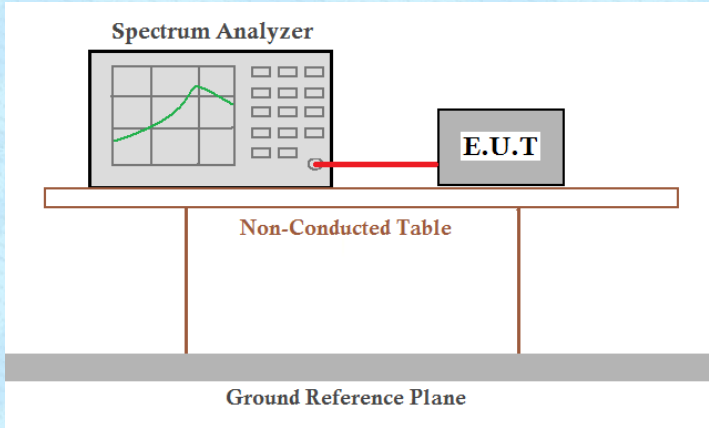


## 7.7 Spurious Emission

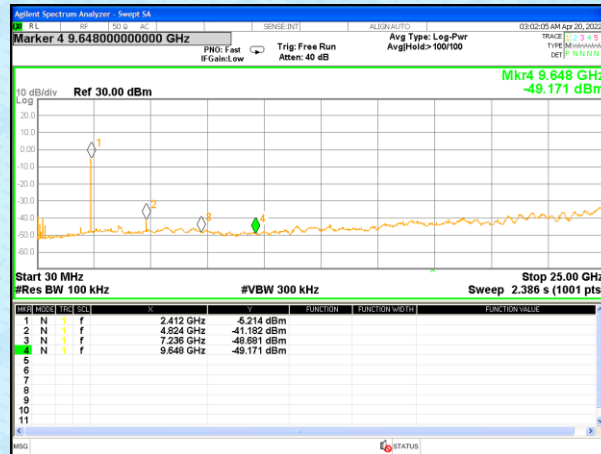
### 7.7.1 Conducted Emission Method

|                   |                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (d)                                                                                                                                                                                                                                                                                                                                                         |
| Test Method:      | KDB558074 D01 15.247 Meas Guidance v05r02                                                                                                                                                                                                                                                                                                                                               |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |
| Test setup:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T are placed on a Non-Conducted Table. The table is supported by two vertical legs and sits on a Ground Reference Plane.</p> |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                                                        |
| Test mode:        | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                                                        |
| Test results:     | Pass                                                                                                                                                                                                                                                                                                                                                                                    |

Test plot as follows:

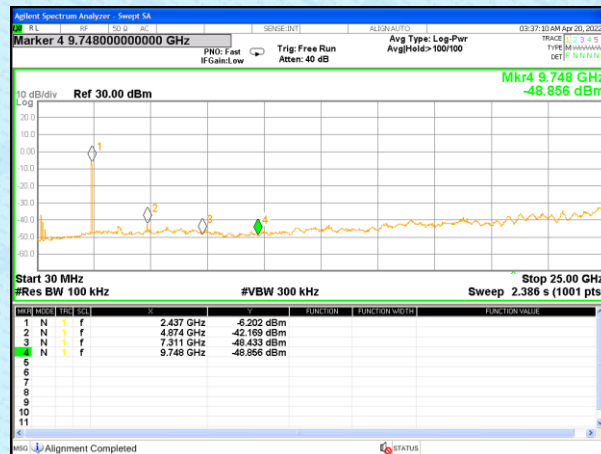
802.11b

Lowest channel



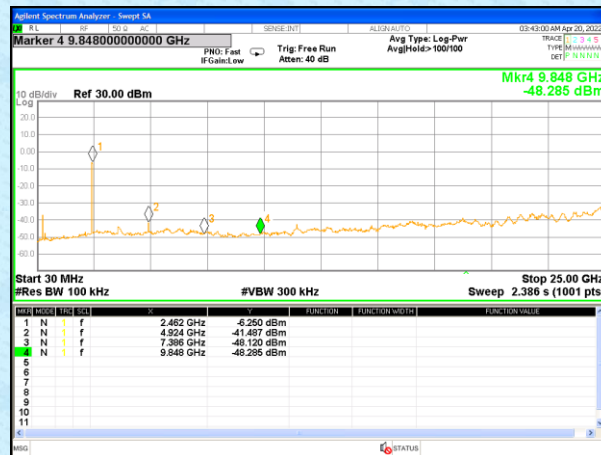
30MHz~25GHz

Middle channel



30MHz~25GHz

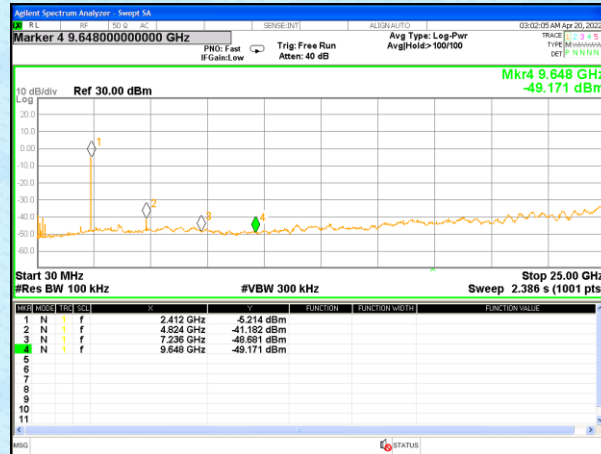
Highest channel



30MHz~25GHz

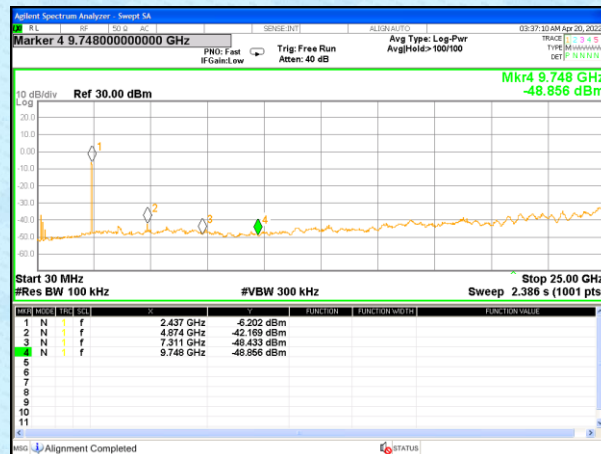
802.11g

Lowest channel



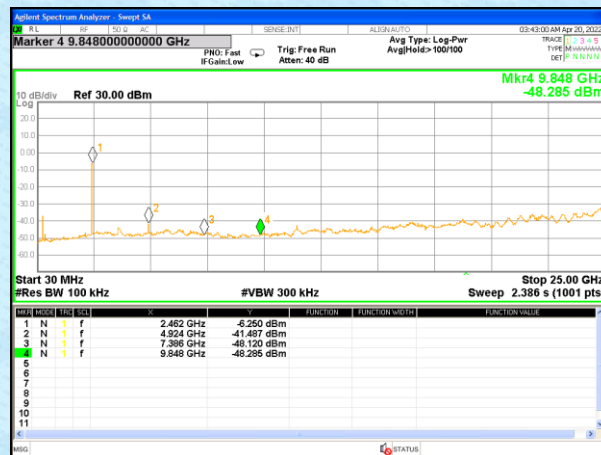
30MHz~25GHz

Middle channel



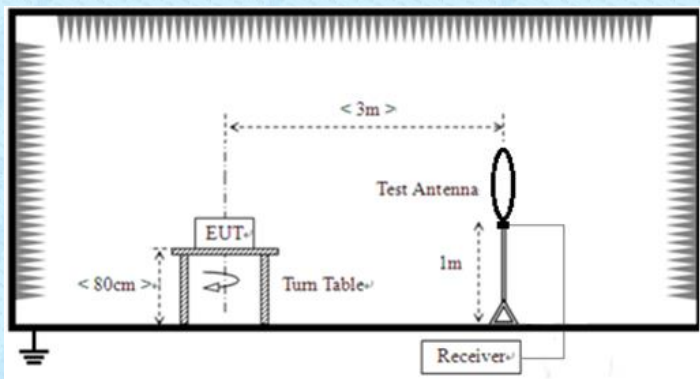
30MHz~25GHz

Highest channel

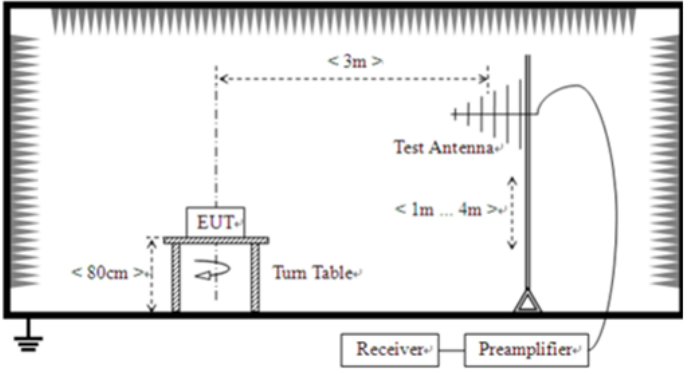
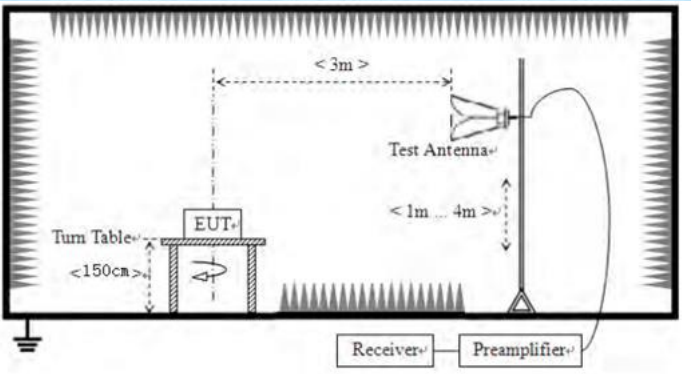


