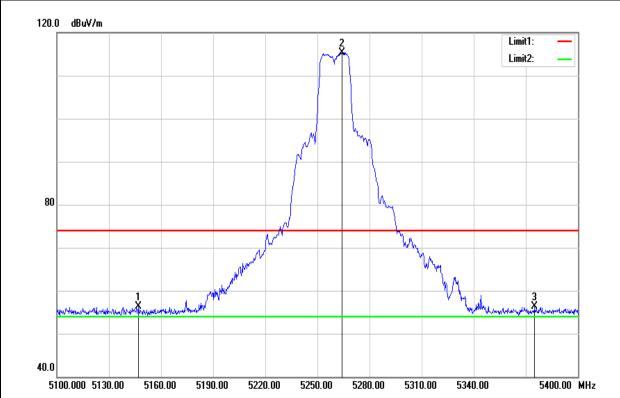
ID: ACJ9TGWL17A Report No.: T180115W01-RP2

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

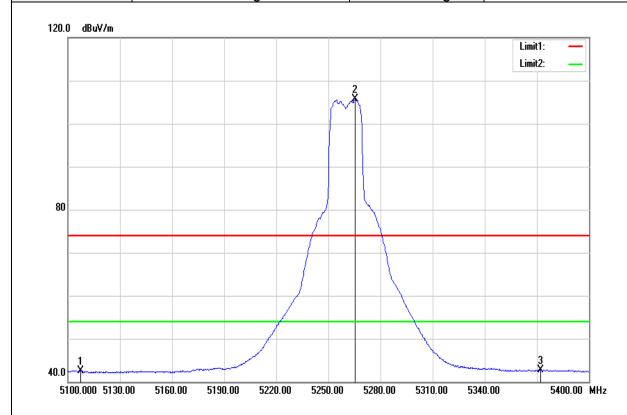
| Test Mode | IEEE 802.11n 20 / 5260MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Band Edge                 | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Peak                      | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5147.250           | 51.21             | 5.06                        | 56.27              | 74.00             | -17.73         | peak   |
| 5264.250           | 110.00            | 5.34                        | 115.34             | -                 | -              | peak   |
| 5375.100           | 50.68             | 5.63                        | 56.31              | 74.00             | -17.69         | peak   |



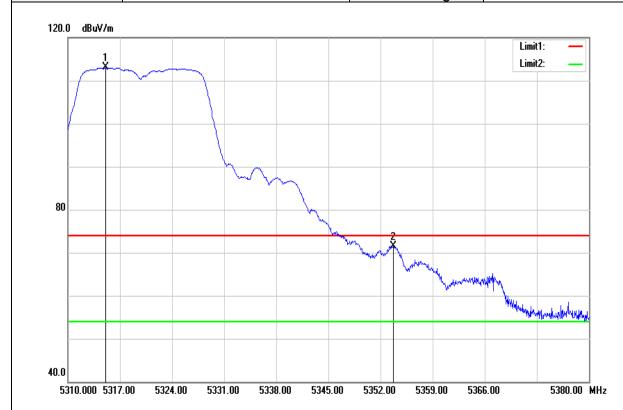
| Test Mode | IEEE 802.11n 20 / 5260MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Band Edge                 | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Average                   | Test Voltage  |                  |



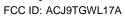
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5107.650           | 37.63             | 4.95                        | 42.58              | 54.00             | -11.42         | AVG    |
| 5265.450           | 100.28            | 5.35                        | 105.63             |                   |                | AVG    |
| 5372.100           | 37.16             | 5.61                        | 42.77              | 54.00             | -11.23         | AVG    |



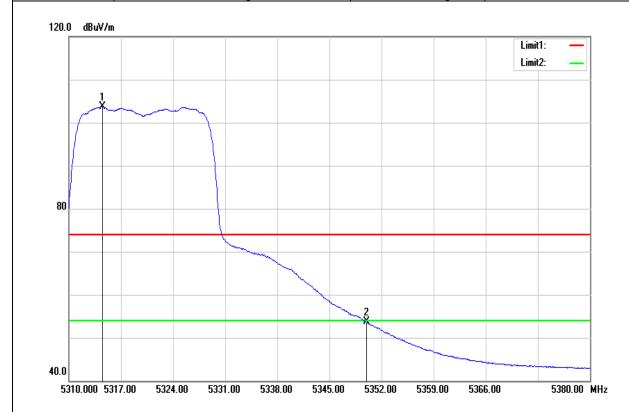
| Test Mode | IEEE 802.11n 20 / 5320MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Band Edge                 | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Peak                      | Test Voltage  |                  |



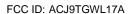
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5315.075           | 107.53            | 5.48                        | 113.01             | 1                 | ı              | peak   |
| 5353.715           | 66.03             | 5.56                        | 71.59              | 74.00             | -2.41          | peak   |



| Test Mode | IEEE 802.11n 20 /<br>5320MHz | Temperature   | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Band Edge                    | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Average                      | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5314.480           | 98.27             | 5.47                        | 103.74             | -                 |                | AVG    |
| 5350.000           | 48.05             | 5.56                        | 53.61              | 54.00             | -0.39          | AVG    |

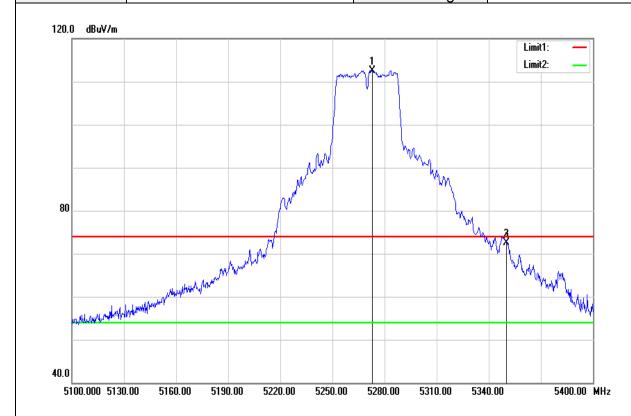


Test Mode IEEE 802.11n 40 / 5270MHz Temp/Hum 24(°C)/ 33%RH

Test Item Band Edge Test Date January 16, 2018

Polarize Horizontal Test Engineer Jerry Chuang

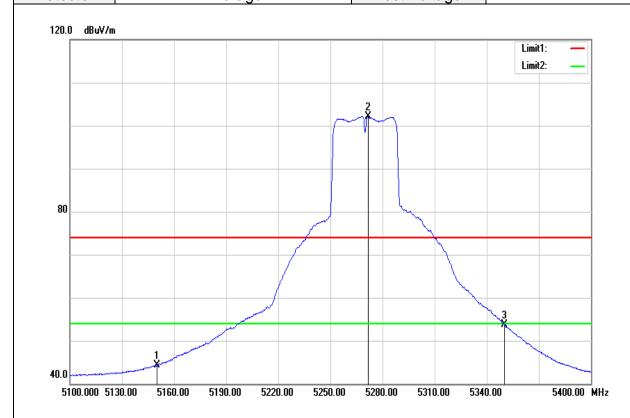
Detector Peak Test Voltage ---



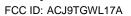
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5272.950           | 107.23            | 5.36                        | 112.59             | -                 | -              | peak   |
| 5350.000           | 67.02             | 5.56                        | 72.58              | 74.00             | -1.42          | peak   |
| 5350.200           | 67.02             | 5.56                        | 72.58              | 74.00             | -1.42          | peak   |



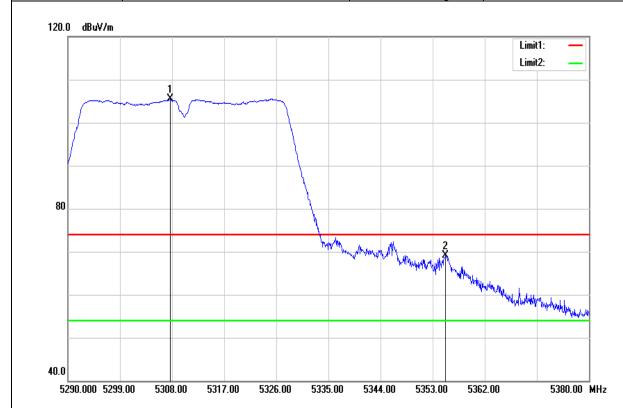
Test ModeIEEE 802.11n 40 / 5270MHzTemperature24(°C)/ 33%RHTest ItemBand EdgeTest DateJanuary 16, 2018PolarizeHorizontalTest EngineerJerry ChuangDetectorAverageTest Voltage---



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5150.000           | 39.21             | 5.06                        | 44.27              | 54.00             | -9.73          | AVG    |
| 5271.600           | 96.74             | 5.36                        | 102.10             |                   |                | AVG    |
| 5350.000           | 48.20             | 5.56                        | 53.76              | 54.00             | -0.24          | AVG    |



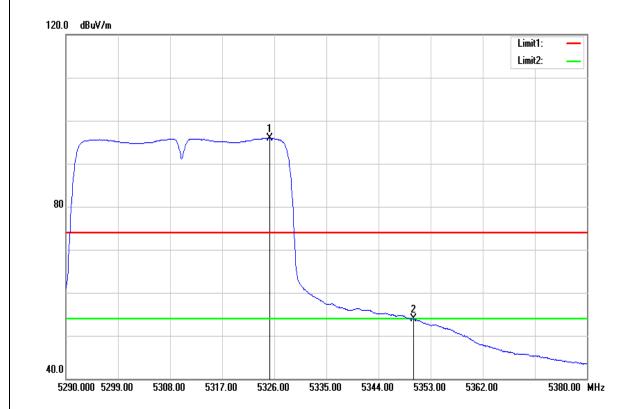
| Test Mode | IEEE 802.11n 40 / 5310MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Band Edge                 | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Peak                      | Test Voltage  |                  |



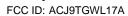
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5307.640           | 99.99             | 5.45                        | 105.44             | ı                 | ı              | peak   |
| 5355.250           | 63.51             | 5.57                        | 69.08              | 74.00             | -4.92          | peak   |



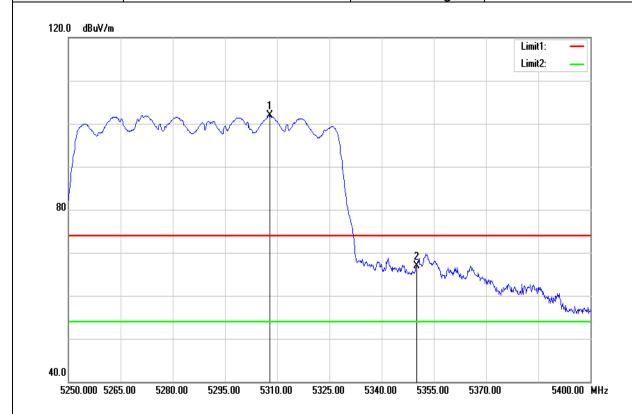
| Test Mode | IEEE 802.11n 40 / 5310MHz | Temperature   | 24(°C)/ 33%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Band Edge                 | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Average                   | Test Voltage  |                  |



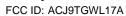
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5325.190           | 90.42             | 5.51                        | 95.93              | -                 | ı              | AVG    |
| 5350.000           | 48.37             | 5.56                        | 53.93              | 54.00             | -0.07          | AVG    |



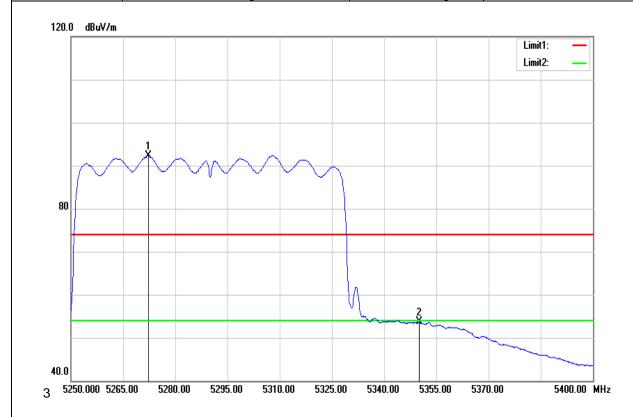
| Test Mode | IEEE 802.11ac VHT80 /<br>5290MHz | Temp/Hum      | 24(°C)/ 33%RH     |
|-----------|----------------------------------|---------------|-------------------|
| Test Item | Band Edge                        | Test Date     | February 12, 2018 |
| Polarize  | Horizontal                       | Test Engineer | Jerry Chuang      |
| Detector  | Peak                             | Test Voltage  |                   |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5307.900           | 96.54             | 5.45                        | 101.99             | -                 | -              | peak   |
| 5350.000           | 61.39             | 5.56                        | 66.95              | 74.00             | -7.05          | peak   |



| Test Mode | IEEE 802.11ac VHT80 /<br>5290MHz | Temperature   | 24(°C)/ 33%RH     |
|-----------|----------------------------------|---------------|-------------------|
| Test Item | Band Edge                        | Test Date     | February 12, 2018 |
| Polarize  | Horizontal                       | Test Engineer | Jerry Chuang      |
| Detector  | Average                          | Test Voltage  |                   |

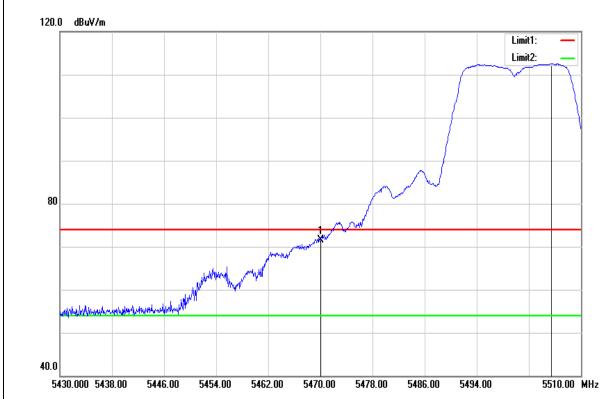


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5272.200           | 86.98             | 5.36                        | 92.34              | 1                 |                | AVG    |
| 5350.000           | 48.05             | 5.56                        | 53.61              | 54.00             | -0.39          | AVG    |

FCC ID: ACJ9TGWL17A

### **Band Edge Test Data for UNII-2c**

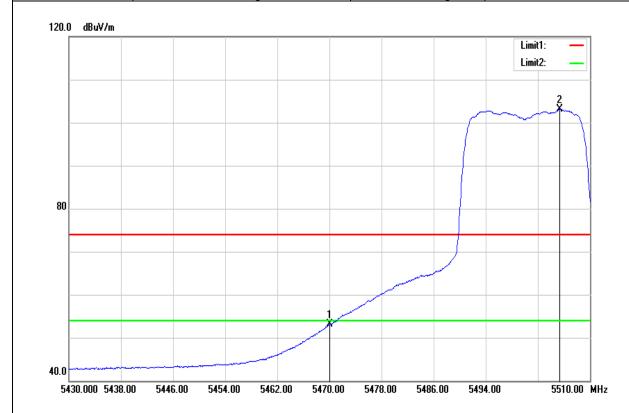
| Test Mode | IEEE 802.11n 20 / 5500MHz | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|---------------------------|---------------|------------------|--|
| Test Item | Band Edge                 | Test Date     | January 16, 2018 |  |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak                      | Test Voltage  |                  |  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5470.000           | 65.66             | 5.85                        | 71.51              | 74.00             | -2.49          | peak   |
| 5505.480           | 106.58            | 5.95                        | 112.53             | -                 | -              | peak   |



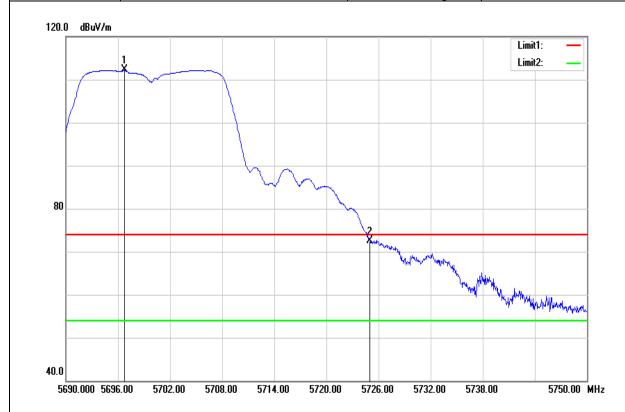
| Test Mode | IEEE 802.11n 20 / 5500MHz | Temperature   | 24(°C)/ 33%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Band Edge                 | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Average                   | Test Voltage  |                  |



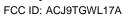
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5470.000           | 47.18             | 5.85                        | 53.03              | 54.00             | -0.97          | AVG    |
| 5505.400           | 97.18             | 5.95                        | 103.13             | •                 | •              | AVG    |



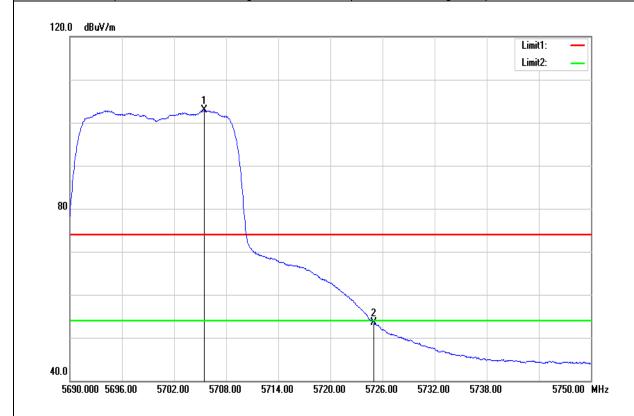
| Test Mode | IEEE 802.11n 20 /<br>5700 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Band Edge                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak                          | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5696.780           | 105.78            | 6.45                        | 112.23             | 1                 |                | peak   |
| 5725.000           | 65.97             | 6.52                        | 72.49              | 74.00             | -1.51          | peak   |



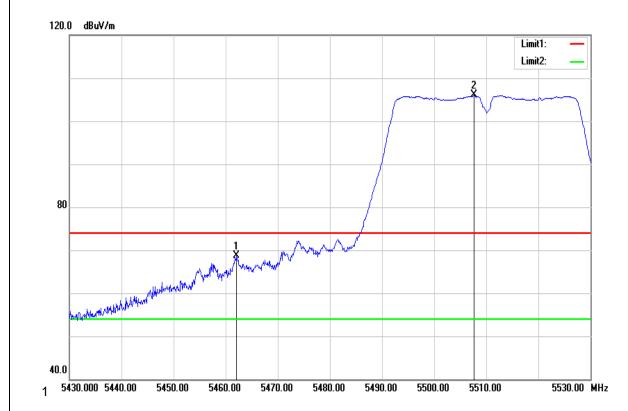
| Test Mode | IEEE 802.11n 20 /<br>5700 MHz | Temperature   | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Band Edge                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Average                       | Test Voltage  |                  |



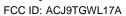
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5705.510           | 96.38             | 6.47                        | 102.85             | -                 | -              | AVG    |
| 5725.000           | 47.01             | 6.52                        | 53.53              | 54.00             | -0.47          | AVG    |



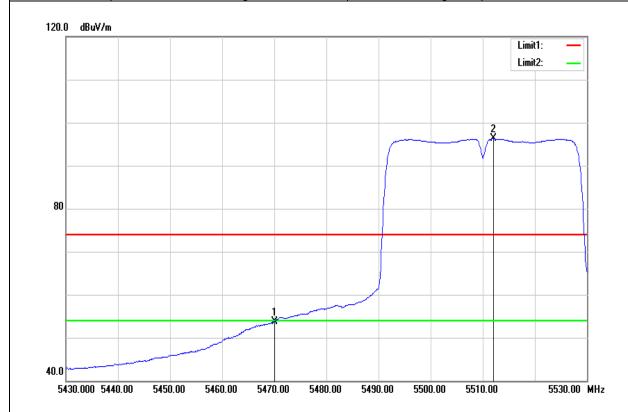
| Test Mode | IEEE 802.11n 40 /<br>5510 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Band Edge                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak                          | Test Voltage  |                  |



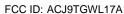
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5462.100           | 62.96             | 5.84                        | 68.80              | 74.00             | -5.20          | peak   |
| 5507.600           | 100.12            | 5.96                        | 106.08             | -                 | -              | peak   |



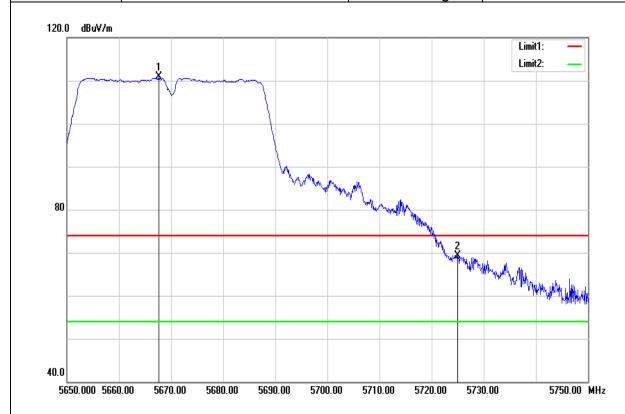
| Test Mode | IEEE 802.11n 40 /<br>5510 MHz | Temperature   | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Band Edge                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Average                       | Test Voltage  |                  |



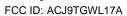
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5470.000           | 47.90             | 5.85                        | 53.75              | 54.00             | -0.25          | AVG    |
| 5512.100           | 90.28             | 5.95                        | 96.23              | -                 | -              | AVG    |



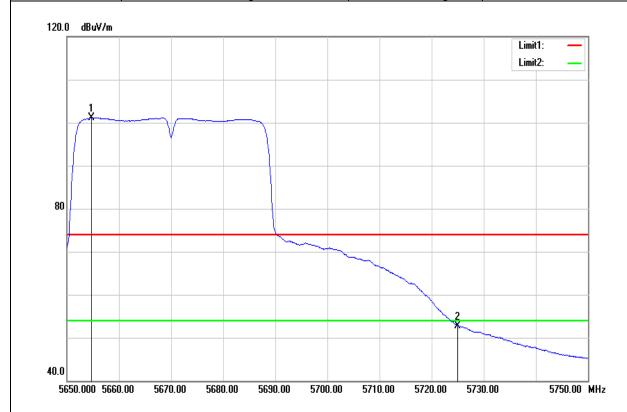
IEEE 802.11n 40 / Test Mode Temp/Hum 24(°C)/33%RH 5670 MHz Band Edge January 16, 2018 **Test Date** Test Item Jerry Chuang **Polarize** Horizontal Test Engineer Test Voltage Detector Peak



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5667.600           | 104.49            | 6.37                        | 110.86             | -                 |                | peak   |
| 5725.000           | 62.85             | 6.52                        | 69.37              | 74.00             | -4.63          | peak   |



| Test Mode | IEEE 802.11n 40 /<br>5670 MHz | Temperature   | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Band Edge                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Average                       | Test Voltage  |                  |

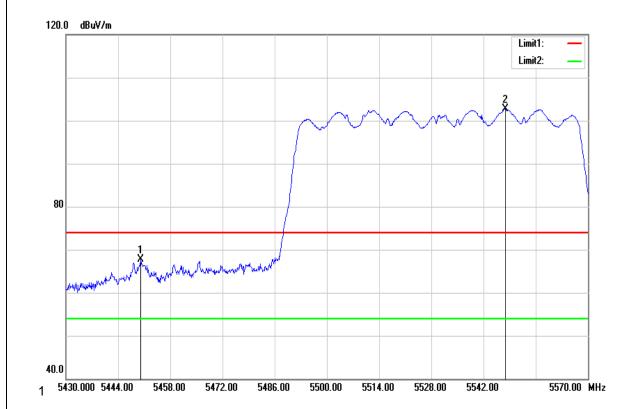


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5654.700           | 94.73             | 6.34                        | 101.07             | -                 | -              | AVG    |
| 5725.000           | 46.26             | 6.52                        | 52.78              | 54.00             | -1.22          | AVG    |

