

## ANNEX A: Test Result

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (Z axis) and the loop antenna is coplanar, the others are vertical and horizontal. and the worst case was recorded.

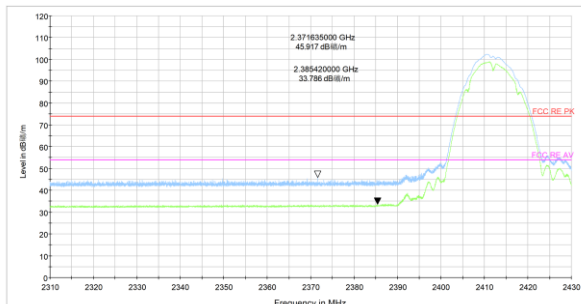
# 1. Unwanted Emission

## 1.1. Wi-Fi 2.4GHz

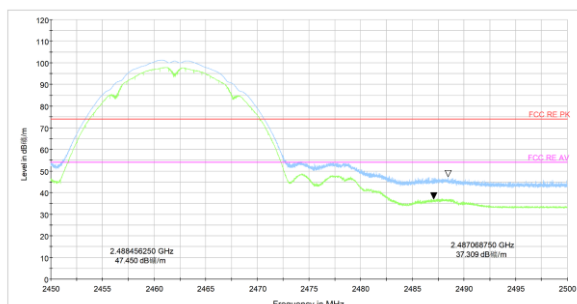
The following graphs display the maximum values of horizontal and vertical by software. Blue trace uses the peak detection, Green trace uses the average detection.

A symbol ( $\text{dB}\mu\text{V/m}$ ) in the test plot below means ( $\text{dB}\mu\text{V/m}$ )

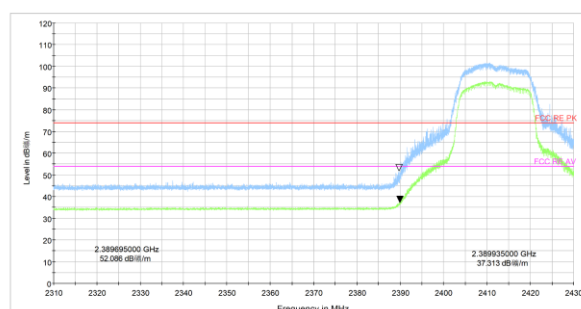
The signal beyond the limit is carrier.



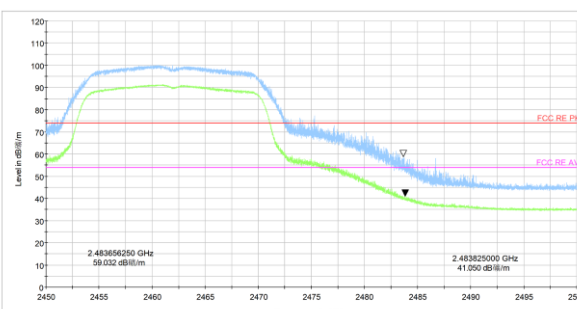
802.11b-Channel 1 Peak+ Average



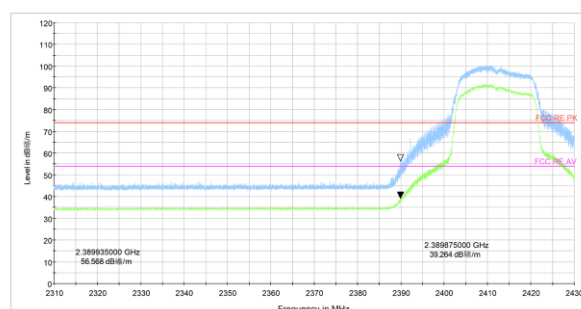
802.11b-Channel 11 Peak+ Average



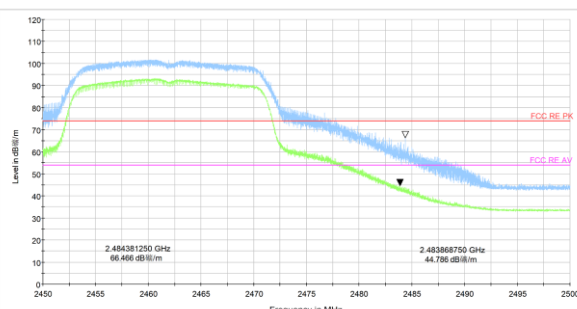
802.11g-Channel 1 Peak+ Average



802.11g-Channel 11 Peak+ Average



802.11n HT20-Channel 1 Peak+ Average



802.11n HT20-Channel 11 Peak+ Average

## Result of RE

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier.  
The Radiates Emission from 18GHz to 26.5GHz are more than 20dB below the limit are not reported.

### Remark:

1. **Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)**
2. **Margin = Limit – Quasi-Peak/ MAX Peak/ Average**
3. **A symbol (  $\text{dB } \mu\text{V/m}$  ) in the test plot below means (dB $\mu\text{V/m}$ )**
4. **The following graphs display the maximum values of coaxial and coplanar for 9k-30MHz; horizontal and vertical for above 30MHz by software.**
5. **For below 1GHz**

 QP Level @Spectrum Overview H
  QP Level @Spectrum Overview V
  QP Level @Final Results
  QP Limit

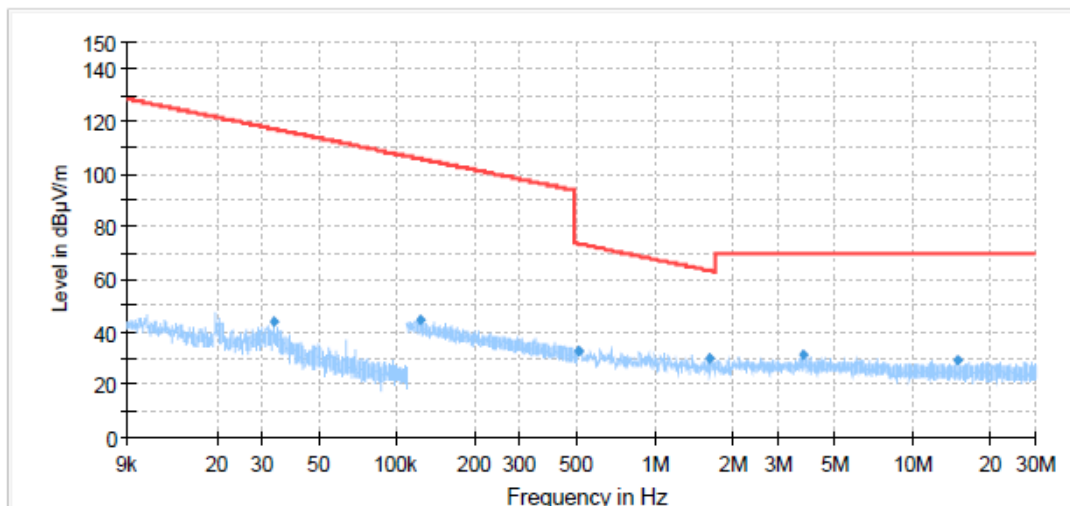
### For above 1GHz

 PK Level @Spectrum Overview H
  PK Level @Spectrum Overview V
  PK Level @Final Results
  PK Limit

 AVG Level @Spectrum Overview H
  AVG Level @Spectrum Overview V
  AVG Level @Final Results
  AVG Limit

### Continuous TX mode:

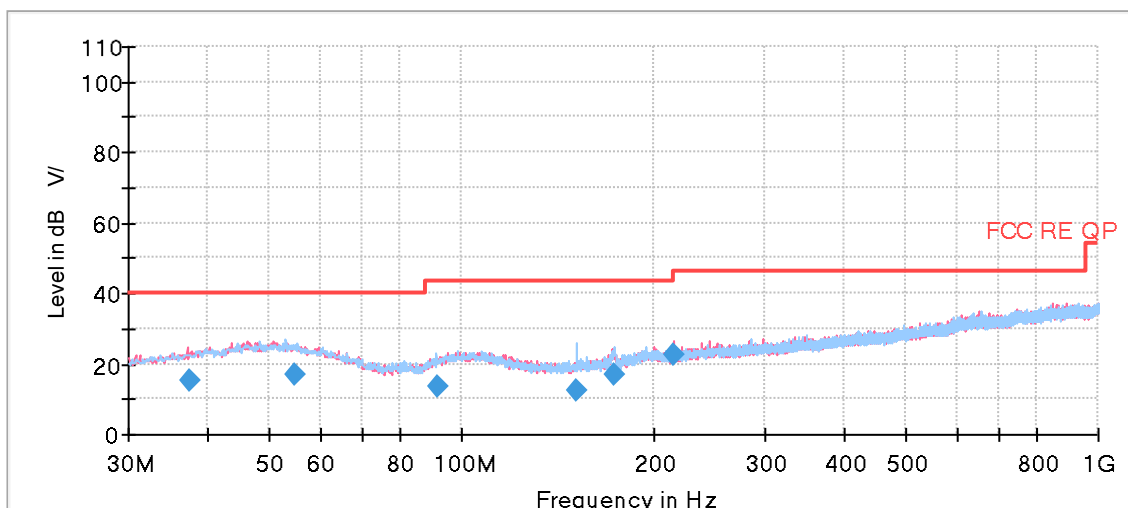
During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels, the test data of the worst-case condition (802.11n (HT20) CH1) was recorded in this report.



### Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-----------------|---------------|--------------|
| 0.03            | 44.06            | 117.10         | 73.04       | 500.00          | 0.00          | 17           |
| 0.12            | 44.39            | 105.73         | 61.34       | 150.00          | 359.00        | 17           |
| 0.50            | 33.00            | 73.54          | 40.54       | 150.00          | 230.00        | 17           |
| 1.63            | 29.81            | 63.37          | 33.56       | 150.00          | 2.00          | 17           |
| 3.79            | 31.51            | 69.50          | 37.99       | 150.00          | 230.00        | 17           |
| 14.86           | 29.02            | 69.50          | 40.48       | 150.00          | 333.00        | 17           |

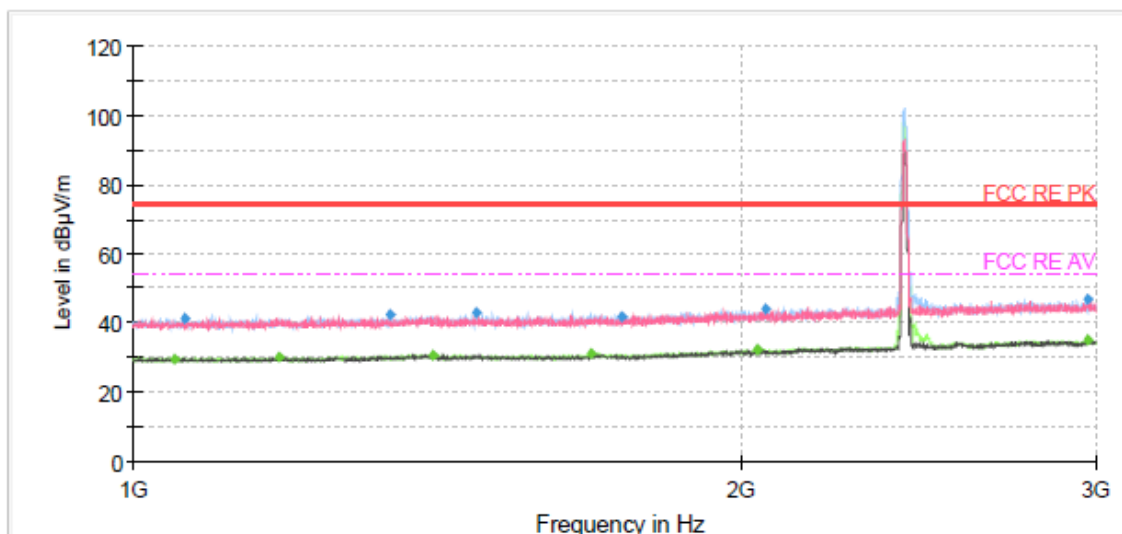
Radiates Emission from 9kHz to 30MHz



Radiates Emission from 30MHz to 1GHz

| Frequency (MHz) | Quasi-Peak (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) |
|-----------------|---------------------------|----------------------|-------------|-------------|--------------|---------------|---------------------|
| 37.353750       | 14.97                     | 40.00                | 25.03       | 107.0       | V            | 76.0          | 19.1                |
| 54.821250       | 16.77                     | 40.00                | 23.23       | 190.0       | H            | 201.0         | 20.8                |
| 92.073750       | 13.53                     | 43.50                | 29.97       | 178.0       | H            | 220.0         | 17.9                |
| 151.296250      | 12.33                     | 43.50                | 31.17       | 199.0       | H            | 80.0          | 15.7                |
| 174.003750      | 16.82                     | 43.50                | 26.68       | 219.0       | H            | 87.0          | 20.2                |
| 215.996250      | 22.43                     | 43.50                | 21.07       | 199.0       | V            | 70.0          | 18.6                |

802.11b CH1

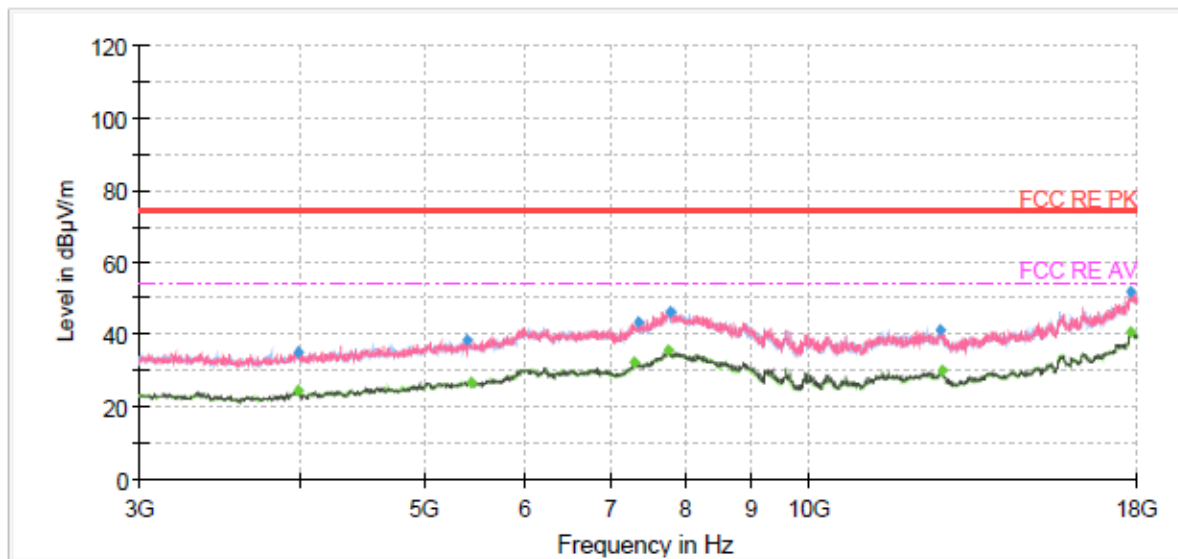


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1047.25         | ---              | 29.61            | 54.00          | 24.39       | 500.00          | 100.0       | H   | 0.00          | -12          |
| 1060.25         | 41.57            | ---              | 74.00          | 32.43       | 500.00          | 100.0       | V   | 358.00        | -12          |
| 1180.25         | ---              | 30.08            | 54.00          | 23.92       | 500.00          | 100.0       | H   | 1.00          | -12          |
| 1341.00         | 42.49            | ---              | 74.00          | 31.51       | 500.00          | 100.0       | H   | 25.00         | -11          |
| 1407.50         | ---              | 30.94            | 54.00          | 23.06       | 500.00          | 100.0       | H   | 1.00          | -11          |
| 1478.50         | 42.73            | ---              | 74.00          | 31.27       | 500.00          | 100.0       | H   | 232.00        | -11          |
| 1686.75         | ---              | 31.03            | 54.00          | 22.97       | 500.00          | 100.0       | V   | 208.00        | -10          |
| 1744.50         | 41.86            | ---              | 74.00          | 32.14       | 500.00          | 100.0       | H   | 11.00         | -10          |
| 2040.25         | ---              | 32.35            | 54.00          | 21.65       | 500.00          | 100.0       | V   | 358.00        | -8           |
| 2058.00         | 43.84            | ---              | 74.00          | 30.16       | 500.00          | 100.0       | H   | 4.00          | -8           |
| 2972.75         | 46.64            | ---              | 74.00          | 27.36       | 500.00          | 200.0       | H   | 224.00        | -4           |
| 2974.50         | ---              | 35.29            | 54.00          | 18.71       | 500.00          | 200.0       | H   | 224.00        | -4           |

