           |
|                                                   | +20              | 0                    | 0                     | -           |
|                                                   | +30              | 0                    | 0                     | -           |
|                                                   | +40              | 0                    | 0                     | -           |
|                                                   | +50              | 0                    | 0                     | -           |
| 102                                               | +20              | 0                    | 0                     | -           |
| 138                                               |                  | 0                    | 0                     | -           |

| LTE B30 Uplink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|-------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                   | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                               | -30              | 120           | 2305.2779            | -                    | >2305       |
|                                           | +20              | 102           | 2305.2767            | -                    |             |
|                                           |                  | 120           | 2305.2784            | -                    |             |
|                                           |                  | 138           | 2305.2769            | -                    |             |
|                                           | +50              | 120           | 2305.2784            | -                    |             |
| High Channel                              | -30              | 120           | -                    | 2314.7134            | <2315       |
|                                           | +20              | 102           | -                    | 2314.7112            |             |
|                                           |                  | 120           | -                    | 2314.7097            |             |
|                                           |                  | 138           | -                    | 2314.7058            |             |
|                                           | +50              | 120           | -                    | 2314.7086            |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B71 Downlink – 5 MHz BW Middle Channel 634.5 MHz |                  |                      |                       |             |
|------------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                        | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                  | -30              | 0                    | 0                     | -           |
|                                                      | -20              | 0                    | 0                     | -           |
|                                                      | -10              | 0                    | 0                     | -           |
|                                                      | 0                | 0                    | 0                     | -           |
|                                                      | +10              | 0                    | 0                     | -           |
|                                                      | +20              | 0                    | 0                     | -           |
|                                                      | +30              | 0                    | 0                     | -           |
|                                                      | +40              | 0                    | 0                     | -           |
|                                                      | +50              | 0                    | 0                     | -           |
| 102                                                  | +20              | 0                    | 0                     | -           |
| 138                                                  |                  | 0                    | 0                     | -           |

| LTE B71 Downlink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|---------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                     | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                                 | -30              | 120           | 617.2827             | -                    | >617        |
|                                             | +20              | 102           | 617.2830             | -                    |             |
|                                             |                  | 120           | 617.2831             | -                    |             |
|                                             |                  | 138           | 617.2796             | -                    |             |
|                                             | +50              | 120           | 617.2823             | -                    |             |
| High Channel                                | -30              | 120           | -                    | 651.7113             | <652        |
|                                             | +20              | 102           | -                    | 651.7126             |             |
|                                             |                  | 120           | -                    | 651.7139             |             |
|                                             |                  | 138           | -                    | 651.7158             |             |
|                                             | +50              | 120           | -                    | 651.7140             |             |

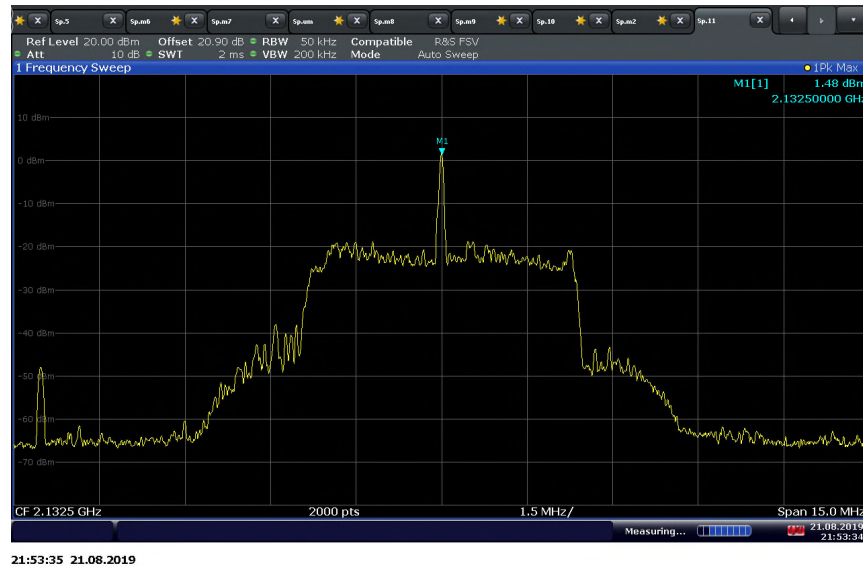
The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

| LTE B71 Uplink – 5 MHz BW Middle Channel 680.5 MHz |                  |                      |                       |             |
|----------------------------------------------------|------------------|----------------------|-----------------------|-------------|
| Voltage (VDC)                                      | Temperature (°C) | Frequency Error (Hz) | Frequency Error (ppm) | Limit (ppm) |
| 120                                                | -30              | 0                    | 0                     | -           |
|                                                    | -20              | 0                    | 0                     | -           |
|                                                    | -10              | 0                    | 0                     | -           |
|                                                    | 0                | 0                    | 0                     | -           |
|                                                    | +10              | 0                    | 0                     | -           |
|                                                    | +20              | 0                    | 0                     | -           |
|                                                    | +30              | 0                    | 0                     | -           |
|                                                    | +40              | 0                    | 0                     | -           |
|                                                    | +50              | 0                    | 0                     | -           |
| 102                                                | +20              | 0                    | 0                     | -           |
| 138                                                |                  | 0                    | 0                     | -           |