30MHz~25GHz

## 7.7.2 Radiated Emission Method

|                       |                                                                                      |              |        |         |                      |
|-----------------------|--------------------------------------------------------------------------------------|--------------|--------|---------|----------------------|
| Test Requirement:     | FCC Part15 C Section 15.209                                                          |              |        |         |                      |
| Test Method:          | ANSI C63.10: 2013                                                                    |              |        |         |                      |
| Test Frequency Range: | 9kHz to 25GHz                                                                        |              |        |         |                      |
| Test site:            | Measurement Distance: 3m                                                             |              |        |         |                      |
| Receiver setup:       | Frequency                                                                            | Detector     | RBW    | VBW     | Value                |
|                       | 9KHz-150KHz                                                                          | Quasi-peak   | 200Hz  | 600Hz   | Quasi-peak           |
|                       | 150KHz-30MHz                                                                         | Quasi-peak   | 9KHz   | 30KHz   | Quasi-peak           |
|                       | 30MHz-1GHz                                                                           | Quasi-peak   | 120KHz | 300KHz  | Quasi-peak           |
|                       | Above 1GHz                                                                           | Peak         | 1MHz   | 3MHz    | Peak                 |
|                       |                                                                                      | Peak         | 1MHz   | 10Hz    | Average              |
| Limit:                | Frequency                                                                            | Limit (uV/m) |        | Value   | Measurement Distance |
|                       | 0.009MHz-0.490MHz                                                                    | 2400/F(KHz)  |        | QP      | 300m                 |
|                       | 0.490MHz-1.705MHz                                                                    | 24000/F(KHz) |        | QP      | 300m                 |
|                       | 1.705MHz-30MHz                                                                       | 30           |        | QP      | 30m                  |
|                       | 30MHz-88MHz                                                                          | 100          |        | QP      | 3m                   |
|                       | 88MHz-216MHz                                                                         | 150          |        | QP      |                      |
|                       | 216MHz-960MHz                                                                        | 200          |        | QP      |                      |
|                       | 960MHz-1GHz                                                                          | 500          |        | QP      |                      |
|                       | Above 1GHz                                                                           | 500          |        | Average |                      |
|                       |                                                                                      | 5000         |        | Peak    |                      |
| Test setup:           | For radiated emissions from 9kHz to 30MHz                                            |              |        |         |                      |
|                       |  |              |        |         |                      |
|                       | For radiated emissions from 30MHz to 1GHz                                            |              |        |         |                      |



|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |  <p>For radiated emissions above 1GHz</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> </ol> |
| Test Instruments: | Refer to section 6.0 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Test mode:        | Refer to section 5.2 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                   |             |       |         |     |         |          |
|-------------------|-------------|-------|---------|-----|---------|----------|
| Test voltage:     | AC120V 60Hz |       |         |     |         |          |
| Test environment: | Temp.:      | 25 °C | Humid.: | 52% | Press.: | 1012mbar |
| Test voltage:     | 5Vdc 1A     |       |         |     |         |          |
| Test results:     | Pass        |       |         |     |         |          |

*Remarks:*

1. Only the worst case Main Antenna test data.
2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

**Measurement data:**

■ **9kHz~30MHz**

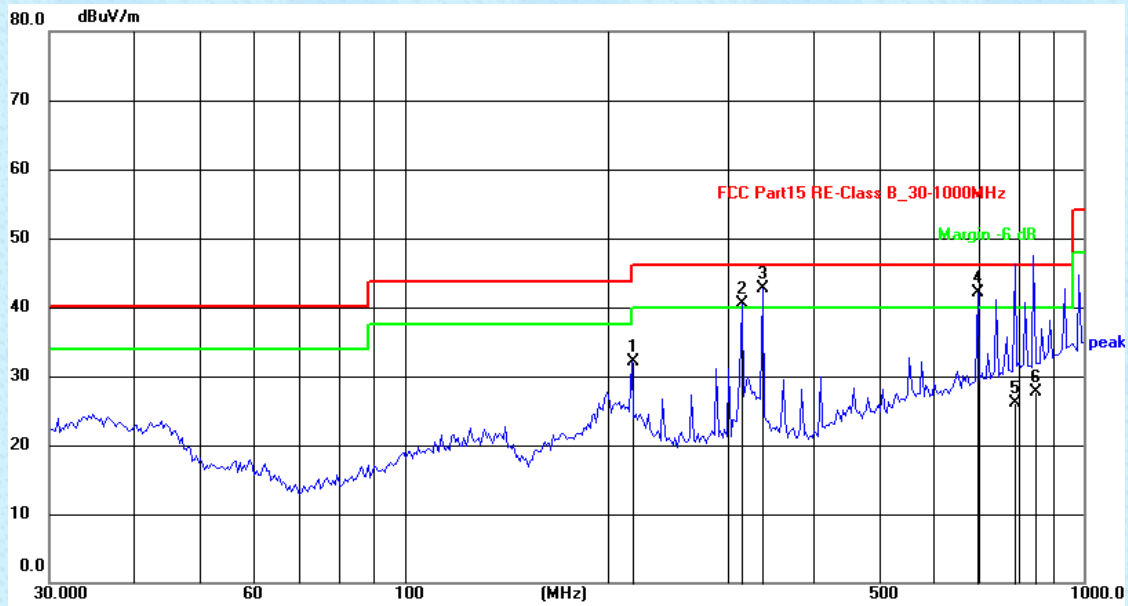
The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

■ **Above 18GHz**

The emission from Above 18GHz was pre-tested and found the result was 20dB lower than the limit, the test result no need to reported.

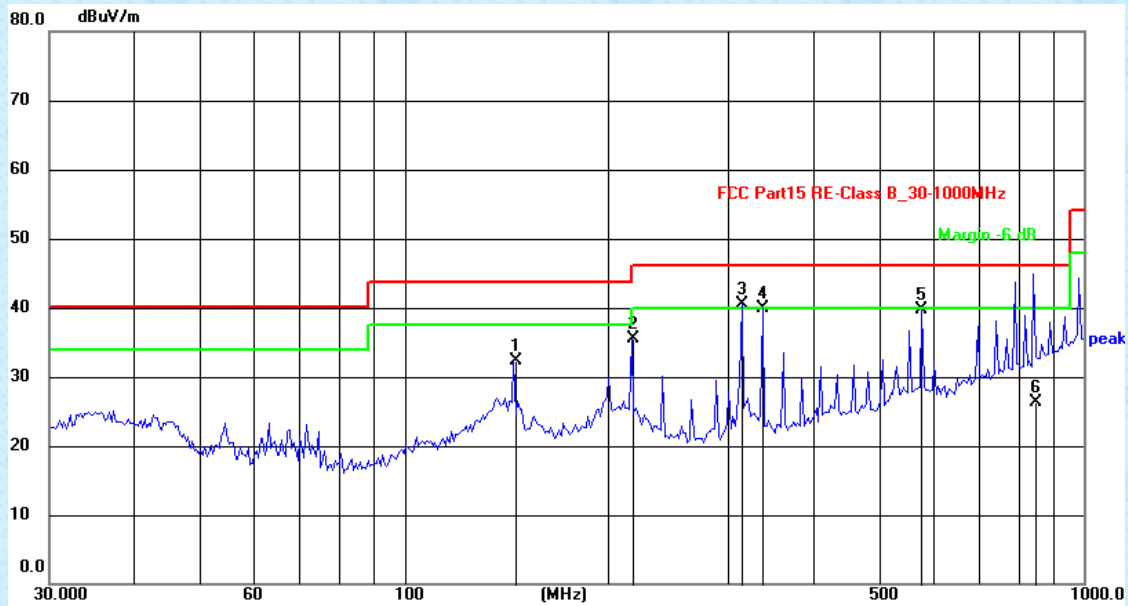
## ■ Below 1GHz

Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 216.1197        | 34.35          | -2.19         | 32.16          | 46.00          | -13.84      | QP       |
| 2   | 313.6482        | 44.91          | -4.44         | 40.47          | 46.00          | -5.53       | QP       |
| 3   | 336.4817        | 46.95          | -4.17         | 42.78          | 46.00          | -3.22       | QP       |
| 4   | 698.8035        | 40.40          | 1.71          | 42.11          | 46.00          | -3.89       | QP       |
| 5   | 793.0281        | 23.26          | 2.93          | 26.19          | 46.00          | -19.81      | QP       |
| 6   | 844.8028        | 24.26          | 3.39          | 27.65          | 46.00          | -18.35      | QP       |

**Vertical:**



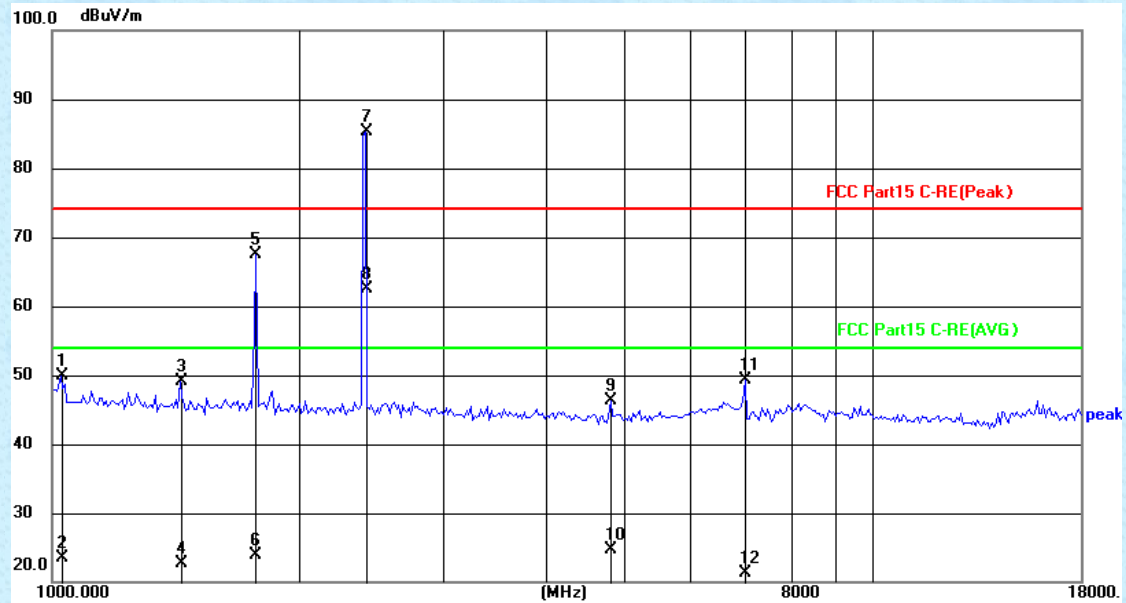
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 144.7899        | 40.41          | -8.01         | 32.40          | 43.50          | -11.10      | QP       |
| 2   | 216.1197        | 38.11          | -2.60         | 35.51          | 46.00          | -10.49      | QP       |
| 3   | 313.6482        | 45.04          | -4.44         | 40.60          | 46.00          | -5.40       | QP       |
| 4   | 336.4817        | 44.10          | -4.17         | 39.93          | 46.00          | -6.07       | QP       |
| 5   | 578.0359        | 39.41          | 0.31          | 39.72          | 46.00          | -6.28       | QP       |
| 6   | 844.8028        | 22.86          | 3.39          | 26.25          | 46.00          | -19.75      | QP       |



