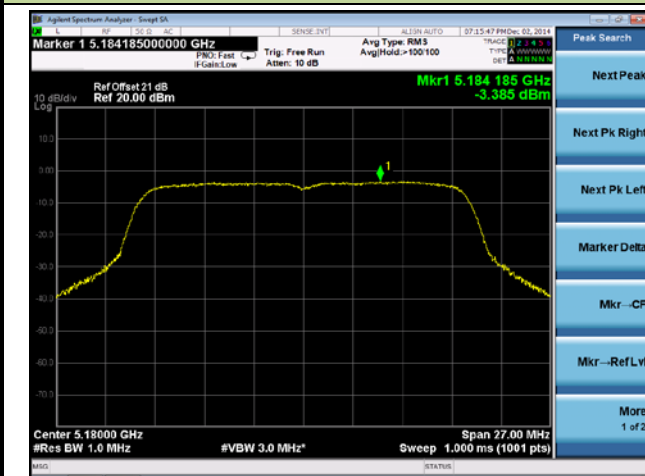
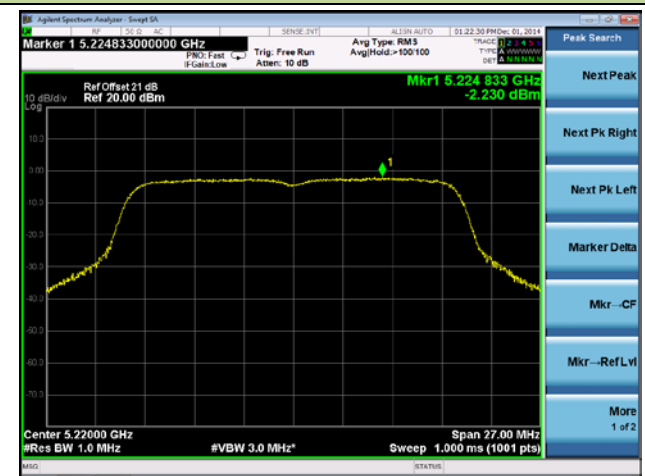


### 802.11n-HT20 Power Spectral Density - Ant 1 / Ant 0 + 1

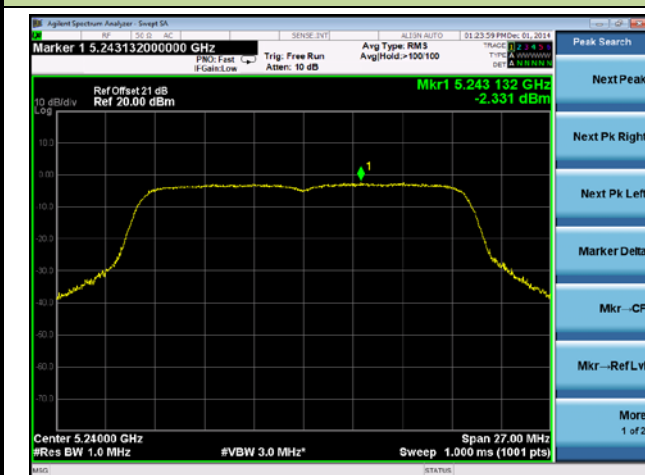
**Channel 36 (5180MHz)**



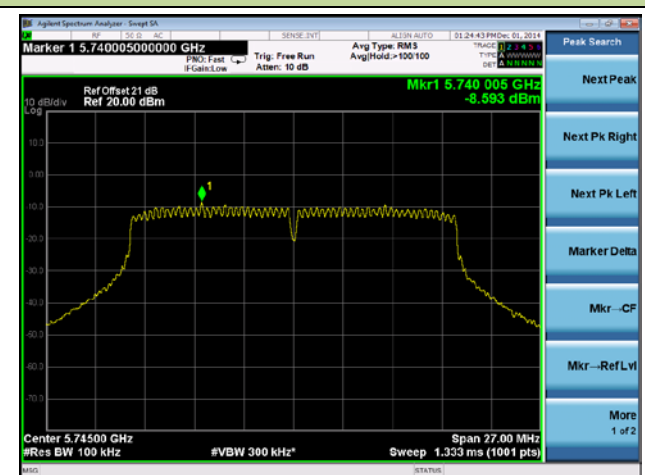
**Channel 44 (5220MHz)**



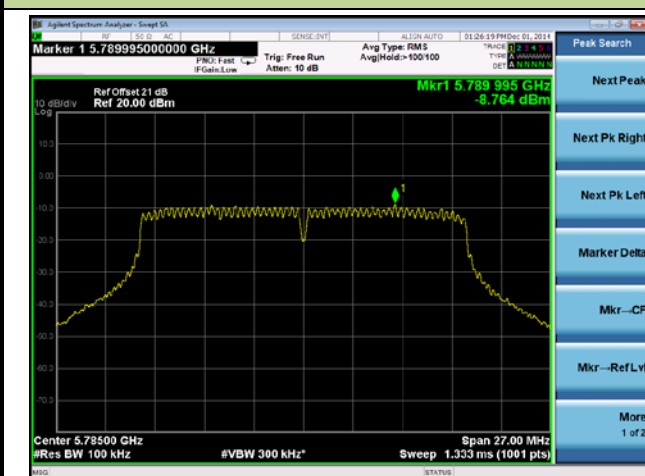
**Channel 48 (5240MHz)**



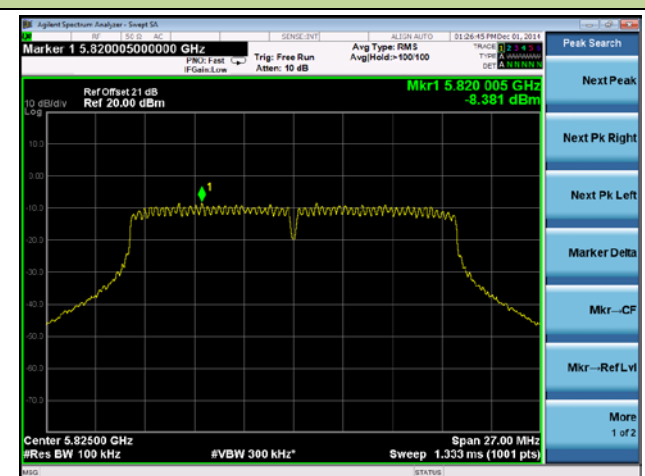
**Channel 149 (5745MHz)**



**Channel 157 (5785MHz)**

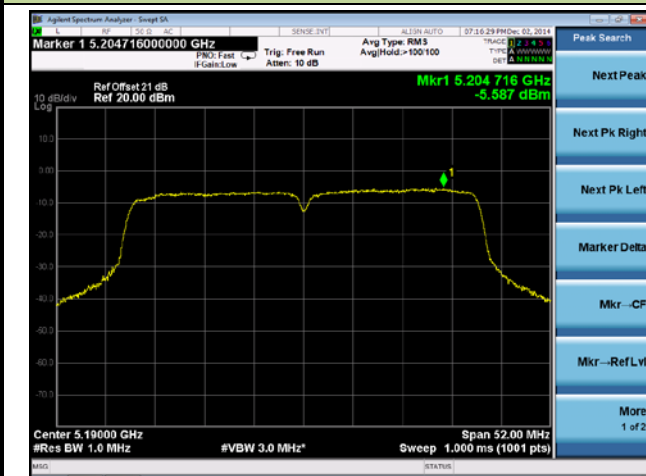


**Channel 165 (5825MHz)**

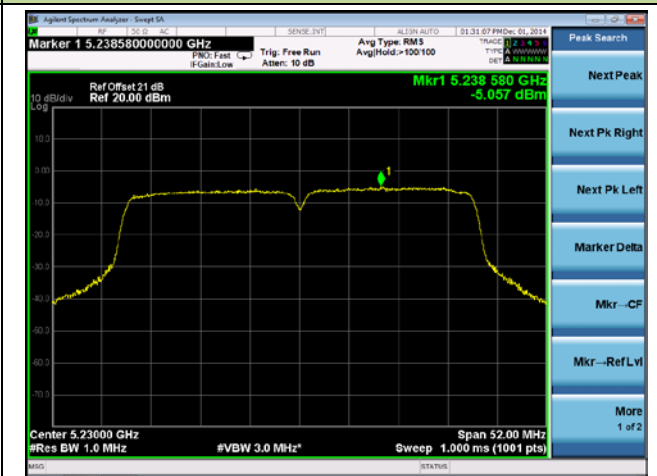


### 802.11n-HT40 Power Spectral Density - Ant 1 / Ant 0 + 1

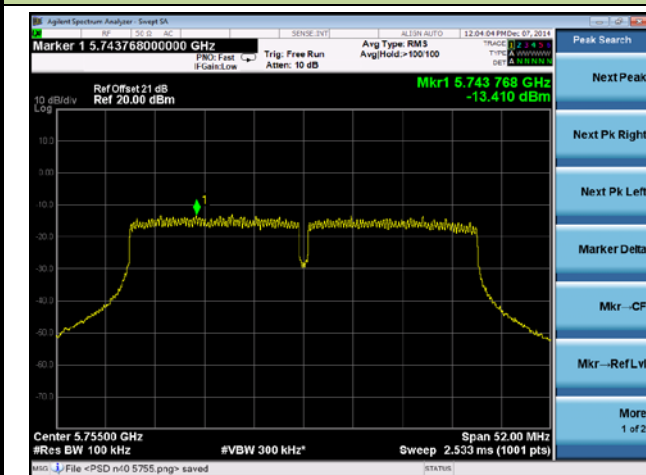
**Channel 38 (5190MHz)**



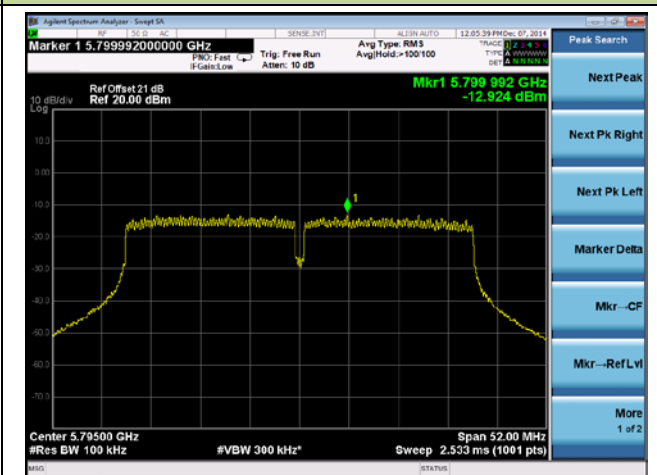
**Channel 46 (5230MHz)**



**Channel 151 (5755MHz)**



**Channel 159 (5795MHz)**



## 7.7. Frequency Stability Measurement

### 7.7.1. Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### 7.7.2. Test Procedure Used

#### Frequency Stability Under Temperature Variations:

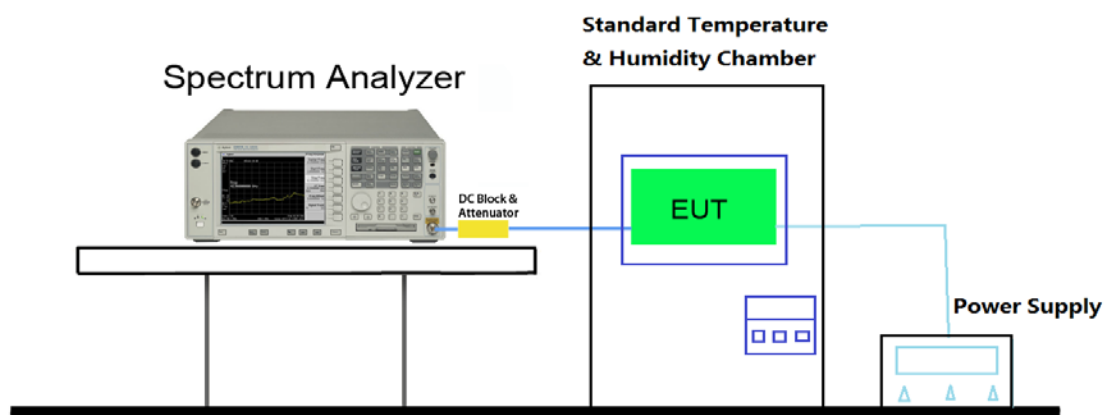
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

#### Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ( $\pm 15\%$ ) and endpoint, record the maximum frequency change.

### 7.7.3. Test Setup



**7.7.4. Test Result**

| Voltage (%) | Power (VAC)    | Temp (°C)  | Frequency (Hz) | Freq. Dev. (Hz) | Deviation (%) |
|-------------|----------------|------------|----------------|-----------------|---------------|
| 100%        | 120            | + 20 (Ref) | 5220034321.425 | 34321.425       | 0.0006575     |
|             |                |            | 5784997132.629 | -2867.371       | -0.0000496    |
|             |                | - 30       | 5220028791.625 | 28791.625       | 0.0005516     |
|             |                |            | 5785046237.832 | 46237.832       | 0.0007993     |
|             |                | - 20       | 5220038964.225 | 38964.225       | 0.0007464     |
|             |                |            | 5784984958.263 | -15041.737      | -0.0002600    |
|             |                | - 10       | 5220047628.149 | 47628.149       | 0.0009124     |
|             |                |            | 5785040648.209 | 40648.209       | 0.0007026     |
|             |                | 0          | 5220019831.529 | 19831.529       | 0.0003799     |
|             |                |            | 5785040934.382 | 40934.382       | 0.0007076     |
|             |                | + 10       | 5220030621.553 | 30621.553       | 0.0005866     |
|             |                |            | 5784962941.193 | -37058.807      | -0.0006406    |
|             |                | + 20       | 5220022548.629 | 22548.629       | 0.0004320     |
|             |                |            | 5784984624.448 | -15375.552      | -0.0002658    |
|             |                | + 30       | 5220034812.405 | 34812.4049      | 0.0006669     |
|             |                |            | 5785018725.453 | 18725.453       | 0.0003237     |
|             |                | + 40       | 5219972548.036 | -27451.964      | -0.0005259    |
|             |                |            | 5785084824.533 | 84824.533       | 0.0014663     |
| + 50        | 5219969257.259 | -30742.741 | -0.0005889     |                 |               |
|             | 5785030947.209 | 30947.209  | 0.0005350      |                 |               |
| 115%        | 138            | + 20       | 5220030694.187 | 30694.187       | 0.0005880     |
|             |                |            | 5785004894.352 | 4894.352        | 0.0000846     |
| 85%         | 102            | + 20       | 5220044986.674 | 44986.674       | 0.0008618     |
|             |                |            | 5784996570.039 | -3429.961       | -0.0000593    |

## 7.8. Radiated Spurious Emission Measurement

### 7.8.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

| FCC Part 15 Subpart C Paragraph 15.209 |                      |                            |
|--|----------------------|----------------------------|
| Frequency [MHz]                        | Field Strength [V/m] | Measured Distance [Meters] |
| 0.009 - 0.490                          | 2400/F (kHz)         | 300                        |
| 0.490 - 1.705                          | 24000/F (kHz)        | 30                         |
| 1.705 - 30                             | 30                   | 30                         |
| 30 - 88                                | 100                  | 3                          |
| 88 - 216                               | 150                  | 3                          |
| 216 - 960                              | 200                  | 3                          |
| Above 960                              | 500                  | 3                          |

### 7.8.2. Test Procedure Used

KDB 789033 D02v01 - Section G

### 7.8.3. Test Setting

#### Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

### **Quasi-Peak Measurements below 1GHz**

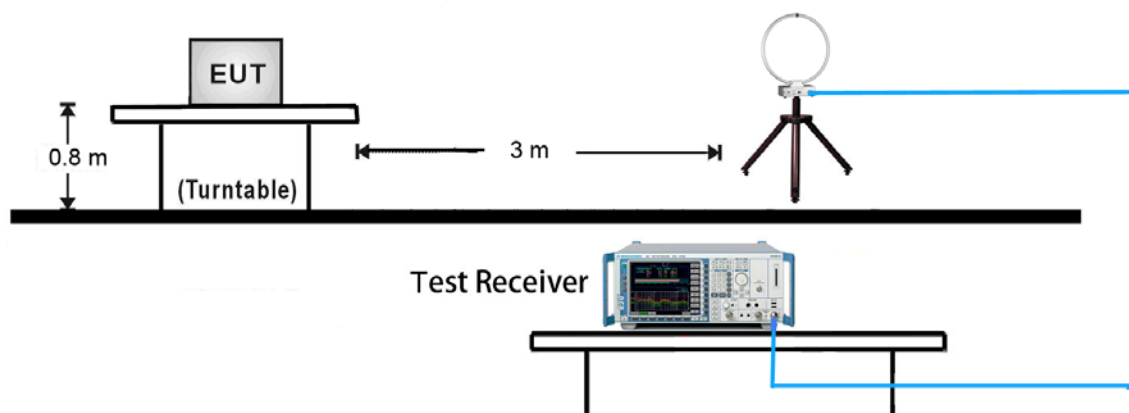
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

### **Average Measurements above 1GHz (Method AD)**

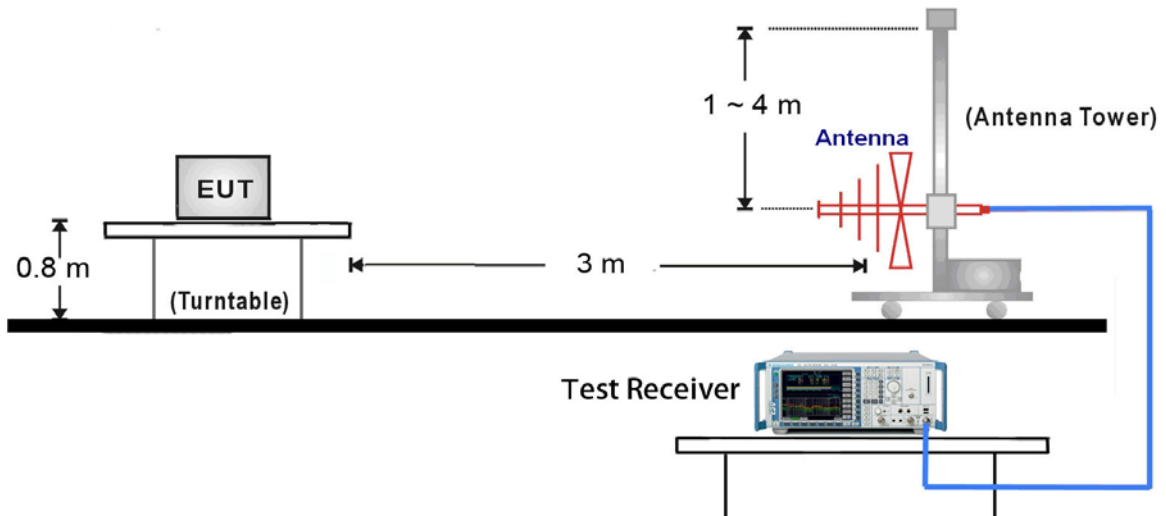
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be  $> 2 \times \text{span}/\text{RBW}$ )
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

#### **7.8.4. Test Setup**

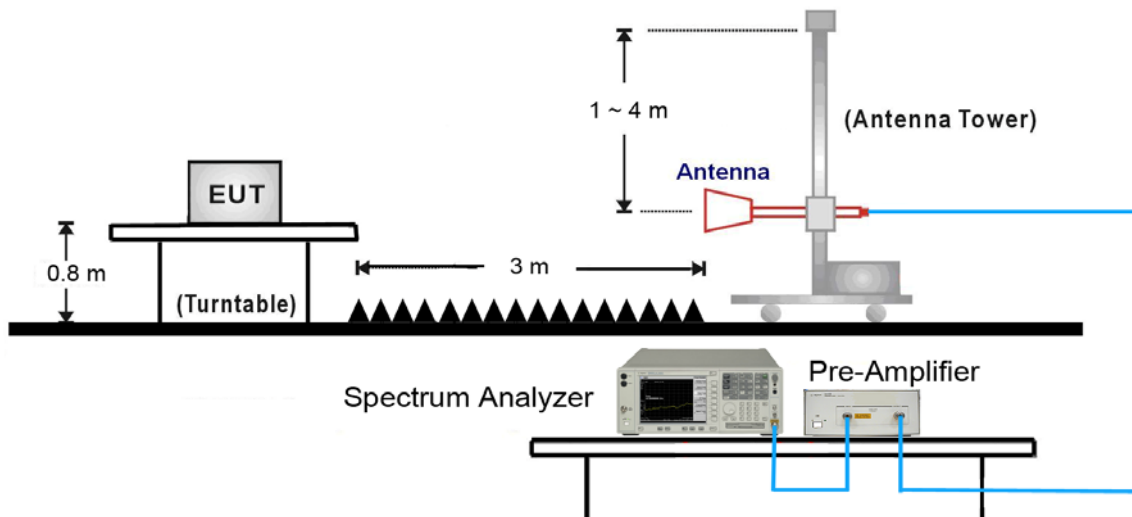
##### 9kHz ~ 30MHz Test Setup:



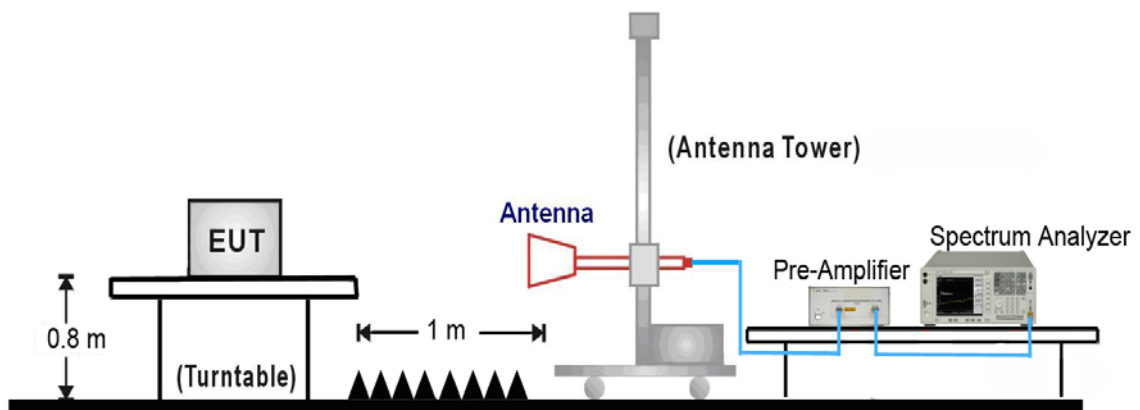
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:



18GHz ~40GHz Test Setup:



