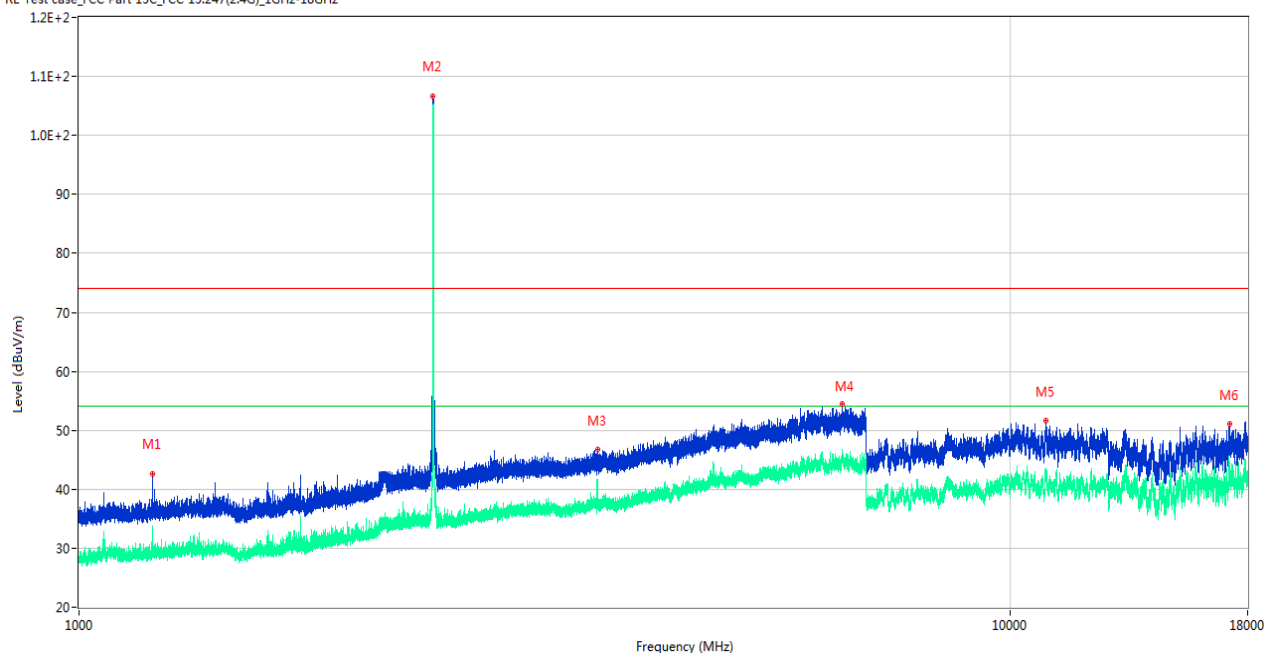


**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H**

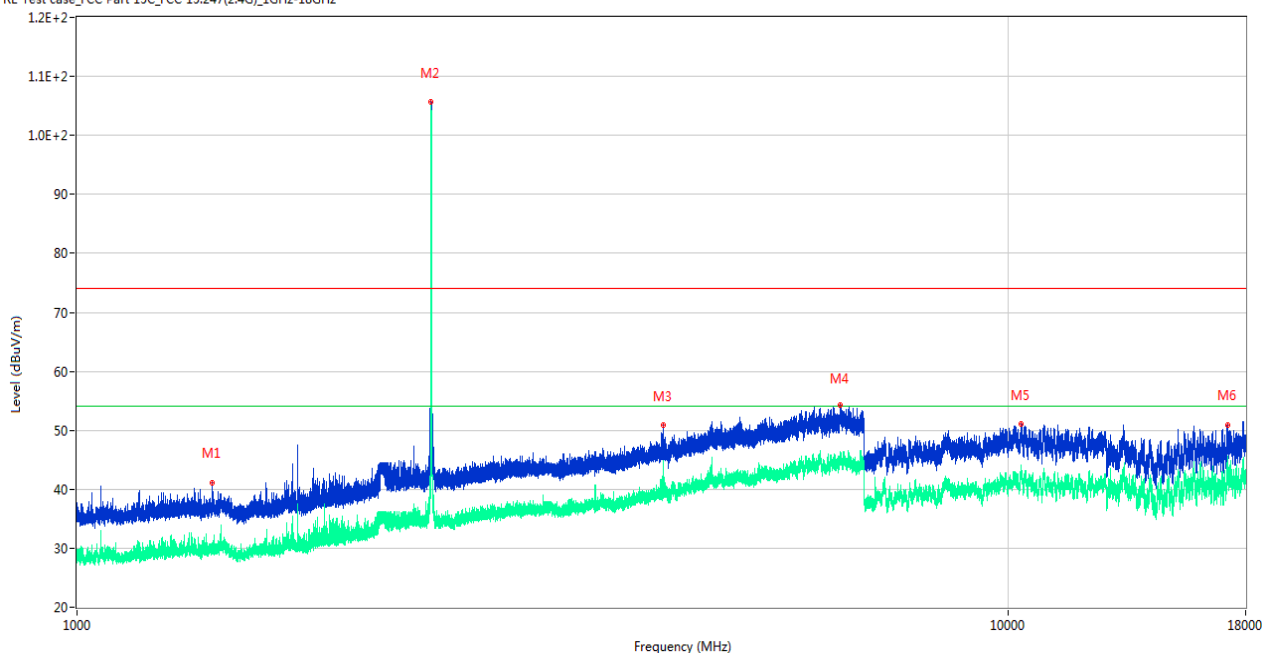
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1198.400        | 42.63            | -17.87      | 74.0           | 31.37       | Peak     | 69.00          | 100         | Horizontal | Pass    |
| 1** | 1198.400        | 28.93            | -17.87      | 54.0           | 25.07       | AV       | 69.00          | 100         | Horizontal | Pass    |
| 2   | 2401.500        | 106.72           | -11.74      | 74.0           | -32.72      | Peak     | 155.00         | 100         | Horizontal | N/A     |
| 2** | 2401.500        | 104.43           | -11.74      | 54.0           | -50.43      | AV       | 155.00         | 100         | Horizontal | N/A     |
| 3   | 3603.400        | 46.79            | -6.72       | 74.0           | 27.21       | Peak     | 346.00         | 100         | Horizontal | Pass    |
| 3** | 3603.400        | 40.51            | -6.72       | 54.0           | 13.49       | AV       | 346.00         | 100         | Horizontal | Pass    |
| 4   | 6608.600        | 54.42            | 1.94        | 74.0           | 19.58       | Peak     | 251.00         | 200         | Horizontal | Pass    |
| 4** | 6608.600        | 45.36            | 1.94        | 54.0           | 8.64        | AV       | 251.00         | 200         | Horizontal | Pass    |
| 5   | 10941.912       | 51.55            | -0.09       | 74.0           | 22.45       | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 5** | 10941.912       | 42.97            | -0.09       | 54.0           | 11.03       | AV       | 0.00           | 200         | Horizontal | Pass    |
| 6   | 17206.198       | 51.03            | 1.60        | 74.0           | 22.97       | Peak     | 0.00           | 300         | Horizontal | Pass    |
| 6** | 17206.198       | 42.45            | 1.60        | 54.0           | 11.55       | AV       | 0.00           | 300         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V**

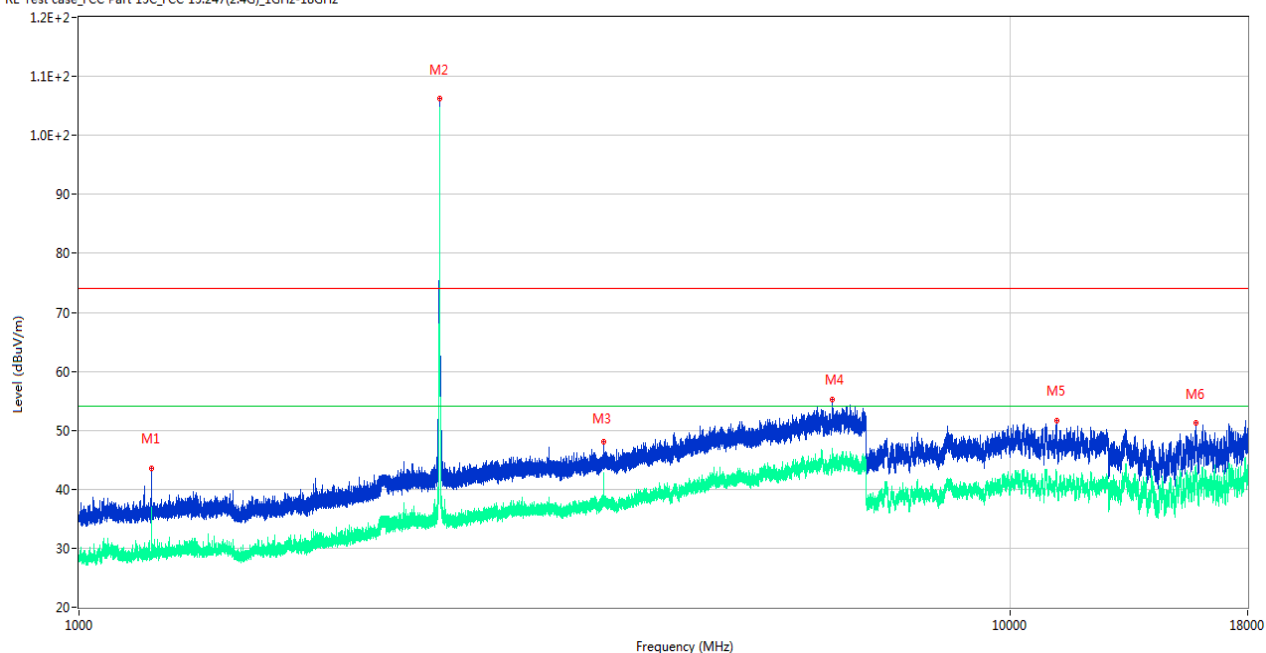
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1397.800        | 41.18            | -17.26      | 74.0           | 32.82       | Peak     | 161.00         | 200         | Vertical | Pass    |
| 1** | 1397.800        | 29.80            | -17.26      | 54.0           | 24.20       | AV       | 161.00         | 200         | Vertical | Pass    |
| 2   | 2401.600        | 105.60           | -11.74      | 74.0           | -31.60      | Peak     | 131.00         | 200         | Vertical | N/A     |
| 2** | 2401.600        | 105.33           | -11.74      | 54.0           | -51.33      | AV       | 131.00         | 200         | Vertical | N/A     |
| 3   | 4265.400        | 50.95            | -3.96       | 74.0           | 23.05       | Peak     | 63.00          | 100         | Vertical | Pass    |
| 3** | 4265.400        | 43.82            | -3.96       | 54.0           | 10.18       | AV       | 63.00          | 100         | Vertical | Pass    |
| 4   | 6608.200        | 54.36            | 1.93        | 74.0           | 19.64       | Peak     | 8.00           | 100         | Vertical | Pass    |
| 4** | 6608.200        | 45.57            | 1.93        | 54.0           | 8.43        | AV       | 8.00           | 100         | Vertical | Pass    |
| 5   | 10336.725       | 50.99            | 0.07        | 74.0           | 23.01       | Peak     | 83.00          | 200         | Vertical | Pass    |
| 5** | 10336.725       | 44.15            | 0.07        | 54.0           | 9.85        | AV       | 83.00          | 200         | Vertical | Pass    |
| 6   | 17213.026       | 50.97            | 1.43        | 74.0           | 23.03       | Peak     | 178.00         | 200         | Vertical | Pass    |
| 6** | 17213.026       | 43.62            | 1.43        | 54.0           | 10.38       | AV       | 178.00         | 200         | Vertical | Pass    |

## GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

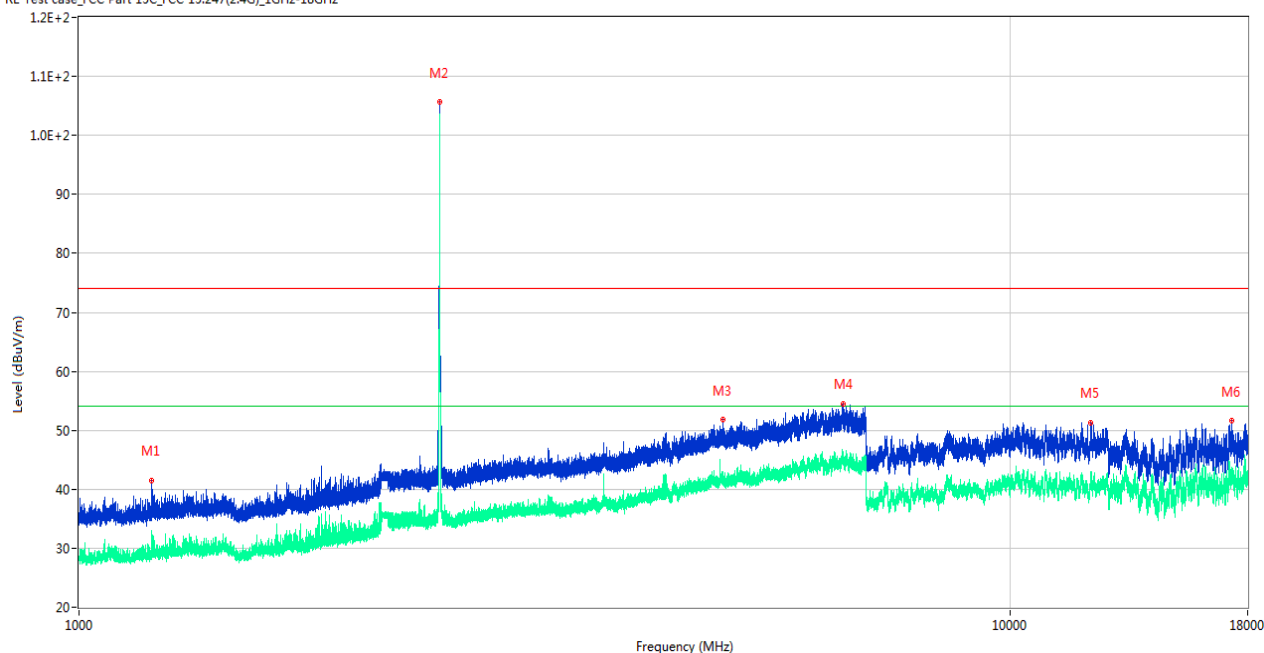
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1196.500        | 43.55            | -17.83      | 74.0           | 30.45       | Peak     | 343.00         | 300         | Horizontal | Pass    |
| 1** | 1196.500        | 28.93            | -17.83      | 54.0           | 25.07       | AV       | 343.00         | 300         | Horizontal | Pass    |
| 2   | 2439.600        | 106.23           | -12.28      | 74.0           | -32.23      | Peak     | 149.00         | 100         | Horizontal | N/A     |
| 2** | 2439.600        | 103.07           | -12.28      | 54.0           | -49.07      | AV       | 149.00         | 100         | Horizontal | N/A     |
| 3   | 3659.800        | 47.98            | -6.41       | 74.0           | 26.02       | Peak     | 318.00         | 100         | Horizontal | Pass    |
| 3** | 3659.800        | 40.56            | -6.41       | 54.0           | 13.44       | AV       | 318.00         | 100         | Horizontal | Pass    |
| 4   | 6447.600        | 55.24            | 2.15        | 74.0           | 18.76       | Peak     | 129.00         | 100         | Horizontal | Pass    |
| 4** | 6447.600        | 45.54            | 2.15        | 54.0           | 8.46        | AV       | 129.00         | 100         | Horizontal | Pass    |
| 5   | 11215.037       | 51.67            | -0.19       | 74.0           | 22.33       | Peak     | 116.00         | 400         | Horizontal | Pass    |
| 5** | 11215.037       | 41.60            | -0.19       | 54.0           | 12.40       | AV       | 116.00         | 400         | Horizontal | Pass    |
| 6   | 15824.925       | 51.19            | 1.64        | 74.0           | 22.81       | Peak     | 64.00          | 300         | Horizontal | Pass    |
| 6** | 15824.925       | 42.97            | 1.64        | 54.0           | 11.03       | AV       | 64.00          | 300         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V**

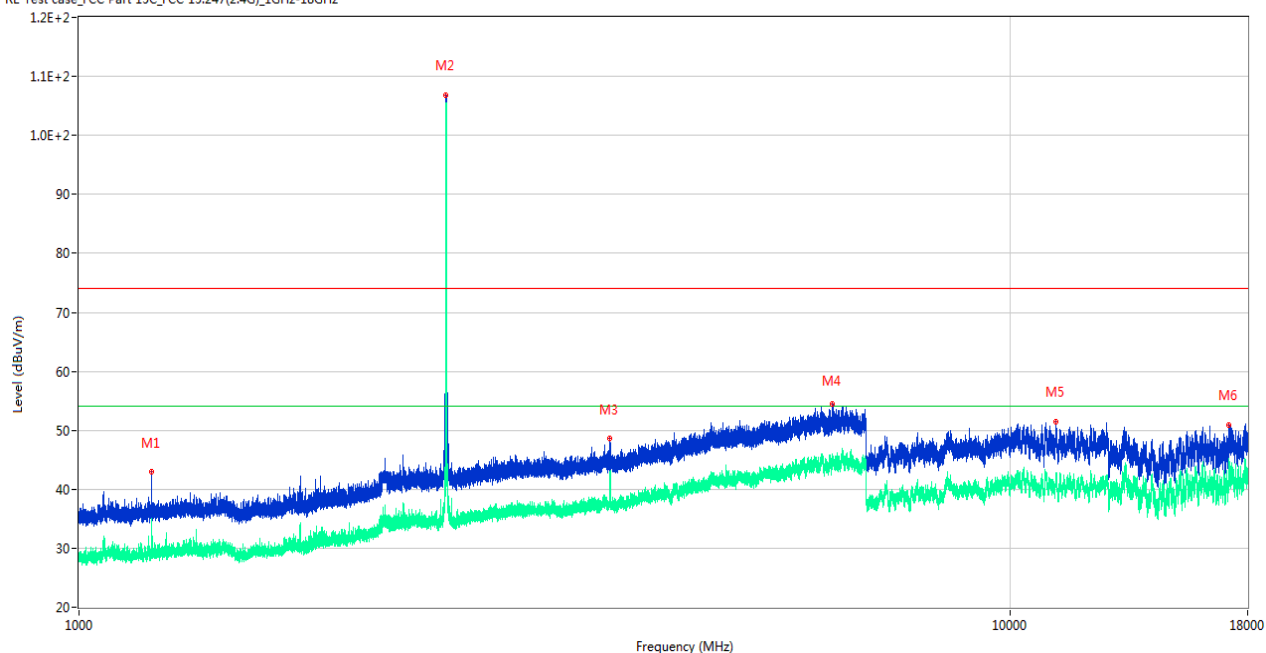
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1196.500        | 41.50            | -17.83      | 74.0           | 32.50       | Peak     | 46.00          | 300         | Vertical | Pass    |
| 1** | 1196.500        | 28.95            | -17.83      | 54.0           | 25.05       | AV       | 46.00          | 300         | Vertical | Pass    |
| 2   | 2440.600        | 105.63           | -12.22      | 74.0           | -31.63      | Peak     | 135.00         | 100         | Vertical | N/A     |
| 2** | 2440.600        | 102.01           | -12.22      | 54.0           | -48.01      | AV       | 135.00         | 100         | Vertical | N/A     |
| 3   | 4921.200        | 51.75            | -2.35       | 74.0           | 22.25       | Peak     | 61.00          | 150         | Vertical | Pass    |
| 3** | 4921.200        | 41.32            | -2.35       | 54.0           | 12.68       | AV       | 61.00          | 150         | Vertical | Pass    |
| 4   | 6612.200        | 54.50            | 2.16        | 74.0           | 19.50       | Peak     | 262.00         | 400         | Vertical | Pass    |
| 4** | 6612.200        | 45.68            | 2.16        | 54.0           | 8.32        | AV       | 262.00         | 400         | Vertical | Pass    |
| 5   | 12214.963       | 51.33            | 1.18        | 74.0           | 22.67       | Peak     | 330.00         | 200         | Vertical | Pass    |
| 5** | 12214.963       | 42.61            | 1.18        | 54.0           | 11.39       | AV       | 330.00         | 200         | Vertical | Pass    |
| 6   | 17287.313       | 51.55            | 1.69        | 74.0           | 22.45       | Peak     | 349.00         | 400         | Vertical | Pass    |
| 6** | 17287.313       | 42.08            | 1.69        | 54.0           | 11.92       | AV       | 349.00         | 400         | Vertical | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

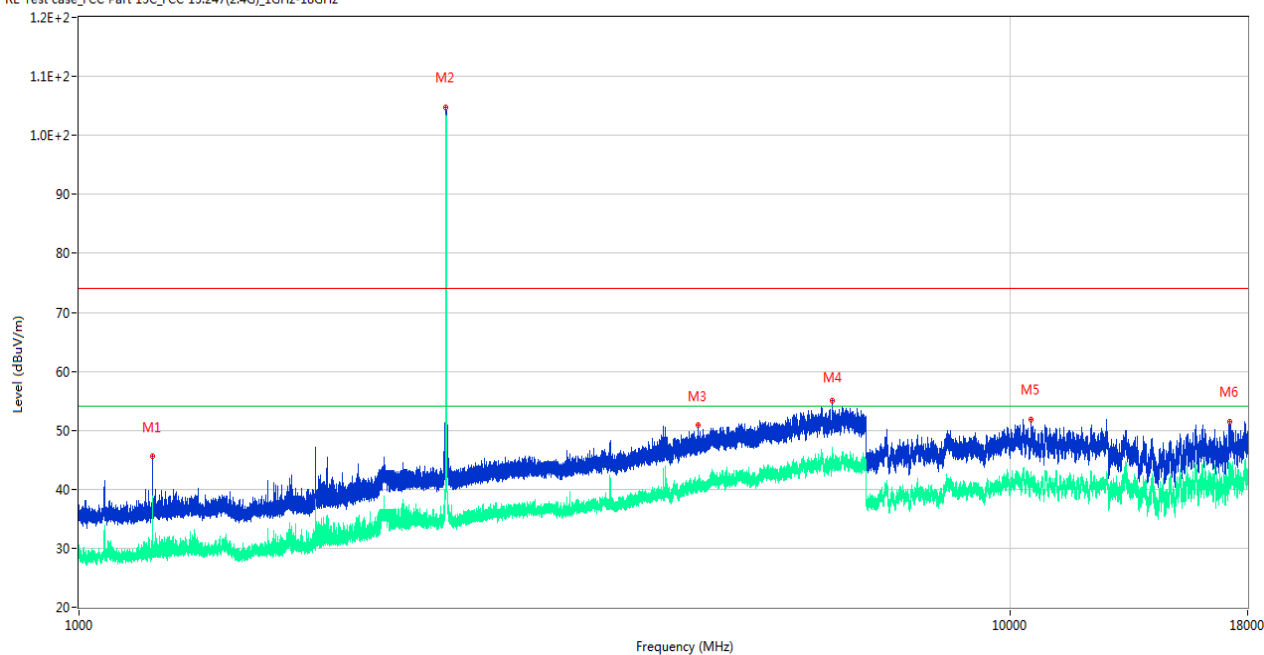
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1197.800        | 42.89            | -17.86      | 74.0           | 31.11       | Peak     | 7.00           | 300         | Horizontal | Pass    |
| 1** | 1197.800        | 28.65            | -17.86      | 54.0           | 25.35       | AV       | 7.00           | 300         | Horizontal | Pass    |
| 2   | 2479.500        | 106.83           | -12.21      | 74.0           | -32.83      | Peak     | 148.00         | 200         | Horizontal | N/A     |
| 2** | 2479.500        | 104.94           | -12.21      | 54.0           | -50.94      | AV       | 148.00         | 200         | Horizontal | N/A     |
| 3   | 3719.800        | 48.66            | -5.86       | 74.0           | 25.34       | Peak     | 313.00         | 100         | Horizontal | Pass    |
| 3** | 3719.800        | 42.23            | -5.86       | 54.0           | 11.77       | AV       | 313.00         | 100         | Horizontal | Pass    |
| 4   | 6449.600        | 54.51            | 1.96        | 74.0           | 19.49       | Peak     | 174.00         | 100         | Horizontal | Pass    |
| 4** | 6449.600        | 44.76            | 1.96        | 54.0           | 9.24        | AV       | 174.00         | 100         | Horizontal | Pass    |
| 5   | 11213.312       | 51.49            | -0.20       | 74.0           | 22.51       | Peak     | 43.00          | 200         | Horizontal | Pass    |
| 5** | 11213.312       | 42.65            | -0.20       | 54.0           | 11.35       | AV       | 43.00          | 200         | Horizontal | Pass    |
| 6   | 17190.713       | 50.91            | 2.31        | 74.0           | 23.09       | Peak     | 206.00         | 400         | Horizontal | Pass    |
| 6** | 17190.713       | 43.00            | 2.31        | 54.0           | 11.00       | AV       | 206.00         | 400         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz

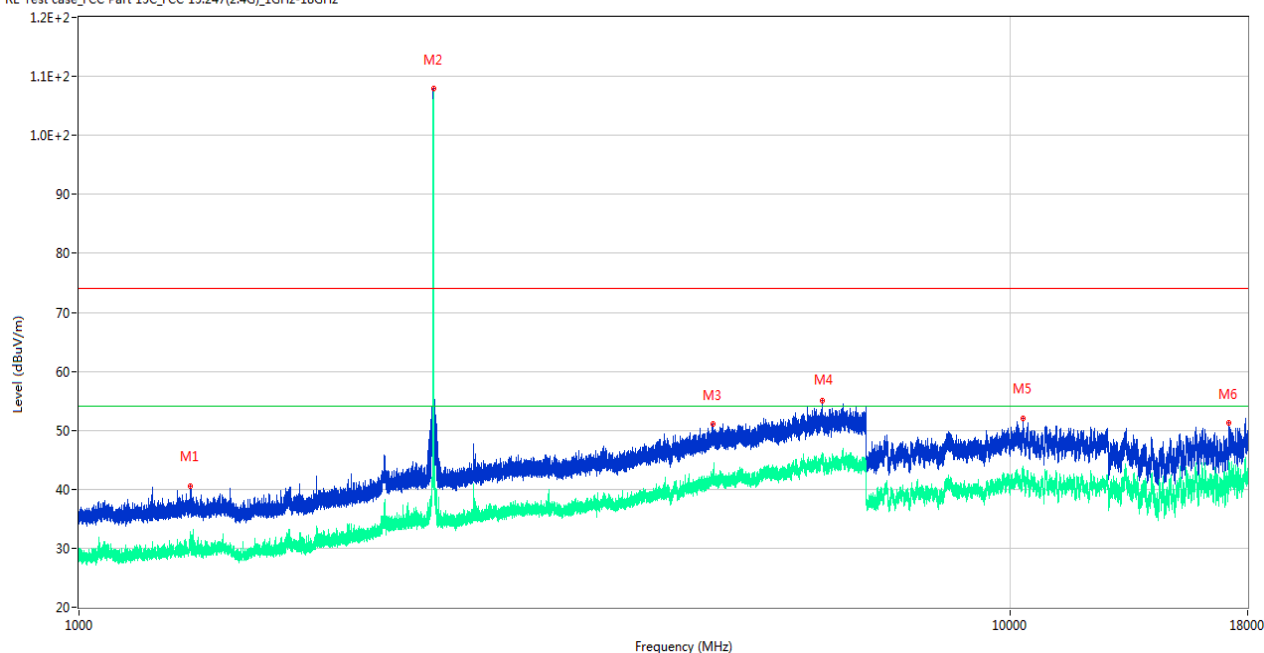


| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1199.300        | 45.52            | -17.86      | 74.0           | 28.48       | Peak     | 52.00          | 200         | Vertical | Pass    |
| 1** | 1199.300        | 28.41            | -17.86      | 54.0           | 25.59       | AV       | 52.00          | 200         | Vertical | Pass    |
| 2   | 2479.600        | 104.76           | -12.21      | 74.0           | -30.76      | Peak     | 133.00         | 200         | Vertical | N/A     |
| 2** | 2479.600        | 102.13           | -12.21      | 54.0           | -48.13      | AV       | 133.00         | 200         | Vertical | N/A     |
| 3   | 4626.600        | 50.94            | -3.60       | 74.0           | 23.06       | Peak     | 103.00         | 100         | Vertical | Pass    |
| 3** | 4626.600        | 40.60            | -3.60       | 54.0           | 13.40       | AV       | 103.00         | 100         | Vertical | Pass    |
| 4   | 6447.000        | 55.07            | 2.07        | 74.0           | 18.93       | Peak     | 243.00         | 300         | Vertical | Pass    |
| 4** | 6447.000        | 44.69            | 2.07        | 54.0           | 9.31        | AV       | 243.00         | 300         | Vertical | Pass    |
| 5   | 10539.125       | 51.90            | -0.65       | 74.0           | 22.10       | Peak     | 304.00         | 100         | Vertical | Pass    |
| 5** | 10539.125       | 42.94            | -0.65       | 54.0           | 11.06       | AV       | 304.00         | 100         | Vertical | Pass    |
| 6   | 17203.575       | 51.46            | 1.71        | 74.0           | 22.54       | Peak     | 279.00         | 200         | Vertical | Pass    |
| 6** | 17203.575       | 42.58            | 1.71        | 54.0           | 11.42       | AV       | 279.00         | 200         | Vertical | Pass    |

## PCB Antenna

## GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H

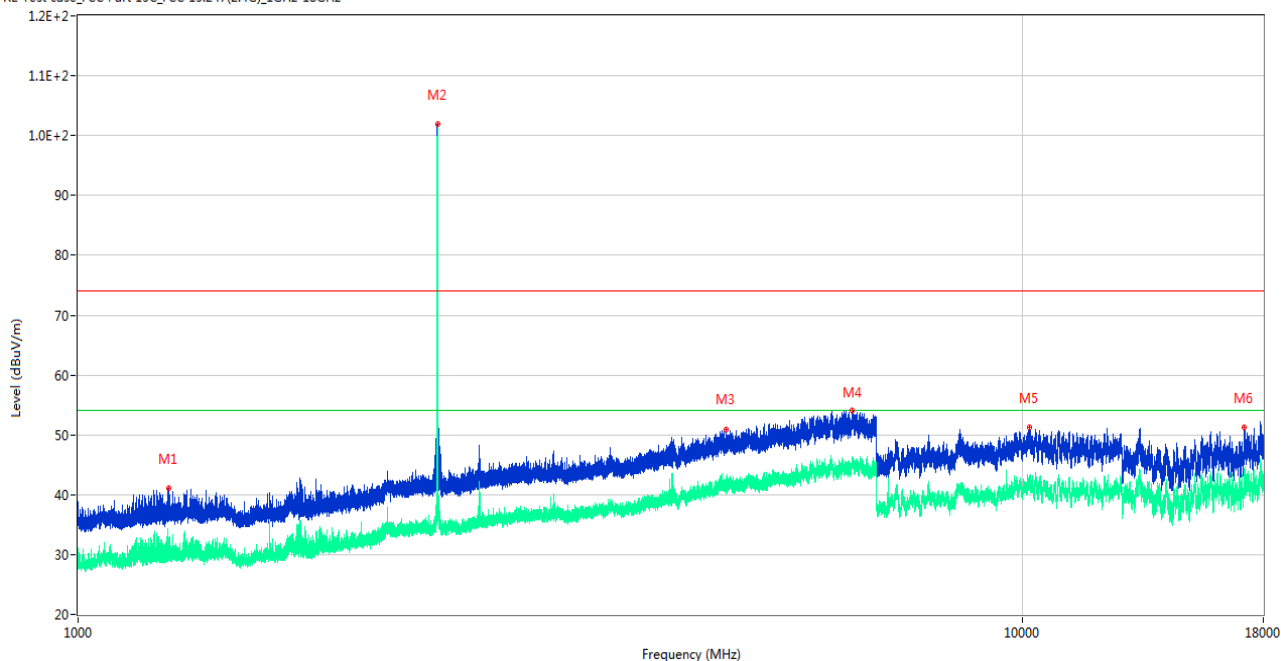
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1318.200        | 40.56            | -17.02      | 74.0           | 33.44       | Peak     | 67.00          | 400         | Horizontal | Pass    |
| 1** | 1318.200        | 30.41            | -17.02      | 54.0           | 23.59       | AV       | 67.00          | 400         | Horizontal | Pass    |
| 2   | 2402.200        | 107.87           | -11.74      | 74.0           | -33.87      | Peak     | 178.00         | 150         | Horizontal | N/A     |
| 2** | 2402.200        | 107.20           | -11.74      | 54.0           | -53.20      | AV       | 178.00         | 150         | Horizontal | N/A     |
| 3   | 4797.800        | 51.03            | -1.96       | 74.0           | 22.97       | Peak     | 142.00         | 100         | Horizontal | Pass    |
| 3** | 4797.800        | 41.07            | -1.96       | 54.0           | 12.93       | AV       | 142.00         | 100         | Horizontal | Pass    |
| 4   | 6288.400        | 54.97            | 1.46        | 74.0           | 19.03       | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 4** | 6288.400        | 45.12            | 1.46        | 54.0           | 8.88        | AV       | 0.00           | 200         | Horizontal | Pass    |
| 5   | 10332.701       | 52.01            | 0.04        | 74.0           | 21.99       | Peak     | 360.00         | 300         | Horizontal | Pass    |
| 5** | 10332.701       | 42.40            | 0.04        | 54.0           | 11.60       | AV       | 360.00         | 300         | Horizontal | Pass    |
| 6   | 17198.324       | 51.18            | 1.99        | 74.0           | 22.82       | Peak     | 62.00          | 200         | Horizontal | Pass    |
| 6** | 17198.324       | 42.97            | 1.99        | 54.0           | 11.03       | AV       | 62.00          | 200         | Horizontal | Pass    |

**GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V**

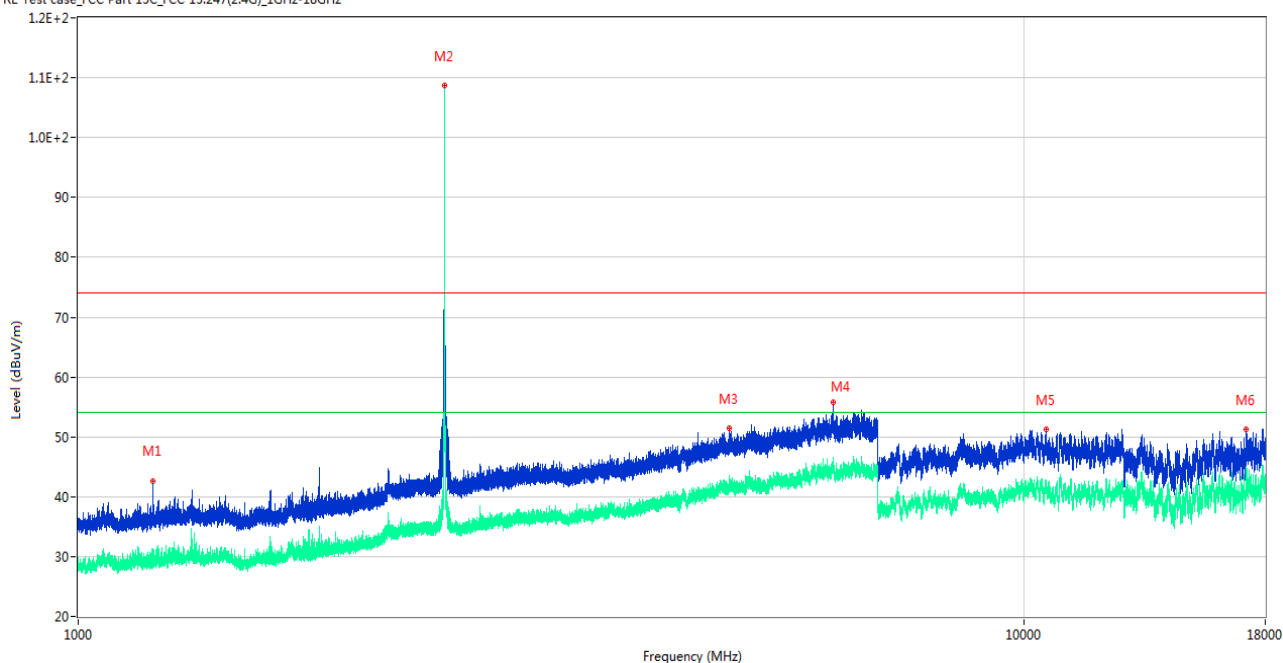
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1246.400        | 41.03            | -17.40      | 74.0           | 32.97       | Peak     | 85.00          | 300         | Vertical | Pass    |
| 1** | 1246.400        | 32.17            | -17.40      | 54.0           | 21.83       | AV       | 85.00          | 300         | Vertical | Pass    |
| 2   | 2402.300        | 101.87           | -11.74      | 74.0           | -27.87      | Peak     | 119.00         | 150         | Vertical | N/A     |
| 2** | 2402.300        | 100.60           | -11.74      | 54.0           | -46.60      | AV       | 119.00         | 150         | Vertical | N/A     |
| 3   | 4860.800        | 50.96            | -2.70       | 74.0           | 23.04       | Peak     | 37.00          | 200         | Vertical | Pass    |
| 3** | 4860.800        | 41.56            | -2.70       | 54.0           | 12.44       | AV       | 37.00          | 200         | Vertical | Pass    |
| 4   | 6603.000        | 54.15            | 1.53        | 74.0           | 19.85       | Peak     | 37.00          | 300         | Vertical | Pass    |
| 4** | 6603.000        | 45.78            | 1.53        | 54.0           | 8.22        | AV       | 37.00          | 300         | Vertical | Pass    |
| 5   | 10186.075       | 51.24            | 0.18        | 74.0           | 22.76       | Peak     | 0.00           | 300         | Vertical | Pass    |
| 5** | 10186.075       | 42.52            | 0.18        | 54.0           | 11.48       | AV       | 0.00           | 300         | Vertical | Pass    |
| 6   | 17196.225       | 51.22            | 2.12        | 74.0           | 22.78       | Peak     | 274.00         | 400         | Vertical | Pass    |
| 6** | 17196.225       | 43.42            | 2.12        | 54.0           | 10.58       | AV       | 274.00         | 400         | Vertical | Pass    |

## GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

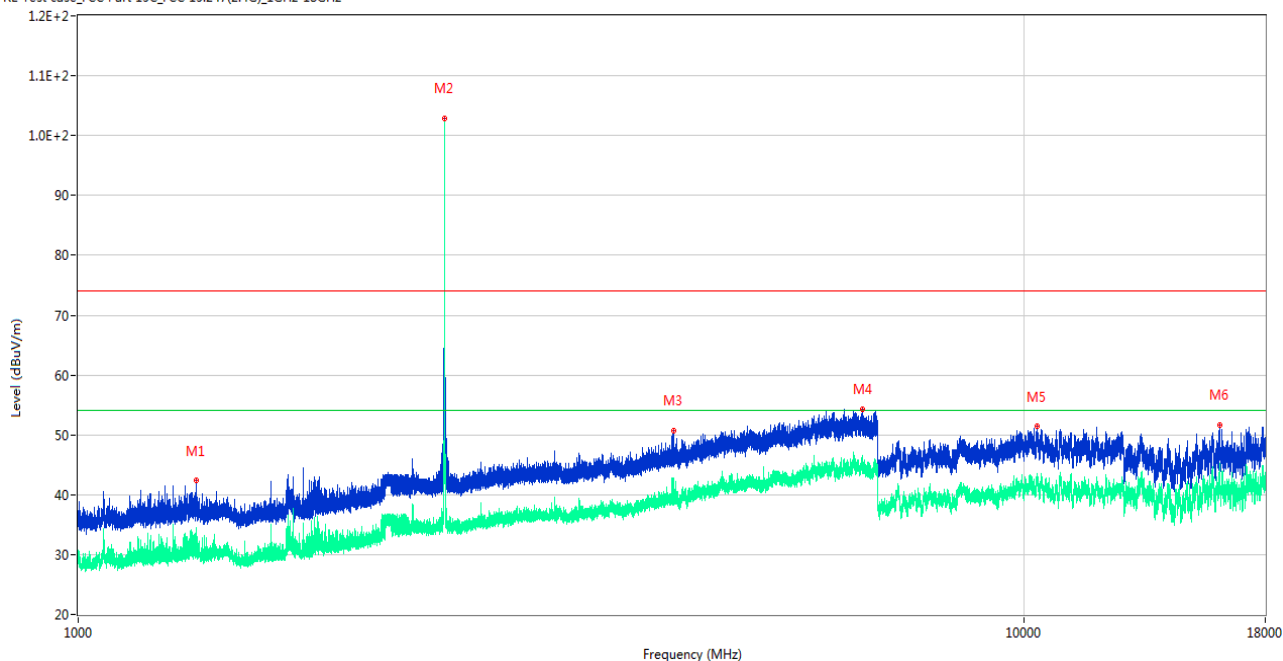
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1198.800        | 42.66            | -17.88      | 74.0           | 31.34       | Peak     | 85.00          | 200         | Horizontal | Pass    |
| 1** | 1198.800        | 31.28            | -17.88      | 54.0           | 22.72       | AV       | 85.00          | 200         | Horizontal | Pass    |
| 2   | 2439.800        | 108.65           | -12.27      | 74.0           | -34.65      | Peak     | 166.00         | 200         | Horizontal | N/A     |
| 2** | 2439.800        | 108.14           | -12.27      | 54.0           | -54.14      | AV       | 166.00         | 200         | Horizontal | N/A     |
| 3   | 4881.200        | 51.39            | -2.62       | 74.0           | 22.61       | Peak     | 341.00         | 150         | Horizontal | Pass    |
| 3** | 4881.200        | 40.96            | -2.62       | 54.0           | 13.04       | AV       | 341.00         | 150         | Horizontal | Pass    |
| 4   | 6291.600        | 55.70            | 1.19        | 74.0           | 18.30       | Peak     | 70.00          | 200         | Horizontal | Pass    |
| 4** | 6291.600        | 45.25            | 1.19        | 54.0           | 8.75        | AV       | 70.00          | 200         | Horizontal | Pass    |
| 5   | 10569.312       | 51.25            | -1.01       | 74.0           | 22.75       | Peak     | 349.00         | 300         | Horizontal | Pass    |
| 5** | 10569.312       | 41.60            | -1.01       | 54.0           | 12.40       | AV       | 349.00         | 300         | Horizontal | Pass    |
| 6   | 17197.801       | 51.21            | 2.02        | 74.0           | 22.79       | Peak     | 128.00         | 100         | Horizontal | Pass    |
| 6** | 17197.801       | 44.85            | 2.02        | 54.0           | 9.15        | AV       | 128.00         | 100         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