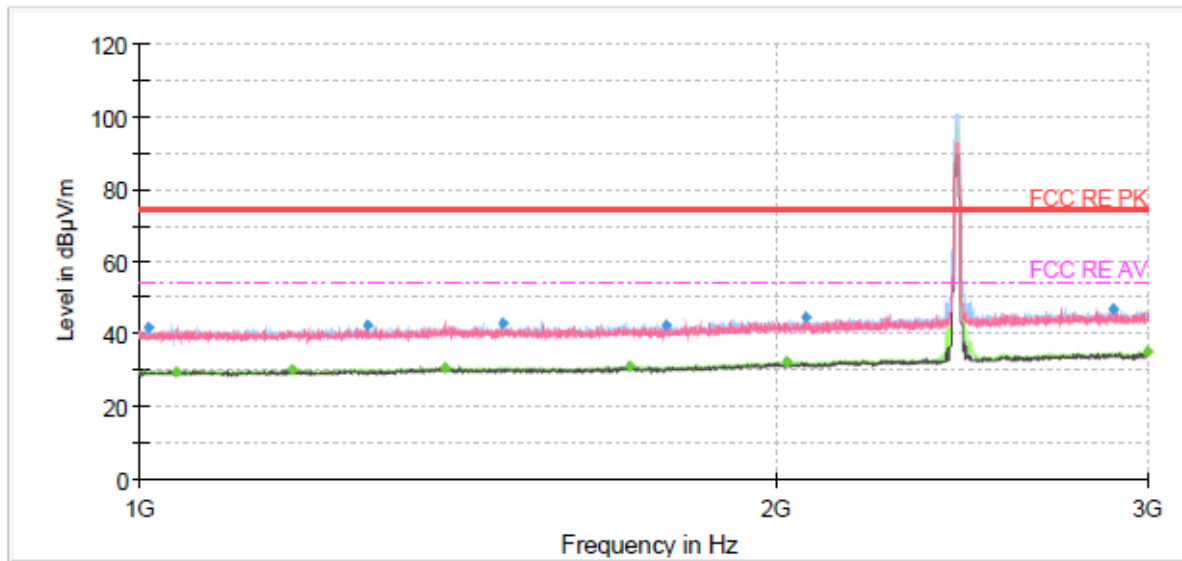


Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3980.63         | ---              | 24.55            | 54.00          | 29.45       | 500.00          | 100.0       | V   | 129.00        | -11          |
| 3986.25         | 35.32            | ---              | 74.00          | 38.68       | 500.00          | 100.0       | H   | 1.00          | -11          |
| 5401.88         | 38.68            | ---              | 74.00          | 35.32       | 500.00          | 100.0       | H   | 184.00        | -8           |
| 5435.63         | ---              | 27.03            | 54.00          | 26.97       | 500.00          | 100.0       | V   | 354.00        | -8           |
| 7290.00         | ---              | 32.46            | 54.00          | 21.54       | 500.00          | 100.0       | H   | 13.00         | 0            |
| 7338.75         | 43.28            | ---              | 74.00          | 30.72       | 500.00          | 200.0       | V   | 61.00         | -1           |
| 7740.00         | ---              | 35.73            | 54.00          | 18.27       | 500.00          | 100.0       | H   | 18.00         | 1            |
| 7796.25         | 46.55            | ---              | 74.00          | 27.45       | 500.00          | 200.0       | H   | 88.00         | 1            |
| 12658.13        | 41.26            | ---              | 74.00          | 32.74       | 500.00          | 200.0       | V   | 184.00        | 5            |
| 12663.75        | ---              | 29.98            | 54.00          | 24.02       | 500.00          | 200.0       | V   | 0.00          | 5            |
| 17795.63        | 51.81            | ---              | 74.00          | 22.19       | 500.00          | 100.0       | H   | 2.00          | 15           |
| 17812.50        | ---              | 40.82            | 54.00          | 13.18       | 500.00          | 200.0       | V   | 4.00          | 15           |

802.11b CH6

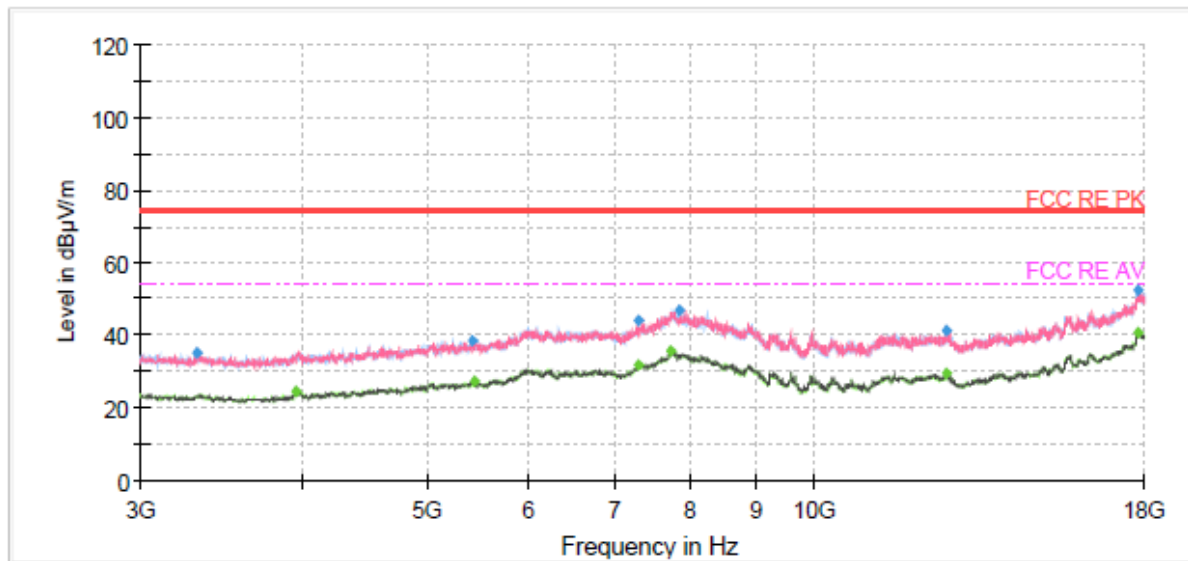


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

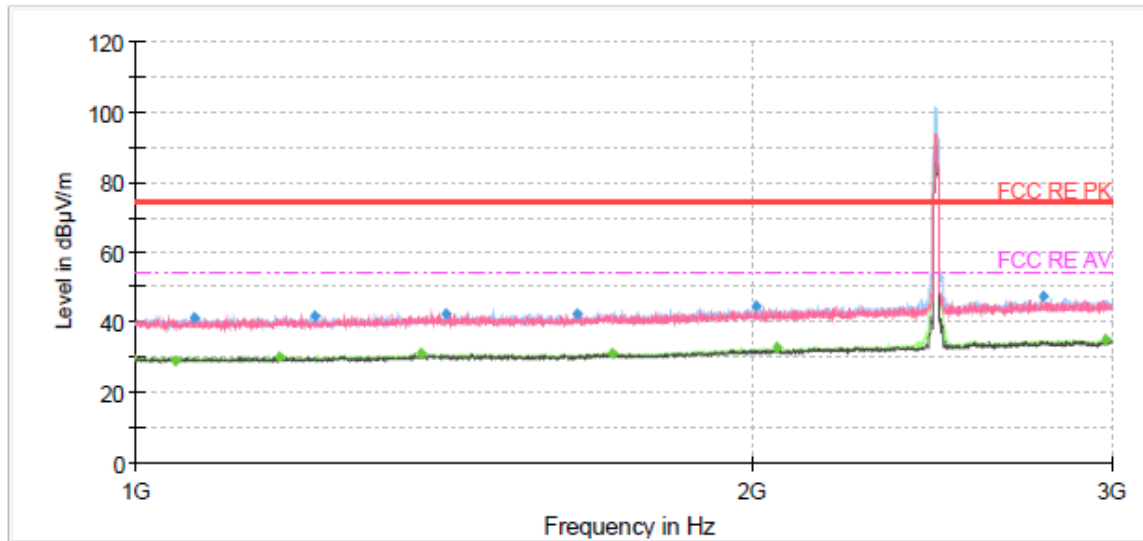
| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1009.75         | 41.59            | ---              | 74.00          | 32.41       | 500.00          | 100.0       | H   | 93.00         | -12          |
| 1040.50         | ---              | 29.48            | 54.00          | 24.52       | 500.00          | 100.0       | V   | 353.00        | -12          |
| 1182.00         | ---              | 30.28            | 54.00          | 23.72       | 500.00          | 200.0       | H   | 350.00        | -12          |
| 1283.00         | 42.39            | ---              | 74.00          | 31.61       | 500.00          | 100.0       | H   | 327.00        | -12          |
| 1393.00         | ---              | 30.85            | 54.00          | 23.15       | 500.00          | 200.0       | H   | 277.00        | -11          |
| 1485.75         | 42.78            | ---              | 74.00          | 31.22       | 500.00          | 100.0       | H   | 17.00         | -11          |
| 1705.50         | ---              | 31.39            | 54.00          | 22.61       | 500.00          | 100.0       | H   | 4.00          | -10          |
| 1773.25         | 42.63            | ---              | 74.00          | 31.37       | 500.00          | 200.0       | V   | 0.00          | -10          |
| 2025.25         | ---              | 32.44            | 54.00          | 21.56       | 500.00          | 200.0       | V   | 209.00        | -8           |
| 2068.00         | 44.40            | ---              | 74.00          | 29.60       | 500.00          | 200.0       | H   | 264.00        | -8           |
| 2888.75         | 46.65            | ---              | 74.00          | 27.35       | 500.00          | 200.0       | H   | 341.00        | -5           |
| 2998.75         | ---              | 35.38            | 54.00          | 18.62       | 500.00          | 100.0       | H   | 258.00        | -4           |



Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3313.13         | 35.31            | ---              | 74.00          | 38.69       | 500.00          | 100.0       | H   | 95.00         | -13          |
| 3960.00         | ---              | 24.50            | 54.00          | 29.50       | 500.00          | 100.0       | V   | 49.00         | -11          |
| 5431.88         | 38.31            | ---              | 74.00          | 35.69       | 500.00          | 100.0       | H   | 232.00        | -8           |
| 5435.63         | ---              | 27.28            | 54.00          | 26.72       | 500.00          | 100.0       | H   | 14.00         | -8           |
| 7282.50         | 43.93            | ---              | 74.00          | 30.07       | 500.00          | 200.0       | H   | 334.00        | -1           |
| 7291.88         | ---              | 32.07            | 54.00          | 21.93       | 500.00          | 100.0       | V   | 223.00        | 0            |
| 7736.25         | ---              | 35.56            | 54.00          | 18.44       | 500.00          | 200.0       | H   | 0.00          | 1            |
| 7845.00         | 46.96            | ---              | 74.00          | 27.04       | 500.00          | 200.0       | H   | 0.00          | 1            |
| 12645.00        | ---              | 29.52            | 54.00          | 24.48       | 500.00          | 200.0       | H   | 280.00        | 5            |
| 12645.00        | 41.10            | ---              | 74.00          | 32.90       | 500.00          | 200.0       | H   | 280.00        | 5            |
| 17808.75        | 52.69            | ---              | 74.00          | 21.31       | 500.00          | 100.0       | V   | 351.00        | 15           |
| 17820.00        | ---              | 40.74            | 54.00          | 13.26       | 500.00          | 200.0       | H   | 350.00        | 15           |

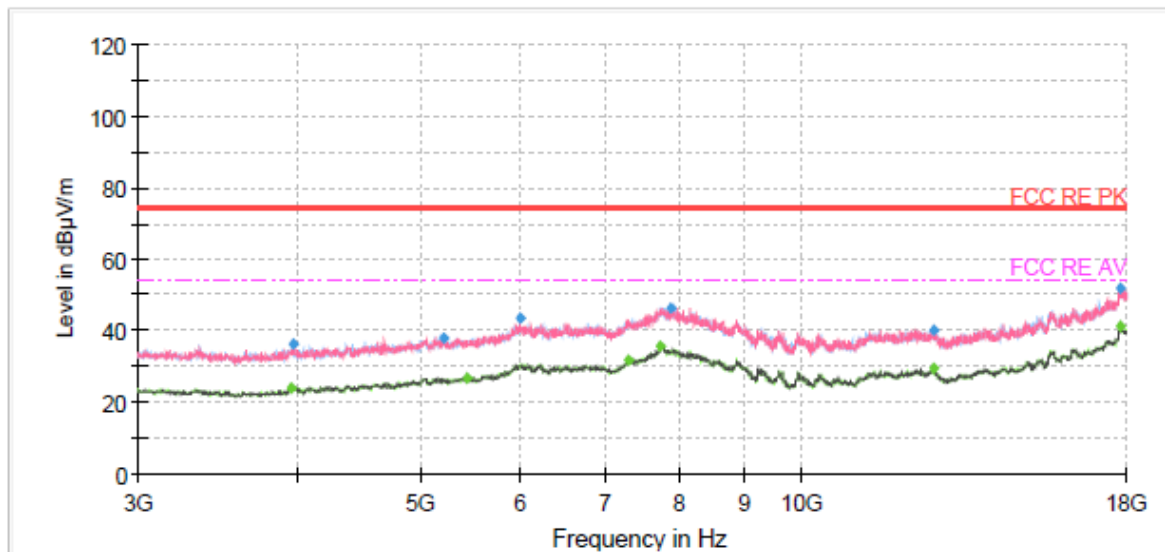


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1046.50         | ---              | 29.14            | 54.00          | 24.86       | 500.00          | 200.0       | H   | 251.00        | -12          |
| 1067.50         | 41.31            | ---              | 74.00          | 32.69       | 500.00          | 200.0       | V   | 14.00         | -12          |
| 1176.25         | ---              | 30.21            | 54.00          | 23.79       | 500.00          | 100.0       | H   | 45.00         | -12          |
| 1222.25         | 41.69            | ---              | 74.00          | 32.31       | 500.00          | 100.0       | V   | 329.00        | -12          |
| 1377.50         | ---              | 31.18            | 54.00          | 22.82       | 500.00          | 100.0       | H   | 299.00        | -11          |
| 1417.75         | 42.60            | ---              | 74.00          | 31.40       | 500.00          | 100.0       | H   | 29.00         | -11          |
| 1642.50         | 42.53            | ---              | 74.00          | 31.47       | 500.00          | 200.0       | V   | 150.00        | -10          |
| 1708.00         | ---              | 31.37            | 54.00          | 22.63       | 500.00          | 100.0       | H   | 9.00          | -10          |
| 2008.25         | 44.37            | ---              | 74.00          | 29.63       | 500.00          | 100.0       | H   | 119.00        | -8           |
| 2059.50         | ---              | 32.66            | 54.00          | 21.34       | 500.00          | 100.0       | H   | 269.00        | -8           |
| 2778.00         | 47.40            | ---              | 74.00          | 26.60       | 500.00          | 200.0       | H   | 0.00          | -5           |
| 2976.50         | ---              | 35.27            | 54.00          | 18.73       | 500.00          | 100.0       | H   | 55.00         | -4           |