### 7.8.5. Test Result

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11a   | Test Site:     | AC1       |
| Test Channel: | 36  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dB $\mu$ V) | Factor (dB) | Measure Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------------|-------------|------------------------------|----------------------|-------------|----------|--------------|
| *    | 7125.4          | 32.0                       | 13.5        | 45.5                         | 88.2                 | -42.7       | Peak     | Horizontal   |
| *    | 7865.4          | 33.2                       | 15.0        | 48.2                         | 88.2                 | -40.0       | Peak     | Horizontal   |
|      | 8423.7          | 32.8                       | 14.6        | 47.4                         | 74.0                 | -26.6       | Peak     | Horizontal   |
|      | 9125.7          | 34.8                       | 15.0        | 49.8                         | 74.0                 | -24.2       | Peak     | Horizontal   |
| *    | 7163.5          | 33.8                       | 13.6        | 47.4                         | 88.2                 | -40.8       | Peak     | Vertical     |
| *    | 7846.4          | 32.5                       | 15.1        | 47.6                         | 88.2                 | -40.6       | Peak     | Vertical     |
|      | 8423.4          | 33.2                       | 14.6        | 47.8                         | 74.0                 | -26.2       | Peak     | Vertical     |
|      | 9144.4          | 35.6                       | 15.2        | 50.8                         | 74.0                 | -23.2       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB $\mu$ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB $\mu$ V/m.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11a   | Test Site:     | AC1       |
| Test Channel: | 44  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dB $\mu$ V) | Factor (dB) | Measure Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------------|-------------|------------------------------|----------------------|-------------|----------|--------------|
| *    | 7145.7          | 33.5                       | 13.5        | 47.0                         | 88.2                 | -41.2       | Peak     | Horizontal   |
| *    | 7846.4          | 32.6                       | 15.1        | 47.7                         | 88.2                 | -40.5       | Peak     | Horizontal   |
|      | 8421.4          | 32.7                       | 14.5        | 47.2                         | 74.0                 | -26.8       | Peak     | Horizontal   |
|      | 9141.5          | 35.3                       | 15.2        | 50.5                         | 74.0                 | -23.5       | Peak     | Horizontal   |
| *    | 7147.0          | 32.2                       | 13.5        | 45.7                         | 88.2                 | -42.5       | Peak     | Vertical     |
| *    | 7836.1          | 32.2                       | 15.1        | 47.3                         | 88.2                 | -40.9       | Peak     | Vertical     |
|      | 8498.4          | 33.0                       | 14.7        | 47.7                         | 74.0                 | -26.3       | Peak     | Vertical     |
|      | 9145.7          | 34.9                       | 15.2        | 50.1                         | 74.0                 | -23.9       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB $\mu$ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB $\mu$ V/m.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11a   | Test Site:     | AC1       |
| Test Channel: | 48  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7162.4          | 33.1                 | 13.6        | 46.7                   | 88.2           | -41.5       | Peak     | Horizontal   |
| *    | 7822.4          | 31.8                 | 15.0        | 46.8                   | 88.2           | -41.4       | Peak     | Horizontal   |
|      | 8395.4          | 32.9                 | 14.4        | 47.3                   | 74.0           | -26.7       | Peak     | Horizontal   |
|      | 9144.4          | 35.6                 | 15.2        | 50.8                   | 74.0           | -23.2       | Peak     | Horizontal   |
| *    | 7156.5          | 32.6                 | 13.6        | 46.2                   | 88.2           | -42.0       | Peak     | Vertical     |
| *    | 7847.7          | 32.9                 | 15.1        | 48.0                   | 88.2           | -40.2       | Peak     | Vertical     |
|      | 8472.4          | 32.6                 | 14.6        | 47.2                   | 74.0           | -26.8       | Peak     | Vertical     |
|      | 9143.7          | 35.4                 | 15.2        | 50.6                   | 74.0           | -23.4       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11a   | Test Site:     | AC1       |
| Test Channel: | 149   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7145.7          | 32.9                 | 13.5        | 46.4                   | 88.2           | -41.8       | Peak     | Horizontal   |
| *    | 7822.4          | 31.7                 | 15.0        | 46.7                   | 88.2           | -41.5       | Peak     | Horizontal   |
|      | 8451.3          | 32.8                 | 14.5        | 47.3                   | 74.0           | -26.7       | Peak     | Horizontal   |
|      | 9143.7          | 35.7                 | 15.2        | 50.9                   | 74.0           | -23.1       | Peak     | Horizontal   |
| *    | 7146.4          | 33.6                 | 13.5        | 47.1                   | 88.2           | -41.1       | Peak     | Vertical     |
| *    | 7846.3          | 32.3                 | 15.1        | 47.4                   | 88.2           | -40.8       | Peak     | Vertical     |
|      | 9153.7          | 35.7                 | 15.3        | 51.0                   | 74.0           | -23.0       | Peak     | Vertical     |
|      | 9453.7          | 35.1                 | 15.5        | 50.6                   | 74.0           | -23.4       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11a   | Test Site:     | AC1       |
| Test Channel: | 157   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7163.5          | 33.7                 | 13.6        | 47.3                   | 88.2           | -40.9       | Peak     | Horizontal   |
| *    | 7836.5          | 32.6                 | 15.1        | 47.7                   | 88.2           | -40.5       | Peak     | Horizontal   |
|      | 8457.5          | 33.7                 | 14.5        | 48.2                   | 74.0           | -25.8       | Peak     | Horizontal   |
|      | 9163.9          | 34.7                 | 15.3        | 50.0                   | 74.0           | -24.0       | Peak     | Horizontal   |
| *    | 7163.6          | 32.2                 | 13.6        | 45.8                   | 88.2           | -42.4       | Peak     | Vertical     |
| *    | 7846.4          | 32.0                 | 15.1        | 47.1                   | 88.2           | -41.1       | Peak     | Vertical     |
|      | 8426.4          | 33.7                 | 14.6        | 48.3                   | 74.0           | -25.7       | Peak     | Vertical     |
|      | 9153.7          | 34.7                 | 15.3        | 50.0                   | 74.0           | -24.0       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11a   | Test Site:     | AC1       |
| Test Channel: | 165   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7156.4          | 33.5                 | 13.6        | 47.1                   | 88.2           | -41.1       | Peak     | Horizontal   |
| *    | 7846.4          | 33.3                 | 15.1        | 48.4                   | 88.2           | -39.8       | Peak     | Horizontal   |
|      | 8436.6          | 33.1                 | 14.6        | 47.7                   | 74.0           | -26.3       | Peak     | Horizontal   |
|      | 9143.7          | 35.2                 | 15.2        | 50.4                   | 74.0           | -23.6       | Peak     | Horizontal   |
| *    | 7153.7          | 33.0                 | 13.6        | 46.6                   | 88.2           | -41.6       | Peak     | Vertical     |
| *    | 7842.4          | 32.8                 | 15.1        | 47.9                   | 88.2           | -40.3       | Peak     | Vertical     |
|      | 8436.6          | 32.9                 | 14.6        | 47.5                   | 74.0           | -26.5       | Peak     | Vertical     |
|      | 9143.4          | 35.0                 | 15.2        | 50.2                   | 74.0           | -23.8       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT20  | Test Site:     | AC1       |
| Test Channel: | 36  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7145.6          | 32.6                 | 13.5        | 46.1                   | 88.2           | -42.1       | Peak     | Horizontal   |
| *    | 7846.5          | 32.5                 | 15.1        | 47.6                   | 88.2           | -40.6       | Peak     | Horizontal   |
|      | 8463.6          | 33.6                 | 14.5        | 48.1                   | 74.0           | -25.9       | Peak     | Horizontal   |
|      | 9142.4          | 34.7                 | 15.2        | 49.9                   | 74.0           | -24.1       | Peak     | Horizontal   |
| *    | 7152.7          | 32.0                 | 13.6        | 45.6                   | 88.2           | -42.6       | Peak     | Vertical     |
| *    | 7843.7          | 32.6                 | 15.1        | 47.7                   | 88.2           | -40.5       | Peak     | Vertical     |
|      | 8472.7          | 32.8                 | 14.6        | 47.4                   | 74.0           | -26.6       | Peak     | Vertical     |
|      | 9142.1          | 35.0                 | 15.2        | 50.2                   | 74.0           | -23.8       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT20  | Test Site:     | AC1       |
| Test Channel: | 44  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7153.4          | 33.4                 | 13.6        | 47.0                   | 88.2           | -41.2       | Peak     | Horizontal   |
| *    | 7841.0          | 33.3                 | 15.1        | 48.4                   | 88.2           | -39.8       | Peak     | Horizontal   |
|      | 8413.0          | 33.3                 | 14.5        | 47.8                   | 74.0           | -26.2       | Peak     | Horizontal   |
|      | 9145.7          | 34.7                 | 15.2        | 49.9                   | 74.0           | -24.1       | Peak     | Horizontal   |
| *    | 7146.9          | 32.6                 | 13.5        | 46.1                   | 88.2           | -42.1       | Peak     | Vertical     |
| *    | 7846.4          | 33.3                 | 15.1        | 48.4                   | 88.2           | -39.8       | Peak     | Vertical     |
|      | 8471.3          | 33.3                 | 14.6        | 47.9                   | 74.0           | -26.1       | Peak     | Vertical     |
|      | 9147.7          | 35.1                 | 15.3        | 50.4                   | 74.0           | -23.6       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT20  | Test Site:     | AC1       |
| Test Channel: | 48  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dB $\mu$ V) | Factor (dB) | Measure Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------------|-------------|------------------------------|----------------------|-------------|----------|--------------|
| *    | 7146.4          | 33.0                       | 13.5        | 46.5                         | 88.2                 | -41.7       | Peak     | Horizontal   |
| *    | 8472.7          | 32.7                       | 14.6        | 47.3                         | 88.2                 | -40.9       | Peak     | Horizontal   |
|      | 9145.4          | 35.6                       | 15.2        | 50.8                         | 74.0                 | -23.2       | Peak     | Horizontal   |
|      | 9473.5          | 37.0                       | 15.4        | 52.4                         | 74.0                 | -21.6       | Peak     | Horizontal   |
| *    | 7146.4          | 32.0                       | 13.5        | 45.5                         | 88.2                 | -42.7       | Peak     | Vertical     |
| *    | 7846.3          | 32.7                       | 15.1        | 47.8                         | 88.2                 | -40.4       | Peak     | Vertical     |
|      | 9146.6          | 34.5                       | 15.3        | 49.8                         | 74.0                 | -24.2       | Peak     | Vertical     |
|      | 9417.9          | 35.3                       | 15.5        | 50.8                         | 74.0                 | -23.2       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB $\mu$ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB $\mu$ V/m.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)



|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT20  | Test Site:     | AC1       |
| Test Channel: | 149   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7164.6          | 32.4                 | 13.6        | 46.0                   | 88.2           | -42.2       | Peak     | Horizontal   |
| *    | 7823.7          | 32.6                 | 15.1        | 47.7                   | 88.2           | -40.5       | Peak     | Horizontal   |
|      | 8475.3          | 33.4                 | 14.6        | 48.0                   | 74.0           | -26.0       | Peak     | Horizontal   |
|      | 9425.7          | 34.0                 | 15.5        | 49.5                   | 74.0           | -24.5       | Peak     | Horizontal   |
| *    | 7146.4          | 32.7                 | 13.5        | 46.2                   | 88.2           | -42.0       | Peak     | Vertical     |
| *    | 7832.4          | 32.1                 | 15.1        | 47.2                   | 88.2           | -41.0       | Peak     | Vertical     |
|      | 8471.0          | 32.7                 | 14.6        | 47.3                   | 74.0           | -26.7       | Peak     | Vertical     |
|      | 9472.4          | 35.7                 | 15.4        | 51.1                   | 74.0           | -22.9       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT20  | Test Site:     | AC1       |
| Test Channel: | 157   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7143.3          | 32.9                 | 13.5        | 46.4                   | 88.2           | -41.8       | Peak     | Horizontal   |
| *    | 7846.2          | 32.9                 | 15.1        | 48.0                   | 88.2           | -40.2       | Peak     | Horizontal   |
|      | 8479.9          | 33.2                 | 14.6        | 47.8                   | 74.0           | -26.2       | Peak     | Horizontal   |
|      | 9406.4          | 34.5                 | 15.4        | 49.9                   | 74.0           | -24.1       | Peak     | Horizontal   |
| *    | 7146.9          | 32.3                 | 13.5        | 45.8                   | 88.2           | -42.4       | Peak     | Vertical     |
| *    | 7843.1          | 32.3                 | 15.1        | 47.4                   | 88.2           | -40.8       | Peak     | Vertical     |
|      | 8456.6          | 33.1                 | 14.5        | 47.6                   | 74.0           | -26.4       | Peak     | Vertical     |
|      | 9452.0          | 34.9                 | 15.5        | 50.4                   | 74.0           | -23.6       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT20  | Test Site:     | AC1       |
| Test Channel: | 165   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7153.9          | 33.0                 | 13.6        | 46.6                   | 88.2           | -41.6       | Peak     | Horizontal   |
| *    | 7847.2          | 32.5                 | 15.1        | 47.6                   | 88.2           | -40.6       | Peak     | Horizontal   |
|      | 8471.6          | 33.0                 | 14.6        | 47.6                   | 74.0           | -26.4       | Peak     | Horizontal   |
|      | 9412.0          | 34.6                 | 15.5        | 50.1                   | 74.0           | -23.9       | Peak     | Horizontal   |
| *    | 7149.0          | 32.7                 | 13.5        | 46.2                   | 88.2           | -42.0       | Peak     | Vertical     |
| *    | 7823.6          | 32.1                 | 15.1        | 47.2                   | 88.2           | -41.0       | Peak     | Vertical     |
|      | 8472.7          | 34.8                 | 14.6        | 49.4                   | 74.0           | -24.6       | Peak     | Vertical     |
|      | 9471.0          | 35.4                 | 15.4        | 50.8                   | 74.0           | -23.2       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT40  | Test Site:     | AC1       |
| Test Channel: | 38  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dB $\mu$ V) | Factor (dB) | Measure Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------------|-------------|------------------------------|----------------------|-------------|----------|--------------|
| *    | 7146.4          | 32.5                       | 13.5        | 46.0                         | 88.2                 | -42.2       | Peak     | Horizontal   |
| *    | 7846.4          | 32.4                       | 15.1        | 47.5                         | 88.2                 | -40.7       | Peak     | Horizontal   |
|      | 8453.7          | 32.8                       | 14.5        | 47.3                         | 74.0                 | -26.7       | Peak     | Horizontal   |
|      | 9415.4          | 35.3                       | 15.5        | 50.8                         | 74.0                 | -23.2       | Peak     | Horizontal   |
| *    | 7146.4          | 32.2                       | 13.5        | 45.7                         | 88.2                 | -42.5       | Peak     | Vertical     |
| *    | 7836.6          | 31.8                       | 15.1        | 46.9                         | 88.2                 | -41.3       | Peak     | Vertical     |
|      | 8471.3          | 32.9                       | 14.6        | 47.5                         | 74.0                 | -26.5       | Peak     | Vertical     |
|      | 9472.4          | 35.7                       | 15.4        | 51.1                         | 74.0                 | -22.9       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB $\mu$ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB $\mu$ V/m.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT40  | Test Site:     | AC1       |
| Test Channel: | 46  | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dB $\mu$ V) | Factor (dB) | Measure Level (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------------|-------------|------------------------------|----------------------|-------------|----------|--------------|
| *    | 7143.3          | 31.8                       | 13.5        | 45.3                         | 88.2                 | -42.9       | Peak     | Horizontal   |
| *    | 7863.7          | 33.1                       | 15.0        | 48.1                         | 88.2                 | -40.1       | Peak     | Horizontal   |
|      | 8469.9          | 32.3                       | 14.6        | 46.9                         | 74.0                 | -27.1       | Peak     | Horizontal   |
|      | 9472.4          | 35.7                       | 15.4        | 51.1                         | 74.0                 | -22.9       | Peak     | Horizontal   |
| *    | 7146.5          | 33.4                       | 13.5        | 46.9                         | 88.2                 | -41.3       | Peak     | Vertical     |
| *    | 7843.7          | 32.9                       | 15.1        | 48.0                         | 88.2                 | -40.2       | Peak     | Vertical     |
|      | 8472.0          | 33.1                       | 14.6        | 47.7                         | 74.0                 | -26.3       | Peak     | Vertical     |
|      | 9472.4          | 35.6                       | 15.4        | 51.0                         | 74.0                 | -23.0       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dB $\mu$ V/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dB $\mu$ V/m.

Note 2: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT40  | Test Site:     | AC1       |
| Test Channel: | 151   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7146.6          | 32.0                 | 13.5        | 45.5                   | 88.2           | -42.7       | Peak     | Horizontal   |
| *    | 7892.2          | 32.4                 | 15.0        | 47.4                   | 88.2           | -40.8       | Peak     | Horizontal   |
|      | 8471.7          | 34.5                 | 14.6        | 49.1                   | 74.0           | -24.9       | Peak     | Horizontal   |
|      | 9471.0          | 34.9                 | 15.4        | 50.3                   | 74.0           | -23.7       | Peak     | Horizontal   |
| *    | 7146.4          | 33.1                 | 13.5        | 46.6                   | 88.2           | -41.6       | Peak     | Vertical     |
| *    | 7813.3          | 32.3                 | 15.0        | 47.3                   | 88.2           | -40.9       | Peak     | Vertical     |
|      | 8472.1          | 32.9                 | 14.6        | 47.5                   | 74.0           | -26.5       | Peak     | Vertical     |
|      | 9473.6          | 34.7                 | 15.4        | 50.1                   | 74.0           | -23.9       | Peak     | Vertical     |

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

|               |   |                |           |
|---------------|---|----------------|-----------|
| Test Mode:    | 802.11n-HT40  | Test Site:     | AC1       |
| Test Channel: | 159   | Test Engineer: | Roy Cheng |
| Remark:       | 1. Average measurement was not performed if peak level lower than average limit.<br>2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report. |                |           |

| Mark | Frequency (MHz) | Reading Level (dBμV) | Factor (dB) | Measure Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Polarization |
|------|-----------------|----------------------|-------------|------------------------|----------------|-------------|----------|--------------|
| *    | 7148.9          | 32.5                 | 13.5        | 46.0                   | 88.2           | -42.2       | Peak     | Horizontal   |
| *    | 7847.2          | 32.4                 | 15.1        | 47.5                   | 88.2           | -40.7       | Peak     | Horizontal   |
|      | 8473.3          | 32.6                 | 14.6        | 47.2                   | 74.0           | -26.8       | Peak     | Horizontal   |
|      | 9472.4          | 35.6                 | 15.4        | 51.0                   | 74.0           | -23.0       | Peak     | Horizontal   |
| *    | 7147.5          | 32.5                 | 13.5        | 46.0                   | 88.2           | -42.2       | Peak     | Vertical     |
| *    | 7848.7          | 32.5                 | 15.1        | 47.6                   | 88.2           | -40.6       | Peak     | Vertical     |
|      | 8473.4          | 33.2                 | 14.6        | 47.8                   | 74.0           | -26.2       | Peak     | Vertical     |
|      | 9472.4          | 35.4                 | 15.4        | 50.8                   | 74.0           | -23.2       | Peak     | Vertical     |

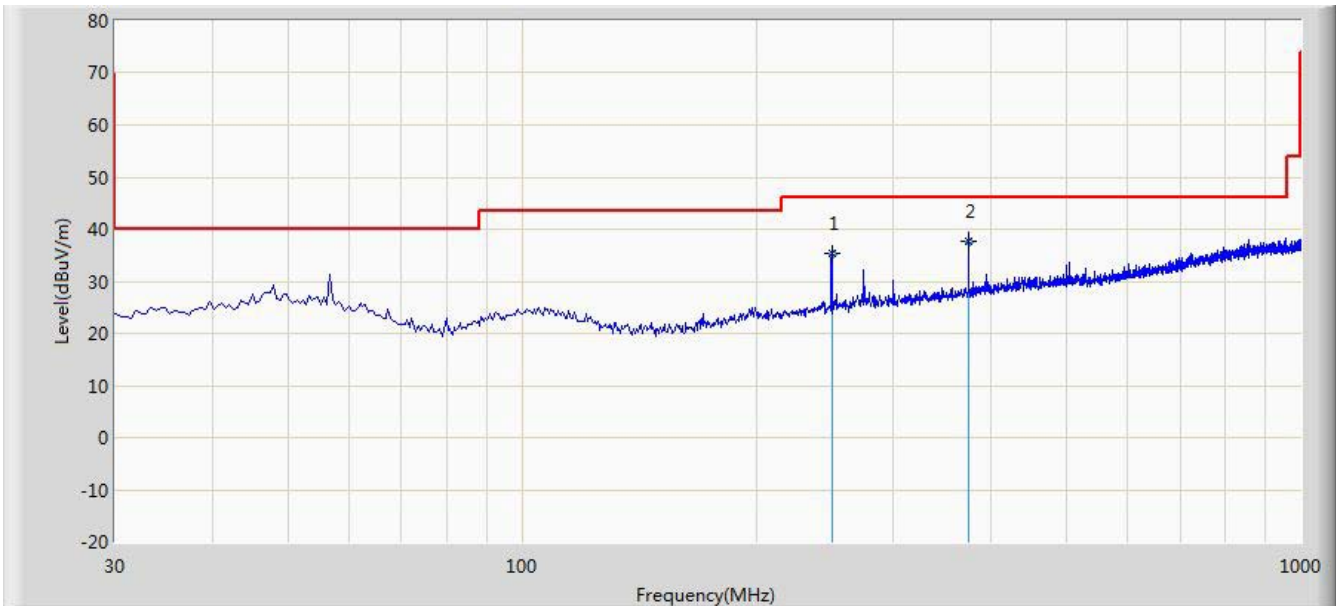
Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions of 68.2dBμV/m.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

**The worst case of Radiated Emission below 1GHz:**

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/03 - 10:40 |
| Limit: FCC_Part15.209_RE(3m)                                 | Engineer: Roy Cheng      |
| Probe: VULB9162_0.03-8GHz                                    | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP        | Power: AC 120V/60Hz      |
| Worst Case Mode: Transmit at channel 5180MHz by 802.11n-HT20 |                          |



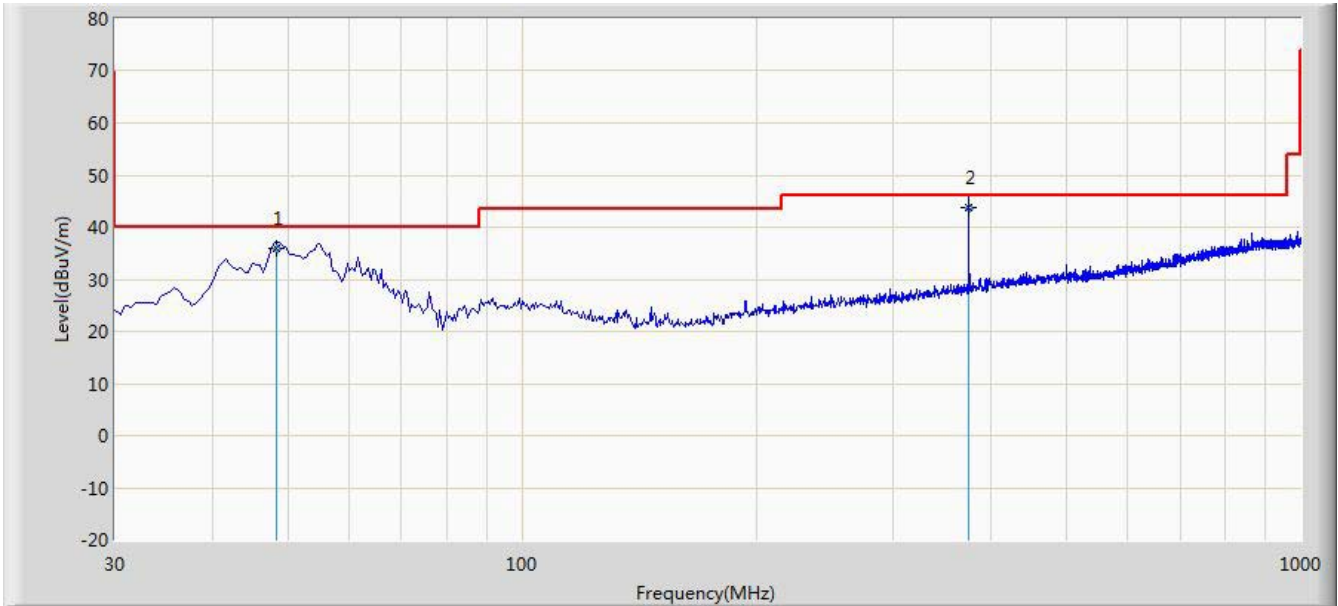
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 250.010         | 35.232                 | 21.952               | -10.768         | 46.000         | 13.279      | QP   |
| 2  |      | *    | 375.022         | 37.752                 | 22.020               | -8.248          | 46.000         | 15.732      | QP   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/03 - 10:44 |
| Limit: FCC_Part15.209_RE(3m)                                 | Engineer: Roy Cheng      |
| Probe: VULB9162_0.03-8GHz                                    | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP        | Power: AC 120V/60Hz      |
| Worst Case Mode: Transmit at channel 5180MHz by 802.11n-HT20 |                          |