## Above 1GHz

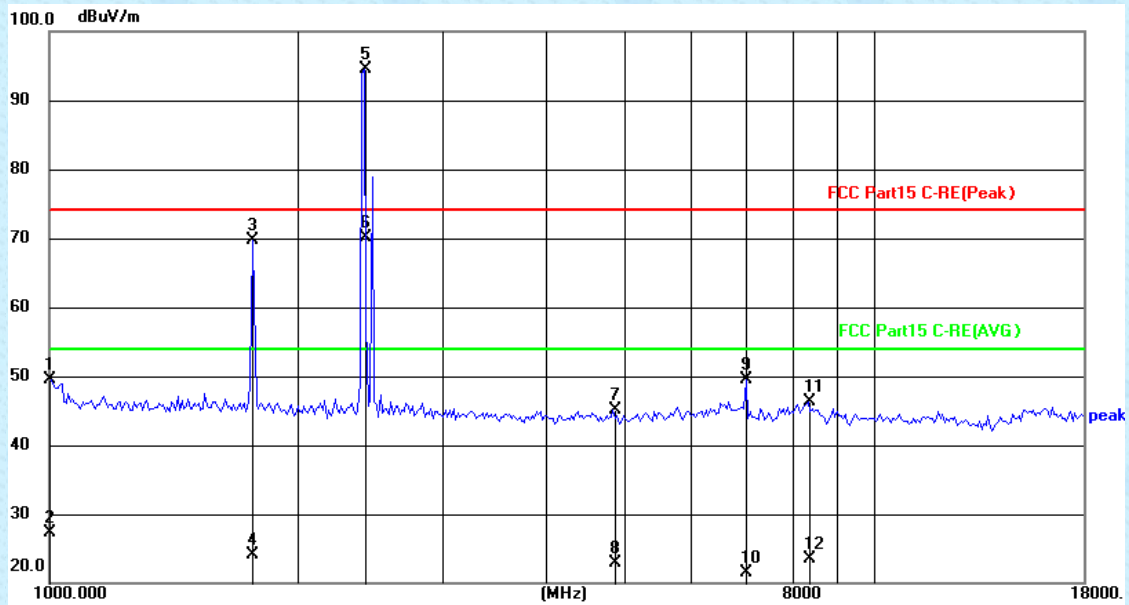
|            |         |               |        |
|------------|---------|---------------|--------|
| Test mode: | 802.11b | Test channel: | Lowest |
|------------|---------|---------------|--------|

### Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1023.440        | 48.09          | 1.76          | 49.85          | 74.00          | -24.15      | peak     |
| 2   | 1023.440        | 21.75          | 1.76          | 23.51          | 54.00          | -30.49      | AVG      |
| 3   | 1432.075        | 24.72          | 24.33         | 49.05          | 74.00          | -24.95      | peak     |
| 4   | 1432.075        | -1.59          | 24.33         | 22.74          | 54.00          | -31.26      | AVG      |
| 5   | 1774.361        | 42.42          | 25.02         | 67.44          | 74.00          | -6.56       | peak     |
| 6   | 1774.361        | -1.18          | 25.02         | 23.84          | 54.00          | -30.16      | AVG      |
| 7   | 2411.946        | 59.03          | 26.36         | 85.39          | 74.00          | 11.39       | peak     |
| 8   | 2411.946        | 36.14          | 26.36         | 62.50          | 54.00          | 8.50        | AVG      |
| 9   | 4805.307        | 16.16          | 30.07         | 46.23          | 74.00          | -27.77      | peak     |
| 10  | 4805.307        | -5.39          | 30.07         | 24.68          | 54.00          | -29.32      | AVG      |
| 11  | 7002.185        | 13.43          | 35.80         | 49.23          | 74.00          | -24.77      | peak     |
| 12  | 7002.185        | -14.45         | 35.80         | 21.35          | 54.00          | -32.65      | AVG      |

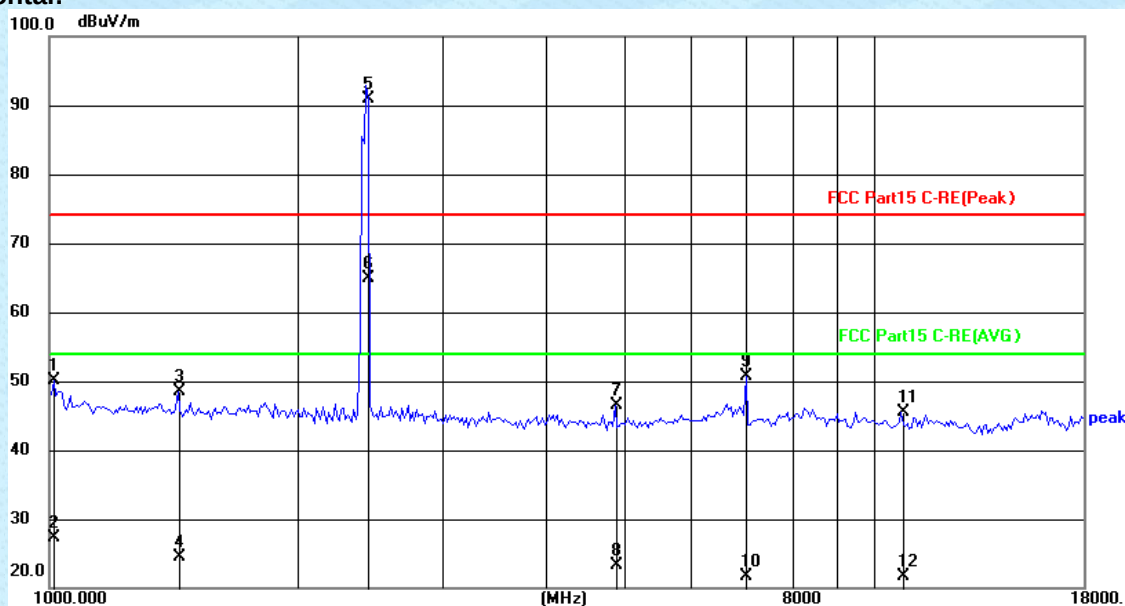
## Vertical:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1005.809        | 48.03          | 1.49          | 49.52          | 74.00          | -24.48      | peak     |
| 2   | 1005.809        | 25.75          | 1.49          | 27.24          | 54.00          | -26.76      | AVG      |
| 3   | 1764.113        | 44.79          | 24.99         | 69.78          | 74.00          | -4.22       | peak     |
| 4   | 1764.113        | -0.90          | 24.99         | 24.09          | 54.00          | -29.91      | AVG      |
| 5   | 2411.946        | 68.15          | 26.36         | 94.51          | 74.00          | 20.51       | peak     |
| 6   | 2411.946        | 43.75          | 26.36         | 70.11          | 54.00          | 16.11       | AVG      |
| 7   | 4833.222        | 14.90          | 30.13         | 45.03          | 74.00          | -28.97      | peak     |
| 8   | 4833.222        | -7.26          | 30.13         | 22.87          | 54.00          | -31.13      | AVG      |
| 9   | 7002.185        | 13.69          | 35.80         | 49.49          | 74.00          | -24.51      | peak     |
| 10  | 7002.185        | -14.39         | 35.80         | 21.41          | 54.00          | -32.59      | AVG      |
| 11  | 8331.072        | 9.51           | 36.73         | 46.24          | 74.00          | -27.76      | peak     |
| 12  | 8331.072        | -13.16         | 36.73         | 23.57          | 54.00          | -30.43      | AVG      |

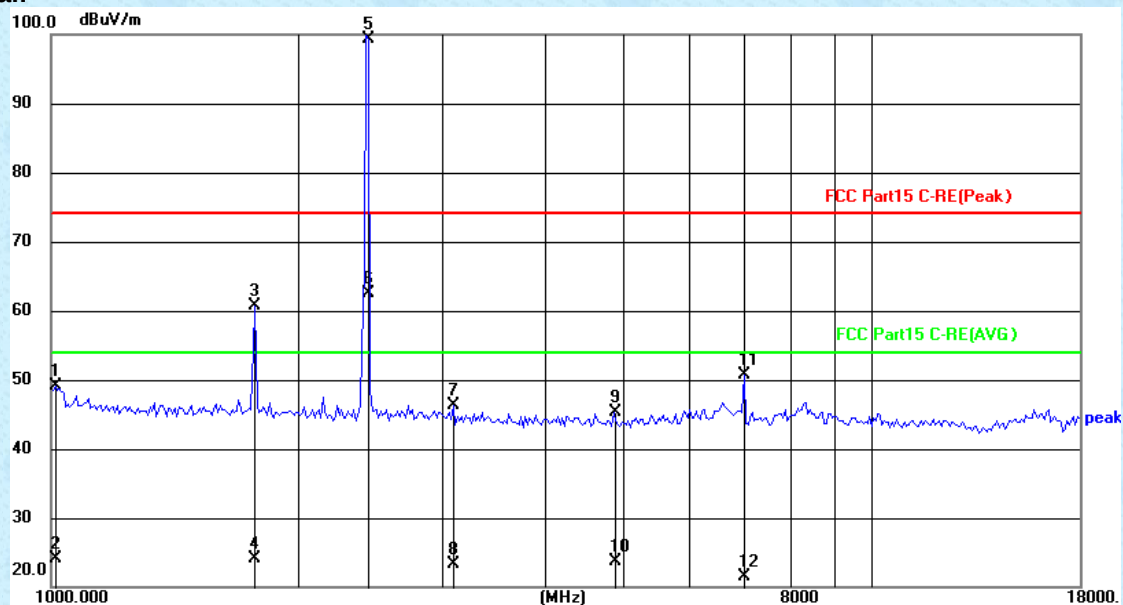
|            |         |               |        |
|------------|---------|---------------|--------|
| Test mode: | 802.11b | Test channel: | Middle |
|------------|---------|---------------|--------|

## Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1011.652        | 48.47          | 1.58          | 50.05          | 74.00          | -23.95      | peak     |
| 2   | 1011.652        | 25.76          | 1.58          | 27.34          | 54.00          | -26.66      | AVG      |
| 3   | 1432.075        | 24.10          | 24.33         | 48.43          | 74.00          | -25.57      | peak     |
| 4   | 1432.075        | 0.21           | 24.33         | 24.54          | 54.00          | -29.46      | AVG      |
| 5   | 2437.000        | 64.56          | 26.40         | 90.96          | 74.00          | 16.96       | peak     |
| 6   | 2437.000        | 38.47          | 26.40         | 64.87          | 54.00          | 10.87       | AVG      |
| 7   | 4861.299        | 16.23          | 30.19         | 46.42          | 74.00          | -27.58      | peak     |
| 8   | 4861.299        | -6.88          | 30.19         | 23.31          | 54.00          | -30.69      | AVG      |
| 9   | 7002.185        | 14.95          | 35.80         | 50.75          | 74.00          | -23.25      | peak     |
| 10  | 7002.185        | -14.06         | 35.80         | 21.74          | 54.00          | -32.26      | AVG      |
| 11  | 10811.895       | 5.66           | 39.77         | 45.43          | 74.00          | -28.57      | peak     |
| 12  | 10811.895       | -18.01         | 39.77         | 21.76          | 54.00          | -32.24      | AVG      |