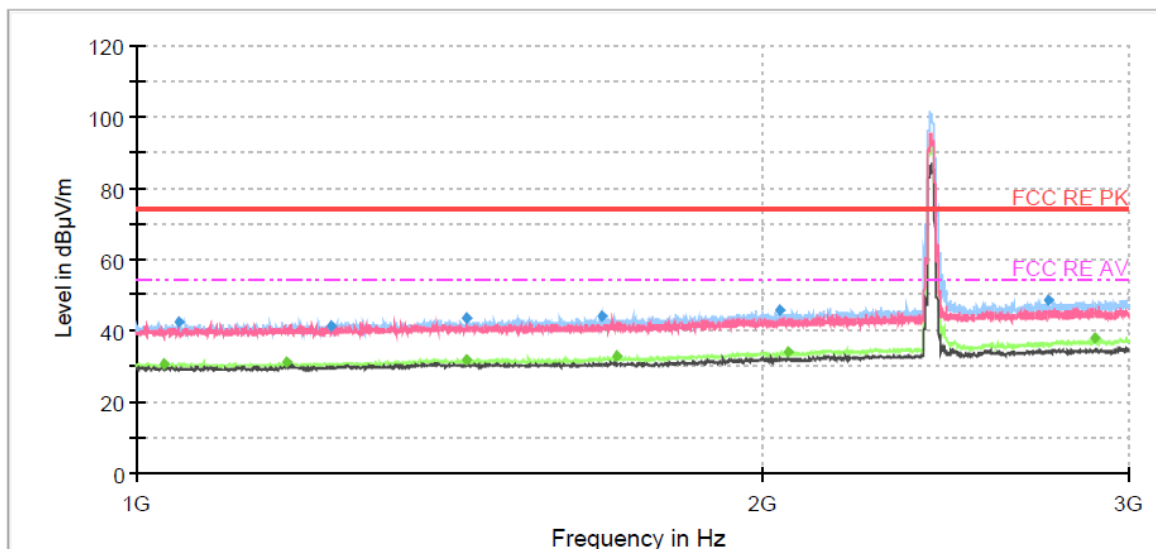


Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3963.75         | ---              | 24.19            | 54.00          | 29.81       | 500.00          | 200.0       | H   | 142.00        | -11          |
| 3969.38         | 36.01            | ---              | 74.00          | 37.99       | 500.00          | 200.0       | H   | 358.00        | -11          |
| 5212.50         | 38.22            | ---              | 74.00          | 35.78       | 500.00          | 100.0       | H   | 99.00         | -9           |
| 5437.50         | ---              | 26.80            | 54.00          | 27.20       | 500.00          | 200.0       | H   | 292.00        | -8           |
| 5986.88         | 43.49            | ---              | 74.00          | 30.51       | 500.00          | 200.0       | V   | 107.00        | -6           |
| 7288.13         | ---              | 31.91            | 54.00          | 22.09       | 500.00          | 100.0       | H   | 99.00         | 0            |
| 7738.13         | ---              | 35.74            | 54.00          | 18.26       | 500.00          | 200.0       | V   | 31.00         | 1            |
| 7888.13         | 46.42            | ---              | 74.00          | 27.58       | 500.00          | 200.0       | H   | 339.00        | 1            |
| 12667.50        | 40.31            | ---              | 74.00          | 33.69       | 500.00          | 100.0       | H   | 15.00         | 5            |
| 12673.13        | ---              | 29.59            | 54.00          | 24.41       | 500.00          | 200.0       | H   | 247.00        | 5            |
| 17816.25        | 51.98            | ---              | 74.00          | 22.02       | 500.00          | 100.0       | V   | 348.00        | 15           |
| 17821.88        | ---              | 41.03            | 54.00          | 12.97       | 500.00          | 100.0       | H   | 28.00         | 15           |

802.11g CH1

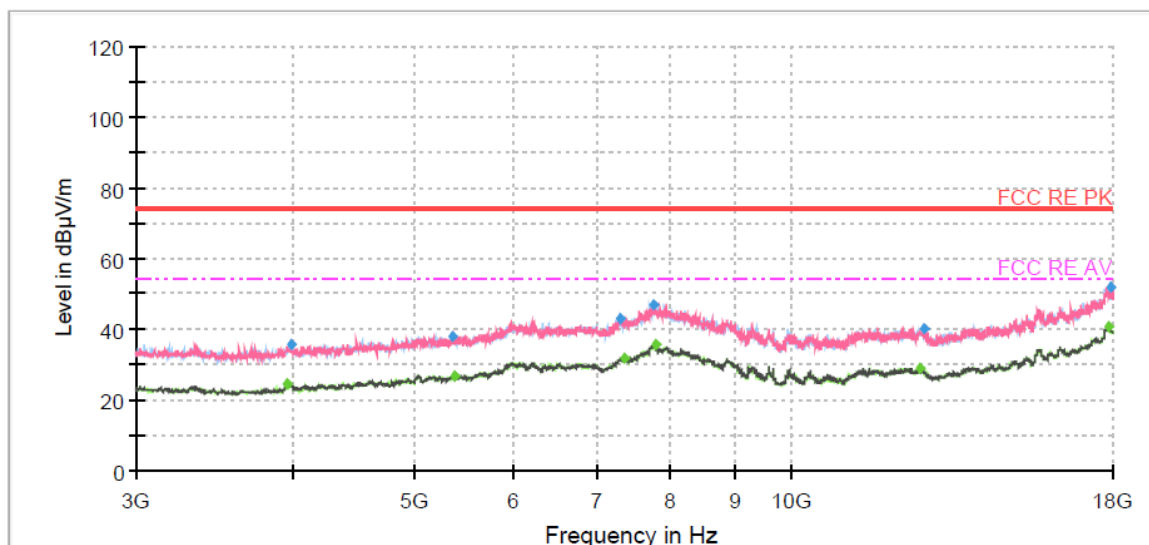


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1031.00         | ---              | 30.87            | 54.00          | 23.13       | 500.00          | 200.0       | H   | 324.00        | -12          |
| 1047.75         | 42.63            | ---              | 74.00          | 31.37       | 500.00          | 200.0       | H   | 343.00        | -12          |
| 1181.00         | ---              | 31.15            | 54.00          | 22.85       | 500.00          | 100.0       | H   | 10.00         | -12          |
| 1239.25         | 41.17            | ---              | 74.00          | 32.83       | 500.00          | 200.0       | H   | 356.00        | -12          |
| 1440.00         | ---              | 32.07            | 54.00          | 21.93       | 500.00          | 200.0       | H   | 357.00        | -11          |
| 1440.25         | 43.27            | ---              | 74.00          | 30.73       | 500.00          | 100.0       | H   | 3.00          | -11          |
| 1672.25         | 44.01            | ---              | 74.00          | 29.99       | 500.00          | 100.0       | H   | 85.00         | -10          |
| 1700.50         | ---              | 32.89            | 54.00          | 21.11       | 500.00          | 100.0       | H   | 31.00         | -10          |
| 2038.50         | 45.85            | ---              | 74.00          | 28.15       | 500.00          | 200.0       | H   | 351.00        | -8           |
| 2057.75         | ---              | 34.20            | 54.00          | 19.80       | 500.00          | 200.0       | H   | 315.00        | -8           |
| 2746.00         | 48.71            | ---              | 74.00          | 25.29       | 500.00          | 200.0       | H   | 324.00        | -5           |
| 2890.25         | ---              | 37.82            | 54.00          | 16.18       | 500.00          | 200.0       | H   | 354.00        | -5           |

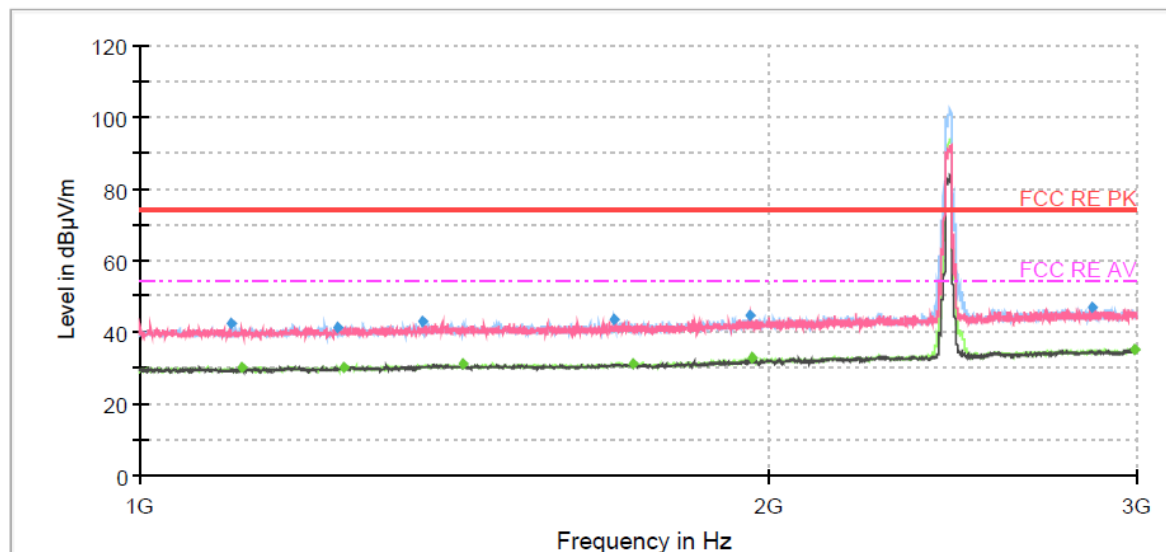


Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3960.00         | ---              | 24.35            | 54.00          | 29.65       | 500.00          | 200.0       | V   | 126.00        | -11          |
| 3982.50         | 35.58            | ---              | 74.00          | 38.42       | 500.00          | 200.0       | H   | 316.00        | -11          |
| 5360.63         | 37.93            | ---              | 74.00          | 36.07       | 500.00          | 200.0       | H   | 6.00          | -8           |
| 5386.88         | ---              | 27.04            | 54.00          | 26.96       | 500.00          | 100.0       | H   | 4.00          | -8           |
| 7305.00         | 43.02            | ---              | 74.00          | 30.98       | 500.00          | 200.0       | V   | 348.00        | -1           |
| 7342.50         | ---              | 31.90            | 54.00          | 22.10       | 500.00          | 200.0       | H   | 0.00          | -1           |
| 7741.88         | 46.90            | ---              | 74.00          | 27.10       | 500.00          | 100.0       | H   | 2.00          | 1            |
| 7771.88         | ---              | 35.53            | 54.00          | 18.47       | 500.00          | 200.0       | H   | 204.00        | 1            |
| 12641.25        | ---              | 29.25            | 54.00          | 24.75       | 500.00          | 100.0       | V   | 325.00        | 5            |
| 12718.13        | 40.28            | ---              | 74.00          | 33.72       | 500.00          | 100.0       | V   | 0.00          | 5            |
| 17842.50        | ---              | 40.92            | 54.00          | 13.08       | 500.00          | 100.0       | V   | 305.00        | 15           |
| 17904.38        | 52.03            | ---              | 74.00          | 21.97       | 500.00          | 200.0       | V   | 1.00          | 16           |

802.11g CH6

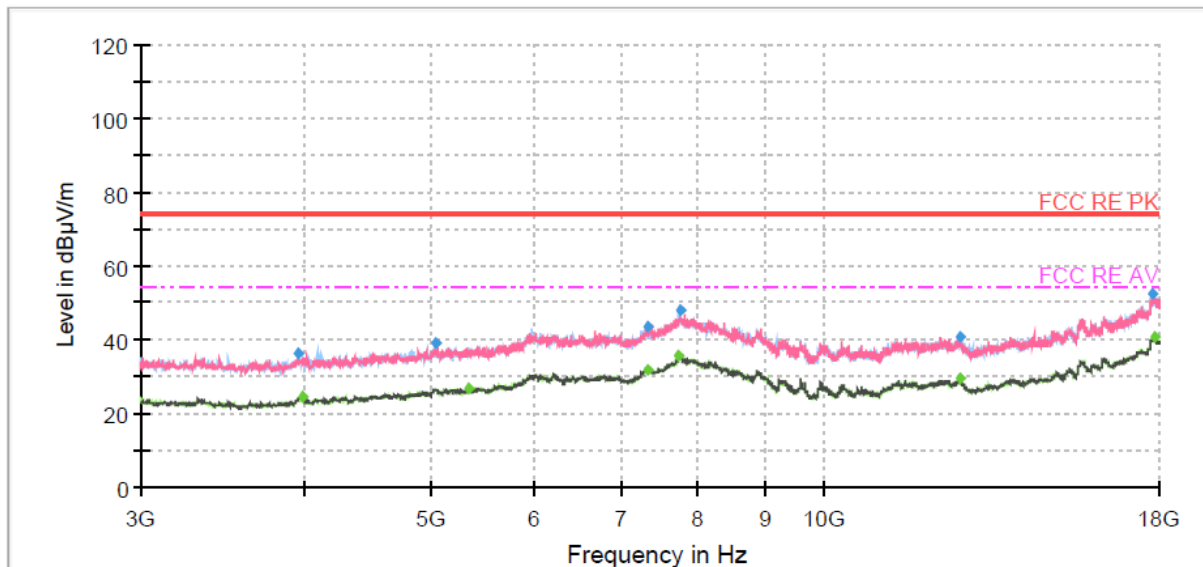


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1106.00         | 42.30            | ---              | 74.00          | 31.70       | 500.00          | 100.0       | V   | 353.00        | -12          |
| 1120.25         | ---              | 30.36            | 54.00          | 23.64       | 500.00          | 100.0       | V   | 359.00        | -12          |
| 1244.25         | 41.34            | ---              | 74.00          | 32.66       | 500.00          | 100.0       | V   | 351.00        | -12          |
| 1252.75         | ---              | 30.03            | 54.00          | 23.97       | 500.00          | 100.0       | H   | 82.00         | -12          |
| 1366.00         | 43.17            | ---              | 74.00          | 30.83       | 500.00          | 100.0       | H   | 5.00          | -11          |
| 1427.75         | ---              | 31.24            | 54.00          | 22.76       | 500.00          | 200.0       | H   | 332.00        | -11          |
| 1687.75         | 43.33            | ---              | 74.00          | 30.67       | 500.00          | 100.0       | H   | 2.00          | -10          |
| 1723.50         | ---              | 31.46            | 54.00          | 22.54       | 500.00          | 200.0       | H   | 332.00        | -10          |
| 1956.50         | 44.43            | ---              | 74.00          | 29.57       | 500.00          | 100.0       | V   | 331.00        | -8           |
| 1962.75         | ---              | 32.85            | 54.00          | 21.15       | 500.00          | 100.0       | H   | 137.00        | -8           |
| 2854.75         | 46.80            | ---              | 74.00          | 27.20       | 500.00          | 200.0       | V   | 330.00        | -5           |
| 2994.75         | ---              | 35.28            | 54.00          | 18.72       | 500.00          | 100.0       | V   | 180.00        | -4           |