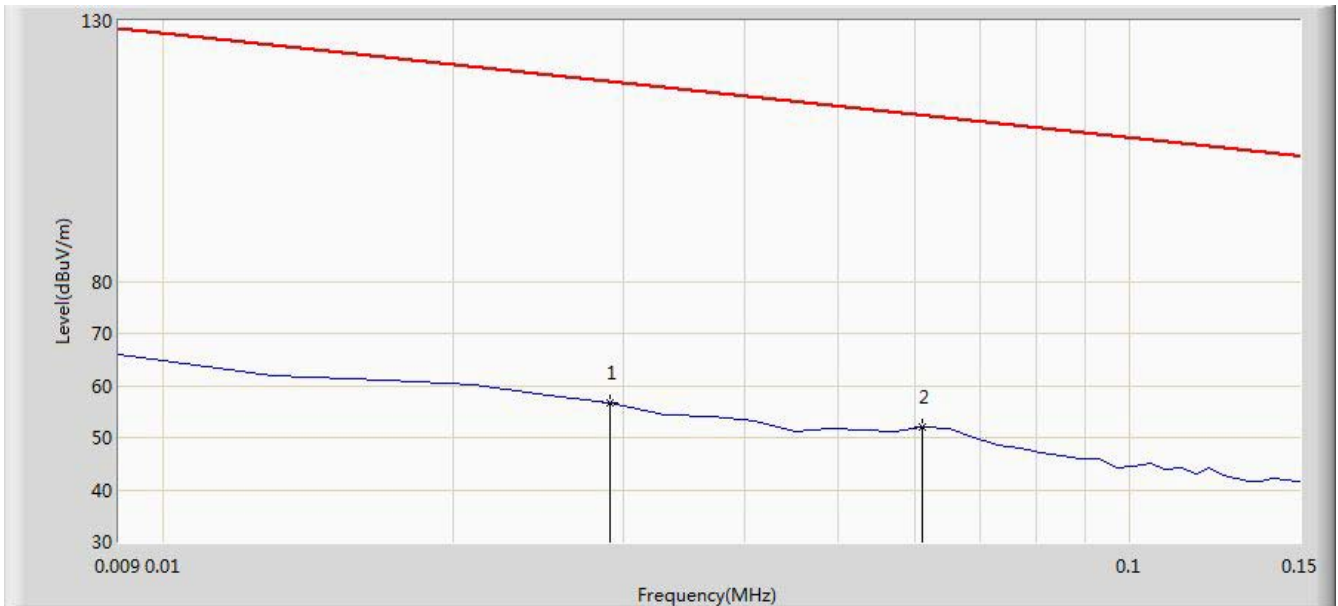


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 48.440          | 36.033                 | 21.250               | -3.967          | 40.000         | 14.783      | QP   |
| 2  |      | *    | 375.020         | 43.752                 | 28.020               | -2.248          | 46.000         | 15.732      | QP   |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/10/20 - 19:18 |
| Limit: FCC_Part15.209_RE(3m)  | Engineer: Roy Cheng      |
| Probe: FMZB1519_0.009-30MHz   | Polarity: Face on        |
| EUT: High performance dual band 2x2 802.11n indoor AP   | Power: AC 120V/60Hz      |
| <b>Worst Case Mode: There is the ambient noise within frequency range 9kHz~30MHz(802.11n-HT20 5180MHz).</b> |                          |

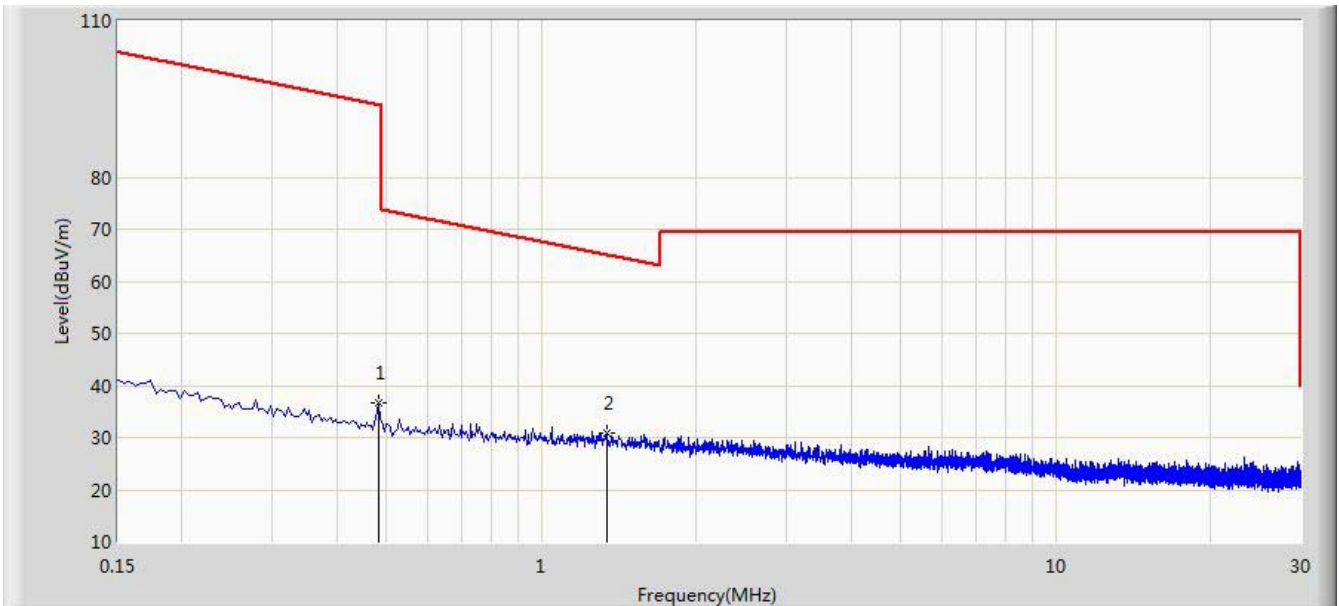


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 0.029           | 56.610                 | 35.660               | -61.732         | 118.342        | 21.049      | QP   |
| 2  |      | *    | 0.061           | 51.899                 | 31.588               | -59.988         | 111.887        | 20.311      | QP   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/10/20 - 19:19 |
| Limit: FCC_Part15.209_RE(3m)  | Engineer: Roy Cheng      |
| Probe: FMZB1519_0.009-30MHz   | Polarity: Face on        |
| EUT: High performance dual band 2x2 802.11n indoor AP   | Power: AC 120V/60Hz      |
| <b>Worst Case Mode: There is the ambient noise within frequency range 9kHz~30MHz(802.11n-HT20 5180MHz).</b> |                          |

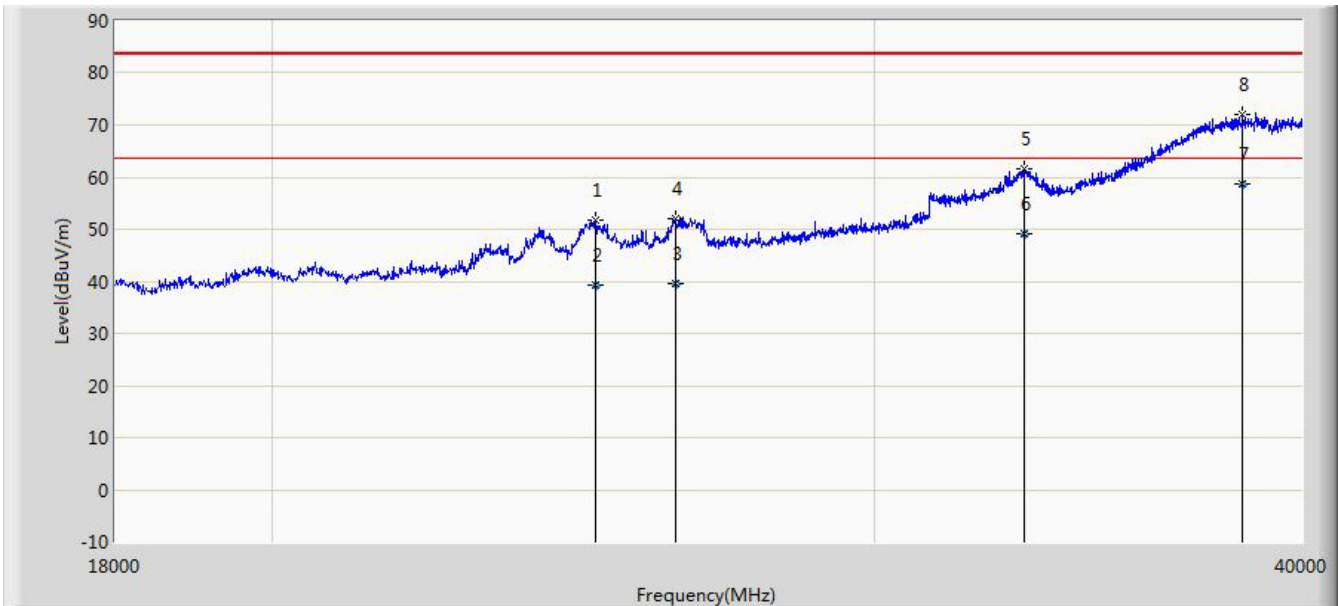


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 0.482           | 36.584                 | 16.183               | -57.359         | 93.943         | 20.401      | QP   |
| 2  |      | *    | 1.338           | 31.001                 | 10.512               | -34.098         | 65.099         | 20.489      | QP   |

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/10/20 - 21:25 |
| Limit: FCC_Part15.209_RE(3m)   | Engineer: Roy Cheng      |
| Probe: BBHA9170_18-40GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP  | Power: AC 120V/60Hz      |
| <b>Worst Case Mode: There is the ambient noise within frequency range 18GHz~40GHz(802.11n-HT20 5180MHz).</b> |                          |



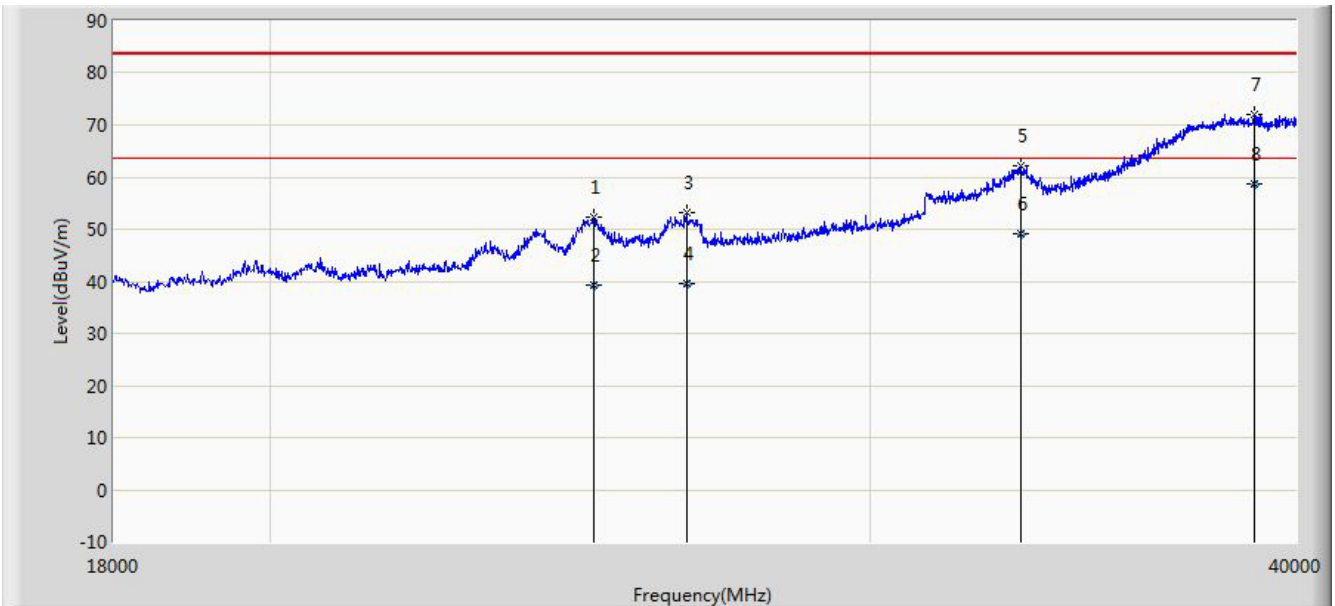
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 24864.000       | 51.836                 | 37.061               | -31.664         | 83.500         | 14.775      | PK   |
| 2  |      |      | 24864.088       | 39.225                 | 24.450               | -24.275         | 63.500         | 14.775      | AV   |
| 3  |      |      | 26260.988       | 39.469                 | 24.050               | -24.031         | 63.500         | 15.419      | AV   |
| 4  |      |      | 26261.000       | 51.956                 | 36.537               | -31.544         | 83.500         | 15.419      | PK   |
| 5  |      |      | 33180.000       | 61.461                 | 39.940               | -22.039         | 83.500         | 21.521      | PK   |
| 6  |      |      | 33180.361       | 49.061                 | 27.540               | -14.439         | 63.500         | 21.521      | AV   |
| 7  |      | *    | 38437.980       | 58.523                 | 31.190               | -4.977          | 63.500         | 27.333      | AV   |
| 8  |      |      | 38438.000       | 72.021                 | 44.688               | -11.479         | 83.500         | 27.333      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Limit (83.5 dB $\mu$ V/m) = 74 dB $\mu$ V/m + 20Log(3m/1m)

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/10/20 - 21:28 |
| Limit: FCC_Part15.209_RE(3m)   | Engineer: Roy Cheng      |
| Probe: BBHA9170_18-40GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP  | Power: AC 120V/60Hz      |
| <b>Worst Case Mode: There is the ambient noise within frequency range 18GHz~40GHz(802.11n-HT20 5180MHz).</b> |                          |



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 24886.000       | 52.313                 | 37.528               | -31.187         | 83.500         | 14.785      | PK   |
| 2  |      |      | 24886.970       | 39.234                 | 24.449               | -24.266         | 63.500         | 14.785      | AV   |
| 3  |      |      | 26503.000       | 53.227                 | 37.207               | -30.273         | 83.500         | 16.020      | PK   |
| 4  |      |      | 26503.872       | 39.572                 | 23.550               | -23.928         | 63.500         | 16.022      | AV   |
| 5  |      |      | 33213.000       | 62.110                 | 40.572               | -21.390         | 83.500         | 21.538      | PK   |
| 6  |      |      | 33213.984       | 49.098                 | 27.560               | -14.402         | 63.500         | 21.538      | AV   |
| 7  |      |      | 38900.000       | 72.096                 | 44.211               | -11.404         | 83.500         | 27.885      | PK   |
| 8  |      | *    | 38900.755       | 58.705                 | 30.820               | -4.795          | 63.500         | 27.885      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

Limit (83.5 dB $\mu$ V/m) = 74 dB $\mu$ V/m + 20Log(3m/1m)

## 7.9. Radiated Restricted Band Edge Measurement

### 7.9.1. Test Limit

#### **For 15.205 requirement:**

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

| MHz                        | MHz                   | MHz             | GHz              |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110              | 16.42 - 16.423        | 399.9 - 410     | 4.5 - 5.15       |
| <sup>1</sup> 0.495 - 0.505 | 16.69475 - 16.69525   | 608 - 614       | 5.35 - 5.46      |
| 2.1735 - 2.1905            | 16.80425 - 16.80475   | 960 - 1240      | 7.25 - 7.75      |
| 4.125 - 4.128              | 25.5 - 25.67          | 1300 - 1427     | 8.025 - 8.5      |
| 4.17725 - 4.17775          | 37.5 - 38.25          | 1435 - 1626.5   | 9.0 - 9.2        |
| 4.20725 - 4.20775          | 73 - 74.6             | 1645.5 - 1646.5 | 9.3 - 9.5        |
| 6.215 - 6.218              | 74.8 - 75.2           | 1660 - 1710     | 10.6 - 12.7      |
| 6.26775 - 6.26825          | 108 - 121.94          | 1718.8 - 1722.2 | 13.25 - 13.4     |
| 6.31175 - 6.31225          | 123 - 138             | 2200 - 2300     | 14.47 - 14.5     |
| 8.291 - 8.294              | 149.9 - 150.05        | 2310 - 2390     | 15.35 - 16.2     |
| 8.362 - 8.366              | 156.52475 - 156.52525 | 2483.5 - 2500   | 17.7 - 21.4      |
| 8.37625 - 8.38675          | 156.7 - 156.9         | 2690 - 2900     | 22.01 - 23.12    |
| 8.41425 - 8.41475          | 162.0125 - 167.17     | 3260 - 3267     | 23.6 - 24.0      |
| 12.29 - 12.293             | 167.72 - 173.2        | 3332 - 3339     | 31.2 - 31.8      |
| 12.51975 - 12.52025        | 240 - 285             | 3345.8 - 3358   | 36.43 - 36.5     |
| 12.57675 - 12.57725        | 322 - 335.4           | 3600 - 4400     | ( <sup>2</sup> ) |

#### **For 15.407(b) requirement:**

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of  $-17$  dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.

| Operating Frequency Band (MHz) | EIRP Limit (dBm/MHz) | Equivalent Field Strength at 3m (dBuV/m) |
|--------------------------------|----------------------|--|
| 5150 - 5250                    | -27                  | 68.2                                     |
| 5725 - 5850                    | -17                  | 78.2                                     |
|                                | -27                  | 68.2                                     |

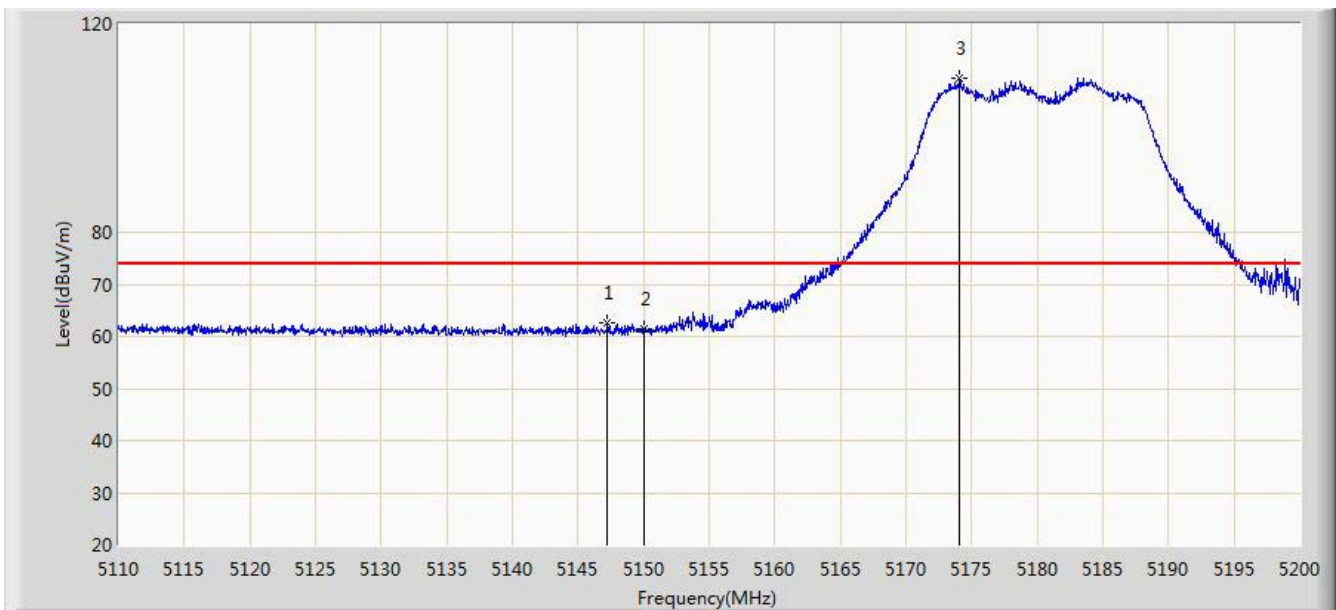
Note: Refer to KDB 789033 D02v01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

| FCC Part 15 Subpart C Paragraph 15.209 |                      |                            |
|--|----------------------|----------------------------|
| Frequency [MHz]                        | Field Strength [V/m] | Measured Distance [Meters] |
| 0.009 - 0.490                          | 2400/F (kHz)         | 300                        |
| 0.490 - 1.705                          | 24000/F (kHz)        | 30                         |
| 1.705 - 30                             | 30                   | 30                         |
| 30 - 88                                | 100                  | 3                          |
| 88 - 216                               | 150                  | 3                          |
| 216 - 960                              | 200                  | 3                          |
| Above 960                              | 500                  | 3                          |

### 7.9.2. Test Result of Radiated Restricted Band Edge

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:04 |
| Limit: FCC_Part15.209_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11a Ant 0 + 1 |                          |



