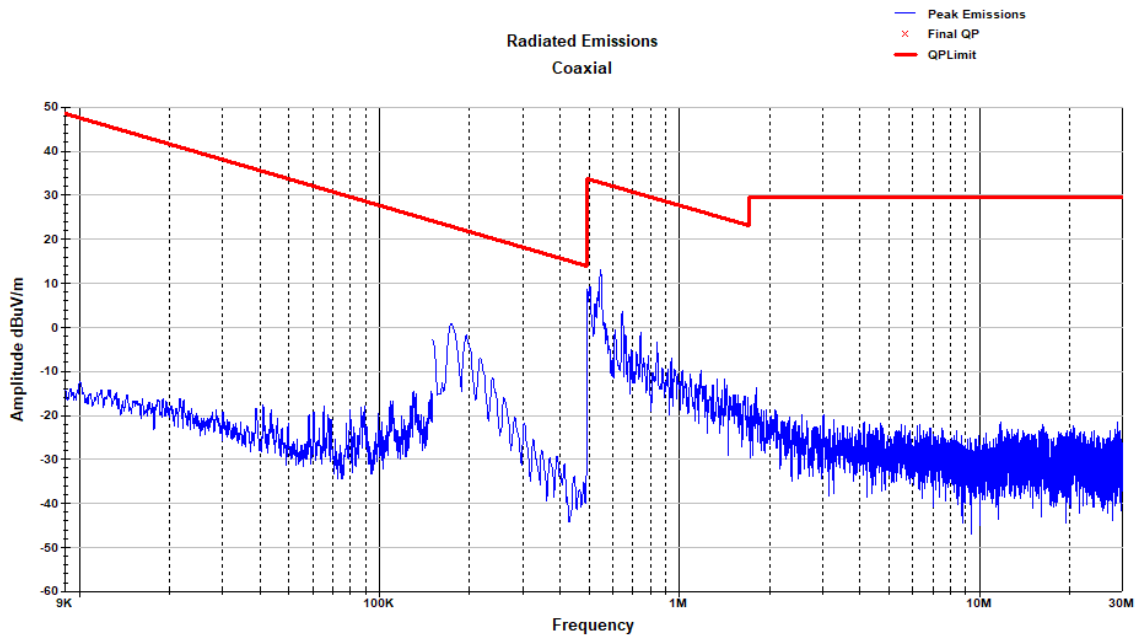


### 3.9 Test Data – U-NII Band 2A – 802.11n

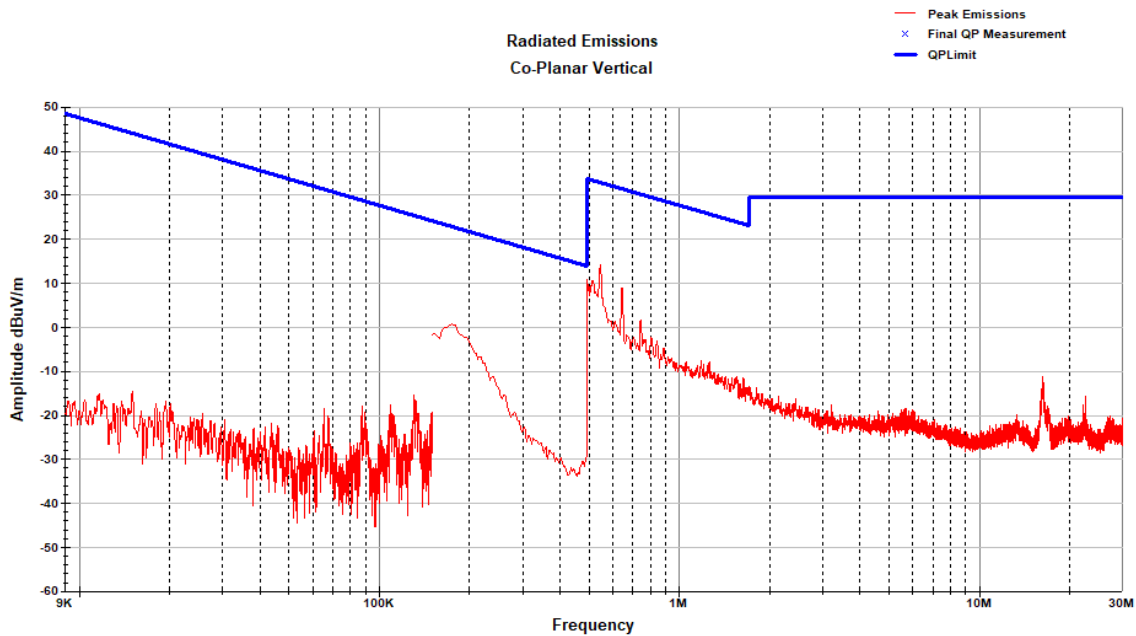
#### 3.9.1 9kHz – 30MHz

All channels had similar plots in the 9kHz to 30MHz frequency range.

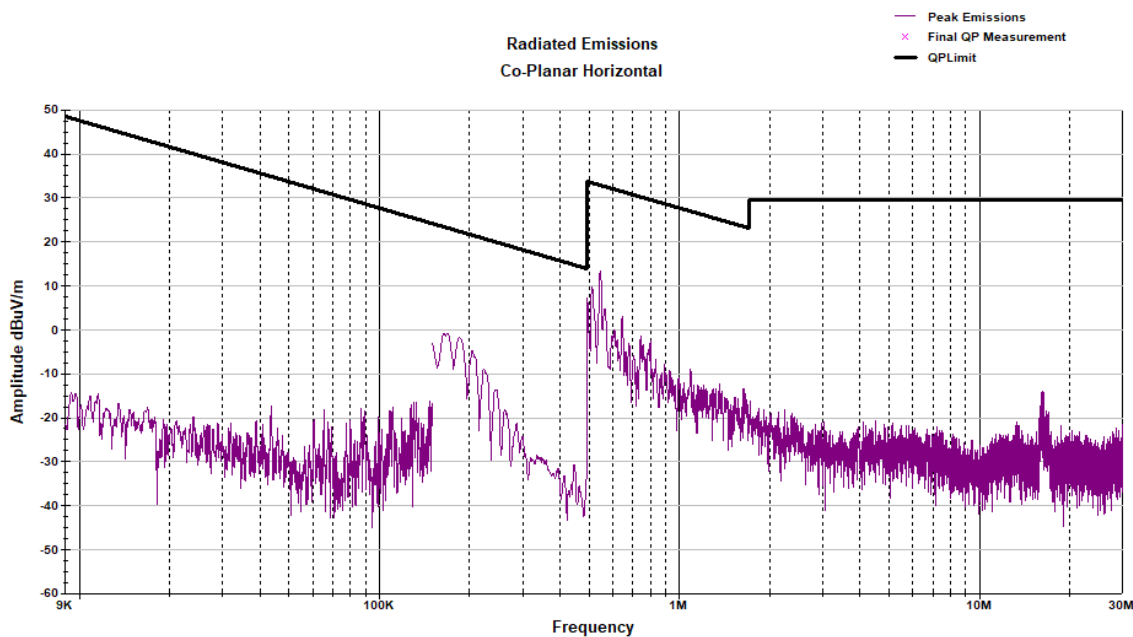
Coaxial Plot – 9 kHz-30MHz – Mid Channel



Co-Planar Vertical Plot – 9 kHz-30MHz – Mid Channel



### Co-Planar Horizontal Plot – 9 kHz-30MHz – Mid Channel

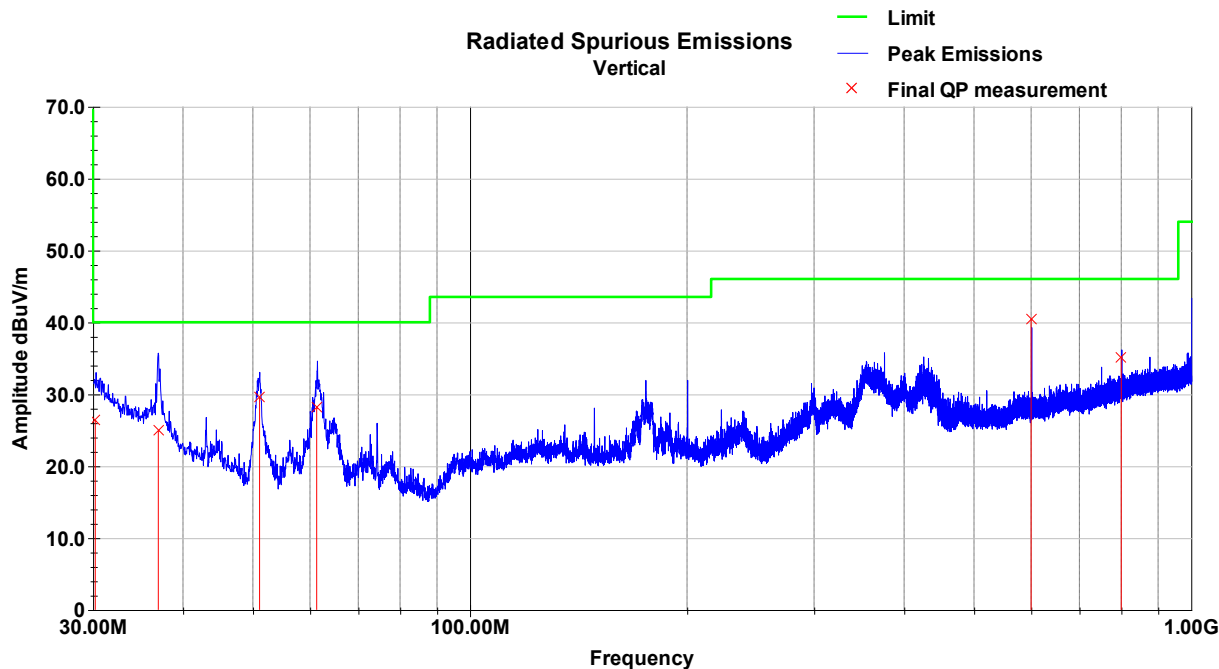


No emissions within 20dB of the limit

### 3.9.2 30-1000 MHz

All channels were measured and had similar plots – the worst-case plots are shown below.

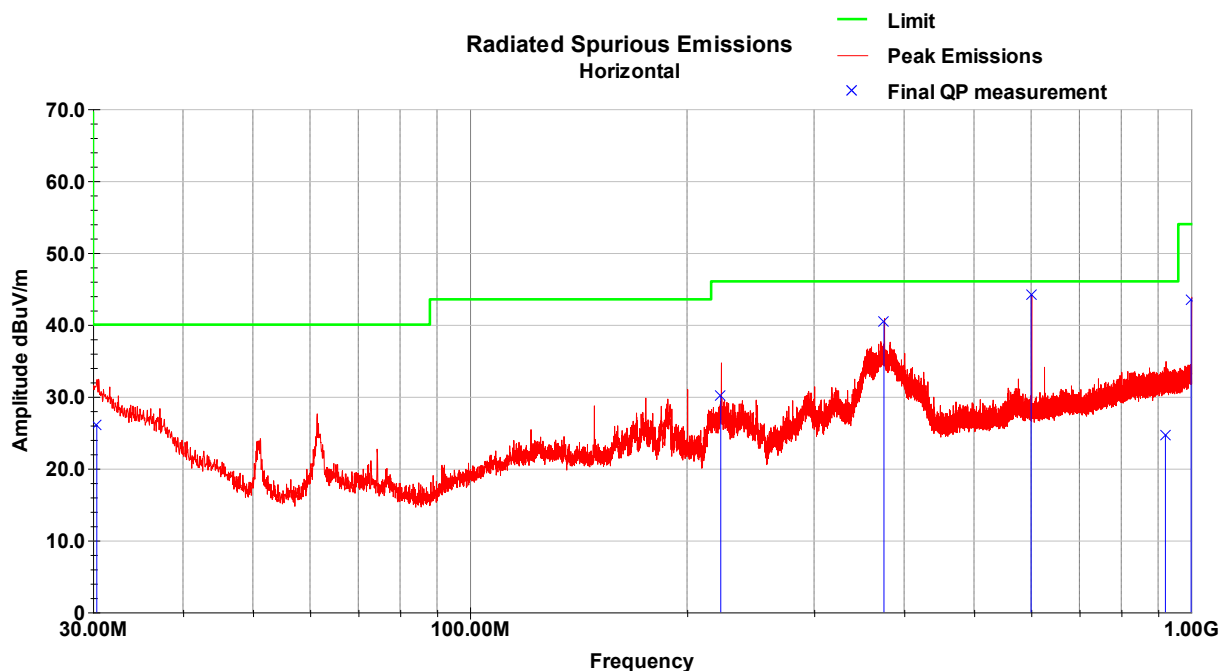
Vertical Plot – 30-1000MHz – High Channel



Vertical Data – 30-1000MHz – High Channel

| Frequency<br>MHz                    | Raw QP<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | Amp<br>dB | QP Value<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------|----------------|-----------------|--------------------|--------------|------------|------------|-----------|--------------------|-----------------|--------------|
| 30.22                               | 30.6           | V               | 77.0               | 400.0        | 26.0       | 0.3        | 30.6      | 26.3               | 100.0           | -13.7        |
| 36.97                               | 34.5           | V               | 272.0              | 100.0        | 20.7       | 0.3        | 30.6      | 24.9               | 100.0           | -15.1        |
| 51.08                               | 47.5           | V               | 293.0              | 100.0        | 12.4       | 0.4        | 30.7      | 29.5               | 100.0           | -10.5        |
| 61.31                               | 46.7           | V               | 325.0              | 117.0        | 11.6       | 0.5        | 30.8      | 28.1               | 100.0           | -11.9        |
| 600.00                              | 44.4           | V               | 64.0               | 137.0        | 23.8       | 1.9        | 29.7      | 40.5               | 100.0           | -5.6         |
| 800.02                              | 36.3           | V               | 360.0              | 100.0        | 26.2       | 1.9        | 29.2      | 35.2               | 100.0           | -10.8        |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
| QP Value = Raw QP + AF + Loss - Amp |                |                 |                    |              |            |            |           |                    |                 |              |
| Margin = QP Value - Limit           |                |                 |                    |              |            |            |           |                    |                 |              |

### Horizontal Plot – 30-1000MHz – High Channel

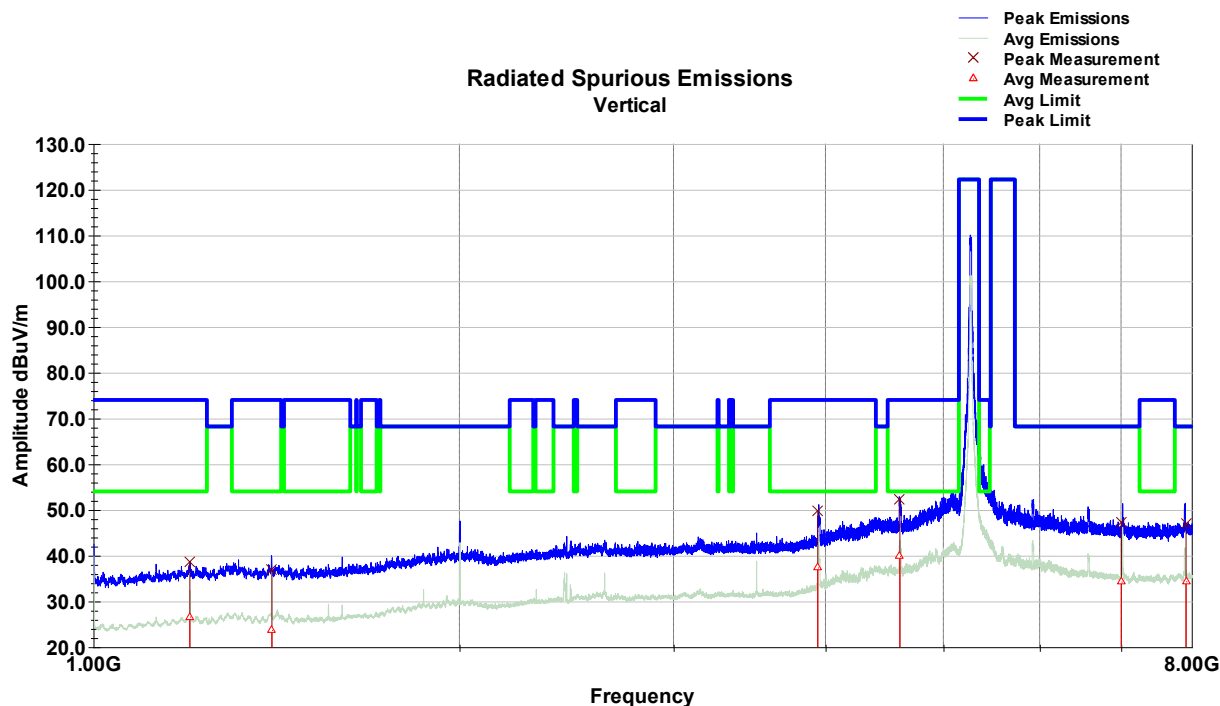


### Horizontal Data – 30-1000MHz – High Channel

| Frequency<br>MHz                    | Raw QP<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | Amp<br>dB | QP Value<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------|----------------|-----------------|--------------------|--------------|------------|------------|-----------|--------------------|-----------------|--------------|
| 30.38                               | 30.4           | H               | 238.0              | 246.0        | 25.9       | 0.3        | 30.6      | 26.0               | 100.0           | -14.0        |
| 222.73                              | 43.6           | H               | 286.0              | 100.0        | 15.7       | 1.1        | 30.3      | 30.1               | 100.0           | -15.9        |
| 375.01                              | 49.1           | H               | 350.0              | 241.0        | 19.7       | 1.6        | 30.1      | 40.4               | 100.0           | -5.6         |
| 600.01                              | 48.1           | H               | 230.0              | 100.0        | 23.8       | 1.9        | 29.7      | 44.2               | 100.0           | -1.8         |
| 921.28                              | 24.3           | H               | 131.0              | 100.0        | 27.2       | 2.1        | 29.0      | 24.7               | 100.0           | -21.3        |
| 1000.00                             | 41.8           | H               | 147.0              | 100.0        | 28.1       | 2.2        | 28.7      | 43.4               | 54.0            | -10.6        |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
| QP Value = Raw QP + AF + Loss - Amp |                |                 |                    |              |            |            |           |                    |                 |              |
| Margin = QP Value - Limit           |                |                 |                    |              |            |            |           |                    |                 |              |