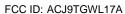


FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

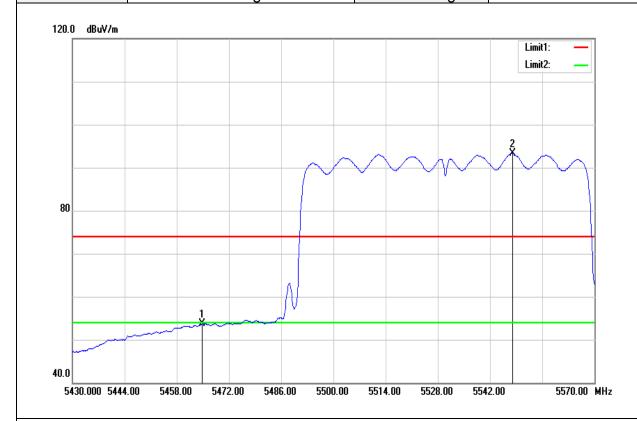
| Test Mode | IEEE 802.11ac VHT80 /<br>5530 MHz | Temp/Hum      | 24(°C)/ 33%RH     |
|-----------|-----------------------------------|---------------|-------------------|
| Test Item | Band Edge                         | Test Date     | February 12, 2018 |
| Polarize  | Horizontal                        | Test Engineer | Jerry Chuang      |
| Detector  | Peak                              | Test Voltage  |                   |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5450.020           | 61.93             | 5.81                        | 67.74              | 74.00             | -6.26          | peak   |
| 5547.880           | 96.72             | 6.06                        | 102.78             | -                 | -              | peak   |



IEEE 802.11ac VHT80 / Test Mode 24(°C)/ 33%RH Temperature 5530 MHz February 12, 2018 Band Edge Test Date Test Item Jerry Chuang **Polarize** Horizontal Test Engineer Test Voltage Detector Average

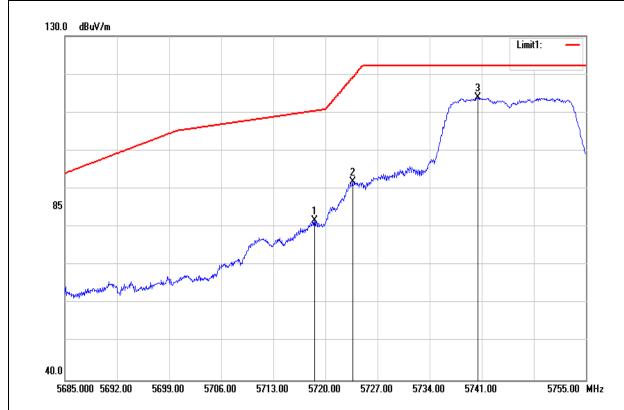


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5464.860           | 47.93             | 5.84                        | 53.77              | 54.00             | -0.23          | AVG    |
| 5548.020           | 87.29             | 6.06                        | 93.35              | -                 | -              | AVG    |

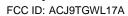
FCC ID: ACJ9TGWL17A

# **Band Edge Test Data for UNII-3**

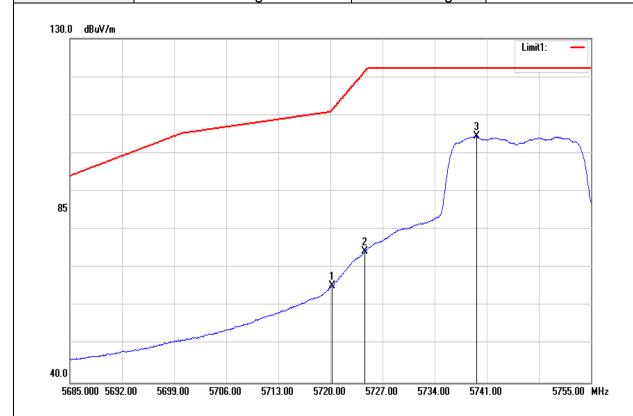
| Test Mode | IEEE 802.11n 20 /<br>5745 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Test Item Band Edge           |               | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak                          | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5718.530           | 75.30             | 6.50                        | 81.80              | 110.39            | -28.59         | peak   |
| 5723.675           | 85.45             | 6.52                        | 91.97              | 119.18            | -27.21         | peak   |
| 5740.510           | 107.34            | 6.56                        | 113.90             | -                 | -              | peak   |



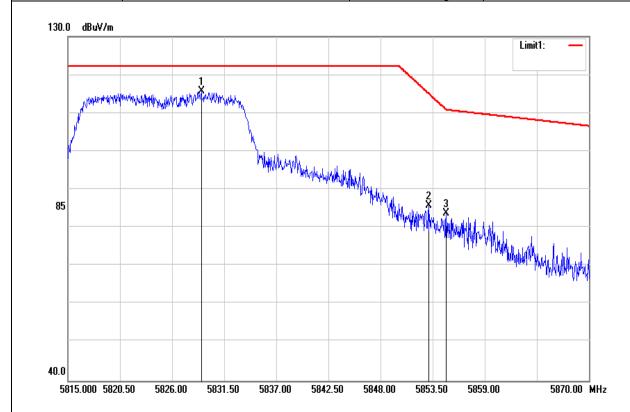
| Test Mode | IEEE 802.11n 20 /<br>5745 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Band Edge                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Average                       | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5720.245           | 58.88             | 6.50                        | 65.38              | 111.36            | -45.98         | AVG    |
| 5724.655           | 67.77             | 6.52                        | 74.29              | 121.41            | -47.12         | AVG    |
| 5739.600           | 97.85             | 6.56                        | 104.41             | -                 | -              | AVG    |



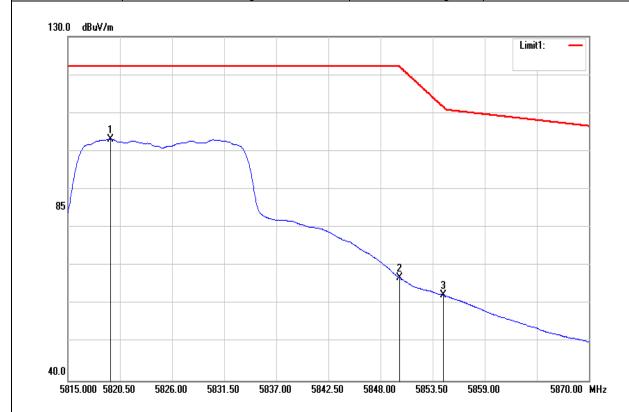
| Test Mode | IEEE 802.11n 20 /<br>5825 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Band Edge                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak                          | Test Voltage  |                  |



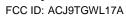
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5829.108           | 108.95            | 6.79                        | 115.74             | -                 | -              | peak   |
| 5853.060           | 78.87             | 6.86                        | 85.73              | 115.22            | -29.49         | peak   |
| 5854.930           | 76.90             | 6.86                        | 83.76              | 110.96            | -27.20         | peak   |



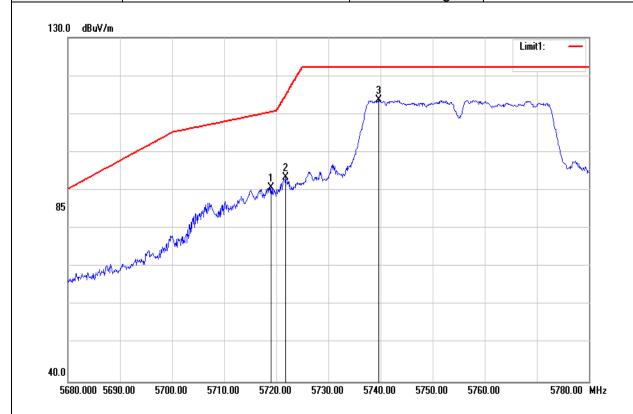
| Test Mode           | IEEE 802.11n 20 /<br>5825 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|---------------------|-------------------------------|---------------|------------------|
| Test Item Band Edge |                               | Test Date     | January 16, 2018 |
| Polarize            | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector            | Average                       | Test Voltage  |                  |



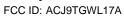
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5819.538           | 96.46             | 6.76                        | 103.22             | -                 |                | AVG    |
| 5850.035           | 60.04             | 6.85                        | 66.89              | 122.12            | -55.23         | AVG    |
| 5854.655           | 55.49             | 6.86                        | 62.35              | 111.59            | -49.24         | AVG    |



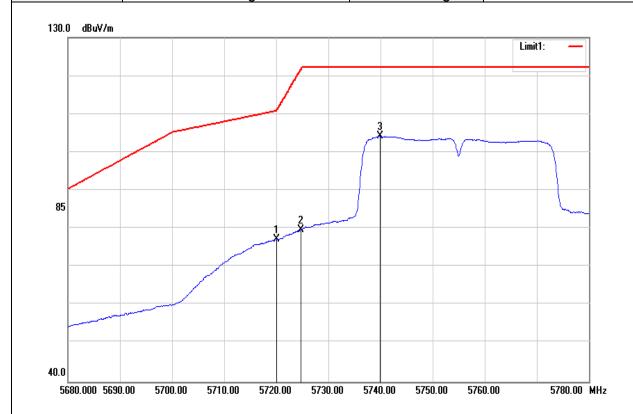
| Test Mode | IEEE 802.11n 40/<br>5755 MHz | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|------------------------------|---------------|------------------|--|
| Test Item | Band Edge                    | Test Date     | January 16, 2018 |  |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak                         | Test Voltage  |                  |  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5719.050           | 84.19             | 6.50                        | 90.69              | 110.53            | -19.84         | peak   |
| 5721.800           | 86.93             | 6.51                        | 93.44              | 114.90            | -21.46         | peak   |
| 5739.700           | 107.04            | 6.56                        | 113.60             | -                 | -              | peak   |



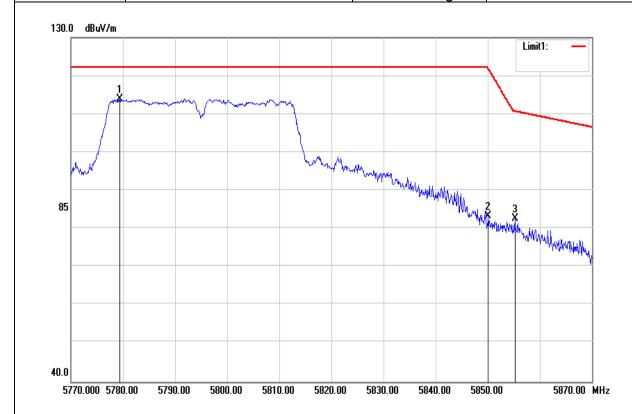
| Test Mode | IEEE 802.11n 40/<br>5755 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Band Edge                    | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Average                      | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5720.150           | 70.72             | 6.50                        | 77.22              | 111.14            | -33.92         | AVG    |
| 5724.750           | 73.13             | 6.52                        | 79.65              | 121.63            | -41.98         | AVG    |
| 5739.900           | 97.63             | 6.56                        | 104.19             | -                 | -              | AVG    |



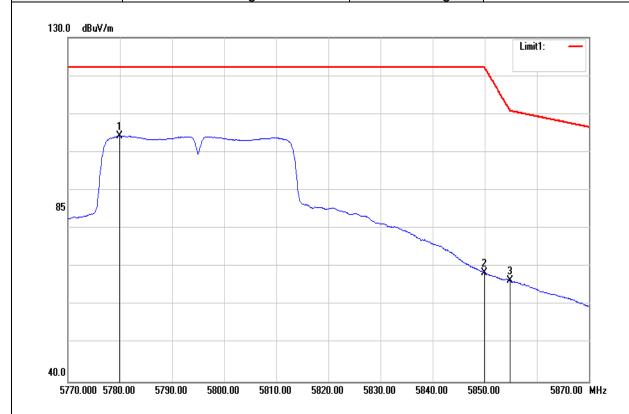
| Test Mode | IEEE 802.11n 40/<br>5795 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Band Edge                    | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak                         | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5779.400           | 107.21            | 6.67                        | 113.88             | -                 | 1              | peak   |
| 5850.100           | 76.36             | 6.85                        | 83.21              | 121.97            | -38.76         | peak   |
| 5855.250           | 75.82             | 6.86                        | 82.68              | 110.73            | -28.05         | peak   |



| Test Mode | IEEE 802.11n 40/<br>5795 MHz | I Lemp/Hum    |                  |
|-----------|------------------------------|---------------|------------------|
| Test Item | Band Edge                    | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Average                      | Test Voltage  |                  |

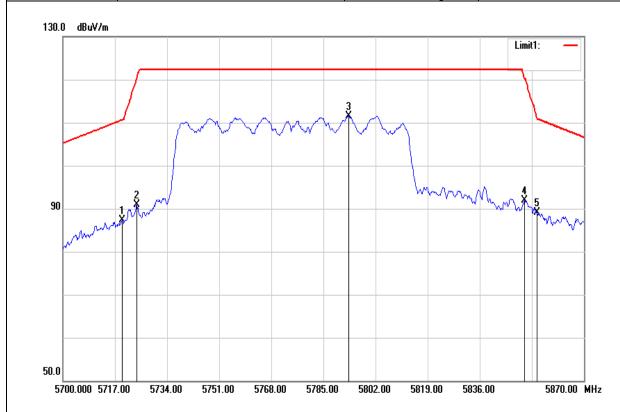


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5779.950           | 97.55             | 6.67                        | 104.22             | -                 |                | AVG    |
| 5849.900           | 61.62             | 6.85                        | 68.47              | 122.20            | -53.73         | AVG    |
| 5854.900           | 59.48             | 6.86                        | 66.34              | 111.03            | -44.69         | AVG    |

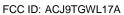


FCC ID: ACJ9TGWL17A

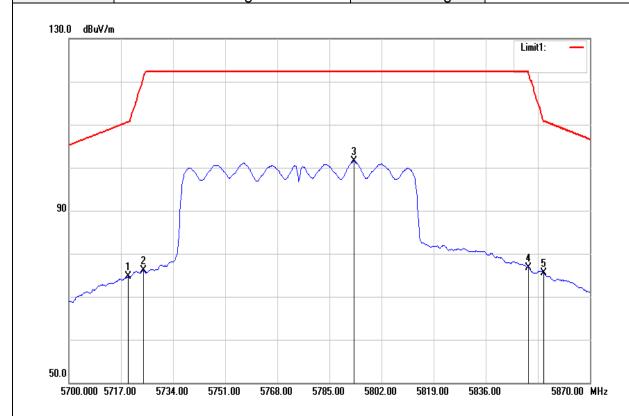
| Test Mode | Test Mode IEEE 802.11ac VHT80 / 5775 MHz |               | 24(°C)/ 33%RH    |
|-----------|--|---------------|------------------|
| Test Item | Band Edge                                | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                               | Test Engineer | Jerry Chuang     |
| Detector  | Peak                                     | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5719.380           | 80.88             | 6.50                        | 87.38              | 110.63            | -23.25         | peak   |
| 5724.140           | 84.45             | 6.52                        | 90.97              | 120.24            | -29.27         | peak   |
| 5793.160           | 104.72            | 6.70                        | 111.42             | -                 | -              | peak   |
| 5850.620           | 85.06             | 6.85                        | 91.91              | 120.79            | -28.88         | peak   |
| 5854.700           | 82.18             | 6.86                        | 89.04              | 111.48            | -22.44         | peak   |



IEEE 802.11ac VHT80 / Test Mode Temp/Hum 24(°C)/33%RH 5775 MHz January 16, 2018 Test Item Band Edge **Test Date** Polarize Jerry Chuang Horizontal Test Engineer Test Voltage Detector Average

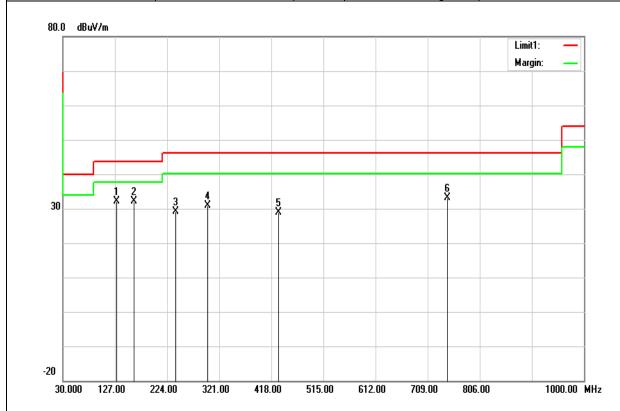


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 5719.380           | 68.13             | 6.50                        | 74.63              | 110.63            | -36.00         | AVG    |
| 5724.310           | 69.67             | 6.52                        | 76.19              | 120.63            | -44.44         | AVG    |
| 5792.990           | 94.82             | 6.70                        | 101.52             | -                 | -              | AVG    |
| 5849.940           | 69.88             | 6.85                        | 76.73              | 122.20            | -45.47         | AVG    |
| 5854.870           | 68.63             | 6.86                        | 75.49              | 111.10            | -35.61         | AVG    |

FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

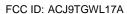
# **Below 1G Test Data**

| Test Mode | IEEE 802.11ac VHT80 /<br>5210MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|----------------------------------|---------------|------------------|
| Test Item | 30MHz-1GHz                       | Test Date     | January 17, 2018 |
| Polarize  | Horizontal                       | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Quasi-peak              | Test Voltage  |                  |

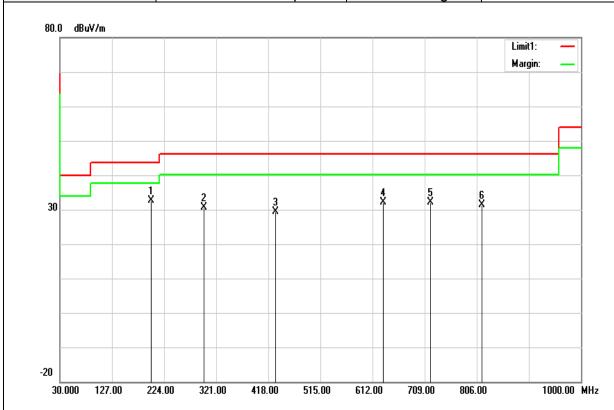


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 129.9100           | 47.37             | -15.27                      | 32.10              | 43.52             | -11.42         | peak   |
| 162.4050           | 48.29             | -16.11                      | 32.18              | 43.52             | -11.34         | peak   |
| 240.0050           | 45.27             | -16.13                      | 29.14              | 46.02             | -16.88         | peak   |
| 299.6600           | 45.06             | -14.07                      | 30.99              | 46.02             | -15.03         | peak   |
| 432.0650           | 39.16             | -10.24                      | 28.92              | 46.02             | -17.10         | peak   |
| 746.3450           | 37.43             | -4.33                       | 33.10              | 46.02             | -12.92         | peak   |

**Note**: No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)

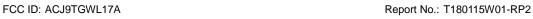


IEEE 802.11ac VHT80 / Test Mode Temp/Hum 24(°C)/33%RH 5210MHZ January 17, 2018 Test Date 30MHz-1GHz Test Item **Polarize** Test Engineer Horizontal Jerry Chuang Detector Test Voltage Peak and Quasi-peak



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 199.7500           | 47.83             | -15.32                      | 32.51              | 43.52             | -11.01         | peak   |
| 298.6900           | 44.78             | -14.09                      | 30.69              | 46.02             | -15.33         | peak   |
| 432.0650           | 39.67             | -10.24                      | 29.43              | 46.02             | -16.59         | peak   |
| 632.3700           | 38.27             | -6.04                       | 32.23              | 46.02             | -13.79         | peak   |
| 720.1550           | 36.72             | -4.65                       | 32.07              | 46.02             | -13.95         | peak   |
| 816.1850           | 34.62             | -3.21                       | 31.41              | 46.02             | -14.61         | peak   |

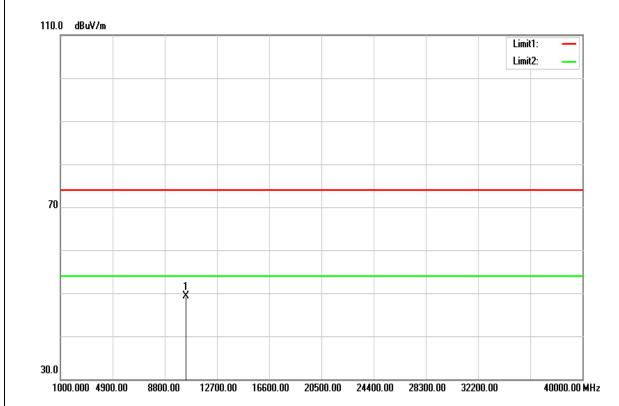
**Note**: No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)



#### For 1TX:

# **Above 1G Test Data for UNII-1**

| Test Mode | IEEE 802.11a /<br>5180MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Harmonic                  | Test Date     | February 9, 2018 |
| Polarize  | Vertical                  | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average          | Test Voltage  |                  |



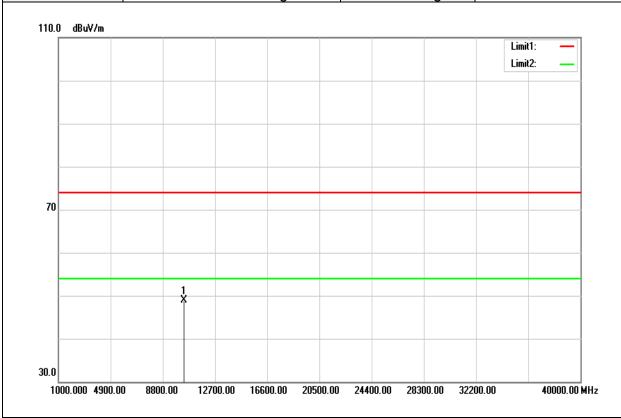
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10360.000          | 34.94             | 14.45                       | 49.39              | 74.00             | -24.61         | 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 | IEEE 802.11a/<br>5180MHZ | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|--------------------------|---------------|------------------|--|
| Test Item | Harmonic                 | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal               | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average         | Test Voltage  |                  |  |



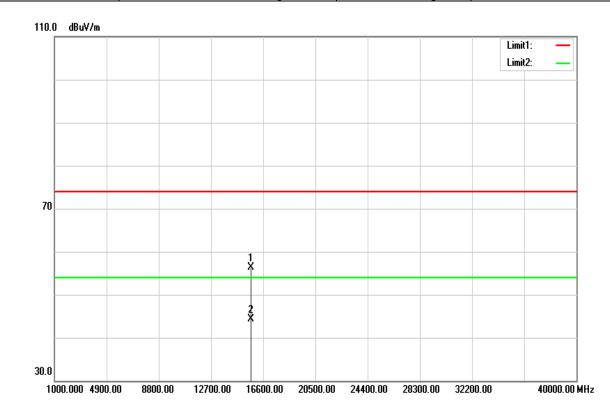
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10360.000          | 34.42             | 14.45                       | 48.87              | 74.00             | -25.13         | 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



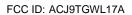
| Test Mode | IEEE 802.11a /<br>5220MHZ | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|---------------------------|---------------|------------------|--|
| Test Item | Harmonic                  | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                  | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average          | Test Voltage  |                  |  |



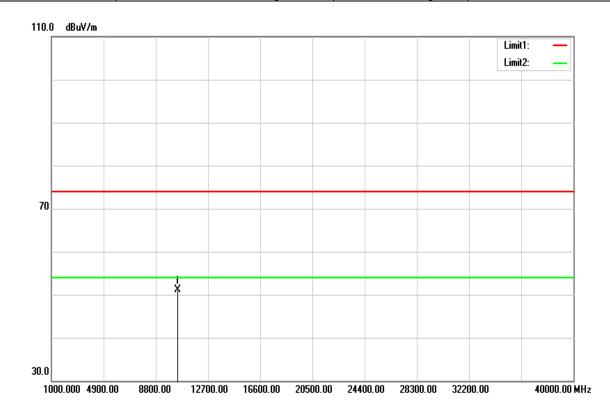
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15670.000          | 37.34             | 19.06                       | 56.40              | 74.00             | -17.60         | peak   |
| 15670.000          | 25.31             | 19.06                       | 44.37              | 54.00             | -9.63          | 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



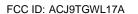
| Test Mode | IEEE 802.11a /<br>5220MHZ | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|---------------------------|---------------|------------------|--|
| Test Item | Harmonic                  | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average          | Test Voltage  |                  |  |



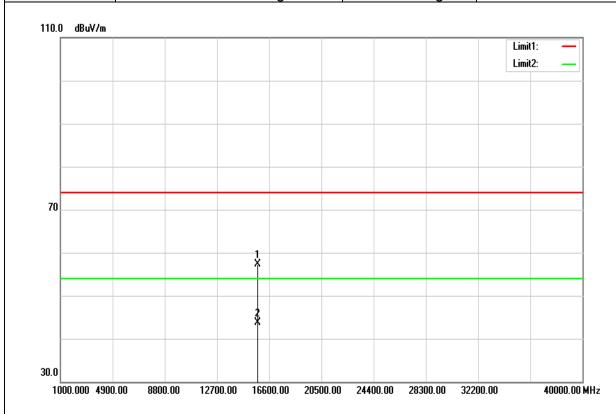
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10440.000          | 36.45             | 14.71                       | 51.16              | 74.00             | -22.84         | 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