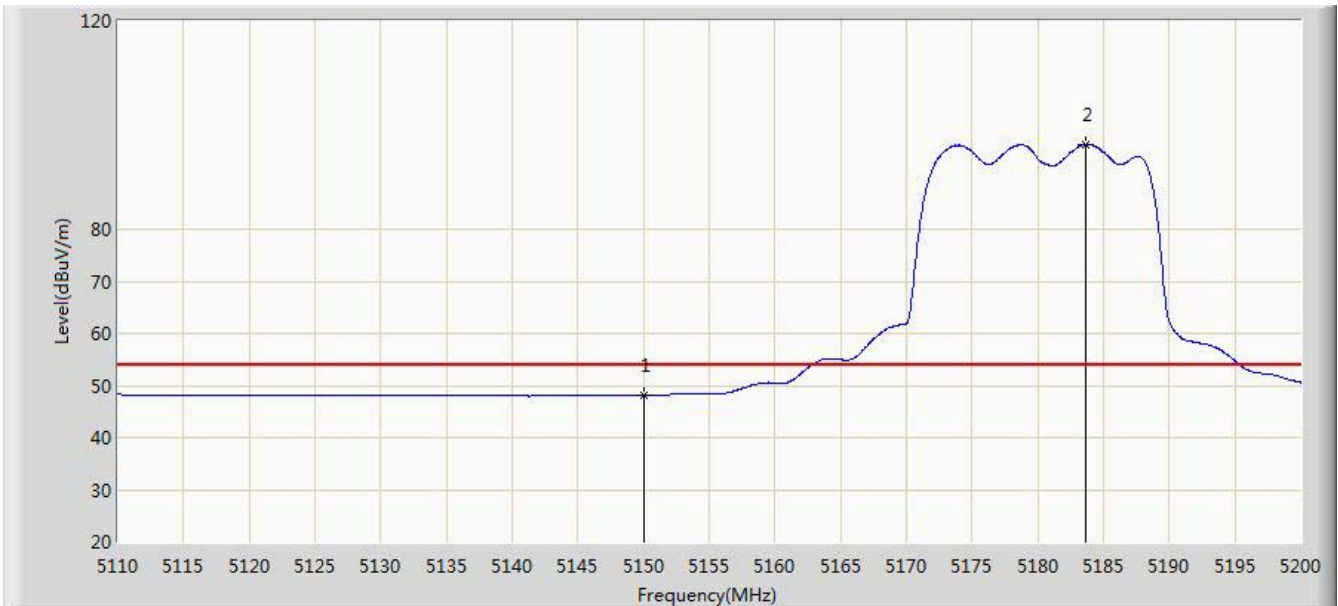
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5147.260        | 62.490                 | 25.734               | -11.510         | 74.000         | 36.756      | PK   |
| 2  |      |      | 5150.000        | 61.349                 | 24.597               | -12.651         | 74.000         | 36.752      | PK   |
| 3  |      | *    | 5174.080        | 109.626                | 72.942               | 35.626          | 74.000         | 36.684      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).



|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:23 |
| Limit: FCC_Part15.209_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11a Ant 0 + 1 |                          |

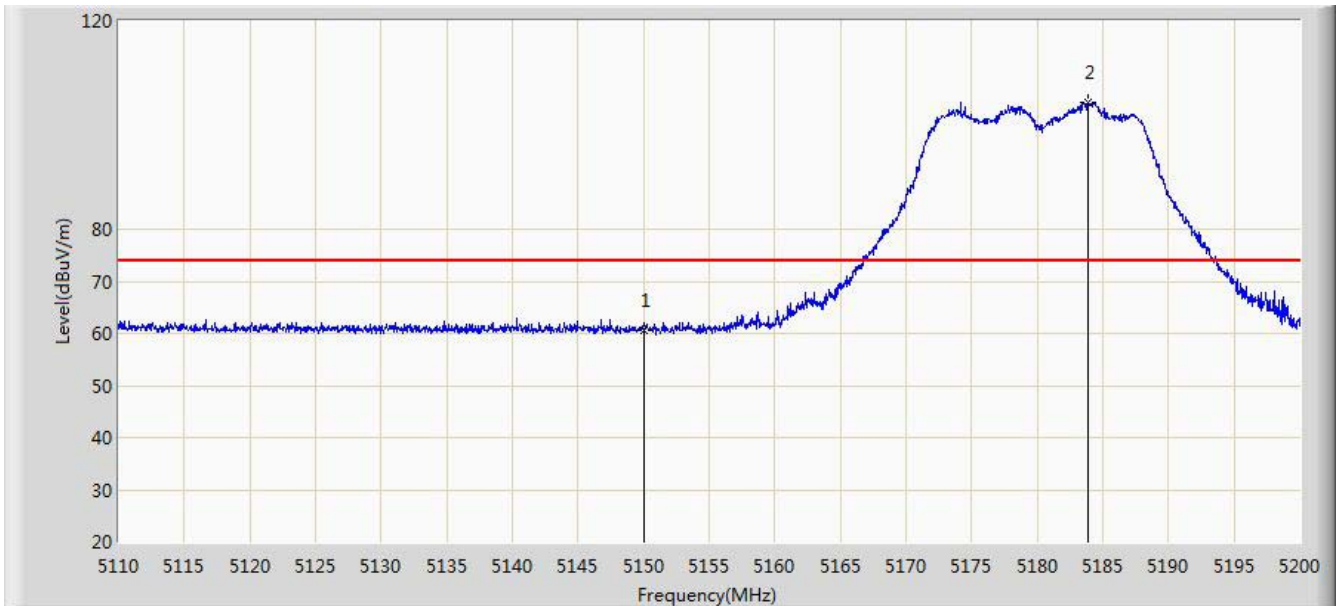


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 48.102                 | 11.350               | -5.898          | 54.000         | 36.752      | AV   |
| 2  |      | *    | 5183.665        | 96.247                 | 59.592               | 42.247          | 54.000         | 36.654      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:24 |
| Limit: FCC_Part15.209_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11a Ant 0 + 1 |                          |

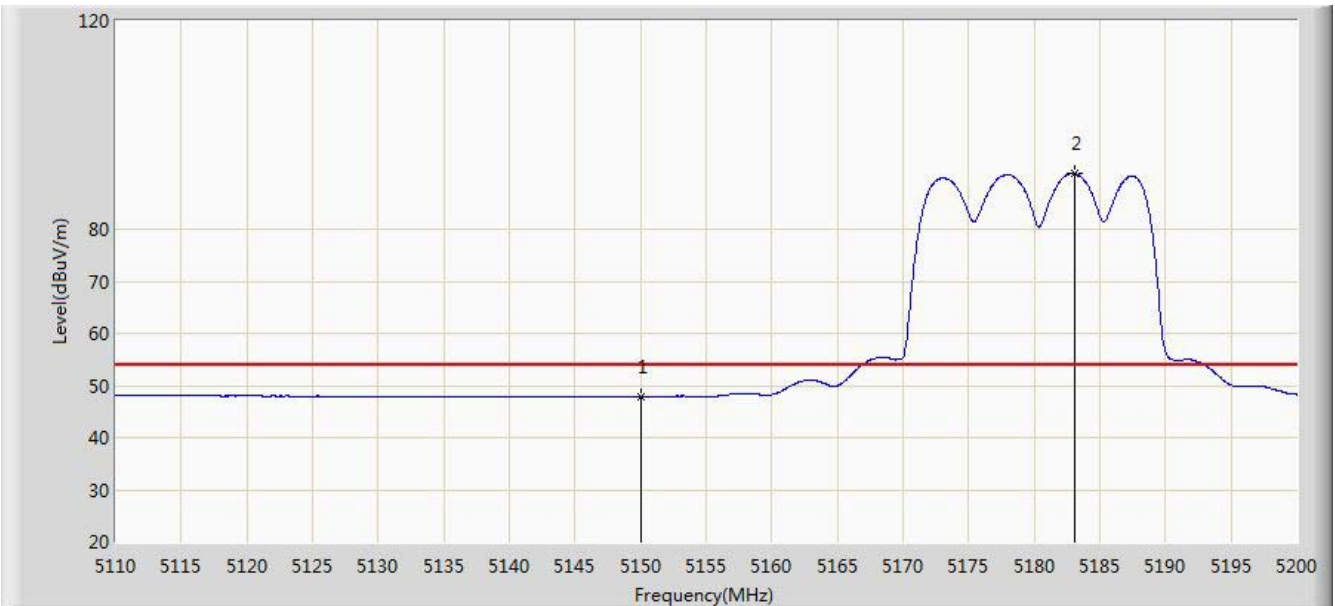


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 60.537                 | 23.785               | -13.463         | 74.000         | 36.752      | PK   |
| 2  |      | *    | 5183.845        | 104.358                | 67.704               | 30.358          | 74.000         | 36.654      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:26 |
| Limit: FCC_Part15.209_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11a Ant 0 + 1 |                          |

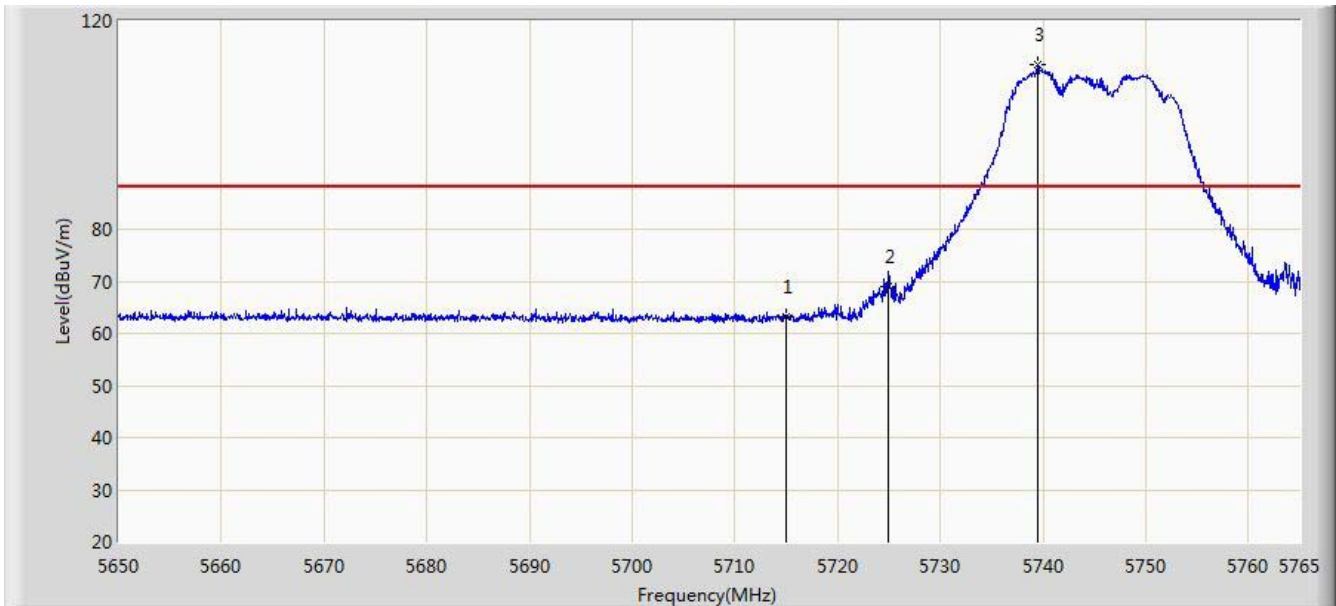


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 47.822                 | 11.070               | -6.178          | 54.000         | 36.752      | AV   |
| 2  |      | *    | 5183.035        | 90.706                 | 54.050               | 36.706          | 54.000         | 36.657      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:29 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11a Ant 0 + 1 |                          |

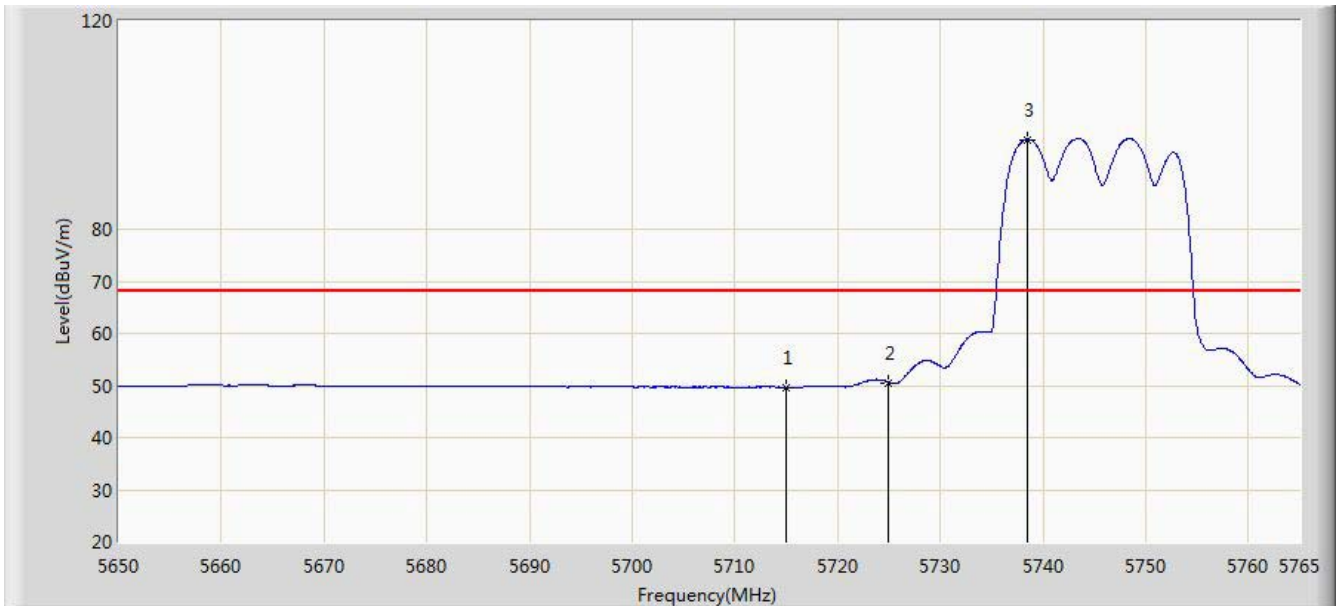


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 63.275                 | 26.008               | -24.925         | 88.200         | 37.267      | PK   |
| 2  |      |      | 5725.000        | 68.863                 | 31.558               | -19.337         | 88.200         | 37.305      | PK   |
| 3  |      | *    | 5739.470        | 111.599                | 74.236               | 23.399          | 88.200         | 37.363      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:32 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11a Ant 0 + 1 |                          |

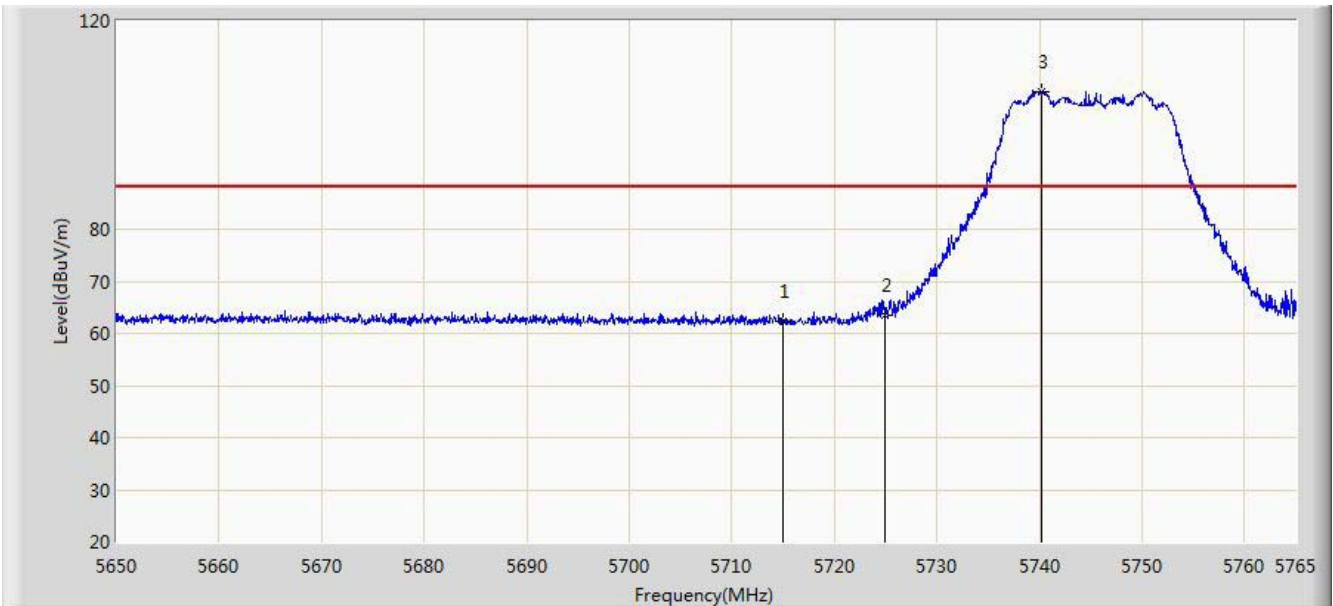


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 49.626                 | 12.359               | -18.574         | 68.200         | 37.267      | AV   |
| 2  |      |      | 5725.000        | 50.539                 | 13.234               | -17.661         | 68.200         | 37.305      | AV   |
| 3  |      | *    | 5738.493        | 97.239                 | 59.879               | 29.039          | 68.200         | 37.360      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:33 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11a Ant 0 + 1 |                          |

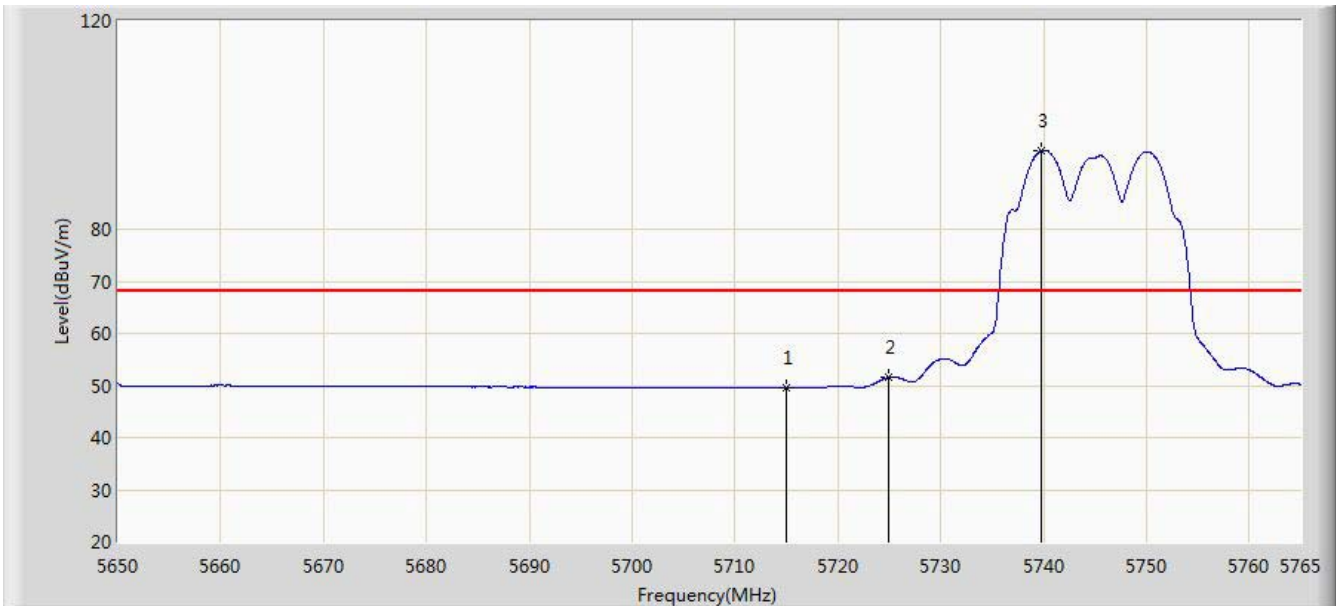


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 62.351                 | 25.084               | -25.849         | 88.200         | 37.267      | PK   |
| 2  |      |      | 5725.000        | 63.600                 | 26.295               | -24.600         | 88.200         | 37.305      | PK   |
| 3  |      | *    | 5740.275        | 106.516                | 69.150               | 18.316          | 88.200         | 37.366      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:34 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11a Ant 0 + 1 |                          |

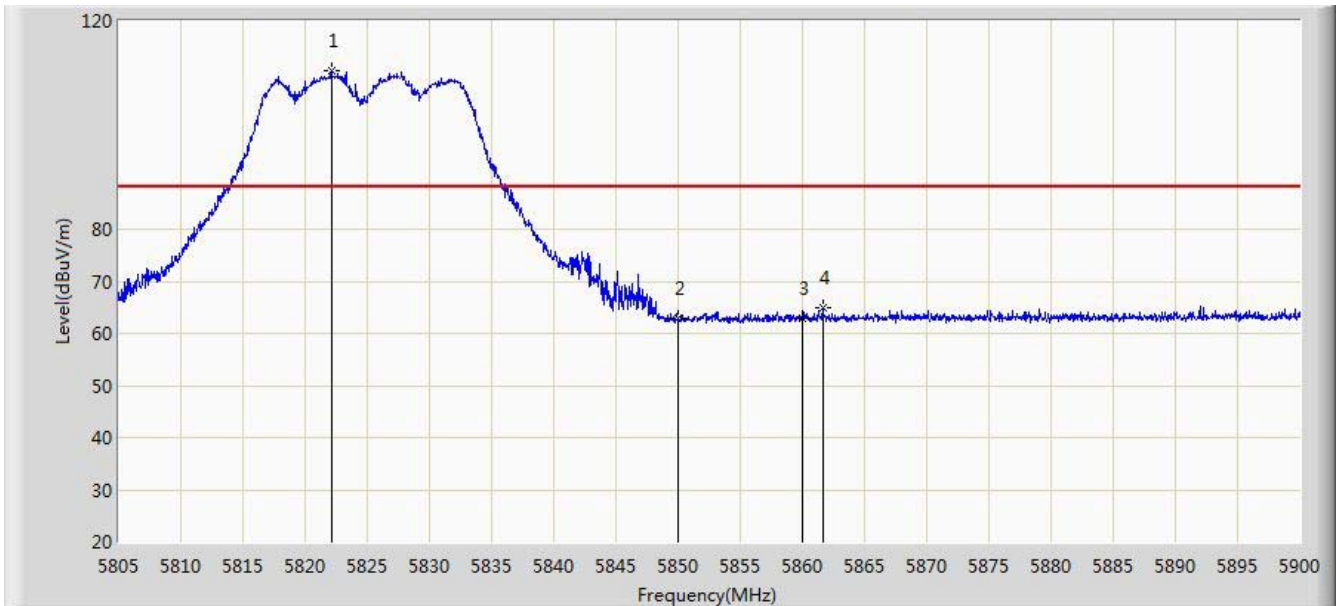


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 49.614                 | 12.347               | -18.586         | 68.200         | 37.267      | AV   |
| 2  |      |      | 5725.000        | 51.591                 | 14.286               | -16.609         | 68.200         | 37.305      | AV   |
| 3  |      | *    | 5739.757        | 95.075                 | 57.711               | 26.875          | 68.200         | 37.364      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:36 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11a Ant 0 + 1 |                          |