### 3.9.3 1-18 GHz

#### Vertical Plot – 1-8GHz – Low Channel

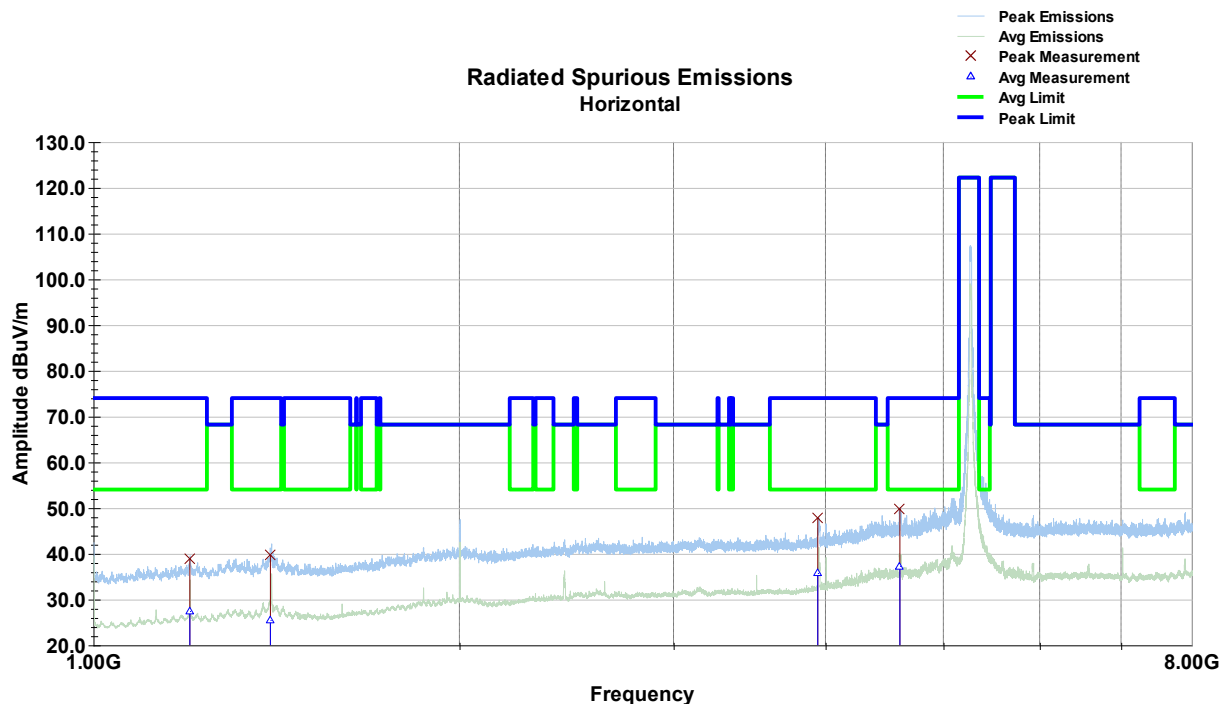


#### Vertical Data – 1-8GHz – Low Channel

| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | DCF<br>dB | Amp<br>dB | Final Avg<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|---------------------------------------------|-----------------|-----------------|--------------------|--------------|------------|------------|-----------|-----------|---------------------|-----------------|--------------|
| 1200.48                                     | 31.2            | V               | 236.0              | 225.0        | 28.6       | 1.3        | 0.0       | 34.4      | 26.7                | 54.0            | -27.3        |
| 1402.35                                     | 28.2            | V               | 142.0              | 130.0        | 28.2       | 1.6        | 0.0       | 34.3      | 23.8                | 54.0            | -30.2        |
| 3942.30                                     | 35.8            | V               | 288.0              | 136.0        | 33.4       | 2.7        | 0.0       | 34.4      | 37.4                | 54.0            | -16.6        |
| 4605.04                                     | 36.4            | V               | 183.0              | 229.0        | 34.7       | 3.0        | 0.0       | 34.2      | 39.9                | 54.0            | -14.1        |
| 7005.51                                     | 30.3            | V               | 203.0              | 226.0        | 35.7       | 3.3        | 0.0       | 35.0      | 34.3                | 68.2            | -33.9        |
| 7916.18                                     | 29.5            | V               | 149.0              | 205.0        | 35.8       | 3.5        | 0.0       | 34.4      | 34.4                | 68.2            | -33.8        |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Margin = Final Avg - Limit                  |                 |                 |                    |              |            |            |           |           |                     |                 |              |

| Frequency<br>MHz                          | Raw Pk<br>(dBuV) | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>(dB) | Amp<br>(dB) | Final Pk<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) |
|-------------------------------------------|------------------|-------------------|----------------------|----------------|--------------|--------------|-------------|-------------|----------------------|-------------------|----------------|
| 1200.48                                   | 43.1             | V                 | 236.0                | 225.0          | 28.6         | 1.3          | 0.0         | 34.4        | 38.6                 | 74.0              | -35.4          |
| 1402.35                                   | 41.3             | V                 | 142.0                | 130.0          | 28.2         | 1.6          | 0.0         | 34.3        | 36.9                 | 74.0              | -37.1          |
| 3942.30                                   | 48.2             | V                 | 288.0                | 136.0          | 33.4         | 2.7          | 0.0         | 34.4        | 49.8                 | 74.0              | -24.2          |
| 4605.04                                   | 48.8             | V                 | 183.0                | 229.0          | 34.7         | 3.0          | 0.0         | 34.2        | 52.3                 | 74.0              | -21.7          |
| 7005.51                                   | 43.1             | V                 | 203.0                | 226.0          | 35.7         | 3.3          | 0.0         | 35.0        | 47.2                 | 68.2              | -21.0          |
| 7916.18                                   | 42.2             | V                 | 149.0                | 205.0          | 35.8         | 3.5          | 0.0         | 34.4        | 47.1                 | 68.2              | -21.1          |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Margin = Final Pk - Limit                 |                  |                   |                      |                |              |              |             |             |                      |                   |                |

### Horizontal Plot – 1-8GHz – Low Channel

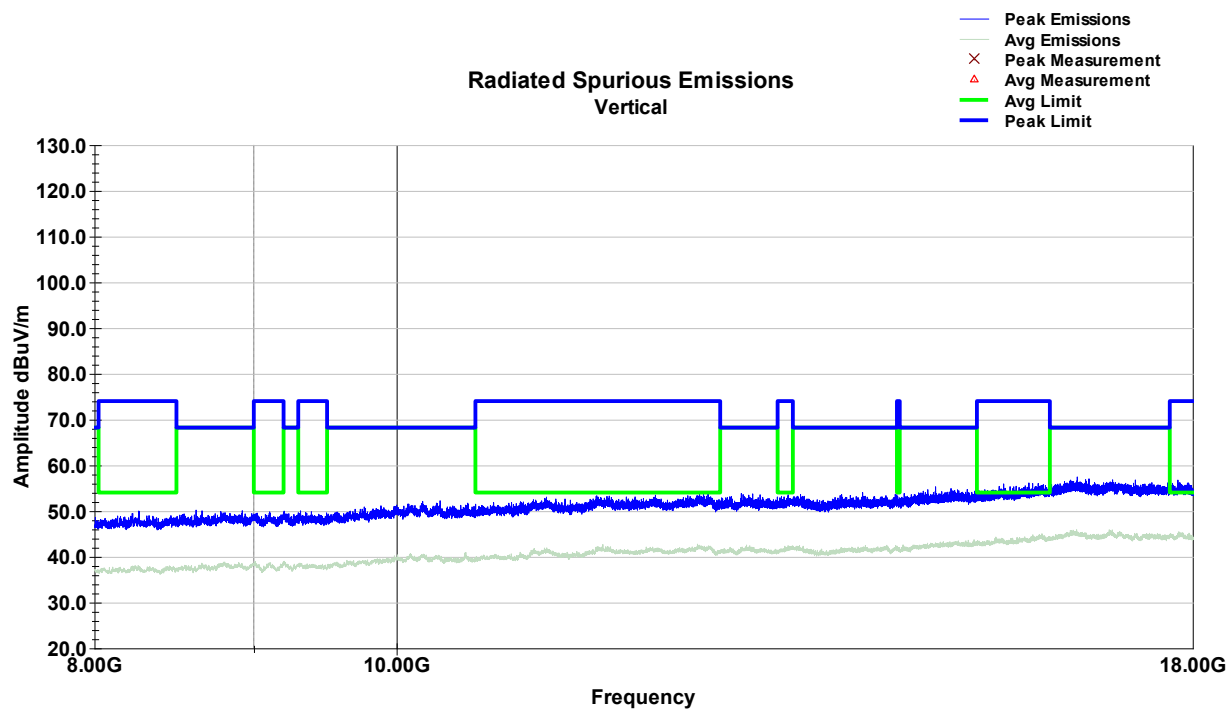


### Horizontal Data – 1-8GHz – Low Channel

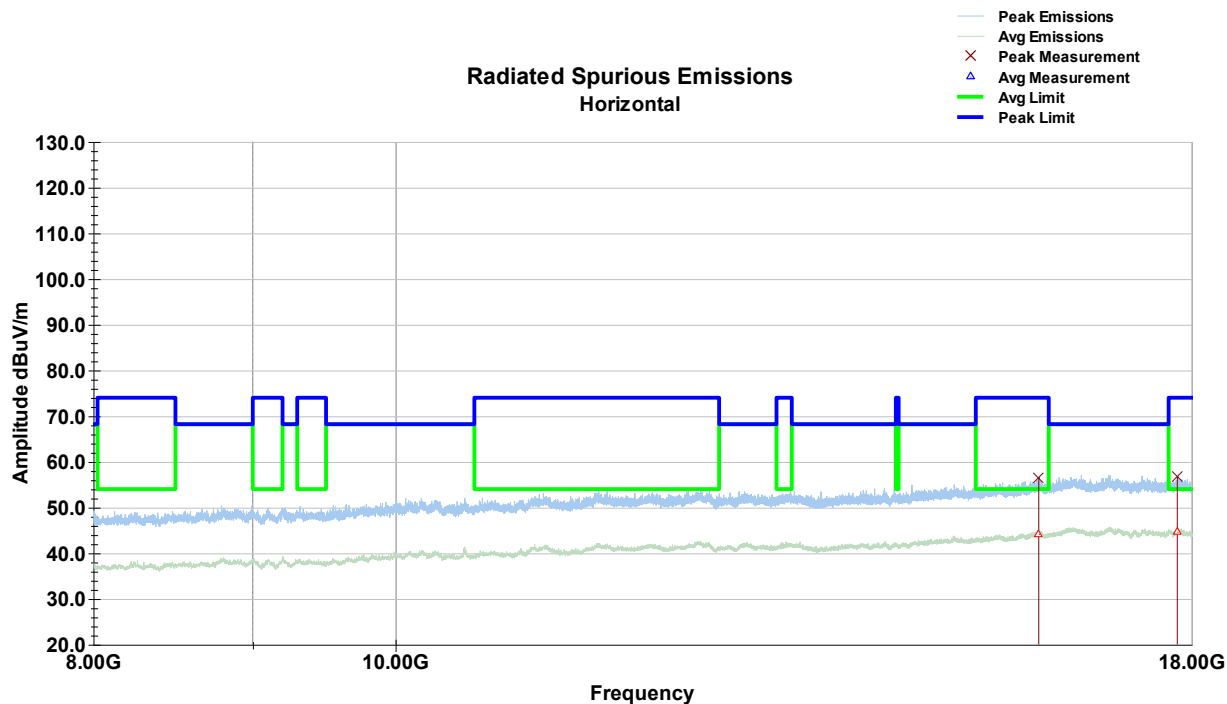
| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Avg Value<br>dBuV/m | Limit<br>(dBuV/m) | Margin<br>(dB) |
|---------------------------------------------|-----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|---------------------|-------------------|----------------|
| 1200.61                                     | 32.0            | H                 | 239.0                | 122.0          | 28.6         | 1.3          | 0.0       | 34.4        | 27.5                | 54.0              | -26.5          |
| 1398.25                                     | 30.0            | H                 | 142.0                | 177.0          | 28.2         | 1.6          | 0.0       | 34.3        | 25.5                | 54.0              | -28.5          |
| 3942.43                                     | 34.2            | H                 | 217.0                | 194.0          | 33.4         | 2.7          | 0.0       | 34.4        | 35.8                | 54.0              | -18.2          |
| 4605.29                                     | 33.8            | H                 | 167.0                | 179.0          | 34.7         | 3.0          | 0.0       | 34.2        | 37.4                | 54.0              | -16.6          |
|                                             |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Margin = Final Avg - Limit                  |                 |                   |                      |                |              |              |           |             |                     |                   |                |

| Frequency<br>MHz                          | Raw Pk<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Final Pk<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------------|----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|--------------------|-----------------|--------------|
| 1200.61                                   | 43.4           | H                 | 239.0                | 122.0          | 28.6         | 1.3          | 0.0       | 34.4        | 38.9               | 74.0            | -35.1        |
| 1398.25                                   | 44.1           | H                 | 142.0                | 177.0          | 28.2         | 1.6          | 0.0       | 34.3        | 39.7               | 74.0            | -34.3        |
| 3942.43                                   | 46.2           | H                 | 217.0                | 194.0          | 33.4         | 2.7          | 0.0       | 34.4        | 47.8               | 74.0            | -26.2        |
| 4605.29                                   | 46.3           | H                 | 167.0                | 179.0          | 34.7         | 3.0          | 0.0       | 34.2        | 49.8               | 74.0            | -24.2        |
|                                           |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Margin = Final Pk - Limit                 |                |                   |                      |                |              |              |           |             |                    |                 |              |

### Vertical Plot – 8-18GHz – Low Channel



### Horizontal Plot – 8-18GHz – Low Channel

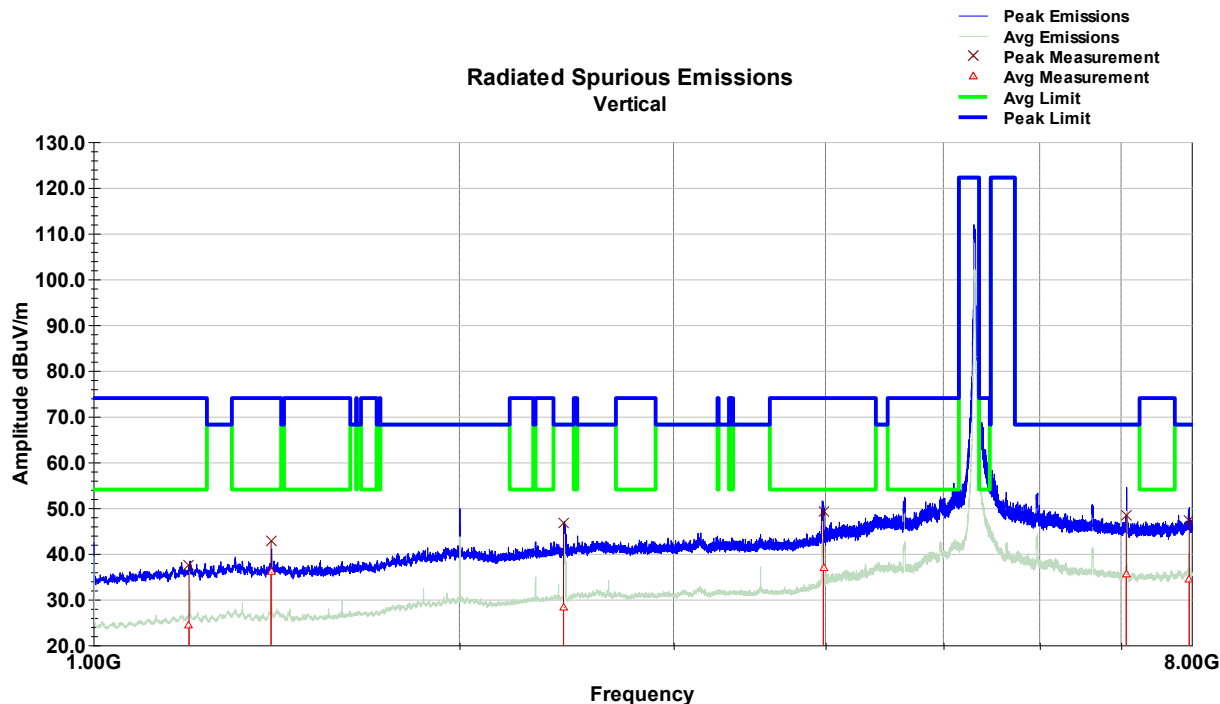


### Horizontal Data – 8-18GHz – Low Channel

| Frequency (MHz)                             | Raw Avg (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Avg (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|---------------------------------------------|----------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|--------------------|----------------|-------------|
| 16081.00                                    | 33.9           | H              | 128.0             | 200.0       | 40.9      | 5.4       | 0.0      | 35.9     | 44.3               | 54.0           | -9.7        |
| 17812.50                                    | 34.6           | H              | 18.0              | 150.0       | 41.0      | 5.7       | 0.0      | 36.6     | 44.7               | 54.0           | -9.3        |
|                                             |                |                |                   |             |           |           |          |          |                    |                |             |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                |                |                   |             |           |           |          |          |                    |                |             |
| Margin = Final Avg - Limit                  |                |                |                   |             |           |           |          |          |                    |                |             |

| Frequency (MHz)                           | Raw Pk (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Pk (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|-------------------------------------------|---------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|-------------------|----------------|-------------|
| 16081.00                                  | 46.3          | H              | 128.0             | 200.0       | 40.9      | 5.4       | 0.0      | 35.9     | 56.6              | 74.0           | -17.4       |
| 17812.50                                  | 46.7          | H              | 18.0              | 150.0       | 41.0      | 5.7       | 0.0      | 36.6     | 56.8              | 74.0           | -17.2       |
|                                           |               |                |                   |             |           |           |          |          |                   |                |             |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |               |                |                   |             |           |           |          |          |                   |                |             |
| Margin = Final Pk - Limit                 |               |                |                   |             |           |           |          |          |                   |                |             |