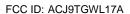


| Test Mode | IEEE 802.11a /<br>5240MHZ | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|---------------------------|---------------|------------------|--|
| Test Item | Harmonic                  | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                  | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average          | Test Voltage  |                  |  |

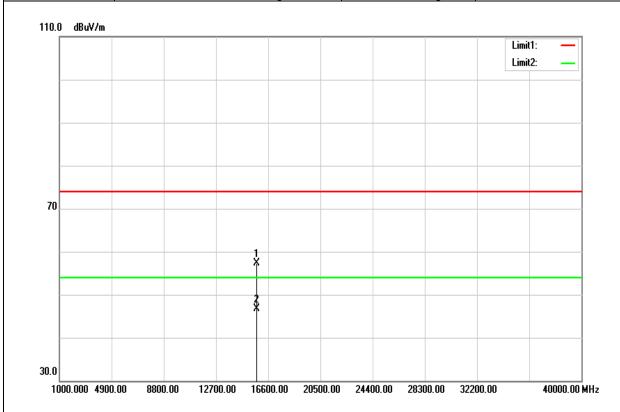


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15720.000          | 38.10             | 19.20                       | 57.30              | 74.00             | -16.70         | peak   |
| 15720.000          | 24.59             | 19.20                       | 43.79              | 54.00             | -10.21         | 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 | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Harmonic                  | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average          | Test Voltage  |                  |

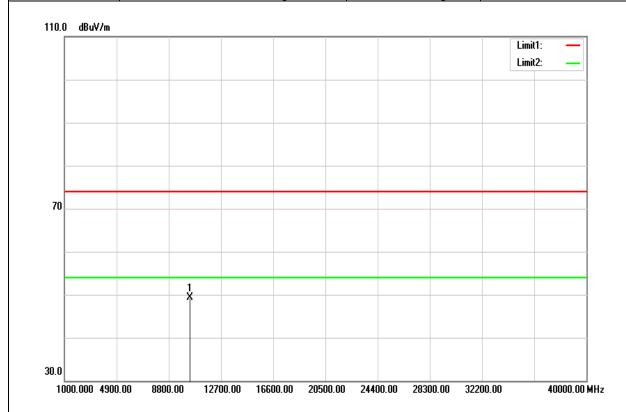


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15720.000          | 38.05             | 19.20                       | 57.25              | 74.00             | -16.75         | peak   |
| 15720.000          | 27.57             | 19.20                       | 46.77              | 54.00             | -7.23          | 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 802.11n 20 /<br>5180MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

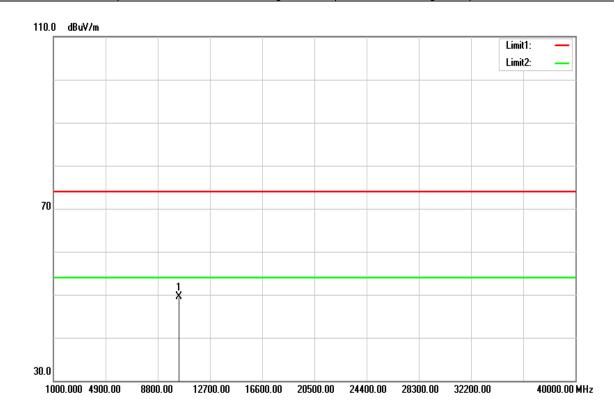


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10360.000          | 34.80             | 14.45                       | 49.25              | 74.00             | -24.75         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20/<br>5180MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-----------------------------|---------------|------------------|
| Test Item | Harmonic                    | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                  | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average            | Test Voltage  |                  |

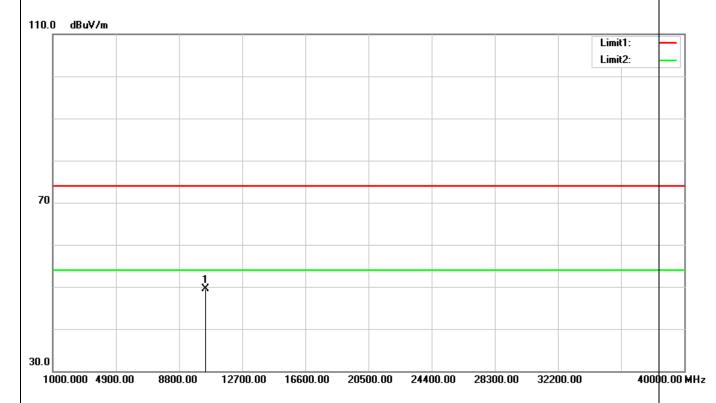


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10360.000          | 35.14             | 14.45                       | 49.59              | 74.00             | -24.41         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20 /<br>5220MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

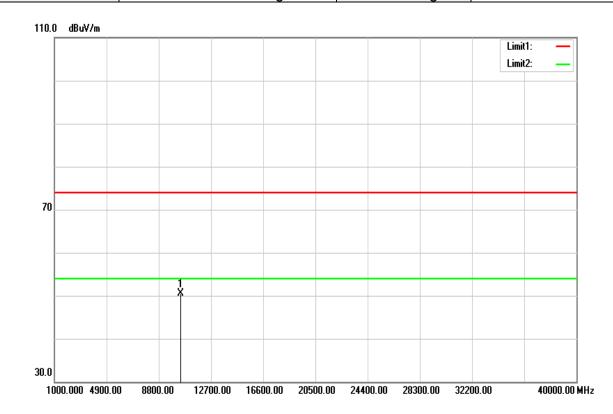


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10440.000          | 34.80             | 14.71                       | 49.51              | 74.00             | -24.49         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 n 20 /<br>5220MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

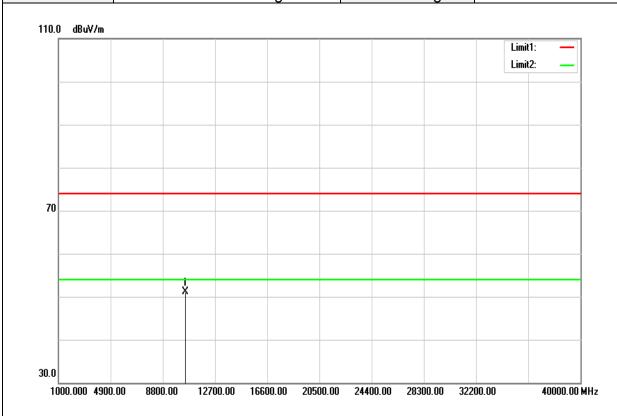


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10440.000          | 35.85             | 14.71                       | 50.56              | 74.00             | -23.44         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 n 20 /<br>5240MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

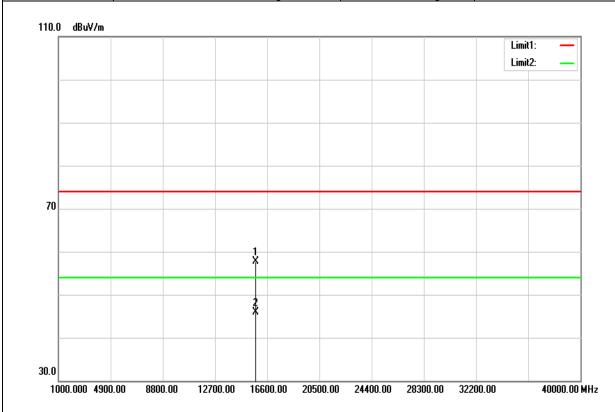


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10480.000          | 36.25             | 14.84                       | 51.09              | 74.00             | -22.91         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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

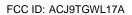


| Test Mode | IEEE 802.11n 20 /<br>5240MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

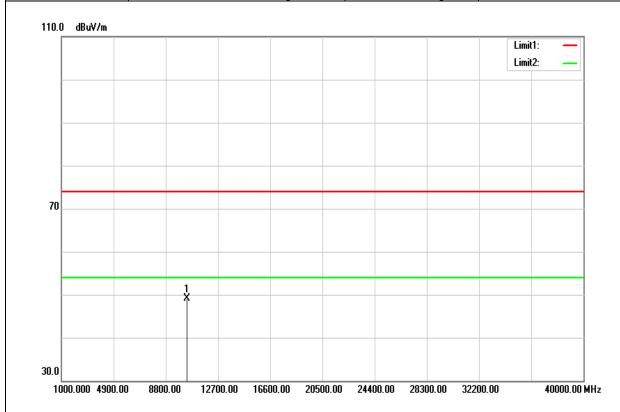


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15720.000          | 38.48             | 19.20                       | 57.68              | 74.00             | -16.32         | peak   |
| 15720.000          | 26.66             | 19.20                       | 45.86              | 54.00             | -8.14          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 40 /<br>5190MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

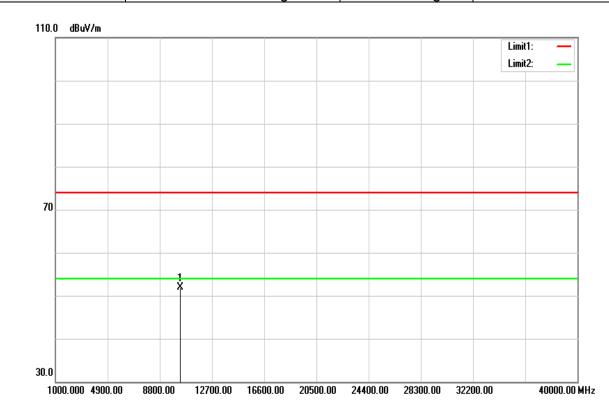


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10380.000          | 34.68             | 14.50                       | 49.18              | 74.00             | -24.82         | 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

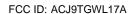


| Test Mode | IEEE 802.11n 40 /<br>5190MHZ | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|------------------------------|---------------|------------------|--|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average             | Test Voltage  |                  |  |

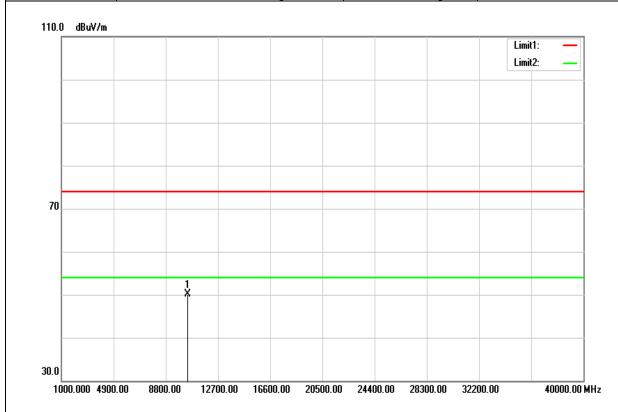


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10340.000          | 37.47             | 14.37                       | 51.84              | 74.00             | -22.16         | 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

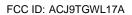


| Test Mode | IEEE 802.11n 40 /<br>5230MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

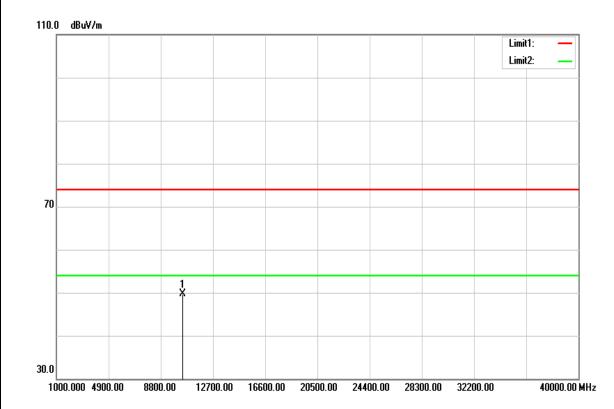


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10460.000          | 35.40             | 14.79                       | 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 |   | IEEE 802.11n 40 /<br>5230MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|---|------------------------------|---------------|------------------|
| Test Ite  | m | Harmonic                     | Test Date     | February 9, 2018 |
| Polariz   | е | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  |   | Peak and Average             | Test Voltage  |                  |

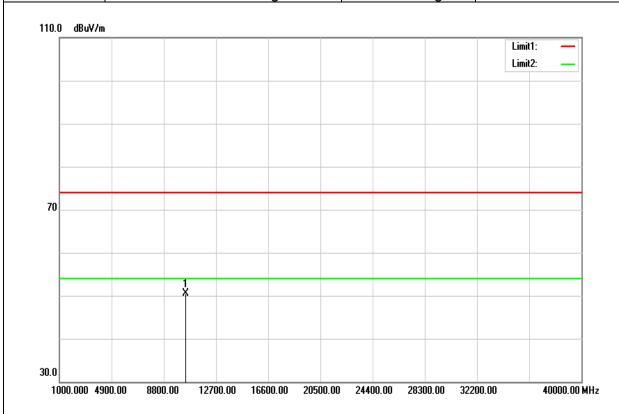


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10460.000          | 34.91             | 14.79                       | 49.70              | 74.00             | -24.30         | 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 802.11ac VHT80 /<br>5210MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------------|---------------|------------------|
| Test Item | Harmonic                         | Test Date     | February 9, 2018 |
| Polarize  | Vertical                         | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                 | Test Voltage  |                  |

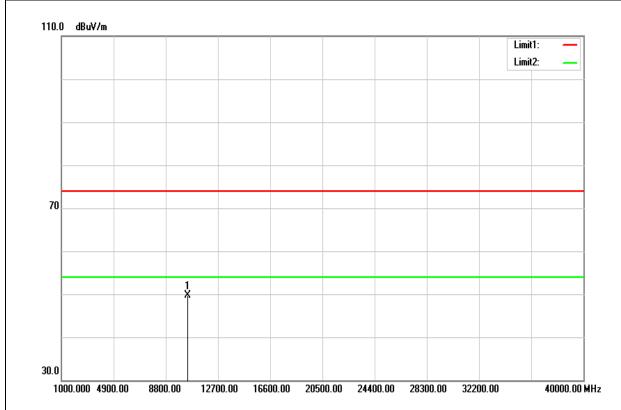


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10420.000          | 35.86             | 14.66                       | 50.52              | 74.00             | -23.48         | 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 802.11ac VHT80 /<br>5210MHZ | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------------|---------------|------------------|
| Test Item | Harmonic                         | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                       | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                 | Test Voltage  |                  |



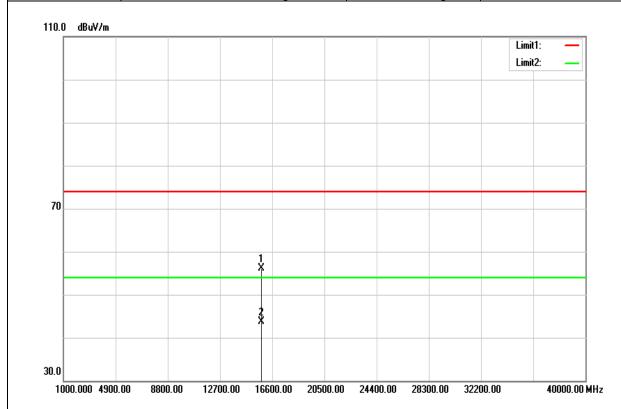
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10420.000          | 34.96             | 14.66                       | 49.62              | 74.00             | -24.38         | 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

FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

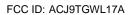
## **Above 1G Test Data for UNII-2a**

| Test Mode | IEEE 802.11a /<br>5260 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Vertical                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

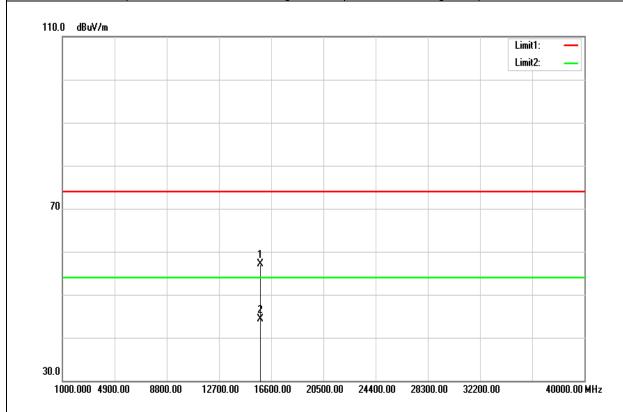


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15780.000          | 36.75             | 19.38                       | 56.13              | 74.00             | -17.87         | peak   |
| 15780.000          | 24.34             | 19.38                       | 43.72              | 54.00             | -10.28         | 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>5260 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

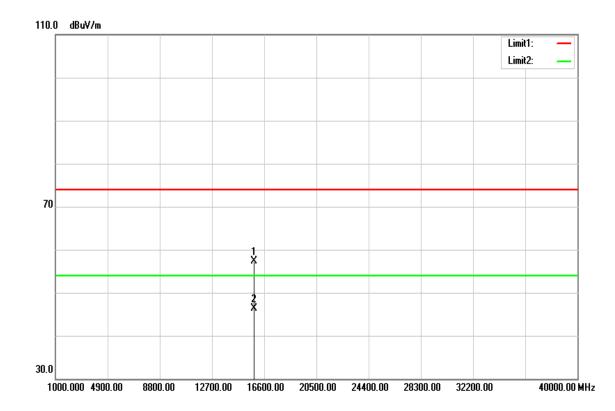


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15790.000          | 37.79             | 19.41                       | 57.20              | 74.00             | -16.80         | peak   |
| 15790.000          | 24.80             | 19.41                       | 44.21              | 54.00             | -9.79          | 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

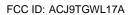


| Test Mode | IEEE 802.11a /<br>5280 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Vertical                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  | -                |

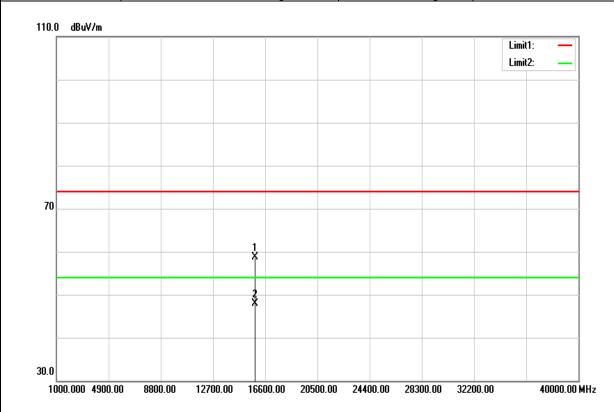


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15840.000          | 37.81             | 19.55                       | 57.36              | 74.00             | -16.64         | peak   |
| 15840.000          | 26.77             | 19.55                       | 46.32              | 54.00             | -7.68          | 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 | IEEE 802.11a /<br>5280 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

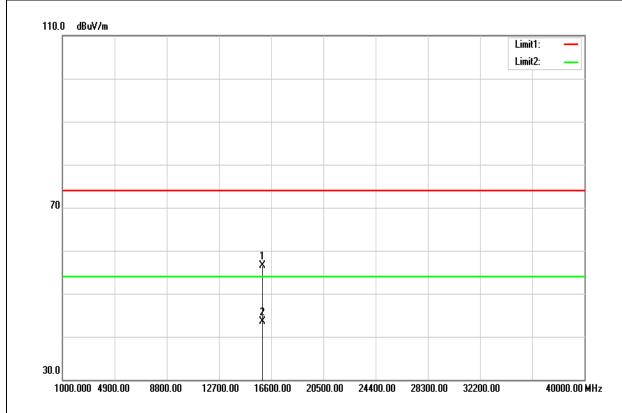


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15840.000          | 39.06             | 19.55                       | 58.61              | 74.00             | -15.39         | peak   |
| 15840.000          | 28.27             | 19.55                       | 47.82              | 54.00             | -6.18          | 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 | IEEE 802.11a /<br>5320 MHz | Temp/Hum     | 22(°C)/ 34%RH    |  |
|-----------|----------------------------|--------------|------------------|--|
| Test Item | Harmonic                   | Test Date    | February 9, 2018 |  |
| Polarize  | Polarize Vertical          |              | Jerry Chuang     |  |
| Detector  | Peak and Average           | Test Voltage |                  |  |

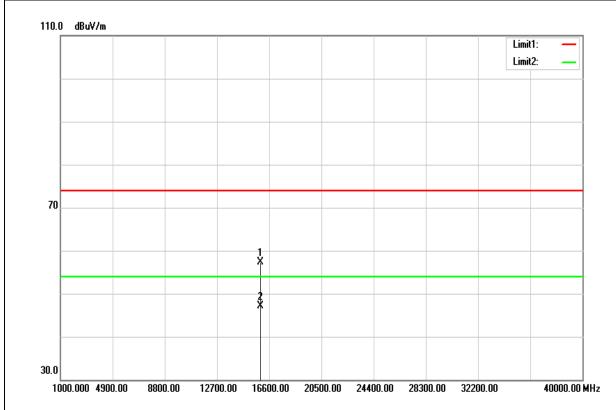


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15960.000          | 36.67             | 19.90                       | 56.57              | 74.00             | -17.43         | peak   |
| 15960.000          | 23.66             | 19.90                       | 43.56              | 54.00             | -10.44         | 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

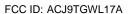


| Test Mode | IEEE 802.11a /<br>5320 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|----------------------------|---------------|------------------|--|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average           | Test Voltage  |                  |  |

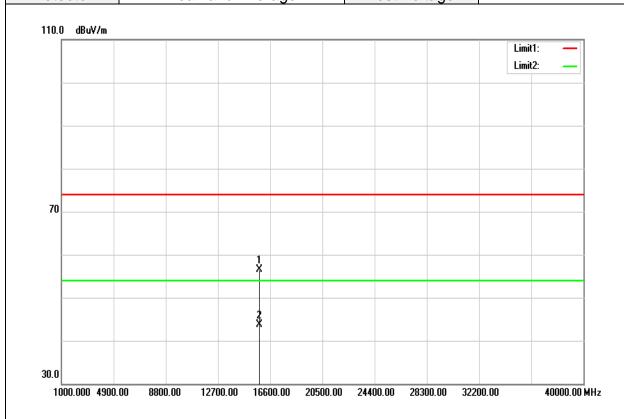


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15950.000          | 37.44             | 19.88                       | 57.32              | 74.00             | -16.68         | peak   |
| 15950.000          | 27.22             | 19.88                       | 47.10              | 54.00             | -6.90          | 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 | IEEE 802.11n 20 /<br>5260 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

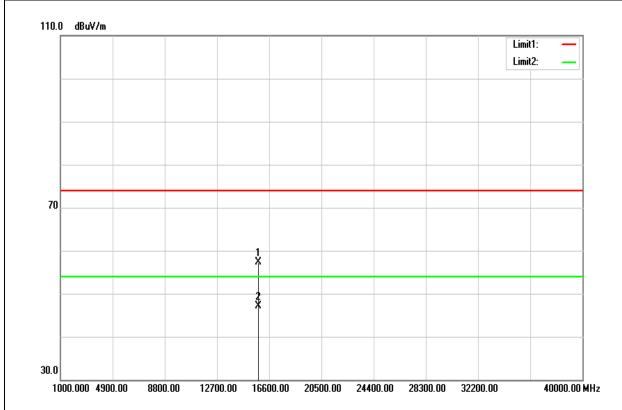


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15780.000          | 37.13             | 19.38                       | 56.51              | 74.00             | -17.49         | peak   |
| 15780.000          | 24.40             | 19.38                       | 43.78              | 54.00             | -10.22         | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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>5260 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|----------------------------|---------------|------------------|--|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average           | Test Voltage  |                  |  |



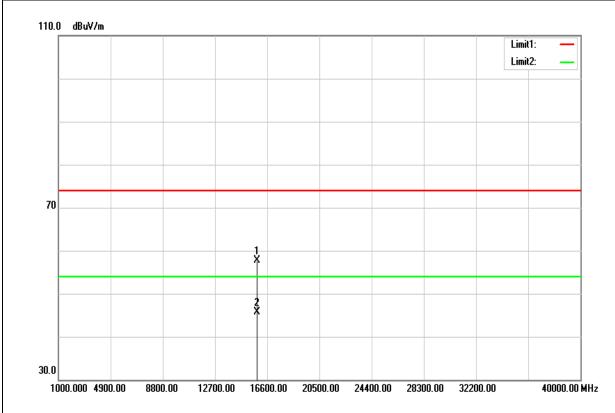
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15780.000          | 38.00             | 19.38                       | 57.38              | 74.00             | -16.62         | peak   |
| 15780.000          | 27.63             | 19.38                       | 47.01              | 54.00             | -6.99          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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



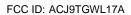
FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

| Test Mode | IEEE 802.11n 20 /<br>5280 MHz | Temp/Hum     | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|--------------|------------------|--|
| Test Item | Harmonic                      | Test Date    | February 9, 2018 |  |
| Polarize  | Polarize Vertical             |              | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage | -                |  |