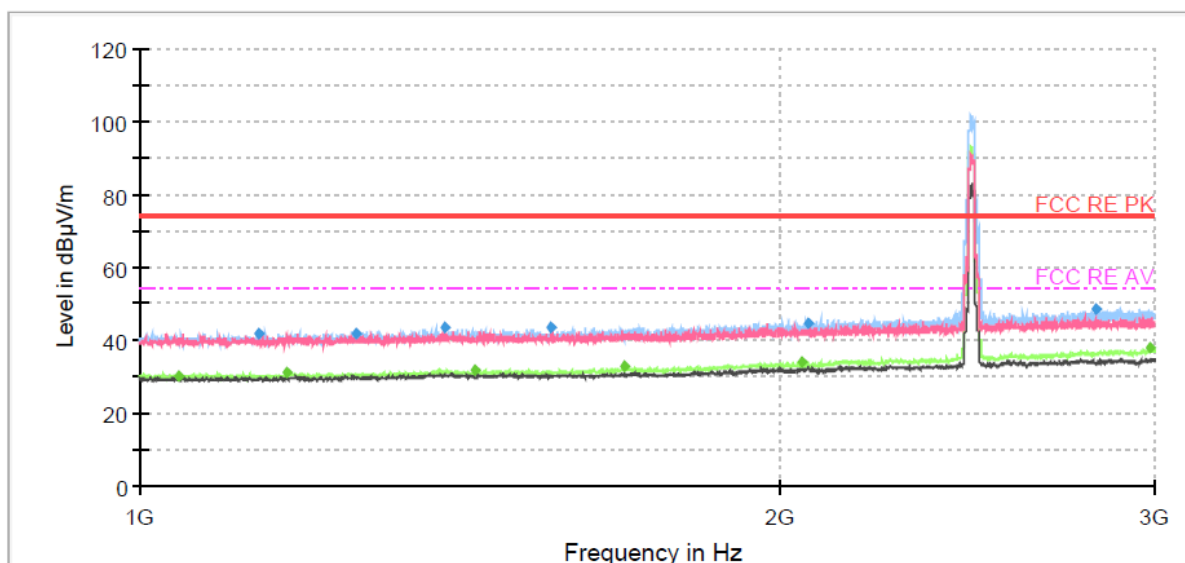


Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3960.00         | 36.09            | ---              | 74.00          | 37.91       | 500.00          | 200.0       | H   | 0.00          | -11          |
| 3988.13         | ---              | 24.55            | 54.00          | 29.45       | 500.00          | 100.0       | H   | 3.00          | -11          |
| 5043.75         | 39.16            | ---              | 74.00          | 34.84       | 500.00          | 200.0       | H   | 277.00        | -8           |
| 5347.50         | ---              | 26.94            | 54.00          | 27.06       | 500.00          | 100.0       | H   | 218.00        | -8           |
| 7316.25         | 43.33            | ---              | 74.00          | 30.67       | 500.00          | 200.0       | H   | 64.00         | -1           |
| 7321.88         | ---              | 31.97            | 54.00          | 22.03       | 500.00          | 100.0       | H   | 43.00         | -1           |
| 7738.13         | ---              | 35.52            | 54.00          | 18.48       | 500.00          | 100.0       | V   | 279.00        | 1            |
| 7755.00         | 47.91            | ---              | 74.00          | 26.09       | 500.00          | 100.0       | H   | 186.00        | 1            |
| 12661.88        | 40.70            | ---              | 74.00          | 33.30       | 500.00          | 100.0       | H   | 109.00        | 5            |
| 12661.88        | ---              | 29.33            | 54.00          | 24.67       | 500.00          | 200.0       | V   | 11.00         | 5            |
| 17812.50        | 52.28            | ---              | 74.00          | 21.72       | 500.00          | 200.0       | H   | 324.00        | 15           |
| 17836.88        | ---              | 40.81            | 54.00          | 13.19       | 500.00          | 200.0       | V   | 2.00          | 15           |

802.11g CH11

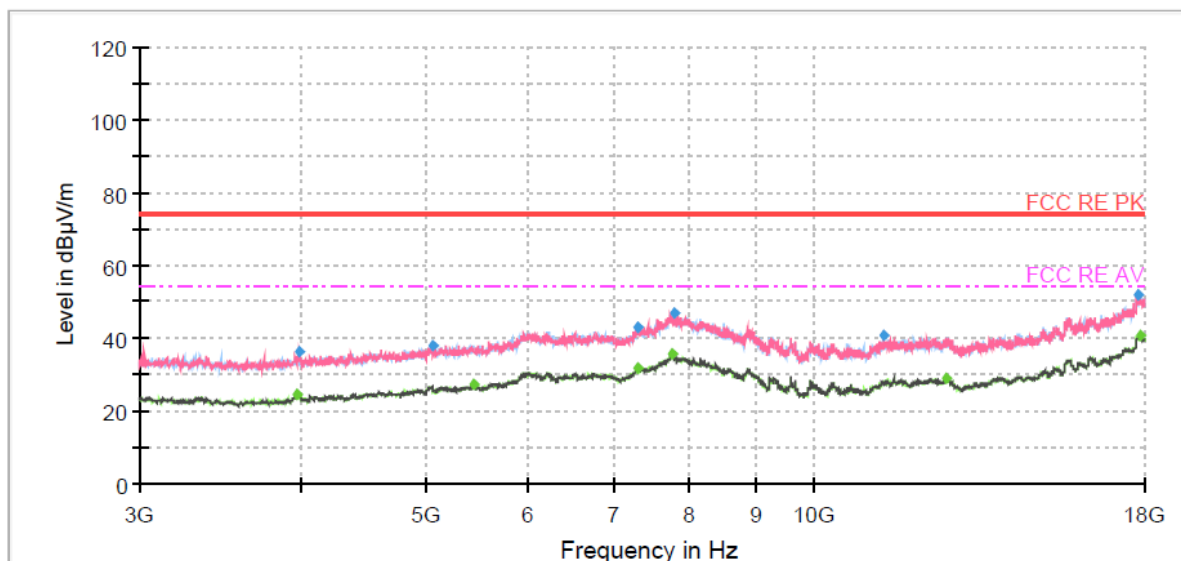


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1042.50         | ---              | 30.18            | 54.00          | 23.82       | 500.00          | 200.0       | H   | 342.00        | -12          |
| 1137.25         | 42.08            | ---              | 74.00          | 31.92       | 500.00          | 200.0       | H   | 351.00        | -12          |
| 1172.00         | ---              | 31.06            | 54.00          | 22.94       | 500.00          | 200.0       | H   | 359.00        | -12          |
| 1263.25         | 41.94            | ---              | 74.00          | 32.06       | 500.00          | 200.0       | H   | 203.00        | -11          |
| 1391.50         | 43.58            | ---              | 74.00          | 30.42       | 500.00          | 200.0       | H   | 236.00        | -11          |
| 1436.75         | ---              | 32.08            | 54.00          | 21.92       | 500.00          | 200.0       | H   | 0.00          | -11          |
| 1559.50         | 43.61            | ---              | 74.00          | 30.39       | 500.00          | 200.0       | H   | 355.00        | -11          |
| 1689.00         | ---              | 32.80            | 54.00          | 21.20       | 500.00          | 200.0       | H   | 355.00        | -10          |
| 2050.00         | ---              | 34.30            | 54.00          | 19.70       | 500.00          | 200.0       | H   | 351.00        | -8           |
| 2061.75         | 44.90            | ---              | 74.00          | 29.10       | 500.00          | 200.0       | H   | 347.00        | -8           |
| 2816.00         | 48.68            | ---              | 74.00          | 25.32       | 500.00          | 200.0       | H   | 0.00          | -5           |
| 2989.00         | ---              | 37.68            | 54.00          | 16.32       | 500.00          | 200.0       | H   | 0.00          | -4           |

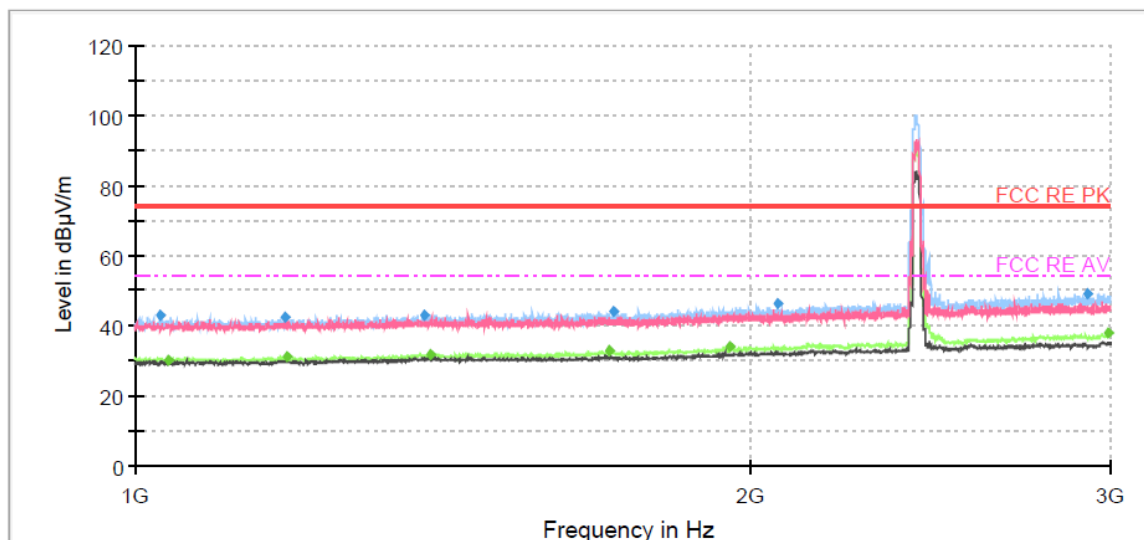


Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3965.63         | ---              | 24.49            | 54.00          | 29.51       | 500.00          | 200.0       | V   | 5.00          | -11          |
| 3993.75         | 36.29            | ---              | 74.00          | 37.71       | 500.00          | 100.0       | V   | 350.00        | -11          |
| 5053.13         | 38.01            | ---              | 74.00          | 35.99       | 500.00          | 200.0       | H   | 0.00          | -8           |
| 5446.88         | ---              | 27.17            | 54.00          | 26.83       | 500.00          | 200.0       | H   | 145.00        | -8           |
| 7291.88         | ---              | 32.01            | 54.00          | 21.99       | 500.00          | 200.0       | V   | 3.00          | 0            |
| 7297.50         | 42.93            | ---              | 74.00          | 31.07       | 500.00          | 200.0       | H   | 308.00        | 0            |
| 7741.88         | ---              | 35.57            | 54.00          | 18.43       | 500.00          | 100.0       | V   | 294.00        | 1            |
| 7790.63         | 46.87            | ---              | 74.00          | 27.13       | 500.00          | 200.0       | V   | 7.00          | 1            |
| 11311.88        | 40.48            | ---              | 74.00          | 33.52       | 500.00          | 100.0       | V   | 217.00        | 5            |
| 12648.75        | ---              | 29.05            | 54.00          | 24.95       | 500.00          | 200.0       | V   | 10.00         | 5            |
| 17823.75        | 52.14            | ---              | 74.00          | 21.86       | 500.00          | 200.0       | V   | 28.00         | 15           |
| 17840.63        | ---              | 40.70            | 54.00          | 13.30       | 500.00          | 100.0       | H   | 7.00          | 15           |

802.11n (HT20) CH1

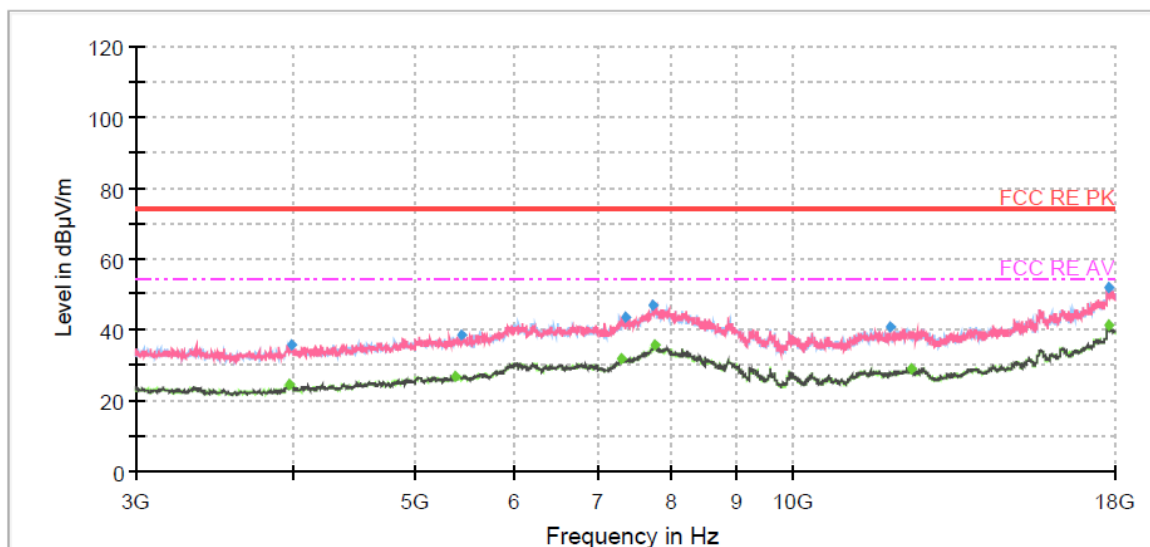


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1027.75         | 43.05            | ---              | 74.00          | 30.95       | 500.00          | 100.0       | H   | 18.00         | -12          |
| 1037.75         | ---              | 29.98            | 54.00          | 24.02       | 500.00          | 200.0       | H   | 0.00          | -12          |
| 1184.75         | 42.37            | ---              | 74.00          | 31.63       | 500.00          | 100.0       | H   | 0.00          | -12          |
| 1187.50         | ---              | 31.17            | 54.00          | 22.83       | 500.00          | 100.0       | H   | 5.00          | -12          |
| 1385.00         | 43.18            | ---              | 74.00          | 30.82       | 500.00          | 200.0       | H   | 333.00        | -11          |
| 1393.25         | ---              | 32.09            | 54.00          | 21.91       | 500.00          | 100.0       | H   | 1.00          | -11          |
| 1706.50         | ---              | 32.66            | 54.00          | 21.34       | 500.00          | 100.0       | H   | 3.00          | -10          |
| 1714.75         | 43.89            | ---              | 74.00          | 30.11       | 500.00          | 100.0       | H   | 5.00          | -10          |
| 1954.25         | ---              | 34.25            | 54.00          | 19.75       | 500.00          | 100.0       | H   | 0.00          | -8           |
| 2062.25         | 46.23            | ---              | 74.00          | 27.77       | 500.00          | 100.0       | H   | 48.00         | -8           |
| 2926.75         | 49.14            | ---              | 74.00          | 24.86       | 500.00          | 100.0       | H   | 23.00         | -5           |
| 2992.50         | ---              | 37.71            | 54.00          | 16.29       | 500.00          | 200.0       | H   | 358.00        | -4           |