### Vertical Plot – 1-8GHz – Mid Channel

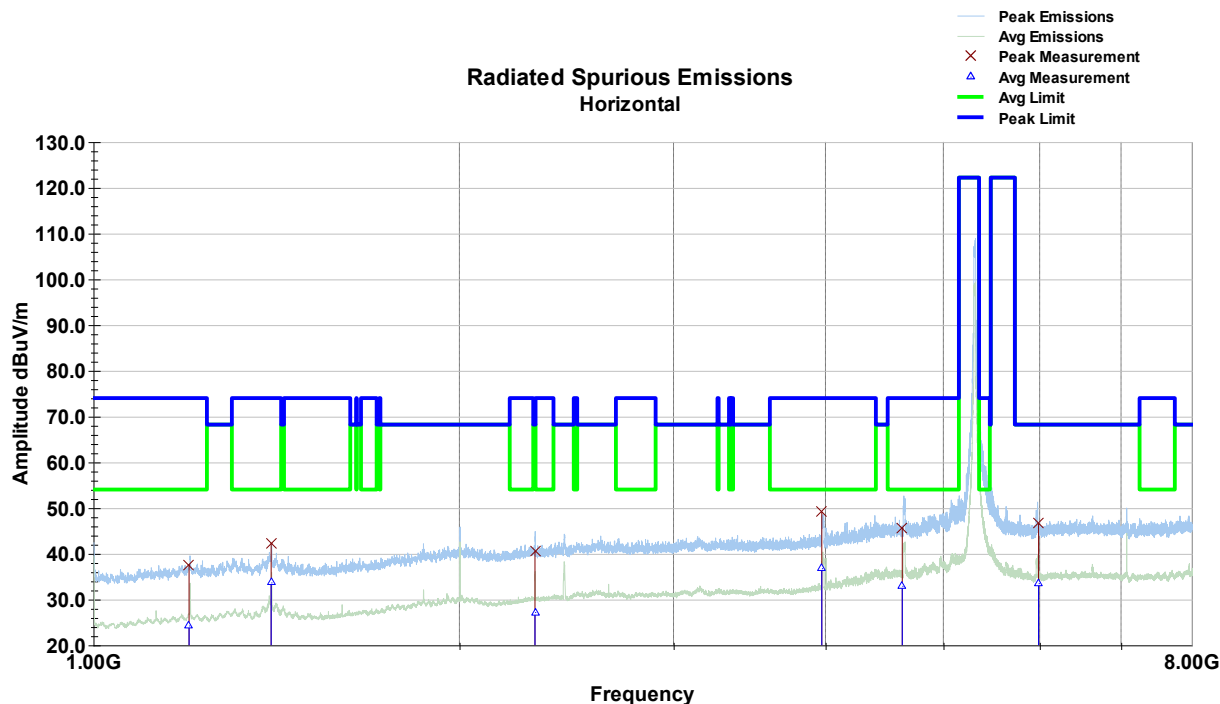


### Vertical Data – 1-8GHz – Mid Channel

| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | DCF<br>dB | Amp<br>dB | Final Avg<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|---------------------------------------------|-----------------|-----------------|--------------------|--------------|------------|------------|-----------|-----------|---------------------|-----------------|--------------|
| 1198.79                                     | 28.7            | V               | 158.0              | 139.0        | 28.6       | 1.3        | 0.0       | 34.4      | 24.3                | 54.0            | -29.7        |
| 1400.11                                     | 40.4            | V               | 30.0               | 134.0        | 28.2       | 1.6        | 0.0       | 34.2      | 36.0                | 54.0            | -18.0        |
| 2436.28                                     | 28.6            | V               | 119.0              | 149.0        | 32.3       | 2.1        | 0.0       | 34.6      | 28.3                | 68.2            | -39.9        |
| 3984.16                                     | 35.1            | V               | 247.0              | 209.0        | 33.4       | 2.7        | 0.0       | 34.4      | 36.8                | 54.0            | -17.2        |
| 7068.85                                     | 31.1            | V               | 241.0              | 195.0        | 35.8       | 3.3        | 0.0       | 34.6      | 35.6                | 68.2            | -32.6        |
| 7963.74                                     | 29.6            | V               | 150.0              | 225.0        | 35.8       | 3.6        | 0.0       | 34.6      | 34.3                | 68.2            | -33.9        |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Margin = Final Avg - Limit                  |                 |                 |                    |              |            |            |           |           |                     |                 |              |

| Frequency<br>MHz                          | Raw Pk<br>(dBuV) | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>(dB) | Amp<br>(dB) | Final Pk<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) |
|-------------------------------------------|------------------|-------------------|----------------------|----------------|--------------|--------------|-------------|-------------|----------------------|-------------------|----------------|
| 1198.79                                   | 42.1             | V                 | 158.0                | 139.0          | 28.6         | 1.3          | 0.0         | 34.4        | 37.6                 | 74.0              | -36.4          |
| 1400.11                                   | 47.1             | V                 | 30.0                 | 134.0          | 28.2         | 1.6          | 0.0         | 34.2        | 42.7                 | 74.0              | -31.3          |
| 2436.28                                   | 46.9             | V                 | 119.0                | 149.0          | 32.3         | 2.1          | 0.0         | 34.6        | 46.6                 | 68.2              | -21.6          |
| 3984.16                                   | 47.4             | V                 | 247.0                | 209.0          | 33.4         | 2.7          | 0.0         | 34.4        | 49.1                 | 74.0              | -24.9          |
| 7068.85                                   | 43.8             | V                 | 241.0                | 195.0          | 35.8         | 3.3          | 0.0         | 34.6        | 48.3                 | 68.2              | -19.9          |
| 7963.74                                   | 42.4             | V                 | 150.0                | 225.0          | 35.8         | 3.6          | 0.0         | 34.6        | 47.2                 | 68.2              | -21.0          |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Margin = Final Pk - Limit                 |                  |                   |                      |                |              |              |             |             |                      |                   |                |

### Horizontal Plot – 1-8GHz – Mid Channel

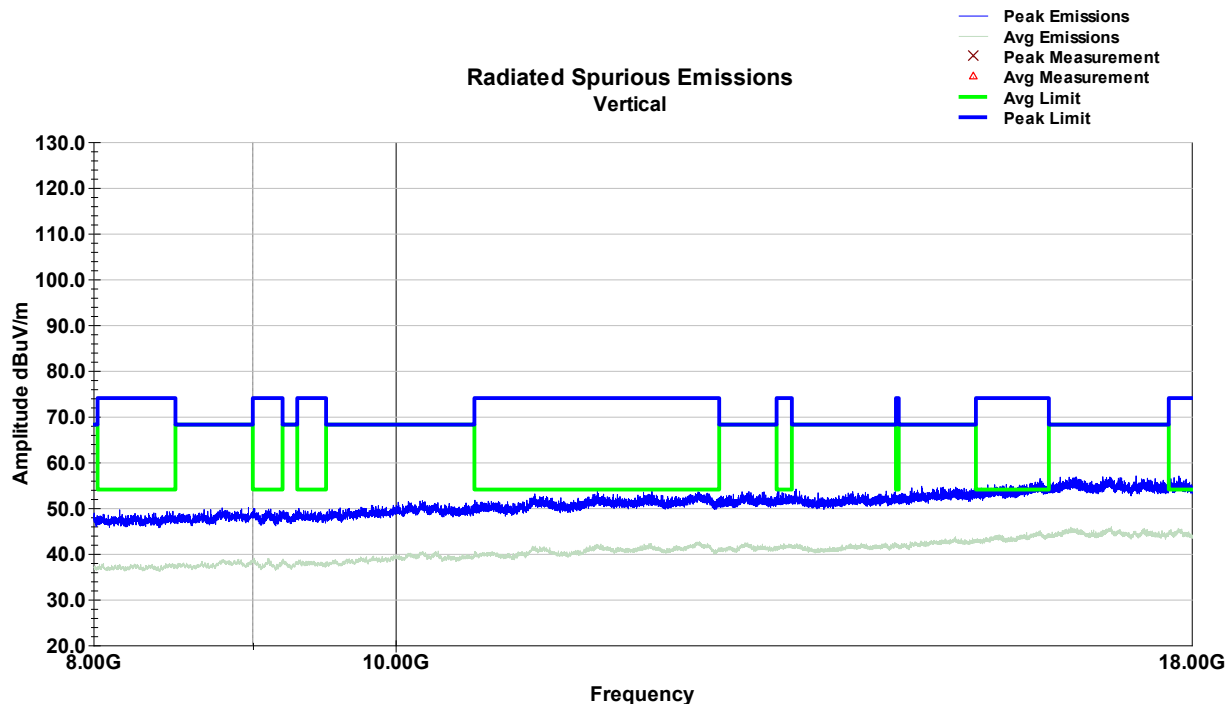


### Horizontal Data – 1-8GHz – Mid Channel

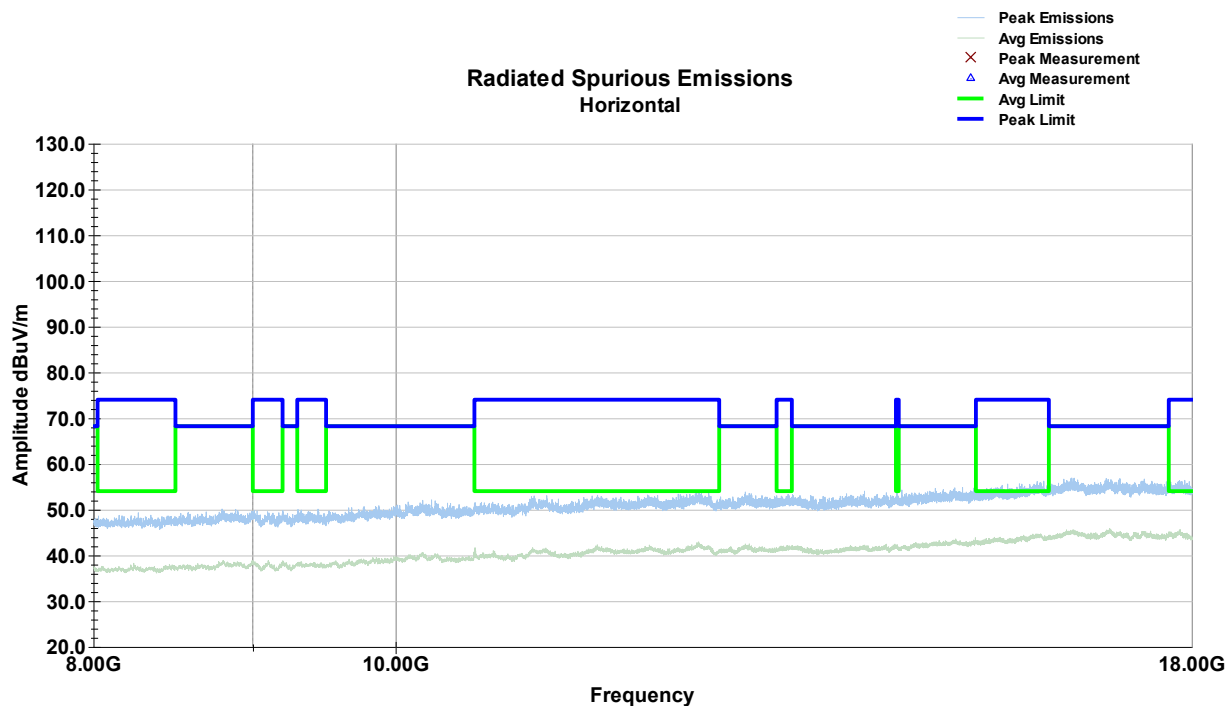
| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Avg Value<br>dBuV/m | Limit<br>(dBuV/m) | Margin<br>(dB) |
|---------------------------------------------|-----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|---------------------|-------------------|----------------|
| 1198.80                                     | 28.8            | H                 | 215.0                | 233.0          | 28.6         | 1.3          | 0.0       | 34.4        | 24.3                | 54.0              | -29.7          |
| 1400.36                                     | 38.2            | H                 | 183.0                | 195.0          | 28.2         | 1.6          | 0.0       | 34.2        | 33.7                | 54.0              | -20.3          |
| 2307.49                                     | 27.7            | H                 | 323.0                | 145.0          | 31.9         | 2.0          | 0.0       | 34.4        | 27.3                | 68.2              | -40.9          |
| 3972.28                                     | 35.2            | H                 | 187.0                | 120.0          | 33.4         | 2.7          | 0.0       | 34.4        | 36.9                | 54.0              | -17.1          |
| 4626.19                                     | 29.5            | H                 | 231.0                | 127.0          | 34.7         | 3.0          | 0.0       | 34.2        | 33.0                | 54.0              | -21.0          |
| 5987.92                                     | 29.5            | H                 | 44.0                 | 134.0          | 35.2         | 3.2          | 0.0       | 34.3        | 33.6                | 68.2              | -34.6          |
|                                             |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Margin = Final Avg - Limit                  |                 |                   |                      |                |              |              |           |             |                     |                   |                |

| Frequency<br>MHz                          | Raw Pk<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Final Pk<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------------|----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|--------------------|-----------------|--------------|
| 1198.80                                   | 42.1           | H                 | 215.0                | 233.0          | 28.6         | 1.3          | 0.0       | 34.4        | 37.6               | 74.0            | -36.4        |
| 1400.36                                   | 46.8           | H                 | 183.0                | 195.0          | 28.2         | 1.6          | 0.0       | 34.2        | 42.4               | 74.0            | -31.6        |
| 2307.49                                   | 41.0           | H                 | 323.0                | 145.0          | 31.9         | 2.0          | 0.0       | 34.4        | 40.6               | 68.2            | -27.6        |
| 3972.28                                   | 47.5           | H                 | 187.0                | 120.0          | 33.4         | 2.7          | 0.0       | 34.4        | 49.2               | 74.0            | -24.8        |
| 4626.19                                   | 42.2           | H                 | 231.0                | 127.0          | 34.7         | 3.0          | 0.0       | 34.2        | 45.7               | 74.0            | -28.3        |
| 5987.92                                   | 42.5           | H                 | 44.0                 | 134.0          | 35.2         | 3.2          | 0.0       | 34.3        | 46.6               | 68.2            | -21.6        |
|                                           |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Margin = Final Pk - Limit                 |                |                   |                      |                |              |              |           |             |                    |                 |              |

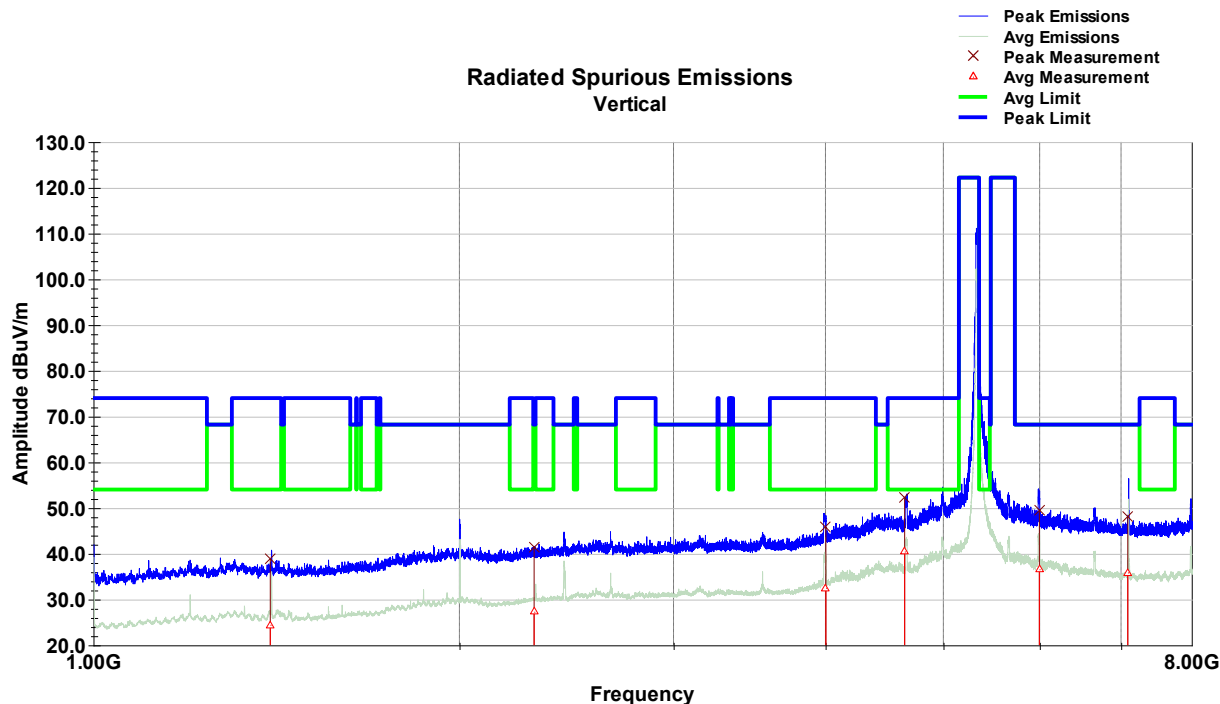
### Vertical Plot – 8-18GHz – Mid Channel



