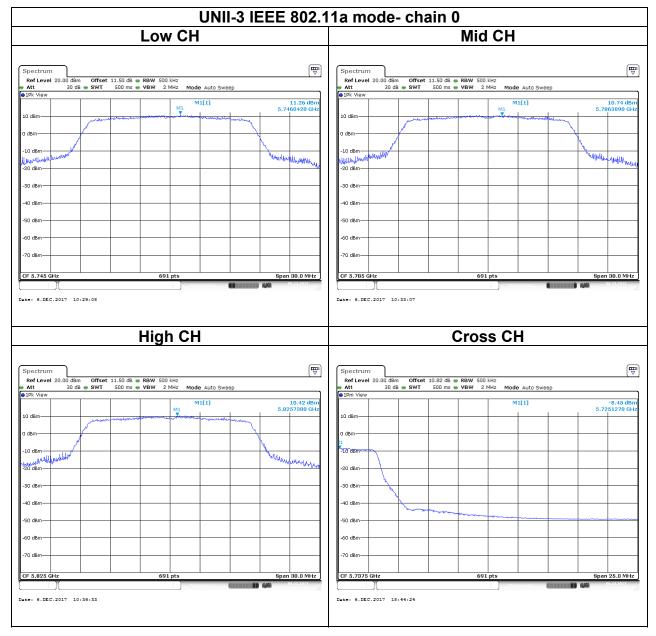
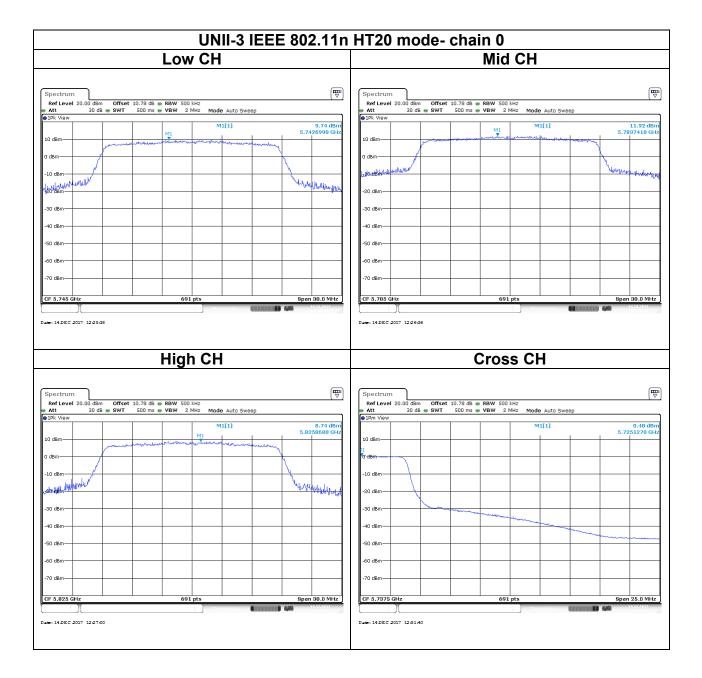
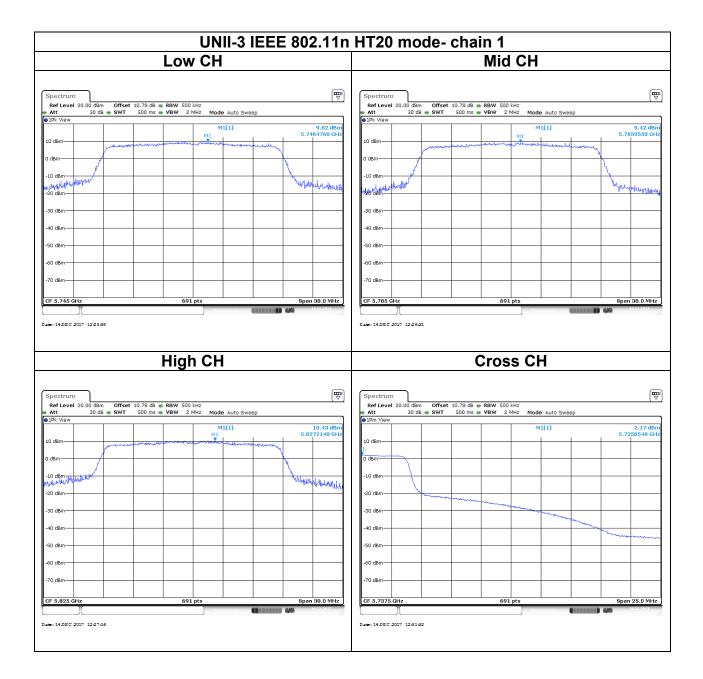


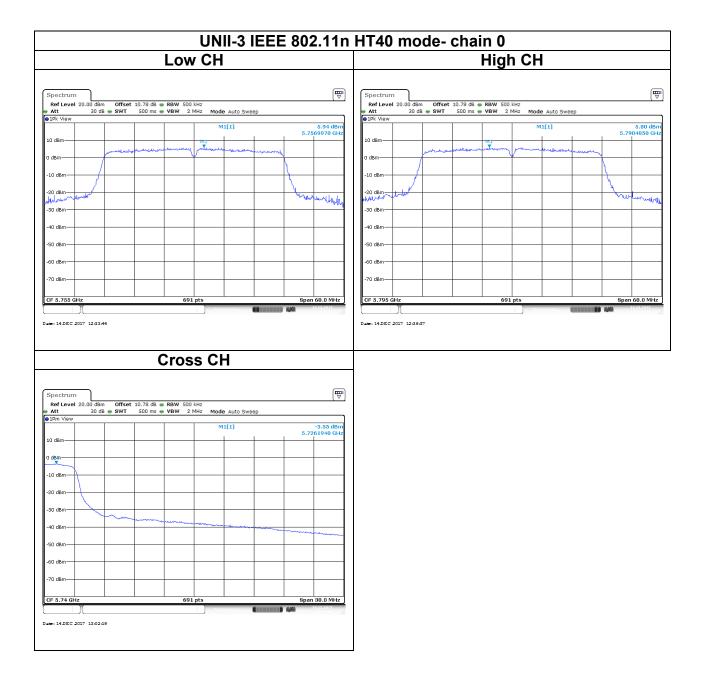
**COMPLIANCE Certification Services Inc.** FCC ID: PPQ-WCBN3507R ISED NO: 4491A-WCBN3507R

## <u>Test Data</u>

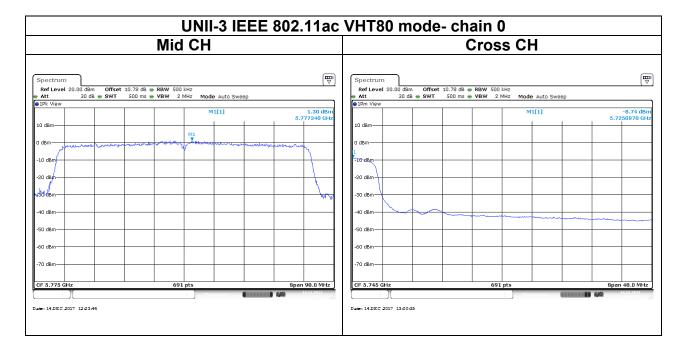


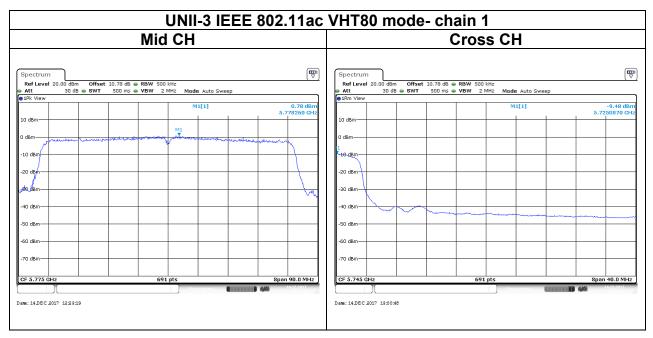












# 4.5 RADIATION BANDEDGE AND SPURIOUS EMISSION

## 4.5.1 Test Limit

FCC according to §15.407, §15.209 and §15.205,

#### Below 30 MHz

| Frequency     | Field Strength<br>(microvolts/m) | Magnetic<br>H-Field<br>(microamperes/m) | Measurement<br>Distance<br>(metres) |
|---------------|----------------------------------|---|-------------------------------------|
| 9-490 kHz     | 2,400/F (F in kHz)               | 2,400/F (F in kHz)                      | 300                                 |
| 490-1,705 kHz | 24,000/F (F in kHz)              | 24,000/F (F in kHz)                     | 30                                  |
| 1.705-30 MHz  | 30                               | N/A                                     | 30                                  |

#### Above 30 MHz

| Frequency | Field Strength<br>microvolts/m at 3 metres (watts, e.i.r.p.) |              |  |  |  |  |  |
|-----------|--|--------------|--|--|--|--|--|
| (MHz)     | Transmitters   | Receivers    |  |  |  |  |  |
| 30-88     | 100 (3 nW)   | 100 (3 nW)   |  |  |  |  |  |
| 88-216    | 150 (6.8 nW)   | 150 (6.8 nW) |  |  |  |  |  |
| 216-960   | 200 (12 nW)  | 200 (12 nW)  |  |  |  |  |  |
| Above 960 | 500 (75 nW)  | 500 (75 nW)  |  |  |  |  |  |

IC according to RSS-247 section 6.2.1(2), section 6.2.2(2), section 6.2.3(2) and section 6.2.4(2)

#### <u>UNII-1 :</u>

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

#### UNII-2a and 2c :

For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices' unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled "for indoor use only." Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

#### <u>UNII-3:</u>

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

#### 4.5.2 Test Procedure

Test method Refer as KDB 789033 D02 v02r01, Section G.3, G.4, G.5, and G.6,.

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10, and the EUT set in a continuous mode.

2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.

3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.

4. No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)

- 5. The SA setting following :
  - (1) Below 1G : RBW = 100kHz, VBW ≥ 3\*RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
  - (2) Above 1G:
    - (2.1) For Peak measurement : RBW = 1MHz, VBW ≥ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
    - (2.2) For Average measurement : RBW = 1MHz, VBW

If Duty Cycle  $\geq$  98%, VBW=10Hz.

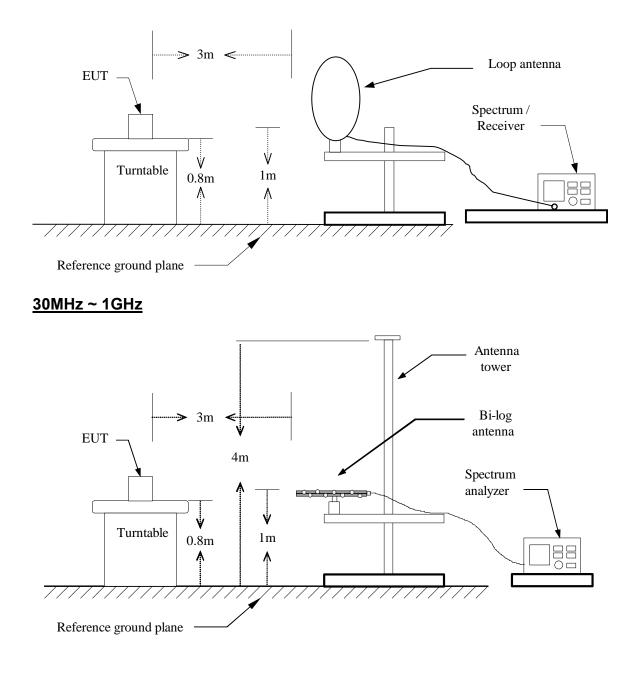
If Duty Cycle < 98%, VBW=1/T.

| Configuration  | Duty Cycle (%) | T(ms)  | 1/T (Hz) | VBW Setting |
|----------------|----------------|--------|----------|-------------|
| 802.11a        | 88%            | 1.4600 | 684.932  | 750Hz       |
| 802.11n HT20   | 91%            | 1.3900 | 719.424  | 750Hz       |
| 802.11n HT40   | 85%            | 0.7100 | 1408.451 | 1.5KHz      |
| 802.11ac VHT80 | 66%            | 0.3500 | 2857.143 | 3KHz        |

# Compliance Certification Services Inc. FCC ID: PPQ-WCBN3507R ISED NO: 4491A-WCBN3507R

# 4.5.3 Test Setup

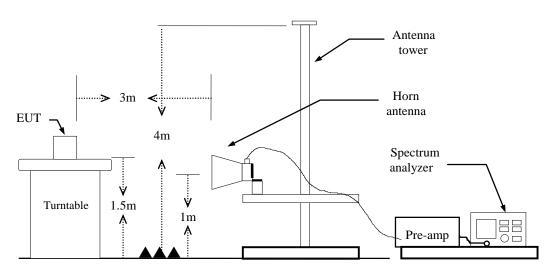
<u>9kHz ~ 30MHz</u>



**CELERE** Compliance Certification Services Inc. ISED NO: 4491A-WCBN3507R

#### Above 1 GHz

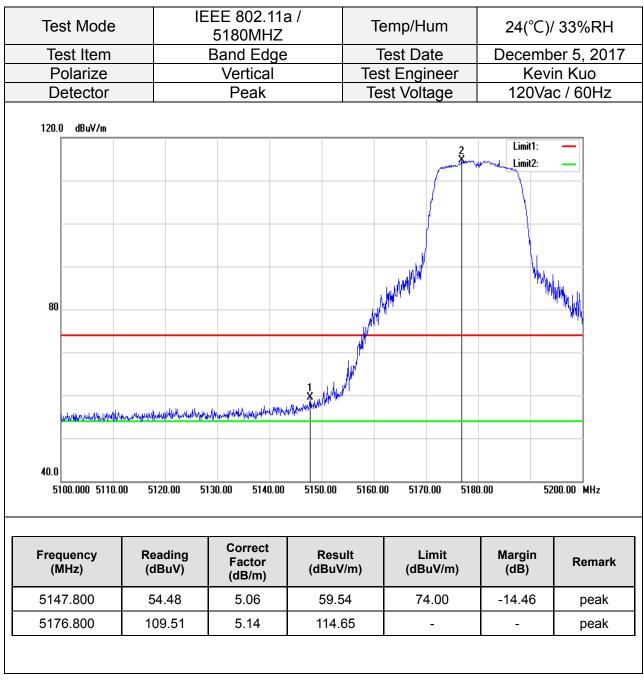
FCC ID: PPQ-WCBN3507R



## 4.5.4 Test Result

### Test Data

#### Band Edge Test Data for UNII-1



| Test Mode               | IE                | IEEE 802.11a /<br>5180MHZ |               |               | nperature         | 24(°C)/            | / 33%RH    |
|-------------------------|-------------------|---------------------------|---------------|---------------|-------------------|--------------------|------------|
| Test Item               |                   | Band Edge                 | ;             | Test Date     |                   |                    | er 5, 2017 |
| Polarize                |                   | Vertical                  |               | Test Engineer |                   |                    | in Kuo     |
| Detector                |                   | Average                   |               | Te            | st Voltage        | 120Va              | c / 60Hz   |
| 120.0 dBu¥/m            |                   |                           |               |               |                   |                    |            |
|                         |                   |                           |               |               |                   | Limit1:<br>Limit2: | _          |
|                         |                   |                           |               |               | 2                 |                    |            |
|                         |                   |                           |               |               |                   |                    |            |
| 80                      |                   |                           |               |               |                   |                    |            |
|                         |                   |                           |               |               |                   |                    |            |
|                         |                   |                           |               | $\square$     |                   |                    |            |
| 40.0<br>5100.000 5110.0 | 00 5120.00 5      | 5130.00 5140.00           | 5150.00       | 5160.0        | 0 5170.00 518     | 0.00 52            | 200.00 MHz |
|                         |                   | Correct                   |               |               |                   |                    |            |
| Frequency<br>(MHz)      | Reading<br>(dBuV) | Factor<br>(dB/m)          | Resu<br>(dBuV |               | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |
| 5149.600                | 41.89             | 5.06                      | 46.9          | 5             | 54.00             | -7.05              | AVG        |
| 5179.100                | 99.78             | 5.14                      | 104.9         | 92            | -                 | -                  | AVG        |
|                         |                   |                           |               |               |                   |                    |            |

| Test          | Mode                             | IE                   | IEEE 802.11a /<br>5240MHZ   |               |            | mp/Hum                     | 24(°C)/ 33%RH                        |           |
|---------------|----------------------------------|----------------------|---|---------------|------------|----------------------------|--------------------------------------|-----------|
| Tes           | t Item                           |                      | Band Edge   | ;             | Те         | st Date                    | Decemb                               | er 5, 201 |
| Pol           | larize                           |                      | Vertical  |               |            | Engineer                   |                                      | in Kuo    |
| Det           | tector                           |                      | Peak  |               | Tes        | t Voltage                  | 120Va                                | c / 60Hz  |
| 120.0         | dBuV/m                           |                      |   |               |            |                            |                                      |           |
|               |                                  |                      |   | 2             |            |                            | Limit1:<br>Limit2:                   | _         |
|               |                                  |                      |   |               |            |                            |                                      |           |
|               |                                  |                      |   |               |            |                            |                                      |           |
| 80            |                                  |                      | /   |               |            |                            |                                      |           |
|               |                                  |                      |   |               |            |                            |                                      |           |
| term          | nyu ya kesana gindasi walaa yaaf | Land water water and | under service of the |               | Withowsham | usph#HMMmalleten/Anae./agu | 1 Martin Martin Martin Martin Martin | ahethame  |
| 40.0          |                                  |                      |   |               |            |                            |                                      |           |
| 5100          | 0.000 5130.00                    | 5160.00 5            | 190.00 5220.00  | 5250.00       | 5280.00    | 5310.00 5340               | D.OO 54                              | 00.00 MHz |
| Freque<br>(MH |                                  | Reading<br>(dBuV)    | Correct<br>Factor<br>(dB/m)   | Resı<br>(dBuV |            | Limit<br>(dBuV/m)          | Margin<br>(dB)                       | Remark    |
| 5145.         | .600                             | 50.77                | 5.06  | 55.8          | 3          | 74.00                      | -18.17                               | peak      |
| 5238.         | .600                             | 107.10               | 5.28  | 112.3         | 38         | -                          | -                                    | peak      |
| 0200.         |                                  |                      | 5.56  | 56.4          |            | 74.00                      | -17.59                               | peak      |

| Test Mode          | IE                | IEEE 802.11a /<br>5240MHZ   |                |           | o/Hum             | 24(°C)/ 33%RH      |            |
|--------------------|-------------------|-----------------------------|----------------|-----------|-------------------|--------------------|------------|
| Test Item          |                   | Band Edge                   |                | Test Date |                   |                    | er 5, 2017 |
| Polarize           |                   | Vertical                    |                |           | ngineer           |                    | n Kuo      |
| Detector           |                   | Average                     |                | Test \    | /oltage           | 120Va              | c / 60Hz   |
| 120.0 dBu∀/m       |                   |                             |                |           |                   |                    |            |
|                    |                   |                             |                |           |                   | Limit1:<br>Limit2: | _          |
|                    |                   |                             | 2              |           |                   |                    |            |
| 80                 |                   |                             |                |           |                   |                    |            |
|                    |                   |                             |                |           |                   |                    |            |
| 40.0               |                   |                             |                |           |                   | 3                  |            |
| 5100.000 5130.     | 00 5160.00 5      | 190.00 5220.00              | 5250.00        | 5280.00   | 5310.00 5340      | 0.00 54            | 00.00 MHz  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV/ |           | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |
| 5141.100           | 38.67             | 5.03                        | 43.70          | )         | 54.00             | -10.30             | AVG        |
| 5241.000           | 97.69             | 5.28                        | 102.9          | 7         | -                 | -                  | AVG        |
|                    | 1                 | 5.56                        | 44.34          | .         | 54.00             | -9.66              | AVG        |

| Test Mode  |   | IEEE 802.11n HT20 /<br>5180MHZ |               |        | emp/Hum                                | <b>24(</b> °C)/              | ′ 33%RH   |
|--|---|--------------------------------|---------------|--------|--|------------------------------|-----------|
| Test Item  |   | Ind Edge                       |               |        | est Date                               | December 12, 20 <sup>-</sup> |           |
| Polarize   | \<br>\  | Vertical                       |               |        | t Engineer                             |                              | in Kuo    |
| Detector   |   | Peak                           |               | Te     | st Voltage                             | 120Va                        | c / 60Hz  |
| 120.0 dBuV/m   |   |                                |               |        |  |                              |           |
| 80   |   |                                |               |        | 10000000000000000000000000000000000000 | Limit1:<br>Limit2:           |           |
| 80   |   |                                | 1<br>× 104    | WW .   |  |                              |           |
| f the state of the | ang panjadi na sa katalan sa katalan sa katalan sa sa k | In the well the present of the |               |        |  |                              |           |
| 40.0<br>5100.000 5110.   |   | 30.00 5140.00                  | 5150.00       | 5160.0 | 0 5170.00 518                          | 0.00 52                      | 00.00 MHz |
|  |   | Correct                        |               |        |  |                              |           |
| Frequency<br>(MHz)   | Reading<br>(dBuV)   | Factor<br>(dB/m)               | Resu<br>(dBuV |        | Limit<br>(dBuV/m)                      | Margin<br>(dB)               | Remark    |
| 5149.000   | 66.66   | 5.06                           | 71.7          | 2      | 74.00                                  | -2.28                        | peak      |
| 5182.100   | 106.39  | 5.14                           | 111.5         | 53     | -                                      | -                            | peak      |
|  |   |                                |               |        |  |                              |           |

| Test Mode      |  | IEEE 802.11n HT20 /<br>5180MHZ |         |               | emp/Hum   | I                                      |                              | )/ 33%RH    |
|----------------|--|--------------------------------|---------|---------------|-----------|--|------------------------------|-------------|
| Test Item      |  | and Edge                       |         |               | est Date  |  | December 12, 20 <sup>2</sup> |             |
| Polarize       |  | Vertical                       |         | Test Engineer |           |  |                              | vin Kuo     |
| Detector       |  | Average                        |         | Test Voltage  |           | 120V                                   | /ac / 60Hz                   |             |
| 120.0 dBuV/m   |  |                                |         |               |           |  |                              |             |
|                |  |                                |         |               |           |  | Limit1:<br>Limit2:           |             |
|                |  |                                |         |               | (m        | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | house                        |             |
| 80             |  |                                |         |               |           |  |                              |             |
|                |  |                                |         | A A           | MAN       |  |                              |             |
|                |  |                                |         |               |           |  |                              |             |
| 40.0           | and the second |                                | Ť.      |               |           |  |                              |             |
| 5100.000 5110. | 00 5120.00 51  | 130.00 5140.00                 | 5150.00 | 5160.0        | 0 5170.00 | 5180                                   | .00                          | 5200.00 MHz |
| Frequency      | Reading  | Correct                        | Resu    | .1+           | Limit     |  | Margin                       |             |
| (MHz)          | (dBuV)   | Factor<br>(dB/m)               | (dBuV   |               | (dBuV/    |  | (dB)                         | Remark      |
| 5150.000       | 45.64  | 5.06                           | 50.7    | 0             | 54.00     | )                                      | -3.30                        | AVG         |
| 5179.000       | 95.21  | 5.14                           | 100.3   | 35            | -         |  | -                            | AVG         |
|                |  |                                |         |               |           |  |                              |             |

| Test Mode  |  | )2.11n HT2<br>240MHZ              | 0 /                | Temp/Hum                | 24(℃)/ 33%RH                     |               |
|--|--|-----------------------------------|--------------------|-------------------------|----------------------------------|---------------|
| Test Item  | Ba   | nd Edge                           |                    | Test Date               | Decembe                          | er 12, 2017   |
| Polarize   | ١  | /ertical                          | Т                  | est Engineer            |                                  | n Kuo         |
| Detector   |  | Peak                              | 7                  | est Voltage             | 120Va                            | c / 60Hz      |
| 120.0 dBu¥/m   |  |                                   |                    |                         | Limit1:                          |               |
|  |  |                                   | ~                  |                         | Limit2:                          | _             |
|  |  |                                   |                    |                         |                                  |               |
|  |  | - Market and Andrews              |                    |                         |                                  |               |
| 80   |  | lun                               |                    |                         |                                  |               |
|  |  | ///////////////////////////////// |                    |                         |                                  |               |
| <mark>₩₽₽<mark>₽</mark>₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽₽₩₽</mark> | angen in the second | M <sup>M</sup>                    |                    | Whitemanialismuseressee | ut densi alter den den ser tigen | ruthranc<br>X |
| 40.0   |  |                                   |                    |                         |                                  |               |
| 5100.000 5130.   | 00 5160.00 51  | 90.00 5220.00                     | 5250.00 528        | 0.00 5310.00 534        | 0.00 54                          | 00.00 MHz     |
| Frequency<br>(MHz)   | Reading<br>(dBuV)  | Correct<br>Factor<br>(dB/m)       | Result<br>(dBuV/m) | Limit<br>(dBuV/m)       | Margin<br>(dB)                   | Remark        |
| 5145.600   | 50.68  | 5.06                              | 55.74              | 74.00                   | -18.26                           | peak          |
| 5241.000   | 108.62   | 5.28                              | 113.90             | -                       | -                                | peak          |
|  | 51.12  | 5.67                              | 56.79              | 74.00                   | -17.21                           | peak          |

| Test Mode            |                   | 2.11n HT20<br>40MHZ         | )/            | Ter     | nperature                              | <b>;</b> | <b>24(°</b> ℃)/    | 33%RH       |
|----------------------|-------------------|-----------------------------|---------------|---------|--|----------|--------------------|-------------|
| Test Item            |                   | nd Edge                     |               |         | est Date                               |          |                    | er 12, 2017 |
| Polarize             | V                 | ertical                     |               |         | t Enginee                              |          |                    | n Kuo       |
| Detector             | Av                | /erage                      |               | Tes     | st Voltage                             | •        | 120Va              | c / 60Hz    |
| 120.0 dBu¥/m         |                   |                             |               |         |  |          |                    |             |
|                      |                   |                             |               |         |  |          | Limit1:<br>Limit2: | _           |
|                      |                   |                             | 2             |         |  |          |                    |             |
|                      |                   |                             |               |         |  |          |                    |             |
| 80                   |                   |                             |               |         |  |          |                    |             |
|                      |                   |                             |               |         |  |          |                    |             |
|                      |                   |                             |               |         |  |          |                    |             |
|                      | 1                 |                             |               |         | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |          | 3                  |             |
| 40.0<br>5100.000 513 | ).00              | 90.00 5220.00               | 5250.00       | 5280.00 | ) 5310.00                              | 5340.    | 00 54              | 00.00 MHz   |
|                      |                   |                             |               |         |  |          |                    |             |
| Frequency<br>(MHz)   | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |         | Limit<br>(dBuV/n                       | ו)       | Margin<br>(dB)     | Remark      |
| 5150.000             | 38.83             | 5.06                        | 43.8          | 89      | 54.00                                  |          | -10.11             | AVG         |
| 5242.500             | 98.83             | 5.29                        | 104.          | 12      | -                                      |          | -                  | AVG         |
| 5350.000             | 38.93             | 5.56                        | 44.4          | 9       | 54.00                                  |          | -9.51              | AVG         |
|                      |                   |                             |               |         |  |          |                    |             |

| Test Mode  |  | IEEE 802.11n HT40 /<br>5190MHZ |               | Te      | emp/Hum                | 24(℃)/ 33%RI   |           |
|--|--|--------------------------------|---------------|---------|------------------------|----------------|-----------|
| Test Item  | Bar  | nd Edge                        |               |         | Test Date December 12, |                |           |
| Polarize   | V  | ertical                        |               | Tes     | t Engineer             | Kevi           | n Kuo     |
| Detector   |  | Peak                           |               | Te      | st Voltage             | 120Va          | c / 60Hz  |
| 120.0 dBuV/m   |  |                                |               |         | 1                      |                |           |
| 80   |  |                                |               | aght MM |                        |                |           |
| the addition of the second | daharining a later ang | (n) (n) (n)                    |               |         |                        |                |           |
|  |  |                                |               |         |                        |                |           |
| 40.0   |  |                                |               |         |                        |                |           |
| 5100.000 5111  | .00 5122.00 513  | 33.00 5144.00                  | 5155.00       | 5166.0  | 0 5177.00 518          | 8.00 52        | 10.00 MHz |
| Frequency<br>(MHz)   | Reading<br>(dBuV)  | Correct<br>Factor<br>(dB/m)    | Resu<br>(dBuV |         | Limit<br>(dBuV/m)      | Margin<br>(dB) | Remark    |
| 5150.000   | 65.61  | 5.06                           | 70.6          | 7       | 74.00                  | -3.33          | peak      |
| 5187.560   | 105.01   | 5.16                           | 110.1         | 17      | -                      | -              | peak      |
|  |  |                                |               |         |                        |                |           |

| Test Mode           |                   | IEEE 802.11n HT40 /<br>5190MHZ   |               |  |                | e    | 24(℃)/ 33%RH       |             |
|---------------------|-------------------|--|---------------|--|----------------|------|--------------------|-------------|
| Test Item           |                   | nd Edge  |               |  | est Date       |      |                    | er 12, 2017 |
| Polarize            | V                 | ertical  |               | Test Engineer  |                |      |                    | in Kuo      |
| Detector            | Av                | /erage   |               | Tes  | st Voltag      | e    | 120Va              | c / 60Hz    |
| 120.0 dBu¥/m        |                   |  |               |  |                |      |                    |             |
|                     |                   |  |               |  |                |      | Limit1:<br>Limit2: | _           |
|                     |                   |  |               |  |                | 2    | man                |             |
|                     |                   |  |               |  |                |      | V                  |             |
| 80                  |                   |  |               |  |                |      |                    |             |
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|                     |                   | and the second sec |               |  |                |      |                    |             |
| 40.0<br>5100.000 51 | 11.00 5122.00 51  | 33.00 5144.00  | 5155.00       | 5166.00  | ) 5177.00      | 5188 | .00 52             | 110.00 MHz  |
|                     |                   |  |               |  |                |      |                    |             |
| Frequency<br>(MHz)  | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m)  | Resı<br>(dBuV |  | Limi<br>(dBuV/ |      | Margin<br>(dB)     | Remark      |
| 5150.000            | 47.67             | 5.06   | 52.7          | 3  | 54.00          | )    | -1.27              | AVG         |
| 5186.130            | 93.91             | 5.15   | 99.0          | 6  | -              |      | -                  | AVG         |
|                     |                   |  |               |  |                |      |                    |             |

| Test Mode            |                        | 02.11n HT4<br>230MHZ        | 0 /             | Tem     | p/Hum                  | <b>24(</b> °C)/               | ′ 33%RH     |
|----------------------|------------------------|-----------------------------|-----------------|---------|------------------------|-------------------------------|-------------|
| Test Item            | Ba                     | nd Edge                     |                 | Test    | t Date                 | Decembe                       | er 12, 2017 |
| Polarize             | ١                      | /ertical                    |                 | Test E  | Ingineer               |                               | in Kuo      |
| Detector             |                        | Peak                        |                 | Test \  | Voltage                | 120Va                         | c / 60Hz    |
| 120.0 dBu¥/m         |                        |                             |                 |         |                        |                               |             |
|                      |                        |                             | ing             |         |                        | Limit1:<br>Limit2:            | _           |
|                      |                        |                             |                 |         |                        |                               |             |
| 80                   |                        | North War                   | may             |         |                        |                               |             |
|                      | الل<br>المن            | ul <sup>m</sup>             |                 |         |                        |                               |             |
|                      | MAN                    |                             |                 | hun     |                        | 3                             |             |
| dytopic durante also | Sunger June - San Mark |                             |                 |         | Martinerickinskihrigen | material property as a second | hampthic    |
| 40.0                 |                        |                             |                 |         |                        |                               |             |
| 5100.000 5130.       | .00 5160.00 51         | 90.00 5220.00               | 5250.00         | 5280.00 | 5310.00 534            | D.00 54                       | 00.00 MHz   |
| Frequency<br>(MHz)   | Reading<br>(dBuV)      | Correct<br>Factor<br>(dB/m) | Resul<br>(dBuV/ |         | Limit<br>(dBuV/m)      | Margin<br>(dB)                | Remark      |
| 5132.100             | 51.62                  | 5.02                        | 56.64           | 4       | 74.00                  | -17.36                        | peak        |
| 5231.100             | 106.49                 | 5.26                        | 111.7           | 5       | -                      | -                             | peak        |
| 5354.100             | 52.20                  | 5.56                        | 57.76           | a –     | 74.00                  | -16.24                        | peak        |

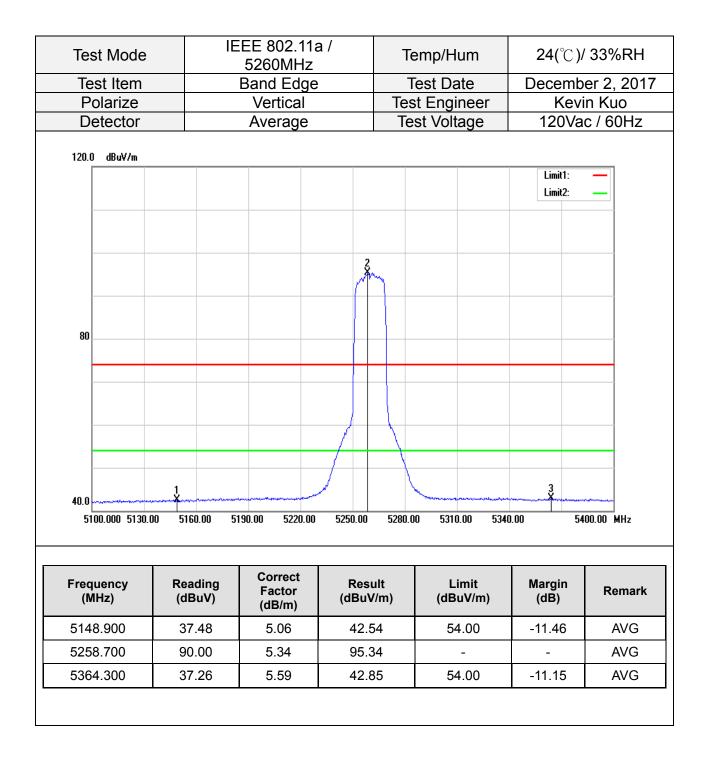
| Test Mode          |                    | 02.11n HT4<br>230MHZ        | 0 /           | Те      | emp/Hu       | n      | <b>24(</b> °C      | )/ 33%RH     |
|--------------------|--------------------|-----------------------------|---------------|---------|--------------|--------|--------------------|--------------|
| Test Item          | Ba                 | nd Edge                     |               | Т       | est Date     | Э      |                    | per 12, 2017 |
| Polarize           |                    | /ertical                    |               |         | t Engin      |        |                    | vin Kuo      |
| Detector           | A                  | verage                      |               | Tes     | st Volta     | ge     | 120V               | ac / 60Hz    |
| 120.0 dBuV/m       |                    |                             |               |         |              |        |                    |              |
|                    |                    |                             |               |         |              |        | Limit1:<br>Limit2: |              |
|                    |                    |                             |               |         |              |        |                    |              |
| 80                 |                    |                             |               |         |              |        |                    |              |
|                    | /                  |                             |               |         |              |        |                    |              |
| 40.0               | 1<br>00 5160.00 51 | 90.00 5220.00               | 5250.00       | 5280.00 | D 5310.0     | D 5340 | 3                  | 5400.00 MHz  |
| 5100.000 5130.     | 00 3160.00 31      | 30.00 5220.00               | 5250.00       | 5260.00 | 0 3310.0     | J JJ4U |                    | 3400.00 MHZ  |
| Frequency<br>(MHz) | Reading<br>(dBuV)  | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV |         | Lim<br>(dBu\ |        | Margin<br>(dB)     | Remark       |
| 5144.100           | 39.46              | 5.05                        | 44.5          | 1       | 54.0         | 00     | -9.49              | AVG          |
| 5228.400           | 97.08              | 5.26                        | 102.3         | 34      | -            |        | -                  | AVG          |
| 5351.100           | 39.99              | 5.56                        | 45.5          | 5       | 54.0         | 00     | -8.45              | AVG          |
|                    |                    |                             |               |         |              |        |                    | ·            |

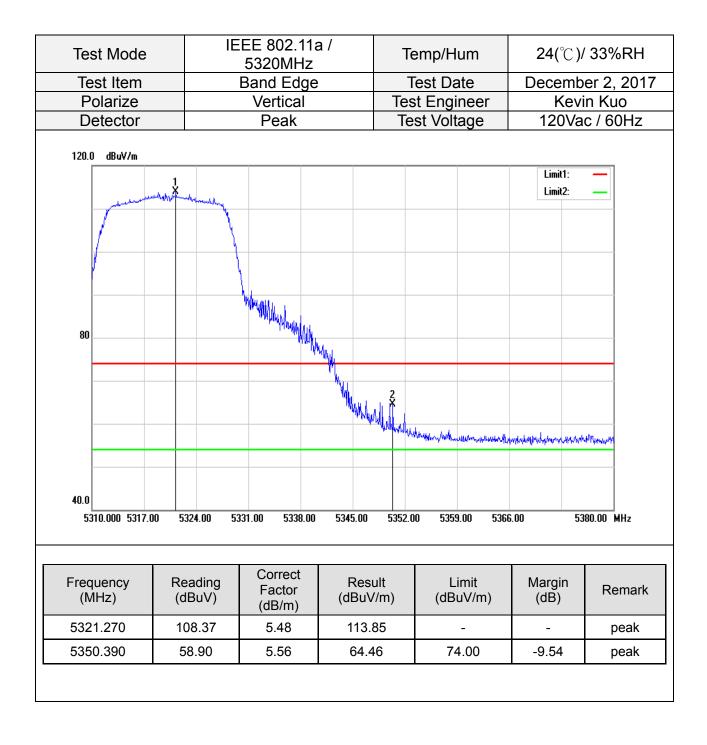
| Test Mode          |                   | 2.11ac VHT<br>10MHZ   | 80 /          | Те      | mp/Hum                                    |        | <b>24(</b> °C      | )/ 33%RH     |
|--------------------|-------------------|---|---------------|---------|---|--------|--------------------|--------------|
| Test Item          |                   | nd Edge   |               |         | est Date                                  |        |                    | ber 12, 2017 |
| Polarize           | V                 | /ertical  |               | Tes     | t Engine                                  | er     |                    | vin Kuo      |
| Detector           |                   | Peak  |               | Tes     | st Voltage                                | e      | 120\               | /ac / 60Hz   |
| 120.0 dBuV/m       |                   |   |               |         |   |        | 1                  |              |
|                    |                   |   |               |         |   |        | Limit1:<br>Limit2: | _            |
|                    |                   |   | mark          |         | man and and and and and and and and and a | 2<br>X | - Masking and      |              |
|                    |                   |   |               |         | 1   |        |                    | and a start  |
| 80                 |                   |   |               |         |   |        |                    |              |
|                    | 1                 |   | uk l          |         |   |        |                    |              |
| The state          | WANNIN MAR        | handrade and a second a |               |         |   |        |                    |              |
| 40.0               |                   | 45.00 5160.00   | 5175.00       | 5190.00 | ) 5205.00                                 | 5220   | 1 00               | 5250.00 MHz  |
|                    |                   |   |               |         |   |        |                    |              |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m)   | Resı<br>(dBuV |         | Limit<br>(dBuV/ı                          |        | Margin<br>(dB)     | Remark       |
| 5141.100           | 63.11             | 5.03  | 68.1          | 4       | 74.00                                     |        | -5.86              | peak         |
| 5212.800           | 98.21             | 5.22  | 103.4         | 43      | -   |        | -                  | peak         |
|                    |                   |   |               |         |   |        |                    |              |

| Test Mode              |                   | 2.11ac VHT<br>210MHZ  | 80 /          | Те      | mp/Hum            | <b>24(</b> °C)∕            | ′ 33%RH     |
|------------------------|-------------------|---|---------------|---------|-------------------|----------------------------|-------------|
| Test Item              | Ba                | nd Edge   |               |         | est Date          |                            | er 12, 2017 |
| Polarize               | \                 | /ertical  |               |         | t Engineer        |                            | in Kuo      |
| Detector               | A                 | verage  |               | Tes     | st Voltage        | 120Va                      | c / 60Hz    |
| 120.0 dBuV/m           |                   |   |               |         |                   |                            |             |
|                        |                   |   |               |         |                   | Limit1:<br>Limit2:         | _           |
|                        |                   |   |               |         |                   |                            |             |
|                        |                   |   |               | -       | 2<br>             | and the stand of the stand | any         |
| 80                     |                   |   |               |         |                   |                            |             |
|                        |                   |   |               |         |                   |                            |             |
|                        |                   |   | $\mathcal{N}$ |         |                   |                            |             |
|                        | mm                | wether the second se |               |         |                   |                            | _           |
| 40.0<br>5100.000 5115. | 00 5130.00 51     | 45.00 5160.00   | 5175.00       | 5190.00 | ) 5205.00 5220    | ).00 52                    | 50.00 MHz   |
|                        |                   |   |               |         |                   |                            |             |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m)   | Resı<br>(dBuV |         | Limit<br>(dBuV/m) | Margin<br>(dB)             | Remark      |
| 5148.300               | 47.66             | 5.06  | 52.7          | 2       | 54.00             | -1.28                      | AVG         |
| 5204.250               | 87.71             | 5.19  | 92.9          | 0       | -                 | -                          | AVG         |
|                        |                   |   |               |         |                   |                            |             |