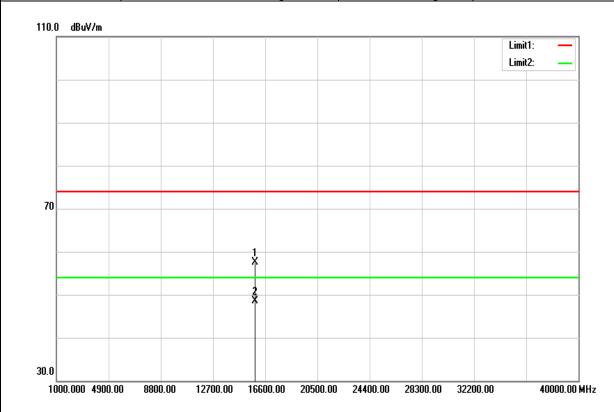


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15850.000          | 38.08             | 19.59                       | 57.67              | 74.00             | -16.33         | peak   |
| 15850.000          | 26.04             | 19.59                       | 45.63              | 54.00             | -8.37          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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

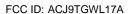


| Test Mode | IEEE 802.11n 20 /<br>5280 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

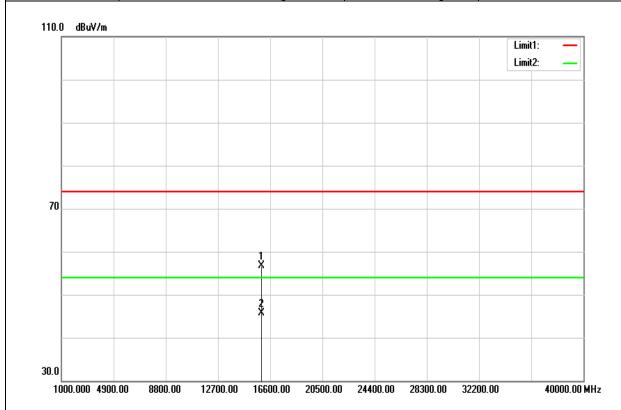


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15840.000          | 38.02             | 19.55                       | 57.57              | 74.00             | -16.43         | peak   |
| 15840.000          | 28.98             | 19.55                       | 48.53              | 54.00             | -5.47          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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

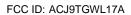


| Test Mode | IEEE 802.11n 20 /<br>5320 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

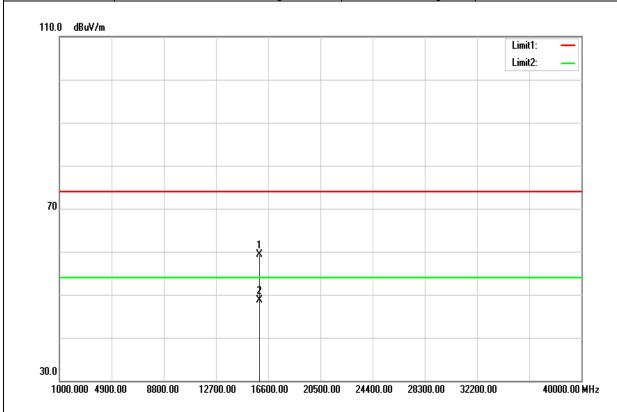


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15970.000          | 36.78             | 19.94                       | 56.72              | 74.00             | -17.28         | peak   |
| 15970.000          | 25.69             | 19.94                       | 45.63              | 54.00             | -8.37          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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

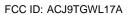


| Test Mode | IEEE 802.11n 20 /<br>5320 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

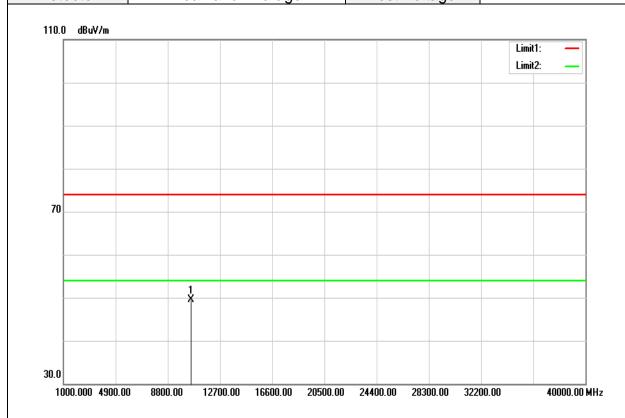


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15960.000          | 39.34             | 19.90                       | 59.24              | 74.00             | -14.76         | peak   |
| 15960.000          | 28.89             | 19.90                       | 48.79              | 54.00             | -5.21          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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

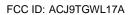


| Test Mode | IEEE 802.11n 40 /<br>5270 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

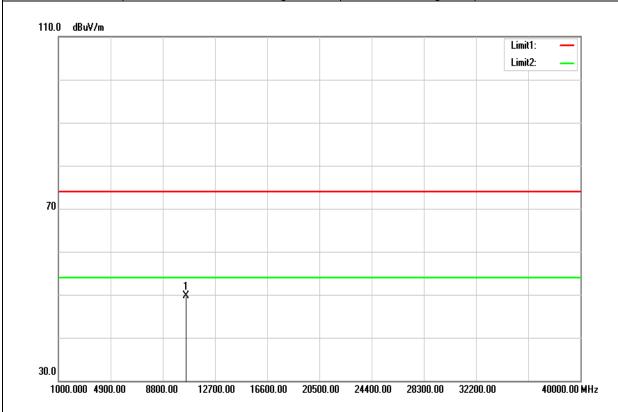


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10540.000          | 34.46             | 15.01                       | 49.47              | 74.00             | -24.53         | 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

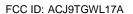


| Test Mode | IEEE 802.11n 40 /<br>5270 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

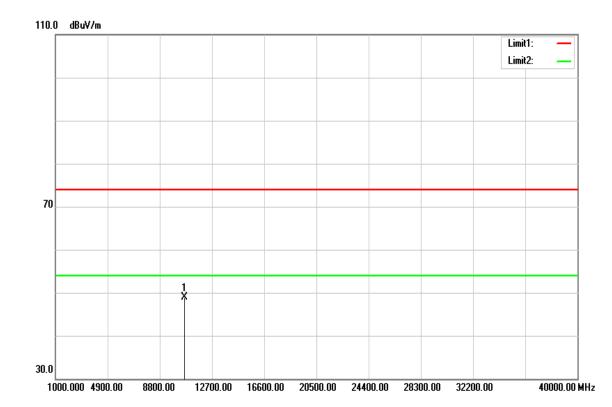


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10540.000          | 34.68             | 15.01                       | 49.69              | 74.00             | -24.31         | 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 802.11n 40 /<br>5310 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

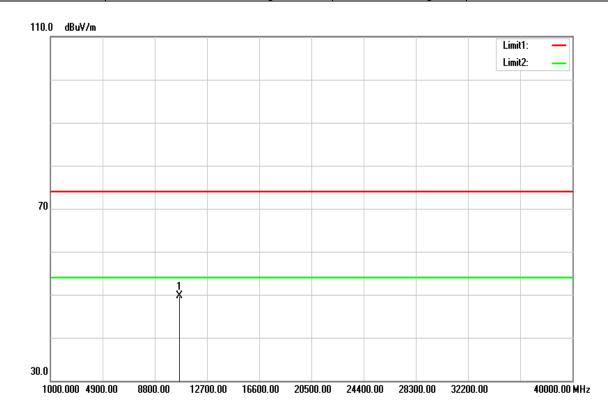


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10620.000          | 33.67             | 15.20                       | 48.87              | 74.00             | -25.13         | 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 802.11n 40 /<br>5310 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

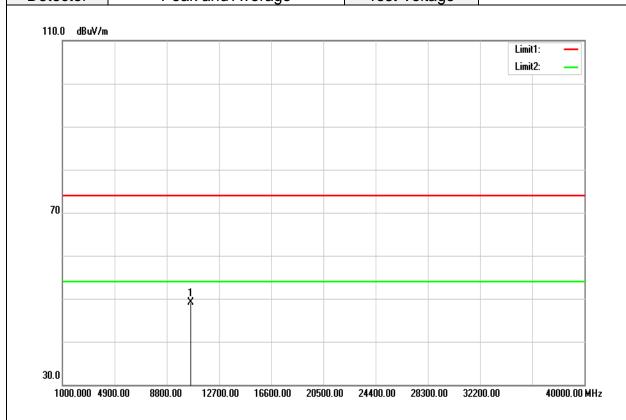


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10620.000          | 34.46             | 15.20                       | 49.66              | 74.00             | -24.34         | 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 802.11ac VHT80 /<br>5290 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-----------------------------------|---------------|------------------|--|
| Test Item | Harmonic                          | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                          | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average                  | Test Voltage  |                  |  |

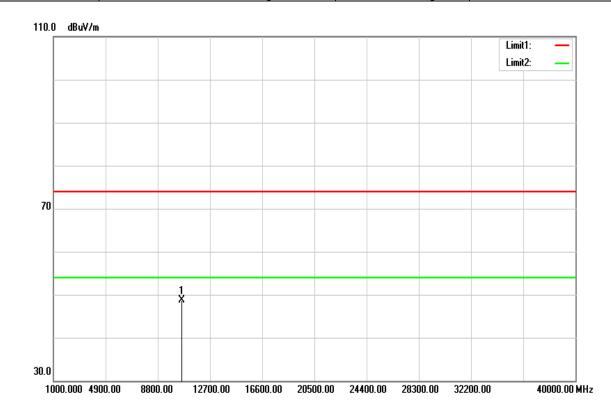


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10580.000          | 33.93             | 15.10                       | 49.03              | 74.00             | -24.97         | 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 802.11ac VHT80 /<br>5290 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-----------------------------------|---------------|------------------|
| Test Item | Harmonic                          | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                        | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                  | Test Voltage  |                  |



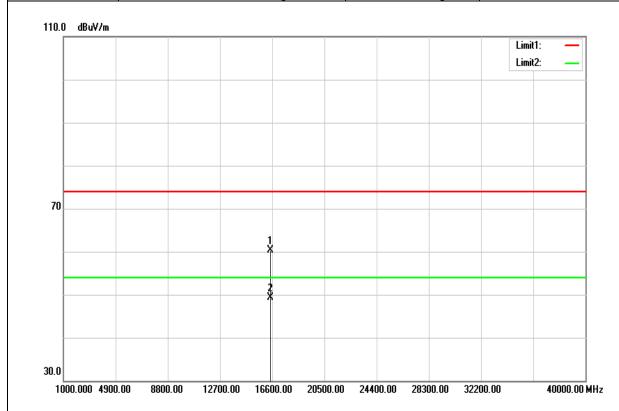
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10580.000          | 33.55             | 15.10                       | 48.65              | 74.00             | -25.35         | 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

FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

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

| Test Mode | IEEE 802.11a /<br>5500 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Vertical                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

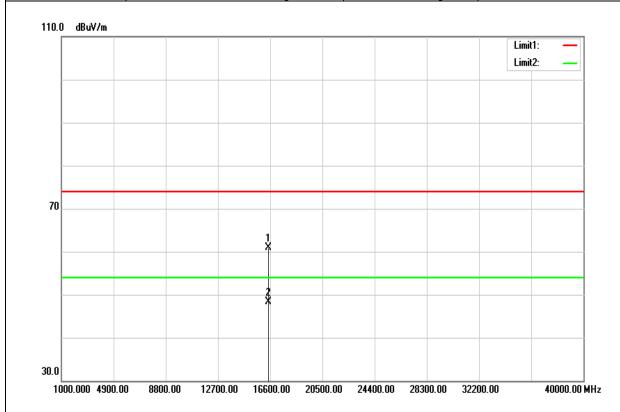


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 16490.000          | 37.37             | 22.95                       | 60.32              | 74.00             | -13.68         | peak   |
| 16490.000          | 26.37             | 22.95                       | 49.32              | 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

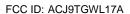


| Test Mode | IEEE 802.11a /<br>5500 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

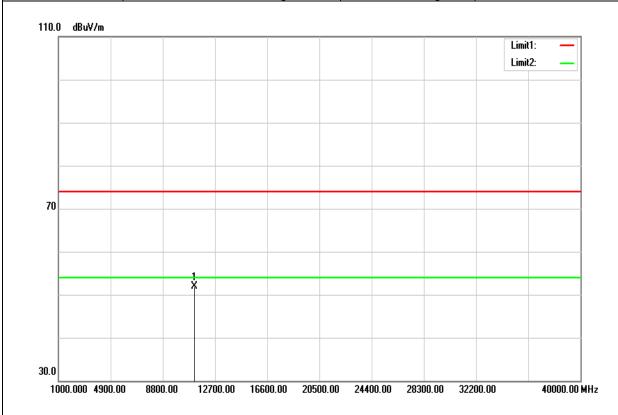


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 16490.000          | 37.91             | 22.95                       | 60.86              | 74.00             | -13.14         | peak   |
| 16490.000          | 25.26             | 22.95                       | 48.21              | 54.00             | -5.79          | 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

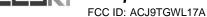


| Test Mode | IEEE 802.11a /<br>5580 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Vertical                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |



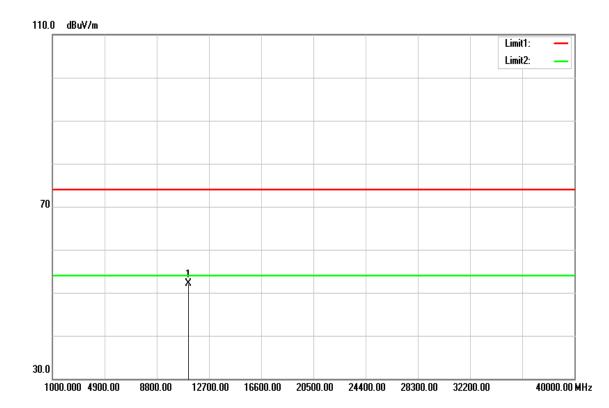
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11160.000          | 35.91             | 16.07                       | 51.98              | 74.00             | -22.02         | 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



CC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

| Test Mode | IEEE 802.11a /<br>5580 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

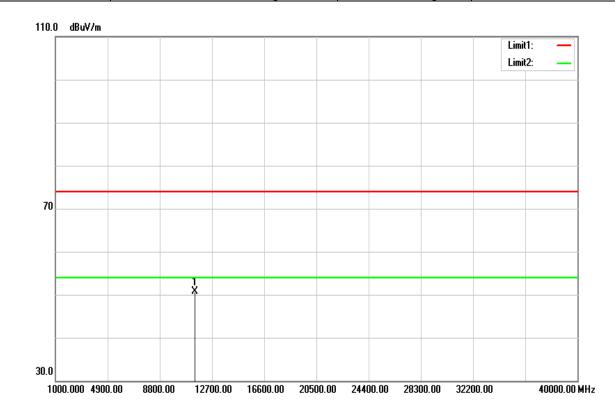


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11160.000          | 36.02             | 16.07                       | 52.09              | 74.00             | -21.91         | 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 802.11a /<br>5700 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Vertical                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

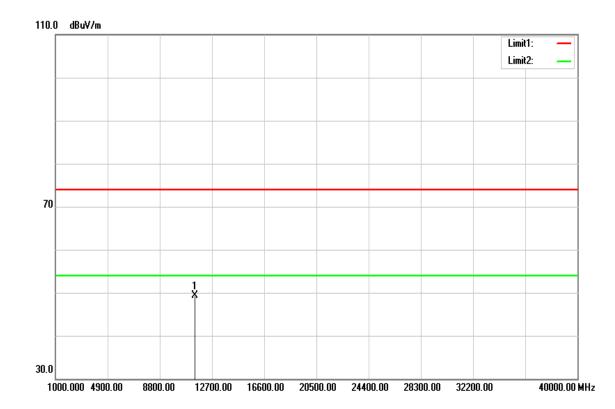


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11400.000          | 34.60             | 16.08                       | 50.68              | 74.00             | -23.32         | 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

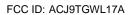


| Test Mode | IEEE 802.11a /<br>5700 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

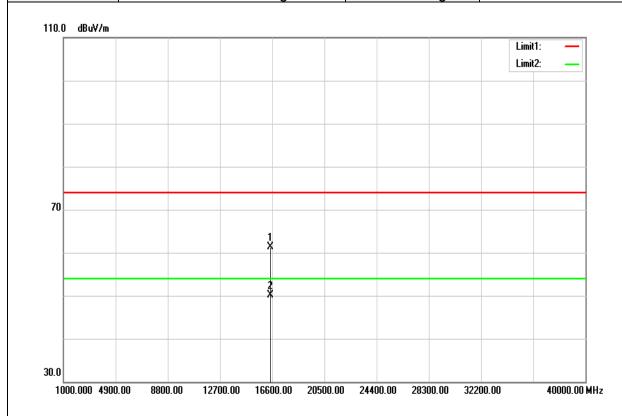


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11400.000          | 33.30             | 16.08                       | 49.38              | 74.00             | -24.62         | 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 802.11n 20 /<br>5500 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

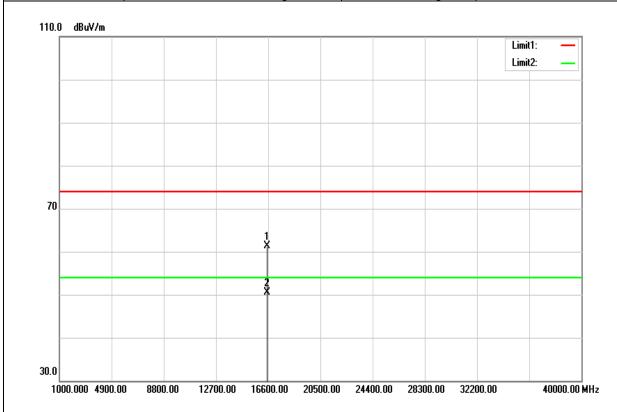


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 16490.000          | 38.45             | 22.95                       | 61.40              | 74.00             | -12.60         | peak   |
| 16490.000          | 27.07             | 22.95                       | 50.02              | 54.00             | -3.98          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20 /<br>5500 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

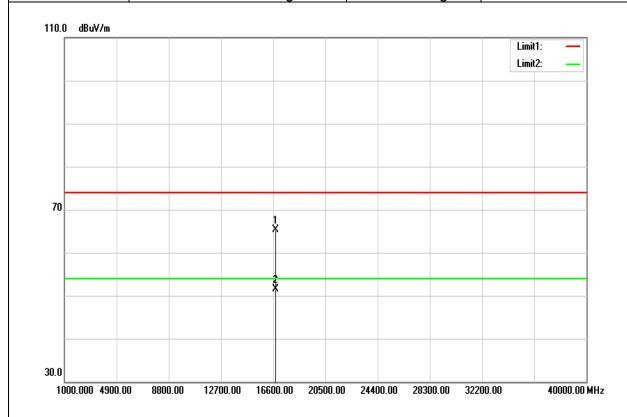


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 16510.000          | 38.16             | 23.11                       | 61.27              | 74.00             | -12.73         | peak   |
| 16510.000          | 27.44             | 23.11                       | 50.55              | 54.00             | -3.45          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20 /<br>5580 MHz | Temp/Hum      | 22(°C)/ 34%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |  |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

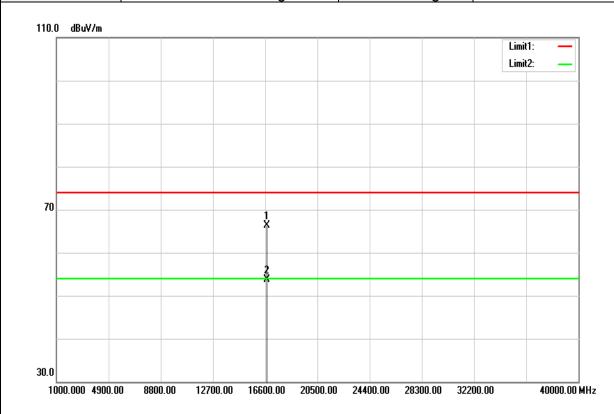


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 16760.000          | 39.84             | 25.52                       | 65.36              | 74.00             | -8.64          | peak   |
| 16760.000          | 26.03             | 25.52                       | 51.55              | 54.00             | -2.45          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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



IEEE 802.11n 20 / Test Mode Temp/Hum 22(°C)/ 34%RH 5580 MHz February 9, 2018 Test Item Harmonic **Test Date Polarize** Horizontal Test Engineer Jerry Chuang Detector Test Voltage Peak and Average



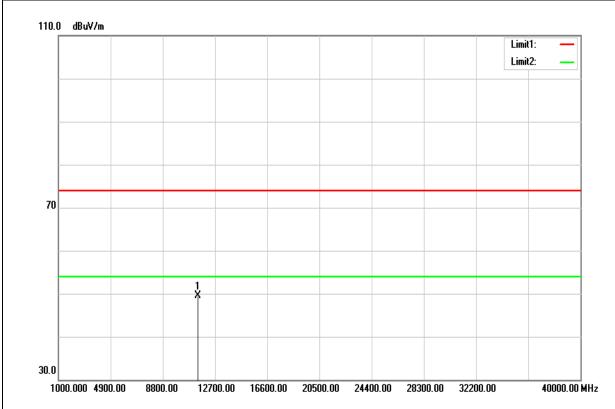
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 16730.000          | 41.14             | 25.23                       | 66.37              | 74.00             | -7.63          | peak   |
| 16730.000          | 28.45             | 25.23                       | 53.68              | 54.00             | -0.32          | AVG    |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

#### Remark:

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20 /<br>5700 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

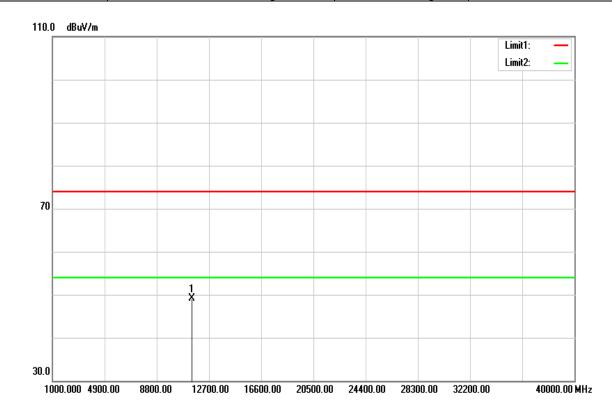


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11400.000          | 33.50             | 16.08                       | 49.58              | 74.00             | -24.42         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20 /<br>5700 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

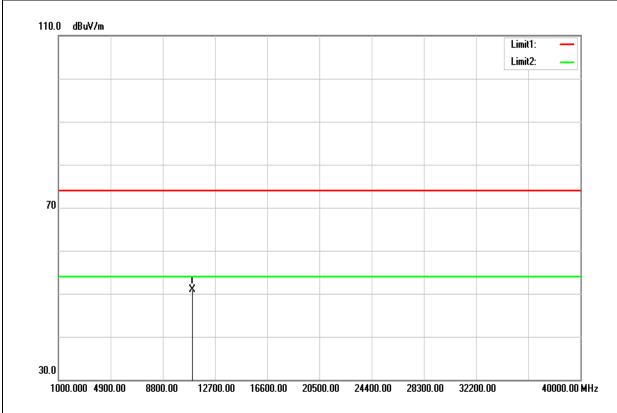


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11400.000          | 33.00             | 16.08                       | 49.08              | 74.00             | -24.92         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

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

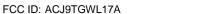


| Test Mode | IEEE 802.11n 40 /<br>5510 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  | -                |

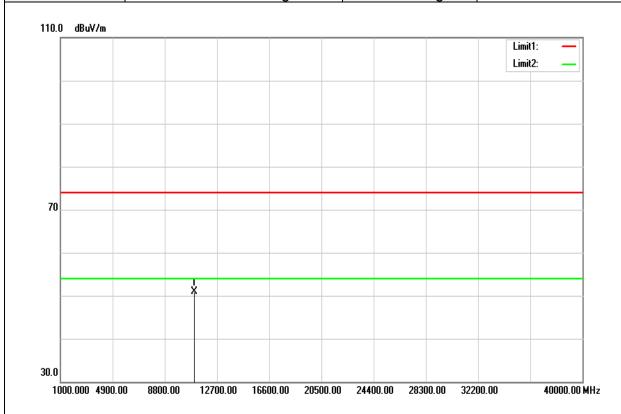


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11020.000          | 34.81             | 16.05                       | 50.86              | 74.00             | -23.14         | 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 | IEEE 802.11n 40 /<br>5510 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