### Horizontal Plot – 8-18GHz – Mid Channel



### Vertical Plot – 1-8GHz – High Channel

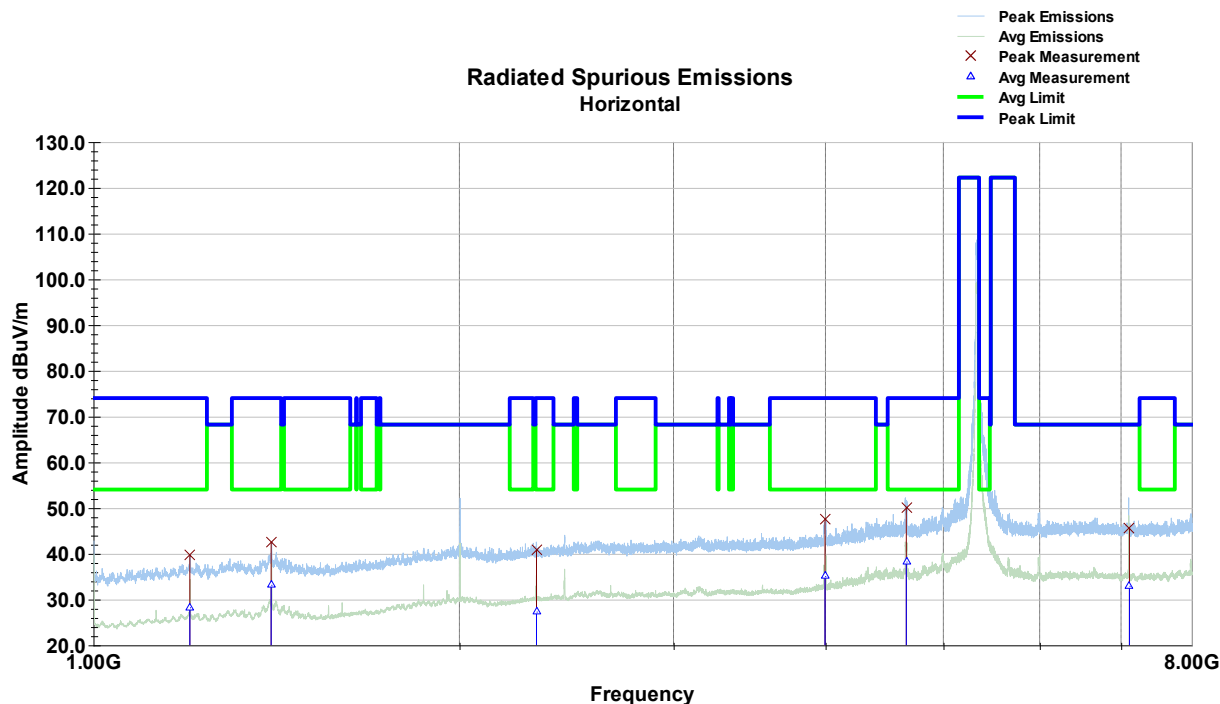


### Vertical Data – 1-8GHz – High Channel

| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | DCF<br>dB | Amp<br>dB | Final Avg<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|---------------------------------------------|-----------------|-----------------|--------------------|--------------|------------|------------|-----------|-----------|---------------------|-----------------|--------------|
| 1398.00                                     | 28.9            | V               | 169.0              | 116.0        | 28.2       | 1.6        | 0.0       | 34.3      | 24.5                | 54.0            | -29.5        |
| 2304.00                                     | 27.8            | V               | 280.0              | 113.0        | 31.9       | 2.0        | 0.0       | 34.4      | 27.3                | 68.2            | -40.9        |
| 4002.47                                     | 30.9            | V               | 176.0              | 138.0        | 33.4       | 2.7        | 0.0       | 34.4      | 32.6                | 54.0            | -21.4        |
| 4647.41                                     | 37.0            | V               | 284.0              | 246.0        | 34.7       | 3.0        | 0.0       | 34.2      | 40.5                | 54.0            | -13.5        |
| 5997.19                                     | 32.5            | V               | 237.0              | 234.0        | 35.2       | 3.2        | 0.0       | 34.3      | 36.6                | 68.2            | -31.6        |
| 7090.22                                     | 31.9            | V               | 220.0              | 100.0        | 35.8       | 3.3        | 0.0       | 35.0      | 35.9                | 68.2            | -32.3        |
|                                             |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Margin = Final Avg - Limit                  |                 |                 |                    |              |            |            |           |           |                     |                 |              |

| Frequency<br>MHz                          | Raw Pk<br>(dBuV) | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>(dB) | Amp<br>(dB) | Final Pk<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) |
|-------------------------------------------|------------------|-------------------|----------------------|----------------|--------------|--------------|-------------|-------------|----------------------|-------------------|----------------|
| 1398.00                                   | 43.3             | V                 | 169.0                | 116.0          | 28.2         | 1.6          | 0.0         | 34.3        | 38.8                 | 74.0              | -35.2          |
| 2304.00                                   | 41.8             | V                 | 280.0                | 113.0          | 31.9         | 2.0          | 0.0         | 34.4        | 41.3                 | 68.2              | -26.9          |
| 4002.47                                   | 44.1             | V                 | 176.0                | 138.0          | 33.4         | 2.7          | 0.0         | 34.4        | 45.8                 | 74.0              | -28.2          |
| 4647.41                                   | 48.8             | V                 | 284.0                | 246.0          | 34.7         | 3.0          | 0.0         | 34.2        | 52.3                 | 74.0              | -21.7          |
| 5997.19                                   | 45.3             | V                 | 237.0                | 234.0          | 35.2         | 3.2          | 0.0         | 34.3        | 49.4                 | 68.2              | -18.8          |
| 7090.22                                   | 44.1             | V                 | 220.0                | 100.0          | 35.8         | 3.3          | 0.0         | 35.0        | 48.2                 | 68.2              | -20.0          |
|                                           |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Margin = Final Pk - Limit                 |                  |                   |                      |                |              |              |             |             |                      |                   |                |

### Horizontal Plot – 1-8GHz – High Channel

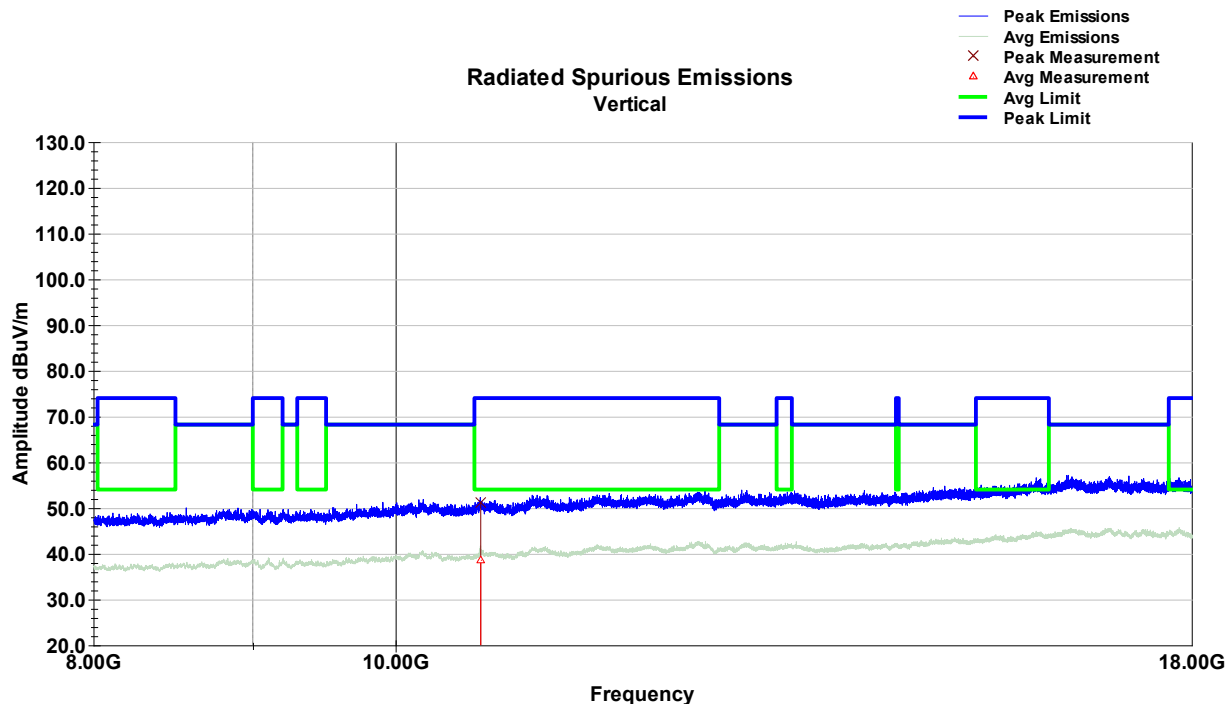


### Horizontal Data – 1-8GHz – High Channel

| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Avg Value<br>dBuV/m | Limit<br>(dBuV/m) | Margin<br>(dB) |
|---------------------------------------------|-----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|---------------------|-------------------|----------------|
| 1200.61                                     | 32.8            | H                 | 124.0                | 111.0          | 28.6         | 1.3          | 0.0       | 34.4        | 28.3                | 54.0              | -25.7          |
| 1400.36                                     | 37.6            | H                 | -1.0                 | 173.0          | 28.2         | 1.6          | 0.0       | 34.2        | 33.2                | 54.0              | -20.8          |
| 2314.46                                     | 27.9            | H                 | 360.0                | 105.0          | 31.9         | 2.1          | 0.0       | 34.4        | 27.4                | 54.0              | -26.6          |
| 3996.33                                     | 33.5            | H                 | 167.0                | 105.0          | 33.4         | 2.7          | 0.0       | 34.4        | 35.1                | 54.0              | -18.9          |
| 4661.22                                     | 34.8            | H                 | 204.0                | 105.0          | 34.7         | 3.1          | 0.0       | 34.2        | 38.3                | 54.0              | -15.7          |
| 7111.78                                     | 28.9            | H                 | 305.0                | 245.0          | 35.8         | 3.3          | 0.0       | 35.0        | 33.0                | 68.2              | -35.2          |
|                                             |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Margin = Final Avg - Limit                  |                 |                   |                      |                |              |              |           |             |                     |                   |                |

| Frequency<br>MHz                          | Raw Pk<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Final Pk<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------------|----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|--------------------|-----------------|--------------|
| 1200.61                                   | 44.1           | H                 | 124.0                | 111.0          | 28.6         | 1.3          | 0.0       | 34.4        | 39.6               | 74.0            | -34.4        |
| 1400.36                                   | 47.0           | H                 | -1.0                 | 173.0          | 28.2         | 1.6          | 0.0       | 34.2        | 42.5               | 74.0            | -31.5        |
| 2314.46                                   | 41.4           | H                 | 360.0                | 105.0          | 31.9         | 2.1          | 0.0       | 34.4        | 40.9               | 74.0            | -33.1        |
| 3996.33                                   | 45.9           | H                 | 167.0                | 105.0          | 33.4         | 2.7          | 0.0       | 34.4        | 47.6               | 74.0            | -26.4        |
| 4661.22                                   | 46.6           | H                 | 204.0                | 105.0          | 34.7         | 3.1          | 0.0       | 34.2        | 50.2               | 74.0            | -23.8        |
| 7111.78                                   | 41.4           | H                 | 305.0                | 245.0          | 35.8         | 3.3          | 0.0       | 35.0        | 45.5               | 68.2            | -22.7        |
|                                           |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Margin = Final Pk - Limit                 |                |                   |                      |                |              |              |           |             |                    |                 |              |

### Vertical Plot – 8-18GHz – High Channel

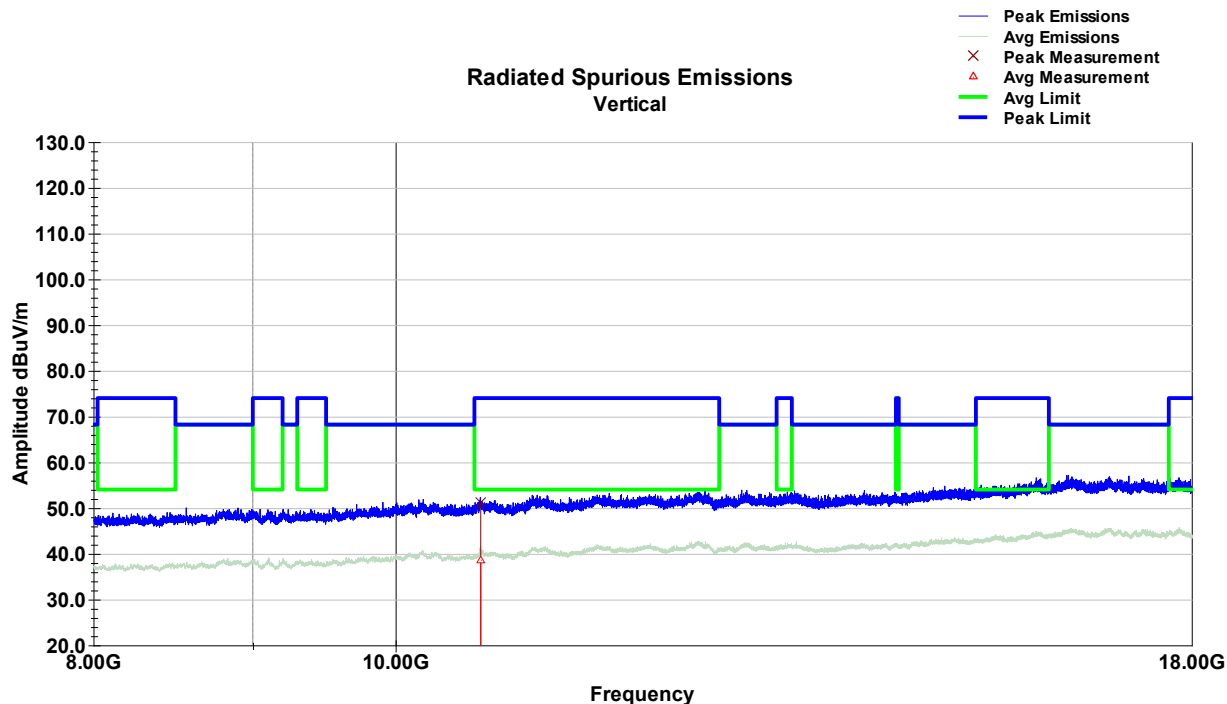


### Vertical Data – 8-18GHz – High Channel

| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | DCF<br>dB | Amp<br>dB | Final Avg<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|---------------------------------------------|-----------------|-----------------|--------------------|--------------|------------|------------|-----------|-----------|---------------------|-----------------|--------------|
| 10649.72                                    | 31.5            | V               | 330.0              | 247.0        | 38.2       | 4.4        | 0.0       | 35.4      | 38.7                | 54.0            | -15.3        |
|                                             |                 |                 |                    |              |            |            |           |           |                     |                 |              |
|                                             |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Margin = Final Avg - Limit                  |                 |                 |                    |              |            |            |           |           |                     |                 |              |

| Frequency<br>MHz                          | Raw Pk<br>(dBuV) | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>(dB) | Amp<br>(dB) | Final Pk<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) |
|-------------------------------------------|------------------|-------------------|----------------------|----------------|--------------|--------------|-------------|-------------|----------------------|-------------------|----------------|
| 10649.72                                  | 43.9             | V                 | 330.0                | 247.0          | 38.2         | 4.4          | 0.0         | 35.4        | 51.1                 | 74.0              | -22.9          |
|                                           |                  |                   |                      |                |              |              |             |             |                      |                   |                |
|                                           |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Margin = Final Pk - Limit                 |                  |                   |                      |                |              |              |             |             |                      |                   |                |

### Horizontal Plot – 8-18GHz – High Channel



### Horizontal Data – 8-18GHz – High Channel

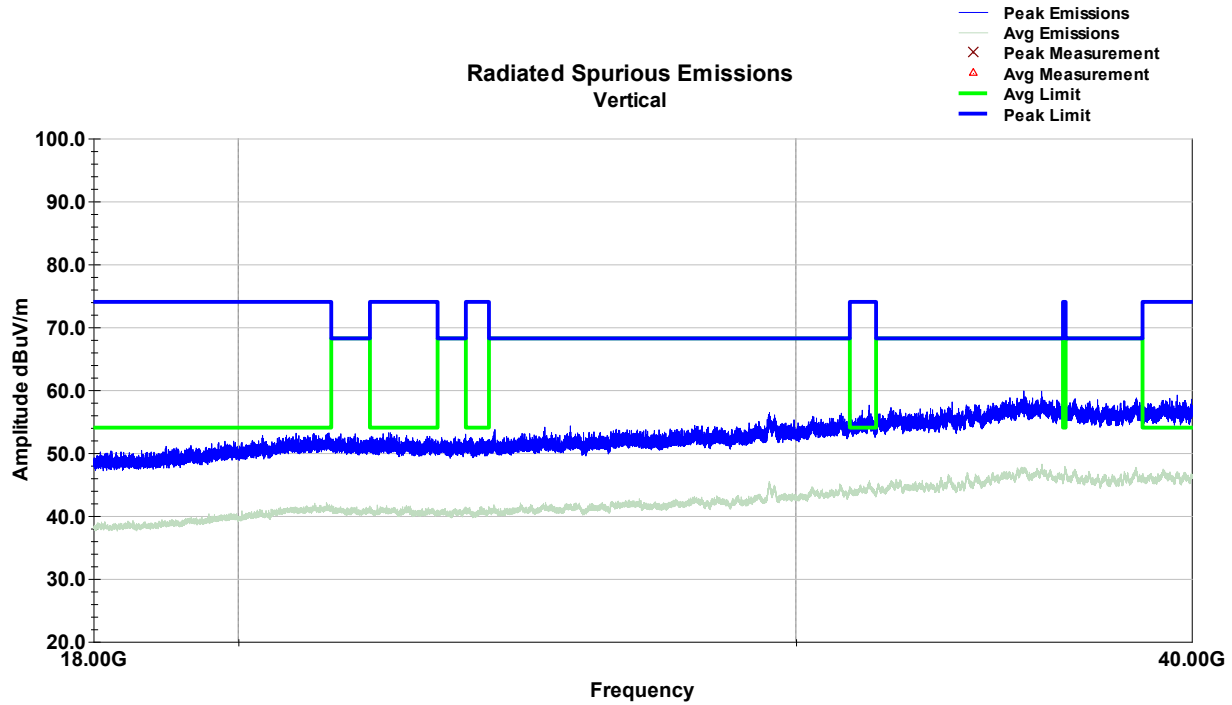
| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Avg Value<br>dBuV/m | Limit<br>(dBuV/m) | Margin<br>(dB) |
|---------------------------------------------|-----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|---------------------|-------------------|----------------|
| 10636.95                                    | 33.2            | H                 | 86.0                 | 202.0          | 38.2         | 4.4          | 0.0       | 35.4        | 40.4                | 54.0              | -13.6          |
|                                             |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Margin = Final Avg - Limit                  |                 |                   |                      |                |              |              |           |             |                     |                   |                |

| Frequency<br>MHz                          | Raw Pk<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Final Pk<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------------|----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|--------------------|-----------------|--------------|
| 10636.95                                  | 45.4           | H                 | 86.0                 | 202.0          | 38.2         | 4.4          | 0.0       | 35.4        | 52.6               | 74.0            | -21.4        |
|                                           |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Margin = Final Pk - Limit                 |                |                   |                      |                |              |              |           |             |                    |                 |              |

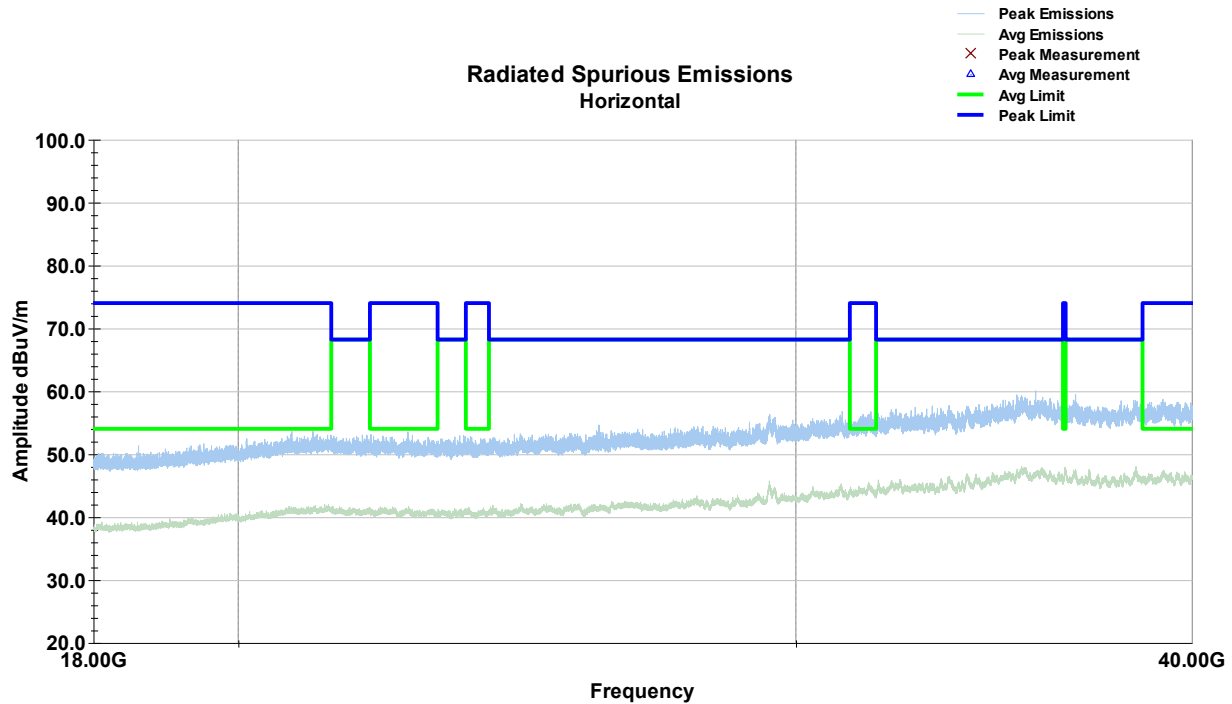
### 3.9.4 18-40 GHz

All channels had similar plots in the 18-40GHz frequency range.