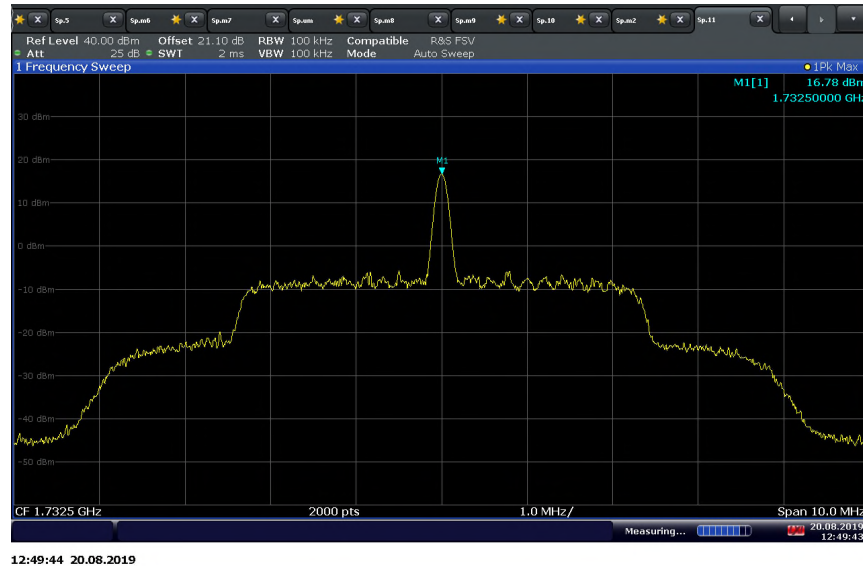
| LTE B71 Uplink Frequency Range – 5 MHz BW |                  |               |                      |                      |             |
|-------------------------------------------|------------------|---------------|----------------------|----------------------|-------------|
| Channel                                   | Temperature (°C) | Voltage (VAC) | F <sub>L</sub> (MHz) | F <sub>H</sub> (MHz) | Limit (MHz) |
| Low Channel                               | -30              | 120           | 663.3225             | -                    | >663        |
|                                           | +20              | 102           | 663.3250             | -                    |             |
|                                           |                  | 120           | 663.3214             | -                    |             |
|                                           |                  | 138           | 663.3239             | -                    |             |
|                                           | +50              | 120           | 663.3187             | -                    |             |
| High Channel                              | -30              | 120           | -                    | 697.7082             | <698        |
|                                           | +20              | 102           | -                    | 697.7070             |             |
|                                           |                  | 120           | -                    | 697.7078             |             |
|                                           |                  | 138           | -                    | 697.7092             |             |
|                                           | +50              | 120           | -                    | 697.7096             |             |

The frequency stability of the EUT is sufficient to keep it within the authorised frequency ranges at any temperature interval and voltage variations across the measured range.

## 2.9.9 Sample Test Plots



LTE Band 4 Downlink Middle Channel 120VAC @ 20°C



LTE Band 4 Uplink Middle Channel 120VAC @ 20°C



15:45:06 21.08.2019

### LTE B4 Downlink Low Channel @ 20°C Nominal Voltage



15:49:53 21.08.2019

### LTE B4 Downlink High Channel @ 20°C Nominal Voltage



13:39:17 20.08.2019

#### LTE B4 Uplink Low Channel @ 20°C Nominal Voltage



13:44:31 20.08.2019

#### LTE B4 Uplink High Channel @ 20°C Nominal Voltage

## 2.10 POWER LINE CONDUCTED EMISSIONS

### 2.10.1 Specification Reference

RSS-Gen, Section 8.8

### 2.10.2 Standard Applicable

An intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN).

| Frequency of emission (MHz) | Conducted limit (dB $\mu$ V) |           |
|-----------------------------|------------------------------|-----------|
|                             | Quasi-peak                   | Average   |
| 0.15–0.5                    | 66 to 56*                    | 56 to 46* |
| 0.5–5                       | 56                           | 46        |
| 5–30                        | 60                           | 50        |

*\*Decreases with the logarithm of the frequency.*

### 2.10.3 Equipment Under Test and Modification State

Serial No: 370920000139 (NU) and 371929000156 (CU) / Test Configuration B

### 2.10.4 Date of Test/Initial of test personnel who performed the test

August 30, 2019/XYZ

### 2.10.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

### 2.10.6 Environmental Conditions

Test performed at TÜV SÜD America Inc. Rancho Bernardo facility.

|                     |          |
|---------------------|----------|
| Ambient Temperature | 25.2 °C  |
| Relative Humidity   | 47.3 %   |
| ATM Pressure        | 98.9 kPa |



## 2.10.7 Additional Observations

- EUT verified using input voltage of 120VAC 60Hz.
- There are no significant variations in test results between each operating modes. Only the worst operation mode is presented.
- Measurement was done using EMC32 automated software. Reported level is the actual level with all the correction factors factored in. Correction Factor column is for informational purposes only. See Section 2.10.8 for sample computation.

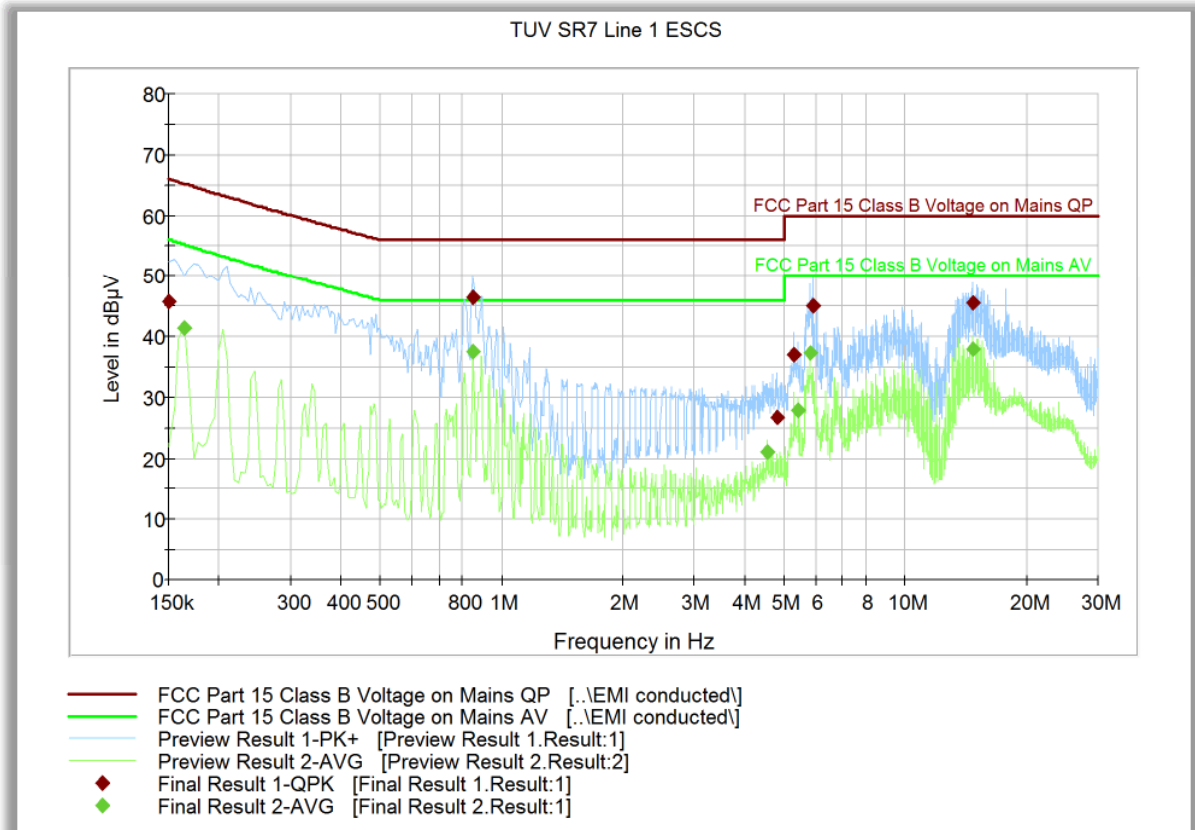
## 2.10.8 Sample Computation (Conducted Emission – Quasi Peak)