#### Band Edge Test Data for UNII-2a

| Test Mode          | I                                  | EEE 802.11a<br>5260 MHz              | a /  | Те      | emp/Hum                        | 24(°C)/   | 33%RH      |
|--------------------|------------------------------------|--------------------------------------|--|---------|--------------------------------|---|------------|
| Test Item          |                                    | Band Edge                            | 9  | T       | est Date                       | Decemb  | er 2, 2017 |
| Polarize           |                                    | Vertical                             |  | Tes     | t Engineer                     | Kevi  | n Kuo      |
| Detector           |                                    | Peak                                 |  | Tes     | st Voltage                     | 120Va   | c / 60Hz   |
| 120.0 dBu¥/m       |                                    |                                      |  |         |                                |   |            |
|                    |                                    |                                      | 2  |         |                                | Limit1:<br>Limit2:                                  | _          |
|                    |                                    |                                      | put the second s | 7       |                                |   |            |
|                    |                                    |                                      |  |         |                                |   |            |
| 80                 |                                    |                                      |  |         |                                |   |            |
|                    |                                    |                                      | 1  |         |                                |   |            |
|                    | 1<br>half and some the matter when | an approximation and an and a second | M  |         | W. Historytheory Martin Marcad | nhumanan ang sa | Westermand |
|                    |                                    |                                      |  |         |                                |   |            |
| 40.0               |                                    |                                      |  |         |                                |   |            |
| 5100.000 5130.0    | 00 5160.00 5                       | 190.00 5220.00                       | 5250.00  | 5280.00 | D 5310.00 534                  | 0.00 54   | 00.00 MHz  |
|                    |                                    |                                      |  |         |                                |   |            |
| Frequency<br>(MHz) | Reading<br>(dBuV)                  | Correct<br>Factor<br>(dB/m)          | Resu<br>(dBuV  |         | Limit<br>(dBuV/m)              | Margin<br>(dB)                                      | Remark     |
| 5145.300           | 52.01                              | 5.06                                 | 57.0   | )7      | 74.00                          | -16.93  | peak       |
| 5259.900           | 102.03                             | 5.34                                 | 107.3  | 37      | -                              | -   | peak       |
| 5373.900           | 51.02                              | 5.61                                 | 56.6   | 2       | 74.00                          | -17.37  | peak       |





| Test Mode          | IE                | EEE 802.11a<br>5320MHz      | а/              |         | mp/Hum            |                    | 33%RH      |
|--------------------|-------------------|-----------------------------|-----------------|---------|-------------------|--------------------|------------|
| Test Item          |                   | Band Edge                   | ;               |         | est Date          |                    | er 2, 2017 |
| Polarize           |                   | Vertical                    |                 |         | Engineer          |                    | n Kuo      |
| Detector           |                   | Average                     |                 | Tes     | st Voltage        | 120Va              | c / 60Hz   |
| 120.0 dBu¥/m       |                   |                             |                 |         |                   |                    |            |
|                    | 1                 |                             |                 |         |                   | Limit1:<br>Limit2: |            |
| 80                 |                   | Landon Mark                 |                 |         |                   |                    |            |
| 40.0               |                   |                             |                 | 2       |                   |                    |            |
| 5310.000 5317.0    | 0 5324.00 5       | i331.00                     | 5345.00         | 5352.00 | 5359.00 5366      | 6.00 53            | 80.00 MHz  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resul<br>(dBuV/ |         | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |
| 5318.540           | 97.88             | 5.48                        | 103.3           | 6       | -                 | -                  | AVG        |
| 5350.000           | 41.51             | 5.56                        | 47.07           | 7       | 54.00             | -6.93              | AVG        |

| Test Mode             |  | 02.11n HT2<br>260MHz  | 20 /              | Temp/      | Hum             | <b>24(</b> ℃).  | / 33%RH     |
|-----------------------|--|---|-------------------|------------|-----------------|---|-------------|
| Test Item             | Ba   | and Edge  |                   | Test D     | Date            |   | er 12, 2017 |
| Polarize              |  | Vertical  |                   | Test Eng   |                 |   | in Kuo      |
| Detector              |  | Peak  |                   | Test Vo    | ltage           | 120Va   | c / 60Hz    |
| 120.0 dBuV/m          |  |   | 2                 |            |                 |   |             |
| 80                    |  |   |                   |            |                 | Limit1:<br>Limit2:  |             |
| 40.0                  | n service and the second s | which have been a second se |                   |            | Mutumanya       | 3<br>Mining Manual Manual<br>Mining Manual Manual<br>Mining Manual | ury'llunch  |
| 40.0<br>5100.000 5130 | .00 5160.00 51   | 90.00 5220.00   | 5250.00           | 5280.00 53 | 310.00 5340     | D.00 54   | 100.00 MHz  |
| Frequency<br>(MHz)    | Reading<br>(dBuV)  | Correct<br>Factor<br>(dB/m)   | Result<br>(dBuV/m |            | Limit<br>BuV/m) | Margin<br>(dB)  | Remark      |
| 5142.000              | 51.06  | 5.04  | 56.10             |            | 74.00           | -17.90  | peak        |
| 5258.700              | 113.86   | 5.34  | 119.20            |            | -               | -   | peak        |
| 5352.900              | 53.07  | 5.56  | 58.63             |            | 74.00           | -15.37  | peak        |
| i                     | 1  |   |                   | <b>I</b>   |                 | I   | <u> </u>    |

| Test Mode               |                   | 02.11n HT2<br>260MHz        | 20 /   | Te           | emp/Hum           | <b>24(</b> °C)/                        | 33%RH       |
|-------------------------|-------------------|-----------------------------|--|--------------|-------------------|--|-------------|
| Test Item               | Ba                | and Edge                    |  | Т            | est Date          | Decembe                                | er 12, 2017 |
| Polarize                |                   | Vertical                    |  | Tes          | t Engineer        |  | n Kuo       |
| Detector                |                   | Average                     |  | Te           | st Voltage        | 120Va                                  | c / 60Hz    |
| 120.0 dBuV/m            |                   |                             |  |              |                   |  |             |
|                         |                   |                             | 2  |              |                   | Limit1:<br>Limit2:                     | _           |
|                         |                   |                             | for the second sec | Mary I.      |                   |  |             |
|                         |                   |                             |  |              |                   |  |             |
| 80                      |                   |                             |  | $\backslash$ |                   |  |             |
|                         |                   |                             |  |              |                   |  |             |
|                         |                   |                             |  | 1            |                   |  |             |
|                         |                   |                             |  |              |                   |  |             |
|                         | 1                 |                             |  |              | Mun manana        | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |             |
| 40.0<br>5100.000 5130.0 | 0 5160.00 51      | 90.00 5220.00               | 5250.00  | 5280.0       | 0 5310.00 5340    | ).00 54                                | 00.00 MHz   |
|                         |                   |                             |  |              |                   |  |             |
| Frequency<br>(MHz)      | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Res<br>(dBu\   |              | Limit<br>(dBuV/m) | Margin<br>(dB)                         | Remark      |
| 5150.000                | 38.66             | 5.06                        | 43.7   | 72           | 54.00             | -10.28                                 | AVG         |
| 5259.000                | 103.71            | 5.34                        | 109.   | 05           | -                 | -                                      | AVG         |
| 5350.000                | 40.35             | 5.56                        | 45.9   | 91           | 54.00             | -8.09                                  | AVG         |
|                         | -                 |                             | -  |              |                   | -                                      | •           |

| Test Mode              |                   | 2.11n HT2<br>20MHz          | 0 /           | Te     | emp/Hun       | n              | <b>24(</b> °C  | )/ 33%RH     |
|------------------------|-------------------|-----------------------------|---------------|--------|---------------|----------------|----------------|--------------|
| Test Item              | Ba                | nd Edge                     |               | Т      | est Date      | ;              |                | per 12, 2017 |
| Polarize               | $\sim$            | /ertical                    |               | Tes    | st Engine     | er             | Key            | vin Kuo      |
| Detector               |                   | Peak                        |               | Те     | st Voltag     | ge             | 120V           | ac / 60Hz    |
| 120.0 dBuV/m           | <b>1</b>          | - i i                       |               |        |               |                |                |              |
| 80                     |                   |                             |               | 2      |               | Mentholisatist |                | Alvy-heide   |
| 40.0<br>5310.000 5317. | .00 5324.00 53    | 31.00 5338.00               | 5345.00       | 5352.0 |               |                |                | 5380.00 MHz  |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV |        | Limi<br>(dBuV |                | Margin<br>(dB) | Remark       |
| 5323.090               | 112.00            | 5.48                        | 117.4         | 48     | -             |                | -              | peak         |
| 5352.070               | 67.26             | 5.56                        | 72.8          | 2      | 74.0          | 0              | -1.18          | peak         |
|                        |                   |                             |               |        |               |                |                |              |

| Test Mode     |                 | 2.11n HT2(<br>20MHz | )/                                      | Ter    | mperature    | <b>24(</b> °C)/    | 33%RH       |
|---------------|-----------------|---------------------|---|--------|--------------|--------------------|-------------|
| Test Item     |                 | nd Edge             |   | Т      | est Date     | Decembe            | er 12, 2017 |
| Polarize      | V               | ertical             |   |        | t Engineer   |                    | n Kuo       |
| Detector      | A               | verage              |   | Te     | st Voltage   | 120Va              | c / 60Hz    |
| 120.0_dBu∀/m  |                 |                     |   |        |              |                    |             |
| 80            |                 |                     |   |        |              | Limit1:<br>Limit2: |             |
|               |                 |                     | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | ~      |              |                    |             |
|               |                 |                     |   |        | · ·····      | · ·····            |             |
| 40.0          |                 |                     |   |        |              |                    |             |
| 5310.000 5317 | 7.00 5324.00 53 | 331.00 5338.00      | 5345.00                                 | 5352.0 | 0 5359.00 53 | 66.00 53           | 80.00 MHz   |
| Frequency     | Reading         | Correct             | Resu                                    | ult    | Limit        | Margin             |             |
| (MHz)         | (dBuV)          | Factor<br>(dB/m)    | (dBuV                                   | /m)    | (dBuV/m)     | (dB)               | Remark      |
| 5320.850      | 102.19          | 5.48                | 107.6                                   | 67     | -            | -                  | AVG         |
| 5350.000      | 46.44           | 5.56                | 52.0                                    | 0      | 54.00        | -2.00              | AVG         |
| 5350.000      | 46.44           | 5.56                | 52.0                                    | U      | 54.00        | -2.00              | AVG         |

| Test Item                  |  | 270MHz                      |                    | Temp/Hum           | 24(0)                    | 33%RH       |
|----------------------------|--|-----------------------------|--------------------|--------------------|--------------------------|-------------|
|                            | Ba   | nd Edge                     |                    | Test Date          | Decembe                  | er 12, 2017 |
| Polarize                   | ١  | /ertical                    |                    | Test Engineer      |                          | n Kuo       |
| Detector                   |  | Peak                        |                    | Test Voltage       | 120Va                    | c / 60Hz    |
| 120.0 dBuV/m               |  |                             |                    |                    |                          |             |
|                            |  |                             |                    |                    | Limit1:<br>Limit2:       | _           |
|                            |  |                             |                    | hu hu              |                          |             |
| 80                         |  | , hull                      |                    |                    |                          |             |
| adografian no or statistic | aliter and the second | in Athen and the            |                    | he he              | Worked William Contacted | when        |
| 40.0                       |  |                             |                    |                    |                          |             |
| 5100.000 5130.             | 00 5160.00 51  | 90.00 5220.00               | 5250.00 5          | 280.00 5310.00 534 | 10.00 54                 | 00.00 MHz   |
| Frequency<br>(MHz)         | Reading<br>(dBuV)  | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB)           | Remark      |
| 5143.800                   | 51.93  | 5.05                        | 56.98              | 74.00              | -17.02                   | peak        |
| 5267.700                   | 108.19   | 5.36                        | 113.55             | -                  | -                        | peak        |
| 5352.000                   | 53.07  | 5.56                        | 58.63              | 74.00              | -15.37                   | peak        |

| Test Mode          | IEEE 802.11r   | n HT40 / 52  | 70MHz              | Temperature      | <b>24(°</b> ℃)/                        | ′ 33%RH   |
|--------------------|--|--|--------------------|------------------|--|---|
| Test Item          | Bai  | Band Edge  |                    |                  | Decembe                                | er 12, 2017   |
| Polarize           | V  | Vertical   |                    |                  | Kevi                                   | in Kuo  |
| Detector           | A  | verage   |                    | Test Voltage     | 120Va                                  | c / 60Hz  |
| 120.0 dBu¥/m       | 1  | -  | ·                  |                  | •                                      |   |
|                    |  |  |                    |                  | Limit1:<br>Limit2:                     |   |
|                    |  |  | 2                  | mmy              |  |   |
|                    |  |  |                    |                  |  |   |
| 80                 |  |  |                    |                  |  |   |
|                    |  |  |                    |                  |  |   |
|                    |  | /  |                    |                  |  |   |
|                    | 1  |  |                    |                  | ······································ |   |
| 40.0               | damman and a second | And the second sec |                    |                  |  | and the second se |
| 5100.000 51        | 30.00 5160.00 5  | 90.00 5220.00  | 5250.00 52         | 80.00 5310.00 53 | 40.00 54                               | 00.00 MHz   |
| <b>F</b>           | Deeding  | Correct  | Desult             | Limit            | Manaia                                 |   |
| Frequency<br>(MHz) | Reading<br>(dBuV)  | Factor<br>(dB/m)   | Result<br>(dBuV/m) | (dBuV/m)         | Margin<br>(dB)                         | Remark  |
| 5144.400           | 39.18  | 5.05   | 44.23              | 54.00            | -9.77                                  | AVG   |
| 5271.300           | 98.17  | 5.36   | 103.53             | -                | -                                      | AVG   |
| 5350.200           | 40.79  | 5.56   | 46.35              | 54.00            | -7.65                                  | AVG   |
|                    |  |  |                    |                  |  |   |

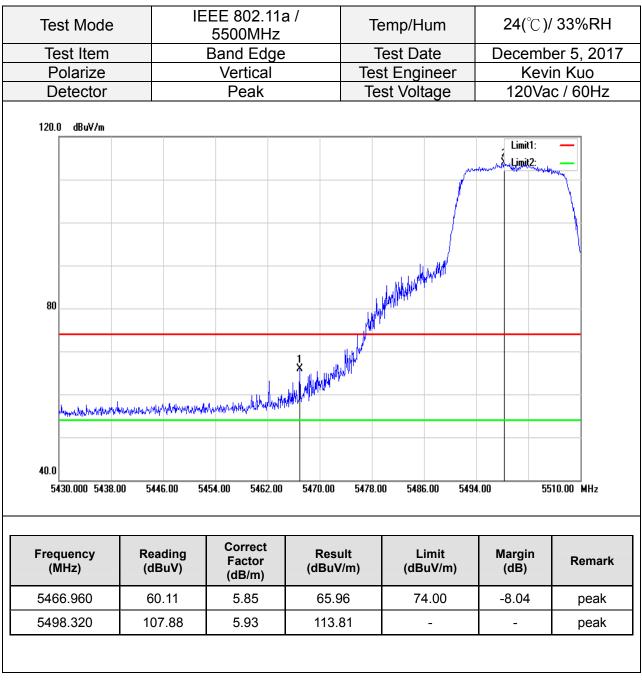
| Test Mode          |                   | 2.11n HT4<br>10MHz          | 0 /           | Те                                       | mp/H     | um   | <b>24(</b> ℃)  | / 33%RH     |
|--------------------|-------------------|-----------------------------|---------------|--|----------|--|----------------|-------------|
| Test Item          | Bar               | nd Edge                     |               | Te                                       | est Da   | te   |                | er 12, 2017 |
| Polarize           | V                 | 'ertical                    |               | Tes                                      | t Engii  | neer   | Kev            | rin Kuo     |
| Detector           |                   | Peak                        |               | Tes                                      | st Volta | age  | 120Va          | ac / 60Hz   |
| 120.0 dBuV/m       |                   |                             |               |  |          |  |                |             |
| 80                 | Watana Wint       |                             |               | W <sup>all</sup> utu <sub>k</sub> ng Jah | mm &     | Ang and a second se |                |             |
| 40.0               |                   |                             |               |  |          |  |                |             |
| 5290.000 5299      | .00 5308.00 531   | 17.00 5326.00               | 5335.00       | 5344.00                                  | ) 5353   | .00 5362   | 2.00 5         | 380.00 MHz  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |  |          | mit<br>JV/m)   | Margin<br>(dB) | Remark      |
| 5319.070           | 104.46            | 5.48                        | 109.9         | 94                                       |          | -  | -              | peak        |
| 5350.210           | 67.14             | 5.56                        | 72.7          | 0  | 74       | .00  | -1.30          | peak        |
|                    |                   |                             |               |  |          |  | •              | <u> </u>    |

| Test Mode              |  | )2.11n HT4<br>310MHz        | 0 /           | Ter     | nperature         | <b>24(</b> °C)/    | 33%RH       |
|------------------------|--|-----------------------------|---------------|---------|-------------------|--------------------|-------------|
| Test Item              | Ba                                     | nd Edge                     |               | Te      | est Date          | Decembe            | er 12, 2017 |
| Polarize               | ١                                      | /ertical                    |               |         | t Engineer        |                    | n Kuo       |
| Detector               | Α                                      | verage                      |               | Tes     | st Voltage        | 120Va              | c / 60Hz    |
| 120.0 dBu¥/m           |  |                             |               |         |                   |                    |             |
|                        |  |                             |               |         |                   | Limit1:<br>Limit2: | _           |
| 80                     | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |                             |               |         |                   |                    |             |
|                        |  |                             | L.            | huren   | ~~~ 3             |                    |             |
|                        |  |                             |               |         | m 5               |                    |             |
|                        |  |                             |               |         | - manut           | - Martine -        |             |
| 40.0                   |  |                             |               |         |                   |                    | man         |
| 40.0<br>5290.000 5299. | 00 5308.00 53                          | 317.00 5326.00              | 5335.00       | 5344.00 | ) 5353.00 536     | 2.00 53            | 80.00 MHz   |
|                        |  |                             |               |         |                   |                    |             |
| Frequency<br>(MHz)     | Reading<br>(dBuV)                      | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |         | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark      |
| 5308.630               | 94.43                                  | 5.46                        | 99.8          | 9       | -                 | -                  | AVG         |
| 5350.000               | 48.39                                  | 5.56                        | 53.9          | 5       | 54.00             | -0.05              | AVG         |
|                        |  |                             |               |         |                   |                    |             |

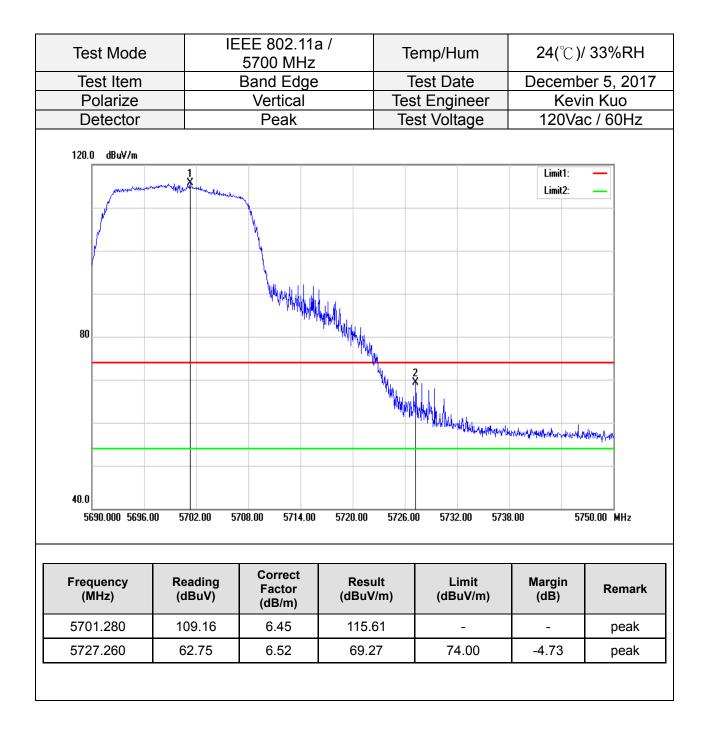
| Test Mode             |                      | 11ac VHT<br>90MHz                                  | 80 /          | Те      | mp/Hur       | n        | <b>24(</b> °(  | C)/ 33%RH    |
|-----------------------|----------------------|--|---------------|---------|--------------|----------|----------------|--------------|
| Test Item             | Ba                   | nd Edge  |               | Te      | est Date     | ;        |                | ber 12, 2017 |
| Polarize              | $\sim$               | /ertical   |               | Tes     | t Engine     | er       | Ke             | evin Kuo     |
| Detector              |                      | Peak   |               | Tes     | st Voltag    | ge       | 120            | Vac / 60Hz   |
| 120.0 dBu∀/m          | ĺ                    |  | i             |         |              |          | Limit1:        |              |
| 80                    | www.hundanee.New.You | kander han som | num 1         |         |              |          | Limit2         |              |
|                       |                      |  |               | *****   |              | W.L.M.M. | humanh         | Ammy /       |
| 40.0<br>5250.000 5265 | .00 5280.00 52       | 95.00 5310.00                                      | 5325.00       | 5340.00 | ) 5355.00    | 5370     | .00            | 5400.00 MHz  |
| Frequency<br>(MHz)    | Reading<br>(dBuV)    | Correct<br>Factor<br>(dB/m)                        | Resı<br>(dBuV |         | Lim<br>(dBuV |          | Margin<br>(dB) | Remark       |
| 5293.800              | 100.07               | 5.42   | 105.4         | 49      | -            |          | -              | peak         |
| 5350.950              | 63.29                | 5.56   | 68.8          | 5       | 74.0         | 0        | -5.15          | peak         |
|                       |                      |  |               |         |              |          |                |              |

| Test Moc          | le             |                   | 2.11ac VHT<br>290MHz         | <sup>80 /</sup> Г  | emperature        | <b>24(</b> °C)/    | ′ 33%RH    |
|-------------------|----------------|-------------------|------------------------------|--------------------|-------------------|--------------------|------------|
| Test Iter         | n              | Ba                | nd Edge                      |                    | Test Date         | December 12, 20    |            |
| Polarize          | <b>;</b>       | ١                 | /ertical                     | Т                  | est Engineer      | Kevi               | in Kuo     |
| Detecto           | r              | A                 | verage                       | 7                  | est Voltage       | 120Va              | c / 60Hz   |
| 120.0 d           | Bu¥/m          |                   |                              |                    |                   |                    |            |
|                   |                |                   |                              |                    |                   | Limit1:<br>Limit2: | _          |
|                   |                | ţ                 |                              |                    |                   |                    |            |
| _/**              | yezer Kirineko | www.www           | and the second second second | manning            |                   |                    |            |
| 80                |                |                   |                              |                    |                   |                    |            |
|                   |                |                   |                              |                    |                   |                    |            |
|                   |                |                   |                              |                    | margan A          | which              |            |
| 40.0<br>3 5250.00 | 00 5265.       | 00 5280.00 5      | 295.00 5310.00               | 5325.00 53         | 40.00 5355.00 53  | 70.00 5            | 400.00 MHz |
|                   |                |                   |                              |                    |                   |                    |            |
| Frequen<br>(MHz)  | су             | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m)  | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |
| 5286.45           | 50             | 90.38             | 5.40                         | 95.78              | -                 | -                  | AVG        |
| 5351.70           | 00             | 48.10             | 5.56                         | 53.66              | 54.00             | -0.34              | AVG        |
|                   |                |                   |                              |                    |                   |                    |            |

## Band Edge Test Data for UNII-2c

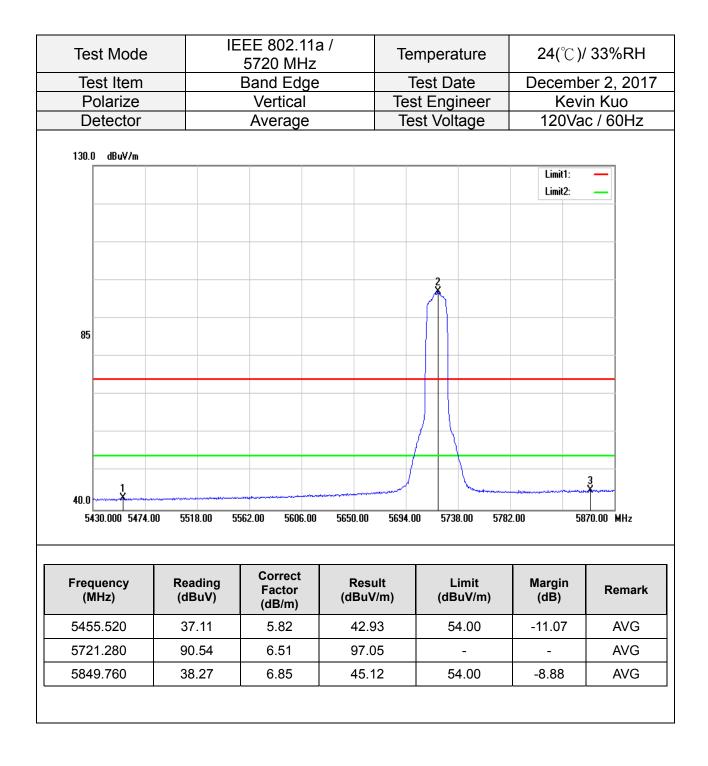


| Tes          | t Mode        | IE                | IEEE 802.11a /<br>5500MHz |               |         | nperature         |   | ′ 33%RH    |
|--------------|---------------|-------------------|---------------------------|---------------|---------|-------------------|---|------------|
|              | st Item       |                   | Band Edge                 | ;             |         | est Date          | December 5, 2017                        |            |
|              | olarize       |                   | Vertical                  |               |         | t Engineer        | Kevin Kuo                               |            |
| De           | etector       |                   | Average                   |               | Tes     | st Voltage        | 120Va                                   | c / 60Hz   |
| 120.0        | dBuV/m        |                   |                           |               |         |                   |   |            |
|              |               |                   |                           |               |         |                   | Limit1:<br>Limit2:                      | _          |
|              |               |                   |                           |               |         |                   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | ~          |
|              |               |                   |                           |               |         |                   |   |            |
| 80           |               |                   |                           |               |         |                   |   |            |
|              |               |                   |                           |               |         |                   |   |            |
|              |               |                   |                           |               |         |                   |   |            |
| -            |               |                   |                           |               |         |                   |   |            |
| 40.0         |               |                   |                           |               |         |                   |   |            |
| L            | 0.000 5438.00 | 5446.00 5         | i454.00 5462.00           | 5470.00       | 5478.00 | ) 5486.00 5494    | 4.00 55                                 | i10.00 MHz |
|              |               |                   | Correct                   |               |         |                   |   |            |
| Frequ<br>(MI |               | Reading<br>(dBuV) | Factor<br>(dB/m)          | Resı<br>(dBuV |         | Limit<br>(dBuV/m) | Margin<br>(dB)                          | Remark     |
| 5470         | 0.000         | 42.10             | 5.85                      | 47.9          | 95      | 54.00             | -6.05                                   | AVG        |
| 5500         | .800          | 98.02             | 5.93                      | 103.9         | 95      | -                 | -                                       | AVG        |
|              |               |                   | •                         |               |         |                   | -                                       |            |



| Test Item     Band Edge     Test Date     December 5,       Polarize     Vertical     Test Engineer     Kevin Kur       Detector     Average     Test Voltage     120Vac / 60                        | o          |
|--|------------|
| Detector     Average     Test Voltage     120Vac / 60       120.0     dBuV/m   |            |
|  | <u>0Hz</u> |
|  |            |
|  |            |
|  |            |
|  |            |
|  |            |
| 40.0 5690.000 5696.00 5702.00 5708.00 5714.00 5720.00 5726.00 5732.00 5738.00 5750.00 M  | MHz        |
|  |            |
| Frequency<br>(MHz)Reading<br>(dBuV)Correct<br>Factor<br>(dB/m)Result<br>(dBuV/m)Limit<br>(dBuV/m)Margin<br>(dBuV/m)Result<br>(dBuV/m)Result<br>(dBuV/m)Limit<br>(dBuV/m)Margin<br>(dB)Result<br>(dB) | emark      |
| 5698.160 99.10 6.46 105.56 A   | AVG        |
| 5725.000 44.19 6.52 50.71 54.00 -3.29 A  | AVG        |

| Test Mod           | e               | IE                          | EE 802.1<br>5720 MH  |               | Ter          | mp/Hum            | 24(°C).                   | / 33%RH             |
|--------------------|-----------------|-----------------------------|--|---------------|--------------|-------------------|---------------------------|---------------------|
| Test Item          | า               |                             | Band Edg   | е             | Те           | est Date          | Decemb                    | er 2, 201           |
| Polarize           |                 |                             | Vertical   |               | Test         | Engineer          |                           | in Kuo              |
| Detector           |                 |                             | Peak   |               | Tes          | t Voltage         | 120Va                     | ic / 60Hz           |
| 130.0 dBu¥/m       |                 |                             |  |               |              |                   |                           |                     |
|                    |                 |                             |  |               |              |                   | Limit1:<br>Limit2:        | _                   |
|                    |                 |                             |  |               |              | 2                 |                           |                     |
|                    |                 |                             |  |               |              | Â.                |                           |                     |
|                    |                 |                             |  |               |              |                   |                           |                     |
| 85                 |                 |                             |  |               |              |                   |                           |                     |
|                    |                 |                             |  |               |              |                   |                           |                     |
| 1                  |                 |                             |  |               | h            |                   | un prominente and a state | and section for the |
| nin frakayan       | enderteenis Abe | periodial descenses whether | udebytere and the second s |               | a Ministra a |                   |                           |                     |
| 40.0               |                 |                             |  |               |              |                   |                           |                     |
| 5430.000 547       | 74.00 5         | 518.00 55                   | i62.00 5606.0  | 00 5650.00    | 5694.00      | 5738.00           | 5782.00 56                | 370.00 MHz          |
| Frequency<br>(MHz) |                 | ading<br>IBuV)              | Correct<br>Factor<br>(dB/m)  | Resi<br>(dBu) |              | Limit<br>(dBuV/m) | Margin<br>(dB)            | Remark              |
| 5442.760           | 5               | 0.58                        | 5.79   | 56.3          | 37           | 74.00             | -17.63                    | peak                |
|                    | 1(              | 00.14                       | 6.52   | 106.          | 66           | -                 | -                         | peak                |
| 5723.040           |                 |                             |  |               | 61           |                   | -15.39                    | 1                   |



| Test Mode               | IEEE 802.11n F<br>5500MHz  |              | Temp/Hur                               | n 24(°  | °C )/ 33%RH   |
|-------------------------|--|--------------|--|---------|---------------|
| Test Item               | Band Edge  | e            | Test Date                              | e Decer | nber 12, 2017 |
| Polarize                | Vertical   |              | Test Engine                            | er K    | evin Kuo      |
| Detector                | Peak   |              | Test Voltag                            | je 120  | Vac / 60Hz    |
| 120.0 dBuV/m            |  |              |  |         |               |
| 80<br>                  | man and the constant of the dealer of the de |              | MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM |         |               |
| 40.0<br>5430.000 5438.0 | 0 5446.00 5454.00 546  | 2.00 5470.00 | 5478.00 5486.00                        | 5494.00 | 5510.00 MHz   |
| _                       | – Correct  |              |  |         |               |
| Frequency<br>(MHz)      | Reading<br>(dBuV)<br>(dB/m)  |              |  |         | n Remark      |
| 5469.840                | 65.91 5.85   | 71.7         | 6 74.0                                 | 0 -2.24 | peak          |
| 5500.640                | 110.14 5.93  | 116.0        |  | -       | peak          |
|                         |  |              |  |         |               |

| Test Mode              |                   | 02.11n HT2<br>500MHz | 20 /          | Ten     | nperature         | <b>24(</b> °C)/   | ′ 33%RH   |
|------------------------|-------------------|----------------------|---------------|---------|-------------------|-------------------|-----------|
| Test Item              |                   | and Edge             |               | Te      | est Date          | December 12, 2017 |           |
| Polarize               |                   | Vertical             |               | Test    | Engineer          | Kevin Kuo         |           |
| Detector               |                   | Average              |               |         | st Voltage        | 120Va             | c / 60Hz  |
| 120.0 dBu¥/m           |                   |                      |               |         |                   | Limit1:           | _         |
| 80                     |                   |                      |               |         |                   |                   |           |
| 40.0<br>5430.000 5438. | 0 5446.00 54      | 454.00 5462.00       | 5470.00       | 5478.00 | 5486.00 5494      | 4.00 55           | 10.00 MHz |
|                        |                   | Correct              |               |         |                   |                   |           |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Factor<br>(dB/m)     | Resı<br>(dBuV |         | Limit<br>(dBuV/m) | Margin<br>(dB)    | Remark    |
| 5470.000               | 46.24             | 5.85                 | 52.0          | 9       | 54.00             | -1.91             | AVG       |
| 5498.720               | 100.40            | 5.93                 | 106.3         | 33      | -                 | -                 | AVG       |
|                        |                   |                      |               |         |                   |                   |           |

| Test Mode             |                   | 2.11n HT2<br>00 MHz         | 0 /             | Te     | emp/Hum                        | <b>24(</b> ℃)                 | / 33%RH     |
|-----------------------|-------------------|-----------------------------|-----------------|--------|--------------------------------|-------------------------------|-------------|
| Test Item             | Bar               | nd Edge                     |                 | Т      | est Date                       | Decemb                        | er 12, 2017 |
| Polarize              | V                 | ertical                     |                 |        | t Engineer                     |                               | vin Kuo     |
| Detector              |                   | Peak                        |                 | Te     | st Voltage                     | 120Va                         | ac / 60Hz   |
| 120.0 dBu∀/m          | 1                 |                             |                 |        |                                |                               |             |
| 80                    |                   |                             | rayuk mayakanga |        |                                |                               |             |
|                       |                   |                             |                 |        | holes we level and a start and | two with more and a second of | n-Multuder  |
| 40.0<br>5690.000 5696 | .00 5702.00 570   | 08.00 5714.00               | 5720.00         | 5726.0 | 0 5732.00 5                    | 5738.00 5                     | 750.00 MHz  |
| Frequency<br>(MHz)    | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV   |        | Limit<br>(dBuV/m)              | Margin<br>(dB)                | Remark      |
| 5698.220              | 108.07            | 6.46                        | 114.            | 53     | -                              | -                             | peak        |
| 5725.000              | 65.48             | 6.52                        | 72.0            | 0      | 74.00                          | -2.00                         | peak        |
|                       | • • •             |                             | 1               |        |                                |                               |             |

| Test Mode          |                   | 2.11n HT20<br>00 MHz        | )/            | Ter     | mperature         | <b>24(</b> °∁)/    | / 33%RH     |
|--------------------|-------------------|-----------------------------|---------------|---------|-------------------|--------------------|-------------|
| Test Item          | Bar               | nd Edge                     |               | T       | est Date          | Decembe            | er 12, 2017 |
| Polarize           | V                 | ertical                     |               | Tes     | t Engineer        | Kev                | in Kuo      |
| Detector           | Av                | verage                      |               | Tes     | st Voltage        | 120Va              | c / 60Hz    |
| 120.0 dBu¥/m       |                   |                             |               |         |                   |                    |             |
| 80                 |                   |                             |               |         |                   | Limit1:<br>Limit2: |             |
|                    |                   |                             |               | 2       |                   |                    |             |
|                    |                   |                             |               |         |                   |                    |             |
| 40.0               |                   |                             |               |         |                   |                    |             |
| 5690.000 5696      | .00 5702.00 57    | 708.00 5714.00              | 5720.00       | 5726.00 | 0 5732.00 573     | 38.00 57           | '50.00 MHz  |
|                    |                   |                             |               |         |                   |                    |             |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |         | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark      |
| 5701.280           | 97.77             | 6.45                        | 104.2         | 22      | -                 | -                  | AVG         |
| 5725.000           | 46.24             | 6.52                        | 52.7          | '6      | 54.00             | -1.24              | AVG         |
|                    | -                 |                             | -             |         |                   |                    |             |