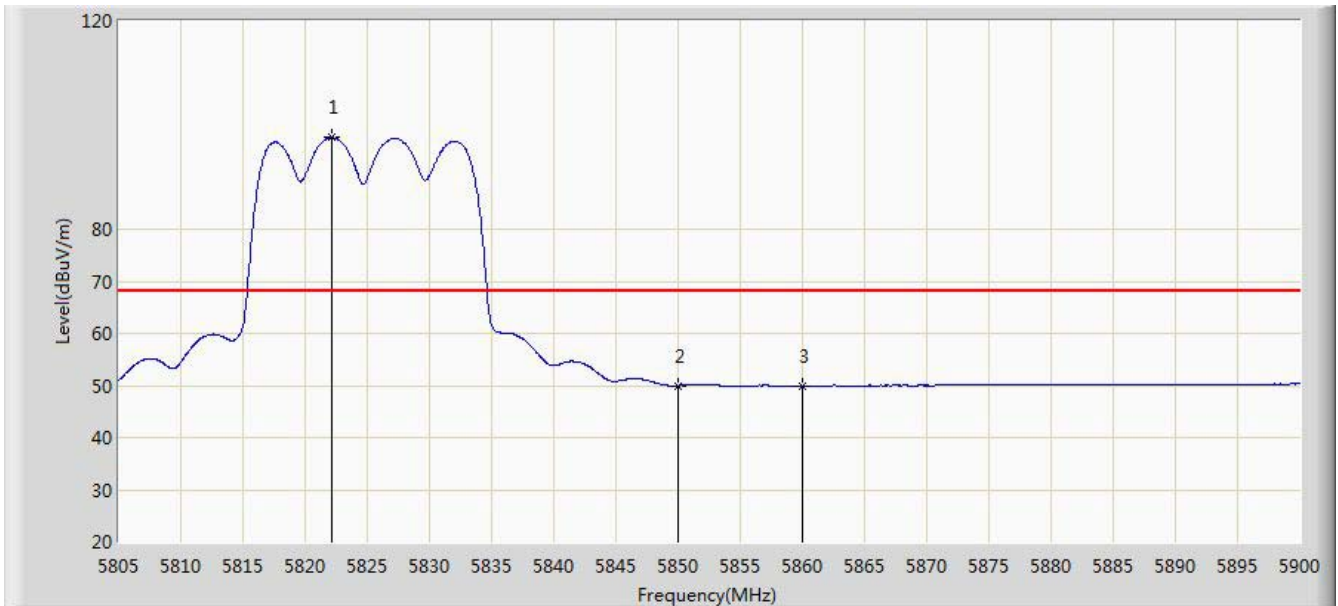
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5822.100        | 110.435                | 72.787               | 22.235          | 88.200         | 37.648      | PK   |
| 2  |      |      | 5850.000        | 62.902                 | 25.166               | -25.298         | 88.200         | 37.736      | PK   |
| 3  |      |      | 5860.000        | 62.997                 | 25.223               | -25.203         | 88.200         | 37.774      | PK   |
| 4  |      |      | 5861.667        | 64.972                 | 27.192               | -23.228         | 88.200         | 37.780      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).



|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:38 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11a Ant 0 + 1 |                          |

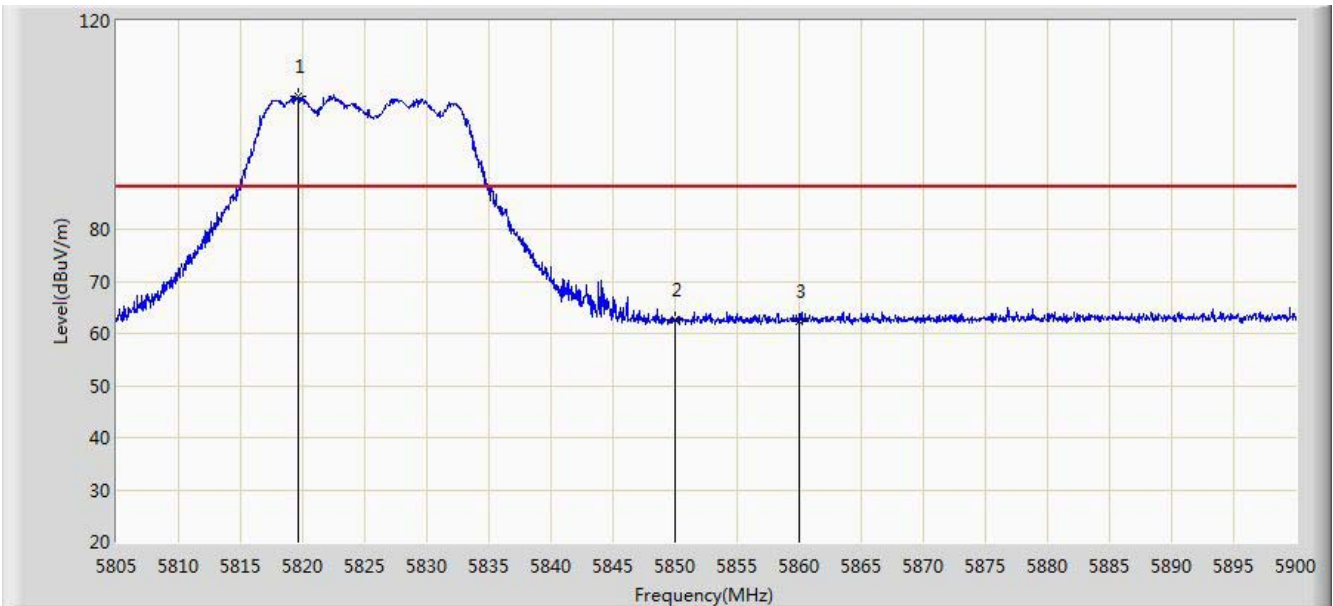


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5822.100        | 97.576                 | 59.928               | 29.376          | 68.200         | 37.648      | AV   |
| 2  |      |      | 5850.000        | 49.979                 | 12.243               | -18.221         | 68.200         | 37.736      | AV   |
| 3  |      |      | 5860.000        | 49.906                 | 12.132               | -18.294         | 68.200         | 37.774      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:39 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11a Ant 0 + 1 |                          |

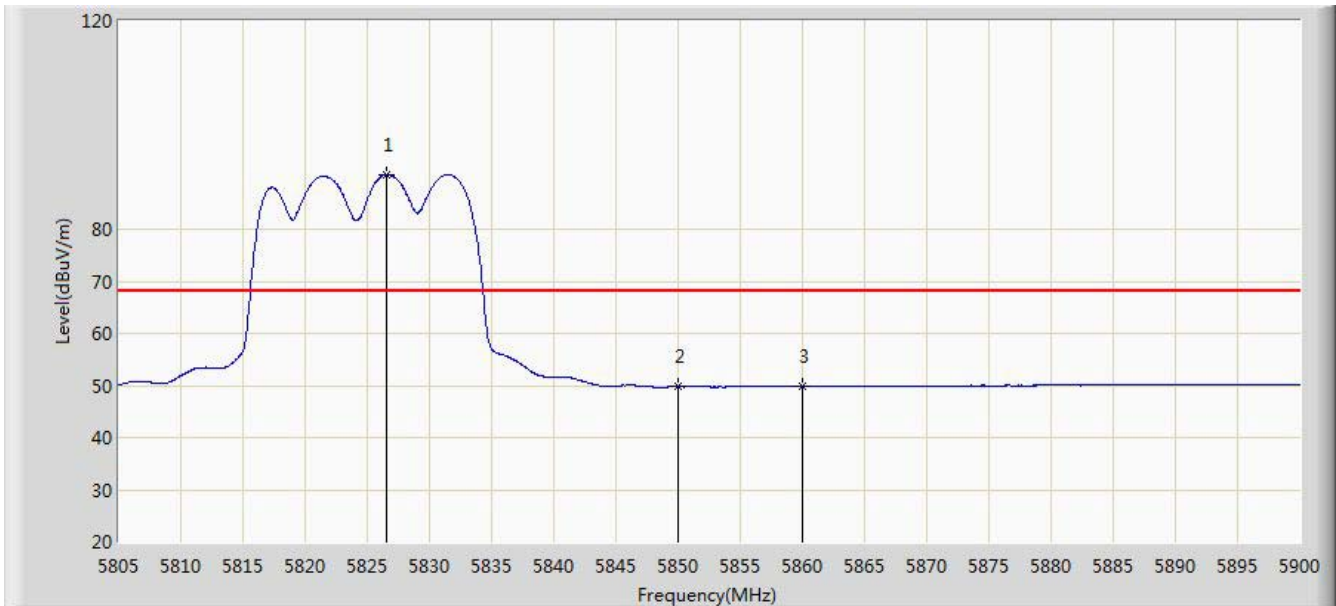


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5819.678        | 105.399                | 67.756               | 17.199          | 88.200         | 37.643      | PK   |
| 2  |      |      | 5850.000        | 62.469                 | 24.733               | -25.731         | 88.200         | 37.736      | PK   |
| 3  |      |      | 5860.000        | 62.387                 | 24.613               | -25.813         | 88.200         | 37.774      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|   |                          |
|---|--------------------------|
| Site: AC1   | Time: 2014/12/02 - 16:40 |
| Limit: FCC_Part15.407_RE(3m)                                | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz                                    | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP       | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11a Ant 0 + 1 |                          |

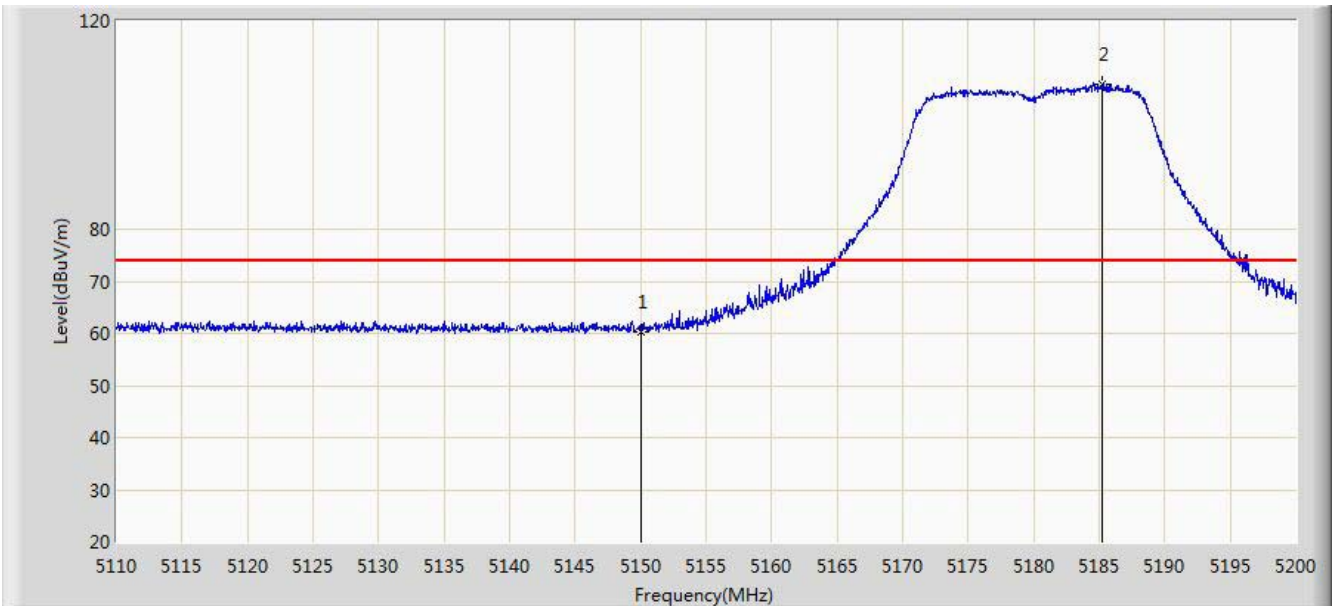


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5826.518        | 90.433                 | 52.777               | 22.233          | 68.200         | 37.656      | AV   |
| 2  |      |      | 5850.000        | 49.744                 | 12.008               | -18.456         | 68.200         | 37.736      | AV   |
| 3  |      |      | 5860.000        | 49.783                 | 12.009               | -18.417         | 68.200         | 37.774      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:48 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11n-HT20 Ant 0 + 1 |                          |

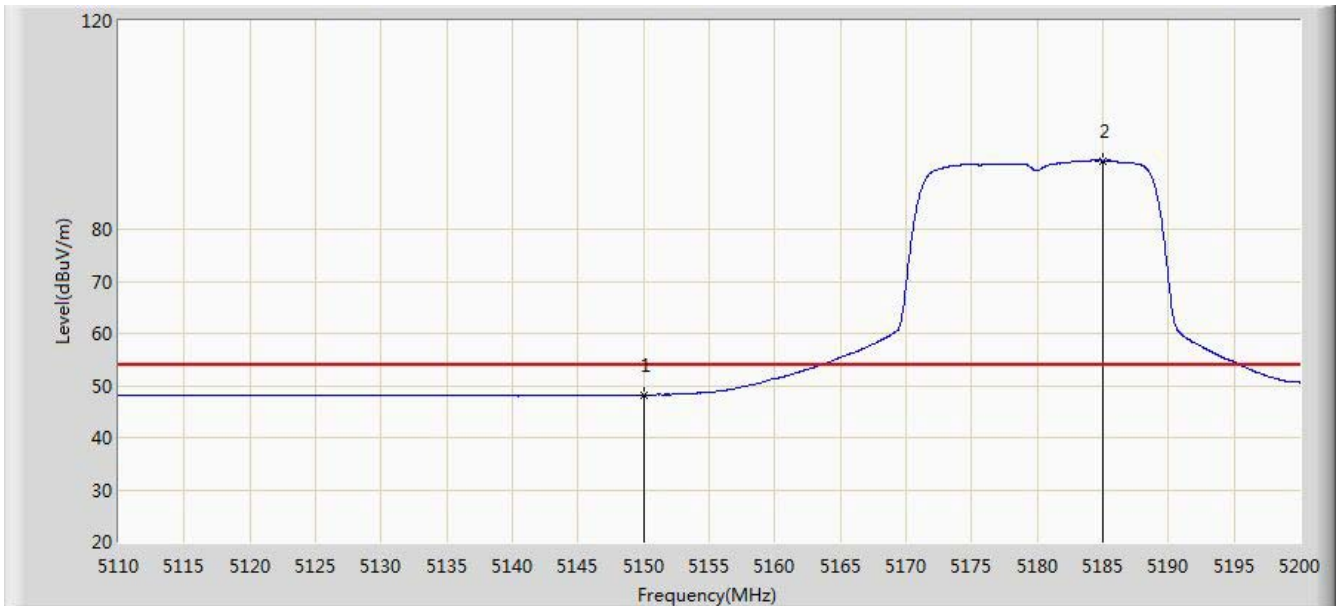


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 60.424                 | 23.672               | -13.576         | 74.000         | 36.752      | PK   |
| 2  |      | *    | 5185.195        | 107.922                | 71.272               | 33.922          | 74.000         | 36.650      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:48 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11n-HT20 Ant 0 + 1 |                          |

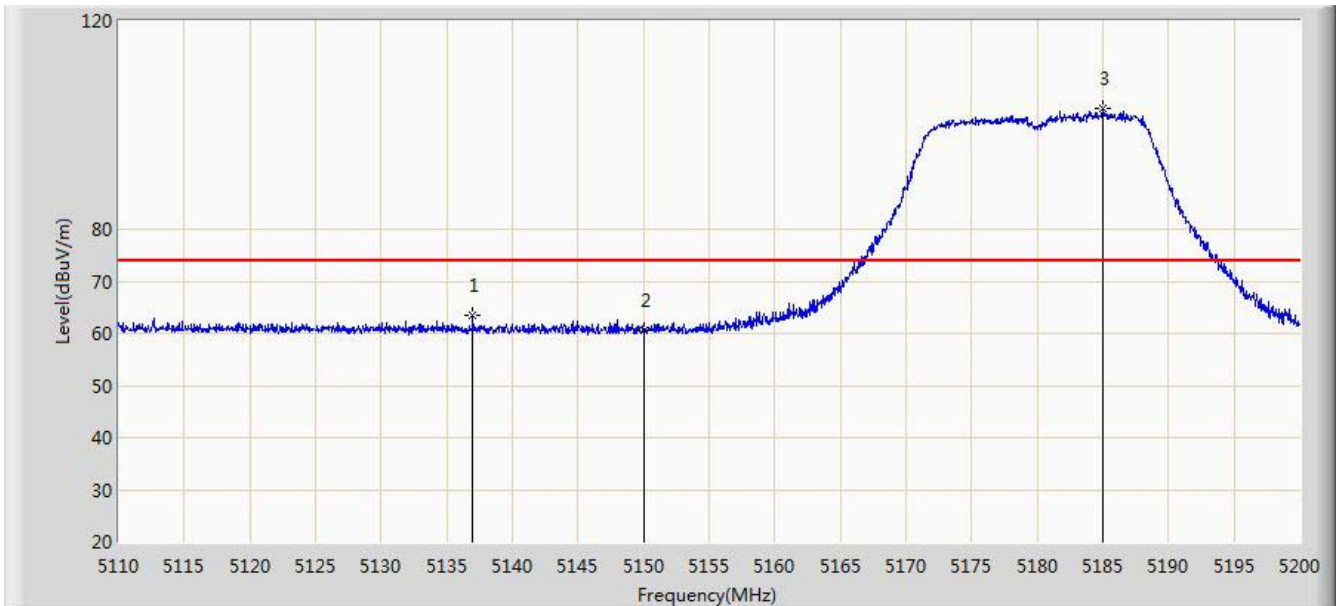


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 48.163                 | 11.411               | -5.837          | 54.000         | 36.752      | AV   |
| 2  |      | *    | 5184.970        | 93.173                 | 56.522               | 39.173          | 54.000         | 36.651      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:49 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11n-HT20 Ant 0 + 1 |                          |

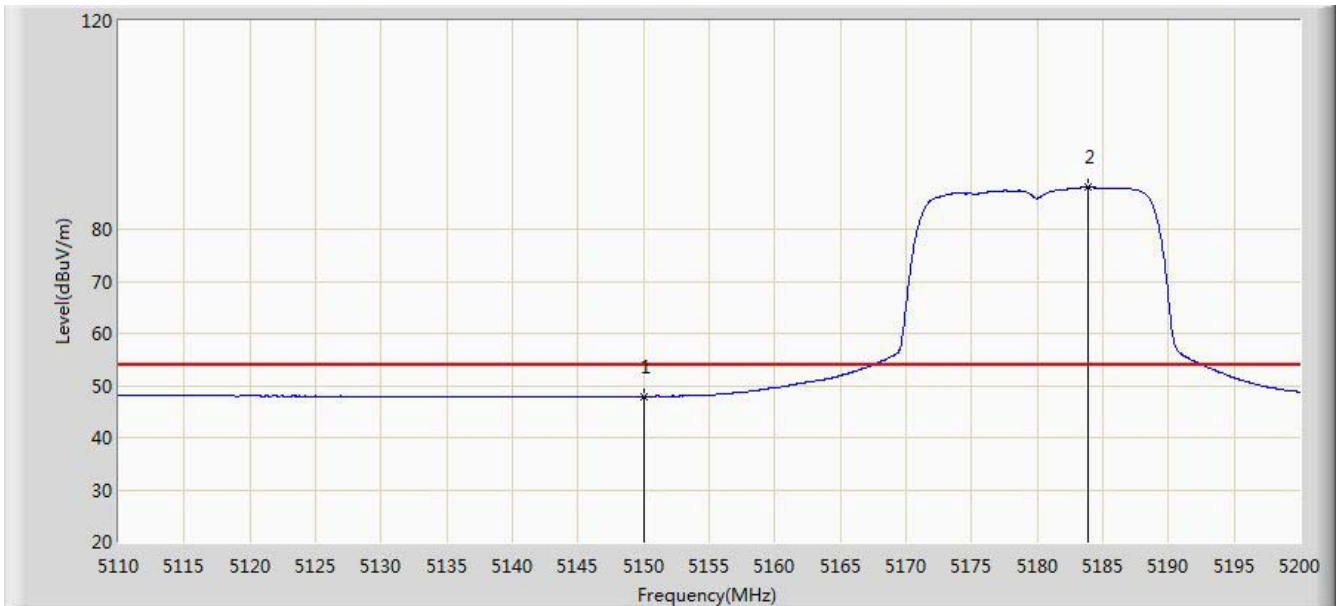


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5137.000        | 63.424                 | 26.654               | -10.576         | 74.000         | 36.770      | PK   |
| 2  |      |      | 5150.000        | 60.618                 | 23.866               | -13.382         | 74.000         | 36.752      | PK   |
| 3  |      | *    | 5184.970        | 103.285                | 66.634               | 29.285          | 74.000         | 36.651      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:49 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5180MHz by 802.11n-HT20 Ant 0 + 1 |                          |

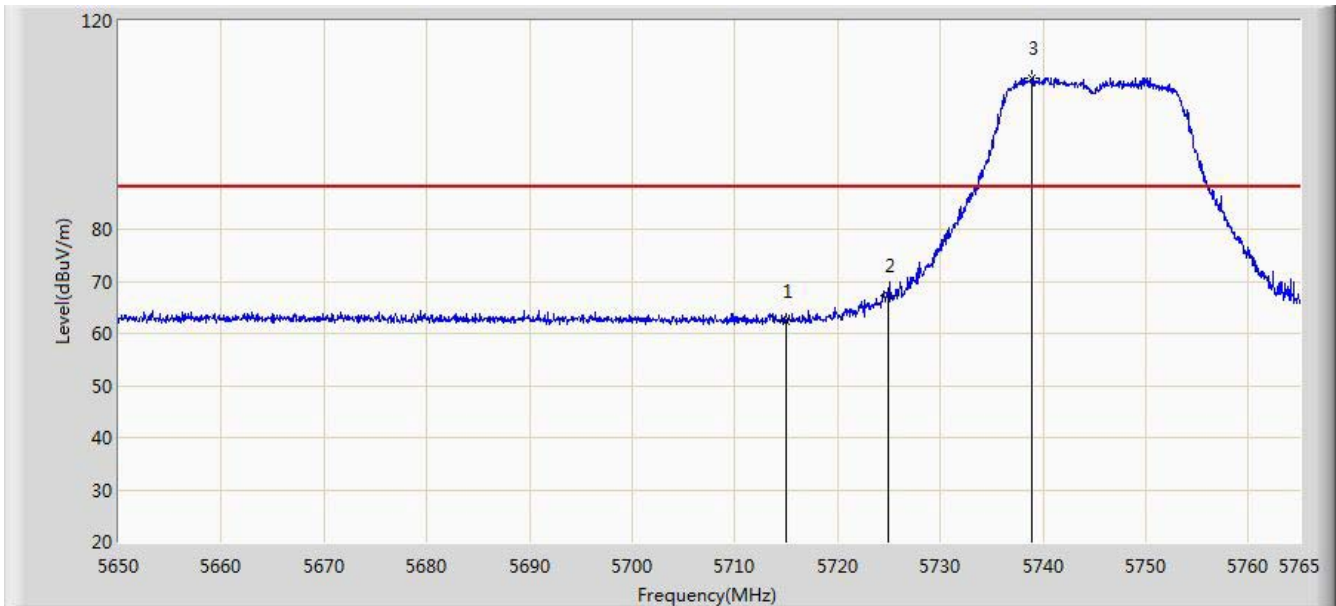


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 47.937                 | 11.185               | -6.063          | 54.000         | 36.752      | AV   |
| 2  |      | *    | 5183.845        | 87.989                 | 51.335               | 33.989          | 54.000         | 36.654      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:49 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11n-HT20 Ant 0 + 1 |                          |