|                                                            |                                |      |      |
|------------------------------------------------------------|--------------------------------|------|------|
| Measuring equipment raw measurement (db $\mu$ V) @ 150kHz  |                                |      | 5.5  |
| Correction Factor (dB)                                     | Asset# 8607 (20 dB attenuator) | 19.9 | 20.7 |
|                                                            | Asset# 1177 (cable)            | 0.15 |      |
|                                                            | Asset# 1176 (cable)            | 0.35 |      |
|                                                            | Asset# 7568 (LISN)             | 0.30 |      |
| Reported QuasiPeak Final Measurement (db $\mu$ V) @ 150kHz |                                |      | 26.2 |

## 2.10.9 Test Results

Compliant. See attached plots and tables.

## 2.10.10 Test Results - Conducted Emissions Line 1 – Hot (LTE B4 as the worst case)



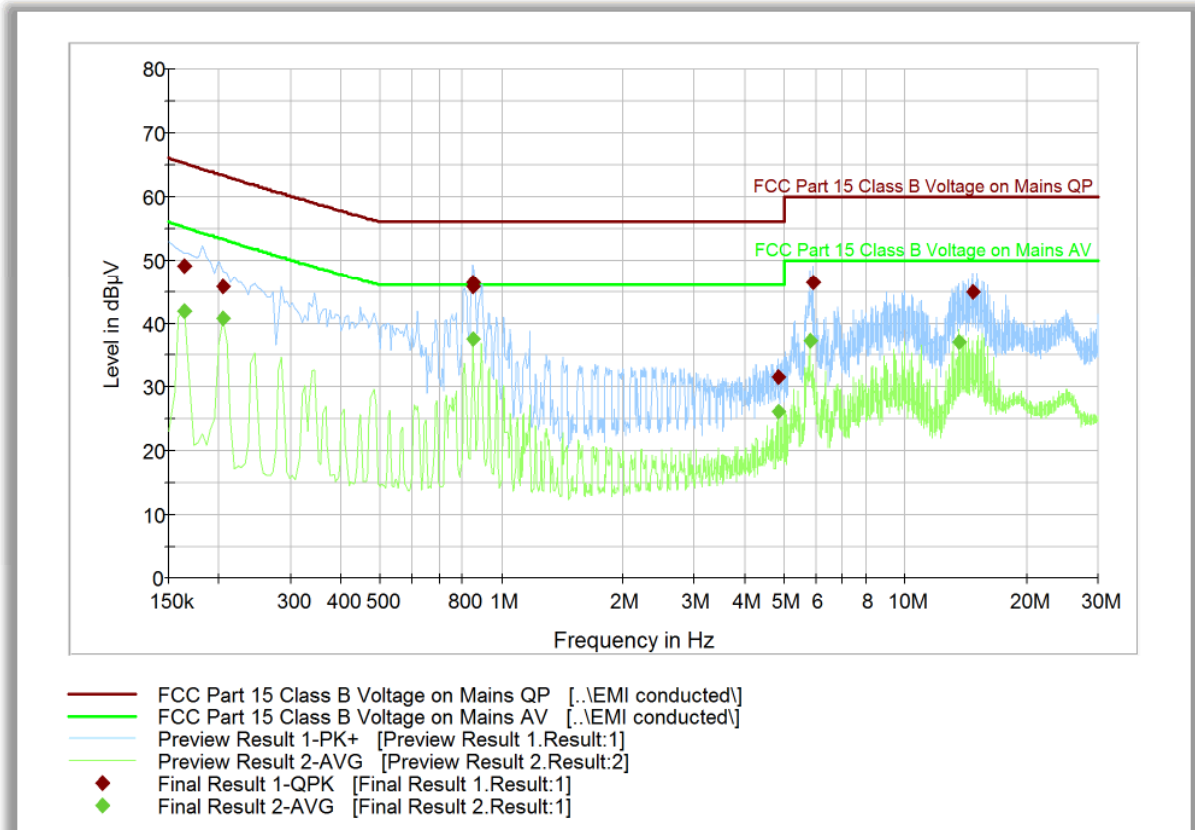
### Quasi Peak

| Frequency (MHz) | QuasiPeak (dBµV) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV) |
|-----------------|------------------|-----------------|-----------------|--------|------|------------|-------------------|--------------------|
| 0.150000        | 45.8             | 1000.0          | 9.000           | Off    | L1   | 20.1       | 20.2              | 66.0               |
| 0.852000        | 46.3             | 1000.0          | 9.000           | Off    | L1   | 19.9       | 9.7               | 56.0               |
| 4.812000        | 26.6             | 1000.0          | 9.000           | Off    | L1   | 20.5       | 29.4              | 56.0               |
| 5.311500        | 37.0             | 1000.0          | 9.000           | Off    | L1   | 20.4       | 23.0              | 60.0               |
| 5.905500        | 45.1             | 1000.0          | 9.000           | Off    | L1   | 20.4       | 14.9              | 60.0               |
| 14.653500       | 45.4             | 1000.0          | 9.000           | Off    | L1   | 20.5       | 14.6              | 60.0               |