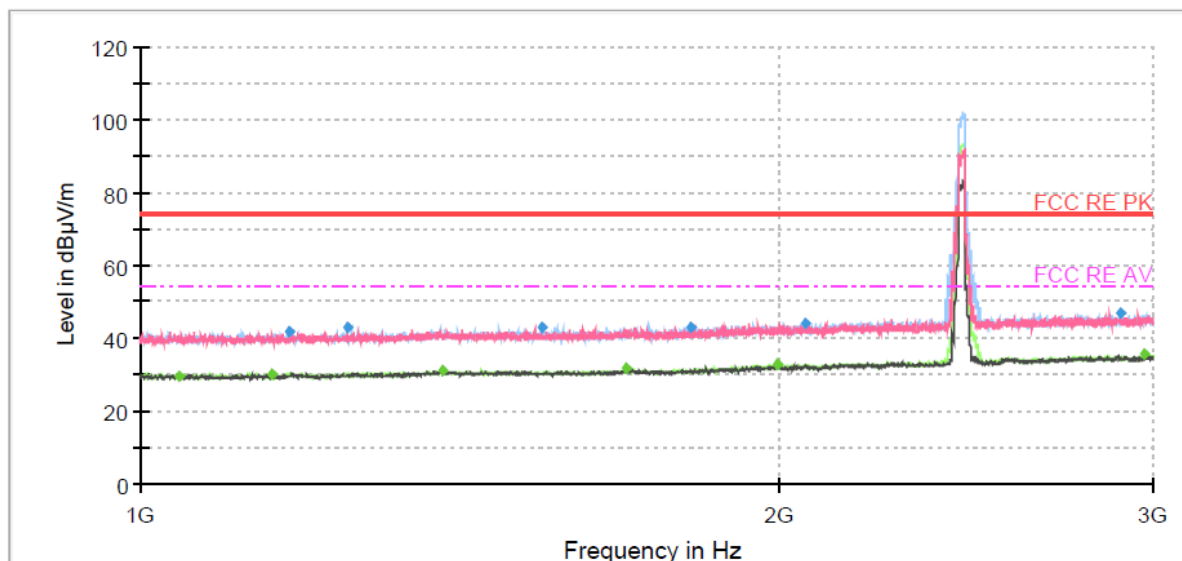


Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3965.63         | ---              | 24.51            | 54.00          | 29.49       | 500.00          | 200.0       | V   | 9.00          | -11          |
| 3988.13         | 35.64            | ---              | 74.00          | 38.36       | 500.00          | 100.0       | V   | 220.00        | -11          |
| 5377.50         | ---              | 27.03            | 54.00          | 26.97       | 500.00          | 200.0       | V   | 4.00          | -8           |
| 5448.75         | 38.33            | ---              | 74.00          | 35.67       | 500.00          | 100.0       | V   | 335.00        | -8           |
| 7288.13         | ---              | 31.89            | 54.00          | 22.11       | 500.00          | 200.0       | H   | 13.00         | 0            |
| 7342.50         | 43.28            | ---              | 74.00          | 30.72       | 500.00          | 100.0       | V   | 358.00        | -1           |
| 7738.13         | 46.65            | ---              | 74.00          | 27.35       | 500.00          | 200.0       | V   | 13.00         | 1            |
| 7756.88         | ---              | 35.46            | 54.00          | 18.54       | 500.00          | 100.0       | V   | 36.00         | 1            |
| 11910.00        | 40.51            | ---              | 74.00          | 33.49       | 500.00          | 100.0       | H   | 135.00        | 6            |
| 12410.63        | ---              | 29.11            | 54.00          | 24.89       | 500.00          | 200.0       | H   | 94.00         | 5            |
| 17765.63        | 51.90            | ---              | 74.00          | 22.10       | 500.00          | 200.0       | H   | 318.00        | 14           |
| 17823.75        | ---              | 41.12            | 54.00          | 12.88       | 500.00          | 100.0       | V   | 281.00        | 15           |

802.11n (HT20) CH6

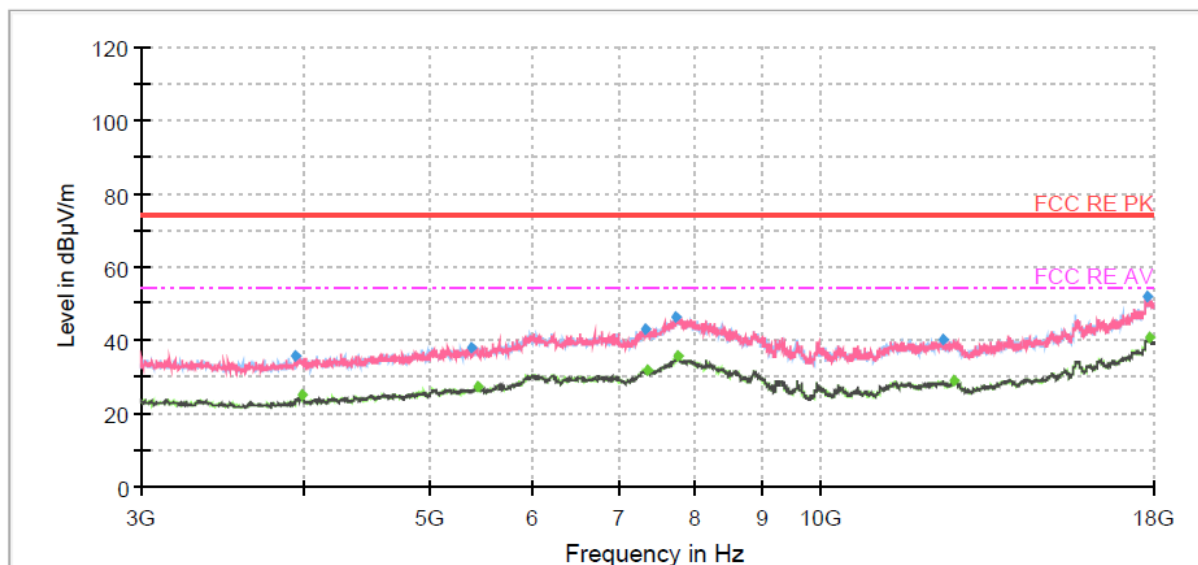


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1043.75         | ---              | 29.65            | 54.00          | 24.35       | 500.00          | 100.0       | H   | 245.00        | -12          |
| 1153.50         | ---              | 30.34            | 54.00          | 23.66       | 500.00          | 200.0       | H   | 356.00        | -12          |
| 1174.25         | 41.95            | ---              | 74.00          | 32.05       | 500.00          | 100.0       | H   | 1.00          | -12          |
| 1251.75         | 43.14            | ---              | 74.00          | 30.86       | 500.00          | 200.0       | V   | 25.00         | -12          |
| 1389.25         | ---              | 31.30            | 54.00          | 22.70       | 500.00          | 100.0       | V   | 359.00        | -11          |
| 1544.50         | 43.19            | ---              | 74.00          | 30.81       | 500.00          | 100.0       | V   | 352.00        | -11          |
| 1694.00         | ---              | 31.64            | 54.00          | 22.36       | 500.00          | 200.0       | V   | 25.00         | -10          |
| 1816.00         | 43.06            | ---              | 74.00          | 30.94       | 500.00          | 100.0       | V   | 0.00          | -10          |
| 1997.00         | ---              | 32.74            | 54.00          | 21.26       | 500.00          | 200.0       | H   | 310.00        | -8           |
| 2058.50         | 44.36            | ---              | 74.00          | 29.64       | 500.00          | 100.0       | H   | 299.00        | -8           |
| 2895.75         | 46.82            | ---              | 74.00          | 27.18       | 500.00          | 100.0       | H   | 0.00          | -5           |
| 2971.75         | ---              | 35.84            | 54.00          | 18.16       | 500.00          | 100.0       | H   | 1.00          | -4           |

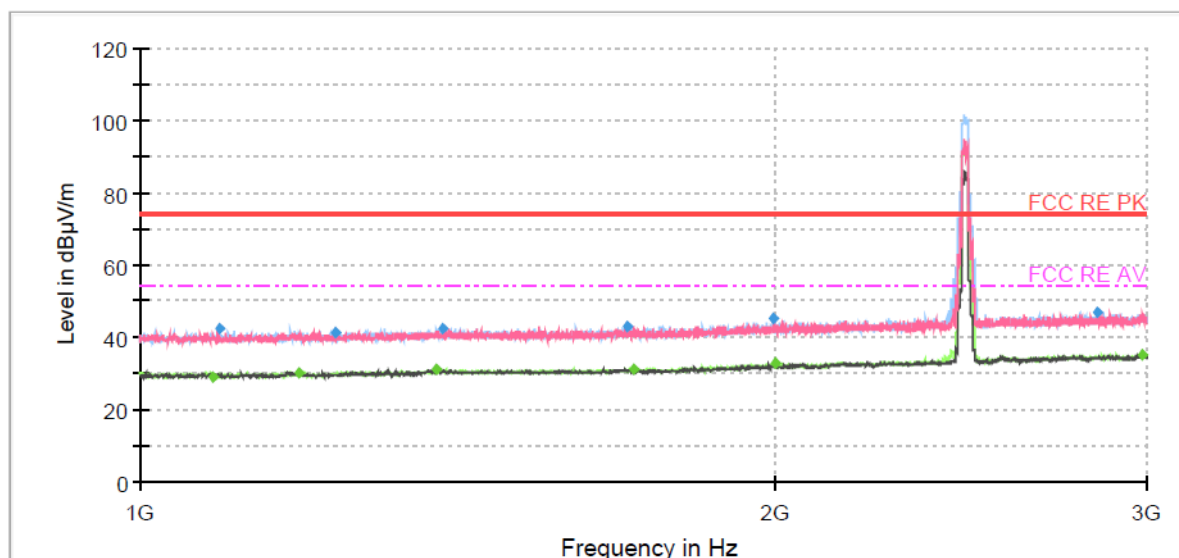


Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3945.00         | 35.62            | ---              | 74.00          | 38.38       | 500.00          | 200.0       | V   | 61.00         | -12          |
| 3980.63         | ---              | 25.12            | 54.00          | 28.88       | 500.00          | 200.0       | V   | 1.00          | -11          |
| 5373.75         | 38.14            | ---              | 74.00          | 35.86       | 500.00          | 100.0       | V   | 174.00        | -8           |
| 5437.50         | ---              | 27.17            | 54.00          | 26.83       | 500.00          | 200.0       | H   | 208.00        | -8           |
| 7306.88         | 43.06            | ---              | 74.00          | 30.94       | 500.00          | 200.0       | H   | 327.00        | -1           |
| 7340.63         | ---              | 31.99            | 54.00          | 22.01       | 500.00          | 200.0       | H   | 357.00        | -1           |
| 7730.63         | 46.45            | ---              | 74.00          | 27.55       | 500.00          | 200.0       | H   | 96.00         | 1            |
| 7741.88         | ---              | 35.55            | 54.00          | 18.45       | 500.00          | 200.0       | V   | 6.00          | 1            |
| 12418.13        | 40.26            | ---              | 74.00          | 33.74       | 500.00          | 200.0       | H   | 0.00          | 5            |
| 12641.25        | ---              | 29.14            | 54.00          | 24.86       | 500.00          | 200.0       | V   | 0.00          | 5            |
| 17827.50        | 52.08            | ---              | 74.00          | 21.92       | 500.00          | 200.0       | V   | 1.00          | 15           |
| 17846.25        | ---              | 40.82            | 54.00          | 13.18       | 500.00          | 200.0       | H   | 357.00        | 15           |

802.11n (HT20) CH11

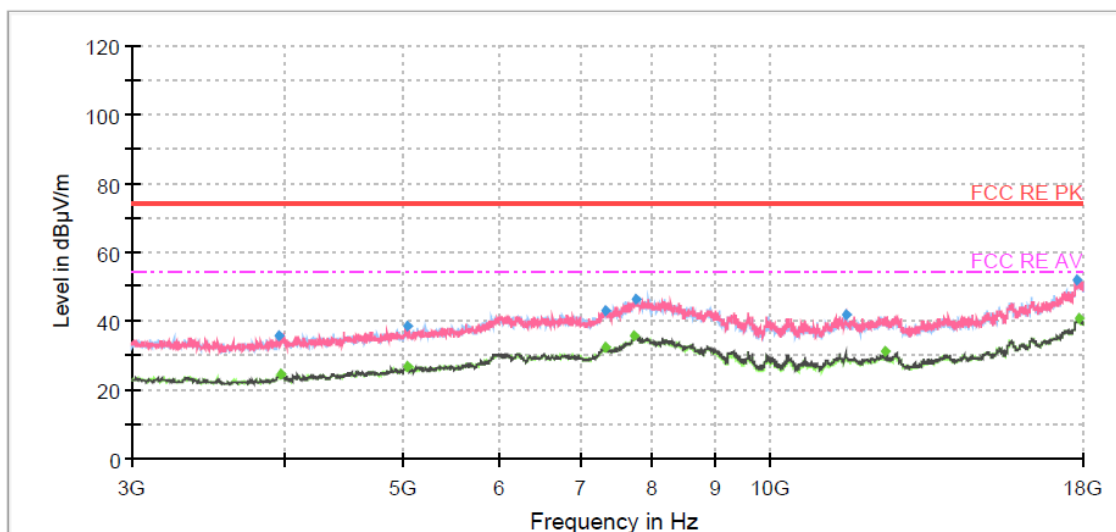


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1083.50         | ---              | 29.27            | 54.00          | 24.73       | 500.00          | 100.0       | V   | 209.00        | -12          |
| 1091.50         | 42.35            | ---              | 74.00          | 31.65       | 500.00          | 200.0       | H   | 358.00        | -12          |
| 1190.50         | ---              | 30.39            | 54.00          | 23.61       | 500.00          | 100.0       | H   | 4.00          | -12          |
| 1238.25         | 41.25            | ---              | 74.00          | 32.75       | 500.00          | 100.0       | H   | 105.00        | -12          |
| 1380.50         | ---              | 31.20            | 54.00          | 22.80       | 500.00          | 200.0       | V   | 130.00        | -11          |
| 1392.25         | 42.58            | ---              | 74.00          | 31.42       | 500.00          | 200.0       | H   | 0.00          | -11          |
| 1702.75         | 43.21            | ---              | 74.00          | 30.79       | 500.00          | 200.0       | H   | 358.00        | -10          |
| 1715.50         | ---              | 31.53            | 54.00          | 22.47       | 500.00          | 200.0       | H   | 0.00          | -10          |
| 1995.75         | 45.16            | ---              | 74.00          | 28.84       | 500.00          | 200.0       | V   | 9.00          | -8           |
| 1998.75         | ---              | 32.83            | 54.00          | 21.17       | 500.00          | 200.0       | H   | 270.00        | -8           |
| 2842.75         | 46.80            | ---              | 74.00          | 27.20       | 500.00          | 200.0       | H   | 189.00        | -5           |
| 2988.00         | ---              | 35.34            | 54.00          | 18.66       | 500.00          | 100.0       | V   | 346.00        | -4           |



Radiates Emission from 3GHz to 18GHz

## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3960.00         | 35.61            | ---              | 74.00          | 38.39       | 500.00          | 200.0       | H   | 12.00         | -11          |
| 3969.38         | ---              | 24.41            | 54.00          | 29.59       | 500.00          | 100.0       | H   | 319.00        | -11          |
| 5041.88         | ---              | 27.02            | 54.00          | 26.98       | 500.00          | 100.0       | H   | 304.00        | -8           |
| 5041.88         | 38.49            | ---              | 74.00          | 35.51       | 500.00          | 200.0       | V   | 225.00        | -8           |
| 7308.75         | ---              | 32.48            | 54.00          | 21.52       | 500.00          | 200.0       | V   | 8.00          | -1           |
| 7316.25         | 43.16            | ---              | 74.00          | 30.84       | 500.00          | 200.0       | H   | 127.00        | -1           |
| 7736.25         | ---              | 35.68            | 54.00          | 18.32       | 500.00          | 200.0       | H   | 353.00        | 1            |
| 7749.38         | 46.47            | ---              | 74.00          | 27.53       | 500.00          | 200.0       | H   | 0.00          | 1            |
| 11505.00        | 41.62            | ---              | 74.00          | 32.38       | 500.00          | 200.0       | V   | 0.00          | 6            |
| 12408.75        | ---              | 31.22            | 54.00          | 22.78       | 500.00          | 100.0       | V   | 177.00        | 5            |
| 17810.63        | 52.02            | ---              | 74.00          | 21.98       | 500.00          | 100.0       | V   | 358.00        | 15           |
| 17836.88        | ---              | 40.63            | 54.00          | 13.37       | 500.00          | 100.0       | H   | 0.00          | 15           |

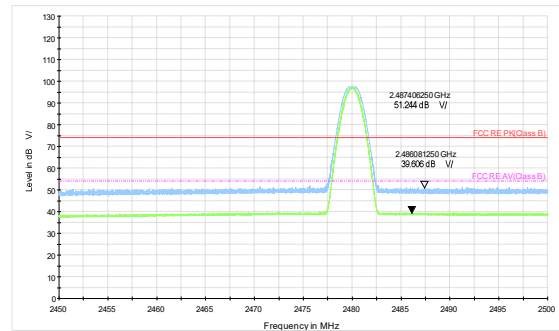
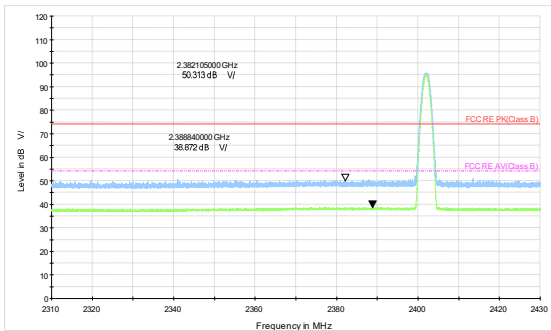
## 1.2. Bluetooth LE

The following graphs display the maximum values of horizontal and vertical by software.  
Blue trace uses the peak detection, Green trace uses the average detection.