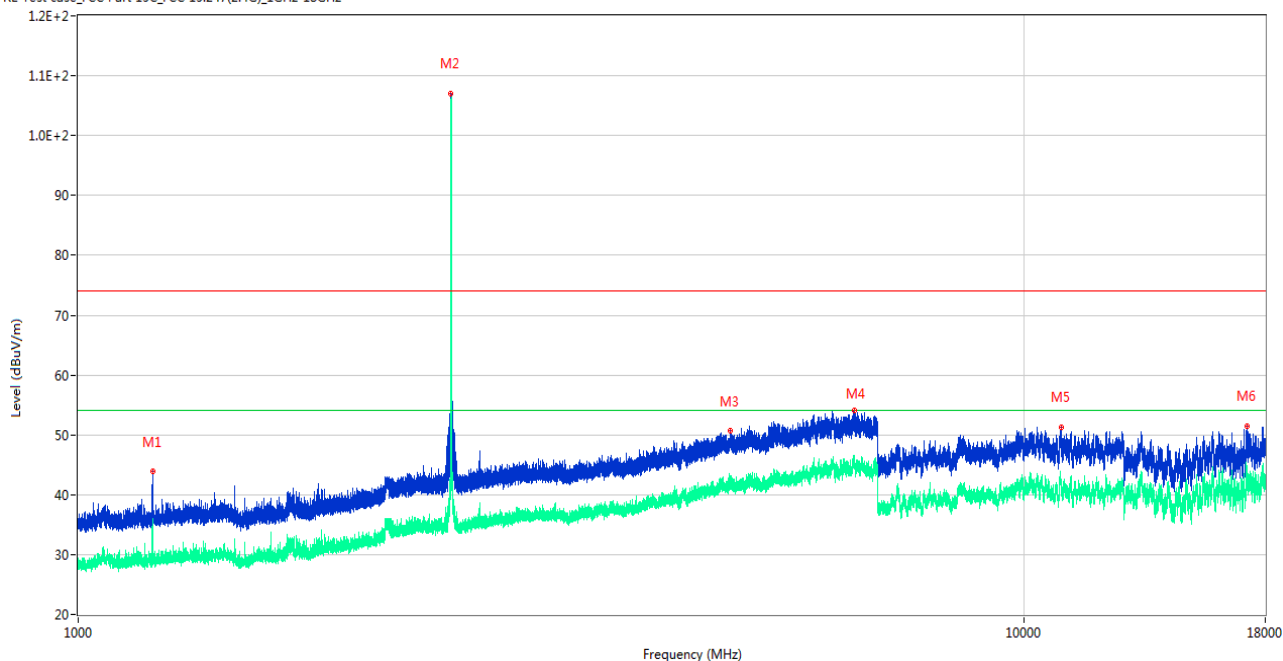
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1332.600        | 42.40            | -17.09      | 74.0           | 31.60       | Peak     | 81.00          | 400         | Vertical | Pass    |
| 1** | 1332.600        | 31.33            | -17.09      | 54.0           | 22.67       | AV       | 81.00          | 400         | Vertical | Pass    |
| 2   | 2439.800        | 102.88           | -12.27      | 74.0           | -28.88      | Peak     | 184.00         | 100         | Vertical | N/A     |
| 2** | 2439.800        | 101.63           | -12.27      | 54.0           | -47.63      | AV       | 184.00         | 100         | Vertical | N/A     |
| 3   | 4260.000        | 50.61            | -4.53       | 74.0           | 23.39       | Peak     | 62.00          | 200         | Vertical | Pass    |
| 3** | 4260.000        | 39.43            | -4.53       | 54.0           | 14.57       | AV       | 62.00          | 200         | Vertical | Pass    |
| 4   | 6743.800        | 54.22            | 1.99        | 74.0           | 19.78       | Peak     | 263.00         | 400         | Vertical | Pass    |
| 4** | 6743.800        | 45.95            | 1.99        | 54.0           | 8.05        | AV       | 263.00         | 400         | Vertical | Pass    |
| 5   | 10323.500       | 51.37            | -0.10       | 74.0           | 22.63       | Peak     | 187.00         | 300         | Vertical | Pass    |
| 5** | 10323.500       | 42.72            | -0.10       | 54.0           | 11.28       | AV       | 187.00         | 300         | Vertical | Pass    |
| 6   | 16110.000       | 51.64            | 0.77        | 74.0           | 22.36       | Peak     | 169.00         | 400         | Vertical | Pass    |
| 6** | 16110.000       | 43.52            | 0.77        | 54.0           | 10.48       | AV       | 169.00         | 400         | Vertical | Pass    |

## GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H

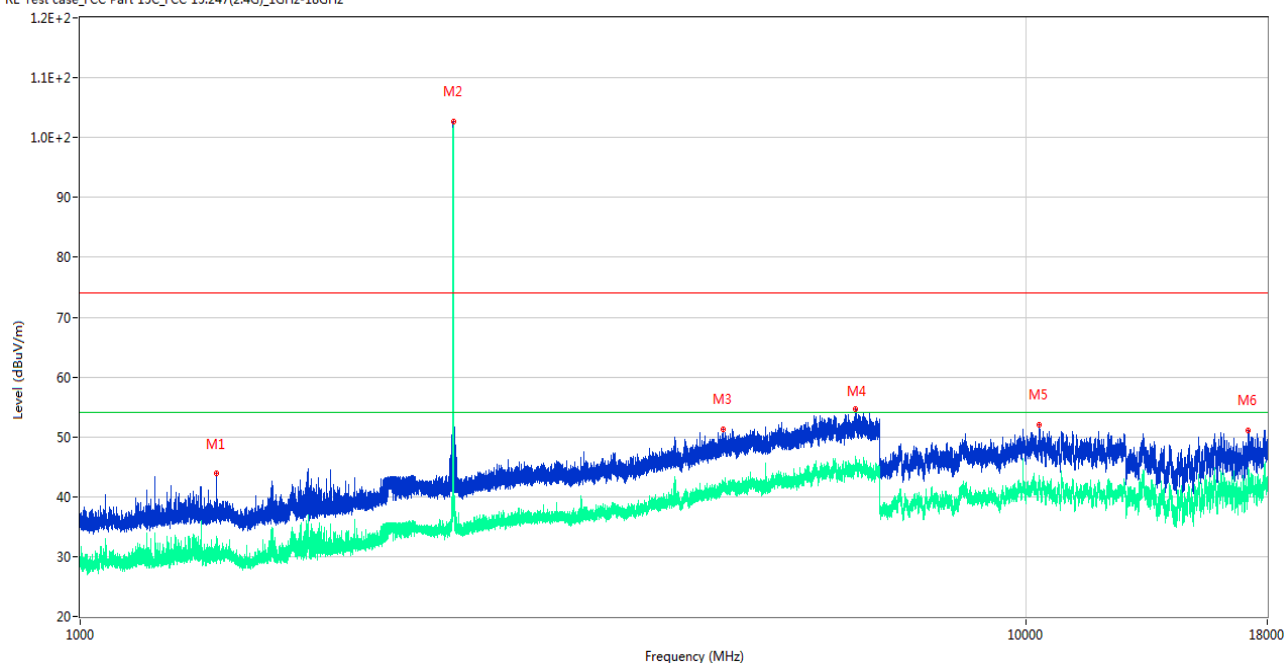
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1199.400        | 43.86            | -17.85      | 74.0           | 30.14       | Peak     | 73.00          | 100         | Horizontal | Pass    |
| 1** | 1199.400        | 29.07            | -17.85      | 54.0           | 24.93       | AV       | 73.00          | 100         | Horizontal | Pass    |
| 2   | 2479.700        | 107.00           | -12.21      | 74.0           | -33.00      | Peak     | 170.00         | 150         | Horizontal | N/A     |
| 2** | 2479.700        | 106.11           | -12.21      | 54.0           | -52.11      | AV       | 170.00         | 150         | Horizontal | N/A     |
| 3   | 4890.200        | 50.64            | -2.53       | 74.0           | 23.36       | Peak     | 189.00         | 100         | Horizontal | Pass    |
| 3** | 4890.200        | 41.36            | -2.53       | 54.0           | 12.64       | AV       | 189.00         | 100         | Horizontal | Pass    |
| 4   | 6611.800        | 54.16            | 2.14        | 74.0           | 19.84       | Peak     | 189.00         | 400         | Horizontal | Pass    |
| 4** | 6611.800        | 46.39            | 2.14        | 54.0           | 7.61        | AV       | 189.00         | 400         | Horizontal | Pass    |
| 5   | 10945.937       | 51.32            | -0.15       | 74.0           | 22.68       | Peak     | 299.00         | 200         | Horizontal | Pass    |
| 5** | 10945.937       | 41.55            | -0.15       | 54.0           | 12.45       | AV       | 299.00         | 200         | Horizontal | Pass    |
| 6   | 17205.412       | 51.47            | 1.63        | 74.0           | 22.53       | Peak     | 151.00         | 100         | Horizontal | Pass    |
| 6** | 17205.412       | 43.08            | 1.63        | 54.0           | 10.92       | AV       | 151.00         | 100         | Horizontal | Pass    |

**GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

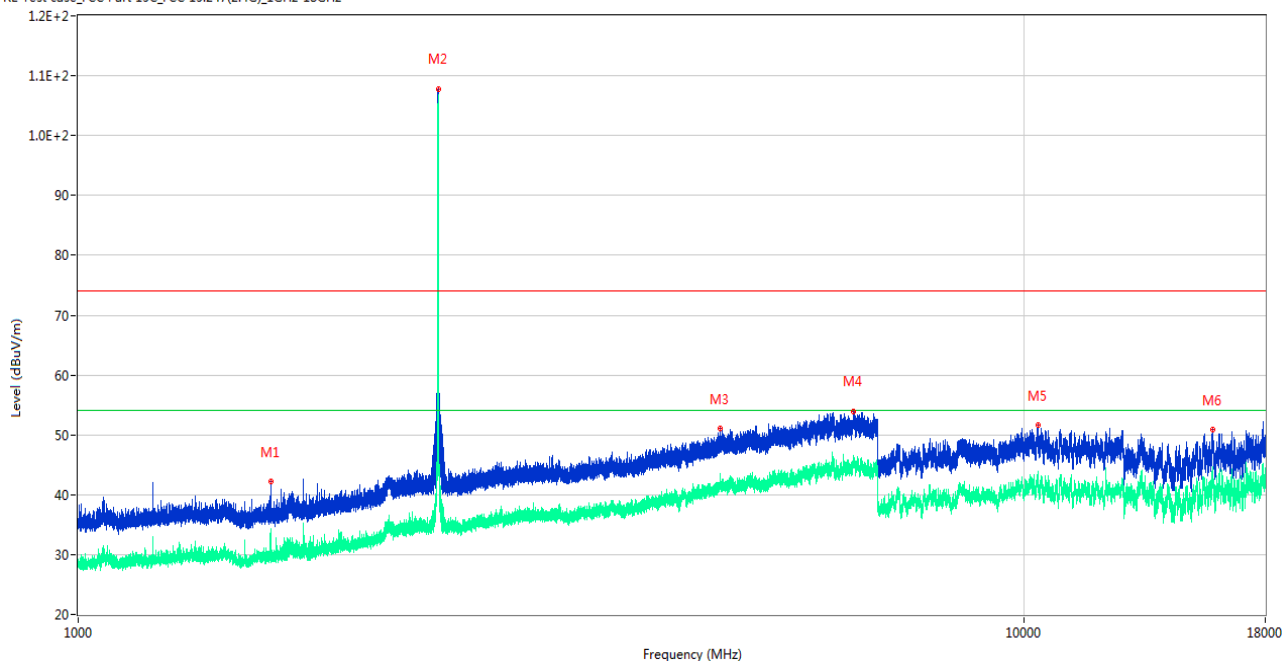
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1394.600        | 43.85            | -17.57      | 74.0           | 30.15       | Peak     | 171.00         | 300         | Vertical | Pass    |
| 1** | 1394.600        | 28.87            | -17.57      | 54.0           | 25.13       | AV       | 171.00         | 300         | Vertical | Pass    |
| 2   | 2479.800        | 102.76           | -12.20      | 74.0           | -28.76      | Peak     | 185.00         | 200         | Vertical | N/A     |
| 2** | 2479.800        | 101.08           | -12.20      | 54.0           | -47.08      | AV       | 185.00         | 200         | Vertical | N/A     |
| 3   | 4786.000        | 51.27            | -1.82       | 74.0           | 22.73       | Peak     | 109.00         | 100         | Vertical | Pass    |
| 3** | 4786.000        | 41.15            | -1.82       | 54.0           | 12.85       | AV       | 109.00         | 100         | Vertical | Pass    |
| 4   | 6599.400        | 54.60            | 0.90        | 74.0           | 19.40       | Peak     | 71.00          | 400         | Vertical | Pass    |
| 4** | 6599.400        | 46.03            | 0.90        | 54.0           | 7.97        | AV       | 71.00          | 400         | Vertical | Pass    |
| 5   | 10335.287       | 52.08            | 0.07        | 74.0           | 21.92       | Peak     | 78.00          | 200         | Vertical | Pass    |
| 5** | 10335.287       | 43.02            | 0.07        | 54.0           | 10.98       | AV       | 78.00          | 200         | Vertical | Pass    |
| 6   | 17184.938       | 51.10            | 2.53        | 74.0           | 22.90       | Peak     | 79.00          | 200         | Vertical | Pass    |
| 6** | 17184.938       | 42.87            | 2.53        | 54.0           | 11.13       | AV       | 79.00          | 200         | Vertical | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H**

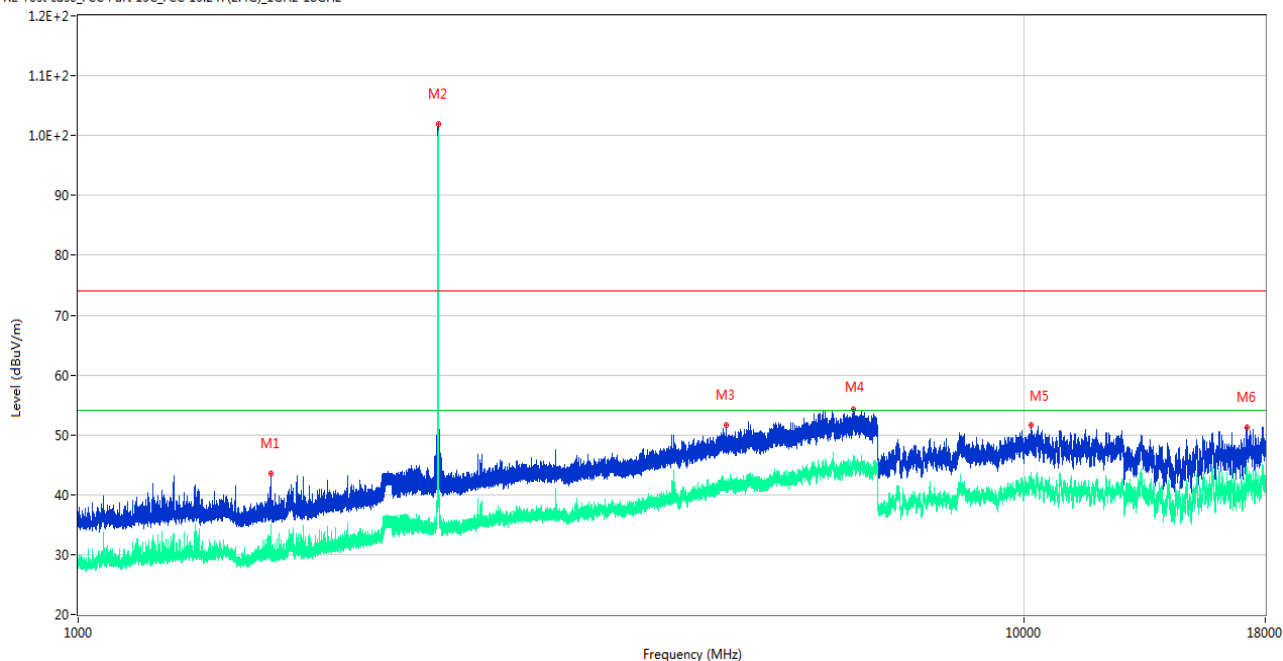
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1598.200        | 42.19            | -17.46      | 74.0           | 31.81       | Peak     | 39.00          | 300         | Horizontal | Pass    |
| 1** | 1598.200        | 29.41            | -17.46      | 54.0           | 24.59       | AV       | 39.00          | 300         | Horizontal | Pass    |
| 2   | 2402.600        | 107.84           | -11.74      | 74.0           | -33.84      | Peak     | 178.00         | 150         | Horizontal | N/A     |
| 2** | 2402.600        | 105.42           | -11.74      | 54.0           | -51.42      | AV       | 178.00         | 150         | Horizontal | N/A     |
| 3   | 4775.600        | 51.00            | -1.86       | 74.0           | 23.00       | Peak     | 296.00         | 100         | Horizontal | Pass    |
| 3** | 4775.600        | 40.82            | -1.86       | 54.0           | 13.18       | AV       | 296.00         | 100         | Horizontal | Pass    |
| 4   | 6604.800        | 53.93            | 1.88        | 74.0           | 20.07       | Peak     | 98.00          | 300         | Horizontal | Pass    |
| 4** | 6604.800        | 45.90            | 1.88        | 54.0           | 8.10        | AV       | 98.00          | 300         | Horizontal | Pass    |
| 5   | 10348.800       | 51.57            | 0.03        | 74.0           | 22.43       | Peak     | 229.00         | 400         | Horizontal | Pass    |
| 5** | 10348.800       | 42.84            | 0.03        | 54.0           | 11.16       | AV       | 229.00         | 400         | Horizontal | Pass    |
| 6   | 15831.224       | 50.84            | 1.48        | 74.0           | 23.16       | Peak     | 123.00         | 400         | Horizontal | Pass    |
| 6** | 15831.224       | 44.18            | 1.48        | 54.0           | 9.82        | AV       | 123.00         | 400         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V**

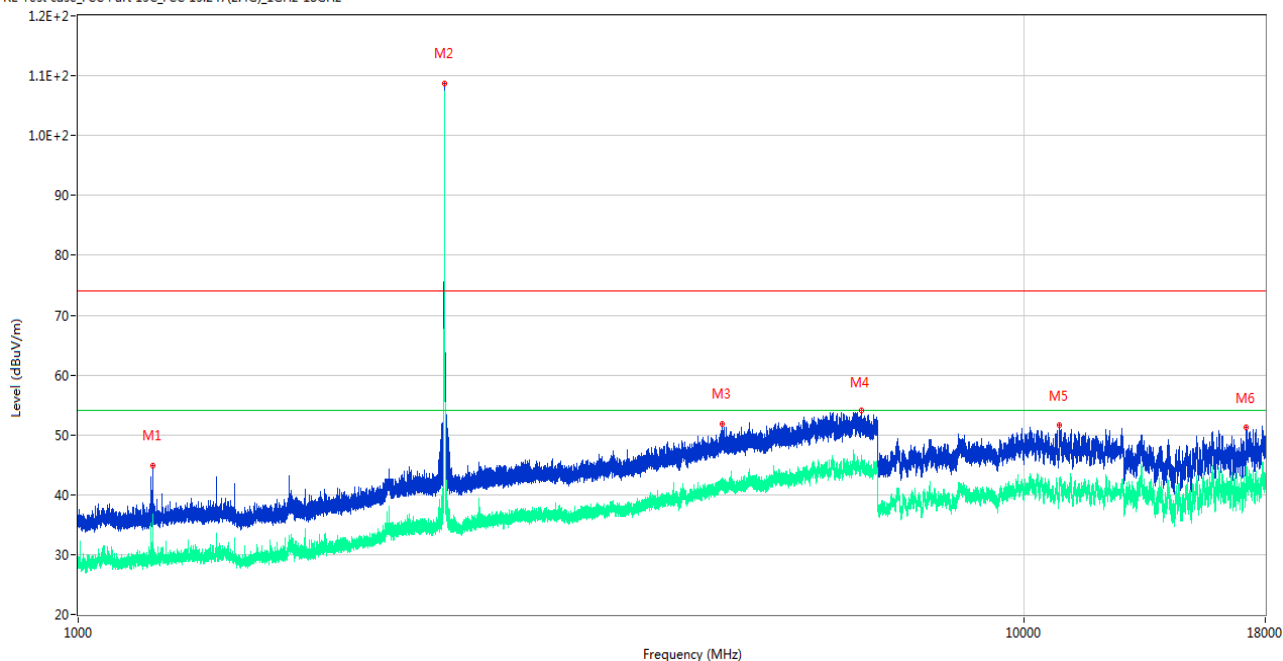
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1599.300        | 43.58            | -17.40      | 74.0           | 30.42       | Peak     | 127.00         | 100         | Vertical | Pass    |
| 1** | 1599.300        | 29.91            | -17.40      | 54.0           | 24.09       | AV       | 127.00         | 100         | Vertical | Pass    |
| 2   | 2402.500        | 101.95           | -11.74      | 74.0           | -27.95      | Peak     | 120.00         | 100         | Vertical | N/A     |
| 2** | 2402.500        | 98.26            | -11.74      | 54.0           | -44.26      | AV       | 120.00         | 100         | Vertical | N/A     |
| 3   | 4849.400        | 51.72            | -2.88       | 74.0           | 22.28       | Peak     | 155.00         | 200         | Vertical | Pass    |
| 3** | 4849.400        | 40.78            | -2.88       | 54.0           | 13.22       | AV       | 155.00         | 200         | Vertical | Pass    |
| 4   | 6605.200        | 54.27            | 1.88        | 74.0           | 19.73       | Peak     | 238.00         | 200         | Vertical | Pass    |
| 4** | 6605.200        | 46.22            | 1.88        | 54.0           | 7.78        | AV       | 238.00         | 200         | Vertical | Pass    |
| 5   | 10179.174       | 51.59            | 0.01        | 74.0           | 22.41       | Peak     | 305.00         | 400         | Vertical | Pass    |
| 5** | 10179.174       | 41.84            | 0.01        | 54.0           | 12.16       | AV       | 305.00         | 400         | Vertical | Pass    |
| 6   | 17200.163       | 51.29            | 1.88        | 74.0           | 22.71       | Peak     | 320.00         | 200         | Vertical | Pass    |
| 6** | 17200.163       | 44.33            | 1.88        | 54.0           | 9.67        | AV       | 320.00         | 200         | Vertical | Pass    |

## GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

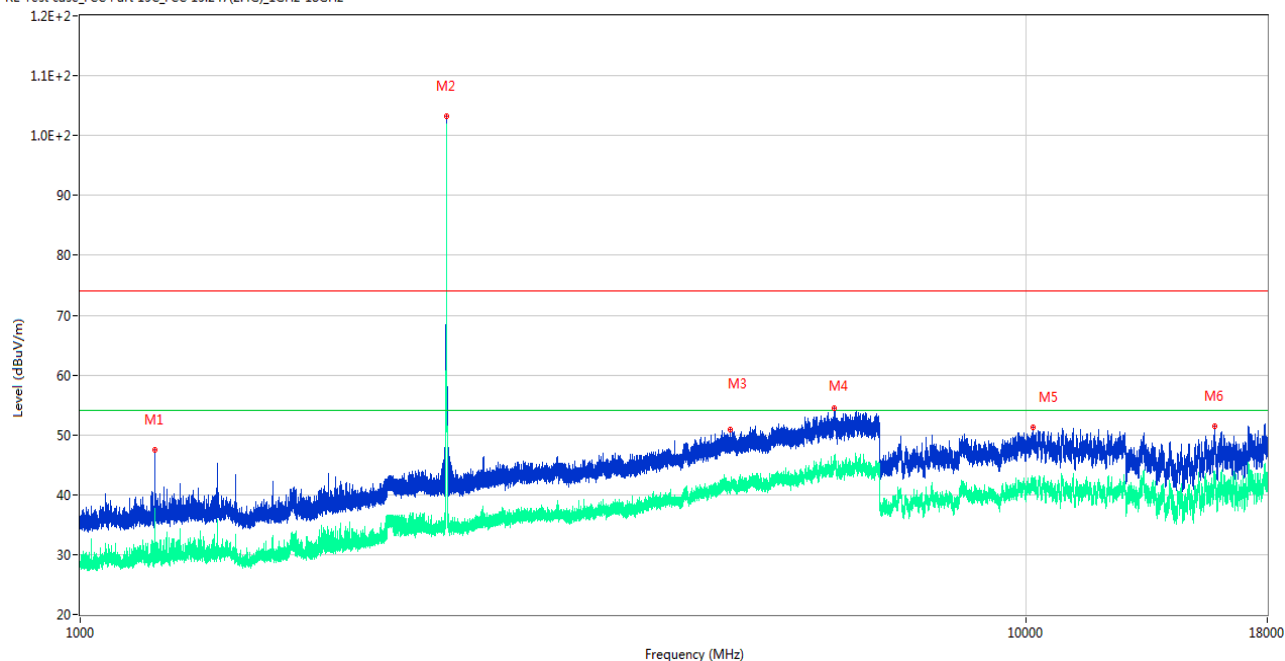
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1198.500        | 44.93            | -17.88      | 74.0           | 29.07       | Peak     | 4.00           | 300         | Horizontal | Pass    |
| 1** | 1198.500        | 29.22            | -17.88      | 54.0           | 24.78       | AV       | 4.00           | 300         | Horizontal | Pass    |
| 2   | 2440.500        | 108.77           | -12.23      | 74.0           | -34.77      | Peak     | 175.00         | 150         | Horizontal | N/A     |
| 2** | 2440.500        | 105.40           | -12.23      | 54.0           | -51.40      | AV       | 175.00         | 150         | Horizontal | N/A     |
| 3   | 4795.800        | 51.85            | -1.81       | 74.0           | 22.15       | Peak     | 314.00         | 200         | Horizontal | Pass    |
| 3** | 4795.800        | 41.00            | -1.81       | 54.0           | 13.00       | AV       | 314.00         | 200         | Horizontal | Pass    |
| 4   | 6736.000        | 54.15            | 2.38        | 74.0           | 19.85       | Peak     | 326.00         | 400         | Horizontal | Pass    |
| 4** | 6736.000        | 45.44            | 2.38        | 54.0           | 8.56        | AV       | 326.00         | 400         | Horizontal | Pass    |
| 5   | 10912.588       | 51.61            | 0.18        | 74.0           | 22.39       | Peak     | 167.00         | 100         | Horizontal | Pass    |
| 5** | 10912.588       | 41.83            | 0.18        | 54.0           | 12.17       | AV       | 167.00         | 100         | Horizontal | Pass    |
| 6   | 17193.863       | 51.25            | 2.22        | 74.0           | 22.75       | Peak     | 305.00         | 200         | Horizontal | Pass    |
| 6** | 17193.863       | 43.68            | 2.22        | 54.0           | 10.32       | AV       | 305.00         | 200         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V**

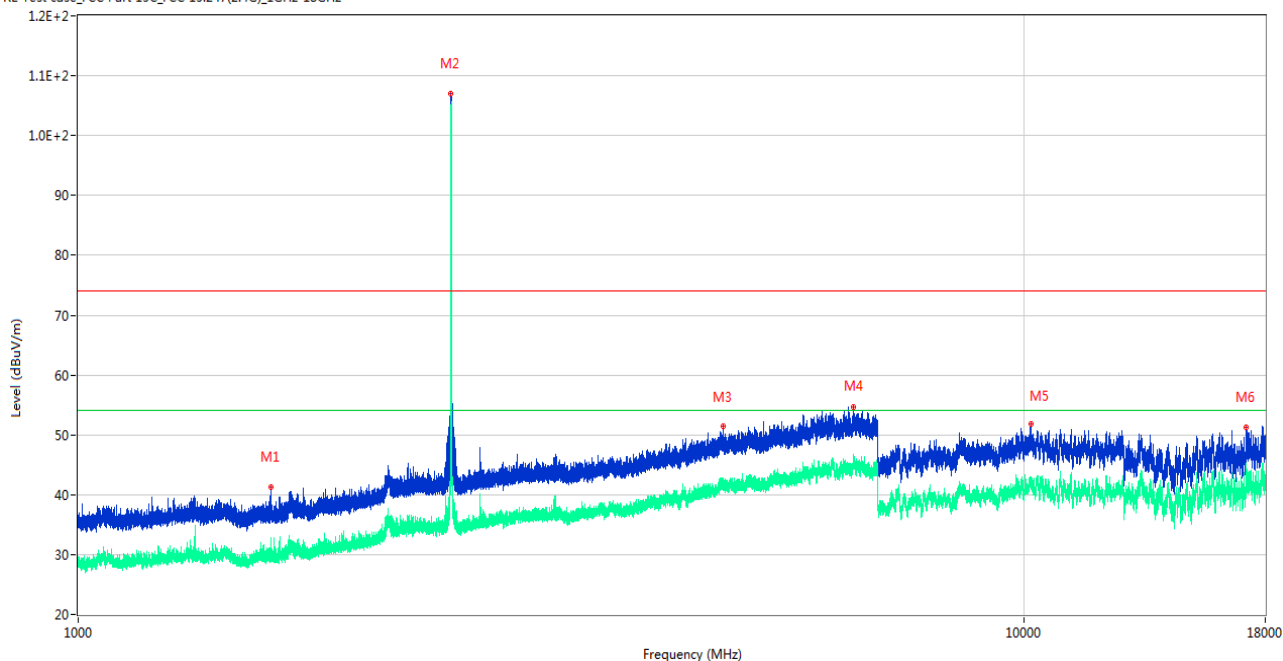
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1199.600        | 47.59            | -17.84      | 74.0           | 26.41       | Peak     | 83.00          | 300         | Vertical | Pass    |
| 1** | 1199.600        | 28.70            | -17.84      | 54.0           | 25.30       | AV       | 83.00          | 300         | Vertical | Pass    |
| 2   | 2439.500        | 103.27           | -12.28      | 74.0           | -29.27      | Peak     | 184.00         | 150         | Vertical | N/A     |
| 2** | 2439.500        | 101.00           | -12.28      | 54.0           | -47.00      | AV       | 184.00         | 150         | Vertical | N/A     |
| 3   | 4871.400        | 50.86            | -2.69       | 74.0           | 23.14       | Peak     | 82.00          | 100         | Vertical | Pass    |
| 3** | 4871.400        | 41.37            | -2.69       | 54.0           | 12.63       | AV       | 82.00          | 100         | Vertical | Pass    |
| 4   | 6271.400        | 54.43            | 0.77        | 74.0           | 19.57       | Peak     | 163.00         | 400         | Vertical | Pass    |
| 4** | 6271.400        | 44.69            | 0.77        | 54.0           | 9.31        | AV       | 163.00         | 400         | Vertical | Pass    |
| 5   | 10186.651       | 51.27            | 0.20        | 74.0           | 22.73       | Peak     | 360.00         | 100         | Vertical | Pass    |
| 5** | 10186.651       | 42.03            | 0.20        | 54.0           | 11.97       | AV       | 360.00         | 100         | Vertical | Pass    |
| 6   | 15829.387       | 51.51            | 1.51        | 74.0           | 22.49       | Peak     | 46.00          | 100         | Vertical | Pass    |
| 6** | 15829.387       | 43.37            | 1.51        | 54.0           | 10.63       | AV       | 46.00          | 100         | Vertical | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

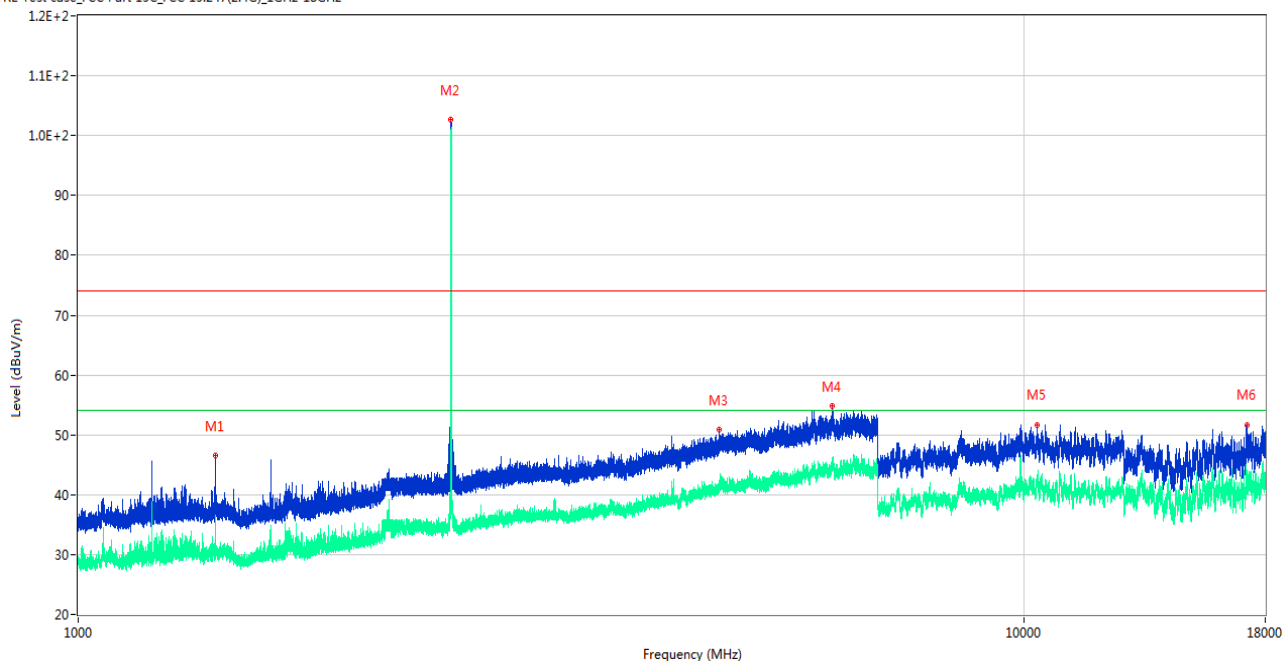
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1599.500        | 41.30            | -17.39      | 74.0           | 32.70       | Peak     | 93.00          | 300         | Horizontal | Pass    |
| 1** | 1599.500        | 30.10            | -17.39      | 54.0           | 23.90       | AV       | 93.00          | 300         | Horizontal | Pass    |
| 2   | 2479.500        | 107.02           | -12.21      | 74.0           | -33.02      | Peak     | 170.00         | 150         | Horizontal | N/A     |
| 2** | 2479.500        | 105.13           | -12.21      | 54.0           | -51.13      | AV       | 170.00         | 150         | Horizontal | N/A     |
| 3   | 4805.400        | 51.47            | -2.14       | 74.0           | 22.53       | Peak     | 70.00          | 100         | Horizontal | Pass    |
| 3** | 4805.400        | 42.12            | -2.14       | 54.0           | 11.88       | AV       | 70.00          | 100         | Horizontal | Pass    |
| 4   | 6605.000        | 54.69            | 1.88        | 74.0           | 19.31       | Peak     | 0.00           | 100         | Horizontal | Pass    |
| 4** | 6605.000        | 45.73            | 1.88        | 54.0           | 8.27        | AV       | 0.00           | 100         | Horizontal | Pass    |
| 5   | 10180.037       | 51.76            | 0.03        | 74.0           | 22.24       | Peak     | 49.00          | 100         | Horizontal | Pass    |
| 5** | 10180.037       | 42.13            | 0.03        | 54.0           | 11.87       | AV       | 49.00          | 100         | Horizontal | Pass    |
| 6   | 17194.125       | 51.35            | 2.21        | 74.0           | 22.65       | Peak     | 195.00         | 100         | Horizontal | Pass    |
| 6** | 17194.125       | 43.51            | 2.21        | 54.0           | 10.49       | AV       | 195.00         | 100         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz

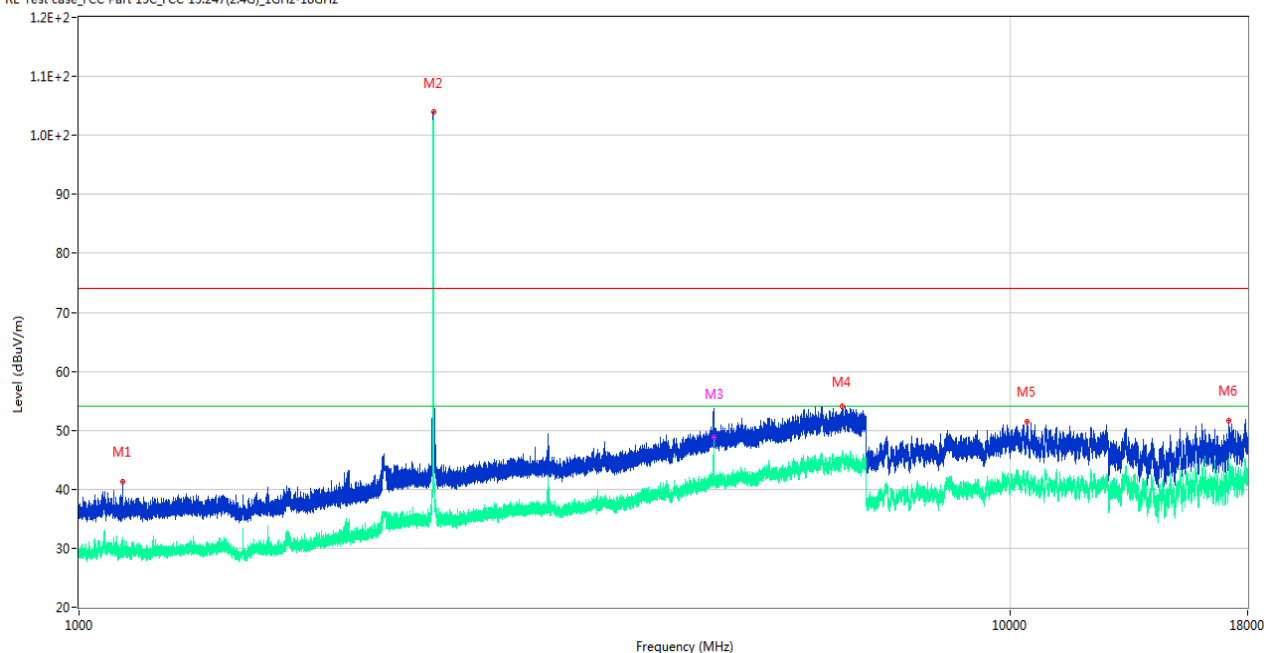


| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1398.100        | 46.47            | -17.29      | 74.0           | 27.53       | Peak     | 94.00          | 300         | Vertical | Pass    |
| 1** | 1398.100        | 30.32            | -17.29      | 54.0           | 23.68       | AV       | 94.00          | 300         | Vertical | Pass    |
| 2   | 2479.400        | 102.63           | -12.21      | 74.0           | -28.63      | Peak     | 178.00         | 100         | Vertical | N/A     |
| 2** | 2479.400        | 100.64           | -12.21      | 54.0           | -46.64      | AV       | 178.00         | 100         | Vertical | N/A     |
| 3   | 4766.600        | 50.81            | -2.06       | 74.0           | 23.19       | Peak     | 76.00          | 100         | Vertical | Pass    |
| 3** | 4766.600        | 41.40            | -2.06       | 54.0           | 12.60       | AV       | 76.00          | 100         | Vertical | Pass    |
| 4   | 6264.400        | 54.82            | 0.71        | 74.0           | 19.18       | Peak     | 0.00           | 300         | Vertical | Pass    |
| 4** | 6264.400        | 45.38            | 0.71        | 54.0           | 8.62        | AV       | 0.00           | 300         | Vertical | Pass    |
| 5   | 10336.437       | 51.65            | 0.07        | 74.0           | 22.35       | Peak     | 204.00         | 200         | Vertical | Pass    |
| 5** | 10336.437       | 42.77            | 0.07        | 54.0           | 11.23       | AV       | 204.00         | 200         | Vertical | Pass    |
| 6   | 17199.901       | 51.66            | 1.90        | 74.0           | 22.34       | Peak     | 344.00         | 300         | Vertical | Pass    |
| 6** | 17199.901       | 43.35            | 1.90        | 54.0           | 10.65       | AV       | 344.00         | 300         | Vertical | Pass    |