Vertical Plot – 18-40GHz – Mid Channel



Horizontal Plot – 18-40GHz – Mid Channel

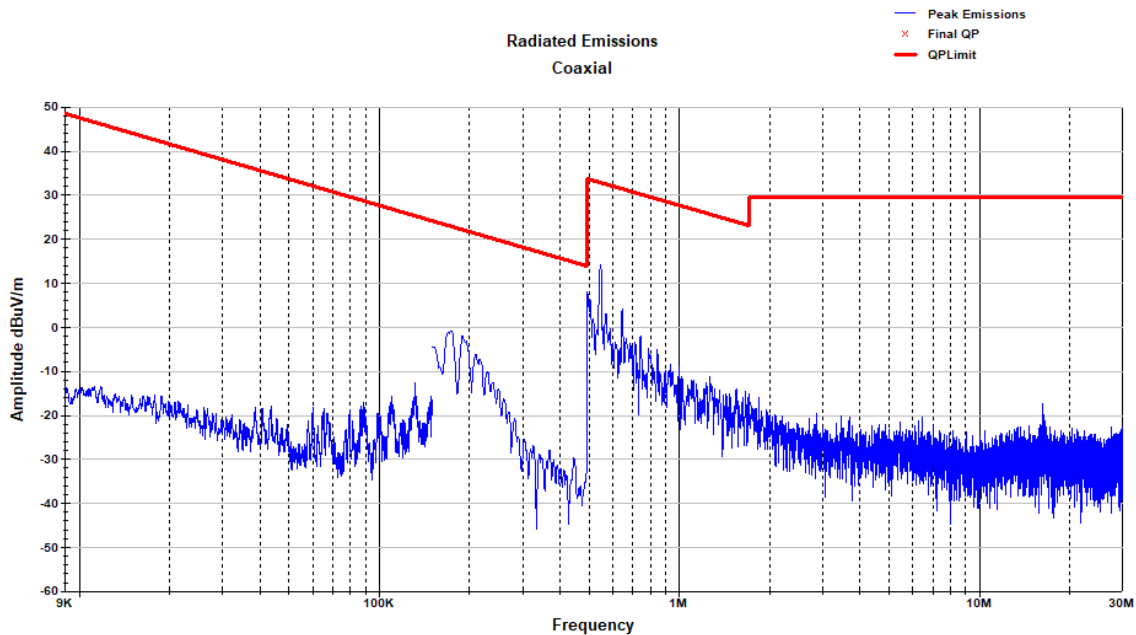


### 3.10 Test Data – U-NII Band 2A – 802.11ac

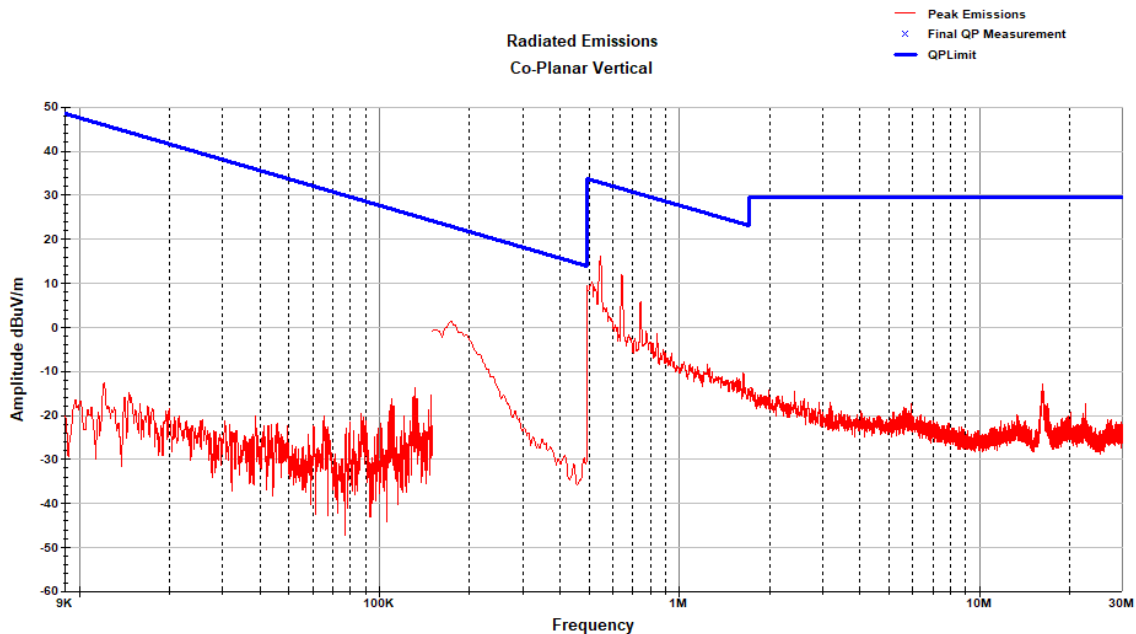
#### 3.10.1 9kHz – 30MHz

All channels had similar plots in the 9kHz to 30MHz frequency range.

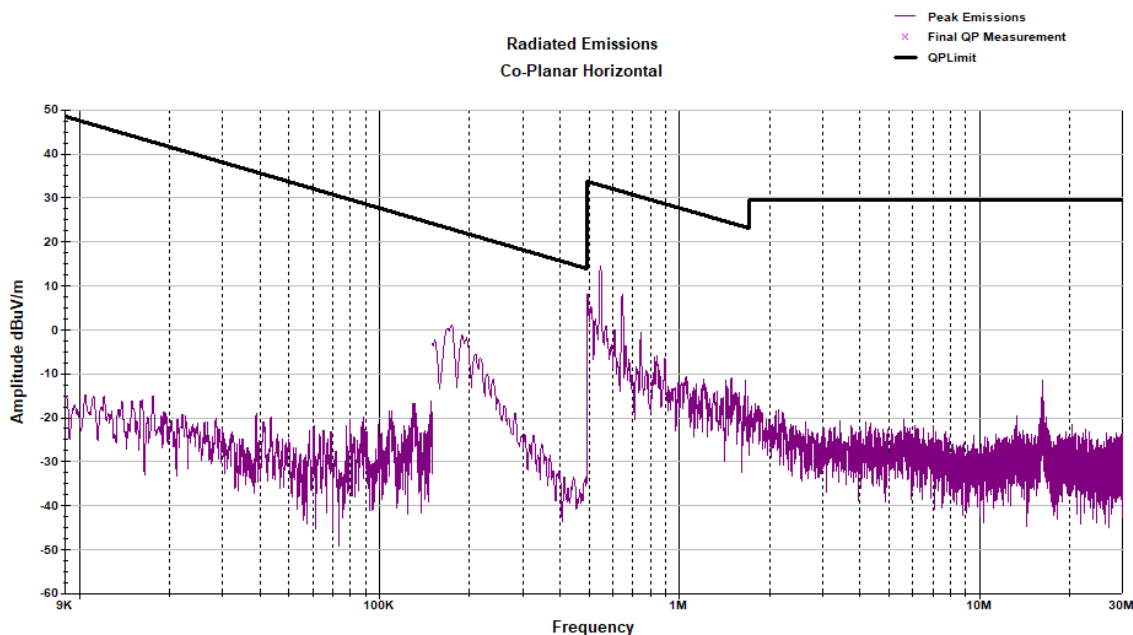
Coaxial Plot – 9 kHz-30MHz – Mid Channel



Co-Planar Vertical Plot – 9 kHz-30MHz – Mid Channel



### Co-Planar Horizontal Plot – 9 kHz-30MHz – Mid Channel

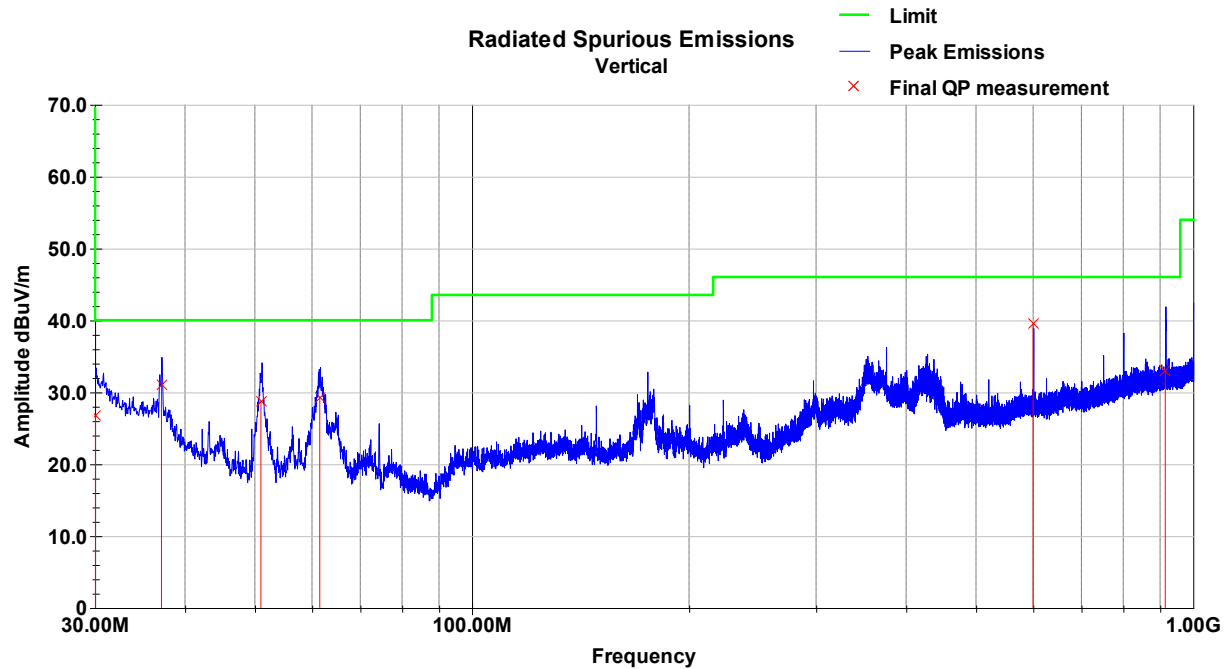


No emissions within 20dB of the limit

### 3.10.2 30-1000 MHz

All channels were measured and had similar plots – the worst-case plots are shown below.

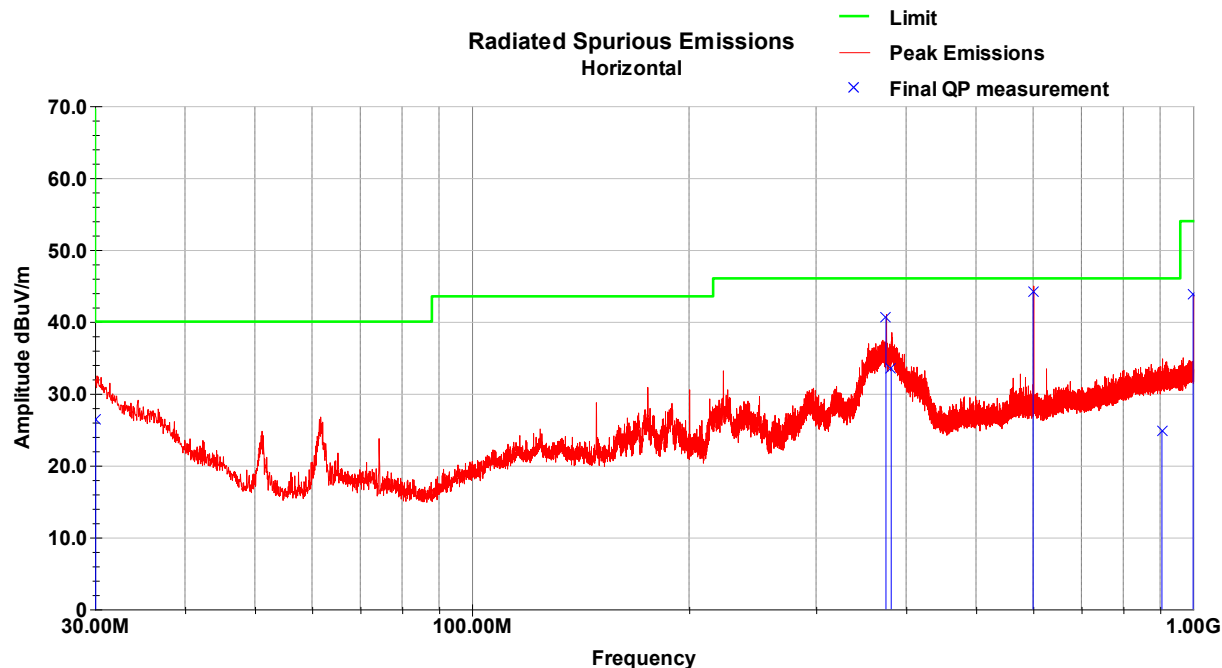
Vertical Plot – 30-1000MHz – Mid Channel



Vertical Data – 30-1000MHz – Mid Channel

| Frequency<br>MHz                    | Raw QP<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | Amp<br>dB | QP Value<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------|----------------|-----------------|--------------------|--------------|------------|------------|-----------|--------------------|-----------------|--------------|
| 30.05                               | 30.9           | V               | 162.0              | 157.0        | 26.2       | 0.3        | 30.6      | 26.7               | 100.0           | -13.3        |
| 37.11                               | 40.7           | V               | 137.0              | 100.0        | 20.6       | 0.3        | 30.6      | 31.0               | 100.0           | -9.0         |
| 50.98                               | 46.7           | V               | 298.0              | 100.0        | 12.4       | 0.4        | 30.7      | 28.8               | 100.0           | -11.2        |
| 61.51                               | 47.9           | V               | 319.0              | 100.0        | 11.7       | 0.5        | 30.8      | 29.3               | 100.0           | -10.7        |
| 600.00                              | 43.4           | V               | 81.0               | 116.0        | 23.8       | 1.9        | 29.7      | 39.5               | 100.0           | -6.5         |
| 915.15                              | 32.6           | V               | 265.0              | 382.0        | 27.2       | 2.1        | 28.9      | 33.0               | 100.0           | -13.1        |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
| QP Value = Raw QP + AF + Loss - Amp |                |                 |                    |              |            |            |           |                    |                 |              |
| Margin = QP Value - Limit           |                |                 |                    |              |            |            |           |                    |                 |              |

### Horizontal Plot – 30-1000MHz – Mid Channel

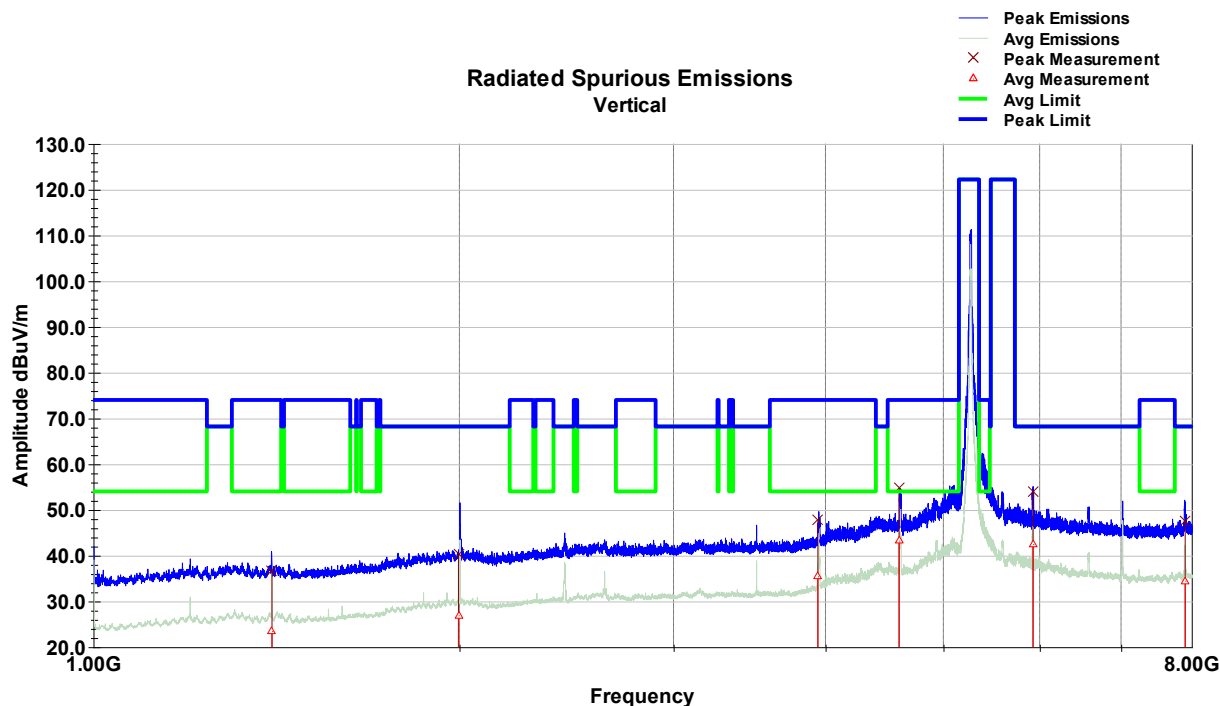


### Horizontal Data – 30-1000MHz – Mid Channel

| Frequency<br>MHz                    | Raw QP<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | Amp<br>dB | QP Value<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------|----------------|-----------------|--------------------|--------------|------------|------------|-----------|--------------------|-----------------|--------------|
| 30.08                               | 30.6           | H               | 46.0               | 100.0        | 26.1       | 0.3        | 30.6      | 26.4               | 100.0           | -13.6        |
| 375.00                              | 49.3           | H               | 350.0              | 227.0        | 19.7       | 1.6        | 30.1      | 40.6               | 100.0           | -5.4         |
| 381.40                              | 42.0           | H               | 146.0              | 100.0        | 19.9       | 1.6        | 30.1      | 33.5               | 100.0           | -12.5        |
| 600.01                              | 48.0           | H               | 243.0              | 100.0        | 23.8       | 1.9        | 29.7      | 44.1               | 100.0           | -1.9         |
| 905.34                              | 24.4           | H               | 348.0              | 288.0        | 27.2       | 2.1        | 28.8      | 24.9               | 100.0           | -21.2        |
| 1000.00                             | 42.1           | H               | 133.0              | 100.0        | 28.1       | 2.2        | 28.7      | 43.8               | 54.0            | -10.2        |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
|                                     |                |                 |                    |              |            |            |           |                    |                 |              |
| QP Value = Raw QP + AF + Loss - Amp |                |                 |                    |              |            |            |           |                    |                 |              |
| Margin = QP Value - Limit           |                |                 |                    |              |            |            |           |                    |                 |              |

