

# **FCC Test Report**

Product Name : Mesh WiFi AP

Model No. : AP5621-N-TH

FCC ID. : 2AF7R-AP5621NTH

Applicant: Yang Hwa Technology Corp.

: 31046 No.96, Gongye 2nd Rd., Zhudong Township, Address

Hsinchu County 310, Taiwan (R.O.C.)

Date of Receipt : Sep. 01, 2015

: Oct. 13, 2015 Issued Date

Report No. : 1590141R-RFUSP38V00

Report Version : V1.0



3024

The test results relate only to the samples tested.

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# **Test Report Certification**

Issued Date: Oct. 13, 2015

Report No.: 1590141R-RFUSP38V00



Product Name : Mesh WiFi AP

Applicant : Yang Hwa Technology Corp.

Address : 31046 No.96, Gongye 2nd Rd., Zhudong Township, Hsinchu

County 310, Taiwan (R.O.C.)

Model No. : AP5621-N-TH

FCC ID. : 2AF7R-AP5621NTH EUT Test Voltage : AC 100-240V, 50-60Hz

Testing Voltage : AC 120V/60Hz

Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2014

ANSI C63.10: 2013

Test Lab : QuieTek Hsin Chu Laboratory

Test Result : Complied

The test results relate only to the samples tested.

Documented By

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( Carol Tsai / Senior Engineering Adm. Specialist )

Tested By

( Ken Huang / Engineer )

Approved By

( Roy Wang / Director )



# **Revision History**

| Report No.          | Version  | Description             | Issued Date   |
|---------------------|----------|-------------------------|---------------|
| 1590141R-RFUSP38V00 | Rev. 1.0 | Initial issue of report | Oct. 13, 2015 |
|                     |          |                         |               |
|                     |          |                         |               |
|                     |          |                         |               |
|                     |          |                         |               |
|                     |          |                         |               |
|                     |          |                         |               |
|                     |          |                         |               |
|                     |          |                         |               |



#### **Laboratory Information**

We, **QuieTek Corporation**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/ accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C. : TAF, Accreditation Number: 3024

USA : FCC, Registration Number: 365520

Canada : IC, Submission No: 181665 / IC Registration Number: 4075C-4

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site: <a href="http://www.quietek.com/english/about/certificates.aspx?bval=5">http://www.quietek.com/english/about/certificates.aspx?bval=5</a>

The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : <a href="http://www.quietek.com/index">http://www.quietek.com/index</a> en.aspx

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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# 1. General Information

# 1.1. EUT Description

| Product Name                      | Mesh WiFi AP  |
|-----------------------------------|---|
| Model No.                         | AP5621-N-TH   |
| Frequency Range/Channel Number    | 2412~2462MHz / 11 Channels                                  |
| -IEEE 802.11b/g & IEEE 802.11n    |   |
| (20MHz)                           |   |
| Frequency Range/Channel Number    | 2422~2452MHz / 7 Channels                                   |
| IEEE 802.11n (40MHz)              |   |
| Type of Modulation (IEEE 802.11b) | Direct Sequence Spread Spectrum (DSSS)                      |
| Type of Modulation                | Orthogonal Frequency Division Multiplexing (OFDM)           |
| (IEEE 802.11g/n)                  |   |
| Data Speed (IEEE 802.11b)         | 1Mbps, 2Mbps, 5.5Mbps, 11Mbps                               |
| Data Speed (IEEE 802.11g)         | 6Mbps,9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps       |
| Data Speed (IEEE 802.11n)         | Support a subset of the combination of GI, MCS 0~MCS 15 and |
|                                   | bandwidth defined in 802.11n                                |

| Antenna Information | Antenna Information |  |  |  |  |  |
|---------------------|---------------------|--|--|--|--|--|
| Antenna Type        | Omni Antenna        |  |  |  |  |  |
| Antenna Gain        | 2.4GHz              |  |  |  |  |  |
|                     | Ant 0: 4.00dBi      |  |  |  |  |  |
|                     | Ant 1: 4.00dBi      |  |  |  |  |  |
|                     | 5GHz                |  |  |  |  |  |
|                     | Ant 0: 6.00dBi      |  |  |  |  |  |
|                     | Ant 1: 6.00dBi      |  |  |  |  |  |



# ANT-TX / RX & Bandwidth

| ANT-TX / RX             | Т     | X        | RX    |       |  |
|-------------------------|-------|----------|-------|-------|--|
| Mode/ Channel Bandwidth | 20MHz | 40MHz    | 20MHz | 40MHz |  |
| IEEE802.11b             | ✓     |          | ✓     |       |  |
| IEEE802.11g             | ✓     |          | ✓     |       |  |
| IEEE802.11n             | ✓     | <b>√</b> | ✓     | ✓     |  |

# 2.4GHz WLAN(2TX, 3RX), 5GHz WLAN(2TX, 3RX)





# **IEEE 802.11n**

| 1400   |  |     |                    | N <sub>CBPS</sub> |         | N <sub>DBPS</sub> |         | Data Rate(Mb/s) |       |          |       |
|--------|--|-----|--------------------|-------------------|---------|-------------------|---------|-----------------|-------|----------|-------|
| MCS    | Modulation   | R   | N <sub>BPSCS</sub> | 008411-           | 408411- | 008411-           | 408411- | 800ns GI        |       | 400ns GI |       |
| Index  |  |     |                    | 20MHz             | 40MHz   | 20MHz             | 40MHz   | 20MHz           | 40MHz | 20MHz    | 40MHz |
| 0      | BPSK   | 1/2 | 1                  | 52                | 108     | 26                | 54      | 6.5             | 13.5  | 7.2      | 15.0  |
| 1      | QPSK   | 1/2 | 2                  | 104               | 216     | 52                | 108     | 13.0            | 27.0  | 14.4     | 30.0  |
| 2      | QPSK   | 3/4 | 2                  | 104               | 216     | 78                | 162     | 19.5            | 40.5  | 21.7     | 45.0  |
| 3      | 16-QAM   | 1/2 | 4                  | 208               | 432     | 104               | 216     | 26.0            | 54.0  | 28.9     | 60.0  |
| 4      | 16-QAM   | 3/4 | 4                  | 208               | 432     | 156               | 324     | 39.0            | 81.0  | 43.3     | 90.0  |
| 5      | 64-QAM   | 2/3 | 6                  | 312               | 648     | 208               | 432     | 52.0            | 108.0 | 57.8     | 120.0 |
| 6      | 64-QAM   | 3/4 | 6                  | 312               | 648     | 234               | 486     | 58.5            | 121.5 | 65.0     | 135.0 |
| 7      | 64-QAM   | 5/6 | 6                  | 312               | 648     | 260               | 540     | 65.0            | 135.0 | 72.2     | 150.0 |
| Note 1 | Note 1: Support of 400ns GI is optional on transmit and receive. |     |                    |                   |         |                   |         |                 |       |          |       |

Table 1 – MCS parameters for TX Antenna number = 1

| 1400   |  |     |                    | N <sub>C</sub> | BPS     | N <sub>D</sub> | BPS   |                   | Data Ra | te(Mb/s) |       |
|--------|--|-----|--------------------|----------------|---------|----------------|-------|-------------------|---------|----------|-------|
| MCS    | Modulation   | R   | N <sub>BPSCS</sub> | 008411-        | 408411- | 008411-        |       | 800ns GI 400ns GI |         |          |       |
| Index  |  |     |                    | 20MHz          | 40MHz   | 20MHz          | 40MHz | 20MHz             | 40MHz   | 20MHz    | 40MHz |
| 8      | BPSK   | 1/2 | 1                  | 104            | 216     | 52             | 108   | 13.0              | 27.0    | 14.4     | 30.0  |
| 9      | QPSK   | 1/2 | 2                  | 208            | 432     | 104            | 216   | 26.0              | 54.0    | 28.9     | 60.0  |
| 10     | QPSK   | 3/4 | 2                  | 208            | 432     | 156            | 324   | 39.0              | 81.0    | 43.3     | 90.0  |
| 11     | 16-QAM   | 1/2 | 4                  | 416            | 864     | 208            | 432   | 52.0              | 108.0   | 57.8     | 120.0 |
| 12     | 16-QAM   | 3/4 | 4                  | 416            | 864     | 312            | 648   | 78.0              | 162.0   | 86.7     | 180.0 |
| 13     | 64-QAM   | 2/3 | 6                  | 624            | 1296    | 416            | 864   | 104.0             | 216.0   | 115.6    | 240.0 |
| 14     | 64-QAM   | 3/4 | 6                  | 624            | 1296    | 468            | 972   | 117.0             | 243.0   | 130.0    | 270.0 |
| 15     | 64-QAM   | 5/6 | 6                  | 624            | 1296    | 520            | 1080  | 130.0             | 270.0   | 144.4    | 300.0 |
| Note 1 | Note 1: Support of 400ns GI is optional on transmit and receive. |     |                    |                |         |                |       |                   |         |          |       |

Table 2 – MCS parameters for TX Antenna number = 2

| Symbol            | Explanation                             |  |  |  |
|-------------------|---|--|--|--|
| R                 | ode rate                                |  |  |  |
| N <sub>BPSC</sub> | lumber of coded bits per single carrier |  |  |  |
| N <sub>CBPS</sub> | Number of coded bits per symbol         |  |  |  |
| N <sub>DBPS</sub> | Number of data bits per symbol          |  |  |  |
| GI                | guard interval                          |  |  |  |



#### IEEE 802.11b/g & IEEE 802.11n (20MHz)

| Working | Working Frequency of Each Channel |         |           |         |           |         |           |
|---------|-----------------------------------|---------|-----------|---------|-----------|---------|-----------|
| Channel | Frequency                         | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 001     | 2412 MHz                          | 002     | 2417 MHz  | 003     | 2422 MHz  | 004     | 2427 MHz  |
| 005     | 2432 MHz                          | 006     | 2437 MHz  | 007     | 2442 MHz  | 800     | 2447 MHz  |
| 009     | 2452 MHz                          | 010     | 2457 MHz  | 011     | 2462 MHz  |         |           |

#### IEEE 802.11n (40MHz)

| Working Frequency of Each Channel |           |         |           |         |           |         |           |
|-----------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|
| Channel                           | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 003                               | 2422 MHz  | 004     | 2427 MHz  | 005     | 2432 MHz  | 006     | 2437 MHz  |
| 007                               | 2442 MHz  | 008     | 2447 MHz  | 009     | 2452 MHz  |         |           |

- 1. This device is a Mesh WiFi AP, which including 2.4GHz b/g/n(2x3) and 5GHz a/n/ac (2x3) Transmitting and receiving function.
- 2. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart C Paragraph 15.247.
- 3. Regards to the frequency band operation; the lowest middle and highest frequency of channel were selected to perform the test, and then shown on this report.
- 4. The function of the 5GHz transmitting is measured. The test report of the number is 1590141R-RFUSP45V00.
- 5. This device is a composite device in accordance with Part 15 regulations. The receiving function test and the report number is 1590141R-RFUSP01V00.



# 1.2. Test Mode

QuieTek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

| TX | Mode 1: Transmit Mode |
|----|-----------------------|
|----|-----------------------|

| Test Items                  | Modulation | Channel  | Antenna | Result   |
|-----------------------------|------------|----------|---------|----------|
| Conducted Emission          | 11n(40MHz) | 6        | 0+1     | Complies |
| Peak Power Output           | 11b/g      | 1/ 6/ 11 | 0       | Complies |
|                             | 11n(20MHz) | 1/ 6/ 11 | 0+1     | Complies |
|                             | 11n(40MHz) | 3/ 6/ 9  | 0+1     | Complies |
| Radiated Emission           | 11b/g      | 1/ 6/ 11 | 0       | Complies |
|                             | 11n(20MHz) | 1/ 6/ 11 | 0+1     | Complies |
|                             | 11n(40MHz) | 3/ 6/ 9  | 0+1     | Complies |
| RF antenna conducted test   | 11b/g      | 1/ 6/ 11 | 0       | Complies |
|                             | 11n(20MHz) | 1/ 6/ 11 | 0+1     | Complies |
|                             | 11n(40MHz) | 3/ 6/ 9  | 0+1     | Complies |
| Radiated Emission Band Edge | 11b/g      | 1/ 11    | 0       | Complies |
|                             | 11n(20MHz) | 1/ 11    | 0+1     | Complies |
|                             | 11n(40MHz) | 3/ 9     | 0+1     | Complies |
| DTS Occupied Bandwidth      | 11b/g      | 1/ 6/ 11 | 0       | Complies |
|                             | 11n(20MHz) | 1/ 6/ 11 | 0+1     | Complies |
|                             | 11n(40MHz) | 3/ 6/ 9  | 0+1     | Complies |
| Power Density               | 11b/g      | 1/ 6/ 11 | 0       | Complies |
|                             | 11n(20MHz) | 1/ 6/ 11 | 0+1     | Complies |
|                             | 11n(40MHz) | 3/ 6/ 9  | 0+1     | Complies |

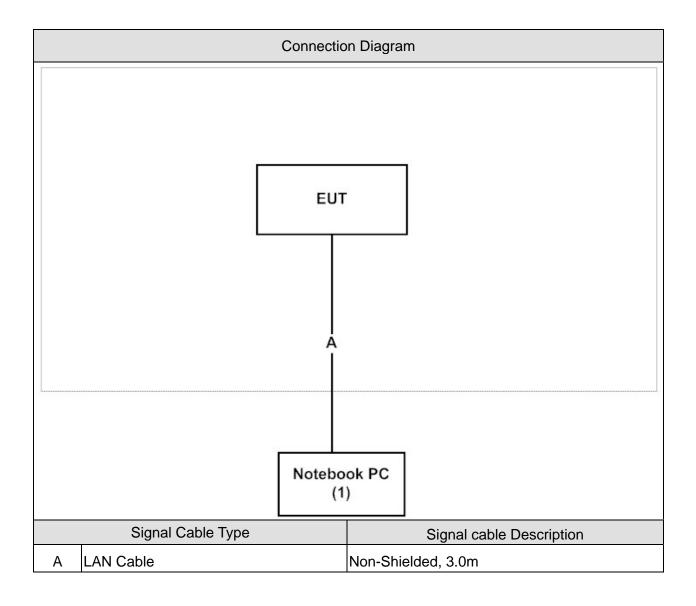


# 1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

| Pro | duct        | Manufacturer | Model No. | Serial No. | FCC ID | Power Cord              |
|-----|-------------|--------------|-----------|------------|--------|-------------------------|
| 1   | Notebook PC | ASUS         | X522EP    | E5N0CV0432 | DoC    | Non-Shielded, 1.8m,     |
|     |             |              |           | 64197      |        | one ferrite core bonded |

# 1.4. Configuration of tested System





# 1.5. EUT Exercise Software

| 1 | Setup the EUT as shown in Section 1.4.                        |
|---|---|
| 2 | Execute the telnet command on the EUT.                        |
| 3 | Configure the test mode, the test channel, and the data rate. |
| 4 | Press "Start TX" to start the continuous transmitting.        |
| 5 | Verify that the EUT works properly.                           |

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# 1.6. Test Facility

Ambient conditions in the laboratory:

| Items                      | Test Item                 | Required (IEC 68-1) | Actual   |
|----------------------------|---------------------------|---------------------|----------|
| Temperature (°C)           | FCC PART 15 C 15.207      | 15 - 35             | 20       |
| Humidity (%RH)             | Conducted Emission        | 25 - 75             | 50       |
| Barometric pressure (mbar) | Conducted Emission        | 860 - 1060          | 950-1000 |
| Temperature (°C)           | FOO DADT 45 O 45 047      | 15 - 35             | 25       |
| Humidity (%RH)             | FCC PART 15 C 15.247      | 25 - 75             | 45       |
| Barometric pressure (mbar) | Peak Power Output         | 860 - 1060          | 950-1000 |
| Temperature (°C)           | FCC DADT 45 C 45 047      | 15 - 35             | 20       |
| Humidity (%RH)             | FCC PART 15 C 15.247      | 25 - 75             | 50       |
| Barometric pressure (mbar) | Radiated Emission         | 860 - 1060          | 950-1000 |
| Temperature (°C)           | FOO DADT 45 O 45 047      | 15 - 35             | 25       |
| Humidity (%RH)             | FCC PART 15 C 15.247      | 25 - 75             | 45       |
| Barometric pressure (mbar) | RF antenna conducted test | 860 - 1060          | 950-1000 |
| Temperature (°C)           | FCC DADT 45 C 45 047      | 15 - 35             | 20       |
| Humidity (%RH)             | FCC PART 15 C 15.247      | 25 - 75             | 50       |
| Barometric pressure (mbar) | Band Edge                 | 860 - 1060          | 950-1000 |
| Temperature (°C)           | FOO DADT 45 O 45 047      | 15 - 35             | 25       |
| Humidity (%RH)             | FCC PART 15 C 15.247      | 25 - 75             | 45       |
| Barometric pressure (mbar) | DTS Occupied Bandwidth    | 860 - 1060          | 950-1000 |
| Temperature (°C)           | FOO DADT 45 O 45 0 47     | 15 - 35             | 25       |
| Humidity (%RH)             | FCC PART 15 C 15.247      | 25 - 75             | 45       |
| Barometric pressure (mbar) | Power Density             | 860 - 1060          | 950-1000 |

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#### 2. Conducted Emission

# 2.1. Test Equipment

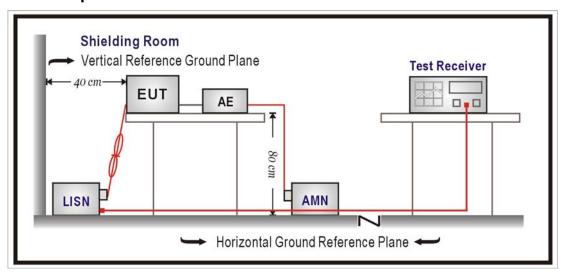
The following test equipments are used during the test:

#### Conducted Emission / SR3

| Instrument    | Manufacturer | Model No. | Serial No  | Next Cal. Date |
|---------------|--------------|-----------|------------|----------------|
| LISN          | R&S          | ENV216    | 100096     | 2016/07/27     |
| LISN          | R&S          | ESH3-Z5   | 836679/022 | 2015/12/15     |
| Test Receiver | R&S          | ESCS 30   | 825442/017 | 2016/01/14     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

# 2.2. Test Setup





#### 2.3. Limits

| FCC Part 15 Subpart C Paragraph 15.207 Limits (dBuV) |       |       |  |  |  |  |
|--|-------|-------|--|--|--|--|
| Frequency<br>MHz                                     | QP    | AV    |  |  |  |  |
| 0.15 - 0.50  | 66-56 | 56-46 |  |  |  |  |
| 0.50 - 5.0   | 56    | 46    |  |  |  |  |
| 5.0 - 30   | 60    | 50    |  |  |  |  |

Remarks: In the above table, the tighter limit applies at the band edges.

#### 2.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to DTS test procedure of KDB558074 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.

#### 2.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2014

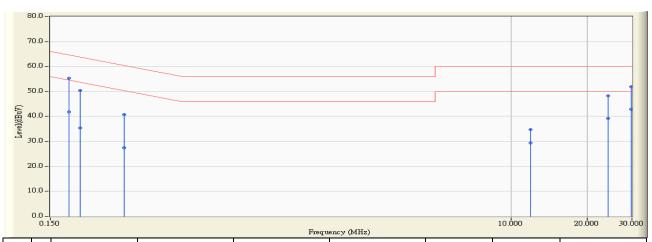
#### 2.6. Uncertainty

The measurement uncertainty is defined as  $\pm 2.26$  dB.



#### 2.7. Test Result

| Site : SR3                           | Time : 2015/10/06 - 10:21  |
|--------------------------------------|----------------------------|
| Limit : CISPR_B_00M_QP               | Margin : 10                |
| Probe : SR3_LISN(16A)-5_0728 - Line1 | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                   | Note: 802.11n(40M)_2437MHz |



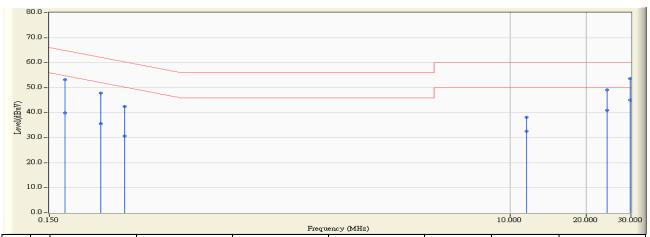
|    | Freq | uency  | Correct Factor | Reading Level | Measure Level | Margin  | Limit  | Detector Type |
|----|------|--------|----------------|---------------|---------------|---------|--------|---------------|
|    | (M   | Hz)    | (dB)           | (dBuV)        | (dBuV)        | (dB)    | (dBuV) |               |
| 1  |      | 0.177  | 9.749          | 45.640        | 55.388        | -9.221  | 64.609 | QUASIPEAK     |
| 2  |      | 0.177  | 9.749          | 32.120        | 41.868        | -12.741 | 54.609 | AVERAGE       |
| 3  |      | 0.197  | 9.749          | 40.760        | 50.508        | -13.233 | 63.741 | QUASIPEAK     |
| 4  |      | 0.197  | 9.749          | 25.660        | 35.408        | -18.333 | 53.741 | AVERAGE       |
| 5  |      | 0.295  | 9.760          | 30.920        | 40.680        | -19.715 | 60.396 | QUASIPEAK     |
| 6  |      | 0.295  | 9.760          | 17.740        | 27.500        | -22.895 | 50.396 | AVERAGE       |
| 7  |      | 11.892 | 10.150         | 24.580        | 34.730        | -25.270 | 60.000 | QUASIPEAK     |
| 8  |      | 11.892 | 10.150         | 19.190        | 29.340        | -20.660 | 50.000 | AVERAGE       |
| 9  |      | 24.197 | 10.354         | 37.900        | 48.254        | -11.746 | 60.000 | QUASIPEAK     |
| 10 |      | 24.197 | 10.354         | 28.910        | 39.264        | -10.736 | 50.000 | AVERAGE       |
| 11 |      | 29.779 | 10.361         | 41.620        | 51.980        | -8.020  | 60.000 | QUASIPEAK     |
| 12 | *    | 29.779 | 10.361         | 32.460        | 42.820        | -7.180  | 50.000 | AVERAGE       |

#### Note

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "  $^{*}$  ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : SR3                           | Time : 2015/10/06 - 10:24  |
|--------------------------------------|----------------------------|
| Limit : CISPR_B_00M_QP               | Margin : 10                |
| Probe : SR3_LISN(16A)-5_0728 - Line2 | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                   | Note: 802.11n(40M)_2437MHz |



|    | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit  | Detector Type |
|----|-----------|----------------|---------------|---------------|---------|--------|---------------|
|    | (MHz)     | (dB)           | (dBuV)        | (dBuV)        | (dB)    | (dBuV) |               |
| 1  | 0.173     | 9.746          | 43.520        | 53.266        | -11.528 | 64.794 | QUASIPEAK     |
| 2  | 0.173     | 9.746          | 30.100        | 39.846        | -14.948 | 54.794 | AVERAGE       |
| 3  | 0.240     | 9.751          | 38.020        | 47.771        | -14.331 | 62.102 | QUASIPEAK     |
| 4  | 0.240     | 9.751          | 25.880        | 35.631        | -16.471 | 52.102 | AVERAGE       |
| 5  | 0.298     | 9.756          | 32.780        | 42.536        | -17.750 | 60.286 | QUASIPEAK     |
| 6  | 0.298     | 9.756          | 20.950        | 30.706        | -19.580 | 50.286 | AVERAGE       |
| 7  | 11.619    | 10.192         | 27.900        | 38.092        | -21.908 | 60.000 | QUASIPEAK     |
| 8  | 11.619    | 10.192         | 22.470        | 32.662        | -17.338 | 50.000 | AVERAGE       |
| 9  | 24.193    | 10.549         | 38.520        | 49.069        | -10.931 | 60.000 | QUASIPEAK     |
| 10 | 24.193    | 10.549         | 30.410        | 40.959        | -9.041  | 50.000 | AVERAGE       |
| 11 | 29.775    | 10.656         | 43.060        | 53.716        | -6.284  | 60.000 | QUASIPEAK     |
| 12 | * 29.775  | 10.656         | 34.400        | 45.056        | -4.944  | 50.000 | AVERAGE       |

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "  $^{*}$  ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



### 3. Peak Power Output

### 3.1. Test Equipment

The following test equipments are used during the test:

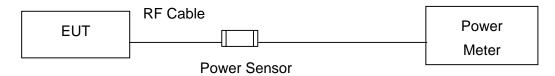
Peak Power Output / SR7

| Instrument   | Manufacturer | Model No. | Serial No  | Next Cal. Date |
|--------------|--------------|-----------|------------|----------------|
| Power Meter  | Agilent      | N1911A    | MY45101353 | 2015/10/31     |
| Power Sensor | Agilent      | N1921A    | MY45241670 | 2015/10/31     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

# 3.2. Test Setup

IEEE 802.11 b / g / n ( 20M / 40M ) MODE



## 3.3. Test procedures

The EUT was tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

#### 3.4. Limits

The maximum peak power shall be less 1 Watt.

# 3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

# 3.6. Uncertainty

The measurement uncertainty is defined as  $\pm$  1.27 dB.



# 3.7. Test Result

| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Peak Power Output     |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

| IEEE 802.11b (ANT 0) |           |               |       |  |  |  |  |  |  |  |
|----------------------|-----------|---------------|-------|--|--|--|--|--|--|--|
| Channel No.          | Frequency | Measure Level | Limit |  |  |  |  |  |  |  |
| Channel No.          | (MHz)     | (dBm)         | (dBm) |  |  |  |  |  |  |  |
| 1                    | 2412      | 17.900        | ≦30   |  |  |  |  |  |  |  |
| 6                    | 2437      | 17.700        | ≦30   |  |  |  |  |  |  |  |
| 11                   | 2462      | 17.350        | ≦30   |  |  |  |  |  |  |  |

The worst emission of data rate is 1Mbps.

|         | Peak Power Output (dBm) |       |          |        |          |        |  |  |  |  |  |
|---------|-------------------------|-------|----------|--------|----------|--------|--|--|--|--|--|
| Channel | Frequency               |       | Data Rat |        | Required |        |  |  |  |  |  |
| No      | (MHz)                   | 1     | 2        | 5.5    | 11       | Limit  |  |  |  |  |  |
| 1       | 2412                    | 17.90 |          |        |          | ≦30dBm |  |  |  |  |  |
| 6       | 2437                    | 17.70 | 17.60    | 17.14  | ≦30dBm   |        |  |  |  |  |  |
| 11      | 2462                    | 17.35 |          | ≦30dBm |          |        |  |  |  |  |  |



| Product      | Mesh WiFi AP          |           |     |  |
|--------------|-----------------------|-----------|-----|--|
| Test Item    | Peak Power Output     |           |     |  |
| Test Mode    | Mode 1: Transmit Mode |           |     |  |
| Date of Test | 2015/10/12            | Test Site | SR7 |  |

| IEEE 802.11g (ANT 0) |           |               |       |  |  |  |  |  |  |  |
|----------------------|-----------|---------------|-------|--|--|--|--|--|--|--|
| Channel No.          | Frequency | Measure Level | Limit |  |  |  |  |  |  |  |
| Channel No.          | (MHz)     | (dBm)         | (dBm) |  |  |  |  |  |  |  |
| 1                    | 2412      | 24.600        | ≦30   |  |  |  |  |  |  |  |
| 6                    | 2437      | 24.440        | ≦30   |  |  |  |  |  |  |  |
| 11                   | 2462      | 23.110        | ≦30   |  |  |  |  |  |  |  |

The worst emission of data rate is 6 Mbps.

| THE WOL | The worst emission of data rate is 6 mbps. |        |          |    |    |       |  |   |        |  |  |  |  |
|---------|--|--------|----------|----|----|-------|--|---|--------|--|--|--|--|
|         | Peak Power Output (dBm)                    |        |          |    |    |       |  |   |        |  |  |  |  |
| Channel | Frequency                                  |        | Required |    |    |       |  |   |        |  |  |  |  |
| No      | (MHz)                                      | 6      | 12       | 18 | 54 | Limit |  |   |        |  |  |  |  |
| 1       | 2412                                       | 24.60  | 1        | 1  | 1  | 1     |  | 1 | ≦30dBm |  |  |  |  |
| 6       | 2437                                       | ≦30dBm |          |    |    |       |  |   |        |  |  |  |  |
| 11      | 2462                                       | 23.11  | ≦30dBm   |    |    |       |  |   |        |  |  |  |  |



| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Peak Power Output     |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

# IEEE 802.11n (20MHz) (ANT 0)

| Channel No. | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
|-------------|--------------------|------------------------|----------------|--------|
| 1           | 2412               | 23.800                 | ≦28.99         | Pass   |
| 6           | 2437               | 23.710                 | ≦28.99         | Pass   |
| 11          | 2462               | 22.660                 | ≦28.99         | Pass   |

# The worst emission of data rate is 13 Mbps.

|         | The West emission of data rate is to imper |       |       |       |       |       |       |       |       |                   |  |  |
|---------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|--|--|
|         | Peak Power Output (dBm)                    |       |       |       |       |       |       |       |       |                   |  |  |
| MCS     | S Index                                    | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | Daninad           |  |  |
| Channel | Frequency                                  |       |       |       | Data  | Rate  |       |       |       | Required<br>Limit |  |  |
| No      | (MHz)                                      | 13    | 26    | 39    | 52    | 78    | 104   | 117   | 130   | LIMIIL            |  |  |
| 1       | 2412                                       | 23.80 | -     | -     |       | -     |       | -     | -     | ≦28.99dBm         |  |  |
| 6       | 2437                                       | 23.71 | 23.59 | 23.49 | 23.27 | 23.14 | 23.02 | 22.78 | 22.56 | ≦28.99dBm         |  |  |
| 11      | 2462                                       | 22.66 | 1     | -     |       | 1     |       | 1     | 1     | ≦28.99dBm         |  |  |



| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Peak Power Output     |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

# IEEE 802.11n (20MHz) (ANT 1)

| Channel No. | Frequency<br>(MHz) | Measure Level<br>(dBm) |        |      |
|-------------|--------------------|------------------------|--------|------|
| 1           | 2412               | 18.600                 | ≦28.99 | Pass |
| 6           | 2437               | 17.120                 | ≦28.99 | Pass |
| 11          | 2462               | 16.560                 | ≦28.99 | Pass |

# The worst emission of data rate is 13 Mbps.

| THE WOLL | The worst emission of data rate is 10 mbps. |       |       |       |       |       |       |       |       |           |  |  |
|----------|---|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--|--|
|          | Peak Power Output (dBm)                     |       |       |       |       |       |       |       |       |           |  |  |
| MCS      | S Index                                     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | Danwinad  |  |  |
| Channel  | Frequency                                   |       |       |       | Data  | Rate  |       |       |       | Required  |  |  |
| No       | (MHz)                                       | 13    | 26    | 39    | 52    | 78    | 104   | 117   | 130   | Limit     |  |  |
| 1        | 2412  | 18.60 |       |       |       |       | I     | ı     | 1     | ≦28.99dBm |  |  |
| 6        | 2437  | 17.12 | 17.02 | 16.90 | 16.70 | 16.58 | 16.34 | 16.10 | 15.97 | ≦28.99dBm |  |  |
| 11       | 2462  | 16.56 |       |       |       |       |       |       | -     | ≦28.99dBm |  |  |



| Product      | Mesh WiFi AP          |           |     |  |
|--------------|-----------------------|-----------|-----|--|
| Test Item    | Peak Power Output     |           |     |  |
| Test Mode    | Mode 1: Transmit Mode |           |     |  |
| Date of Test | 2015/10/12            | Test Site | SR7 |  |

# IEEE 802.11n (20MHz) (ANT 0+1)

| Channel No. | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
|-------------|--------------------|------------------------|----------------|--------|
| 1           | 2412               | 24.946                 | ≦28.99         | Pass   |
| 6           | 2437               | 24.571                 | ≦28.99         | Pass   |
| 11          | 2462               | 23.613                 | ≦28.99         | Pass   |

|         | Peak Power Output (dBm)         |       |           |       |       |       |       |          |       |           |
|---------|---------------------------------|-------|-----------|-------|-------|-------|-------|----------|-------|-----------|
| MCS     | MCS Index 8 9 10 11 12 13 14 15 |       |           |       |       |       |       | Dogwined |       |           |
| Channel | Frequency                       |       | Data Rate |       |       |       |       |          |       | Required  |
| No      | (MHz)                           | 13    | 26        | 39    | 52    | 78    | 104   | 117      | 130   | Limit     |
| 1       | 2412                            | 24.95 |           |       |       | -     |       | 1        | 1     | ≦28.99dBm |
| 6       | 2437                            | 24.57 | 24.45     | 24.35 | 24.13 | 24.01 | 23.86 | 23.62    | 23.42 | ≦28.99dBm |
| 11      | 2462                            | 23.61 |           |       |       | -     |       | -        |       | ≦28.99dBm |



| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Peak Power Output     |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

# IEEE 802.11n (40MHz) (ANT 0)

| · · · · · · · · · · · · · · · · · · · |                    |                        |                |        |
|---------------------------------------|--------------------|------------------------|----------------|--------|
| Channel No.                           | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
| 3                                     | 2422               | 19.710                 | ≦28.99         | Pass   |
| 6                                     | 2437               | 19.400                 | ≦28.99         | Pass   |
| 9                                     | 2452               | 18.900                 | ≦28.99         | Pass   |

### The worst emission of data rate is 27 Mbps.

| 1110 1101                       | The worst emission of data rate is 27 mbps. |       |       |       |       |       |          |          |       |           |
|---------------------------------|---|-------|-------|-------|-------|-------|----------|----------|-------|-----------|
|                                 | Peak Power Output (dBm)                     |       |       |       |       |       |          |          |       |           |
| MCS Index 8 9 10 11 12 13 14 15 |   |       |       |       |       |       | Deguined |          |       |           |
| Channel                         | Channel Frequency Data Rate                 |       |       |       |       |       |          | Required |       |           |
| No                              | (MHz)                                       | 27    | 54    | 81    | 108   | 162   | 216      | 243      | 270   | Limit     |
| 3                               | 2422  | 19.71 | 1     | 1     | 1     | 1     | I        | I        | 1     | ≦28.99dBm |
| 6                               | 2437  | 19.40 | 19.20 | 19.09 | 18.99 | 18.89 | 18.77    | 18.51    | 18.27 | ≦28.99dBm |
| 9                               | 2452  | 18.90 |       |       |       |       |          |          |       | ≦28.99dBm |



| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Peak Power Output     |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

# IEEE 802.11n (40MHz) (ANT 1)

| Channel No. | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
|-------------|--------------------|------------------------|----------------|--------|
| 3           | 2422               | 19.340                 | ≦28.99         | Pass   |
| 6           | 2437               | 19.120                 | ≦28.99         | Pass   |
| 9           | 2452               | 16.120                 | ≦28.99         | Pass   |

# The worst emission of data rate is 27 Mbps.

| THE WOL | The worst emission of data rate is 27 mbps. |       |       |       |       |       |       |       |       |           |  |
|---------|---|-------|-------|-------|-------|-------|-------|-------|-------|-----------|--|
|         | Peak Power Output (dBm)                     |       |       |       |       |       |       |       |       |           |  |
| MCS     | S Index                                     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | Deguined  |  |
| Channel | Innel Frequency Data Rate Required          |       |       |       |       |       |       | •     |       |           |  |
| No      | (MHz)                                       | 27    | 54    | 81    | 108   | 162   | 216   | 243   | 270   | Limit     |  |
| 3       | 2422  | 19.34 | 1     | -     | 1     | 1     | -     | 1     | 1     | ≦28.99dBm |  |
| 6       | 2437  | 19.12 | 18.92 | 18.82 | 18.69 | 18.59 | 18.47 | 18.35 | 18.11 | ≦28.99dBm |  |
| 9       | 2452  | 16.12 |       |       |       |       |       |       |       | ≦28.99dBm |  |



| Product      | Mesh WiFi AP          |           |     |  |
|--------------|-----------------------|-----------|-----|--|
| Test Item    | Peak Power Output     |           |     |  |
| Test Mode    | Mode 1: Transmit Mode |           |     |  |
| Date of Test | 2015/10/12            | Test Site | SR7 |  |

# IEEE 802.11n (40MHz) (ANT 0+1)

| Channel No. | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
|-------------|--------------------|------------------------|----------------|--------|
| 3           | 2422               | 22.539                 | ≦28.99         | Pass   |
| 6           | 2437               | 22.273                 | ≦28.99         | Pass   |
| 9           | 2452               | 20.739                 | ≦28.99         | Pass   |

|         | Peak Power Output (dBm)         |       |       |       |       |       |       |                   |          |           |
|---------|---------------------------------|-------|-------|-------|-------|-------|-------|-------------------|----------|-----------|
| MCS     | MCS Index 8 9 10 11 12 13 14 15 |       |       |       |       |       |       | 15                | Dogwinod |           |
| Channel | Channel Frequency Data Rate     |       |       |       |       |       |       | Required<br>Limit |          |           |
| No      | (MHz)                           | 27    | 54    | 81    | 108   | 162   | 216   | 243               | 270      | LITTIIL   |
| 3       | 2422                            | 22.54 | 1     | 1     | 1     | 1     | I     | 1                 | 1        | ≦28.99dBm |
| 6       | 2437                            | 22.27 | 22.07 | 21.97 | 21.85 | 21.75 | 21.63 | 21.44             | 21.20    | ≦28.99dBm |
| 9       | 2452                            | 20.74 |       | -     | -     | -     |       |                   |          | ≦28.99dBm |



# 4. Radiated Emission

# 4.1. Test Equipment

The following test equipments are used during the test:

# Radiated Emission / CB1

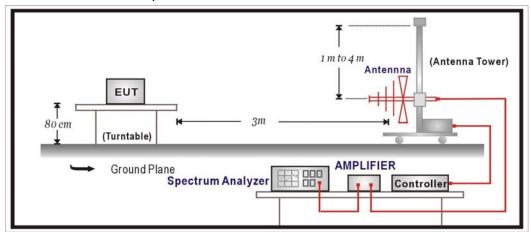
| Instrument                       | Manufacturer | Model No.  | Serial No   | Next Cal. Date |
|----------------------------------|--------------|------------|-------------|----------------|
| Bilog Antenna                    | Schaffner    | CBL6112B   | 2895        | 2016/08/14     |
| Double Ridged Guide Horn Antenna | Schwarzbeck  | BBHA 9120  | D743        | 2016/01/26     |
| Pre-Amplifier                    | EMCI         | EMC0031835 | 980233      | 2016/01/18     |
| Pre-Amplifier                    | QuieTek      | AP-025C    | CHM-0706049 | 2016/01/18     |
| Spectrum Analyzer                | Agilent      | E4440A     | MY46187335  | 2016/01/07     |
| k Type Cable                     | Huber+Suhner | SF 102     | 25623/2     | 2016/01/26     |
| Horn Antenna                     | Schwarzbeck  | BBHA 9170  | 203         | 2016/09/07     |
| Signal & Spectrum<br>Analyzer    | R&S          | FSV40      | 101049      | 2015/10/30     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

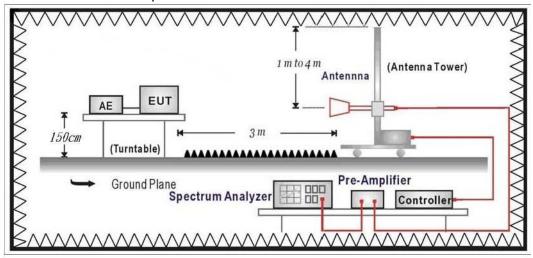


# 4.2. Test Setup

Under 1GHz Test Setup:



# Above 1GHz Test Setup:





#### 4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

| FCC Part 15 Subpart C Paragraph 15.209 Limits |        |        |  |  |  |
|---|--------|--------|--|--|--|
| Frequency<br>MHz                              | dBuV/m | dBuV/m |  |  |  |
| 30-88   | 100    | 40     |  |  |  |
| 88-216  | 150    | 43.5   |  |  |  |
| 216-960                                       | 200    | 46     |  |  |  |
| Above 960                                     | 500    | 54     |  |  |  |

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

#### 4.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to DTS test procedure of KDB558074 v03r02 for compliance to FCC 47CFR 15.247 requirements. The EUT and its simulators are placed on a turn table which is 0.8 meter above ground (under 1GHz) or 1.5 meter above ground (above 1GHz). The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

#### 4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

#### 4.6. Uncertainty

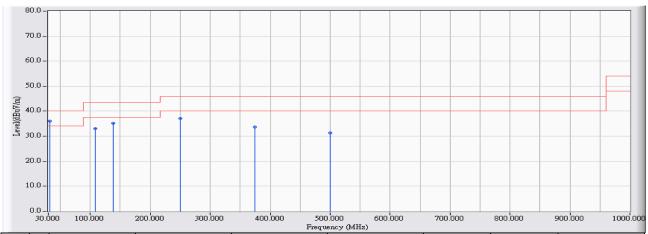
The measurement uncertainty 30MHz~1GHz as ±3.43dB 1GHz~26.5Ghz as ±3.65dB



#### 4.7. Test Result

# 30MHz-1GHz Spurious

| Site : CB1                                    | Time : 2015/09/30 - 14:49 |
|---|---------------------------|
| Limit : FCC_CLASS_B_03M_QP                    | Margin : 6                |
| Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                            | Note: 802.11b_2437MHz     |

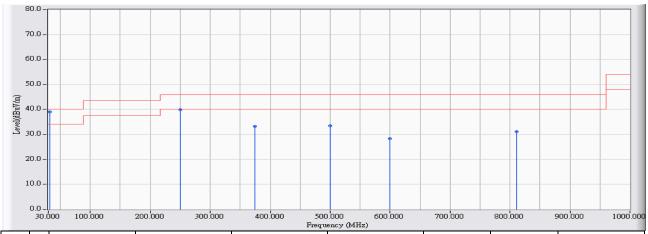


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 32.909    | 13.128         | 22.865        | 35.993        | -4.007  | 40.000   | AVERAGE       |
| 2 |   | 108.531   | 10.259         | 22.864        | 33.123        | -10.377 | 43.500   | AVERAGE       |
| 3 |   | 138.101   | 10.197         | 25.012        | 35.209        | -8.291  | 43.500   | AVERAGE       |
| 4 |   | 249.595   | 11.849         | 25.345        | 37.194        | -8.806  | 46.000   | AVERAGE       |
| 5 |   | 374.663   | 14.546         | 19.202        | 33.748        | -12.252 | 46.000   | AVERAGE       |
| 6 |   | 499.730   | 17.175         | 14.106        | 31.281        | -14.719 | 46.000   | AVERAGE       |

- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : CB1                                  | Time : 2015/09/30 - 15:04 |
|---|---------------------------|
| Limit : FCC_CLASS_B_03M_QP                  | Margin : 6                |
| Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                          | Note : 802.11b_2437MHz    |

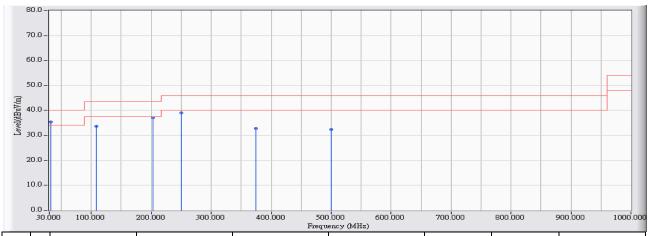


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 32.424    | 13.258         | 25.833        | 39.091        | -0.909  | 40.000   | QUASIPEAK     |
| 2 |   | 249.595   | 11.849         | 27.993        | 39.842        | -6.158  | 46.000   | QUASIPEAK     |
| 3 |   | 374.663   | 14.546         | 18.727        | 33.273        | -12.727 | 46.000   | QUASIPEAK     |
| 4 |   | 499.730   | 17.175         | 16.199        | 33.374        | -12.626 | 46.000   | QUASIPEAK     |
| 5 |   | 599.590   | 17.482         | 10.743        | 28.225        | -17.775 | 46.000   | QUASIPEAK     |
| 6 |   | 811.429   | 19.243         | 11.856        | 31.099        | -14.901 | 46.000   | QUASIPEAK     |

- 1. All Reading Levels are Quasi-Peak value.
- 2. "  $^{*}$ ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : CB1                                    | Time : 2015/09/30 - 15:08 |
|---|---------------------------|
| Limit : FCC_CLASS_B_03M_QP                    | Margin : 6                |
| Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                            | Note : 802.11g_2437MHz    |

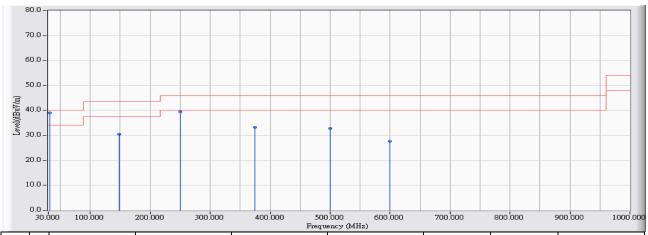


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 32.424    | 13.258         | 22.082        | 35.340        | -4.660  | 40.000   | QUASIPEAK     |
| 2 |   | 108.531   | 10.259         | 23.358        | 33.617        | -9.883  | 43.500   | QUASIPEAK     |
| 3 |   | 202.574   | 8.356          | 28.669        | 37.025        | -6.475  | 43.500   | QUASIPEAK     |
| 4 |   | 249.595   | 11.849         | 27.239        | 39.088        | -6.912  | 46.000   | QUASIPEAK     |
| 5 |   | 374.663   | 14.546         | 18.326        | 32.872        | -13.128 | 46.000   | QUASIPEAK     |
| 6 |   | 499.730   | 17.175         | 15.179        | 32.354        | -13.646 | 46.000   | QUASIPEAK     |

- 1. All Reading Levels are Quasi-Peak value.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : CB1                                  | Time : 2015/09/30 - 15:08 |
|---|---------------------------|
| Limit : FCC_CLASS_B_03M_QP                  | Margin : 6                |
| Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                          | Note: 802.11g_2437MHz     |

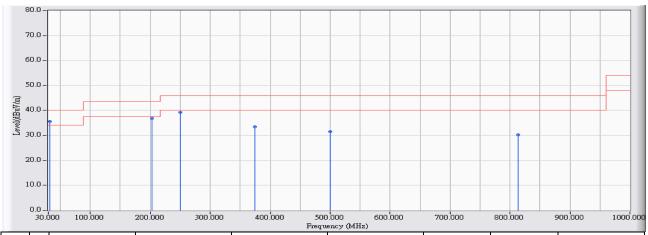


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 32.424    | 13.258         | 25.760        | 39.018        | -0.982  | 40.000   | QUASIPEAK     |
| 2 |   | 147.796   | 9.743          | 20.678        | 30.422        | -13.078 | 43.500   | QUASIPEAK     |
| 3 |   | 249.595   | 11.849         | 27.680        | 39.529        | -6.471  | 46.000   | QUASIPEAK     |
| 4 |   | 374.663   | 14.546         | 18.775        | 33.321        | -12.679 | 46.000   | QUASIPEAK     |
| 5 |   | 499.730   | 17.175         | 15.640        | 32.815        | -13.185 | 46.000   | QUASIPEAK     |
| 6 |   | 599.590   | 17.482         | 10.278        | 27.760        | -18.240 | 46.000   | QUASIPEAK     |

- 1. All Reading Levels are Quasi-Peak value.
- 2. "  $^{\star}$  ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : CB1                                    | Time : 2015/09/30 - 15:13  |
|---|----------------------------|
| Limit : FCC_CLASS_B_03M_QP                    | Margin : 6                 |
| Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                            | Note: 802.11n(20M)_2437MHz |

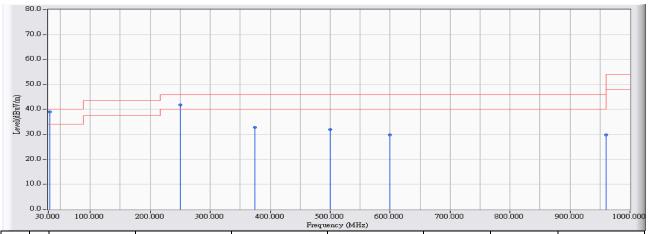


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 32.909    | 13.128         | 22.515        | 35.643        | -4.357  | 40.000   | QUASIPEAK     |
| 2 |   | 202.574   | 8.356          | 28.531        | 36.887        | -6.613  | 43.500   | QUASIPEAK     |
| 3 |   | 249.595   | 11.849         | 27.303        | 39.152        | -6.848  | 46.000   | QUASIPEAK     |
| 4 |   | 374.663   | 14.546         | 19.016        | 33.562        | -12.438 | 46.000   | QUASIPEAK     |
| 5 |   | 499.730   | 17.175         | 14.247        | 31.422        | -14.578 | 46.000   | QUASIPEAK     |
| 6 |   | 813.368   | 19.249         | 10.963        | 30.211        | -15.789 | 46.000   | QUASIPEAK     |

- 1. All Reading Levels are Quasi-Peak value.
- 2. "  $^{*}$ ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : CB1                                  | Time : 2015/09/30 - 15:17  |
|---|----------------------------|
| Limit : FCC_CLASS_B_03M_QP                  | Margin : 6                 |
| Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                          | Note: 802.11n(20M)_2437MHz |

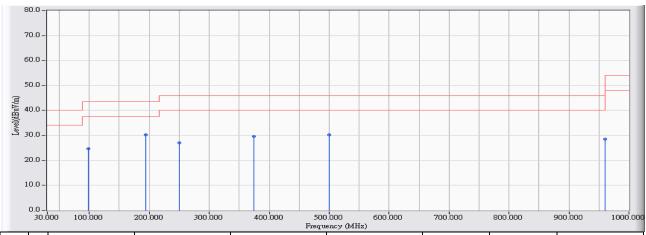


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | <b>Detector Type</b> |  |
|---|---|-----------|----------------|---------------|---------------|---------|----------|----------------------|--|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |                      |  |
| 1 | * | 32.424    | 13.258         | 25.799        | 39.057        | -0.943  | 40.000   | QUASIPEAK            |  |
| 2 |   | 249.595   | 11.849         | 29.902        | 41.751        | -4.249  | 46.000   | QUASIPEAK            |  |
| 3 |   | 374.663   | 14.546         | 18.311        | 32.857        | -13.143 | 46.000   | QUASIPEAK            |  |
| 4 |   | 499.730   | 17.175         | 14.824        | 31.999        | -14.001 | 46.000   | QUASIPEAK            |  |
| 5 |   | 599.590   | 17.482         | 12.410        | 29.892        | -16.108 | 46.000   | QUASIPEAK            |  |
| 6 |   | 959.765   | 19.960         | 9.825         | 29.785        | -16.215 | 46.000   | QUASIPEAK            |  |

- 1. All Reading Levels are Quasi-Peak value.
- 2. "  $^{\star}$  ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : CB1                                   | Time : 2015/09/30 - 15:25  |
|--|----------------------------|
| Limit : FCC_CLASS_B_03M_QP                   | Margin : 6                 |
| Probe: CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                           | Note: 802.11n(40M)_2437MHz |

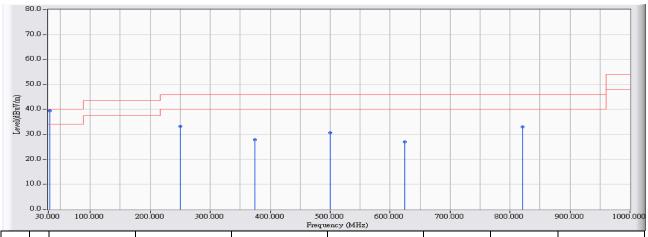


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 98.351    | 9.456          | 15.123        | 24.579        | -18.921 | 43.500   | QUASIPEAK     |
| 2 | * | 193.848   | 8.194          | 22.104        | 30.298        | -13.202 | 43.500   | QUASIPEAK     |
| 3 |   | 249.595   | 11.849         | 15.097        | 26.946        | -19.054 | 46.000   | QUASIPEAK     |
| 4 |   | 374.663   | 14.546         | 15.112        | 29.658        | -16.342 | 46.000   | QUASIPEAK     |
| 5 |   | 499.730   | 17.175         | 13.070        | 30.245        | -15.755 | 46.000   | QUASIPEAK     |
| 6 |   | 959.765   | 19.960         | 8.500         | 28.460        | -17.540 | 46.000   | QUASIPEAK     |

- 1. All Reading Levels are Quasi-Peak value.
- 2. "  $^{\star}$  ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



| Site : CB1                                  | Time : 2015/09/30 - 15:30  |
|---|----------------------------|
| Limit : FCC_CLASS_B_03M_QP                  | Margin: 6                  |
| Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                          | Note: 802.11n(40M)_2437MHz |



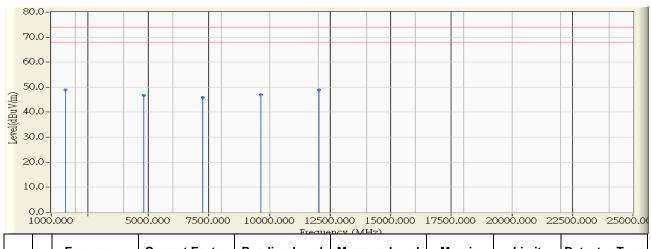
|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 31.939    | 13.388         | 25.986        | 39.373        | -0.627  | 40.000   | QUASIPEAK     |
| 2 |   | 249.595   | 11.849         | 21.449        | 33.298        | -12.702 | 46.000   | QUASIPEAK     |
| 3 |   | 374.663   | 14.546         | 13.329        | 27.875        | -18.125 | 46.000   | QUASIPEAK     |
| 4 |   | 499.730   | 17.175         | 13.481        | 30.656        | -15.344 | 46.000   | QUASIPEAK     |
| 5 |   | 624.798   | 17.610         | 9.442         | 27.052        | -18.948 | 46.000   | QUASIPEAK     |
| 6 |   | 820.640   | 19.267         | 13.820        | 33.087        | -12.913 | 46.000   | QUASIPEAK     |

- 1. All Reading Levels are Quasi-Peak value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



**Above 1GHz Spurious** 

| Site : CB1                                | Time : 2015/10/04 - 06:30 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note : 802.11b_2412MHz    |



|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 1600.000  | -9.652         | 58.651        | 49.000        | -25.000 | 74.000   | PEAK          |
| 2 |   | 4823.870  | -2.560         | 49.310        | 46.750        | -27.250 | 74.000   | PEAK          |
| 3 |   | 7231.020  | 5.916          | 39.920        | 45.836        | -28.164 | 74.000   | PEAK          |
| 4 |   | 9653.350  | 7.688          | 39.340        | 47.028        | -26.972 | 74.000   | PEAK          |
| 5 |   | 12056.840 | 10.341         | 38.580        | 48.921        | -25.079 | 74.000   | PEAK          |

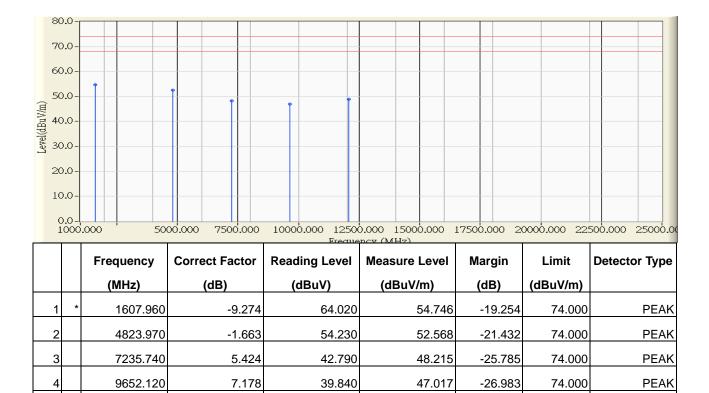
- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.

74.000

**PEAK** 



| Site : CB1                              | Time : 2015/10/04 - 06:35 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11b_2412MHz    |



# Note:

5

12069.550

 All readings above 1GHz are performed with peak and/or average measurements as necessary.

38.950

48.862

-25.138

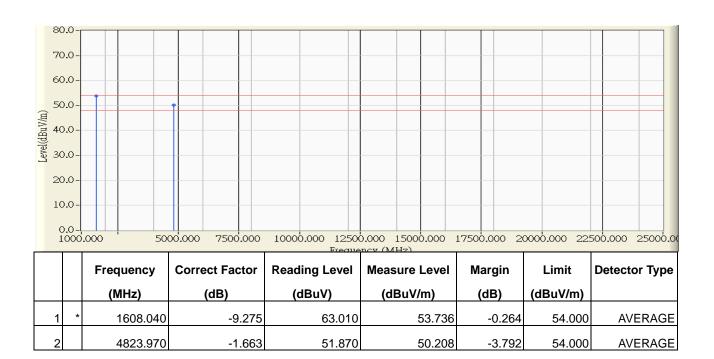
2. " \* ", means this data is the worst emission level.

9.912

- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



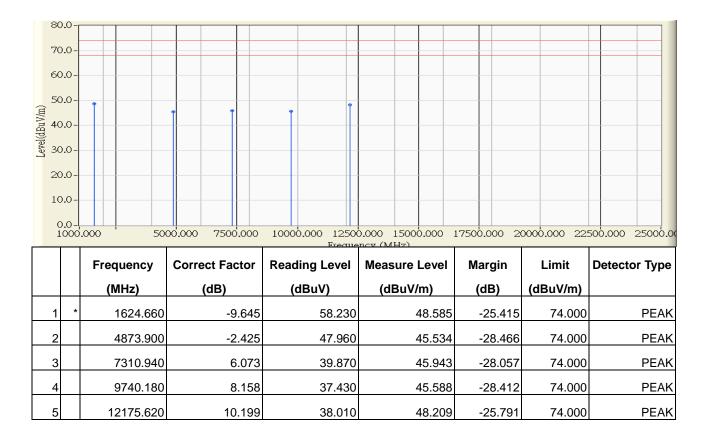
| Site : CB1                              | Time : 2015/10/04 - 06:40 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11b_2412MHz    |



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



| Site : CB1                                | Time : 2015/10/04 - 06:45 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin: 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11b_2437MHz     |



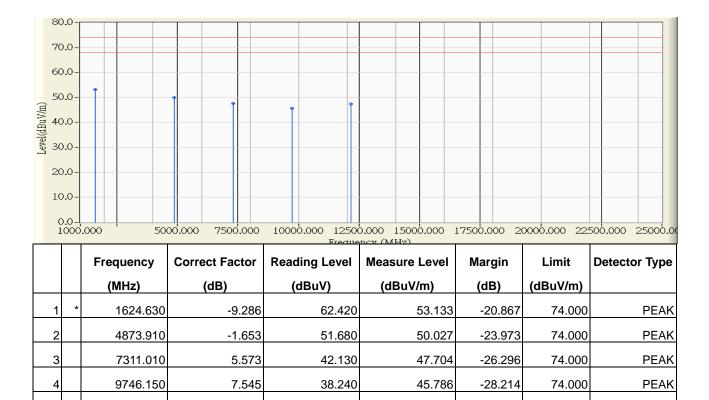
- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.

74.000

**PEAK** 



| Site : CB1                              | Time : 2015/10/04 - 06:51 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11b_2437MHz    |



# Note:

5

12179.280

 All readings above 1GHz are performed with peak and/or average measurements as necessary.

37.450

2. " \* ", means this data is the worst emission level.

9.891

- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.

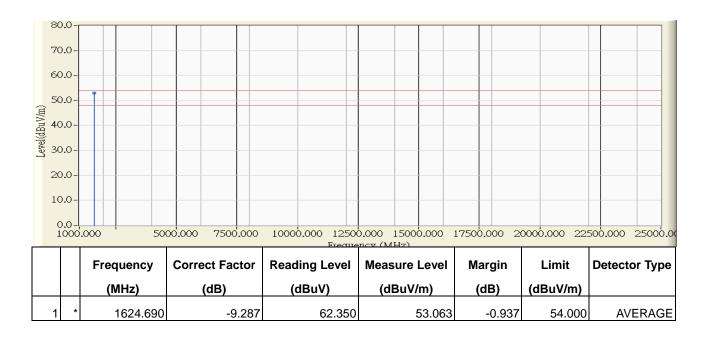
47.341

-26.659

5. The Emission above 18GHz were not included because their levels is far less than the limit.



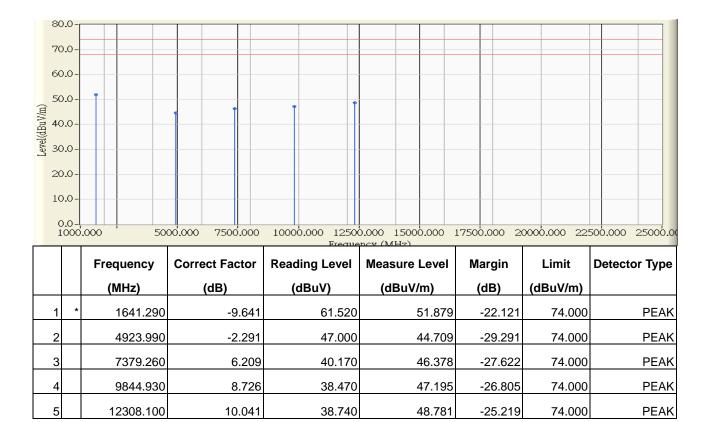
| Site : CB1                              | Time : 2015/10/04 – 06:54 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note: 802.11b_2437MHz     |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



| Site : CB1                                | Time : 2015/10/04 - 07:00 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11b_2462MHz     |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.

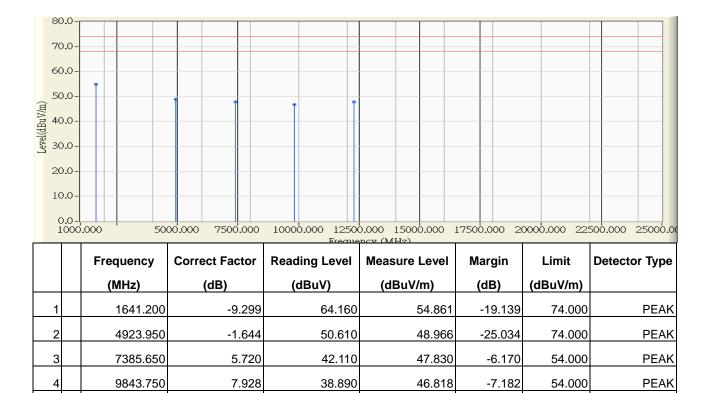
54.000

**PEAK** 

-6.113



| Site : CB1                              | Time : 2015/10/04 - 07:05 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11b_2462MHz    |



# Note:

5

12305.180

 All readings above 1GHz are performed with peak and/or average measurements as necessary.

38.020

47.887

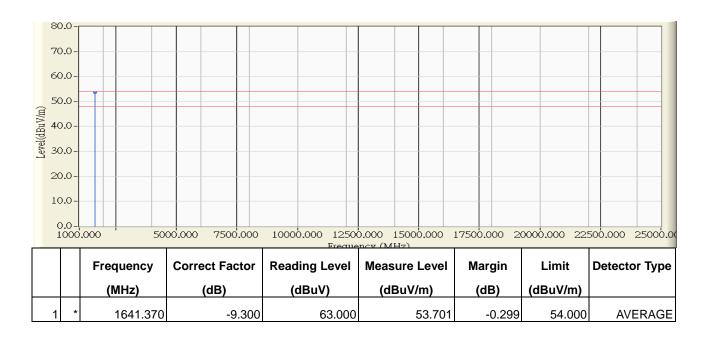
2. " \* ", means this data is the worst emission level.

9.867

- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



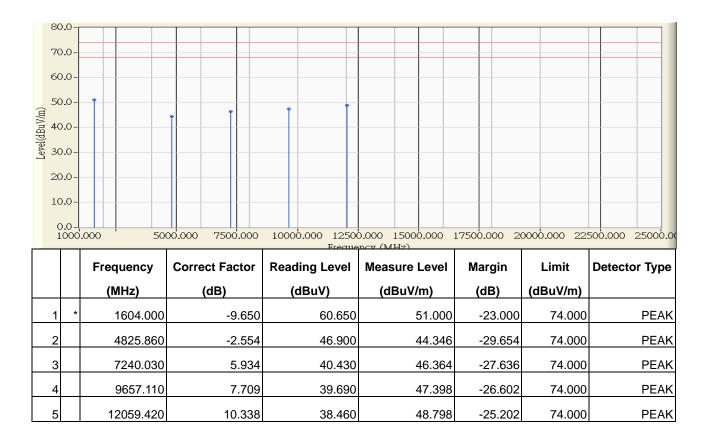
| Site : CB1                              | Time : 2015/10/04 - 07:10 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note: 802.11b_2462MHz     |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



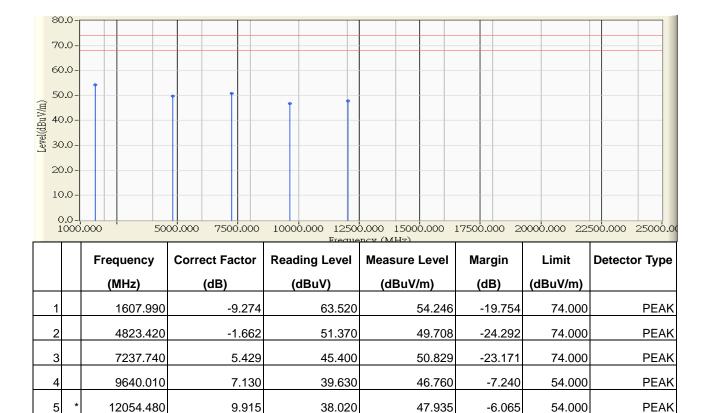
| Site : CB1                                | Time : 2015/10/04 - 07:15 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11g_2412MHz     |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



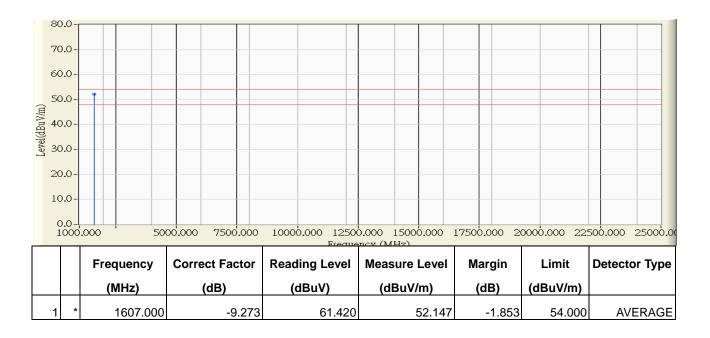
| Site : CB1                              | Time : 2015/10/04 - 07:20 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11g_2412MHz    |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



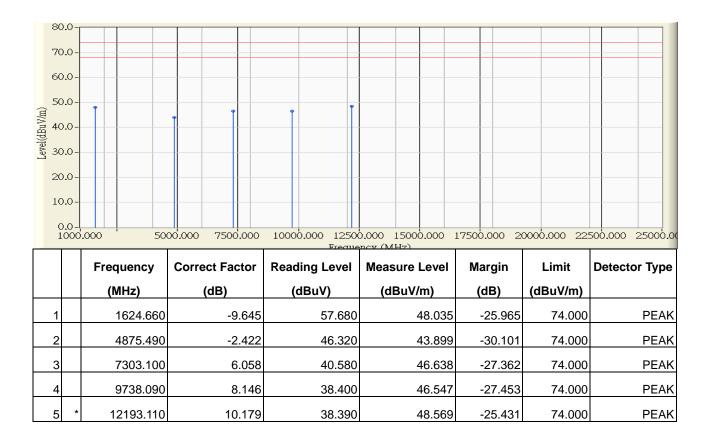
| Site : CB1                              | Time : 2015/10/04 - 07:25 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note: 802.11g_2412MHz     |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



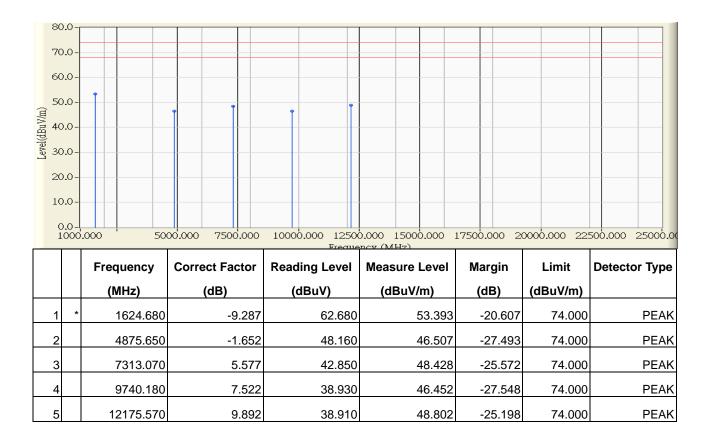
| Site : CB1                                | Time : 2015/10/04 - 07:31 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11g_2437MHz     |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



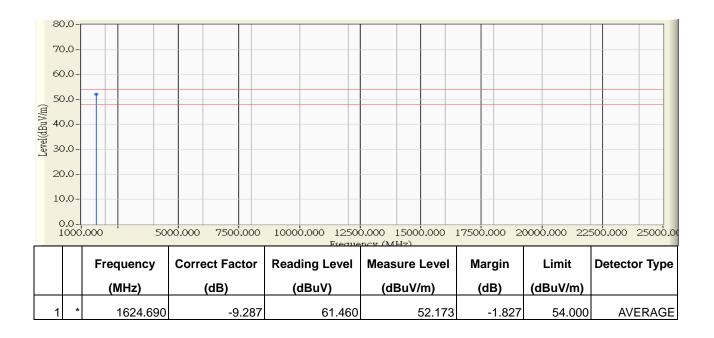
| Site : CB1                              | Time : 2015/10/04 - 07:36 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note: 802.11g_2437MHz     |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



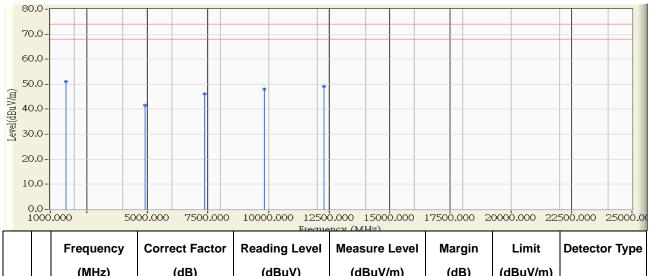
| Site : CB1                              | Time : 2015/10/04 - 07:46 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11g_2437MHz    |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



| Engineer:                                 |                           |
|---|---------------------------|
| Site : CB1                                | Time : 2015/10/04 - 07:50 |
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note : 802.11g_2462MHz    |



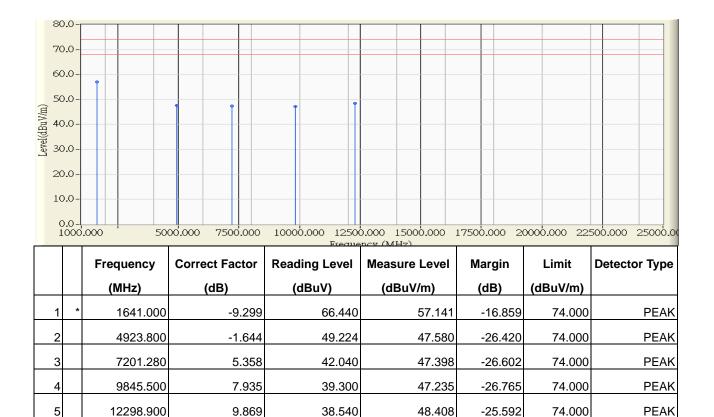
|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | * | 1642.000  | -9.641         | 60.641        | 51.000        | -23.000 | 74.000   | PEAK          |
| 2 |   | 4920.150  | -2.302         | 43.810        | 41.508        | -32.492 | 74.000   | PEAK          |
| 3 |   | 7378.970  | 6.208          | 39.980        | 46.187        | -27.813 | 74.000   | PEAK          |
| 4 |   | 9845.110  | 8.727          | 39.230        | 47.956        | -26.044 | 74.000   | PEAK          |
| 5 |   | 12302.380 | 10.049         | 38.980        | 49.028        | -24.972 | 74.000   | PEAK          |

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. "\*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.

**PEAK** 



| Site : CB1                              | Time : 2015/10/04 - 07:54 |
|---|---------------------------|
| Limit: FCC_SpartC_15.247_H_03M_PK       | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note: 802.11g_2462MHz     |



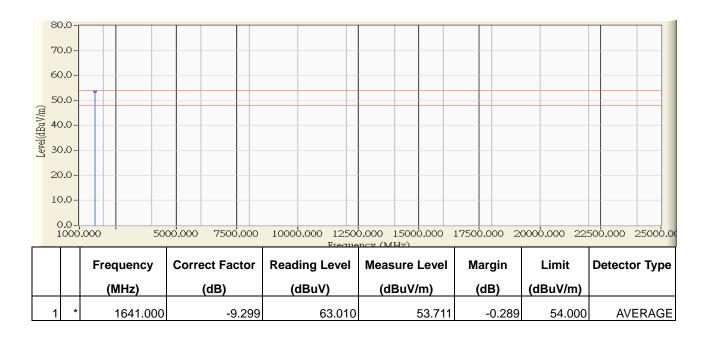
# Note:

5

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



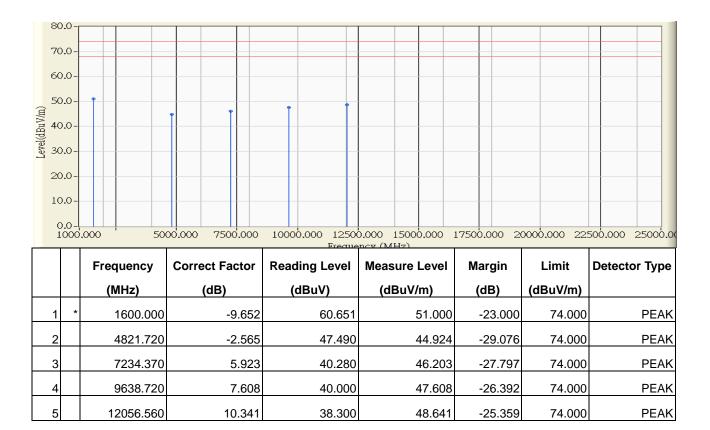
| Site : CB1                              | Time : 2015/10/04 - 08:00 |
|---|---------------------------|
| Limit: FCC_SpartC_15.247_H_03M_AV       | Margin: 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11g_2462MHz    |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



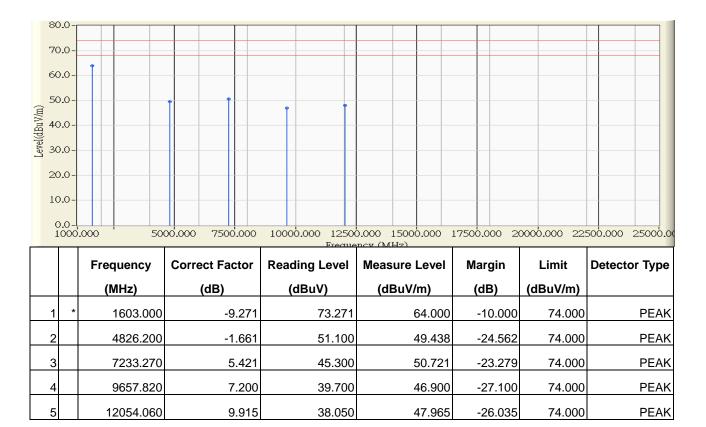
| Site : CB1                                | Time : 2015/10/04 - 08:05  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(20M)_2412MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



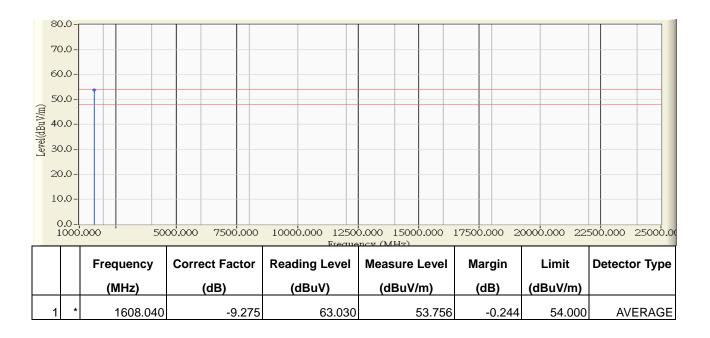
| Site : CB1                              | Time : 2015/10/04 - 08:10  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(20M)_2412MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



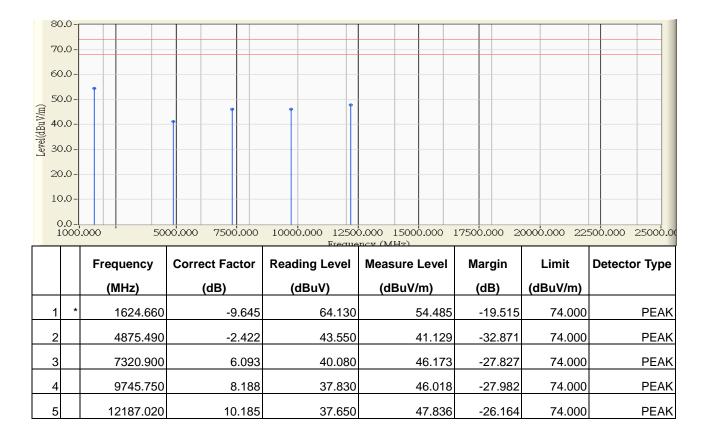
| Site : CB1                              | Time : 2015/10/04 – 08:15  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(20M)_2412MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



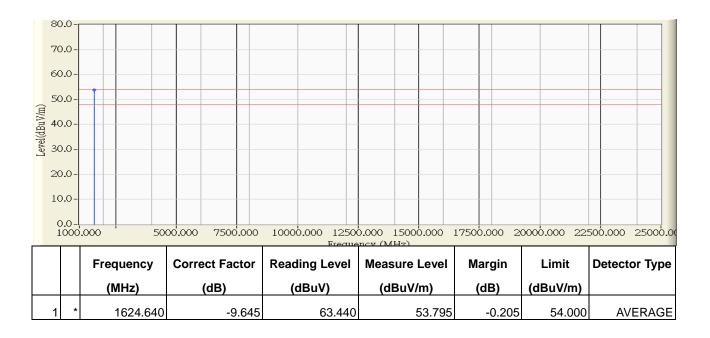
| Site : CB1                                | Time : 2015/10/04 - 08:20  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(20M)_2437MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



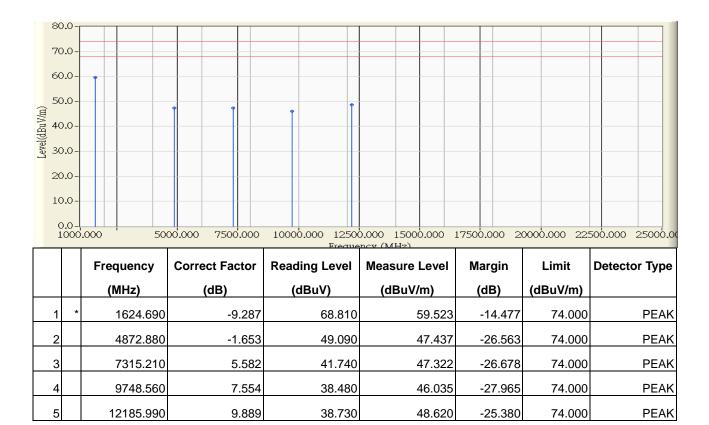
| Site : CB1                                | Time : 2015/10/04 - 08:25   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                        | Note : 802.11n(20M)_2437MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



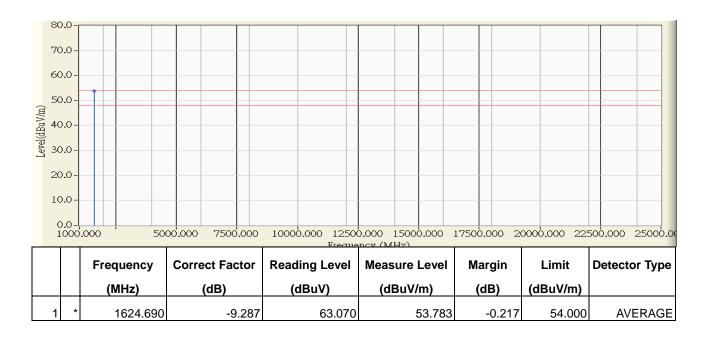
| Site : CB1                              | Time : 2015/10/04 - 08:40  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(20M)_2437MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



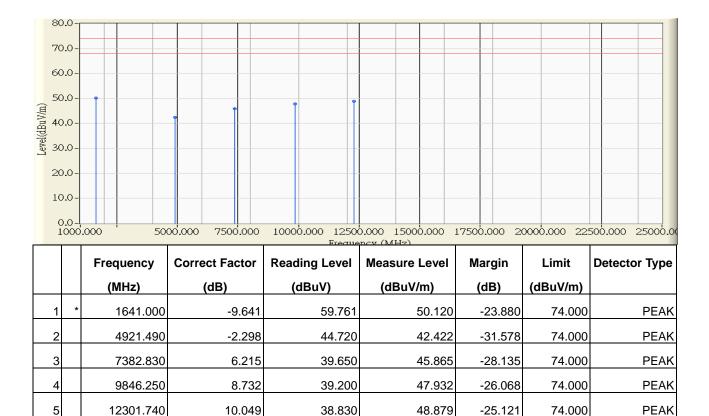
| Site : CB1                              | Time : 2015/10/04 - 08:45   |
|---|-----------------------------|
| Limit: FCC_SpartC_15.247_H_03M_AV       | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                      | Note : 802.11n(20M)_2437MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



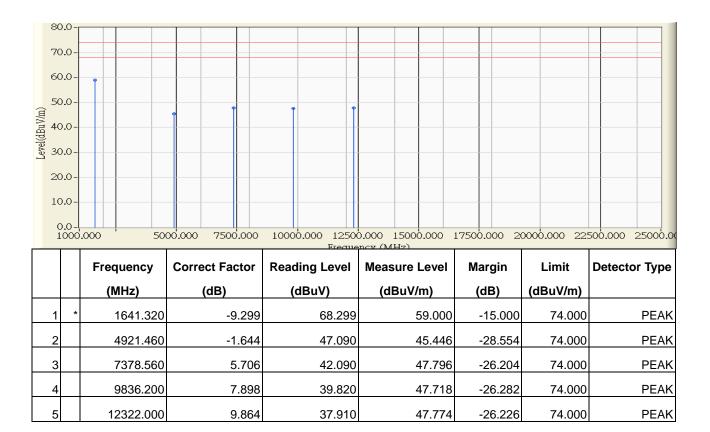
| Site : CB1                                | Time : 2015/10/04 - 08:50   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                        | Note : 802.11n(20M)_2462MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



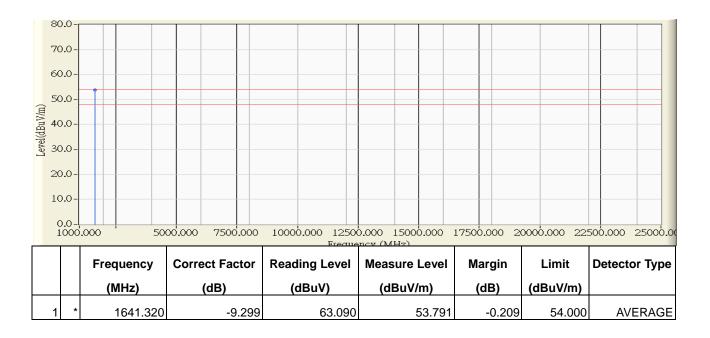
| Site : CB1                              | Time : 2015/10/04 - 08:55   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                      | Note : 802.11n(20M)_2462MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



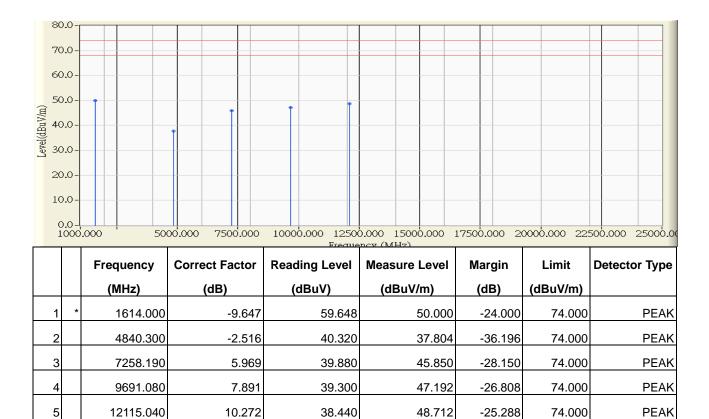
| Site : CB1                              | Time : 2015/10/04 - 09:00  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(20M)_2462MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



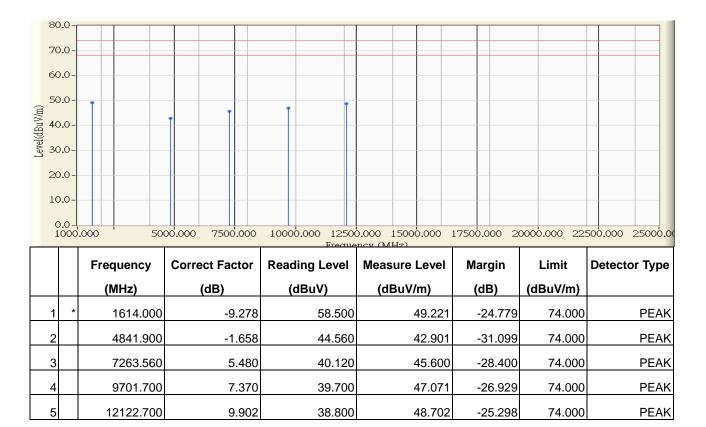
| Site : CB1                                | Time : 2015/10/04 - 09:05  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(40M)_2422MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



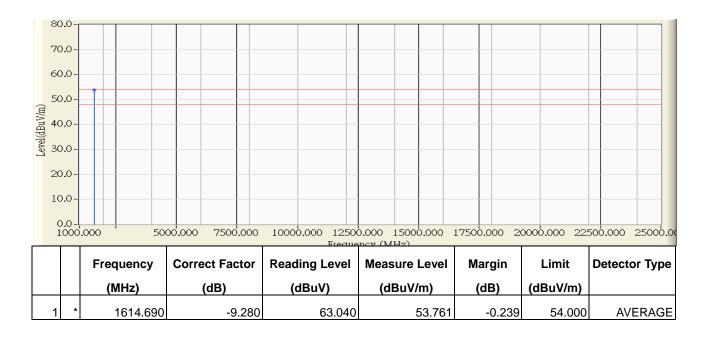
| Site : CB1                              | Time : 2015/10/04 - 09:07  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2422MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



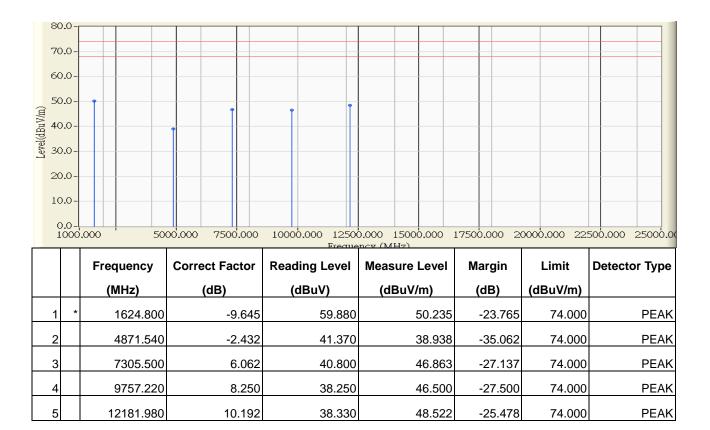
| Site : CB1                              | Time : 2015/10/04 - 09:10  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2422MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



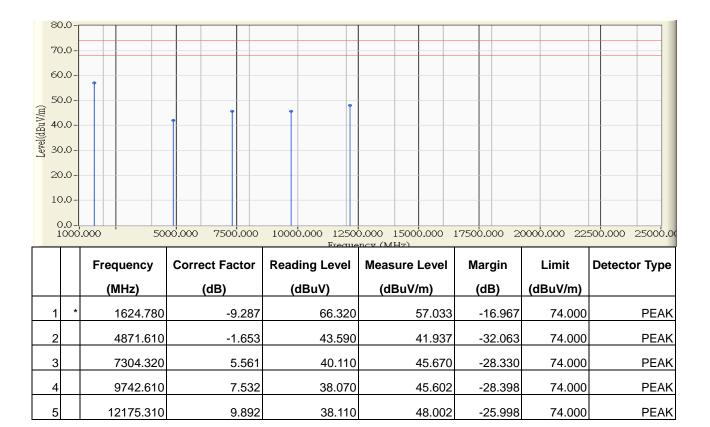
| Site : CB1                                | Time : 2015/10/04 - 09:15  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin: 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(40M)_2437MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



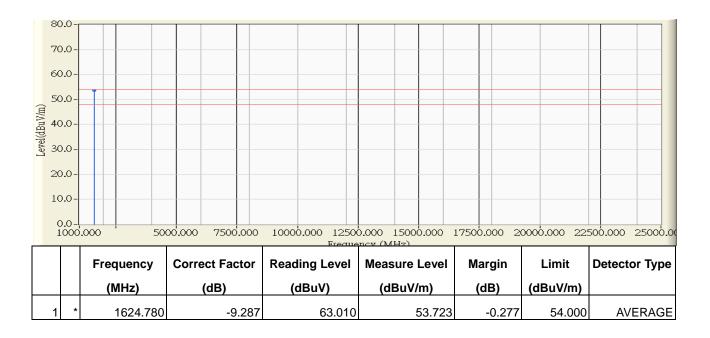
| Site : CB1                              | Time : 2015/10/04 - 09:20  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2437MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



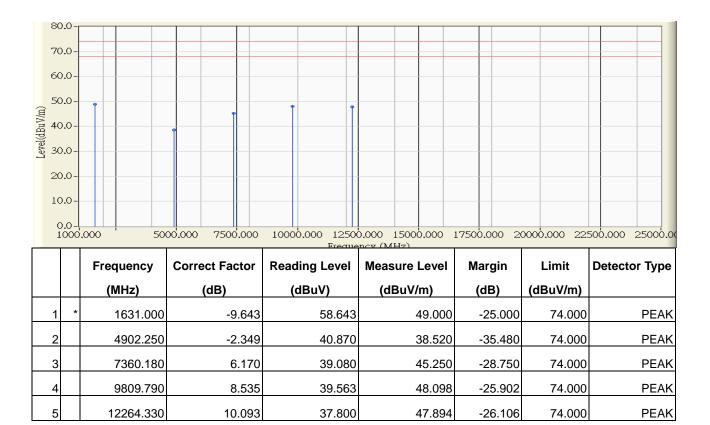
| Site : CB1                              | Time : 2015/10/04 - 09:25  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2437MHz |



- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



| Site : CB1                                | Time : 2015/10/04 - 09:30  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(40M)_2452MHz |

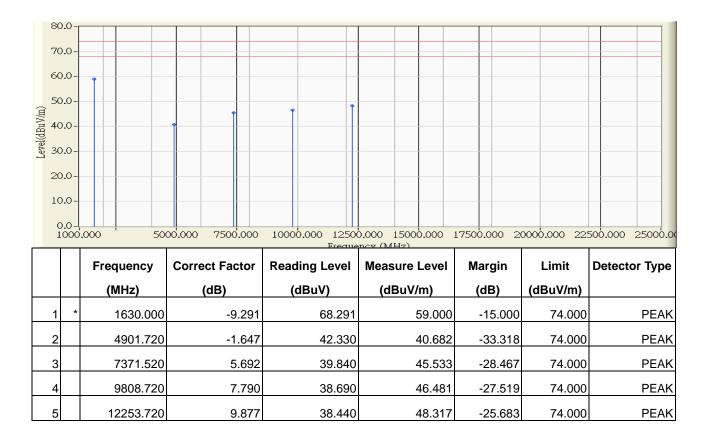


#### Note:

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



| Site : CB1                              | Time : 2015/10/04 - 09:35  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2452MHz |

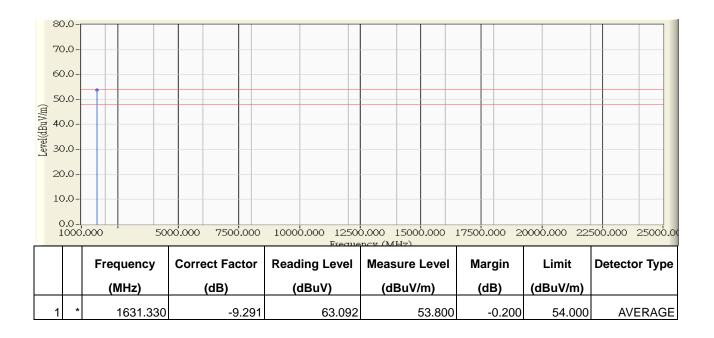


#### Note:

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



| Site : CB1                              | Time : 2015/10/04 - 09:45  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin: 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2452MHz |



#### Note:

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.
- 4. The average measurement was not performed when the peak measured data under the limit of average detection.
- 5. The Emission above 18GHz were not included because their levels is far less than the limit.



## 5. RF antenna conducted test

# 5.1. Test Equipment

The following test equipments are used during the test:

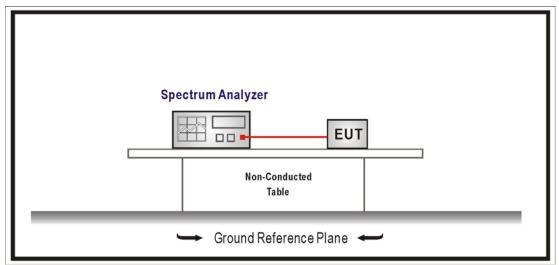
## RF antenna conducted test / SR7

| Instrument        | Manufacturer | Model No.  | Serial No  | Next Cal. Date |
|-------------------|--------------|------------|------------|----------------|
| Spectrum Analyzer | Agilent      | N9010A-EXA | US47140172 | 2016/07/13     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

# 5.2. Test Setup

RF Antenna Conducted Measurement:





#### 5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on an RF conducted or radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

#### 5.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to DTS test procedure section 11.2 of KDB558074 v03r02 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

# 5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

# 5.6. Uncertainty

Conducted is defined as ± 1.27dB

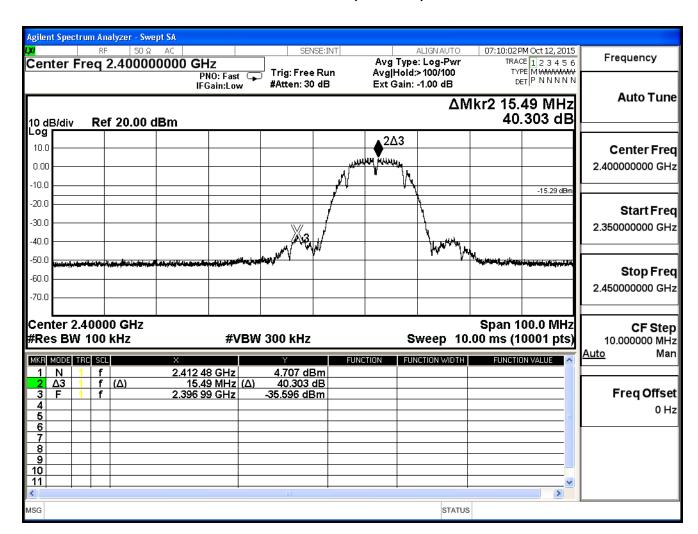


#### 5.7. Test Result

| Product      | Mesh WiFi AP              |           |     |
|--------------|---------------------------|-----------|-----|
| Test Item    | RF antenna conducted test |           |     |
| Test Mode    | Mode 1: Transmit Mode     |           |     |
| Date of Test | 2015/10/12                | Test Site | SR7 |

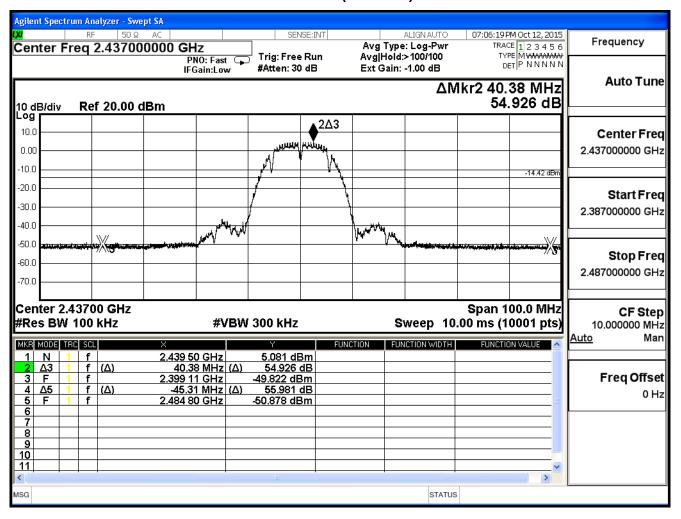
| IEEE 802.11b (ANT 0) |                    |                        |                |        |
|----------------------|--------------------|------------------------|----------------|--------|
| Channel No.          | Frequency<br>(MHz) | Measure Level<br>(dBc) | Limit<br>(dBc) | Result |
| 1                    | 2412               | 40.303                 | ≧20            | Pass   |
| 6                    | 2437               | 54.926                 | ≧20            | Pass   |
| 11                   | 2462               | 53.019                 | ≧20            | Pass   |

#### Channel 1 (2412MHz)



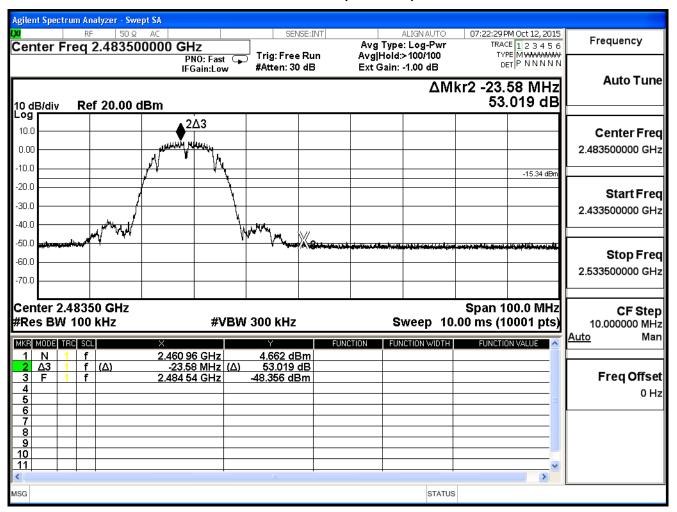


# Channel 6 (2437MHz)





## **Channel 11 (2462MHz)**

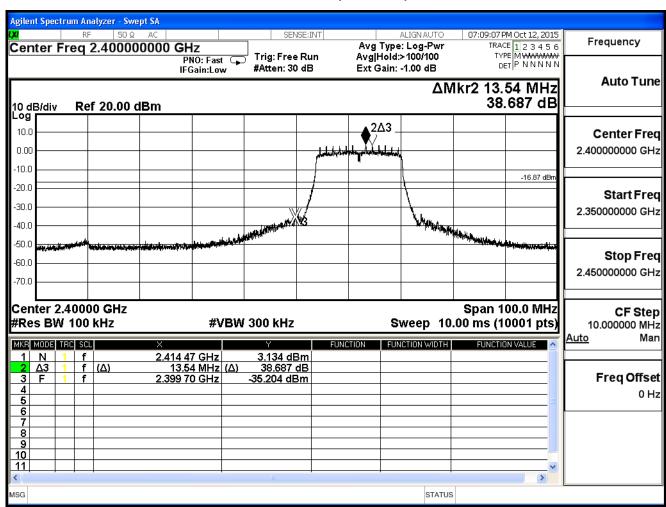




| Product      | Mesh WiFi AP              |                           |          |     |  |
|--------------|---------------------------|---------------------------|----------|-----|--|
| Test Item    | RF antenna conducted test | RF antenna conducted test |          |     |  |
| Test Mode    | Mode 1: Transmit Mode     | Mode 1: Transmit Mode     |          |     |  |
| Date of Test | 2015/10/12                | Т                         | est Site | SR7 |  |

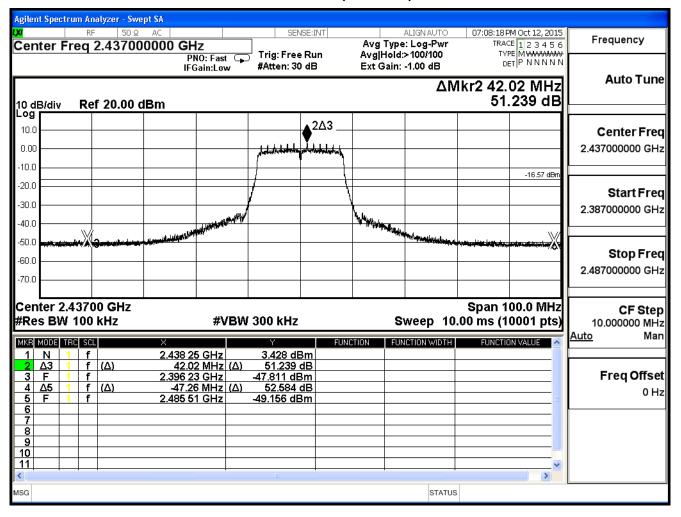
| IEEE 802.11g (ANT 0) |                    |                        |                |        |
|----------------------|--------------------|------------------------|----------------|--------|
| Channel No.          | Frequency<br>(MHz) | Measure Level<br>(dBc) | Limit<br>(dBc) | Result |
| 1                    | 2412               | 38.687                 | ≧20            | Pass   |
| 6                    | 2437               | 51.239                 | ≧20            | Pass   |
| 11                   | 2462               | 49.571                 | ≧20            | Pass   |

#### Channel 1 (2412MHz)



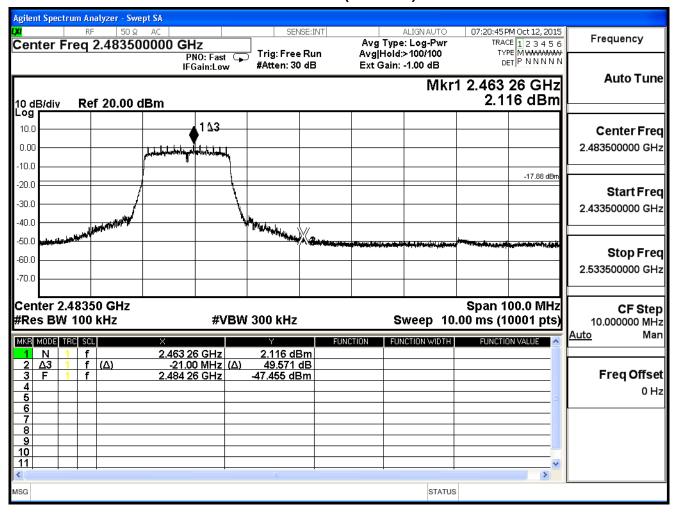


## Channel 6 (2437MHz)





## **Channel 11 (2462MHz)**

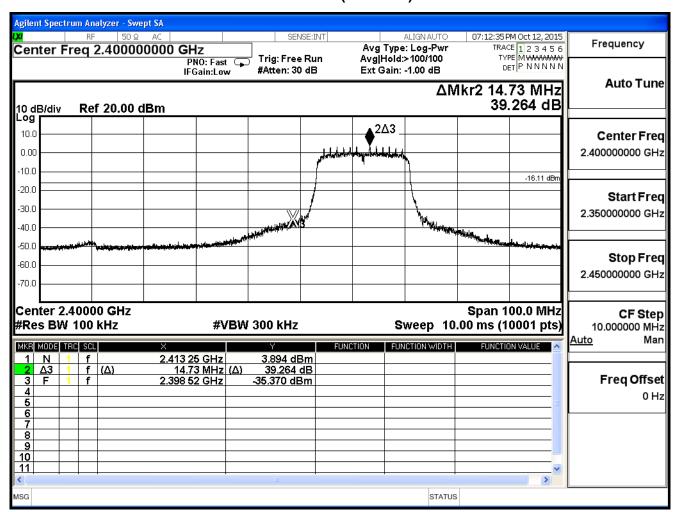




| Product      | Mesh WiFi AP              |                           |     |  |
|--------------|---------------------------|---------------------------|-----|--|
| Test Item    | RF antenna conducted test | RF antenna conducted test |     |  |
| Test Mode    | Mode 1: Transmit Mode     |                           |     |  |
| Date of Test | 2015/10/12                | Test Site                 | SR7 |  |

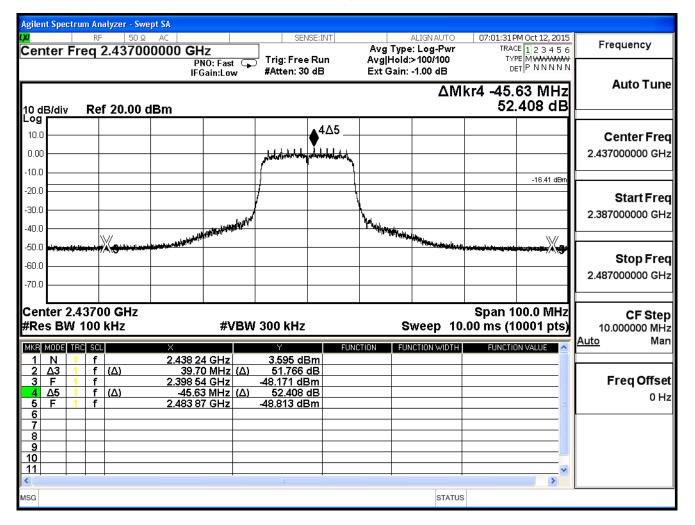
| IEEE 802.11n (20MHz) (ANT 0) |           |               |       |        |
|------------------------------|-----------|---------------|-------|--------|
| Channel No.                  | Frequency | Measure Level | Limit | Result |
| Channel No.                  | (MHz)     | (dBc)         | (dBc) | Nesuit |
| 1                            | 2412      | 39.264        | ≧20   | Pass   |
| 6                            | 2437      | 51.766        | ≧20   | Pass   |
| 11                           | 2462      | 49.779        | ≧20   | Pass   |

## Channel 1 (2412MHz)



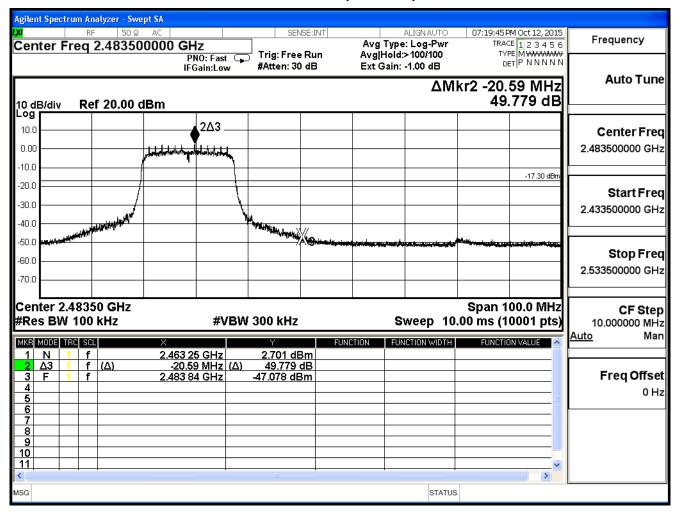


## Channel 6 (2437MHz)





#### **Channel 11 (2462MHz)**

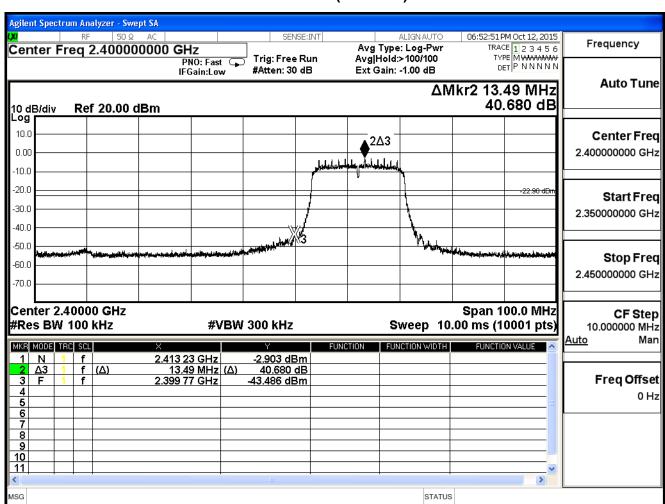




| Product      | Mesh WiFi AP              |                           |          |     |  |
|--------------|---------------------------|---------------------------|----------|-----|--|
| Test Item    | RF antenna conducted test | RF antenna conducted test |          |     |  |
| Test Mode    | Mode 1: Transmit Mode     | Mode 1: Transmit Mode     |          |     |  |
| Date of Test | 2015/10/12                | Т                         | est Site | SR7 |  |

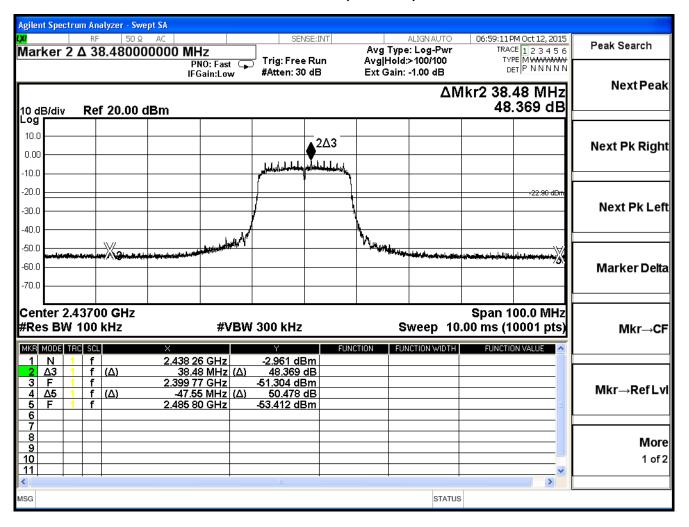
| IEEE 802.11n (20MHz) (ANT 1) |                    |                     |                |        |
|------------------------------|--------------------|---------------------|----------------|--------|
| Channel No.                  | Frequency<br>(MHz) | Measure Level (dBc) | Limit<br>(dBc) | Result |
| 1                            | 2412               | 40.680              | ≧20            | Pass   |
| 6                            | 2437               | 48.369              | ≧20            | Pass   |
| 11                           | 2462               | 47.003              | ≧20            | Pass   |

## Channel 1 (2412MHz)



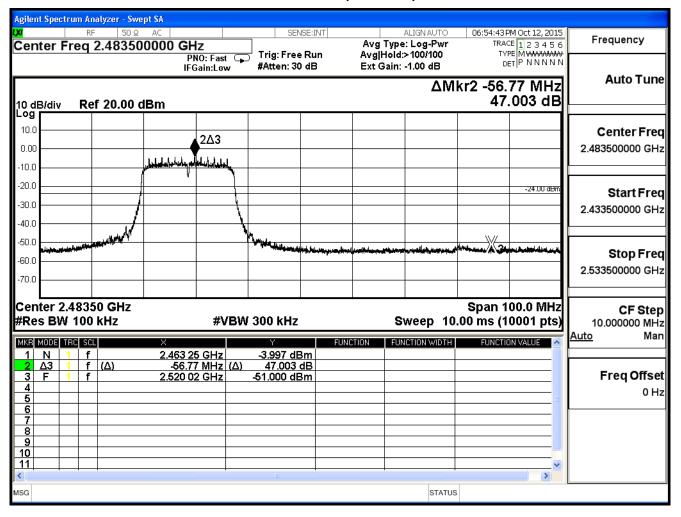


#### Channel 6 (2437MHz)





#### **Channel 11 (2462MHz)**

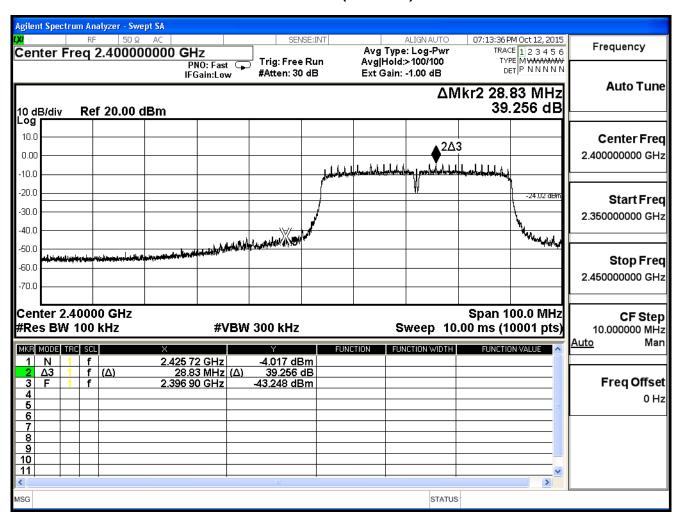




| Product      | Mesh WiFi AP              |   |          |     |
|--------------|---------------------------|---|----------|-----|
| Test Item    | RF antenna conducted test |   |          |     |
| Test Mode    | Mode 1: Transmit Mode     |   |          |     |
| Date of Test | 2015/10/12                | Т | est Site | SR7 |

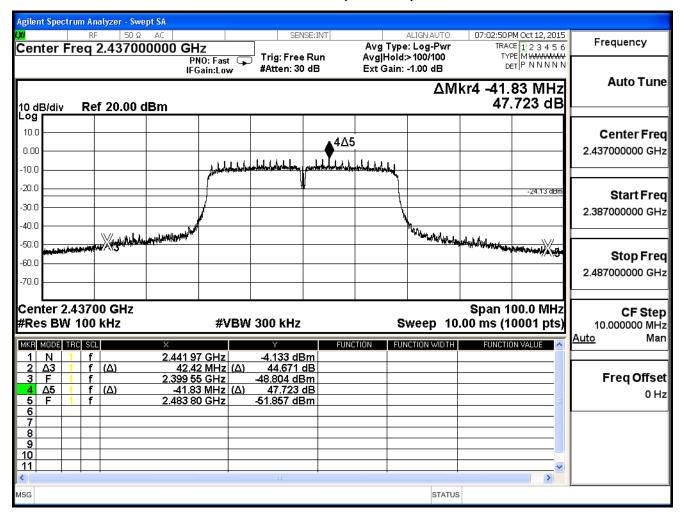
| IEEE 802.11n (40MHz) (ANT 0)                                |      |        |            |        |
|---|------|--------|------------|--------|
| Channel No. Frequency Measure Level Limit (MHz) (dBc) (dBc) |      |        |            | Result |
| 3   | 2422 | 39.256 | ≥20        | Pass   |
| 6   | 2437 | 44.671 | <b>≧20</b> | Pass   |
| 9   | 2452 | 41.835 | ≥20        | Pass   |

#### Channel 3 (2422MHz)



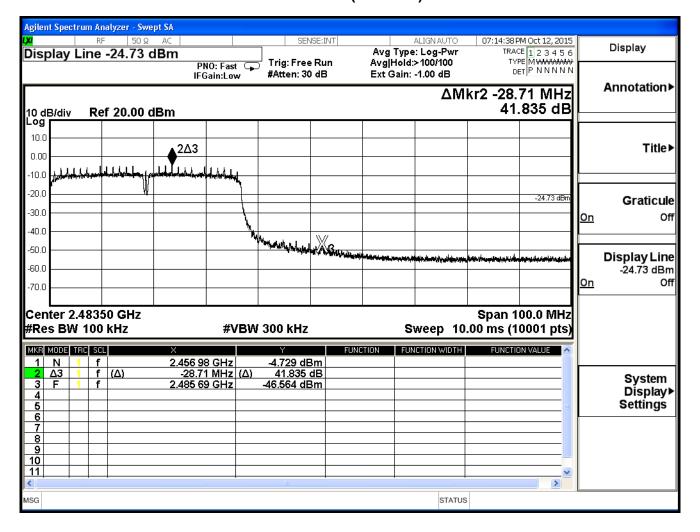


#### Channel 6 (2437MHz)





# Channel 9 (2452MHz)

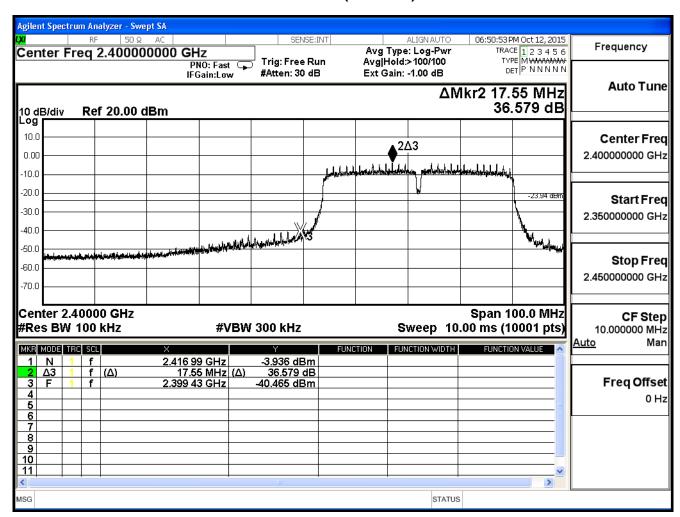




| Product      | Mesh WiFi AP              |   |          |     |
|--------------|---------------------------|---|----------|-----|
| Test Item    | RF antenna conducted test |   |          |     |
| Test Mode    | Mode 1: Transmit Mode     |   |          |     |
| Date of Test | 2015/10/12                | Т | est Site | SR7 |

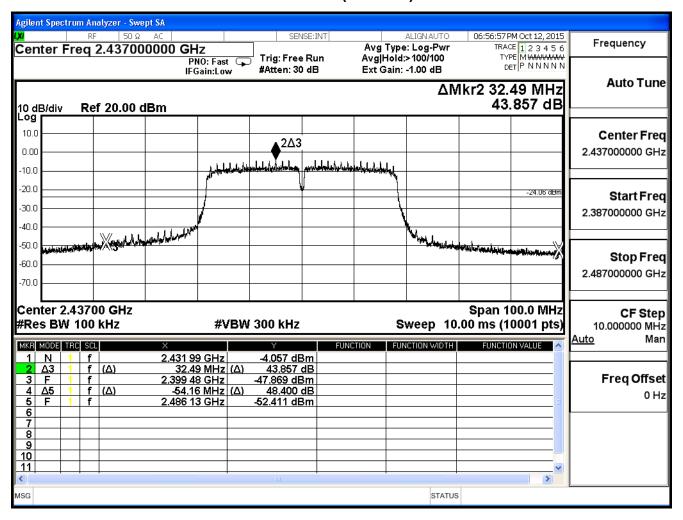
| IEEE 802.11n (40MHz) (ANT 1) |           |               |            |        |  |
|------------------------------|-----------|---------------|------------|--------|--|
| Channel No.                  | Frequency | Measure Level | Limit      | Result |  |
| Channel No.                  | (MHz)     | (dBc)         | (dBc)      |        |  |
| 3                            | 2422      | 36.579        | <b>≧20</b> | Pass   |  |
| 6                            | 2437      | 43.857        | <b>≧20</b> | Pass   |  |
| 9                            | 2452      | 43.077        | ≥20        | Pass   |  |

#### Channel 3 (2422MHz)



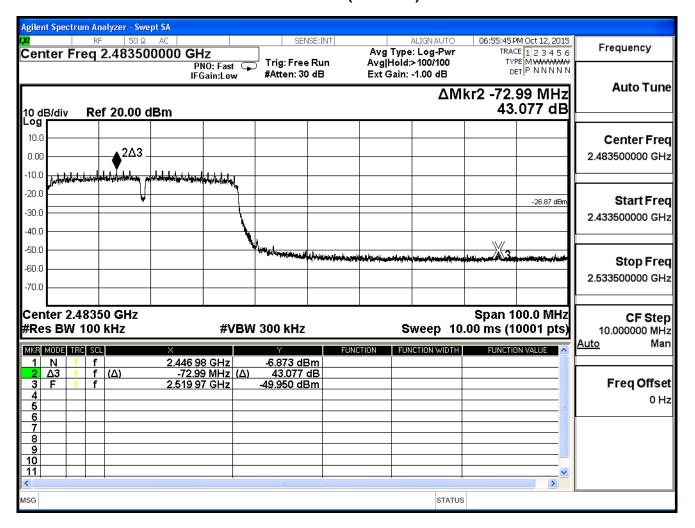


# Channel 6 (2437MHz)



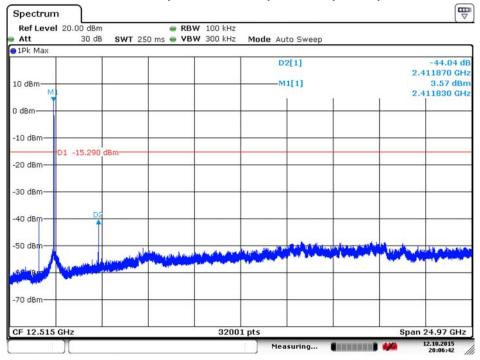


# Channel 9 (2452MHz)



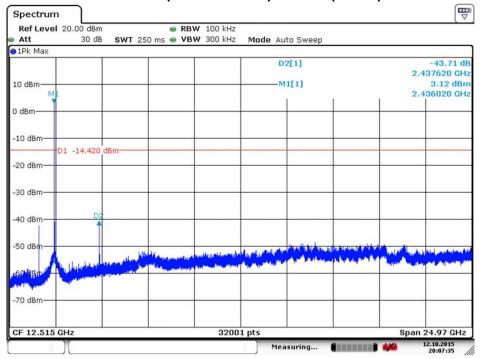


# 2412MHz (30MHz-25GHz)-802.11b(ANT 0)



Date: 12.OCT.2015 20:06:42

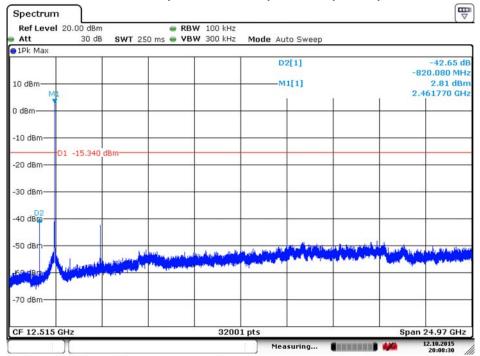
## 2437MHz (30MHz-25GHz)-802.11b(ANT 0)



Date: 12.OCT.2015 20:07:35



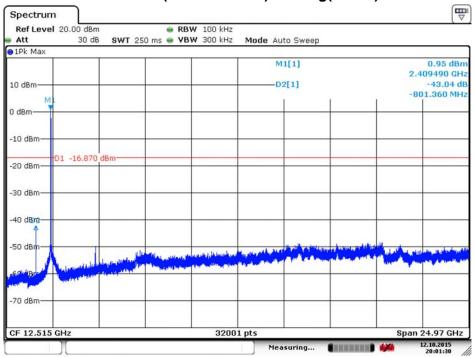
# 2462MHz (30MHz-25GHz)-802.11b(ANT 0)



Date: 12.OCT.2015 20:08:30

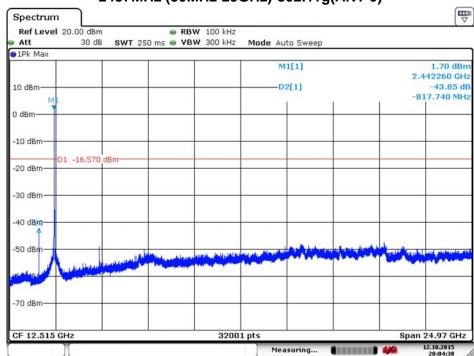






Date: 12.OCT.2015 20:01:30

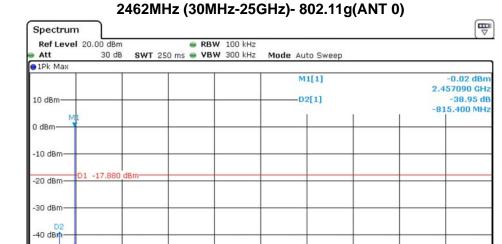
## 2437MHz (30MHz-25GHz)-802.11g(ANT 0)



Date: 12.OCT.2015 20:04:38

Span 24.97 GHz





32001 pts

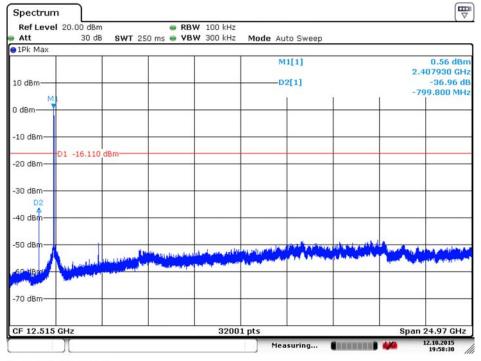
Date: 12.OCT.2015 20:05:12

-70 dBm-

CF 12.515 GHz

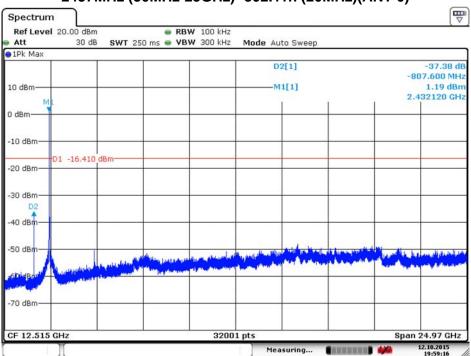


# 2412MHz (30MHz-25GHz)- 802.11n (20MHz)(ANT 0)



Date: 12.OCT.2015 19:58:30

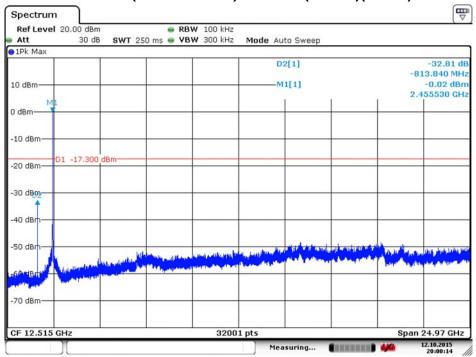
## 2437MHz (30MHz-25GHz)- 802.11n (20MHz)(ANT 0)



Date: 12.OCT.2015 19:59:17

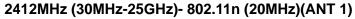


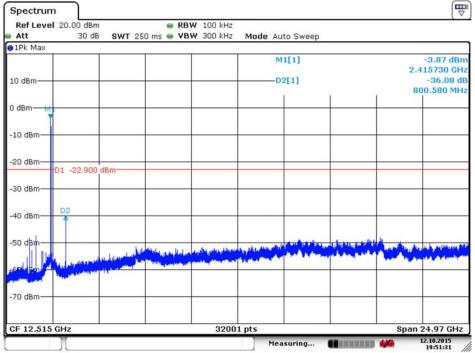
# 2462MHz (30MHz-25GHz)- 802.11n (20MHz)(ANT 0)



Date: 12.OCT.2015 20:00:14

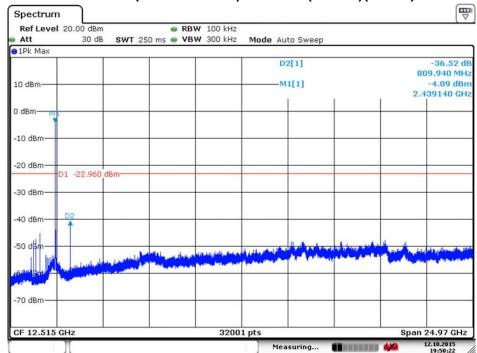






Date: 12.OCT.2015 19:51:31

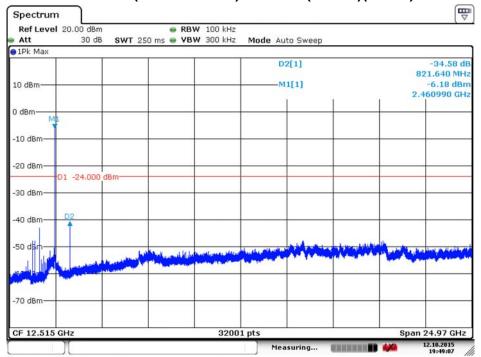
# 2437MHz (30MHz-25GHz)- 802.11n (20MHz)(ANT 1)



Date: 12.OCT.2015 19:50:22

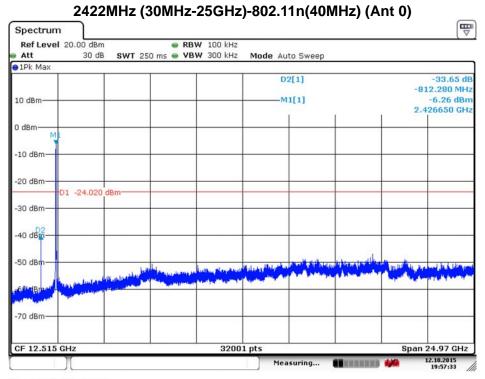


# 2462MHz (30MHz-25GHz)- 802.11n (20MHz)(ANT 1)

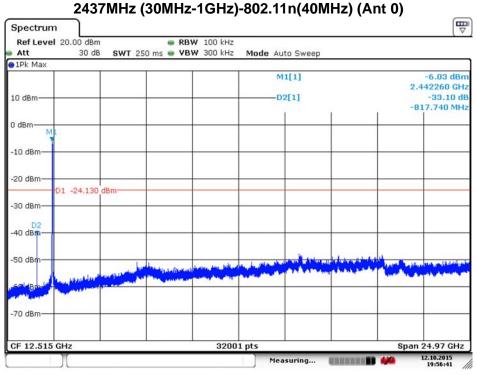


Date: 12.OCT.2015 19:49:07



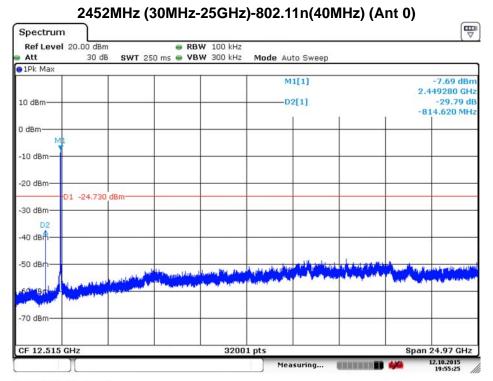


Date: 12.OCT.2015 19:57:33



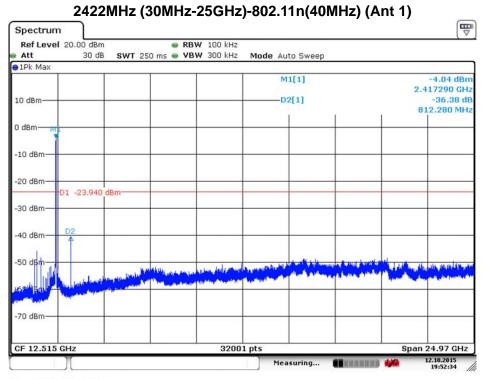
Date: 12.OCT.2015 19:56:41



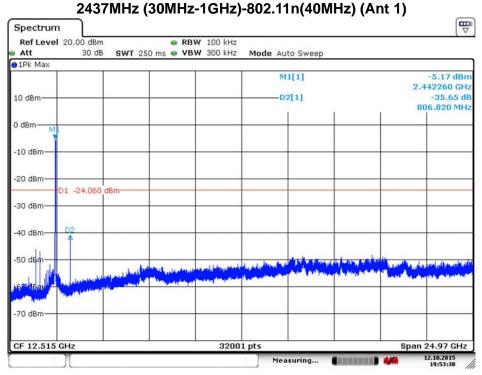


Date: 12.OCT.2015 19:55:25



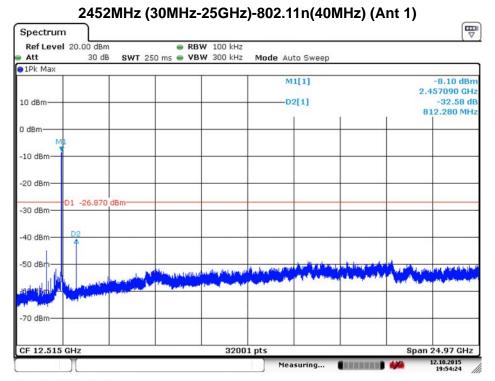


Date: 12.OCT.2015 19:52:34



Date: 12.OCT.2015 19:53:29





Date: 12.OCT.2015 19:54:24



# 6. Radiated Emission Band Edge

# 6.1. Test Equipment

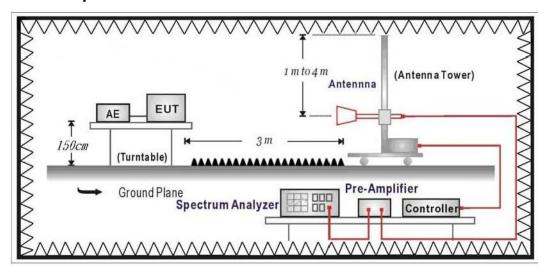
The following test equipments are used during the test:

Radiated Emission Band Edge / CB1

| Instrument          | Manufacturer | Model No.    | Serial No  | Next Cal. Date |
|---------------------|--------------|--------------|------------|----------------|
| Double Ridged Guide | Schwarzbeck  | BBHA 9120    | D743       | 2016/01/26     |
| Horn Antenna        |              |              |            |                |
| Spectrum Analyzer   | Agilent      | E4440A       | MY46187335 | 2016/01/07     |
| k Type Cable        | Huber Suhner | Sucoflex 102 | 25623/2    | 2016/01/26     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

# 6.2. Test Setup





### 6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

### 6.4. Test Procedure

The EUT was setup according to ANSI C63.10:2013 and tested according to DTS test procedure of KDB558074 v03r02 for compliance to FCC 47CFR 15.247 requirements. The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2013 on radiated measurement.

# 6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

# 6.6. Uncertainty

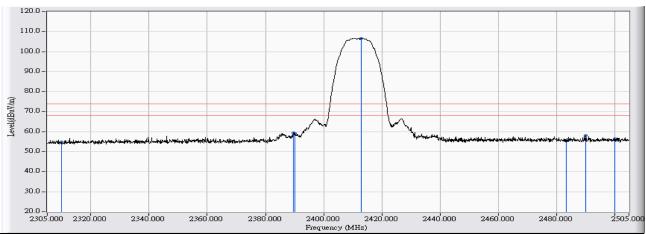
The measurement uncertainty ± 3.9 dB above 1GHz



## 6.7. Test Result

## Radiated is defined as

| Site : CB1                                | Time : 2015/10/01 - 13:54 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11b_2412MHz     |

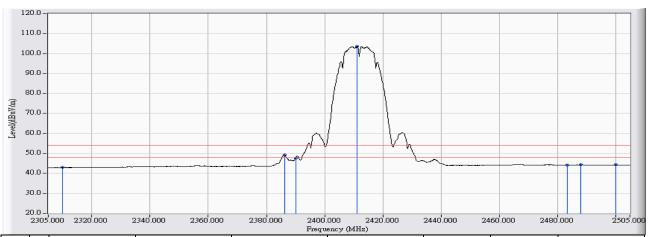


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | <b>Detector Type</b> |
|---|---|-----------|----------------|---------------|---------------|---------|----------|----------------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |                      |
| 1 |   | 2310.000  | 28.366         | 26.575        | 54.941        | -19.059 | 74.000   | PEAK                 |
| 2 |   | 2389.658  | 28.708         | 30.750        | 59.458        | -14.542 | 74.000   | PEAK                 |
| 3 |   | 2390.000  | 28.709         | 30.510        | 59.219        | -14.781 | 74.000   | PEAK                 |
| 4 | * | 2412.946  | 28.807         | 77.916        | 106.724       | 32.724  | 74.000   | PEAK                 |
| 5 |   | 2483.500  | 29.110         | 26.222        | 55.332        | -18.668 | 74.000   | PEAK                 |
| 6 |   | 2490.007  | 29.138         | 28.965        | 58.103        | -15.897 | 74.000   | PEAK                 |
| 7 |   | 2500.000  | 29.183         | 27.189        | 56.371        | -17.629 | 74.000   | PEAK                 |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 13:55 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11b_2412MHz     |

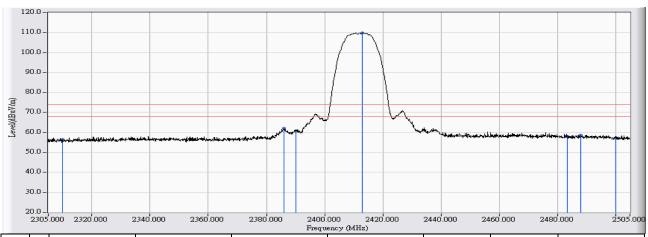


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.557        | 42.923        | -11.077 | 54.000   | AVERAGE       |
| 2 |   | 2386.159  | 28.693         | 20.599        | 49.292        | -4.708  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 18.868        | 47.577        | -6.423  | 54.000   | AVERAGE       |
| 4 | * | 2411.147  | 28.800         | 74.812        | 103.612       | 49.612  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 15.068        | 44.178        | -9.822  | 54.000   | AVERAGE       |
| 6 |   | 2488.009  | 29.129         | 15.165        | 44.294        | -9.706  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.183         | 15.094        | 44.276        | -9.724  | 54.000   | AVERAGE       |

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:13 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note: 802.11b_2412MHz     |

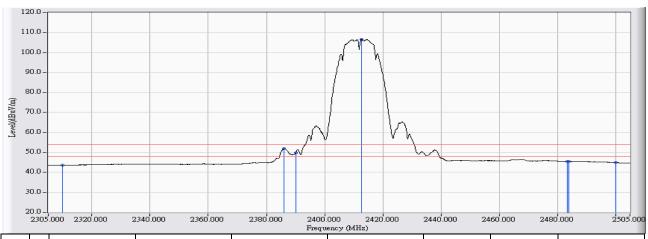


|   | Fre | equency  | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|-----|----------|----------------|---------------|---------------|---------|----------|---------------|
|   | (   | MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |     | 2310.000 | 29.201         | 27.190        | 56.392        | -17.608 | 74.000   | PEAK          |
| 2 |     | 2386.059 | 29.158         | 32.938        | 62.096        | -11.904 | 74.000   | PEAK          |
| 3 |     | 2390.000 | 29.155         | 31.572        | 60.728        | -13.272 | 74.000   | PEAK          |
| 4 | *   | 2412.946 | 29.142         | 80.673        | 109.815       | 35.815  | 74.000   | PEAK          |
| 5 |     | 2483.500 | 29.102         | 28.921        | 58.023        | -15.977 | 74.000   | PEAK          |
| 6 |     | 2488.009 | 29.099         | 29.510        | 58.609        | -15.391 | 74.000   | PEAK          |
| 7 |     | 2500.000 | 29.094         | 28.202        | 57.296        | -16.704 | 74.000   | PEAK          |

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:12 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11b_2412MHz    |

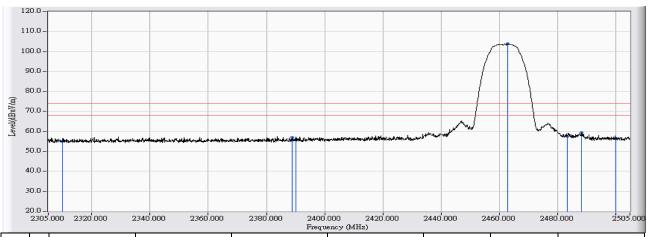


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.393        | 43.595        | -10.405 | 54.000   | AVERAGE       |
| 2 |   | 2386.059  | 29.158         | 22.803        | 51.961        | -2.039  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 20.640        | 49.796        | -4.204  | 54.000   | AVERAGE       |
| 4 | * | 2412.746  | 29.142         | 77.502        | 106.644       | 52.644  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 16.289        | 45.391        | -8.609  | 54.000   | AVERAGE       |
| 6 |   | 2483.910  | 29.102         | 16.288        | 45.389        | -8.611  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.094         | 15.832        | 44.926        | -9.074  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:30 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11b_2462MHz     |

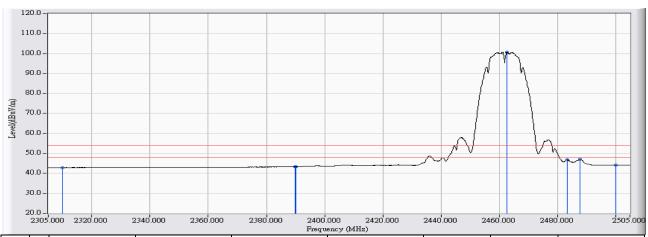


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 26.781        | 55.147        | -18.853 | 74.000   | PEAK          |
| 2 |   | 2388.958  | 28.705         | 28.298        | 57.003        | -16.997 | 74.000   | PEAK          |
| 3 |   | 2390.000  | 28.709         | 27.139        | 55.848        | -18.152 | 74.000   | PEAK          |
| 4 | * | 2463.021  | 29.022         | 74.852        | 103.874       | 29.874  | 74.000   | PEAK          |
| 5 |   | 2483.500  |                |               |               |         |          | PEAK          |
| 6 |   | 2488.408  |                | 30.333        |               |         |          | PEAK          |
| 7 |   | 2500.000  |                |               |               |         |          | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:48 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11b_2462MHz     |

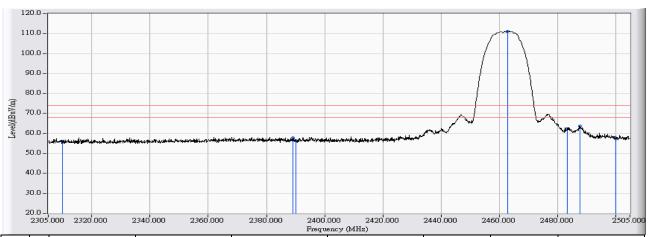


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.505        | 42.871        | -11.129 | 54.000   | AVERAGE       |
| 2 |   | 2389.758  | 28.709         | 14.713        | 43.421        | -10.579 | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 14.650        | 43.359        | -10.641 | 54.000   | AVERAGE       |
| 4 | * | 2462.721  | 29.021         | 71.759        | 100.780       | 46.780  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 17.608        | 46.718        | -7.282  | 54.000   | AVERAGE       |
| 6 |   | 2487.708  | 29.128         | 17.963        | 47.091        | -6.909  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.183         | 15.019        | 44.201        | -9.799  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 10:20 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11b_2462MHz    |

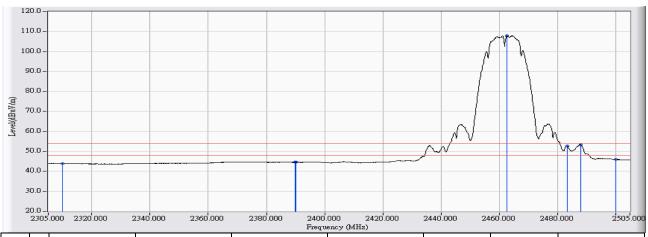


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 26.623        | 55.825        | -18.175 | 74.000   | PEAK          |
| 2 |   | 2389.158  | 29.156         | 28.630        | 57.786        | -16.214 | 74.000   | PEAK          |
| 3 |   | 2390.000  | 29.155         | 27.313        | 56.469        | -17.531 | 74.000   | PEAK          |
| 4 | * | 2463.021  | 29.113         | 82.088        | 111.201       | 37.201  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.102         | 33.155        | 62.257        | -11.743 | 74.000   | PEAK          |
| 6 |   | 2487.708  | 29.099         | 34.607        | 63.706        | -10.294 | 74.000   | PEAK          |
| 7 |   | 2500.000  | 29.094         | 28.266        | 57.360        | -16.640 | 74.000   | PEAK          |

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 10:21 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11b_2462MHz    |

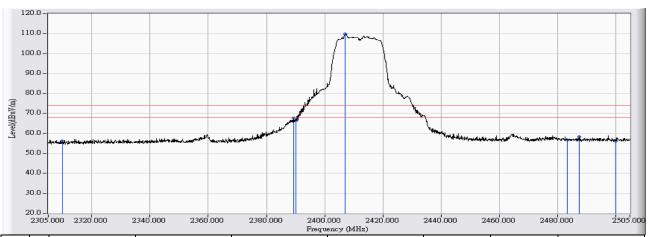


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.665        | 43.867        | -10.133 | 54.000   | AVERAGE       |
| 2 |   | 2389.758  | 29.156         | 15.408        | 44.564        | -9.436  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 15.386        | 44.542        | -9.458  | 54.000   | AVERAGE       |
| 4 | * | 2462.721  | 29.113         | 78.917        | 108.031       | 54.031  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 23.558        | 52.660        | -1.340  | 54.000   | AVERAGE       |
| 6 |   | 2488.009  |                |               |               |         |          |               |
| 7 |   | 2500.000  |                |               |               |         |          | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 13:49 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note : 802.11g_2412MHz    |

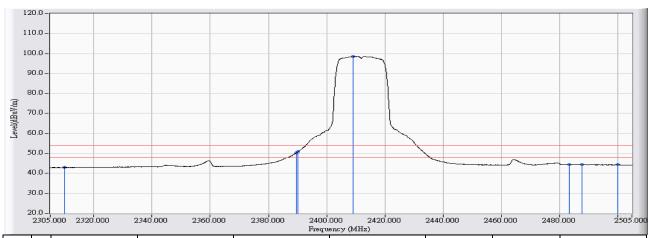


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 27.791        | 56.157        | -17.843 | 74.000   | PEAK          |
| 2 |   | 2389.258  | 28.706         | 39.104        | 67.810        | -6.190  | 74.000   | PEAK          |
| 3 |   | 2390.000  | 28.709         | 37.741        | 66.450        | -7.550  | 74.000   | PEAK          |
| 4 | * | 2407.149  | 28.782         | 80.908        | 109.691       | 35.691  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.110         | 27.517        | 56.627        | -17.373 | 74.000   | PEAK          |
| 6 |   | 2487.509  |                |               |               |         |          | PEAK          |
| 7 |   | 2500.000  |                |               |               |         |          | PEAK          |

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 13:50 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11g_2412MHz     |

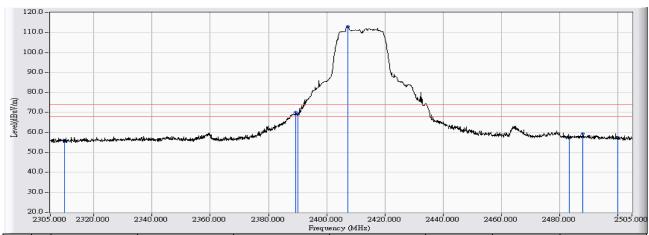


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.564        | 42.930        | -11.070 | 54.000   | AVERAGE       |
| 2 |   | 2389.558  | 28.708         | 21.517        | 50.224        | -3.776  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 22.025        | 50.734        | -3.266  | 54.000   | AVERAGE       |
| 4 | * | 2409.148  | 28.792         | 69.735        | 98.526        | 44.526  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 15.250        | 44.360        | -9.640  | 54.000   | AVERAGE       |
| 6 |   | 2487.708  | 29.128         | 15.279        | 44.407        | -9.593  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.183         | 15.262        | 44.444        | -9.556  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:20 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11g_2412MHz    |

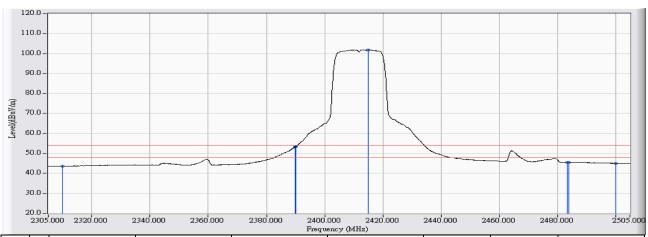


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 26.153        | 55.355        | -18.645 | 74.000   | PEAK          |
| 2 |   | 2389.458  | 29.156         | 40.918        | 70.074        | -3.926  | 74.000   | PEAK          |
| 3 |   | 2390.000  | 29.155         | 39.981        | 69.137        | -4.863  | 74.000   | PEAK          |
| 4 | * | 2407.249  | 29.145         | 83.801        | 112.947       | 38.947  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.102         |               | 57.386        | -16.614 | 74.000   |               |
| 6 |   | 2488.108  | 29.099         |               |               |         |          |               |
| 7 |   | 2500.000  | 29.094         |               |               |         |          |               |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:19 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11g_2412MHz    |

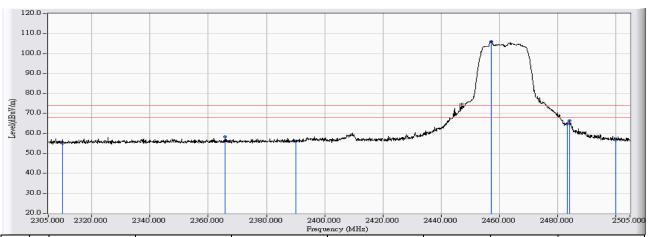


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.433        | 43.635        | -10.365 | 54.000   | AVERAGE       |
| 2 |   | 2389.857  | 29.156         | 24.075        | 53.231        | -0.769  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 24.274        | 53.430        | -0.570  | 54.000   | AVERAGE       |
| 4 | * | 2415.045  | 29.141         | 72.720        | 101.861       | 47.861  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 16.322        | 45.424        | -8.576  | 54.000   | AVERAGE       |
| 6 |   | 2483.910  | 29.102         | 16.364        | 45.465        | -8.535  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.094         | 15.920        | 45.014        | -8.986  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:26 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11g_2462MHz     |

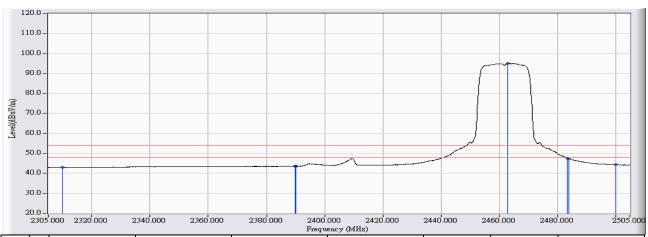


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 26.801        | 55.167        | -18.833 | 74.000   | PEAK          |
| 2 |   | 2365.869  | 28.605         | 29.853        | 58.459        | -15.541 | 74.000   | PEAK          |
| 3 |   | 2390.000  | 28.709         | 27.587        | 56.296        | -17.704 | 74.000   | PEAK          |
| 4 | * | 2457.224  | 28.997         | 76.993        | 105.990       | 31.990  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.110         | 35.712        | 64.822        | -9.178  | 74.000   |               |
| 6 |   | 2484.310  |                |               |               |         |          |               |
| 7 |   | 2500.000  |                |               |               |         |          |               |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:27 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                        | Note: 802.11g_2462MHz     |

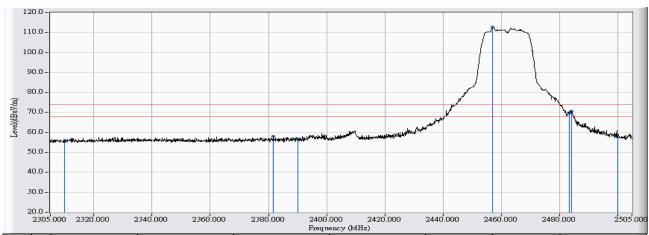


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.616        | 42.982        | -11.018 | 54.000   | AVERAGE       |
| 2 |   | 2389.758  | 28.709         | 14.905        | 43.613        | -10.387 | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 14.929        | 43.638        | -10.362 | 54.000   | AVERAGE       |
| 4 | * | 2462.921  | 29.022         | 66.016        | 95.038        | 41.038  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 18.556        | 47.666        | -6.334  | 54.000   | AVERAGE       |
| 6 |   | 2483.910  | 29.112         | 18.343        | 47.455        | -6.545  | 54.000   |               |
| 7 |   | 2500.000  | 29.183         | 15.240        | 44.422        | -9.578  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 10:31 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11g_2462MHz    |

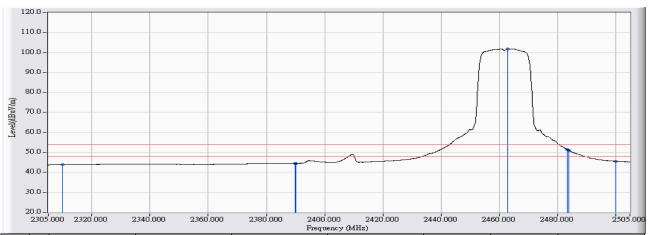


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 26.188        | 55.390        | -18.610 | 74.000   | PEAK          |
| 2 |   | 2381.761  | 29.160         | 29.025        | 58.185        | -15.815 | 74.000   | PEAK          |
| 3 |   | 2390.000  | 29.155         | 27.440        | 56.596        | -17.404 | 74.000   | PEAK          |
| 4 | * | 2457.124  | 29.117         | 83.726        | 112.843       | 38.843  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.102         | 40.495        | 69.597        | -4.403  | 74.000   | PEAK          |
| 6 |   | 2484.110  | 29.102         | 41.645        | 70.746        | -3.254  | 74.000   | PEAK          |
| 7 |   | 2500.000  | 29.094         | 28.839        | 57.933        | -16.067 | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 10:32 |
|---|---------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz    |
| EUT : Mesh WiFi AP                      | Note : 802.11g_2462MHz    |

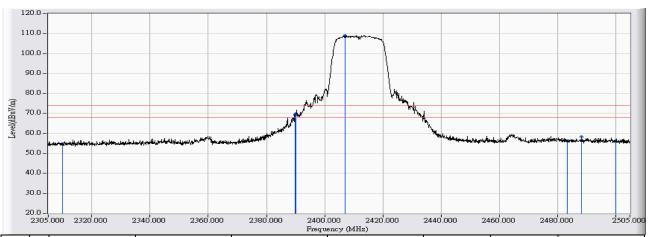


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.560        | 43.762        | -10.238 | 54.000   | AVERAGE       |
| 2 |   | 2389.758  | 29.156         | 15.317        | 44.473        | -9.527  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 15.305        | 44.461        | -9.539  | 54.000   | AVERAGE       |
| 4 | * | 2462.821  | 29.113         | 72.755        | 101.869       | 47.869  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 22.288        | 51.390        | -2.610  | 54.000   | AVERAGE       |
| 6 |   | 2483.910  | 29.102         | 21.932        | 51.033        | -2.967  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.094         | 16.448        | 45.542        | -8.458  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 13:46   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                        | Note : 802.11n(20M)_2412MHz |

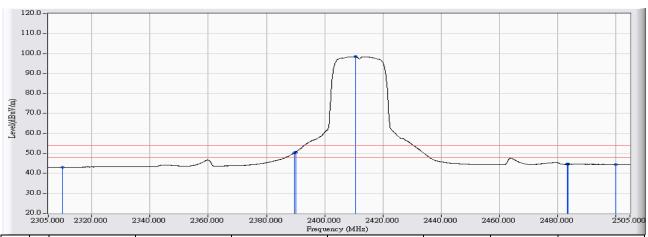


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 26.382        | 54.748        | -19.252 | 74.000   | PEAK          |
| 2 |   | 2389.758  | 28.709         | 40.713        | 69.421        | -4.579  | 74.000   | PEAK          |
| 3 |   | 2390.000  | 28.709         | 41.203        | 69.912        | -4.088  | 74.000   | PEAK          |
| 4 | * | 2407.149  | 28.782         | 80.196        | 108.979       | 34.979  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.110         | 27.160        | 56.270        | -17.730 | 74.000   | PEAK          |
| 6 |   | 2488.308  | 29.131         | 29.320        | 58.451        | -15.549 | 74.000   | PEAK          |
| 7 |   | 2500.000  | 29.183         | 26.781        | 55.963        | -18.037 | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 13:47   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                        | Note : 802.11n(20M)_2412MHz |

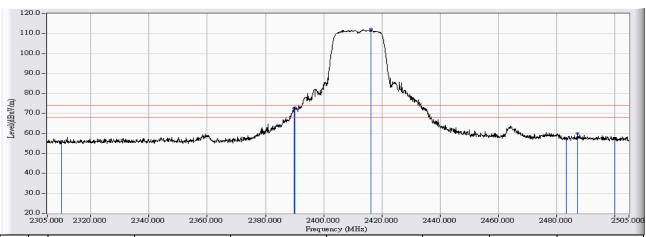


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.658        | 43.024        | -10.976 | 54.000   | AVERAGE       |
| 2 |   | 2389.558  | 28.708         | 21.615        | 50.322        | -3.678  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 21.897        | 50.606        | -3.394  | 54.000   | AVERAGE       |
| 4 | * | 2410.747  | 28.798         | 69.646        | 98.444        | 44.444  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 15.457        | 44.567        | -9.433  | 54.000   | AVERAGE       |
| 6 |   | 2483.611  | 29.111         |               | 44.533        | -9.467  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.183         | 15.299        | 44.481        | -9.519  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:26   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                      | Note : 802.11n(20M)_2412MHz |

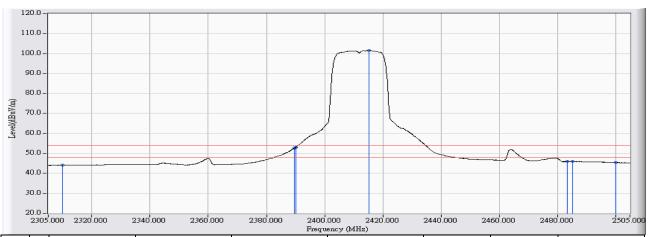


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 26.703        | 55.905        | -18.095 | 74.000   | PEAK          |
| 2 |   | 2389.758  | 29.156         | 43.291        | 72.447        | -1.553  | 74.000   | PEAK          |
| 3 |   | 2390.000  | 29.155         | 43.619        | 72.775        | -1.225  | 74.000   | PEAK          |
| 4 | * | 2416.244  | 29.140         | 82.965        | 112.105       | 38.105  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.102         | 28.054        | 57.156        | -16.844 | 74.000   | PEAK          |
| 6 |   | 2487.409  | 29.099         | 30.818        | 59.917        | -14.083 | 74.000   | PEAK          |
| 7 |   | 2500.000  | 29.094         | 28.316        | 57.410        | -16.590 | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:26   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                      | Note : 802.11n(20M)_2412MHz |

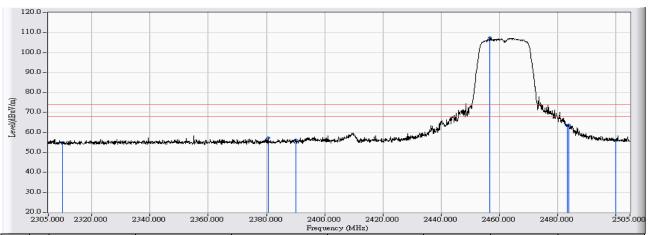


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|--------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)   | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.853        | 44.055        | -9.945 | 54.000   | AVERAGE       |
| 2 |   | 2389.658  | 29.156         | 23.557        | 52.713        | -1.287 | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 23.876        | 53.032        | -0.968 | 54.000   | AVERAGE       |
| 4 | * | 2415.145  | 29.141         | 72.332        | 101.473       | 47.473 | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 16.832        | 45.934        | -8.066 | 54.000   | AVERAGE       |
| 6 |   | 2485.210  | 29.100         | 16.816        | 45.917        | -8.083 | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.094         | 16.481        | 45.575        | -8.425 | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:16   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                        | Note : 802.11n(20M)_2462MHz |

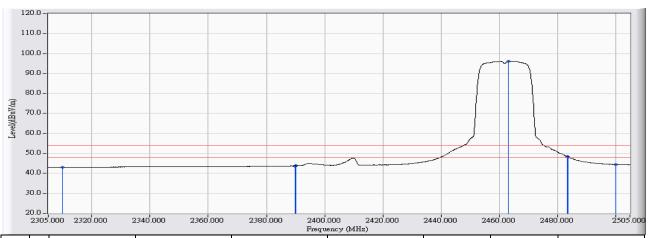


|   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | 2310.00   | 0 28.366       | 26.421        | 54.787        | -19.213 | 74.000   | PEAK          |
| 2 | 2380.66   | 2 28.669       | 28.720        | 57.389        | -16.611 | 74.000   | PEAK          |
| 3 | 2390.00   | 28.709         | 27.390        | 56.099        | -17.901 | 74.000   | PEAK          |
| 4 | * 2456.82 | 28.995         | 78.328        | 107.324       | 33.324  | 74.000   | PEAK          |
| 5 | 2483.50   | 0 29.110       | 34.375        | 63.485        | -10.515 | 74.000   | PEAK          |
| 6 | 2483.91   | 0 29.112       | 34.533        | 63.645        | -10.355 | 74.000   | PEAK          |
| 7 | 2500.00   | 0 29.183       | 26.664        | 55.846        | -18.154 | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:17   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                        | Note : 802.11n(20M)_2462MHz |

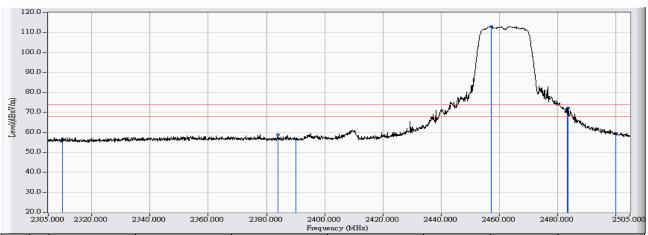


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.639        | 43.005        | -10.995 | 54.000   | AVERAGE       |
| 2 |   | 2389.758  | 28.709         | 15.013        | 43.721        | -10.279 | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 15.034        | 43.743        | -10.257 | 54.000   | AVERAGE       |
| 4 | * | 2463.321  | 29.024         | 67.168        | 96.192        | 42.192  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 19.180        | 48.290        | -5.710  | 54.000   | AVERAGE       |
| 6 |   | 2483.611  | 29.111         | 19.134        | 48.245        | -5.755  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.183         | 15.293        | 44.475        | -9.525  | 54.000   | AVERAGE       |

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 10:48  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(20M)_2462MHz |



|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 27.510        | 56.712        | -17.288 | 74.000   | PEAK          |
| 2 |   | 2383.861  | 29.159         | 29.802        | 58.961        | -15.039 | 74.000   | PEAK          |
| 3 |   | 2390.000  | 29.155         | 27.566        | 56.722        | -17.278 | 74.000   | PEAK          |
| 4 | * | 2457.224  | 29.117         | 84.021        | 113.138       | 39.138  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.102         | 42.628        | 71.730        | -2.270  | 74.000   | PEAK          |
| 6 |   | 2483.711  | 29.102         | 43.248        | 72.349        | -1.651  | 74.000   | PEAK          |
| 7 |   | 2500.000  | 29.094         | 30.432        | 59.526        | -14.474 | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 10:48  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(20M)_2462MHz |

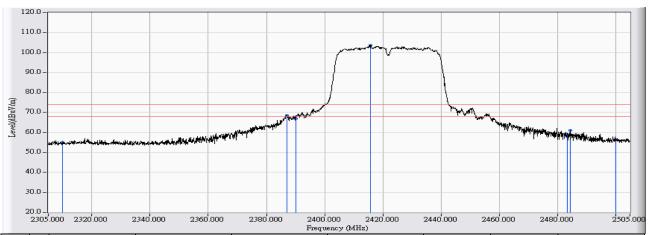


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.590        | 43.792        | -10.208 | 54.000   | AVERAGE       |
| 2 |   | 2389.258  | 29.156         | 15.366        | 44.522        | -9.478  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 15.365        | 44.521        | -9.479  | 54.000   | AVERAGE       |
| 4 | * | 2463.321  | 29.113         | 72.978        | 102.091       | 48.091  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 23.707        | 52.809        | -1.191  | 54.000   | AVERAGE       |
| 6 |   | 2483.611  | 29.102         | 23.644        | 52.746        | -1.254  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.094         | 17.686        | 46.780        | -7.220  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 13:41  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(40M)_2422MHz |

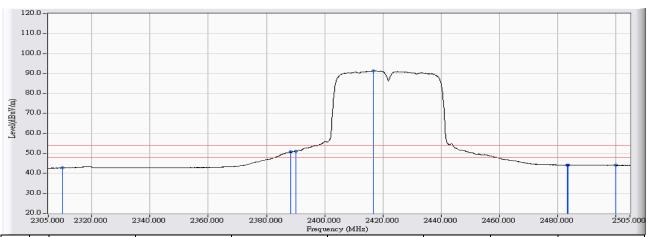


|   | Frequency  | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|------------|----------------|---------------|---------------|---------|----------|---------------|
|   | (MHz)      | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | 2310.000   | 28.366         | 26.803        | 55.169        | -18.831 | 74.000   | PEAK          |
| 2 | 2387.059   | 28.697         | 39.867        | 68.564        | -5.436  | 74.000   | PEAK          |
| 3 | 2390.000   | 28.709         | 38.106        | 66.815        | -7.185  | 74.000   | PEAK          |
| 4 | * 2415.745 | 28.819         | 74.778        | 103.598       | 29.598  | 74.000   | PEAK          |
| 5 | 2483.500   | 29.110         | 29.838        | 58.948        | -15.052 | 74.000   | PEAK          |
| 6 | 2484.610   | 29.115         | 31.779        | 60.894        | -13.106 | 74.000   | PEAK          |
| 7 | 2500.000   | 29.183         | 27.380        | 56.562        | -17.438 | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 13:42  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(40M)_2422MHz |

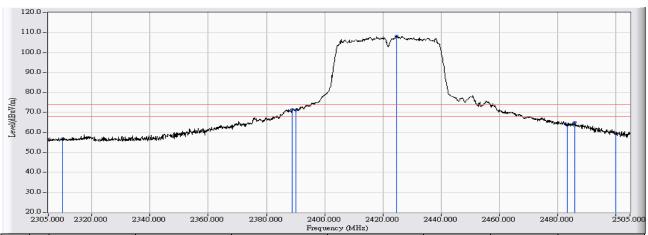


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.336        | 42.702        | -11.298 | 54.000   | AVERAGE       |
| 2 |   | 2388.458  | 28.703         | 21.998        | 50.701        | -3.299  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 22.313        | 51.022        | -2.978  | 54.000   | AVERAGE       |
| 4 | * | 2416.744  | 28.824         | 62.483        | 91.307        | 37.307  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 15.063        | 44.173        | -9.827  | 54.000   | AVERAGE       |
| 6 |   | 2483.611  | 29.111         | 15.039        | 44.150        | -9.850  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.183         | 14.901        | 44.083        | -9.917  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:35   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                      | Note : 802.11n(40M)_2422MHz |

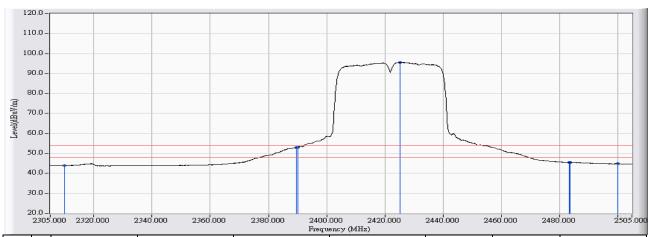


|   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 | 2310.00   | 29.201         | 27.660        | 56.862        | -17.138 | 74.000   | PEAK          |
| 2 | 2388.95   | 29.156         | 42.384        | 71.540        | -2.460  | 74.000   | PEAK          |
| 3 | 2390.00   | 29.155         | 42.110        | 71.266        | -2.734  | 74.000   | PEAK          |
| 4 | * 2424.64 | 29.136         | 79.003        | 108.139       | 34.139  | 74.000   | PEAK          |
| 5 | 2483.50   | 29.102         | 34.613        | 63.715        | -10.285 | 74.000   | PEAK          |
| 6 | 2486.10   | 29.100         | 35.934        | 65.034        | -8.966  | 74.000   | PEAK          |
| 7 | 2500.00   | 29.094         | 30.418        | 59.512        | -14.488 | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 13:34   |
|---|-----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                  |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz      |
| EUT : Mesh WiFi AP                      | Note : 802.11n(40M)_2422MHz |

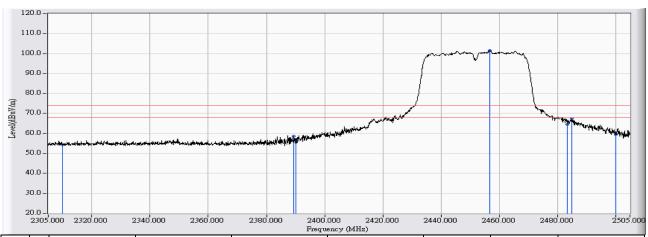


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.641        | 43.843        | -10.157 | 54.000   | AVERAGE       |
| 2 |   | 2389.558  | 29.156         | 23.761        | 52.917        | -1.083  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 23.940        | 53.096        | -0.904  | 54.000   | AVERAGE       |
| 4 | * | 2425.240  | 29.135         | 66.447        | 95.582        | 41.582  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 16.289        | 45.391        | -8.609  | 54.000   | AVERAGE       |
| 6 |   | 2483.611  | 29.102         |               | 45.429        | -8.571  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.094         | 15.878        | 44.972        | -9.028  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:08  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(40M)_2452MHz |

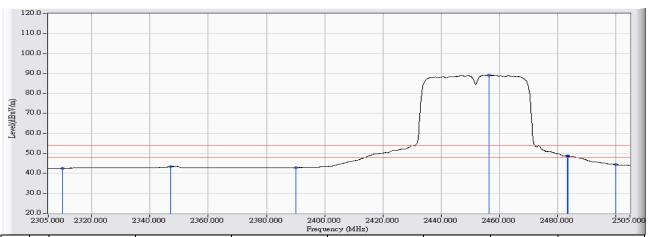


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 25.946        | 54.312        | -19.688 | 74.000   | PEAK          |
| 2 |   | 2389.458  | 28.707         | 29.908        | 58.615        | -15.385 | 74.000   | PEAK          |
| 3 |   | 2390.000  | 28.709         | 27.774        | 56.483        | -17.517 | 74.000   | PEAK          |
| 4 | * | 2456.724  | 28.995         | 72.544        | 101.539       | 27.539  | 74.000   | PEAK          |
| 5 |   | 2483.500  |                |               |               |         |          | PEAK          |
| 6 |   | 2485.110  |                |               |               |         |          | PEAK          |
| 7 |   | 2500.000  | -              |               | 59.463        |         |          | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                                | Time : 2015/10/01 - 11:10  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV        | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                        | Note: 802.11n(40M)_2452MHz |

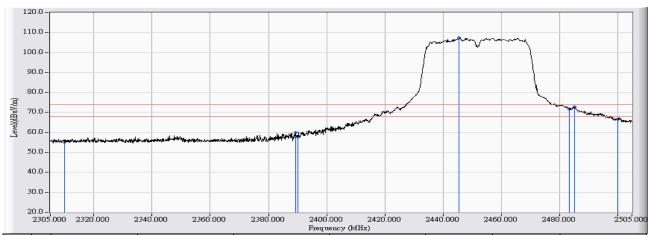


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 28.366         | 14.245        | 42.611        | -11.389 | 54.000   | AVERAGE       |
| 2 |   | 2346.979  | 28.525         | 14.825        | 43.350        | -10.650 | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 28.709         | 14.166        | 42.875        | -11.125 | 54.000   | AVERAGE       |
| 4 | * | 2456.424  | 28.994         | 60.171        | 89.165        | 35.165  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.110         | 19.565        | 48.675        | -5.325  | 54.000   | AVERAGE       |
| 6 |   | 2483.611  | 29.111         | 19.482        | 48.593        | -5.407  | 54.000   | AVERAGE       |
| 7 |   | 2500.000  | 29.183         | 15.296        | 44.478        | -9.522  | 54.000   | AVERAGE       |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. " \* ", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 11:00  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_PK      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2452MHz |

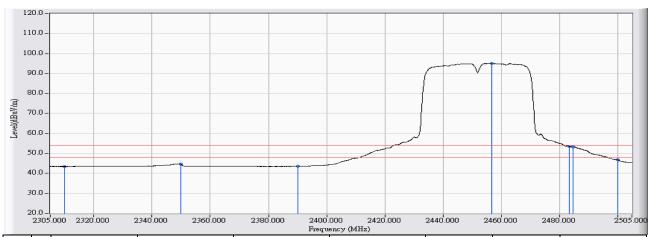


|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 25.814        | 55.016        | -18.984 | 74.000   | PEAK          |
| 2 |   | 2389.358  | 29.156         | 30.710        | 59.866        | -14.134 | 74.000   | PEAK          |
| 3 |   | 2390.000  | 29.155         | 28.630        | 57.786        | -16.214 | 74.000   | PEAK          |
| 4 | * | 2445.630  | 29.123         | 78.174        | 107.297       | 33.297  | 74.000   | PEAK          |
| 5 |   | 2483.500  | 29.102         | 42.651        | 71.753        | -2.247  | 74.000   | PEAK          |
| 6 |   | 2485.310  | 29.100         | 43.645        | 72.746        | -1.254  | 74.000   | PEAK          |
| 7 |   | 2500.000  | 29.094         | 37.566        | 66.660        | -7.340  | 74.000   | PEAK          |

- All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



| Site : CB1                              | Time : 2015/10/01 - 10:59  |
|---|----------------------------|
| Limit : FCC_SpartC_15.247_H_03M_AV      | Margin : 6                 |
| Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL | Power : AC 120V / 60Hz     |
| EUT : Mesh WiFi AP                      | Note: 802.11n(40M)_2452MHz |



|   |   | Frequency | Correct Factor | Reading Level | Measure Level | Margin  | Limit    | Detector Type |
|---|---|-----------|----------------|---------------|---------------|---------|----------|---------------|
|   |   | (MHz)     | (dB)           | (dBuV)        | (dBuV/m)      | (dB)    | (dBuV/m) |               |
| 1 |   | 2310.000  | 29.201         | 14.230        | 43.432        | -10.568 | 54.000   | AVERAGE       |
| 2 |   | 2349.778  | 29.179         | 15.352        | 44.531        | -9.469  | 54.000   | AVERAGE       |
| 3 |   | 2390.000  | 29.155         | 14.378        | 43.534        | -10.466 | 54.000   | AVERAGE       |
| 4 | * | 2456.824  | 29.117         | 66.005        | 95.122        | 41.122  | 54.000   | AVERAGE       |
| 5 |   | 2483.500  | 29.102         | 24.368        | 53.470        | -0.530  | 54.000   | AVERAGE       |
| 6 |   | 2484.710  | 29.101         | 24.113        | 53.214        | -0.786  | 54.000   |               |
| 7 |   | 2500.000  | 29.094         | 17.792        | 46.886        | -7.114  | 54.000   | AVERAGE       |

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "\*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



# 7. DTS Occupied Bandwidth

# 7.1. Test Equipment

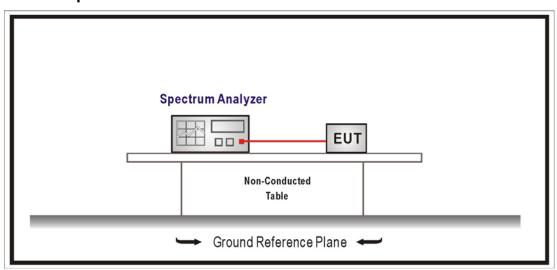
The following test equipments are used during the test:

DTS Occupied Bandwidth / SR7

| Instrument        | Manufacturer | Model No.  | Serial No  | Next Cal. Date |
|-------------------|--------------|------------|------------|----------------|
| Spectrum Analyzer | Agilent      | N9010A-EXA | US47140172 | 2016/07/13     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

# 7.2. Test Setup



### 7.3. Test Procedures

The EUT was setup according to ANSI C63.10:2013; tested procedure section 8.1 of KDB558074 v03r02 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100KHz, Set the VBW≥3xRBW, Sweep Time=Auto, Set Peak Detector.

### 7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

# 7.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

## 7.6. Uncertainty

The measurement uncertainty is defined as ±150Hz

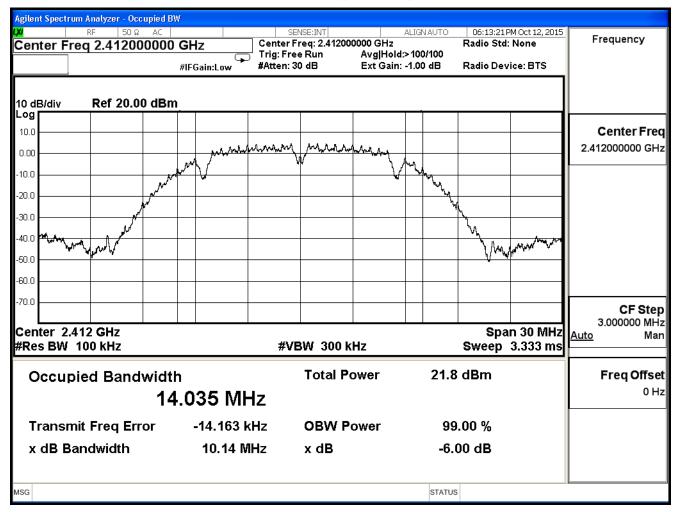


## 7.7. Test Result

| Product      | Mesh WiFi AP           |                        |     |  |  |
|--------------|------------------------|------------------------|-----|--|--|
| Test Item    | DTS Occupied Bandwidth | DTS Occupied Bandwidth |     |  |  |
| Test Mode    | Mode 1: Transmit Mode  |                        |     |  |  |
| Date of Test | 2015/10/12             | Test Site              | SR7 |  |  |

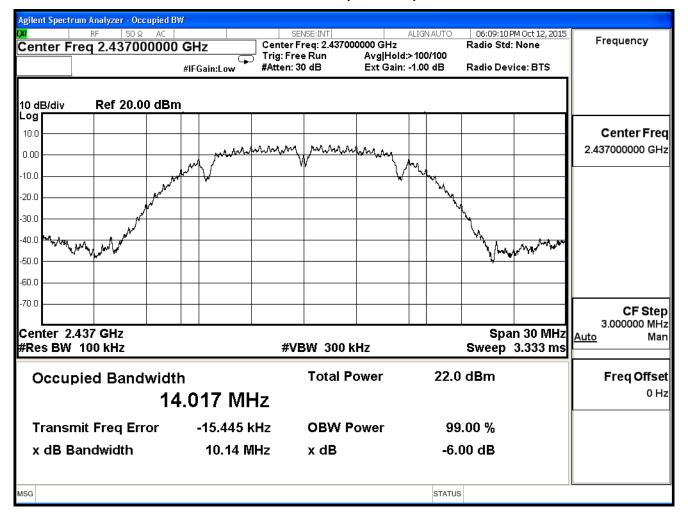
| 802.11 b (ANT 0) |           |                   |                |        |  |
|------------------|-----------|-------------------|----------------|--------|--|
| Channel No.      | Frequency | Measurement Level | Required Limit | Result |  |
| Charmer No.      | (MHz)     | (MHz)             | (MHz)          | Result |  |
| 1                | 2412      | 10.140            | ≧0.5           | Pass   |  |
| 6                | 2437      | 10.140            | ≧0.5           | Pass   |  |
| 11               | 2462      | 10.120            | ≧0.5           | Pass   |  |

## Channel 1 (2412MHz)

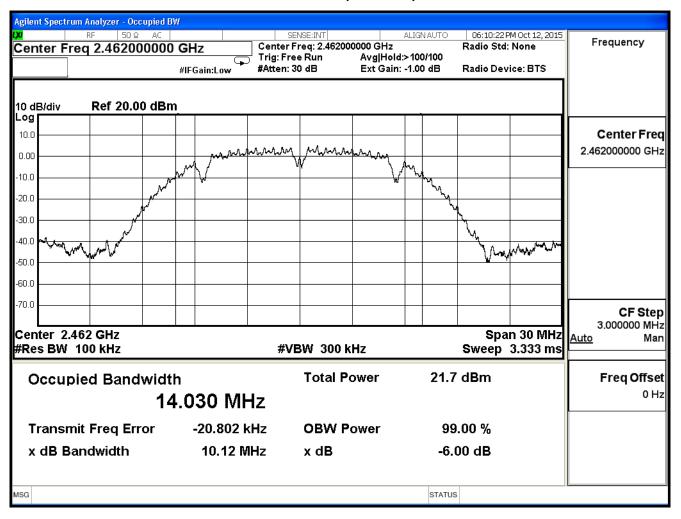




# Channel 6 (2437MHz)



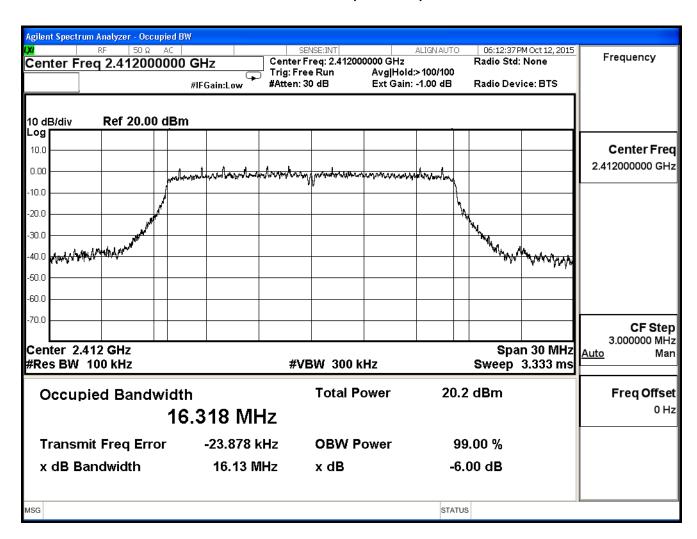




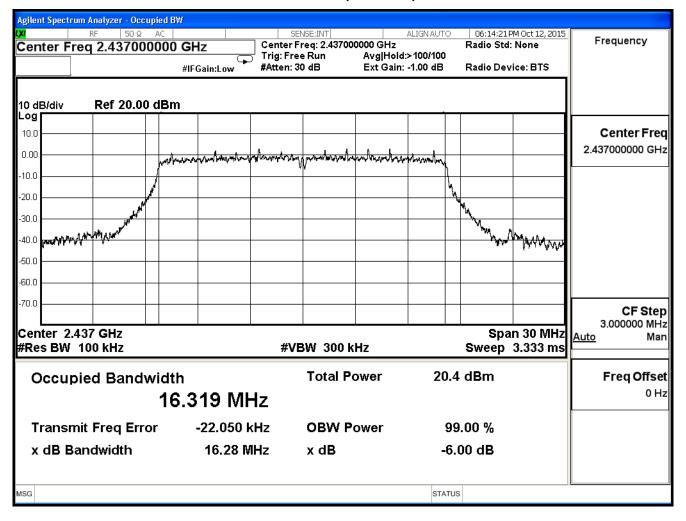


| Product      | Mesh WiFi AP           |           |     |
|--------------|------------------------|-----------|-----|
| Test Item    | DTS Occupied Bandwidth |           |     |
| Test Mode    | Mode 1: Transmit Mode  |           |     |
| Date of Test | 2015/10/12             | Test Site | SR7 |

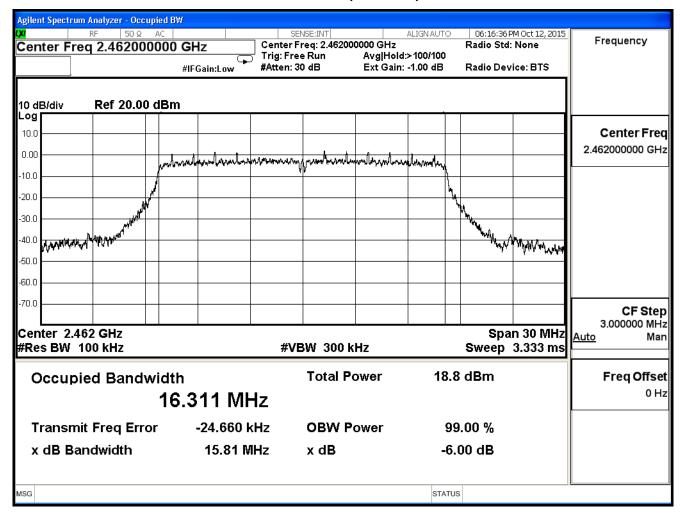
| IEEE 802.11g (ANT 0) |                    |                         |                         |        |
|----------------------|--------------------|-------------------------|-------------------------|--------|
| Channel No.          | Frequency<br>(MHz) | Measurement Level (MHz) | Required Limit<br>(MHz) | Result |
| 1                    | 2412               | 16.130                  | ≧0.5                    | Pass   |
| 6                    | 2437               | 16.280                  | ≧0.5                    | Pass   |
| 11                   | 2462               | 15.810                  | ≧0.5                    | Pass   |







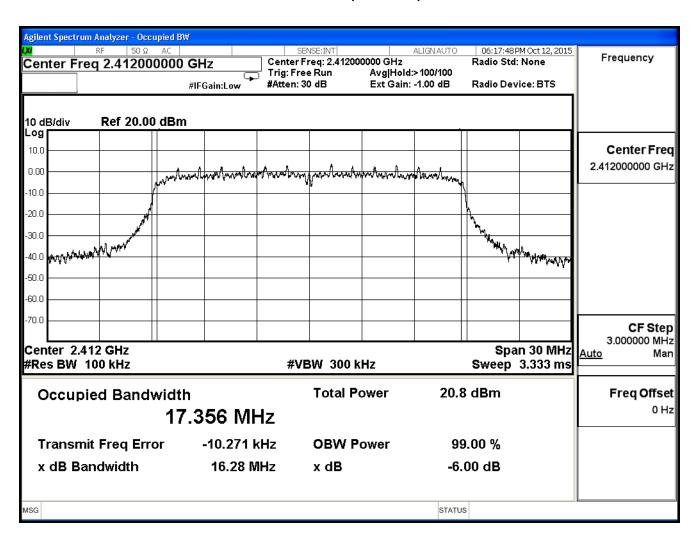




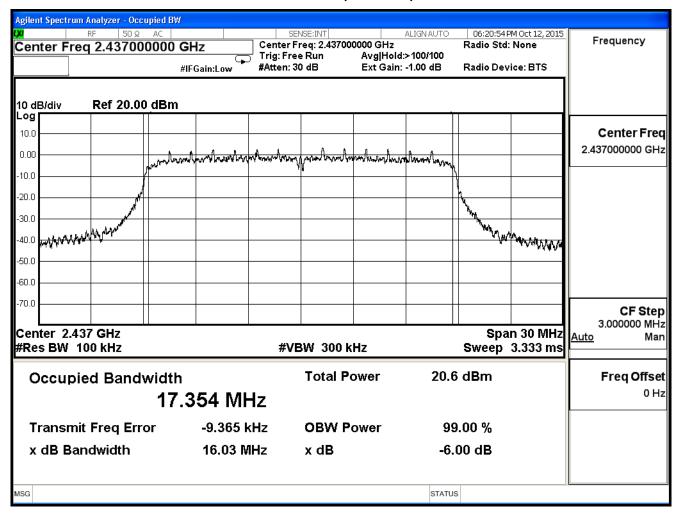


| Product      | Mesh WiFi AP           |           |     |  |
|--------------|------------------------|-----------|-----|--|
| Test Item    | DTS Occupied Bandwidth |           |     |  |
| Test Mode    | Mode 1: Transmit Mode  |           |     |  |
| Date of Test | 2015/10/12             | Test Site | SR7 |  |

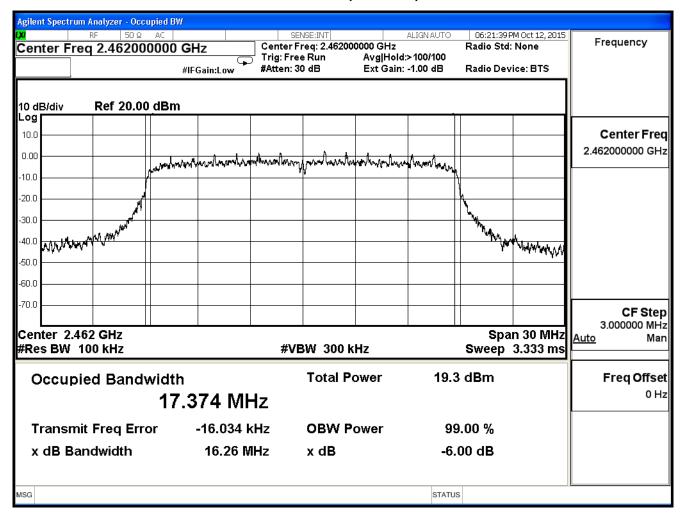
| IEEE 802.11n (20MHz) (ANT 0) |  |        |       |        |
|------------------------------|--|--------|-------|--------|
| Channel No.                  | Channel No. Frequency Measurement Level Required Limit |        |       |        |
| Onamic No.                   | (MHz)  | (MHz)  | (MHz) | Result |
| 1                            | 2412   | 16.280 | ≧0.5  | Pass   |
| 6                            | 2437   | 16.030 | ≧0.5  | Pass   |
| 11                           | 2462   | 16.260 | ≧0.5  | Pass   |







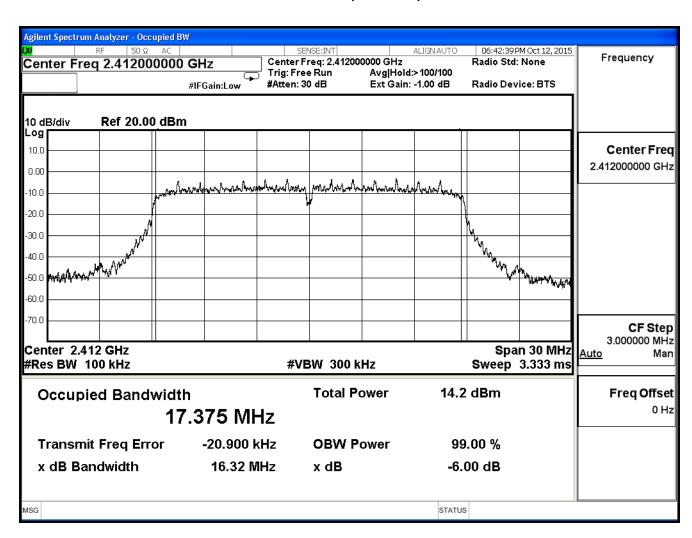




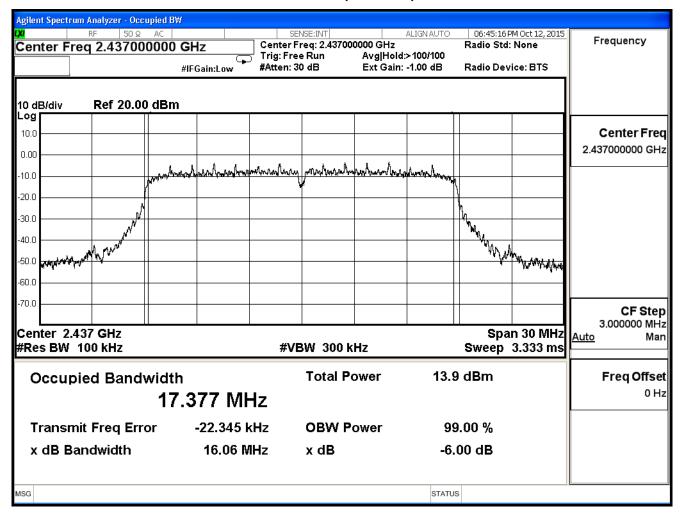


| Product      | Mesh WiFi AP           |           |     |  |
|--------------|------------------------|-----------|-----|--|
| Test Item    | DTS Occupied Bandwidth |           |     |  |
| Test Mode    | Mode 1: Transmit Mode  |           |     |  |
| Date of Test | 2015/10/12             | Test Site | SR7 |  |

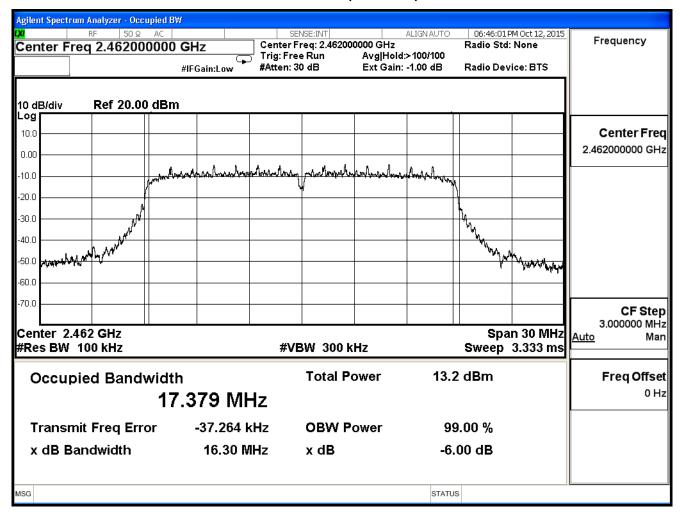
| IEEE 802.11n (20MHz) (ANT 1)                           |       |        |                |        |
|--|-------|--------|----------------|--------|
| Channel No. Frequency Measurement Level Required Limit |       |        | Required Limit | Result |
| Onamici No.  | (MHz) | (MHz)  | (MHz)          | resuit |
| 1  | 2412  | 16.320 | ≧0.5           | Pass   |
| 6  | 2437  | 16.060 | ≧0.5           | Pass   |
| 11   | 2462  | 16.300 | ≧0.5           | Pass   |









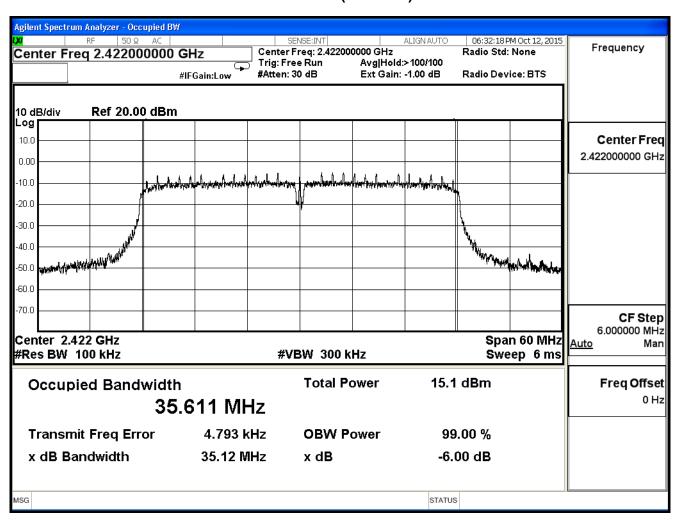




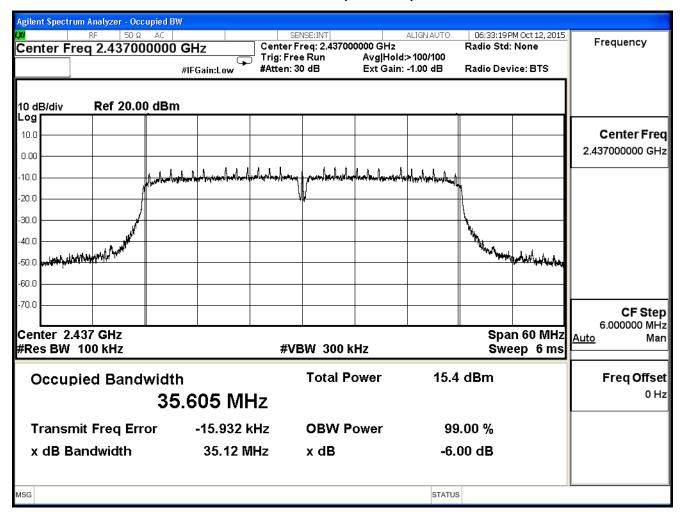
| Product      | Mesh WiFi AP           |           |     |  |
|--------------|------------------------|-----------|-----|--|
| Test Item    | DTS Occupied Bandwidth |           |     |  |
| Test Mode    | Mode 1: Transmit Mode  |           |     |  |
| Date of Test | 2015/10/12             | Test Site | SR7 |  |

| IEEE 802.11n (40MHz) (ANT 0) |                    |                         |                         |        |
|------------------------------|--------------------|-------------------------|-------------------------|--------|
| Channel No.                  | Frequency<br>(MHz) | Measurement Level (MHz) | Required Limit<br>(MHz) | Result |
| 3                            | 2422               | 35.120                  | ≥0.5                    | Pass   |
| 6                            | 2437               | 35.120                  | ≥0.5                    | Pass   |
| 9                            | 2452               | 35.130                  | ≧0.5                    | Pass   |

### Channel 3 (2422MHz)

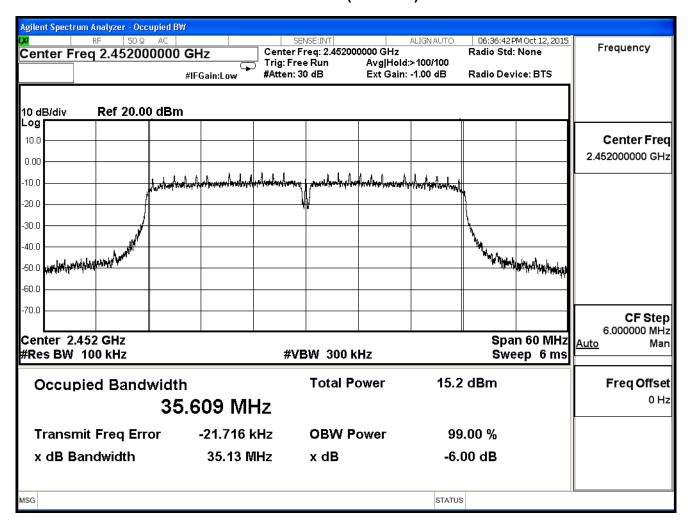








### Channel 9 (2452MHz)

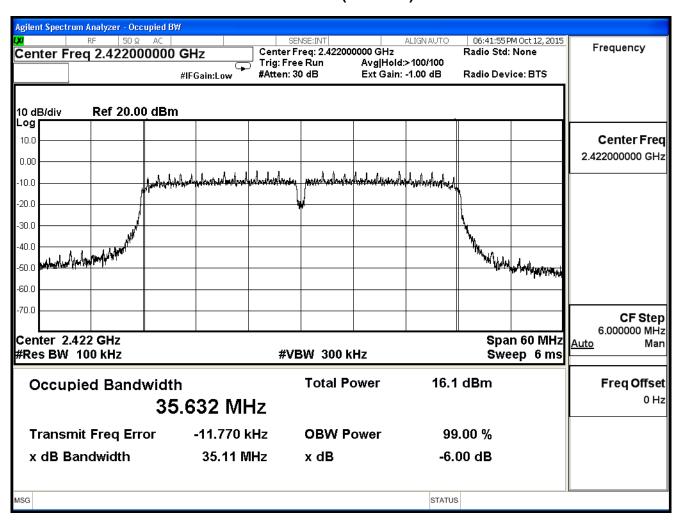




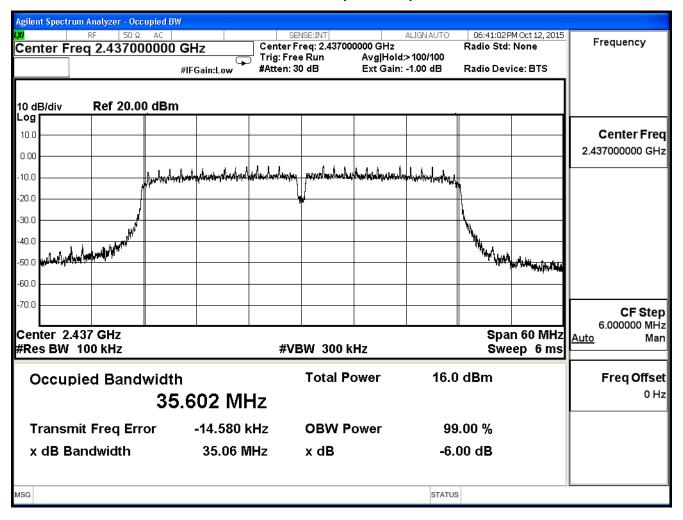
| Product      | Mesh WiFi AP           |           |     |  |
|--------------|------------------------|-----------|-----|--|
| Test Item    | DTS Occupied Bandwidth |           |     |  |
| Test Mode    | Mode 1: Transmit Mode  |           |     |  |
| Date of Test | 2015/10/12             | Test Site | SR7 |  |

| IEEE 802.11n (40MHz) (ANT 1) |  |        |       |        |
|------------------------------|--|--------|-------|--------|
| Channel No.                  | Frequency Measurement Level Required Limit |        |       | Result |
| Onamici No.                  | (MHz)                                      | (MHz)  | (MHz) | resuit |
| 3                            | 2422                                       | 35.110 | ≧0.5  | Pass   |
| 6                            | 2437                                       | 35.060 | ≧0.5  | Pass   |
| 9                            | 2452                                       | 35.110 | ≧0.5  | Pass   |

### Channel 3 (2422MHz)

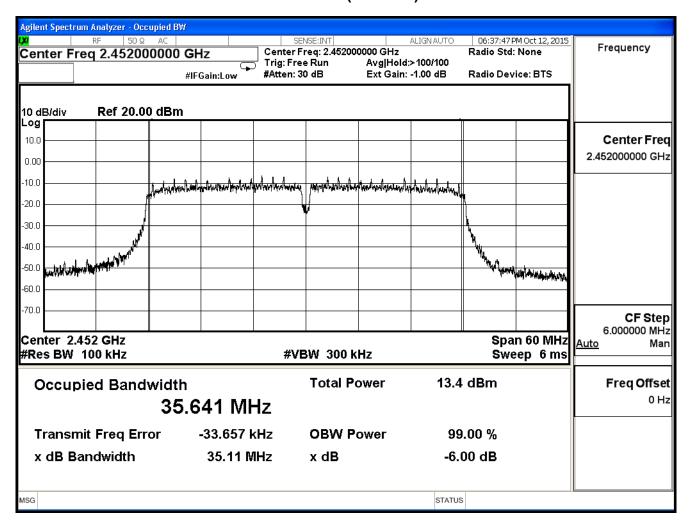








### Channel 9 (2452MHz)





# 8. Power Density

## 8.1. Test Equipment

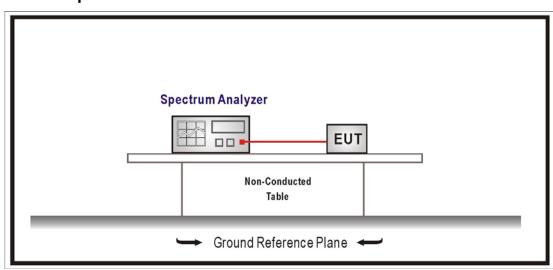
The following test equipment is used during the test:

Power Density / SR7

| Instrument        | Manufacturer | Model No.  | Serial No  | Next Cal. Date |
|-------------------|--------------|------------|------------|----------------|
| Spectrum Analyzer | Agilent      | N9010A-EXA | US47140172 | 2016/07/13     |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

### 8.2. Test Setup



#### 8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

#### 8.4. Test Procedures

The EUT was setup according to ANSI C63.10:2013; tested according to DTS test procedure section 10.2 of KDB558074 v03r02 for compliance to FCC 47CFR 15.247 requirements. Set  $3KHz \le RBW \le 100 \text{ kHz}$ , Set  $VBW \ge 3xRBW$ , Sweep time=Auto, Set Peak detector; The tested according to section E)c) of KDB662911 v02v01.

# 8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

### 8.6. Uncertainty

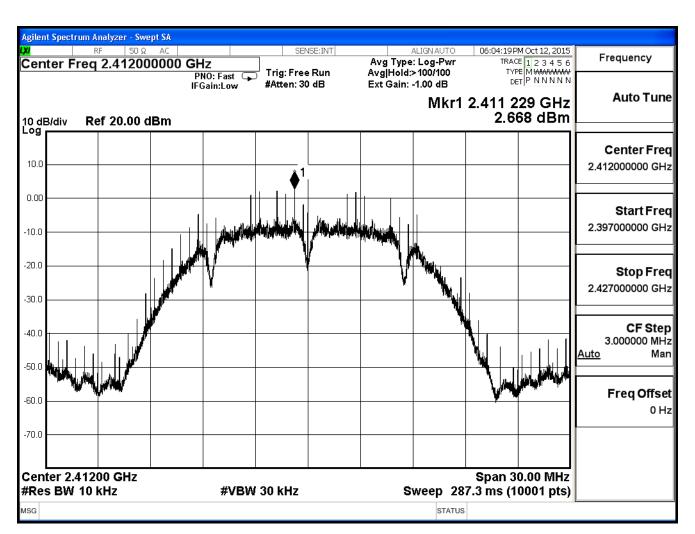
The measurement uncertainty is defined as ±1.27dB.



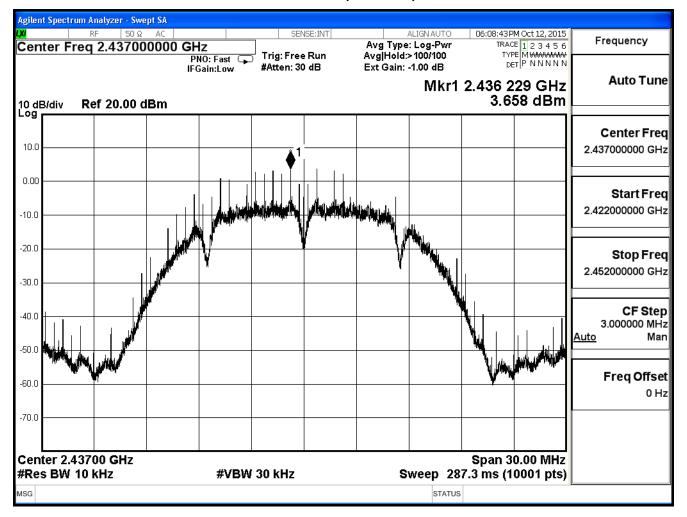
### 8.7. Test Result

| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Power Density         |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

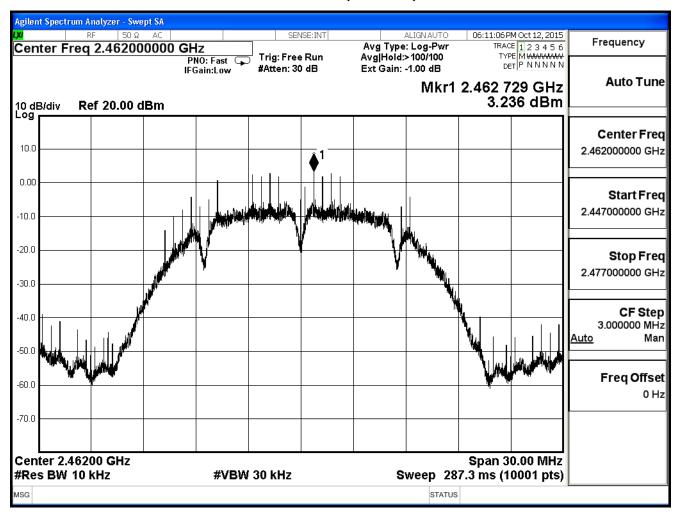
| IEEE 802.11b (ANT 0) |           |               |       |        |
|----------------------|-----------|---------------|-------|--------|
| Channel No.          | Frequency | Measure Level | Limit | Result |
| Channel No.          | (MHz)     | (dBm)         | (dBm) | Resuit |
| 1                    | 2412      | 2.668         | ≦8    | Pass   |
| 6                    | 2437      | 3.658         | ≦8    | Pass   |
| 11                   | 2462      | 3.236         | ≦8    | Pass   |







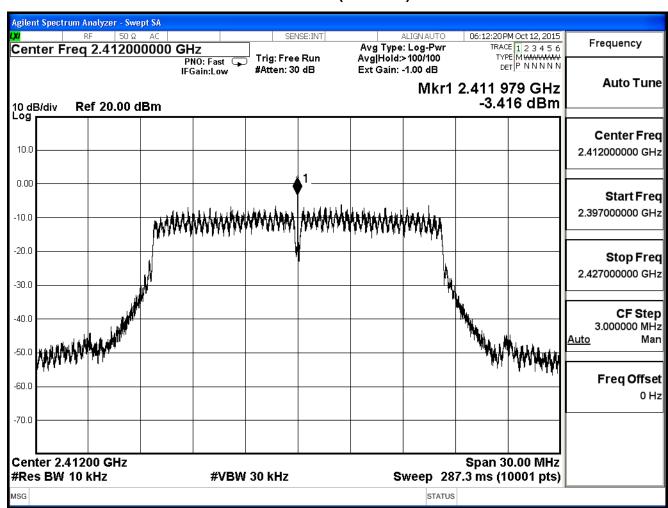




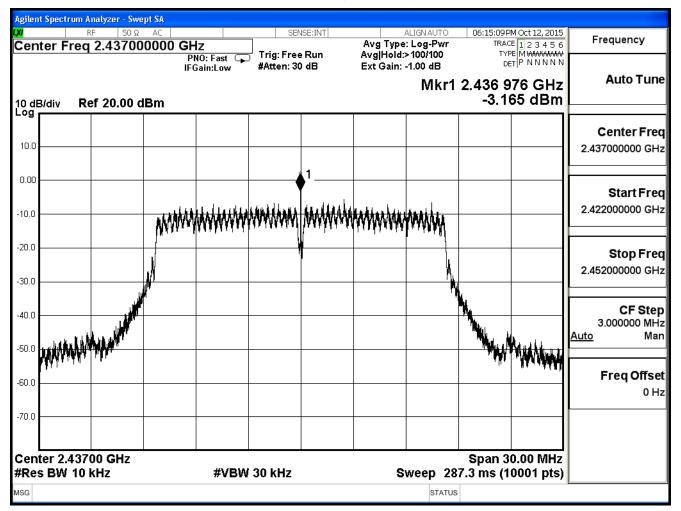


| Product      | Mesh WiFi AP          |           |     |  |
|--------------|-----------------------|-----------|-----|--|
| Test Item    | Power Density         |           |     |  |
| Test Mode    | Mode 1: Transmit Mode |           |     |  |
| Date of Test | 2015/10/12            | Test Site | SR7 |  |

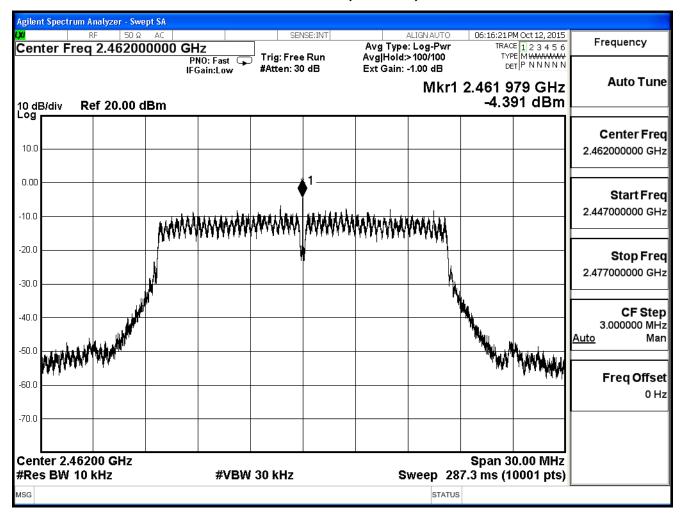
| IEEE 802.11g (ANT 0) |                    |                      |                |        |
|----------------------|--------------------|----------------------|----------------|--------|
| Channel No.          | Frequency<br>(MHz) | Measurement<br>(dBm) | Limit<br>(dBm) | Result |
| 1                    | 2412               | -3.416               | ≦8             | Pass   |
| 6                    | 2437               | -3.165               | ≦8             | Pass   |
| 11                   | 2462               | -4.391               | ≦8             | Pass   |







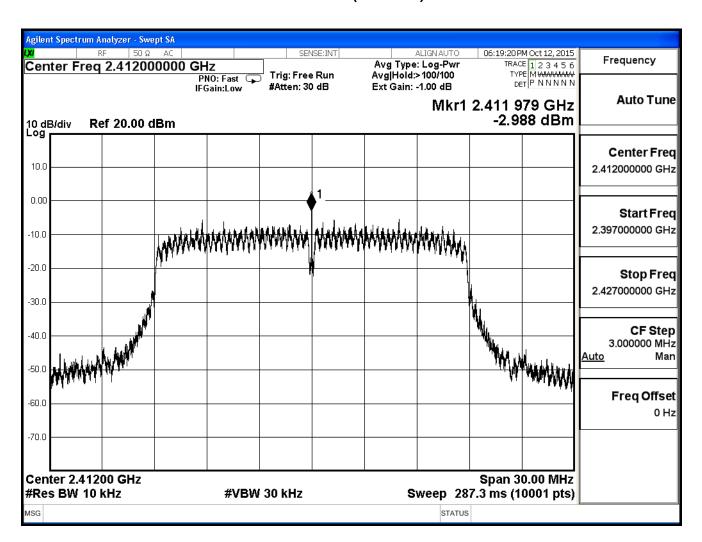




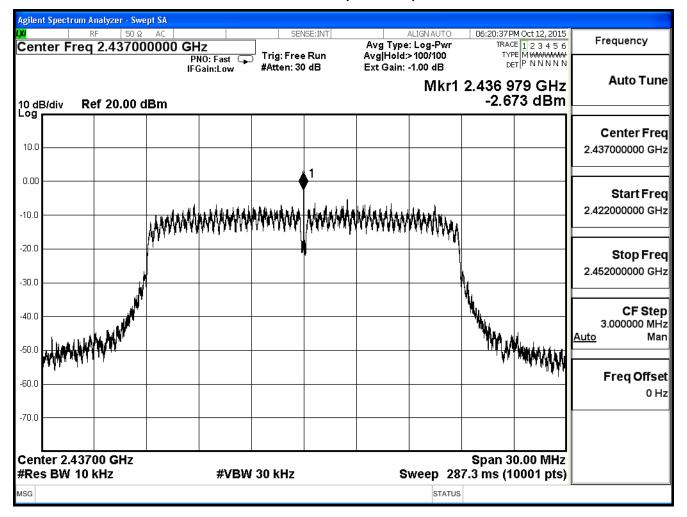


| Product      | Mesh WiFi AP          |           |     |  |
|--------------|-----------------------|-----------|-----|--|
| Test Item    | Power Density         |           |     |  |
| Test Mode    | Mode 1: Transmit Mode |           |     |  |
| Date of Test | 2015/10/12            | Test Site | SR7 |  |

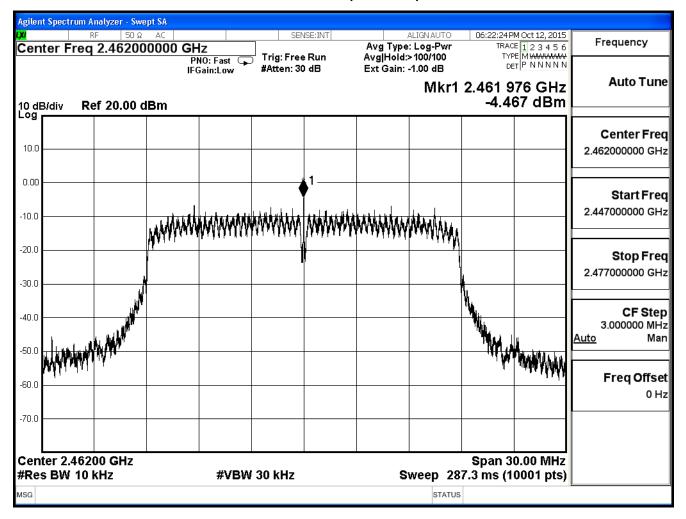
| IEEE 802.11n (20MHz) (ANT 0) |                    |                        |                |        |
|------------------------------|--------------------|------------------------|----------------|--------|
| Channel No.                  | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
| 1                            | 2412               | -2.988                 | <b>≦6.99</b>   | Pass   |
| 6                            | 2437               | -2.673                 | <b>≦6.99</b>   | Pass   |
| 11                           | 2462               | -4.467                 | <b>≦6.99</b>   | Pass   |







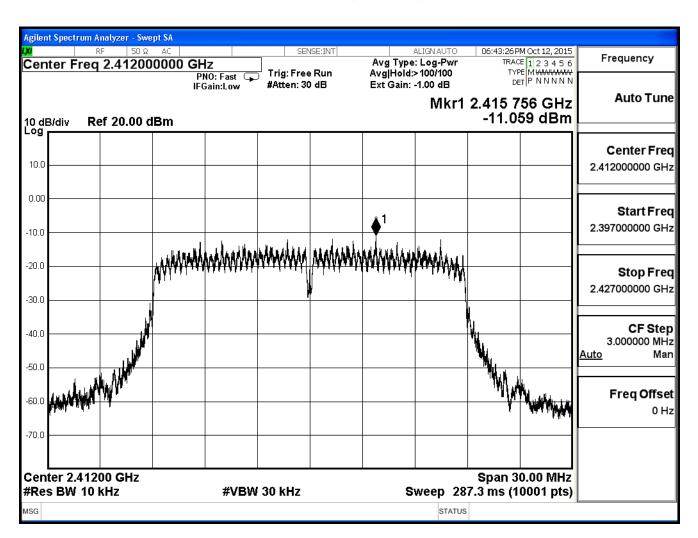




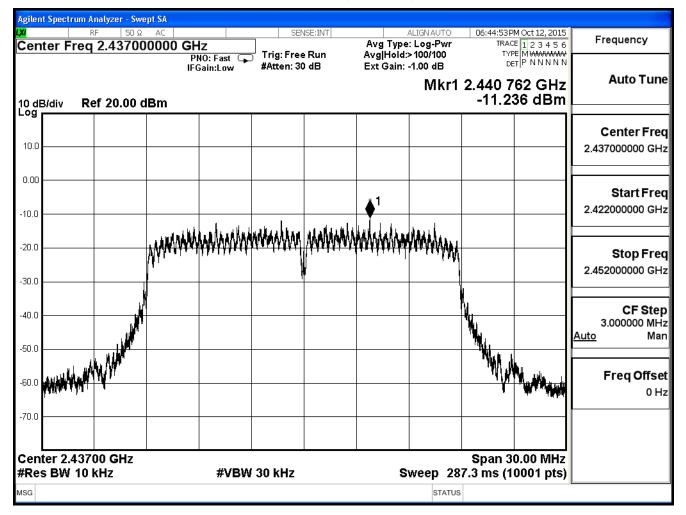


| Product      | Mesh WiFi AP          |           |     |  |
|--------------|-----------------------|-----------|-----|--|
| Test Item    | Power Density         |           |     |  |
| Test Mode    | Mode 1: Transmit Mode |           |     |  |
| Date of Test | 2015/10/12            | Test Site | SR7 |  |

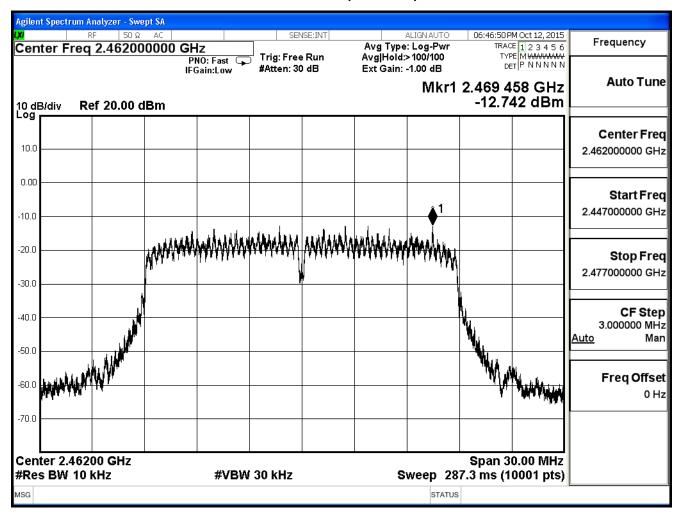
| IEEE 802.11n (20MHz) (ANT 1) |                    |                        |                |        |
|------------------------------|--------------------|------------------------|----------------|--------|
| Channel No.                  | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
| 1                            | 2412               | -11.059                | <b>≦6.99</b>   | Pass   |
| 6                            | 2437               | -11.236                | ≦6.99          | Pass   |
| 11                           | 2462               | -12.742                | <b>≦6.99</b>   | Pass   |













| Product      | Mesh WiFi AP          |           |     |  |
|--------------|-----------------------|-----------|-----|--|
| Test Item    | Power Density         |           |     |  |
| Test Mode    | Mode 1: Transmit Mode |           |     |  |
| Date of Test | 2015/10/12            | Test Site | SR7 |  |

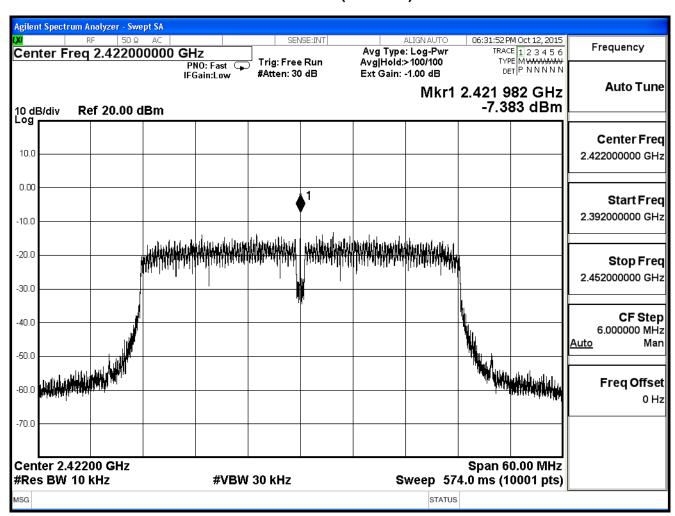
| IEEE 802.11n (20MHz) (ANT 0+1) |                    |                        |                |        |
|--------------------------------|--------------------|------------------------|----------------|--------|
| Channel No.                    | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
| 1                              | 2412               | -2.359                 | ≦6.99          | Pass   |
| 6                              | 2437               | -2.107                 | <b>≦6.99</b>   | Pass   |
| 11                             | 2462               | -3.865                 | <b>≦6.99</b>   | Pass   |



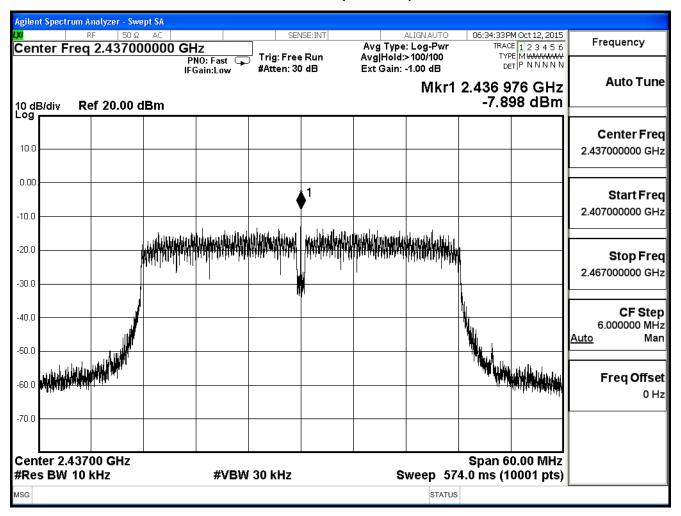
| Product      | Mesh WiFi AP          |    |         |     |
|--------------|-----------------------|----|---------|-----|
| Test Item    | Power Density         |    |         |     |
| Test Mode    | Mode 1: Transmit Mode |    |         |     |
| Date of Test | 2015/10/12            | Te | st Site | SR7 |

| IEEE 802.11n (40MHz) (ANT 0) |                    |                        |                |        |
|------------------------------|--------------------|------------------------|----------------|--------|
| Channel No.                  | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |
| 3                            | 2422               | -7.383                 | <b>≦6.99</b>   | Pass   |
| 6                            | 2437               | -7.898                 | <b>≦6.99</b>   | Pass   |
| 9                            | 2452               | -8.425                 | <b>≦6.99</b>   | Pass   |

### Channel 3 (2422MHz)

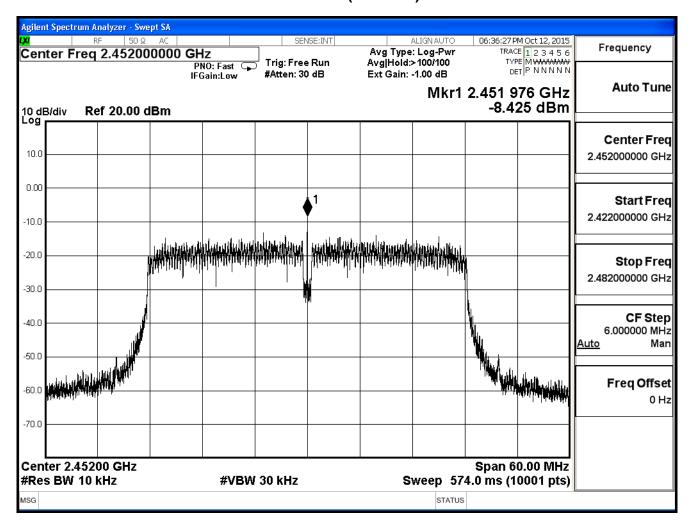








### Channel 9 (2452MHz)

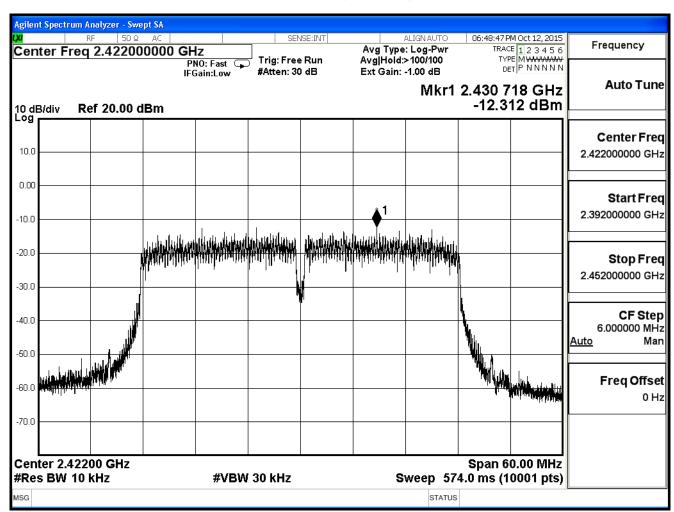




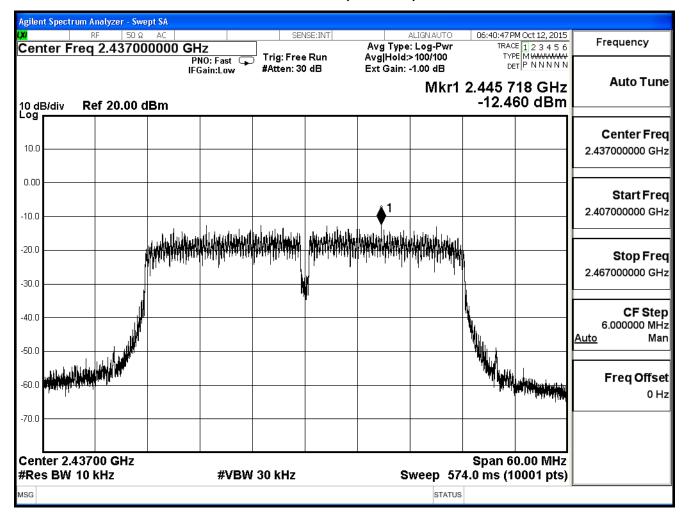
| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Power Density         |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

| IEEE 802.11n (40MHz) (ANT 1) |                    |                        |                |        |  |  |  |  |
|------------------------------|--------------------|------------------------|----------------|--------|--|--|--|--|
| Channel No.                  | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |  |  |  |  |
| 3                            | 2422               | -12.312                | ≦6.99          | Pass   |  |  |  |  |
| 6                            | 2437               | -12.460                | <b>≦6.99</b>   | Pass   |  |  |  |  |
| 9                            | 2452               | -14.986                | <b>≦6.99</b>   | Pass   |  |  |  |  |

## Channel 3 (2422MHz)

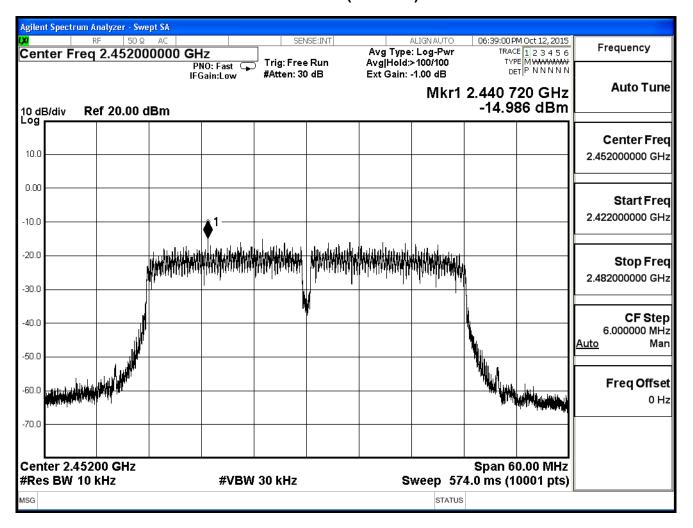








### Channel 9 (2452MHz)





| Product      | Mesh WiFi AP          |           |     |
|--------------|-----------------------|-----------|-----|
| Test Item    | Power Density         |           |     |
| Test Mode    | Mode 1: Transmit Mode |           |     |
| Date of Test | 2015/10/12            | Test Site | SR7 |

| IEEE 802.11n (40MHz) (ANT 1) |                    |                        |                |        |  |  |  |  |
|------------------------------|--------------------|------------------------|----------------|--------|--|--|--|--|
| Channel No.                  | Frequency<br>(MHz) | Measure Level<br>(dBm) | Limit<br>(dBm) | Result |  |  |  |  |
| 3                            | 2422               | -6.173                 | ≦6.99          | Pass   |  |  |  |  |
| 6                            | 2437               | -6.595                 | <b>≦6.99</b>   | Pass   |  |  |  |  |
| 9                            | 2452               | -7.559                 | ≦6.99          | Pass   |  |  |  |  |