| Test Mode          |  | 2.11n HT2(<br>20 MHz        | )/                    | Temp    | /Hum             | 24(℃)/ 33%RH       |            |
|--------------------|--|-----------------------------|-----------------------|---------|------------------|--------------------|------------|
| Test Item          | Ba   | nd Edge                     |                       | Test    | Date             | December 12, 201   |            |
| Polarize           | \  | /ertical                    |                       | Test Er | ngineer          | Kevin Kuo          |            |
| Detector           |  | Peak                        |                       | Test V  | oltage           | 120Va              | c / 60Hz   |
| 130.0 dBuV/m       |  |                             |                       |         |                  |                    |            |
|                    |  |                             |                       |         |                  | Limit1:<br>Limit2: | _          |
|                    |  |                             |                       | 2       |                  |                    |            |
| 85                 |  |                             |                       |         |                  |                    |            |
| 1<br>******        | palyaliyanguyadaaqalaaqadaaqadaaqadaaqadaaqadaaqadaa |                             | adamon malarabal with |         | Manganan         | urount-many and    | pApiNeur   |
| 40.0               |  |                             |                       |         |                  |                    |            |
| 5430.000 5470      | 6.00 5522.00 55                                      | i68.00 561 <b>4</b> .00     | 5660.00               | 5706.00 | 5752.00 579      | 8.00 58            | 390.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV)                                    | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/n     |         | Limit<br>dBuV/m) | Margin<br>(dB)     | Remark     |
| 5454.840           | 49.82  | 5.81                        | 55.63                 |         | 74.00            | -18.37             | peak       |
| 5720.720           | 109.39   | 6.50                        | 115.89                | )       | -                | -                  | peak       |
| 5845.380           | 50.88  | 6.83                        | 57.71                 |         | 74.00            | -16.29             | peak       |
|                    |  |                             |                       |         |                  |                    |            |

| Test Mode          |                   | 2.11n HT20<br>20 MHz        | ) / Te             | mperature         | <b>24(</b> °∁)/    | 33%RH     |  |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|--------------------|-----------|--|
| Test Item          | Bai               | nd Edge                     |                    | Fest Date         | December 12, 20    |           |  |
| Polarize           | V                 | 'ertical                    |                    | st Engineer       |                    | n Kuo     |  |
| Detector           | A                 | verage                      | Те                 | est Voltage       | 120Va              | c / 60Hz  |  |
| 130.0 dBuV/m       |                   |                             |                    |                   | 1:-31.             |           |  |
|                    |                   |                             |                    |                   | Limit1:<br>Limit2: | _         |  |
|                    |                   |                             |                    |                   |                    |           |  |
|                    |                   |                             |                    | 1                 |                    |           |  |
|                    |                   |                             |                    |                   |                    |           |  |
| 85                 |                   |                             |                    |                   |                    |           |  |
|                    |                   |                             |                    |                   |                    |           |  |
|                    |                   |                             |                    |                   |                    |           |  |
|                    |                   |                             |                    |                   | 2                  |           |  |
| 40.0 <b>1</b>      |                   |                             |                    |                   | 3                  | *******   |  |
| 5430.000 547       | 6.00 5522.00 5    | 568.00 5614.00              | 5660.00 5706.0     | 00 5752.00 579    | 8.00 58            | 90.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark    |  |
| 5468.640           | 37.43             | 5.85                        | 43.28              | 54.00             | -10.72             | AVG       |  |
| 5721.180           | 99.68             | 6.51                        | 106.19             | -                 | -                  | AVG       |  |
| 5828.360           | 39.29             | 6.79                        | 46.08              | 54.00             | -7.92              | AVG       |  |

|                 |              |                     |             | 44           | 1174    | 0 / |           |       |              |                     |         |                   |         |                   |
|-----------------|--------------|---------------------|-------------|--------------|---------|-----|-----------|-------|--------------|---------------------|---------|-------------------|---------|-------------------|
| Test N          | /lode        | IEE                 | E 802       | .11n<br>0 MF |         | U / |           | Te    | emp/F        | lum                 |         | <b>24(</b> °C)    | / 33%   | 6RH               |
| Test I          | Item         |                     | Band        |              |         |     |           | Т     | est D        | ate                 | De      | ecemb             | er 12   | , 20 <sup>-</sup> |
| Pola            |              |                     | Ve          | rtica        |         |     |           |       | st Eng       |                     |         | Kev               | in Kι   | 10                |
| Dete            | ctor         |                     | Р           | eak          |         |     |           | Те    | st Vol       | tage                |         | 120Va             | ac / 6  | 0Hz               |
| 120.0           | 0 dBuV/m     |                     |             |              |         |     |           |       |              |                     |         |                   |         |                   |
| 120.0           |              |                     |             |              |         |     |           |       |              |                     |         | Limit1:           | _       | 1                 |
|                 |              |                     |             |              |         |     |           |       |              |                     |         | Limit2:           | _       |                   |
|                 |              |                     |             |              |         |     |           |       |              | A Reasonable Street | 2<br>   | ANAK I I I        |         | ĺ                 |
|                 |              |                     |             |              |         |     |           |       | ( almost and | - Contract          | Y       | " modern back the | many    |                   |
|                 |              |                     |             |              |         |     |           |       | [            |                     |         |                   | 1       | 1                 |
|                 |              |                     |             |              |         |     |           |       |              |                     |         |                   |         |                   |
|                 |              |                     |             |              |         |     |           |       |              |                     |         |                   |         | Í                 |
| 80              |              |                     |             |              |         |     |           |       |              |                     |         |                   |         |                   |
| 00              |              |                     |             | -            |         |     |           |       |              |                     |         |                   |         | ĺ                 |
|                 |              |                     |             | ,            | مەر بار | ~~~ | Millyhand | W.    |              |                     |         |                   |         |                   |
|                 |              |                     |             | L.UM         | ANDREAM | ,   |           |       |              |                     |         |                   |         | 1                 |
|                 |              | ulminesty hered the | . at        | MM           |         |     |           |       |              |                     |         |                   |         |                   |
|                 | monthematic  | Justine marked      | when differ |              |         |     |           |       |              |                     |         |                   |         | 1                 |
|                 | ¥            |                     |             |              |         |     |           |       |              |                     |         |                   |         |                   |
|                 |              |                     |             |              |         |     |           |       |              |                     |         |                   |         |                   |
| 40.0            |              |                     |             |              |         |     |           |       |              |                     |         |                   |         |                   |
| 1 <sup>54</sup> | 430.000 5440 | ).00 5450.0         | 0 5460      | ).00         | 5470.00 | 548 | 0.00      | 5490. | 00 55        | 00.00 5             | 5510.00 | į                 | 5530.00 | MHz               |
|                 |              |                     |             |              |         |     |           |       |              |                     |         |                   |         |                   |
| Erog            | uency        | Readii              |             | Corr         | ect     |     | lesult    |       |              | _imit               |         | largin            |         |                   |
|                 | Hz)          | (dBu\               |             | Fact<br>(dB/ |         |     | BuV/n     |       |              | BuV/m)              |         | (dB)              | Re      | emark             |
| 5466            | 6.200        | 67.8                | 5           | . 5.8        | -       | 7   | 3.70      |       | 7            | 4.00                |         | -0.30             | F       | beak              |
|                 | 9.200        | 101.7               | 6           | 5.9          | 5       | 1   | 07.71     |       |              | _                   |         | _                 | r       | beak              |

| Test Mode            |                   | 2.11n HT4(<br>10 MHz        | )/            | Ter     | nperature         | <b>24(</b> °C).    | / 33%RH     |
|----------------------|-------------------|-----------------------------|---------------|---------|-------------------|--------------------|-------------|
| Test Item            |                   | nd Edge                     |               |         | est Date          |                    | er 12, 2017 |
| Polarize             | V                 | ertical                     |               |         | t Engineer        |                    | in Kuo      |
| Detector             | Av                | /erage                      |               | Tes     | st Voltage        | 120Va              | c / 60Hz    |
| 120.0 dBu∀/m         |                   |                             |               |         |                   |                    |             |
| 80                   |                   |                             |               |         | 2                 | Limit1:<br>Limit2: |             |
|                      |                   |                             |               |         |                   |                    |             |
| 40.0<br>5430.000 544 | 0.00 5450.00 54   | 60.00 5470.00               | 5480.00       | 5490.00 | D 5500.00 55      | 10.00 55           | 530.00 MHz  |
| Frequency<br>(MHz)   | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV |         | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark      |
| 5470.000             | 48.02             | 5.85                        | 53.8          | 7       | 54.00             | -0.13              | AVG         |
| 5508.200             | 91.73             | 5.96                        | 97.6          | 9       | -                 | -                  | AVG         |
|                      |                   |                             |               |         |                   |                    |             |

| Test Mode               |                   | 02.11n HT40<br>670 MHz      | )/                 | Temp/      | Hum             | <b>24(</b> ℃)/                        | 33%RH       |
|-------------------------|-------------------|-----------------------------|--------------------|------------|-----------------|---------------------------------------|-------------|
| Test Item               | Ba                | and Edge                    |                    | Test D     | Date            | Decembe                               | er 12, 2017 |
| Polarize                | ١                 | Vertical                    |                    | Test Eng   | gineer          | Kevi                                  | n Kuo       |
| Detector                |                   | Peak                        |                    | Test Vo    | ltage           | 120Va                                 | c / 60Hz    |
| 120.0 dBu¥/m            |                   |                             |                    |            |                 |                                       |             |
| 80                      |                   |                             | manda and a second |            |                 | Limit1:<br>Limit2:                    |             |
| 40.0                    |                   |                             |                    |            | "Tent tent      | anti <mark>belan</mark> anan menangan | uddiwdhy    |
| 40.0<br>5650.000 5660.1 | 00 5670.00 56     | 680.00 5690.00              | 5700.00            | 5710.00 57 | 720.00 573      | 0.00 57                               | 50.00 MHz   |
| Frequency<br>(MHz)      | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resul<br>(dBuV/ı   |            | Limit<br>BuV/m) | Margin<br>(dB)                        | Remark      |
| 5675.000                | 105.42            | 6.39                        | 111.8 <sup>-</sup> | 1          | _               | -                                     | peak        |
|                         | 55.69             | 6.52                        | 62.21              | 1          | 74.00           | -11.79                                | peak        |

| Test Mode          |                   | )2.11n HT4<br>570 MHz       | 0 /           | Tei        | mperatur   | е    | <b>24(</b> °C)/    | 33%RH       |
|--------------------|-------------------|-----------------------------|---------------|------------|--|------|--------------------|-------------|
| Test Item          | Ba                | nd Edge                     |               |            | est Date   |      |                    | er 12, 2017 |
| Polarize           | \                 | /ertical                    |               |            | t Engine   |      |                    | n Kuo       |
| Detector           | A                 | verage                      |               | Te         | st Voltage   | e    | 120Va              | c / 60Hz    |
| 120.0 dBu¥/m       |                   |                             |               |            |  |      |                    |             |
|                    |                   |                             |               |            |  |      | Limit1:<br>Limit2: | _           |
|                    | 1                 |                             |               |            |  |      |                    |             |
| (man               | V                 | - Martine                   |               |            |  |      |                    |             |
|                    |                   |                             |               |            |  |      |                    |             |
| 80                 |                   |                             |               |            |  |      |                    |             |
|                    |                   | - June                      | manum         | horan      |  |      |                    |             |
|                    |                   |                             |               | - And Mark | ~~~~   |      |                    |             |
| 40.0               |                   |                             |               |            | - The second sec | 2    | www.weeken         |             |
| 5650.000 5660      | .00 5670.00 56    | 80.00 5690.00               | 5700.00       | 5710.0     | 0 5720.00  | 5730 | ).00 57            | 50.00 MHz   |
|                    |                   |                             |               |            |  |      |                    |             |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |            | Limit<br>(dBuV/i   |      | Margin<br>(dB)     | Remark      |
| 5674.600           | 94.70             | 6.39                        | 101.0         | 09         | -  |      | -                  | AVG         |
| 5725.000           | 41.31             | 6.52                        | 47.8          | 3          | 54.00  | )    | -6.17              | AVG         |
|                    |                   |                             |               |            |  |      |                    |             |

|                  | FCC ID: PI               | PQ-WCBN | 3507R               | ISED NO:            | : 4491A-V     | VCBN3507 | R          | Report No.:                               | T171129W02-                           |
|------------------|--------------------------|---------|---------------------|---------------------|---------------|----------|------------|---|---------------------------------------|
| Test Mode        |                          |         | 02.11n HT<br>10 MHz | 40 /                | Te            | emp/Hu   | m          | 24(℃)/ 33%RH                              |                                       |
| Test Item        |                          | Ba      | nd Edge             |                     | T             | est Dat  | е          | Decemb                                    | er 12, 201                            |
| Polarize         |                          |         | /ertical            |                     | Test Engineer |          |            |   | in Kuo                                |
| Detector         |                          |         | Peak                |                     | Те            | st Volta | ge         | 120Va                                     | ic / 60Hz                             |
| 130.0 dBuV       | /m                       |         |                     |                     |               |          |            |   |                                       |
|                  |                          |         |                     |                     |               |          |            | Limit1:<br>Limit2:                        |                                       |
|                  |                          |         |                     |                     |               |          |            |   |                                       |
|                  |                          |         |                     |                     | لمرا          | 2        |            |   |                                       |
|                  |                          |         |                     |                     | ſ             |          |            |   |                                       |
|                  |                          |         |                     |                     |               |          |            |   |                                       |
|                  |                          |         |                     |                     |               |          |            |   |                                       |
| 85               |                          |         |                     |                     |               |          |            |   |                                       |
|                  |                          |         |                     |                     | M             | - M      | 4          |   |                                       |
|                  |                          |         |                     |                     |               | 1        | <u>الا</u> |   |                                       |
|                  |                          |         |                     | /                   |               |          | Ŋ          |   |                                       |
| 1                |                          |         |                     | in a company of the |               |          | - human    | encantrativantaritaritari                 | S S S S S S S S S S S S S S S S S S S |
| To Manager 19    | when the transition with |         | number              | WWWWWWWW            |               |          | ( - 4)     | a devolution a constraint datafata a cons |                                       |
|                  |                          |         |                     |                     |               |          |            |   |                                       |
| 40.0<br>5430.000 | 5474.00 551              | 8.00 55 | 562.00 5606.0       | )0 5650.00          | 5694.0        | 0 5738.0 | 0 5782     | 2.00 5/                                   | B70.00 MHz                            |
|                  |                          |         |                     |                     |               |          |            |   |                                       |
| Frequency        | Rea                      | ading   | Correct             | Res                 | ult           | Lin      | nit        | Margin                                    | Bomark                                |
| (MHz)            |                          | BuV)    | Factor<br>(dB/m)    | (dBu)               | //m)          | (dBu     | V/m)       | (dB)                                      | Remark                                |
| 5434.400         | 49                       | 9.48    | 5.56                | 55.                 | 04            | 74.      | 00         | -18.96                                    | peak                                  |
| 5707.640         | 10                       | 4.03    | 6.13                | 110.                | 16            | -        |            | -   | peak                                  |
| 5870.000         | 51                       | .02     | 6.83                | 57.                 | 85            | 74.      | 00         | -16.15                                    | peak                                  |

| Test Mode          |                   | )2.11n HT4<br>10 MHz   | 0 /                              | Ter     | nperature         |                    | 33%RH     |
|--------------------|-------------------|--|----------------------------------|---------|-------------------|--------------------|-----------|
| Test Item          |                   | nd Edge  |                                  | Te      | est Date          | December 12, 201   |           |
| Polarize           | <u>۱</u>          | /ertical   |                                  |         | t Engineer        |                    | n Kuo     |
| Detector           | A                 | verage   |                                  | Tes     | st Voltage        | 120Va              | c / 60Hz  |
| 130.0 dBuV/m       |                   |  |                                  |         |                   |                    |           |
|                    |                   |  |                                  |         |                   | Limit1:<br>Limit2: | _         |
|                    |                   |  |                                  |         |                   |                    |           |
|                    |                   |  |                                  | m       | 2                 |                    |           |
| 85                 |                   |  |                                  |         |                   |                    |           |
|                    |                   |  |                                  |         |                   |                    |           |
|                    |                   |  |                                  | M       |                   |                    |           |
|                    |                   |  | /                                |         |                   | 2                  |           |
| 40.0 <b>1</b>      |                   | manana and and a second and a | and a survey of the second start |         | here              |                    |           |
| 5430.000 5474      | l.00 5518.00 55   | 62.00 5606.00  | 5650.00                          | 5694.00 | ) 5738.00 578.    | 2.00 58            | 70.00 MHz |
|                    |                   | Correct  |                                  |         |                   |                    |           |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m)   | Resu<br>(dBuV                    |         | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark    |
| 5444.080           | 37.70             | 5.51   | 43.2                             | :1      | 54.00             | -10.79             | AVG       |
| 5708.520           | 94.24             | 6.14   | 100.3                            | 38      | -                 | -                  | AVG       |
| 5827.760           | 39.11             | 6.65   | 45.7                             | 6       | 54.00             | -8.24              | AVG       |
|                    |                   |  |                                  |         |                   |                    |           |

| Test Mode          |                      |  | 80 /          | Ten                   | np/Hum            | <b>24(°</b> ℃)/ | 33%RH      |
|--------------------|----------------------|--|---------------|-----------------------|-------------------|-----------------|------------|
| Test Item          | В                    | 1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         1       1         5458.00       5472.00         5458.00       5472.00         5458.00       5500.0         Station       5500.0         Reading<br>(dBuV)       Correct<br>Factor<br>(dB/m)         67.17       5.85 |               |                       | st Date           |                 | er 12, 201 |
| Polarize           |                      | 5530 MHz<br>Band Edge<br>Vertical<br>Peak  |               |                       | Engineer          |                 | n Kuo      |
| Detector           |                      | Peak   |               | Test                  | Voltage           | 120Va           | c / 60Hz   |
| 120.0 dBuV         | 'm                   |  |               |                       |                   | Limit1:         | _          |
|                    |                      |  |               |                       |                   | Limit2:         | _          |
|                    |                      |  | when how and  | and the second second | manny was         | Mussonemanne    | -MAL       |
|                    |                      |  |               |                       |                   |                 |            |
| 80                 |                      |  |               |                       |                   |                 |            |
|                    |                      | 1<br>1<br>1<br>1<br>1  |               |                       |                   |                 |            |
| Appendix           | August Market Market | 6(N/ *11 * * *   |               |                       |                   |                 |            |
| 40.0               |                      |  |               |                       |                   |                 |            |
| 1 5430.000         | i444.00 5458.00      | 5472.00 5486.00  | 5500.00       | 5514.00               | 5528.00 554       | 12.00 5         | 570.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV)    | Factor   | Resu<br>(dBuV |                       | Limit<br>(dBuV/m) | Margin<br>(dB)  | Remark     |
| 5469.340           | 67.17                | 5.85   | 73.0          | 2                     | 74.00             | -0.98           | peak       |
| 5523.380           | 96.91                | 6.00   | 102.9         | 91                    | -                 | -               | peak       |
|                    |                      |  |               |                       |                   |                 |            |

| Test Mode             |   | 2.11ac VHT<br>30 MHz | 80 /          | Ter     | nperature                              | <b>24(</b> °ℂ)/    | ′ 33%RH     |
|-----------------------|---|----------------------|---------------|---------|--|--------------------|-------------|
| Test Item             | Ba                                      | nd Edge              |               |         | est Date                               |                    | er 12, 2017 |
| Polarize              | ١                                       | /ertical             |               |         | t Engineer                             | Kevin Kuo          |             |
| Detector              | A                                       | verage               |               | Tes     | st Voltage                             | 120Va              | c / 60Hz    |
| 120.0 dBuV/m          |   |                      |               |         |  |                    |             |
|                       |   |                      |               |         |  | Limit1:<br>Limit2: | _           |
|                       |   |                      |               |         |  |                    |             |
|                       |   |                      |               |         | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | Watterson and      |             |
| 80                    |   |                      |               |         | V                                      |                    |             |
|                       |   |                      |               |         |  |                    |             |
|                       |   |                      |               |         |  |                    |             |
|                       | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | $\sim$               |               |         |  |                    |             |
| and the second        |   |                      |               |         |  |                    |             |
| 40.0<br>5430.000 5444 | .00 5458.00 54                          | 72.00 5486.00        | 5500.00       | 5514.00 | ) 5528.00 554                          | 12.00 55           | 70.00 MHz   |
|                       |   | Correct              |               |         |  |                    |             |
| Frequency<br>(MHz)    | Reading<br>(dBuV)                       | Factor<br>(dB/m)     | Resı<br>(dBuV |         | Limit<br>(dBuV/m)                      | Margin<br>(dB)     | Remark      |
| 5468.080              | 47.47                                   | 5.85                 | 53.3          | 2       | 54.00                                  | -0.68              | AVG         |
| 5527.160              | 86.20                                   | 5.99                 | 92.1          | 9       | -                                      | -                  | AVG         |
|                       |   |                      |               |         |  |                    |             |

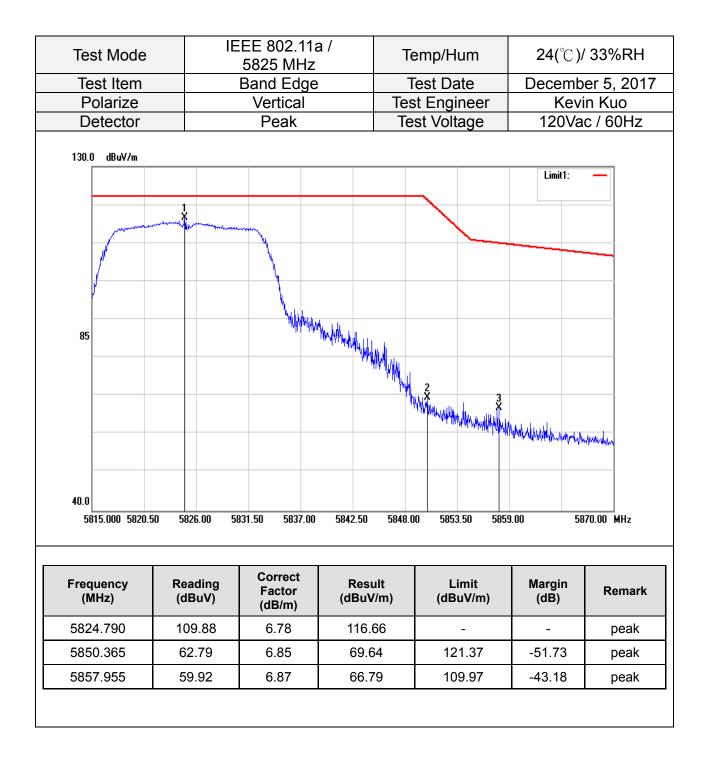
| Test Mode                 |                          |  | 80 / т             | ēmp/Hum                                | <b>24(</b> °C)/    | ′ 33%RH            |
|---------------------------|--------------------------|--|--------------------|--|--------------------|--------------------|
| Test Item                 | Ba                       | nd Edge  | -                  | Test Date                              | Decembe            | er 12, 2017        |
| Polarize                  | ١                        | 5522.00 5568.00 5614.00 5660.00<br>Correct<br>Factor<br>(dBuV)<br>50.71 5.82 56. |                    | st Engineer                            | Kevi               | in Kuo             |
| Detector                  |                          | Peak   | Te                 | est Voltage                            | 120Va              | c / 60Hz           |
| 130.0 dBu∀/m              |                          |  |                    |  |                    |                    |
|                           |                          |  |                    |  | Limit1:<br>Limit2: | _                  |
|                           |                          |  | 2<br>marine        | mary                                   |                    |                    |
| 85                        |                          |  |                    |  |                    |                    |
|                           |                          |  | W <sup>M</sup>     | Wi Mi                                  |                    |                    |
| and and the second second | ngelathar and the second | M  |                    | WWW WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW | hur and an         | and a start of the |
| 40.0                      |                          |  |                    |  |                    |                    |
| 5430.000 5476.            | 00 5522.00 55            | 68.00 5614.00  | 5660.00 5706.      | .00 5752.00 5798                       | 3.00 58            | 90.00 MHz          |
| Frequency<br>(MHz)        | Reading<br>(dBuV)        | Factor   | Result<br>(dBuV/m) | Limit<br>(dBuV/m)                      | Margin<br>(dB)     | Remark             |
| 5456.680                  | 50.71                    | 5.82   | 56.53              | 74.00                                  | -17.47             | peak               |
| 5694.500                  | 102.23                   | 6.44   | 108.67             | -                                      | -                  | peak               |
|                           | 1                        |  |                    | 74.00                                  | -15.31             |                    |

| Test Mode          |                   |                             | 80 /              | Ter    | mperature                                | <b>24(</b> °C )∕   | ′ 33%RH     |
|--------------------|-------------------|-----------------------------|-------------------|--------|--|--------------------|-------------|
| Test Item          |                   |                             |                   |        | est Date                                 |                    | er 12, 2017 |
| Polarize           |                   | ng Correct Po               |                   |        | t Engineer                               |                    | in Kuo      |
| Detector           | A                 | verage                      |                   | Tes    | st Voltage                               | 120Va              | c / 60Hz    |
| 130.0 dBuV/m       |                   |                             |                   |        |  |                    |             |
|                    |                   |                             |                   |        |  | Limit1:<br>Limit2: | _           |
|                    |                   |                             |                   | 2      |  |                    |             |
| 85                 |                   |                             |                   |        |  |                    |             |
|                    |                   |                             | www               |        | la l |                    |             |
| 40.0               |                   | nAnt                        |                   |        | My                                       | M                  | 3           |
| 5430.000 5476      | .00 5522.00 55    | i68.00 561 <b>4</b> .00     | 5660.00           | 5706.0 | 0 5752.00 5                              | 798.00 58          | 190.00 MHz  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV/    |        | Limit<br>(dBuV/m)                        | Margin<br>(dB)     | Remark      |
| 5450.240           | 38.44             | 5.81                        | 44.2              | 5      | 54.00                                    | -9.75              | AVG         |
| 5688.520           | 91.79             | 6.43                        | 98.22             | 2      | -  | -                  | AVG         |
|                    | 1                 | 6.94                        | 46.3 <sup>-</sup> |        | 54.00                                    | -7.69              | AVG         |

## Band Edge Test Data for UNII-3

| Test Mode            | IE                              | EEE 802.11a<br>5745 MHz                      | a /               | Ter           | mp/Hum            | <b>24(°</b> ℃)/ | ′ 33%RH    |
|----------------------|---------------------------------|--|-------------------|---------------|-------------------|-----------------|------------|
| Test Item            |                                 | Band Edge                                    |                   | Те            | st Date           | Decemb          | er 5, 201  |
| Polarize             |                                 | Vertical                                     |                   |               | Engineer          |                 | in Kuo     |
| Detector             |                                 | Peak   |                   |               | t Voltage         | 120Va           | c / 60Hz   |
| 130.0 dBuV/m         |                                 |  |                   |               |                   |                 |            |
|                      |                                 |  |                   | $\rightarrow$ |                   | Limit1:         |            |
|                      |                                 |  |                   |               | Janstein          | - mar markens   | Wm.        |
|                      |                                 |  |                   |               |                   |                 |            |
|                      |                                 |  |                   |               | 4                 |                 |            |
| 85                   |                                 |  | 2                 | 2. UNIVAN     | 1 Mar Mar Mark    |                 |            |
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| 40.0                 |                                 |  |                   |               |                   |                 |            |
| 5685.000 5692.0      |                                 | i706.00 5713.00                              | 5720.00           | 5727.00       | 5734.00 5741      | .00 57          | '55.00 MHz |
|                      |                                 | Correct                                      |                   |               |                   |                 |            |
| Frequency<br>(MHz)   | Reading<br>(dBuV)               | Factor<br>(dB/m)                             | Result<br>(dBuV/n |               | Limit<br>(dBuV/m) | Margin<br>(dB)  | Remark     |
|                      | 69.63                           | 6.50   | 76.13             | 5             | 110.64            | -34.51          | peak       |
| 5719.440             |                                 |  |                   | . I           | 110.00            | 05.00           | I .        |
| 5719.440<br>5723.990 | 78.15                           | 6.52   | 84.67             | ,<br>         | 119.90            | -35.23          | peak       |

| Test Mode       | IE          | EE 802.11a<br>5745 MHz |         | Temp    | /Hum        | 24(℃)/ 33%RH |            |
|-----------------|-------------|------------------------|---------|---------|-------------|--------------|------------|
| Test Item       |             | Band Edge              | •       | Test    | Date        | Decemb       | er 5, 2017 |
| Polarize        |             | Vertical               |         | Test Er | gineer      |              | n Kuo      |
| Detector        |             | Average                |         | Test V  | oltage      | 120Va        | c / 60Hz   |
| 130.0 dBuV/m    |             |                        |         |         |             |              |            |
|                 |             |                        |         |         |             | Limit1:      | —          |
|                 |             |                        | /       |         |             |              |            |
|                 |             |                        |         |         |             | 3            |            |
|                 |             |                        |         |         |             |              |            |
| 85              |             |                        |         |         |             |              |            |
|                 |             |                        |         |         |             |              |            |
|                 |             |                        |         | 2       |             |              |            |
|                 |             |                        |         | × ·     |             |              |            |
|                 |             |                        |         |         |             |              |            |
| 40.0            |             |                        |         |         |             |              |            |
| 5685.000 5692.0 | 0 5699.00 5 | 706.00 5713.00         | 5720.00 | 5727.00 | i734.00 574 | 1.00 57      | 55.00 MHz  |
| Frequency       | Reading     | Correct<br>Factor      | Resul   | t       | Limit       | Margin       | Remark     |
| (MHz)           | (dBuV)      | (dB/m)                 | (dBuV/ı | m) (    | dBuV/m)     | (dB)         | Kemark     |
| 5719.860        | 48.21       | 6.50                   | 54.71   |         | 110.76      | -56.05       | AVG        |
| 5724.760        | 58.42       | 6.52                   | 64.94   | ŀ       | 121.65      | -56.71       | AVG        |
| 5743.310        | 98.04       | 6.57                   | 104.6   |         |             | -            | AVG        |



| Test Mode          | IE                | EE 802.11a<br>5825 MHz      | а/ Т   | ēmp/Hum           | 24(°C)/ 33%R⊦  |            |
|--------------------|-------------------|-----------------------------|--|-------------------|----------------|------------|
| Test Item          |                   | Band Edge                   | -  | Test Date         | Decemb         | er 5, 2017 |
| Polarize           |                   | Vertical                    | Те   | st Engineer       |                | n Kuo      |
| Detector           |                   | Average                     | Te   | est Voltage       | 120Va          | c / 60Hz   |
| 130.0 dBuV/m       |                   |                             | 1  |                   | 1              |            |
|                    |                   |                             |  | <u> </u>          | Limit1:        |            |
|                    |                   |                             |  |                   |                |            |
|                    |                   | ~~~                         |  |                   |                |            |
|                    |                   |                             |  |                   |                |            |
| 85                 |                   |                             |  |                   |                |            |
| 1                  |                   |                             |  |                   |                |            |
|                    |                   |                             | man and a second se |                   |                |            |
|                    |                   |                             |  | 3                 |                |            |
|                    |                   |                             |  | 3                 |                | ~~~~~      |
| 40.0               |                   |                             |  |                   |                |            |
| 5815.000 5820.50   | 0 5826.00 58      | 831.50 5837.00              | 5842.50 5848.  | 00 5853.50 585    | 9.00 58        | 70.00 MHz  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark     |
| 5823.965           | 99.37             | 6.78                        | 106.15   | -                 | -              | AVG        |
| 5850.035           | 46.63             | 6.85                        | 53.48  | 122.12            | -68.64         | AVG        |
|                    | 43.25             | 6.86                        | 50.11  | 111.08            | -60.97         | AVG        |

| Test Mode               | IEEE 802.11n HT20 /<br>5745 MHz |                             |   | Temp/Hum   |                   | 24(°C)/ 33%RH    |            |
|-------------------------|---------------------------------|-----------------------------|---|--|-------------------|------------------|------------|
| Test Item               | Ba                              | and Edge                    |   | Te   | est Date          | Decembe          | er 12, 201 |
| Polarize                |                                 | Vertical                    |   | Tes  | t Engineer        |                  | in Kuo     |
| Detector                |                                 | Peak                        |   | Tes  | st Voltage        | 120Va            | c / 60Hz   |
| 130.0 dBuV/m            |                                 |                             |   |  |                   | Limit1:          |            |
|                         |                                 |                             |   |  | A. Hallan         | numerikan terret |            |
| 85                      | uywinithtur haalmaan haadhuun   | www.wheelellellellelle      | *<br>//////////////////////////////////// | 1000 - 10000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1 |                   |                  |            |
| 40.0<br>5685.000 5692.0 |                                 | 706.00 5713.00              | 5720.00                                   | 5727.00  |                   | 1.00 57          | 55.00 MHz  |
| Frequency<br>(MHz)      | Reading<br>(dBuV)               | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV                             |  | Limit<br>(dBuV/m) | Margin<br>(dB)   | Remark     |
| 5718.250                | 74.86                           | 6.50                        | 81.3                                      | 6  | 110.31            | -28.95           | peak       |
| 57 10.250               | 92.65                           | 6.52                        | 90.1                                      | 7  | 120.85            | -30.68           | peak       |
| 5718.230                | 83.65                           | 0.01                        |   |  |                   |                  |            |
|                         | 109.32                          | 6.58                        | 115.9                                     | 90   | -                 | -                | peak       |

| Test Mode          |                   | 02.11n HT2<br>745 MHz   | 20 /          | Te     | emp/Hum          |        | <b>24(</b> °C) | / 33%RH     |
|--------------------|-------------------|-------------------------|---------------|--------|------------------|--------|----------------|-------------|
| Test Item          | Ba                | and Edge                |               | Т      | est Date         |        | Decemb         | er 12, 2017 |
| Polarize           |                   | Vertical                |               | Tes    | t Enginee        |        |                | /in Kuo     |
| Detector           | l A               | Average                 |               | Te     | st Voltage       | ;      | 120Va          | ac / 60Hz   |
| 130.0 dBu¥/m       |                   |                         |               |        |                  |        |                |             |
|                    |                   |                         |               | _      |                  |        | Limit1:        | _           |
|                    |                   |                         |               |        |                  |        |                |             |
|                    |                   |                         |               |        |                  |        |                |             |
|                    |                   |                         |               |        |                  |        |                |             |
| 85                 |                   |                         |               |        |                  |        |                |             |
|                    |                   |                         |               |        | - ward           |        |                |             |
|                    |                   |                         |               | 2      |                  |        |                |             |
|                    |                   |                         | 1             |        |                  |        |                |             |
|                    |                   |                         |               |        |                  |        |                |             |
| 40.0               |                   |                         |               |        |                  |        |                |             |
| 5685.000 5692.0    | 0 5699.00 57      | 06.00 5713.00           | 5720.00       | 5727.0 | 0 5734.00        | 5741.0 | 0 9            | 755.00 MHz  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor       | Resu<br>(dBuV |        | Limit<br>(dBuV/m | ı)     | Margin<br>(dB) | Remark      |
| 5719.790           | 53.78             | ( <b>dB/m</b> )<br>6.50 | 60.2          |        | 110.74           |        | -50.46         | AVG         |
| 5724.830           | 64.09             | 6.52                    | 70.6          | 1      | 121.81           |        | -51.20         | AVG         |
| 5746.600           | 99.37             | 6.58                    | 105.9         | 95     | -                |        | -              | AVG         |
|                    |                   |                         |               |        |                  |        |                |             |

| Test Mode          |                    | 02.11n HT2<br>325 MHz       | 0 /               | Temp/H     | lum             | 24(°C)/ 33%RH         |             |
|--------------------|--------------------|-----------------------------|-------------------|------------|-----------------|-----------------------|-------------|
| Test Item          | Ba                 | and Edge                    |                   | Test D     | ate             | Decembe               | er 12, 2017 |
| Polarize           | <u> </u>           | Vertical                    |                   | Test Eng   |                 |                       | in Kuo      |
| Detector           |                    | Peak                        |                   | Test Vol   | tage            | 120Va                 | c / 60Hz    |
| 130.0 dBu∀/m       |                    |                             |                   |            |                 |                       |             |
|                    |                    |                             |                   |            |                 | Limit1:               | —           |
|                    | 1                  |                             |                   |            |                 |                       |             |
| and a second       | manadore Alfilites | and the second              |                   |            | <u> </u>        |                       |             |
|                    |                    |                             |                   |            |                 |                       |             |
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| 85                 |                    |                             | Man when the work | La Je i    |                 |                       |             |
|                    |                    |                             |                   | × *        |                 |                       |             |
|                    |                    |                             |                   | WILLIAM    | 3<br>41 X       |                       |             |
|                    |                    |                             |                   |            | " MARANA AND    | Web. K                |             |
|                    |                    |                             |                   |            |                 | 17 WANNAMAN AND WANNA | KMMMM       |
|                    |                    |                             |                   |            |                 |                       |             |
| 40.0               |                    |                             |                   |            |                 |                       |             |
| 5815.000 5820.     | 50 5826.00 5       | 831.50 5837.00              | 5842.50           | 5848.00 58 | i3.50 5859      | 9.00 58               | 70.00 MHz   |
|                    |                    |                             |                   |            |                 |                       |             |
| Frequency<br>(MHz) | Reading<br>(dBuV)  | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m |            | ₋imit<br>BuV/m) | Margin<br>(dB)        | Remark      |
| 5823.250           | 108.12             | 6.78                        | 114.90            | 90 -       |                 | -                     | peak        |
| 5852.290           | 72.12              | 6.85                        | 78.97             | 1          | 16.98           | -38.01                | peak        |
| 5856.745           | 66.11              | 6.86                        | 72.97             | 97 110.31  |                 | -37.34                | peak        |