### 3.10.3 1-18 GHz

#### Vertical Plot – 1-8GHz – Low Channel

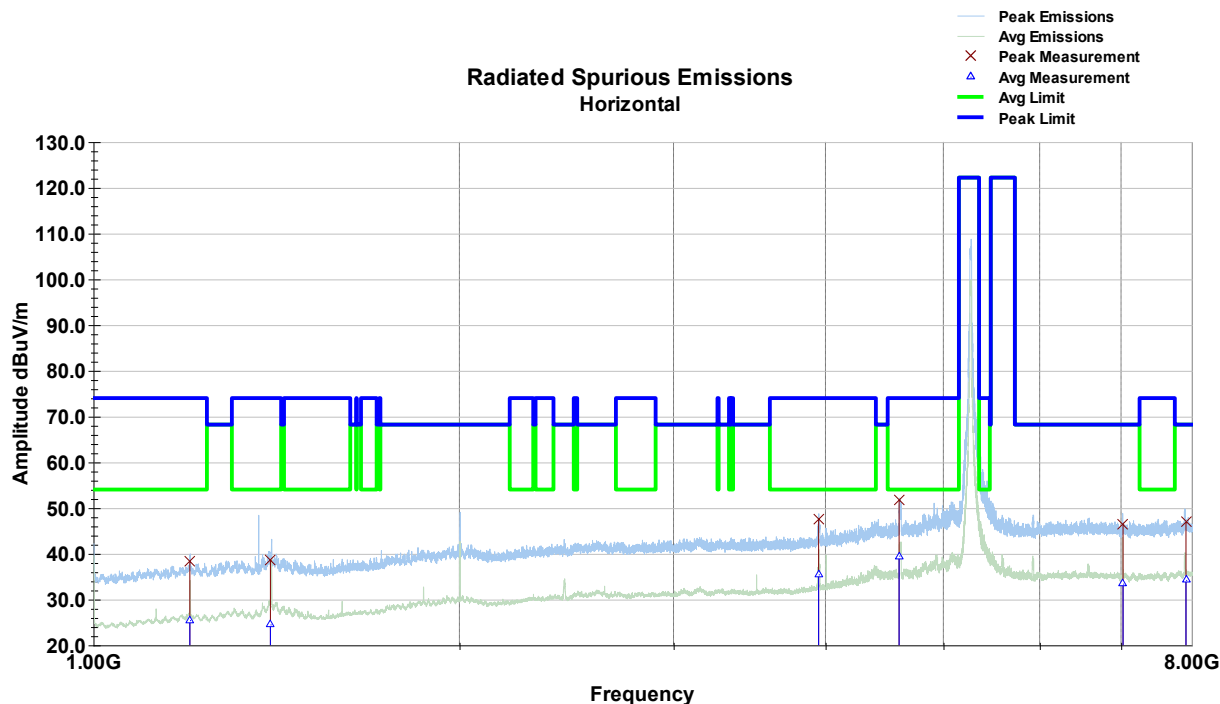


#### Vertical Data – 1-8GHz – Low Channel

| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>V/H | Azimuth<br>degrees | Height<br>cm | AF<br>dB/m | Loss<br>dB | DCF<br>dB | Amp<br>dB | Final Avg<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|---------------------------------------------|-----------------|-----------------|--------------------|--------------|------------|------------|-----------|-----------|---------------------|-----------------|--------------|
| 1402.73                                     | 28.0            | V               | 15.0               | 217.0        | 28.2       | 1.6        | 0.0       | 34.3      | 23.5                | 54.0            | -30.5        |
| 1996.44                                     | 28.0            | V               | 181.0              | 192.0        | 31.7       | 1.9        | 0.0       | 34.7      | 27.0                | 68.2            | -41.2        |
| 3942.54                                     | 33.8            | V               | 253.0              | 188.0        | 33.4       | 2.7        | 0.0       | 34.4      | 35.5                | 54.0            | -18.5        |
| 4598.22                                     | 39.8            | V               | 6.0                | 180.0        | 34.7       | 3.0        | 0.0       | 34.2      | 43.3                | 54.0            | -10.7        |
| 5924.88                                     | 38.7            | V               | 264.0              | 192.0        | 35.0       | 3.1        | 0.0       | 34.4      | 42.6                | 68.2            | -25.6        |
| 7904.24                                     | 29.6            | V               | 211.0              | 242.0        | 35.8       | 3.5        | 0.0       | 34.4      | 34.5                | 68.2            | -33.7        |
|                                             |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                 |                    |              |            |            |           |           |                     |                 |              |
| Margin = Final Avg - Limit                  |                 |                 |                    |              |            |            |           |           |                     |                 |              |

| Frequency<br>MHz                          | Raw Pk<br>(dBuV) | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>(dB) | Amp<br>(dB) | Final Pk<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) |
|-------------------------------------------|------------------|-------------------|----------------------|----------------|--------------|--------------|-------------|-------------|----------------------|-------------------|----------------|
| 1402.73                                   | 41.2             | V                 | 15.0                 | 217.0          | 28.2         | 1.6          | 0.0         | 34.3        | 36.7                 | 74.0              | -37.3          |
| 1996.44                                   | 41.3             | V                 | 181.0                | 192.0          | 31.7         | 1.9          | 0.0         | 34.7        | 40.2                 | 68.2              | -28.0          |
| 3942.54                                   | 46.2             | V                 | 253.0                | 188.0          | 33.4         | 2.7          | 0.0         | 34.4        | 47.8                 | 74.0              | -26.2          |
| 4598.22                                   | 51.3             | V                 | 6.0                  | 180.0          | 34.7         | 3.0          | 0.0         | 34.2        | 54.8                 | 74.0              | -19.2          |
| 5924.88                                   | 50.2             | V                 | 264.0                | 192.0          | 35.0         | 3.1          | 0.0         | 34.4        | 54.0                 | 68.2              | -14.2          |
| 7904.24                                   | 42.8             | V                 | 211.0                | 242.0          | 35.8         | 3.5          | 0.0         | 34.4        | 47.7                 | 68.2              | -20.5          |
|                                           |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                  |                   |                      |                |              |              |             |             |                      |                   |                |
| Margin = Final Pk - Limit                 |                  |                   |                      |                |              |              |             |             |                      |                   |                |

### Horizontal Plot – 1-8GHz – Low Channel

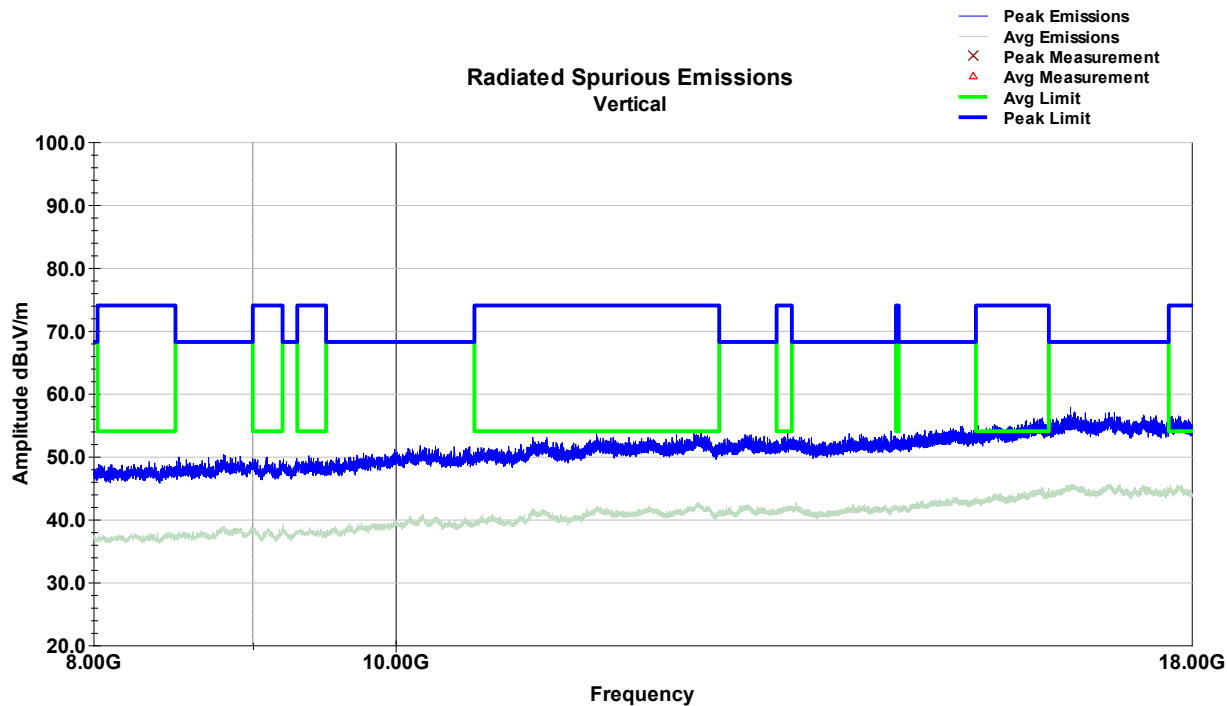


### Horizontal Data – 1-8GHz – Low Channel

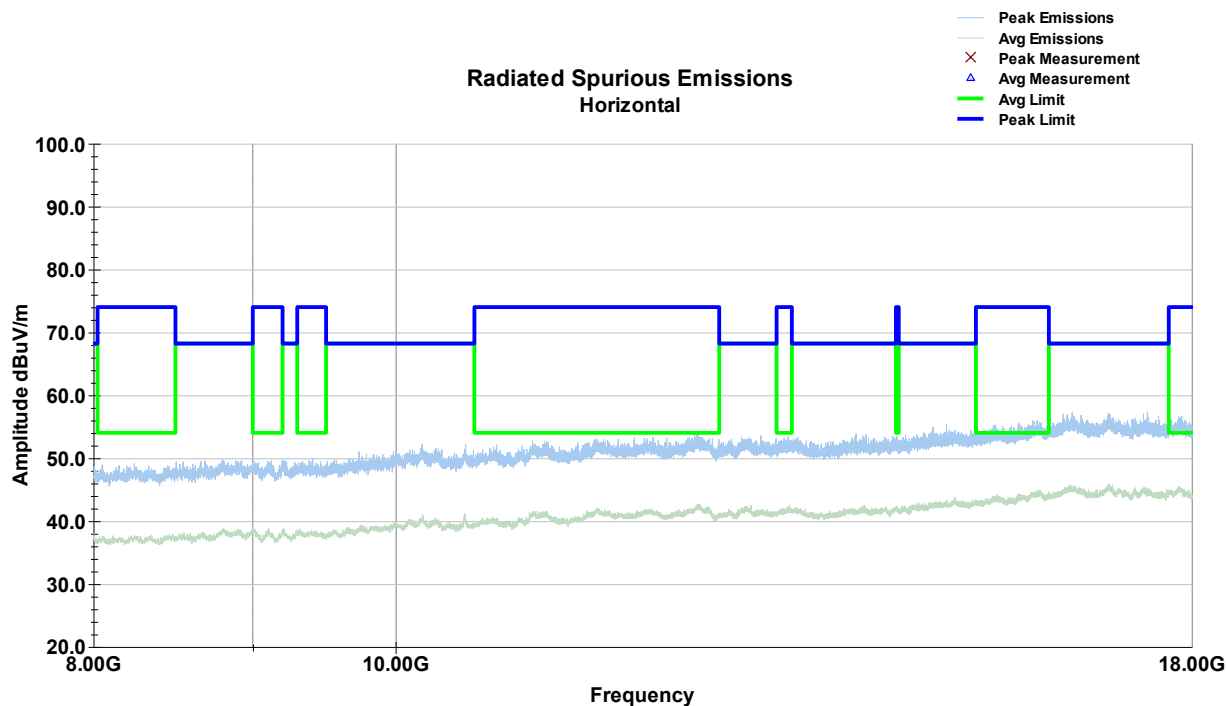
| Frequency<br>MHz                            | Raw Avg<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Avg Value<br>dBuV/m | Limit<br>(dBuV/m) | Margin<br>(dB) |
|---------------------------------------------|-----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|---------------------|-------------------|----------------|
| 1200.61                                     | 30.0            | H                 | 207.0                | 191.0          | 28.6         | 1.3          | 0.0       | 34.4        | 25.5                | 54.0              | -28.5          |
| 1398.25                                     | 29.0            | H                 | 60.0                 | 112.0          | 28.2         | 1.6          | 0.0       | 34.3        | 24.6                | 54.0              | -29.4          |
| 3948.38                                     | 33.9            | H                 | 165.0                | 246.0          | 33.4         | 2.7          | 0.0       | 34.4        | 35.5                | 54.0              | -18.5          |
| 4598.35                                     | 36.1            | H                 | 169.0                | 195.0          | 34.7         | 3.0          | 0.0       | 34.2        | 39.6                | 54.0              | -14.4          |
| 7026.45                                     | 28.9            | H                 | 144.0                | 100.0          | 35.8         | 3.4          | 0.0       | 34.6        | 33.5                | 68.2              | -34.7          |
| 7915.95                                     | 29.4            | H                 | 254.0                | 187.0          | 35.8         | 3.5          | 0.0       | 34.4        | 34.3                | 68.2              | -33.9          |
|                                             |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                 |                   |                      |                |              |              |           |             |                     |                   |                |
| Margin = Final Avg - Limit                  |                 |                   |                      |                |              |              |           |             |                     |                   |                |

| Frequency<br>MHz                          | Raw Pk<br>dBuV | Polarity<br>(V/H) | Azimuth<br>(degrees) | Height<br>(cm) | AF<br>(dB/m) | Loss<br>(dB) | DCF<br>dB | Amp<br>(dB) | Final Pk<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB |
|-------------------------------------------|----------------|-------------------|----------------------|----------------|--------------|--------------|-----------|-------------|--------------------|-----------------|--------------|
| 1200.61                                   | 42.7           | H                 | 207.0                | 191.0          | 28.6         | 1.3          | 0.0       | 34.4        | 38.3               | 74.0            | -35.7        |
| 1398.25                                   | 43.0           | H                 | 60.0                 | 112.0          | 28.2         | 1.6          | 0.0       | 34.3        | 38.6               | 74.0            | -35.4        |
| 3948.38                                   | 46.0           | H                 | 165.0                | 246.0          | 33.4         | 2.7          | 0.0       | 34.4        | 47.7               | 74.0            | -26.3        |
| 4598.35                                   | 48.1           | H                 | 169.0                | 195.0          | 34.7         | 3.0          | 0.0       | 34.2        | 51.7               | 74.0            | -22.3        |
| 7026.45                                   | 41.9           | H                 | 144.0                | 100.0          | 35.8         | 3.4          | 0.0       | 34.6        | 46.4               | 68.2            | -21.8        |
| 7915.95                                   | 42.0           | H                 | 254.0                | 187.0          | 35.8         | 3.5          | 0.0       | 34.4        | 46.9               | 68.2            | -21.3        |
|                                           |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |                |                   |                      |                |              |              |           |             |                    |                 |              |
| Margin = Final Pk - Limit                 |                |                   |                      |                |              |              |           |             |                    |                 |              |