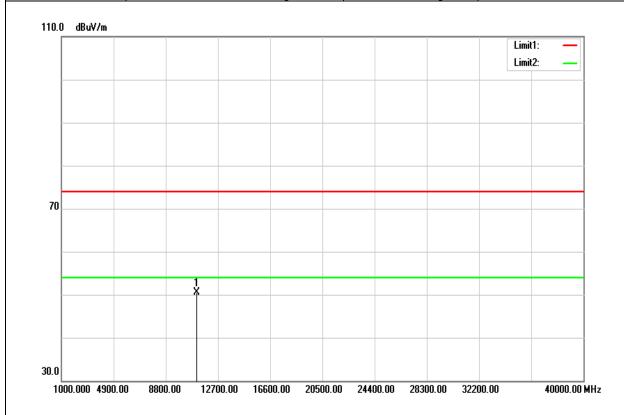


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11020.000          | 34.77             | 16.05                       | 50.82              | 74.00             | -23.18         | 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 802.11n 40 /<br>5550 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

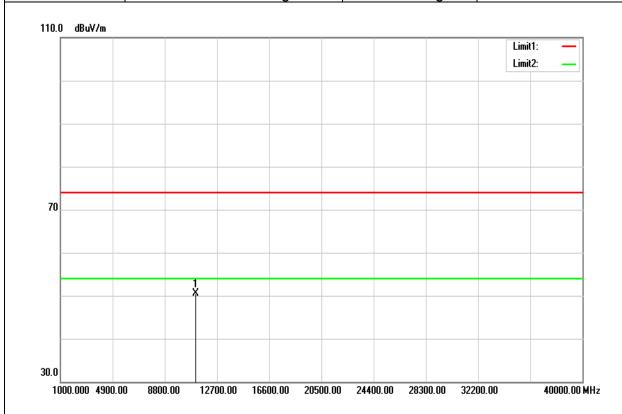


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11100.000          | 34.37             | 16.07                       | 50.44              | 74.00             | -23.56         | 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 802.11n 40 /<br>5550 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

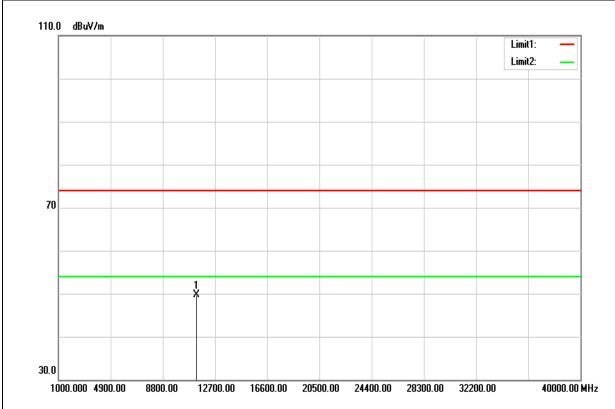


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11100.000          | 34.39             | 16.07                       | 50.46              | 74.00             | -23.54         | 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 802.11n 40 /<br>5670 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

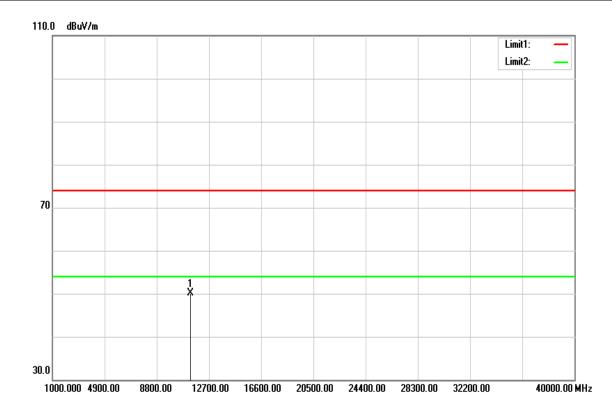


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11340.000          | 33.68             | 16.08                       | 49.76              | 74.00             | -24.24         | 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 802.11n 40 /<br>5670 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

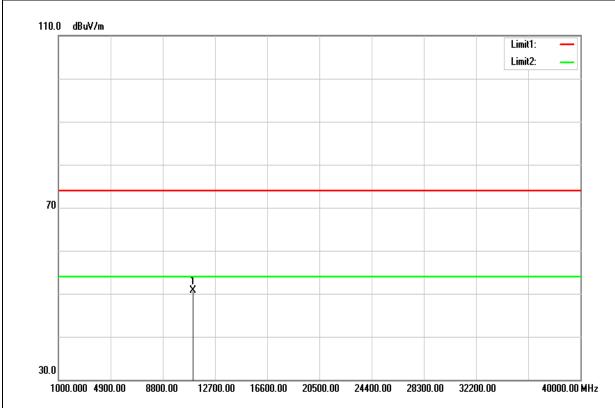


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11340.000          | 33.96             | 16.08                       | 50.04              | 74.00             | -23.96         | 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 802.11ac VHT80 /<br>5530 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-----------------------------------|---------------|------------------|
| Test Item | Harmonic                          | Test Date     | February 9, 2018 |
| Polarize  | Vertical                          | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                  | Test Voltage  |                  |

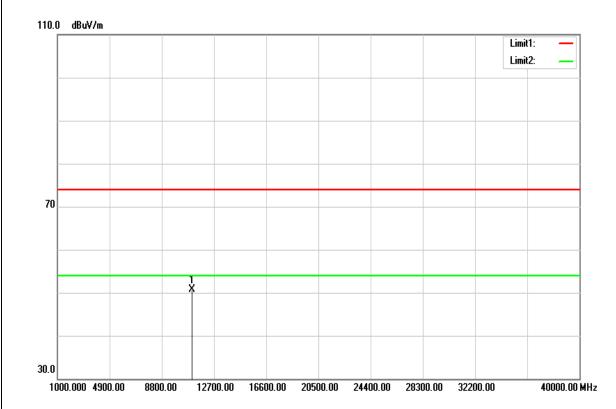


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11060.000          | 34.72             | 16.06                       | 50.78              | 74.00             | -23.22         | 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 802.11ac VHT80 /<br>5530 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-----------------------------------|---------------|------------------|
| Test Item | Harmonic                          | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                        | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                  | Test Voltage  |                  |



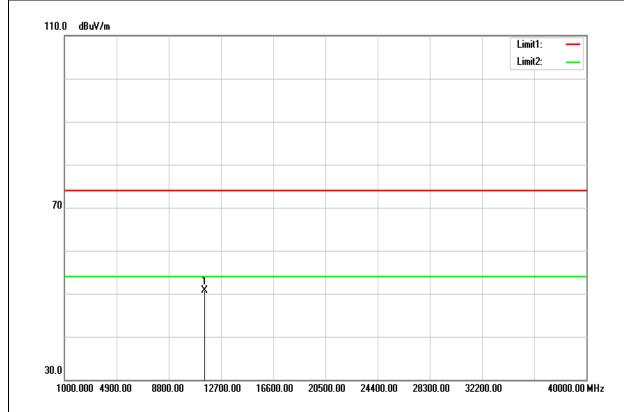
| Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m)   | Limit<br>(dBuV/m)      | Margin<br>(dB)                  | Remark  |
|-------------------|-----------------------------|----------------------|------------------------|---------------------------------|---|
| 34.60             | 16.06                       | 50.66                | 74.00                  | -23.34                          | peak  |
|                   |                             |                      |                        |                                 |   |
|                   |                             |                      |                        |                                 |   |
|                   |                             |                      |                        |                                 |   |
|                   | (dBuV)                      | (dBuV) Factor (dB/m) | (dBuV) Factor (dBuV/m) | (dBuV) Factor (dBuV/m) (dBuV/m) | (dBuV) Factor (dBuV/m) (dBuV/m) (dBuV/m) (dB) |

- 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

FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

### **Above 1G Test Data for UNII-3**

| Test Mode | IEEE 802.11a /<br>5745 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Vertical                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

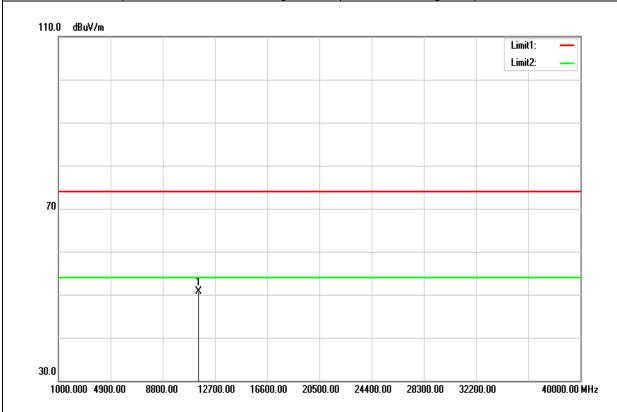


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11490.000          | 34.58             | 16.09                       | 50.67              | 74.00             | -23.33         | 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 802.11a /<br>5745 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------|---------------|------------------|
| Test Item | Harmonic                   | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                 | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average           | Test Voltage  |                  |

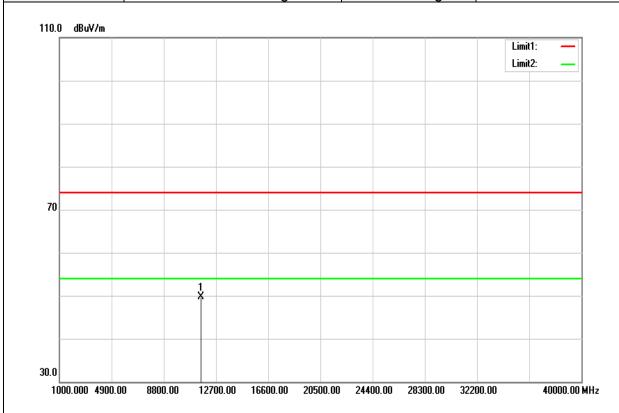


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11490.000          | 34.71             | 16.09                       | 50.80              | 74.00             | -23.20         | 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

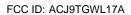


| Test Mode | IEEE 802.11n 20/<br>5785 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

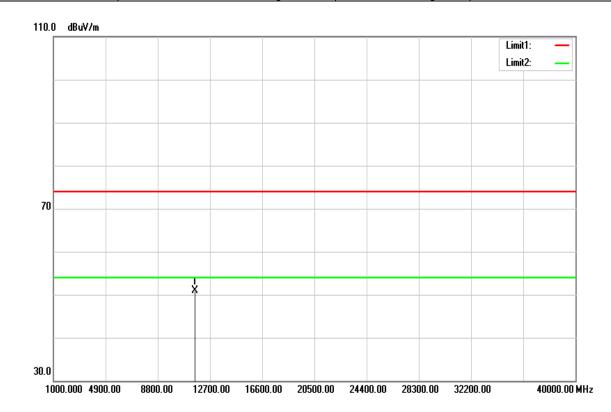


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11570.000          | 33.71             | 16.01                       | 49.72              | 74.00             | -24.28         | 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 | IEEE 802.11a/<br>5785 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Harmonic                  | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average          | Test Voltage  |                  |

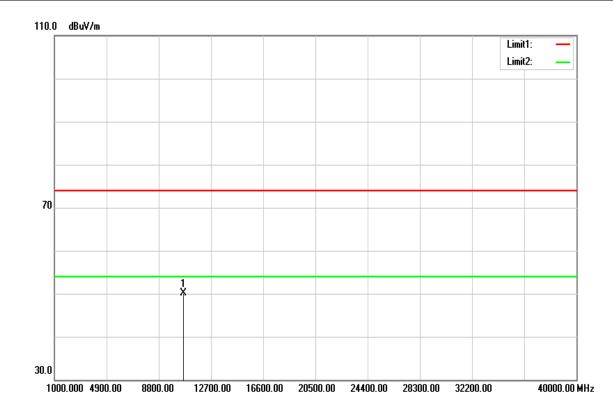


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11570.000          | 34.85             | 16.01                       | 50.86              | 74.00             | -23.14         | 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

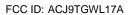


| Test Mode | IEEE 802.11a/<br>5825 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|---------------------------|---------------|------------------|
| Test Item | Harmonic                  | Test Date     | February 9, 2018 |
| Polarize  | Vertical                  | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average          | Test Voltage  |                  |

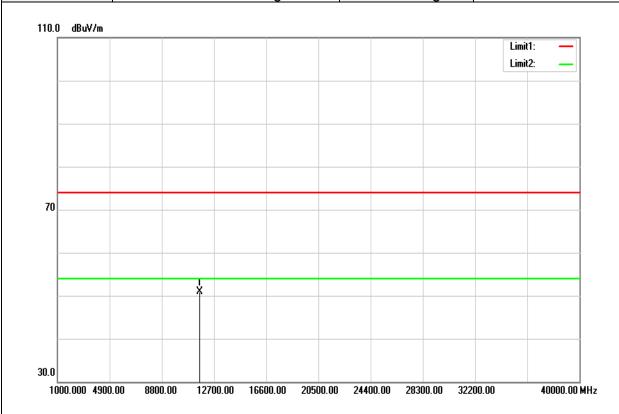


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11650.000          | 34.87             | 15.26                       | 50.13              | 74.00             | -23.87         | 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 802.11n 20/<br>5825 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

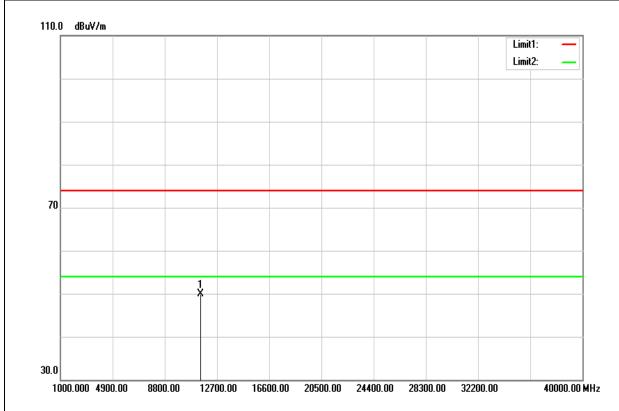


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11650.000          | 34.91             | 15.93                       | 50.84              | 74.00             | -23.16         | 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 802.11n 20 /<br>5745 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  | -                |

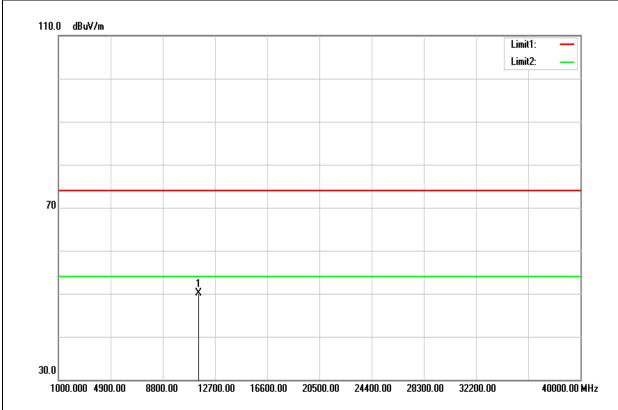


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11490.000          | 33.84             | 16.09                       | 49.93              | 74.00             | -24.07         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20 /<br>5745 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

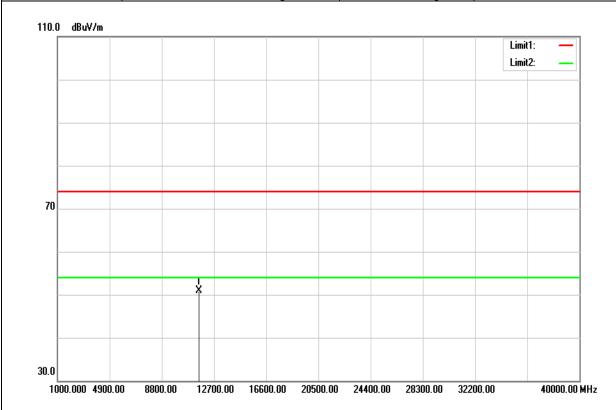


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11490.000          | 34.10             | 16.09                       | 50.19              | 74.00             | -23.81         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20/<br>5785 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

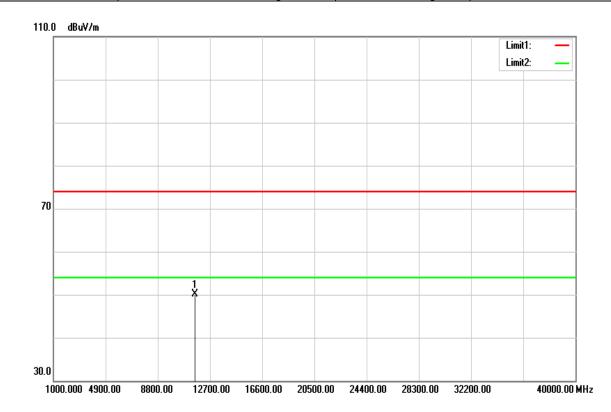


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11570.000          | 34.81             | 16.01                       | 50.82              | 74.00             | -23.18         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20/<br>5785 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

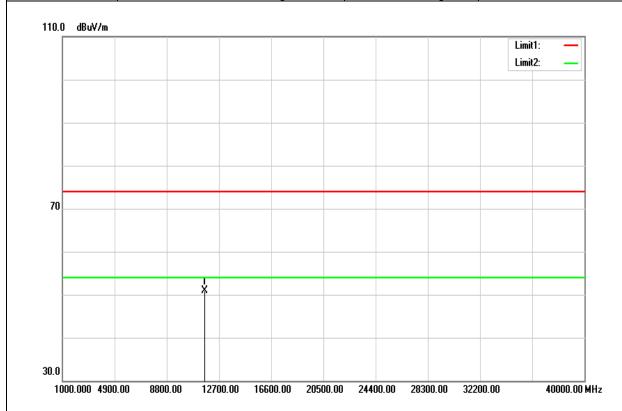


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11570.000          | 34.18             | 16.01                       | 50.19              | 74.00             | -23.81         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20/<br>5825 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

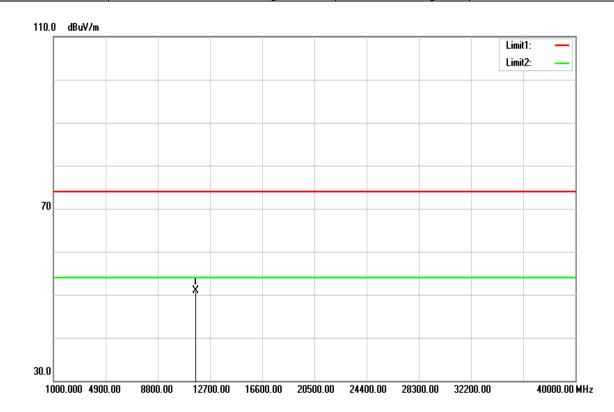


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11650.000          | 34.92             | 15.93                       | 50.85              | 74.00             | -23.15         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 20/<br>5825 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

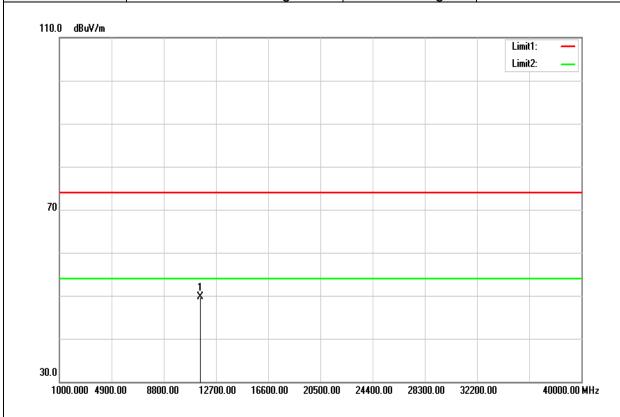


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11650.000          | 35.02             | 15.93                       | 50.95              | 74.00             | -23.05         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 40/<br>5755 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

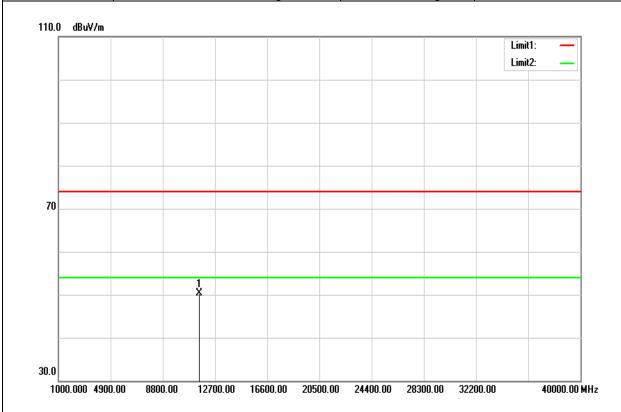


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11510.000          | 33.72             | 16.08                       | 49.80              | 74.00             | -24.20         | 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 802.11n 40/<br>5755 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

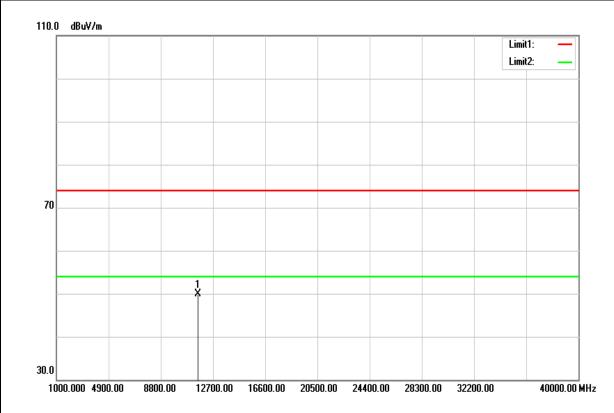


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11510.000          | 34.16             | 16.08                       | 50.24              | 74.00             | -23.76         | 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 802.11n 40/<br>5795 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

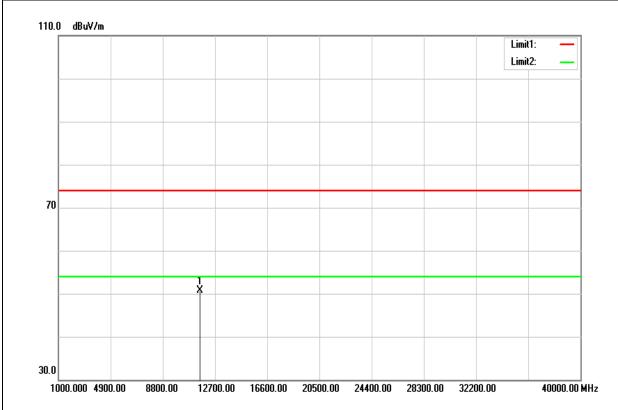


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11590.000          | 33.88             | 16.00                       | 49.88              | 74.00             | -24.12         | 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 802.11n 40/<br>5795 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

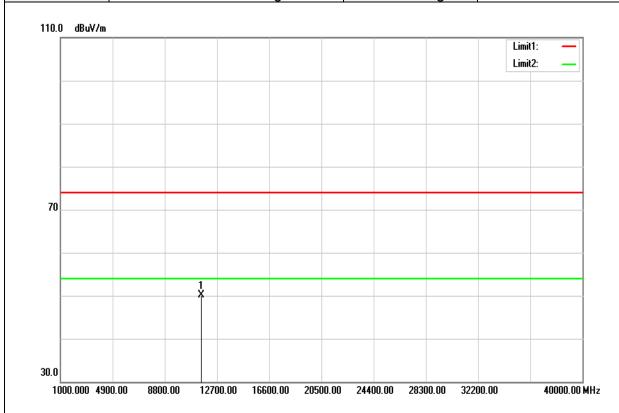


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11590.000          | 34.63             | 16.00                       | 50.63              | 74.00             | -23.37         | 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 802.11ac VHT80/<br>5775 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------------|---------------|------------------|
| Test Item | Harmonic                         | Test Date     | February 9, 2018 |
| Polarize  | Vertical                         | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                 | Test Voltage  |                  |

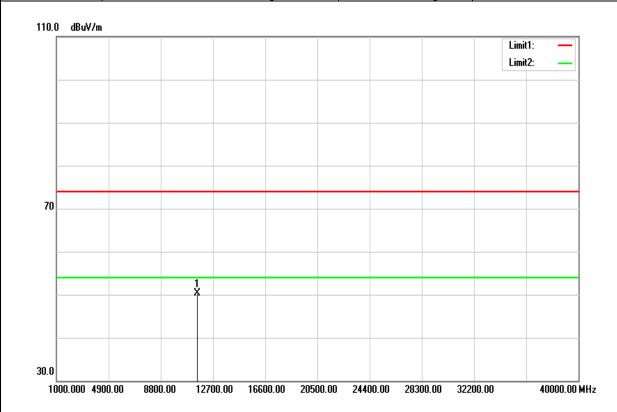


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11550.000          | 34.09             | 16.04                       | 50.13              | 74.00             | -23.87         | 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 802.11ac VHT80/<br>5775 MHz | Temp/Hum      | 22(°C)/ 34%RH    |
|-----------|----------------------------------|---------------|------------------|
| Test Item | Harmonic                         | Test Date     | February 9, 2018 |
| Polarize  | Horizontal                       | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                 | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11550.000          | 34.16             | 16.04                       | 50.20              | 74.00             | -23.80         | peak   |
| N/A                |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |
|                    |                   |                             |                    |                   |                |        |