## Dipole Antenna 1

### GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H

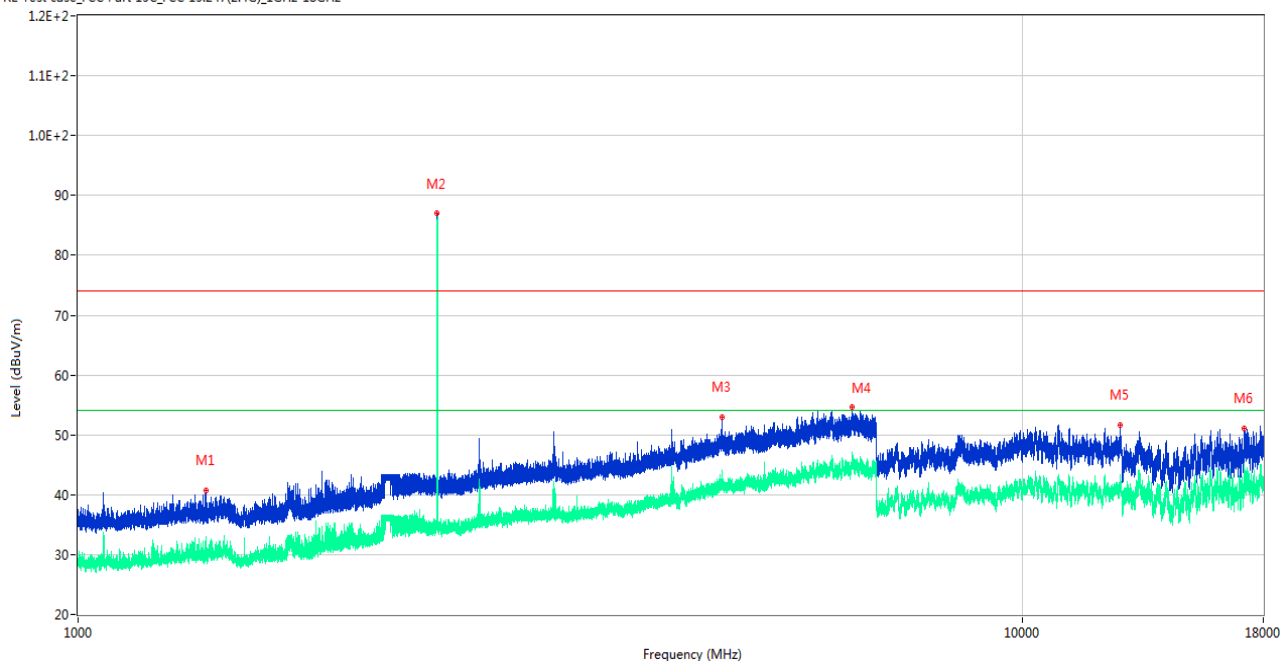
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1114.600        | 41.28            | -18.36      | 74.0           | 32.72       | Peak     | 360.00         | 400         | Horizontal | Pass    |
| 1** | 1114.600        | 28.83            | -18.36      | 54.0           | 25.17       | AV       | 360.00         | 400         | Horizontal | Pass    |
| 2   | 2402.300        | 103.96           | -11.74      | 74.0           | -29.96      | Peak     | 175.00         | 150         | Horizontal | N/A     |
| 2** | 2402.300        | 102.96           | -11.74      | 54.0           | -48.96      | AV       | 175.00         | 150         | Horizontal | N/A     |
| 3   | 4804.600        | 53.69            | -2.10       | 74.0           | 20.31       | Peak     | 169.00         | 100         | Horizontal | Pass    |
| 3** | 4804.600        | 48.78            | -2.10       | 54.0           | 5.22        | AV       | 169.00         | 100         | Horizontal | Pass    |
| 4   | 6601.400        | 54.13            | 1.24        | 74.0           | 19.87       | Peak     | 60.00          | 200         | Horizontal | Pass    |
| 4** | 6601.400        | 45.07            | 1.24        | 54.0           | 8.93        | AV       | 60.00          | 200         | Horizontal | Pass    |
| 5   | 10418.662       | 51.50            | 0.06        | 74.0           | 22.50       | Peak     | 30.00          | 100         | Horizontal | Pass    |
| 5** | 10418.662       | 42.86            | 0.06        | 54.0           | 11.14       | AV       | 30.00          | 100         | Horizontal | Pass    |
| 6   | 17198.850       | 51.65            | 1.96        | 74.0           | 22.35       | Peak     | 0.00           | 100         | Horizontal | Pass    |
| 6** | 17198.850       | 44.19            | 1.96        | 54.0           | 9.81        | AV       | 0.00           | 100         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V

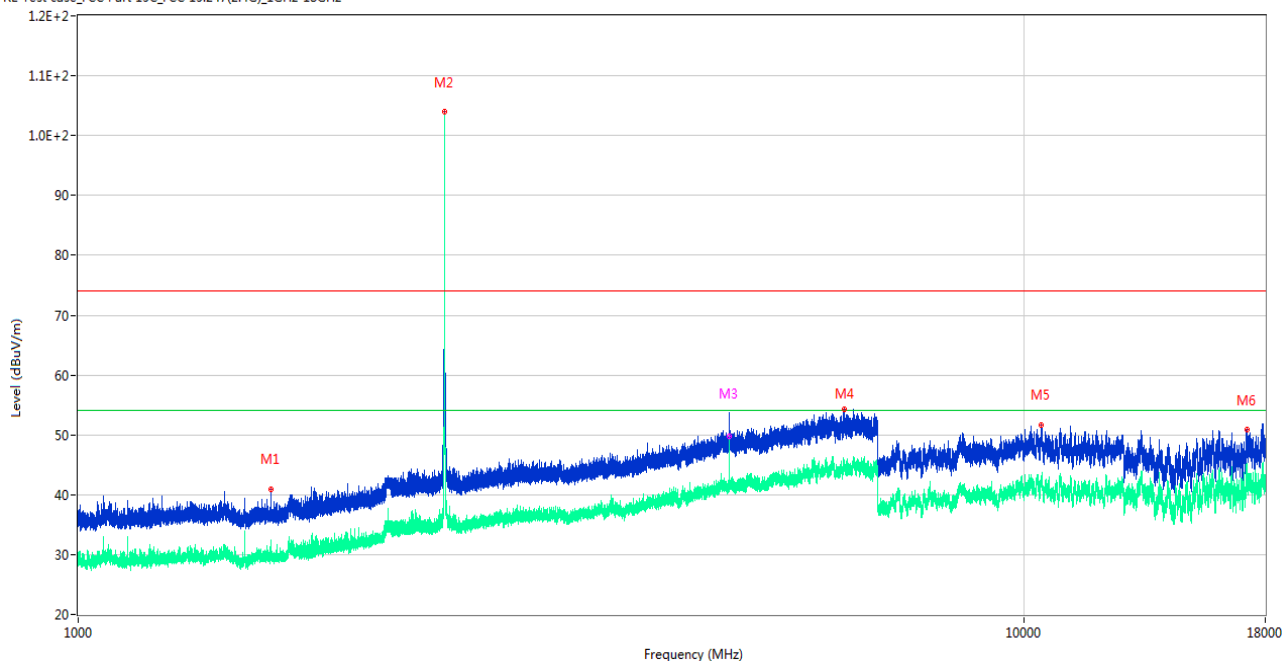
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1365.800        | 40.71            | -17.32      | 74.0           | 33.29       | Peak     | 76.00          | 400         | Vertical | Pass    |
| 1** | 1365.800        | 30.78            | -17.32      | 54.0           | 23.22       | AV       | 76.00          | 400         | Vertical | Pass    |
| 2   | 2401.700        | 86.97            | -11.74      | 74.0           | -12.97      | Peak     | 154.00         | 150         | Vertical | N/A     |
| 2** | 2401.700        | 85.66            | -11.74      | 54.0           | -31.66      | AV       | 154.00         | 150         | Vertical | N/A     |
| 3   | 4804.200        | 53.03            | -2.06       | 74.0           | 20.97       | Peak     | 133.00         | 100         | Vertical | Pass    |
| 3** | 4804.200        | 43.55            | -2.06       | 54.0           | 10.45       | AV       | 133.00         | 100         | Vertical | Pass    |
| 4   | 6599.600        | 54.73            | 0.94        | 74.0           | 19.27       | Peak     | 6.00           | 300         | Vertical | Pass    |
| 4** | 6599.600        | 45.09            | 0.94        | 54.0           | 8.91        | AV       | 6.00           | 300         | Vertical | Pass    |
| 5   | 12699.112       | 51.69            | 0.84        | 74.0           | 22.31       | Peak     | 356.00         | 400         | Vertical | Pass    |
| 5** | 12699.112       | 42.32            | 0.84        | 54.0           | 11.68       | AV       | 356.00         | 400         | Vertical | Pass    |
| 6   | 17189.663       | 51.12            | 2.35        | 74.0           | 22.88       | Peak     | 93.00          | 400         | Vertical | Pass    |
| 6** | 17189.663       | 44.19            | 2.35        | 54.0           | 9.81        | AV       | 93.00          | 400         | Vertical | Pass    |

## GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

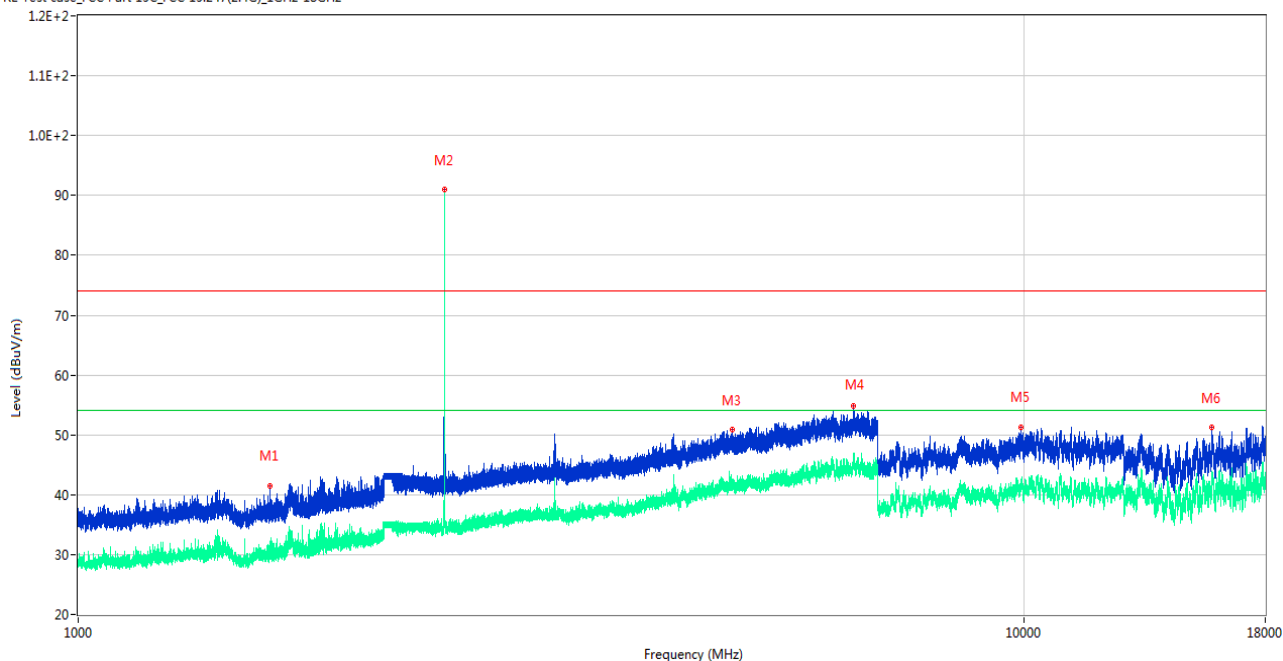
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1597.400        | 40.97            | -17.44      | 74.0           | 33.03       | Peak     | 41.00          | 400         | Horizontal | Pass    |
| 1** | 1597.400        | 32.26            | -17.44      | 54.0           | 21.74       | AV       | 41.00          | 400         | Horizontal | Pass    |
| 2   | 2440.300        | 103.96           | -12.24      | 74.0           | -29.96      | Peak     | 326.00         | 200         | Horizontal | N/A     |
| 2** | 2440.300        | 103.04           | -12.24      | 54.0           | -49.04      | AV       | 326.00         | 200         | Horizontal | N/A     |
| 3   | 4880.600        | 53.27            | -2.61       | 74.0           | 20.73       | Peak     | 138.00         | 100         | Horizontal | Pass    |
| 3** | 4880.600        | 49.71            | -2.61       | 54.0           | 4.29        | AV       | 138.00         | 100         | Horizontal | Pass    |
| 4   | 6456.200        | 54.27            | 1.57        | 74.0           | 19.73       | Peak     | 161.00         | 200         | Horizontal | Pass    |
| 4** | 6456.200        | 44.27            | 1.57        | 54.0           | 9.73        | AV       | 161.00         | 200         | Horizontal | Pass    |
| 5   | 10421.250       | 51.64            | 0.06        | 74.0           | 22.36       | Peak     | 108.00         | 400         | Horizontal | Pass    |
| 5** | 10421.250       | 42.11            | 0.06        | 54.0           | 11.89       | AV       | 108.00         | 400         | Horizontal | Pass    |
| 6   | 17211.187       | 50.84            | 1.47        | 74.0           | 23.16       | Peak     | 49.00          | 100         | Horizontal | Pass    |
| 6** | 17211.187       | 43.06            | 1.47        | 54.0           | 10.94       | AV       | 49.00          | 100         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

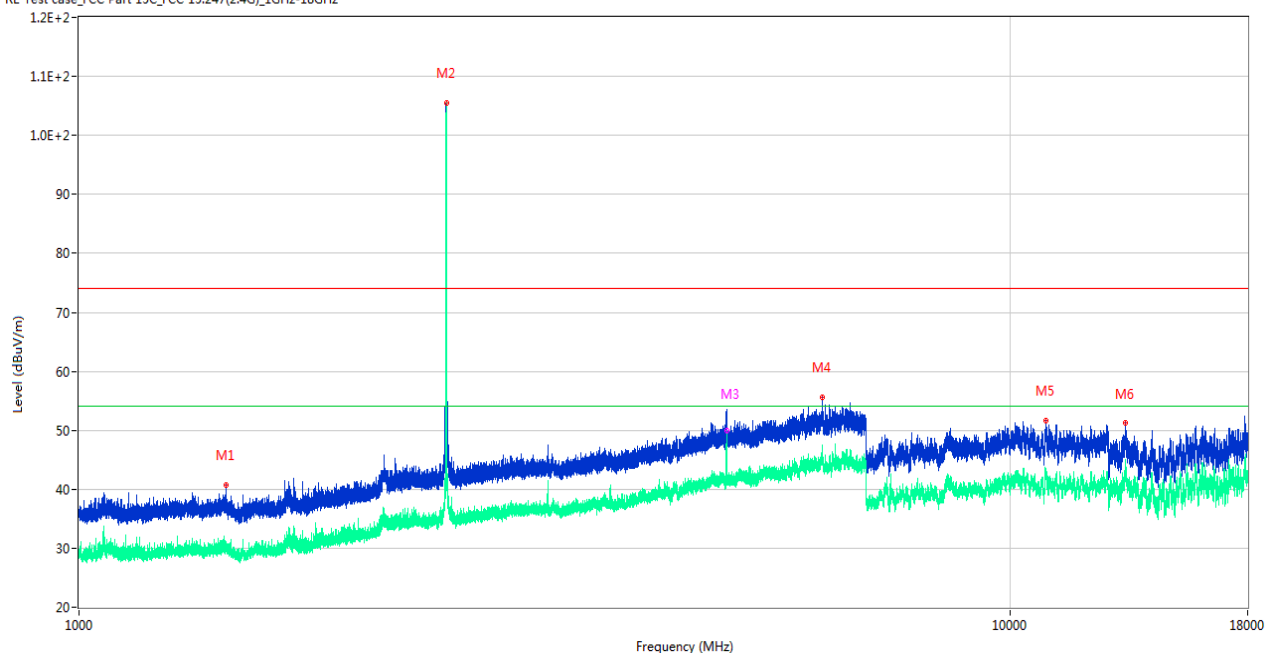
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1595.300        | 41.52            | -17.27      | 74.0           | 32.48       | Peak     | 134.00         | 200         | Vertical | Pass    |
| 1** | 1595.300        | 32.07            | -17.27      | 54.0           | 21.93       | AV       | 134.00         | 200         | Vertical | Pass    |
| 2   | 2439.700        | 90.96            | -12.28      | 74.0           | -16.96      | Peak     | 97.00          | 150         | Vertical | N/A     |
| 2** | 2439.700        | 89.39            | -12.28      | 54.0           | -35.39      | AV       | 97.00          | 150         | Vertical | N/A     |
| 3   | 4913.600        | 50.86            | -2.23       | 74.0           | 23.14       | Peak     | 115.00         | 200         | Vertical | Pass    |
| 3** | 4913.600        | 41.34            | -2.23       | 54.0           | 12.66       | AV       | 115.00         | 200         | Vertical | Pass    |
| 4   | 6602.400        | 54.81            | 1.40        | 74.0           | 19.19       | Peak     | 353.00         | 400         | Vertical | Pass    |
| 4** | 6602.400        | 45.42            | 1.40        | 54.0           | 8.58        | AV       | 353.00         | 400         | Vertical | Pass    |
| 5   | 9931.924        | 51.28            | -1.10       | 74.0           | 22.72       | Peak     | 16.00          | 300         | Vertical | Pass    |
| 5** | 9931.924        | 41.63            | -1.10       | 54.0           | 12.37       | AV       | 16.00          | 300         | Vertical | Pass    |
| 6   | 15804.450       | 51.22            | 2.28        | 74.0           | 22.78       | Peak     | 195.00         | 100         | Vertical | Pass    |
| 6** | 15804.450       | 41.03            | 2.28        | 54.0           | 12.97       | AV       | 195.00         | 100         | Vertical | Pass    |

**GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

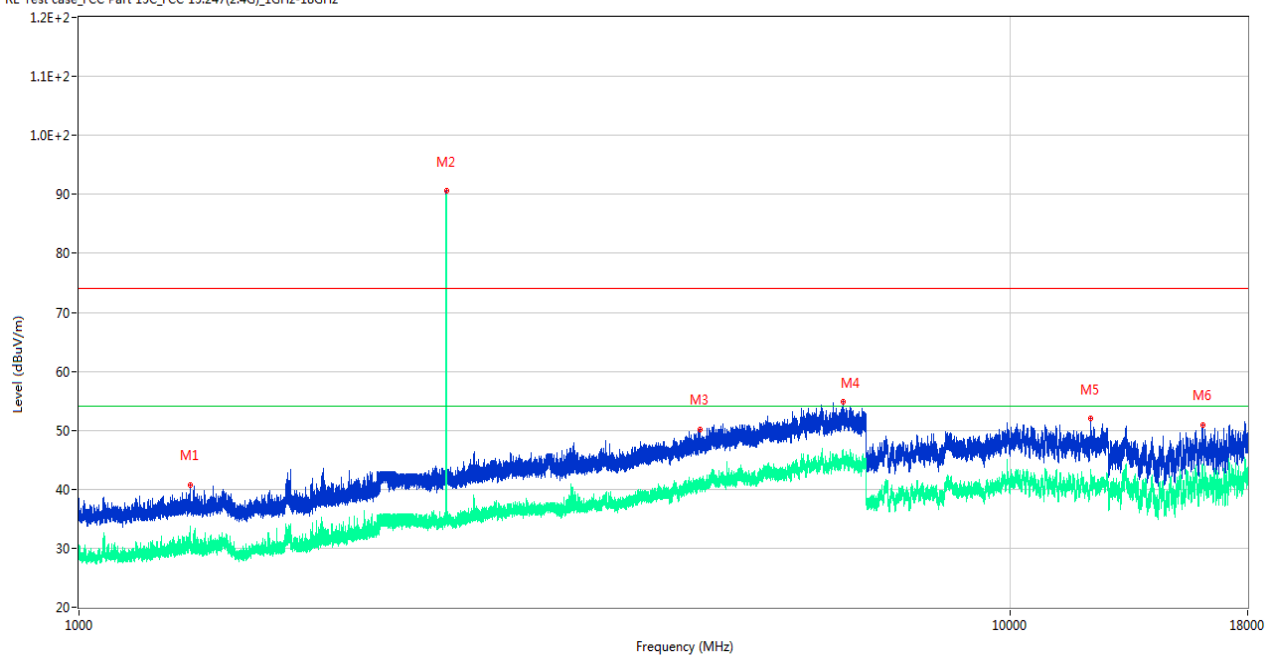
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1439.300        | 40.74            | -16.92      | 74.0           | 33.26       | Peak     | 24.00          | 100         | Horizontal | Pass    |
| 1** | 1439.300        | 31.18            | -16.92      | 54.0           | 22.82       | AV       | 24.00          | 100         | Horizontal | Pass    |
| 2   | 2479.800        | 105.59           | -12.20      | 74.0           | -31.59      | Peak     | 176.00         | 150         | Horizontal | N/A     |
| 2** | 2479.800        | 104.03           | -12.20      | 54.0           | -50.03      | AV       | 176.00         | 150         | Horizontal | N/A     |
| 3   | 4960.600        | 53.18            | -1.98       | 74.0           | 20.82       | Peak     | 204.00         | 100         | Horizontal | Pass    |
| 3** | 4960.600        | 49.88            | -1.98       | 54.0           | 4.12        | AV       | 204.00         | 100         | Horizontal | Pass    |
| 4   | 6288.200        | 55.67            | 1.48        | 74.0           | 18.33       | Peak     | 308.00         | 200         | Horizontal | Pass    |
| 4** | 6288.200        | 46.03            | 1.48        | 54.0           | 7.97        | AV       | 308.00         | 200         | Horizontal | Pass    |
| 5   | 10941.050       | 51.67            | -0.08       | 74.0           | 22.33       | Peak     | 44.00          | 300         | Horizontal | Pass    |
| 5** | 10941.050       | 42.04            | -0.08       | 54.0           | 11.96       | AV       | 44.00          | 300         | Horizontal | Pass    |
| 6   | 13298.625       | 51.17            | 0.86        | 74.0           | 22.83       | Peak     | 272.00         | 300         | Horizontal | Pass    |
| 6** | 13298.625       | 41.59            | 0.86        | 54.0           | 12.41       | AV       | 272.00         | 300         | Horizontal | Pass    |

**GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

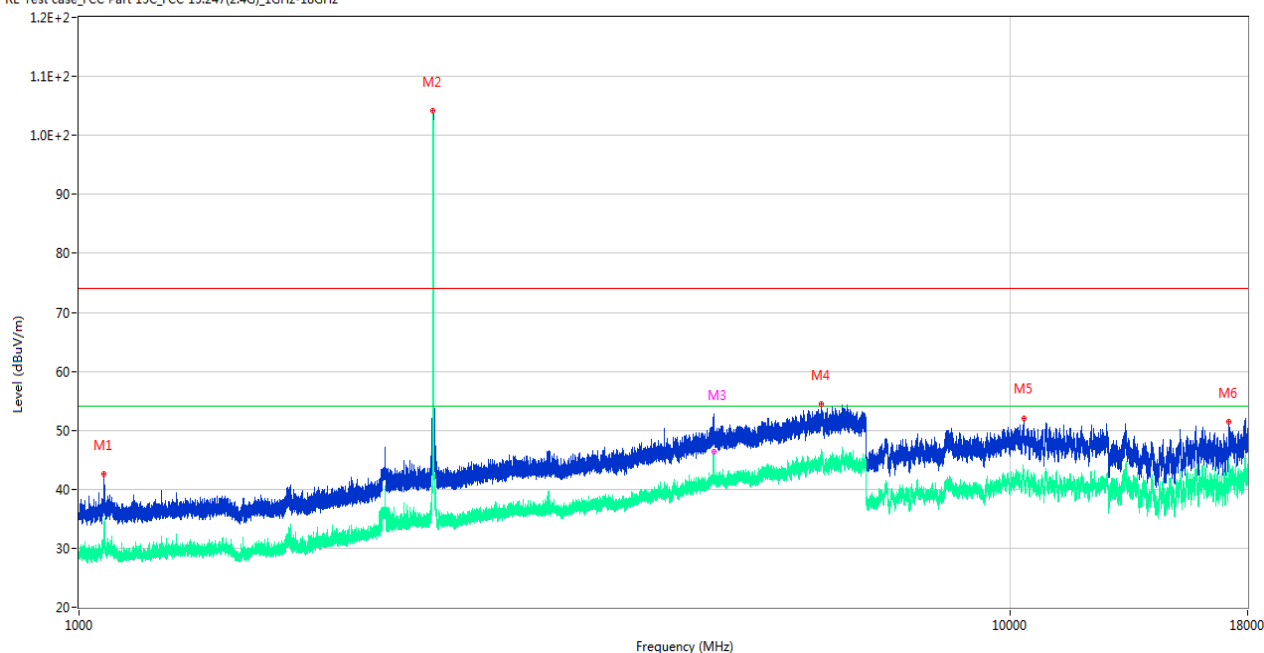
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1315.900        | 40.80            | -17.08      | 74.0           | 33.20       | Peak     | 88.00          | 200         | Vertical | Pass    |
| 1** | 1315.900        | 31.02            | -17.08      | 54.0           | 22.98       | AV       | 88.00          | 200         | Vertical | Pass    |
| 2   | 2480.300        | 90.59            | -12.21      | 74.0           | -16.59      | Peak     | 227.00         | 100         | Vertical | N/A     |
| 2** | 2480.300        | 89.16            | -12.21      | 54.0           | -35.16      | AV       | 227.00         | 100         | Vertical | N/A     |
| 3   | 4645.800        | 50.10            | -3.33       | 74.0           | 23.90       | Peak     | 220.00         | 100         | Vertical | Pass    |
| 3** | 4645.800        | 40.50            | -3.33       | 54.0           | 13.50       | AV       | 220.00         | 100         | Vertical | Pass    |
| 4   | 6612.600        | 54.79            | 2.17        | 74.0           | 19.21       | Peak     | 241.00         | 200         | Vertical | Pass    |
| 4** | 6612.600        | 45.31            | 2.17        | 54.0           | 8.69        | AV       | 241.00         | 200         | Vertical | Pass    |
| 5   | 12219.275       | 51.98            | 1.22        | 74.0           | 22.02       | Peak     | 221.00         | 300         | Vertical | Pass    |
| 5** | 12219.275       | 43.39            | 1.22        | 54.0           | 10.61       | AV       | 221.00         | 300         | Vertical | Pass    |
| 6   | 16107.375       | 50.96            | 0.88        | 74.0           | 23.04       | Peak     | 235.00         | 200         | Vertical | Pass    |
| 6** | 16107.375       | 41.74            | 0.88        | 54.0           | 12.26       | AV       | 235.00         | 200         | Vertical | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H**

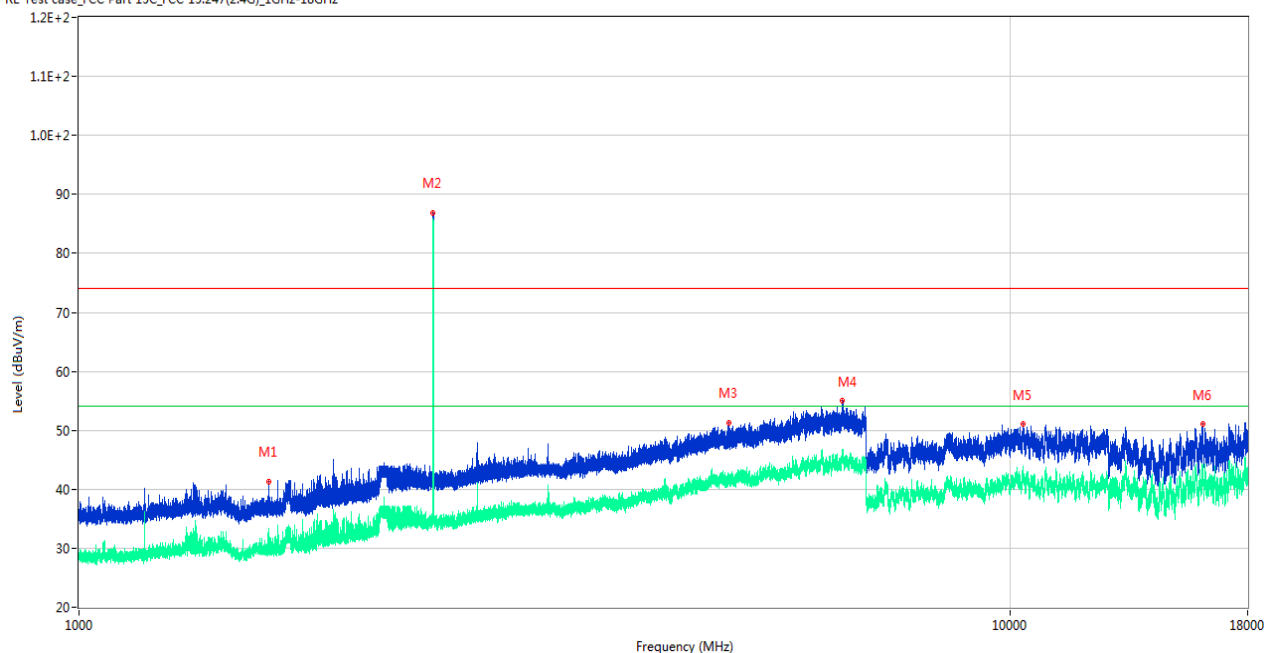
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1064.600        | 42.57            | -18.27      | 74.0           | 31.43       | Peak     | 338.00         | 100         | Horizontal | Pass    |
| 1** | 1064.600        | 33.79            | -18.27      | 54.0           | 20.21       | AV       | 338.00         | 100         | Horizontal | Pass    |
| 2   | 2401.500        | 104.16           | -11.74      | 74.0           | -30.16      | Peak     | 181.00         | 200         | Horizontal | N/A     |
| 2** | 2401.500        | 101.10           | -11.74      | 54.0           | -47.10      | AV       | 181.00         | 200         | Horizontal | N/A     |
| 3   | 4803.400        | 52.80            | -1.98       | 74.0           | 21.20       | Peak     | 293.00         | 100         | Horizontal | Pass    |
| 3** | 4803.400        | 46.41            | -1.98       | 54.0           | 7.59        | AV       | 293.00         | 100         | Horizontal | Pass    |
| 4   | 6267.800        | 54.45            | 0.86        | 74.0           | 19.55       | Peak     | 353.00         | 400         | Horizontal | Pass    |
| 4** | 6267.800        | 45.61            | 0.86        | 54.0           | 8.39        | AV       | 353.00         | 400         | Horizontal | Pass    |
| 5   | 10357.137       | 52.07            | 0.06        | 74.0           | 21.93       | Peak     | 329.00         | 300         | Horizontal | Pass    |
| 5** | 10357.137       | 41.77            | 0.06        | 54.0           | 12.23       | AV       | 329.00         | 300         | Horizontal | Pass    |
| 6   | 17189.136       | 51.40            | 2.37        | 74.0           | 22.60       | Peak     | 108.00         | 200         | Horizontal | Pass    |
| 6** | 17189.136       | 43.47            | 2.37        | 54.0           | 10.53       | AV       | 108.00         | 200         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V**

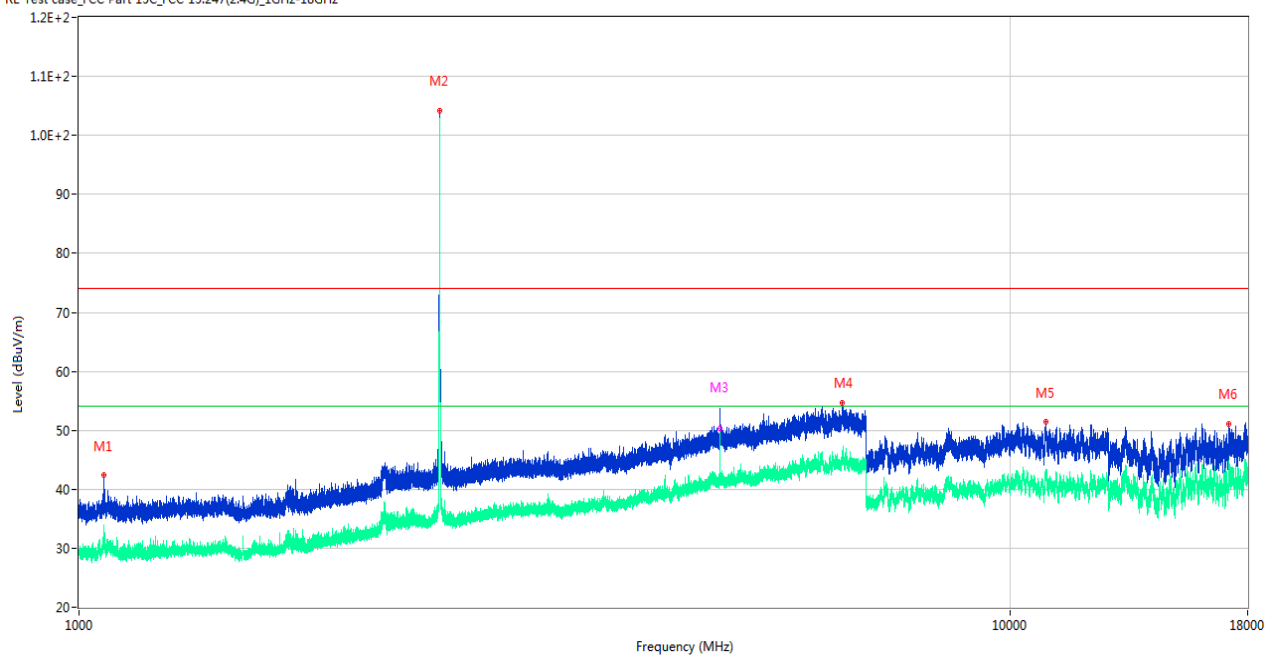
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1598.700        | 41.27            | -17.44      | 74.0           | 32.73       | Peak     | 312.00         | 400         | Vertical | Pass    |
| 1** | 1598.700        | 33.38            | -17.44      | 54.0           | 20.62       | AV       | 312.00         | 400         | Vertical | Pass    |
| 2   | 2401.500        | 86.92            | -11.74      | 74.0           | -12.92      | Peak     | 156.00         | 200         | Vertical | N/A     |
| 2** | 2401.500        | 85.96            | -11.74      | 54.0           | -31.96      | AV       | 156.00         | 200         | Vertical | N/A     |
| 3   | 4987.800        | 51.29            | -1.84       | 74.0           | 22.71       | Peak     | 252.00         | 150         | Vertical | Pass    |
| 3** | 4987.800        | 41.97            | -1.84       | 54.0           | 12.03       | AV       | 252.00         | 150         | Vertical | Pass    |
| 4   | 6604.600        | 54.96            | 1.88        | 74.0           | 19.04       | Peak     | 314.00         | 200         | Vertical | Pass    |
| 4** | 6604.600        | 45.39            | 1.88        | 54.0           | 8.61        | AV       | 314.00         | 200         | Vertical | Pass    |
| 5   | 10328.963       | 51.01            | -0.01       | 74.0           | 22.99       | Peak     | 170.00         | 300         | Vertical | Pass    |
| 5** | 10328.963       | 42.01            | -0.01       | 54.0           | 11.99       | AV       | 170.00         | 300         | Vertical | Pass    |
| 6   | 16102.912       | 51.05            | 1.07        | 74.0           | 22.95       | Peak     | 346.00         | 400         | Vertical | Pass    |
| 6** | 16102.912       | 43.37            | 1.07        | 54.0           | 10.63       | AV       | 346.00         | 400         | Vertical | Pass    |

**GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H**

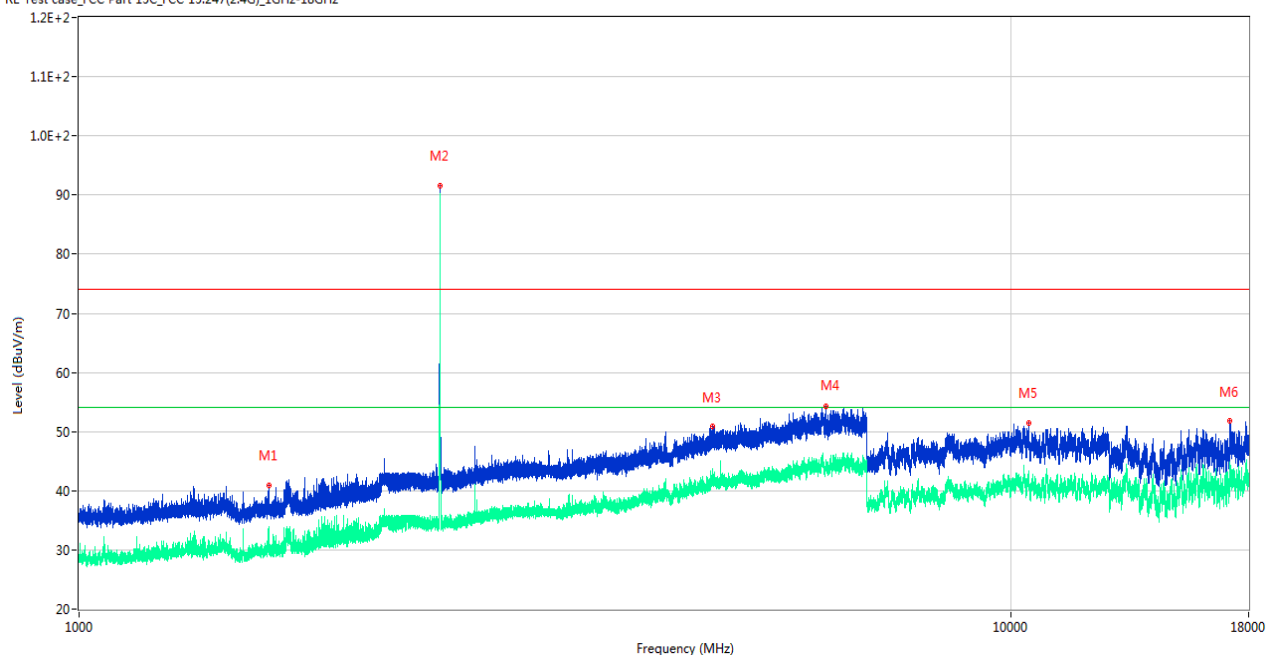
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1064.200        | 42.34            | -18.24      | 74.0           | 31.66       | Peak     | 335.00         | 300         | Horizontal | Pass    |
| 1** | 1064.200        | 32.70            | -18.24      | 54.0           | 21.30       | AV       | 335.00         | 300         | Horizontal | Pass    |
| 2   | 2440.500        | 104.20           | -12.23      | 74.0           | -30.20      | Peak     | 329.00         | 150         | Horizontal | N/A     |
| 2** | 2440.500        | 101.99           | -12.23      | 54.0           | -47.99      | AV       | 329.00         | 150         | Horizontal | N/A     |
| 3   | 4879.200        | 53.64            | -2.58       | 74.0           | 20.36       | Peak     | 146.00         | 100         | Horizontal | Pass    |
| 3** | 4879.200        | 50.30            | -2.58       | 54.0           | 3.70        | AV       | 146.00         | 100         | Horizontal | Pass    |
| 4   | 6602.000        | 54.71            | 1.33        | 74.0           | 19.29       | Peak     | 323.00         | 400         | Horizontal | Pass    |
| 4** | 6602.000        | 45.79            | 1.33        | 54.0           | 8.21        | AV       | 323.00         | 400         | Horizontal | Pass    |
| 5   | 10929.263       | 51.39            | 0.10        | 74.0           | 22.61       | Peak     | 204.00         | 300         | Horizontal | Pass    |
| 5** | 10929.263       | 42.01            | 0.10        | 54.0           | 11.99       | AV       | 204.00         | 300         | Horizontal | Pass    |
| 6   | 17181.786       | 51.07            | 2.63        | 74.0           | 22.93       | Peak     | 31.00          | 300         | Horizontal | Pass    |
| 6** | 17181.786       | 43.19            | 2.63        | 54.0           | 10.81       | AV       | 31.00          | 300         | Horizontal | Pass    |

## GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

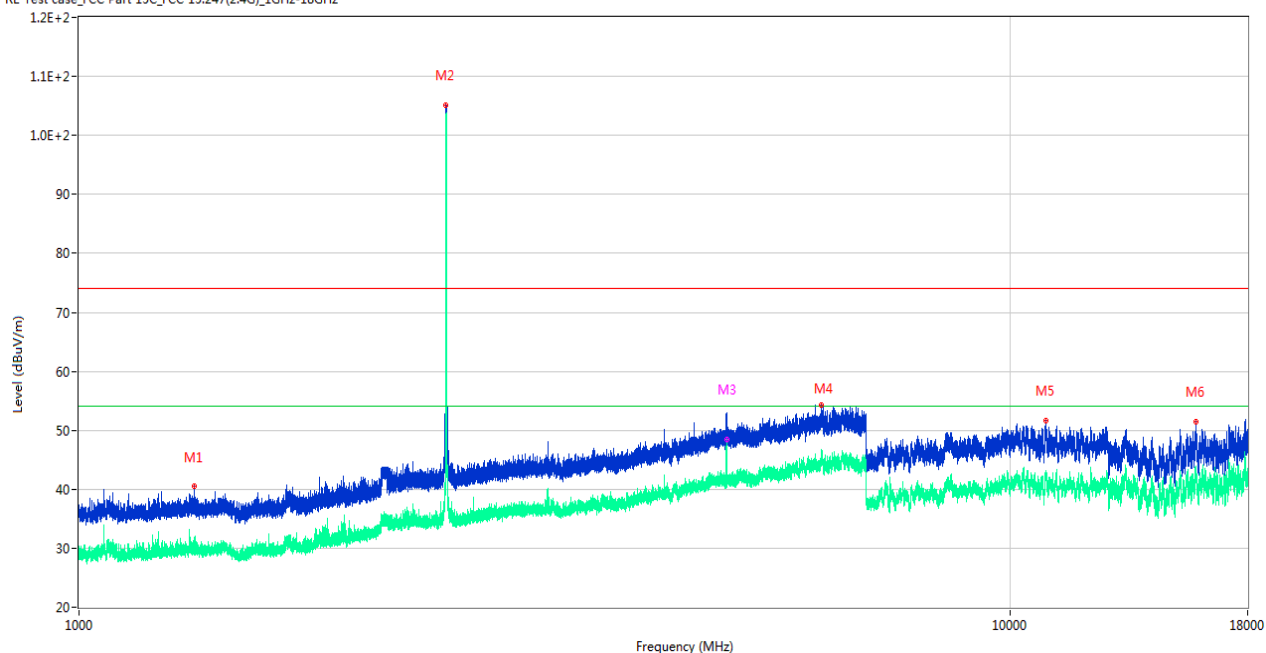
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1597.300        | 40.92            | -17.44      | 74.0           | 33.08       | Peak     | 136.00         | 200         | Vertical | Pass    |
| 1** | 1597.300        | 30.45            | -17.44      | 54.0           | 23.55       | AV       | 136.00         | 200         | Vertical | Pass    |
| 2   | 2439.500        | 91.62            | -12.28      | 74.0           | -17.62      | Peak     | 96.00          | 200         | Vertical | N/A     |
| 2** | 2439.500        | 88.95            | -12.28      | 54.0           | -34.95      | AV       | 96.00          | 200         | Vertical | N/A     |
| 3   | 4789.800        | 50.90            | -1.78       | 74.0           | 23.10       | Peak     | 118.00         | 100         | Vertical | Pass    |
| 3** | 4789.800        | 41.02            | -1.78       | 54.0           | 12.98       | AV       | 118.00         | 100         | Vertical | Pass    |
| 4   | 6325.600        | 54.36            | 0.37        | 74.0           | 19.64       | Peak     | 89.00          | 100         | Vertical | Pass    |
| 4** | 6325.600        | 44.44            | 0.37        | 54.0           | 9.56        | AV       | 89.00          | 100         | Vertical | Pass    |
| 5   | 10448.850       | 51.54            | -0.55       | 74.0           | 22.46       | Peak     | 360.00         | 100         | Vertical | Pass    |
| 5** | 10448.850       | 41.92            | -0.55       | 54.0           | 12.08       | AV       | 360.00         | 100         | Vertical | Pass    |
| 6   | 17193.075       | 51.75            | 2.24        | 74.0           | 22.25       | Peak     | 343.00         | 300         | Vertical | Pass    |
| 6** | 17193.075       | 44.13            | 2.24        | 54.0           | 9.87        | AV       | 343.00         | 300         | Vertical | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

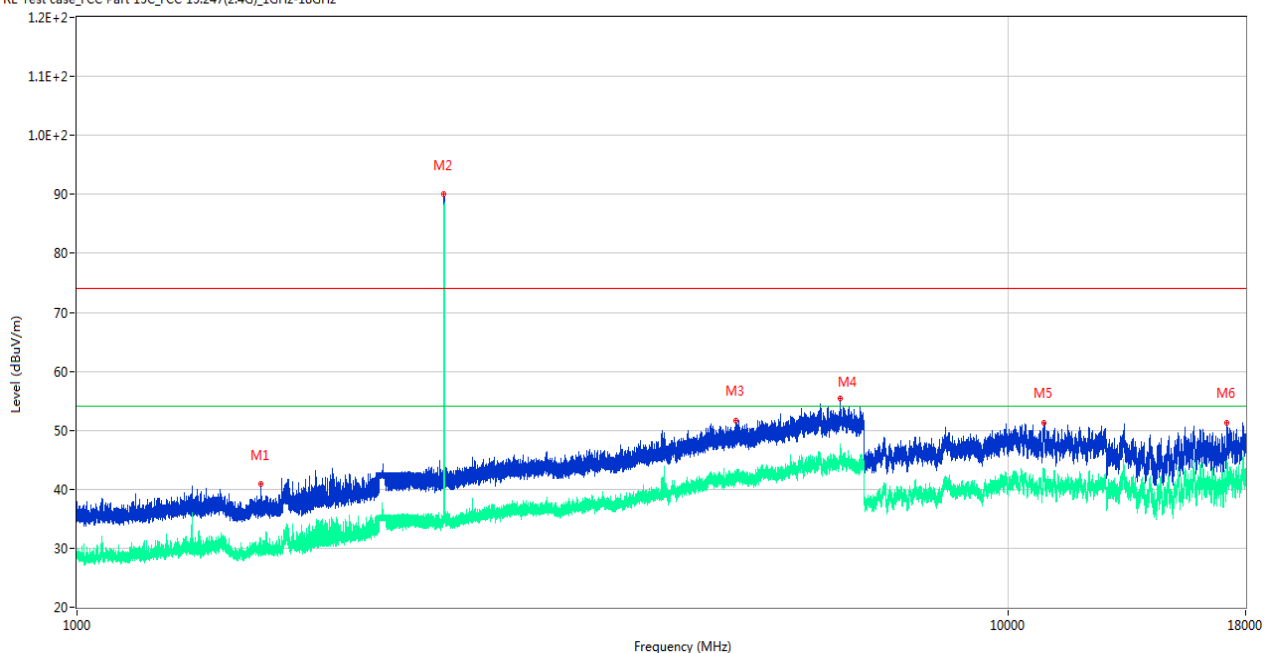
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1329.400        | 40.45            | -17.24      | 74.0           | 33.55       | Peak     | 65.00          | 200         | Horizontal | Pass    |
| 1** | 1329.400        | 30.32            | -17.24      | 54.0           | 23.68       | AV       | 65.00          | 200         | Horizontal | Pass    |
| 2   | 2479.500        | 105.20           | -12.21      | 74.0           | -31.20      | Peak     | 182.00         | 200         | Horizontal | N/A     |
| 2** | 2479.500        | 103.51           | -12.21      | 54.0           | -49.51      | AV       | 182.00         | 200         | Horizontal | N/A     |
| 3   | 4961.000        | 51.82            | -1.95       | 74.0           | 22.18       | Peak     | 360.00         | 100         | Horizontal | Pass    |
| 3** | 4961.000        | 48.36            | -1.95       | 54.0           | 5.64        | AV       | 360.00         | 100         | Horizontal | Pass    |
| 4   | 6264.200        | 54.27            | 0.68        | 74.0           | 19.73       | Peak     | 272.00         | 100         | Horizontal | Pass    |
| 4** | 6264.200        | 45.37            | 0.68        | 54.0           | 8.63        | AV       | 272.00         | 100         | Horizontal | Pass    |
| 5   | 10941.625       | 51.65            | -0.08       | 74.0           | 22.35       | Peak     | 16.00          | 400         | Horizontal | Pass    |
| 5** | 10941.625       | 41.87            | -0.08       | 54.0           | 12.13       | AV       | 16.00          | 400         | Horizontal | Pass    |
| 6   | 15830.438       | 51.46            | 1.49        | 74.0           | 22.54       | Peak     | 227.00         | 300         | Horizontal | Pass    |
| 6** | 15830.438       | 43.84            | 1.49        | 54.0           | 10.16       | AV       | 227.00         | 300         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz

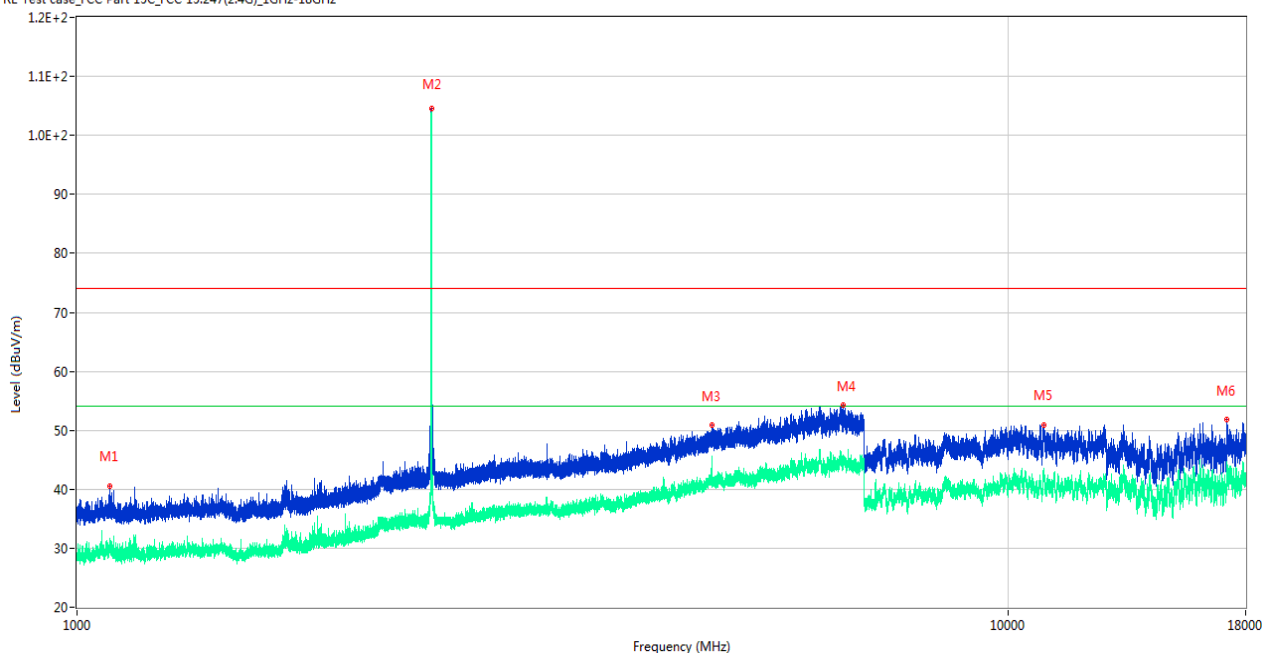


| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1574.300        | 40.89            | -17.42      | 74.0           | 33.11       | Peak     | 122.00         | 200         | Vertical | Pass    |
| 1** | 1574.300        | 30.04            | -17.42      | 54.0           | 23.96       | AV       | 122.00         | 200         | Vertical | Pass    |
| 2   | 2479.500        | 89.99            | -12.21      | 74.0           | -15.99      | Peak     | 145.00         | 200         | Vertical | N/A     |
| 2** | 2479.500        | 87.47            | -12.21      | 54.0           | -33.47      | AV       | 145.00         | 200         | Vertical | N/A     |
| 3   | 5099.000        | 51.66            | -1.42       | 74.0           | 22.34       | Peak     | 260.00         | 100         | Vertical | Pass    |
| 3** | 5099.000        | 42.10            | -1.42       | 54.0           | 11.90       | AV       | 260.00         | 100         | Vertical | Pass    |
| 4   | 6606.400        | 55.45            | 1.88        | 74.0           | 18.55       | Peak     | 226.00         | 100         | Vertical | Pass    |
| 4** | 6606.400        | 47.64            | 1.88        | 54.0           | 6.36        | AV       | 226.00         | 100         | Vertical | Pass    |
| 5   | 10919.487       | 51.34            | 0.23        | 74.0           | 22.66       | Peak     | 275.00         | 100         | Vertical | Pass    |
| 5** | 10919.487       | 42.33            | 0.23        | 54.0           | 11.67       | AV       | 275.00         | 100         | Vertical | Pass    |
| 6   | 17184.150       | 51.33            | 2.55        | 74.0           | 22.67       | Peak     | 53.00          | 400         | Vertical | Pass    |
| 6** | 17184.150       | 43.63            | 2.55        | 54.0           | 10.37       | AV       | 53.00          | 400         | Vertical | Pass    |

## Dipole Antenna 2

### GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H

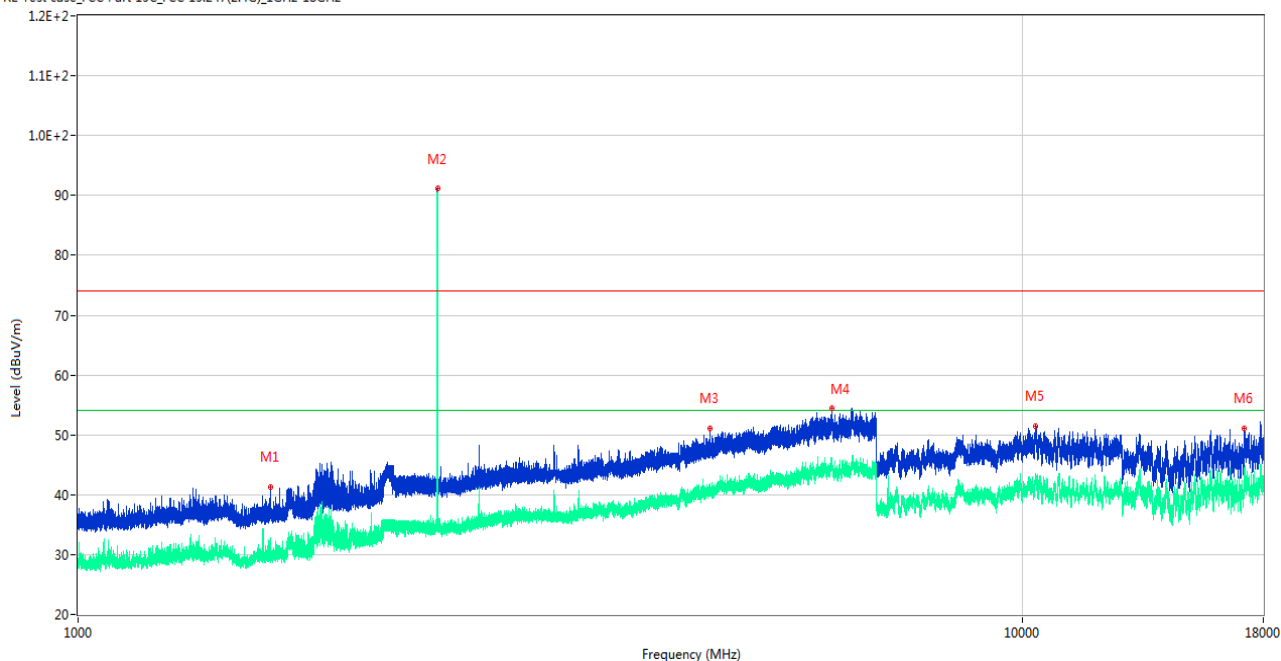
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1084.300        | 40.58            | -18.20      | 74.0           | 33.42       | Peak     | 338.00         | 200         | Horizontal | Pass    |
| 1** | 1084.300        | 30.18            | -18.20      | 54.0           | 23.82       | AV       | 338.00         | 200         | Horizontal | Pass    |
| 2   | 2402.300        | 104.63           | -11.74      | 74.0           | -30.63      | Peak     | 183.00         | 100         | Horizontal | N/A     |
| 2** | 2402.300        | 103.75           | -11.74      | 54.0           | -49.75      | AV       | 183.00         | 100         | Horizontal | N/A     |
| 3   | 4803.600        | 50.84            | -2.00       | 74.0           | 23.16       | Peak     | 165.00         | 100         | Horizontal | Pass    |
| 3** | 4803.600        | 44.99            | -2.00       | 54.0           | 9.01        | AV       | 165.00         | 100         | Horizontal | Pass    |
| 4   | 6658.200        | 54.31            | 0.99        | 74.0           | 19.69       | Peak     | 8.00           | 200         | Horizontal | Pass    |
| 4** | 6658.200        | 44.97            | 0.99        | 54.0           | 9.03        | AV       | 8.00           | 200         | Horizontal | Pass    |
| 5   | 10935.300       | 50.96            | -0.02       | 74.0           | 23.04       | Peak     | 56.00          | 300         | Horizontal | Pass    |
| 5** | 10935.300       | 42.27            | -0.02       | 54.0           | 11.73       | AV       | 56.00          | 300         | Horizontal | Pass    |
| 6   | 17185.724       | 51.80            | 2.50        | 74.0           | 22.20       | Peak     | 0.00           | 400         | Horizontal | Pass    |
| 6** | 17185.724       | 43.70            | 2.50        | 54.0           | 10.30       | AV       | 0.00           | 400         | Horizontal | Pass    |

**GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V**

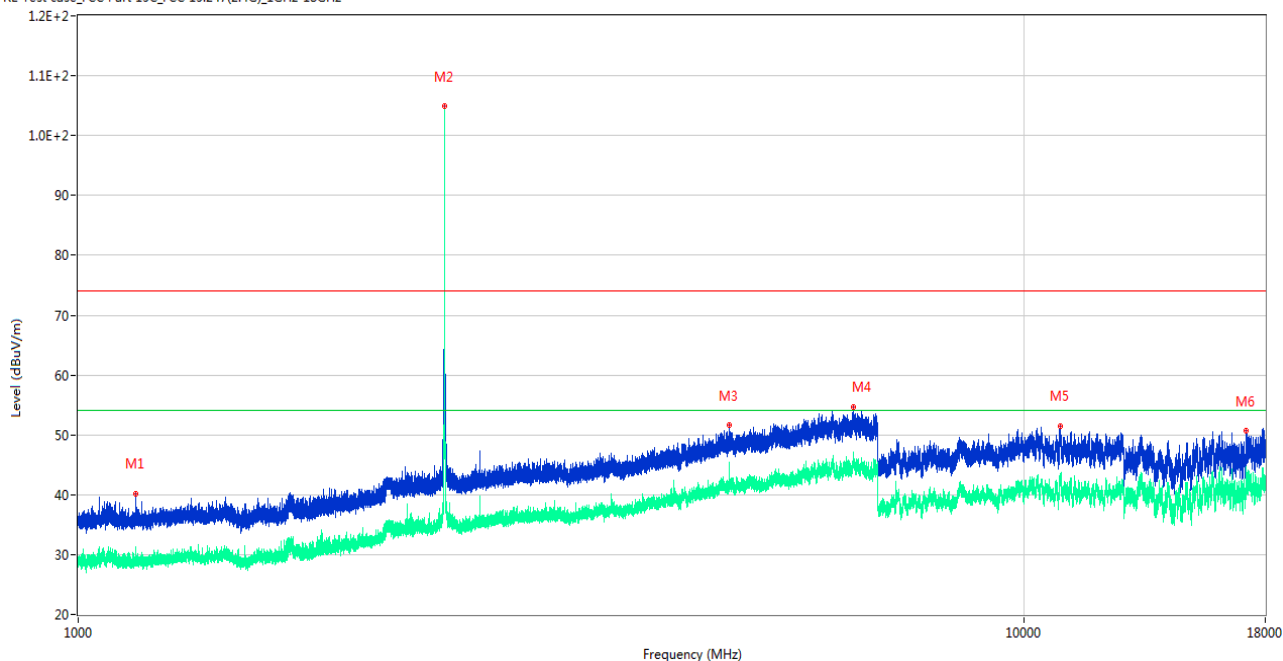
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1598.400        | 41.30            | -17.45      | 74.0           | 32.70       | Peak     | 33.00          | 400         | Vertical | Pass    |
| 1** | 1598.400        | 29.92            | -17.45      | 54.0           | 24.08       | AV       | 33.00          | 400         | Vertical | Pass    |
| 2   | 2402.200        | 91.13            | -11.74      | 74.0           | -17.13      | Peak     | 232.00         | 100         | Vertical | N/A     |
| 2** | 2402.200        | 90.51            | -11.74      | 54.0           | -36.51      | AV       | 232.00         | 100         | Vertical | N/A     |
| 3   | 4667.600        | 51.05            | -2.22       | 74.0           | 22.95       | Peak     | 50.00          | 100         | Vertical | Pass    |
| 3** | 4667.600        | 40.43            | -2.22       | 54.0           | 13.57       | AV       | 50.00          | 100         | Vertical | Pass    |
| 4   | 6289.200        | 54.50            | 1.38        | 74.0           | 19.50       | Peak     | 0.00           | 200         | Vertical | Pass    |
| 4** | 6289.200        | 45.30            | 1.38        | 54.0           | 8.70        | AV       | 0.00           | 200         | Vertical | Pass    |
| 5   | 10327.812       | 51.54            | -0.03       | 74.0           | 22.46       | Peak     | 81.00          | 200         | Vertical | Pass    |
| 5** | 10327.812       | 42.19            | -0.03       | 54.0           | 11.81       | AV       | 81.00          | 200         | Vertical | Pass    |
| 6   | 17198.324       | 51.14            | 1.99        | 74.0           | 22.86       | Peak     | 96.00          | 100         | Vertical | Pass    |
| 6** | 17198.324       | 43.53            | 1.99        | 54.0           | 10.47       | AV       | 96.00          | 100         | Vertical | Pass    |

**GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H**

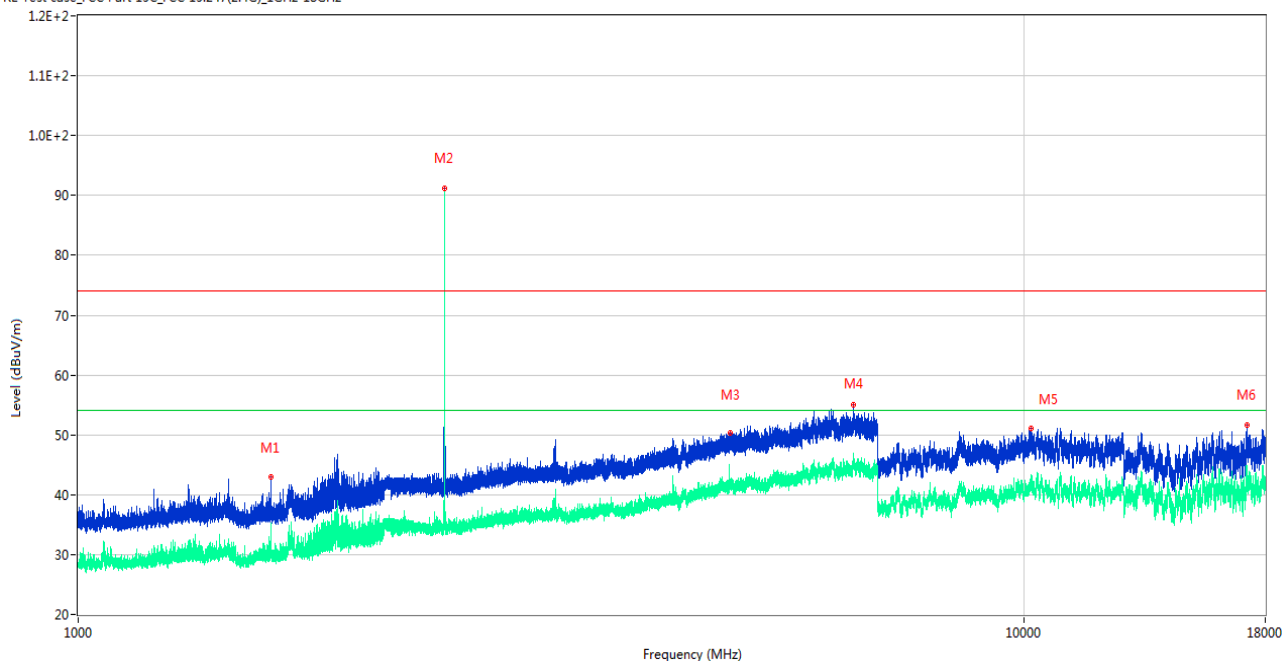
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1151.300        | 40.20            | -17.85      | 74.0           | 33.80       | Peak     | 24.00          | 400         | Horizontal | Pass    |
| 1** | 1151.300        | 28.53            | -17.85      | 54.0           | 25.47       | AV       | 24.00          | 400         | Horizontal | Pass    |
| 2   | 2440.200        | 104.91           | -12.25      | 74.0           | -30.91      | Peak     | 336.00         | 150         | Horizontal | N/A     |
| 2** | 2440.200        | 104.60           | -12.25      | 54.0           | -50.60      | AV       | 336.00         | 150         | Horizontal | N/A     |
| 3   | 4880.400        | 51.63            | -2.61       | 74.0           | 22.37       | Peak     | 156.00         | 150         | Horizontal | Pass    |
| 3** | 4880.400        | 43.78            | -2.61       | 54.0           | 10.22       | AV       | 156.00         | 150         | Horizontal | Pass    |
| 4   | 6610.600        | 54.70            | 2.09        | 74.0           | 19.30       | Peak     | 275.00         | 400         | Horizontal | Pass    |
| 4** | 6610.600        | 46.05            | 2.09        | 54.0           | 7.95        | AV       | 275.00         | 400         | Horizontal | Pass    |
| 5   | 10933.287       | 51.47            | 0.02        | 74.0           | 22.53       | Peak     | 327.00         | 200         | Horizontal | Pass    |
| 5** | 10933.287       | 41.92            | 0.02        | 54.0           | 12.08       | AV       | 327.00         | 200         | Horizontal | Pass    |
| 6   | 17196.751       | 50.66            | 2.08        | 74.0           | 23.34       | Peak     | 0.00           | 400         | Horizontal | Pass    |
| 6** | 17196.751       | 43.23            | 2.08        | 54.0           | 10.77       | AV       | 0.00           | 400         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

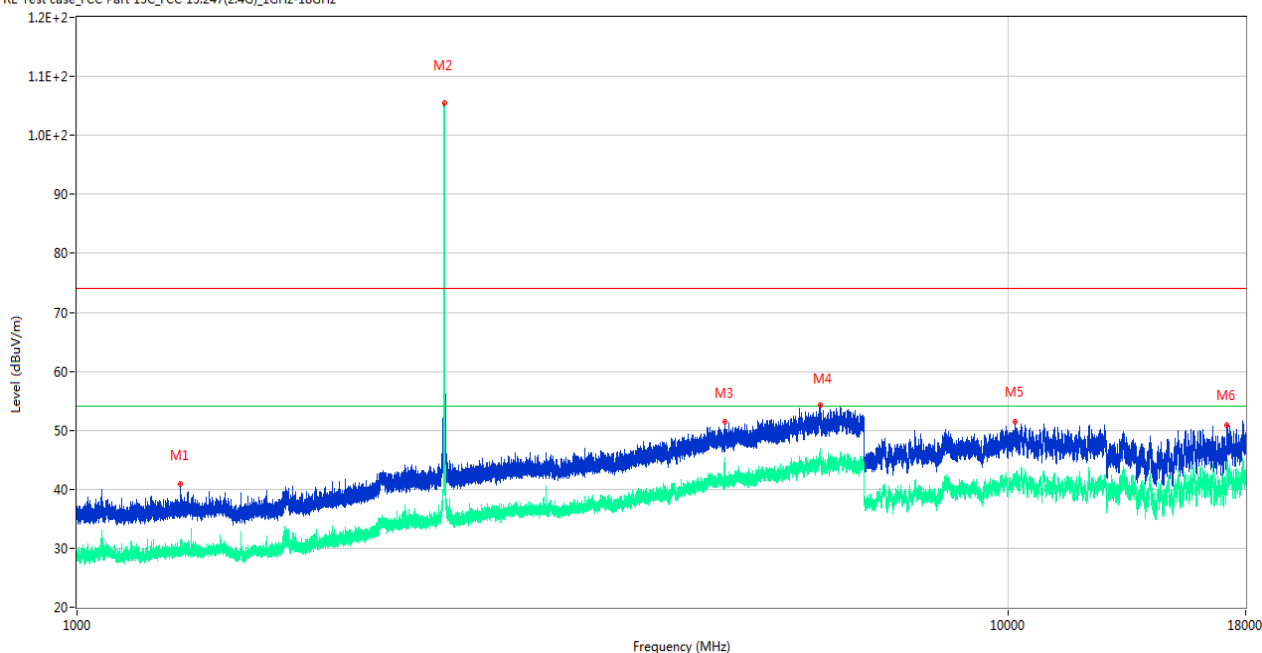
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1597.400        | 42.95            | -17.44      | 74.0           | 31.05       | Peak     | 139.00         | 400         | Vertical | Pass    |
| 1** | 1597.400        | 34.02            | -17.44      | 54.0           | 19.98       | AV       | 139.00         | 400         | Vertical | Pass    |
| 2   | 2440.000        | 91.19            | -12.26      | 74.0           | -17.19      | Peak     | 146.00         | 100         | Vertical | N/A     |
| 2** | 2440.000        | 90.32            | -12.26      | 54.0           | -36.32      | AV       | 146.00         | 100         | Vertical | N/A     |
| 3   | 4897.000        | 50.32            | -2.35       | 74.0           | 23.68       | Peak     | 207.00         | 100         | Vertical | Pass    |
| 3** | 4897.000        | 41.54            | -2.35       | 54.0           | 12.46       | AV       | 207.00         | 100         | Vertical | Pass    |
| 4   | 6604.800        | 55.07            | 1.88        | 74.0           | 18.93       | Peak     | 111.00         | 300         | Vertical | Pass    |
| 4** | 6604.800        | 45.34            | 1.88        | 54.0           | 8.66        | AV       | 111.00         | 300         | Vertical | Pass    |
| 5   | 10188.662       | 51.11            | 0.24        | 74.0           | 22.89       | Peak     | 13.00          | 100         | Vertical | Pass    |
| 5** | 10188.662       | 41.63            | 0.24        | 54.0           | 12.37       | AV       | 13.00          | 100         | Vertical | Pass    |
| 6   | 17202.262       | 51.70            | 1.78        | 74.0           | 22.30       | Peak     | 138.00         | 400         | Vertical | Pass    |
| 6** | 17202.262       | 44.35            | 1.78        | 54.0           | 9.65        | AV       | 138.00         | 400         | Vertical | Pass    |

**GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

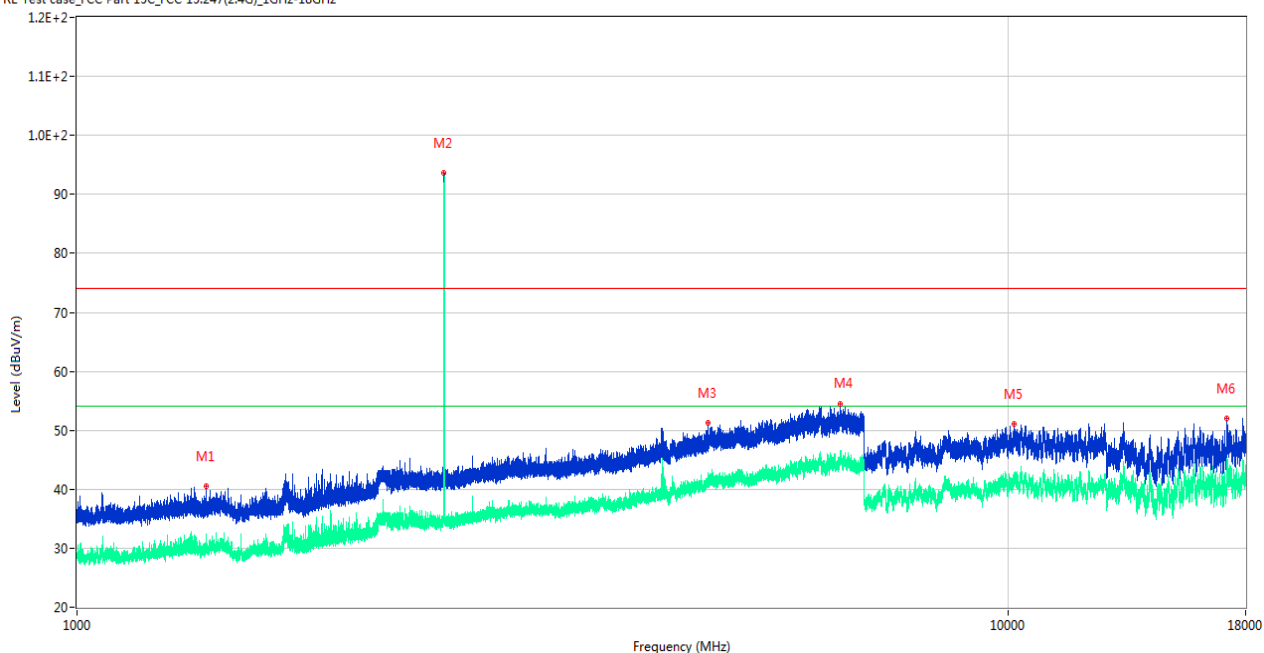
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1292.300        | 40.83            | -17.42      | 74.0           | 33.17       | Peak     | 88.00          | 100         | Horizontal | Pass    |
| 1** | 1292.300        | 31.49            | -17.42      | 54.0           | 22.51       | AV       | 88.00          | 100         | Horizontal | Pass    |
| 2   | 2479.800        | 105.58           | -12.20      | 74.0           | -31.58      | Peak     | 331.00         | 100         | Horizontal | N/A     |
| 2** | 2479.800        | 104.47           | -12.20      | 54.0           | -50.47      | AV       | 331.00         | 100         | Horizontal | N/A     |
| 3   | 4959.400        | 51.38            | -2.19       | 74.0           | 22.62       | Peak     | 177.00         | 100         | Horizontal | Pass    |
| 3** | 4959.400        | 45.21            | -2.19       | 54.0           | 8.79        | AV       | 177.00         | 100         | Horizontal | Pass    |
| 4   | 6284.800        | 54.28            | 1.39        | 74.0           | 19.72       | Peak     | 166.00         | 200         | Horizontal | Pass    |
| 4** | 6284.800        | 45.24            | 1.39        | 54.0           | 8.76        | AV       | 166.00         | 200         | Horizontal | Pass    |
| 5   | 10187.800       | 51.51            | 0.22        | 74.0           | 22.49       | Peak     | 315.00         | 300         | Horizontal | Pass    |
| 5** | 10187.800       | 42.47            | 0.22        | 54.0           | 11.53       | AV       | 315.00         | 300         | Horizontal | Pass    |
| 6   | 17194.912       | 50.90            | 2.19        | 74.0           | 23.10       | Peak     | 105.00         | 400         | Horizontal | Pass    |
| 6** | 17194.912       | 42.74            | 2.19        | 54.0           | 11.26       | AV       | 105.00         | 400         | Horizontal | Pass    |

**GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

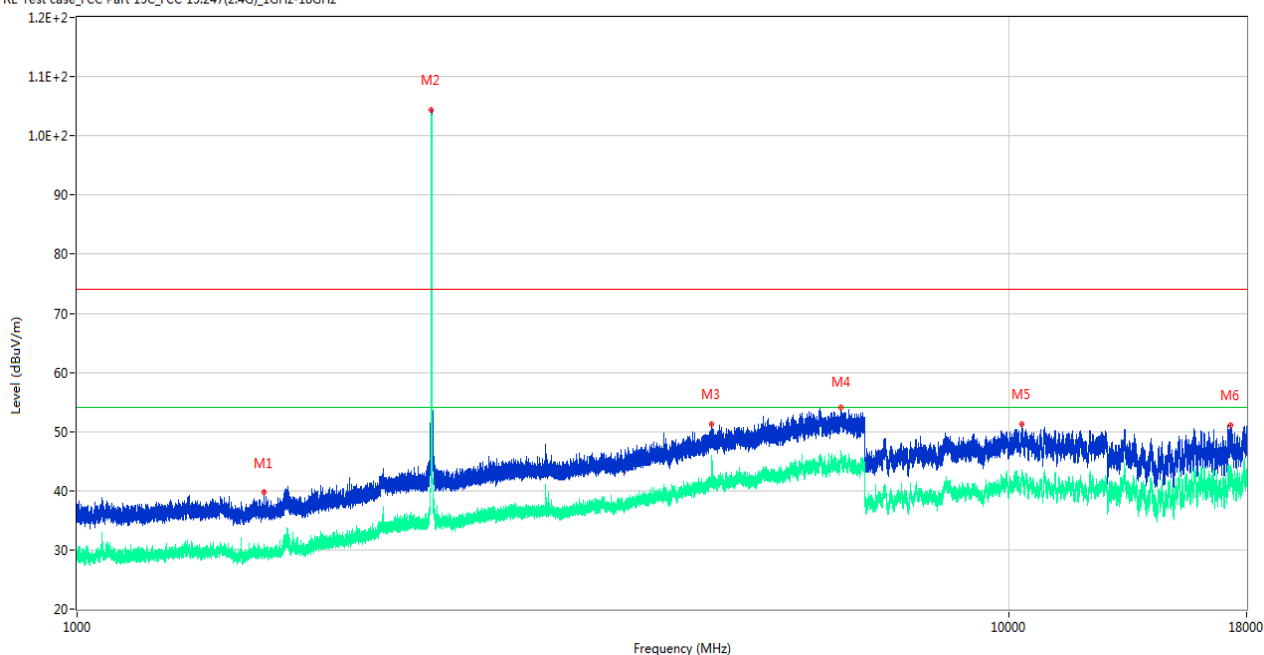
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1375.100        | 40.54            | -16.95      | 74.0           | 33.46       | Peak     | 106.00         | 300         | Vertical | Pass    |
| 1** | 1375.100        | 30.10            | -16.95      | 54.0           | 23.90       | AV       | 106.00         | 300         | Vertical | Pass    |
| 2   | 2479.700        | 93.69            | -12.21      | 74.0           | -19.69      | Peak     | 227.00         | 100         | Vertical | N/A     |
| 2** | 2479.700        | 91.64            | -12.21      | 54.0           | -37.64      | AV       | 227.00         | 100         | Vertical | N/A     |
| 3   | 4767.200        | 51.32            | -2.13       | 74.0           | 22.68       | Peak     | 0.00           | 200         | Vertical | Pass    |
| 3** | 4767.200        | 40.82            | -2.13       | 54.0           | 13.18       | AV       | 0.00           | 200         | Vertical | Pass    |
| 4   | 6609.600        | 54.38            | 2.01        | 74.0           | 19.62       | Peak     | 229.00         | 400         | Vertical | Pass    |
| 4** | 6609.600        | 46.05            | 2.01        | 54.0           | 7.95        | AV       | 229.00         | 400         | Vertical | Pass    |
| 5   | 10164.799       | 51.16            | -0.30       | 74.0           | 22.84       | Peak     | 29.00          | 200         | Vertical | Pass    |
| 5** | 10164.799       | 41.65            | -0.30       | 54.0           | 12.35       | AV       | 29.00          | 200         | Vertical | Pass    |
| 6   | 17198.324       | 52.07            | 1.99        | 74.0           | 21.93       | Peak     | 306.00         | 300         | Vertical | Pass    |
| 6** | 17198.324       | 44.35            | 1.99        | 54.0           | 9.65        | AV       | 306.00         | 300         | Vertical | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H**