A symbol ( $\text{dB } \mu\text{V/m}$ ) in the test plot below means ( $\text{dB}\mu\text{V/m}$ )

The signal beyond the limit is carrier.

After the pretest, Bluetooth LE (1M) was selected as the worst Mode for Bluetooth LE.



## Result of RE

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier.  
The Radiates Emission from 18GHz to 26.5GHz are more than 20dB below the limit are not reported.

### Remark:

1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit – Quasi-Peak/ MAX Peak/ Average
3. A symbol ( $\text{dB V/}$ ) in the test plot below means ( $\text{dB}\mu\text{V/m}$ )
4. The following graphs display the maximum values of coaxial and coplanar for 9k-30MHz; horizontal and vertical for above 30MHz by software.
5. For below 1GHz

 QP Level @Spectrum Overview H 
  QP Level @Spectrum Overview V 
  QP Level @Final Results 
  QP Limit

### For above 1GHz

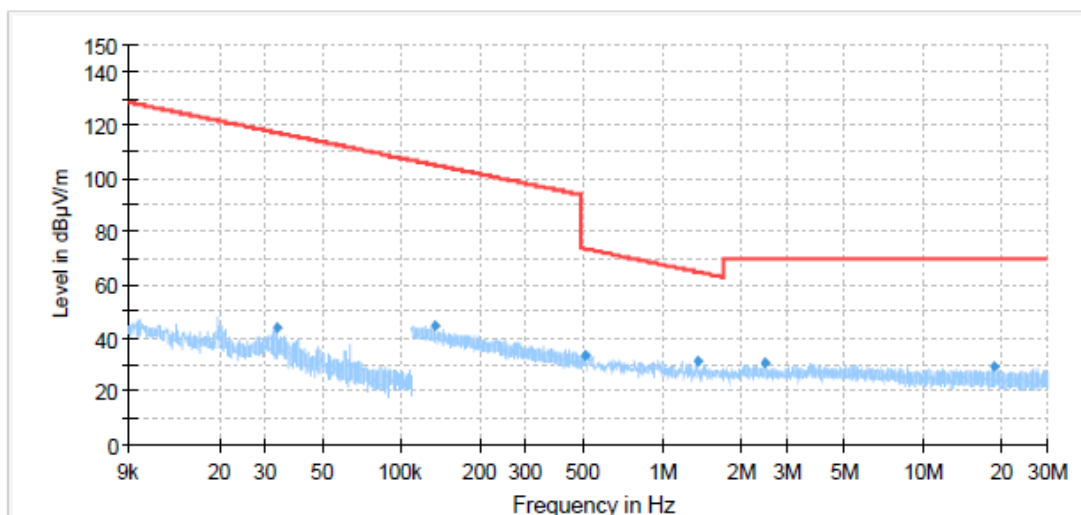
 PK Level @Spectrum Overview H 
  PK Level @Spectrum Overview V 
  PK Level @Final Results 
  PK Limit

 AVG Level @Spectrum Overview H 
  AVG Level @Spectrum Overview V 
  AVG Level @Final Results 
  AVG Limit

After the pretest, Bluetooth LE (1M) was selected as the worst Mode for Bluetooth LE.

### Continuous TX mode:

During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels. The test data of the worst-case condition (Bluetooth LE-Channel 39) was recorded in this report.

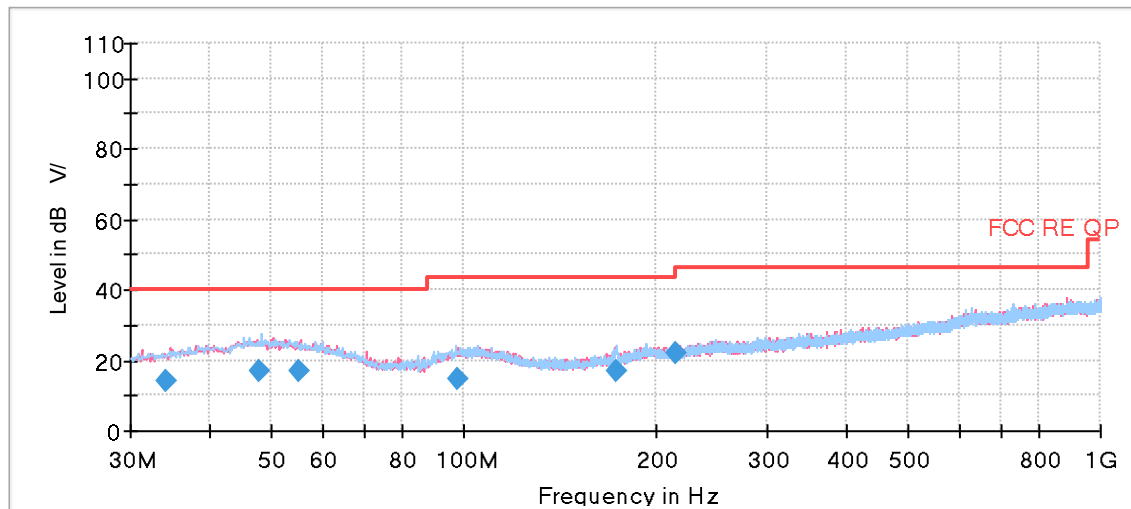


## Final Result

| Frequency (MHz) | MaxPeak (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-----------------|---------------|--------------|
| 0.03            | 44.13            | 117.17         | 73.04       | 500.00          | 302.00        | 17           |
| 0.13            | 44.95            | 105.07         | 60.12       | 150.00          | 283.00        | 17           |
| 0.50            | 33.65            | 73.54          | 39.89       | 150.00          | 33.00         | 17           |
| 1.36            | 31.30            | 64.90          | 33.60       | 150.00          | 253.00        | 17           |
| 2.47            | 30.40            | 69.50          | 39.10       | 150.00          | 3.00          | 17           |
| 18.65           | 29.13            | 69.50          | 40.37       | 150.00          | 95.00         | 17           |

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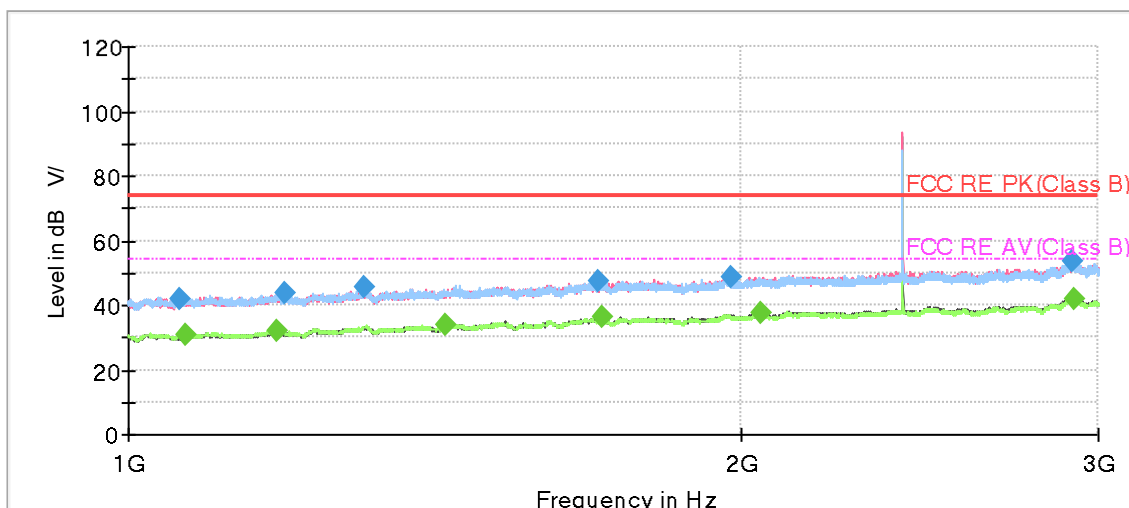
Radiates Emission from 9kHz to 30MHz



Radiates Emission from 30MHz to 1GHz

| Frequency (MHz) | Quasi-Peak (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Height (cm) | Polarization | Azimuth (deg) | Correct Factor (dB) |
|-----------------|---------------------------|----------------------|-------------|-------------|--------------|---------------|---------------------|
| 34.128750       | 14.15                     | 40.00                | 25.85       | 200.0       | V            | 162.0         | 18.1                |
| 47.707500       | 17.08                     | 40.00                | 22.92       | 182.0       | H            | 279.0         | 21.2                |
| 55.062500       | 16.74                     | 40.00                | 23.26       | 221.0       | V            | 89.0          | 20.7                |
| 97.893750       | 14.48                     | 43.50                | 29.02       | 181.0       | H            | 236.0         | 18.9                |
| 174.003750      | 16.86                     | 43.50                | 26.64       | 125.0       | V            | 140.0         | 20.2                |
| 215.997500      | 22.17                     | 43.50                | 21.33       | 198.0       | V            | 0.0           | 18.6                |

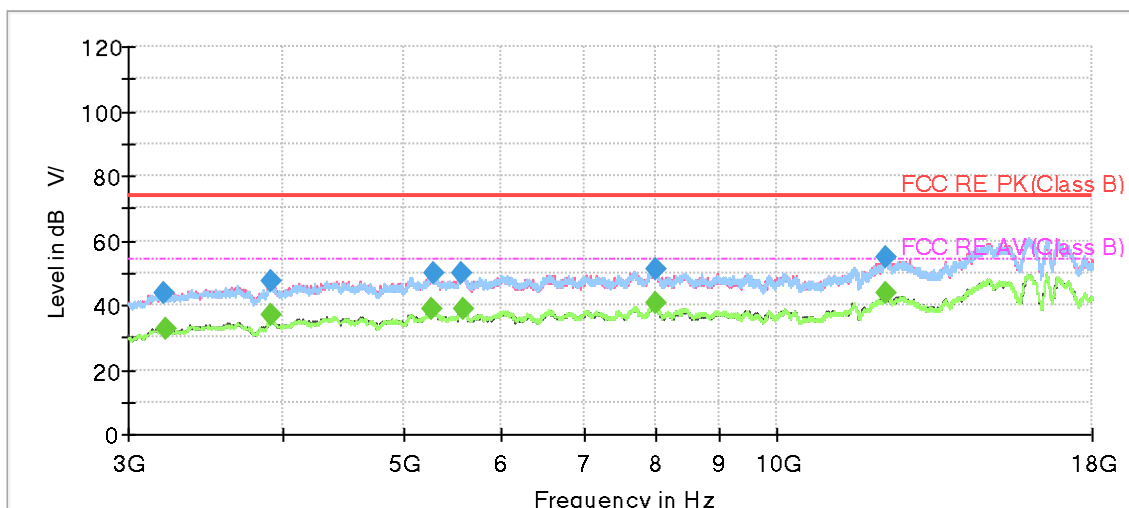
# Bluetooth LE-Channel 0



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

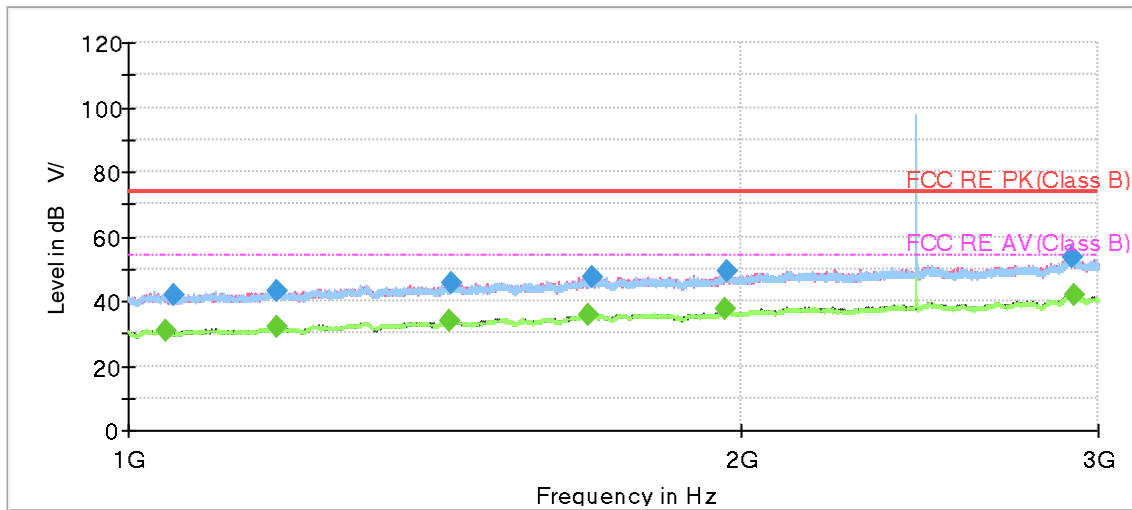
| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1059.500000     | 42.04                  | ---                    | 74.00                | 31.96       | 500.0           | 200.0       | H   | 103.0         | -6.0         |
| 1067.250000     | ---                    | 30.75                  | 54.00                | 23.25       | 500.0           | 200.0       | H   | 139.0         | -5.7         |
| 1182.500000     | ---                    | 32.22                  | 54.00                | 21.78       | 500.0           | 200.0       | V   | 322.0         | -3.9         |
| 1194.500000     | 43.71                  | ---                    | 74.00                | 30.29       | 500.0           | 100.0       | H   | 307.0         | -4.5         |
| 1307.250000     | 45.69                  | ---                    | 74.00                | 28.31       | 500.0           | 100.0       | V   | 0.0           | -2.1         |
| 1434.000000     | ---                    | 33.81                  | 54.00                | 20.19       | 500.0           | 200.0       | H   | 133.0         | -1.9         |
| 1704.750000     | 47.24                  | ---                    | 74.00                | 26.76       | 500.0           | 100.0       | H   | 0.0           | 0.4          |
| 1710.750000     | ---                    | 36.20                  | 54.00                | 17.80       | 500.0           | 200.0       | V   | 168.0         | 0.5          |
| 1978.500000     | 48.43                  | ---                    | 74.00                | 25.57       | 500.0           | 100.0       | V   | 0.0           | 1.9          |
| 2046.000000     | ---                    | 37.26                  | 54.00                | 16.74       | 500.0           | 100.0       | V   | 49.0          | 2.5          |
| 2916.750000     | 53.23                  | ---                    | 74.00                | 20.77       | 500.0           | 100.0       | H   | 349.0         | 8.3          |
| 2918.250000     | ---                    | 42.08                  | 54.00                | 11.92       | 500.0           | 200.0       | V   | 322.0         | 8.3          |