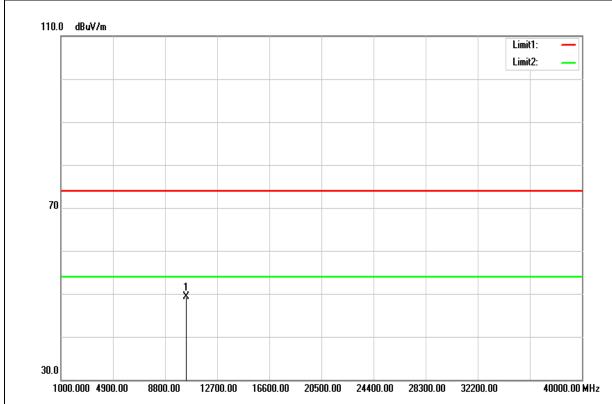
- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit



#### For 2TX:

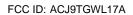
# **Above 1G Test Data for UNII-1**

| Test Mode | IEEE 802.11n 20 /<br>5180MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

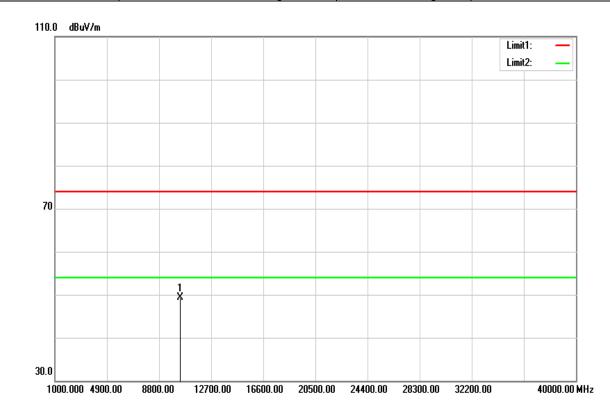


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10360.000          | 34.89             | 14.45                       | 49.34              | 74.00             | -24.66         | 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

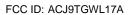


| Test Mode | IEEE 802.11n 20/<br>5180MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-----------------------------|---------------|------------------|
| Test Item | Harmonic                    | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                  | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average            | Test Voltage  |                  |

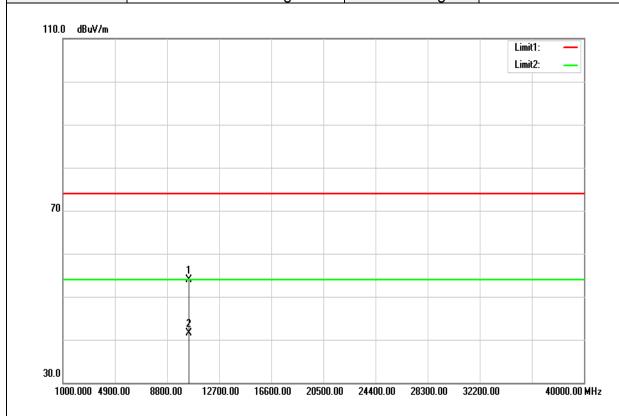


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10360.000          | 34.87             | 14.45                       | 49.32              | 74.00             | -24.68         | 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 802.11n 20 /<br>5220MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 16, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

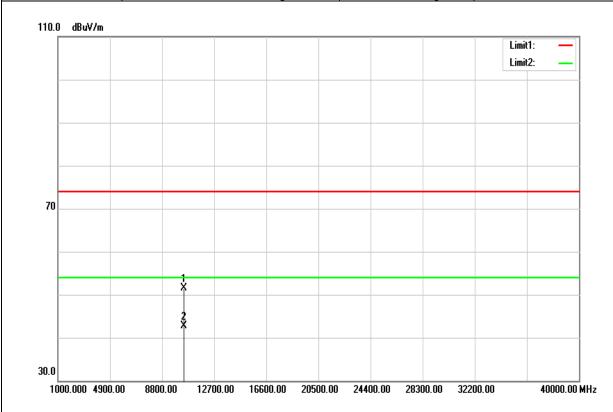


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10440.000          | 39.15             | 14.71                       | 53.86              | 74.00             | -20.14         | peak   |
| 10440.000          | 26.82             | 14.71                       | 41.53              | 54.00             | -12.47         | 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 802.11n 20 /<br>5220MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

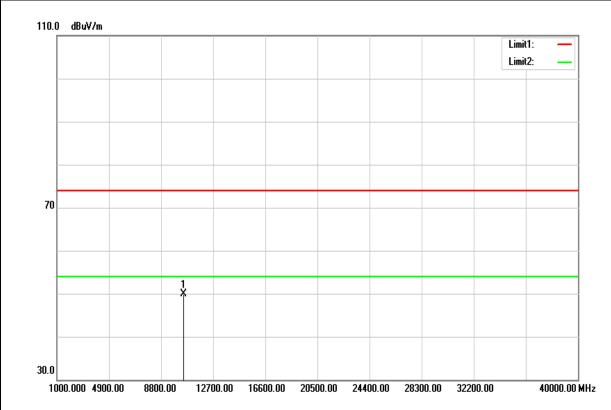


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10450.000          | 36.81             | 14.75                       | 51.56              | 74.00             | -22.44         | peak   |
| 10450.000          | 27.96             | 14.75                       | 42.71              | 54.00             | -11.29         | 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

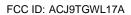


| Test Mode | IEEE 802.11n 20 /<br>5240MHZ | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|------------------------------|---------------|------------------|--|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |  |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average             | Test Voltage  |                  |  |

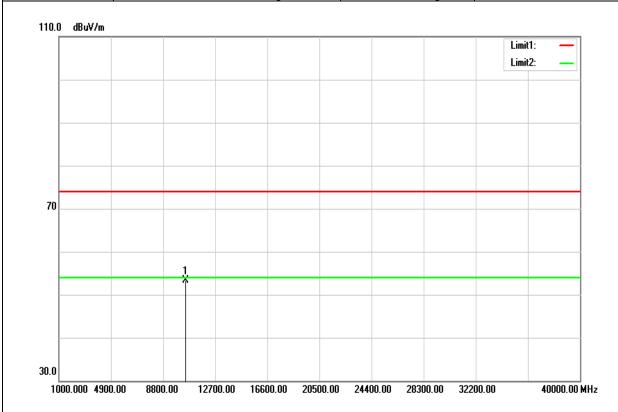


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10480.000          | 35.05             | 14.84                       | 49.89              | 74.00             | -24.11         | 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

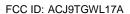


| Test Mode | IEEE 802.11n 20 /<br>5240MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

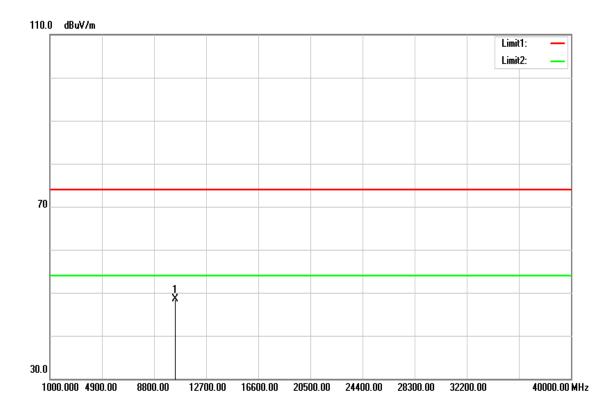


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10480.000          | 38.51             | 14.84                       | 53.35              | 74.00             | -20.65         | 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 802.11n 40 /<br>5190MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

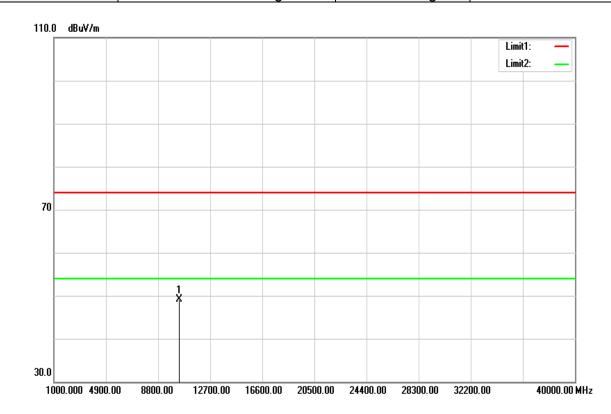


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10380.000          | 34.08             | 14.50                       | 48.58              | 74.00             | -25.42         | 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 802.11n 40 /<br>5190MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

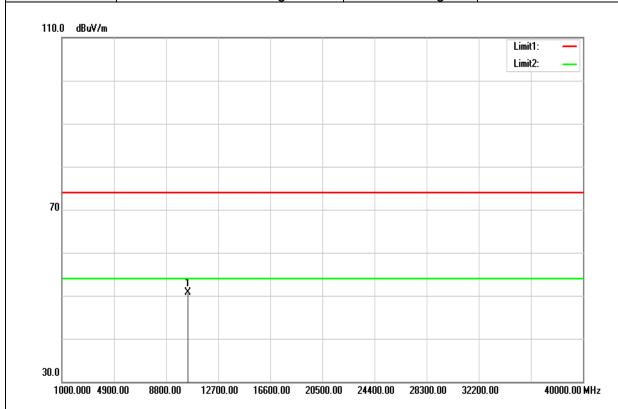


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10380.000          | 34.66             | 14.50                       | 49.16              | 74.00             | -24.84         | 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 802.11n 40 /<br>5230MHZ | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

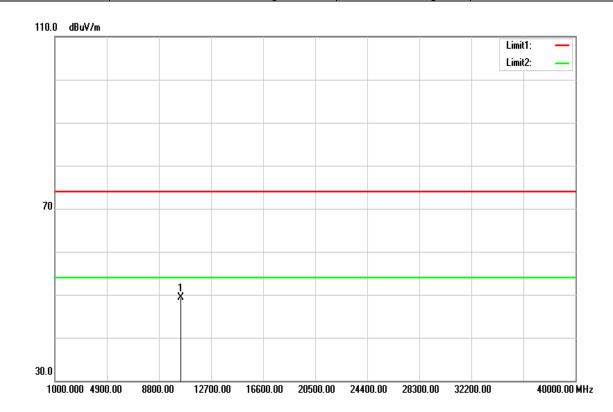


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10460.000          | 35.84             | 14.79                       | 50.63              | 74.00             | -23.37         | 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 802.11n 40 /<br>5230MHZ | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|------------------------------|---------------|------------------|--|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |  |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average             | Test Voltage  |                  |  |

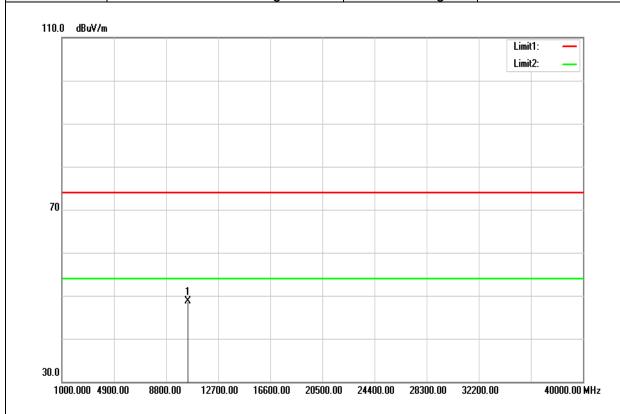


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10460.000          | 34.61             | 14.79                       | 49.40              | 74.00             | -24.60         | 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 IEI |           | IEEE 802.11ac VHT80 /<br>5210MHZ | Temp/Hum      | 24(°C)/ 33%RH    |  |
|---------------|-----------|----------------------------------|---------------|------------------|--|
|               | Test Item | Harmonic                         | Test Date     | January 16, 2018 |  |
|               | Polarize  | Vertical                         | Test Engineer | Jerry Chuang     |  |
|               | Detector  | Peak and Average                 | Test Voltage  |                  |  |

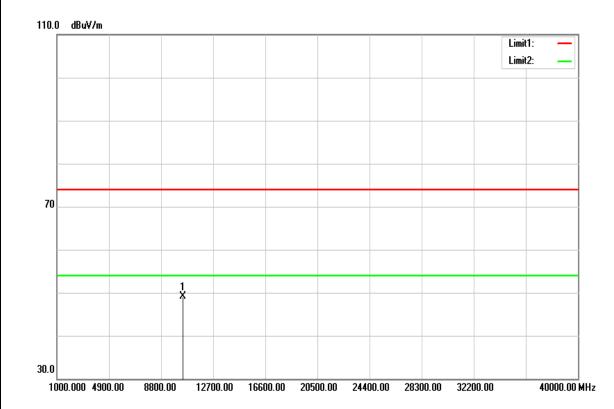


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10420.000          | 34.08             | 14.66                       | 48.74              | 74.00             | -25.26         | 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 802.11ac VHT80 /<br>5210MHZ | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|----------------------------------|---------------|------------------|--|
| Test Item | Harmonic                         | Test Date     | January 16, 2018 |  |
| Polarize  | Horizontal                       | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average                 | Test Voltage  |                  |  |



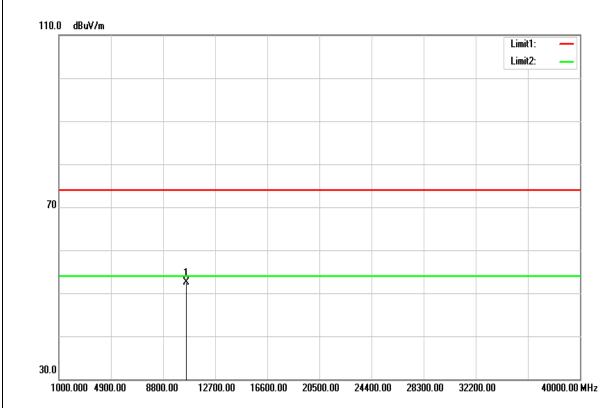
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10420.000          | 34.43             | 14.66                       | 49.09              | 74.00             | -24.91         | 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

FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

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

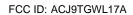
| Test Mode | IEEE 802.11n 20 /<br>5260 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |



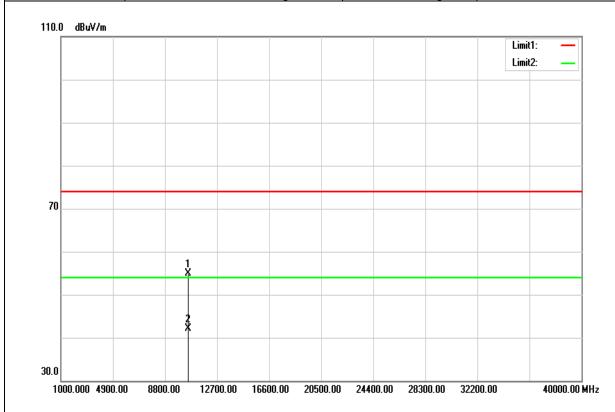
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10530.000          | 37.57             | 14.98                       | 52.55              | 74.00             | -21.45         | 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

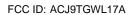


| Test Mode | IEEE 802.11n 20 /<br>5260 MHz | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |  |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

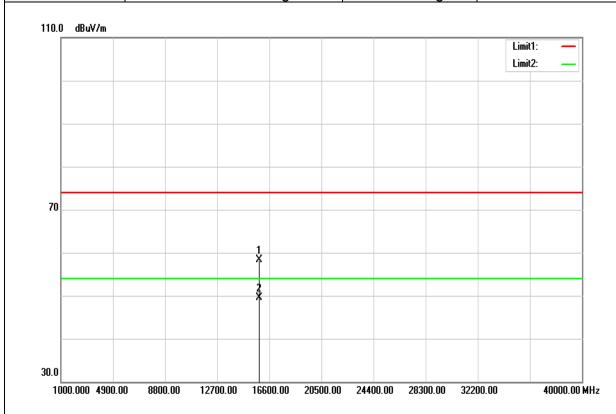


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10520.000          | 39.95             | 14.97                       | 54.92              | 74.00             | -19.08         | peak   |
| 10520.000          | 27.20             | 14.97                       | 42.17              | 54.00             | -11.83         | 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

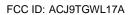


| Test Mode | IEEE 802.11n 20 /<br>5280 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 16, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

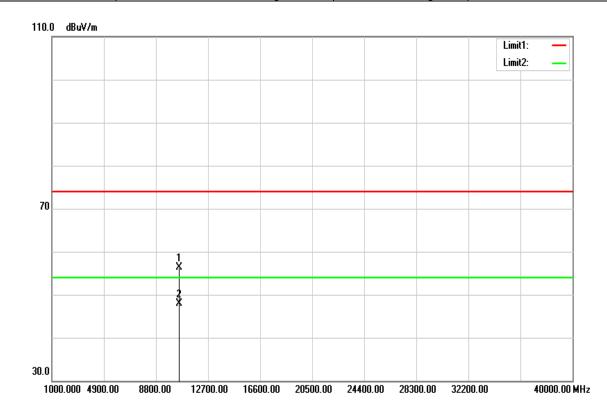


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 15840.000          | 38.85             | 19.55                       | 58.40              | 74.00             | -15.60         | peak   |
| 15840.000          | 30.02             | 19.55                       | 49.57              | 54.00             | -4.43          | 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 802.11n 20 /<br>5280 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|---|-----------|-------------------------------|---------------|------------------|
| Ī | Test Item | Test Item Harmonic            |               | January 16, 2018 |
| Ī | Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
|   | Detector  | Peak and Average              | Test Voltage  |                  |

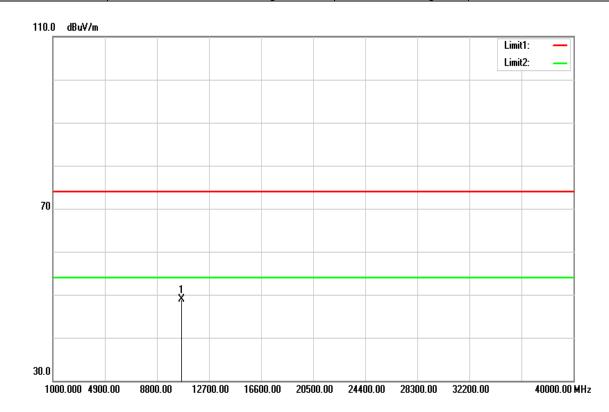


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10560.000          | 41.30             | 15.06                       | 56.36              | 74.00             | -17.64         | peak   |
| 10560.000          | 32.75             | 15.06                       | 47.81              | 54.00             | -6.19          | 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 | IEEE 802.11n 20 /<br>5320 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Test Item Harmonic            |               | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

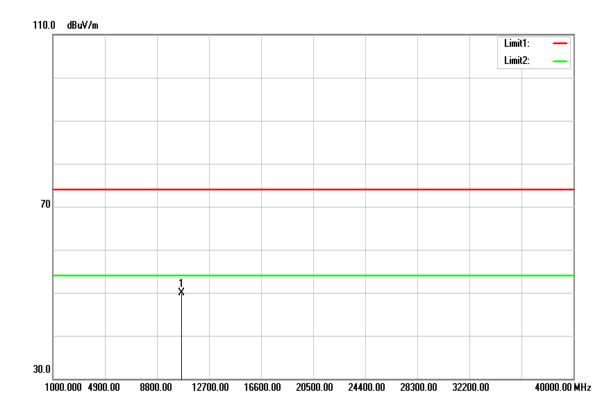


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10640.000          | 33.65             | 15.23                       | 48.88              | 74.00             | -25.12         | 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

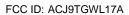


| Test Mode | IEEE 802.11n 20 /<br>5320 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

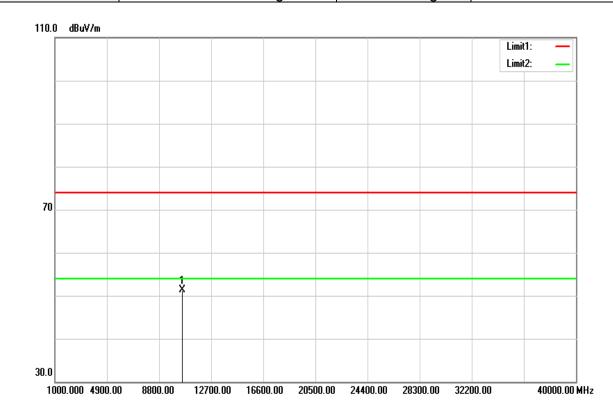


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10640.000          | 34.72             | 15.23                       | 49.95              | 74.00             | -24.05         | 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

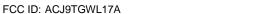


| Test Mode | IEEE 802.11n 40 /<br>5270 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

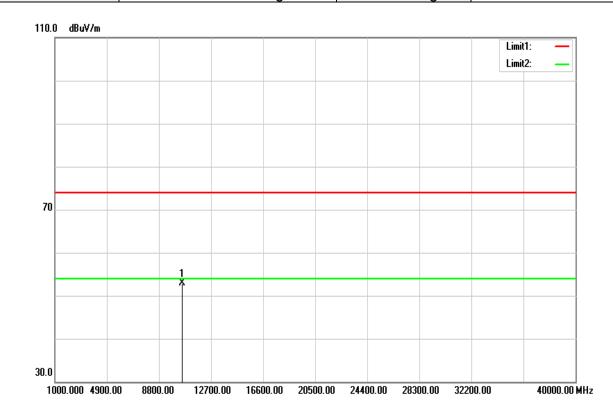


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10540.000          | 36.36             | 15.01                       | 51.37              | 74.00             | -22.63         | 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 802.11n 40 /<br>5270 MHz | Temp/Hum     | 24(°C)/ 33%RH    |
|-----------|-------------------------------|--------------|------------------|
| Test Item | Harmonic                      | Test Date    | January 16, 2018 |
| Polarize  | Polarize Horizontal           |              | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage |                  |

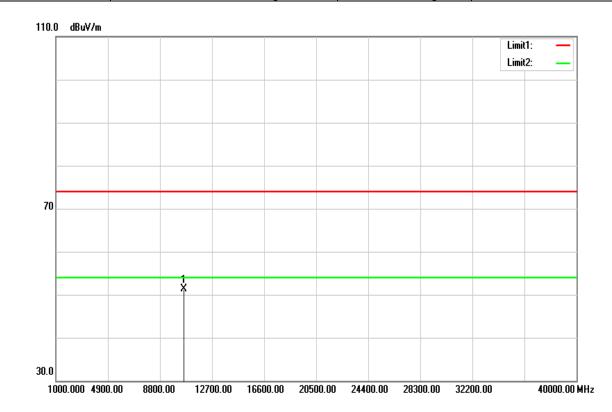


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10545.000          | 37.91             | 15.03                       | 52.94              | 74.00             | -21.06         | 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 802.11n 40 /<br>5310 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

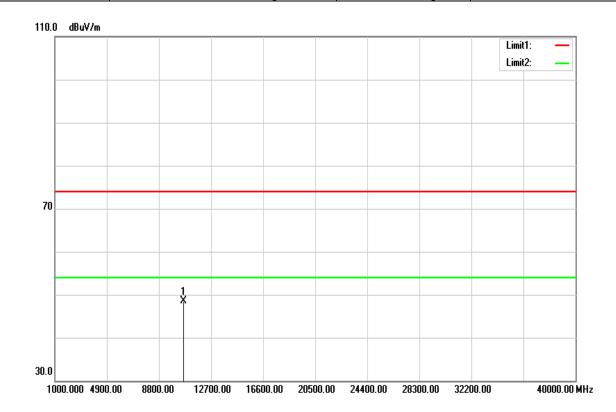


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10600.000          | 36.06             | 15.15                       | 51.21              | 74.00             | -22.79         | 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



| Test Mode | IEEE 802.11n 40 /<br>5310 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