Vertical:

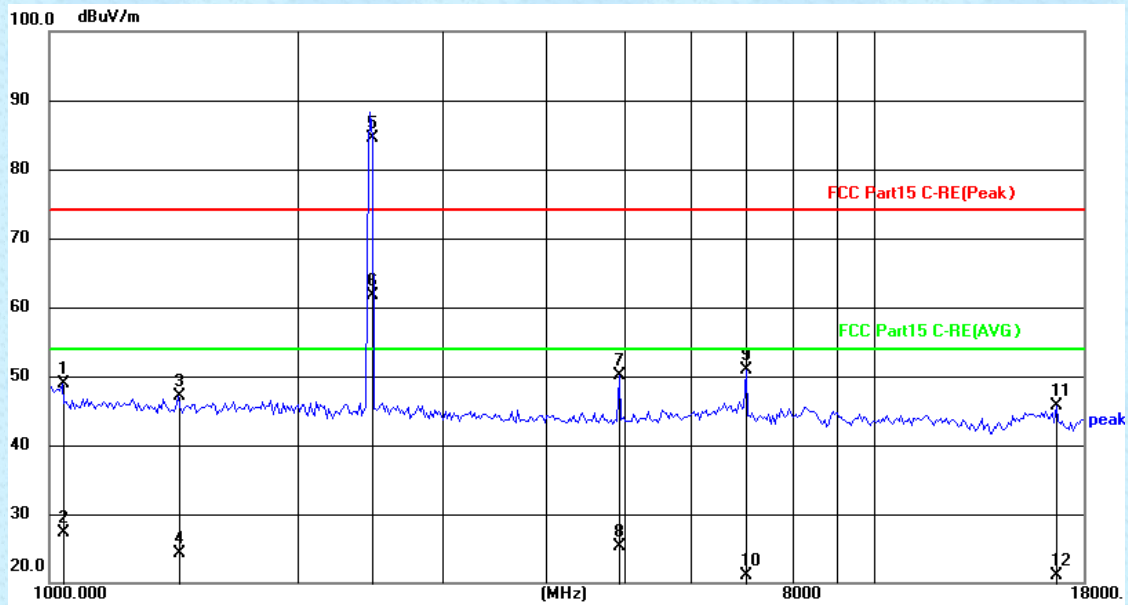


| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1011.652        | 47.56          | 1.58          | 49.14          | 74.00          | -24.86      | peak     |
| 2   | 1011.652        | 22.57          | 1.58          | 24.15          | 54.00          | -29.85      | AVG      |
| 3   | 1774.361        | 35.77          | 25.02         | 60.79          | 74.00          | -13.21      | peak     |
| 4   | 1774.361        | -0.93          | 25.02         | 24.09          | 54.00          | -29.91      | AVG      |
| 5   | 2437.000        | 72.95          | 26.40         | 99.35          | 74.00          | 25.35       | peak     |
| 6   | 2437.000        | 36.15          | 26.40         | 62.55          | 54.00          | 8.55        | AVG      |
| 7   | 3094.121        | 18.71          | 27.57         | 46.28          | 74.00          | -27.72      | peak     |
| 8   | 3094.121        | -4.36          | 27.57         | 23.21          | 54.00          | -30.79      | AVG      |
| 9   | 4861.299        | 15.06          | 30.19         | 45.25          | 74.00          | -28.75      | peak     |
| 10  | 4861.299        | -6.46          | 30.19         | 23.73          | 54.00          | -30.27      | AVG      |
| 11  | 7002.185        | 14.82          | 35.80         | 50.62          | 74.00          | -23.38      | peak     |
| 12  | 7002.185        | -14.38         | 35.80         | 21.42          | 54.00          | -32.58      | AVG      |



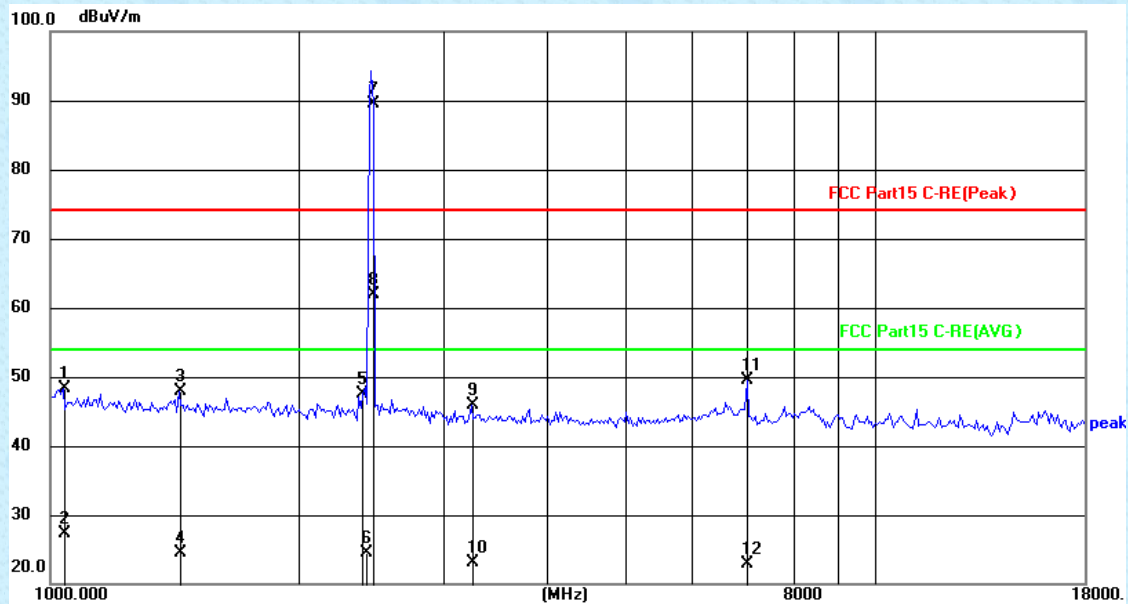
|            |         |               |         |
|------------|---------|---------------|---------|
| Test mode: | 802.11b | Test channel: | Highest |
|------------|---------|---------------|---------|

## Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1035.365        | 47.02          | 1.95          | 48.97          | 74.00          | -25.03      | peak     |
| 2   | 1035.365        | 25.26          | 1.95          | 27.21          | 54.00          | -26.79      | AVG      |
| 3   | 1432.075        | 22.87          | 24.33         | 47.20          | 74.00          | -26.80      | peak     |
| 4   | 1432.075        | -0.01          | 24.33         | 24.32          | 54.00          | -29.68      | AVG      |
| 5   | 2462.000        | 58.12          | 26.44         | 84.56          | 74.00          | 10.56       | peak     |
| 6   | 2462.000        | 35.30          | 26.44         | 61.74          | 54.00          | 7.74        | AVG      |
| 7   | 4917.942        | 19.69          | 30.32         | 50.01          | 74.00          | -23.99      | peak     |
| 8   | 4917.942        | -5.00          | 30.32         | 25.32          | 54.00          | -28.68      | AVG      |
| 9   | 7002.185        | 15.04          | 35.80         | 50.84          | 74.00          | -23.16      | peak     |
| 10  | 7002.185        | -14.76         | 35.80         | 21.04          | 54.00          | -32.96      | AVG      |
| 11  | 16694.369       | 7.26           | 38.38         | 45.64          | 74.00          | -28.36      | peak     |
| 12  | 16694.369       | -17.19         | 38.38         | 21.19          | 54.00          | -32.81      | AVG      |

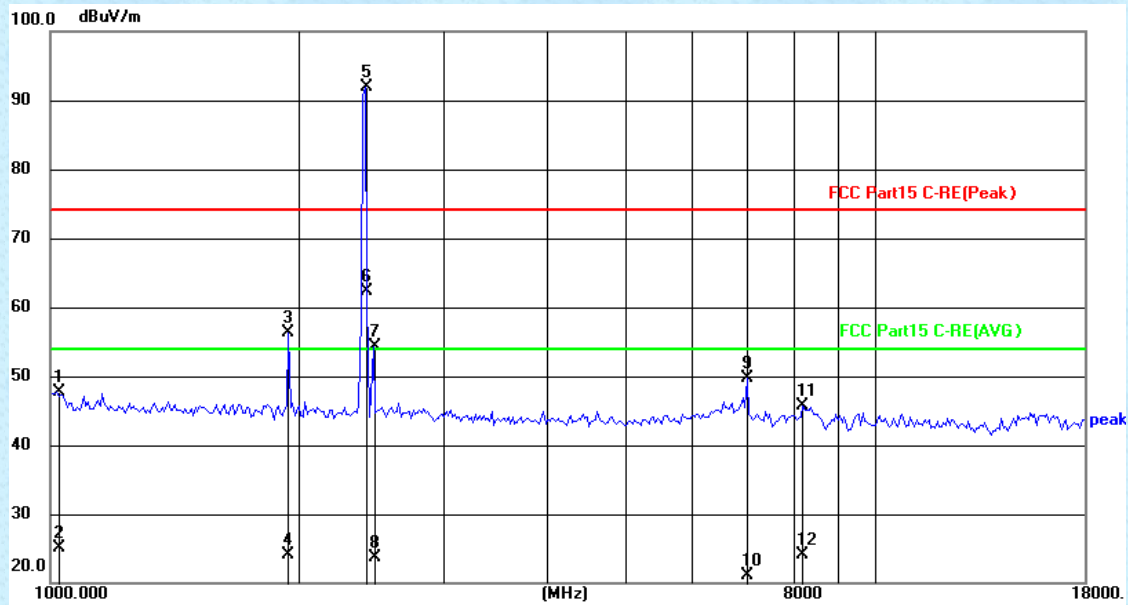
**Vertical:**



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1035.365        | 46.36          | 1.95          | 48.31          | 74.00          | -25.69      | peak     |
| 2   | 1035.365        | 25.31          | 1.95          | 27.26          | 54.00          | -26.74      | AVG      |
| 3   | 1432.075        | 23.65          | 24.33         | 47.98          | 74.00          | -26.02      | peak     |
| 4   | 1432.075        | 0.11           | 24.33         | 24.44          | 54.00          | -29.56      | AVG      |
| 5   | 2398.015        | 21.21          | 26.34         | 47.55          | 74.00          | -26.45      | peak     |
| 6   | 2411.946        | -1.82          | 26.36         | 24.54          | 54.00          | -29.46      | AVG      |
| 7   | 2462.000        | 62.98          | 26.44         | 89.42          | 74.00          | 15.42       | peak     |
| 8   | 2462.000        | 35.40          | 26.44         | 61.84          | 54.00          | 7.84        | AVG      |
| 9   | 3240.873        | 18.03          | 27.83         | 45.86          | 74.00          | -28.14      | peak     |
| 10  | 3240.873        | -4.82          | 27.83         | 23.01          | 54.00          | -30.99      | AVG      |
| 11  | 7002.185        | 13.63          | 35.80         | 49.43          | 74.00          | -24.57      | peak     |
| 12  | 7002.185        | -12.81         | 35.80         | 22.99          | 54.00          | -31.01      | AVG      |