| Test Item         Band Edge         Test Date         December 12, 2017           Polarize         Vertical         Test Engineer         Kevin Kuo           Detector         Average         Test Voltage         120Vac / 60Hz           130.0         dbw/m         Imit:         Imit:         Imit:           40.0         Jacobia         Jacobia         Jacobia         Jacobia           80.0         Jacobia         Jacobia         Jacobia         Jacobia         Jacobia           90.0         Jacobia   | Test Mode          |                   | 2.11n HT2<br>25 MHz | 0 /      | Temp/Hum |          | 24(°C)/ 33%RH |                |            |
|--|--------------------|-------------------|---------------------|----------|----------|----------|---------------|----------------|------------|
| Detector         Average         Test Voltage         120Vac / 60Hz           130.0         dBuV/m         Imit:   | Test Item          |                   |                     |          |          |          |               |                |            |
| 130.0 dBuV/n<br>130.0 dBuV/n<br>130.0 dBuV/n<br>130.0 dBuV/n<br>100.0 5820.50 5825.00 5831.50 583.00 5842.50 5848.00 5853.50 5859.00 Hz<br>100.0 5820.50 5826.00 5831.50 5837.00 5842.50 5848.00 5853.50 5859.00 Hz<br>100.0 5820.50 5826.00 5831.50 5837.00 5842.50 5848.00 5853.50 5859.00 Hz<br>100.0 5820.50 5826.00 5831.50 5837.00 5842.50 5848.00 5853.50 5859.00 Hz  |                    | V                 | ertical             |          |          |          |               |                |            |
| Frequency         Reading<br>(dBuV)         Correct<br>Factor<br>(dB/m)         Result<br>(dBuV/m)         Limit<br>(dBuV/m)         Margin<br>(dBuV/m)         Remark<br>Margin<br>(dBuV/m)           5823.965         97.94         6.78         104.72         -         -         AVG  | Detector           | A                 | verage              |          | Tes      | st Volta | age           | 120Va          | ac / 60Hz  |
| Frequency         Reading         Correct<br>Factor<br>(dB/m)         Result<br>(dB/W/m)         Limit<br>(dB/W/m)         Margin<br>(dB/W/m)         Remark<br>Remark           5823.965         97.94         6.78         104.72         -         -         AVG  | 130.0 dBuV/m       |                   |                     |          |          |          |               |                |            |
| Frequency         Reading         Correct<br>Factor<br>(dB/m)         Result<br>(dBUV/m)         Limit<br>(dBUV/m)         Margin<br>(dB)         Remark           5823.965         97.94         6.78         104.72         -         -         AVG  |                    |                   |                     |          |          | _        |               | Limit1:        | -          |
| Frequency         Reading         Correct<br>Factor<br>(dB/m)         Result<br>(dBUV/m)         Limit<br>(dBUV/m)         Margin<br>(dB)         Remark           5823.965         97.94         6.78         104.72         -         -         AVG  |                    |                   |                     |          |          |          |               |                |            |
| Home         Home <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> |                    |                   |                     |          |          |          |               |                |            |
| Home         Home <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> |                    |                   |                     |          |          |          |               |                |            |
| 40.0       5815.000       5826.00       5831.50       5837.00       5842.50       5848.00       5853.50       5859.00       5870.00       MHz         Frequency<br>(MHz)       Reading<br>(dBuV)       Correct<br>Factor<br>(dB/m)       Result<br>(dBuV/m)       Limit<br>(dBuV/m)       Margin<br>(dB)       Remark         5823.965       97.94       6.78       104.72       -       -       AVG         5850.090       52.37       6.85       59.22       121.99       -62.77       AVG   | 85                 |                   |                     |          |          |          |               |                |            |
| 40.0       5815.000       5826.00       5831.50       5837.00       5842.50       5848.00       5853.50       5859.00       5870.00       MHz         Frequency<br>(MHz)       Reading<br>(dBuV)       Correct<br>Factor<br>(dB/m)       Result<br>(dBuV/m)       Limit<br>(dBuV/m)       Margin<br>(dB)       Remark         5823.965       97.94       6.78       104.72       -       -       AVG         5850.090       52.37       6.85       59.22       121.99       -62.77       AVG   |                    |                   | - have a second     |          |          |          |               |                |            |
| 40.0       5815.000       5826.00       5831.50       5837.00       5842.50       5848.00       5853.50       5859.00       5870.00       MHz         Frequency<br>(MHz)       Reading<br>(dBuV)       Correct<br>Factor<br>(dB/m)       Result<br>(dBuV/m)       Limit<br>(dBuV/m)       Margin<br>(dB)       Remark         5823.965       97.94       6.78       104.72       -       -       AVG         5850.090       52.37       6.85       59.22       121.99       -62.77       AVG   |                    |                   |                     | - Andrew | ~~       |          |               |                |            |
| 40.0       5815.000       5826.00       5831.50       5837.00       5842.50       5848.00       5853.50       5859.00       5870.00       MHz         Frequency<br>(MHz)       Reading<br>(dBuV)       Correct<br>Factor<br>(dB/m)       Result<br>(dBuV/m)       Limit<br>(dBuV/m)       Margin<br>(dB)       Remark         5823.965       97.94       6.78       104.72       -       -       AVG         5850.090       52.37       6.85       59.22       121.99       -62.77       AVG   |                    |                   |                     |          |          | 2        |               |                |            |
| 5815.000         5826.00         5831.50         5837.00         5842.50         5848.00         5853.50         5859.00         5870.00         MHz           Frequency<br>(MHz)         Reading<br>(dBuV)         Correct<br>Factor<br>(dB/m)         Result<br>(dBuV/m)         Limit<br>(dBuV/m)         Margin<br>(dB)         Remark           5823.965         97.94         6.78         104.72         -         -         AVG           5850.090         52.37         6.85         59.22         121.99         -62.77         AVG  |                    |                   |                     |          |          |          | ×~~~          | ······         |            |
| Frequency<br>(MHz)         Reading<br>(dBuV)         Correct<br>Factor<br>(dB/m)         Result<br>(dBuV/m)         Limit<br>(dBuV/m)         Margin<br>(dB)         Remark           5823.965         97.94         6.78         104.72         -         -         AVG           5850.090         52.37         6.85         59.22         121.99         -62.77         AVG   | 40.0               |                   |                     |          |          |          |               |                |            |
| Frequency<br>(MHz)Reading<br>(dBuV)Factor<br>(dB/m)Result<br>(dBuV/m)Limit<br>(dBuV/m)Margin<br>(dB)Remark5823.96597.946.78104.72AVG5850.09052.376.8559.22121.99-62.77AVG  | 5815.000 5820      | .50 5826.00 583   | 31.50 5837.00       | 5842.50  | 5848.0   | 0 5853.  | 50 5859       | ).00 5         | 870.00 MHz |
| Frequency<br>(MHz)Reading<br>(dBuV)Factor<br>(dB/m)Result<br>(dBuV/m)Limit<br>(dBuV/m)Margin<br>(dB)Remark5823.96597.946.78104.72AVG5850.09052.376.8559.22121.99-62.77AVG  | _                  |                   | Correct             | _        |          |          |               |                |            |
| 5850.090 52.37 6.85 59.22 121.99 -62.77 AVG  | Frequency<br>(MHz) | Reading<br>(dBuV) | Factor              |          |          |          |               | Margin<br>(dB) | Remark     |
|  |                    |                   |                     |          | 72 -     |          |               |                |            |
| 5855.040 46.45 6.86 53.31 110.79 -57.48 AVG  | 5850.090           | 52.37             | 6.85                |          |          |          |               | -62.77         |            |
|  | 5855.040           | 46.45             | 6.86                | 53.3     | 51       | 110      | 0.79          | -57.48         | AVG        |

| Test Mode  |                                    | )2.11n HT4<br>55 MHz | ·0/ T         | ēmp/Hum                 | 24(°C)/ 33%RH |             |
|--|------------------------------------|----------------------|---------------|-------------------------|---------------|-------------|
| Test Item  | Ba                                 | nd Edge              | -             | Test Date               | Decembe       | er 12, 2017 |
| Polarize   | $\sim$                             | /ertical             | Те            | st Engineer             |               | n Kuo       |
| Detector   |                                    | Peak                 | Te            | est Voltage             | 120Va         | c / 60Hz    |
| 130.0 dBu∀/m   |                                    |                      |               |                         |               |             |
|  |                                    |                      | ,             |                         | Limit1:       | _           |
|  |                                    | /                    |               | 3                       |               |             |
|  |                                    |                      |               | moder the man where the | mathematic    |             |
|  |                                    |                      |               |                         |               |             |
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| and the second   | Marnahand <sup>ha</sup> nnandahadh |                      |               |                         |               |             |
| an ship to a shi |                                    |                      |               |                         |               |             |
| 40.0   |                                    |                      |               |                         |               |             |
| 5680.000 5690  | .00 5700.00 57                     | 10.00 5720.00        | 5730.00 5740. | 00 5750.00 5760         | 0.00 57       | 80.00 MHz   |
| Frequency  | Reading                            | Correct              | Result        | Limit                   | Margin        |             |
| (MHz)  | (dBuV)                             | Factor<br>(dB/m)     | (dBuV/m)      | (dBuV/m)                | (dB)          | Remark      |
| 5714.800   | 75.94                              | 6.50                 | 82.44         | 109.34                  | -26.90        | peak        |
| 5700 000   | 76.47                              | 6.50                 | 82.97         | 112.62                  | -29.65        | peak        |
| 5720.800   | 103.71                             |                      | 110.29        |                         |               |             |

| Test Mode          |  | )2.11n HT4<br>55 MHz   | 0/            | Temp/Hum |  |        | 24(℃)/ 33%RH   |             |
|--------------------|--|--|---------------|----------|--|--------|----------------|-------------|
| Test Item          | Bai  | nd Edge  |               | Т        | est Dat                                  | e      | Decemb         | er 12, 2017 |
| Polarize           | V  | 'ertical   |               |          | st Engir                                 |        |                | in Kuo      |
| Detector           | A  | verage   |               | Те       | st Volta                                 | ige    | 120Va          | ic / 60Hz   |
| 130.0 dBuV/m       |  |  |               |          |  |        |                |             |
|                    |  |  |               |          |  |        | Limit1:        | -           |
|                    |  | /  |               |          |  |        |                |             |
|                    |  |  |               |          |  | 3      |                |             |
|                    |  |  |               | m        | en e | -Tym   | L              |             |
| 85                 |  |  |               |          |  |        |                |             |
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|                    |  | 1  | 3 mm          |          |  |        |                | they are    |
|                    |  | - And - Contraction - Contract |               |          |  |        |                |             |
| 40.0               | Sector and the sector of the s |  |               |          |  |        |                |             |
| 5680.000 5690.     | 00 5700.00 57  | 10.00 5720.00  | 5730.00       | 5740.0   | 0 5750.0                                 | 0 5760 | .00 57         | 780.00 MHz  |
|                    |  | Correct  |               |          |  |        |                |             |
| Frequency<br>(MHz) | Reading<br>(dBuV)  | Factor<br>(dB/m)   | Resu<br>(dBuV |          | Lir<br>(dBu                              |        | Margin<br>(dB) | Remark      |
| 5719.700           | 57.82  | 6.50   | 64.3          | 2        | 110                                      | .72    | -46.40         | AVG         |
| 5724.600           | 60.05  | 6.52   | 66.5          | 7        | 121                                      | .29    | -54.72         | AVG         |
| 5753.400           | 93.57  | 6.59   | 100.1         | 16       | -  |        | -              | AVG         |
|                    |  |  |               |          |  |        |                |             |

| Test Mode          |  | 02.11n HT4<br>95 MHz        | -0/           | Tei               | mp/Hum              | <b>24(</b> ℃).   | / 33%RH            |  |
|--------------------|--|-----------------------------|---------------|-------------------|---------------------|--|--------------------|--|
| Test Item          | Ba   | nd Edge                     |               | Те                | est Date            | December 12, 20 <sup>2</sup>   |                    |  |
| Polarize           | N  | /ertical                    |               | Test              | Engineer            |  | in Kuo             |  |
| Detector           |  | Peak                        |               | Tes               | t Voltage           | 120Va  | c / 60Hz           |  |
| 130.0 dBuV/m       |  |                             |               |                   |                     | 1  |                    |  |
|                    |  |                             |               |                   |                     | Limit1:  | _                  |  |
|                    | 1  |                             |               |                   |                     | $\mathbf{X}$   |                    |  |
|                    | - American Contraction of the second se | - marine and have been a    | Ŋ             |                   |                     |  |                    |  |
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| 85 mm/             |  |                             | Industriantly | And the number of |                     |  |                    |  |
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| 40.0               |  |                             |               |                   |                     |  |                    |  |
| 5770.000 5780.     | 00 5790.00 58  | 00.00 5810.00               | 5820.00       | 5830.00           | 5840.00 585         | i0.00 58   | 370.00 MHz         |  |
| Frequency<br>(MHz) | Reading<br>(dBuV)  | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV |                   | Limit<br>(dBuV/m)   | Margin<br>(dB)   | Remark             |  |
| 5797.400           | 103.27   | 6.71                        | 109.9         | 98                | -                   | -  | peak               |  |
| 5850.800           | 54.80  | 6.85                        | 61.6          | 5                 | 120.38              | -58.73   | peak               |  |
| 5858.600           | 54.22  | 6.87                        | 61.0          | 9                 | 109.79              | -48.70   | peak               |  |
|                    |  |                             |               |                   |                     |  |                    |  |

| Test Mode          |                   | IEEE 802.11n HT40/<br>5795 MHz |  |               |   | m          | 24(℃)/ 33%RH     |             |  |
|--------------------|-------------------|--------------------------------|--|---------------|---|------------|------------------|-------------|--|
| Test Item          | Bar               | nd Edge                        |  | Test Date     |   |            | December 12, 201 |             |  |
| Polarize           | V                 | ertical                        |  | Test Engineer |   |            |                  | evin Kuo    |  |
| Detector           | Av                | /erage                         |  | Test Voltage  |   |            | 120              | Vac / 60Hz  |  |
| 130.0 dBuV/m       |                   |                                |  |               |   |            |                  |             |  |
|                    |                   |                                |  |               |   |            | Limit1           | :           |  |
|                    |                   |                                |  |               |   |            |                  |             |  |
|                    |                   |                                |  |               |   |            | •••••            |             |  |
|                    | mana har          | munner                         |  |               |   |            |                  |             |  |
| 85                 |                   |                                |  |               |   |            |                  |             |  |
| 00                 |                   |                                |  |               |   |            |                  |             |  |
| - Andrew           |                   |                                |  |               |   |            |                  |             |  |
| ~~                 |                   |                                | and a second and a second and a second | human         | ~                                       |            |                  |             |  |
|                    |                   |                                |  |               | and | <b>~</b> ~ | <b>)</b> _       |             |  |
|                    |                   |                                |  |               |   | m          | \$               |             |  |
| 40.0               |                   |                                |  |               |   |            |                  |             |  |
| 5770.000 5780      | .00 5790.00 580   | 0.00 5810.00                   | 5820.00  | 5830.00       | ) 5840.0                                | 0 5850     | ).00             | 5870.00 MHz |  |
|                    |                   | Correct                        |  |               |   |            |                  |             |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m)               | Resu<br>(dBuV  |               | Lim<br>(dBu)                            |            | Margin<br>(dB)   | Remark      |  |
| 5796.400           | 92.86             | 6.71                           | 99.5   |               | -                                       |            | -                | AVG         |  |
| 5850.900           | 42.61             | 6.85                           | 49.4   | ·6            | 120.                                    | .15        | -70.69           | AVG         |  |
| 5855.100           | 41.52             | 6.86                           | 48.3   | 8             | 110.                                    | 77         | -62.39           | AVG         |  |
|                    |                   |                                |  |               |   |            |                  |             |  |

| Test Mode            |                | 2.11ac VHT<br>775 MHz | 80 /            | Temp/Hum                               | <b>24(</b> °C).               | / 33%RH      |
|----------------------|----------------|-----------------------|-----------------|--|-------------------------------|--------------|
| Test Item            |                | and Edge              |                 | Test Date                              | 2, December 12                |              |
| Polarize             |                | Vertical              |                 | Test Engineer                          |                               | in Kuo       |
| Detector             |                | Peak                  |                 | Test Voltage                           | 120Va                         | c / 60Hz     |
| 120.0 dBuV/m         |                |                       |                 |  |                               |              |
|                      |                |                       |                 |  | Limit1:                       | _            |
|                      | -<br>June John | man 3                 | monund          | . Ль.                                  |                               |              |
|                      |                |                       | V               | manny                                  |                               |              |
|                      |                |                       |                 |  |                               |              |
| 80                   | 1              |                       |                 |  |                               |              |
| 80                   | X & MAN        |                       |                 | h hundre                               |                               |              |
|                      |                |                       |                 | ······································ | and and a stranger of the set | many a       |
|                      |                |                       |                 |  |                               |              |
|                      |                |                       |                 |  |                               |              |
| 40.0                 |                |                       |                 |  |                               |              |
| 5700.000 5717        | .00 5734.00 5  | 751.00 5768.00        | 5785.00 5       | 802.00 5819.00 5                       | B36.00 58                     | 370.00 MHz   |
| Frequency            | Reading        | Correct<br>Factor     | Result          | Limit                                  | Margin                        | Remark       |
| (MHz)                | (dBuV)         | (dB/m)                | (dBuV/m)        | (dBuV/m)                               | (dB)                          |              |
| 5719.550             | 70.57          | 6.50                  | 77.07           | 110.67                                 | -33.60                        | peak         |
|                      | 69.67          | 6.52                  | 76.19           | 118.69                                 | -42.50                        | peak         |
| 5723.460             |                |                       |                 |  | 1                             |              |
| 5723.460<br>5770.890 | 98.29          | 6.64                  | 104.93          | -                                      | -                             | peak         |
|                      | -              | 6.64<br>6.85          | 104.93<br>67.06 | - 119.24                               | -52.18                        | peak<br>peak |

| Test Mode                     |                          | 11ac VHT8<br>75 MHz                            | 30 / 7                     | Гетр/Hum                     | <b>24(</b> °C)/          | 33%RH                |
|-------------------------------|--------------------------|--|----------------------------|------------------------------|--------------------------|----------------------|
| Test Item                     |                          | nd Edge  |                            | Test Date                    | Decembe                  | er 12, 201           |
| Polarize                      |                          | /ertical                                       |                            | est Engineer                 |                          | n Kuo                |
| Detector                      | A                        | verage   |                            | est Voltage                  | 120Vac / 60H             |                      |
| 120.0 dBuV/m                  |                          |  |                            |                              |                          |                      |
|                               | /                        |  |                            |                              | Limit1:                  |                      |
|                               |                          |  | humana                     | www                          |                          |                      |
| 80                            |                          |  |                            |                              |                          |                      |
| www.marthat                   | 1 2 M                    |  |                            | W.                           |                          |                      |
| 40.0<br>5700.000 57           | 17.00 5734.00 57         | 751.00 5768.00                                 | 5785.00 5802               |                              | 6.00 58                  | 70.00 MHz            |
|                               |                          |  |                            |                              |                          |                      |
| Frequency<br>(MHz)            | Reading<br>(dBuV)        | Correct<br>Factor<br>(dB/m)                    | Result<br>(dBuV/m)         | Limit<br>(dBuV/m)            | Margin<br>(dB)           | Remark               |
|                               |                          | Factor   |                            |                              |                          | <b>Remark</b><br>AVG |
| (MHz)                         | (dBuV)                   | Factor<br>(dB/m)                               | (dBuV/m)                   | (dBuV/m)                     | (dB)                     |                      |
| (MHz)<br>5718.020             | (dBuV)<br>54.55          | Factor<br>(dB/m)<br>6.50                       | ( <b>dBuV/m)</b><br>61.05  | (dBuV/m)<br>110.25           | (dB)<br>-49.20           | AVG                  |
| (MHz)<br>5718.020<br>5724.310 | (dBuV)<br>54.55<br>54.70 | Factor<br>(dB/m)           6.50           6.52 | (dBuV/m)<br>61.05<br>61.22 | (dBuV/m)<br>110.25<br>120.63 | (dĒ)<br>-49.20<br>-59.41 | AVG<br>AVG           |

## Below 1G Test Data

| Test Mode            | IEEE              | 802.11ac V<br>5210MHZ       | HT80 /        | Tei    | mp/Hum            | <b>24(</b> °C)/ | / 33%RH      |
|----------------------|-------------------|-----------------------------|---------------|--------|-------------------|-----------------|--------------|
| Test Item            |                   | 30MHz-1GF                   | lz            | Te     | est Date          | Decemb          | er 2, 201    |
| Polarize             |                   | Horizontal                  |               | Test   | Engineer          |                 | in Kuo       |
| Detector             | Pea               | k and Quasi                 | -peak         | Tes    | t Voltage         | 120Va           | c / 60Hz     |
| 80.0 dBu¥/m          |                   |                             |               |        |                   | Limit1:         | —            |
|                      |                   |                             |               |        |                   | Margin:         |              |
|                      |                   |                             |               |        |                   |                 | F            |
| 30                   |                   |                             |               |        |                   | 4 5<br>X        | 6<br>X       |
|                      | 1                 |                             | 2<br>X        | 3<br>X |                   | 4 X             |              |
|                      |                   |                             |               |        |                   |                 |              |
| -20<br>30.000 127.00 | ) 224.00          | 321.00 418.00               | 515.00        | 612.00 | 709.00 80         | 6.00 10         | 00.00 MHz    |
| Frequency<br>(MHz)   | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |        | Limit<br>(dBuV/m) | Margin<br>(dB)  | Remark       |
| 281.2300             | 25.29             | -14.25                      | 11.0          | )4     | 46.02             | -34.98          | peak         |
| 483.9600             | 24.89             | -8.85                       | 16.0          | )4     | 46.02             | -29.98          | peak         |
| .00.0000             | 00.50             | -7.01                       | 19.5          | 55     | 46.02             | -26.47          | peak         |
| 593.5700             | 26.56             |                             | 1             |        |                   |                 |              |
|                      | 26.56<br>24.40    | -3.44                       | 20.9          | 96     | 46.02             | -25.06          | peak         |
| 593.5700             |                   | -3.44                       | 20.9<br>22.8  |        | 46.02<br>46.02    | -25.06          | peak<br>peak |

| Test Mode                                  | IEEE                          | IEEE 802.11ac VHT80 /<br>5210MHZ            |                           |     | mp/Hum         | 24(°C)/ 33%R            |                      |  |
|--|-------------------------------|---|---------------------------|-----|----------------|-------------------------|----------------------|--|
| Test Item                                  |                               | 30MHz-1GH                                   | Ηz                        | T   | est Date       | Decemb                  | per 2, 201           |  |
| Polarize                                   |                               | Horizonta                                   |                           |     | t Engineer     |                         | vin Kuo              |  |
| Detector                                   | Pea                           | k and Quas                                  | i-peak                    | Tes | st Voltage     | 120Va                   | ac / 60Hz            |  |
| 80.0 dBuV/m                                |                               |   |                           |     |                | Limit1:                 | _                    |  |
| 30   |                               | 3X  |                           | 4   | 5x             | 6<br>X                  |                      |  |
| -20<br>30.000 127.00<br>Frequency<br>(MHz) | 224.00 3<br>Reading<br>(dBuV) | 21.00 418.00<br>Correct<br>Factor<br>(dB/m) | 515.00<br>Resul<br>(dBuV/ | -   | 709.00 806.    | 00 1(<br>Margin<br>(dB) | 000.00 MHz<br>Remark |  |
| 30.0000                                    | 24.45                         | -8.14                                       | 16.31                     | 1   | 40.00          | -23.69                  | peak                 |  |
| 133.7900                                   | 26.08                         | -15.37                                      | 10.71                     |     | 43.52          | -32.81                  | peak                 |  |
| 365.6200                                   | 25.52                         | -12.48                                      | 13.04                     |     | 46.02          | -32.98                  | peak                 |  |
| 000.0200                                   |                               |   |                           |     |                |                         |                      |  |
| E0E 0400                                   | 25.70                         | -7.10                                       | 18.60                     |     | 46.02          | -27.42                  | peak                 |  |
| 585.8100                                   |                               |   |                           |     |                | 1 26.22                 | I nooli              |  |
| 585.8100<br>762.3500<br>861.2900           | 23.86<br>25.36                | -4.06                                       | 19.80<br>22.69            |     | 46.02<br>46.02 | -26.22<br>-23.33        | peak                 |  |

## Above 1G Test Data for UNII-1

15550.000

N/A

Remark:

29.57

fundamental frequency.

18.71

| Test Mode          |         |               | EE 802.1 <sup>°</sup><br>5180MH2 |               | Te     | emp/H    | um            | <b>24(</b> ℃)      | / 33%RH     |
|--------------------|---------|---------------|----------------------------------|---------------|--------|----------|---------------|--------------------|-------------|
| Test Item          |         |               | Harmonio                         | )             | Т      | est Da   | ate           | Decemb             | per 5, 2017 |
| Polarize           |         |               | Vertical                         |               | Tes    | st Engi  | neer          | Kevin Kuo          |             |
| Detector           |         | Pea           | k and Ave                        | erage         | Те     | st Volt  | age           | 120Va              | ac / 60Hz   |
| 110.0 dBu¥/m       |         |               |                                  |               |        |          |               |                    |             |
|                    |         |               |                                  |               |        |          |               | Limit1:<br>Limit2: |             |
|                    |         |               |                                  |               |        |          |               |                    |             |
|                    |         |               |                                  |               |        |          |               |                    |             |
|                    |         |               |                                  |               |        |          |               |                    |             |
|                    |         |               |                                  |               |        |          |               |                    |             |
| 70                 |         |               |                                  |               |        |          |               |                    |             |
|                    |         |               | 1<br>X                           |               |        |          |               |                    |             |
|                    |         |               |                                  |               |        |          |               |                    |             |
|                    |         |               | 2                                |               |        |          |               |                    |             |
|                    |         |               |                                  |               |        |          |               |                    |             |
|                    |         |               |                                  |               |        |          |               |                    |             |
| 30.0               |         |               |                                  |               |        |          |               |                    |             |
| 1000.000 4900      | .00 880 | 0.00 12       | 700.00 16600                     | .00 20500.00  | 24400. | .00 2830 | )0.00 3220    | 0.00 4             | 0000.00 MHz |
|                    |         |               | O a ma st                        |               |        |          |               |                    |             |
| Frequency<br>(MHz) |         | ading<br>BuV) | Correct<br>Factor<br>(dB/m)      | Resi<br>(dBuV |        |          | imit<br>uV/m) | Margin<br>(dB)     | Remark      |
| 15550.000          | 43      | 3.27          | 18.71                            | 61.9          | 98     | 74       | 4.00          | -12.02             | peak        |
|                    |         |               |                                  |               |        | 1        |               |                    | 1           |

2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest

48.28

54.00

-5.72

AVG

| Test Mode          |       | IEEE 802.11a /<br>5180MHZ<br>Harmonic |                         |         |        |                 | np/H          |        | 24(°C)/ 33%R⊦ |                 |          |           |
|--------------------|-------|---------------------------------------|-------------------------|---------|--------|-----------------|---------------|--------|---------------|-----------------|----------|-----------|
| Test Item          |       |                                       |                         |         |        |                 | Test Date     |        |               | December 5, 202 |          |           |
| Polarize           |       |                                       | Horizo                  |         |        |                 | Test Engineer |        |               |                 | Kevin K  |           |
| Detector           |       | Pea                                   | ik and A                | Ver     | age    |                 | Test          | t Volt | age           | 12              | 0Vac / 6 | 50Hz      |
| 110.0 dBuV/m       |       |                                       |                         |         |        |                 |               |        |               |                 |          |           |
|                    |       |                                       |                         |         |        |                 |               |        |               | Lim             |          |           |
|                    |       |                                       |                         |         |        |                 |               |        |               |                 |          |           |
|                    |       |                                       |                         |         |        |                 |               |        |               |                 |          |           |
| 70                 |       |                                       | 1                       |         |        |                 |               |        |               |                 |          |           |
|                    |       |                                       | 2                       |         |        |                 |               |        |               |                 |          |           |
|                    |       |                                       | ×                       |         |        |                 |               |        |               |                 |          |           |
| 30.0               |       |                                       |                         |         |        |                 |               |        |               |                 |          |           |
| 1000.000 4900.0    | 00 88 | 00.00 12                              | 2700.00 16              | 5600.00 | ) 2050 | 0.00 24         | 400.00        | 2830   | )0.00 322     | 00.00           | 40000.00 | _<br>JMHz |
| Frequency<br>(MHz) |       | ading<br>BuV)                         | Corre<br>Facto<br>(dB/m | r       |        | esult<br>BuV/m) |               |        | imit<br>uV/m) | Marg<br>(dB)    |          | lemark    |
| 15540.000          | 43    | 3.24                                  | 18.68                   | 3       | 6      | 1.92            |               | 74     | 4.00          | -12.0           | 8        | peak      |
| 15540.000          | 30    | 0.64                                  | 18.68                   | 3       | 4      | 9.32            |               | 54     | 4.00          | -4.6            | 8        | AVG       |
| N/A                |       |                                       |                         |         |        |                 |               |        |               |                 |          |           |
|                    |       |                                       |                         |         |        |                 |               |        |               | 1               |          |           |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |            | IE            | EEE 802<br>5220 N        |        | Т             | emp/H         | um       | <b>24(</b> ℃  | )/ 33%RH                    |              |  |
|--------------------|------------|---------------|--------------------------|--------|---------------|---------------|----------|---------------|-----------------------------|--------------|--|
| Test Item          |            |               | Horizo                   |        |               |               | Test Da  |               | December 4, 20 <sup>-</sup> |              |  |
| Polarize           |            |               | Vertic                   |        |               | Test Engineer |          |               | Kevin Kuo                   |              |  |
| Detector           |            | Pea           | ak and A                 | vera   | ge            | Test Voltage  |          |               | 120V                        | ac / 60Hz    |  |
| 110.0 dBuV/m       |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               | Limit1:<br>Limit2:          | _            |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
| 70                 |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               | X                        |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
| 30.0               |            |               |                          |        |               |               |          |               |                             |              |  |
| 1000.000 4900.     | 00 880     | 0.00 1        | 2700.00 16               | 600.00 | 20500.00      | 24400         | 0.00 283 | 00.00 3220    | 00.00                       | 40000.00 MHz |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
| Frequency<br>(MHz) | Rea<br>(dE | ading<br>BuV) | Correc<br>Facto<br>(dB/m | r      | Resu<br>(dBuV |               |          | imit<br>uV/m) | Margin<br>(dB)              | Remark       |  |
| 15660.000          | 44         | 1.12          | 19.03                    | 3      | 63.1          | 5             | 74       | 4.00          | -10.85                      | peak         |  |
| 15660.000          | 32         | 2.18          | 19.03                    | 3      | 51.2          | 21            | 54       | 4.00          | -2.79                       | AVG          |  |
| N/A                |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |
|                    |            |               |                          |        |               |               |          |               |                             |              |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          | IE                | EEE 802.11a<br>5220 MHz     | a /               | Temp/H        | um           | 24(°C)/ 33%RH   |             |  |
|--------------------|-------------------|-----------------------------|-------------------|---------------|--------------|-----------------|-------------|--|
| Test Item          |                   | Harmonic                    |                   | Test Da       | te           | December 4, 201 |             |  |
| Polarize           |                   | Horizontal                  |                   | Test Engi     |              |                 | in Kuo      |  |
| Detector           | Pea               | ak and Aver                 | age               | Test Volta    | age          | 120Va           | c / 60Hz    |  |
| 110.0 dBu¥/m       |                   |                             |                   |               |              | Limit1:         |             |  |
|                    |                   |                             |                   |               |              | Limit2:         | _           |  |
|                    |                   |                             |                   |               |              |                 |             |  |
|                    |                   |                             |                   |               |              |                 |             |  |
|                    |                   |                             |                   |               |              |                 |             |  |
| 70                 |                   |                             |                   |               |              |                 |             |  |
|                    |                   |                             |                   |               |              |                 |             |  |
|                    |                   |                             |                   |               |              |                 |             |  |
|                    |                   | ×                           |                   |               |              |                 |             |  |
| 30.0               |                   |                             |                   |               |              |                 |             |  |
| 1000.000 4900.0    | 0 8800.00 1       | 2700.00 16600.00            | ) 20500.00        | 24400.00 2830 | 0.00 322     | DO. OO 40       | 0000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m |               | mit<br>JV/m) | Margin<br>(dB)  | Remark      |  |
| 15670.000          | 39.05             | 19.06                       | 58.11             | 74            | .00          | -15.89          | peak        |  |
| 15670.000          | 28.46             | 19.06                       | 47.52             | 54            | .00          | -6.48           | AVG         |  |
| N/A                |                   |                             |                   |               |              |                 |             |  |
|                    |                   |                             |                   |               |              |                 |             |  |
|                    |                   |                             |                   |               |              |                 |             |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |       | IEEE 802.11a /<br>5240MHZ |                |          | Т            | ſemp/H        | um        | <b>24(</b> °( | C)/ 33%RH          |              |  |
|--------------------|-------|---------------------------|----------------|----------|--------------|---------------|-----------|---------------|--------------------|--------------|--|
| Test Item          |       |                           | Harmo          | nic      |              | Test Date     |           |               | December 5, 201    |              |  |
| Polarize           |       |                           | Vertic         |          |              | Test Engineer |           |               |                    | evin Kuo     |  |
| Detector           |       | Pea                       | ak and A       | \ver     | age          | Te            | est Volt  | age           | 120\               | /ac / 60Hz   |  |
| 110.0 dBu¥/m       |       |                           |                |          |              |               |           |               |                    |              |  |
|                    |       |                           |                |          |              |               |           |               | Limit1:<br>Limit2: |              |  |
|                    |       |                           |                |          |              |               |           |               |                    |              |  |
|                    |       |                           |                |          |              |               |           |               |                    |              |  |
|                    |       |                           |                |          |              |               |           |               |                    |              |  |
| 70                 |       |                           |                |          |              |               |           |               |                    |              |  |
|                    |       |                           | 1              |          |              |               |           |               |                    |              |  |
|                    |       |                           | 1              | <u>د</u> |              |               |           |               |                    |              |  |
|                    |       |                           | X              |          |              |               |           |               |                    |              |  |
|                    |       |                           |                |          |              |               |           |               |                    |              |  |
| 30.0               |       |                           |                |          |              |               |           |               |                    |              |  |
| 1000.000 4900.     | DO 88 | 00.00 12                  | 2700.00 1      | 6600.00  | ) 20500.00   | 2440          | 0.00 2830 | 00.00 3220    | DO. OO             | 40000.00 MHz |  |
|                    | _     |                           | Corre          | ct       | _            |               |           |               |                    |              |  |
| Frequency<br>(MHz) |       | ading<br>BuV)             | Facto<br>(dB/m | or       | Res<br>(dBu\ |               |           | imit<br>uV/m) | Margin<br>(dB)     | Remar        |  |
| 15720.000          | 4     | 2.18                      | 19.2           | C        | 61.3         | 38            | 74        | 4.00          | -12.62             | peak         |  |
| 15720.000          | 3     | 0.82                      | 19.2           | )        | 50.0         | )2            | 54        | 4.00          | -3.98              | AVG          |  |
| N/A                |       |                           |                |          |              |               |           |               |                    |              |  |
|                    |       |                           |                |          |              |               |           |               |                    |              |  |
|                    |       |                           |                |          |              |               |           |               |                    |              |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          | IE                | IEEE 802.11a /<br>5240MHZ |                   |            | 'Hum             |                             | / 33%RH     |  |
|--------------------|-------------------|---------------------------|-------------------|------------|------------------|-----------------------------|-------------|--|
| Test Item          |                   | Harmonic                  |                   | Test I     |                  | December 5, 20 <sup>2</sup> |             |  |
| Polarize           |                   | Horizontal                |                   | Test En    |                  |                             | in Kuo      |  |
| Detector           | Pe                | ak and Aver               | age               | Test Vo    | oltage           | 120Va                       | c / 60Hz    |  |
| 110.0 dBuV/m       |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  | Limit1:                     | -           |  |
|                    |                   |                           |                   |            |                  | Limit2:                     |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
| 70                 |                   |                           |                   |            |                  |                             |             |  |
| 10                 |                   | _                         |                   |            |                  |                             |             |  |
|                    |                   | 1<br>X                    |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   | × ×                       |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
| 30.0               |                   |                           |                   |            |                  |                             |             |  |
| 1000.000 4900.0    | 00 8800.00 1      | 2700.00 16600.00          | ) 20500.00        | 24400.00 2 | 8300.00 322      | 00.00 40                    | 0000.00 MHz |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor         | Result<br>(dBuV/m | ı) (c      | Limit<br>JBuV/m) | Margin<br>(dB)              | Remark      |  |
| 15720.000          | 43.32             | (dB/m)<br>19.20           | 62.52             |            | 74.00            | -11.48                      | peak        |  |
| 15720.000          | 32.52             | 19.20                     | 51.72             |            | 54.00            | -2.28                       | AVG         |  |
| N/A                | 02.02             |                           |                   |            |                  |                             |             |  |
| IN/A               |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |
|                    |                   |                           |                   |            |                  |                             |             |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode              | 5                 | 02.11n HT2<br>180MHZ        | 0 /           |        | emp/H    |              |                    | )/ 33%RH     |
|------------------------|-------------------|-----------------------------|---------------|--------|----------|--------------|--------------------|--------------|
| Test Item              |                   | armonic                     |               |        | est Da   |              | December 4, 201    |              |
| Polarize               |                   | /ertical                    |               |        | t Engi   |              | Kevin Kuo          |              |
| Detector               | Peak a            | and Average                 | е             | Te     | st Volta | age          | 120V               | ac / 60Hz    |
| 110.0 dBuV/m           |                   |                             |               |        |          |              |                    |              |
|                        |                   |                             |               |        |          |              | Limit1:<br>Limit2: | _            |
|                        |                   |                             |               |        |          |              |                    |              |
|                        |                   |                             |               |        |          |              |                    |              |
|                        |                   |                             |               |        |          |              |                    |              |
|                        |                   |                             |               |        |          |              |                    |              |
| 70                     |                   |                             |               |        |          |              |                    |              |
|                        |                   | 1<br>X                      |               |        |          |              |                    |              |
|                        |                   | Ś.                          |               |        |          |              |                    |              |
|                        |                   |                             |               |        |          |              |                    |              |
| 30.0                   |                   |                             |               |        |          |              |                    |              |
| 1000.000 <b>4</b> 900. | 00 8800.00 12     | 2700.00 16600.00            | ) 20500.00    | 24400. | 00 2830  | 0.00 3220    | )0.00              | 40000.00 MHz |
|                        |                   |                             |               |        |          |              |                    |              |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |        |          | mit<br>uV/m) | Margin<br>(dB)     | Remark       |
| 15550.000              | 43.25             | 18.71                       | 61.9          | 6      | 74       | .00          | -12.04             | peak         |
| 15550.000              | 32.10             | 18.71                       | 50.8          | 51     | 54       | .00          | -3.19              | AVG          |
| N/A                    |                   |                             |               |        |          |              |                    |              |
|                        |                   |                             |               |        |          |              |                    |              |
|                        |                   |                             |               |        |          |              |                    |              |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