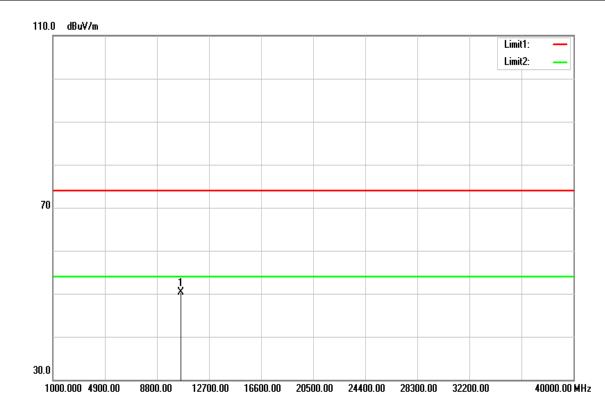


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10620.000          | 33.35             | 15.20                       | 48.55              | 74.00             | -25.45         | 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 802.11ac VHT80 /<br>5290 MHz | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|-----------------------------------|---------------|------------------|--|
| Test Item | Harmonic                          | Test Date     | January 16, 2018 |  |
| Polarize  | Vertical                          | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average                  | Test Voltage  |                  |  |

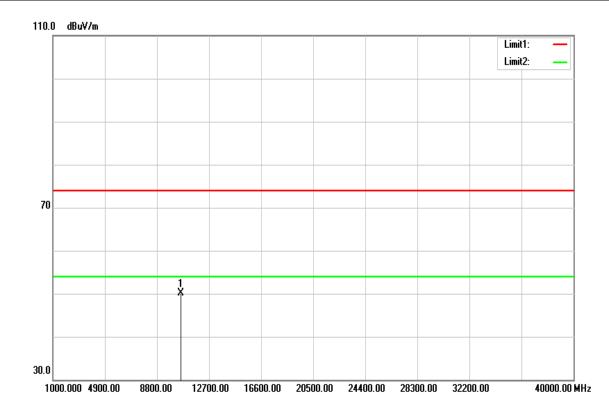


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10580.000          | 35.20             | 15.10                       | 50.30              | 74.00             | -23.70         | 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 802.11ac VHT80 /<br>5290 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-----------------------------------|---------------|------------------|
| Test Item | Harmonic                          | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                        | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                  | Test Voltage  |                  |



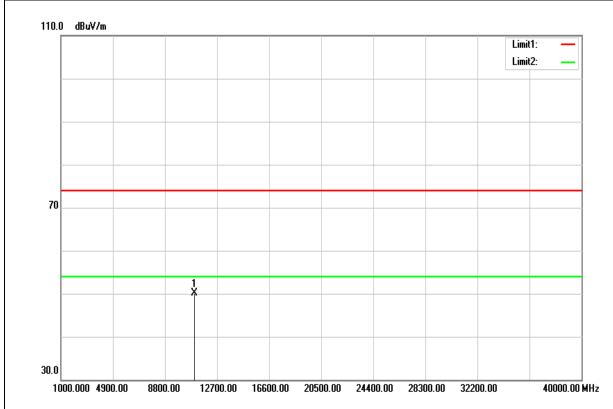
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 10580.000          | 35.05             | 15.10                       | 50.15              | 74.00             | -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

FCC ID: ACJ9TGWL17A Report No.: T180115W01-RP2

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

| Test Mode | IEEE 802.11n 20 /<br>5500 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |



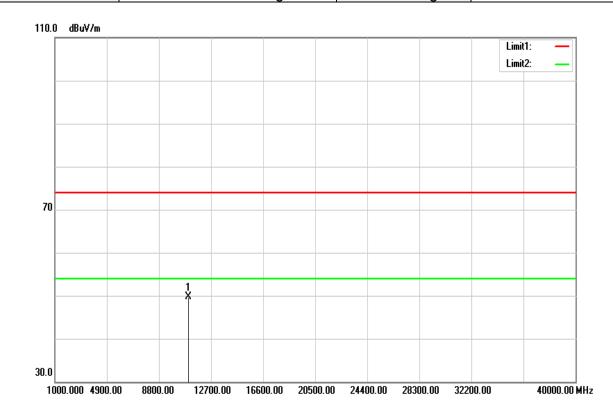
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11000.000          | 34.10             | 16.06                       | 50.16              | 74.00             | -23.84         | 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

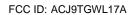


| Test Mode | IEEE 802.11n 20 /<br>5500 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

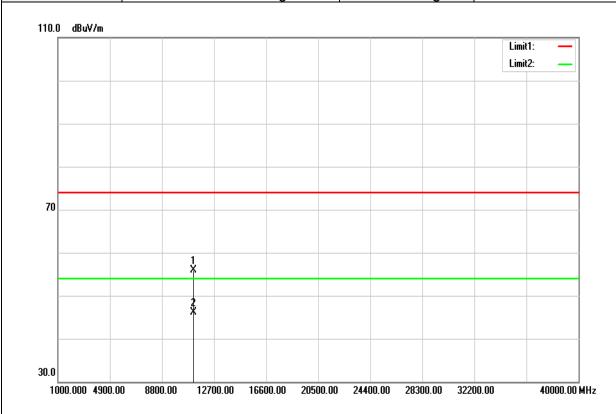


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11000.000          | 33.71             | 16.06                       | 49.77              | 74.00             | -24.23         | 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 802.11n 20 /<br>5580 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 16, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

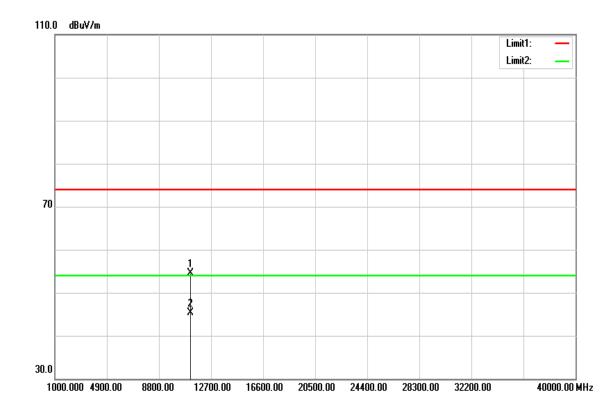


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11160.000          | 39.91             | 16.07                       | 55.98              | 74.00             | -18.02         | peak   |
| 11160.000          | 30.10             | 16.07                       | 46.17              | 54.00             | -7.83          | 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 802.11n 20 /<br>5580 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

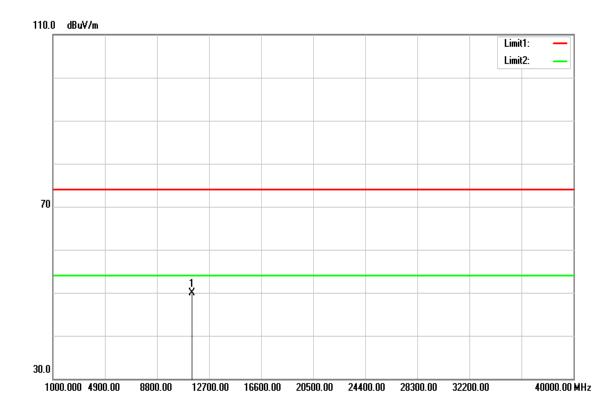


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11165.000          | 38.49             | 16.07                       | 54.56              | 74.00             | -19.44         | peak   |
| 11165.000          | 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

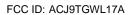


| Test Mode                 | IEEE 802.11n 20 /<br>5700 MHz | Temp/Hum      | 24(°C)/ 33%RH    |  |
|---------------------------|-------------------------------|---------------|------------------|--|
| Test Item                 | Harmonic                      | Test Date     | January 18, 2018 |  |
| Polarize                  | Vertical                      | Test Engineer | Jerry Chuang     |  |
| Detector Peak and Average |                               | Test Voltage  |                  |  |

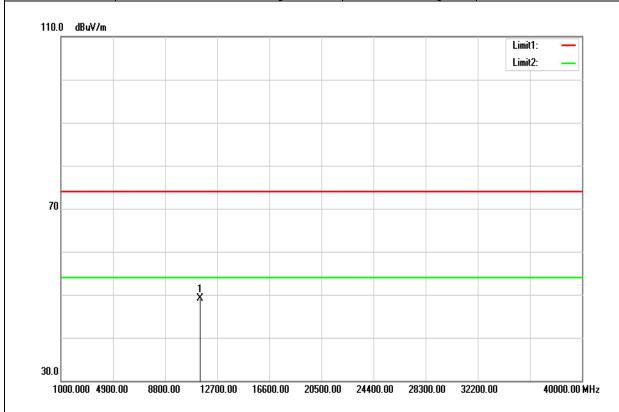


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11400.000          | 33.79             | 16.08                       | 49.87              | 74.00             | -24.13         | 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 802.11n 20 /<br>5700 MHz | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|-------------------------------|---------------|------------------|--|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |  |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average              | Test Voltage  |                  |  |

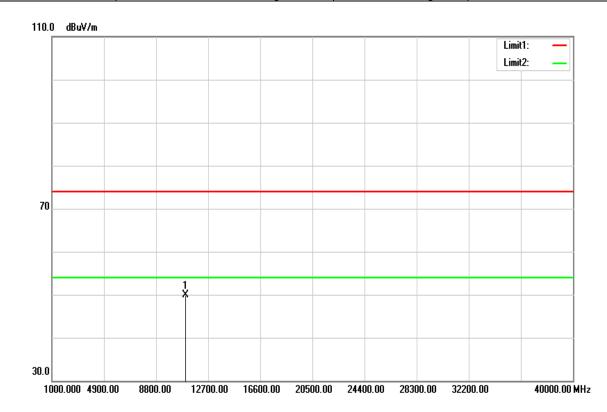


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11400.000          | 32.96             | 16.08                       | 49.04              | 74.00             | -24.96         | 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 802.11n 40 /<br>5510 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

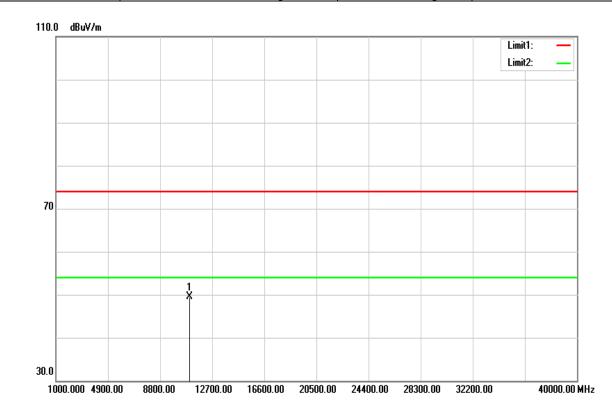


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11020.000          | 33.78             | 16.05                       | 49.83              | 74.00             | -24.17         | 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

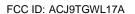


| Test Mode | IEEE 802.11n 40 /<br>5510 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

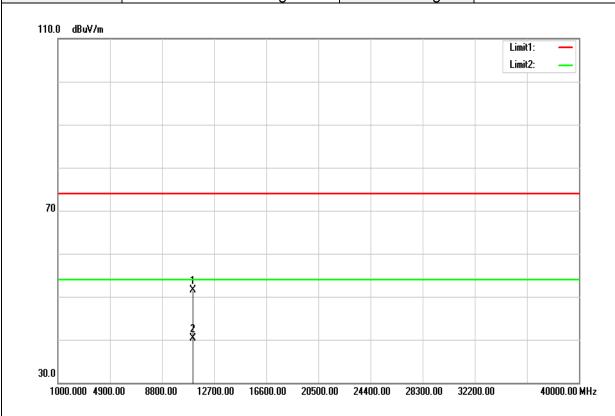


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11020.000          | 33.48             | 16.05                       | 49.53              | 74.00             | -24.47         | 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 802.11n 40 /<br>5550 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 16, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

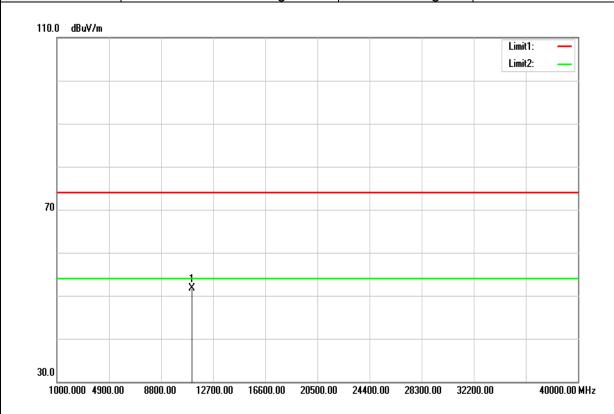


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11100.000          | 35.35             | 16.07                       | 51.42              | 74.00             | -22.58         | peak   |
| 11100.000          | 24.32             | 16.07                       | 40.39              | 54.00             | -13.61         | 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

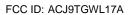


| Test Mode | IEEE 802.11n 40 /<br>5550 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

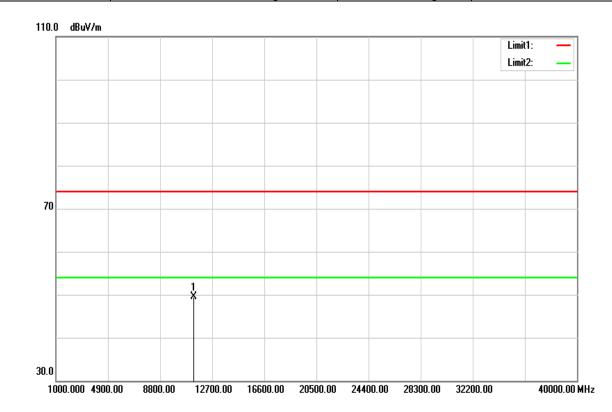


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11100.000          | 35.63             | 16.07                       | 51.70              | 74.00             | -22.30         | 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 802.11n 40 /<br>5670 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

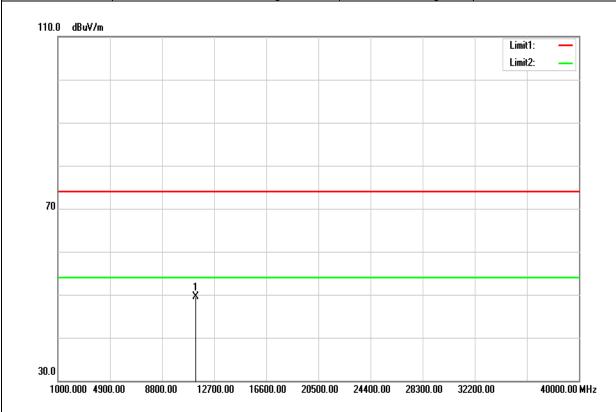


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11340.000          | 33.47             | 16.08                       | 49.55              | 74.00             | -24.45         | 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

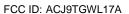


| Test Mode | Test Mode IEEE 802.11n 40 / 5670 MHz |               | 24(°C)/ 33%RH    |
|-----------|--------------------------------------|---------------|------------------|
| Test Item | Test Item Harmonic                   |               | January 18, 2018 |
| Polarize  | Horizontal                           | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                     | Test Voltage  |                  |

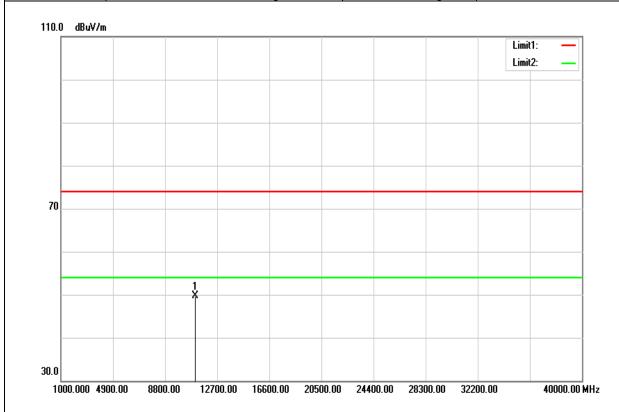


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11340.000          | 33.49             | 16.08                       | 49.57              | 74.00             | -24.43         | 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 802.11ac VHT80 /<br>5530 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-----------------------------------|---------------|------------------|
| Test Item | Harmonic                          | Test Date     | January 18, 2018 |
| Polarize  | Vertical                          | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                  | Test Voltage  |                  |

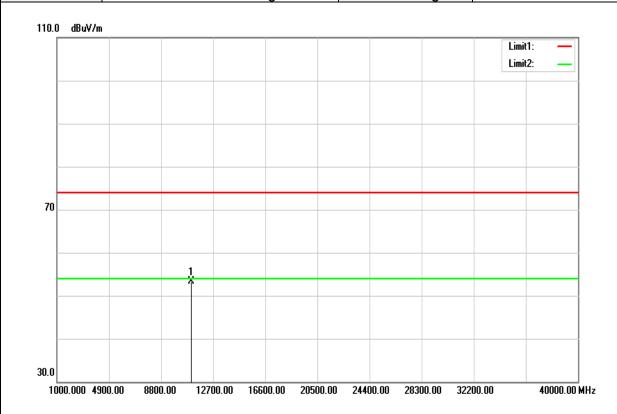


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11060.000          | 33.74             | 16.06                       | 49.80              | 74.00             | -24.20         | 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 802.11ac VHT80 /<br>5530 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|---------------------|-----------------------------------|---------------|------------------|
| Test Item           | Harmonic                          | Test Date     | January 18, 2018 |
| Polarize Horizontal |                                   | Test Engineer | Jerry Chuang     |
| Detector            | Peak and Average                  | Test Voltage  |                  |

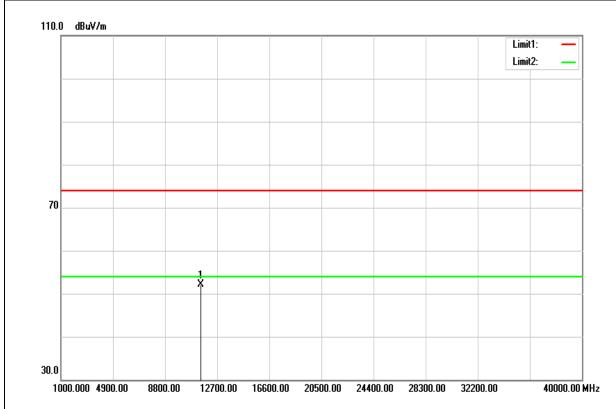


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11060.000          | 37.25             | 16.06                       | 53.31              | 74.00             | -20.69         | 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

# **Above 1G Test Data for UNII-3**

| Test Mode | IEEE 802.11n 20 /<br>5745 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Vertical                      | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |



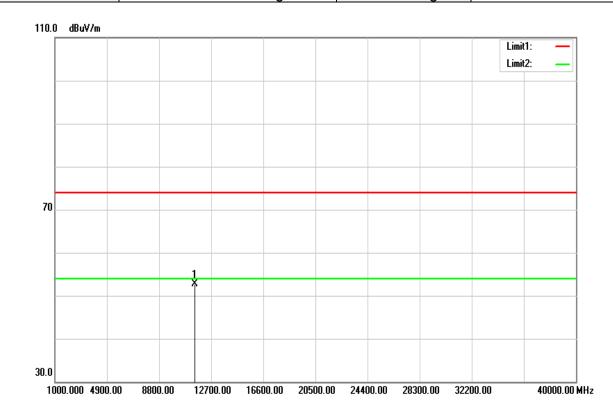
| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11490.000          | 35.94             | 16.09                       | 52.03              | 74.00             | -21.97         | 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 | IEEE 802.11n 20 /<br>5745 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|-------------------------------|---------------|------------------|
| Test Item | Harmonic                      | Test Date     | January 18, 2018 |
| Polarize  | Horizontal                    | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average              | Test Voltage  |                  |

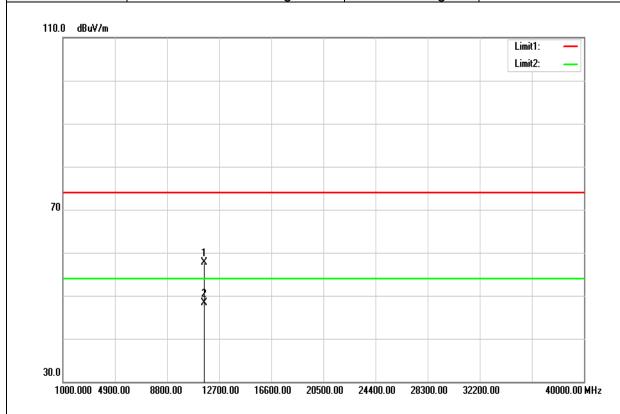


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11495.000          | 36.64             | 16.08                       | 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 | IEEE 802.11n 20/<br>5785 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 16, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

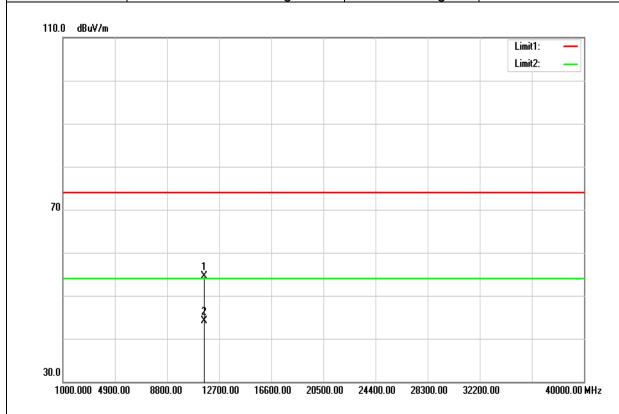


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11560.000          | 41.73             | 16.02                       | 57.75              | 74.00             | -16.25         | peak   |
| 11560.000          | 32.24             | 16.02                       | 48.26              | 54.00             | -5.74          | 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

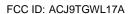


| Test Mode | IEEE 802.11n 20/<br>5785 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

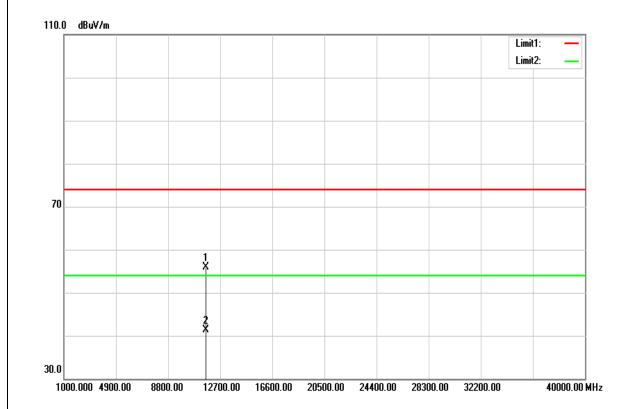


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11575.000          | 38.49             | 16.01                       | 54.50              | 74.00             | -19.50         | peak   |
| 11575.000          | 28.17             | 16.01                       | 44.18              | 54.00             | -9.82          | 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 802.11n 20/<br>5825 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

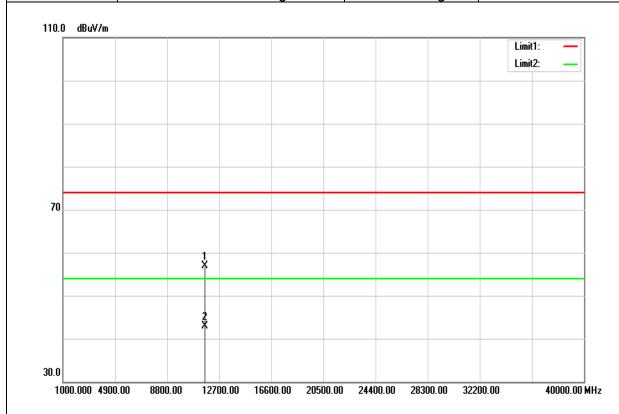


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11650.000          | 39.94             | 15.93                       | 55.87              | 74.00             | -18.13         | peak   |
| 11650.000          | 25.41             | 15.93                       | 41.34              | 54.00             | -12.66         | 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

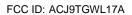


|                    | Test Mode | IEEE 802.11n 20/<br>5825 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|--------------------|-----------|------------------------------|---------------|------------------|
| Test Item Harmonic |           | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize Hor       |           | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector           |           | Peak and Average             | Test Voltage  |                  |

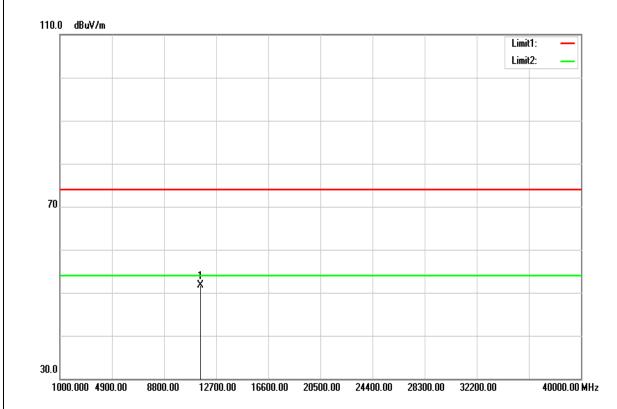


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11655.000          | 40.93             | 15.93                       | 56.86              | 74.00             | -17.14         | peak   |
| 11655.000          | 26.90             | 15.93                       | 42.83              | 54.00             | -11.17         | 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 802.11n 40/<br>5755 MHz | Temp/Hum      | 24(°C)/ 33%RH    |  |
|-----------|------------------------------|---------------|------------------|--|
| Test Item | Harmonic                     | Test Date     | January 16, 2018 |  |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |  |
| Detector  | Peak and Average             | Test Voltage  |                  |  |

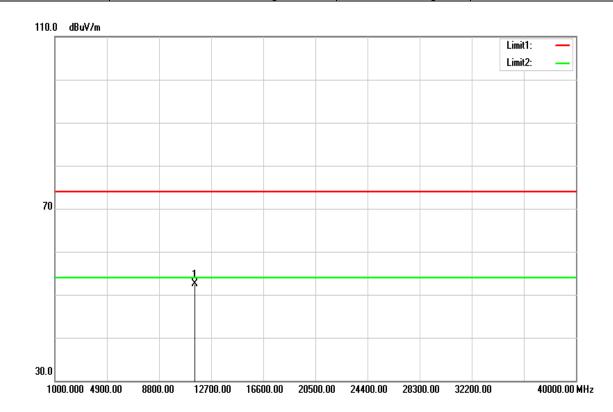


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11505.000          | 35.62             | 16.09                       | 51.71              | 74.00             | -22.29         | 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

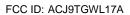


| Test Mode | IEEE 802.11n 40/<br>5755 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

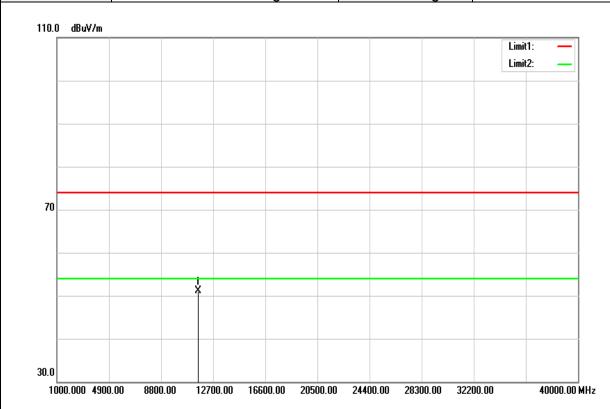


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11500.000          | 36.34             | 16.09                       | 52.43              | 74.00             | -21.57         | 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 802.11n 40/<br>5795 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Harmonic                     | Test Date     | January 18, 2018 |
| Polarize  | Vertical                     | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

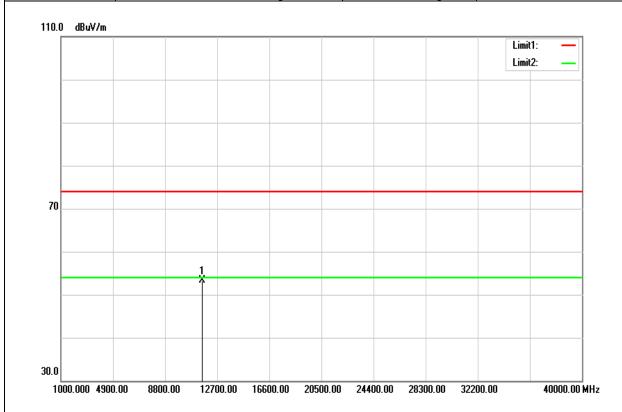


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11590.000          | 35.12             | 16.00                       | 51.12              | 74.00             | -22.88         | 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

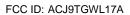


| Test Mode | IEEE 802.11n 40/<br>5795 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|------------------------------|---------------|------------------|
| Test Item | Test Item Harmonic           |               | January 18, 2018 |
| Polarize  | Horizontal                   | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average             | Test Voltage  |                  |

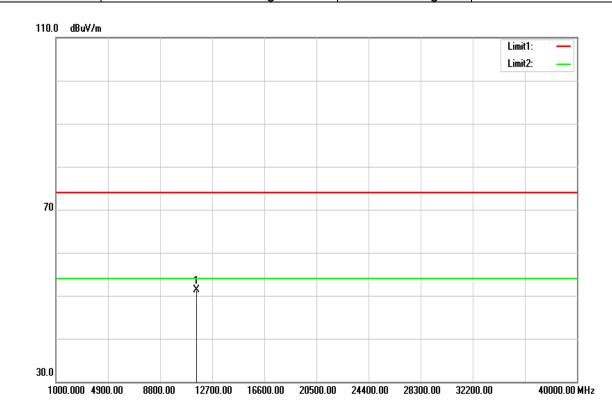


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11590.000          | 37.31             | 16.00                       | 53.31              | 74.00             | -20.69         | 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 802.11ac VHT80/<br>5775 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|----------------------------------|---------------|------------------|
| Test Item | Harmonic                         | Test Date     | January 16, 2018 |
| Polarize  | Vertical                         | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                 | Test Voltage  |                  |

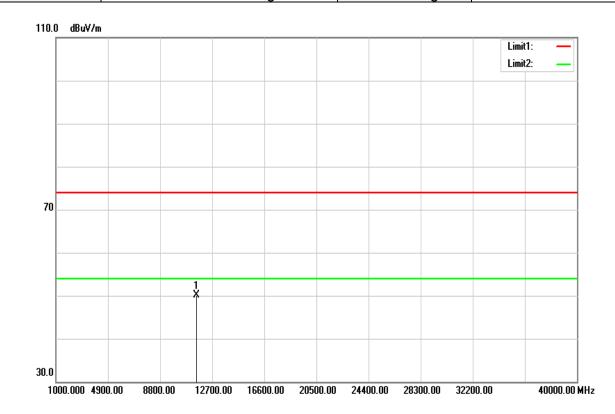


| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11550.000          | 35.22             | 16.04                       | 51.26              | 74.00             | -22.74         | 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 802.11ac VHT80/<br>5775 MHz | Temp/Hum      | 24(°C)/ 33%RH    |
|-----------|----------------------------------|---------------|------------------|
| Test Item | Harmonic                         | Test Date     | January 16, 2018 |
| Polarize  | Horizontal                       | Test Engineer | Jerry Chuang     |
| Detector  | Peak and Average                 | Test Voltage  |                  |



| Frequency<br>(MHz) | Reading<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------|-----------------------------|--------------------|-------------------|----------------|--------|
| 11550.000          | 34.13             | 16.04                       | 50.17              | 74.00             | -23.83         | 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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# **4.6 FREQUENCY STABILITY**

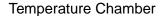
# 4.6.1 Test Limit

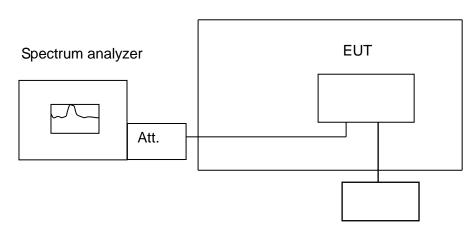
According to §15.407(g) manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the operational description.

# 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°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

# 4.6.3 Test Setup





Variable Power Supply

# 4.6.4 Test Result

| Tames (0C) |             | Measured Frequency | 51         | 80         | (MHz)      |         | Liı         | mit     |         |        |
|------------|-------------|--------------------|------------|------------|------------|---------|-------------|---------|---------|--------|
| remp. (°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  |        |
| 85 5       |             | 5180.08944         | 5180.08944 | 5180.08952 | 5180.08965 | 17.2664 | 17.2664     | 17.2819 | 17.3069 | Pass   |
| 70 5       |             | 5180.04652         | 5180.04652 | 5180.04652 | 5180.04682 | 8.9807  | 8.9807      | 8.9807  | 9.0386  | Pass   |
| 60         | 5           | 5180.02431         | 5180.02468 | 5180.02568 | 5180.02548 | 4.6931  | 4.7645      | 4.9575  | 4.9189  | Pass   |
| 50         | 5           | 5179.99609         | 5179.99602 | 5179.99623 | 5179.99662 | -0.7548 | -0.7683     | -0.7278 | -0.6525 | Pass   |
| 40         | 5           | 5179.98263         | 5179.98256 | 5179.98263 | 5179.98361 | -3.3533 | -3.3668     | -3.3533 | -3.1641 | Pass   |
| 30         | 5           | 5179.97699         | 5179.97856 | 5179.97952 | 5179.97952 | -4.4421 | -4.1390     | -3.9537 | -3.9537 | Pass   |
| 20         | 5           | 5179.98003         | 5179.98003 | 5179.98003 | 5179.98003 | -3.8552 | -3.8552     | -3.8552 | -3.8552 | Pass   |
| 10         | 5           | 5179.99566         | 5179.99582 | 5180.00000 | 5180.00000 | -0.8378 | -0.8069     | 0.0000  | 0.0000  | Pass   |
| 0          | 5           | 5179.99887         | 5179.99887 | 5179.99824 | 5179.99824 | -0.2181 | -0.2181     | -0.3398 | -0.3398 | Pass   |
| -10        | 5           | 5180.00608         | 5180.00523 | 5180.00608 | 5180.00608 | 1.1737  | 1.0097      | 1.1737  | 1.1737  | Pass   |
| -20        | 5           | 5180.01085         | 5180.01085 | 5180.01068 | 5180.01045 | 2.0946  | 2.0946      | 2.0618  | 2.0174  | Pass   |
| Tomp (9C)  | Voltage (V) | Measured Frequency | 51         | 80         | (MHz)      |         | Liı         | mit     |         |        |
| remp. (*C) | voitage (v) |                    | Time (min  | 1)         | •          |         | <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         | 5179.98003         | 5179.98003 | 5179.98003 | 5179.98003 | -3.8552 | -3.8552     | -3.8552 | -3.8552 | Pass   |
| 20         | 5           | 5179.98003         | 5179.98003 | 5179.98003 | 5179.98003 | -3.8552 | -3.8552     | -3.8552 | -3.8552 | Pass   |
| 20         | 5.5         | 5179.98003         | 5179.98003 | 5179.98003 | 5179.98003 | -3.8552 | -3.8552     | -3.8552 | -3.8552 | Pass   |



| - (00)     |             | Measured Frequency | 52         | 60         | (MHz)      |         | Lin     | 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  |        |
| 85         | 5           | 5260.09161         | 5260.09161 | 5260.09161 | 5260.09161 | 17.4163 | 17.4163 | 17.4163 | 17.4163 | Pass   |
| 70         | 5           | 5260.04528         | 5260.04563 | 5260.04652 | 5260.04803 | 8.6084  | 8.6749  | 8.8441  | 9.1312  | Pass   |
| 60         | 5           | 5260.02546         | 5260.02418 | 5260.02418 | 5260.02418 | 4.8403  | 4.5970  | 4.5970  | 4.5970  | Pass   |
| 50         | 5           | 5260.00525         | 5260.00598 | 5260.00582 | 5260.00518 | 0.9981  | 1.1369  | 1.1065  | 0.9848  | Pass   |
| 40         | 5           | 5259.99525         | 5259.99525 | 5259.99348 | 5259.99348 | -0.9030 | -0.9030 | -1.2395 | -1.2395 | Pass   |
| 30         | 5           | 5259.98648         | 5259.98607 | 5259.98618 | 5259.98618 | -2.5703 | -2.6483 | -2.6274 | -2.6274 | Pass   |
| 20         | 5           | 5259.97752         | 5259.97958 | 5259.97981 | 5259.97897 | -4.2738 | -3.8821 | -3.8384 | -3.9981 | Pass   |
| 10         | 5           | 5259.99215         | 5259.99179 | 5259.99215 | 5259.99215 | -1.4924 | -1.5608 | -1.4924 | -1.4924 | Pass   |
| 0          | 5           | 5259.99908         | 5259.99908 | 5259.99917 | 5259.99937 | -0.1749 | -0.1749 | -0.1578 | -0.1198 | Pass   |
| -10        | 5           | 5260.00512         | 5260.00178 | 5260.00750 | 5260.00750 | 0.9734  | 0.3384  | 1.4259  | 1.4259  | Pass   |
| -20        | 5           | 5260.01526         | 5260.01632 | 5260.01632 | 5260.01526 | 2.9011  | 3.1027  | 3.1027  | 2.9011  | Pass   |
| T (00)     | V-11 00     | Measured Frequency | 52         | 60         | (MHz)      |         | Liı     | nit     |         |        |
| remp. (°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  |        |
| 20         | 4.5         | 5259.97958         | 5259.97981 | 5259.97897 | 5259.97897 | -3.8821 | -3.8384 | -3.9981 | -3.9981 | Pass   |
| 20         | 5           | 5259.97752         | 5259.97958 | 5259.97981 | 5259.97897 | -4.2738 | -3.8821 | -3.8384 | -3.9981 | Pass   |
| 20         | 5.5         | 5259.97981         | 5259.97897 | 5259.97981 | 5259.97897 | -3.8384 | -3.9981 | -3.8384 | -3.9981 | Pass   |



|            |             | Measured Frequency | 55         | 00         | (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  |        |
| 85         | 5           | 5500.09421         | 5500.09421 | 5500.09421 | 5500.09421 | 17.1291 | 17.1291     | 17.1291 | 17.1291 | Pass   |
| 70         | 5           | 5500.03824         | 5500.04084 | 5500.04657 | 5500.05091 | 6.9527  | 7.4255      | 8.4673  | 9.2564  | Pass   |
| 60         | 5           | 5500.02401         | 5500.02836 | 5500.03184 | 5500.03702 | 4.3655  | 5.1564      | 5.7891  | 6.7309  | Pass   |
| 50         | 5           | 5500.01582         | 5500.01267 | 5500.01345 | 5500.01397 | 2.8764  | 2.3036      | 2.4455  | 2.5400  | Pass   |
| 40         | 5           | 5499.98181         | 5499.98257 | 5499.98246 | 5499.98246 | -3.3073 | -3.1691     | -3.1891 | -3.1891 | Pass   |
| 30         | 5           | 5499.96817         | 5499.96817 | 5499.96817 | 5499.96977 | -5.7873 | -5.7873     | -5.7873 | -5.4964 | Pass   |
| 20         | 5           | 5499.99052         | 5499.99179 | 5499.99052 | 5499.99052 | -1.7236 | -1.4927     | -1.7236 | -1.7236 | Pass   |
| 10         | 5           | 5499.99571         | 5499.99758 | 5499.99682 | 5499.99682 | -0.7800 | -0.4400     | -0.5782 | -0.5782 | Pass   |
| 0          | 5           | 5500.00454         | 5500.00611 | 5500.00745 | 5500.00917 | 0.8255  | 1.1109      | 1.3545  | 1.6673  | Pass   |
| -10        | 5           | 5500.01279         | 5500.01279 | 5500.01371 | 5500.01371 | 2.3255  | 2.3255      | 2.4927  | 2.4927  | Pass   |
| -20        | 5           | 5500.03271         | 5500.03182 | 5500.03251 | 5500.03178 | 5.9473  | 5.7855      | 5.9109  | 5.7782  | Pass   |
| Tamp (9C)  | Valtage (V) | Measured Frequency | 55         | 00         | (MHz)      |         | Lir         | nit     |         |        |
| remp. (°C) | Voltage (V) |                    | Time (min  | 1)         |            |         | <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         | 5499.99052         | 5499.99052 | 5499.99052 | 5499.99052 | -1.7236 | -1.7236     | -1.7236 | -1.7236 | Pass   |
| 20         | 5           | 5499.99052         | 5499.99179 | 5499.99052 | 5499.99052 | -1.7236 | -1.4927     | -1.7236 | -1.7236 | Pass   |
| 20         | 5.5         | 5499.99052         | 5499.99052 | 5499.99052 | 5499.99052 | -1.7236 | -1.7236     | -1.7236 | -1.7236 | Pass   |



| <b>T</b> (00) | W K 00      | Measured Frequency | 57         | 45         | (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  |        |
| 85            | 5           | 5745.10072         | 5745.10072 | 5745.10072 | 5745.10072 | 17.5318 | 17.5318 | 17.5318 | 17.5318 | Pass   |
| 70            | 5           | 5745.04230         | 5745.05014 | 5745.05568 | 5745.05714 | 7.3629  | 8.7276  | 9.6919  | 9.9460  | Pass   |
| 60            | 5           | 5745.02317         | 5745.03128 | 5745.03496 | 5745.04018 | 4.0331  | 5.4447  | 6.0853  | 6.9939  | Pass   |
| 50            | 5           | 5745.00406         | 5745.00491 | 5745.00569 | 5745.00682 | 0.7067  | 0.8547  | 0.9904  | 1.1871  | Pass   |
| 40            | 5           | 5744.99821         | 5744.99715 | 5744.99715 | 5744.99715 | -0.3116 | -0.4961 | -0.4961 | -0.4961 | Pass   |
| 30            | 5           | 5744.97615         | 5744.97128 | 5744.97625 | 5744.97108 | -4.1514 | -4.9991 | -4.1340 | -5.0339 | Pass   |
| 20            | 5           | 5744.99284         | 5744.99382 | 5744.99382 | 5744.99382 | -1.2463 | -1.0757 | -1.0757 | -1.0757 | Pass   |
| 10            | 5           | 5745.00381         | 5745.00328 | 5745.00328 | 5745.00328 | 0.6632  | 0.5709  | 0.5709  | 0.5709  | Pass   |
| 0             | 5           | 5745.01285         | 5745.01658 | 5745.01658 | 5745.01628 | 2.2367  | 2.8860  | 2.8860  | 2.8338  | Pass   |
| -10           | 5           | 5745.03041         | 5745.03525 | 5745.03525 | 5745.03525 | 5.2933  | 6.1358  | 6.1358  | 6.1358  | Pass   |
| -20           | 5           | 5745.03521         | 5745.03521 | 5745.03521 | 5745.03631 | 6.1288  | 6.1288  | 6.1288  | 6.3206  | Pass   |
| Tames (0C)    | Valtana (() | Measured Frequency | 57         | 45         | (MHz)      |         | Lin     | mit     |         |        |
| remp. (°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  |        |
| 20            | 4.5         | 5744.99382         | 5744.99382 | 5744.99382 | 5744.99382 | -1.0757 | -1.0757 | -1.0757 | -1.0757 | Pass   |
| 20            | 5           | 5744.99284         | 5744.99382 | 5744.99382 | 5744.99382 | -1.2463 | -1.0757 | -1.0757 | -1.0757 | Pass   |
| 20            | 5.5         | 5744.99382         | 5744.99382 | 5744.99382 | 5744.99382 | -1.0757 | -1.0757 | -1.0757 | -1.0757 | 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.

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

| Barriage 1                      |        | 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

| Bt                                | 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 Performance Check      | All BW modes must be tested                     | Not required                   |
| Channel Move Time and Channel Closing                            | ı   |                                |
| Transmission Time  | available                                       | available for the link         |
| All other tests  | Any single BW mode                              | Not required                   |

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

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

| Maximum Transmit Power   | Value (See Notes 1, 2, and 3) |
|--|-------------------------------|
| EIRP ≥ 200 milliwatt   | -64 dBm                       |
| EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz                 | -62 dBm                       |
| EIRP < 200 milliwatt that do not meet the power spectral density requirement | -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 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.

Table 5 - Short Pulse Radar Test Waveforms

| Radar<br>Type | Pulse Width (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 unique PRI values randomly selected from the list of 23 PRI values in Table 5a  Test B: 15 unique PRI values randomly selected within the range of 518-3066 µsec, with a minimum increment of 1 µsec, excluding PRI values selected in Test A | Roundup $ \left\{ \left( \frac{1}{360} \right). \\ \left( \frac{19 \cdot 10^6}{\text{PRI}_{\mu \text{sec}}} \right) \right\} $ | 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                             |
| Aggregate     | (Radar Types       | s 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.

Table 6 - Long Pulse Radar Test Signal

| Radar Type | Pulse<br>Width<br>(µsec) | Chirp Width<br>(MHz) | PRI<br>(µsec) | 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 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: 1030.13.704.2016

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.

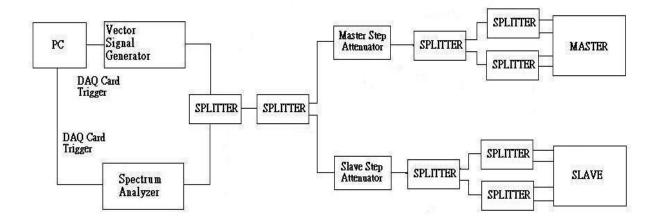
The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

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.

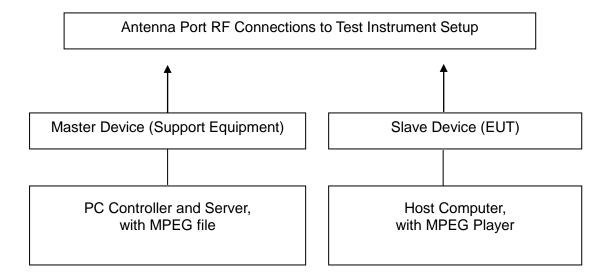
Set the signal generator to produce a radar waveform, trigger a burst manually and measure the level on the spectrum analyzer. Readjust the amplitude of the signal generator as required so that the peak level of the waveform is at a displayed level equal to the required or desired interference detection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

# Adjustment Of Displayed Traffic Level

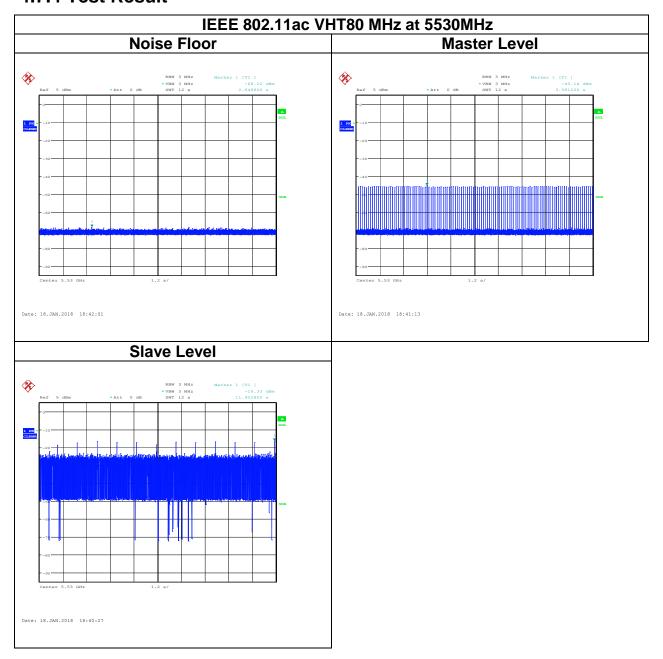
Establish a link between the Master and Slave, adjusting the Link Step Attenuator as needed to provide a suitable received level at the Master and Slave devices. Stream the video test file to generate WLAN traffic. Confirm that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower 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



# Radar Waveforms Sample of short Pluse Radar Type 0 RBM 3 MIR \*VBM 3 MIR \*VBM 3 MIR \*ALL 0 GB SWT 30 mB 1,427000 mB 1,42

**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 =

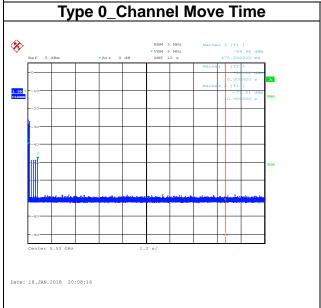
(Number of analyzer bins showing transmission) \* (dwell time per bin)

The observation period over which the aggregate time is calculated

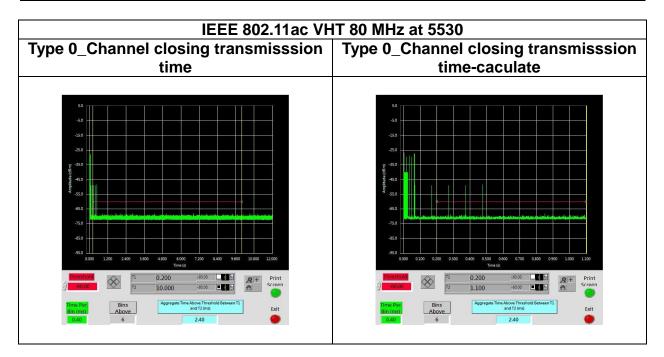
Begins at (Reference Marker + 200 msec) and

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





| Channel Move Time (s) | Limit<br>(s) |
|-----------------------|--------------|
| 0.4752                | 10           |



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