### Average

| Frequency (MHz) | Average (dBµV) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin - Ave (dB) | Limit - Ave (dBµV) |
|-----------------|----------------|-----------------|-----------------|--------|------|------------|-------------------|--------------------|
| 0.163500        | 41.4           | 1000.0          | 9.000           | Off    | L1   | 20.1       | 13.8              | 55.2               |
| 0.852000        | 37.5           | 1000.0          | 9.000           | Off    | L1   | 19.9       | 8.5               | 46.0               |
| 4.551000        | 21.0           | 1000.0          | 9.000           | Off    | L1   | 20.4       | 25.0              | 46.0               |
| 5.415000        | 27.9           | 1000.0          | 9.000           | Off    | L1   | 20.4       | 22.1              | 50.0               |
| 5.824500        | 37.2           | 1000.0          | 9.000           | Off    | L1   | 20.4       | 12.8              | 50.0               |
| 14.653500       | 38.0           | 1000.0          | 9.000           | Off    | L1   | 20.5       | 12.0              | 50.0               |

## 2.10.11 Test Result - Conducted Emissions Line 2 – Neutral (LTE B4 as the worst case)



### Quasi Peak

| Frequency (MHz) | QuasiPeak (dBµV) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin - QPK (dB) | Limit - QPK (dBµV) |
|-----------------|------------------|-----------------|-----------------|--------|------|------------|-------------------|--------------------|
| 0.163500        | 49.0             | 1000.0          | 9.000           | Off    | N    | 20.0       | 16.2              | 65.2               |
| 0.204000        | 45.8             | 1000.0          | 9.000           | Off    | N    | 19.9       | 17.5              | 63.3               |
| 0.852000        | 46.4             | 1000.0          | 9.000           | Off    | N    | 19.8       | 9.6               | 56.0               |
| 4.857000        | 31.6             | 1000.0          | 9.000           | Off    | N    | 20.5       | 24.4              | 56.0               |
| 5.905500        | 46.4             | 1000.0          | 9.000           | Off    | N    | 20.3       | 13.6              | 60.0               |
| 14.658000       | 44.9             | 1000.0          | 9.000           | Off    | N    | 20.6       | 15.1              | 60.0               |

### Average

| Frequency (MHz) | Average (dBµV) | Meas. Time (ms) | Bandwidth (kHz) | Filter | Line | Corr. (dB) | Margin - Ave (dB) | Limit - Ave (dBµV) |
|-----------------|----------------|-----------------|-----------------|--------|------|------------|-------------------|--------------------|
| 0.163500        | 41.9           | 1000.0          | 9.000           | Off    | N    | 20.0       | 13.3              | 55.2               |
| 0.204000        | 40.7           | 1000.0          | 9.000           | Off    | N    | 19.9       | 12.5              | 53.3               |
| 0.852000        | 37.5           | 1000.0          | 9.000           | Off    | N    | 19.8       | 8.5               | 46.0               |
| 4.857000        | 26.1           | 1000.0          | 9.000           | Off    | N    | 20.5       | 19.9              | 46.0               |
| 5.820000        | 37.2           | 1000.0          | 9.000           | Off    | N    | 20.3       | 12.8              | 50.0               |
| 13.636500       | 37.0           | 1000.0          | 9.000           | Off    | N    | 20.6       | 13.0              | 50.0               |

FCC ID: NU: YETQ44-1234CNU  
CU: YETQ41-5ECU  
IC: NU: 9298A-Q441234CNU  
CU: 9298A-Q415ECU  
Report No. 72146075B



### **SECTION 3**

#### **TEST EQUIPMENT USED**

### 3.1 TEST EQUIPMENT USED

List of absolute measuring and other principal items of test equipment.

| ID Number<br>(SDGE/SDRB)     | Test Equipment                          | Type             | Serial Number | Manufacturer                  | Cal Date                  | Cal Due<br>Date |
|------------------------------|-----------------------------------------|------------------|---------------|-------------------------------|---------------------------|-----------------|
| Antenna Conducted Port Setup |                                         |                  |               |                               |                           |                 |
| 7662                         | P-Series Power Meter                    | N1911A           | MY45100951    | Agilent                       | 06/28/19                  | 06/28/20        |
| 7661                         | 50MHz-18GHz Wideband<br>Power Sensor    | N1921A           | MY45241383    | Agilent                       | 07/24/19                  | 07/24/20        |
| 7608                         | Vector Signal Generator                 | SMBV100A         | 259021        | Rhode & Schwarz               | 10/10/19                  | 10/10/21        |
| 7582                         | Signal/Spectrum Analyzer                | FSW26            | 101614        | Rhode & Schwarz               | 01/07/19                  | 01/07/20        |
| 8825                         | 20dB Attenuator                         | 46-20-34         | BK5773        | Weinschel Corp.               | Verified by 7608 and 7582 |                 |
| -                            | 10dB Attenuator                         | VAT-10W2+2W      | N/A           | MCL                           | Verified by 7608 and 7582 |                 |
| Radiated Test Setup          |                                         |                  |               |                               |                           |                 |
| 1033                         | Bilog Antenna                           | 3142C            | 00044556      | EMCO                          | 09/05/19                  | 09/05/21        |
| 7575                         | Double-ridged waveguide<br>horn antenna | 3117             | 00155511      | EMCO                          | 06/16/18                  | 06/16/20        |
| 8628                         | Pre-amplifier                           | QLJ 01182835-JO  | 8986002       | QuinStar<br>Technologies Inc. | 03/07/19                  | 03/07/20        |
| 1040                         | EMI Test Receiver                       | ESIB40           | 100292        | Rhode & Schwarz               | 10/11/19                  | 10/11/20        |
| 7620                         | EMI Test Receiver                       | ESU              | 100399        | Rhode & Schwarz               | 10/18/19                  | 10/18/20        |
| 1016                         | Pre-amplifier                           | PAM-0202         | 187           | A.H. Systems, Inc.            | 03/08/19                  | 03/08/20        |
| Conducted Emissions          |                                         |                  |               |                               |                           |                 |
| 7620                         | EMI Test Receiver                       | ESU              | 100399        | Rhode & Schwarz               | 10/18/19                  | 10/18/20        |
| 7567                         | LISN                                    | FCC-LISN-50-25-2 | 120304        | Fischer Custom<br>Comm.       | 12/14/17                  | 12/14/19        |
| 8822                         | 20dB Attenuator                         | 34-20-34         | N/A           | MCE / Weinschel               | 03/05/19                  | 03/06/20        |
| 8824                         | 20dB Attenuator                         | 34-20-34         | N/A           | MCE / Weinschel               | 03/05/19                  | 03/05/20        |
| Miscellaneous                |                                         |                  |               |                               |                           |                 |
| 43003                        | True RMS Multimeter                     | 85 III           | 96880143      | Fluke                         | 10/07/19                  | 10/07/20        |
| 7579                         | Temperature Chamber                     | 115              | 151617        | TestQuity                     | 09/09/19                  | 09/09/20        |
| 7619                         | Temp & Humidity Sensor                  | iBTHX-W          | 15050268      | Omega                         | 06/18/19                  | 06/18/20        |
|                              | Test Software                           | EMC32            | V8.53         | Rhode & Schwarz               | N/A                       |                 |