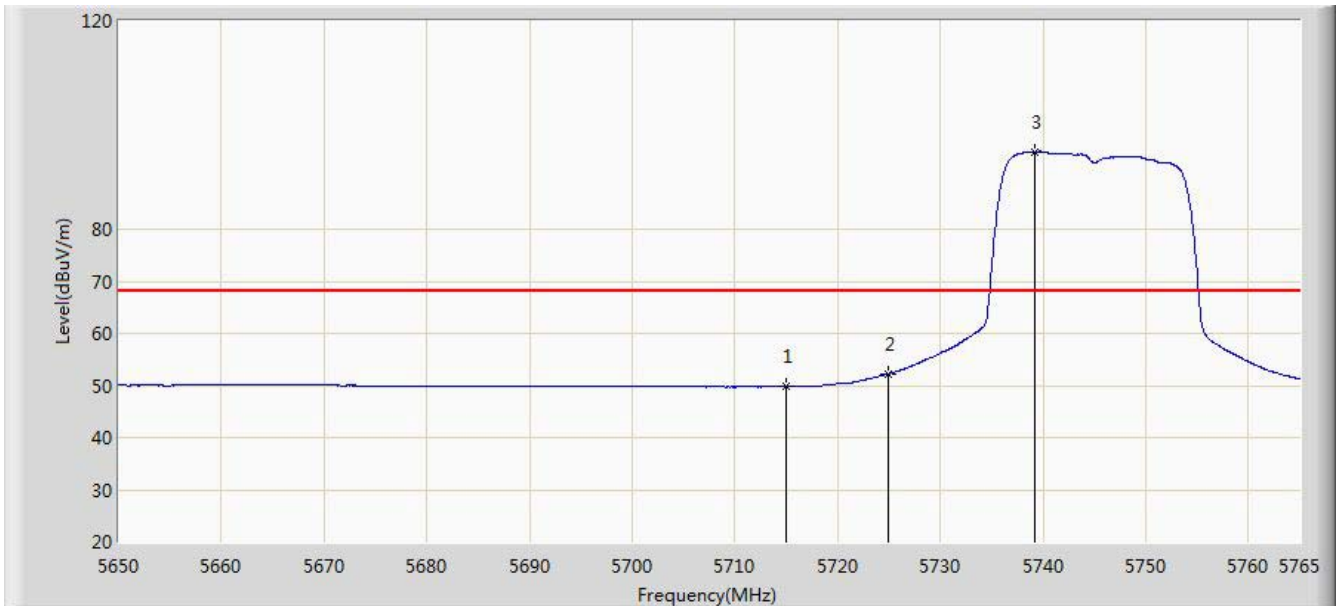
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 62.405                 | 25.138               | -25.795         | 88.200         | 37.267      | PK   |
| 2  |      |      | 5725.000        | 67.319                 | 30.014               | -20.881         | 88.200         | 37.305      | PK   |
| 3  |      | *    | 5738.895        | 109.034                | 71.673               | 20.834          | 88.200         | 37.361      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).



|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:50 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11n-HT20 Ant 0 + 1 |                          |

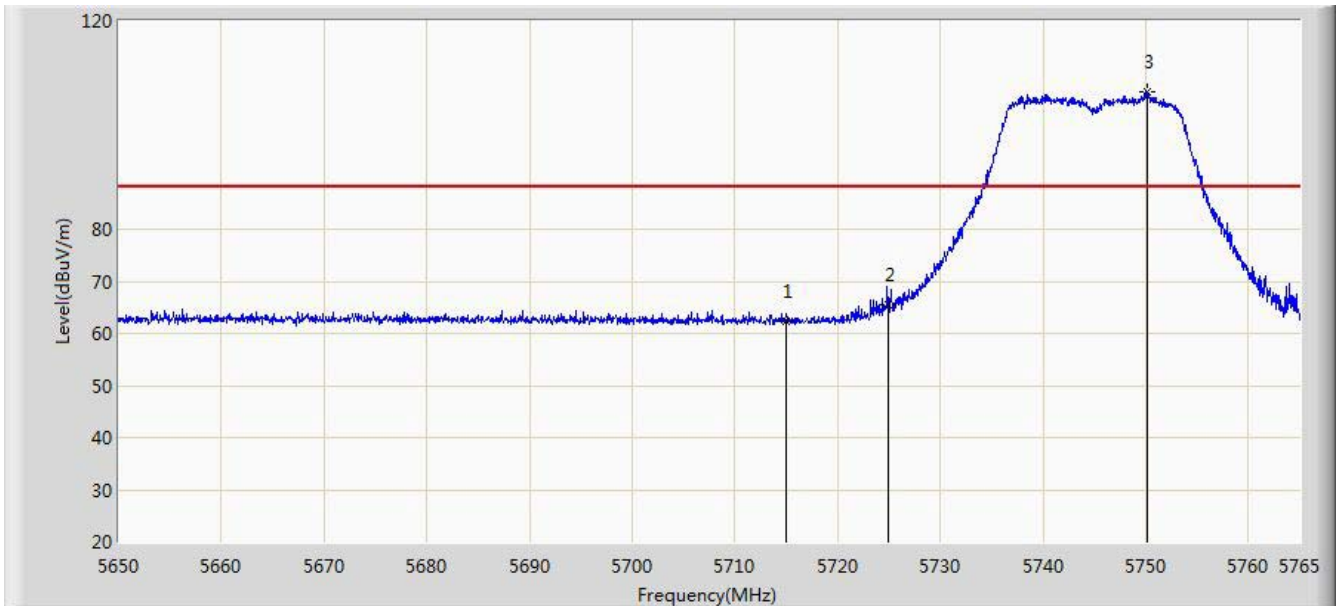


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 49.815                 | 12.548               | -18.385         | 68.200         | 37.267      | AV   |
| 2  |      |      | 5725.000        | 52.261                 | 14.956               | -15.939         | 68.200         | 37.305      | AV   |
| 3  |      | *    | 5739.183        | 94.859                 | 57.497               | 26.659          | 68.200         | 37.362      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:51 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11n-HT20 Ant 0 + 1 |                          |

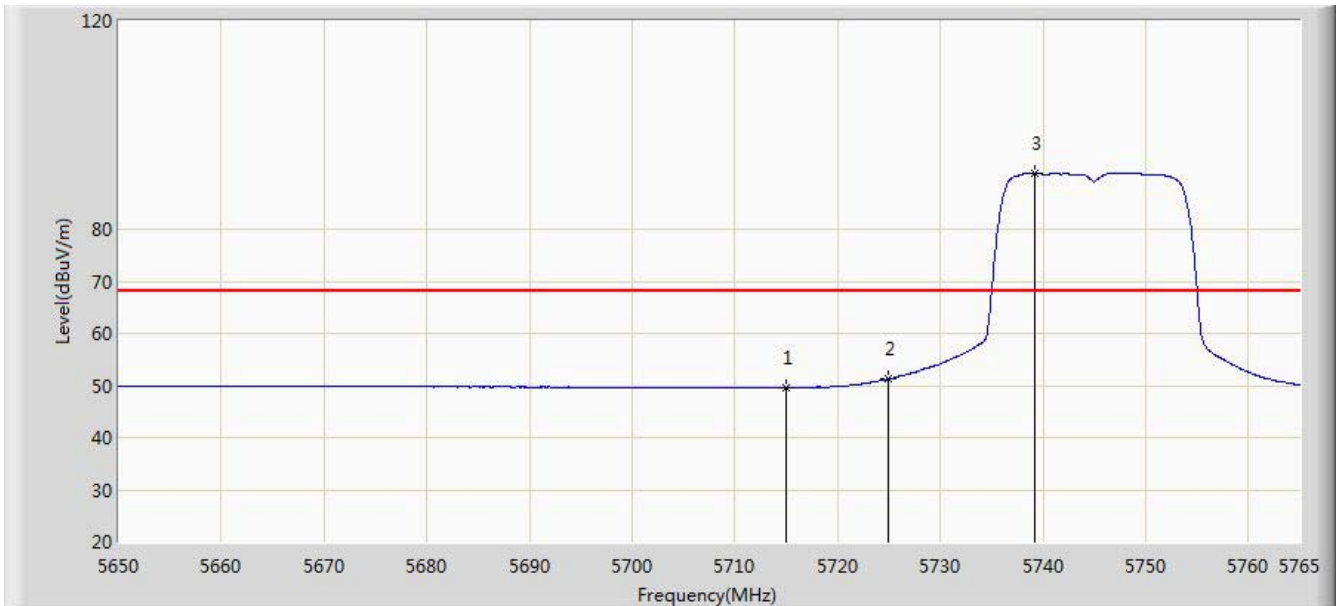


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 62.378                 | 25.111               | -25.822         | 88.200         | 37.267      | PK   |
| 2  |      |      | 5725.000        | 65.445                 | 28.140               | -22.755         | 88.200         | 37.305      | PK   |
| 3  |      | *    | 5750.107        | 106.328                | 68.923               | 18.128          | 88.200         | 37.405      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:52 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5745MHz by 802.11n-HT20 Ant 0 + 1 |                          |

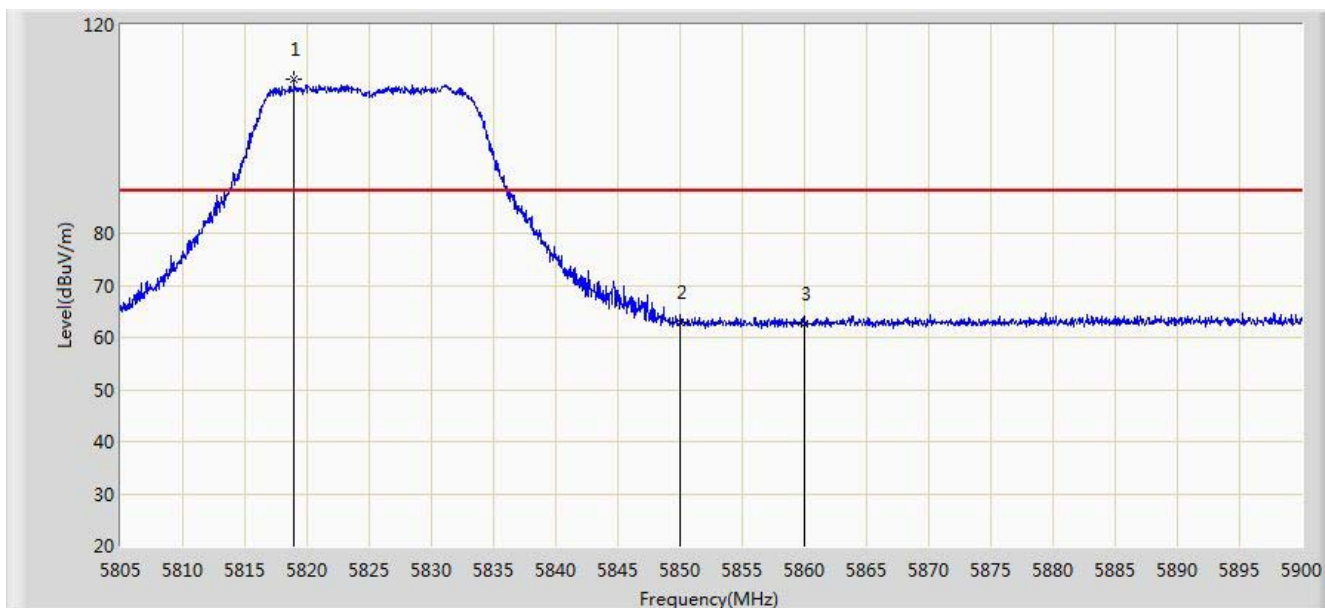


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 49.554                 | 12.287               | -18.646         | 68.200         | 37.267      | AV   |
| 2  |      |      | 5725.000        | 51.210                 | 13.905               | -16.990         | 68.200         | 37.305      | AV   |
| 3  |      | *    | 5739.240        | 90.658                 | 53.296               | 22.458          | 68.200         | 37.362      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:53 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11n-HT20 Ant 0 + 1 |                          |

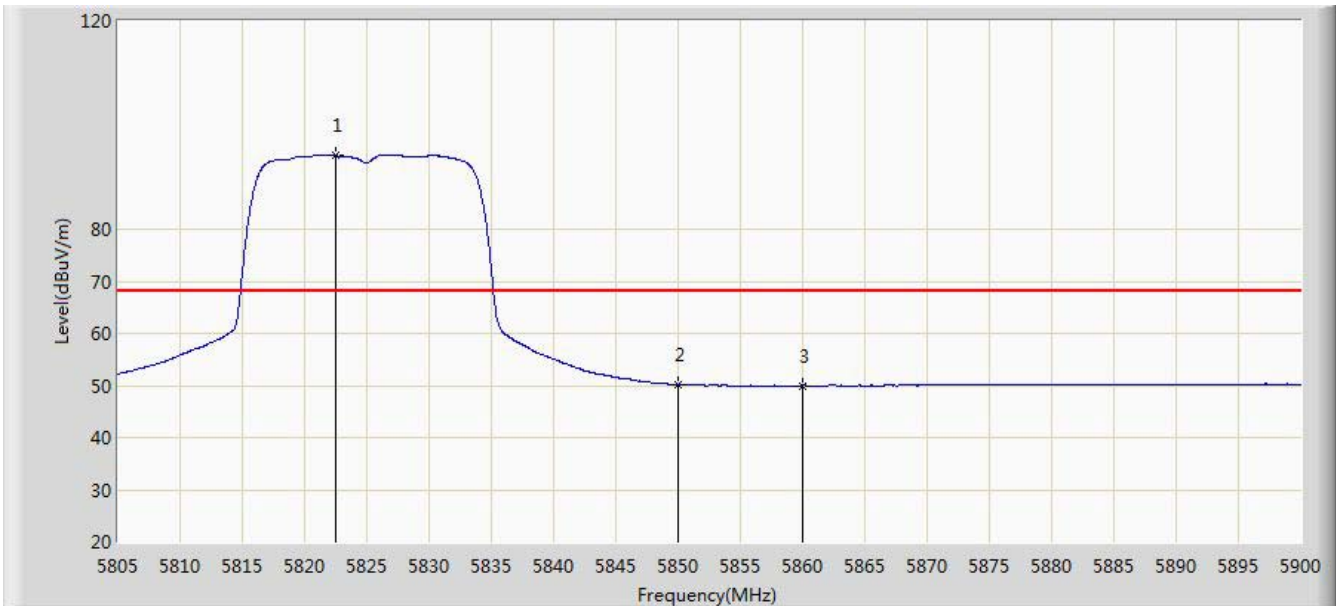


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5818.917        | 109.569                | 71.927               | 21.369          | 88.200         | 37.641      | PK   |
| 2  |      |      | 5850.000        | 63.002                 | 25.266               | -25.198         | 88.200         | 37.736      | PK   |
| 3  |      |      | 5860.000        | 62.479                 | 24.705               | -25.721         | 88.200         | 37.774      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:54 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11n-HT20 Ant 0 + 1 |                          |

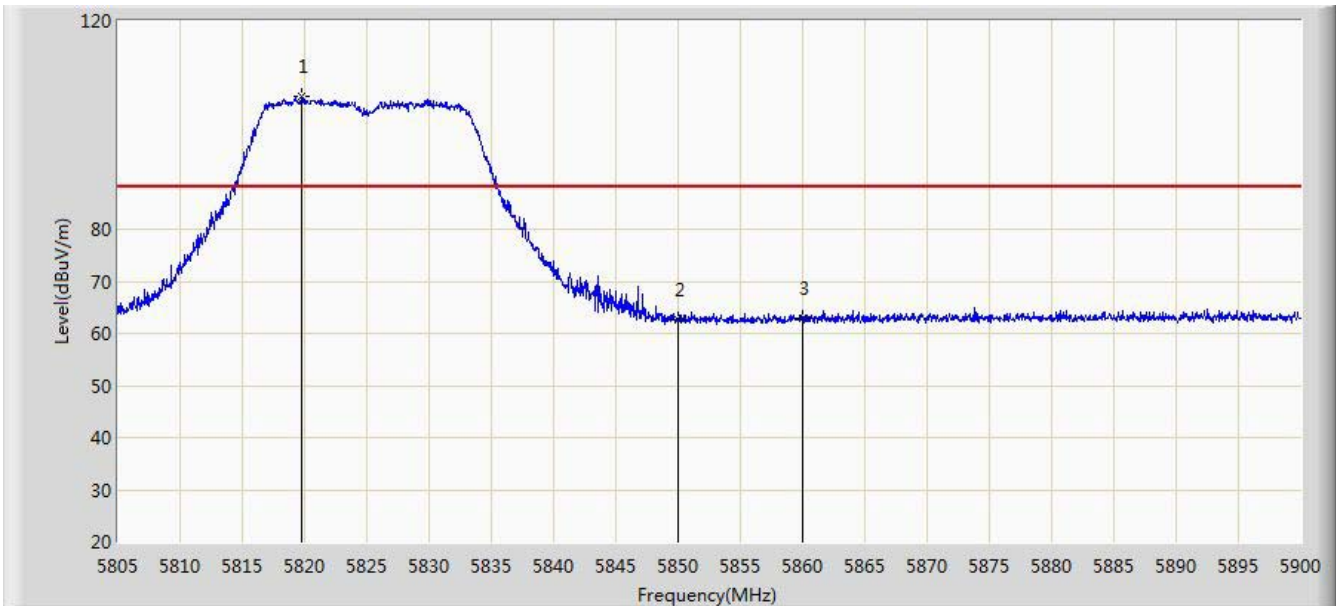


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5822.527        | 94.081                 | 56.432               | 25.881          | 68.200         | 37.649      | AV   |
| 2  |      |      | 5850.000        | 50.185                 | 12.449               | -18.015         | 68.200         | 37.736      | AV   |
| 3  |      |      | 5860.000        | 49.984                 | 12.210               | -18.216         | 68.200         | 37.774      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:55 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11n-HT20 Ant 0 + 1 |                          |

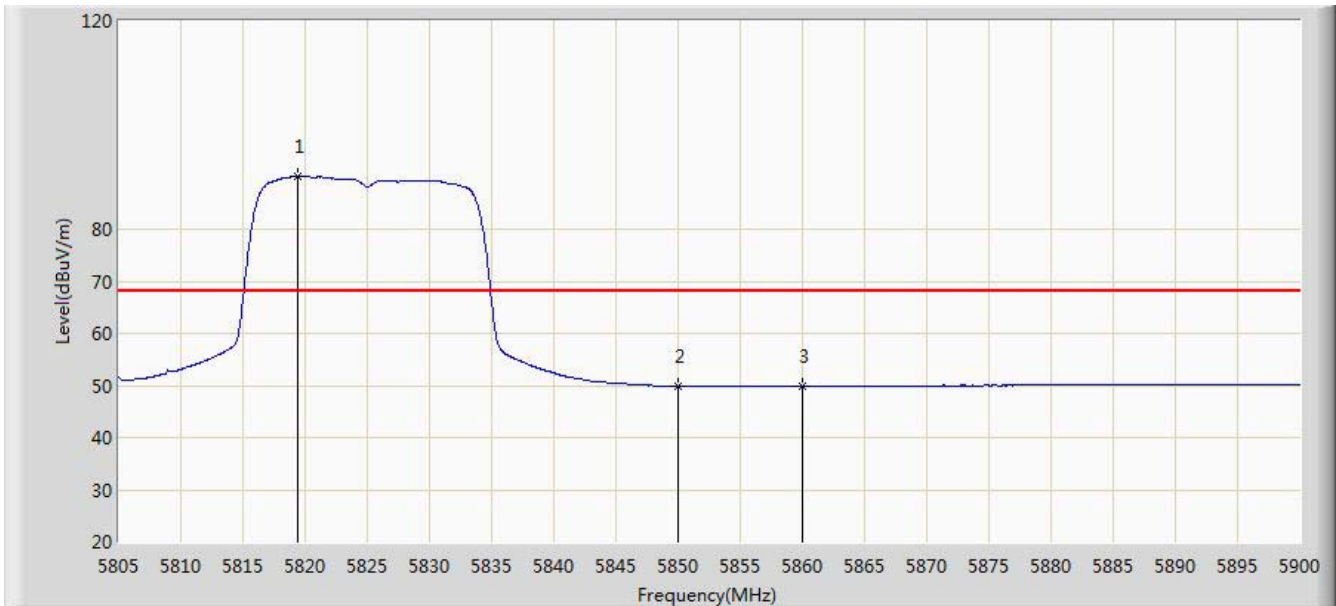


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5819.820        | 105.535                | 67.892               | 17.335          | 88.200         | 37.643      | PK   |
| 2  |      |      | 5850.000        | 62.468                 | 24.732               | -25.732         | 88.200         | 37.736      | PK   |
| 3  |      |      | 5860.000        | 62.759                 | 24.985               | -25.441         | 88.200         | 37.774      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:57 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5825MHz by 802.11n-HT20 Ant 0 + 1 |                          |

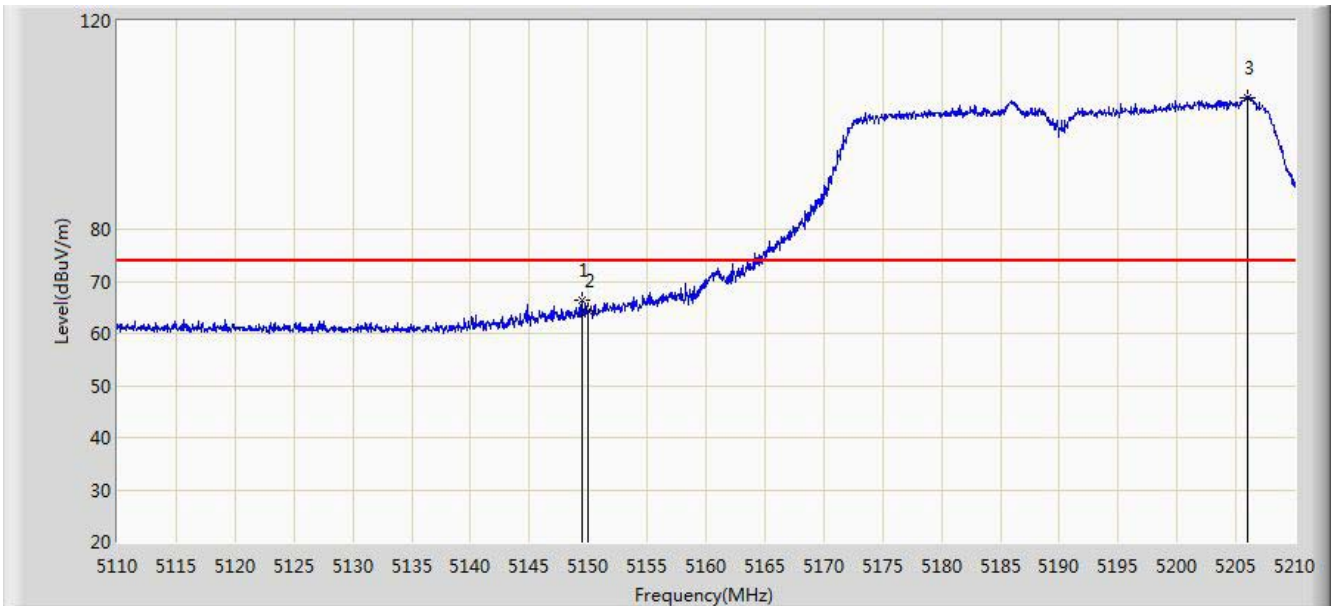


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5819.440        | 90.137                 | 52.494               | 21.937          | 68.200         | 37.643      | AV   |
| 2  |      |      | 5850.000        | 49.895                 | 12.159               | -18.305         | 68.200         | 37.736      | AV   |
| 3  |      |      | 5860.000        | 49.826                 | 12.052               | -18.374         | 68.200         | 37.774      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 16:58 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5190MHz by 802.11n-HT40 Ant 0 + 1 |                          |