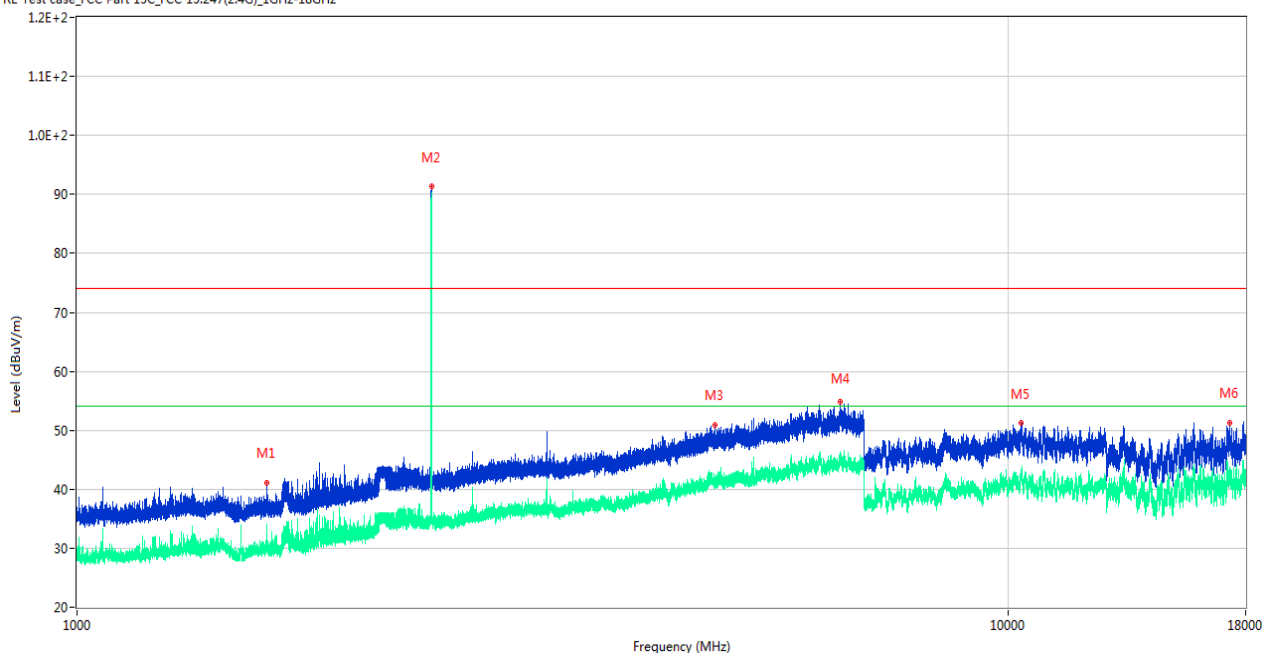
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1586.900        | 39.72            | -17.16      | 74.0           | 34.28       | Peak     | 67.00          | 300         | Horizontal | Pass    |
| 1** | 1586.900        | 29.62            | -17.16      | 54.0           | 24.38       | AV       | 67.00          | 300         | Horizontal | Pass    |
| 2   | 2401.500        | 104.45           | -11.74      | 74.0           | -30.45      | Peak     | 183.00         | 100         | Horizontal | N/A     |
| 2** | 2401.500        | 104.07           | -11.74      | 54.0           | -50.07      | AV       | 183.00         | 100         | Horizontal | N/A     |
| 3   | 4802.800        | 51.30            | -1.91       | 74.0           | 22.70       | Peak     | 164.00         | 200         | Horizontal | Pass    |
| 3** | 4802.800        | 44.55            | -1.91       | 54.0           | 9.45        | AV       | 164.00         | 200         | Horizontal | Pass    |
| 4   | 6604.400        | 54.07            | 1.85        | 74.0           | 19.93       | Peak     | 26.00          | 200         | Horizontal | Pass    |
| 4** | 6604.400        | 46.38            | 1.85        | 54.0           | 7.62        | AV       | 26.00          | 200         | Horizontal | Pass    |
| 5   | 10326.950       | 51.34            | -0.04       | 74.0           | 22.66       | Peak     | 47.00          | 400         | Horizontal | Pass    |
| 5** | 10326.950       | 42.84            | -0.04       | 54.0           | 11.16       | AV       | 47.00          | 400         | Horizontal | Pass    |
| 6   | 17291.512       | 51.07            | 1.66        | 74.0           | 22.93       | Peak     | 114.00         | 400         | Horizontal | Pass    |
| 6** | 17291.512       | 42.37            | 1.66        | 54.0           | 11.63       | AV       | 114.00         | 400         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V**

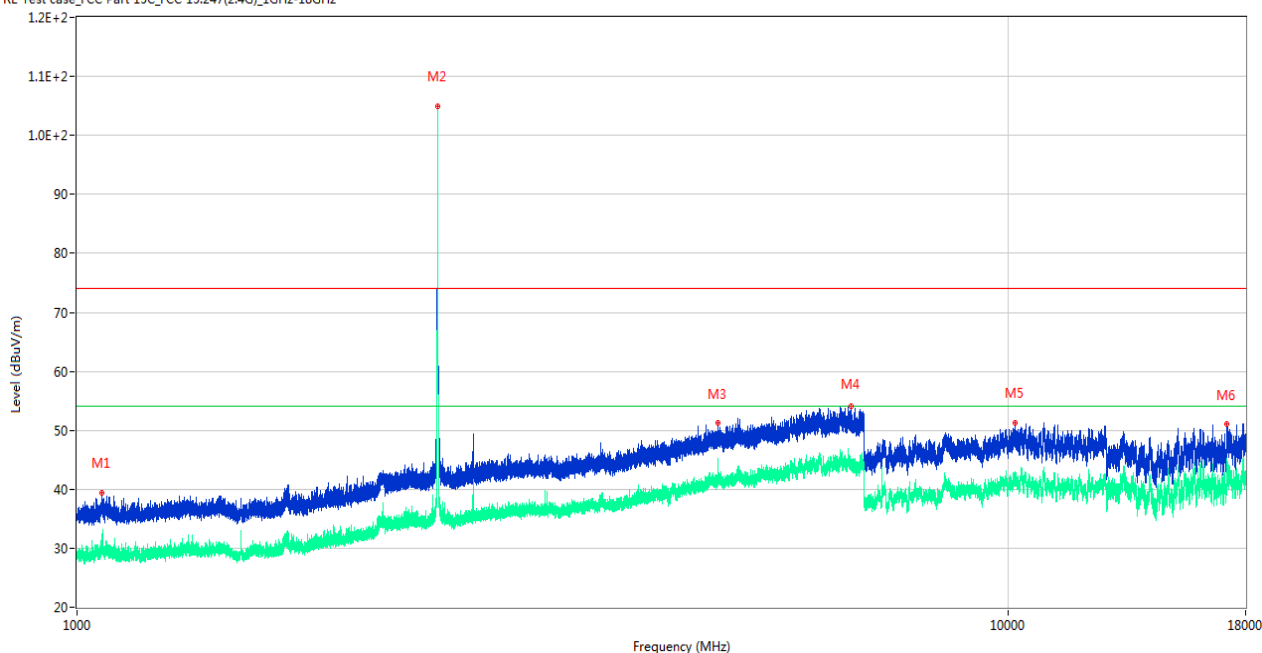
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1599.500        | 41.09            | -17.39      | 74.0           | 32.91       | Peak     | 318.00         | 200         | Vertical | Pass    |
| 1** | 1599.500        | 31.54            | -17.39      | 54.0           | 22.46       | AV       | 318.00         | 200         | Vertical | Pass    |
| 2   | 2402.500        | 91.30            | -11.74      | 74.0           | -17.30      | Peak     | 227.00         | 200         | Vertical | N/A     |
| 2** | 2402.500        | 89.62            | -11.74      | 54.0           | -35.62      | AV       | 227.00         | 200         | Vertical | N/A     |
| 3   | 4842.600        | 50.90            | -3.06       | 74.0           | 23.10       | Peak     | 22.00          | 200         | Vertical | Pass    |
| 3** | 4842.600        | 40.82            | -3.06       | 54.0           | 13.18       | AV       | 22.00          | 200         | Vertical | Pass    |
| 4   | 6611.200        | 54.83            | 2.12        | 74.0           | 19.17       | Peak     | 278.00         | 100         | Vertical | Pass    |
| 4** | 6611.200        | 45.79            | 2.12        | 54.0           | 8.21        | AV       | 278.00         | 100         | Vertical | Pass    |
| 5   | 10330.112       | 51.18            | 0.01        | 74.0           | 22.82       | Peak     | 29.00          | 200         | Vertical | Pass    |
| 5** | 10330.112       | 42.69            | 0.01        | 54.0           | 11.31       | AV       | 29.00          | 200         | Vertical | Pass    |
| 6   | 17286.525       | 51.35            | 1.69        | 74.0           | 22.65       | Peak     | 0.00           | 100         | Vertical | Pass    |
| 6** | 17286.525       | 43.29            | 1.69        | 54.0           | 10.71       | AV       | 0.00           | 100         | Vertical | Pass    |

## GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

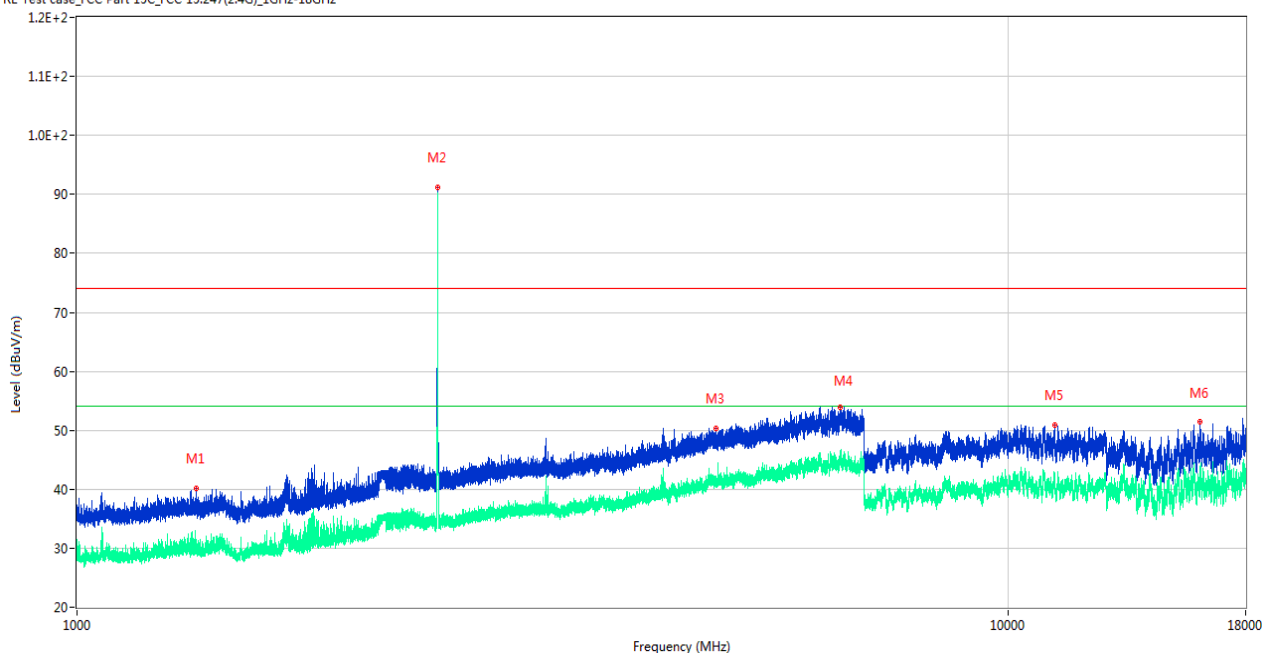
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1063.400        | 39.47            | -18.16      | 74.0           | 34.53       | Peak     | 337.00         | 300         | Horizontal | Pass    |
| 1** | 1063.400        | 29.46            | -18.16      | 54.0           | 24.54       | AV       | 337.00         | 300         | Horizontal | Pass    |
| 2   | 2439.500        | 104.93           | -12.28      | 74.0           | -30.93      | Peak     | 332.00         | 150         | Horizontal | N/A     |
| 2** | 2439.500        | 102.09           | -12.28      | 54.0           | -48.09      | AV       | 332.00         | 150         | Horizontal | N/A     |
| 3   | 4879.000        | 51.24            | -2.59       | 74.0           | 22.76       | Peak     | 176.00         | 100         | Horizontal | Pass    |
| 3** | 4879.000        | 42.91            | -2.59       | 54.0           | 11.09       | AV       | 176.00         | 100         | Horizontal | Pass    |
| 4   | 6792.000        | 54.00            | 0.96        | 74.0           | 20.00       | Peak     | 310.00         | 300         | Horizontal | Pass    |
| 4** | 6792.000        | 44.28            | 0.96        | 54.0           | 9.72        | AV       | 310.00         | 300         | Horizontal | Pass    |
| 5   | 10187.513       | 51.32            | 0.22        | 74.0           | 22.68       | Peak     | 45.00          | 200         | Horizontal | Pass    |
| 5** | 10187.513       | 42.36            | 0.22        | 54.0           | 11.64       | AV       | 45.00          | 200         | Horizontal | Pass    |
| 6   | 17192.550       | 51.03            | 2.26        | 74.0           | 22.97       | Peak     | 360.00         | 400         | Horizontal | Pass    |
| 6** | 17192.550       | 43.45            | 2.26        | 54.0           | 10.55       | AV       | 360.00         | 400         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V**

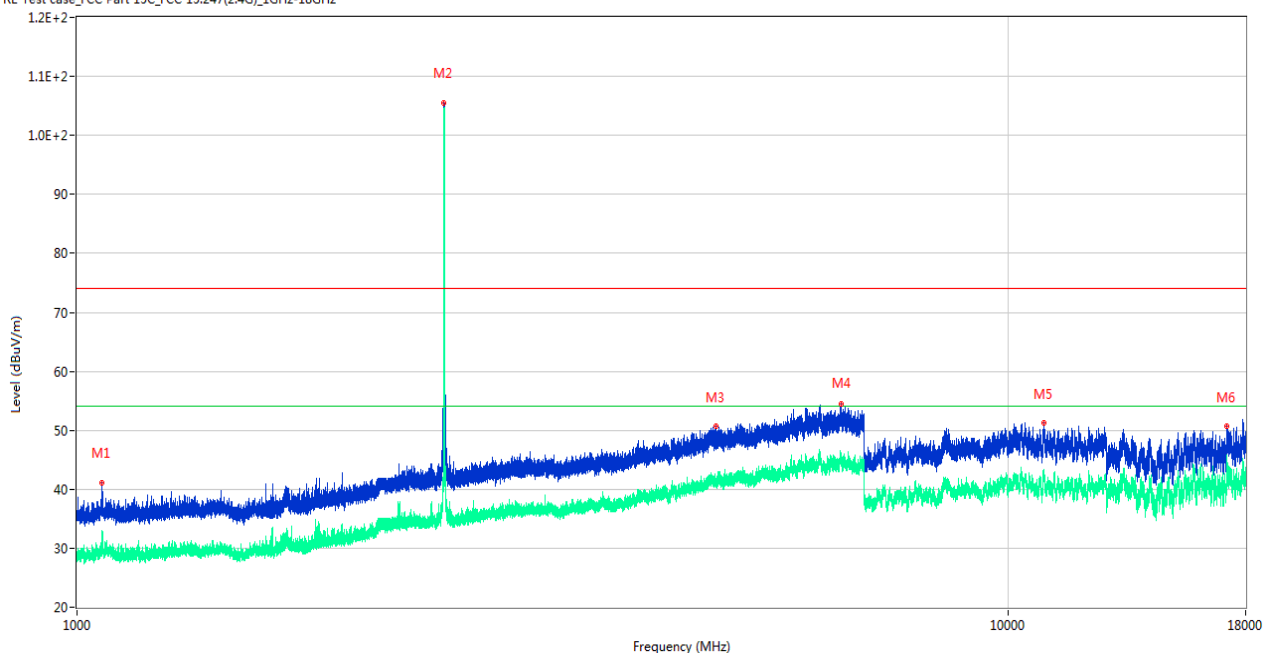
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1341.900        | 40.21            | -17.02      | 74.0           | 33.79       | Peak     | 97.00          | 100         | Vertical | Pass    |
| 1** | 1341.900        | 31.17            | -17.02      | 54.0           | 22.83       | AV       | 97.00          | 100         | Vertical | Pass    |
| 2   | 2439.600        | 91.18            | -12.28      | 74.0           | -17.18      | Peak     | 141.00         | 100         | Vertical | N/A     |
| 2** | 2439.600        | 89.33            | -12.28      | 54.0           | -35.33      | AV       | 141.00         | 100         | Vertical | N/A     |
| 3   | 4859.600        | 50.40            | -2.73       | 74.0           | 23.60       | Peak     | 350.00         | 100         | Vertical | Pass    |
| 3** | 4859.600        | 41.43            | -2.73       | 54.0           | 12.57       | AV       | 350.00         | 100         | Vertical | Pass    |
| 4   | 6604.600        | 53.94            | 1.88        | 74.0           | 20.06       | Peak     | 107.00         | 100         | Vertical | Pass    |
| 4** | 6604.600        | 45.62            | 1.88        | 54.0           | 8.38        | AV       | 107.00         | 100         | Vertical | Pass    |
| 5   | 11217.338       | 50.97            | -0.20       | 74.0           | 23.03       | Peak     | 103.00         | 400         | Vertical | Pass    |
| 5** | 11217.338       | 41.29            | -0.20       | 54.0           | 12.71       | AV       | 103.00         | 400         | Vertical | Pass    |
| 6   | 16093.463       | 51.44            | 1.36        | 74.0           | 22.56       | Peak     | 316.00         | 400         | Vertical | Pass    |
| 6** | 16093.463       | 42.83            | 1.36        | 54.0           | 11.17       | AV       | 316.00         | 400         | Vertical | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

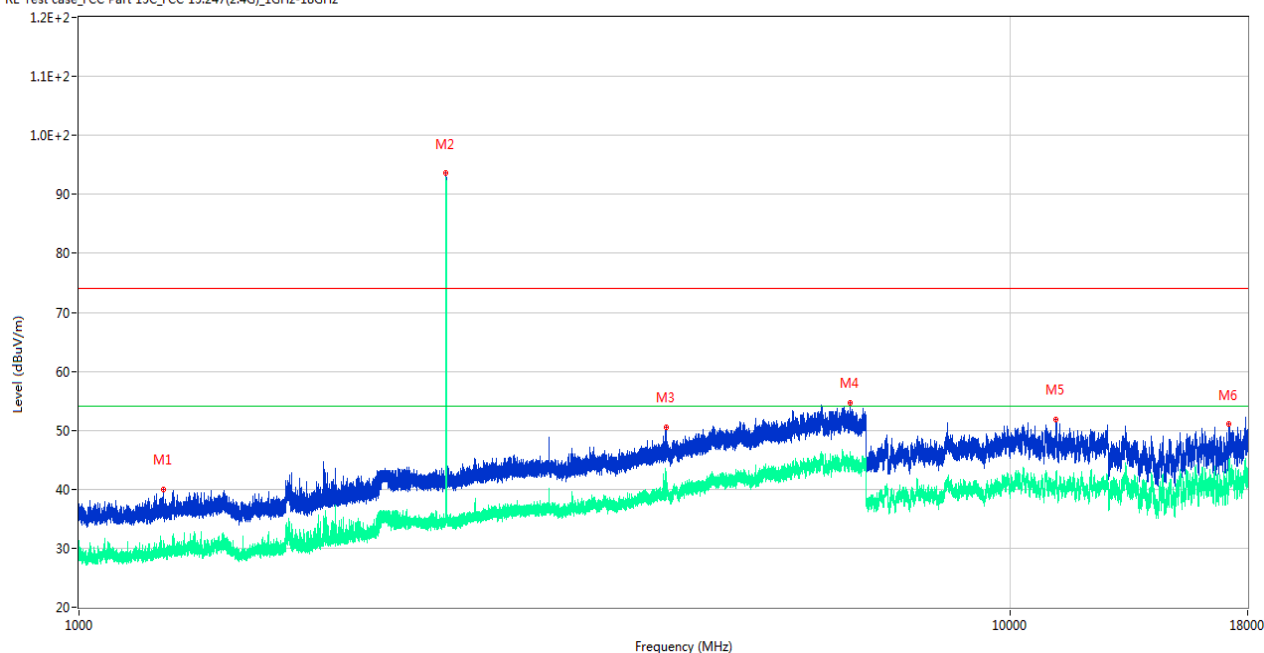
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1064.500        | 41.09            | -18.26      | 74.0           | 32.91       | Peak     | 344.00         | 200         | Horizontal | Pass    |
| 1** | 1064.500        | 30.87            | -18.26      | 54.0           | 23.13       | AV       | 344.00         | 200         | Horizontal | Pass    |
| 2   | 2479.500        | 105.58           | -12.21      | 74.0           | -31.58      | Peak     | 325.00         | 100         | Horizontal | N/A     |
| 2** | 2479.500        | 103.31           | -12.21      | 54.0           | -49.31      | AV       | 325.00         | 100         | Horizontal | N/A     |
| 3   | 4860.800        | 50.65            | -2.70       | 74.0           | 23.35       | Peak     | 351.00         | 100         | Horizontal | Pass    |
| 3** | 4860.800        | 41.44            | -2.70       | 54.0           | 12.56       | AV       | 351.00         | 100         | Horizontal | Pass    |
| 4   | 6614.200        | 54.54            | 2.05        | 74.0           | 19.46       | Peak     | 292.00         | 400         | Horizontal | Pass    |
| 4** | 6614.200        | 45.24            | 2.05        | 54.0           | 8.76        | AV       | 292.00         | 400         | Horizontal | Pass    |
| 5   | 10921.500       | 51.21            | 0.21        | 74.0           | 22.79       | Peak     | 147.00         | 100         | Horizontal | Pass    |
| 5** | 10921.500       | 42.32            | 0.21        | 54.0           | 11.68       | AV       | 147.00         | 100         | Horizontal | Pass    |
| 6   | 17183.887       | 50.62            | 2.56        | 74.0           | 23.38       | Peak     | 0.00           | 400         | Horizontal | Pass    |
| 6** | 17183.887       | 42.65            | 2.56        | 54.0           | 11.35       | AV       | 0.00           | 400         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz

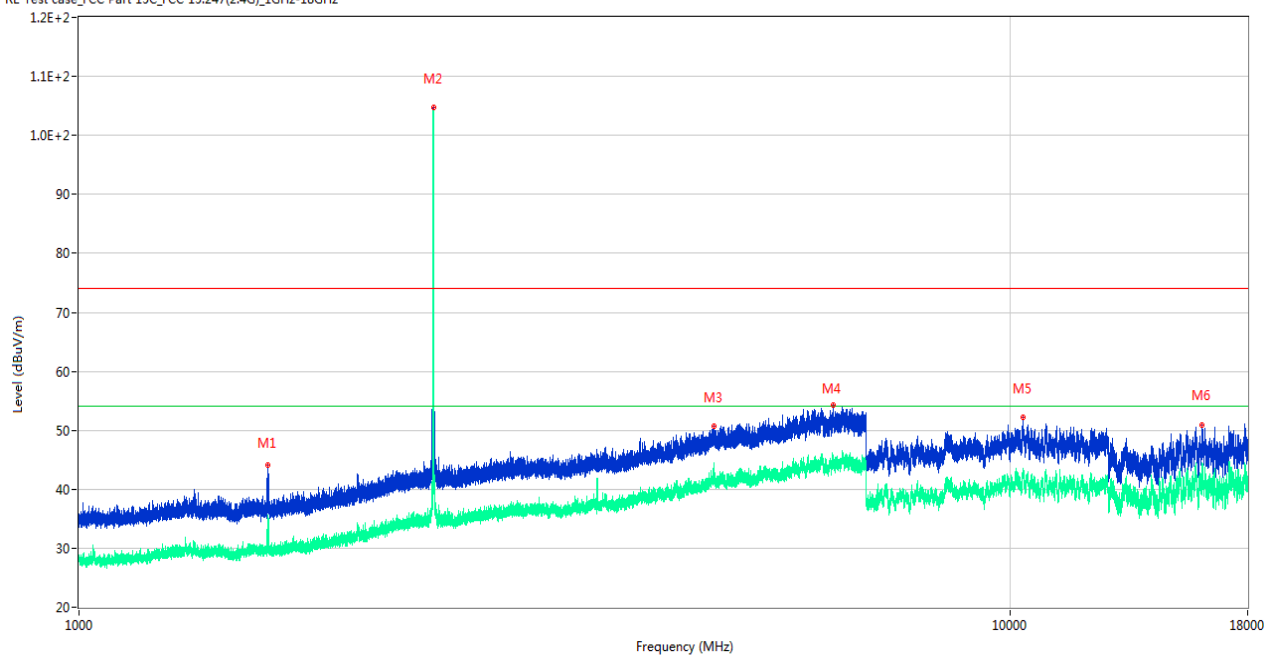


| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1231.400        | 40.00            | -17.41      | 74.0           | 34.00       | Peak     | 72.00          | 100         | Vertical | Pass    |
| 1** | 1231.400        | 29.23            | -17.41      | 54.0           | 24.77       | AV       | 72.00          | 100         | Vertical | Pass    |
| 2   | 2479.500        | 93.61            | -12.21      | 74.0           | -19.61      | Peak     | 224.00         | 100         | Vertical | N/A     |
| 2** | 2479.500        | 90.13            | -12.21      | 54.0           | -36.13      | AV       | 224.00         | 100         | Vertical | N/A     |
| 3   | 4271.200        | 50.53            | -3.66       | 74.0           | 23.47       | Peak     | 74.00          | 100         | Vertical | Pass    |
| 3** | 4271.200        | 39.24            | -3.66       | 54.0           | 14.76       | AV       | 74.00          | 100         | Vertical | Pass    |
| 4   | 6740.200        | 54.73            | 2.26        | 74.0           | 19.27       | Peak     | 162.00         | 300         | Vertical | Pass    |
| 4** | 6740.200        | 45.39            | 2.26        | 54.0           | 8.61        | AV       | 162.00         | 300         | Vertical | Pass    |
| 5   | 11214.750       | 51.85            | -0.19       | 74.0           | 22.15       | Peak     | 195.00         | 300         | Vertical | Pass    |
| 5** | 11214.750       | 41.75            | -0.19       | 54.0           | 12.25       | AV       | 195.00         | 300         | Vertical | Pass    |
| 6   | 17195.438       | 50.99            | 2.16        | 74.0           | 23.01       | Peak     | 160.00         | 400         | Vertical | Pass    |
| 6** | 17195.438       | 43.70            | 2.16        | 54.0           | 10.30       | AV       | 160.00         | 400         | Vertical | Pass    |

### Dipole Antenna 3

#### GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H

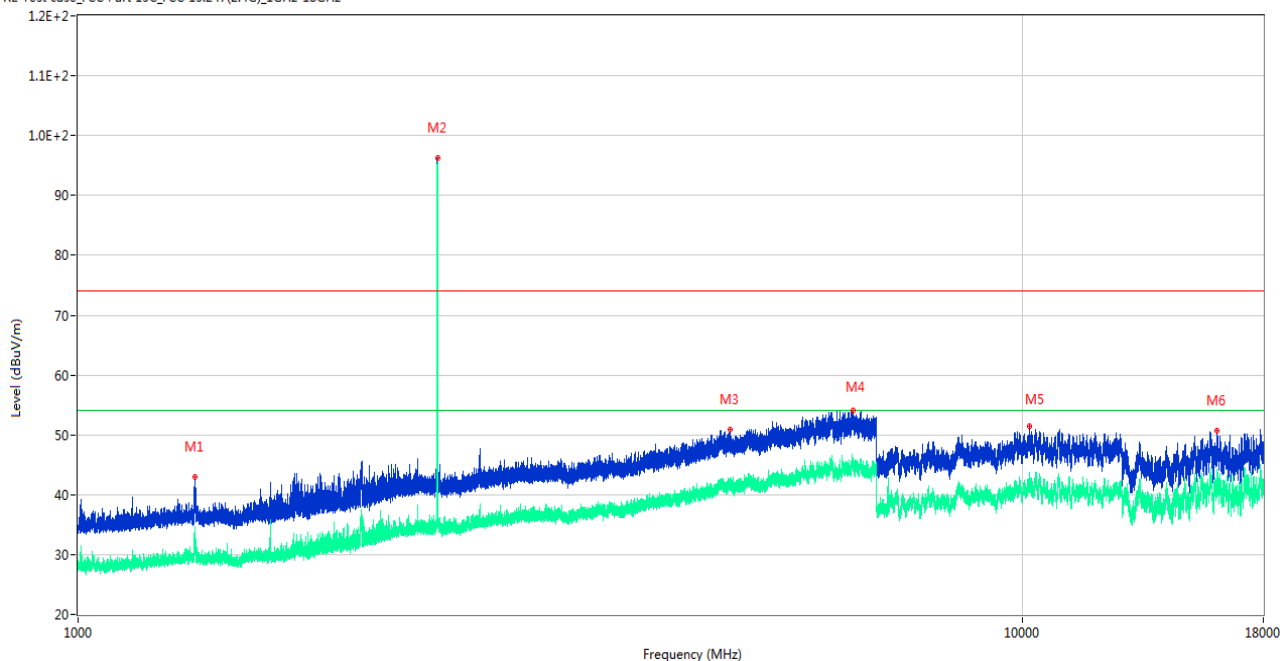
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1594.400        | 44.05            | -17.11      | 74.0           | 29.95       | Peak     | 251.00         | 400         | Horizontal | Pass    |
| 1** | 1594.400        | 35.67            | -17.11      | 54.0           | 18.33       | AV       | 251.00         | 400         | Horizontal | Pass    |
| 2   | 2402.300        | 104.71           | -11.74      | 74.0           | -30.71      | Peak     | 256.00         | 200         | Horizontal | N/A     |
| 2** | 2402.300        | 103.98           | -11.74      | 54.0           | -49.98      | AV       | 256.00         | 200         | Horizontal | N/A     |
| 3   | 4803.600        | 50.62            | -2.00       | 74.0           | 23.38       | Peak     | 302.00         | 200         | Horizontal | Pass    |
| 3** | 4803.600        | 42.38            | -2.00       | 54.0           | 11.62       | AV       | 302.00         | 200         | Horizontal | Pass    |
| 4   | 6453.600        | 54.31            | 1.81        | 74.0           | 19.69       | Peak     | 0.00           | 100         | Horizontal | Pass    |
| 4** | 6453.600        | 44.46            | 1.81        | 54.0           | 9.54        | AV       | 0.00           | 100         | Horizontal | Pass    |
| 5   | 10326.950       | 52.15            | -0.04       | 74.0           | 21.85       | Peak     | 186.00         | 200         | Horizontal | Pass    |
| 5** | 10326.950       | 42.47            | -0.04       | 54.0           | 11.53       | AV       | 186.00         | 200         | Horizontal | Pass    |
| 6   | 16083.750       | 50.95            | 1.56        | 74.0           | 23.05       | Peak     | 54.00          | 300         | Horizontal | Pass    |
| 6** | 16083.750       | 42.94            | 1.56        | 54.0           | 11.06       | AV       | 54.00          | 300         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V

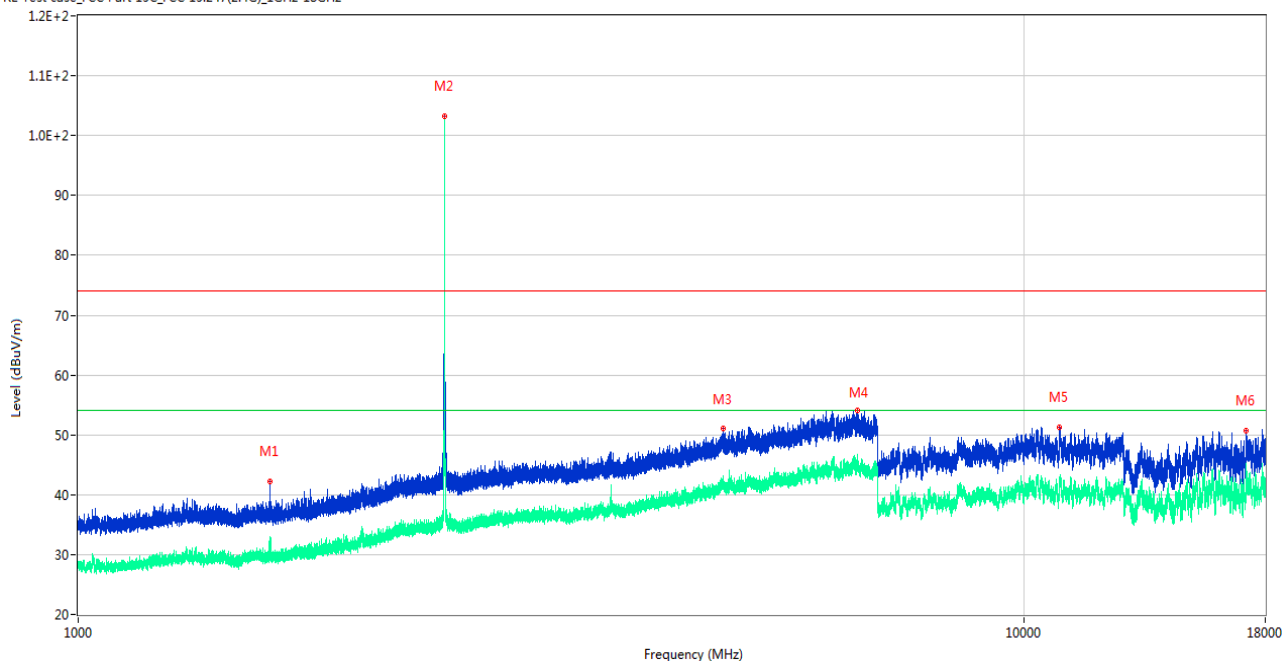
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1328.300        | 43.02            | -17.10      | 74.0           | 30.98       | Peak     | 190.00         | 300         | Vertical | Pass    |
| 1** | 1328.300        | 32.24            | -17.10      | 54.0           | 21.76       | AV       | 190.00         | 300         | Vertical | Pass    |
| 2   | 2402.000        | 96.30            | -11.74      | 74.0           | -22.30      | Peak     | 145.00         | 100         | Vertical | N/A     |
| 2** | 2402.000        | 95.51            | -11.74      | 54.0           | -41.51      | AV       | 145.00         | 100         | Vertical | N/A     |
| 3   | 4902.200        | 50.97            | -2.15       | 74.0           | 23.03       | Peak     | 106.00         | 100         | Vertical | Pass    |
| 3** | 4902.200        | 41.46            | -2.15       | 54.0           | 12.54       | AV       | 106.00         | 100         | Vertical | Pass    |
| 4   | 6612.600        | 54.07            | 2.17        | 74.0           | 19.93       | Peak     | 75.00          | 300         | Vertical | Pass    |
| 4** | 6612.600        | 45.31            | 2.17        | 54.0           | 8.69        | AV       | 75.00          | 300         | Vertical | Pass    |
| 5   | 10166.525       | 51.46            | -0.28       | 74.0           | 22.54       | Peak     | 108.00         | 200         | Vertical | Pass    |
| 5** | 10166.525       | 43.72            | -0.28       | 54.0           | 10.28       | AV       | 108.00         | 200         | Vertical | Pass    |
| 6   | 16081.388       | 50.74            | 1.61        | 74.0           | 23.26       | Peak     | 54.00          | 200         | Vertical | Pass    |
| 6** | 16081.388       | 42.04            | 1.61        | 54.0           | 11.96       | AV       | 54.00          | 200         | Vertical | Pass    |

## GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H

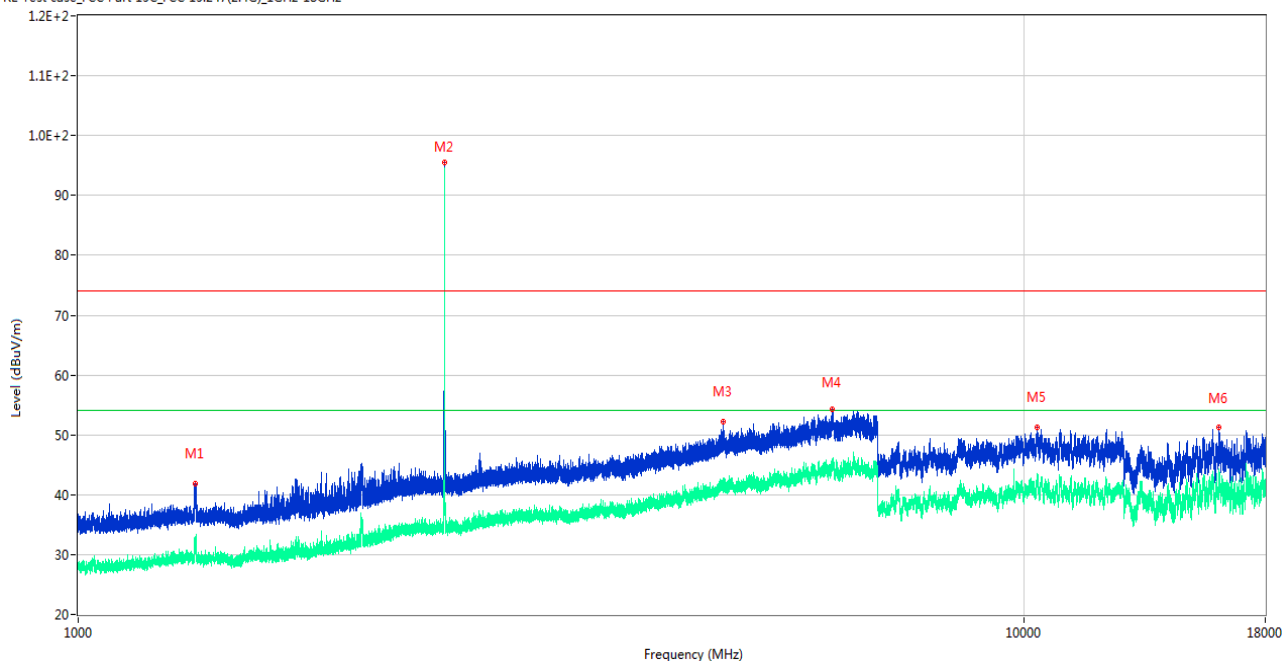
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1596.200        | 42.22            | -17.42      | 74.0           | 31.78       | Peak     | 87.00          | 300         | Horizontal | Pass    |
| 1** | 1596.200        | 32.84            | -17.42      | 54.0           | 21.16       | AV       | 87.00          | 300         | Horizontal | Pass    |
| 2   | 2439.800        | 103.28           | -12.27      | 74.0           | -29.28      | Peak     | 257.00         | 150         | Horizontal | N/A     |
| 2** | 2439.800        | 102.49           | -12.27      | 54.0           | -48.49      | AV       | 257.00         | 150         | Horizontal | N/A     |
| 3   | 4804.800        | 51.06            | -2.12       | 74.0           | 22.94       | Peak     | 240.00         | 150         | Horizontal | Pass    |
| 3** | 4804.800        | 41.30            | -2.12       | 54.0           | 12.70       | AV       | 240.00         | 150         | Horizontal | Pass    |
| 4   | 6662.600        | 54.13            | 0.86        | 74.0           | 19.87       | Peak     | 26.00          | 200         | Horizontal | Pass    |
| 4** | 6662.600        | 45.53            | 0.86        | 54.0           | 8.47        | AV       | 26.00          | 200         | Horizontal | Pass    |
| 5   | 10915.174       | 51.29            | 0.20        | 74.0           | 22.71       | Peak     | 138.00         | 300         | Horizontal | Pass    |
| 5** | 10915.174       | 42.59            | 0.20        | 54.0           | 11.41       | AV       | 138.00         | 300         | Horizontal | Pass    |
| 6   | 17183.363       | 50.70            | 2.58        | 74.0           | 23.30       | Peak     | 255.00         | 300         | Horizontal | Pass    |
| 6** | 17183.363       | 44.10            | 2.58        | 54.0           | 9.90        | AV       | 255.00         | 300         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V

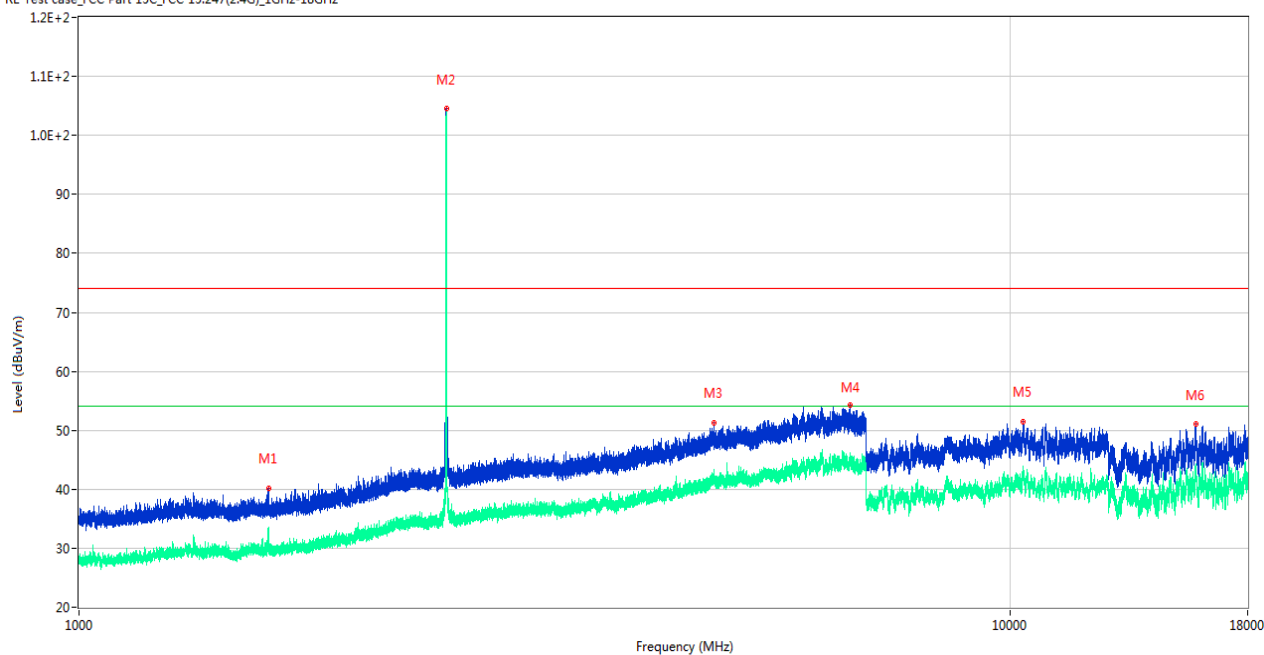
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1331.100        | 41.86            | -17.31      | 74.0           | 32.14       | Peak     | 190.00         | 300         | Vertical | Pass    |
| 1** | 1331.100        | 31.19            | -17.31      | 54.0           | 22.81       | AV       | 190.00         | 300         | Vertical | Pass    |
| 2   | 2440.300        | 95.53            | -12.24      | 74.0           | -21.53      | Peak     | 145.00         | 150         | Vertical | N/A     |
| 2** | 2440.300        | 93.48            | -12.24      | 54.0           | -39.48      | AV       | 145.00         | 150         | Vertical | N/A     |
| 3   | 4807.200        | 52.28            | -2.15       | 74.0           | 21.72       | Peak     | 311.00         | 200         | Vertical | Pass    |
| 3** | 4807.200        | 42.03            | -2.15       | 54.0           | 11.97       | AV       | 311.00         | 200         | Vertical | Pass    |
| 4   | 6273.200        | 54.28            | 0.80        | 74.0           | 19.72       | Peak     | 47.00          | 100         | Vertical | Pass    |
| 4** | 6273.200        | 44.75            | 0.80        | 54.0           | 9.25        | AV       | 47.00          | 100         | Vertical | Pass    |
| 5   | 10337.013       | 51.28            | 0.07        | 74.0           | 22.72       | Peak     | 360.00         | 400         | Vertical | Pass    |
| 5** | 10337.013       | 42.54            | 0.07        | 54.0           | 11.46       | AV       | 360.00         | 400         | Vertical | Pass    |
| 6   | 16078.763       | 51.22            | 1.62        | 74.0           | 22.78       | Peak     | 90.00          | 300         | Vertical | Pass    |
| 6** | 16078.763       | 42.75            | 1.62        | 54.0           | 11.25       | AV       | 90.00          | 300         | Vertical | Pass    |

**GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

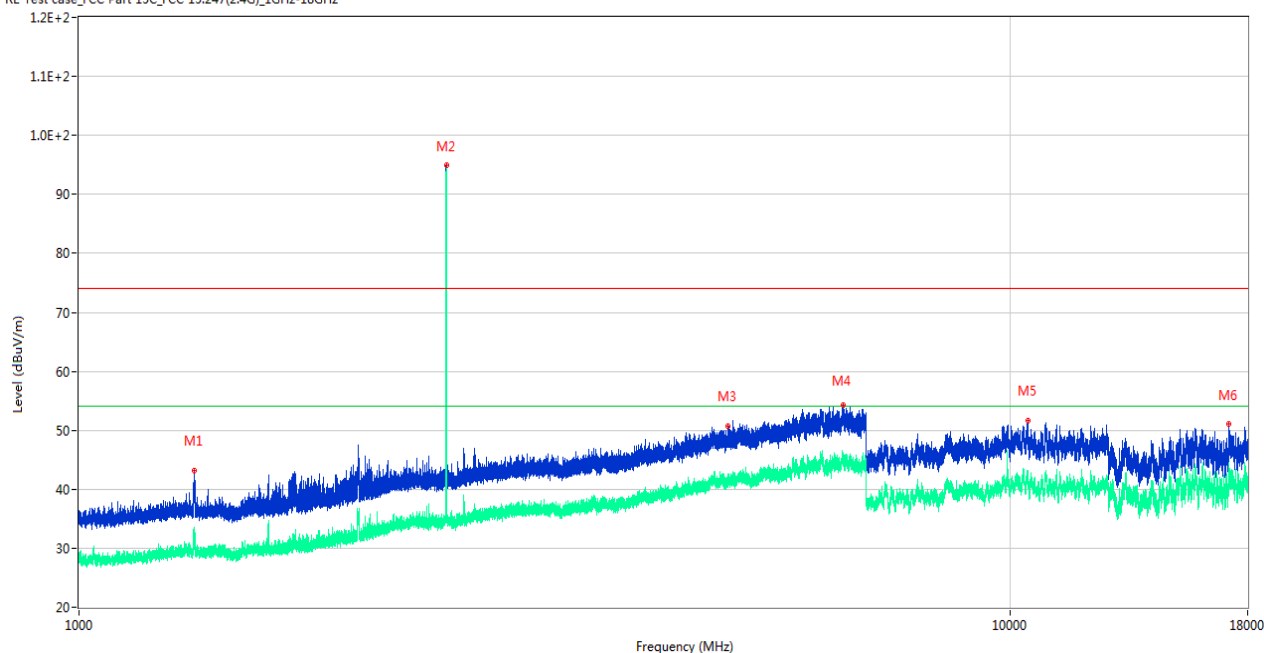
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1597.400        | 40.17            | -17.44      | 74.0           | 33.83       | Peak     | 87.00          | 400         | Horizontal | Pass    |
| 1** | 1597.400        | 30.95            | -17.44      | 54.0           | 23.05       | AV       | 87.00          | 400         | Horizontal | Pass    |
| 2   | 2479.800        | 104.51           | -12.20      | 74.0           | -30.51      | Peak     | 254.00         | 150         | Horizontal | N/A     |
| 2** | 2479.800        | 103.22           | -12.20      | 54.0           | -49.22      | AV       | 254.00         | 150         | Horizontal | N/A     |
| 3   | 4808.000        | 51.21            | -2.07       | 74.0           | 22.79       | Peak     | 293.00         | 100         | Horizontal | Pass    |
| 3** | 4808.000        | 42.10            | -2.07       | 54.0           | 11.90       | AV       | 293.00         | 100         | Horizontal | Pass    |
| 4   | 6736.400        | 54.20            | 2.46        | 74.0           | 19.80       | Peak     | 360.00         | 100         | Horizontal | Pass    |
| 4** | 6736.400        | 45.04            | 2.46        | 54.0           | 8.96        | AV       | 360.00         | 100         | Horizontal | Pass    |
| 5   | 10328.388       | 51.52            | -0.02       | 74.0           | 22.48       | Peak     | 76.00          | 300         | Horizontal | Pass    |
| 5** | 10328.388       | 42.19            | -0.02       | 54.0           | 11.81       | AV       | 76.00          | 300         | Horizontal | Pass    |
| 6   | 15832.800       | 50.99            | 1.47        | 74.0           | 23.01       | Peak     | 53.00          | 200         | Horizontal | Pass    |
| 6** | 15832.800       | 42.90            | 1.47        | 54.0           | 11.10       | AV       | 53.00          | 200         | Horizontal | Pass    |

**GFSK (BLE 1Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

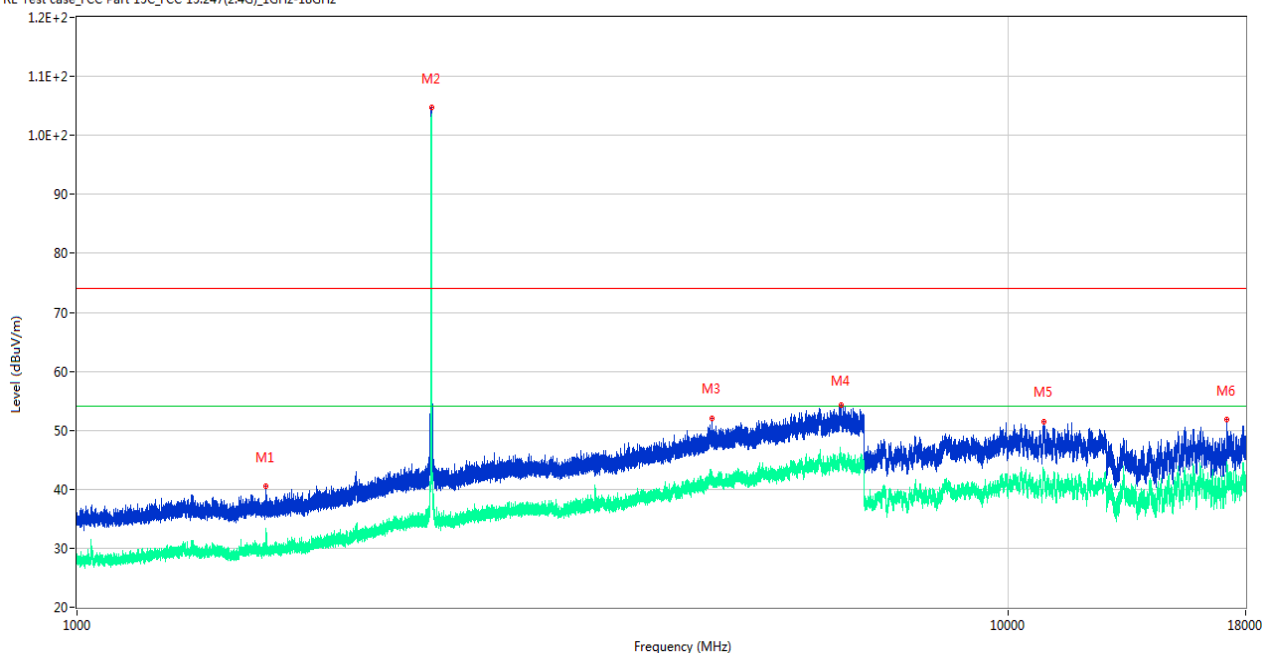
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1328.700        | 43.19            | -17.13      | 74.0           | 30.81       | Peak     | 184.00         | 400         | Vertical | Pass    |
| 1** | 1328.700        | 31.02            | -17.13      | 54.0           | 22.98       | AV       | 184.00         | 400         | Vertical | Pass    |
| 2   | 2480.300        | 94.95            | -12.21      | 74.0           | -20.95      | Peak     | 145.00         | 150         | Vertical | N/A     |
| 2** | 2480.300        | 94.35            | -12.21      | 54.0           | -40.35      | AV       | 145.00         | 150         | Vertical | N/A     |
| 3   | 4981.000        | 50.74            | -1.84       | 74.0           | 23.26       | Peak     | 323.00         | 100         | Vertical | Pass    |
| 3** | 4981.000        | 41.18            | -1.84       | 54.0           | 12.82       | AV       | 323.00         | 100         | Vertical | Pass    |
| 4   | 6611.600        | 54.32            | 2.14        | 74.0           | 19.68       | Peak     | 119.00         | 400         | Vertical | Pass    |
| 4** | 6611.600        | 45.15            | 2.14        | 54.0           | 8.85        | AV       | 119.00         | 400         | Vertical | Pass    |
| 5   | 10447.412       | 51.73            | -0.51       | 74.0           | 22.27       | Peak     | 203.00         | 400         | Vertical | Pass    |
| 5** | 10447.412       | 41.91            | -0.51       | 54.0           | 12.09       | AV       | 203.00         | 400         | Vertical | Pass    |
| 6   | 17196.751       | 51.05            | 2.08        | 74.0           | 22.95       | Peak     | 37.00          | 300         | Vertical | Pass    |
| 6** | 17196.751       | 43.54            | 2.08        | 54.0           | 10.46       | AV       | 37.00          | 300         | Vertical | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT H**

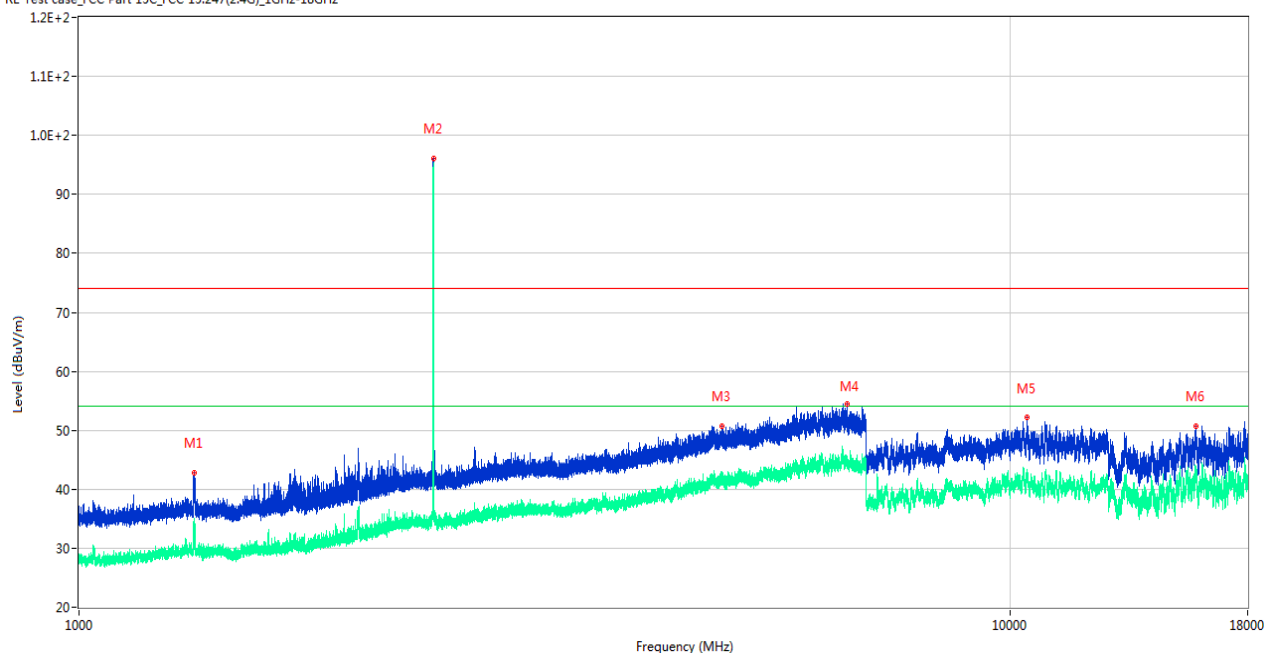
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1594.600        | 40.51            | -17.15      | 74.0           | 33.49       | Peak     | 156.00         | 400         | Horizontal | Pass    |
| 1** | 1594.600        | 31.16            | -17.15      | 54.0           | 22.84       | AV       | 156.00         | 400         | Horizontal | Pass    |
| 2   | 2402.500        | 104.72           | -11.74      | 74.0           | -30.72      | Peak     | 259.00         | 200         | Horizontal | N/A     |
| 2** | 2402.500        | 102.43           | -11.74      | 54.0           | -48.43      | AV       | 259.00         | 200         | Horizontal | N/A     |
| 3   | 4809.200        | 52.02            | -2.02       | 74.0           | 21.98       | Peak     | 272.00         | 150         | Horizontal | Pass    |
| 3** | 4809.200        | 41.90            | -2.02       | 54.0           | 12.10       | AV       | 272.00         | 150         | Horizontal | Pass    |
| 4   | 6612.000        | 54.23            | 2.15        | 74.0           | 19.77       | Peak     | 241.00         | 100         | Horizontal | Pass    |
| 4** | 6612.000        | 45.69            | 2.15        | 54.0           | 8.31        | AV       | 241.00         | 100         | Horizontal | Pass    |
| 5   | 10921.213       | 51.47            | 0.22        | 74.0           | 22.53       | Peak     | 139.00         | 100         | Horizontal | Pass    |
| 5** | 10921.213       | 42.56            | 0.22        | 54.0           | 11.44       | AV       | 139.00         | 100         | Horizontal | Pass    |
| 6   | 17182.575       | 51.74            | 2.60        | 74.0           | 22.26       | Peak     | 0.00           | 300         | Horizontal | Pass    |
| 6** | 17182.575       | 43.20            | 2.60        | 54.0           | 10.80       | AV       | 0.00           | 300         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) LOW CHANNEL 1 GHz to 18 GHz, ANT V**

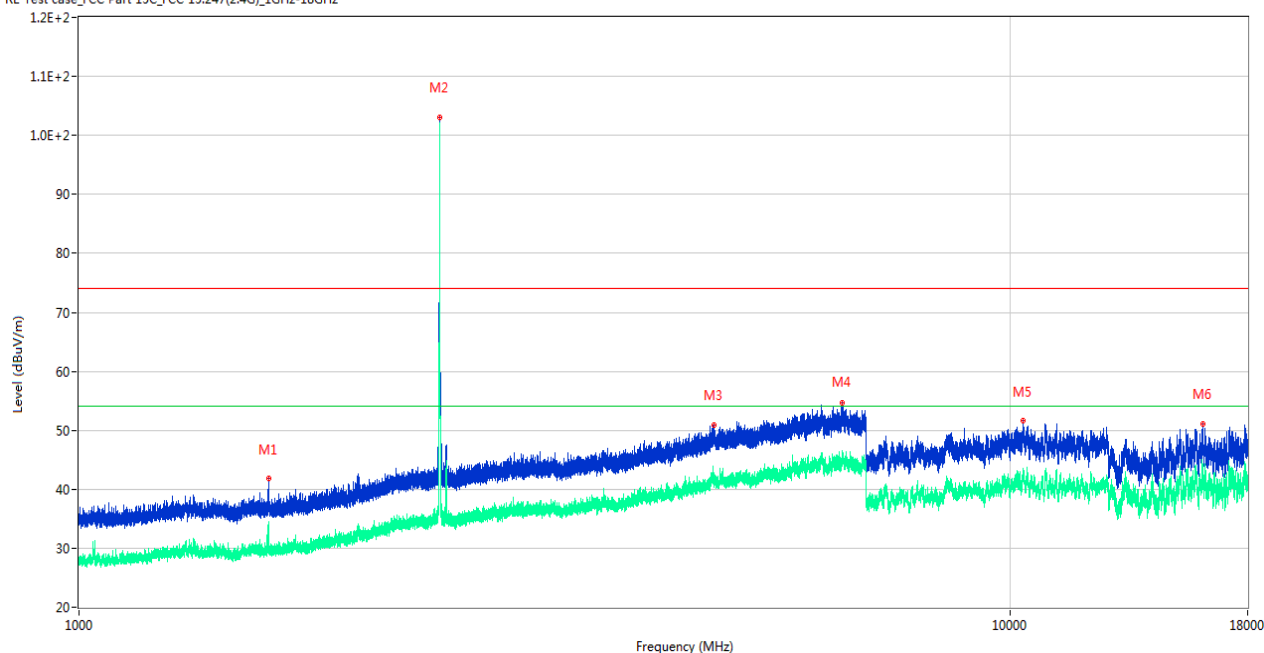
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1329.400        | 42.86            | -17.24      | 74.0           | 31.14       | Peak     | 183.00         | 300         | Vertical | Pass    |
| 1** | 1329.400        | 33.30            | -17.24      | 54.0           | 20.70       | AV       | 183.00         | 300         | Vertical | Pass    |
| 2   | 2402.500        | 96.15            | -11.74      | 74.0           | -22.15      | Peak     | 149.00         | 200         | Vertical | N/A     |
| 2** | 2402.500        | 94.09            | -11.74      | 54.0           | -40.09      | AV       | 149.00         | 200         | Vertical | N/A     |
| 3   | 4901.600        | 50.70            | -2.19       | 74.0           | 23.30       | Peak     | 251.00         | 200         | Vertical | Pass    |
| 3** | 4901.600        | 41.57            | -2.19       | 54.0           | 12.43       | AV       | 251.00         | 200         | Vertical | Pass    |
| 4   | 6682.400        | 54.51            | -0.09       | 74.0           | 19.49       | Peak     | 360.00         | 100         | Vertical | Pass    |
| 4** | 6682.400        | 43.99            | -0.09       | 54.0           | 10.01       | AV       | 360.00         | 100         | Vertical | Pass    |
| 5   | 10430.451       | 52.19            | -0.11       | 74.0           | 21.81       | Peak     | 44.00          | 100         | Vertical | Pass    |
| 5** | 10430.451       | 42.27            | -0.11       | 54.0           | 11.73       | AV       | 44.00          | 100         | Vertical | Pass    |
| 6   | 15833.062       | 50.79            | 1.47        | 74.0           | 23.21       | Peak     | 197.00         | 200         | Vertical | Pass    |
| 6** | 15833.062       | 42.04            | 1.47        | 54.0           | 11.96       | AV       | 197.00         | 200         | Vertical | Pass    |

**GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT H**

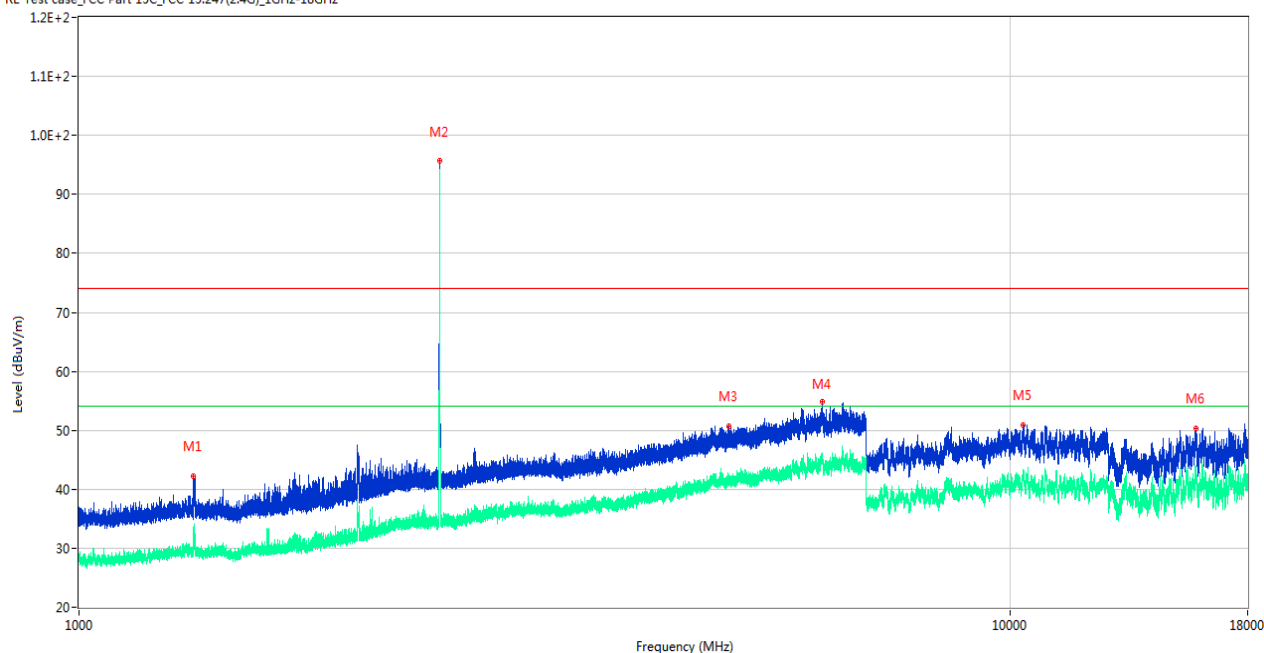
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1597.400        | 41.77            | -17.44      | 74.0           | 32.23       | Peak     | 163.00         | 300         | Horizontal | Pass    |
| 1** | 1597.400        | 29.52            | -17.44      | 54.0           | 24.48       | AV       | 163.00         | 300         | Horizontal | Pass    |
| 2   | 2439.500        | 103.11           | -12.28      | 74.0           | -29.11      | Peak     | 253.00         | 100         | Horizontal | N/A     |
| 2** | 2439.500        | 100.83           | -12.28      | 54.0           | -46.83      | AV       | 253.00         | 100         | Horizontal | N/A     |
| 3   | 4812.400        | 50.92            | -2.64       | 74.0           | 23.08       | Peak     | 344.00         | 100         | Horizontal | Pass    |
| 3** | 4812.400        | 41.41            | -2.64       | 54.0           | 12.59       | AV       | 344.00         | 100         | Horizontal | Pass    |
| 4   | 6610.600        | 54.62            | 2.09        | 74.0           | 19.38       | Peak     | 60.00          | 400         | Horizontal | Pass    |
| 4** | 6610.600        | 44.83            | 2.09        | 54.0           | 9.17        | AV       | 60.00          | 400         | Horizontal | Pass    |
| 5   | 10338.162       | 51.59            | 0.08        | 74.0           | 22.41       | Peak     | 202.00         | 400         | Horizontal | Pass    |
| 5** | 10338.162       | 42.45            | 0.08        | 54.0           | 11.55       | AV       | 202.00         | 400         | Horizontal | Pass    |
| 6   | 16103.437       | 51.08            | 1.05        | 74.0           | 22.92       | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 6** | 16103.437       | 42.06            | 1.05        | 54.0           | 11.94       | AV       | 0.00           | 200         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) MIDDLE CHANNEL 1 GHz to 18 GHz, ANT V**

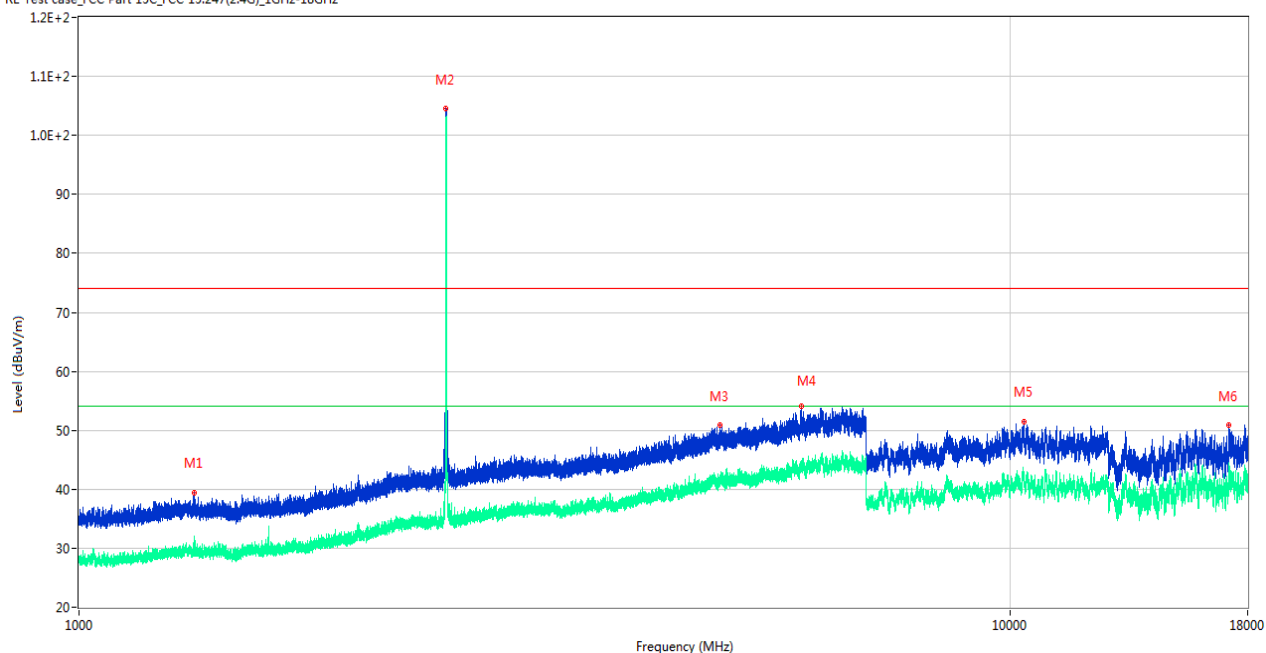
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1328.000        | 42.29            | -17.13      | 74.0           | 31.71       | Peak     | 198.00         | 100         | Vertical | Pass    |
| 1** | 1328.000        | 31.37            | -17.13      | 54.0           | 22.63       | AV       | 198.00         | 100         | Vertical | Pass    |
| 2   | 2440.600        | 95.65            | -12.22      | 74.0           | -21.65      | Peak     | 145.00         | 150         | Vertical | N/A     |
| 2** | 2440.600        | 93.39            | -12.22      | 54.0           | -39.39      | AV       | 145.00         | 150         | Vertical | N/A     |
| 3   | 4992.800        | 50.72            | -1.98       | 74.0           | 23.28       | Peak     | 18.00          | 200         | Vertical | Pass    |
| 3** | 4992.800        | 41.53            | -1.98       | 54.0           | 12.47       | AV       | 18.00          | 200         | Vertical | Pass    |
| 4   | 6289.800        | 54.79            | 1.32        | 74.0           | 19.21       | Peak     | 129.00         | 400         | Vertical | Pass    |
| 4** | 6289.800        | 45.24            | 1.32        | 54.0           | 8.76        | AV       | 129.00         | 400         | Vertical | Pass    |
| 5   | 10334.713       | 50.95            | 0.06        | 74.0           | 23.05       | Peak     | 13.00          | 100         | Vertical | Pass    |
| 5** | 10334.713       | 42.32            | 0.06        | 54.0           | 11.68       | AV       | 13.00          | 100         | Vertical | Pass    |
| 6   | 15820.987       | 50.40            | 1.83        | 74.0           | 23.60       | Peak     | 0.00           | 100         | Vertical | Pass    |
| 6** | 15820.987       | 42.97            | 1.83        | 54.0           | 11.03       | AV       | 0.00           | 100         | Vertical | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT H**

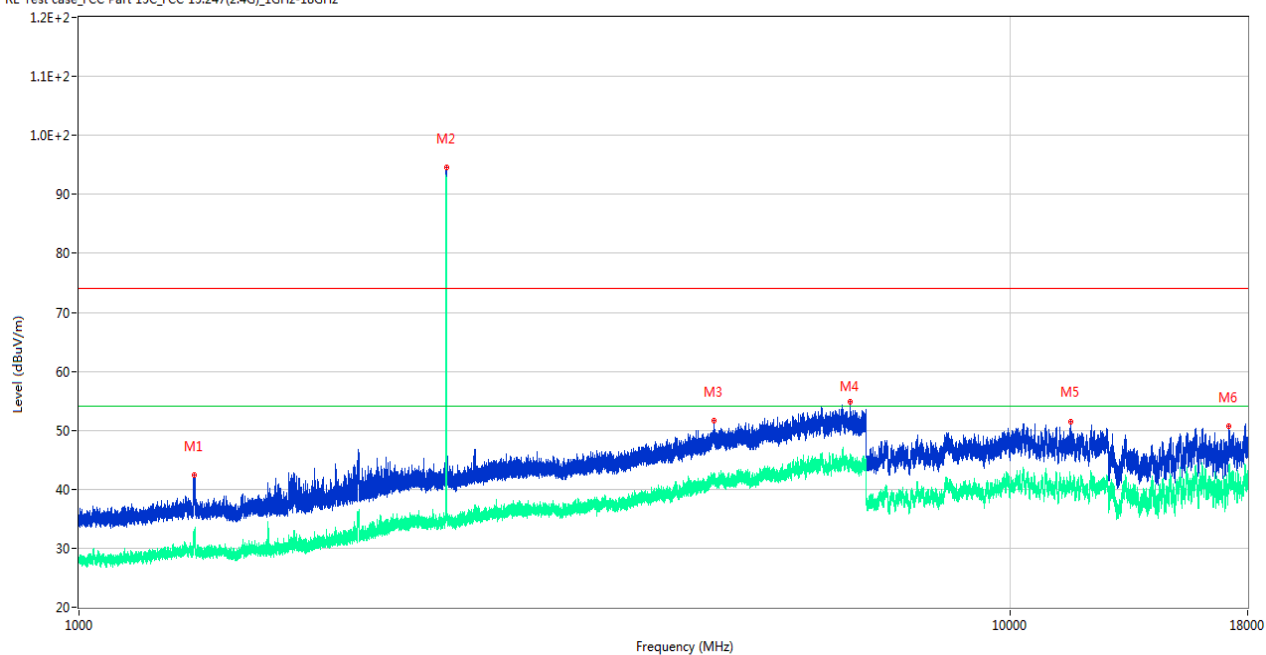
RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 1330.100        | 39.41            | -17.34      | 74.0           | 34.59       | Peak     | 138.00         | 300         | Horizontal | Pass    |
| 1** | 1330.100        | 29.42            | -17.34      | 54.0           | 24.58       | AV       | 138.00         | 300         | Horizontal | Pass    |
| 2   | 2479.500        | 104.49           | -12.21      | 74.0           | -30.49      | Peak     | 253.00         | 150         | Horizontal | N/A     |
| 2** | 2479.500        | 102.08           | -12.21      | 54.0           | -48.08      | AV       | 253.00         | 150         | Horizontal | N/A     |
| 3   | 4882.400        | 50.87            | -2.58       | 74.0           | 23.13       | Peak     | 49.00          | 100         | Horizontal | Pass    |
| 3** | 4882.400        | 42.13            | -2.58       | 54.0           | 11.87       | AV       | 49.00          | 100         | Horizontal | Pass    |
| 4   | 5975.800        | 54.10            | 0.32        | 74.0           | 19.90       | Peak     | 110.00         | 200         | Horizontal | Pass    |
| 4** | 5975.800        | 44.38            | 0.32        | 54.0           | 9.62        | AV       | 110.00         | 200         | Horizontal | Pass    |
| 5   | 10341.900       | 51.44            | 0.07        | 74.0           | 22.56       | Peak     | 77.00          | 300         | Horizontal | Pass    |
| 5** | 10341.900       | 42.02            | 0.07        | 54.0           | 11.98       | AV       | 77.00          | 300         | Horizontal | Pass    |
| 6   | 17198.850       | 50.85            | 1.96        | 74.0           | 23.15       | Peak     | 234.00         | 300         | Horizontal | Pass    |
| 6** | 17198.850       | 43.11            | 1.96        | 54.0           | 10.89       | AV       | 234.00         | 300         | Horizontal | Pass    |

**GFSK (BLE 2Mbps) HIGH CHANNEL 1 GHz to 18 GHz, ANT V**

RE Test case\_FCC Part 15C\_FCC 15.247(2.4G)\_1GHz-18GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 1328.900        | 42.37            | -17.16      | 74.0           | 31.63       | Peak     | 215.00         | 300         | Vertical | Pass    |
| 1** | 1328.900        | 32.33            | -17.16      | 54.0           | 21.67       | AV       | 215.00         | 300         | Vertical | Pass    |
| 2   | 2480.700        | 94.53            | -12.23      | 74.0           | -20.53      | Peak     | 146.00         | 100         | Vertical | N/A     |
| 2** | 2480.700        | 90.68            | -12.23      | 54.0           | -36.68      | AV       | 146.00         | 100         | Vertical | N/A     |
| 3   | 4809.600        | 51.56            | -2.14       | 74.0           | 22.44       | Peak     | 292.00         | 100         | Vertical | Pass    |
| 3** | 4809.600        | 41.62            | -2.14       | 54.0           | 12.38       | AV       | 292.00         | 100         | Vertical | Pass    |
| 4   | 6739.600        | 54.82            | 2.23        | 74.0           | 19.18       | Peak     | 152.00         | 200         | Vertical | Pass    |
| 4** | 6739.600        | 45.17            | 2.23        | 54.0           | 8.83        | AV       | 152.00         | 200         | Vertical | Pass    |
| 5   | 11623.576       | 51.54            | -0.10       | 74.0           | 22.46       | Peak     | 186.00         | 100         | Vertical | Pass    |
| 5** | 11623.576       | 40.56            | -0.10       | 54.0           | 13.44       | AV       | 186.00         | 100         | Vertical | Pass    |
| 6   | 17182.312       | 50.62            | 2.61        | 74.0           | 23.38       | Peak     | 55.00          | 300         | Vertical | Pass    |
| 6** | 17182.312       | 42.26            | 2.61        | 54.0           | 11.74       | AV       | 55.00          | 300         | Vertical | Pass    |

## A.7 Band Edge (Restricted-band band-edge)

Note <sup>1</sup>: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note <sup>2</sup>: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

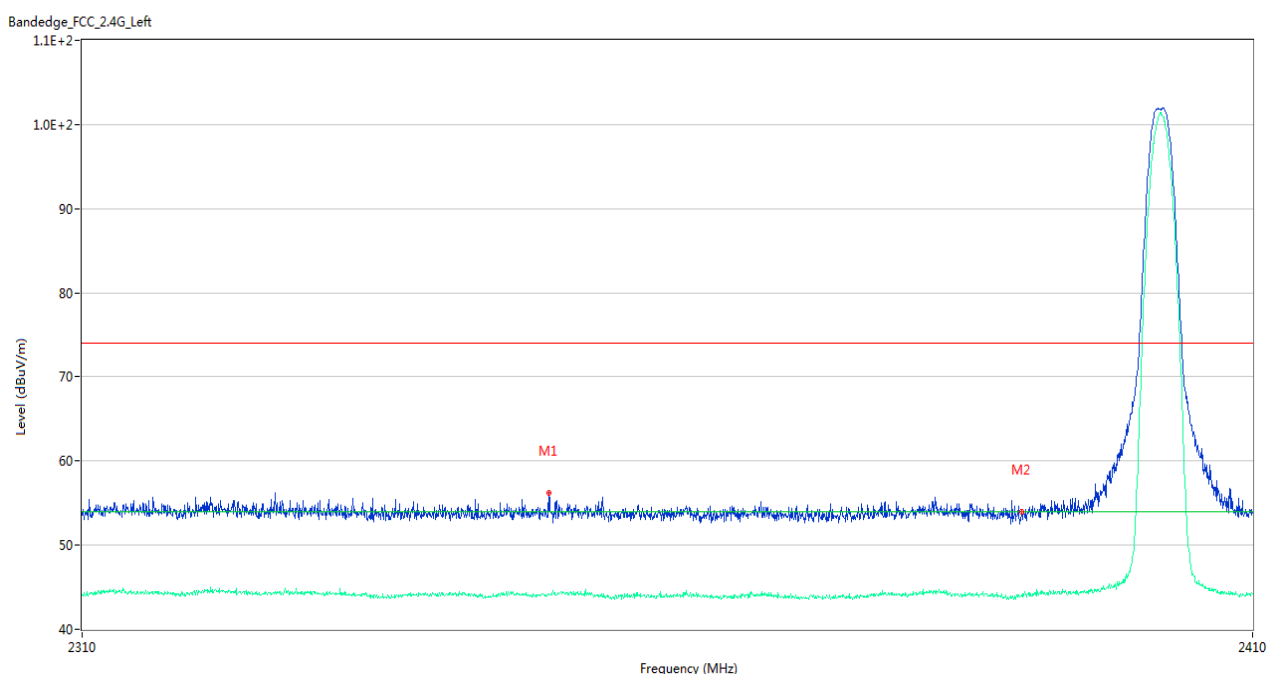
Note <sup>3</sup>: According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note <sup>4</sup>: The Level (dBuV/m) has been corrected by factor.