### 3.2 MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:

#### 3.2.1 Conducted Antenna Port Measurement

|                               | Input Quantity (Contribution) $X_i$ | Value   | Prob. Dist. | Divisor | $u_i(x)$ | $u_i(x)^2$ |
|-------------------------------|-------------------------------------|---------|-------------|---------|----------|------------|
| 1                             | Receiver reading                    | 0.10 dB | Normal, k=1 | 1.000   | 0.10     | 0.01       |
| 2                             | Cable attenuation                   | 1.00 dB | Normal, k=2 | 2.000   | 0.50     | 0.25       |
| 3                             | Receiver sinewave accuracy          | 0.08 dB | Normal, k=2 | 2.000   | 0.04     | 0.00       |
| 4                             | Receiver pulse amplitude            | 0.00 dB | Rectangular | 1.732   | 0.00     | 0.00       |
| 5                             | Receiver pulse repetition rate      | 0.00 dB | Rectangular | 1.732   | 0.00     | 0.00       |
| 6                             | Noise floor proximity               | 0.00 dB | Rectangular | 1.732   | 0.00     | 0.00       |
| 7                             | Frequency interpolation             | 0.10 dB | Rectangular | 1.732   | 0.06     | 0.00       |
| 8                             | Mismatch                            | 0.07 dB | U-shaped    | 1.414   | 0.05     | 0.00       |
|                               |                                     |         |             |         |          |            |
| Combined standard uncertainty |                                     |         | Normal      | 0.52    | dB       |            |
| Expanded uncertainty          |                                     |         | Normal, k=2 | 1.03    | dB       |            |

#### 3.2.2 Radiated Emission Measurements (Below 1GHz)

|                               | Input Quantity (Contribution) $X_i$ | Value   | Prob. Dist. | Divisor | $u_i(x)$ | $u_i(x)^2$ |
|-------------------------------|-------------------------------------|---------|-------------|---------|----------|------------|
| 1                             | Receiver reading                    | 0.10 dB | Normal, k=1 | 1.000   | 0.10     | 0.01       |
| 2                             | Attenuation: antenna-receiver       | 0.20 dB | Normal, k=2 | 2.000   | 0.10     | 0.01       |
| 3                             | Antenna factor AF                   | 0.75 dB | Normal, k=2 | 2.000   | 0.38     | 0.14       |
| 4                             | Receiver sinewave accuracy          | 0.45 dB | Normal, k=2 | 2.000   | 0.23     | 0.05       |
| 5                             | Receiver pulse amplitude            | 1.50 dB | Rectangular | 1.732   | 0.87     | 0.75       |
| 6                             | Receiver pulse repetition rate      | 1.50 dB | Rectangular | 1.732   | 0.87     | 0.75       |
| 7                             | Noise floor proximity               | 0.50 dB | Rectangular | 1.732   | 0.29     | 0.08       |
| 8                             | Mismatch: antenna-receiver          | 0.95 dB | U-shaped    | 1.414   | 0.67     | 0.45       |
| 9                             | AF frequency interpolation          | 0.30 dB | Rectangular | 1.732   | 0.17     | 0.03       |
| 10                            | AF height deviations                | 0.10 dB | Rectangular | 1.732   | 0.06     | 0.00       |
| 11                            | Directivity difference at 3 m       | 3.12 dB | Rectangular | 1.732   | 1.80     | 3.24       |
| 12                            | Phase center location at 3 m        | 1.00 dB | Rectangular | 1.732   | 0.58     | 0.33       |
| 13                            | Cross-polarisation                  | 0.90 dB | Rectangular | 1.732   | 0.52     | 0.27       |
| 14                            | Balance                             | 0.00 dB | Rectangular | 1.732   | 0.00     | 0.00       |
| 15                            | Site imperfections                  | 3.76 dB | Triangular  | 2.449   | 1.54     | 2.36       |
| 16                            | Separation distance at 3 m          | 0.30 dB | Rectangular | 1.732   | 0.17     | 0.03       |
| 17                            | Effect of setup table material      | 0.77 dB | Rectangular | 1.732   | 0.44     | 0.20       |
| 18                            | Table height at 3 m                 | 0.10 dB | Normal, k=2 | 2.000   | 0.05     | 0.00       |
| 19                            | Near-field effects                  | 0.00 dB | Triangular  | 2.449   | 0.00     | 0.00       |
| 20                            | Effect of ambient noise on OATS     | 0.00 dB |             |         |          | 0.00       |
|                               |                                     |         |             |         |          |            |
| Combined standard uncertainty |                                     |         | Normal      | 2.95    | dB       |            |
| Expanded uncertainty          |                                     |         | Normal, k=2 | 5.90    | dB       |            |