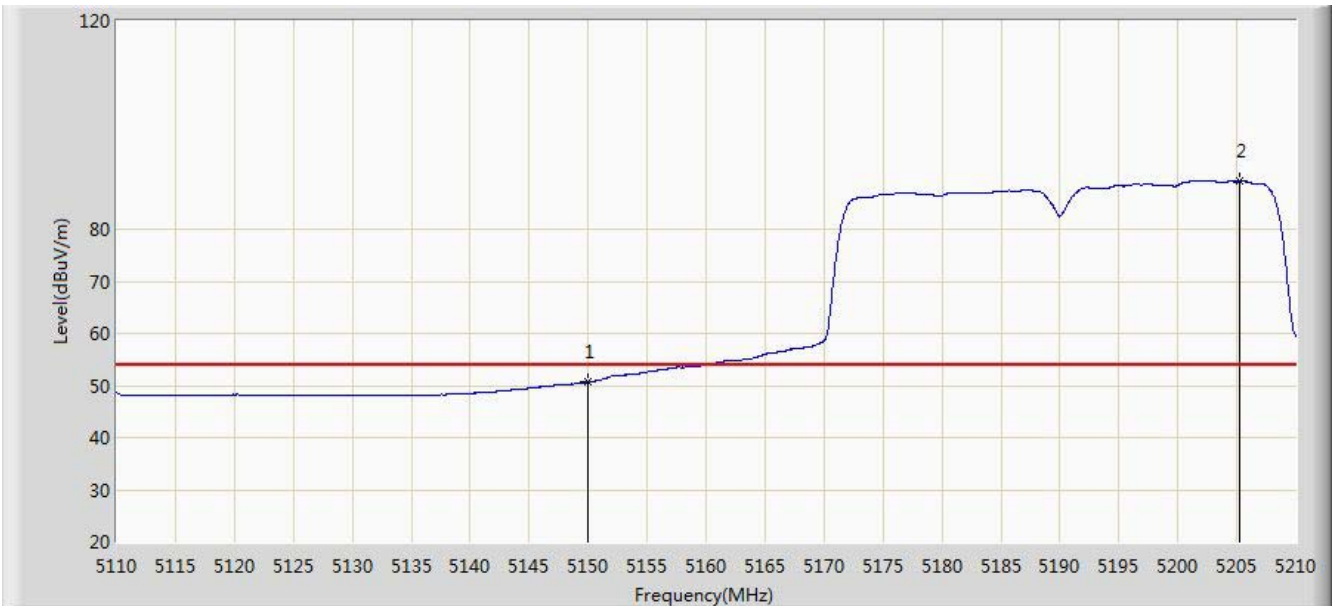
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5149.450        | 66.358                 | 29.605               | -7.642          | 74.000         | 36.753      | PK   |
| 2  |      |      | 5150.000        | 64.434                 | 27.682               | -9.566          | 74.000         | 36.752      | PK   |
| 3  |      | *    | 5206.050        | 105.309                | 68.709               | 31.309          | 74.000         | 36.600      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).



|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:02 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5190MHz by 802.11n-HT40 Ant 0 + 1 |                          |

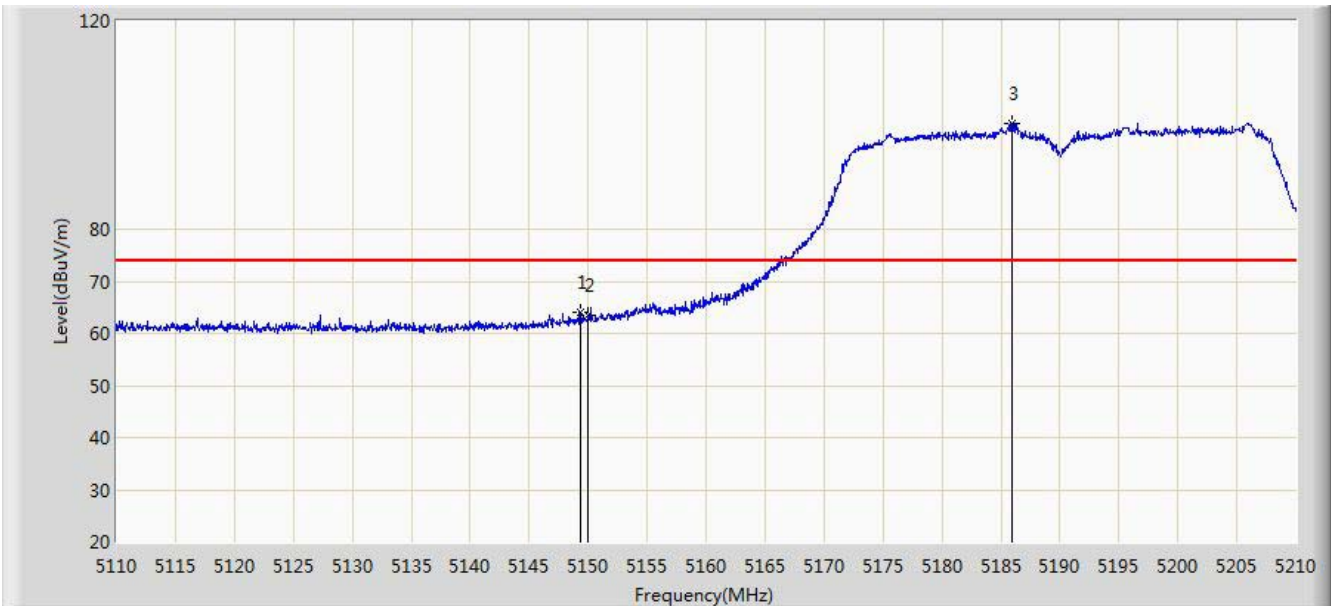


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 50.635                 | 13.883               | -3.365          | 54.000         | 36.752      | AV   |
| 2  |      | *    | 5205.300        | 89.242                 | 52.640               | 35.242          | 54.000         | 36.601      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:02 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5190MHz by 802.11n-HT40 Ant 0 + 1 |                          |

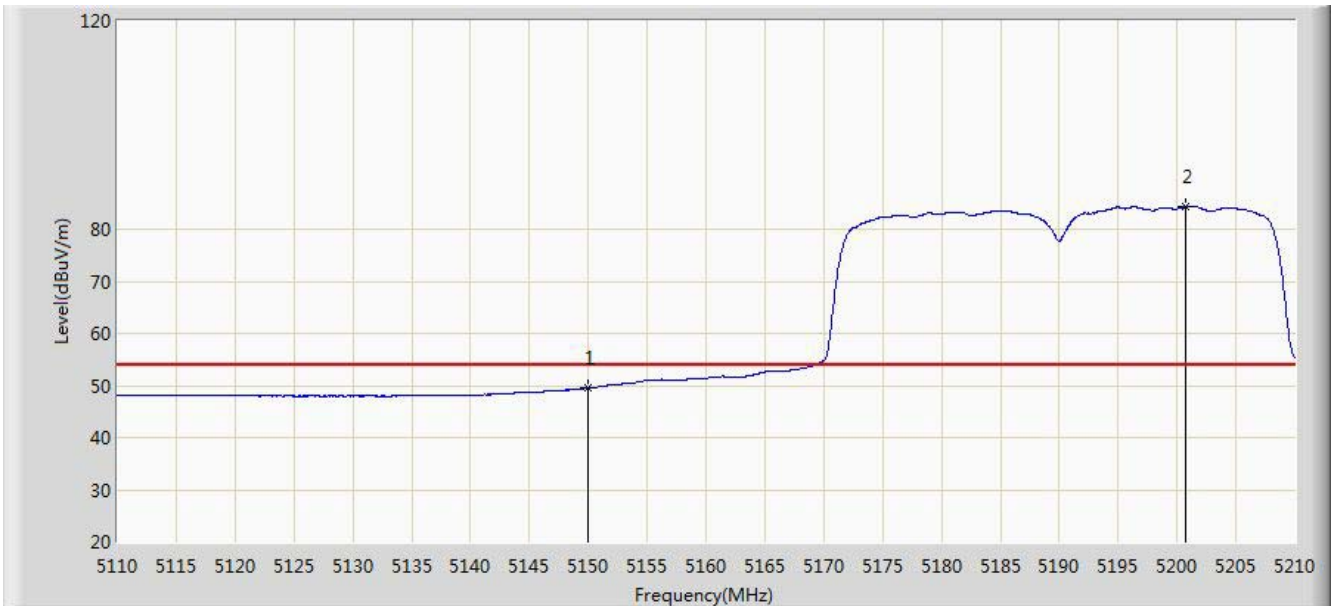


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5149.400        | 64.054                 | 27.301               | -9.946          | 74.000         | 36.753      | PK   |
| 2  |      |      | 5150.000        | 63.381                 | 26.629               | -10.619         | 74.000         | 36.752      | PK   |
| 3  |      | *    | 5186.000        | 100.323                | 63.675               | 26.323          | 74.000         | 36.648      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:04 |
| Limit: FCC_Part15.209_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5190MHz by 802.11n-HT40 Ant 0 + 1 |                          |

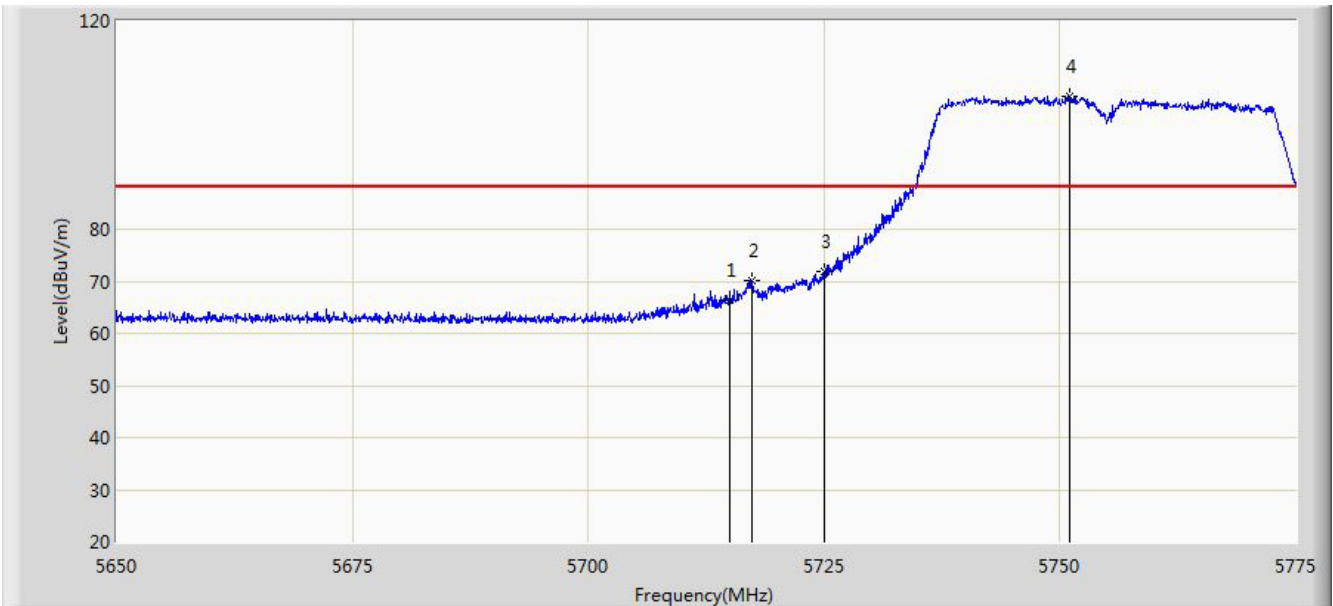


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5150.000        | 49.482                 | 12.730               | -4.518          | 54.000         | 36.752      | AV   |
| 2  |      | *    | 5200.750        | 84.275                 | 47.664               | 30.275          | 54.000         | 36.611      | AV   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:05 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5755MHz by 802.11n-HT40 Ant 0 + 1 |                          |

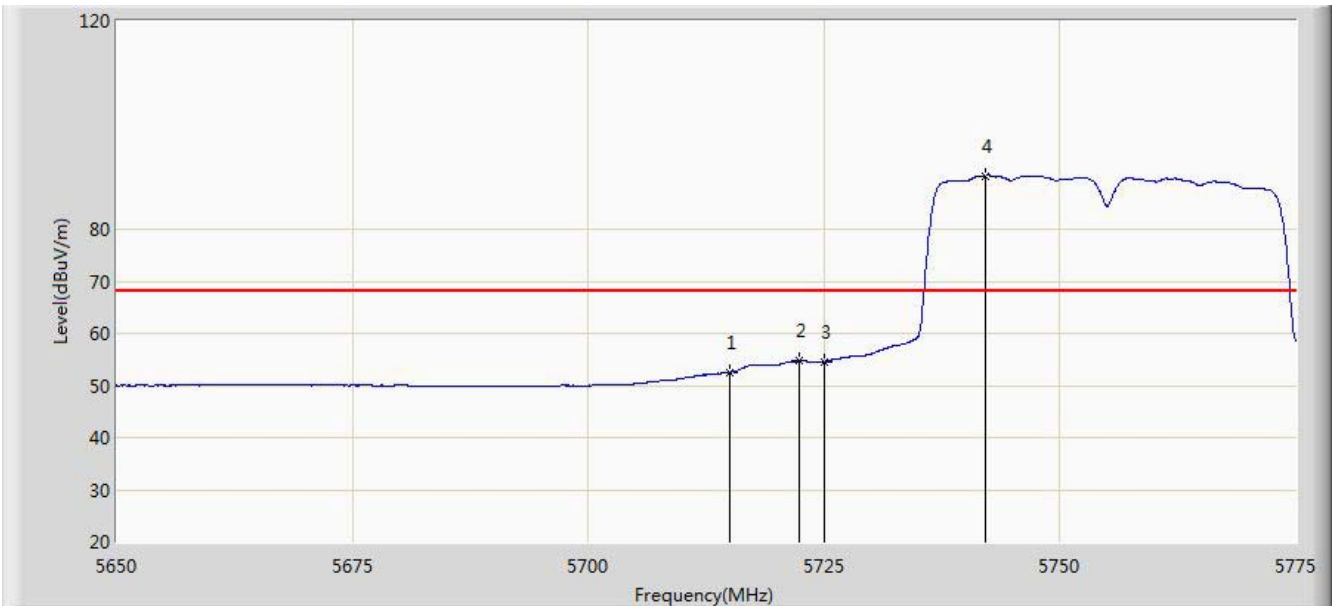


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 66.373                 | 29.106               | -21.827         | 88.200         | 37.267      | PK   |
| 2  |      |      | 5717.375        | 70.014                 | 32.738               | -18.186         | 88.200         | 37.276      | PK   |
| 3  |      |      | 5725.000        | 71.857                 | 34.552               | -16.343         | 88.200         | 37.305      | PK   |
| 4  |      | *    | 5751.000        | 105.516                | 68.108               | 17.316          | 88.200         | 37.409      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:20 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5755MHz by 802.11n-HT40 Ant 0 + 1 |                          |

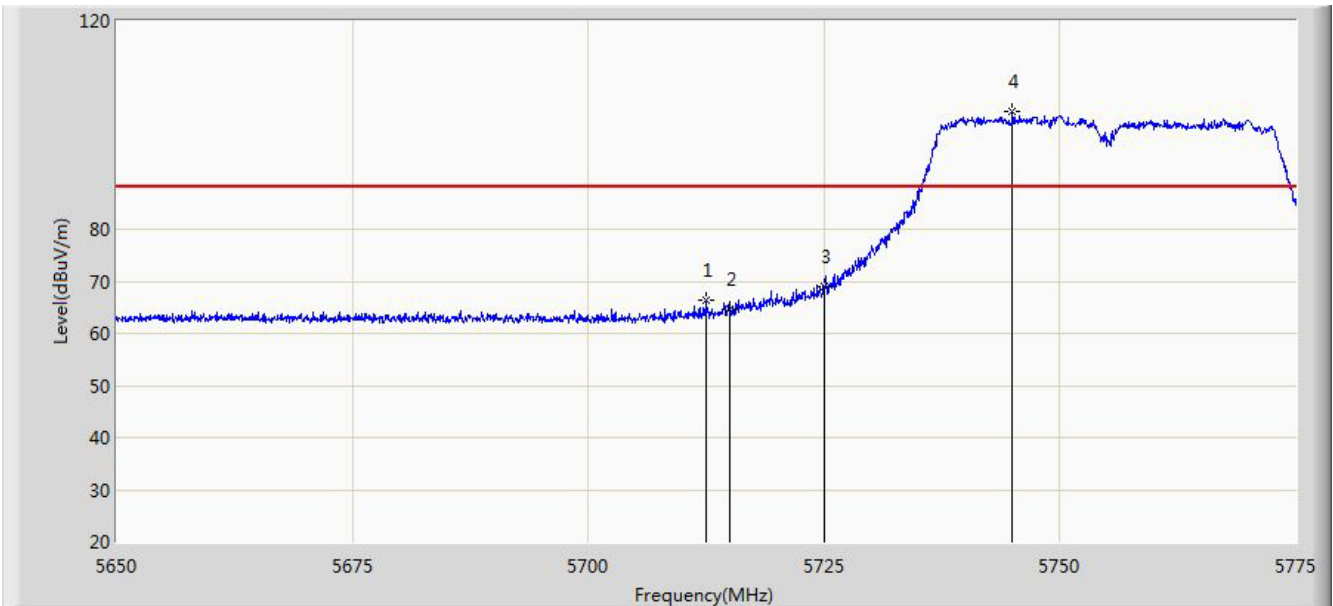


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 52.548                 | 15.281               | -15.652         | 68.200         | 37.267      | AV   |
| 2  |      |      | 5722.437        | 54.779                 | 17.484               | -13.421         | 68.200         | 37.295      | AV   |
| 3  |      |      | 5725.000        | 54.428                 | 17.123               | -13.772         | 68.200         | 37.305      | AV   |
| 4  |      | *    | 5742.062        | 90.232                 | 52.859               | 22.032          | 68.200         | 37.373      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:21 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5755MHz by 802.11n-HT40 Ant 0 + 1 |                          |

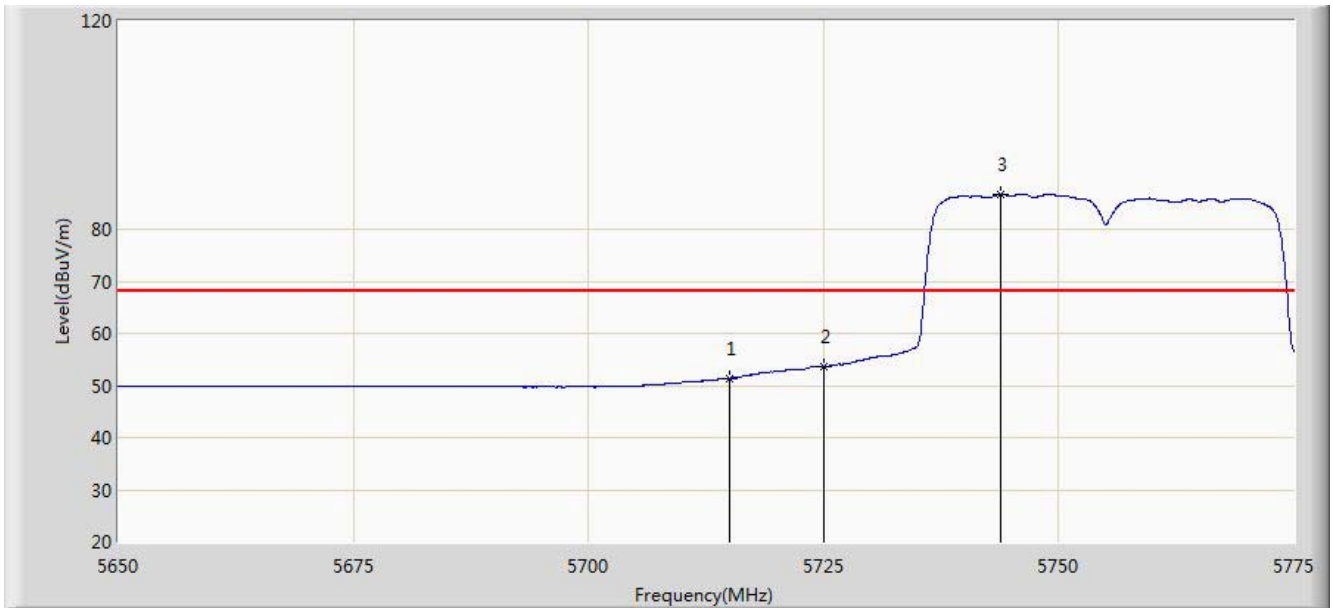


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5712.500        | 66.497                 | 29.240               | -21.703         | 88.200         | 37.257      | PK   |
| 2  |      |      | 5715.000        | 64.711                 | 27.444               | -23.489         | 88.200         | 37.267      | PK   |
| 3  |      |      | 5725.000        | 69.101                 | 31.796               | -19.099         | 88.200         | 37.305      | PK   |
| 4  |      | *    | 5745.000        | 102.526                | 65.142               | 14.326          | 88.200         | 37.384      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:23 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5755MHz by 802.11n-HT40 Ant 0 + 1 |                          |

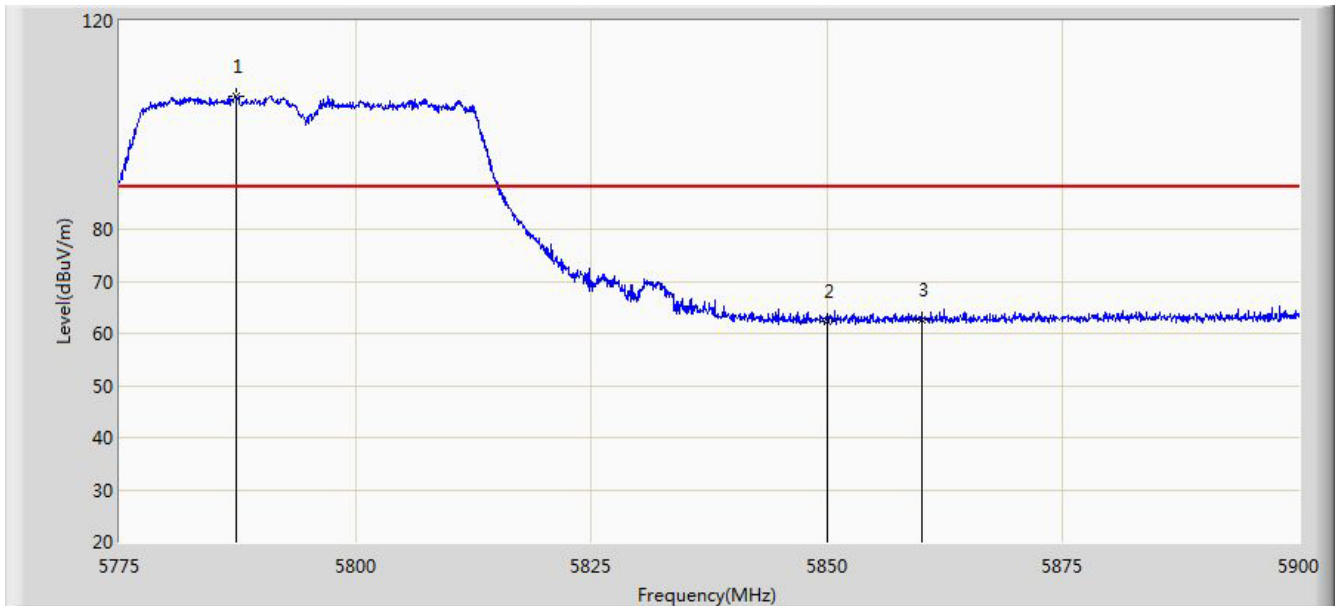


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      |      | 5715.000        | 51.414                 | 14.147               | -16.786         | 68.200         | 37.267      | AV   |
| 2  |      |      | 5725.000        | 53.521                 | 16.216               | -14.679         | 68.200         | 37.305      | AV   |
| 3  |      | *    | 5743.812        | 86.717                 | 49.338               | 18.517          | 68.200         | 37.379      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:25 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5795MHz by 802.11n-HT40 Ant 0 + 1 |                          |