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| Test Mode          |                   | 802.11n HT2<br>180MHZ       | 20/           | Te     | emp/Hun       | n      | <b>24(</b> °C      | )/ 33%RH     |
|--------------------|-------------------|-----------------------------|---------------|--------|---------------|--------|--------------------|--------------|
| Test Item          | F                 | larmonic                    |               | Т      | est Date      | ;      | Decem              | ber 4, 2017  |
| Polarize           |                   | orizontal                   |               |        | t Engine      |        |                    | vin Kuo      |
| Detector           | Peak              | and Averag                  | je            | Te     | st Voltag     | je     | 120\               | /ac / 60Hz   |
| 110.0 dBuV/m       |                   |                             |               |        |               |        |                    |              |
|                    |                   |                             |               |        |               |        | Limit1:<br>Limit2: | _            |
|                    |                   |                             |               |        |               |        |                    |              |
| 70                 |                   |                             |               |        |               |        |                    |              |
|                    |                   | X                           |               |        |               |        |                    |              |
|                    |                   | *                           |               |        |               |        |                    |              |
| 30.0               |                   |                             |               |        |               |        |                    |              |
| 1000.000 4900.0    | 00 8800.00 12     | 2700.00 16600.00            | ) 20500.00    | 24400. | 00 28300.0    | 0 3220 | 0.00               | 40000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV |        | Limi<br>(dBuV |        | Margin<br>(dB)     | Remark       |
| 15540.000          | 43.11             | 18.68                       | 61.7          | 9      | 74.0          | 0      | -12.21             | peak         |
| 15540.000          | 32.91             | 18.68                       | 51.5          | 9      | 54.0          | 0      | -2.41              | AVG          |
| N/A                |                   |                             |               |        |               |        |                    |              |
|                    |                   |                             |               |        |               |        |                    |              |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode               |                          | 02.11n HT2<br>220MHZ                  | 20 /               | Te  | emp/Hu            | m   | <b>24(</b> °C      | )/ 33%RH     |  |
|-------------------------|--------------------------|---------------------------------------|--------------------|-----|-------------------|-----|--------------------|--------------|--|
| Test Item               | F                        | larmonic                              |                    | Т   | est Date          | e   | Decem              | ber 4, 201   |  |
| Polarize                |                          | Vertical                              |                    | Tes | st Engin          | eer |                    | Kevin Kuo    |  |
| Detector                | Peak                     | and Average                           | je                 |     | st Volta          |     | 120V               | ac / 60Hz    |  |
| 110.0 dBu¥/m            |                          |                                       |                    |     |                   |     | Limit1:<br>Limit2: | —            |  |
| 70                      |                          |                                       |                    |     |                   |     |                    |              |  |
| 30.0<br>1000.000 4900.0 | 00 8800.00 1:<br>Reading | 2700.00 16600.00<br>Correct<br>Factor | 0 20500.00<br>Resu |     | 00 28300.<br>Lirr |     | 00.00<br>Margin    | 40000.00 MHz |  |
| (MHz)                   | (dBuV)                   | (dB/m)                                | (dBuV              |     | (dBu\             |     | (dB)               | Remark       |  |
| 15660.000               | 45.47                    | 19.03                                 | 64.5               |     | 74.0              |     | -9.50              | peak         |  |
| 15660.000               | 32.01                    | 19.03                                 | 51.0               | )4  | 54.0              | 00  | -2.96              | AVG          |  |
| N/A                     |                          |                                       |                    |     |                   |     |                    |              |  |
|                         |                          |                                       |                    |     |                   |     |                    |              |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode               |               | 802.11n HT2<br>220MHZ | 20 /          | Temp/Hum            | <b>24(</b> °C)/    | 33%RH      |
|-------------------------|---------------|-----------------------|---------------|---------------------|--------------------|------------|
| Test Item               |               | larmonic              |               | Test Date           |                    | er 4, 2017 |
| Polarize                |               | lorizontal            |               | Test Engineer       |                    | n Kuo      |
| Detector                | Peak          | and Averag            | e             | Test Voltage        | 120Va              | c / 60Hz   |
| 110.0 dBuV/m            |               |                       |               |                     | Limit1:<br>Limit2: |            |
| 70                      |               |                       |               |                     |                    |            |
| 30.0<br>1000.000 4900.0 | 00 8800.00 12 | 2700.00 16600.00      | ) 20500.00 24 | 4400.00 28300.00 32 | 200.00 40          | 000.00 MHz |
| Frequency               | Reading       | Correct<br>Factor     | Result        | Limit               | Margin             | Remark     |
| (MHz)                   | (dBuV)        | (dB/m)                | (dBuV/m)      | (dBuV/m)            | (dB)               |            |
| 15660.000               | 44.47         | 19.03                 | 63.50         | 74.00               | -10.50             | peak       |
| 15660.000               | 31.19         | 19.03                 | 50.22         | 54.00               | -3.78              | AVG        |
| N/A                     |               |                       |               |                     |                    |            |
|                         |               |                       |               |                     |                    |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode              |                   | 02.11n HT2<br>240MHZ        | 0 /           | Te     | emp/Hu      | Im      |                | / 33%RH     |
|------------------------|-------------------|-----------------------------|---------------|--------|-------------|---------|----------------|-------------|
| Test Item              |                   | armonic                     |               |        | est Dat     |         |                | er 4, 2017  |
| Polarize               | ١                 | /ertical                    |               |        | t Engir     |         | Kev            | in Kuo      |
| Detector               | Peak a            | and Average                 | e             | Te     | st Volta    | ige     | 120Va          | ic / 60Hz   |
| 110.0 dBu∀/m           |                   |                             |               |        |             |         | Limit1:        |             |
|                        |                   |                             |               |        |             |         | Limit2:        |             |
|                        |                   |                             |               |        |             |         |                |             |
|                        |                   |                             |               |        |             |         |                |             |
| 70                     |                   | 1<br>*                      |               |        |             |         |                |             |
|                        |                   | *                           |               |        |             |         |                |             |
|                        |                   |                             |               |        |             |         |                |             |
| 30.0<br>1000.000 4900. | 00 8800.00 12     | 2700.00 16600.00            | ) 20500.00    | 24400. | 00 28300    | .00 322 | 00.00 4        | 0000.00 MHz |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV |        | Lir<br>(dBu |         | Margin<br>(dB) | Remark      |
| 15720.000              | 44.43             | 19.20                       | 63.6          | 3      | 74.         | .00     | -10.37         | peak        |
| 15720.000              | 32.01             | 19.20                       | 51.2          | 1      | 54.         | .00     | -2.79          | AVG         |
| N/A                    |                   |                             |               |        |             |         |                |             |
|                        |                   |                             |               |        |             |         |                |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | )2.11n HT2(<br>240MHZ       |                    | Temp/Hum          | <b>24(</b> °C)/ | 33%RH      |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|-----------------|------------|
| Test Item          |                   | armonic                     |                    | Test Date         |                 | er 4, 201  |
| Polarize           |                   | orizontal                   |                    | est Engineer      |                 | in Kuo     |
| Detector           | Peak a            | and Average                 | e                  | Test Voltage      | 120Va           | c / 60Hz   |
| 110.0 dBuV/m       |                   |                             |                    |                   | Limit1:         | _          |
|                    |                   |                             |                    |                   | Limit2:         | _          |
|                    |                   |                             |                    |                   |                 |            |
|                    |                   |                             |                    |                   |                 |            |
|                    |                   |                             |                    |                   |                 |            |
| 70                 |                   |                             |                    |                   |                 |            |
|                    |                   | 1<br>X                      |                    |                   |                 |            |
|                    |                   | 2                           |                    |                   |                 |            |
|                    |                   | X                           |                    |                   |                 |            |
| 30.0               |                   |                             |                    |                   |                 |            |
| 1000.000 4900.0    | 0 8800.00 12      | 2700.00 16600.00            | 20500.00 24        | 400.00 28300.00   | 32200.00 40     | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)  | Remark     |
| 15710.000          | 45.00             | 19.17                       | 64.17              | 74.00             | -9.83           | peak       |
| 15710.000          | 30.93             | 19.17                       | 50.10              | 54.00             | -3.90           | AVG        |
| N/A                |                   |                             |                    |                   |                 |            |
|                    |                   |                             |                    |                   |                 |            |
|                    |                   |                             |                    |                   |                 |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT4<br>190MHZ | 10 /           | Te           | emp/H   | um            | <b>24(</b> °C)     | / 33%RH     |
|--------------------|-------------------|----------------------|----------------|--------------|---------|---------------|--------------------|-------------|
| Test Item          | F                 | larmonic             |                | Т            | est Da  | ate           | Decemb             | oer 4, 2017 |
| Polarize           |                   | Vertical             |                | Tes          | t Engi  | neer          |                    | rin Kuo     |
| Detector           | Peak              | and Averag           | je             | Test Voltage |         |               | 120Va              | ac / 60Hz   |
| 110.0 dBuV/m       |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               | Limit1:<br>Limit2: |             |
|                    |                   |                      |                |              |         |               | Lillikz.           |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
| 70                 |                   |                      |                |              |         |               |                    |             |
|                    |                   | 1                    |                |              |         |               |                    |             |
|                    |                   | 1<br>X               |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   | Ž.                   |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
| 30.0               |                   |                      |                |              |         |               |                    |             |
| 1000.000 4900.0    | 0 8800.00 12      | 2700.00 16600.00     | ) 20500.00     | 24400.       | 00 2830 | 0.00 3220     | 0.00 4             | 0000.00 MHz |
|                    |                   |                      |                |              |         |               |                    |             |
|                    |                   | Correct              |                |              |         |               |                    |             |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m)     | Resu<br>(dBuV/ |              |         | imit<br>uV/m) | Margin<br>(dB)     | Remark      |
| 15580.000          | 41.99             | 18.79                | 60.78          | 3            | 74      | 1.00          | -13.22             | peak        |
| 15580.000          | 31.78             | 18.79                | 50.57          | 7            | 54      | 4.00          | -3.43              | AVG         |
| N/A                |                   |                      |                |              |         |               |                    |             |
|                    |                   |                      |                |              |         |               |                    |             |
|                    | 1                 | <u> </u>             |                |              | L       |               | <u>ı</u>           | 1           |
|                    |                   |                      |                |              |         |               |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT4<br>190MHZ | 0 /               | Tem      | p/Hum             | <b>24(</b> °C)∕    | ′ 33%RH    |
|--------------------|-------------------|----------------------|-------------------|----------|-------------------|--------------------|------------|
| Test Item          | F                 | larmonic             |                   | Tes      | t Date            | Decemb             | er 4, 201  |
| Polarize           |                   | lorizontal           |                   |          | Ingineer          |                    | in Kuo     |
| Detector           | Peak              | and Averag           | e                 | Test '   | Voltage           | 120Va              | c / 60Hz   |
| 110.0 dBu¥/m       |                   |                      |                   |          |                   |                    |            |
|                    |                   |                      |                   |          |                   | Limit1:<br>Limit2: | _          |
|                    |                   |                      |                   |          |                   |                    |            |
|                    |                   |                      |                   |          |                   |                    |            |
|                    |                   |                      |                   |          |                   |                    |            |
| 70                 |                   |                      |                   |          |                   |                    |            |
|                    |                   |                      |                   |          |                   |                    |            |
|                    |                   | 1<br>X               |                   |          |                   |                    |            |
|                    |                   | *                    |                   |          |                   |                    |            |
| 30.0               |                   |                      |                   |          |                   |                    |            |
| 1000.000 4900.0    | 10 8800.00 1      | 2700.00 16600.00     | 20500.00          | 24400.00 | 28300.00 322      | 00.00 40           | 000.00 MHz |
|                    |                   | Correct              |                   |          |                   |                    |            |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m)     | Result<br>(dBuV/n |          | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |
| 15580.000          | 39.59             | 18.79                | 58.38             |          | 74.00             | -15.62             | peak       |
| 15580.000          | 29.58             | 18.79                | 48.37             |          | 54.00             | -5.63              | AVG        |
| N/A                |                   |                      |                   |          |                   |                    |            |
|                    |                   |                      |                   |          |                   |                    |            |
|                    |                   |                      |                   |          |                   |                    |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode              |                   | 02.11n HT4<br>230MHZ        | 0 /             | Те      | emp/Hu      | m        | <b>24(</b> °C  | )/ 33%RH     |
|------------------------|-------------------|-----------------------------|-----------------|---------|-------------|----------|----------------|--------------|
| Test Item              | H                 | armonic                     |                 | Т       | est Dat     | e        | December 5, 20 |              |
| Polarize               | ١                 | /ertical                    |                 | Tes     | t Engir     | ieer     | Ke             | vin Kuo      |
| Detector               | Peak a            | and Average                 | e               | Tes     | st Volta    | ige      | 120V           | ac / 60Hz    |
| 110.0 dBuV/m           |                   |                             |                 |         |             |          | Limit1:        | _            |
|                        |                   |                             |                 |         |             |          |                |              |
| 70                     |                   | 1<br>X                      |                 |         |             |          |                |              |
|                        |                   |                             |                 |         |             |          |                |              |
| 30.0<br>1000.000 4900. | 00 8800.00 12     | 2700.00 16600.00            | ) 20500.00      | 24400.0 | DO 28300    | .00 3220 | 0.00           | 40000.00 MHz |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resul<br>(dBuV/ |         | Lir<br>(dBu |          | Margin<br>(dB) | Remark       |
| 15670.000              | 44.03             | 19.06                       | 63.09           | )       | 74.         | 00       | -10.91         | peak         |
| 15670.000              | 32.92             | 19.06                       | 51.98           | 3       | 54.         | 00       | -2.02          | AVG          |
| N/A                    |                   |                             |                 |         |             |          |                |              |
|                        |                   |                             |                 |         |             |          |                |              |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode              |                   | 02.11n HT40<br>230MHZ       | 0 /            | Te     | emp/Hu      | Temp/Hum |                    | / 33%RH         |  |
|------------------------|-------------------|-----------------------------|----------------|--------|-------------|----------|--------------------|-----------------|--|
| Test Item              |                   | armonic                     |                |        | est Dat     |          |                    | December 5, 201 |  |
| Polarize               |                   | orizontal                   |                |        | t Engir     |          | Kevin Kuo          |                 |  |
| Detector               | Peak a            | and Average                 | e              | Te     | st Volta    | ige      | 120Va              | ac / 60Hz       |  |
| 110.0 dBu¥/m           |                   |                             |                |        |             |          | Limit1:<br>Limit2: | _               |  |
| 70                     |                   |                             |                |        |             |          |                    |                 |  |
| 30.0<br>1000.000 4900. | 00 8800.00 12     | 2700.00 16600.00            | 20500.00       | 24400. | 00 28300    | .00 322  | 0.00 4             | 0000.00 MHz     |  |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV/ |        | Lir<br>(dBu |          | Margin<br>(dB)     | Remark          |  |
| 15680.000              | 43.61             | 19.09                       | 62.7           | 0      | 74.         | 00       | -11.30             | peak            |  |
| 15680.000              | 32.03             | 19.09                       | 51.1           | 2      | 54.         | 00       | -2.88              | AVG             |  |
| N/A                    |                   |                             |                |        |             |          |                    |                 |  |
|                        |                   |                             |                |        |             |          |                    |                 |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode           |                   | 11ac VHT8<br>10MHZ          |                    | Temp/Hum           | <b>24(°</b> ℃)/    | 33%RH      |  |
|---------------------|-------------------|-----------------------------|--------------------|--------------------|--------------------|------------|--|
| Test Item           | Ha                | armonic                     |                    | Test Date          | Decemb             | er 4, 2017 |  |
| Polarize            | V                 | ertical                     |                    | est Engineer       | Kevin Kuo          |            |  |
| Detector            | Peak a            | ind Average                 | e T                | est Voltage        | 120Va              | c / 60Hz   |  |
| 110.0 dBuV/m        | ·                 |                             |                    |                    | Limit1:<br>Limit2: |            |  |
| 30.0<br>1000.000 49 | 00.00 8800.00 1   | 2700.00 16600.00            | ) 20500.00 244     | 00.00 28300.00 323 | 200.00 40          | 000.00 MHz |  |
| Frequency<br>(MHz)  | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB)     | Remark     |  |
| 15670.000           | 39.85             | 19.06                       | 58.91              | 74.00              | -15.09             | peak       |  |
| 15670.000           | 31.05             | 19.06                       | 50.11              | 54.00              | -3.89              | AVG        |  |
| N/A                 |                   |                             |                    |                    |                    |            |  |
| Remark:             |                   |                             |                    |                    |                    |            |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode            |                   | .11ac VHT8<br>10MHZ         | 30 /          | T€     | emp/Hi   | Jm           | <b>24(</b> °C   | )/ 33%RH     |  |
|----------------------|-------------------|-----------------------------|---------------|--------|----------|--------------|-----------------|--------------|--|
| Test Item            | Ha                | rmonic                      |               | Т      | est Da   | te           | December 4, 201 |              |  |
| Polarize             |                   | rizontal                    |               |        | st Engii |              | Kevin Kuo       |              |  |
| Detector             | Peak a            | nd Average                  | ;             | Те     | st Volta | age          | 120V            | ac / 60Hz    |  |
| 110.0 dBuV/m         |                   |                             |               |        |          |              | Limit1:         | _            |  |
|                      |                   |                             |               |        |          |              | Limit2:         |              |  |
|                      |                   |                             |               |        |          |              |                 |              |  |
|                      |                   |                             |               |        |          |              |                 |              |  |
| 70                   |                   |                             |               |        |          |              |                 |              |  |
|                      |                   | 1                           |               |        |          |              |                 |              |  |
|                      |                   | ž                           |               |        |          |              |                 |              |  |
| 30.0<br>1000.000 490 | 0.00 8800.00 12   | 2700.00 16600.00            | 0 20500.00    | 24400. | 00 2830  | 0.00 322     | 0.00            | 40000.00 MHz |  |
| Frequency<br>(MHz)   | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |        |          | mit<br>ıV/m) | Margin<br>(dB)  | Remark       |  |
| 15620.000            | 41.04             | 18.91                       | 59.9          | 5      | 74       | .00          | -14.05          | peak         |  |
| 15620.000            | 31.72             | 18.91                       | 50.6          | 3      | 54       | .00          | -3.37           | AVG          |  |
| N/A                  |                   |                             |               |        |          |              |                 |              |  |
|                      |                   |                             |               |        |          |              |                 |              |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Rev.00

## Above 1G Test Data for UNII-2a

| Те   | st Mode        |       | IE       | EE 802.<br>5260 MH |            | Т          | emp/H    | lum        | <b>24(</b> ℃)      | / 33%RH     |
|------|----------------|-------|----------|--------------------|------------|------------|----------|------------|--------------------|-------------|
| Te   | est Item       |       |          | Harmon             | ic         |            | lest Da  | ate        | Decemb             | per 4, 2017 |
| F    | olarize        |       |          | Vertica            | l          | Tes        | st Eng   | ineer      | Kev                | rin Kuo     |
| D    | etector        |       | Pea      | ik and Av          | rerage     | Te         | est Voli | tage       | 120Va              | ac / 60Hz   |
| 110. | 0 dBuV/m       |       |          |                    |            |            |          |            |                    |             |
|      |                |       |          |                    |            |            |          |            | Limit1:<br>Limit2: | _           |
|      |                |       |          |                    |            |            |          |            |                    |             |
|      |                |       |          |                    |            |            |          |            |                    |             |
|      |                |       |          |                    |            |            |          |            |                    |             |
| 70   |                |       |          |                    |            |            |          |            |                    |             |
|      |                |       |          | 1<br>X             |            |            |          |            |                    |             |
|      |                |       |          | ×                  |            |            |          |            |                    |             |
|      |                |       |          |                    |            |            |          |            |                    |             |
|      |                |       |          |                    |            |            |          |            |                    |             |
| 30.0 |                |       |          |                    |            |            |          |            |                    |             |
| 1    | 000.000 4900.0 | 0 880 | )0.00 12 | 700.00 1660        | 0.00 20500 | 0.00 24400 | .00 283  | 00.00 3220 | 0.00 4             | 0000.00 MHz |
| Free | quency         | Rea   | ading    | Correct            | R          | esult      | Ι.       | imit       | Margin             |             |
|      | MHz)           |       | BuV)     | Factor<br>(dB/m)   |            | uV/m)      |          | suV/m)     | (dB)               | Remark      |
| 157  | 80.000         | 45    | 5.30     | 19.38              | 6          | 4.68       | 7        | 4.00       | -9.32              | peak        |
| 157  | 80.000         | 31    | .71      | 19.38              | 5          | 1.09       | 5        | 4.00       | -2.91              | AVG         |
|      | N/A            |       |          |                    |            |            |          |            |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |   |        | EE 802. <sup>-</sup><br>5260 MH |               | Т       | <b>Temp/Hum</b> 24(℃)/ 33%R |               |                | )/ 33%RH     |  |
|--------------------|---|--------|---------------------------------|---------------|---------|-----------------------------|---------------|----------------|--------------|--|
| Test Item          |   |        | Harmon                          | ic            | -       | Test Da                     | ate           | Decem          | ber 4, 201   |  |
| Polarize           |   |        | Horizont                        |               |         | st Engi                     |               | Kevin Kuo      |              |  |
| Detector           | Polarize         Otelector           10.0         dBuV/m           70 |        | and Av                          | verage        | Te      | est Volt                    | age           | 120\           | /ac / 60Hz   |  |
| 110.0 dBu¥/m       |   |        |                                 |               |         |                             |               | Limit1:        |              |  |
|                    |   |        |                                 |               |         |                             |               | Limit2:        |              |  |
|                    |   |        |                                 |               |         |                             |               |                |              |  |
|                    |   |        |                                 |               |         |                             |               |                |              |  |
|                    |   |        |                                 |               |         |                             |               |                |              |  |
| 70                 |   |        |                                 |               |         |                             |               |                |              |  |
|                    |   |        | 1<br>X                          |               |         |                             |               |                |              |  |
|                    |   |        |                                 |               |         |                             |               |                |              |  |
|                    |   |        | ž                               |               |         |                             |               |                |              |  |
| 30.0               |   |        |                                 |               |         |                             |               |                |              |  |
| 1000.000 4900.     | UU 8800.0   | JU 127 | 00.00 1660                      | 0.00 20500.00 | ) 24400 | J.OO 2830                   | )0.00 322(    | )0.00          | 40000.00 MHz |  |
| Frequency<br>(MHz) | Readi<br>(dBu   |        | Correct<br>Factor<br>(dB/m)     | Res<br>(dBu)  |         |                             | imit<br>uV/m) | Margin<br>(dB) | Remark       |  |
| 15770.000          | 40.9  | 2      | 19.35                           | 60.           | 27      | 74                          | 4.00          | -13.73         | peak         |  |
| 15770.000          | 25.7  | 6      | 19.35                           | 45.           | 11      | 54                          | 4.00          | -8.89          | AVG          |  |
| N/A                |   |        |                                 |               |         |                             |               |                |              |  |
|                    |   |        |                                 |               |         |                             |               |                |              |  |
|                    |   |        |                                 |               |         |                             |               |                |              |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | IEEE 802.11<br>5280 MHz     |                 | Ten      | np/Hum            | <b>24(</b> ℃)/ | ′ 33%RH    |
|--------------------|-------------------|-----------------------------|-----------------|----------|-------------------|----------------|------------|
| Test Item          |                   | Harmonic                    |                 |          | st Date           |                | er 5, 201  |
| Polarize           |                   | Vertical                    |                 |          | Engineer          |                | n Kuo      |
| Detector           | F                 | Peak and Aver               | age             | Test     | Voltage           | 120Va          | c / 60Hz   |
| 110.0 dBuV/m       |                   |                             |                 |          |                   | Limit1:        |            |
|                    |                   |                             |                 |          |                   | Limit2:        | _          |
|                    |                   |                             |                 |          |                   |                |            |
|                    |                   |                             |                 |          |                   |                |            |
|                    |                   |                             |                 |          |                   |                |            |
| 70                 |                   |                             |                 |          |                   |                |            |
|                    |                   | 1<br>X                      |                 |          |                   |                |            |
|                    |                   | ž.                          |                 |          |                   |                |            |
|                    |                   |                             |                 |          |                   |                |            |
| 30.0               |                   |                             |                 |          |                   |                |            |
| 1000.000 4900.     | DO 8800.00        | 12700.00 16600.0            | 0 20500.00      | 24400.00 | 28300.00 3220     | 00.00 40       | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resul<br>(dBuV/ |          | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark     |
| 15840.000          | 41.82             | 19.55                       | 61.37           | ,        | 74.00             | -12.63         | peak       |
| 15840.000          | 31.60             | 19.55                       | 51.15           | 5        | 54.00             | -2.85          | AVG        |
| N/A                |                   |                             |                 |          |                   |                |            |
|                    |                   |                             |                 |          |                   |                |            |
|                    |                   |                             |                 |          |                   |                |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | EEE 802.11a<br>5280 MHz     |                   | Те      | mp/Hum            | <b>24(</b> ℃)  | / 33%RH     |
|--------------------|-------------------|-----------------------------|-------------------|---------|-------------------|----------------|-------------|
| Test Item          |                   | Harmonic                    |                   | Te      | est Date          |                | oer 5, 201  |
| Polarize           |                   | Horizontal                  |                   |         | Engineer          |                | in Kuo      |
| Detector           | Pe                | ak and Aver                 | age               | Tes     | t Voltage         | 120Va          | ic / 60Hz   |
| 110.0 dBu¥/m       |                   |                             |                   |         |                   | Limit1:        |             |
|                    |                   |                             |                   |         |                   | Limit2:        |             |
|                    |                   |                             |                   |         |                   |                |             |
|                    |                   |                             |                   |         |                   |                |             |
|                    |                   |                             |                   |         |                   |                |             |
| 70                 |                   | 1                           |                   |         |                   |                |             |
|                    |                   | 1<br>X                      |                   |         |                   |                |             |
|                    |                   | ,<br>X                      |                   |         |                   |                |             |
|                    |                   |                             |                   |         |                   |                |             |
| 30.0               |                   |                             |                   |         |                   |                |             |
| 1000.000 4900.0    | 0 8800.00         | 12700.00 16600.00           | D 20500.00        | 24400.0 | 0 28300.00 32     | 200.00 4       | 0000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/r |         | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark      |
| 15840.000          | 45.05             | 19.55                       | 64.60             |         | 74.00             | -9.40          | peak        |
| 15840.000          | 32.09             | 19.55                       | 51.64             |         | 54.00             | -2.36          | AVG         |
| N/A                |                   |                             |                   |         |                   |                |             |
|                    |                   |                             |                   |         |                   |                |             |
|                    |                   |                             |                   |         |                   |                |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          | ;   | IL            | EE 802.11<br>5320 MHz |               | Te     | emp/Hi   | um           | <b>24(</b> ℃)      | / 33%RH     |
|--------------------|---|---------------|-----------------------|---------------|--------|----------|--------------|--------------------|-------------|
| Test Item          |   |               | Harmonic              |               |        | est Da   |              |                    | oer 5, 201  |
| Polarize           |   |               | Vertical              |               |        | st Engi  |              | Kevin Kuo          |             |
| Detector           | Detector           10.0         dBuV/m           70 |               | ak and Ave            | rage          | Те     | st Volta | age          | 120Va              | ac / 60Hz   |
| 110.0 dBuV/m       |   |               |                       |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              | Limit1:<br>Limit2: | _           |
|                    |   |               |                       |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              |                    |             |
| 70                 |   |               |                       |               |        |          |              |                    |             |
|                    |   |               | 1                     |               |        |          |              |                    |             |
|                    |   |               | × 1                   |               |        |          |              |                    |             |
|                    |   |               | 2                     |               |        |          |              |                    |             |
|                    |   |               | ×                     |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              |                    |             |
| 20.0               |   |               |                       |               |        |          |              |                    |             |
|                    | ).00 88   | 800.00 12     | 2700.00 16600.0       | 0 20500.00    | 24400. | 00 2830  | 0.00 3220    | )0.00 4            | 0000.00 MHz |
|                    |   |               |                       |               |        |          |              |                    |             |
|                    |   |               | Correct               |               |        |          |              |                    |             |
| Frequency<br>(MHz) |   | ading<br>BuV) | Factor<br>(dB/m)      | Resu<br>(dBuV |        |          | mit<br>uV/m) | Margin<br>(dB)     | Remark      |
| 15950.000          | 4   | 0.46          | 19.88                 | 60.3          | 4      | 74       | 1.00         | -13.66             | peak        |
| 15950.000          | 2   | 8.93          | 19.88                 | 48.8          | 51     | 54       | 1.00         | -5.19              | AVG         |
| N/A                |   |               |                       |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              |                    |             |
|                    |   |               |                       |               |        |          |              |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | EEE 802.11a<br>5320 MHz     | a /               | Tei      | mp/Hum            | <b>24(</b> °C)∕ | ′ 33%RH    |
|--------------------|-------------------|-----------------------------|-------------------|----------|-------------------|-----------------|------------|
| Test Item          |                   | Harmonic                    |                   |          | est Date          |                 | er 5, 201  |
| Polarize           |                   | Horizontal                  |                   |          | Engineer          |                 | in Kuo     |
| Detector           | Pe                | ak and Aver                 | age               | Tes      | t Voltage         | 120Va           | c / 60Hz   |
| 110.0 dBuV/m       |                   |                             |                   |          |                   | Limit1:         | _          |
|                    |                   |                             |                   |          |                   | Limit2:         | _          |
|                    |                   |                             |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |
| 70                 |                   |                             |                   |          |                   |                 |            |
|                    |                   | _                           |                   |          |                   |                 |            |
|                    |                   | 1<br>X                      |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |
|                    |                   | *                           |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |
| 30.0               |                   |                             |                   |          |                   |                 |            |
| 1000.000 4900.0    | )0 8800.00        | 12700.00 16600.00           | 0 20500.00        | 24400.00 | ) 28300.00 322    | 00.00 40        | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resulf<br>(dBuV/r |          | Limit<br>(dBuV/m) | Margin<br>(dB)  | Remark     |
| 15970.000          | 41.43             | 19.94                       | 61.37             |          | 74.00             | -12.63          | peak       |
| 15970.000          | 31.28             | 19.94                       | 51.22             |          | 54.00             | -2.78           | AVG        |
| N/A                |                   |                             |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |
|                    |                   |                             |                   |          |                   |                 |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT2<br>260 MHz       | 0 /           | Te     | emp/Hi   | um           | <b>24(</b> ℃)  | )/ 33%RH     |
|--------------------|-------------------|-----------------------------|---------------|--------|----------|--------------|----------------|--------------|
| Test Item          |                   | armonic                     |               |        | est Da   |              |                | ber 4, 2017  |
| Polarize           |                   | /ertical                    |               |        | st Engi  |              |                | /in Kuo      |
| Detector           | Peaka             | and Average                 | e             | Те     | st Volta | age          | 120Va          | ac / 60Hz    |
| 110.0 dBu∀/m       |                   |                             |               |        |          |              | Limit1:        | _            |
|                    |                   |                             |               |        |          |              | Limit2:        | _            |
|                    |                   |                             |               |        |          |              |                |              |
|                    |                   |                             |               |        |          |              |                |              |
|                    |                   |                             |               |        |          |              |                |              |
| 70                 |                   | 1                           |               |        |          |              |                |              |
|                    |                   |                             |               |        |          |              |                |              |
|                    |                   | ×.                          |               |        |          |              |                |              |
|                    |                   |                             |               |        |          |              |                |              |
| 30.0               |                   |                             |               |        |          |              |                |              |
| 1000.000 4900      | .00 8800.00 12    | 2700.00 16600.00            | ) 20500.00    | 24400. | 00 2830  | 0.00 322     | 00.00 4        | 10000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |        |          | mit<br>JV/m) | Margin<br>(dB) | Remark       |
| 15780.000          | 47.16             | 19.38                       | 66.5          | 4      | 74       | .00          | -7.46          | peak         |
| 15780.000          | 31.85             | 19.38                       | 51.2          | 3      | 54       | .00          | -2.77          | AVG          |
| N/A                |                   |                             |               |        |          |              |                |              |
|                    |                   |                             |               |        |          |              |                |              |
|                    |                   |                             |               |        |          |              | 1              | <u> </u>     |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Item Polarize Detector  110.0 dBuV/m  70 70 | Ho            | armonic<br>prizontal<br>and Avera |               | Test     | est Date<br>Enginee<br>t Voltage | er e | Kevin           | er 4, 201<br>N Kuo<br>7 60Hz |
|--|---------------|-----------------------------------|---------------|----------|----------------------------------|--|-----------------|------------------------------|
| Detector           110.0         dBu∀/m          |               | and Avera                         |               |          |                                  | er e | Kevin<br>120Vac | i Kuo                        |
| 110.0 dBuV/m                                     | Peak a        |                                   |               |          |                                  |  | Limit1:         | / 60Hz                       |
|  |               |                                   |               |          |                                  |  |                 |                              |
| 70   |               |                                   |               |          |                                  |  |                 |                              |
| 70   |               |                                   |               |          |                                  |  |                 |                              |
| 70   |               | 1<br>X                            |               |          |                                  |  |                 |                              |
| 70   |               | 1                                 |               |          |                                  |  |                 |                              |
| 70   |               |                                   |               |          |                                  |  |                 |                              |
|  |               | 1                                 |               |          |                                  |  |                 |                              |
|  |               |                                   |               |          |                                  |  |                 |                              |
|  |               |                                   |               |          |                                  |  |                 |                              |
|  |               | 2×                                |               |          |                                  |  |                 |                              |
| 30.0<br>1000.000 4900.00 880                     | 0.00 127      | 00.00 16600                       | .00 20500.00  | 24400.00 | ) 28300.00                       | 32200.00                                 | 4000            | 00.00 MHz                    |
|  | JU.UU 127     | 00.00 16600                       | .00 20300.00  | 24400.00 | J 28300.00                       | 32200.00                                 | 4000            | JU. UU MITZ                  |
|  | ading<br>BuV) | Correct<br>Factor<br>(dB/m)       | Resi<br>(dBu\ |          | Limit<br>(dBuV/n                 |  | argin<br>dB)    | Remark                       |
| 15790.000 39                                     | 9.61          | 19.41                             | 59.0          | )2       | 74.00                            | -1                                       | 4.98            | peak                         |
| 15790.000 25                                     | 5.19          | 19.41                             | 44.6          | 60       | 54.00                            | -9                                       | 9.40            | AVG                          |
| N/A  |               |                                   |               |          |                                  |  |                 |                              |
|  |               |                                   |               |          |                                  |  |                 |                              |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 802.11n HT2<br>280 MHz      | 20 /               | Temp/H      | lum            | <b>24(</b> ℃)      | / 33%RH     |
|--------------------|-------------------|-----------------------------|--------------------|-------------|----------------|--------------------|-------------|
| Test Item          | ŀ                 | larmonic                    |                    | Test Da     | ate            | Decemb             | per 5, 201  |
| Polarize           |                   | Vertical                    |                    | Test Eng    | ineer          |                    | in Kuo      |
| Detector           | Peak              | and Averag                  | e                  | Test Vol    | tage           | 120Va              | ac / 60Hz   |
| 110.0 dBuV/m       | 1                 |                             |                    |             | 1              |                    |             |
|                    |                   |                             |                    |             |                | Limit1:<br>Limit2: | _           |
|                    |                   |                             |                    |             |                |                    |             |
|                    |                   |                             |                    |             |                |                    |             |
| 70                 |                   |                             |                    |             |                |                    |             |
|                    |                   | 1<br>X                      |                    |             |                |                    |             |
|                    |                   | *                           |                    |             |                |                    |             |
|                    |                   |                             |                    |             |                |                    |             |
| 30.0               | ND 0000 00 1      |                             | 20500.00           | 1400.00 000 | 00.00 000      | 0.00               |             |
| 1000.000 4900.0    | 0 8800.00 1       | 2700.00 16600.00            | 20500.00 2         | 4400.00 283 | 00.00 322      | 00.00 40           | 0000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) |             | imit<br>suV/m) | Margin<br>(dB)     | Remark      |
| 15830.000          | 44.07             | 19.52                       | 63.59              | 7           | 4.00           | -10.41             | peak        |
| 15830.000          | 31.93             | 19.52                       | 51.45              | 5           | 4.00           | -2.55              | AVG         |
| N/A                |                   |                             |                    |             |                |                    |             |
|                    |                   |                             |                    |             |                |                    |             |
|                    |                   |                             |                    |             |                |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode               |                   | 02.11n HT2<br>280 MHz       | 20 /              | Temp/Hum          | າ <b>24(</b> ℃     | )/ 33%RH     |
|-------------------------|-------------------|-----------------------------|-------------------|-------------------|--------------------|--------------|
| Test Item               |                   | larmonic                    |                   | Test Date         |                    | ber 5, 2017  |
| Polarize                | H                 | lorizontal                  |                   | Test Engine       |                    | vin Kuo      |
| Detector                | Peak              | and Averag                  | e                 | Test Voltag       | e 120V             | /ac / 60Hz   |
| 110.0 dBu¥/m            |                   |                             |                   |                   | Limit1:<br>Limit2: |              |
| 70                      |                   |                             |                   |                   |                    |              |
| 30.0<br>1000.000 4900.0 | 00 8800.00 12     | 2700.00 16600.00            | 0 20500.00        | 24400.00 28300.00 | 32200.00           | 40000.00 MHz |
| Frequency<br>(MHz)      | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m | Limi<br>) (dBuV/  |                    | Remark       |
| 15840.000               | 51.08             | 19.55                       | 70.63             | 74.00             | 0 -3.37            | peak         |
| 15840.000               | 32.03             | 19.55                       | 51.58             | 54.00             | ) -2.42            | AVG          |
| N/A                     |                   |                             |                   |                   |                    |              |
|                         |                   |                             |                   |                   |                    |              |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT2<br>320 MHz       | 0 /                | Temp/Hum            |                    | ' 33%RH    |
|--------------------|-------------------|-----------------------------|--------------------|---------------------|--------------------|------------|
| Test Item          |                   | armonic                     |                    | Test Date           |                    | er 5, 2017 |
| Polarize           |                   | /ertical                    |                    | Test Engineer       |                    | in Kuo     |
| Detector           | Peaka             | and Average                 | e                  | Test Voltage        | 120Va              | c / 60Hz   |
| 110.0 dBu∀/m       |                   |                             |                    |                     | Limit1:<br>Limit2: | _          |
| 70                 |                   |                             |                    |                     |                    |            |
| 1000.000 4900.     | .00 8800.00 12    | 2700.00 16600.00            | 0 20500.00 24      | 4400.00 28300.00 32 | 2200.00 40         | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)   | Margin<br>(dB)     | Remark     |
| 15960.000          | 41.00             | 19.90                       | 60.90              | 74.00               | -13.10             | peak       |
| 15960.000          | 30.07             | 19.90                       | 49.97              | 54.00               | -4.03              | AVG        |
| N/A                |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     | I                  | 1          |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode              | 53                | )2.11n HT2(<br>)20 MHz      | 0 /            | Те     | emp/Hu      | ım       | <b>24(</b> °C) | / 33%RH     |
|------------------------|-------------------|-----------------------------|----------------|--------|-------------|----------|----------------|-------------|
| Test Item              |                   | armonic                     |                |        | est Dat     |          |                | per 5, 201  |
| Polarize               |                   | orizontal                   |                |        | t Engir     |          |                | rin Kuo     |
| Detector               | Peak a            | and Average                 | e              | Te     | st Volta    | ige      | 120Va          | ac / 60Hz   |
| 110.0 dBuV/m           |                   |                             |                |        |             |          | Limit1:        | _           |
| 70                     |                   |                             |                |        |             |          |                |             |
| 30.0<br>1000.000 4900. | 00 8800.00 12     | 700.00 16600.00             | ) 20500.00     | 24400. | 00 28300    | .00 3220 | 0.00 4         | 0000.00 MHz |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV/ |        | Lir<br>(dBu |          | Margin<br>(dB) | Remark      |
| 15960.000              | 45.56             | 19.90                       | 65.46          | 6      | 74.         | .00      | -8.54          | peak        |
| 15960.000              | 30.92             | 19.90                       | 50.82          | 2      | 54.         | .00      | -3.18          | AVG         |
| N/A                    |                   |                             |                |        |             |          |                |             |
|                        |                   |                             |                |        |             |          |                |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 802.11n HT4<br>270 MHz      | .0 /               | Temp/H       | um            | <b>24(</b> ℃)      | / 33%RH     |
|--------------------|-------------------|-----------------------------|--------------------|--------------|---------------|--------------------|-------------|
| Test Item          | ŀ                 | larmonic                    |                    | Test Da      | ate           | Decemb             | oer 5, 201  |
| Polarize           |                   | Vertical                    |                    | Test Engi    | neer          |                    | in Kuo      |
| Detector           | Peak              | and Averag                  | e                  | Test Volt    | age           | 120Va              | nc / 60Hz   |
| 110.0 dBuV/m       |                   |                             |                    |              |               |                    |             |
|                    |                   |                             |                    |              |               | Limit1:<br>Limit2: | _           |
|                    |                   |                             |                    |              |               |                    |             |
|                    |                   |                             |                    |              |               |                    |             |
|                    |                   |                             |                    |              |               |                    |             |
| 70                 |                   | 1                           |                    |              |               |                    |             |
|                    |                   |                             |                    |              |               |                    |             |
|                    |                   | ×                           |                    |              |               |                    |             |
| 30.0               |                   |                             |                    |              |               |                    |             |
| 1000.000 4900.0    | 0 8800.00 1       | 2700.00 16600.00            | 20500.00 2         | 4400.00 2830 | 10.00 322     | 00.00 4            | 0000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) |              | imit<br>uV/m) | Margin<br>(dB)     | Remark      |
| 15810.000          | 42.84             | 19.46                       | 62.30              | 74           | 4.00          | -11.70             | peak        |
| 15810.000          | 31.45             | 19.46                       | 50.91              | 54           | 4.00          | -3.09              | AVG         |
| N/A                |                   |                             |                    |              |               |                    |             |
|                    |                   |                             |                    |              |               |                    |             |
|                    |                   |                             |                    |              |               |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode               |                   | 02.11n HT4<br>270 MHz       | 10 /              | Temp/H        | lum             | <b>24(</b> °C)     | / 33%RH     |
|-------------------------|-------------------|-----------------------------|-------------------|---------------|-----------------|--------------------|-------------|
| Test Item               | F                 | larmonic                    |                   | Test D        | ate             | Decemb             | er 5, 201   |
| Polarize                | Н                 | orizontal                   |                   | Test Engineer |                 |                    | in Kuo      |
| Detector                | Peak              | and Averag                  | je                | Test Vol      | tage            | 120Va              | ic / 60Hz   |
| 110.0 dBuV/m            |                   |                             |                   |               |                 | Limit1:<br>Limit2: | _           |
| 70                      |                   |                             |                   |               |                 |                    |             |
| 30.0<br>1000.000 4900.0 | 0 8800.00 12      | 700.00 16600.00             | ) 20500.00 ;      | 24400.00 283  | 00.00 3220      | 0.00 40            | 0000.00 MHz |
| Frequency<br>(MHz)      | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m |               | ₋imit<br>3uV/m) | Margin<br>(dB)     | Remark      |
| 15790.000               | 46.64             | 19.41                       | 66.05             | 7             | 4.00            | -7.95              | peak        |
| 15790.000               | 31.81             | 19.41                       |                   |               | 4.00            | -2.78              | AVG         |
| N/A                     |                   |                             |                   |               |                 |                    |             |
|                         |                   |                             |                   |               |                 |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT4<br>310 MHz       | 0 /           | Te       | emp/H    | um           | <b>24(</b> °C)     | )/ 33%RH    |  |
|--------------------|-------------------|-----------------------------|---------------|----------|----------|--------------|--------------------|-------------|--|
| Test Item          |                   | armonic                     |               |          | ēst Da   |              | December 13, 20    |             |  |
| Polarize           |                   | /ertical                    |               |          | st Engi  |              |                    | /in Kuo     |  |
| Detector           | Peak              | and Average                 | е             | Те       | st Volta | age          | 120Va              | ac / 60Hz   |  |
| 110.0 dBu∀/m       |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              | Limit1:<br>Limit2: |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
| 70                 |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   | 1<br>X                      |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   | *                           |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
| 30.0               |                   |                             |               |          |          |              |                    |             |  |
| 1000.000 4900.     | 00 8800.00 12     | 2700.00 16600.00            | ) 20500.00    | 24400    | .00 2830 | 0.00 322     | 00.00 4            | 0000.00 MHz |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resı<br>(dBuV |          |          | mit<br>JV/m) | Margin<br>(dB)     | Remark      |  |
| 15930.000          | 36.17             | 19.81                       | 55.9          | 98 74.00 |          | -18.02       | peak               |             |  |
| 15930.000          | 26.84             | 19.81                       | 46.6          | 5        | 54       | .00          | -7.35              | AVG         |  |
| N/A                |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |
|                    |                   |                             |               |          |          |              |                    |             |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode     |               | 02.11n HT4<br>310 MHz | 0 /           | Temp/Hu       | n       | <b>24(</b> °C) | / 33%RH     |
|---------------|---------------|-----------------------|---------------|---------------|---------|----------------|-------------|
| Test Item     |               | armonic               |               | Test Date     |         |                | er 13, 201  |
| Polarize      |               | orizontal             |               | Test Engin    |         |                | rin Kuo     |
| Detector      | Peak          | and Average           | e             | Test Volta    | ge      | 120Va          | ac / 60Hz   |
| 110.0 dBuV/m  |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         | Limit1:        | -           |
|               |               |                       |               |               |         | Limit2:        |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
| 70            |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               | 1                     |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               | ×                     |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
| 30.0          |               |                       |               |               |         |                |             |
| 1000.000 4900 | .00 8800.00 1 | 2700.00 16600.00      | ) 20500.00 24 | 400.00 28300. | )0 3220 | 0.00 4         | 0000.00 MHz |
|               |               |                       |               |               |         |                |             |
|               |               | 0                     |               |               |         |                |             |
| Frequency     | Reading       | Correct<br>Factor     | Result        | Lim<br>(dBu)  |         | Margin         | Remark      |
| (MHz)         | (dBuV)        | (dB/m)                | (dBuV/m)      | (dBu\         | ////)   | (dB)           |             |
| 15920.000     | 36.84         | 19.79                 | 56.63         | 74.0          | 00      | -17.37         | peak        |
| 15920.000     | 27.24         | 19.79                 | 47.03         | 54.0          | 00      | -6.97          | AVG         |
| N/A           |               |                       |               |               |         |                |             |
|               | 1             |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |
|               |               |                       |               |               |         |                |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 2.11ac VHT80<br>90 MHz      | ד <sup>א כ</sup>   | emp/Hum            | <b>24(</b> °C)/ | 33%RH       |
|--------------------|-------------------|-----------------------------|--------------------|--------------------|-----------------|-------------|
| Test Item          |                   | armonic                     | -                  | Test Date          |                 | er 13, 2017 |
| Polarize           |                   | /ertical                    |                    | st Engineer        |                 | n Kuo       |
| Detector           | Peak a            | and Average                 | Te                 | est Voltage        | 120Va           | c / 60Hz    |
| 110.0 dBuV/m       |                   |                             |                    |                    | Limit1:         |             |
|                    |                   |                             |                    |                    | Limit2:         | _           |
|                    |                   |                             |                    |                    |                 |             |
|                    |                   |                             |                    |                    |                 |             |
| 70                 |                   |                             |                    |                    |                 |             |
| 70                 |                   |                             |                    |                    |                 |             |
|                    |                   |                             |                    |                    |                 |             |
|                    | 1                 |                             |                    |                    |                 |             |
| 30.0               |                   |                             |                    |                    |                 |             |
| 1000.000 4900      | ).00 8800.00 1    | 2700.00 16600.00            | 20500.00 24400     | 0.00 28300.00 3220 | 00.00 40        | 000.00 MHz  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB)  | Remark      |
| 10580.000          | 33.34             | 15.10                       | 48.44              | 74.00              | -25.56          | peak        |
| N/A                |                   |                             |                    |                    |                 |             |
|                    |                   |                             |                    |                    |                 |             |
|                    | 1                 | 1 1                         |                    | I                  | I               |             |
| Remark:            |                   |                             |                    |                    |                 |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          | IEE       |              | .11ac VH<br>90 MHz          | T80 /         | Te     | emp/Hu      | IM      | <b>24(</b> ℃)  | / 33%RH      |  |
|--------------------|-----------|--------------|-----------------------------|---------------|--------|-------------|---------|----------------|--------------|--|
| Test Item          |           |              | armonic                     |               | Т      | est Dat     | e       |                | er 13, 201   |  |
| Polarize           |           |              | orizontal                   |               |        | st Engin    |         | Kevin Kuo      |              |  |
| Detector           |           | Peak a       | ind Avera                   | ge            | Те     | st Volta    | ige     | 120Va          | ac / 60Hz    |  |
| 110.0 dBu∀/m       |           |              |                             |               |        |             |         | Limit1:        | _            |  |
|                    |           |              |                             |               |        |             |         | Limit2:        |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
| 70                 |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           | 1            |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
| 30.0               | 00.00 000 | 0.00 1/      | 2700.00 1000                | 0.00 20500.00 | 21100  | 00 20200    | 00 222  | 0.00 4         | 0000 00 1411 |  |
| 1000.000 49        | 00.00 880 | 0.00 12      | 2700.00 1660                | 0.00 20500.00 | 24400. | 00 28300    | .00 322 | 00.00 4        | 0000.00 MHz  |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
| Frequency<br>(MHz) |           | ding<br>BuV) | Correct<br>Factor<br>(dB/m) | Res<br>(dBu\  |        | Lin<br>(dBu |         | Margin<br>(dB) | Remark       |  |
| 10580.000          | 34        | .11          | 15.10                       | 49.2          | 21     | 74.         | .00     | -24.79         | peak         |  |
| N/A                |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    |           |              |                             |               |        |             |         |                | 1            |  |
|                    |           |              |                             |               |        |             |         |                |              |  |
|                    | 1         |              | 1                           | 1             |        |             |         |                |              |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

## Above 1G Test Data for UNII-2c

| Test Mode                |                   | EEE 802.11a<br>5500 MHz     | -              | Te     | emp/H      | um            | <b>24(</b> °C)     | )/ 33%RH     |
|--------------------------|-------------------|-----------------------------|----------------|--------|------------|---------------|--------------------|--------------|
| Test Item                |                   | Harmonic Test Date December |                |        | ber 5, 201 |               |                    |              |
| Polarize                 |                   | Vertical                    |                |        | t Engi     |               |                    | vin Kuo      |
| Detector                 | Pe                | ak and Aver                 | age            | Tes    | st Volt    | age           | 120Va              | ac / 60Hz    |
| 110.0 dBuV/m             |                   |                             |                |        |            |               |                    |              |
|                          |                   |                             |                |        |            |               | Limit1:<br>Limit2: | _            |
|                          |                   |                             |                |        |            |               |                    |              |
| 70                       |                   | 1                           |                |        |            |               |                    |              |
|                          |                   | Ś.                          |                |        |            |               |                    |              |
| 30.0<br>1000.000 4900.00 | ) <u>8800.00</u>  | 12700.00 16600.0            | 0 20500.00     | 24400. | 00 283(    | 00.00 3220    | 0.00 4             | 40000.00 MHz |
|                          |                   |                             |                |        |            |               |                    |              |
| Frequency<br>(MHz)       | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV/ |        |            | imit<br>uV/m) | Margin<br>(dB)     | Remark       |
| 16500.000                | 37.68             | 23.01                       | 60.6           | 9      | 74         | 4.00          | -13.31             | peak         |
| 16500.000                | 27.86             | 23.01                       | 50.8           | 7      | 54         | 4.00          | -3.13              | AVG          |
| N/A                      |                   |                             |                |        |            |               |                    |              |
|                          |                   | 1                           |                |        |            |               |                    | 1            |
| mark:                    |                   |                             |                |        |            |               |                    |              |

2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                  | IEEE 8<br>550 | 302.11a<br>0 MHz        | a /           | Te     | emp/H    | um            | <b>24(</b> °C      | c)/ 33%RH    |  |
|--------------------|------------------|---------------|-------------------------|---------------|--------|----------|---------------|--------------------|--------------|--|
| Test Item          |                  |               | monic                   |               |        | est Da   |               |                    | nber 5, 201  |  |
| Polarize           |                  |               | zontal                  |               |        | st Engi  |               | Kevin Kuo          |              |  |
| Detector           |                  | Peak an       | d Aver                  | age           | Te     | st Volt  | age           | 120\               | /ac / 60Hz   |  |
| 110.0 dBuV/m       |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               | Limit1:<br>Limit2: | _            |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |
| 70                 |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               | .00 4              |              |  |
|                    |                  | 1             |                         |               |        |          |               |                    |              |  |
|                    |                  | ×             |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |
| 30.0               |                  |               |                         |               |        |          |               |                    |              |  |
| 1000.000 4900.0    | 0 8800.00        | 12700.00      | 16600.00                | ) 20500.00    | 24400. | .00 2830 | 0.00 3220     | )0.00              | 40000.00 MHz |  |
| Frequency<br>(MHz) | Readin<br>(dBuV) | J Fa          | orrect<br>actor<br>B/m) | Resi<br>(dBuV |        |          | imit<br>uV/m) | Margin<br>(dB)     | Remark       |  |
| 11000.000          | 36.22            |               | 6.06                    | 52.2          | 28     | 74       | 1.00          | -21.72             | peak         |  |
| N/A                |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |
|                    |                  |               |                         |               |        |          |               |                    |              |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

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| Test Mode          |                            |        | EE 802. <sup>-</sup><br>5580 MF |               | Те      | emp/H    | um            | 24(°C)/ 33%R⊦      |            |      |
|--------------------|----------------------------|--------|---------------------------------|---------------|---------|----------|---------------|--------------------|------------|------|
| Test Item          |                            |        | Harmon                          |               |         | est Da   |               |                    | nber 4,    |      |
| Polarize           |                            |        |                                 |               | evin Ku |          |               |                    |            |      |
| Detector           |                            | Peak   | and Av                          | reage         | Te      | st Volt  | age           | 120                | Vac / 60   | )Hz  |
| 110.0 dBu¥/m       |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               | Limit1:<br>Limit2: |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
| 70                 |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            | 1<br>X |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
| 30.0               |                            |        |                                 |               |         |          |               |                    |            |      |
| 1000.000 4900.0    | 0 8800.0                   | 0 127  | 00.00 1660                      | 0.00 20500.00 | 24400   | .00 2830 | 0.00 3220     | 0.00               | 40000.00 M | lHz  |
| Frequency<br>(MHz) | Readi<br>(dBu <sup>v</sup> |        | Correct<br>Factor<br>(dB/m)     | Res<br>(dBu\  |         |          | imit<br>uV/m) | Margin<br>(dB)     | Re         | mark |
| 11160.000          | 34.2                       | 0      | 16.07                           | 50.2          | 27      | 74       | 4.00          | -23.73             | р          | eak  |
| N/A                |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |
|                    |                            |        |                                 |               |         |          |               |                    |            |      |

- fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test M            |           |                 |       | EE 802.<br>5580 MI          |                |         | emp/H    |               | 24(°C)/ 33%F       |              |  |
|-------------------|-----------|-----------------|-------|-----------------------------|----------------|---------|----------|---------------|--------------------|--------------|--|
| Test If           |           |                 |       | Harmon                      |                |         | Fest Da  |               |                    | ber 4, 201   |  |
| Polar             |           |                 |       | Horizon                     |                |         | st Engi  |               |                    | /in Kuo      |  |
| Deteo             | ctor      |                 | Peak  | c and Av                    | /erage         | Te      | est Volt | age           | 120V               | ac / 60Hz    |  |
| 110.0 dB          | uV/m      |                 |       |                             |                |         |          |               |                    |              |  |
|                   |           |                 |       |                             |                |         |          |               | Limit1:<br>Limit2: | _            |  |
|                   |           |                 |       |                             |                |         |          |               |                    |              |  |
|                   |           |                 |       |                             |                |         |          |               |                    |              |  |
|                   |           |                 |       |                             |                |         |          |               |                    |              |  |
| 70                |           |                 |       |                             |                |         |          |               |                    |              |  |
|                   |           |                 |       |                             |                |         |          |               |                    |              |  |
|                   |           |                 |       |                             |                |         |          |               |                    |              |  |
| 30.0              |           |                 |       |                             |                |         |          |               |                    |              |  |
| 1000.000          | 0 4900.00 | 8800.0          | 0 127 | 00.00 1660                  | 00.00 20500.00 | ) 24400 | .00 2830 | 00.00 3220    | 00.00 4            | 40000.00 MHz |  |
| Frequenc<br>(MHz) | су        | Readiı<br>(dBu\ |       | Correct<br>Factor<br>(dB/m) | Res<br>(dBu)   |         |          | imit<br>uV/m) | Margin<br>(dB)     | Remark       |  |
| 11160.00          | 00        | 33.5            | 0     | 16.07                       | 49.            | 57      | 74       | 4.00          | -24.43             | peak         |  |
| N/A               |           |                 |       |                             |                |         |          |               |                    |              |  |
|                   |           |                 |       |                             |                |         |          |               |                    |              |  |
|                   | I         |                 | I     |                             | I              |         |          |               |                    |              |  |
| mark:             |           |                 |       |                             |                |         |          |               |                    |              |  |

- Measuring frequencies from FGF2 to the Four narmonic of highest fundamental frequency.
   Far above 100 F the FUT reactive was under everyone limit therefore
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Polarize         Vertical         Test Engineer         Kevin Kud           Detector         Peak and Average         Test Voltage         120Vac / 60           110.0         d8wV/m         Imit:         Imit:         Imit:         Imit:           10.0         d8wV/m         Imit:         Imit:         Imit:         Imit:         Imit:           10.0         Imit:         Imit:         Imit:         Imit:         Imit:         Imit:   |                        | Temp/Hum 24(°C)/ 33%R                     |
|--|------------------------|---|
| Polarize         Vertical         Test Engineer         Kevin Kud           Detector         Peak and Average         Test Voltage         120Vac / 60           110.0         dBuV/m         Imit:         Imit:         Imit:         Imit:           10.0         dBuV/m         Imit:         Imit:         Imit:         Imit:         Imit:           70         Imit:         Imit:         Imit:         Imit:         Imit:         Imit:           30.0         Imit:         Imit:         Imit:         Imit:         Imit:         Imit:  |                        |   |
| 110.0       dBuV/m         1100.000       4000.00         1100.000       4000.00         1100.000       4000.00         1100.000       31.83         1100.000       31.83   |                        | Test Engineer Kevin Kuo                   |
| Image: | etector                | Test Voltage 120Vac / 60H                 |
| Image: | dBuV/m                 |   |
| 30.0         1 <th1< th="">         1         1         1</th1<>   |                        |   |
| Image: Second |                        |   |
| Image: Second |                        |   |
| Image: Second |                        |   |
| 30.0       30.0       30.0       1000.000 4900.00       8800.00       12700.00       16600.00       20500.00       24400.00       28300.00       32200.00       40000.00 M         Frequency<br>(MHz)       Reading<br>(dBuV)       Correct<br>Factor<br>(dB/m)       Result<br>(dBuV/m)       Limit<br>(dBuV/m)       Margin<br>(dB)       Rer         11400.000       31.83       16.08       47.91       74.00       -26.09       pe  |                        |   |
| 30.0       30.0       30.0       1000.000 4900.00       8800.00       12700.00       16600.00       20500.00       24400.00       28300.00       32200.00       40000.00 M         Frequency (MHz)       Reading (dBuV)       Correct Factor (dB/m)       Result (dBuV/m)       Limit (dBuV/m)       Margin (dB)       Rer         11400.000       31.83       16.08       47.91       74.00       -26.09       pe   |                        |   |
| 30.0       30.0       30.0       1000.000 4900.00       8800.00       12700.00       16600.00       20500.00       24400.00       28300.00       32200.00       40000.00 M         Frequency (MHz)       Reading (dBuV)       Correct Factor (dB/m)       Result (dBuV/m)       Limit (dBuV/m)       Margin (dB)       Rer         11400.000       31.83       16.08       47.91       74.00       -26.09       pe   |                        |   |
| Index         Reading<br>(dBuV)         Correct<br>Factor<br>(dB/m)         Result<br>(dBuV/m)         Limit<br>(dBuV/m)         Margin<br>(dBuV/m)         Rer<br>(dBuV/m)           11400.000         31.83         16.08         47.91         74.00         -26.09         per   |                        |   |
| Index         Reading<br>(dBuV)         Correct<br>Factor<br>(dB/m)         Result<br>(dBuV/m)         Limit<br>(dBuV/m)         Margin<br>(dBuV/m)         Rer<br>(dBuV/m)           11400.000         31.83         16.08         47.91         74.00         -26.09         per   |                        |   |
| Frequency<br>(MHz)Reading<br>(dBuV)Factor<br>(dB/m)Result<br>(dBuV/m)Limit<br>(dBuV/m)Margin<br>(dB)Rer11400.00031.8316.0847.9174.00-26.09per  | JO.000 <b>4</b> 900.00 | 0 24400.00 28300.00 32200.00 40000.00 MHz |
| Frequency<br>(MHz)Reading<br>(dBuV)Factor<br>(dB/m)Result<br>(dBuV/m)Limit<br>(dBuV/m)Margin<br>(dB)Rer11400.00031.8316.0847.9174.00-26.09per  |                        |   |
|  |                        |   |
|  | 0.000                  | 91 74.00 -26.09 pea                       |
| N/A  | /A                     |   |
|  |                        |   |
|  |                        |   |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |              |                        | E 802. <sup>-</sup><br>5700 MF |               | Те    | emp/H    | um            | <b>24(</b> °C      | )/ 33%RH     |
|--------------------|--------------|------------------------|--------------------------------|---------------|-------|----------|---------------|--------------------|--------------|
| Test Item          |              |                        | Harmon                         |               |       | est Da   |               |                    | ber 4, 201   |
| Polarize           |              | Horizontal Test Engine |                                |               |       | vin Kuo  |               |                    |              |
| Detector           |              | Peak                   | and Av                         | reage         | Te    | st Volt  | age           | 120V               | ac / 60Hz    |
| 110.0 dBuV/m       |              |                        |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               | Limit1:<br>Limit2: | _            |
|                    |              |                        |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               |                    |              |
| 70                 |              |                        |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               |                    |              |
|                    |              | 1<br>X                 |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               |                    |              |
| 30.0               |              |                        |                                |               |       |          |               |                    |              |
| 1000.000 4900.0    | DO 8800.     | 00 1270                | 00.00 1660                     | 0.00 20500.00 | 24400 | .00 2830 | )0.00 322(    | 00.00              | 40000.00 MHz |
| Frequency<br>(MHz) | Read<br>(dBu |                        | Correct<br>Factor<br>(dB/m)    | Res<br>(dBu)  |       |          | imit<br>uV/m) | Margin<br>(dB)     | Remark       |
| 11400.000          | 33.5         | 54                     | 16.08                          | 49.6          | 62    | 74       | 4.00          | -24.38             | peak         |
| N/A                |              |                        |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               |                    |              |
|                    |              |                        |                                |               |       |          |               |                    |              |

fundamental frequency.2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode       |           | IEEE 802.1<br>5720 MH |               | Terr                | ıp/Hum       | 24(°C)/ 33%F       |                     |
|-----------------|-----------|-----------------------|---------------|---------------------|--------------|--------------------|---------------------|
| Test Item       |           | Harmoni               |               |                     | t Date       |                    | er 4, 201           |
| Polarize        |           | Vertical              |               |                     | Engineer     |                    | in Kuo              |
| Detector        | F         | Peak and Ave          | erage         | Test Voltage 120Vac |              | c / 60Hz           |                     |
| 110.0 dBu∀/m    |           |                       |               |                     |              |                    |                     |
|                 |           |                       |               |                     |              | Limit1:<br>Limit2: | _                   |
|                 |           |                       |               |                     |              |                    |                     |
|                 |           |                       |               |                     |              |                    |                     |
|                 |           |                       |               |                     |              |                    |                     |
| 70              |           |                       |               |                     |              |                    |                     |
|                 |           | :                     | 1<br>X        |                     |              |                    |                     |
|                 |           |                       |               |                     |              |                    |                     |
|                 |           |                       | ×             |                     |              |                    |                     |
|                 |           |                       |               |                     |              |                    |                     |
| 30.0            |           |                       |               |                     |              |                    |                     |
| 1000.000 4900.0 | 0 8800.00 | 12700.00 16600        | 0.00 20500.00 | 24400.00            | 28300.00 322 | 00.00 40           | 0000.00 <b>M</b> Hz |
| Frequency       | Reading   | Correct               | Resu          | ult                 | Limit        | Margin             |                     |
| (MHz)           | (dBuV)    | Factor<br>(dB/m)      | (dBuV         |                     | (dBuV/m)     | (dB)               | Remark              |
| 17160.000       | 35.68     | 28.35                 | 64.0          |                     | 74.00        | -9.97              | peak                |
| 17160.000       | 22.56     | 28.35                 | 50.9          | )1                  | 54.00        | -3.09              | AVG                 |
| N/A             |           |                       |               |                     |              |                    |                     |
|                 |           |                       |               |                     |              |                    |                     |
|                 |           |                       |               |                     |              |                    |                     |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                 |        | E 802.′<br>720 M⊦           |               | Те    | emp/H    | um            | 24(℃)/ 33%RH   |              |
|--------------------|-----------------|--------|-----------------------------|---------------|-------|----------|---------------|----------------|--------------|
| Test Item          |                 |        | larmon                      |               |       | lest Da  |               |                | ber 4, 201   |
| Polarize           |                 |        | lorizont                    |               |       | st Engi  |               |                | vin Kuo      |
| Detector           |                 | Peak   | and Av                      | erage         | Te    | st Volt  | age           | 120V           | ac / 60Hz    |
| 110.0 dBuV/m       |                 |        |                             |               |       |          |               | Limit1:        |              |
|                    |                 |        |                             |               |       |          |               | Limit2:        | _            |
|                    |                 |        |                             |               |       |          |               |                |              |
|                    |                 |        |                             |               |       |          |               |                |              |
| 70                 |                 |        |                             |               |       |          |               |                |              |
|                    |                 |        |                             |               |       |          |               |                |              |
|                    |                 |        |                             |               |       |          |               |                |              |
|                    |                 | X      |                             |               |       |          |               |                |              |
| 30.0               |                 |        |                             |               |       |          |               |                |              |
| 1000.000 4900.0    | )0 8800.0       | 0 1270 | D.OO 1660                   | 0.00 20500.00 | 24400 | .00 2830 | 0.00 322      | 00.00          | 40000.00 MHz |
| Frequency<br>(MHz) | Readiı<br>(dBu\ |        | Correct<br>Factor<br>(dB/m) | Resi<br>(dBuV |       |          | imit<br>uV/m) | Margin<br>(dB) | Remark       |
| 11440.000          | 32.08           | 8      | 16.09                       | 48.1          | 7     | 74       | 4.00          | -25.83         | peak         |
| N/A                |                 |        |                             |               |       |          |               |                |              |
|                    |                 |        |                             |               |       |          |               |                | <u> </u>     |
|                    |                 |        |                             |               |       |          |               |                |              |
| emark:             |                 |        |                             |               |       |          |               |                |              |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT20<br>500 MHz      |                    | Temp/Hum           |                | 33%RH      |
|--------------------|-------------------|-----------------------------|--------------------|--------------------|----------------|------------|
| Test Item          |                   | armonic                     |                    | Test Date          |                | er 4, 201  |
| Polarize           |                   | /ertical                    |                    | est Engineer       |                | n Kuo      |
| Detector           | Peak              | and Average                 | e                  | Test Voltage       | 120Va          | c / 60Hz   |
| 110.0 dBuV/m       |                   |                             |                    |                    | Limit1:        |            |
|                    |                   |                             |                    |                    | Limit1:        |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
| 70                 |                   |                             |                    |                    |                |            |
|                    |                   | 1                           |                    |                    |                |            |
|                    |                   | Ň.                          |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   | 1                           |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
| 30.0               |                   |                             |                    |                    |                |            |
| 1000.000 4900.     | 00 8800.00 12     | 2700.00 16600.00            | 20500.00 24        | 400.00 28300.00 32 | 200.00 40      | 000.00 MHz |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB) | Remark     |
| 16500.000          | 37.30             | 23.01                       | 60.31              | 74.00              | -13.69         | peak       |
| 16500.000          | 28.33             | 23.01                       | 51.34              | 54.00              | -2.66          | AVG        |
| N/A                |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |
|                    |                   |                             |                    |                    |                |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 802.11n HT2<br>500 MHz      | 20 /            | Terr     | np/Hum            | 24(°∁)/ 33%R       |             |
|--------------------|-------------------|-----------------------------|-----------------|----------|-------------------|--------------------|-------------|
| Test Item          |                   | larmonic                    |                 | Tes      | st Date           | Decemb             | er 4, 201   |
| Polarize           | F                 | lorizontal                  |                 |          | Engineer          | Kev                | in Kuo      |
| Detector           | Peak              | and Averag                  | e               | Test     | Voltage           | 120Va              | c / 60Hz    |
| 110.0 dBuV/m       |                   |                             |                 |          |                   |                    |             |
|                    |                   |                             |                 |          |                   | Limit1:<br>Limit2: | _           |
|                    |                   |                             |                 |          |                   |                    |             |
|                    |                   |                             |                 |          |                   |                    |             |
|                    |                   |                             |                 |          |                   |                    |             |
| 70                 |                   |                             |                 |          |                   |                    |             |
|                    |                   | 1<br>X                      |                 |          |                   |                    |             |
|                    |                   | 3                           |                 |          |                   |                    |             |
|                    |                   |                             |                 |          |                   |                    |             |
| 30.0               |                   |                             |                 |          |                   |                    |             |
| 1000.000 4900.0    | 0 8800.00 1.      | 2700.00 16600.00            | 20500.00        | 24400.00 | 28300.00 32       | 200.00 40          | 0000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resul<br>(dBuV/ |          | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark      |
| 16490.000          | 39.30             | 22.95                       | 62.25           | 5        | 74.00             | -11.75             | peak        |
| 16490.000          | 26.37             | 22.95                       | 49.32           | 2        | 54.00             | -4.68              | AVG         |
| N/A                |                   |                             |                 |          |                   |                    |             |
|                    |                   |                             |                 |          |                   |                    |             |
|                    |                   |                             |                 |          |                   |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT2<br>580 MHz       | 0 /                | Temp/Hum            | <b>24(</b> °C)/    | / 33%RH     |
|--------------------|-------------------|-----------------------------|--------------------|---------------------|--------------------|-------------|
| Test Item          | F                 | larmonic                    |                    | Test Date           | December 5, 201    |             |
| Polarize           |                   | Vertical                    |                    | est Engineer        |                    | in Kuo      |
| Detector           | Peak              | and Averag                  | e                  | Test Voltage        | 120Va              | c / 60Hz    |
| 110.0 dBuV/m       |                   |                             |                    |                     |                    |             |
|                    |                   |                             |                    |                     | Limit1:<br>Limit2: | _           |
|                    |                   |                             |                    |                     |                    |             |
|                    |                   |                             |                    |                     |                    |             |
|                    |                   |                             |                    |                     |                    |             |
| 70                 |                   |                             |                    |                     |                    |             |
|                    |                   |                             |                    |                     |                    |             |
|                    | 1<br>X            |                             |                    |                     |                    |             |
|                    | 2<br>X            |                             |                    |                     |                    |             |
| 30.0               |                   |                             |                    |                     |                    |             |
| 1000.000 4900.     | 00 8800.00 12     | 2700.00 16600.00            | 20500.00 244       | 100.00 28300.00 322 | 00.00 40           | 1000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)   | Margin<br>(dB)     | Remark      |
| 11160.000          | 38.53             | 16.07                       | 54.60              | 74.00               | -19.40             | peak        |
| 11160.000          | 29.03             | 16.07                       | 45.10              | 54.00               | -8.90              | AVG         |
| N/A                |                   |                             |                    |                     |                    |             |
|                    |                   |                             |                    |                     |                    |             |
|                    |                   |                             |                    |                     |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 302.11n HT2<br>580 MHz      | 20 /               | Temp/Hum           | 24(°C)/ 33%RI      |            |
|--------------------|-------------------|-----------------------------|--------------------|--------------------|--------------------|------------|
| Test Item          |                   | larmonic                    |                    | Test Date          | Decemb             | er 5, 201  |
| Polarize           | F                 | lorizontal                  | 1                  | Fest Engineer      |                    | in Kuo     |
| Detector           | Peak              | and Average                 | je                 | Test Voltage       | 120Va              | c / 60Hz   |
| 110.0 dBuV/m       |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    | Limit1:<br>Limit2: |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
| 70                 |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    | 1                 |                             |                    |                    |                    |            |
|                    | ×                 |                             |                    |                    |                    |            |
|                    | 2<br>X            |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
| 30.0               |                   |                             |                    |                    |                    |            |
| 1000.000 4900.0    | 00 8800.00 1      | 2700.00 16600.00            | 0 20500.00 24      | 400.00 28300.00 32 | 200.00 40          | 000.00 MHz |
|                    |                   |                             |                    |                    |                    |            |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB)     | Remark     |
| 11160.000          | 40.80             | 16.07                       | 56.87              | 74.00              | -17.13             | peak       |
| 11160.000          | 32.87             | 16.07                       | 48.94              | 54.00              | -5.06              | AVG        |
| N/A                |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode              |                   | 02.11n HT20<br>200 MHz      | )/ -               | Temp/Hum           | <b>24(</b> °C)/    | 33%RH      |
|------------------------|-------------------|-----------------------------|--------------------|--------------------|--------------------|------------|
| Test Item              |                   | armonic                     |                    | Test Date          |                    | er 4, 201  |
| Polarize               |                   | /ertical                    |                    | est Engineer       |                    | n Kuo      |
| Detector               | Peaka             | and Average                 | э Т                | est Voltage        | 120Va              | c / 60Hz   |
| 110.0 dBuV/m           |                   |                             |                    |                    | Limit1:<br>Limit2: |            |
| 70                     |                   |                             |                    |                    |                    |            |
| 30.0<br>1000.000 4900. | .00 8800.00 13    | 2700.00 16600.00            | 20500.00 2440      | 10.00 28300.00 322 | 00.00 40           | 000.00 MHz |
| Frequency<br>(MHz)     | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB)     | Remark     |
| 17110.000              | 35.52             | 28.19                       | 63.71              | 74.00              | -10.29             | peak       |
| 17110.000              | 22.20             | 28.19                       | 50.39              | 54.00              | -3.61              | AVG        |
| N/A                    |                   |                             |                    |                    |                    |            |
|                        |                   |                             |                    |                    |                    |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Fest Mode          |                   | 302.11n HT20 /<br>700 MHz | Temp/Hu             | um 24               | 4(℃)/ 33%RH          |
|--------------------|-------------------|---------------------------|---------------------|---------------------|----------------------|
| Test Item          | ŀ                 | Harmonic                  | Test Da             | te De               | cember 4, 201        |
| Polarize           |                   | lorizontal                | Test Engir          |                     | Kevin Kuo            |
| Detector           | Peak              | and Average               | Test Volta          | age 1               | 20Vac / 60Hz         |
| 110.0 dBuV/m       |                   |                           |                     |                     |                      |
|                    |                   |                           |                     |                     | imit1: —<br>imit2: — |
|                    |                   |                           |                     |                     |                      |
|                    |                   |                           |                     |                     |                      |
|                    |                   |                           |                     |                     |                      |
| 70                 |                   |                           |                     |                     |                      |
|                    |                   |                           |                     |                     |                      |
|                    |                   | 4                         |                     |                     |                      |
|                    |                   |                           |                     |                     |                      |
| 30.0               |                   |                           |                     |                     |                      |
| 1000.000 4900.00   | 8800.00           | 12700.00 16600.00 205     | 0.00 24400.00 28300 | ).00 32200.00       | 40000.00 MHz         |
| Frequency<br>(MHz) | Reading<br>(dBuV) |                           |                     | mit Maı<br>ıV/m) (d |                      |
| 11400.000          | 34.38             | 16.08                     | 60.46 74            | .00 -23             | .54 peak             |
| N/A                |                   |                           |                     |                     |                      |
|                    |                   |                           |                     |                     |                      |
|                    |                   |                           |                     |                     |                      |
|                    |                   |                           |                     |                     |                      |
| emark:             |                   |                           |                     |                     |                      |

2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT20 /<br>′20 MHz    | Т                  | emp/Hum           | 24(℃)/ 33%RH       |            |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|--------------------|------------|
| Test Item          | Н                 | armonic                     | -                  | Test Date         | December 4, 201    |            |
| Polarize           | N N               | /ertical                    |                    | st Engineer       |                    | n Kuo      |
| Detector           | Peak              | and Average                 | Te                 | est Voltage       | 120Va              | c / 60Hz   |
| 110.0 dBu¥/m       |                   |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   | Limit1:<br>Limit2: | _          |
|                    |                   |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   |                    |            |
| 70                 |                   |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   |                    |            |
|                    | 1                 |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   |                    |            |
| 30.0               |                   |                             |                    |                   |                    |            |
| 1000.000 4900.     | 00 8800.00 1      | 2700.00 16600.00            | 20500.00 24400     | 1.00 28300.00 322 | 00.00 40           | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |
| 11450.000          | 36.52             | 16.09                       | 52.61              | 54.00             | -1.39              | AVG        |
| N/A                |                   |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   |                    |            |
|                    |                   |                             |                    |                   |                    |            |

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 802.11n HT20 /<br>5720 MHz | Te                     | emp/Hum           | <b>24(</b> °C)/             | 33%RH      |
|--------------------|-------------------|----------------------------|------------------------|-------------------|-----------------------------|------------|
| Test Item          |                   | Harmonic                   |                        | est Date          | December 4, 20 <sup>2</sup> |            |
| Polarize           |                   | Horizontal                 |                        | st Engineer       |                             | n Kuo      |
| Detector           | Peak              | and Average                | Te                     | st Voltage        | 120Va                       | c / 60Hz   |
| 110.0 dBuV/m       |                   |                            |                        |                   |                             |            |
|                    |                   |                            |                        |                   | Limit1:<br>Limit2:          | _          |
|                    |                   |                            |                        |                   |                             |            |
|                    |                   |                            |                        |                   |                             |            |
|                    |                   |                            |                        |                   |                             |            |
| 70                 |                   |                            |                        |                   |                             |            |
|                    |                   |                            |                        |                   |                             |            |
|                    |                   | 1<br>X                     |                        |                   |                             |            |
|                    |                   |                            |                        |                   |                             |            |
| 30.0               |                   |                            |                        |                   |                             |            |
| 1000.000 4900.0    | 0 8800.00         | 12700.00 16600.00 20       | i00.00 2 <b>44</b> 00. | .00 28300.00 3220 | DO.OO 40                    | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) |                            | Result<br>IBuV/m)      | Limit<br>(dBuV/m) | Margin<br>(dB)              | Remark     |
| 11440.000          | 35.20             | 16.09                      | 51.29                  | 54.00             | -2.71                       | AVG        |
| N/A                |                   |                            |                        |                   |                             |            |
|                    |                   |                            |                        |                   |                             |            |
|                    |                   |                            |                        |                   |                             |            |
| emark:             |                   |                            |                        |                   |                             |            |
|                    |                   |                            |                        |                   |                             |            |

2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode                       |                   | 802.11n HT4<br>510 MHz      | ר / כ              | ſemp/Hum          | 24(°C)/ 33%I       |            |
|---------------------------------|-------------------|-----------------------------|--------------------|-------------------|--------------------|------------|
| Test Item                       | ŀ                 | Iarmonic                    |                    | Test Date         | December 4, 20     |            |
| Polarize                        |                   | Vertical                    |                    | est Engineer      |                    | in Kuo     |
| Detector                        | Peak              | and Average                 | e T                | est Voltage       | 120Va              | c / 60Hz   |
| 110.0 dBuV/m                    |                   |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   | Limit1:<br>Limit2: | _          |
|                                 |                   |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |
| 70                              |                   |                             |                    |                   |                    |            |
| /0                              |                   |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |
|                                 | 1<br>X            |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |
| 30.0<br>1000.000 <b>4</b> 900.0 | DO 8800.00 1      | 2700.00 16600.00            | 20500.00 2440      | 0.00 28300.00 322 | 00.00 40           | 000.00 MHz |
| 1000.000 4300.0                 | JU 8800.00 I      | 2700.00 16600.00            | 20300.00 2440      | 0.00 28300.00 322 | 00.00 40           | 000.00 MHZ |
| Frequency<br>(MHz)              | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |
| 11020.000                       | 36.10             | 16.05                       | 52.15              | 74.00             | -21.85             | peak       |
| N/A                             |                   |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |
|                                 |                   | I                           |                    |                   |                    |            |
|                                 |                   |                             |                    |                   |                    |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode       |              | 802.11n HT4<br>510 MHz | 0/ т           | emp/Hum            | 24(°C)/ 33%R⊦      |                        |
|-----------------|--------------|------------------------|----------------|--------------------|--------------------|------------------------|
| Test Item       | ŀ            | Harmonic               | -              | Test Date          |                    | er 4, 201 <sup>°</sup> |
| Polarize        |              | lorizontal             |                | st Engineer        |                    | n Kuo                  |
| Detector        | Peak         | and Average            | e Te           | est Voltage        | 120Va              | c / 60Hz               |
| 110.0 dBuV/m    |              |                        |                |                    |                    |                        |
|                 |              |                        |                |                    | Limit1:<br>Limit2: | _                      |
|                 |              |                        |                |                    |                    |                        |
|                 |              |                        |                |                    |                    |                        |
|                 |              |                        |                |                    |                    |                        |
| 70              |              |                        |                |                    |                    |                        |
|                 |              |                        |                |                    |                    |                        |
|                 | 1            |                        |                |                    |                    |                        |
|                 | ×            |                        |                |                    |                    |                        |
| 30.0            |              |                        |                |                    |                    |                        |
| 1000.000 4900.0 | DO 8800.00 1 | 2700.00 16600.00       | 20500.00 24400 | 0.00 28300.00 3220 | 00.00 40           | 000.00 MHz             |
| Frequency       | Reading      | Correct<br>Factor      | Result         | Limit              | Margin             | Remark                 |
| (MHz)           | (dBuV)       | (dB/m)                 | (dBuV/m)       | (dBuV/m)           | (dB)               | Kennark                |
| 11020.000       | 34.00        | 16.05                  | 50.05          | 74.00              | -23.95             | peak                   |
| N/A             |              |                        |                |                    |                    |                        |
|                 |              |                        |                |                    |                    |                        |
|                 |              |                        |                |                    |                    |                        |
|                 |              |                        |                |                    |                    |                        |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT4<br>550 MHz       | 40 /              | Temp     | /Hum             | 24(℃)/ 33%RH       |             |  |
|--------------------|-------------------|-----------------------------|-------------------|----------|------------------|--------------------|-------------|--|
| Test Item          |                   | larmonic                    |                   | Test     | Date             | December 5, 201    |             |  |
| Polarize           |                   | Vertical                    |                   |          | ngineer          |                    | in Kuo      |  |
| Detector           | Peak              | and Averag                  | je                | Test V   | oltage           | 120Va              | c / 60Hz    |  |
| 110.0 dBuV/m       |                   |                             |                   |          |                  |                    |             |  |
|                    |                   |                             |                   |          |                  | Limit1:<br>Limit2: | _           |  |
|                    |                   |                             |                   |          |                  |                    |             |  |
|                    |                   |                             |                   |          |                  |                    |             |  |
| 70                 |                   |                             |                   |          |                  |                    |             |  |
|                    | 1                 |                             |                   |          |                  |                    |             |  |
|                    | 2                 |                             |                   |          |                  |                    |             |  |
| 30.0               |                   |                             |                   |          |                  |                    |             |  |
| 1000.000 4900.0    | 0 8800.00 12      | 2700.00 16600.00            | ) 20500.00        | 24400.00 | 28300.00 322     | 00.00 40           | 0000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/r |          | Limit<br>dBuV/m) | Margin<br>(dB)     | Remark      |  |
| 11100.000          | 36.60             | 16.07                       | 52.67             |          | 74.00            | -21.33             | peak        |  |
| 11100.000          | 29.30             | 16.07                       | 45.37             |          | 54.00            | -8.63              | AVG         |  |
| N/A                |                   |                             |                   |          |                  |                    |             |  |
|                    |                   |                             |                   |          |                  |                    |             |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

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| Test Mode          |                   | 02.11n HT4<br>550 MHz | 0 /                | Temp/Hu       | ım          | <b>24(</b> °C)     | / 33%RH     |  |
|--------------------|-------------------|-----------------------|--------------------|---------------|-------------|--------------------|-------------|--|
| Test Item          | F                 | larmonic              |                    | Test Dat      | te          | December 5, 20     |             |  |
| Polarize           |                   | lorizontal            |                    | Test Engir    |             |                    | in Kuo      |  |
| Detector           | Peak              | and Averag            | e                  | Test Volta    | age         | 120Va              | c / 60Hz    |  |
| 110.0 dBuV/m       | 1                 |                       |                    |               |             |                    |             |  |
|                    |                   |                       |                    |               |             | Limit1:<br>Limit2: | _           |  |
|                    |                   |                       |                    |               |             |                    |             |  |
|                    |                   |                       |                    |               |             |                    |             |  |
|                    |                   |                       |                    |               |             |                    |             |  |
| 70                 |                   |                       |                    |               |             |                    |             |  |
|                    |                   |                       |                    |               |             |                    |             |  |
|                    | 1<br>¥            |                       |                    |               |             |                    |             |  |
|                    | 2                 |                       |                    |               |             |                    |             |  |
|                    | X                 |                       |                    |               |             |                    |             |  |
| 30.0               |                   |                       |                    |               |             |                    |             |  |
| 1000.000 4900.0    | 0 8800.00 12      | 2700.00 16600.00      | 20500.00 2         | 4400.00 28300 | 1.00 3220   | DO.OO 40           | )000.00 MHz |  |
| _                  |                   | Correct               |                    |               | •           |                    |             |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m)      | Result<br>(dBuV/m) |               | nit<br>V/m) | Margin<br>(dB)     | Remark      |  |
| 11090.000          | 40.91             | 16.07                 | 56.98              |               | .00         | -17.02             | peak        |  |
| 11090.000          | 30.30             | 16.07                 | 46.37              | 54            | .00         | -7.63              | AVG         |  |
| N/A                |                   |                       |                    |               |             |                    |             |  |
|                    |                   |                       |                    |               |             |                    |             |  |
|                    |                   |                       |                    |               |             |                    |             |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT40<br>670 MHz      | / т                | emp/Hum           | <b>24(</b> °C)/    | 33%RH      |  |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|--------------------|------------|--|
| Test Item          |                   | armonic                     | -                  | Test Date         | December 4, 201    |            |  |
| Polarize           |                   | Vertical                    |                    | st Engineer       | Kevi               | n Kuo      |  |
| Detector           | Peak              | and Average                 | Te                 | est Voltage       | 120Va              | c / 60Hz   |  |
| 110.0 dBuV/m       |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   | Limit1:<br>Limit2: | _          |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
| 70                 |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    | 1                 |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
| 30.0               |                   |                             |                    |                   |                    |            |  |
| 1000.000 4900      | .00 8800.00 1     | 2700.00 16600.00            | 20500.00 24400     | 0.00 28300.00 322 | 00.00 40           | 000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |  |
| 11340.000          | 34.24             | 16.08                       | 50.32              | 74.00             | -23.68             | peak       |  |
| N/A                |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |

- fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT40<br>670 MHz      | )/                | Temp     | o/Hum             | 24(°C)/ 33%RH      |             |  |
|--------------------|-------------------|-----------------------------|-------------------|----------|-------------------|--------------------|-------------|--|
| Test Item          |                   | armonic                     |                   |          | Date              | December 4, 201    |             |  |
| Polarize           |                   | orizontal                   |                   |          | ngineer           |                    | in Kuo      |  |
| Detector           | Peak              | and Average                 |                   | Test \   | /oltage           | 120Va              | c / 60Hz    |  |
| 110.0 dBu¥/m       |                   |                             |                   |          |                   |                    |             |  |
|                    |                   |                             |                   |          |                   | Limit1:<br>Limit2: | _           |  |
|                    |                   |                             |                   |          |                   |                    |             |  |
|                    |                   |                             |                   |          |                   |                    |             |  |
|                    |                   |                             |                   |          |                   |                    |             |  |
| 70                 |                   |                             |                   |          |                   |                    |             |  |
|                    |                   |                             |                   |          |                   |                    |             |  |
|                    | *                 |                             |                   |          |                   |                    |             |  |
|                    |                   |                             |                   |          |                   |                    |             |  |
| 30.0               |                   |                             |                   |          |                   |                    |             |  |
| 1000.000 4900.     | 00 8800.00 1      | 2700.00 16600.00            | 20500.00          | 24400.00 | 28300.00 322      | 00.00 40           | 0000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/n |          | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark      |  |
| 11340.000          | 34.64             | 16.08                       | 50.72             |          | 74.00             | -23.28             | peak        |  |
| N/A                |                   |                             |                   |          |                   |                    |             |  |
|                    |                   |                             |                   |          |                   |                    |             |  |
|                    |                   |                             |                   |          |                   |                    |             |  |
| omork:             |                   |                             |                   |          |                   |                    |             |  |
| mark:              | uring freque      | noion from 1                |                   | ha 10th  | hormonia          | of highost         |             |  |

- fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT4<br>710 MHz | 0/                 | ſemp/Hum          | 24(℃)/ 33%RH                |            |  |
|--------------------|-------------------|-----------------------|--------------------|-------------------|-----------------------------|------------|--|
| Test Item          | H                 | armonic               |                    | Test Date         | December 4, 20 <sup>2</sup> |            |  |
| Polarize           |                   | Vertical              |                    | st Engineer       |                             | n Kuo      |  |
| Detector           | Peak              | and Average           | e T                | est Voltage       | 120Va                       | c / 60Hz   |  |
| 110.0 dBu∀/m       |                   |                       |                    |                   | Limit1:                     | _          |  |
|                    |                   |                       |                    |                   | Limit2:                     | _          |  |
|                    |                   |                       |                    |                   |                             |            |  |
|                    |                   |                       |                    |                   |                             |            |  |
|                    |                   |                       |                    |                   |                             |            |  |
| 70                 |                   |                       |                    |                   |                             | _          |  |
| 10                 |                   |                       |                    |                   |                             |            |  |
|                    | 1                 |                       |                    |                   |                             |            |  |
|                    |                   |                       |                    |                   |                             |            |  |
|                    | Ŷ                 |                       |                    |                   |                             |            |  |
| 30.0               |                   |                       |                    |                   |                             |            |  |
| 1000.000 4900      | ).00 8800.00 1    | 2700.00 16600.00      | ) 20500.00 2440    | 0.00 28300.00 322 | 00.00 40                    | 000.00 MHz |  |
|                    |                   | Correct               |                    |                   |                             |            |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m)      | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)              | Remark     |  |
| 11420.000          | 39.90             | 16.08                 | 55.98              | 74.00             | -18.02                      | peak       |  |
| 11420.000          | 30.85             | 16.08                 | 46.93              | 54.00             | -7.07                       | AVG        |  |
| N/A                |                   |                       |                    |                   |                             |            |  |
|                    |                   |                       |                    |                   |                             |            |  |
|                    |                   |                       |                    |                   |                             |            |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT40<br>710 MHz      | )/ -               | Temp/Hum          | 24(°C)/ 33%RH      |            |  |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|--------------------|------------|--|
| Test Item          |                   | armonic                     |                    | Test Date         | December 4, 20     |            |  |
| Polarize           |                   | orizontal                   |                    | est Engineer      |                    | in Kuo     |  |
| Detector           | Peak              | and Average                 | e T                | est Voltage       | 120Va              | c / 60Hz   |  |
| 110.0 dBuV/m       |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   | Limit1:<br>Limit2: | _          |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
| 70                 |                   |                             |                    |                   |                    |            |  |
|                    | 1                 |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
| 30.0               |                   |                             |                    |                   |                    |            |  |
| 1000.000 4900.     | 00 8800.00 1      | 2700.00 16600.00            | 20500.00 2440      | 0.00 28300.00 322 | 00.00 40           | 000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |  |
| 11410.000          | 35.34             | 16.08                       | 51.42              | 74.00             | -22.58             | peak       |  |
| N/A                |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
| emark:             |                   |                             |                    |                   |                    |            |  |

- fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          | IEEE             | 802.11ac VF<br>5530 MHz | IT80 /         | Те      | mp/Hum            | 24(°C)/ 33%RH               |            |  |
|--------------------|------------------|-------------------------|----------------|---------|-------------------|-----------------------------|------------|--|
| Test Item          |                  | Harmonic                |                |         | est Date          | December 4, 20 <sup>2</sup> |            |  |
| Polarize           |                  | Vertical                |                |         | t Engineer        |                             | in Kuo     |  |
| Detector           | Pea              | ak and Avera            | age            | Tes     | st Voltage        | 120Va                       | c / 60Hz   |  |
| 110.0 dBuV/m       |                  |                         |                |         |                   |                             |            |  |
|                    |                  |                         |                |         |                   | Limit1:<br>Limit2:          | _          |  |
|                    |                  |                         |                |         |                   |                             |            |  |
|                    |                  |                         |                |         |                   |                             |            |  |
|                    |                  |                         |                |         |                   |                             |            |  |
| 70                 |                  |                         |                |         |                   |                             |            |  |
|                    |                  |                         |                |         |                   |                             |            |  |
|                    |                  | X                       |                |         |                   |                             |            |  |
|                    |                  |                         |                |         |                   |                             |            |  |
| 30.0               |                  |                         |                |         |                   |                             |            |  |
| 1000.000 49        | 00.00 8800.00    | 12700.00 166            | 00.00 20500.00 | 24400.0 | 10 28300.00 32    | 200.00 40                   | 000.00 MHz |  |
| Frequency<br>(MHz) | Readin<br>(dBuV) |                         | Resi<br>(dBuV  |         | Limit<br>(dBuV/m) | Margin<br>(dB)              | Remark     |  |
| 11060.000          | 34.61            | 16.06                   | 50.6           | 67      | 74.00             | -23.33                      | peak       |  |
| N/A                |                  |                         |                |         |                   |                             |            |  |
|                    |                  |                         |                |         |                   |                             |            |  |
|                    |                  |                         |                |         |                   |                             |            |  |
| Remark:            |                  |                         |                |         |                   |                             |            |  |

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode    | IEEI      |        | 11ac V⊦<br>30 MHz | T80 /       | Т        | emp/H    | um        | 24(°∁)/ 33%RH      |              |  |  |
|--------------|-----------|--------|-------------------|-------------|----------|----------|-----------|--------------------|--------------|--|--|
| Test Item    |           |        | rmonic            |             |          | lest Da  |           | December 4, 201    |              |  |  |
| Polarize     |           |        | rizontal          |             |          | st Engi  |           |                    | /in Kuo      |  |  |
| Detector     | Р         | eak a  | nd Avera          | ge          | Te       | est Volt | age       | 120Va              | ac / 60Hz    |  |  |
| 110.0 dBu∀/m |           |        |                   |             |          |          |           | 1:-31.             | 1            |  |  |
|              |           |        |                   |             |          |          |           | Limit1:<br>Limit2: |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |
| 70           |           |        |                   |             |          |          |           |                    |              |  |  |
| 10           |           |        |                   |             |          |          |           |                    |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |
|              |           | X      |                   |             |          |          |           |                    |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |
| 30.0         |           |        |                   |             |          |          |           |                    |              |  |  |
| 1000.000 490 | 0.00 8800 | .00 12 | 700.00 1660       | 0.00 20500. | )0 24400 | .00 2830 | )0.00 322 | 00.00              | 10000.00 MHz |  |  |
| Frequency    | Read      | ling   | Correct           | Ro          | sult     |          | imit      | Margin             |              |  |  |
| (MHz)        | (dBi      |        | Factor<br>(dB/m)  |             | iV/m)    |          | uV/m)     | (dB)               | Remark       |  |  |
| 11060.000    | 34.       | 95     | 16.06             | 51          | .01      | 74       | 4.00      | -22.99             | peak         |  |  |
| N/A          |           |        |                   |             |          |          |           |                    |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |
|              |           |        |                   |             |          |          |           |                    |              |  |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 2.11ac VHT8<br>90 MHz       | 0/ т               | emp/Hum           | <b>24(</b> °C)/    | 33%RH      |  |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|--------------------|------------|--|
| Test Item          |                   | armonic                     |                    | Test Date         | December 4, 201    |            |  |
| Polarize           |                   | /ertical                    |                    | st Engineer       |                    | n Kuo      |  |
| Detector           | Peak a            | and Average                 | Te                 | est Voltage       | 120Va              | c / 60Hz   |  |
| 110.0 dBuV/m       |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   | Limit1:<br>Limit2: | _          |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
| 70                 |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    | 1<br>×            |                             |                    |                   |                    |            |  |
| 30.0               |                   |                             |                    |                   |                    |            |  |
| 1000.000 490       | 10.00 8800.00 1   | 2700.00 16600.00            | 20500.00 24400     | ).00 28300.00 322 | 00.00 40           | 000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |  |
| 11380.000          | 32.77             | 16.09                       | 48.86              | 74.00             | -25.14             | peak       |  |
| N/A                |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |
|                    |                   |                             |                    |                   |                    |            |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode            |                   | 11ac VHT8<br>90 MHz | 0/т                | ēmp/Hum           | 24(°C)/ 33%RH      |            |  |  |
|----------------------|-------------------|---------------------|--------------------|-------------------|--------------------|------------|--|--|
| Test Item            |                   | armonic             |                    | Test Date         | December 4, 201    |            |  |  |
| Polarize             | Ho                | orizontal           |                    | st Engineer       |                    | n Kuo      |  |  |
| Detector             | Peak a            | Ind Average         | Te                 | est Voltage       | 120Va              | c / 60Hz   |  |  |
| 110.0 dBuV/m         |                   |                     | · · · · · ·        |                   |                    |            |  |  |
|                      |                   |                     |                    |                   | Limit1:<br>Limit2: | _          |  |  |
|                      |                   |                     |                    |                   |                    |            |  |  |
|                      |                   |                     |                    |                   |                    |            |  |  |
|                      |                   |                     |                    |                   |                    | _          |  |  |
| 70                   |                   |                     |                    |                   |                    |            |  |  |
|                      |                   |                     |                    |                   |                    |            |  |  |
|                      | *                 |                     |                    |                   |                    |            |  |  |
|                      |                   |                     |                    |                   |                    |            |  |  |
| 30.0<br>1000.000 490 | 0.00 8800.00 1    | 2700.00 16600.00    | 20500.00 2440      | 0.00 28300.00 322 | 00.00 40           | 000.00 MHz |  |  |
|                      |                   | Correct             |                    |                   |                    |            |  |  |
| Frequency<br>(MHz)   | Reading<br>(dBuV) | Factor<br>(dB/m)    | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark     |  |  |
| 11380.000            | 32.51             | 16.09               | 48.60              | 74.00             | -25.40             | peak       |  |  |
| N/A                  |                   |                     |                    |                   |                    |            |  |  |
|                      |                   |                     |                    |                   |                    |            |  |  |
|                      |                   |                     |                    |                   |                    |            |  |  |
| Remark:              |                   |                     |                    |                   |                    |            |  |  |

fundamental frequency.2. For above 1GHz, the EUT peak value was under average limit, therefore the

Average value compliance with the average limit

## Above 1G Test Data for UNII-3

| Tes   | st Mode        |       | IE            | IEEE 802.11a /<br>5745 MHz |                           |            |                | ēmp/H    | lum            | <b>24(</b> °C)     | )/ 33%RH     |  |
|-------|----------------|-------|---------------|----------------------------|---------------------------|------------|----------------|----------|----------------|--------------------|--------------|--|
|       | est Item       |       |               |                            | rmon                      |            |                | Test Da  |                | December 4, 207    |              |  |
|       | olarize        |       |               |                            | ertica                    |            |                | st Eng   |                |                    | /in Kuo      |  |
| D     | etector        |       | Pea           | ak a                       | nd Av                     | erage      | T              | est Voli | tage           | 120Va              | ac / 60Hz    |  |
| 110.0 | ) dBuV/m       |       |               |                            |                           |            |                |          |                |                    |              |  |
|       |                |       |               |                            |                           |            |                |          |                | Limit1:<br>Limit2: | _            |  |
| 70    |                |       |               |                            |                           |            |                |          |                |                    |              |  |
|       |                |       | 1             |                            |                           |            |                |          |                |                    |              |  |
| 30.0  |                |       |               |                            |                           |            |                |          |                |                    |              |  |
| 10    | 000.000 4900.0 | 00 88 | DO.OO 1       | 2700.00                    | 0 1660                    | 0.00 20500 | .00 2440       | 0.00 283 | 00.00 3220     | 0.00 4             | 10000.00 MHz |  |
|       | juency<br>1Hz) |       | ading<br>BuV) | F                          | orrect<br>Factor<br>dB/m) |            | esult<br>uV/m) |          | imit<br>suV/m) | Margin<br>(dB)     | Remark       |  |
| 1149  | 90.000         | 33    | 3.78          |                            | 16.09                     | 49         | 9.87           | 7        | 4.00           | -24.13             | peak         |  |
| Ν     | N/A            |       |               |                            |                           |            |                |          |                |                    |              |  |
|       |                |       |               |                            |                           |            |                |          |                |                    |              |  |
|       |                |       |               |                            |                           |            |                |          |                |                    |              |  |
|       |                | 1     |               | 1                          |                           |            |                | 1        |                | 1                  | 1            |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode               |       | IE            | EE 802.<br>5745 MH          |              | Те            | emp/H    | um            | 24(°∁)/ 33%RH      |             |  |
|-------------------------|-------|---------------|-----------------------------|--------------|---------------|----------|---------------|--------------------|-------------|--|
| Test Item               |       |               | Harmon                      |              |               | lest Da  |               | December 4, 20     |             |  |
| Polarize                |       |               | Horizont                    |              | Test Engineer |          |               |                    | /in Kuo     |  |
| Detector                |       | Pea           | ak and Av                   | verage       | Те            | st Volt  | age           | 120Va              | ac / 60Hz   |  |
| 110.0 dBuV/m            |       |               |                             |              |               |          |               | 1.54               |             |  |
|                         |       |               |                             |              |               |          |               | Limit1:<br>Limit2: | _           |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
| 70                      |       |               |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
|                         |       | 1             |                             |              |               |          |               |                    |             |  |
|                         |       | ×             |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
| 30.0<br>1000.000 4900.0 | 00 88 | 00.00 12      | 2700.00 1660                | 0.00 20500.0 | ) 24400       | .00 2830 | 10.00 3220    | 0.00 4             | 0000.00 MHz |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
| Frequency<br>(MHz)      |       | ading<br>BuV) | Correct<br>Factor<br>(dB/m) | Res<br>(dBu) |               |          | imit<br>uV/m) | Margin<br>(dB)     | Remark      |  |
| 11490.000               | 32    | 2.50          | 16.09                       | 48.          | 59            | 74       | 4.00          | -25.41             | peak        |  |
| N/A                     |       |               |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             |              |               |          |               |                    |             |  |
|                         |       |               |                             | -            |               |          |               |                    |             |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | EEE 802.11<br>5745 MHz      |                 | Temp/      | Hum             | <b>24(</b> °C).    | / 33%RH     |
|--------------------|-------------------|-----------------------------|-----------------|------------|-----------------|--------------------|-------------|
| Test Item          |                   | Harmonic                    | ;               | Test [     |                 |                    | er 4, 201   |
| Polarize           |                   | Vertical                    |                 | Test En    |                 |                    | in Kuo      |
| Detector           | Pe                | Peak and Average            |                 |            | oltage          | 120Va              | c / 60Hz    |
| 110.0 dBuV/m       | ĺ                 |                             |                 |            |                 | 1                  |             |
|                    |                   |                             |                 |            |                 | Limit1:<br>Limit2: | _           |
|                    |                   |                             |                 |            |                 |                    |             |
|                    |                   |                             |                 |            |                 |                    |             |
|                    |                   |                             |                 |            |                 |                    |             |
|                    |                   |                             |                 |            |                 |                    |             |
| 70                 |                   |                             |                 |            |                 |                    |             |
|                    |                   |                             |                 |            |                 |                    |             |
|                    |                   | 1                           |                 |            |                 |                    |             |
|                    |                   | ×                           |                 |            |                 |                    |             |
|                    |                   |                             |                 |            |                 |                    |             |
| 30.0               |                   |                             |                 |            |                 |                    |             |
| 1000.000 4900.0    | 0 8800.00         | 12700.00 16600.1            | 00 20500.00     | 24400.00 2 | 3300.00 322     | 00.00 40           | )000.00 MHz |
|                    |                   |                             |                 |            |                 |                    |             |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Resul<br>(dBuV/ |            | Limit<br>BuV/m) | Margin<br>(dB)     | Remark      |
| 11570.000          | 34.47             | 16.01                       | 50.48           | 3          | 74.00           | -23.52             | peak        |
| N/A                |                   |                             |                 |            |                 |                    |             |
|                    |                   |                             |                 |            |                 |                    |             |
|                    |                   |                             |                 |            |                 |                    |             |
|                    |                   | 1                           |                 |            |                 |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode      |       | IE       | EE 802. <sup>-</sup><br>5745 MF |               | Temp/Hum  |          |            | 24(°C)/ 33%RH      |              |  |
|----------------|-------|----------|---------------------------------|---------------|-----------|----------|------------|--------------------|--------------|--|
| Test Item      |       |          | Harmon                          |               | Test Date |          |            |                    | ber 4, 201   |  |
| Polarize       |       |          | Horizont                        |               |           | st Engi  |            |                    | /in Kuo      |  |
| Detector       |       | Pea      | ik and Av                       | verage        | Те        | st Volt  | age        | 120Va              | ac / 60Hz    |  |
| 110.0 dBuV/m   |       |          |                                 |               |           |          |            | Limit1:            |              |  |
|                |       |          |                                 |               |           |          |            | Limit1:<br>Limit2: | _            |  |
|                |       |          |                                 |               |           |          |            |                    |              |  |
|                |       |          |                                 |               |           |          |            |                    |              |  |
|                |       |          |                                 |               |           |          |            |                    |              |  |
| 70             |       |          |                                 |               |           |          |            |                    |              |  |
| 70             |       |          |                                 |               |           |          |            |                    |              |  |
|                |       | 1<br>*   |                                 |               |           |          |            |                    |              |  |
|                |       | 2        |                                 |               |           |          |            |                    |              |  |
|                |       | X        |                                 |               |           |          |            |                    |              |  |
| 30.0           |       |          |                                 |               |           |          |            |                    |              |  |
| 1000.000 4900. | 00 88 | 00.00 12 | 2700.00 1660                    | 0.00 20500.00 | 24400.    | .00 2830 | )0.00 3220 | 00.00 4            | 10000.00 MHz |  |
| Frequency      | Re    | ading    | Correct                         | Res           | ılt       |          | imit       | Margin             |              |  |
| (MHz)          |       | BuV)     | Factor<br>(dB/m)                | (dBu\         |           |          | uV/m)      | (dB)               | Remark       |  |
| 11570.000      | 39    | 9.26     | 16.01                           | 55.2          | 27        | 74       | 4.00       | -18.73             | peak         |  |
| 11570.000      | 32    | 2.27     | 16.01                           | 48.2          | 28        | 54       | 4.00       | -5.72              | AVG          |  |
| N/A            |       |          |                                 |               |           |          |            |                    |              |  |
|                |       |          |                                 |               |           |          |            |                    |              |  |
|                | -     |          |                                 | •             |           | -        |            | -                  | -            |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          | IE                | EE 802.11a<br>5825 MHz      | /                  | Temp/Hum            | <b>24(</b> °C)/    | 33%RH      |
|--------------------|-------------------|-----------------------------|--------------------|---------------------|--------------------|------------|
| Test Item          |                   | Harmonic                    |                    | Test Date           |                    | er 4, 201  |
| Polarize           |                   | Vertical                    |                    | est Engineer        |                    | n Kuo      |
| Detector           | Pea               | ak and Avera                | age                | Test Voltage        | 120Va              | c / 60Hz   |
| 110.0 dBuV/m       |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     | Limit1:<br>Limit2: | _          |
|                    |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     |                    |            |
| 70                 |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     |                    |            |
|                    | 1                 |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     |                    |            |
| 30.0               |                   |                             |                    |                     |                    |            |
| 1000.000 4900.00   | 8800.00 12        | 2700.00 16600.00            | 20500.00 24        | 400.00 28300.00 323 | 200.00 40          | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)   | Margin<br>(dB)     | Remark     |
| 11650.000          | 37.28             | 15.93                       | 53.21              | 74.00               | -20.79             | peak       |
| N/A                |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     |                    |            |
|                    |                   |                             |                    |                     |                    |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode      |            | IEEE 8<br>582    | 302.11a<br>5 MHz | a /        | Temp/Hum  |         |                | <b>24(</b> ℃         | )/ 33%RH     |
|----------------|------------|------------------|------------------|------------|-----------|---------|----------------|----------------------|--------------|
| Test Item      |            |                  | monic            |            | Test Date |         | December 5, 20 |                      |              |
| Polarize       |            |                  | zontal           |            |           | st Engi |                |                      | vin Kuo      |
| Detector       |            | Peak and Average |                  | Te         | st Volt   | age     | 120V           | ac / 60Hz            |              |
| 110.0 dBu¥/m   |            |                  |                  |            |           |         |                | Limit1:              |              |
|                |            |                  |                  |            |           |         |                | Limit <sup>2</sup> : | _            |
|                |            |                  |                  |            |           |         |                |                      |              |
|                |            |                  |                  |            |           |         |                |                      |              |
|                |            |                  |                  |            |           |         |                |                      |              |
|                |            |                  |                  |            |           |         |                |                      |              |
| 70             |            |                  |                  |            |           |         |                |                      |              |
|                |            |                  |                  |            |           |         |                |                      |              |
|                |            | 1<br>X           |                  |            |           |         |                |                      |              |
|                |            | 2                |                  |            |           |         |                |                      |              |
|                |            | Ť                |                  |            |           |         |                |                      |              |
|                |            |                  |                  |            |           |         |                |                      |              |
| 30.0           |            |                  |                  |            |           |         |                |                      |              |
| 1000.000 4900. | 00 8800.00 | 12700.00         | 16600.00         | 0 20500.00 | 24400.    | 00 2830 | 0.00 3220      | 0.00                 | 40000.00 MHz |
| Frequency      | Reading    | Co               | orrect           | Resu       | .14       |         | imit           | Margin               |              |
| (MHz)          | (dBuV)     | ГС               | actor<br>B/m)    | (dBuV      |           |         | uV/m)          | (dB)                 | Remark       |
| 11650.000      | 39.01      | 1:               | 5.93             | 54.9       | 4         | 74      | 4.00           | -19.06               | peak         |
| 11650.000      | 32.05      | 1:               | 5.93             | 47.9       | 8         | 54      | 4.00           | -6.02                | AVG          |
| N/A            |            |                  |                  |            |           |         |                |                      |              |
|                |            |                  |                  |            |           |         |                |                      |              |
|                |            |                  |                  |            |           |         |                | l                    | I            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode       |              | IEEE 802.11n HT20 /<br>5745 MHz |             |                 | <b>24(</b> °C).    | / 33%RH                |
|-----------------|--------------|---------------------------------|-------------|-----------------|--------------------|------------------------|
| Test Item       |              | larmonic                        |             | Test Date       | Decemb             | er 13, 20 <sup>-</sup> |
| Polarize        |              | Vertical                        |             | Test Enginee    |                    | in Kuo                 |
| Detector        | Peak         | and Averag                      | e           | Test Voltage    | 120Va              | ic / 60Hz              |
| 110.0 dBuV/m    |              |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 | Limit1:<br>Limit2: | _                      |
|                 |              |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 |                    |                        |
| 70              |              |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 |                    |                        |
|                 | 1            |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 |                    |                        |
| 30.0            |              |                                 |             |                 |                    |                        |
| 1000.000 4900.0 | 0 8800.00 12 | 2700.00 16600.00                | 20500.00 24 | 400.00 28300.00 | 32200.00 40        | 0000.00 MHz            |
| Frequency       | Reading      | Correct<br>Factor               | Result      | Limit           | Margin             | Remark                 |
| (MHz)           | (dBuV)       | (dB/m)                          | (dBuV/m)    | (dBuV/m         | ) (dB)             |                        |
| 11490.000       | 34.10        | 16.09                           | 50.19       | 74.00           | -23.81             | peak                   |
| N/A             |              |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 |                    |                        |
|                 |              |                                 |             |                 |                    |                        |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT2<br>745 MHz       | 0 /                | Temp/Hum           | 24(°C)/ 33%R⊦      |            |
|--------------------|-------------------|-----------------------------|--------------------|--------------------|--------------------|------------|
| Test Item          | F                 | larmonic                    |                    | Test Date          | December 13, 2     |            |
| Polarize           | 4                 | lorizontal                  | Te                 | est Engineer       |                    | in Kuo     |
| Detector           | Peak              | and Averag                  | e 1                | est Voltage        | 120Va              | c / 60Hz   |
| 110.0 dBu¥/m       |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    | Limit1:<br>Limit2: | _          |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
| 70                 |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    | 1<br>X            |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
| 30.0               |                   |                             |                    |                    |                    |            |
| 1000.000 4900.00   | ) 8800.00 12      | 2700.00 16600.00            | 20500.00 244       | 00.00 28300.00 322 | 00.00 40           | 000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB)     | Remark     |
| 11490.000          | 36.63             | 16.09                       | 52.72              | 74.00              | -21.28             | peak       |
| N/A                |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |
|                    |                   |                             |                    |                    |                    |            |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 302.11n HT2<br>785 MHz      | :0/               | Temp/       | Hum             | <b>24(</b> °C)     | / 33%RH     |
|--------------------|-------------------|-----------------------------|-------------------|-------------|-----------------|--------------------|-------------|
| Test Item          |                   | larmonic                    |                   | Test D      | Date            | Decemb             | er 5, 201   |
| Polarize           |                   | Vertical                    |                   | Test Eng    |                 |                    | in Kuo      |
| Detector           | Peak              | and Average                 | e                 | Test Vo     | ltage           | 120Va              | c / 60Hz    |
| 110.0 dBuV/m       |                   |                             |                   |             |                 |                    |             |
|                    |                   |                             |                   |             |                 | Limit1:<br>Limit2: | _           |
|                    |                   |                             |                   |             |                 |                    |             |
|                    |                   |                             |                   |             |                 |                    |             |
|                    |                   |                             |                   |             |                 |                    |             |
| 70                 |                   |                             |                   |             |                 |                    |             |
|                    | 1                 |                             |                   |             |                 |                    |             |
|                    | 2                 |                             |                   |             |                 |                    |             |
|                    |                   |                             |                   |             |                 |                    |             |
| 30.0               |                   |                             |                   |             |                 |                    |             |
| 1000.000 4900.0    | 00 8800.00 1.     | 2700.00 16600.00            | 20500.00          | 24400.00 28 | 300.00 322      | 00.00 40           | )000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m |             | Limit<br>BuV/m) | Margin<br>(dB)     | Remark      |
| 11560.000          | 40.82             | 16.02                       | 56.84             |             | 74.00           | -17.16             | peak        |
| 11560.000          | 32.65             | 16.02                       | 48.67             |             | 54.00           | -5.33              | AVG         |
| N/A                |                   |                             |                   |             |                 |                    |             |
|                    |                   |                             |                   |             |                 |                    |             |
|                    |                   |                             |                   |             |                 |                    |             |

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | IEEE 802.11n HT20/<br>5785 MHz |                  |           | Temp/Hum         |                    | / 33%RH     |
|--------------------|-------------------|--------------------------------|------------------|-----------|------------------|--------------------|-------------|
| Test Item          | F                 | larmonic                       |                  | Test Date |                  |                    | er 5, 2017  |
| Polarize           | H                 | lorizontal                     |                  | Test Er   |                  | Kev                | in Kuo      |
| Detector           | Peak              | and Averag                     | e                | Test V    | oltage           | 120Va              | c / 60Hz    |
| 110.0 dBuV/m       |                   |                                |                  |           |                  | Limit1:<br>Limit2: | _           |
|                    |                   |                                |                  |           |                  |                    |             |
| 70                 | 1                 |                                |                  |           |                  |                    |             |
|                    | ×                 |                                |                  |           |                  |                    |             |
| 30.0               |                   |                                |                  |           |                  |                    |             |
| 1000.000 4900.0    | 0 8800.00 12      | 2700.00 16600.00               | 20500.00         | 24400.00  | 28300.00 322     | 00.00 40           | 0000.00 MHz |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m)    | Resul<br>(dBuV/i |           | Limit<br>dBuV/m) | Margin<br>(dB)     | Remark      |
| 11570.000          | 40.72             | 16.01                          | 56.73            | 3         | 74.00            | -17.27             | peak        |
| 11570.000          | 31.05             | 16.01                          | 47.06            | 6         | 54.00            | -6.94              | AVG         |
| N/A                |                   |                                |                  |           |                  |                    |             |
|                    |                   |                                |                  |           |                  |                    |             |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT2<br>325 MHz       | 0/                 | Temp/Hum         | <b>24(</b> °C ).   | 24(°∁)/ 33%RH |  |  |
|--------------------|-------------------|-----------------------------|--------------------|------------------|--------------------|---------------|--|--|
| Test Item          | Н                 | armonic                     |                    | Test Date        | Decemb             | er 13, 201    |  |  |
| Polarize           | ١                 | Vertical                    | -                  | Test Enginee     | r Kev              | in Kuo        |  |  |
| Detector           | Peak              | and Average                 | <b>)</b>           | Test Voltage     | 120Va              | c / 60Hz      |  |  |
| 110.0 dBuV/m       |                   |                             |                    |                  | 1-14               |               |  |  |
|                    |                   |                             |                    |                  | Limit1:<br>Limit2: | _             |  |  |
|                    |                   |                             |                    |                  |                    |               |  |  |
|                    |                   |                             |                    |                  |                    |               |  |  |
|                    |                   |                             |                    |                  |                    |               |  |  |
| 70                 |                   |                             |                    |                  |                    |               |  |  |
|                    | 1                 |                             |                    |                  |                    |               |  |  |
|                    | ×                 |                             |                    |                  |                    |               |  |  |
|                    |                   |                             |                    |                  |                    |               |  |  |
| 30.0               |                   |                             |                    |                  |                    |               |  |  |
| 1000.000 4900.0    | 0 8800.00 1       | 2700.00 16600.00            | 20500.00 24        | 1400.00 28300.00 | 32200.00 44        | 0000.00 MHz   |  |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m | Margin<br>) (dB)   | Remark        |  |  |
| 11650.000          | 36.99             | 15.93                       | 52.92              | 74.00            | -21.08             | peak          |  |  |
| N/A                |                   |                             |                    |                  |                    |               |  |  |
|                    |                   |                             |                    |                  |                    |               |  |  |
|                    |                   |                             |                    |                  |                    |               |  |  |
|                    |                   |                             |                    |                  |                    |               |  |  |