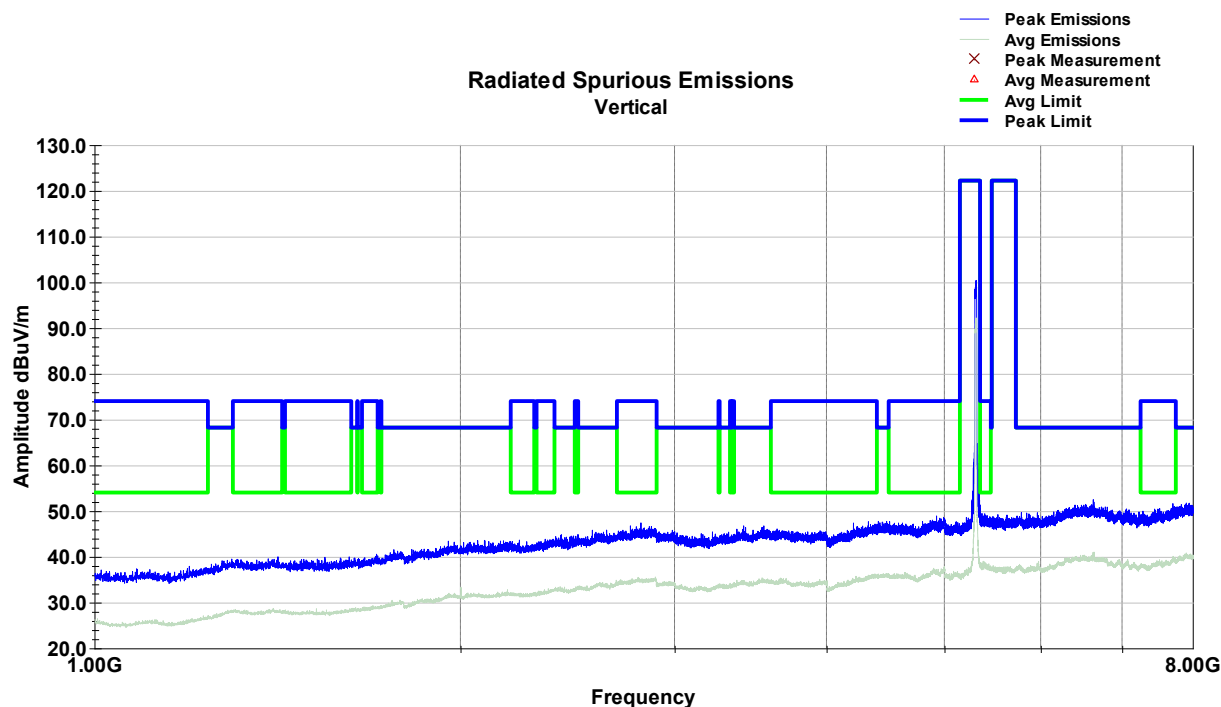
### Vertical Plot – 8-18GHz – Low Channel



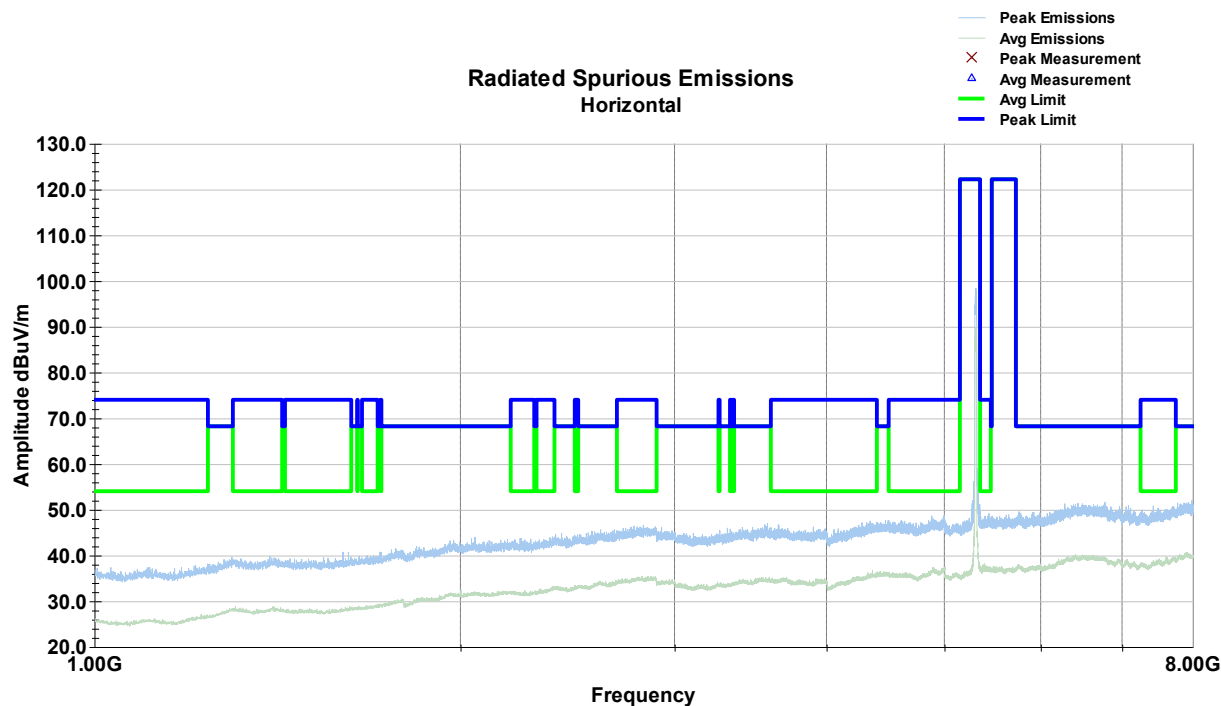
### Horizontal Plot – 8-18GHz – Low Channel



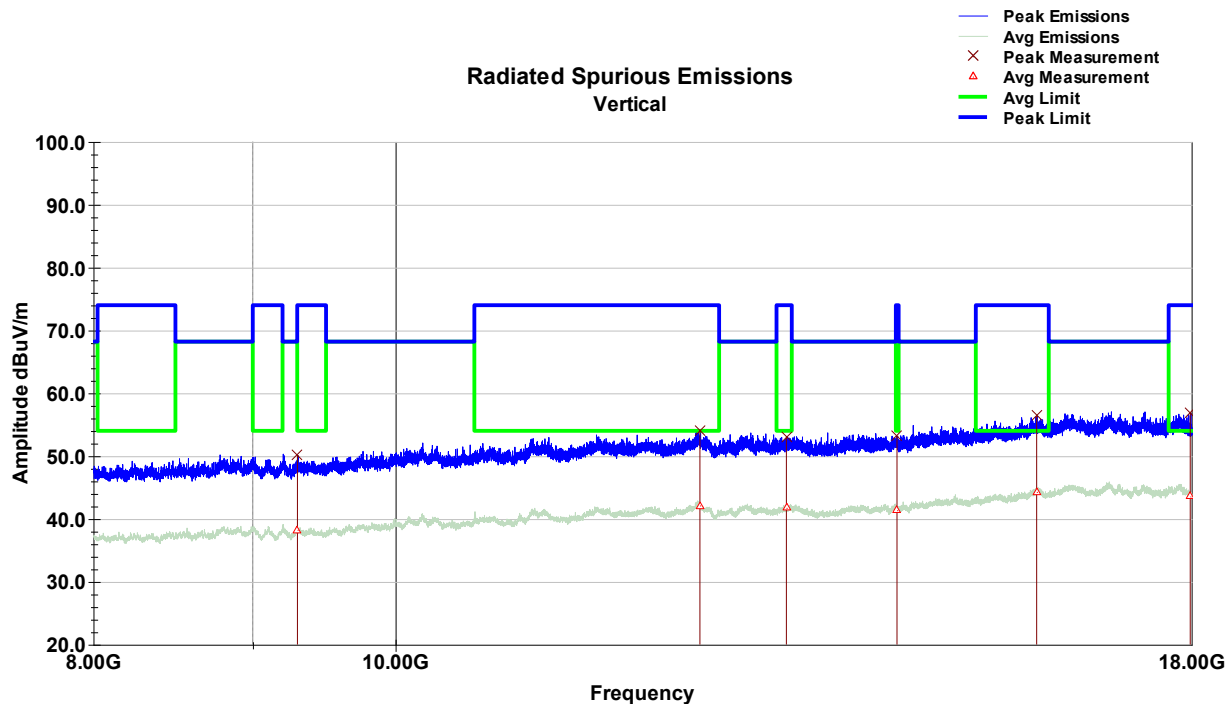
### Vertical Plot – 1-8GHz – Mid Channel



### Horizontal Plot – 1-8GHz – Mid Channel



### Vertical Plot – 8-18GHz – Mid Channel

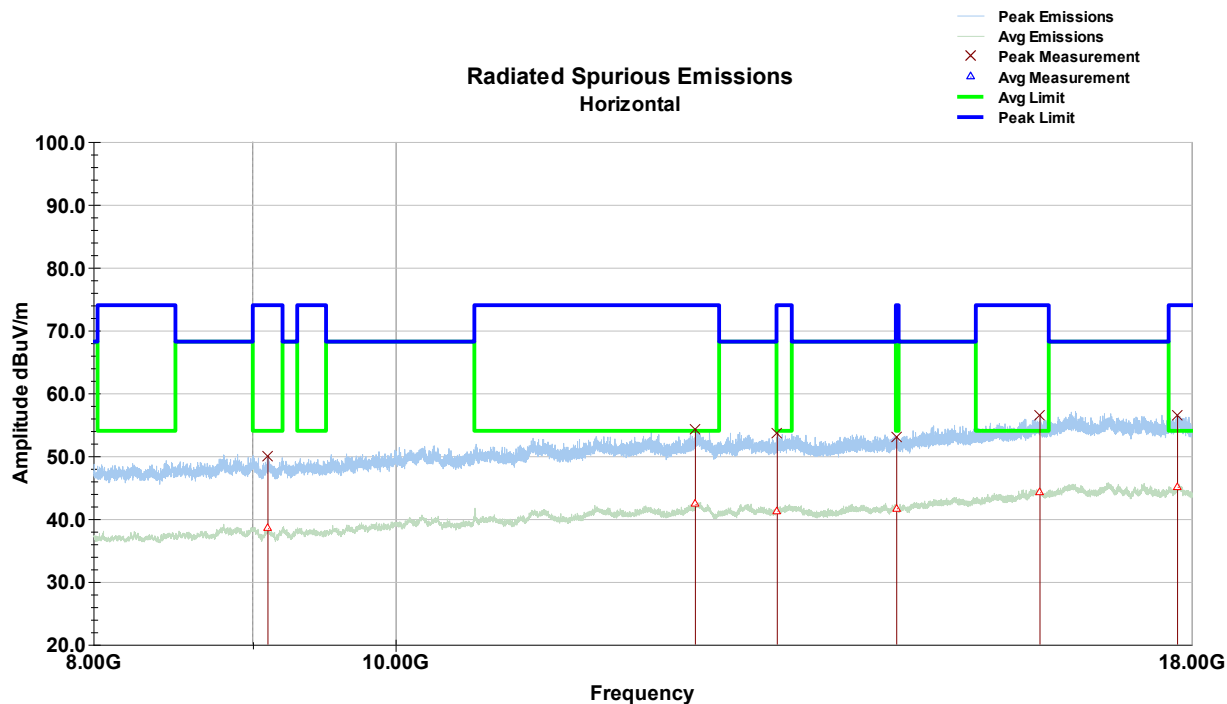


### Vertical Data – 8-18GHz – Mid Channel

| Frequency (MHz)                             | Raw Avg (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Avg (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|---------------------------------------------|----------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|--------------------|----------------|-------------|
| 9301.50                                     | 32.2           | V              | 108.0             | 200.0       | 36.6      | 4.0       | 0.0      | 34.5     | 38.3               | 54.0           | -15.7       |
| 12521.00                                    | 33.8           | V              | 157.0             | 200.0       | 39.3      | 4.8       | 0.0      | 35.7     | 42.2               | 54.0           | -11.9       |
| 13347.00                                    | 33.3           | V              | 188.0             | 250.0       | 39.3      | 5.1       | 0.0      | 35.9     | 41.8               | 54.0           | -12.2       |
| 14482.00                                    | 33.1           | V              | 128.0             | 250.0       | 39.7      | 5.0       | 0.0      | 36.4     | 41.4               | 54.0           | -12.6       |
| 16055.50                                    | 33.9           | V              | 14.0              | 150.0       | 40.9      | 5.4       | 0.0      | 35.9     | 44.3               | 54.0           | -9.7        |
| 17983.50                                    | 33.7           | V              | 144.0             | 250.0       | 41.1      | 5.7       | 0.0      | 37.0     | 43.6               | 54.0           | -10.4       |
|                                             |                |                |                   |             |           |           |          |          |                    |                |             |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                |                |                   |             |           |           |          |          |                    |                |             |
| Margin = Final Avg - Limit                  |                |                |                   |             |           |           |          |          |                    |                |             |

| Frequency (MHz)                           | Raw Pk (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Pk (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|-------------------------------------------|---------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|-------------------|----------------|-------------|
| 9301.50                                   | 44.0          | V              | 108.0             | 200.0       | 36.6      | 4.0       | 0.0      | 34.5     | 50.1              | 74.0           | -23.9       |
| 12521.00                                  | 45.7          | V              | 157.0             | 200.0       | 39.2      | 4.8       | 0.0      | 35.7     | 54.1              | 74.0           | -19.9       |
| 13347.00                                  | 44.7          | V              | 188.0             | 250.0       | 39.3      | 5.1       | 0.0      | 35.9     | 53.1              | 74.0           | -20.9       |
| 14482.00                                  | 44.9          | V              | 128.0             | 250.0       | 39.7      | 5.0       | 0.0      | 36.4     | 53.2              | 74.0           | -20.8       |
| 16055.50                                  | 46.1          | V              | 14.0              | 150.0       | 40.9      | 5.4       | 0.0      | 35.9     | 56.4              | 74.0           | -17.6       |
| 17983.50                                  | 47.0          | V              | 144.0             | 250.0       | 41.1      | 5.7       | 0.0      | 37.0     | 56.9              | 74.0           | -17.1       |
|                                           |               |                |                   |             |           |           |          |          |                   |                |             |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |               |                |                   |             |           |           |          |          |                   |                |             |
| Margin = Final Pk - Limit                 |               |                |                   |             |           |           |          |          |                   |                |             |

### Horizontal Plot – 8-18GHz – Mid Channel

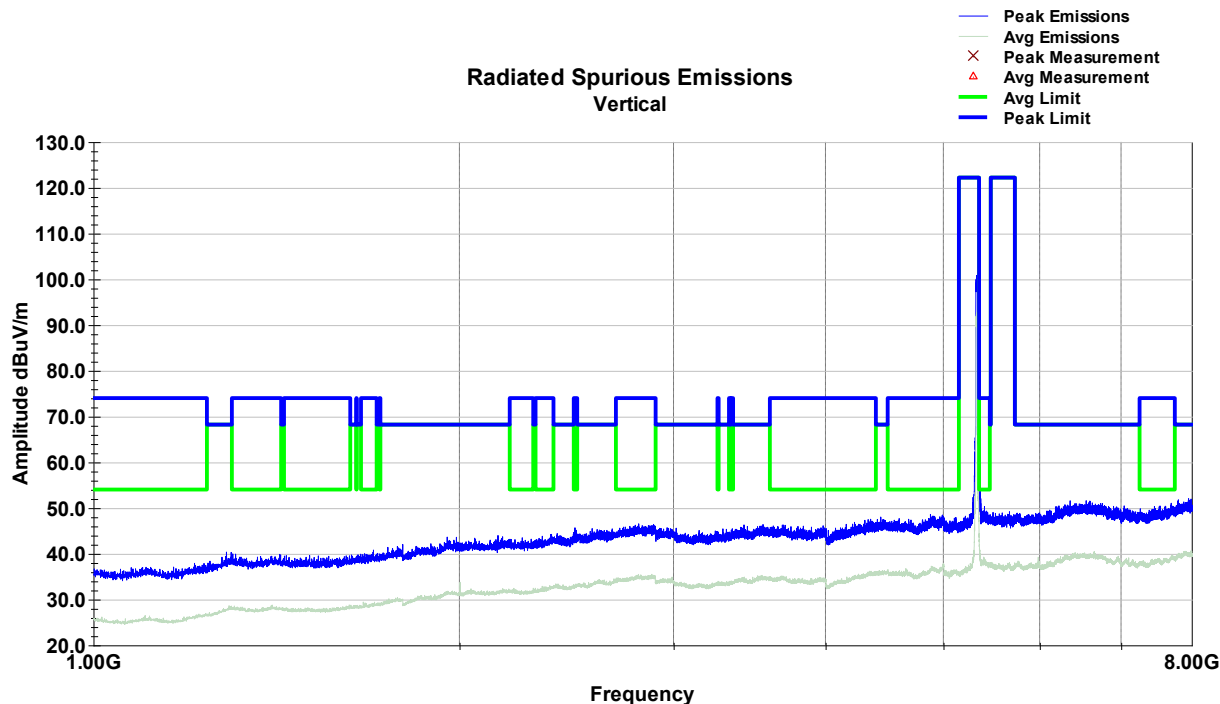


### Horizontal Data – 8-18GHz – Mid Channel

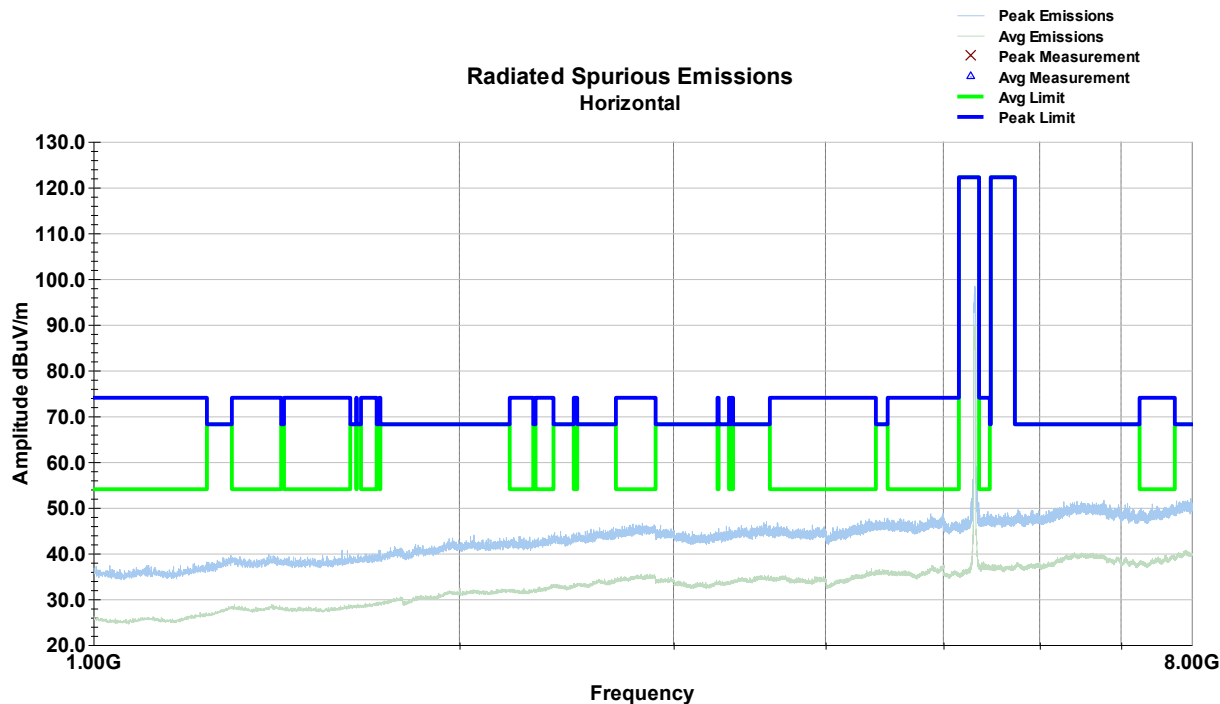
| Frequency (MHz)                             | Raw Avg (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Avg (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|---------------------------------------------|----------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|--------------------|----------------|-------------|
| 9101.50                                     | 32.4           | H              | 217.0             | 250.0       | 36.4      | 3.6       | 0.0      | 33.9     | 38.5               | 54.0           | -15.5       |
| 12479.00                                    | 34.0           | H              | 333.0             | 200.0       | 39.2      | 4.8       | 0.0      | 35.7     | 42.4               | 54.0           | -11.6       |
| 13257.00                                    | 33.0           | H              | 237.0             | 150.0       | 39.2      | 5.0       | 0.0      | 35.9     | 41.3               | 54.0           | -12.7       |
| 14479.00                                    | 33.3           | H              | 18.0              | 250.0       | 39.7      | 5.0       | 0.0      | 36.4     | 41.7               | 54.0           | -12.3       |
| 16095.50                                    | 33.9           | H              | 213.0             | 150.0       | 40.9      | 5.4       | 0.0      | 35.9     | 44.2               | 54.0           | -9.8        |
| 17816.00                                    | 35.0           | H              | 93.0              | 100.0       | 41.0      | 5.7       | 0.0      | 36.6     | 45.1               | 54.0           | -8.9        |
|                                             |                |                |                   |             |           |           |          |          |                    |                |             |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                |                |                   |             |           |           |          |          |                    |                |             |
| Margin = Final Avg - Limit                  |                |                |                   |             |           |           |          |          |                    |                |             |

| Frequency (MHz)                           | Raw Pk (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Pk (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|-------------------------------------------|---------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|-------------------|----------------|-------------|
| 9101.50                                   | 43.8          | H              | 217.0             | 250.0       | 36.4      | 3.6       | 0.0      | 33.9     | 50.0              | 74.0           | -24.0       |
| 12479.00                                  | 46.0          | H              | 333.0             | 200.0       | 39.2      | 4.8       | 0.0      | 35.7     | 54.3              | 74.0           | -19.7       |
| 13257.00                                  | 45.4          | H              | 237.0             | 150.0       | 39.2      | 5.0       | 0.0      | 35.9     | 53.6              | 74.0           | -20.4       |
| 14479.00                                  | 44.7          | H              | 18.0              | 250.0       | 39.7      | 5.0       | 0.0      | 36.4     | 53.1              | 74.0           | -20.9       |
| 16095.50                                  | 46.2          | H              | 213.0             | 150.0       | 40.9      | 5.4       | 0.0      | 35.9     | 56.5              | 74.0           | -17.5       |
| 17816.00                                  | 46.3          | H              | 93.0              | 100.0       | 41.0      | 5.7       | 0.0      | 36.6     | 56.4              | 74.0           | -17.6       |
|                                           |               |                |                   |             |           |           |          |          |                   |                |             |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |               |                |                   |             |           |           |          |          |                   |                |             |
| Margin = Final Pk - Limit                 |               |                |                   |             |           |           |          |          |                   |                |             |

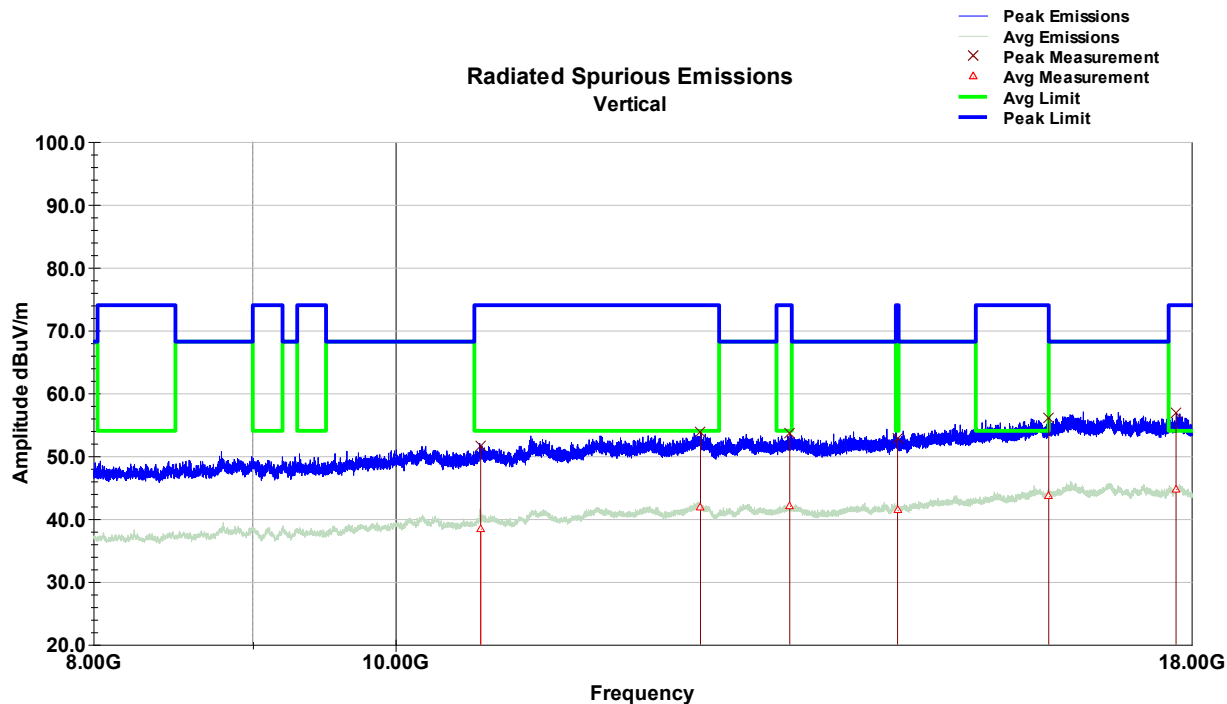
### Vertical Plot – 1-8GHz – High Channel



### Horizontal Plot – 1-8GHz – High Channel



### Vertical Plot – 8-18GHz – High Channel

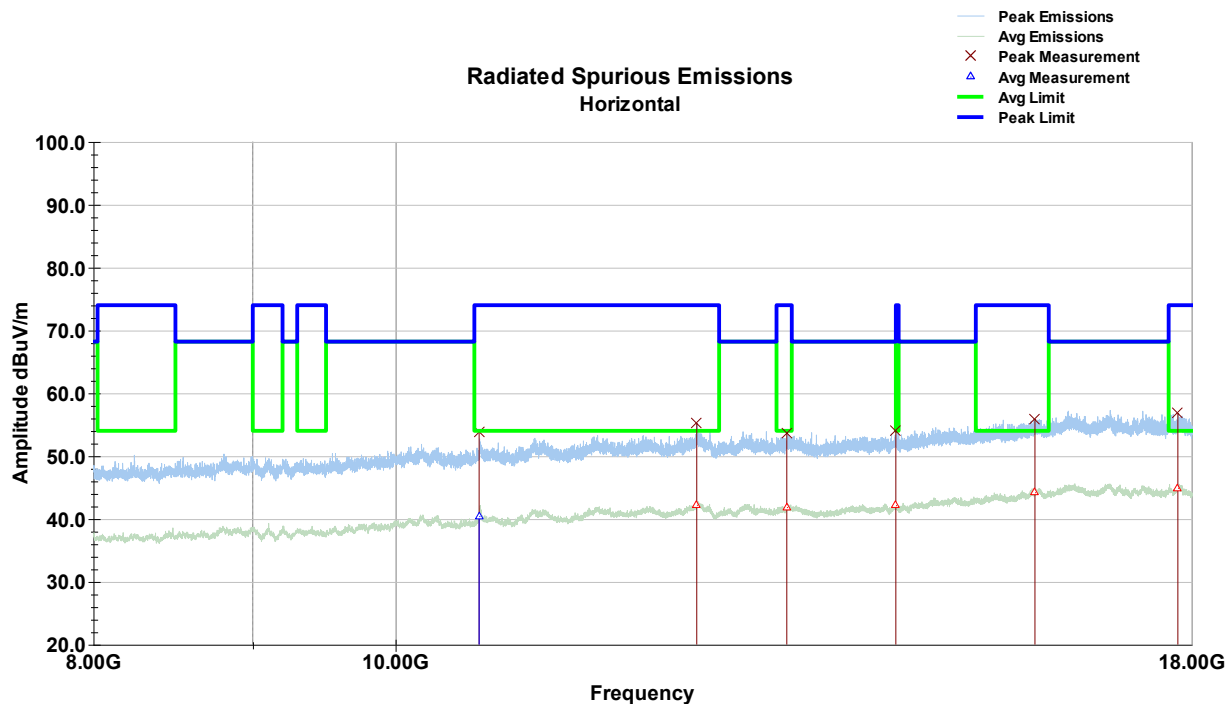


### Vertical Data – 8-18GHz – High Channel

| Frequency (MHz)                             | Raw Avg (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Avg (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|---------------------------------------------|----------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|--------------------|----------------|-------------|
| 10649.72                                    | 31.3           | V              | 330.0             | 235.0       | 38.2      | 4.4       | 0.0      | 35.4     | 38.5               | 54.0           | -15.5       |
| 12526.50                                    | 33.5           | V              | 0.0               | 200.0       | 39.3      | 4.8       | 0.0      | 35.8     | 41.8               | 54.0           | -12.2       |
| 13380.00                                    | 33.9           | V              | 31.0              | 250.0       | 39.3      | 5.0       | 0.0      | 36.1     | 42.1               | 54.0           | -11.9       |
| 14488.50                                    | 33.1           | V              | 73.0              | 250.0       | 39.8      | 5.1       | 0.0      | 36.5     | 41.4               | 54.0           | -12.6       |
| 16200.00                                    | 33.6           | V              | 357.0             | 250.0       | 40.8      | 5.2       | 0.0      | 36.0     | 43.6               | 54.0           | -10.4       |
| 17796.50                                    | 34.7           | V              | 7.0               | 200.0       | 41.0      | 5.7       | 0.0      | 36.6     | 44.8               | 54.0           | -9.2        |
|                                             |                |                |                   |             |           |           |          |          |                    |                |             |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                |                |                   |             |           |           |          |          |                    |                |             |
| Margin = Final Avg - Limit                  |                |                |                   |             |           |           |          |          |                    |                |             |

| Frequency (MHz)                           | Raw Pk (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Pk (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|-------------------------------------------|---------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|-------------------|----------------|-------------|
| 10649.72                                  | 44.3          | V              | 330.0             | 235.0       | 38.2      | 4.4       | 0.0      | 35.4     | 51.5              | 74.0           | -22.5       |
| 12526.50                                  | 45.4          | V              | 0.0               | 200.0       | 39.3      | 4.8       | 0.0      | 35.8     | 53.8              | 74.0           | -20.3       |
| 13380.00                                  | 45.4          | V              | 31.0              | 250.0       | 39.3      | 5.0       | 0.0      | 36.1     | 53.6              | 74.0           | -20.4       |
| 14488.50                                  | 44.5          | V              | 73.0              | 250.0       | 39.8      | 5.1       | 0.0      | 36.5     | 52.9              | 74.0           | -21.2       |
| 16200.00                                  | 46.0          | V              | 357.0             | 250.0       | 40.8      | 5.2       | 0.0      | 36.0     | 56.0              | 74.0           | -18.0       |
| 17796.50                                  | 46.8          | V              | 7.0               | 200.0       | 41.0      | 5.7       | 0.0      | 36.6     | 56.8              | 74.0           | -17.2       |
|                                           |               |                |                   |             |           |           |          |          |                   |                |             |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |               |                |                   |             |           |           |          |          |                   |                |             |
| Margin = Final Pk - Limit                 |               |                |                   |             |           |           |          |          |                   |                |             |

### Horizontal Plot – 8-18GHz – High Channel



### Horizontal Data – 8-18GHz – High Channel

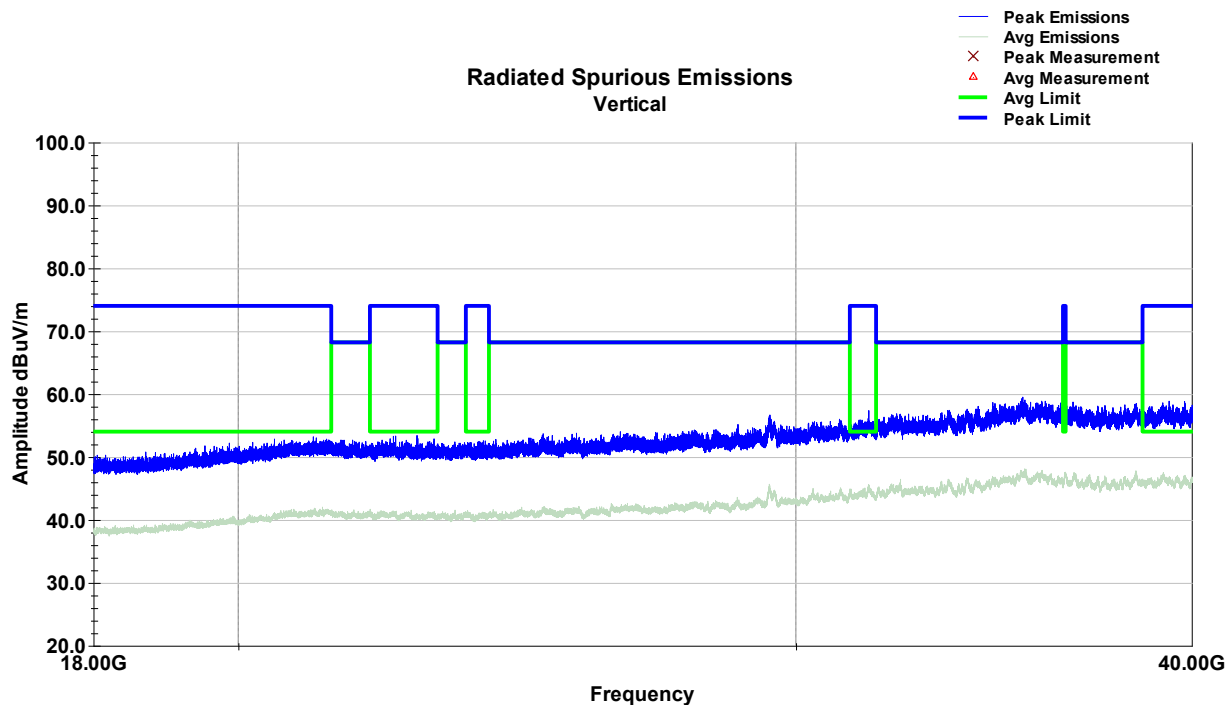
| Frequency (MHz)                             | Raw Avg (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Avg (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|---------------------------------------------|----------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|--------------------|----------------|-------------|
| 10636.95                                    | 33.3           | H              | 273.0             | 228.0       | 38.2      | 4.4       | 0.0      | 35.4     | 40.5               | 54.0           | -13.5       |
| 12491.50                                    | 33.8           | H              | 360.0             | 200.0       | 39.2      | 4.9       | 0.0      | 35.6     | 42.3               | 54.0           | -11.7       |
| 13350.50                                    | 33.4           | H              | 247.0             | 150.0       | 39.3      | 5.1       | 0.0      | 35.9     | 41.9               | 54.0           | -12.1       |
| 14470.50                                    | 33.8           | H              | 341.0             | 150.0       | 39.7      | 5.0       | 0.0      | 36.3     | 42.2               | 54.0           | -11.8       |
| 16035.50                                    | 33.9           | H              | 0.0               | 200.0       | 40.9      | 5.4       | 0.0      | 35.9     | 44.3               | 54.0           | -9.7        |
| 17820.50                                    | 34.9           | H              | 69.0              | 200.0       | 41.0      | 5.7       | 0.0      | 36.6     | 45.0               | 54.0           | -9.0        |
|                                             |                |                |                   |             |           |           |          |          |                    |                |             |
| Final Avg = Raw Avg + AF + Loss + DCF - Amp |                |                |                   |             |           |           |          |          |                    |                |             |
| Margin = Final Avg - Limit                  |                |                |                   |             |           |           |          |          |                    |                |             |

| Frequency (MHz)                           | Raw Pk (dBuV) | Polarity (V/H) | Azimuth (degrees) | Height (cm) | AF (dB/m) | Loss (dB) | DCF (dB) | Amp (dB) | Final Pk (dBuV/m) | Limit (dBuV/m) | Margin (dB) |
|-------------------------------------------|---------------|----------------|-------------------|-------------|-----------|-----------|----------|----------|-------------------|----------------|-------------|
| 10636.95                                  | 46.7          | H              | 273.0             | 228.0       | 38.2      | 4.4       | 0.0      | 35.4     | 53.9              | 74.0           | -20.1       |
| 12491.50                                  | 46.7          | H              | 360.0             | 200.0       | 39.2      | 4.9       | 0.0      | 35.6     | 55.2              | 74.0           | -18.8       |
| 13350.50                                  | 45.3          | H              | 247.0             | 150.0       | 39.3      | 5.1       | 0.0      | 35.9     | 53.7              | 74.0           | -20.3       |
| 14470.50                                  | 45.6          | H              | 341.0             | 150.0       | 39.7      | 5.0       | 0.0      | 36.3     | 54.0              | 74.0           | -20.0       |
| 16035.50                                  | 45.5          | H              | 0.0               | 200.0       | 40.9      | 5.4       | 0.0      | 35.9     | 55.9              | 74.0           | -18.1       |
| 17820.50                                  | 46.7          | H              | 69.0              | 200.0       | 41.0      | 5.7       | 0.0      | 36.6     | 56.8              | 74.0           | -17.2       |
|                                           |               |                |                   |             |           |           |          |          |                   |                |             |
| Final Pk = Raw Pk + AF + Loss + DCF - Amp |               |                |                   |             |           |           |          |          |                   |                |             |
| Margin = Final Pk - Limit                 |               |                |                   |             |           |           |          |          |                   |                |             |

### 3.10.4 18-40 GHz

All channels had similar plots in the 18-40GHz frequency range.

Vertical Plot – 18-40GHz – Mid Channel



Horizontal Plot – 18-40GHz – Mid Channel