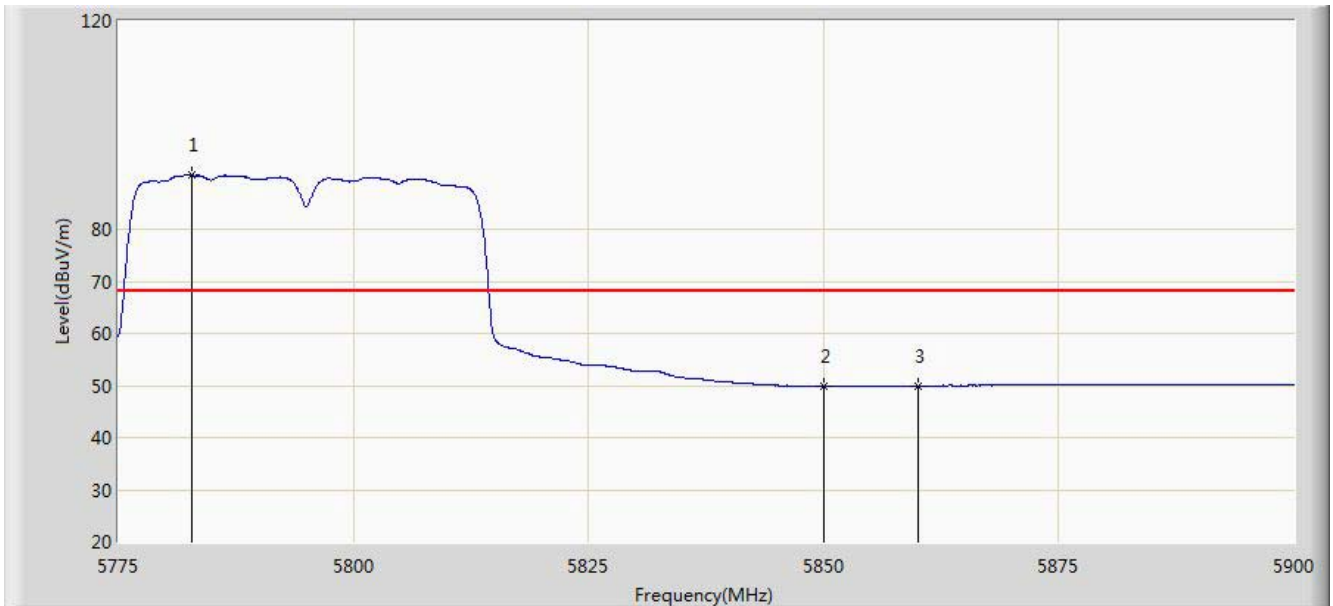
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5787.375        | 105.602                | 68.056               | 17.402          | 88.200         | 37.546      | PK   |
| 2  |      |      | 5850.000        | 62.193                 | 24.457               | -26.007         | 88.200         | 37.736      | PK   |
| 3  |      |      | 5860.000        | 62.580                 | 24.806               | -25.620         | 88.200         | 37.774      | PK   |

Note: Measure Level (dB $\mu$ V/m) = Reading Level (dB $\mu$ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).



|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:26 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Horizontal     |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5795MHz by 802.11n-HT40 Ant 0 + 1 |                          |

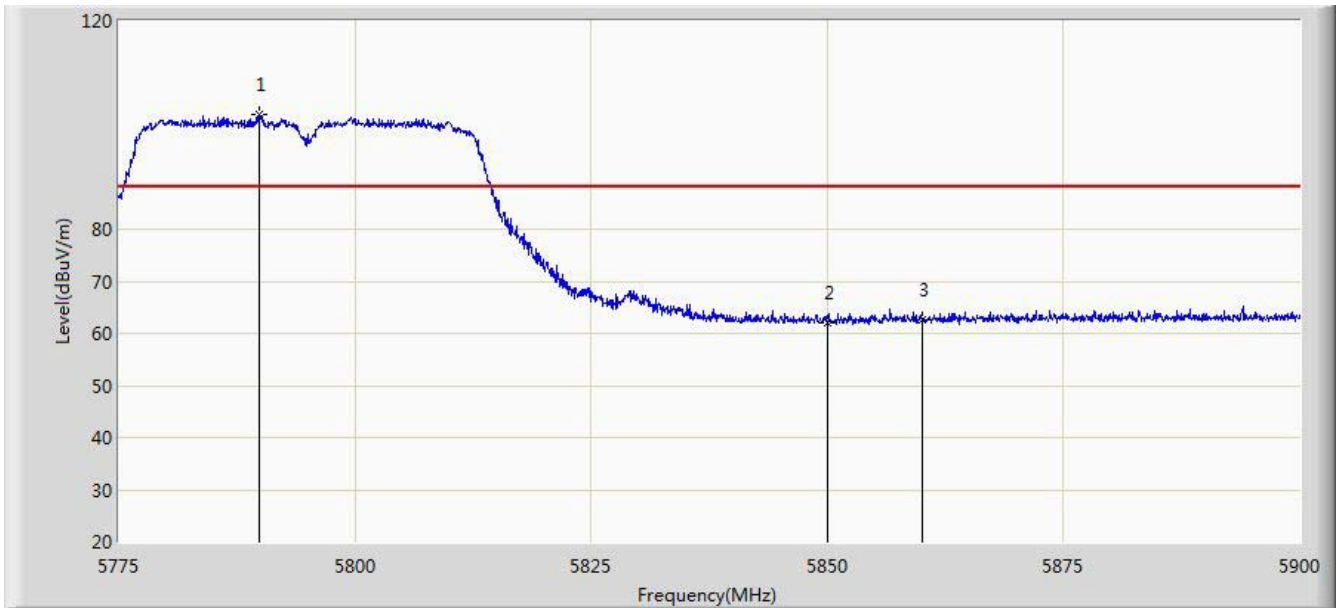


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5782.875        | 90.349                 | 52.821               | 22.149          | 68.200         | 37.528      | AV   |
| 2  |      |      | 5850.000        | 49.834                 | 12.098               | -18.366         | 68.200         | 37.736      | AV   |
| 3  |      |      | 5860.000        | 49.975                 | 12.201               | -18.225         | 68.200         | 37.774      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:27 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5795MHz by 802.11n-HT40 Ant 0 + 1 |                          |

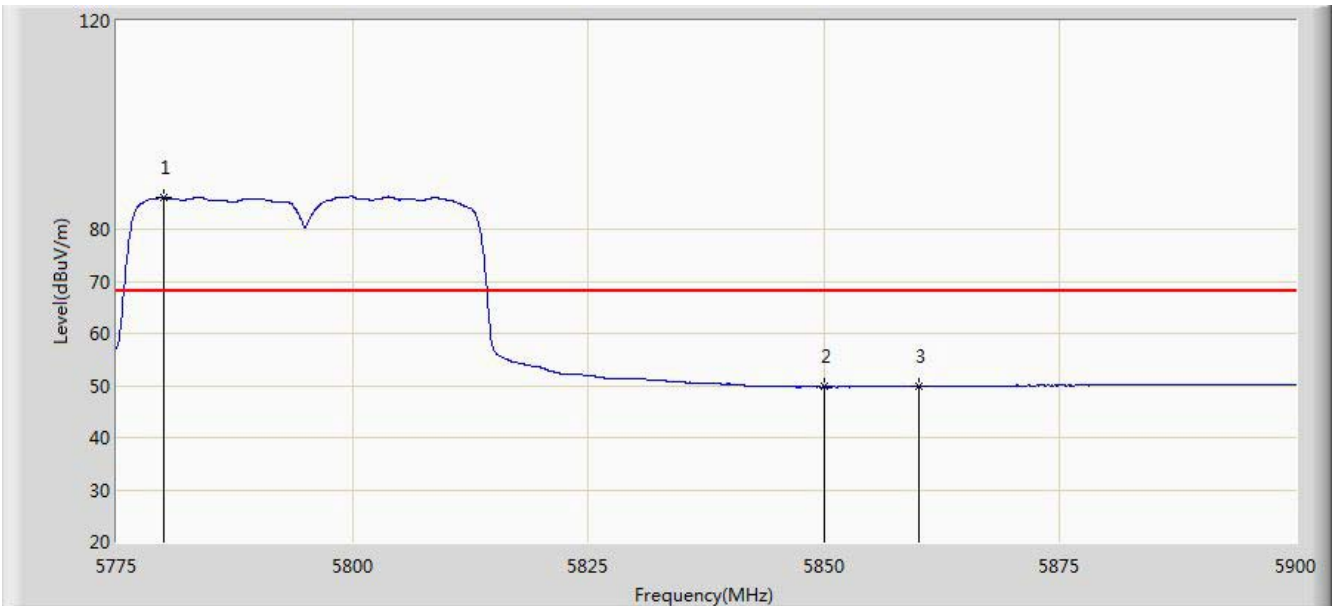


| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5789.875        | 101.901                | 64.345               | 13.701          | 88.200         | 37.556      | PK   |
| 2  |      |      | 5850.000        | 62.107                 | 24.371               | -26.093         | 88.200         | 37.736      | PK   |
| 3  |      |      | 5860.000        | 62.701                 | 24.927               | -25.499         | 88.200         | 37.774      | PK   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

|  |                          |
|--|--------------------------|
| Site: AC1  | Time: 2014/12/02 - 17:29 |
| Limit: FCC_Part15.407_RE(3m)                                     | Engineer: Roy Cheng      |
| Probe: BBHA9120D_1-18GHz   | Polarity: Vertical       |
| EUT: High performance dual band 2x2 802.11n indoor AP            | Power: AC 120V/60Hz      |
| Test Mode: Transmit at channel 5795MHz by 802.11n-HT40 Ant 0 + 1 |                          |



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | Factor (dB) | Type |
|----|------|------|-----------------|------------------------|----------------------|-----------------|----------------|-------------|------|
| 1  |      | *    | 5780.000        | 86.135                 | 48.619               | 17.935          | 68.200         | 37.517      | AV   |
| 2  |      |      | 5850.000        | 49.722                 | 11.986               | -18.478         | 68.200         | 37.736      | AV   |
| 3  |      |      | 5860.000        | 49.842                 | 12.068               | -18.358         | 68.200         | 37.774      | AV   |

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m).

## 7.10. AC Conducted Emissions Measurement

### 7.10.1. Test Limit

| FCC Part 15 Subpart C Paragraph 15.207 |                 |                 |
|--|-----------------|-----------------|
| Frequency (MHz)                        | QP (dB $\mu$ V) | AV (dB $\mu$ V) |
| 0.15 - 0.50                            | 66 - 56         | 56 - 46         |
| 0.50 - 5.0                             | 56              | 46              |
| 5.0 - 30                               | 60              | 50              |

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

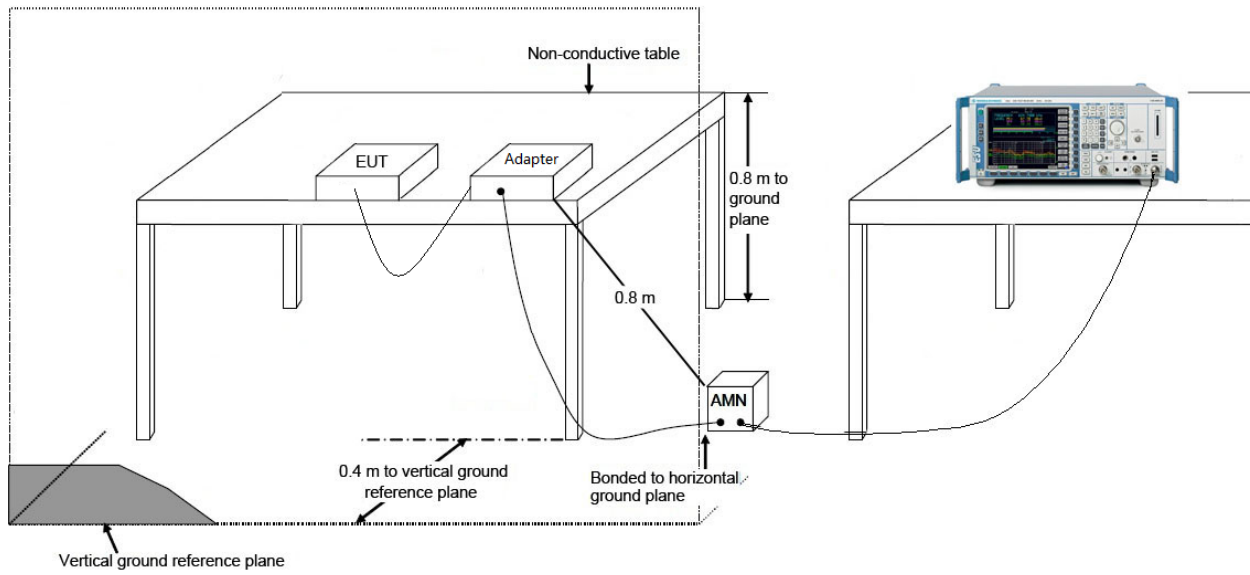
### 7.10.2. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

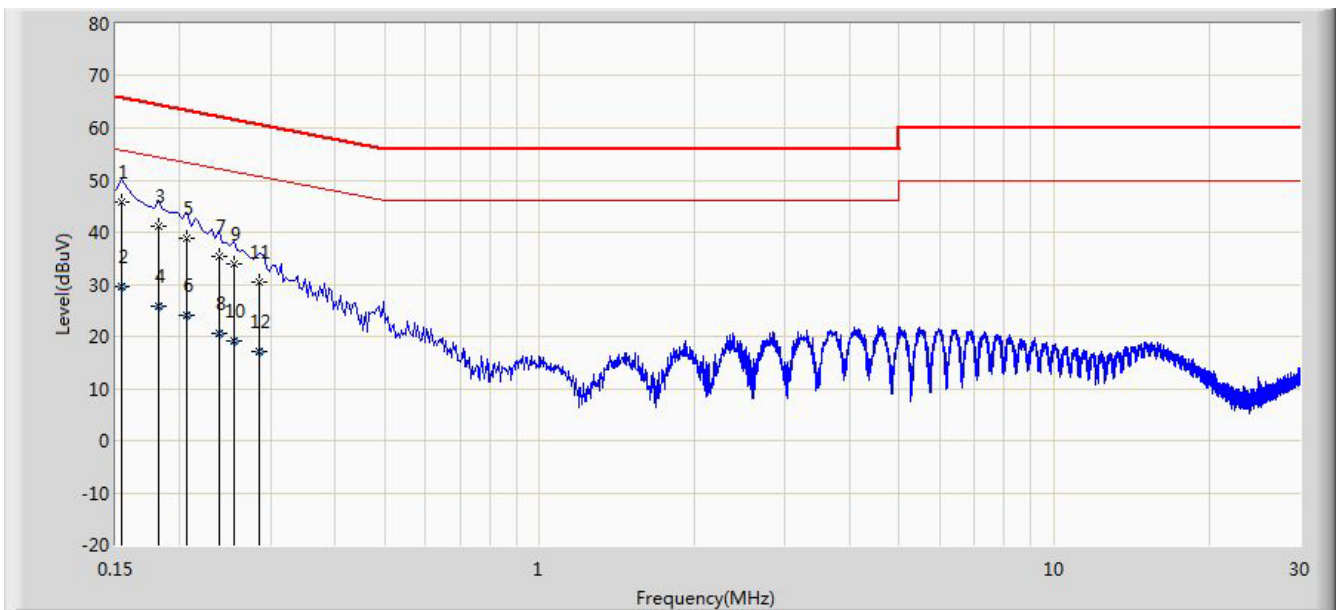
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

### 7.10.3. Test Setup



**7.10.4. Test Result**

|   |                          |
|---|--------------------------|
| Site: SR2   | Time: 2014/11/21 - 18:38 |
| Limit: FCC_Part15.207_CE_AC Power                     | Engineer: Milo Li        |
| Probe: ENV216_101683_Filter On                        | Polarity: Line           |
| EUT: High performance dual band 2x2 802.11n indoor AP | Power: AC 120V/60Hz      |
| Note: Mode 1  |                          |



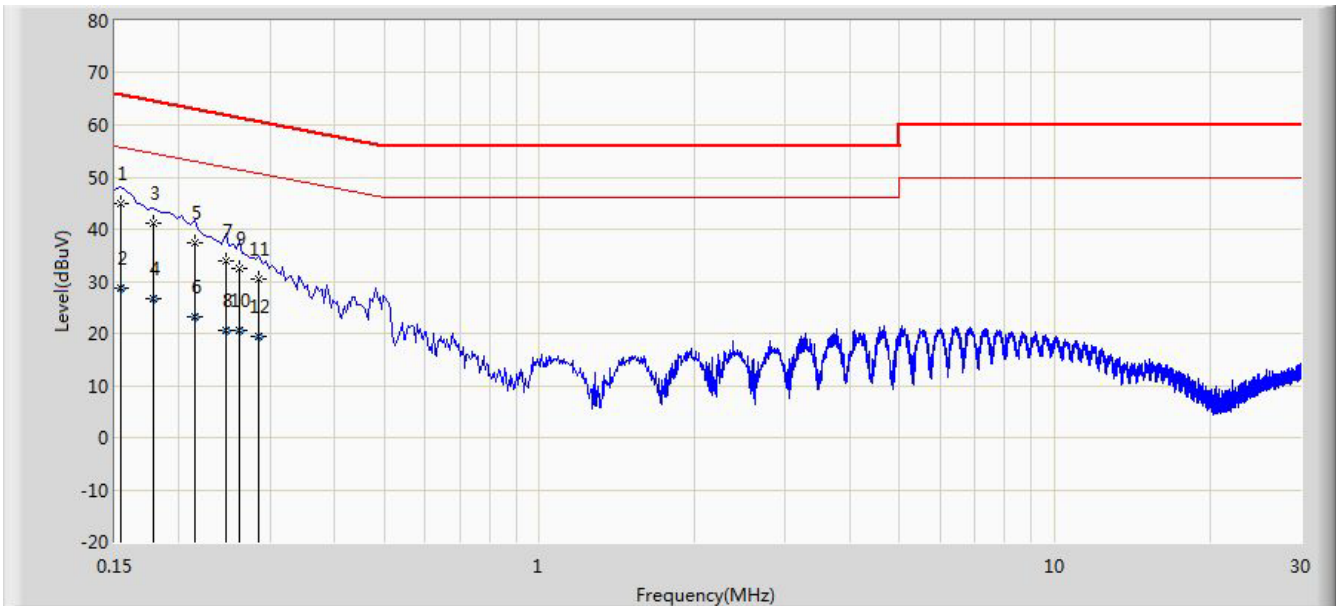
| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV) | Factor (dB) | Type |
|----|------|------|-----------------|----------------------|----------------------|-----------------|--------------|-------------|------|
| 1  |      | *    | 0.154           | 45.832               | 35.092               | -19.950         | 65.781       | 10.740      | QP   |
| 2  |      |      | 0.154           | 29.509               | 18.770               | -26.272         | 55.781       | 10.740      | AV   |
| 3  |      |      | 0.182           | 41.179               | 31.130               | -23.215         | 64.394       | 10.048      | QP   |
| 4  |      |      | 0.182           | 25.860               | 15.811               | -28.534         | 54.394       | 10.048      | AV   |
| 5  |      |      | 0.206           | 38.807               | 28.826               | -24.558         | 63.365       | 9.981       | QP   |
| 6  |      |      | 0.206           | 23.956               | 13.975               | -29.409         | 53.365       | 9.981       | AV   |
| 7  |      |      | 0.238           | 35.394               | 25.439               | -26.772         | 62.166       | 9.954       | QP   |
| 8  |      |      | 0.238           | 20.435               | 10.481               | -31.731         | 52.166       | 9.954       | AV   |
| 9  |      |      | 0.254           | 33.880               | 23.913               | -27.745         | 61.625       | 9.967       | QP   |
| 10 |      |      | 0.254           | 19.203               | 9.236                | -32.422         | 51.625       | 9.967       | AV   |
| 11 |      |      | 0.286           | 30.521               | 20.529               | -30.118         | 60.640       | 9.993       | QP   |
| 12 |      |      | 0.286           | 17.034               | 7.041                | -33.606         | 50.640       | 9.993       | AV   |

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)



|   |                          |
|---|--------------------------|
| Site: SR2   | Time: 2014/11/21 - 18:42 |
| Limit: FCC_Part15.207_CE_AC Power                     | Engineer: Milo Li        |
| Probe: ENV216_101683_Filter On                        | Polarity: Neutral        |
| EUT: High performance dual band 2x2 802.11n indoor AP | Power: AC 120V/60Hz      |
| Note: Mode 1  |                          |



| No | Flag | Mark | Frequency (MHz) | Measure Level (dBuV) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV) | Factor (dB) | Type |
|----|------|------|-----------------|----------------------|----------------------|-----------------|--------------|-------------|------|
| 1  |      | *    | 0.154           | 45.034               | 34.318               | -20.748         | 65.781       | 10.716      | QP   |
| 2  |      |      | 0.154           | 28.836               | 18.120               | -26.945         | 55.781       | 10.716      | AV   |
| 3  |      |      | 0.178           | 41.187               | 31.137               | -23.392         | 64.578       | 10.049      | QP   |
| 4  |      |      | 0.178           | 26.725               | 16.675               | -27.853         | 54.578       | 10.049      | AV   |
| 5  |      |      | 0.214           | 37.248               | 27.260               | -25.800         | 63.049       | 9.988       | QP   |
| 6  |      |      | 0.214           | 23.138               | 13.150               | -29.911         | 53.049       | 9.988       | AV   |
| 7  |      |      | 0.246           | 33.948               | 23.950               | -27.943         | 61.891       | 9.998       | QP   |
| 8  |      |      | 0.246           | 20.559               | 10.561               | -31.332         | 51.891       | 9.998       | AV   |
| 9  |      |      | 0.262           | 32.431               | 22.421               | -28.937         | 61.368       | 10.010      | QP   |
| 10 |      |      | 0.262           | 20.595               | 10.585               | -30.773         | 51.368       | 10.010      | AV   |
| 11 |      |      | 0.286           | 30.319               | 20.291               | -30.321         | 60.640       | 10.027      | QP   |
| 12 |      |      | 0.286           | 19.306               | 9.279                | -31.333         | 50.640       | 10.027      | AV   |

Note: Measure Level (dBμV) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)



## 8. CONCLUSION

The data collected relate only the item(s) tested and show that the **High performance dual band 2x2 802.11n indoor AP FCC ID: WF-122** is in compliance with Part 15E of the FCC Rules.

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The End