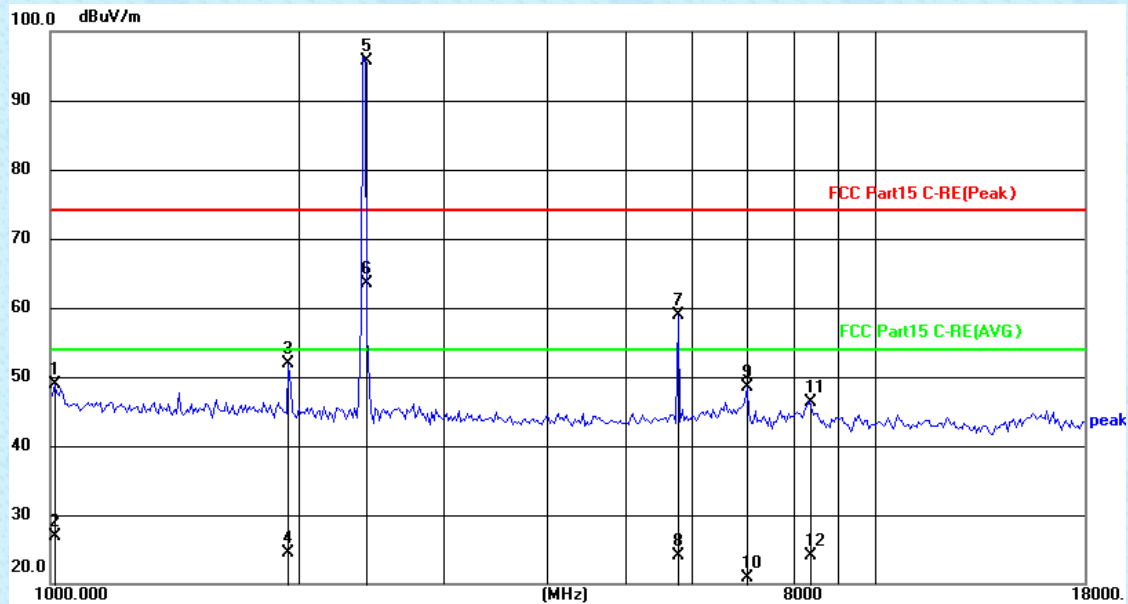
|            |         |               |        |
|------------|---------|---------------|--------|
| Test mode: | 802.11g | Test channel: | lowest |
|------------|---------|---------------|--------|

## Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1017.529        | 46.13          | 1.67          | 47.80          | 74.00          | -26.20      | peak     |
| 2   | 1017.529        | 23.46          | 1.67          | 25.13          | 54.00          | -28.87      | AVG      |
| 3   | 1946.665        | 30.70          | 25.54         | 56.24          | 74.00          | -17.76      | peak     |
| 4   | 1946.665        | -1.45          | 25.54         | 24.09          | 54.00          | -29.91      | AVG      |
| 5   | 2411.946        | 65.47          | 26.36         | 91.83          | 74.00          | 17.83       | peak     |
| 6   | 2411.946        | 36.01          | 26.36         | 62.37          | 54.00          | 8.37        | AVG      |
| 7   | 2468.482        | 27.86          | 26.45         | 54.31          | 74.00          | -19.69      | peak     |
| 8   | 2468.482        | -2.76          | 26.45         | 23.69          | 54.00          | -30.31      | AVG      |
| 9   | 7002.185        | 13.83          | 35.80         | 49.63          | 74.00          | -24.37      | peak     |
| 10  | 7002.185        | -14.71         | 35.80         | 21.09          | 54.00          | -32.91      | AVG      |
| 11  | 8187.553        | 9.00           | 36.72         | 45.72          | 74.00          | -28.28      | peak     |
| 12  | 8187.553        | -12.62         | 36.72         | 24.10          | 54.00          | -29.90      | AVG      |

**Vertical:**

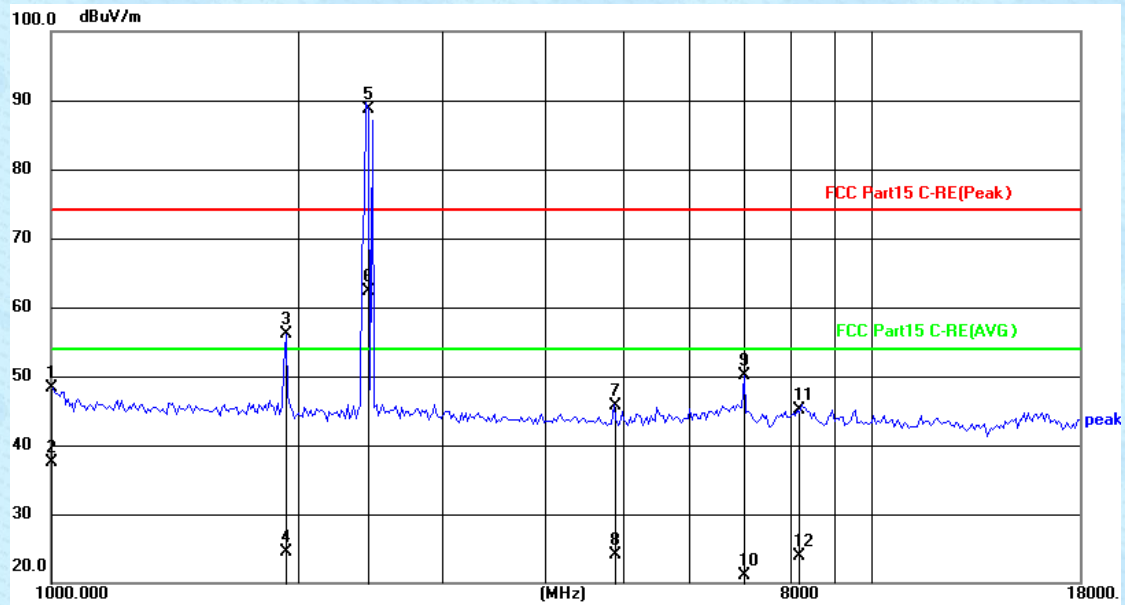


| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1011.652        | 47.37          | 1.58          | 48.95          | 74.00          | -25.05      | peak     |
| 2   | 1011.652        | 25.40          | 1.58          | 26.98          | 54.00          | -27.02      | AVG      |
| 3   | 1946.665        | 26.39          | 25.54         | 51.93          | 74.00          | -22.07      | peak     |
| 4   | 1946.665        | -1.10          | 25.54         | 24.44          | 54.00          | -29.56      | AVG      |
| 5   | 2411.946        | 69.30          | 26.36         | 95.66          | 74.00          | 21.66       | peak     |
| 6   | 2411.946        | 37.23          | 26.36         | 63.59          | 54.00          | 9.59        | AVG      |
| 7   | 5783.884        | 26.81          | 32.05         | 58.86          | 74.00          | -15.14      | peak     |
| 8   | 5783.884        | -7.90          | 32.05         | 24.15          | 54.00          | -29.85      | AVG      |
| 9   | 7002.185        | 12.76          | 35.80         | 48.56          | 74.00          | -25.44      | peak     |
| 10  | 7002.185        | -14.86         | 35.80         | 20.94          | 54.00          | -33.06      | AVG      |
| 11  | 8331.072        | 9.67           | 36.73         | 46.40          | 74.00          | -27.60      | peak     |
| 12  | 8331.072        | -12.59         | 36.73         | 24.14          | 54.00          | -29.86      | AVG      |



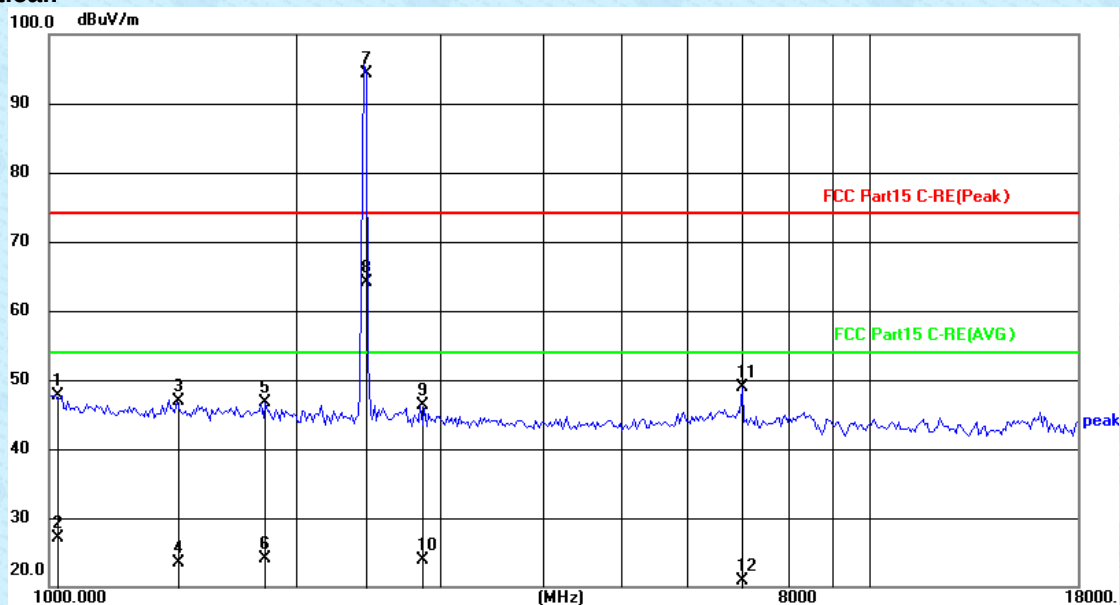
|            |         |               |        |
|------------|---------|---------------|--------|
| Test mode: | 802.11g | Test channel: | Middle |
|------------|---------|---------------|--------|

## Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1005.809        | 46.78          | 1.49          | 48.27          | 74.00          | -25.73      | peak     |
| 2   | 1005.809        | 36.07          | 1.49          | 37.56          | 54.00          | -16.44      | AVG      |
| 3   | 1935.422        | 30.66          | 25.51         | 56.17          | 74.00          | -17.83      | peak     |
| 4   | 1935.422        | -0.94          | 25.51         | 24.57          | 54.00          | -29.43      | AVG      |
| 5   | 2437.000        | 62.35          | 26.40         | 88.75          | 74.00          | 14.75       | peak     |
| 6   | 2437.000        | 35.99          | 26.40         | 62.39          | 54.00          | 8.39        | AVG      |
| 7   | 4861.299        | 15.61          | 30.19         | 45.80          | 74.00          | -28.20      | peak     |
| 8   | 4861.299        | -6.09          | 30.19         | 24.10          | 54.00          | -29.90      | AVG      |
| 9   | 7002.185        | 14.37          | 35.80         | 50.17          | 74.00          | -23.83      | peak     |
| 10  | 7002.185        | -14.79         | 35.80         | 21.01          | 54.00          | -32.99      | AVG      |
| 11  | 8140.266        | 8.43           | 36.71         | 45.14          | 74.00          | -28.86      | peak     |
| 12  | 8140.266        | -12.73         | 36.71         | 23.98          | 54.00          | -30.02      | AVG      |

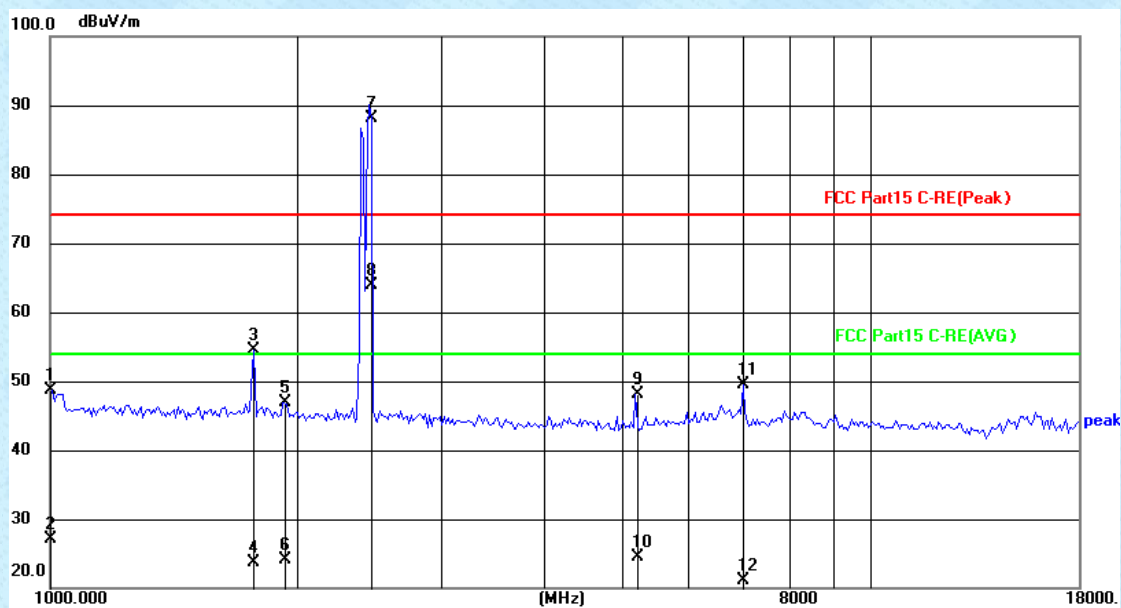
**Vertical:**



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1017.529        | 46.13          | 1.67          | 47.80          | 74.00          | -26.20      | peak     |
| 2   | 1017.529        | 25.42          | 1.67          | 27.09          | 54.00          | -26.91      | AVG      |
| 3   | 1432.075        | 22.54          | 24.33         | 46.87          | 74.00          | -27.13      | peak     |
| 4   | 1432.075        | -0.77          | 24.33         | 23.56          | 54.00          | -30.44      | AVG      |
| 5   | 1837.111        | 21.42          | 25.21         | 46.63          | 74.00          | -27.37      | peak     |
| 6   | 1837.111        | -1.09          | 25.21         | 24.12          | 54.00          | -29.88      | AVG      |
| 7   | 2437.000        | 67.99          | 26.40         | 94.39          | 74.00          | 20.39       | peak     |
| 8   | 2437.000        | 37.78          | 26.40         | 64.18          | 54.00          | 10.18       | AVG      |
| 9   | 2836.637        | 19.25          | 27.11         | 46.36          | 74.00          | -27.64      | peak     |
| 10  | 2836.637        | -3.13          | 27.11         | 23.98          | 54.00          | -30.02      | AVG      |
| 11  | 7002.185        | 13.03          | 35.80         | 48.83          | 74.00          | -25.17      | peak     |
| 12  | 7002.185        | -14.82         | 35.80         | 20.98          | 54.00          | -33.02      | AVG      |

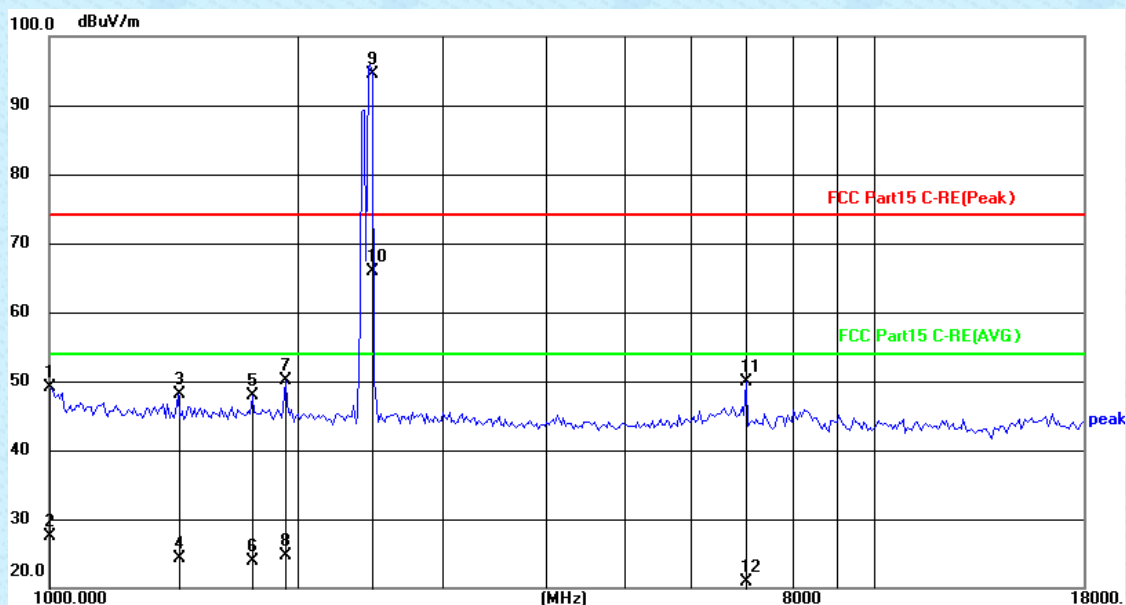
|            |         |               |         |
|------------|---------|---------------|---------|
| Test mode: | 802.11g | Test channel: | Highest |
|------------|---------|---------------|---------|

Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1005.809        | 47.31          | 1.49          | 48.80          | 74.00          | -25.20      | peak     |
| 2   | 1005.809        | 25.62          | 1.49          | 27.11          | 54.00          | -26.89      | AVG      |
| 3   | 1774.361        | 29.50          | 25.02         | 54.52          | 74.00          | -19.48      | peak     |
| 4   | 1774.361        | -1.23          | 25.02         | 23.79          | 54.00          | -30.21      | AVG      |
| 5   | 1924.244        | 21.46          | 25.47         | 46.93          | 74.00          | -27.07      | peak     |
| 6   | 1924.244        | -1.34          | 25.47         | 24.13          | 54.00          | -29.87      | AVG      |
| 7   | 2462.000        | 61.72          | 26.44         | 88.16          | 74.00          | 14.16       | peak     |
| 8   | 2462.000        | 37.40          | 26.44         | 63.84          | 54.00          | 9.84        | AVG      |
| 9   | 5181.120        | 17.27          | 30.75         | 48.02          | 74.00          | -25.98      | peak     |
| 10  | 5181.120        | -6.23          | 30.75         | 24.52          | 54.00          | -29.48      | AVG      |
| 11  | 7002.185        | 13.71          | 35.80         | 49.51          | 74.00          | -24.49      | peak     |
| 12  | 7002.185        | -14.77         | 35.80         | 21.03          | 54.00          | -32.97      | AVG      |

## Vertical:

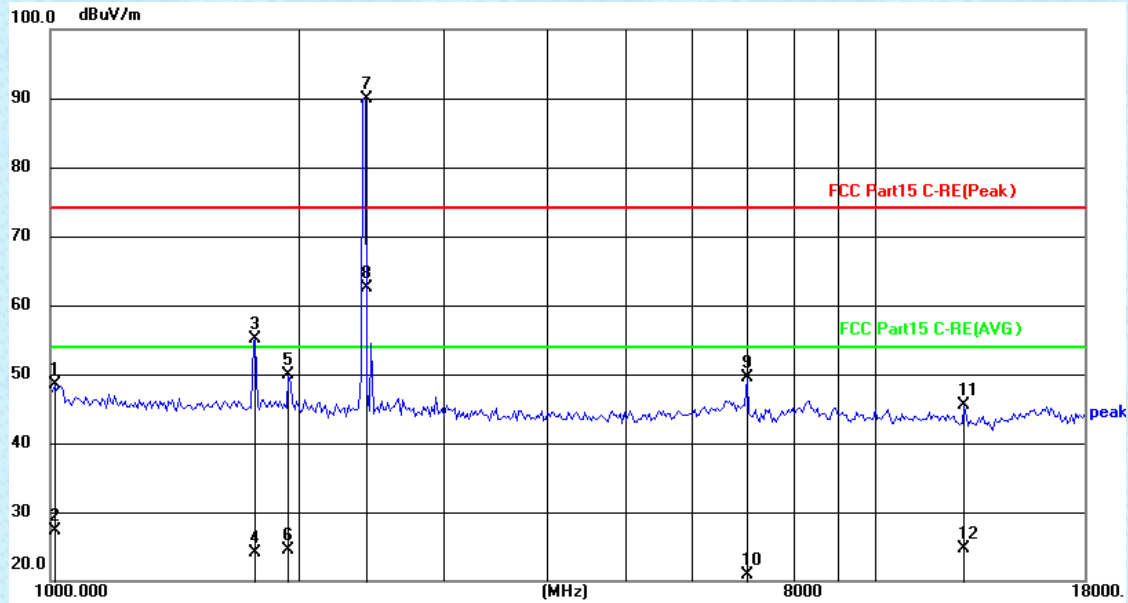


| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1005.809        | 47.64          | 1.49          | 49.13          | 74.00          | -24.87      | peak     |
| 2   | 1005.809        | 25.95          | 1.49          | 27.44          | 54.00          | -26.56      | AVG      |
| 3   | 1432.075        | 23.77          | 24.33         | 48.10          | 74.00          | -25.90      | peak     |
| 4   | 1432.075        | -0.04          | 24.33         | 24.29          | 54.00          | -29.71      | AVG      |
| 5   | 1764.113        | 22.90          | 24.99         | 47.89          | 74.00          | -26.11      | peak     |
| 6   | 1764.113        | -1.18          | 24.99         | 23.81          | 54.00          | -30.19      | AVG      |
| 7   | 1935.422        | 24.54          | 25.51         | 50.05          | 74.00          | -23.95      | peak     |
| 8   | 1935.422        | -0.75          | 25.51         | 24.76          | 54.00          | -29.24      | AVG      |
| 9   | 2462.000        | 68.14          | 26.44         | 94.58          | 74.00          | 20.58       | peak     |
| 10  | 2462.000        | 39.42          | 26.44         | 65.86          | 54.00          | 11.86       | AVG      |
| 11  | 7002.185        | 14.18          | 35.80         | 49.98          | 74.00          | -24.02      | peak     |
| 12  | 7002.185        | -14.81         | 35.80         | 20.99          | 54.00          | -33.01      | AVG      |



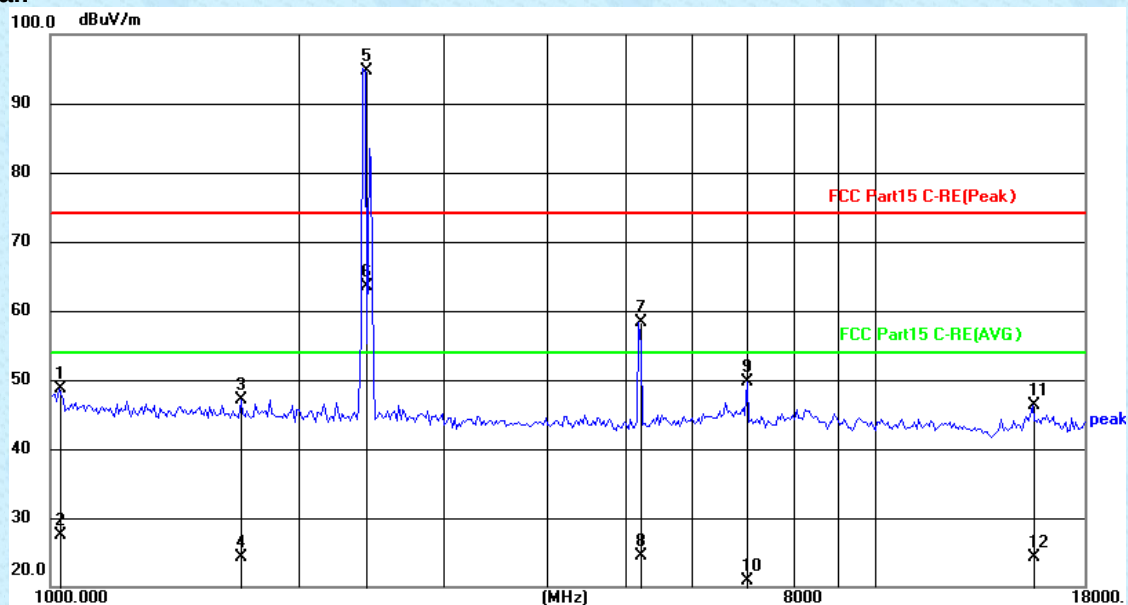
|            |               |               |        |
|------------|---------------|---------------|--------|
| Test mode: | 802.11n(HT20) | Test channel: | Lowest |
|------------|---------------|---------------|--------|

## Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1011.652        | 46.92          | 1.58          | 48.50          | 74.00          | -25.50      | peak     |
| 2   | 1011.652        | 25.78          | 1.58          | 27.36          | 54.00          | -26.64      | AVG      |
| 3   | 1774.361        | 30.04          | 25.02         | 55.06          | 74.00          | -18.94      | peak     |
| 4   | 1774.361        | -0.91          | 25.02         | 24.11          | 54.00          | -29.89      | AVG      |
| 5   | 1946.665        | 24.33          | 25.54         | 49.87          | 74.00          | -24.13      | peak     |
| 6   | 1946.665        | -0.95          | 25.54         | 24.59          | 54.00          | -29.41      | AVG      |
| 7   | 2411.946        | 63.51          | 26.36         | 89.87          | 74.00          | 15.87       | peak     |
| 8   | 2411.946        | 36.05          | 26.36         | 62.41          | 54.00          | 8.41        | AVG      |
| 9   | 7002.185        | 13.73          | 35.80         | 49.53          | 74.00          | -24.47      | peak     |
| 10  | 7002.185        | -14.83         | 35.80         | 20.97          | 54.00          | -33.03      | AVG      |
| 11  | 12863.794       | 5.80           | 39.72         | 45.52          | 74.00          | -28.48      | peak     |
| 12  | 12863.794       | -14.96         | 39.72         | 24.76          | 54.00          | -29.24      | AVG      |

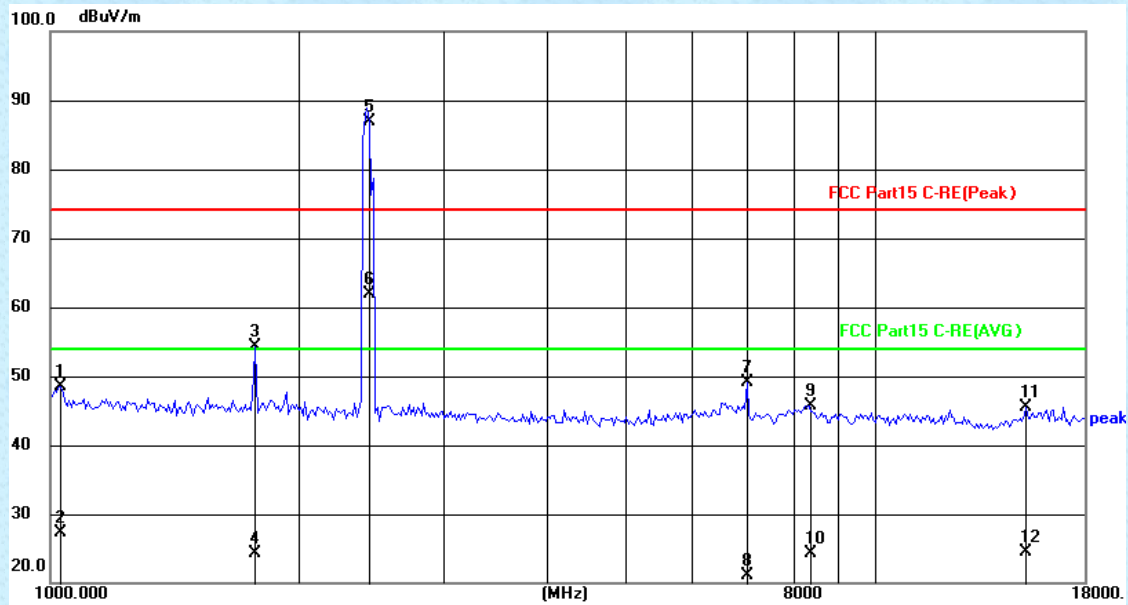
**Vertical:**



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1023.440        | 46.87          | 1.76          | 48.63          | 74.00          | -25.37      | peak     |
| 2   | 1023.440        | 25.69          | 1.76          | 27.45          | 54.00          | -26.55      | AVG      |
| 3   | 1703.856        | 22.35          | 24.81         | 47.16          | 74.00          | -26.84      | peak     |
| 4   | 1703.856        | -0.46          | 24.81         | 24.35          | 54.00          | -29.65      | AVG      |
| 5   | 2411.946        | 68.44          | 26.36         | 94.80          | 74.00          | 20.80       | peak     |
| 6   | 2411.946        | 37.11          | 26.36         | 63.47          | 54.00          | 9.47        | AVG      |
| 7   | 5181.120        | 27.61          | 30.75         | 58.36          | 74.00          | -15.64      | peak     |
| 8   | 5181.120        | -6.21          | 30.75         | 24.54          | 54.00          | -29.46      | AVG      |
| 9   | 7002.185        | 13.95          | 35.80         | 49.75          | 74.00          | -24.25      | peak     |
| 10  | 7002.185        | -14.82         | 35.80         | 20.98          | 54.00          | -33.02      | AVG      |
| 11  | 15573.388       | 8.23           | 38.01         | 46.24          | 74.00          | -27.76      | peak     |
| 12  | 15573.388       | -13.76         | 38.01         | 24.25          | 54.00          | -29.75      | AVG      |

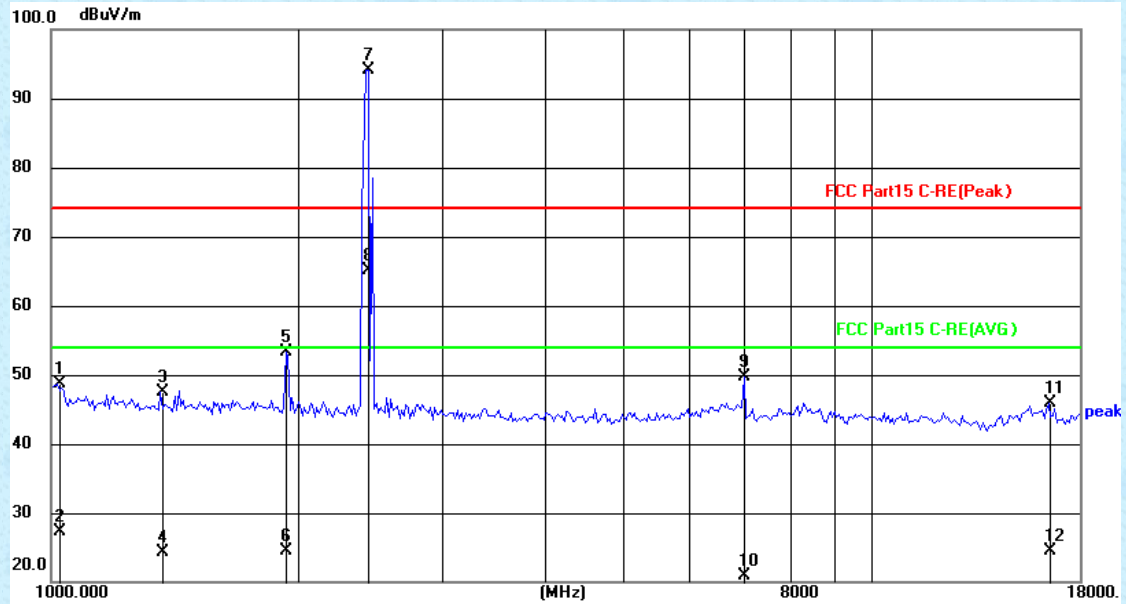
|            |               |               |        |
|------------|---------------|---------------|--------|
| Test mode: | 802.11n(HT20) | Test channel: | Middle |
|------------|---------------|---------------|--------|

## Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1029.385        | 46.67          | 1.86          | 48.53          | 74.00          | -25.47      | peak     |
| 2   | 1029.385        | 25.38          | 1.86          | 27.24          | 54.00          | -26.76      | AVG      |
| 3   | 1774.361        | 29.33          | 25.02         | 54.35          | 74.00          | -19.65      | peak     |
| 4   | 1774.361        | -0.80          | 25.02         | 24.22          | 54.00          | -29.78      | AVG      |
| 5   | 2437.000        | 60.48          | 26.40         | 86.88          | 74.00          | 12.88       | peak     |
| 6   | 2437.000        | 35.43          | 26.40         | 61.83          | 54.00          | 7.83        | AVG      |
| 7   | 7002.185        | 13.37          | 35.80         | 49.17          | 74.00          | -24.83      | peak     |
| 8   | 7002.185        | -14.77         | 35.80         | 21.03          | 54.00          | -32.97      | AVG      |
| 9   | 8331.072        | 8.98           | 36.73         | 45.71          | 74.00          | -28.29      | peak     |
| 10  | 8331.072        | -12.36         | 36.73         | 24.37          | 54.00          | -29.63      | AVG      |
| 11  | 15305.107       | 7.52           | 37.96         | 45.48          | 74.00          | -28.52      | peak     |
| 12  | 15305.107       | -13.40         | 37.96         | 24.56          | 54.00          | -29.44      | AVG      |

## Vertical:

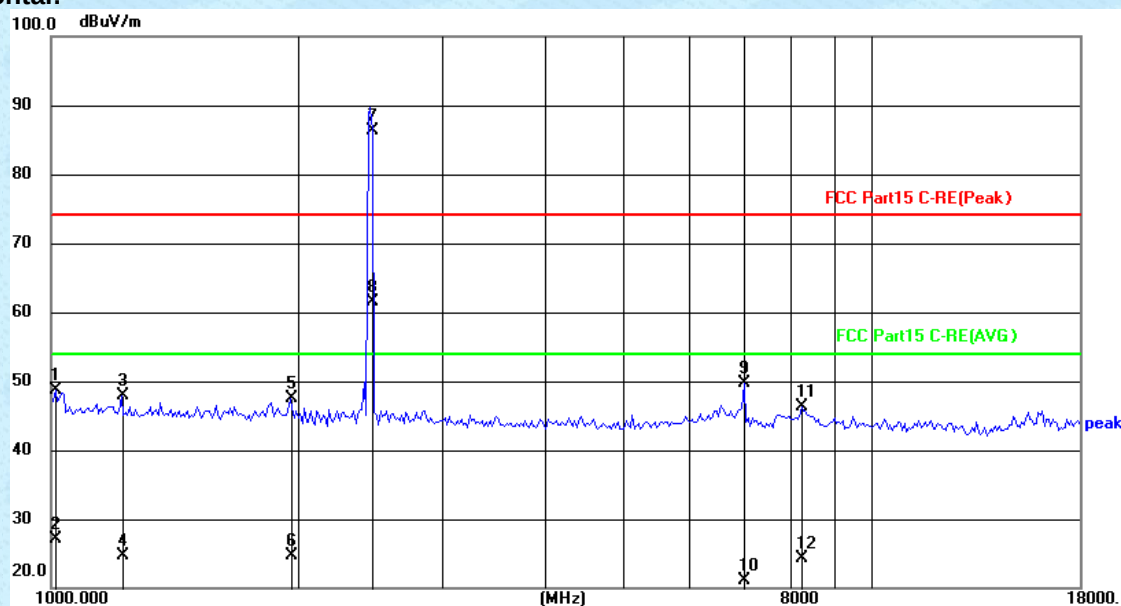


| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1017.529        | 47.01          | 1.67          | 48.68          | 74.00          | -25.32      | peak     |
| 2   | 1017.529        | 25.71          | 1.67          | 27.38          | 54.00          | -26.62      | AVG      |
| 3   | 1359.332        | 23.30          | 24.26         | 47.56          | 74.00          | -26.44      | peak     |
| 4   | 1359.332        | 0.07           | 24.26         | 24.33          | 54.00          | -29.67      | AVG      |
| 5   | 1935.422        | 27.77          | 25.51         | 53.28          | 74.00          | -20.72      | peak     |
| 6   | 1935.422        | -1.06          | 25.51         | 24.45          | 54.00          | -29.55      | AVG      |
| 7   | 2437.000        | 67.74          | 26.40         | 94.14          | 74.00          | 20.14       | peak     |
| 8   | 2437.000        | 38.77          | 26.40         | 65.17          | 54.00          | 11.17       | AVG      |
| 9   | 7002.185        | 13.82          | 35.80         | 49.62          | 74.00          | -24.38      | peak     |
| 10  | 7002.185        | -14.83         | 35.80         | 20.97          | 54.00          | -33.03      | AVG      |
| 11  | 16502.087       | 7.59           | 38.30         | 45.89          | 74.00          | -28.11      | peak     |
| 12  | 16502.087       | -13.74         | 38.30         | 24.56          | 54.00          | -29.44      | AVG      |



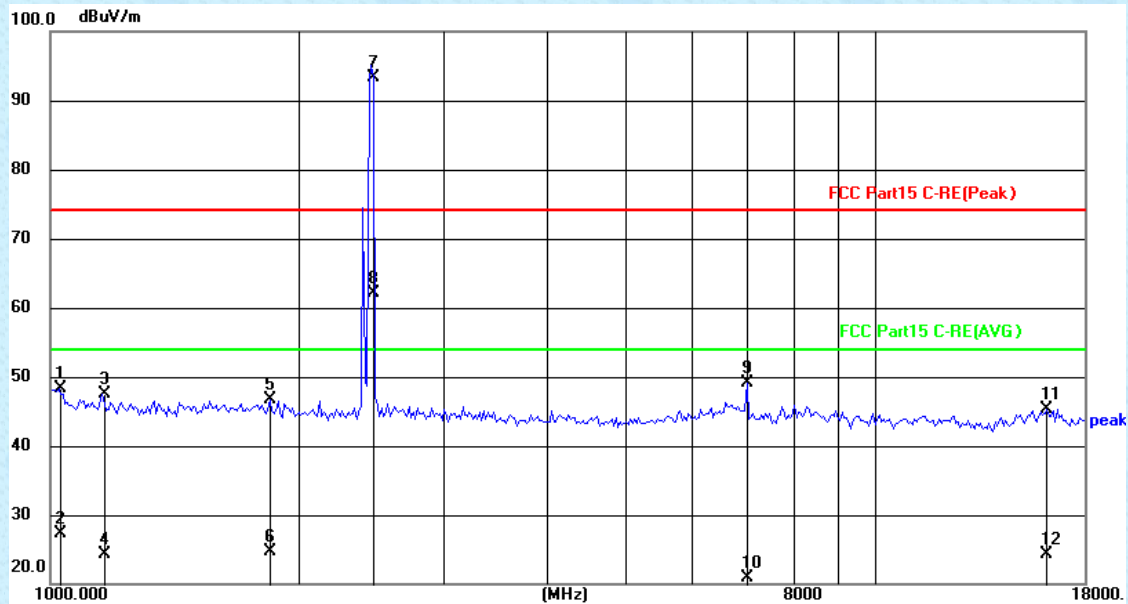
|            |               |               |         |
|------------|---------------|---------------|---------|
| Test mode: | 802.11n(HT20) | Test channel: | Highest |
|------------|---------------|---------------|---------|

## Horizontal:



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1011.652        | 47.05          | 1.58          | 48.63          | 74.00          | -25.37      | peak     |
| 2   | 1011.652        | 25.53          | 1.58          | 27.11          | 54.00          | -26.89      | AVG      |
| 3   | 1217.670        | 23.75          | 24.12         | 47.87          | 74.00          | -26.13      | peak     |
| 4   | 1217.670        | 0.51           | 24.12         | 24.63          | 54.00          | -29.37      | AVG      |
| 5   | 1957.974        | 21.93          | 25.57         | 47.50          | 74.00          | -26.50      | peak     |
| 6   | 1957.974        | -0.82          | 25.57         | 24.75          | 54.00          | -29.25      | AVG      |
| 7   | 2462.000        | 59.96          | 26.44         | 86.40          | 74.00          | 12.40       | peak     |
| 8   | 2462.000        | 35.14          | 26.44         | 61.58          | 54.00          | 7.58        | AVG      |
| 9   | 7002.185        | 13.90          | 35.80         | 49.70          | 74.00          | -24.30      | peak     |
| 10  | 7002.185        | -14.62         | 35.80         | 21.18          | 54.00          | -32.82      | AVG      |
| 11  | 8235.116        | 9.58           | 36.72         | 46.30          | 74.00          | -27.70      | peak     |
| 12  | 8235.116        | -12.37         | 36.72         | 24.35          | 54.00          | -29.65      | AVG      |

**Vertical:**



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 1023.440        | 46.45          | 1.76          | 48.21          | 74.00          | -25.79      | peak     |
| 2   | 1023.440        | 25.56          | 1.76          | 27.32          | 54.00          | -26.68      | AVG      |
| 3   | 1155.818        | 23.45          | 23.97         | 47.42          | 74.00          | -26.58      | peak     |
| 4   | 1155.818        | 0.26           | 23.97         | 24.23          | 54.00          | -29.77      | AVG      |
| 5   | 1847.783        | 21.37          | 25.24         | 46.61          | 74.00          | -27.39      | peak     |
| 6   | 1847.783        | -0.59          | 25.24         | 24.65          | 54.00          | -29.35      | AVG      |
| 7   | 2462.000        | 66.86          | 26.44         | 93.30          | 74.00          | 19.30       | peak     |
| 8   | 2462.000        | 35.74          | 26.44         | 62.18          | 54.00          | 8.18        | AVG      |
| 9   | 7002.185        | 13.31          | 35.80         | 49.11          | 74.00          | -24.89      | peak     |
| 10  | 7002.185        | -14.81         | 35.80         | 20.99          | 54.00          | -33.01      | AVG      |
| 11  | 16217.807       | 7.07           | 38.19         | 45.26          | 74.00          | -28.74      | peak     |
| 12  | 16217.807       | -13.82         | 38.19         | 24.37          | 54.00          | -29.63      | AVG      |

**Remark:**

- 1 Final Level = Receiver Read level + Antenna Factor
- 2 “\*”, means this data is the too weak instrument of signal is unable to test.

## 8 Test Setup Photo

Reference to the **appendix I** for details.

## 9 EUT Constructional Details

Reference to the **appendix II** and **appendix III** for details.

-----End-----