### Test Data and Plots

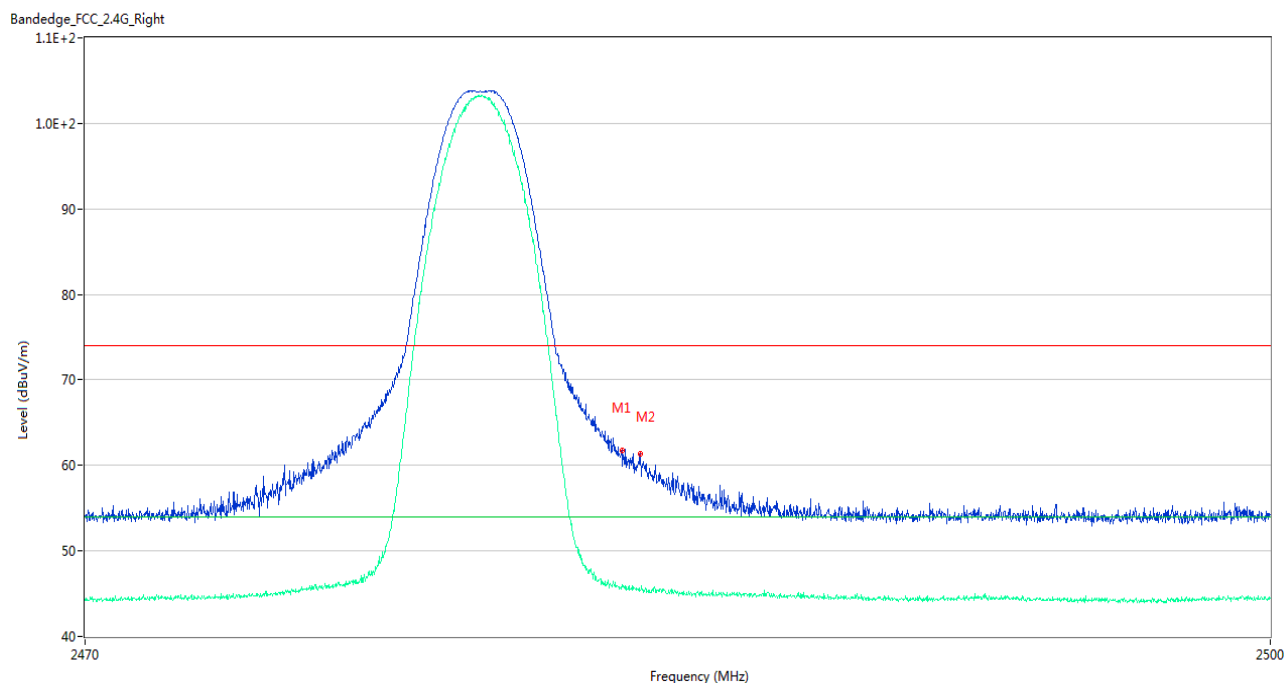
#### Ceramic Chip Antenna

##### GFSK (BLE 1Mbps) LOW CHANNEL



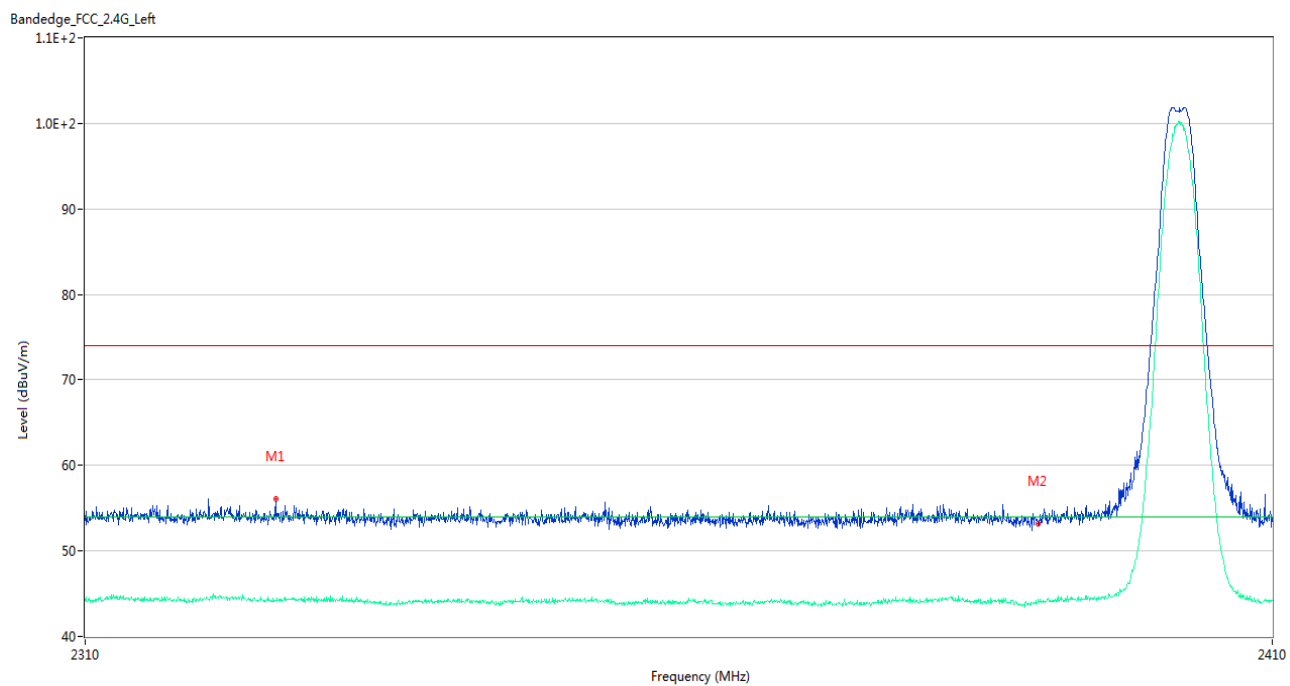
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 2349.350        | 56.26            | -0.25       | 74.0           | 17.74       | Peak     | 254.00         | 200         | Vertical | Pass    |
| 1** | 2349.350        | 44.11            | -0.25       | 54.0           | 9.89        | AV       | 254.00         | 200         | Vertical | Pass    |
| 2   | 2389.950        | 53.94            | -0.59       | 74.0           | 20.06       | Peak     | 335.00         | 200         | Vertical | Pass    |
| 2** | 2389.950        | 43.91            | -0.59       | 54.0           | 10.09       | AV       | 335.00         | 200         | Vertical | Pass    |

### GFSK (BLE 1Mbps) HIGH CHANNEL



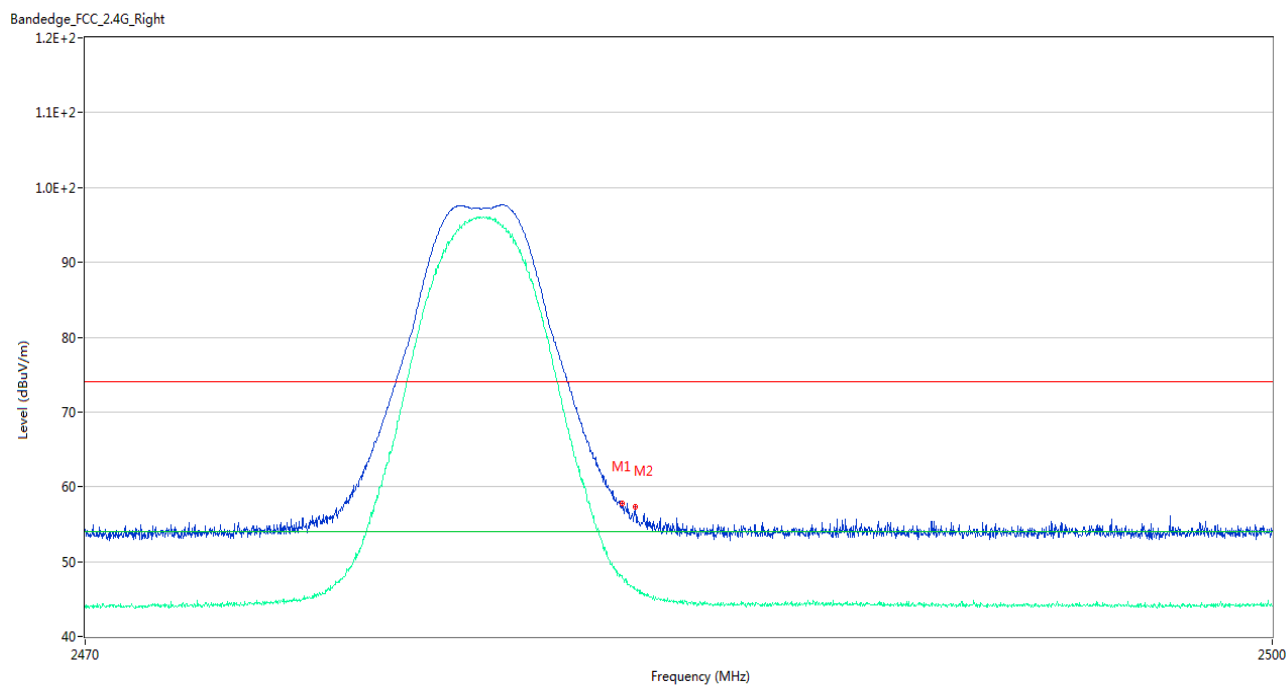
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 2483.545        | 61.73            | -0.20       | 74.0           | 12.27       | Peak     | 268.00         | 100         | Vertical | Pass    |
| 1** | 2483.545        | 45.80            | -0.20       | 54.0           | 8.20        | AV       | 268.00         | 100         | Vertical | Pass    |
| 2   | 2484.010        | 61.34            | -0.17       | 74.0           | 12.66       | Peak     | 230.00         | 100         | Vertical | Pass    |
| 2** | 2484.010        | 45.45            | -0.17       | 54.0           | 8.55        | AV       | 230.00         | 100         | Vertical | Pass    |

## GFSK (BLE 2Mbps) LOW CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna  | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|----------|---------|
| 1   | 2325.750        | 56.06            | -0.31       | 74.0           | 17.94       | Peak     | 267.00         | 200         | Vertical | Pass    |
| 1** | 2325.750        | 44.19            | -0.31       | 54.0           | 9.81        | AV       | 267.00         | 200         | Vertical | Pass    |
| 2   | 2389.950        | 53.14            | -0.59       | 74.0           | 20.86       | Peak     | 325.00         | 150         | Vertical | Pass    |
| 2** | 2389.950        | 44.30            | -0.59       | 54.0           | 9.70        | AV       | 325.00         | 150         | Vertical | Pass    |

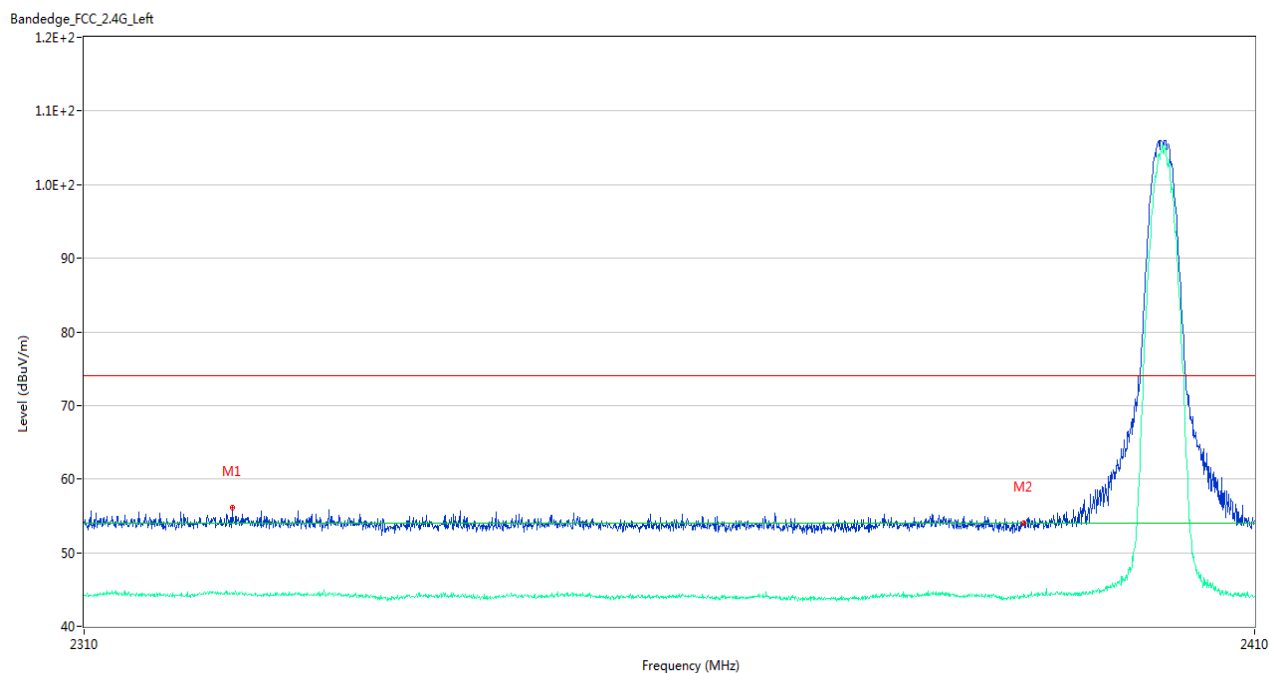
### GFSK (BLE 2Mbps) HIGH CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.515        | 57.75            | -0.05       | 74.0           | 16.25       | Peak     | 17.00          | 150         | Horizontal | Pass    |
| 1** | 2483.515        | 48.09            | -0.05       | 54.0           | 5.91        | AV       | 17.00          | 150         | Horizontal | Pass    |
| 2   | 2483.860        | 57.29            | -0.09       | 74.0           | 16.71       | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 2** | 2483.860        | 46.29            | -0.09       | 54.0           | 7.71        | AV       | 0.00           | 200         | Horizontal | Pass    |

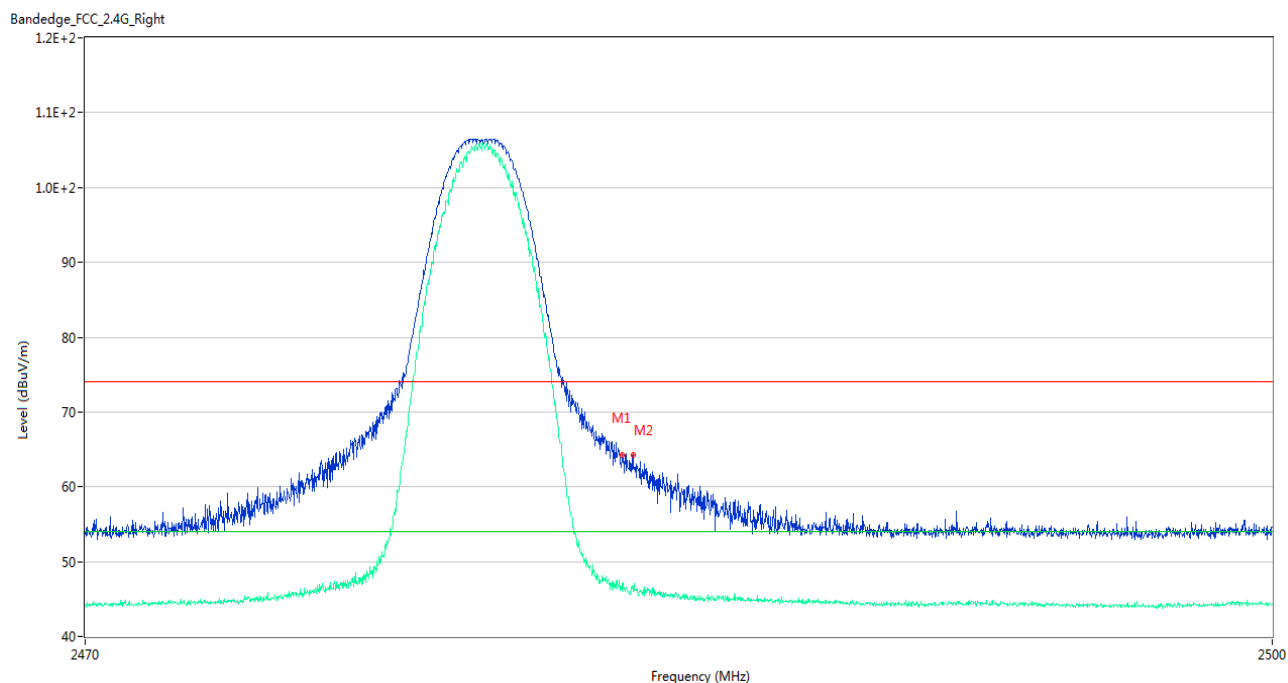
## Metal Antenna

### GFSK (BLE 1Mbps) LOW CHANNEL



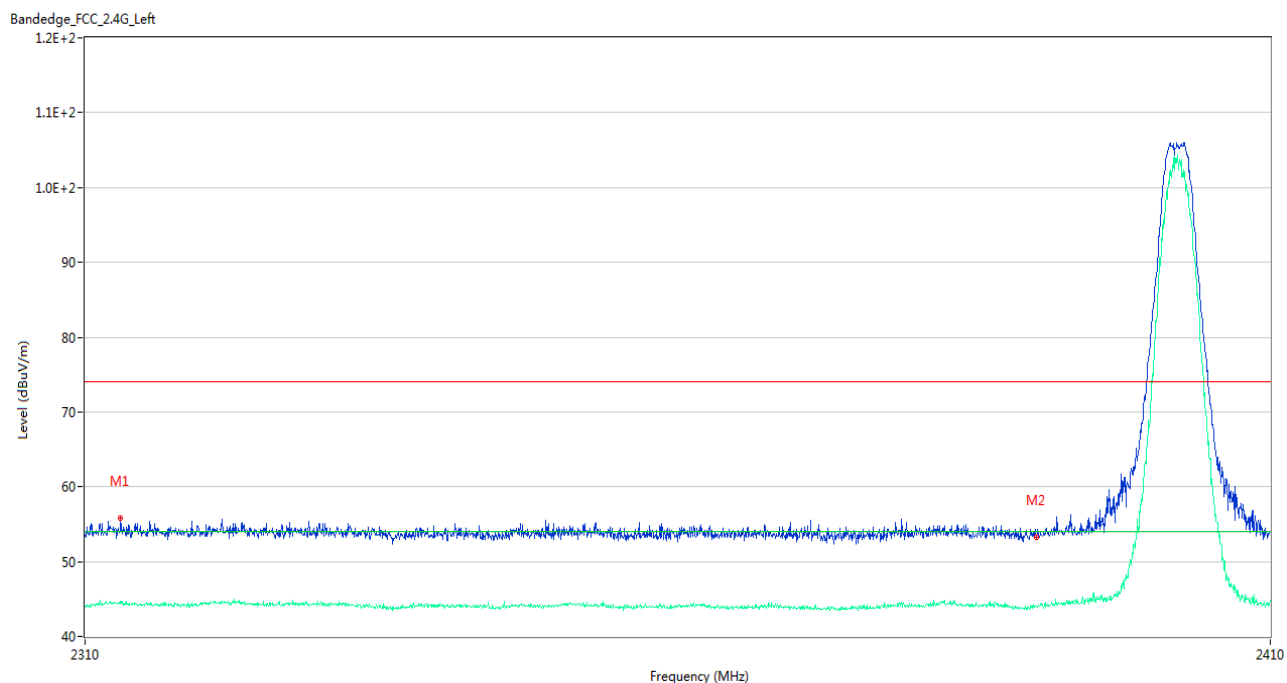
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2322.400        | 56.07            | -0.11       | 74.0           | 17.93       | Peak     | 35.00          | 100         | Horizontal | Pass    |
| 1** | 2322.400        | 44.38            | -0.11       | 54.0           | 9.62        | AV       | 35.00          | 100         | Horizontal | Pass    |
| 2   | 2389.950        | 54.02            | -0.59       | 74.0           | 19.98       | Peak     | 209.00         | 150         | Horizontal | Pass    |
| 2** | 2389.950        | 44.42            | -0.59       | 54.0           | 9.58        | AV       | 209.00         | 150         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) HIGH CHANNEL



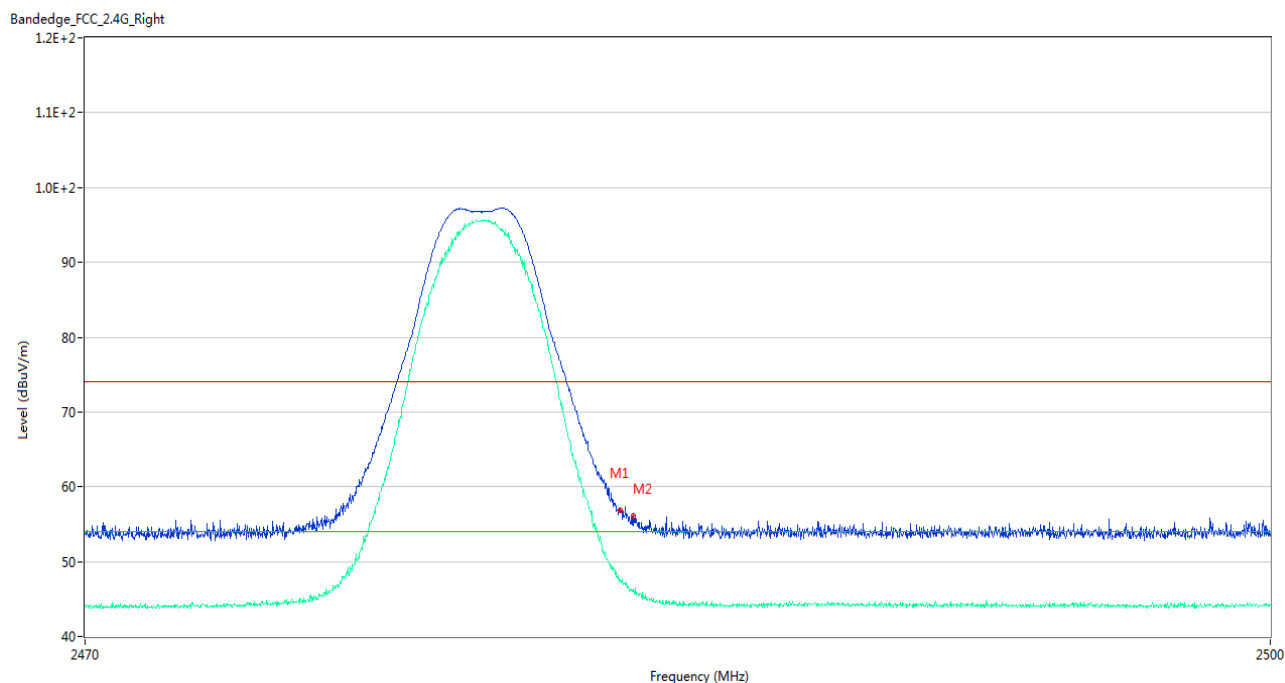
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.530        | 64.28            | -0.20       | 74.0           | 9.72        | Peak     | 150.00         | 150         | Horizontal | Pass    |
| 1** | 2483.530        | 46.94            | -0.20       | 54.0           | 7.06        | AV       | 150.00         | 150         | Horizontal | Pass    |
| 2   | 2483.800        | 64.32            | -0.19       | 74.0           | 9.68        | Peak     | 150.00         | 150         | Horizontal | Pass    |
| 2** | 2483.800        | 46.04            | -0.19       | 54.0           | 7.96        | AV       | 150.00         | 150         | Horizontal | Pass    |

## GFSK (BLE 2Mbps) LOW CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2312.950        | 55.81            | -0.28       | 74.0           | 18.19       | Peak     | 170.00         | 100         | Horizontal | Pass    |
| 1** | 2312.950        | 44.43            | -0.28       | 54.0           | 9.57        | AV       | 170.00         | 100         | Horizontal | Pass    |
| 2   | 2389.950        | 53.25            | -0.59       | 74.0           | 20.75       | Peak     | 204.00         | 150         | Horizontal | Pass    |
| 2** | 2389.950        | 43.85            | -0.59       | 54.0           | 10.15       | AV       | 204.00         | 150         | Horizontal | Pass    |

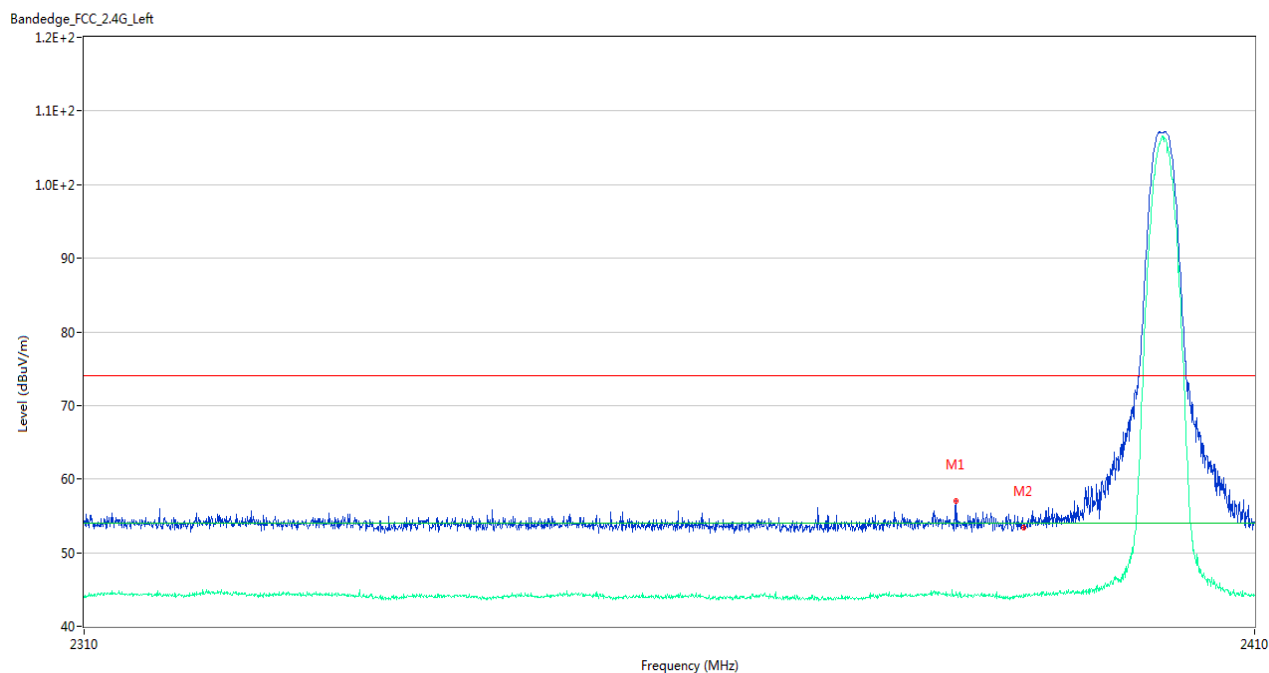
### GFSK (BLE 2Mbps) HIGH CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.500        | 56.87            | -0.05       | 74.0           | 17.13       | Peak     | 243.00         | 100         | Horizontal | Pass    |
| 1** | 2483.500        | 47.47            | -0.05       | 54.0           | 6.53        | AV       | 243.00         | 100         | Horizontal | Pass    |
| 2   | 2483.830        | 56.11            | -0.08       | 74.0           | 17.89       | Peak     | 243.00         | 100         | Horizontal | Pass    |
| 2** | 2483.830        | 46.27            | -0.08       | 54.0           | 7.73        | AV       | 243.00         | 100         | Horizontal | Pass    |

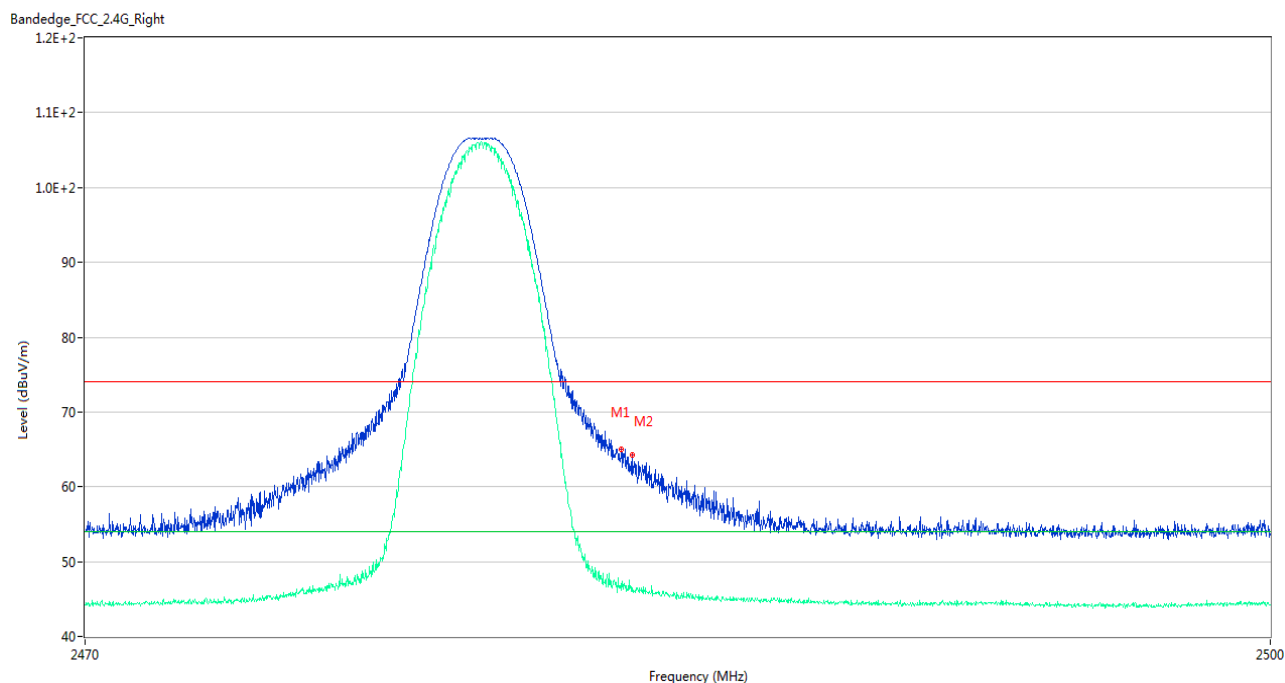
## PCB Antenna

## GFSK (BLE 1Mbps) LOW CHANNEL



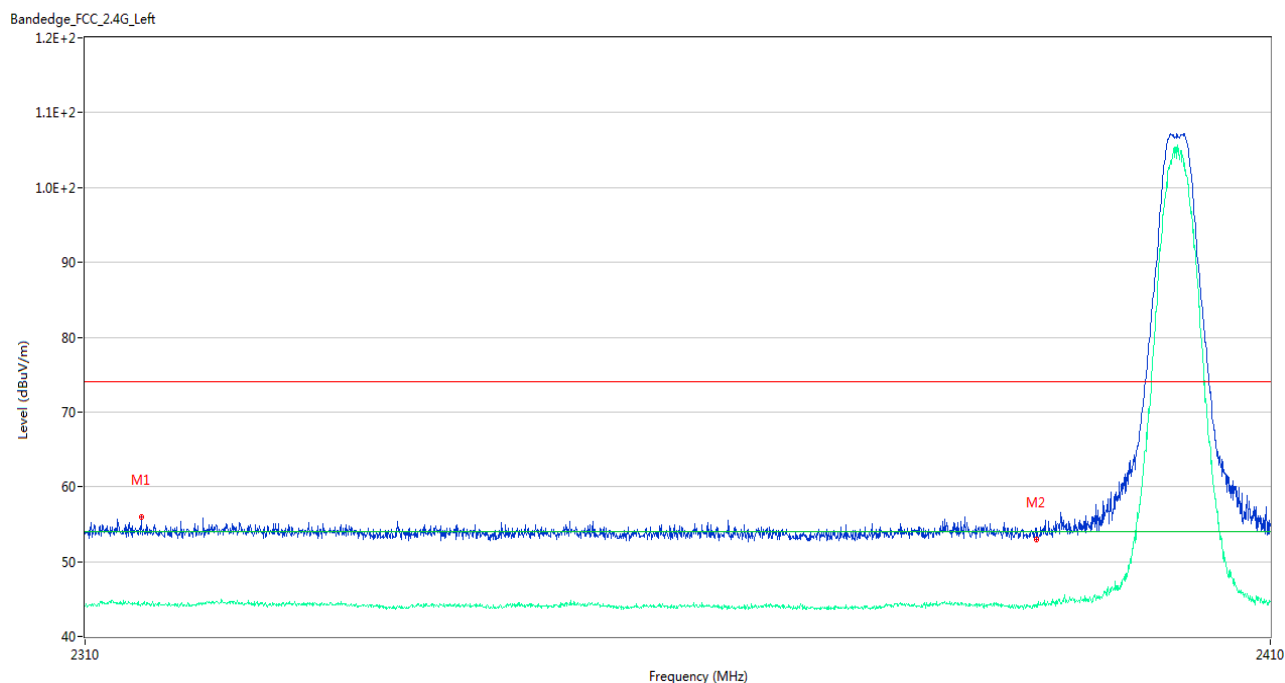
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2384.050        | 57.03            | -0.51       | 74.0           | 16.97       | Peak     | 167.00         | 100         | Horizontal | Pass    |
| 1** | 2384.050        | 44.21            | -0.51       | 54.0           | 9.79        | AV       | 167.00         | 100         | Horizontal | Pass    |
| 2   | 2389.950        | 53.39            | -0.59       | 74.0           | 20.61       | Peak     | 197.00         | 150         | Horizontal | Pass    |
| 2** | 2389.950        | 44.36            | -0.59       | 54.0           | 9.64        | AV       | 197.00         | 150         | Horizontal | Pass    |

### GFSK (BLE 1Mbps) HIGH CHANNEL



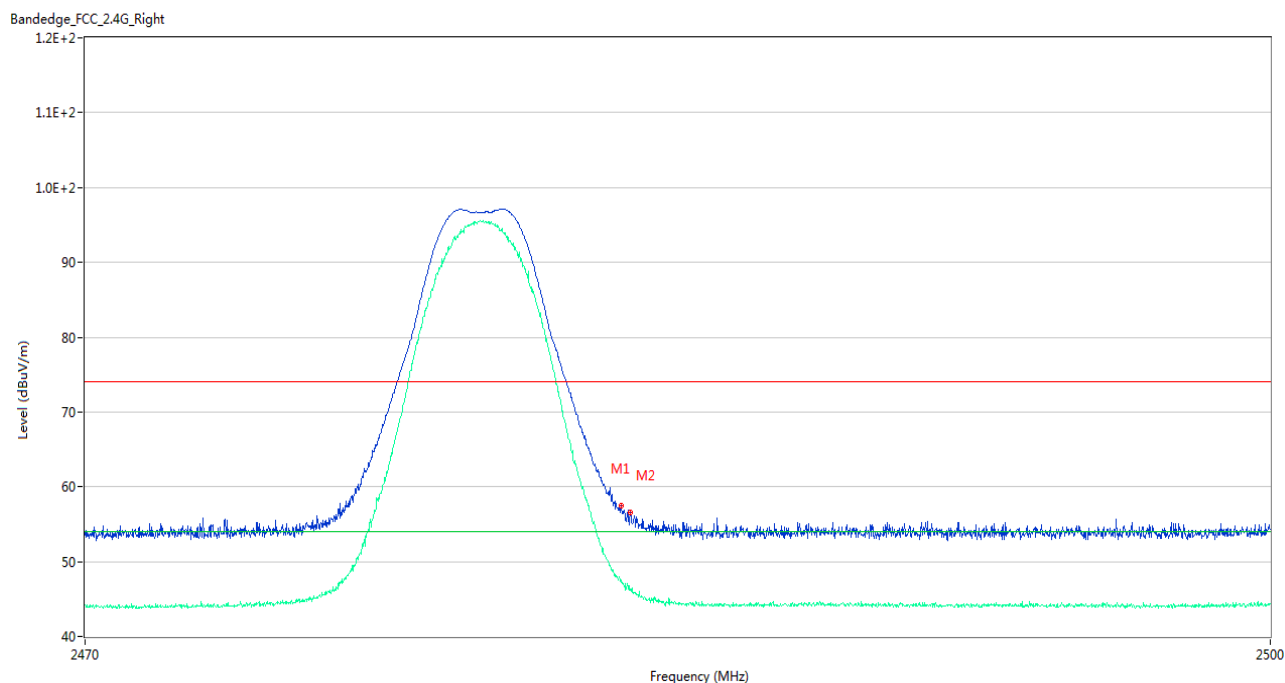
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.530        | 65.02            | -0.20       | 74.0           | 8.98        | Peak     | 165.00         | 100         | Horizontal | Pass    |
| 1** | 2483.530        | 46.76            | -0.20       | 54.0           | 7.24        | AV       | 165.00         | 100         | Horizontal | Pass    |
| 2   | 2483.800        | 64.20            | -0.19       | 74.0           | 9.80        | Peak     | 165.00         | 200         | Horizontal | Pass    |
| 2** | 2483.800        | 46.05            | -0.19       | 54.0           | 7.95        | AV       | 165.00         | 200         | Horizontal | Pass    |

## GFSK (BLE 2Mbps) LOW CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2314.650        | 55.95            | -0.38       | 74.0           | 18.05       | Peak     | 329.00         | 200         | Horizontal | Pass    |
| 1** | 2314.650        | 44.34            | -0.38       | 54.0           | 9.66        | AV       | 329.00         | 200         | Horizontal | Pass    |
| 2   | 2389.950        | 53.00            | -0.59       | 74.0           | 21.00       | Peak     | 295.00         | 200         | Horizontal | Pass    |
| 2** | 2389.950        | 44.26            | -0.59       | 54.0           | 9.74        | AV       | 295.00         | 200         | Horizontal | Pass    |

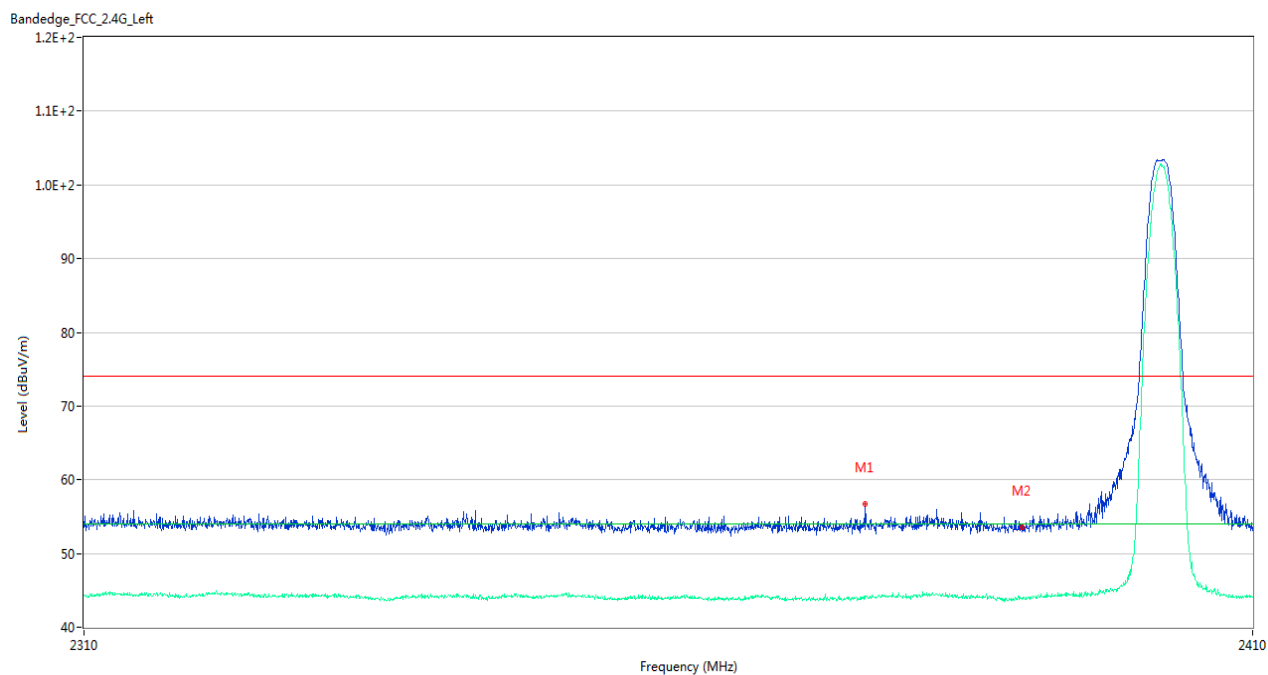
### GFSK (BLE 2Mbps) HIGH CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.515        | 57.43            | -0.05       | 74.0           | 16.57       | Peak     | 247.00         | 100         | Horizontal | Pass    |
| 1** | 2483.515        | 47.24            | -0.05       | 54.0           | 6.76        | AV       | 247.00         | 100         | Horizontal | Pass    |
| 2   | 2483.755        | 56.59            | -0.08       | 74.0           | 17.41       | Peak     | 332.00         | 100         | Horizontal | Pass    |
| 2** | 2483.755        | 46.12            | -0.08       | 54.0           | 7.88        | AV       | 332.00         | 100         | Horizontal | Pass    |

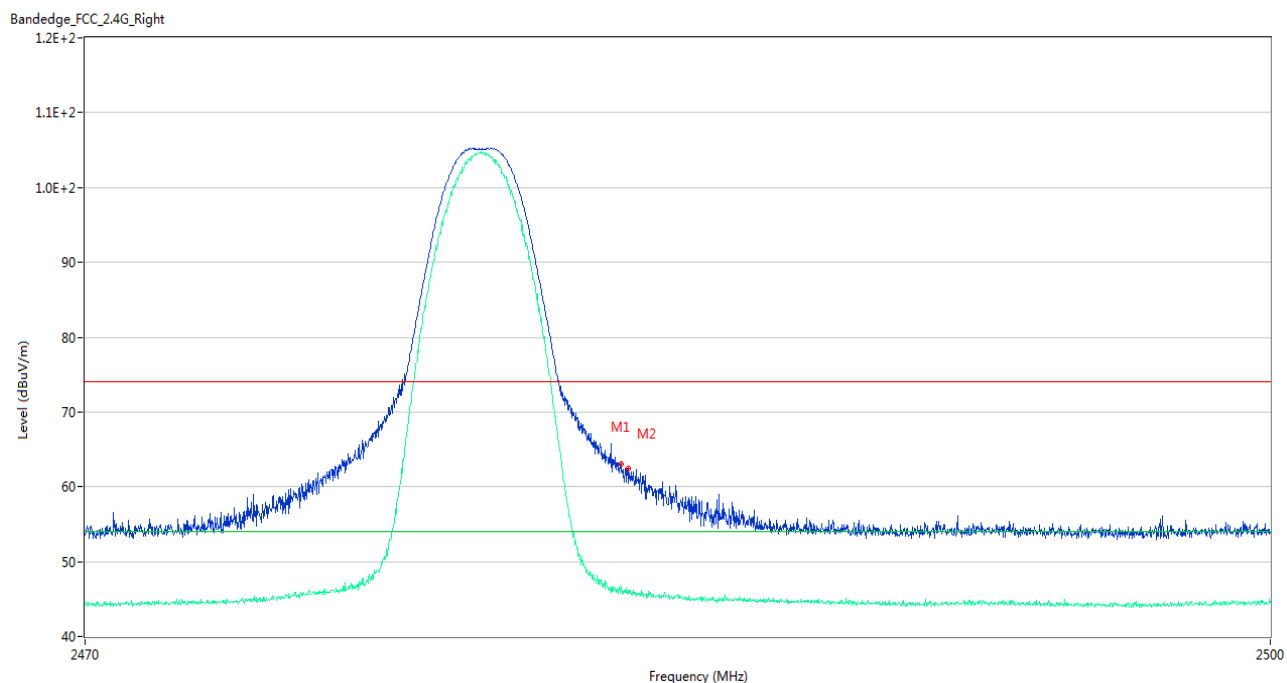
## Dipole Antenna 1

### GFSK (BLE 1Mbps) LOW CHANNEL



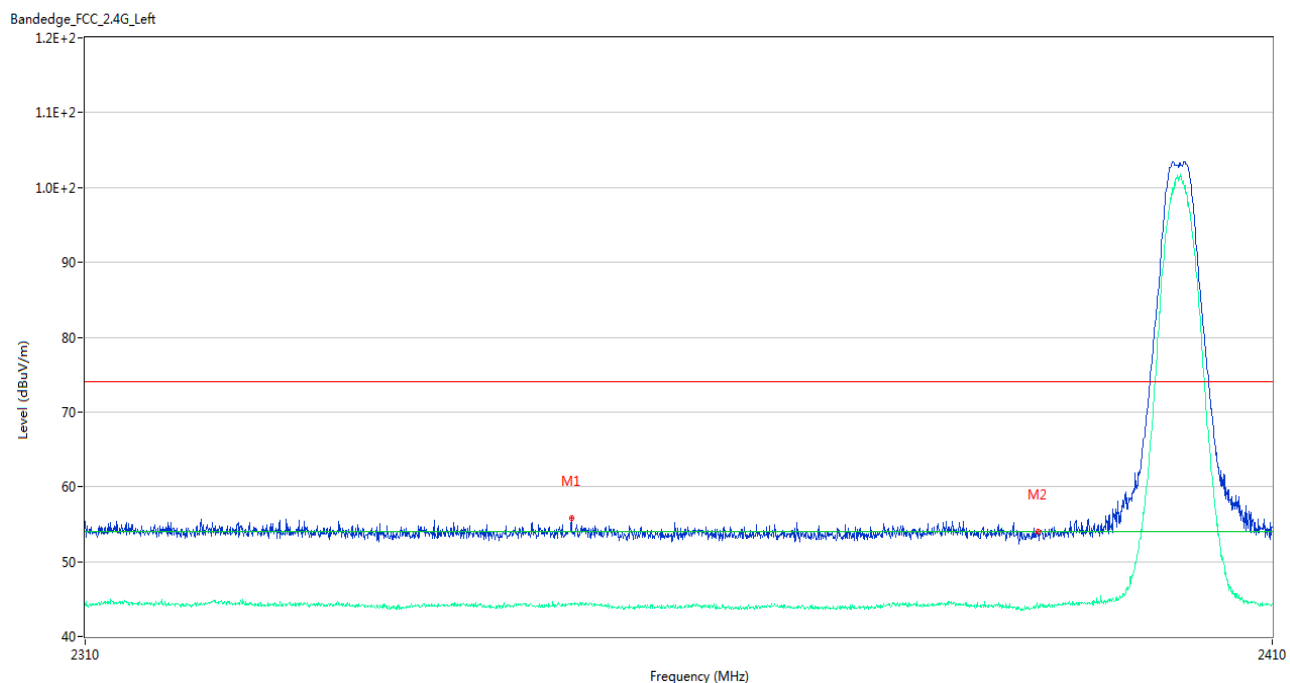
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2376.400        | 56.76            | -0.69       | 74.0           | 17.24       | Peak     | 236.00         | 150         | Horizontal | Pass    |
| 1** | 2376.400        | 44.20            | -0.69       | 54.0           | 9.80        | AV       | 236.00         | 150         | Horizontal | Pass    |
| 2   | 2389.950        | 53.59            | -0.59       | 74.0           | 20.41       | Peak     | 324.00         | 100         | Horizontal | Pass    |
| 2** | 2389.950        | 43.73            | -0.59       | 54.0           | 10.27       | AV       | 324.00         | 100         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) HIGH CHANNEL



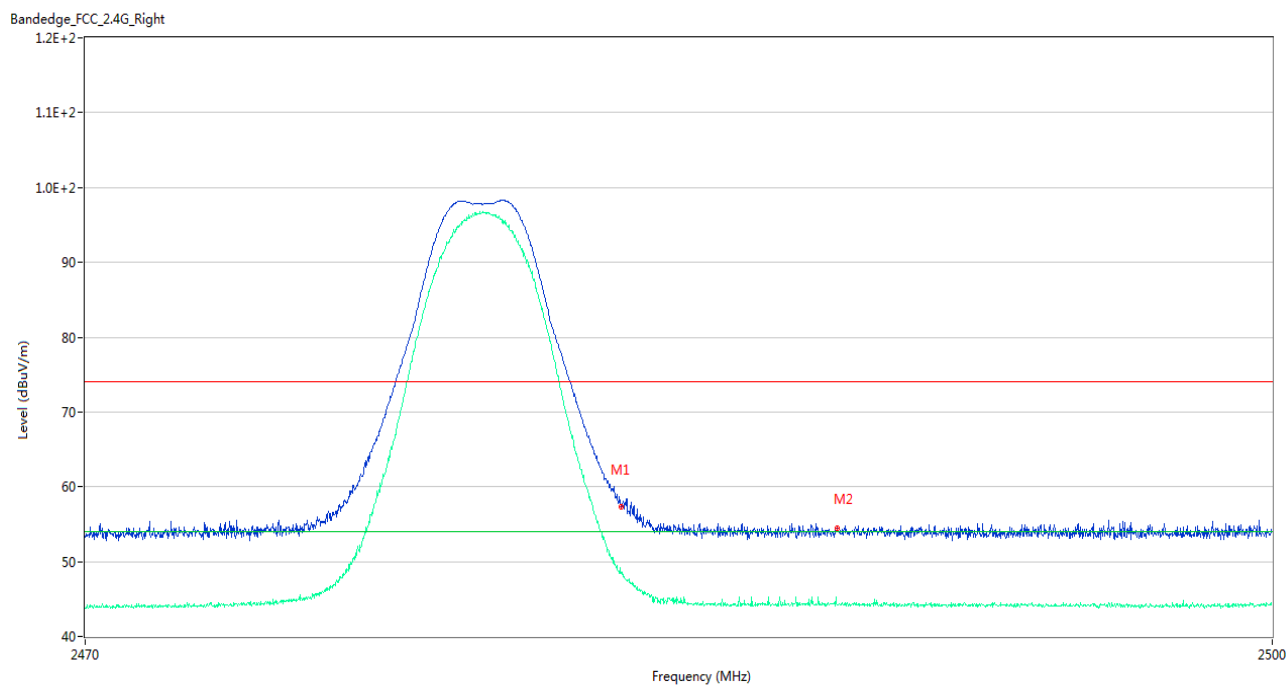
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.515        | 63.09            | -0.20       | 74.0           | 10.91       | Peak     | 318.00         | 150         | Horizontal | Pass    |
| 1** | 2483.515        | 46.83            | -0.20       | 54.0           | 7.17        | AV       | 318.00         | 150         | Horizontal | Pass    |
| 2   | 2483.710        | 62.42            | -0.19       | 74.0           | 11.58       | Peak     | 168.00         | 100         | Horizontal | Pass    |
| 2** | 2483.710        | 45.94            | -0.19       | 54.0           | 8.06        | AV       | 168.00         | 100         | Horizontal | Pass    |

### GFSK (BLE 2Mbps) LOW CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2350.450        | 55.77            | -0.10       | 74.0           | 18.23       | Peak     | 153.00         | 100         | Horizontal | Pass    |
| 1** | 2350.450        | 44.27            | -0.10       | 54.0           | 9.73        | AV       | 153.00         | 100         | Horizontal | Pass    |
| 2   | 2389.950        | 54.03            | -0.59       | 74.0           | 19.97       | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 2** | 2389.950        | 44.13            | -0.59       | 54.0           | 9.87        | AV       | 0.00           | 200         | Horizontal | Pass    |

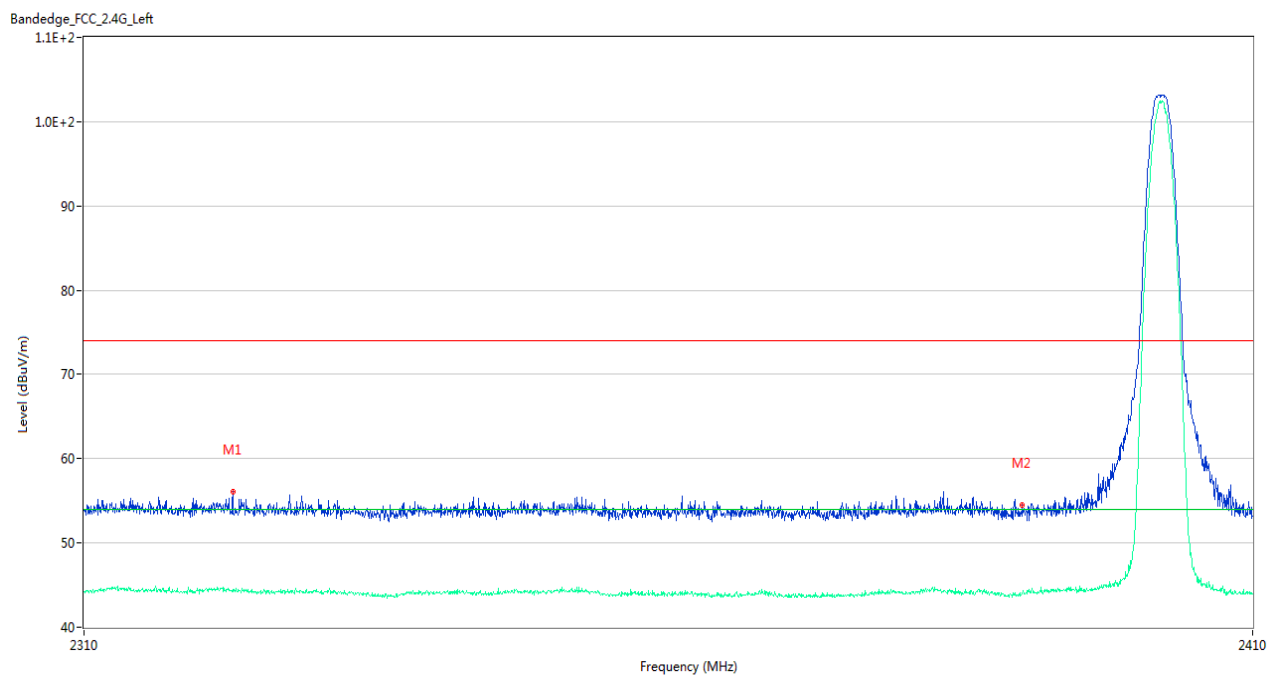
## GFSK (BLE 2Mbps) HIGH CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.500        | 57.39            | -0.05       | 74.0           | 16.61       | Peak     | 0.00           | 150         | Horizontal | Pass    |
| 1** | 2483.500        | 48.52            | -0.05       | 54.0           | 5.48        | AV       | 0.00           | 150         | Horizontal | Pass    |
| 2   | 2488.975        | 54.44            | -0.09       | 74.0           | 19.56       | Peak     | 308.00         | 150         | Horizontal | Pass    |
| 2** | 2488.975        | 44.16            | -0.09       | 54.0           | 9.84        | AV       | 308.00         | 150         | Horizontal | Pass    |

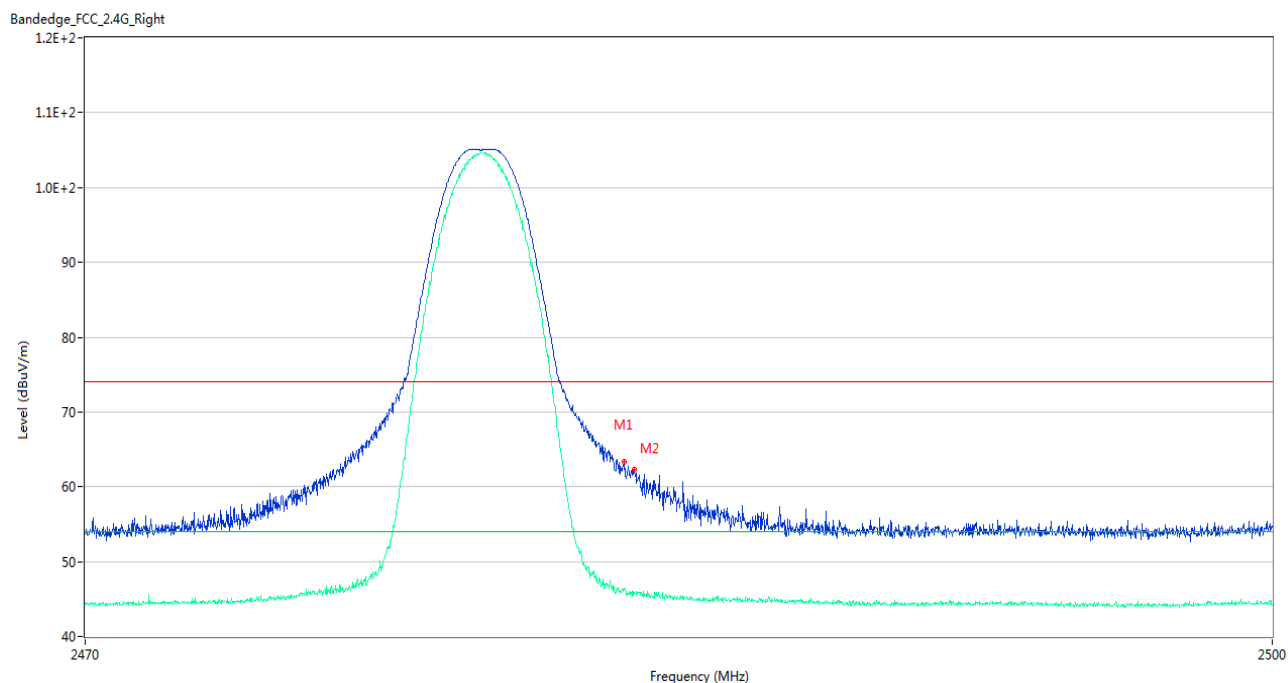
## Dipole Antenna 2

### GFSK (BLE 1Mbps) LOW CHANNEL



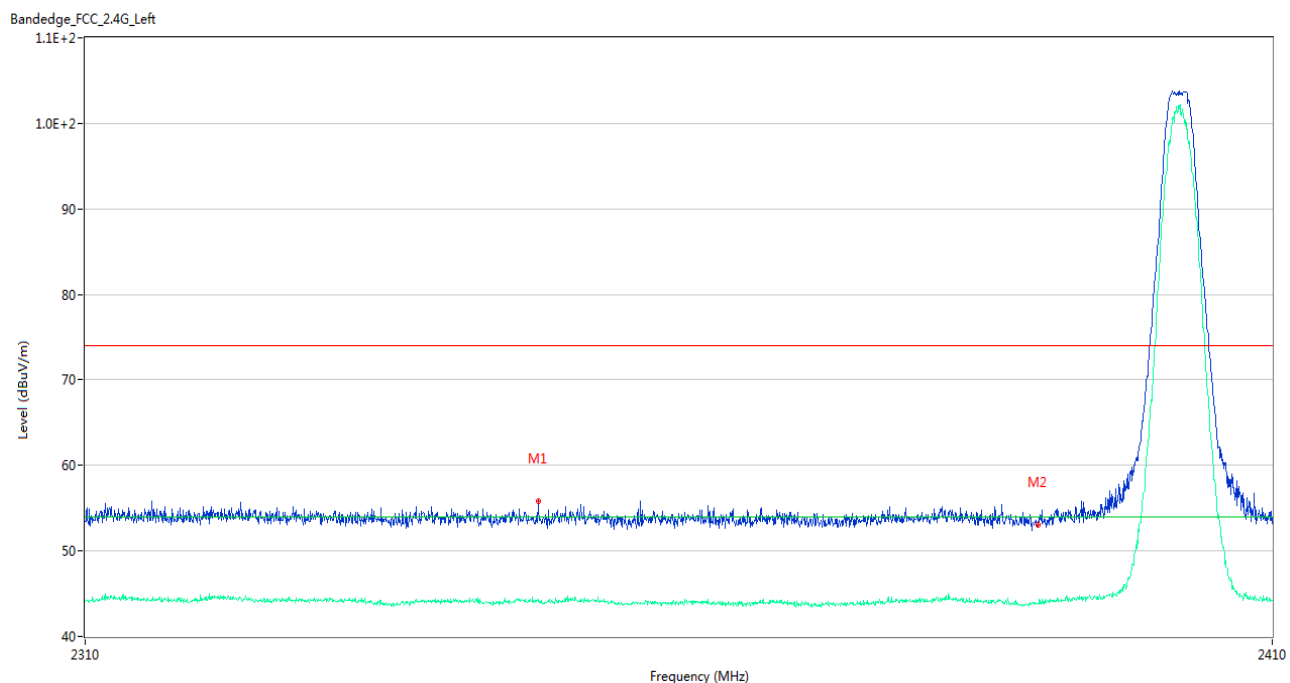
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2322.500        | 56.07            | -0.11       | 74.0           | 17.93       | Peak     | 98.00          | 150         | Horizontal | Pass    |
| 1** | 2322.500        | 44.25            | -0.11       | 54.0           | 9.75        | AV       | 98.00          | 150         | Horizontal | Pass    |
| 2   | 2389.950        | 54.49            | -0.59       | 74.0           | 19.51       | Peak     | 259.00         | 200         | Horizontal | Pass    |
| 2** | 2389.950        | 43.95            | -0.59       | 54.0           | 10.05       | AV       | 259.00         | 200         | Horizontal | Pass    |

### GFSK (BLE 1Mbps) HIGH CHANNEL



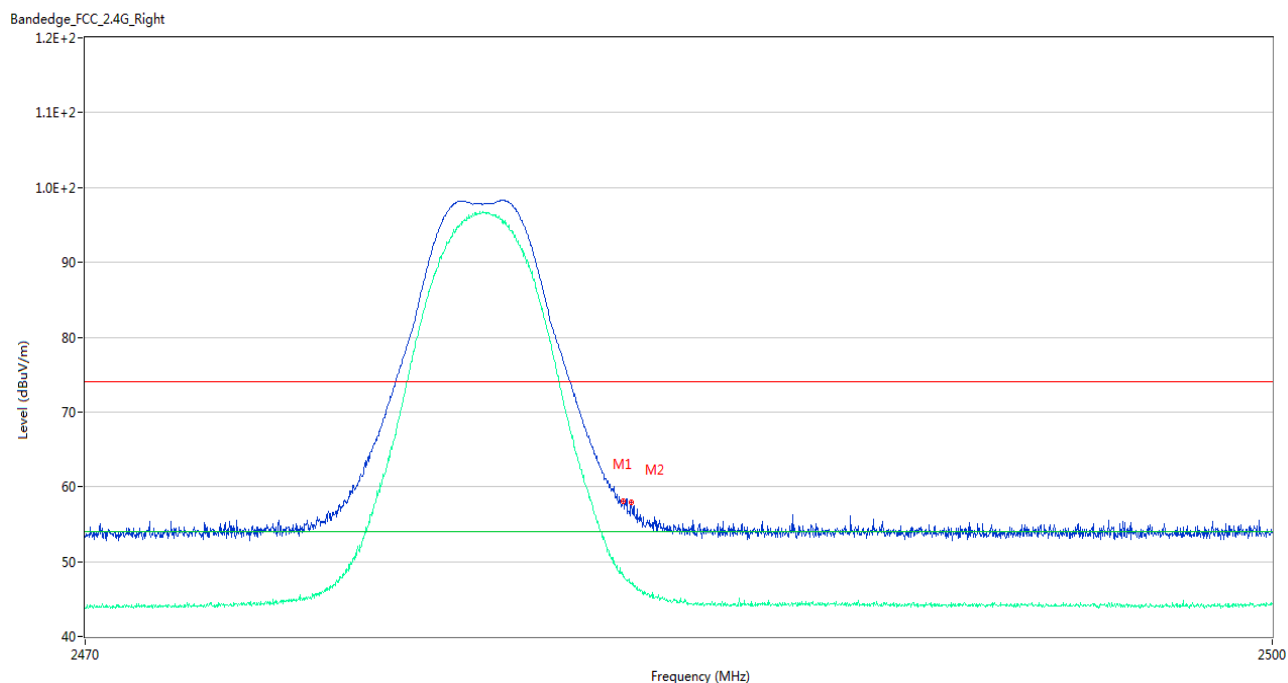
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.590        | 63.39            | -0.20       | 74.0           | 10.61       | Peak     | 327.00         | 150         | Horizontal | Pass    |
| 1** | 2483.590        | 46.34            | -0.20       | 54.0           | 7.66        | AV       | 327.00         | 150         | Horizontal | Pass    |
| 2   | 2483.845        | 62.29            | -0.18       | 74.0           | 11.71       | Peak     | 325.00         | 200         | Horizontal | Pass    |
| 2** | 2483.845        | 45.81            | -0.18       | 54.0           | 8.19        | AV       | 325.00         | 200         | Horizontal | Pass    |

## GFSK (BLE 2Mbps) LOW CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2347.650        | 55.82            | -0.32       | 74.0           | 18.18       | Peak     | 230.00         | 200         | Horizontal | Pass    |
| 1** | 2347.650        | 44.38            | -0.32       | 54.0           | 9.62        | AV       | 230.00         | 200         | Horizontal | Pass    |
| 2   | 2389.950        | 53.07            | -0.59       | 74.0           | 20.93       | Peak     | 179.00         | 200         | Horizontal | Pass    |
| 2** | 2389.950        | 43.88            | -0.59       | 54.0           | 10.12       | AV       | 179.00         | 200         | Horizontal | Pass    |

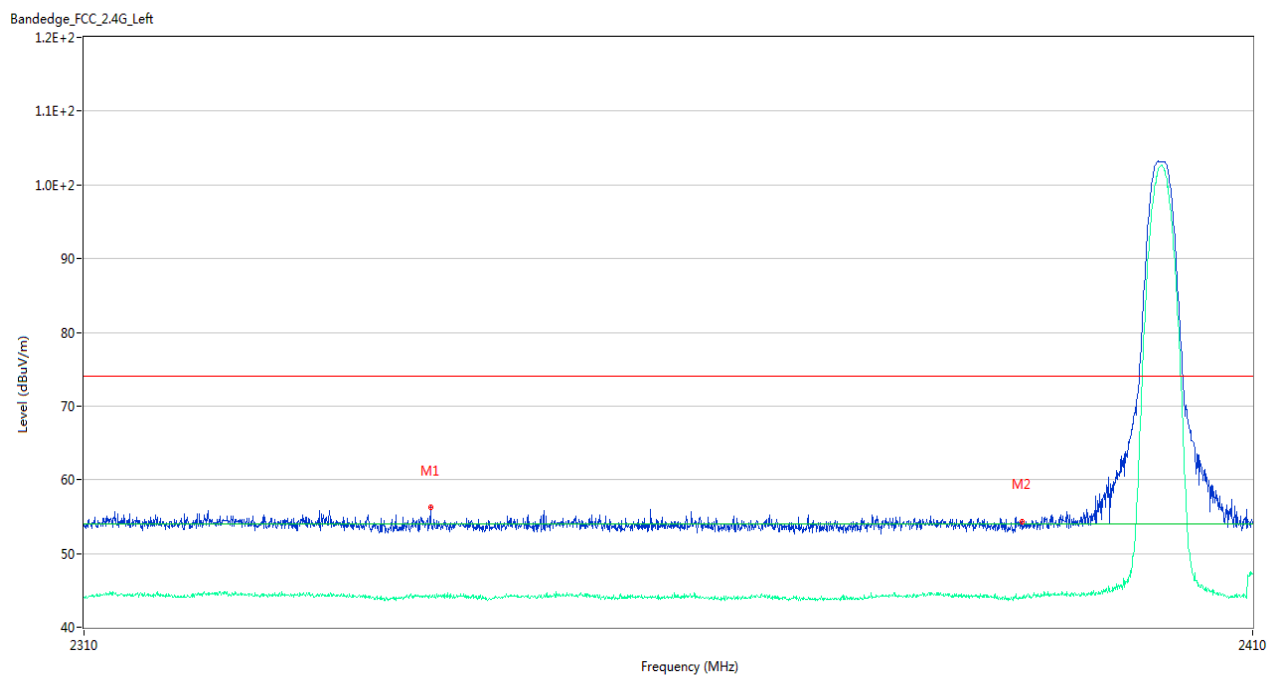
## GFSK (BLE 2Mbps) HIGH CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.545        | 58.12            | -0.06       | 74.0           | 15.88       | Peak     | 21.00          | 100         | Horizontal | Pass    |
| 1** | 2483.545        | 48.09            | -0.06       | 54.0           | 5.91        | AV       | 21.00          | 100         | Horizontal | Pass    |
| 2   | 2483.755        | 57.91            | -0.08       | 74.0           | 16.09       | Peak     | 0.00           | 200         | Horizontal | Pass    |
| 2** | 2483.755        | 47.03            | -0.08       | 54.0           | 6.97        | AV       | 0.00           | 200         | Horizontal | Pass    |

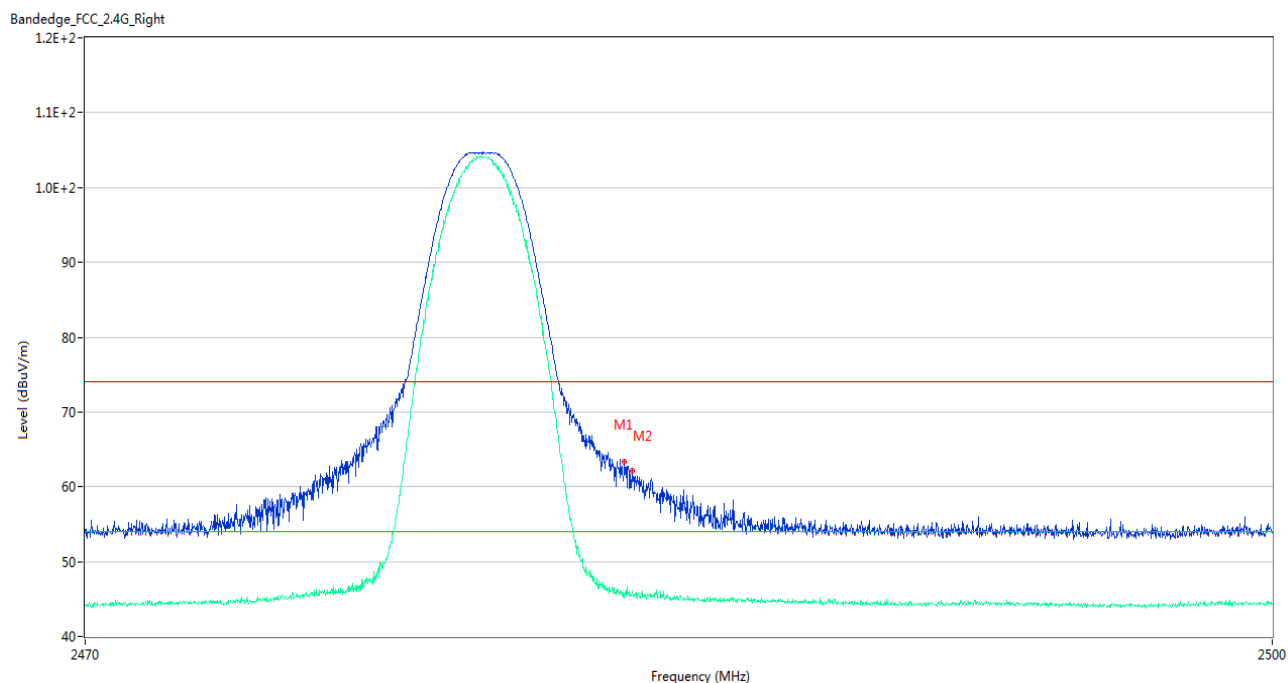
### Dipole Antenna 3

#### GFSK (BLE 1Mbps) LOW CHANNEL



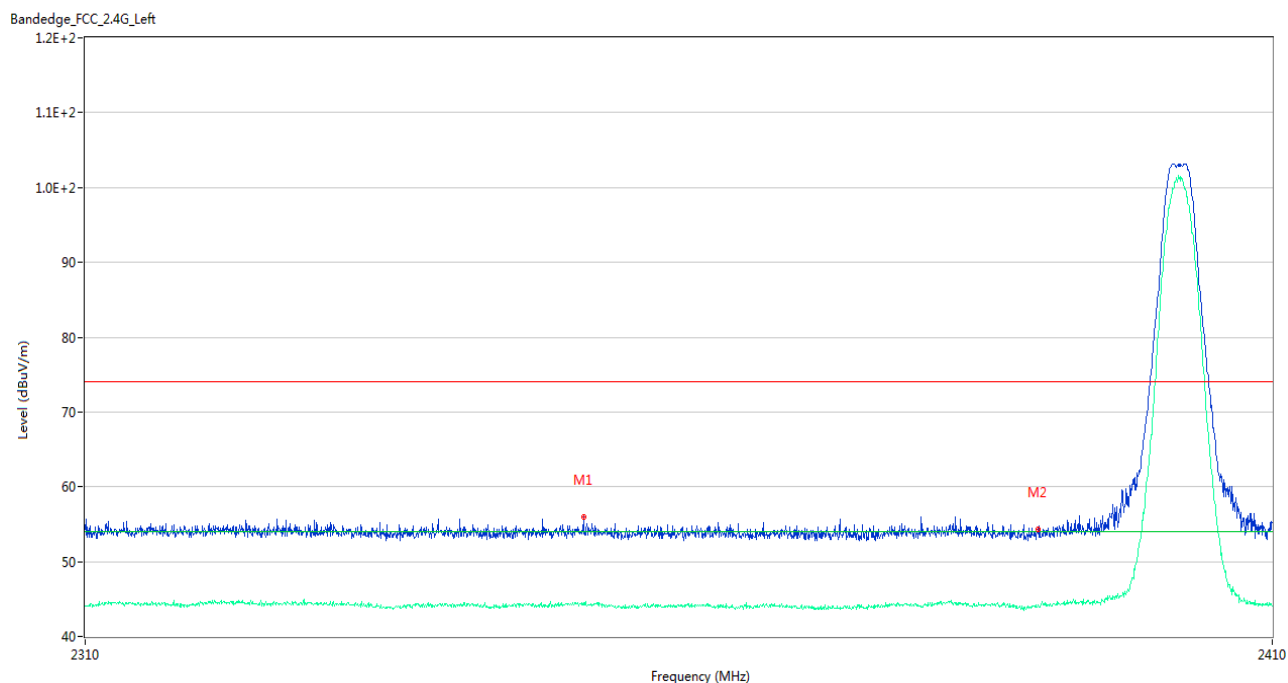
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2339.200        | 56.23            | -0.37       | 74.0           | 17.77       | Peak     | 360.00         | 200         | Horizontal | Pass    |
| 1** | 2339.200        | 44.06            | -0.37       | 54.0           | 9.94        | AV       | 360.00         | 200         | Horizontal | Pass    |
| 2   | 2389.950        | 54.37            | -0.59       | 74.0           | 19.63       | Peak     | 15.00          | 100         | Horizontal | Pass    |
| 2** | 2389.950        | 44.08            | -0.59       | 54.0           | 9.92        | AV       | 15.00          | 100         | Horizontal | Pass    |

## GFSK (BLE 1Mbps) HIGH CHANNEL



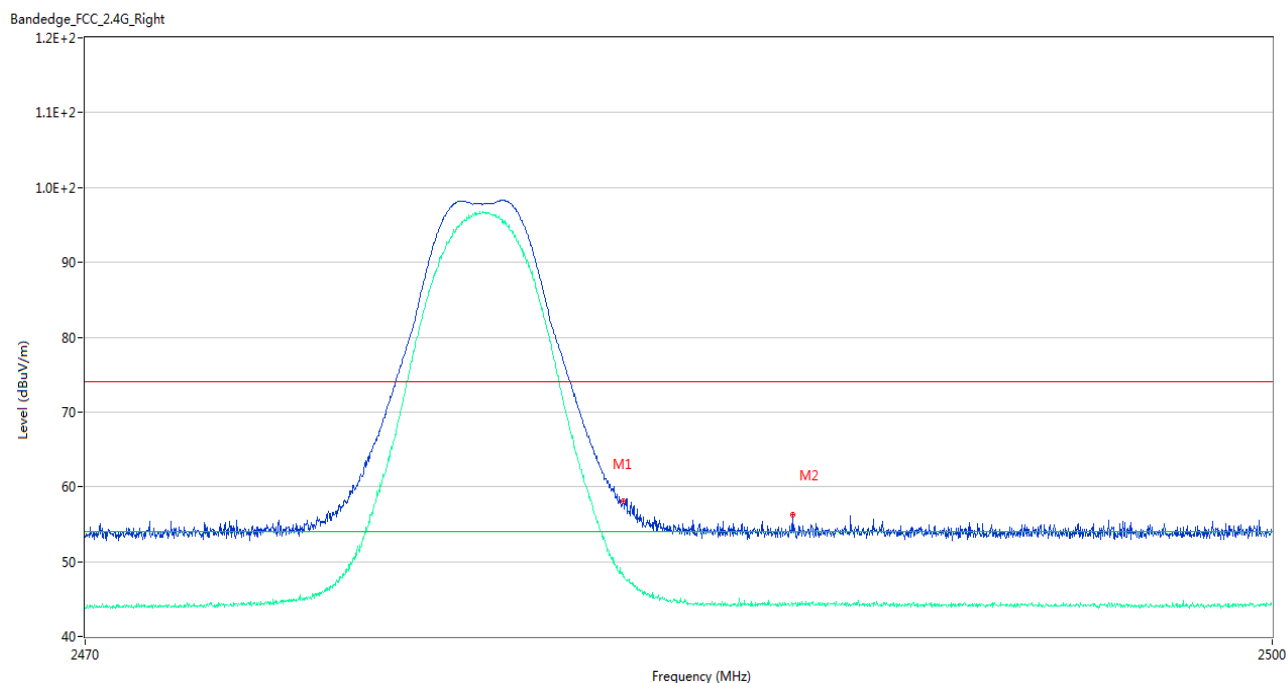
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.590        | 63.29            | -0.20       | 74.0           | 10.71       | Peak     | 248.00         | 100         | Horizontal | Pass    |
| 1** | 2483.590        | 45.80            | -0.20       | 54.0           | 8.20        | AV       | 248.00         | 100         | Horizontal | Pass    |
| 2   | 2483.770        | 62.09            | -0.19       | 74.0           | 11.91       | Peak     | 252.00         | 200         | Horizontal | Pass    |
| 2** | 2483.770        | 45.88            | -0.19       | 54.0           | 8.12        | AV       | 252.00         | 200         | Horizontal | Pass    |

## GFSK (BLE 2Mbps) LOW CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2351.450        | 55.99            | -0.14       | 74.0           | 18.01       | Peak     | 55.00          | 200         | Horizontal | Pass    |
| 1** | 2351.450        | 44.59            | -0.14       | 54.0           | 9.41        | AV       | 55.00          | 200         | Horizontal | Pass    |
| 2   | 2389.950        | 54.26            | -0.59       | 74.0           | 19.74       | Peak     | 282.00         | 150         | Horizontal | Pass    |
| 2** | 2389.950        | 44.25            | -0.59       | 54.0           | 9.75        | AV       | 282.00         | 150         | Horizontal | Pass    |

## GFSK (BLE 2Mbps) HIGH CHANNEL



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (Degree) | Height (cm) | Antenna    | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|----------------|-------------|------------|---------|
| 1   | 2483.545        | 58.12            | -0.06       | 74.0           | 15.88       | Peak     | 21.00          | 150         | Horizontal | Pass    |
| 1** | 2483.545        | 48.36            | -0.06       | 54.0           | 5.64        | AV       | 21.00          | 150         | Horizontal | Pass    |
| 2   | 2487.850        | 56.34            | -0.12       | 74.0           | 17.66       | Peak     | 360.00         | 150         | Horizontal | Pass    |
| 2** | 2487.850        | 44.13            | -0.12       | 54.0           | 9.87        | AV       | 360.00         | 150         | Horizontal | Pass    |

## A.8 Power Spectral Density (PSD)

### Test Data

| GFSK (BLE 1Mbps) |                                      |                     |         |
|------------------|--------------------------------------|---------------------|---------|
| Channel          | Spectral power density<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
| Low Channel      | -11.87                               | 8                   | Pass    |
| Middle Channel   | -11.41                               | 8                   | Pass    |
| High Channel     | -11.74                               | 8                   | Pass    |

| GFSK (BLE 2Mbps) |                                      |                     |         |
|------------------|--------------------------------------|---------------------|---------|
| Channel          | Spectral power density<br>(dBm/3kHz) | Limit<br>(dBm/3kHz) | Verdict |
| Low Channel      | -15.37                               | 8                   | Pass    |
| Middle Channel   | -15.47                               | 8                   | Pass    |
| High Channel     | -14.57                               | 8                   | Pass    |

## Test Plots

### GFSK (BLE 1Mbps) LOW CHANNEL



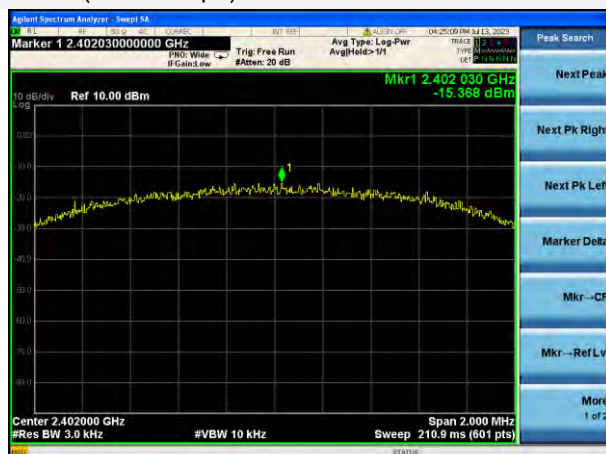
### GFSK (BLE 1Mbps) MIDDLE CHANNEL



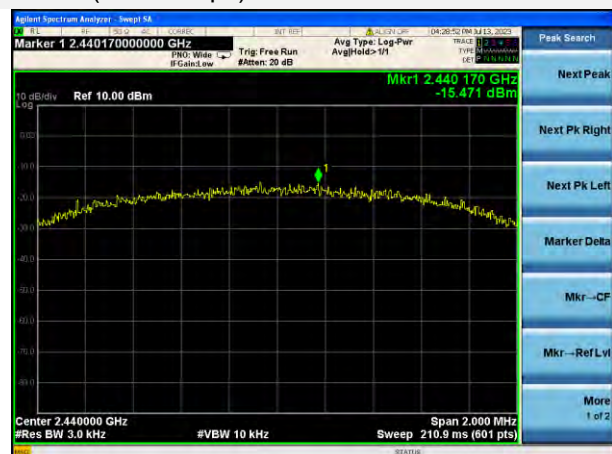
### GFSK (BLE 1Mbps) HIGH CHANNEL



### GFSK (BLE 2Mbps) LOW CHANNEL



### GFSK (BLE 2Mbps) MIDDLE CHANNEL



## GFSK (BLE 2Mbps) HIGH CHANNEL



## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ2310035-AR.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ2310035-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ2310035-AI.PDF”.

## Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the "inspection and testing dedicated stamp" or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--