Radiates Emission from 3GHz to 18GHz

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3200.625000     | 43.62            | ---              | 74.00          | 30.38       | 500.0           | 100.0       | V   | 127.0         | -0.8         |
| 3217.500000     | ---              | 32.55            | 54.00          | 21.45       | 500.0           | 100.0       | V   | 108.0         | -1.0         |
| 3913.125000     | ---              | 36.86            | 54.00          | 17.14       | 500.0           | 100.0       | H   | 3.0           | 3.4          |
| 3913.125000     | 47.45            | ---              | 74.00          | 26.55       | 500.0           | 100.0       | V   | 239.0         | 3.4          |
| 5266.875000     | ---              | 38.49            | 54.00          | 15.51       | 500.0           | 200.0       | H   | 120.0         | 6.5          |
| 5295.000000     | 49.95            | ---              | 74.00          | 24.05       | 500.0           | 200.0       | V   | 88.0          | 6.1          |
| 5566.875000     | 50.07            | ---              | 74.00          | 23.93       | 500.0           | 200.0       | H   | 147.0         | 6.9          |
| 5585.625000     | ---              | 39.02            | 54.00          | 14.98       | 500.0           | 200.0       | H   | 0.0           | 7.8          |
| 7998.750000     | ---              | 40.46            | 54.00          | 13.54       | 500.0           | 200.0       | H   | 226.0         | 9.9          |
| 8004.375000     | 51.34            | ---              | 74.00          | 22.66       | 500.0           | 200.0       | V   | 183.0         | 9.8          |
| 12268.125000    | ---              | 43.64            | 54.00          | 10.36       | 500.0           | 200.0       | H   | 280.0         | 14.5         |
| 12281.250000    | 54.82            | ---              | 74.00          | 19.18       | 500.0           | 100.0       | H   | 190.0         | 14.5         |

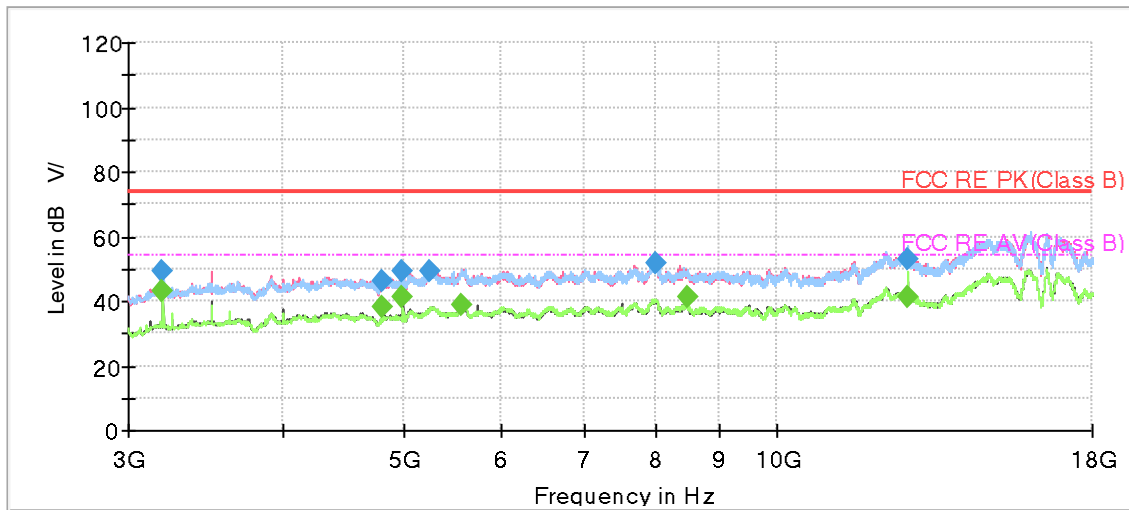
# Bluetooth LE-Channel 19



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

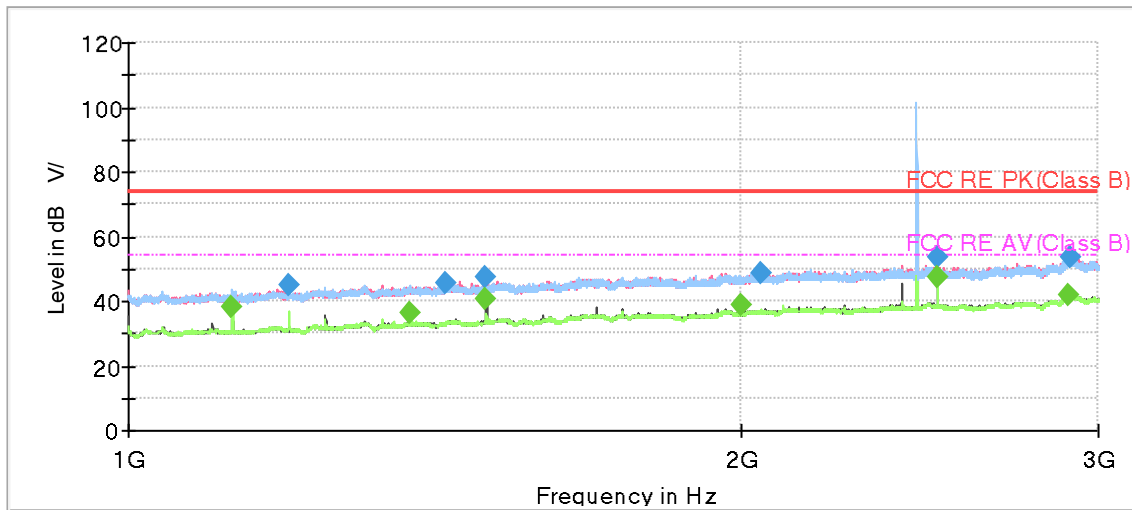
| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1042.750000     | ---              | 30.77            | 54.00          | 23.23       | 500.0           | 200.0       | H   | 14.0          | -5.6         |
| 1052.750000     | 41.65            | ---              | 74.00          | 32.35       | 500.0           | 200.0       | V   | 1.0           | -6.2         |
| 1182.250000     | ---              | 31.98            | 54.00          | 22.02       | 500.0           | 200.0       | V   | 266.0         | -3.9         |
| 1182.500000     | 43.24            | ---              | 74.00          | 30.76       | 500.0           | 100.0       | V   | 160.0         | -3.9         |
| 1438.500000     | ---              | 33.78            | 54.00          | 20.22       | 500.0           | 100.0       | H   | 204.0         | -1.7         |
| 1442.000000     | 45.66            | ---              | 74.00          | 28.34       | 500.0           | 100.0       | V   | 55.0          | -1.6         |
| 1684.500000     | ---              | 35.80            | 54.00          | 18.20       | 500.0           | 100.0       | V   | 289.0         | 0.4          |
| 1692.250000     | 47.64            | ---              | 74.00          | 26.36       | 500.0           | 200.0       | V   | 309.0         | 0.3          |
| 1968.500000     | ---              | 37.55            | 54.00          | 16.45       | 500.0           | 200.0       | V   | 248.0         | 2.3          |
| 1969.250000     | 48.97            | ---              | 74.00          | 25.03       | 500.0           | 200.0       | H   | 99.0          | 2.3          |
| 2911.500000     | 53.58            | ---              | 74.00          | 20.42       | 500.0           | 100.0       | H   | 320.0         | 8.4          |
| 2917.000000     | ---              | 42.11            | 54.00          | 11.89       | 500.0           | 100.0       | H   | 234.0         | 8.3          |



Radiates Emission from 3GHz to 18GHz

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3198.750000     | ---              | 43.13            | 54.00          | 10.87       | 500.0           | 100.0       | V   | 0.0           | -0.8         |
| 3198.750000     | 49.51            | ---              | 74.00          | 24.49       | 500.0           | 100.0       | V   | 0.0           | -0.8         |
| 4803.750000     | ---              | 37.93            | 54.00          | 16.07       | 500.0           | 200.0       | H   | 59.0          | 2.2          |
| 4803.750000     | 46.44            | ---              | 74.00          | 27.56       | 500.0           | 200.0       | H   | 59.0          | 2.2          |
| 4998.750000     | ---              | 41.16            | 54.00          | 12.84       | 500.0           | 100.0       | V   | 64.0          | 2.7          |
| 4998.750000     | 49.22            | ---              | 74.00          | 24.78       | 500.0           | 100.0       | V   | 64.0          | 2.7          |
| 5261.250000     | 49.31            | ---              | 74.00          | 24.69       | 500.0           | 100.0       | V   | 159.0         | 6.3          |
| 5576.250000     | ---              | 39.00            | 54.00          | 15.00       | 500.0           | 200.0       | H   | 210.0         | 7.3          |
| 7993.125000     | 51.56            | ---              | 74.00          | 22.44       | 500.0           | 100.0       | H   | 97.0          | 9.9          |
| 8499.375000     | ---              | 40.98            | 54.00          | 13.02       | 500.0           | 100.0       | H   | 2.0           | 7.5          |
| 12765.000000    | ---              | 41.27            | 54.00          | 12.73       | 500.0           | 100.0       | V   | 271.0         | 12.6         |
| 12765.000000    | 52.81            | ---              | 74.00          | 21.19       | 500.0           | 100.0       | H   | 49.0          | 12.6         |

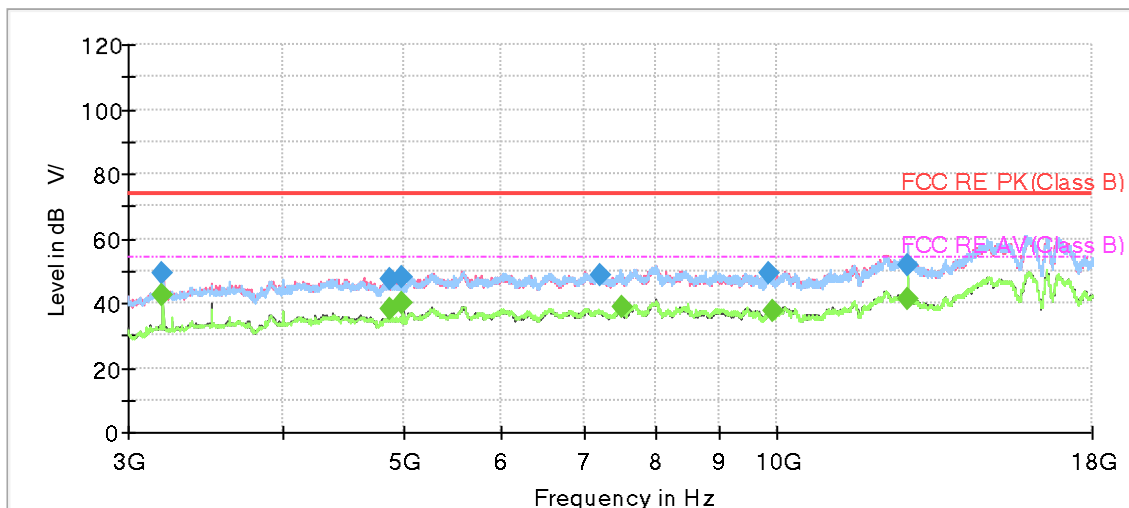
# Bluetooth LE-Channel 39



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

| Frequency (MHz) | MaxPeak (dB $\mu$ V/m) | Average (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------------|------------------------|----------------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 1125.000000     | ---                    | 38.39                  | 54.00                | 15.61       | 500.0           | 100.0       | H   | 52.0          | -5.3         |
| 1200.000000     | 44.86                  | ---                    | 74.00                | 29.14       | 500.0           | 100.0       | H   | 27.0          | -4.5         |
| 1375.000000     | ---                    | 36.07                  | 54.00                | 17.93       | 500.0           | 100.0       | H   | 77.0          | -2.3         |
| 1431.250000     | 45.55                  | ---                    | 74.00                | 28.45       | 500.0           | 100.0       | V   | 39.0          | -1.9         |
| 1499.750000     | 47.59                  | ---                    | 74.00                | 26.41       | 500.0           | 100.0       | V   | 45.0          | -1.6         |
| 1500.000000     | ---                    | 40.60                  | 54.00                | 13.40       | 500.0           | 100.0       | V   | 0.0           | -1.6         |
| 2000.000000     | ---                    | 38.57                  | 54.00                | 15.43       | 500.0           | 100.0       | V   | 33.0          | 1.6          |
| 2045.500000     | 48.82                  | ---                    | 74.00                | 25.18       | 500.0           | 100.0       | V   | 262.0         | 2.5          |
| 2500.250000     | 53.79                  | ---                    | 74.00                | 20.21       | 500.0           | 100.0       | H   | 84.0          | 4.8          |
| 2500.250000     | ---                    | 47.34                  | 54.00                | 6.66        | 500.0           | 100.0       | H   | 84.0          | 4.8          |
| 2901.750000     | ---                    | 42.12                  | 54.00                | 11.88       | 500.0           | 200.0       | V   | 275.0         | 8.6          |
| 2907.250000     | 53.80                  | ---                    | 74.00                | 20.20       | 500.0           | 200.0       | H   | 139.0         | 8.5          |



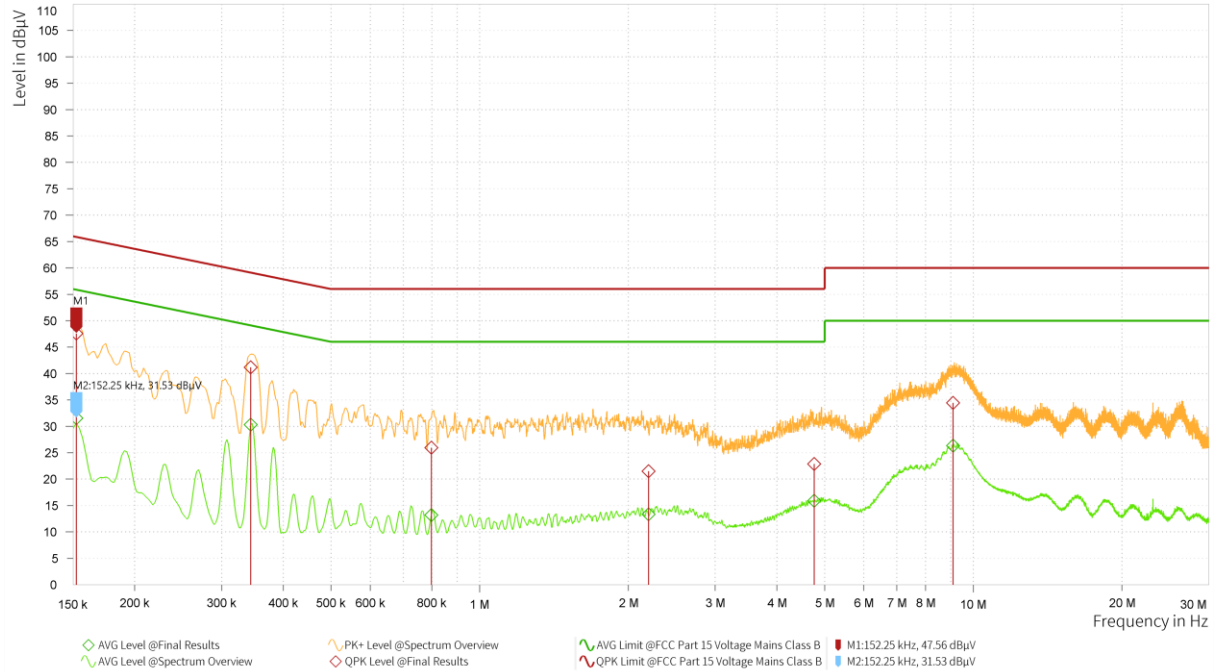
Radiates Emission from 3GHz to 18GHz

| Frequency (MHz) | MaxPeak (dBμV/m) | Average (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB/m) |
|-----------------|------------------|------------------|----------------|-------------|-----------------|-------------|-----|---------------|--------------|
| 3198.750000     | ---              | 42.51            | 54.00          | 11.49       | 500.0           | 100.0       | V   | 357.0         | -0.8         |
| 3198.750000     | 49.33            | ---              | 74.00          | 24.67       | 500.0           | 100.0       | V   | 357.0         | -0.8         |
| 4880.625000     | ---              | 38.29            | 54.00          | 15.71       | 500.0           | 100.0       | H   | 0.0           | 3.0          |
| 4882.500000     | 47.50            | ---              | 74.00          | 26.50       | 500.0           | 100.0       | H   | 6.0           | 3.0          |
| 4998.750000     | ---              | 39.86            | 54.00          | 14.14       | 500.0           | 100.0       | V   | 60.0          | 2.7          |
| 4998.750000     | 48.22            | ---              | 74.00          | 25.78       | 500.0           | 100.0       | V   | 60.0          | 2.7          |
| 7215.000000     | 48.82            | ---              | 74.00          | 25.18       | 500.0           | 100.0       | H   | 46.0          | 7.2          |
| 7500.000000     | ---              | 38.85            | 54.00          | 15.15       | 500.0           | 100.0       | H   | 0.0           | 6.7          |
| 9879.375000     | 49.53            | ---              | 74.00          | 24.47       | 500.0           | 100.0       | V   | 343.0         | 9.1          |
| 9937.500000     | ---              | 37.48            | 54.00          | 16.52       | 500.0           | 100.0       | V   | 245.0         | 7.7          |
| 12765.000000    | 51.88            | ---              | 74.00          | 22.12       | 500.0           | 200.0       | H   | 182.0         | 12.6         |
| 12766.875000    | ---              | 41.10            | 54.00          | 12.90       | 500.0           | 200.0       | H   | 16.0          | 12.6         |