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

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| Test Mode          |                   | 02.11n HT2<br>325 MHz       | 20/                | Temp/Hum            | 24(°C)/ 33%RH      |            |  |
|--------------------|-------------------|-----------------------------|--------------------|---------------------|--------------------|------------|--|
| Test Item          | Н                 | armonic                     |                    | Test Date           | Decembe            | er 13, 201 |  |
| Polarize           | H                 | orizontal                   | Т                  | est Engineer        |                    | n Kuo      |  |
| Detector           | Peak              | and Average                 | e                  | Test Voltage        | 120Va              | c / 60Hz   |  |
| 110.0 dBuV/m       |                   |                             |                    |                     |                    |            |  |
|                    |                   |                             |                    |                     | Limit1:<br>Limit2: | _          |  |
|                    |                   |                             |                    |                     |                    |            |  |
|                    |                   |                             |                    |                     |                    |            |  |
|                    |                   |                             |                    |                     |                    |            |  |
| 70                 |                   |                             |                    |                     |                    |            |  |
|                    |                   |                             |                    |                     |                    |            |  |
|                    | 1<br>×            |                             |                    |                     |                    |            |  |
|                    | 2                 |                             |                    |                     |                    |            |  |
| 30.0               | 00 0000 00 1      | 100.00                      | 0 20500.00 24      | 400.00 20200.00 222 | 200.00 40          | 000.00 MU- |  |
| 1000.000 4900.     | 00 8800.00 12     | 2700.00 16600.00            | ) 20500.00 24      | 400.00 28300.00 322 | 200.00 40          | 000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)   | Margin<br>(dB)     | Remark     |  |
| 11650.000          | 39.81             | 15.93                       | 55.74              | 74.00               | -18.26             | peak       |  |
| 11650.000          | 29.46             | 15.93                       | 45.39              | 54.00               | -8.61              | AVG        |  |
| N/A                |                   |                             |                    |                     |                    |            |  |
|                    |                   |                             |                    |                     |                    |            |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode               |              | 802.11n HT₄<br>755 MHz | 40/        | Temp/Hum  |         | 24(°∁)/ 33%RI |                    |             |
|-------------------------|--------------|------------------------|------------|-----------|---------|---------------|--------------------|-------------|
| Test Item               | F            | larmonic               |            | Test Date |         |               | Decemb             | er 13, 201  |
| Polarize                |              | Vertical               |            |           | st Engi |               |                    | /in Kuo     |
| Detector                | Peak         | and Averag             | e          | Те        | st Volt | age           | 120Va              | ac / 60Hz   |
| 110.0 dBu¥/m            |              |                        |            |           |         |               | Limit1:<br>Limit2: | —           |
| 70                      |              |                        |            |           |         |               |                    |             |
| 30.0<br>1000.000 4900.0 | 0 8800.00 12 | 700.00 16600.00        | 0 20500.00 | 24400.    | 00 2830 | 0.00 3220     | 00.00 4            | 0000.00 MHz |
| Frequency               | Reading      | Correct<br>Factor      | Resu       |           |         | mit           | Margin             | Remark      |
| (MHz)                   | (dBuV)       | (dB/m)                 | (dBuV      | /m)       | (dB     | uV/m)         | (dB)               |             |
| 11510.000               | 33.09        | 16.08                  | 49.1       | 7         | 74      | .00           | -24.83             | peak        |
| N/A                     |              |                        |            |           |         |               |                    |             |
|                         |              |                        |            |           |         |               |                    |             |
|                         |              |                        |            |           | L       |               | <u>I</u>           | <u> </u>    |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT40<br><u>755 MHz</u> | 5/                 | Temp/H      | lum             | 24(°C)/ 33%RH      |             |  |
|--------------------|-------------------|-------------------------------|--------------------|-------------|-----------------|--------------------|-------------|--|
| Test Item          |                   | armonic                       |                    | Test Da     |                 | December 13, 20    |             |  |
| Polarize           | H                 | orizontal                     |                    | Test Eng    |                 |                    | in Kuo      |  |
| Detector           | Peak              | Peak and Average              |                    |             | tage            | 120Va              | c / 60Hz    |  |
| 110.0 dBu¥/m       |                   |                               |                    |             |                 |                    |             |  |
|                    |                   |                               |                    |             |                 | Limit1:<br>Limit2: | _           |  |
|                    |                   |                               |                    |             |                 |                    |             |  |
|                    |                   |                               |                    |             |                 |                    |             |  |
|                    |                   |                               |                    |             |                 |                    |             |  |
| 70                 |                   |                               |                    |             |                 |                    |             |  |
|                    |                   |                               |                    |             |                 |                    |             |  |
|                    | 1                 |                               |                    |             |                 |                    |             |  |
|                    |                   |                               |                    |             |                 |                    |             |  |
| 30.0               |                   |                               |                    |             |                 |                    |             |  |
| 1000.000 4900.0    | 0 8800.00 12      | 2700.00 16600.00              | 20500.00 2         | 4400.00 283 | 00.00 322       | 00.00 40           | 0000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m)   | Result<br>(dBuV/m) |             | .imit<br>suV/m) | Margin<br>(dB)     | Remark      |  |
| 11510.000          | 34.51             | 16.08                         | 50.59              | 7           | 4.00            | -23.41             | peak        |  |
| N/A                |                   |                               |                    |             |                 |                    |             |  |
|                    |                   |                               |                    |             |                 |                    |             |  |
|                    |                   |                               |                    |             |                 |                    |             |  |
| Remark:            |                   |                               |                    |             |                 |                    |             |  |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | 02.11n HT4<br>′95 MHz       | )/                 | Temp/Hum           | 24(°C)/ 33%RH                |            |  |
|--------------------|-------------------|-----------------------------|--------------------|--------------------|------------------------------|------------|--|
| Test Item          | Н                 | armonic                     |                    | Test Date          | December 13, 20 <sup>2</sup> |            |  |
| Polarize           | ١                 | /ertical                    | Т                  | est Engineer       |                              | n Kuo      |  |
| Detector           | Peak              | and Average                 | ;                  | Test Voltage       | 120Va                        | c / 60Hz   |  |
| 110.0 dBuV/m       |                   |                             |                    |                    |                              |            |  |
|                    |                   |                             |                    |                    | Limit1:<br>Limit2:           | _          |  |
|                    |                   |                             |                    |                    |                              |            |  |
|                    |                   |                             |                    |                    |                              |            |  |
|                    |                   |                             |                    |                    |                              |            |  |
| 70                 |                   |                             |                    |                    |                              |            |  |
|                    |                   |                             |                    |                    |                              |            |  |
|                    | 1                 |                             |                    |                    |                              |            |  |
|                    |                   |                             |                    |                    |                              |            |  |
| 30.0               |                   |                             |                    |                    |                              |            |  |
| 1000.000 4900.0    | )O 8800.00 1;     | 2700.00 16600.00            | 20500.00 244       | 100.00 28300.00 32 | 200.00 40                    | 000.00 MHz |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m)  | Margin<br>(dB)               | Remark     |  |
| 11590.000          | 34.08             | 16.00                       | 50.08              | 74.00              | -23.92                       | peak       |  |
| N/A                |                   |                             |                    |                    |                              |            |  |
|                    |                   |                             |                    |                    |                              |            |  |
|                    |                   |                             |                    |                    |                              |            |  |
| emark:             |                   |                             |                    |                    |                              |            |  |

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

| Test Mode          |                   | IEEE 802.11n HT40/<br>5795 MHz |               |          | p/Hum             | 24(°C)/ 33%RH      |                         |  |
|--------------------|-------------------|--------------------------------|---------------|----------|-------------------|--------------------|-------------------------|--|
| Test Item          |                   | Harmonic                       |               | Tes      | t Date            |                    | er 13, 201 <sup>°</sup> |  |
| Polarize           |                   | Horizontal                     |               |          | Ingineer          |                    | n Kuo                   |  |
| Detector           | Pea               | Peak and Average               |               |          | Voltage           | 120Va              | c / 60Hz                |  |
| 110.0 dBu¥/m       |                   |                                |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   | Limit1:<br>Limit2: | _                       |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
| 70                 |                   |                                |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
|                    |                   | 1<br>X                         |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
| 30.0               |                   |                                |               |          |                   |                    |                         |  |
| 1000.000 490       | D.00 8800.00      | 12700.00 16600.0               | 00 20500.00   | 24400.00 | 28300.00 322      | DO.OO 40           | 000.00 MHz              |  |
| _                  |                   | Correct                        |               |          |                   |                    |                         |  |
| Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m)               | Resu<br>(dBuV |          | Limit<br>(dBuV/m) | Margin<br>(dB)     | Remark                  |  |
| 11590.000          | 34.54             | 16.00                          | 50.5          | 4        | 74.00             | -23.46             | peak                    |  |
| N/A                |                   |                                |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
|                    |                   |                                |               |          |                   |                    |                         |  |
| emark:             | C                 | encies from                    |               | 1        |                   |                    |                         |  |
| 1 1/100            | DURINA troau      | analog tram                    |               |          |                   |                    |                         |  |

2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

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| Test Mode           |                             | 2.11ac VHT8<br>75 MHz       | 80/            | Temp/Hum |               | n      | 24(°∁)/ 33%RH      |              |
|---------------------|-----------------------------|-----------------------------|----------------|----------|---------------|--------|--------------------|--------------|
| Test Item           |                             | armonic                     |                | Te       | est Date      |        | December 13, 20    |              |
| Polarize            |                             | 'ertical                    |                |          | t Engine      |        |                    | /in Kuo      |
| Detector            | Peak a                      | ind Average                 | ;              | Tes      | st Voltag     | e      | 120Va              | ac / 60Hz    |
| 110.0 dBuV/n        | 1                           |                             |                |          |               |        | Limit1:<br>Limit2: | _            |
| 70                  |                             |                             |                |          |               |        |                    |              |
| 30.0<br>1000.000 45 | 1<br>X<br>100.00 8800.00 12 | 2700.00 16600.00            | ) 20500.00     | 24400.0  | 0 28300.0     | 0 3220 | 00.00 4            | 10000.00 MHz |
|                     |                             |                             |                |          |               |        |                    |              |
| Frequency<br>(MHz)  | Reading<br>(dBuV)           | Correct<br>Factor<br>(dB/m) | Resu<br>(dBuV/ |          | Limi<br>(dBuV |        | Margin<br>(dB)     | Remark       |
| 11550.000           | 34.11                       | 16.04                       | 50.1           | 5        | 74.0          | 0      | -23.85             | peak         |
| N/A                 |                             |                             |                |          |               |        |                    |              |
|                     |                             |                             |                |          |               |        |                    |              |

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

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| Test Mode          | IE       |               | 02.11a<br>5775 M | c VHT8<br><u>Hz</u>     | 80/           | Т             | emp/H    | um            | 24(°C              | )/ 33%RH     |
|--------------------|----------|---------------|------------------|-------------------------|---------------|---------------|----------|---------------|--------------------|--------------|
| Test Item          |          |               | Harmoi           |                         |               |               | lest Da  |               |                    | per 13, 2017 |
| Polarize           |          |               | lorizor          |                         |               | Test Engineer |          |               |                    | vin Kuo      |
| Detector           |          | Peak          | and A            | verage                  |               | Te            | est Volt | age           | 120V               | ac / 60Hz    |
| 110.0 dBu¥/m       |          |               |                  |                         |               |               |          |               |                    |              |
|                    |          |               |                  |                         |               |               |          |               | Limit1:<br>Limit2: | _            |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
| 70                 |          |               |                  |                         |               |               |          |               |                    |              |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
|                    |          |               | 1<br>X           |                         |               |               |          |               |                    |              |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
| 30.0               |          |               |                  |                         |               |               |          |               |                    |              |
| 1000.000 490       | 0.00 88  | 300.00        | 12700.00         | 16600.00                | 20500.00      | 24400         | .00 2830 | 00.00 322     | 00.00              | 40000.00 MHz |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
| Frequency<br>(MHz) | Re<br>(d | ading<br>BuV) | Fa               | orrect<br>actor<br>B/m) | Resi<br>(dBuV |               |          | imit<br>uV/m) | Margin<br>(dB)     | Remark       |
| 11550.000          | 3        | 4.36          | 10               | 6.04                    | 50.4          | 10            | 74       | 4.00          | -23.60             | peak         |
| N/A                |          |               |                  |                         |               |               |          |               |                    |              |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
|                    |          |               |                  |                         |               |               |          |               |                    |              |
|                    | •        |               | •                |                         |               |               | -        |               | -                  | •            |
| Remark:            |          |               |                  |                         |               |               |          |               |                    |              |
| Sinain.            |          |               | encies           |                         |               |               |          |               |                    |              |

2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

# 4.6 FREQUENCY STABILITY

# 4.6.1 Test Limit

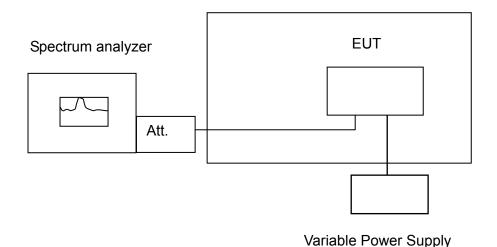
According to §15.407(g) manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the operational description.

# 4.6.2 Test Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to  $-20^{\circ}$ C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with  $10^{\circ}$ C increased per stage until the highest temperature of  $+50^{\circ}$ C reached.

# 4.6.3 Test Setup

Temperature Chamber



# 4.6.4 Test Result

| Tomm (°C)              |             | Measured Frequency | 51         | 80         | (MHz)      |         | Lir         | nit     |         |        |  |
|------------------------|-------------|--------------------|------------|------------|------------|---------|-------------|---------|---------|--------|--|
| Temp. (C)              | Voltage (V) |                    | Time (min) |            |            |         | 20ppm       |         |         |        |  |
| Operating              | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |  |
| 50                     | 5           | 5180.01576         | 5180.02562 | 5180.02041 | 5180.03778 | 3.0425  | 4.9459      | 3.9402  | 7.2929  | Pass   |  |
| 40                     | 5           | 5180.02984         | 5180.03147 | 5180.03264 | 5180.03547 | 5.7606  | 6.0753      | 6.3012  | 6.8475  | Pass   |  |
| 30                     | 5           | 5180.02574         | 5180.02657 | 5180.02787 | 5180.03417 | 4.9691  | 5.1293      | 5.3803  | 6.5965  | Pass   |  |
| 20                     | 5           | 5179.99514         | 5179.99623 | 5180.01540 | 5180.02368 | -0.9382 | -0.7278     | 2.9730  | 4.5714  | Pass   |  |
| 10                     | 5           | 5179.98210         | 5179.98365 | 5179.98569 | 5179.98984 | -3.4556 | -3.1564     | -2.7631 | -1.9614 | Pass   |  |
| 0                      | 5           | 5179.97300         | 5179.97135 | 5179.97091 | 5179.97221 | -5.2124 | -5.5309     | -5.6158 | -5.3649 | Pass   |  |
| Tamm ( <sup>0</sup> C) |             | Measured Frequency | 51         | 80         | (MHz)      |         | Lir         | nit     |         |        |  |
| Temp. (C)              | Voltage (V) |                    | Time (min  | ı)         |            |         | <b>20</b> p | pm      |         | Result |  |
| Operating              | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |  |
| 20                     | 4.5         | 5179.99514         | 5179.99721 | 5180.01536 | 5180.02541 | -0.9382 | -0.5386     | 2.9653  | 4.9054  | Pass   |  |
| 20                     | 5           | 5179.99514         | 5179.99623 | 5180.01540 | 5180.02368 | -0.9382 | -0.7278     | 2.9730  | 4.5714  | Pass   |  |
| 20                     | 5.5         | 5179.99621         | 5179.99636 | 5180.01684 | 5180.02387 | -0.7317 | -0.7027     | 3.2510  | 4.6081  | Pass   |  |

| Tomp (°C)  |             | Measured Frequency | 52         | 60         | (MHz)      |         | Lir         | nit     |         |        |
|------------|-------------|--------------------|------------|------------|------------|---------|-------------|---------|---------|--------|
| Temp. (C)  | Voltage (V) |                    | Time (min  | )          |            | 20ppm   |             |         |         | Result |
| Operating  | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |
| 50         | 5           | 5260.03540         | 5260.03687 | 5260.03751 | 5260.03812 | 6.7300  | 7.0095      | 7.1312  | 7.2471  | Pass   |
| 40         | 5           | 5260.02955         | 5260.03110 | 5260.03113 | 5260.03456 | 5.6179  | 5.9125      | 5.9183  | 6.5703  | Pass   |
| 30         | 5           | 5260.02547         | 5260.02687 | 5260.02895 | 5260.02951 | 4.8422  | 5.1084      | 5.5038  | 5.6103  | Pass   |
| 20         | 5           | 5260.01236         | 5260.02179 | 5260.02317 | 5260.02574 | 2.3498  | 4.1426      | 4.4049  | 4.8935  | Pass   |
| 10         | 5           | 5259.99541         | 5259.99541 | 5260.01240 | 5260.01550 | -0.8726 | -0.8726     | 2.3574  | 2.9468  | Pass   |
| 0          | 5           | 5259.99479         | 5259.98915 | 5259.98654 | 5259.98394 | -0.9905 | -2.0627     | -2.5589 | -3.0532 | Pass   |
| Tomm (°C)  |             | Measured Frequency | 52         | 60         | (MHz)      | -       | Lir         | nit     | -       |        |
| Temp. (°C) | Voltage (V) |                    | Time (min  | )          |            |         | <b>20</b> p | pm      |         | Result |
| Operating  | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |
| 20         | 4.5         | 5260.01236         | 5260.02176 | 5260.01557 | 5260.02668 | 2.3498  | 4.1369      | 2.9601  | 5.0722  | Pass   |
| 20         | 5           | 5260.01236         | 5260.02179 | 5260.02317 | 5260.02574 | 2.3498  | 4.1426      | 4.4049  | 4.8935  | Pass   |
| 20         | 5.5         | 5260.01365         | 5260.02630 | 5260.02314 | 5260.02574 | 2.5951  | 5.0000      | 4.3992  | 4.8935  | Pass   |

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| Tamp (°C)  |             | Measured Frequency | 55         | 00         | (MHz)      |         | Lir         | nit     |         |        |
|------------|-------------|--------------------|------------|------------|------------|---------|-------------|---------|---------|--------|
| remp. ( C) | Voltage (V) |                    | Time (min  | ı)         |            | 20ppm   |             |         |         | Result |
| Operating  | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |
| 50         | 5           | 5500.04136         | 5500.04236 | 5500.04321 | 5500.04321 | 7.5200  | 7.7018      | 7.8564  | 7.8564  | Pass   |
| 40         | 5           | 5500.03925         | 5500.03998 | 5500.04021 | 5500.04221 | 7.1364  | 7.2691      | 7.3109  | 7.6745  | Pass   |
| 30         | 5           | 5500.02245         | 5500.02368 | 5500.03510 | 5500.03878 | 4.0818  | 4.3055      | 6.3818  | 7.0509  | Pass   |
| 20         | 5           | 5500.01268         | 5500.01687 | 5500.02157 | 5500.02236 | 2.3055  | 3.0673      | 3.9218  | 4.0655  | Pass   |
| 10         | 5           | 5499.99514         | 5499.99746 | 5500.00147 | 5500.01270 | -0.8836 | -0.4618     | 0.2673  | 2.3091  | Pass   |
| 0          | 5           | 5499.98334         | 5499.98698 | 5499.98611 | 5499.98480 | -3.0291 | -2.3673     | -2.5255 | -2.7636 | Pass   |
| Tomp (°C)  |             | Measured Frequency | 55         | 00         | (MHz)      |         | Lir         | nit     |         |        |
| remp. ( C) | Voltage (V) |                    | Time (min  | ı)         |            |         | <b>20</b> p | pm      |         | Result |
| Operating  | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |
| 20         | 4.5         | 5500.01236         | 5500.01457 | 5500.02168 | 5500.02351 | 2.2473  | 2.6491      | 3.9418  | 4.2745  | Pass   |
| 20         | 5           | 5500.01268         | 5500.01687 | 5500.02157 | 5500.02236 | 2.3055  | 3.0673      | 3.9218  | 4.0655  | Pass   |
| 20         | 5.5         | 5500.01351         | 5500.02164 | 5500.02136 | 5500.22840 | 2.4564  | 3.9345      | 3.8836  | 4.1527  | Pass   |

| Tomp (°C)  | Voltage (V) | Measured Frequency | 57         | 45         | (MHz)      |         | Lir         | mit     |         |        |  |
|------------|-------------|--------------------|------------|------------|------------|---------|-------------|---------|---------|--------|--|
| remp. ( C) | voltage (v) |                    | Time (min  | Time (min) |            |         | 20ppm       |         |         |        |  |
| Operating  | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |  |
| 50         | 5           | 5745.03847         | 5745.03974 | 5745.04581 | 5745.05102 | 6.6963  | 6.9173      | 7.9739  | 8.8808  | Pass   |  |
| 40         | 5           | 5745.02365         | 5745.02547 | 5745.02687 | 5745.03874 | 4.1166  | 4.4334      | 4.6771  | 6.7433  | Pass   |  |
| 30         | 5           | 5745.01568         | 5745.01365 | 5745.01687 | 5745.02160 | 2.7293  | 2.3760      | 2.9365  | 3.7598  | Pass   |  |
| 20         | 5           | 5744.99514         | 5744.99362 | 5744.99874 | 5745.01450 | -0.8460 | -1.1105     | -0.2193 | 2.5239  | Pass   |  |
| 10         | 5           | 5744.98561         | 5744.98961 | 5744.99157 | 5744.99263 | -2.5048 | -1.8085     | -1.4674 | -1.2829 | Pass   |  |
| 0          | 5           | 5745.00135         | 5744.98510 | 5744.97950 | 5744.98513 | 0.2350  | -2.5936     | -3.5683 | -2.5883 | Pass   |  |
| Tomp (°C)  |             | Measured Frequency | 57         | 45         | (MHz)      |         | Lir         | mit     | -       |        |  |
| Temp. (C)  | Voltage (V) |                    | Time (min  | ı)         |            |         | <b>20</b> p | opm     |         | Result |  |
| Operating  | Frequency:  | 0 min              | 2 min      | 5 min      | 10 min     | 0 min   | 2 min       | 5 min   | 10 min  |        |  |
| 20         | 4.5         | 5744.99354         | 5744.99657 | 5744.99874 | 5745.01555 | -1.1245 | -0.5970     | -0.2193 | 2.7067  | Pass   |  |
| 20         | 5           | 5744.99514         | 5744.99362 | 5744.99874 | 5745.01450 | -0.8460 | -1.1105     | -0.2193 | 2.5239  | Pass   |  |
| 20         | 5.5         | 5744.99514         | 5744.99658 | 5744.99987 | 5745.01254 | -0.8460 | -0.5953     | -0.0226 | 2.1828  | Pass   |  |

# 4.7 DYNAMIC FREQUENCY SELECTION

# 4.7.1 Test Limit

FCC according to §15.407 (h), KDB 905462 D02 "compliance measurement procedures for unlicensed-national information infrastructure devices operating in the 5250-5350 MHz and 5470-5725 MHz bands incorporating dynamic frequency selection". and KDB 905462 D03 " U-NII client devices without radar detection capability.

IC according RSS-247 section 6.3, and it harmonized with FCC Part 15 DFS rules.

The EIRP refer section 4.3 output power measurement in this report.

#### Table 1: Applicability of DFS requirements prior to use of a channel

| De multimente de la constante |        | Operational Mode                 |                              |  |  |  |  |  |
|---|--------|----------------------------------|------------------------------|--|--|--|--|--|
| Requirement   | Master | Client (without radar detection) | Client(with radar detection) |  |  |  |  |  |
| Non-Occupancy Period  | Yes    | Not required                     | Yes                          |  |  |  |  |  |
| DFS Detection Threshold   | Yes    | Not required                     | Yes                          |  |  |  |  |  |
| Channel Availability Check Time   | Yes    | Not required                     | Not required                 |  |  |  |  |  |
| U-NII Detection Bandwidth   | Yes    | Not required                     | Yes                          |  |  |  |  |  |

#### Table 2: Applicability of DFS requirements during normal operation

| <b>D</b> e antinement             | Operational Mode                                |                                   |  |  |  |  |
|-----------------------------------|---|-----------------------------------|--|--|--|--|
| Requirement                       | Master Device or Client with<br>Radar Detection | Client Without Radar<br>Detection |  |  |  |  |
| DFS Detection Threshold           | Yes   | Not required                      |  |  |  |  |
| Channel Closing Transmission Time | Yes   | Yes                               |  |  |  |  |
| Channel Move Time                 | Yes   | Yes                               |  |  |  |  |
| U-NII Detection Bandwidth         | Yes   | Not required                      |  |  |  |  |

| Additional requirements for devices with multiple bandwidth mods  | Master Device or Client with<br>Radar Detection | Client Without Radar Detection                          |
|---|---|---|
| U-NII Detection Bandwidth and Statistical<br>Performance Check  | All BW modes must be tested                     | Not required  |
| Channel Move Time and Channel Closing<br>Transmission Time  | Test using widest BW mode<br>available          | Test using the widest BW mode<br>available for the link |
| All other tests   | Any single BW mode                              | Not required  |
| Note: Frequencies selected for statistic<br>frequencies within the radar detection<br>detection bandwidth. For 802.11 de<br>bonded 20 MHz cha | on bandwidth and frequencies                    | near the edge of the radar frequencies in each of the   |

#### Table 3: Interference Threshold values, Master or Client incorporating In-Service

| -64 dBm |
|---------|
| -62 dBm |
| -64 dBm |
|         |

**Note 1:** This is the level at the input of the receiver assuming a 0 dBi receive antenna.

**Note 2:** Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

#### Table 4: DFS Response requirement values

| Parameter                         | Value   |  |  |
|-----------------------------------|---|--|--|
| Non-occupancy period              | Minimum 30 minutes  |  |  |
| Channel Availability Check Time   | 60 seconds  |  |  |
| Channel Move Time                 | 10 seconds See Note 1.  |  |  |
| Channel Closing Transmission Time | 200 milliseconds + an aggregate of 60 milliseconds over<br>remaining 10 second period. See Notes 1 and 2. |  |  |
| U-NII Detection Bandwidth         | Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.                                   |  |  |

**Note 1:** Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

**Note 2:** The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

**Note 3:** During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

| Radar<br>Type | Pulse Width<br>(µsec)  | PRI (µsec)  | Number of Pulses         Minimum<br>Percentage of<br>Successful<br>Detection  |         | Minimum<br>Number of<br>Trials |  |  |
|---------------|--|---|---|---------|--------------------------------|--|--|
| 0             | 1  | 1428  | 18  | See Not | e 1                            |  |  |
| 1             | 1  | Test A: 15<br>unique PRI<br>values<br>randomly<br>selected<br>from the list<br>of 23 PRI<br>values in<br>Table 5a<br>Test B: 15<br>unique PRI<br>values<br>randomly<br>selected<br>within the<br>range of<br>518-3066<br>µsec, with a<br>minimum<br>increment of<br>1 µsec,<br>excluding<br>PRI values<br>selected in<br>Test A | $\operatorname{Roundup} \begin{cases} \left(\frac{1}{360}\right) \\ \left(\frac{19 \cdot 10^{6}}{\operatorname{PRI}_{\mu \operatorname{sec}}}\right) \end{cases}$ | 60%     | 30                             |  |  |
| 2             | 1-5  | 150-230   | 23-29   | 60%     | 30                             |  |  |
| 3             | 6-10   | 200-500   | 16-18   | 60%     | 30                             |  |  |
| 4             | 11-20  | 200-500   | 12-16   | 60%     | 30                             |  |  |
| Note 1: S     | Aggregate (Radar Types 1-4)       80%       120         Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.       80%       120 |   |   |         |                                |  |  |

#### Table 5 – Short Pulse Radar Test Waveforms

| I | Radar Type | Pulse<br>Width<br>(µsec) | Chirp Width<br>(MHz) | Ŭ         | Number of<br>Pulses per<br>Burst | Number of<br>Bursts | Minimum<br>Percentage<br>of<br>Successful<br>Detection | Minimum<br>Number of<br>Trials |
|---|------------|--------------------------|----------------------|-----------|----------------------------------|---------------------|--|--------------------------------|
|   | 5          | 50-100                   | 5-20                 | 1000-2000 | 1-3                              | 8-20                | 80%  | 30                             |

#### Table 6 – Long Pulse Radar Test Signal

## Table 7 – Frequency Hopping Radar Test Signal

| Radar Type | Pulse<br>Width<br>(µsec) | PRI<br>(µsec) | Pulses per<br>Hop | Hopping<br>Rate<br>(kHz) | Hopping<br>Sequence<br>Length<br>(msec) | Minimum<br>Percentage<br>of<br>Successful<br>Detection | Minimum<br>Number of<br>Trials |
|------------|--------------------------|---------------|-------------------|--------------------------|---|--|--------------------------------|
| 6          | 1                        | 333           | 9                 | 0.333                    | 300                                     | 70%  | 30                             |

# 4.7.2 Test Procedure

#### Overview Of EUT With Respect To §15.407 (H) Requirements

The firmware installed in the EUT during testing was:

Firmware Rev: JEDI.MT76x2

The EUT operates over the 5250-5350 MHz range as a Client Device that does not have radar detection capability.

The EUT uses one transmitter connected to two 50-ohm coaxial antenna ports via a diversity switch. Only one antenna port is connected to the test system since the EUT has one antenna only.

The Slave device associated with the EUT during these tests does not have radar detection capability.

WLAN traffic is generated by streaming the video file TestFile.mp2 "6 ½ Magic Hours" from the Master to the Slave in full motion video mode using the media player with the V2.61 Codec package.

The EUT utilizes the 802.11a architecture, with a nominal channel bandwidth of 20 MHz.

The rated output power of the Master unit is < 23dBm (EIRP). Therefore the required interference threshold level is -62 dBm. After correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is -62 + 5 = -57dBm.

The calibrated conducted DFS Detection Threshold level is set to -57 dBm. The tested level is lower than the required level hence it provides margin to the limit.

#### Manufacturer's Statement Regarding Uniform Channel Spreading

The end product implements an automatic channel selection feature at startup such that operation commences on channels distributed across the entire set of allowed 5GHz channels. This feature will ensure uniform spreading is achieved while avoiding non-allowed channels due to prior radar events.

# TEST AND MEASUREMENT SYSTEM

### System Overview

The measurement system is based on a conducted test method.

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

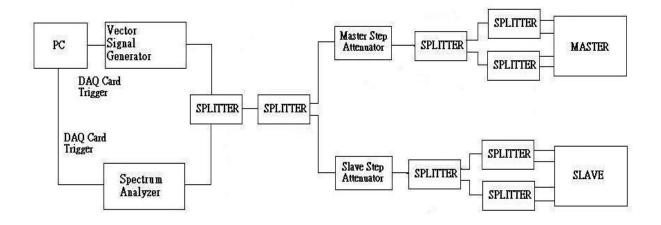
The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from FL to FH for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer set to display 8001 bins on the horizontal axis. The time-domain resolution is 2 msec / bin with a 16 second sweep time, meeting the 10 second short pulse reporting criteria. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold. The time-domain resolution is 3 msec / bin with a 24 second sweep time, meeting the 22 second long pulse reporting criteria and allowing a minimum of 10 seconds after the end of the long pulse waveform.

Should multiple RF ports be utilized for the Master and/or Slave devices (for example, for diversity or MIMO implementations), 50 ohm termination would be removed from the splitter so that connection can be established between splitter and the Master and/or Slave devices.

#### Conducted Method System Block Diagram



### System Calibration

Connect the spectrum analyzer to the test system in place of the master device. Set the signal generator to CW mode. Adjust the amplitude of the signal generator to yield a measured level of –62 dBm on the spectrum analyzer.

Without changing any of the instrument settings, reconnect the spectrum analyzer to the Common port of the Spectrum Analyzer Combiner/Divider and connect a 50 ohm load to the Master Device port of the test system.

Measure the amplitude and calculate the difference from –62 dBm. Adjust the Reference Level Offset of the spectrum analyzer to this difference. Confirm that the signal is displayed at –62 dBm. Readjust the RBW and VBW to 3 MHz, set the span to 10 MHz, and confirm that the signal is still displayed at –62 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –62 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection threshold. Separate signal generator amplitude settings are determined as required for each radar type.

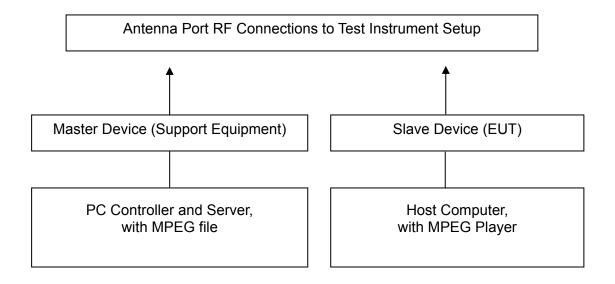
### Adjustment Of Displayed Traffic Level

Establish a link between the Master and Slave, adjusting the Link Step Attenuator as needed to provide a suitable received level at the Master and Slave devices. Stream the video test file to generate WLAN traffic. Confirm that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold. Confirm that the displayed traffic is from the Master Device. For Master Device testing confirm that the displayed traffic does not include Slave Device traffic. For Slave Device testing confirm that the displayed traffic does not include Master Device traffic.

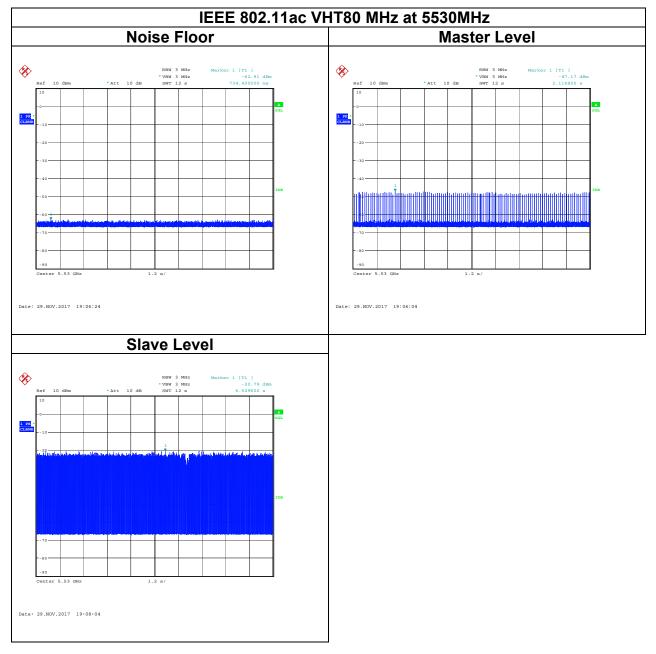
If a different setting of the Master Step Attenuator is required to meet the above conditions, perform a new System Calibration for the new Master Step Attenuator setting.

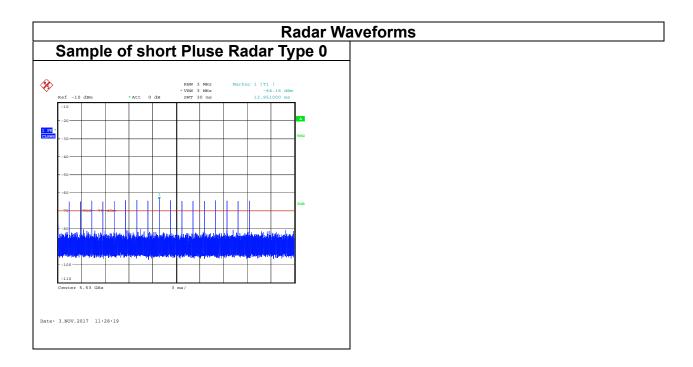


# 4.7.3 Test Setup



# 4.7.4 Test Result





# TEST CHANNEL AND METHOD

All tests were performed at a channel center frequency of 5530 MHz utilizing a conducted test method.

## CHANNEL MOVE TIME AND CHANNEL CLOSING TRANSMISSION TIME

## **GENERAL REPORTING NOTES**

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

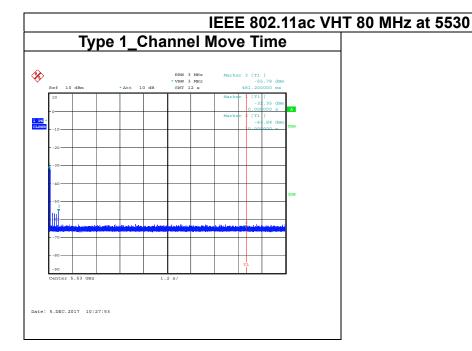
Aggregate Transmission Time =

(Number of analyzer bins showing transmission) \* (dwell time per bin)

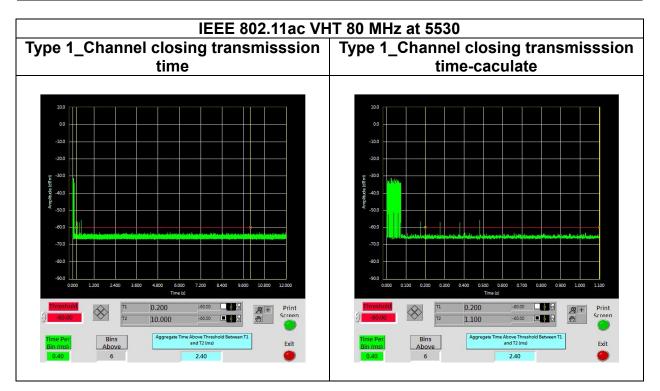
The observation period over which the aggregate time is calculated

Begins at (Reference Marker + 200 msec) and

Ends no earlier than (Reference Marker + 10 sec).



| Channel Move Time | Limit |
|-------------------|-------|
| (s)               | (s)   |
| 0.4812            | 10    |



| Aggregate Transmission Time | Limit | Margin |
|-----------------------------|-------|--------|
| (ms)                        | (ms)  | (ms)   |
| 2.4                         | 60    | -57.6  |