### 3.2.3 Radiated Emission Measurements (Above 1GHz)

|                               | Input Quantity (Contribution) $X_i$ | Value   | Prob. Dist. | Divisor | $u_i(x)$ | $u_i(x)^2$ |
|-------------------------------|-------------------------------------|---------|-------------|---------|----------|------------|
| 1                             | Receiver reading                    | 0.10 dB | Normal, k=1 | 1.000   | 0.10     | 0.01       |
| 2                             | Attenuation: antenna-receiver       | 0.20 dB | Normal, k=2 | 2.000   | 0.10     | 0.01       |
| 3                             | Antenna factor AF                   | 0.75 dB | Normal, k=2 | 2.000   | 0.38     | 0.14       |
| 4                             | Receiver sinewave accuracy          | 0.45 dB | Normal, k=2 | 2.000   | 0.23     | 0.05       |
| 5                             | Receiver pulse amplitude            | 1.50 dB | Rectangular | 1.732   | 0.87     | 0.75       |
| 6                             | Receiver pulse repetition rate      | 1.50 dB | Rectangular | 1.732   | 0.87     | 0.75       |
| 7                             | Noise floor proximity               | 0.50 dB | Rectangular | 1.732   | 0.29     | 0.08       |
| 8                             | Mismatch: antenna-receiver          | 0.95 dB | U-shaped    | 1.414   | 0.67     | 0.45       |
| 9                             | AF frequency interpolation          | 0.30 dB | Rectangular | 1.732   | 0.17     | 0.03       |
| 10                            | AF height deviations                | 0.10 dB | Rectangular | 1.732   | 0.06     | 0.00       |
| 11                            | Directivity difference at 3 m       | 3.12 dB | Rectangular | 1.732   | 1.80     | 3.24       |
| 12                            | Phase center location at 3 m        | 1.00 dB | Rectangular | 1.732   | 0.58     | 0.33       |
| 13                            | Cross-polarisation                  | 0.90 dB | Rectangular | 1.732   | 0.52     | 0.27       |
| 14                            | Balance                             | 0.00 dB | Rectangular | 1.732   | 0.00     | 0.00       |
| 15                            | Site imperfections                  | 3.25 dB | Triangular  | 2.449   | 1.33     | 1.76       |
| 16                            | Separation distance at 3 m          | 0.30 dB | Rectangular | 1.732   | 0.17     | 0.03       |
| 17                            | Effect of setup table material      | 0.77 dB | Rectangular | 1.732   | 0.44     | 0.20       |
| 18                            | Table height at 3 m                 | 0.10 dB | Normal, k=2 | 2.000   | 0.05     | 0.00       |
| 19                            | Near-field effects                  | 0.00 dB | Triangular  | 2.449   | 0.00     | 0.00       |
| 20                            | Effect of ambient noise on OATS     | 0.00 dB |             |         |          | 0.00       |
|                               |                                     |         |             |         |          |            |
| Combined standard uncertainty |                                     |         | Normal      | 2.85    | dB       |            |
| Expanded uncertainty          |                                     |         | Normal, k=2 | 5.70    | dB       |            |

### 3.2.4 Conducted Measurements

|                               | Input Quantity (Contribution) $X_i$ | Value   | Prob. Dist. | Divisor | $u_i(x)$ | $u_i(x)^2$ |
|-------------------------------|-------------------------------------|---------|-------------|---------|----------|------------|
| 1                             | Receiver reading                    | 0.10 dB | Normal, k=1 | 1.000   | 0.10     | 0.01       |
| 2                             | LISN-receiver attenuation           | 0.10 dB | Normal, k=2 | 2.000   | 0.05     | 0.00       |
| 3                             | LISN voltage division factor        | 0.30 dB | Normal, k=2 | 2.000   | 0.15     | 0.02       |
| 4                             | Receiver sinewave accuracy          | 0.36 dB | Normal, k=2 | 2.000   | 0.18     | 0.03       |
| 5                             | Receiver pulse amplitude            | 1.50 dB | Rectangular | 1.732   | 0.87     | 0.75       |
| 6                             | Receiver pulse repetition rate      | 1.50 dB | Rectangular | 1.732   | 0.87     | 0.75       |
| 7                             | Noise floor proximity               | 0.00 dB | Rectangular | 1.732   | 0.00     | 0.00       |
| 8                             | AMN VDF frequency interpolation     | 0.10 dB | Rectangular | 1.732   | 0.06     | 0.00       |
| 9                             | Mismatch                            | 0.07 dB | U-shaped    | 1.414   | 0.05     | 0.00       |
| 10                            | LISN impedance                      | 2.65 dB | Triangular  | 2.449   | 1.08     | 1.17       |
| 11                            | Effect of mains disturbance         | 0.00 dB |             |         | 0.00     | 0.00       |
| 12                            | Effect of the environment           |         |             |         |          |            |
|                               |                                     |         |             |         |          |            |
| Combined standard uncertainty |                                     |         | Normal      | 1.66    | dB       |            |
| Expanded uncertainty          |                                     |         | Normal, k=2 | 3.31    | dB       |            |

FCC ID: NU: YETQ44-1234CNU  
CU: YETQ41-5ECU  
IC: NU: 9298A-Q441234CNU  
CU: 9298A-Q415ECU  
Report No. 72146075B

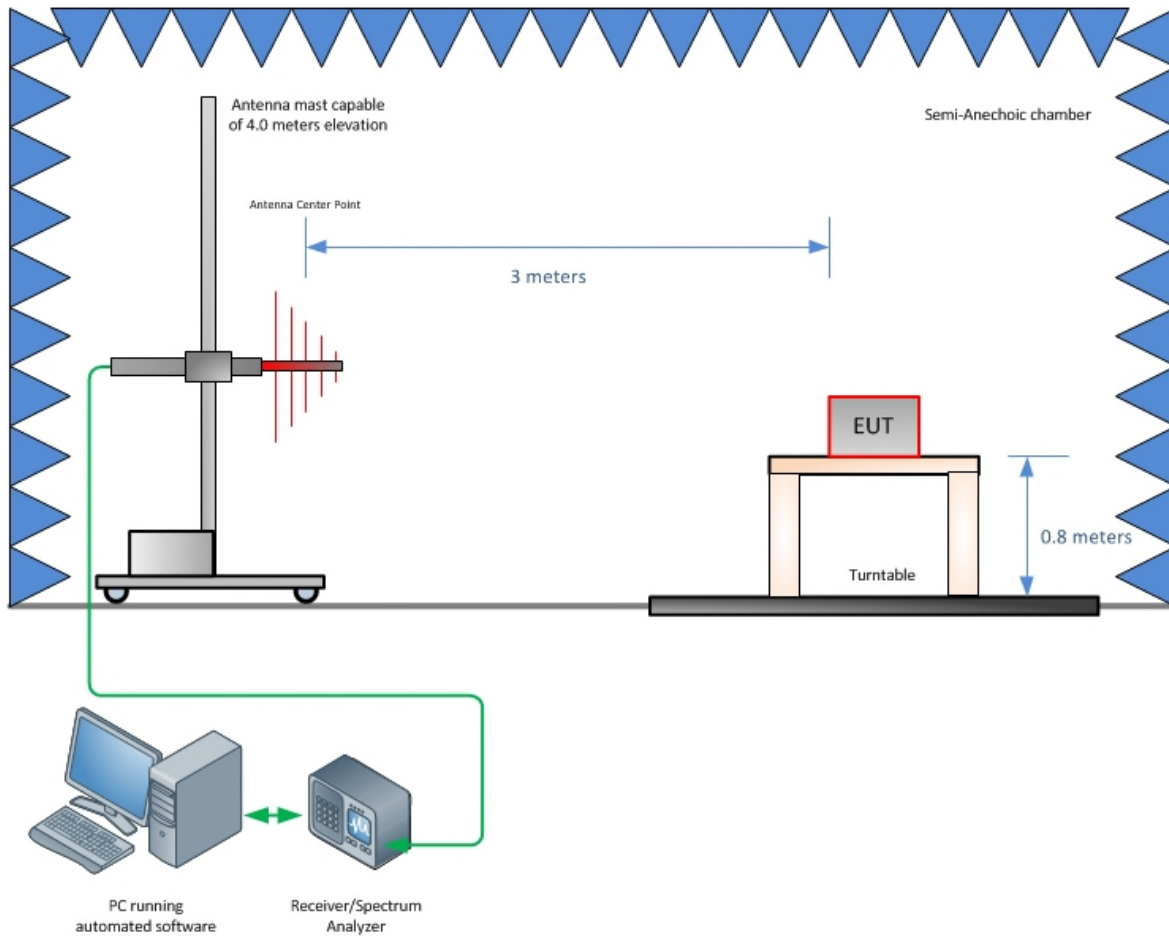


## **SECTION 4**

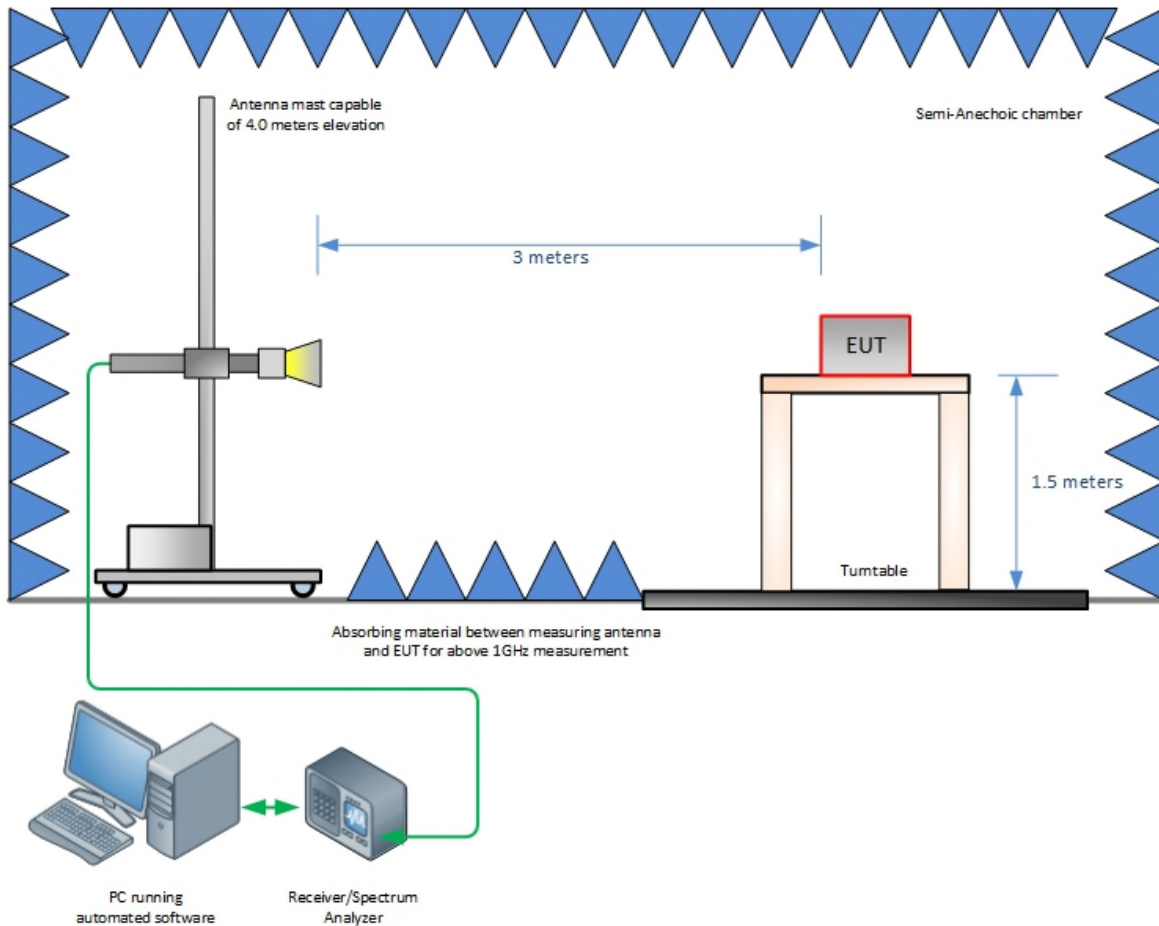
### **DIAGRAM OF TEST SETUP**



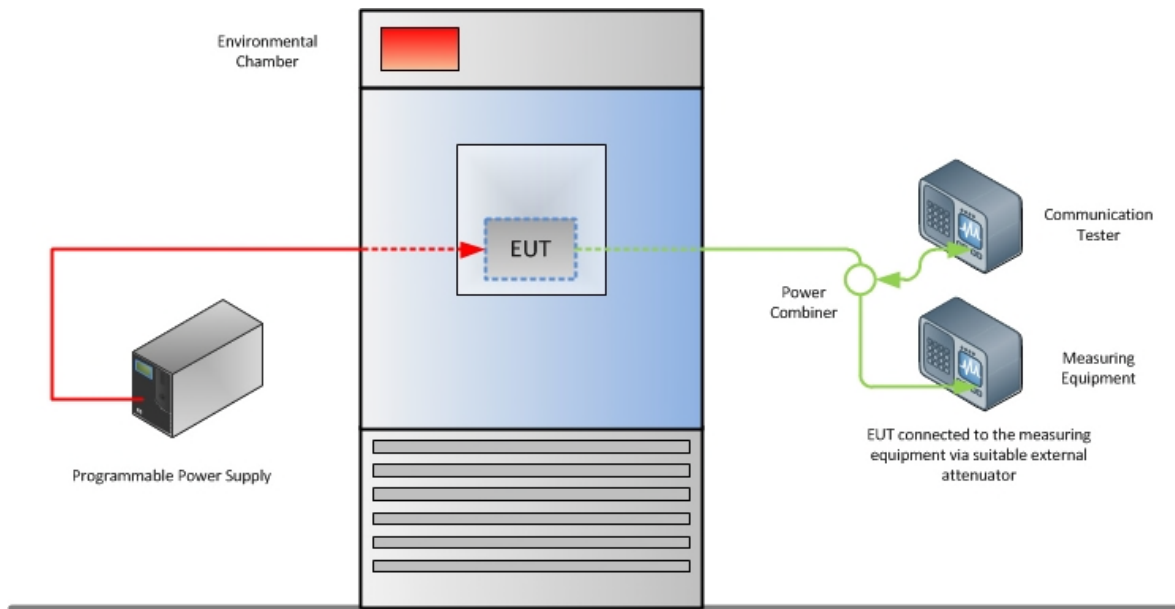
#### 4.1 TEST SETUP DIAGRAM



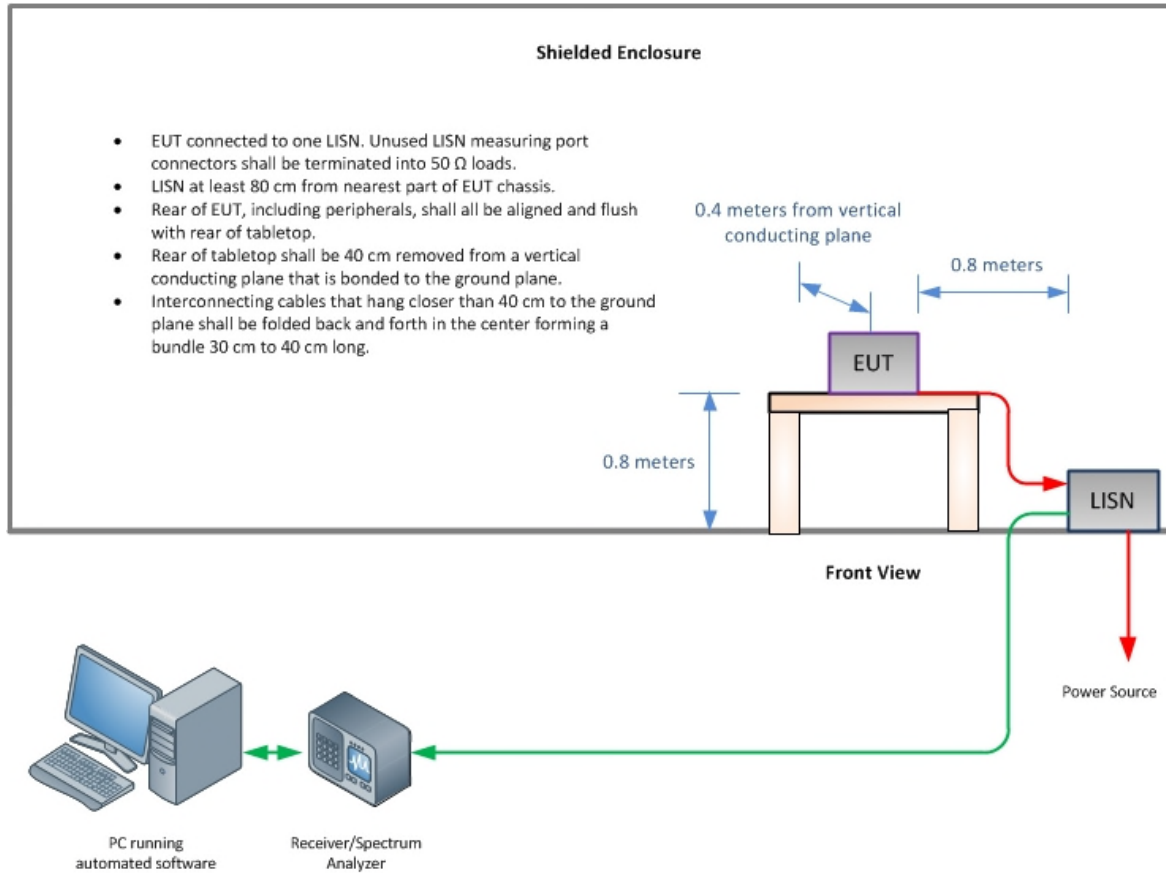
**Radiated Emission Test Setup (Below 1GHz)**



**Radiated Emission Test Setup (Above 1GHz)**



**Frequency Stability Test Configuration**



FCC ID: NU: YETQ44-1234CNU  
CU: YETQ41-5ECU  
IC: NU: 9298A-Q441234CNU  
CU: 9298A-Q415ECU  
Report No. 72146075B



## **SECTION 5**

### **ACCREDITATION, DISCLAIMERS AND COPYRIGHT**

## 5.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT

TÜV SÜD America Inc.'s reports apply only to the specific sample tested under stated test conditions. It is the manufacturer's responsibility to assure the continued compliance of production units of this model. TÜV SÜD America, Inc. shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV SÜD America, Inc.'s issued reports.

This report is the confidential property of the client. As a mutual protection to our clients, the public and TÜV SÜD America, Inc., extracts from the test report shall not be reproduced, except in full without TÜV SÜD America, Inc.'s written approval.

This report must not be used to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the federal government.

TÜV SÜD America, Inc. and its professional staff hold government and professional organization certifications for AAMI, ACIL, AEA, ANSI, IEEE, A2LA, NIST and VCCI.



A2LA Cert. No. 2955.13