## 2. Conducted Emission

### 2.1. Wi-Fi 2.4GHz

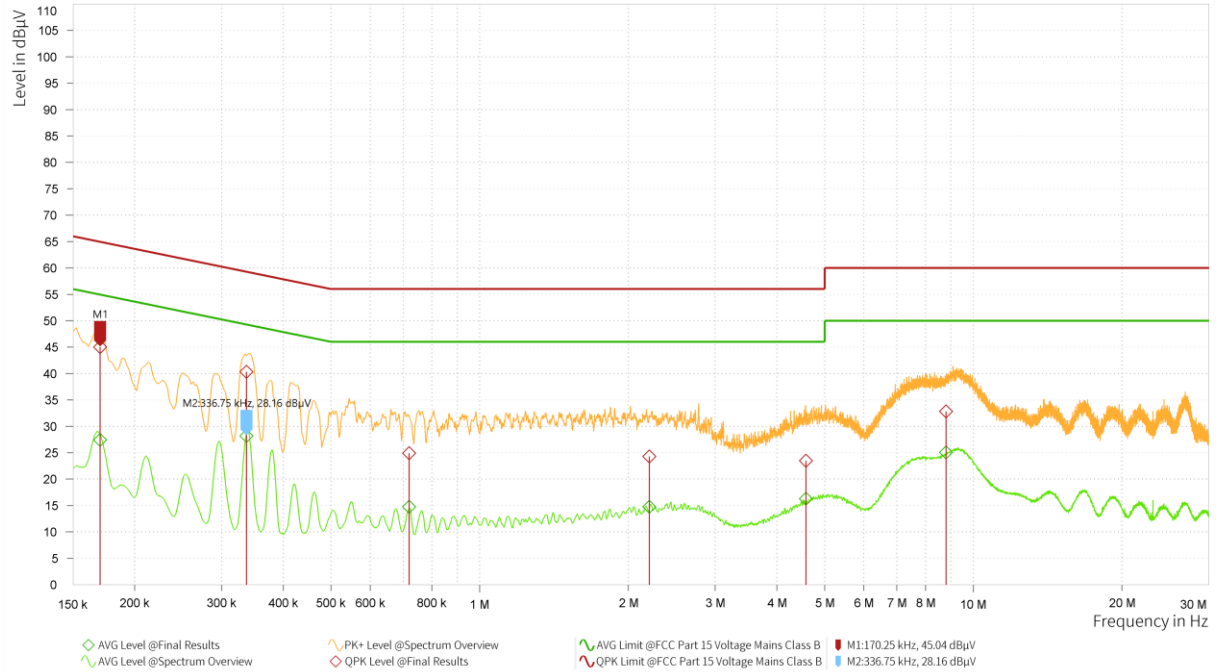
During the test, the Conducted Emission was performed in all modes with all channel. The test data of the worst-case condition (802.11n (HT20) CH1) was recorded in this report.



| Frequency [MHz] | QPK Level [dBμV] | QPK Limit [dBμV] | QPK Margin [dB] | AVG Level [dBμV] | AVG Limit [dBμV] | AVG Margin [dB] | Correction [dB] | Line | Meas. BW [kHz] | Meas. Time [s] |
|-----------------|------------------|------------------|-----------------|------------------|------------------|-----------------|-----------------|------|----------------|----------------|
| 0.152           | 47.56            | 65.88            | 18.31           | 31.53            | 55.88            | 24.35           | 21.24           | L1   | 9.000          | 1.000          |
| 0.344           | 41.17            | 59.12            | 17.95           | 30.30            | 49.12            | 18.82           | 21.26           | L1   | 9.000          | 1.000          |
| 0.798           | 25.93            | 56.00            | 30.07           | 13.20            | 46.00            | 32.80           | 20.66           | L1   | 9.000          | 1.000          |
| 2.198           | 21.48            | 56.00            | 34.52           | 13.32            | 46.00            | 32.68           | 19.96           | L1   | 9.000          | 1.000          |
| 4.763           | 22.86            | 56.00            | 33.14           | 15.90            | 46.00            | 30.10           | 19.75           | L1   | 9.000          | 1.000          |
| 9.103           | 34.45            | 60.00            | 25.55           | 26.33            | 50.00            | 23.67           | 19.76           | L1   | 9.000          | 1.000          |

**Remark: Correct factor=cable loss + LISN factor**

L line Conducted Emission from 150 kHz to 30 MHz



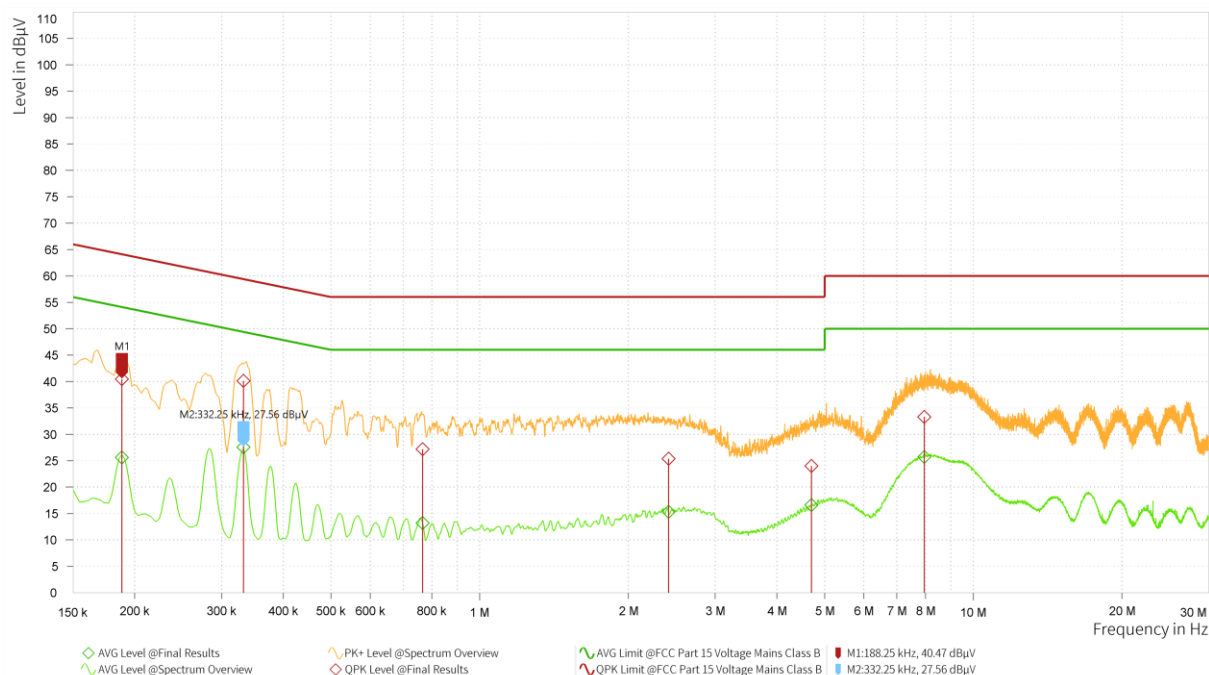
| Frequency [MHz] | QPK Level [dBμV] | QPK Limit [dBμV] | QPK Margin [dB] | AVG Level [dBμV] | AVG Limit [dBμV] | AVG Margin [dB] | Correction [dB] | Line | Meas. BW [kHz] | Meas. Time [s] |
|-----------------|------------------|------------------|-----------------|------------------|------------------|-----------------|-----------------|------|----------------|----------------|
| 0.170           | 45.04            | 64.95            | 19.91           | 27.43            | 54.95            | 27.51           | 21.17           | N    | 9.000          | 1.000          |
| 0.337           | 40.32            | 59.28            | 18.97           | 28.16            | 49.28            | 21.12           | 21.22           | N    | 9.000          | 1.000          |
| 0.719           | 24.91            | 56.00            | 31.09           | 14.77            | 46.00            | 31.23           | 20.89           | N    | 9.000          | 1.000          |
| 2.207           | 24.29            | 56.00            | 31.71           | 14.77            | 46.00            | 31.23           | 19.91           | N    | 9.000          | 1.000          |
| 4.583           | 23.46            | 56.00            | 32.54           | 16.25            | 46.00            | 29.75           | 19.80           | N    | 9.000          | 1.000          |
| 8.804           | 32.85            | 60.00            | 27.15           | 25.03            | 50.00            | 24.97           | 19.72           | N    | 9.000          | 1.000          |

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz

## 2.2. Bluetooth LE

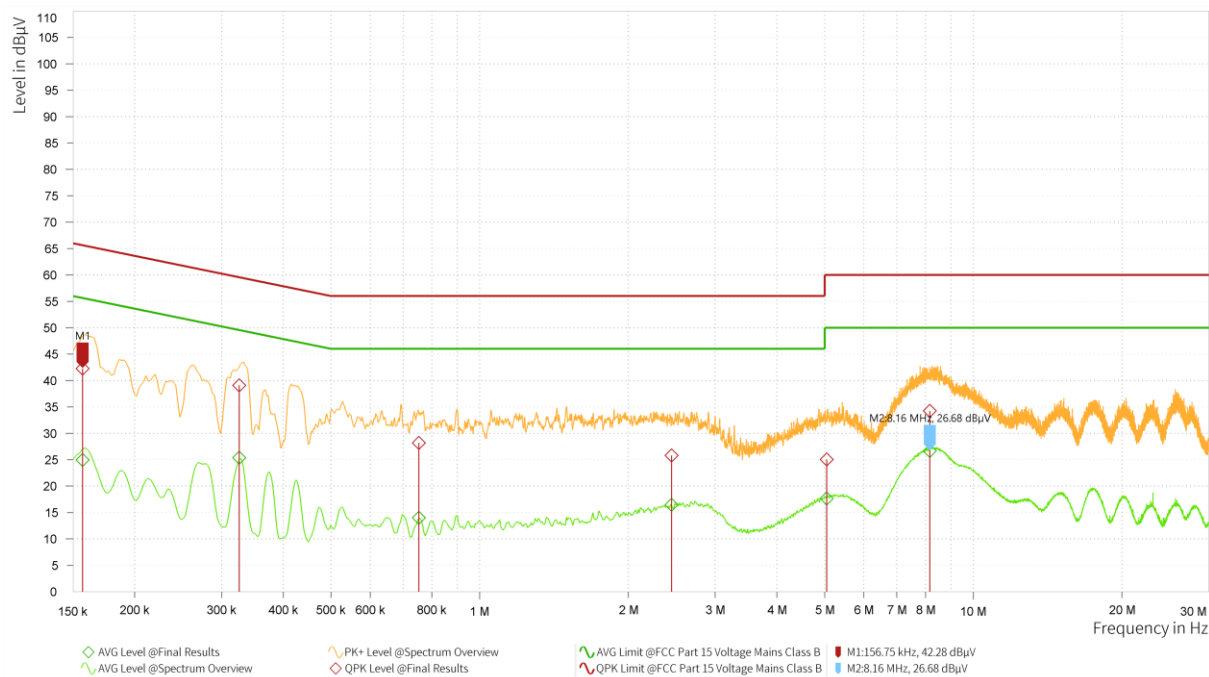
During the test, the Conducted Emission was performed in all modes with all channels. The test data of the worst-case condition (Bluetooth LE-Channel 39) was recorded in this report.



| Frequency [MHz] | QPK Level [dBµV] | QPK Limit [dBµV] | QPK Margin [dB] | AVG Level [dBµV] | AVG Limit [dBµV] | AVG Margin [dB] | Correction [dB] | Line | Meas. BW [kHz] | Meas. Time [s] |
|-----------------|------------------|------------------|-----------------|------------------|------------------|-----------------|-----------------|------|----------------|----------------|
| 0.188           | 40.47            | 64.11            | 23.64           | 25.60            | 54.11            | 28.51           | 21.34           | L1   | 9.000          | 1.000          |
| 0.332           | 40.15            | 59.39            | 19.25           | 27.56            | 49.39            | 21.83           | 21.27           | L1   | 9.000          | 1.000          |
| 0.767           | 27.19            | 56.00            | 28.81           | 13.17            | 46.00            | 32.83           | 20.70           | L1   | 9.000          | 1.000          |
| 2.414           | 25.37            | 56.00            | 30.63           | 15.32            | 46.00            | 30.68           | 19.91           | L1   | 9.000          | 1.000          |
| 4.700           | 24.02            | 56.00            | 31.98           | 16.61            | 46.00            | 29.39           | 19.75           | L1   | 9.000          | 1.000          |
| 7.953           | 33.30            | 60.00            | 26.70           | 25.72            | 50.00            | 24.28           | 19.73           | L1   | 9.000          | 1.000          |

**Remark: Correct factor=cable loss + LISN factor**

L line Conducted Emission from 150 kHz to 30 MHz



| Frequency [MHz] | QPK Level [dBμV] | QPK Limit [dBμV] | QPK Margin [dB] | AVG Level [dBμV] | AVG Limit [dBμV] | AVG Margin [dB] | Correction [dB] | Line | Meas. BW [kHz] | Meas. Time [s] |
|-----------------|------------------|------------------|-----------------|------------------|------------------|-----------------|-----------------|------|----------------|----------------|
| 0.157           | 42.28            | 65.63            | 23.35           | 24.94            | 55.63            | 30.69           | 21.16           | N    | 9.000          | 1.000          |
| 0.326           | 39.07            | 59.57            | 20.49           | 25.36            | 49.57            | 24.21           | 21.22           | N    | 9.000          | 1.000          |
| 0.753           | 28.18            | 56.00            | 27.82           | 13.99            | 46.00            | 32.01           | 20.71           | N    | 9.000          | 1.000          |
| 2.447           | 25.82            | 56.00            | 30.18           | 16.44            | 46.00            | 29.56           | 19.88           | N    | 9.000          | 1.000          |
| 5.048           | 25.05            | 60.00            | 34.95           | 17.63            | 50.00            | 32.37           | 19.80           | N    | 9.000          | 1.000          |
| 8.160           | 34.27            | 60.00            | 25.73           | 26.68            | 50.00            | 23.32           | 19.72           | N    | 9.000          | 1.000          |

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz