



Low Channel (5 755 MHz)



High Channel (5 795 MHz)

### 9.6.2 Test data for Antenna 1

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

#### - FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 190           | -9.57                | 16.47       | 26.04       |
|                       | High    | 5 230           | -9.05                | 16.47       | 25.52       |
| 5 725 ~ 5 850         | Low     | 5 755           | -11.41               | 29.59       | 41.00       |
|                       | High    | 5 795           | -11.86               | 29.59       | 41.45       |

Remark: See next page for measurement data.

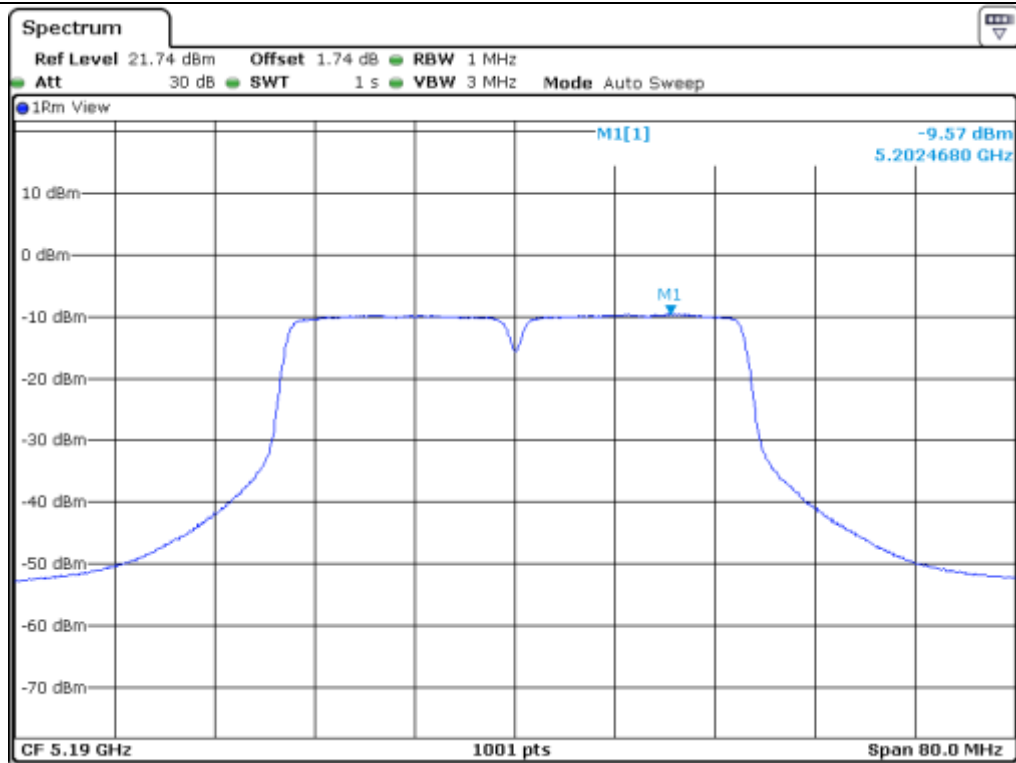
#### - IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 190           | 6.533        | -9.57                | 10.00       | 13.04       | -3.04      |
|                       | High    | 5 230           |              | -9.05                | 10.00       | 12.52       | -2.52      |
| 5 725 ~ 5 825         | Low     | 5 755           | 6.415        | -11.41               | 29.59       | 41.00       | -          |
|                       | High    | 5 795           |              | -11.86               | 29.59       | 41.45       | -          |

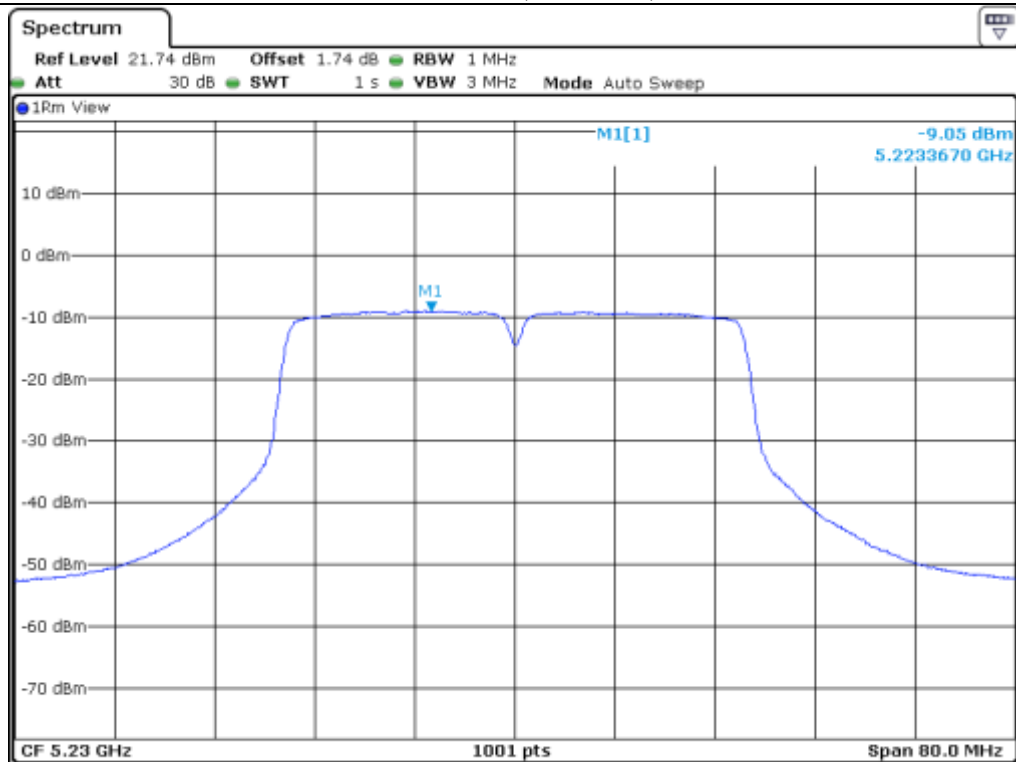
Remark: See next page for measurement data.



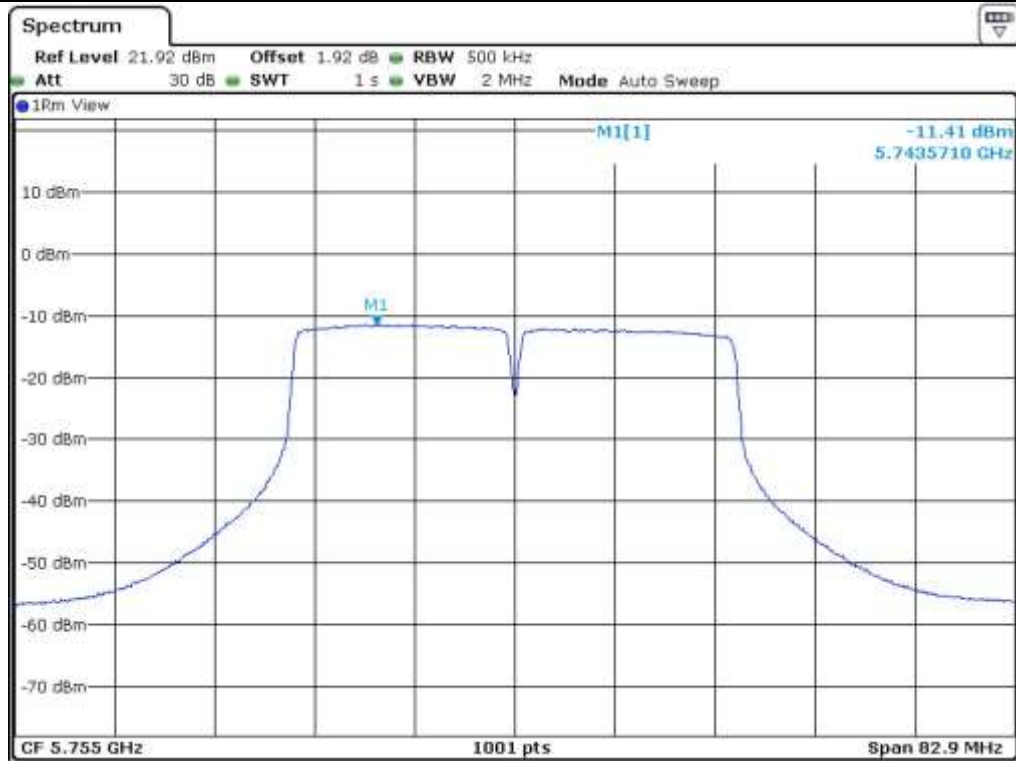
Tested by: Jun-Hui, Lee / Senior Engineer



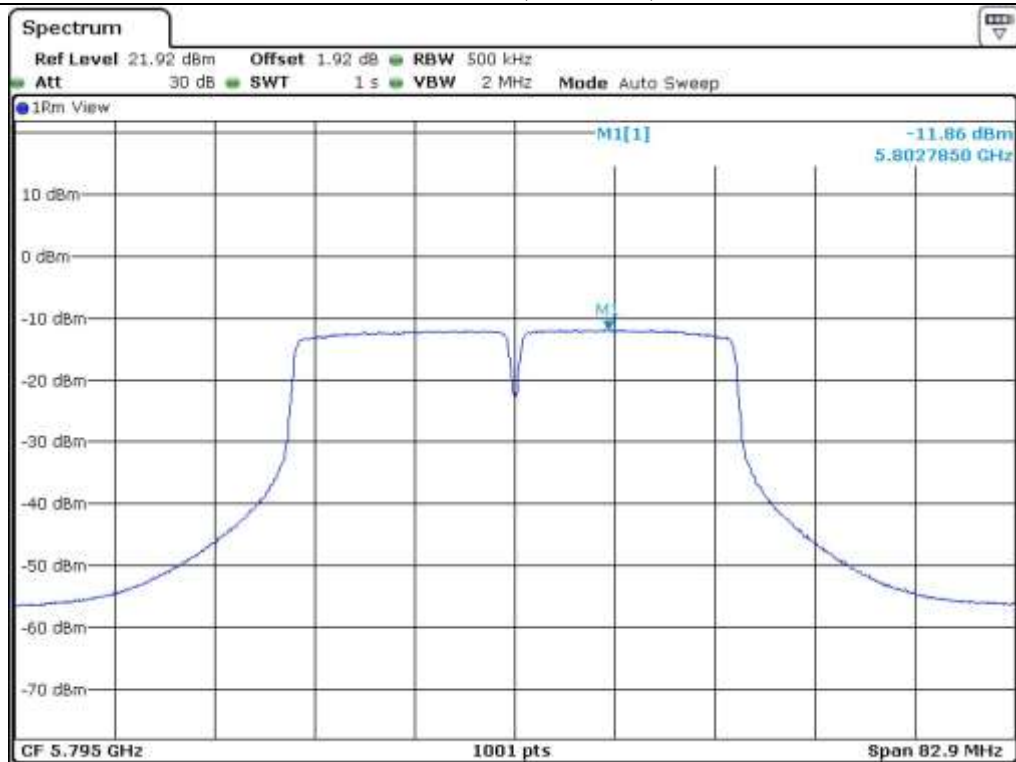
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5.755 MHz)



High Channel (5.795 MHz)

### 9.6.3 Test data for Antenna 2

-. Test Date : May 02, 2016  
 -. Operating condition : Highest Output Power Transmitting Mode  
 -. Test Result : Pass

-. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 190           | -9.56                | 16.47       | 26.03       |
|                       | High    | 5 230           | -9.18                | 16.47       | 25.65       |
| 5 725 ~ 5 850         | Low     | 5 755           | -11.23               | 29.59       | 40.82       |
|                       | High    | 5 795           | -12.02               | 29.59       | 41.61       |

Remark: See next page for measurement data.

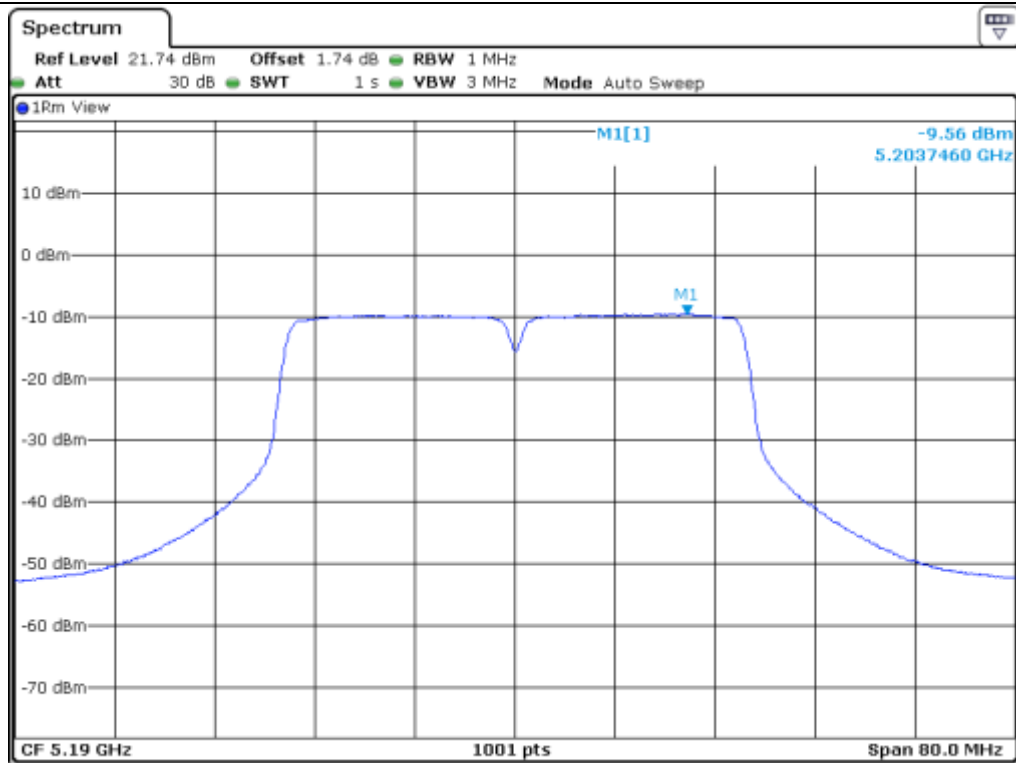
-. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 190           | 6.533        | -9.56                | 10.00       | 13.03       | -3.03      |
|                       | High    | 5 230           |              | -9.18                | 10.00       | 12.65       | -2.65      |
| 5 725 ~ 5 825         | Low     | 5 755           | 6.415        | -11.23               | 29.59       | 40.82       | -          |
|                       | High    | 5 795           |              | -12.02               | 29.59       | 41.61       | -          |

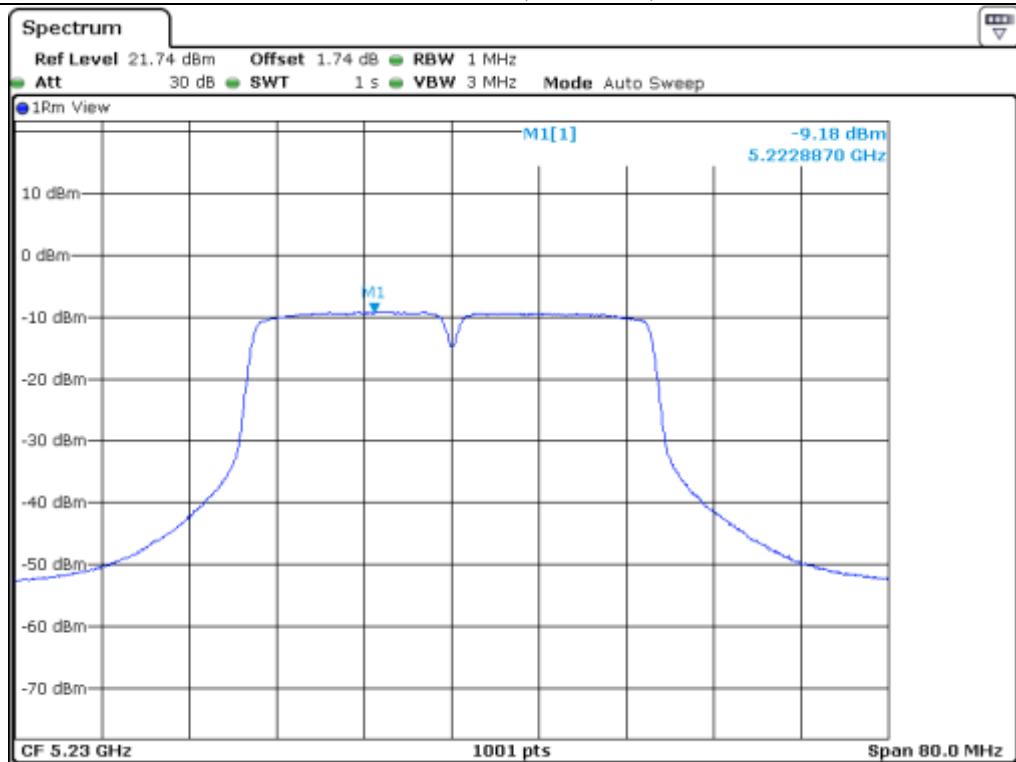
Remark: See next page for measurement data.



Tested by: Jun-Hui, Lee / Senior Engineer



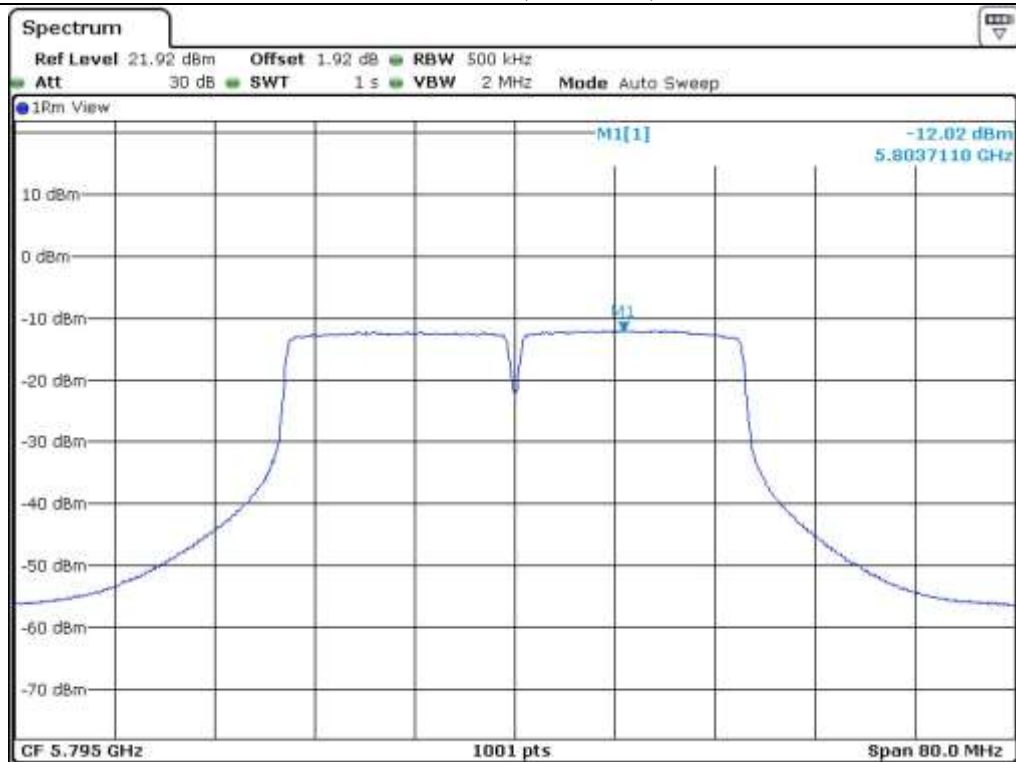
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5.755 MHz)



High Channel (5.795 MHz)

#### 9.6.4 Test data for Multiple transmit

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

##### -. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 190           | -4.67                | 11.70       | 16.36       |
|                       | High    | 5 230           | -4.37                | 11.70       | 16.07       |
| 5 725 ~ 5 850         | Low     | 5 755           | -6.46                | 24.81       | 31.28       |
|                       | High    | 5 795           | -7.06                | 24.81       | 31.87       |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

##### -. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 190           | 11.304       | -4.67                | 10.00       | 3.36        | 6.64       |
|                       | High    | 5 230           |              | -4.37                | 10.00       | 3.07        | 6.93       |
| 5 725 ~ 5 825         | Low     | 5 755           | 11.186       | -6.46                | 24.81       | 31.28       | -          |
|                       | High    | 5 795           |              | -7.06                | 24.81       | 31.87       | -          |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

Tested by: Jun-Hui, Lee / Senior Engineer

## 9.7 Test data for 802.11ac20 RLAN Mode

### 9.7.1 Test data for Antenna 0

-. Test Date : May 02, 2016  
 -. Operating condition : Highest Output Power Transmitting Mode  
 -. Test Result : Pass

-. FCC Test data

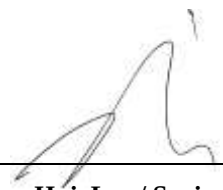
| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 180           | -6.59                | 16.47       | 23.06       |
|                       | Middle  | 5 200           | -6.51                | 16.47       | 22.98       |
|                       | High    | 5 240           | -6.79                | 16.47       | 23.26       |
| 5 725 ~ 5 850         | Low     | 5 745           | -6.32                | 29.59       | 35.91       |
|                       | Middle  | 5 785           | 1.54                 | 29.59       | 28.05       |
|                       | High    | 5 825           | -6.76                | 29.59       | 36.35       |

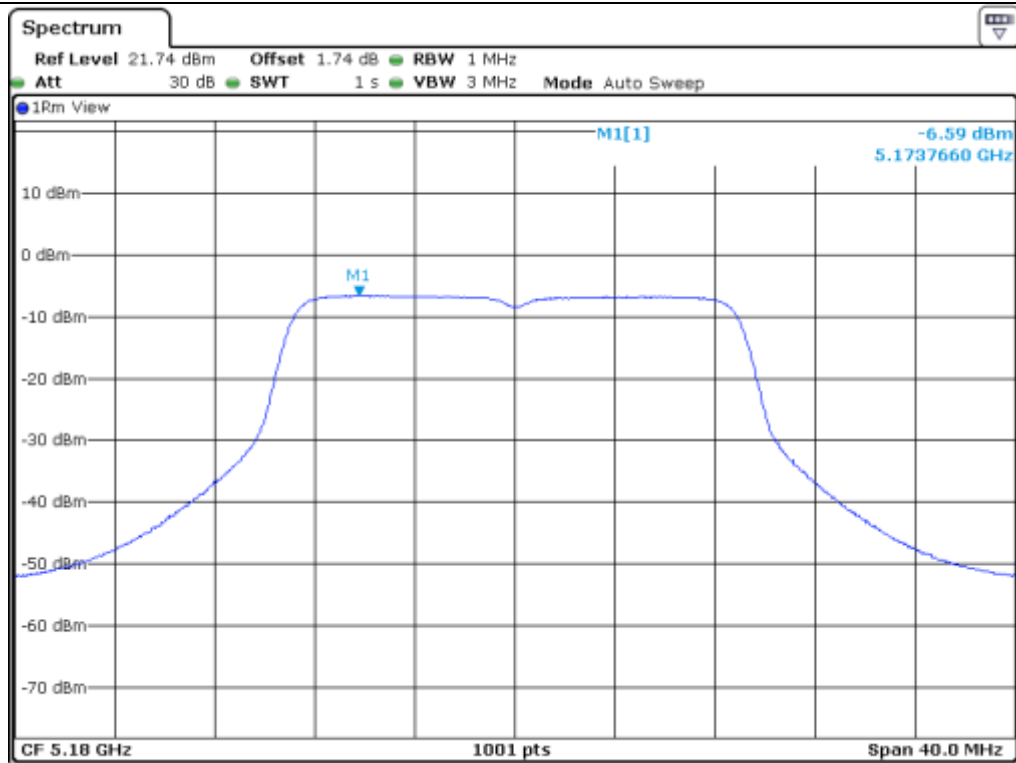
Remark: See next page for measurement data.

-. IC Test data

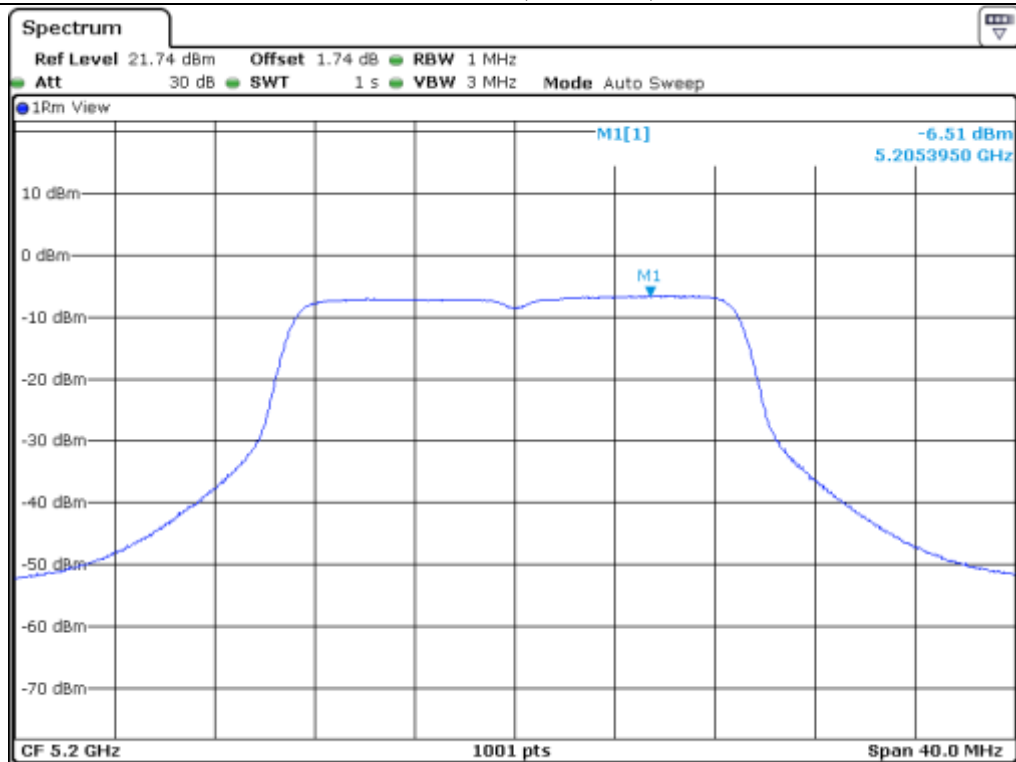
| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 180           | 6.533        | -6.59                | 10.00       | 10.06       | -0.06      |
|                       | Middle  | 5 200           |              | -6.51                | 10.00       | 9.98        | 0.02       |
|                       | High    | 5 240           |              | -6.79                | 10.00       | 10.26       | -0.26      |
| 5 725 ~ 5 825         | Low     | 5 745           | 6.415        | -6.32                | 29.59       | 35.91       | -          |
|                       | Middle  | 5 785           |              | 1.54                 | 29.59       | 28.05       | -          |
|                       | High    | 5 825           |              | -6.76                | 29.59       | 36.35       | -          |

Remark: See next page for measurement data.

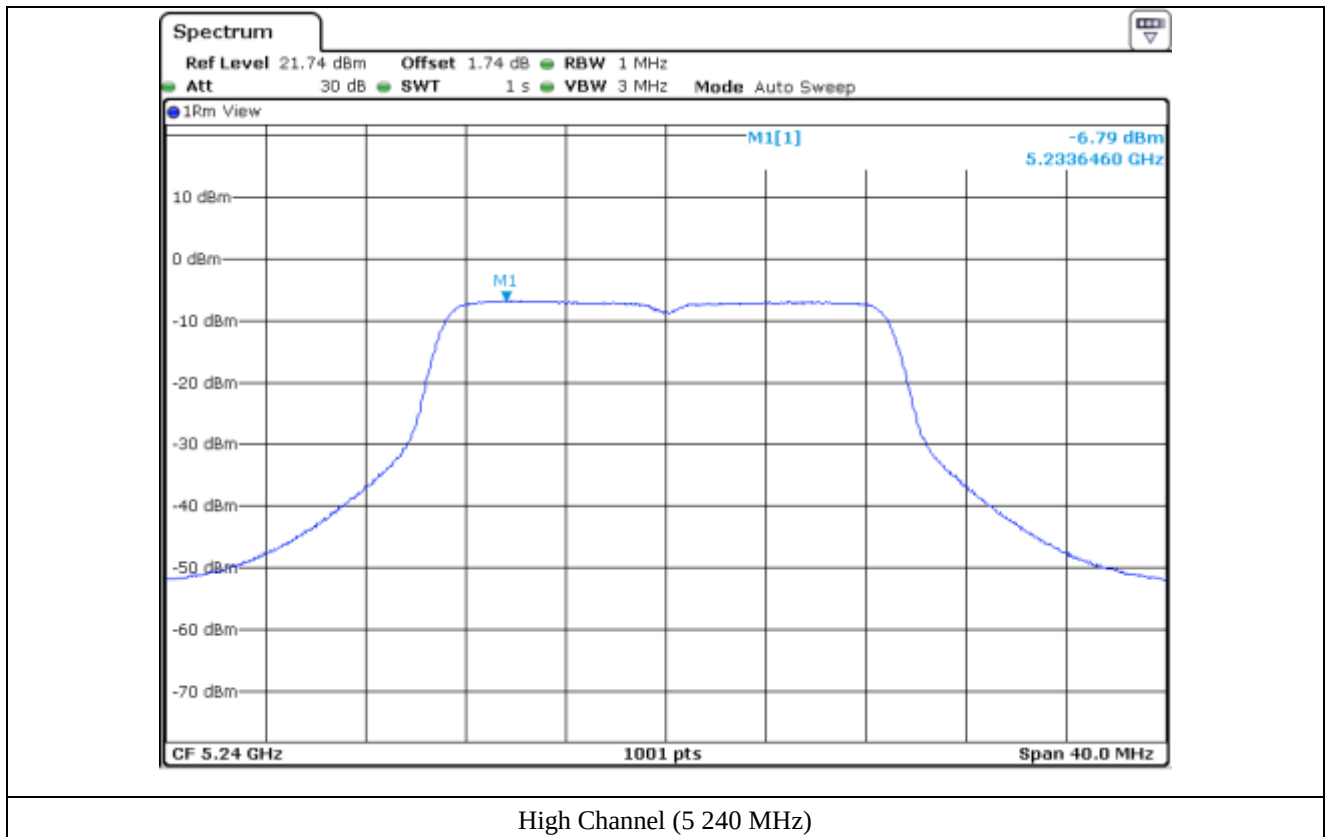
  
 Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 180 MHz)



Middle Channel (5 200 MHz)





Low Channel (5.745 MHz)



Middle Channel (5.785 MHz)



High Channel (5 825 MHz)

### 9.7.2 Test data for Antenna 1

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

#### -. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 180           | -6.94                | 16.47       | 23.41       |
|                       | Middle  | 5 200           | -6.73                | 16.47       | 23.20       |
|                       | High    | 5 240           | -6.60                | 16.47       | 23.07       |
| 5 725 ~ 5 850         | Low     | 5 745           | -6.58                | 29.59       | 36.17       |
|                       | Middle  | 5 785           | 1.78                 | 29.59       | 27.81       |
|                       | High    | 5 825           | -8.03                | 29.59       | 37.62       |

Remark: See next page for measurement data.

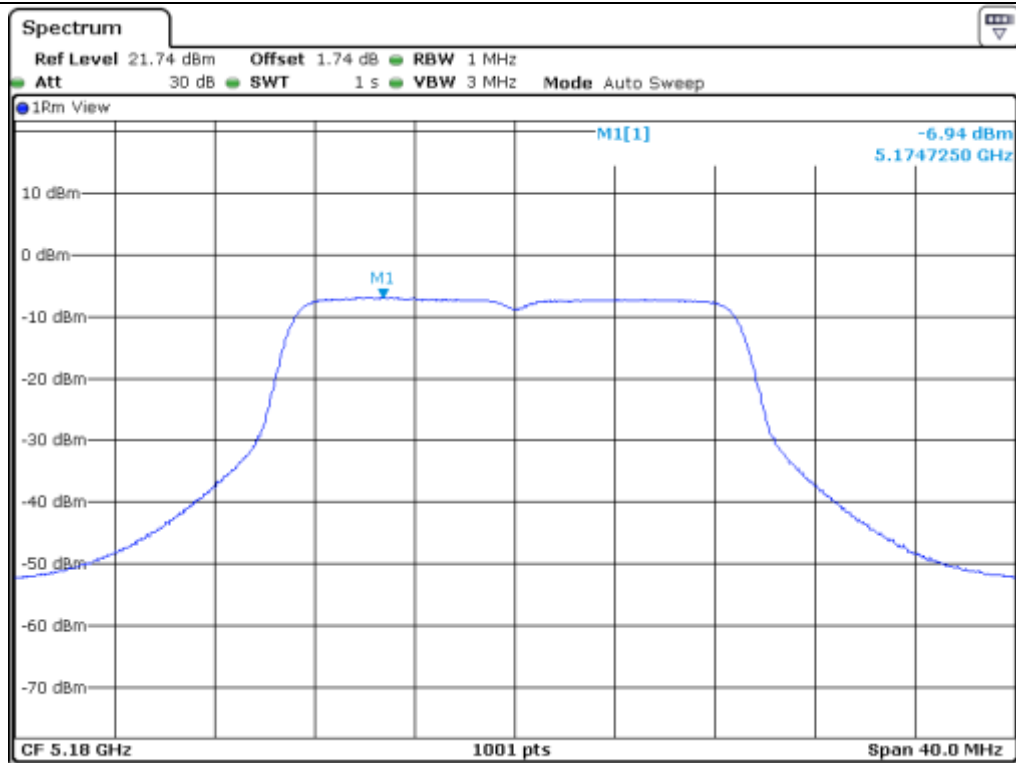
#### -. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 180           | 6.533        | -6.94                | 10.00       | 10.41       | -0.41      |
|                       | Middle  | 5 200           |              | -6.73                | 10.00       | 10.20       | -0.20      |
|                       | High    | 5 240           |              | -6.60                | 10.00       | 10.07       | -0.07      |
| 5 725 ~ 5 825         | Low     | 5 745           | 6.415        | -6.58                | 29.59       | 36.17       | -          |
|                       | Middle  | 5 785           |              | 1.78                 | 29.59       | 27.81       | -          |
|                       | High    | 5 825           |              | -8.03                | 29.59       | 37.62       | -          |

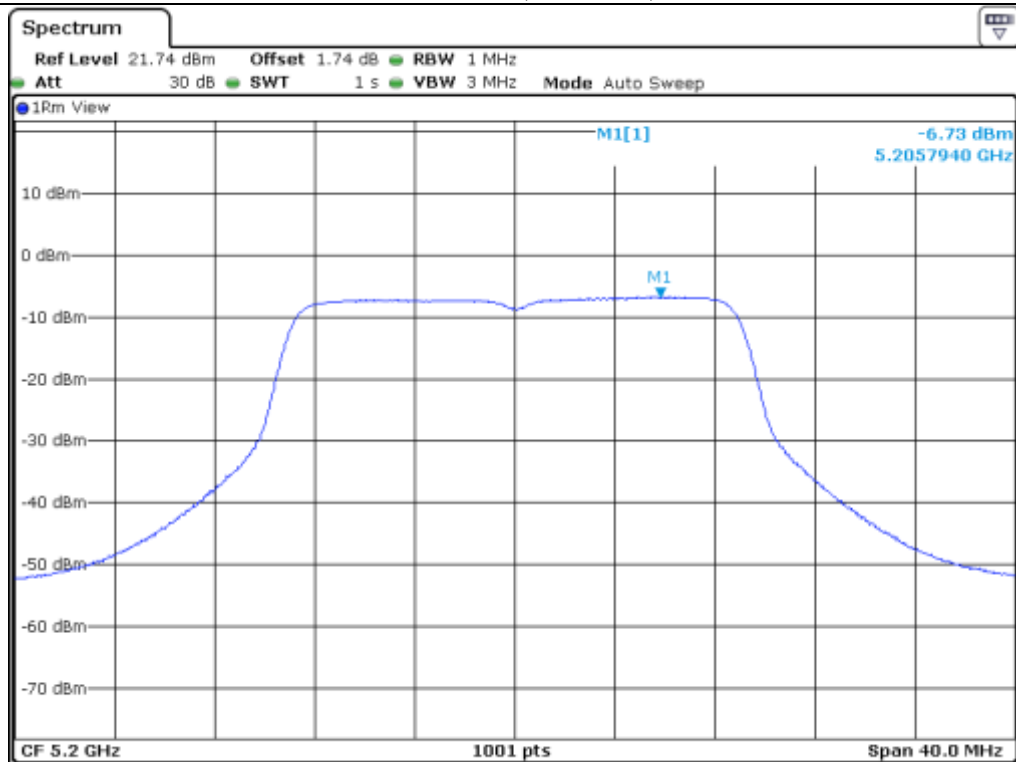
Remark: See next page for measurement data.



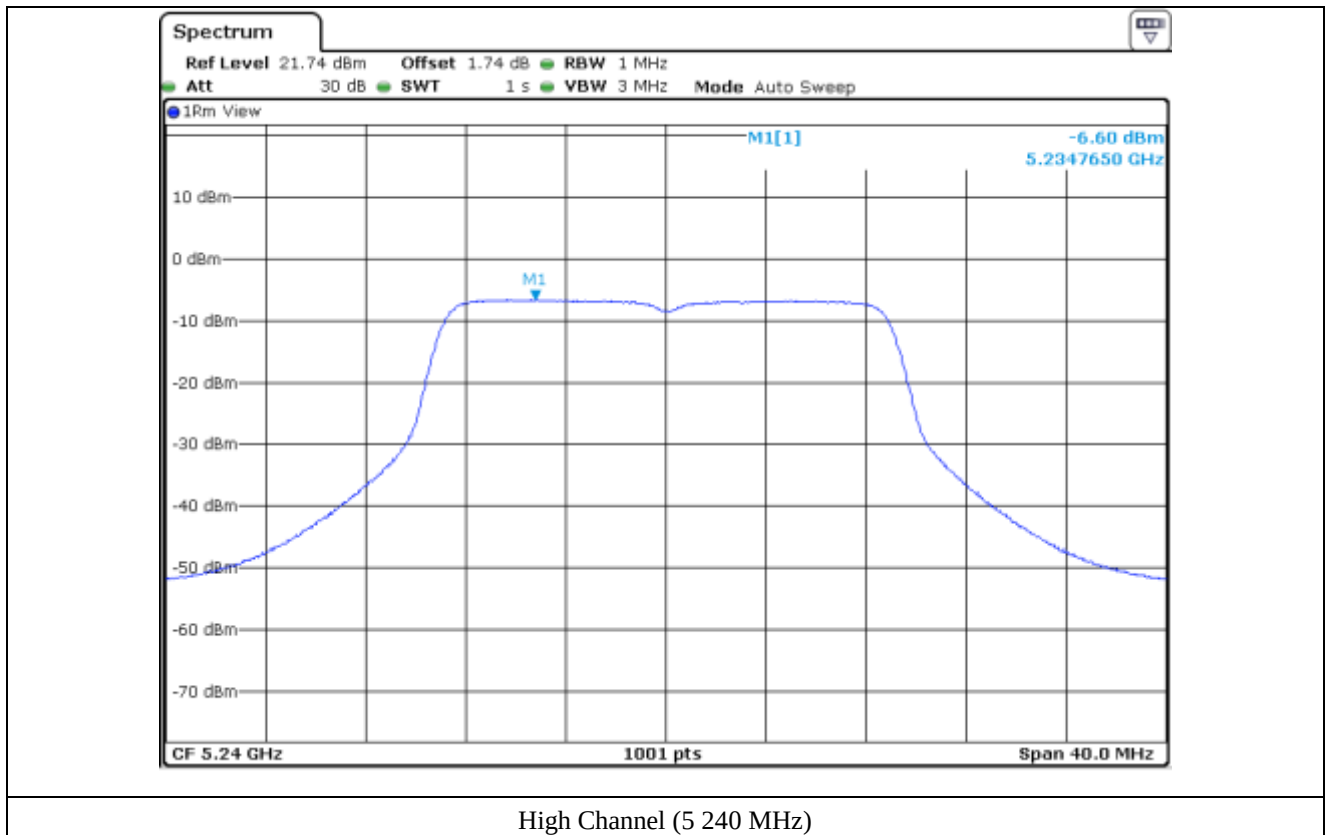
Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 180 MHz)



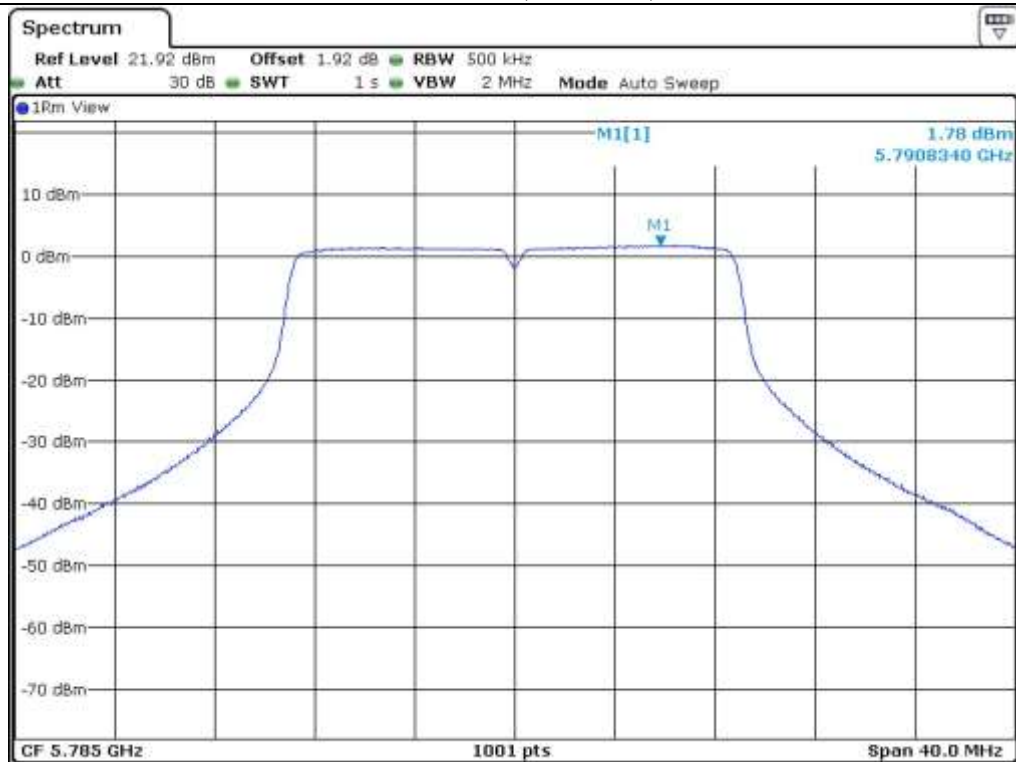
Middle Channel (5 200 MHz)



High Channel (5 240 MHz)



Low Channel (5.745 MHz)



Middle Channel (5.785 MHz)



High Channel (5 825 MHz)

### 9.7.3 Test data for Antenna 2

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

#### - FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 180           | -6.74                | 16.47       | 23.21       |
|                       | Middle  | 5 200           | -6.58                | 16.47       | 23.05       |
|                       | High    | 5 240           | -6.78                | 16.47       | 23.25       |
| 5 725 ~ 5 850         | Low     | 5 745           | -6.60                | 29.59       | 36.19       |
|                       | Middle  | 5 785           | 1.23                 | 29.59       | 28.36       |
|                       | High    | 5 825           | -7.33                | 29.59       | 36.92       |

Remark: See next page for measurement data.

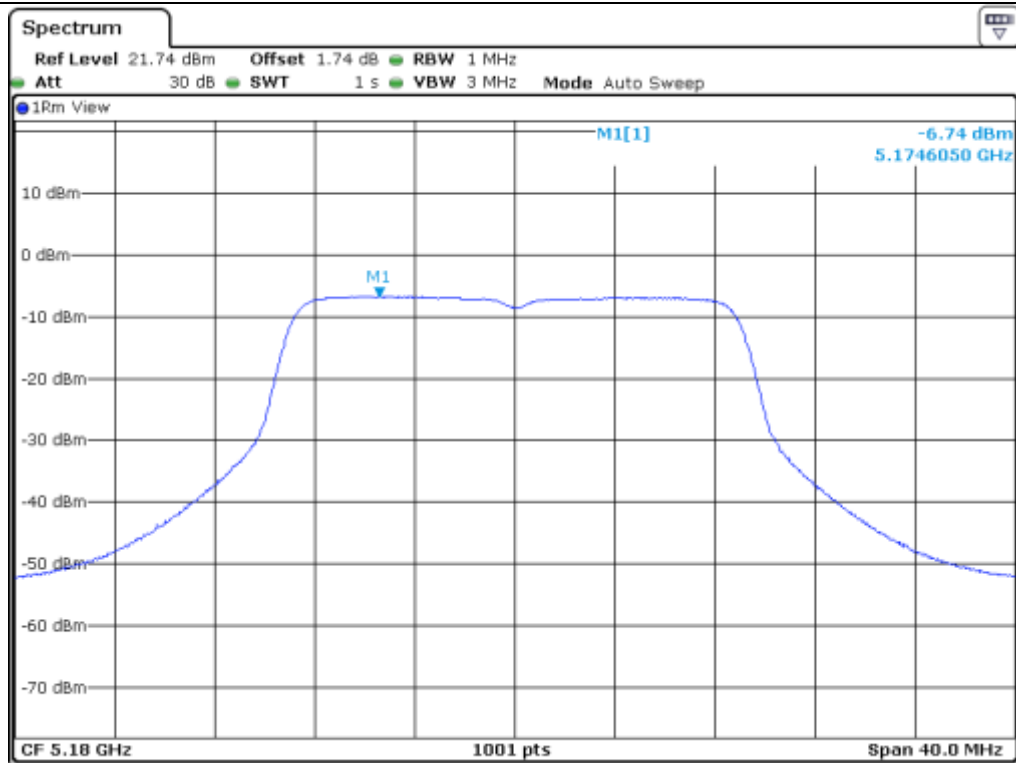
#### - IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 180           | 6.533        | -6.74                | 10.00       | 10.21       | -0.21      |
|                       | Middle  | 5 200           |              | -6.58                | 10.00       | 10.05       | -0.05      |
|                       | High    | 5 240           |              | -6.78                | 10.00       | 10.25       | -0.25      |
| 5 725 ~ 5 825         | Low     | 5 745           | 6.415        | -6.60                | 29.59       | 36.19       | -          |
|                       | Middle  | 5 785           |              | 1.23                 | 29.59       | 28.36       | -          |
|                       | High    | 5 825           |              | -7.33                | 29.59       | 36.92       | -          |

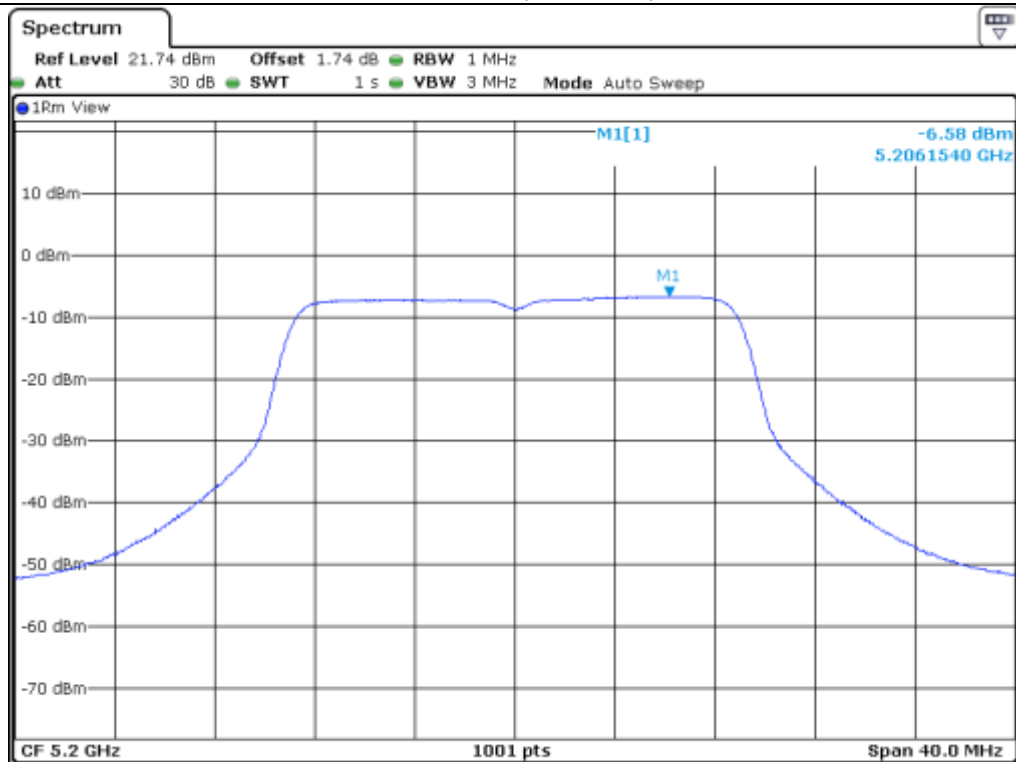
Remark: See next page for measurement data.



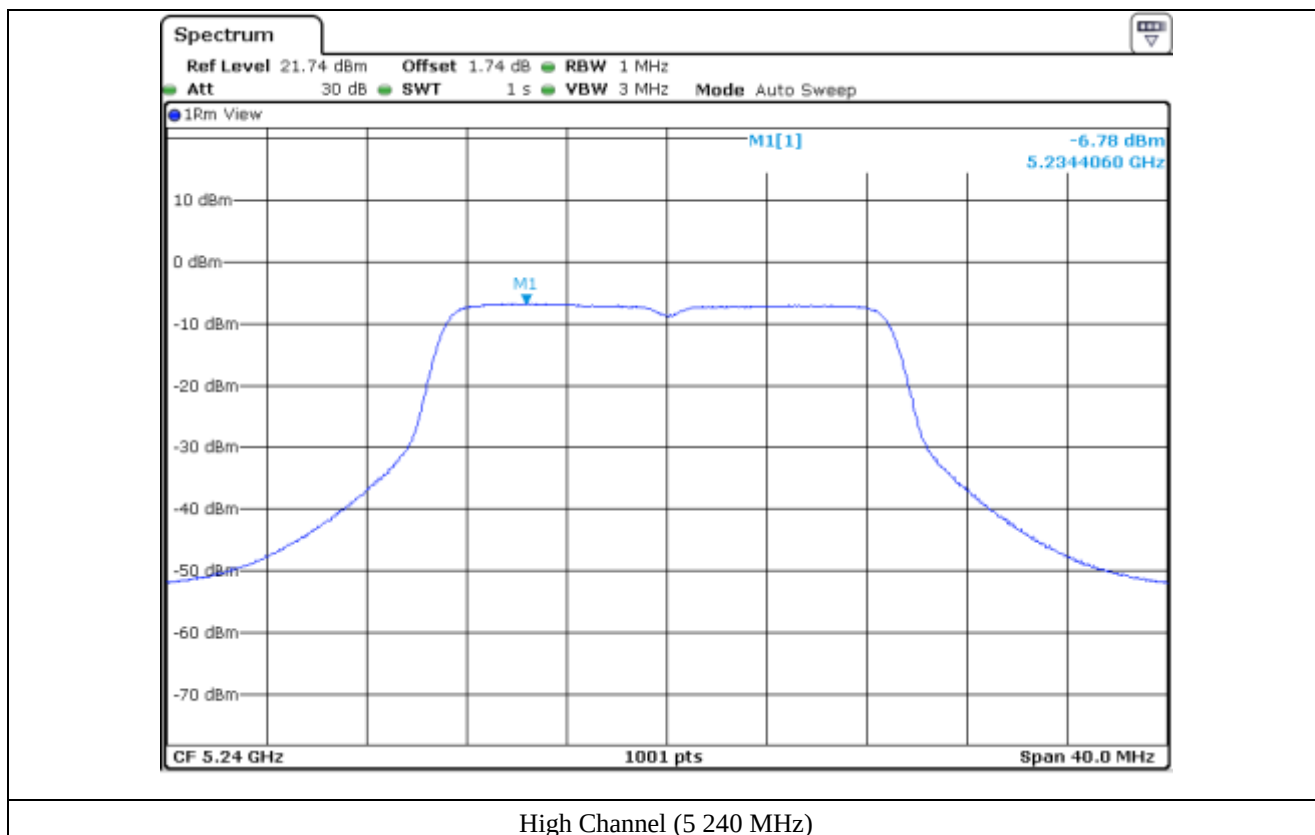
Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 180 MHz)



Middle Channel (5 200 MHz)





Low Channel (5 745 MHz)



Middle Channel (5 785 MHz)



High Channel (5 825 MHz)

#### 9.7.4 Test data for Multiple Transmit

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

##### -. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 180           | -1.98                | 11.70       | 13.68       |
|                       | Middle  | 5 200           | -1.83                | 11.70       | 13.53       |
|                       | High    | 5 240           | -1.95                | 11.70       | 13.65       |
| 5 725 ~ 5 850         | Low     | 5 745           | -1.73                | 24.81       | 26.54       |
|                       | Middle  | 5 785           | 6.29                 | 24.81       | 18.52       |
|                       | High    | 5 825           | -2.57                | 24.81       | 27.39       |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

##### -. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 180           | 11.304       | -1.98                | 10.00       | 0.68        | 9.32       |
|                       | Middle  | 5 200           |              | -1.83                | 10.00       | 0.53        | 9.47       |
|                       | High    | 5 240           |              | -1.95                | 10.00       | 0.65        | 9.35       |
| 5 725 ~ 5 825         | Low     | 5 745           | 11.186       | -1.73                | 24.81       | 26.54       | -          |
|                       | Middle  | 5 785           |              | 6.29                 | 24.81       | 18.52       | -          |
|                       | High    | 5 825           |              | -2.57                | 24.81       | 27.39       | -          |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$



Tested by: Jun-Hui, Lee / Senior Engineer

## 9.8 Test data for 802.11ac40 RLAN Mode

### 9.8.1 Test data for Antenna 0

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

-. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 190           | -9.19                | 16.47       | 25.66       |
|                       | High    | 5 230           | -9.27                | 16.47       | 25.74       |
| 5 725 ~ 5 850         | Low     | 5 755           | -11.04               | 29.59       | 40.63       |
|                       | High    | 5 795           | -11.56               | 29.59       | 41.15       |

Remark: See next page for measurement data.

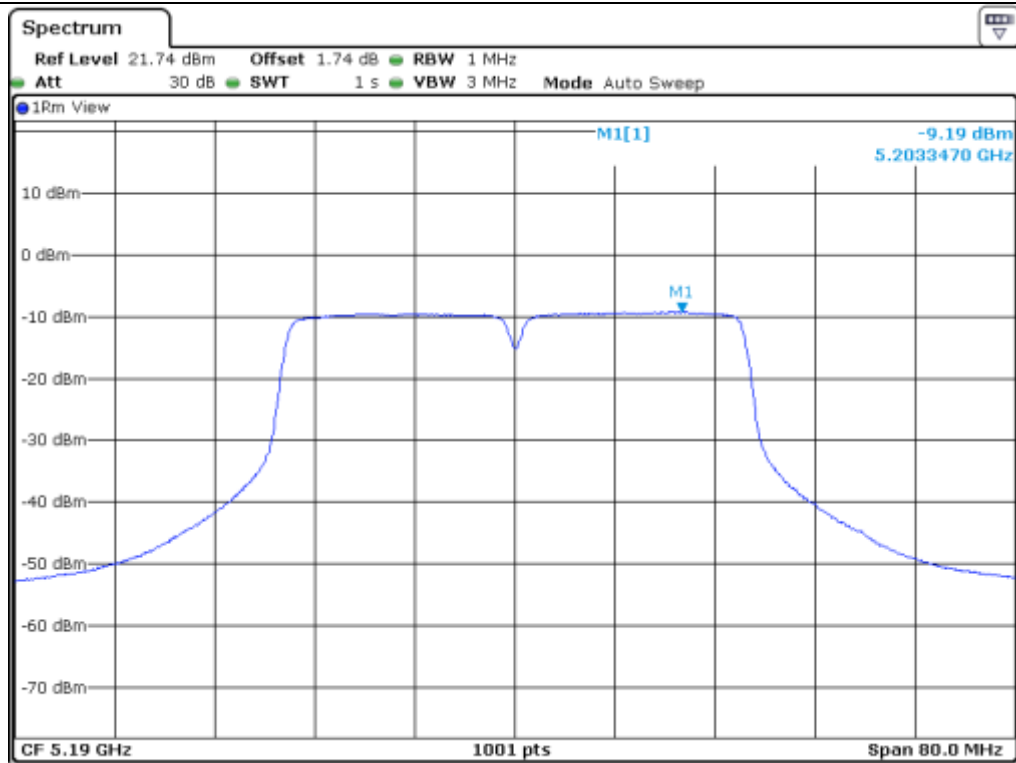
-. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 190           | 6.533        | -9.19                | 10.00       | 12.66       | -2.66      |
|                       | High    | 5 230           |              | -9.27                | 10.00       | 12.74       | -2.74      |
| 5 725 ~ 5 825         | Low     | 5 755           | 6.415        | -11.04               | 29.59       | 40.63       | -          |
|                       | High    | 5 795           |              | -11.56               | 29.59       | 41.15       | -          |

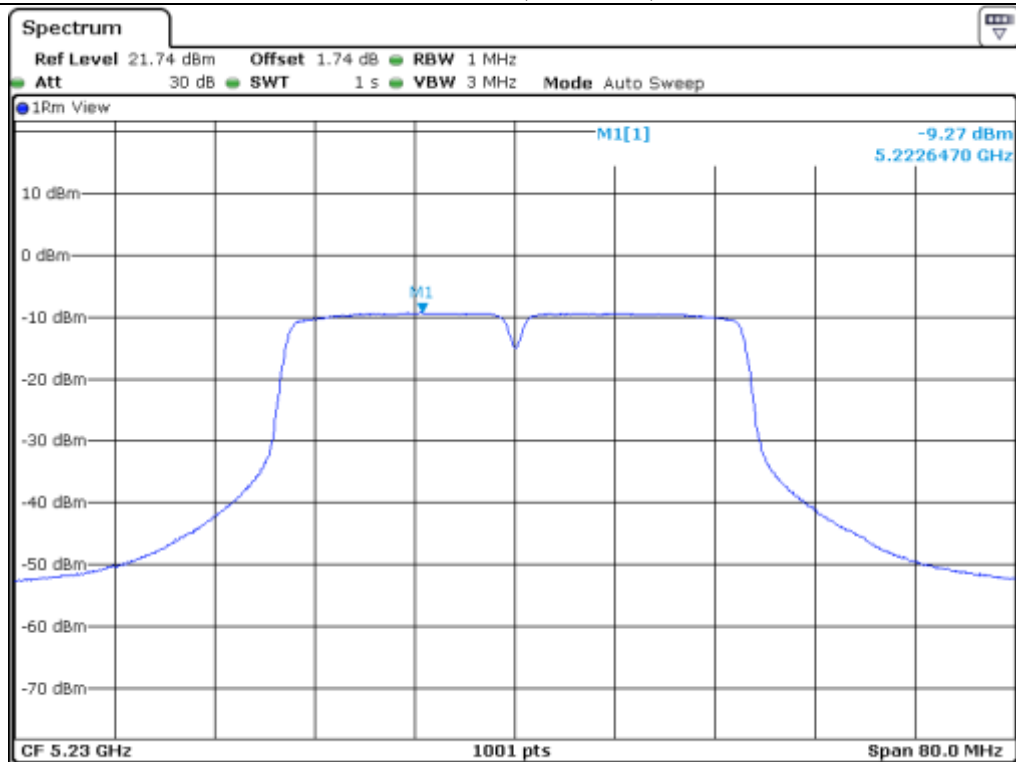
Remark: See next page for measurement data.



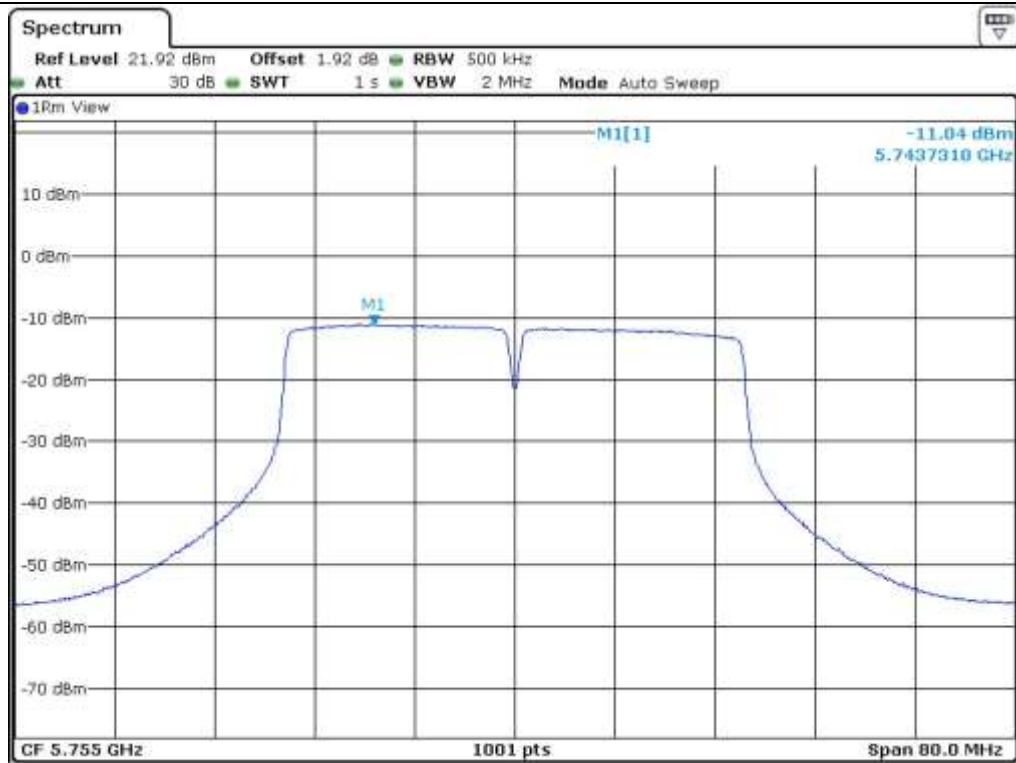
Tested by: Jun-Hui, Lee / Senior Engineer



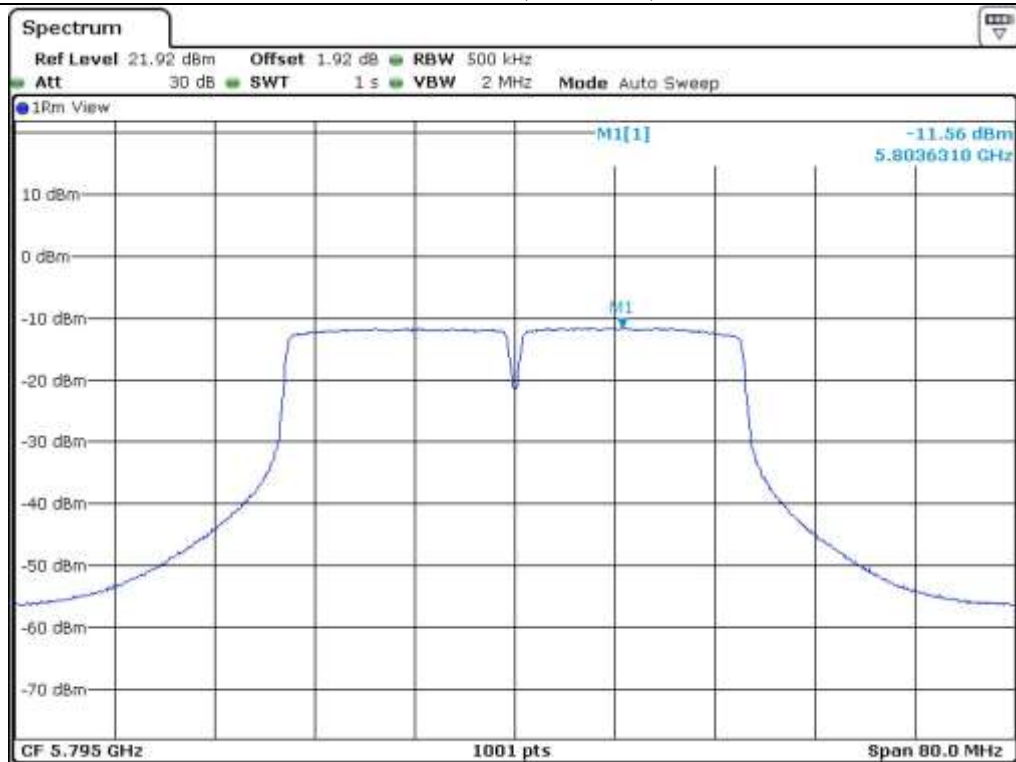
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5 755 MHz)



High Channel (5 795 MHz)

### 9.8.2 Test data for Antenna 1

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

#### - FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 190           | -9.59                | 16.47       | 26.06       |
|                       | High    | 5 230           | -9.02                | 16.47       | 25.49       |
| 5 725 ~ 5 850         | Low     | 5 755           | -11.37               | 29.59       | 40.96       |
|                       | High    | 5 795           | -11.84               | 29.59       | 41.43       |

Remark: See next page for measurement data.

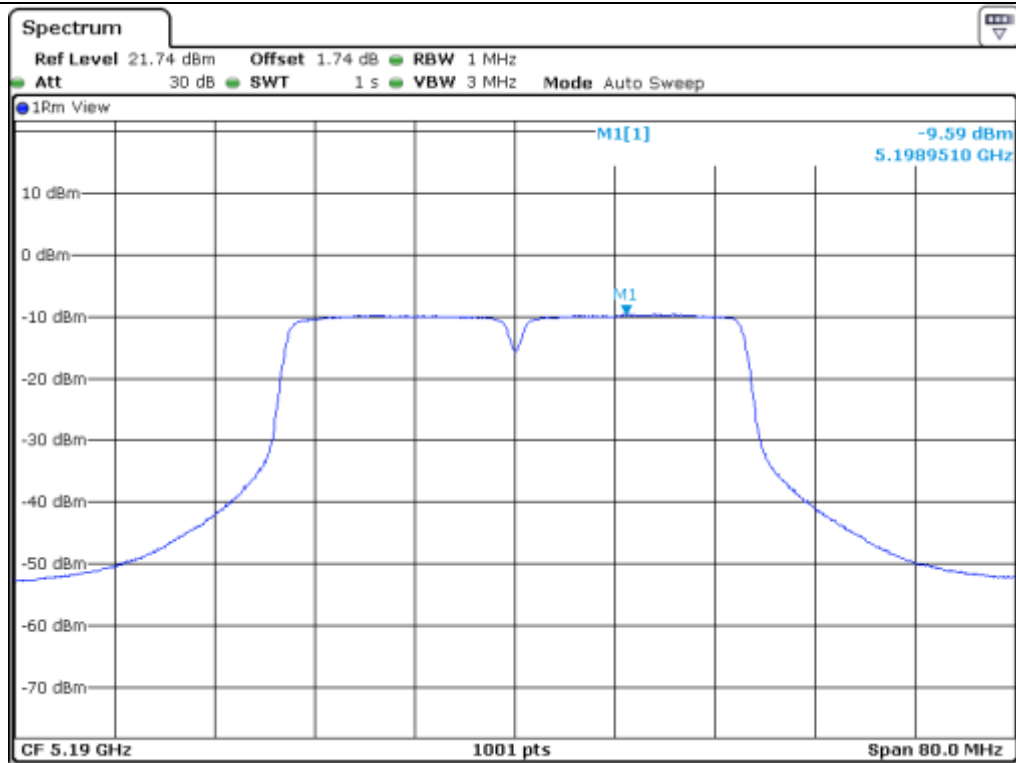
#### - IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 190           | 6.533        | -9.59                | 10.00       | 13.06       | -3.06      |
|                       | High    | 5 230           |              | -9.02                | 10.00       | 12.49       | -2.49      |
| 5 725 ~ 5 825         | Low     | 5 755           | 6.415        | -11.37               | 29.59       | 40.96       | -          |
|                       | High    | 5 795           |              | -11.84               | 29.59       | 41.43       | -          |

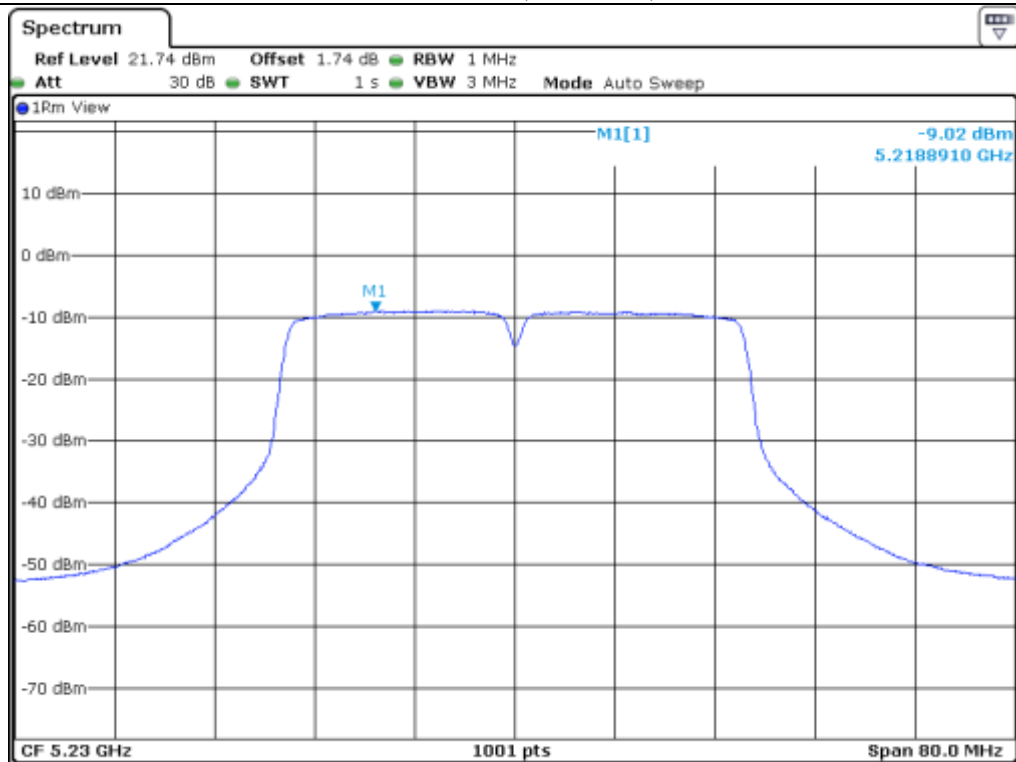
Remark: See next page for measurement data.



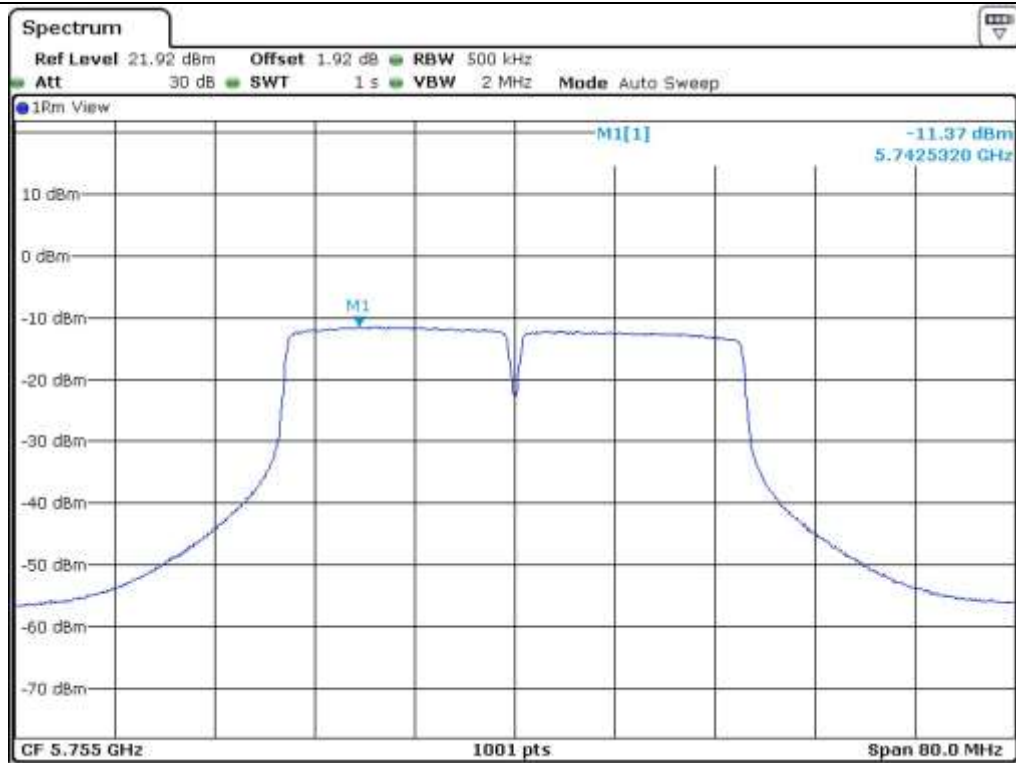
Tested by: Jun-Hui, Lee / Senior Engineer



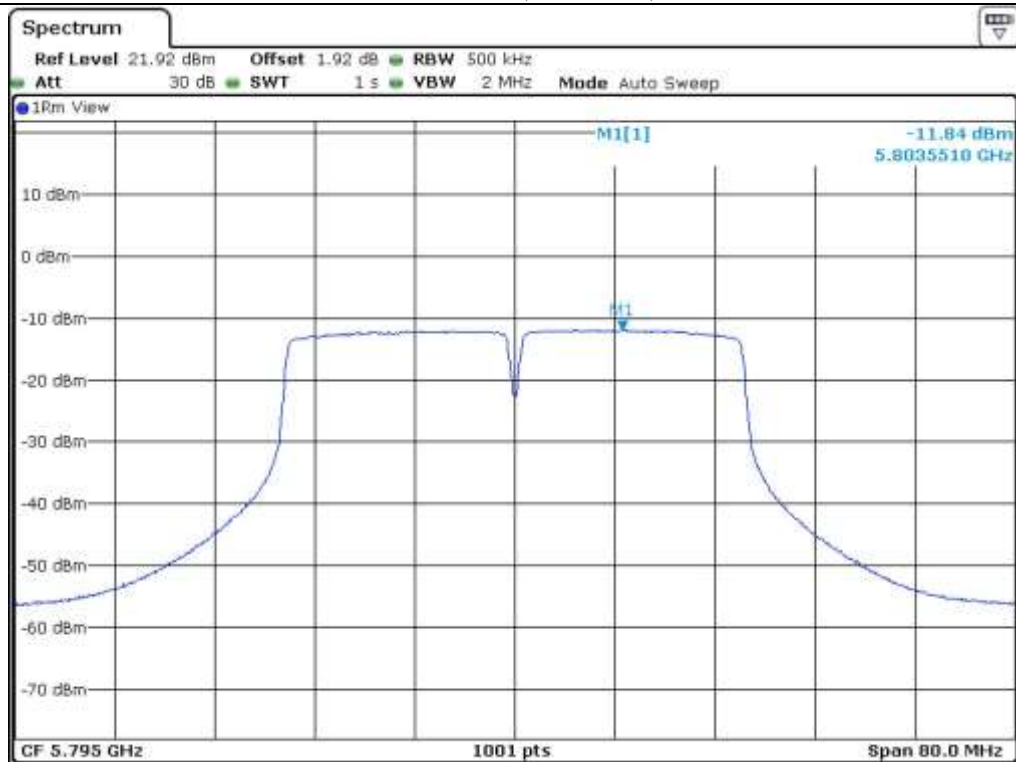
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5 755 MHz)



High Channel (5 795 MHz)

### 9.8.3 Test data for Antenna 2

-. Test Date : May 02, 2016  
 -. Operating condition : Highest Output Power Transmitting Mode  
 -. Test Result : Pass

-. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 190           | -9.47                | 16.47       | 25.94       |
|                       | High    | 5 230           | -9.14                | 16.47       | 25.61       |
| 5 725 ~ 5 850         | Low     | 5 755           | -11.22               | 29.59       | 40.81       |
|                       | High    | 5 795           | -12.08               | 29.59       | 41.67       |

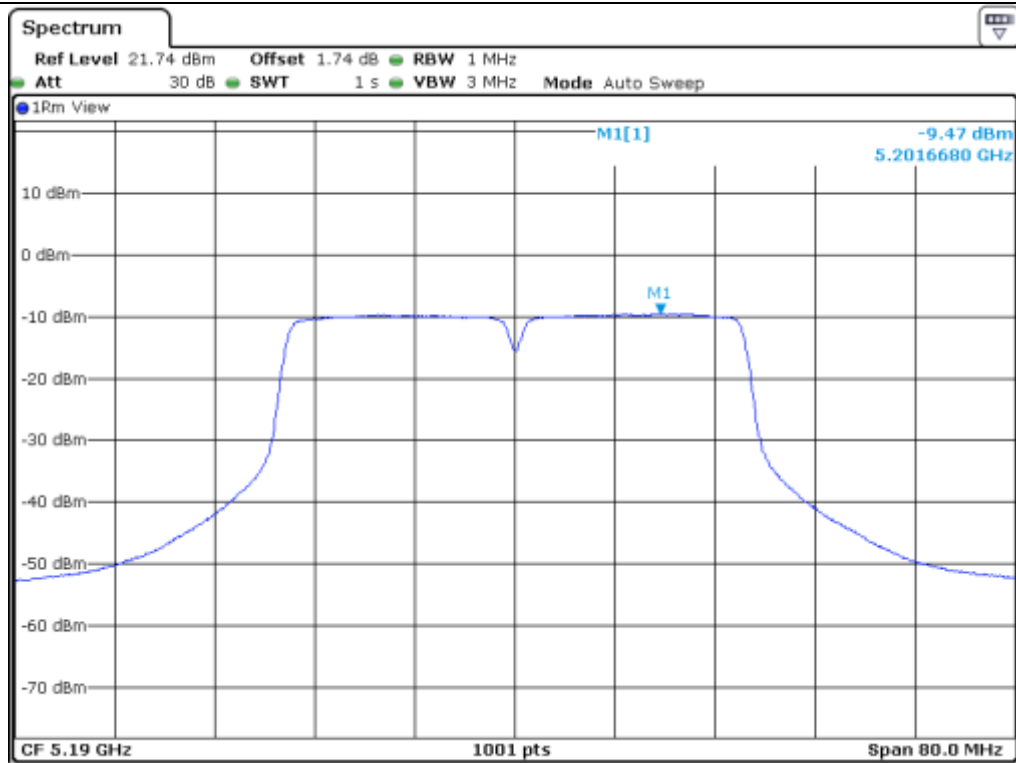
Remark: See next page for measurement data.

-. IC Test data

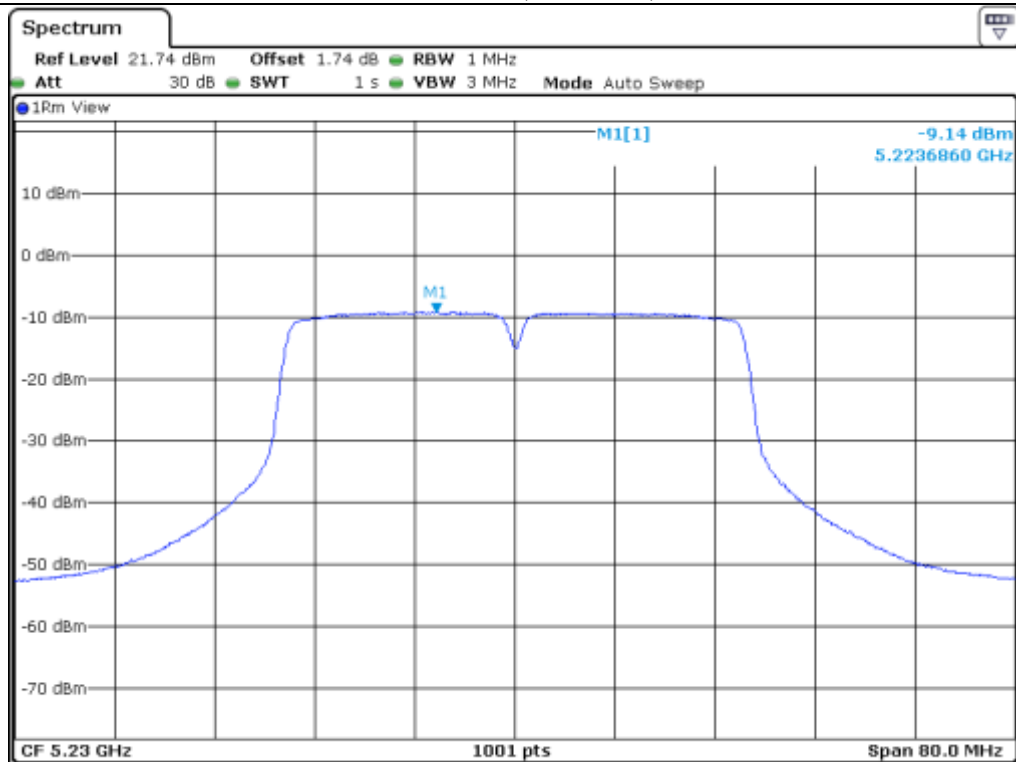
| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 190           | 6.533        | -9.47                | 10.00       | 12.94       | -2.94      |
|                       | High    | 5 230           |              | -9.14                | 10.00       | 12.61       | -2.61      |
| 5 725 ~ 5 825         | Low     | 5 755           | 6.415        | -11.22               | 29.59       | 40.81       | -          |
|                       | High    | 5 795           |              | -12.08               | 29.59       | 41.67       | -          |

Remark: See next page for measurement data.

  
 Tested by: Jun-Hui, Lee / Senior Engineer



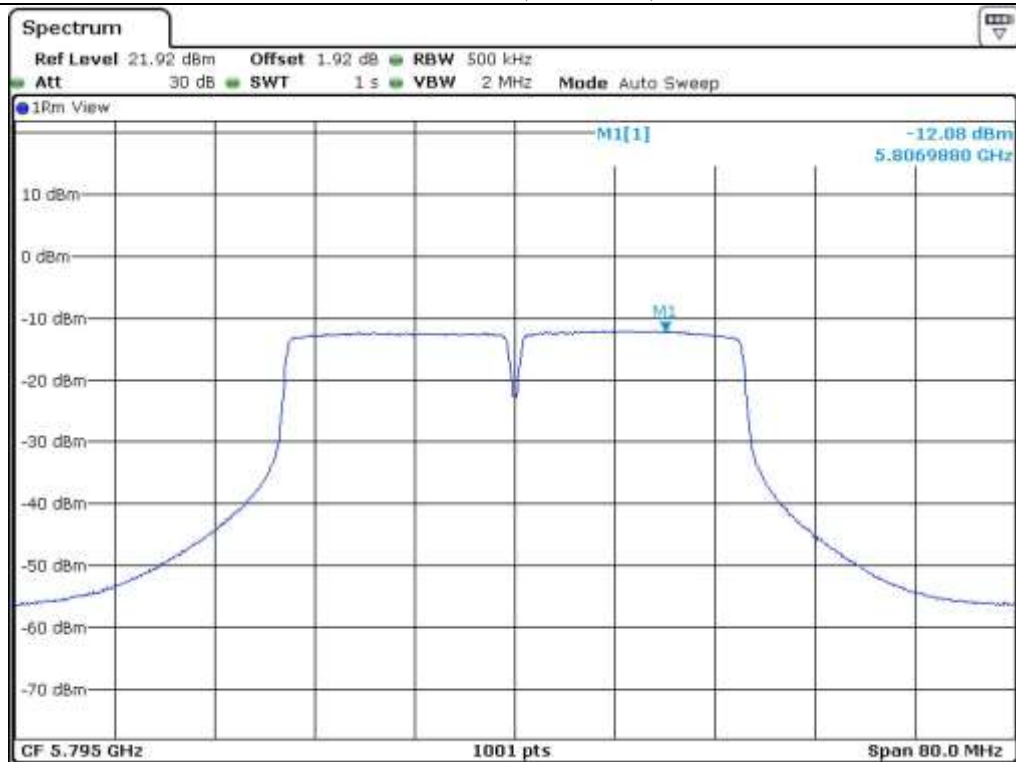
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5.755 MHz)



High Channel (5.795 MHz)

#### 9.8.4 Test data for Multiple transmit

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

##### -. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 190           | -4.64                | 11.70       | 16.34       |
|                       | High    | 5 230           | -4.37                | 11.70       | 16.07       |
| 5 725 ~ 5 850         | Low     | 5 755           | -6.44                | 24.81       | 31.25       |
|                       | High    | 5 795           | -7.05                | 24.81       | 31.86       |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

##### -. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 190           | 11.304       | -4.64                | 10.00       | 3.34        | 6.66       |
|                       | High    | 5 230           |              | -4.37                | 10.00       | 3.07        | 6.93       |
| 5 725 ~ 5 825         | Low     | 5 755           | 11.186       | -6.44                | 24.81       | 31.25       | -          |
|                       | High    | 5 795           |              | -7.05                | 24.81       | 31.86       | -          |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

Tested by: Jun-Hui, Lee / Senior Engineer

## 9.9 Test data for 802.11ac80 RLAN Mode

### 9.9.1 Test data for Antenna 0

-. Test Date : May 02, 2016  
 -. Operating condition : Highest Output Power Transmitting Mode  
 -. Test Result : Pass

-. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 210           | -7.90                | 16.47       | 24.37       |
| 5 725 ~ 5 850         | Low     | 5 775           | -10.39               | 29.59       | 39.98       |

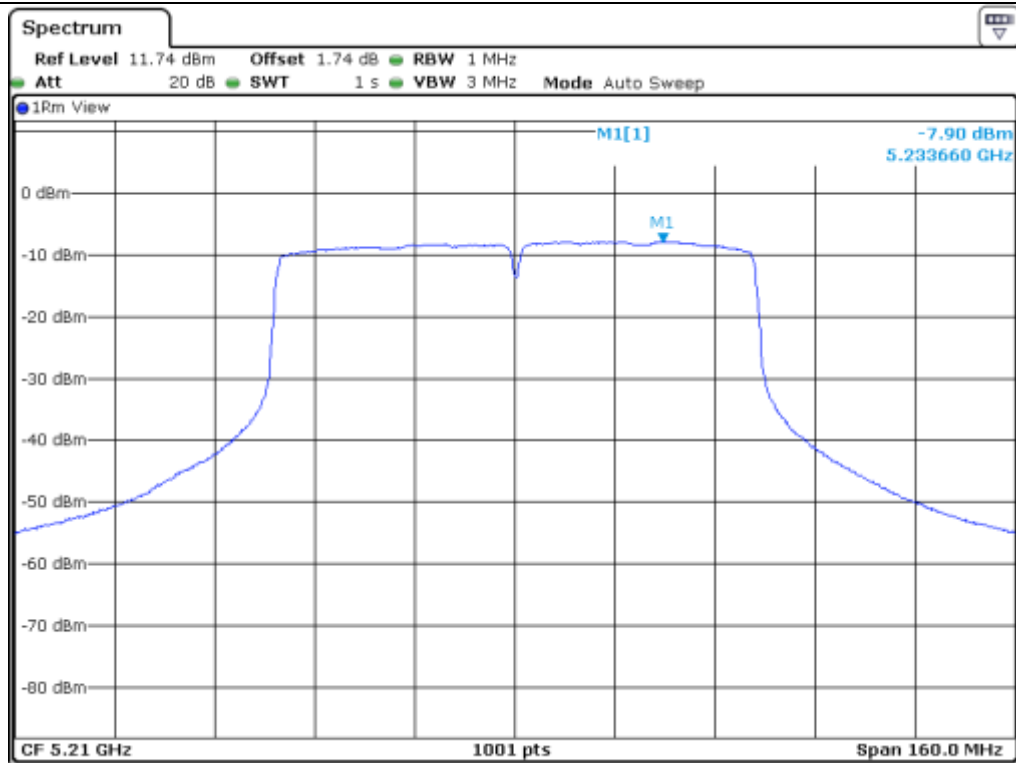
Remark: See next page for measurement data.

-. IC Test data

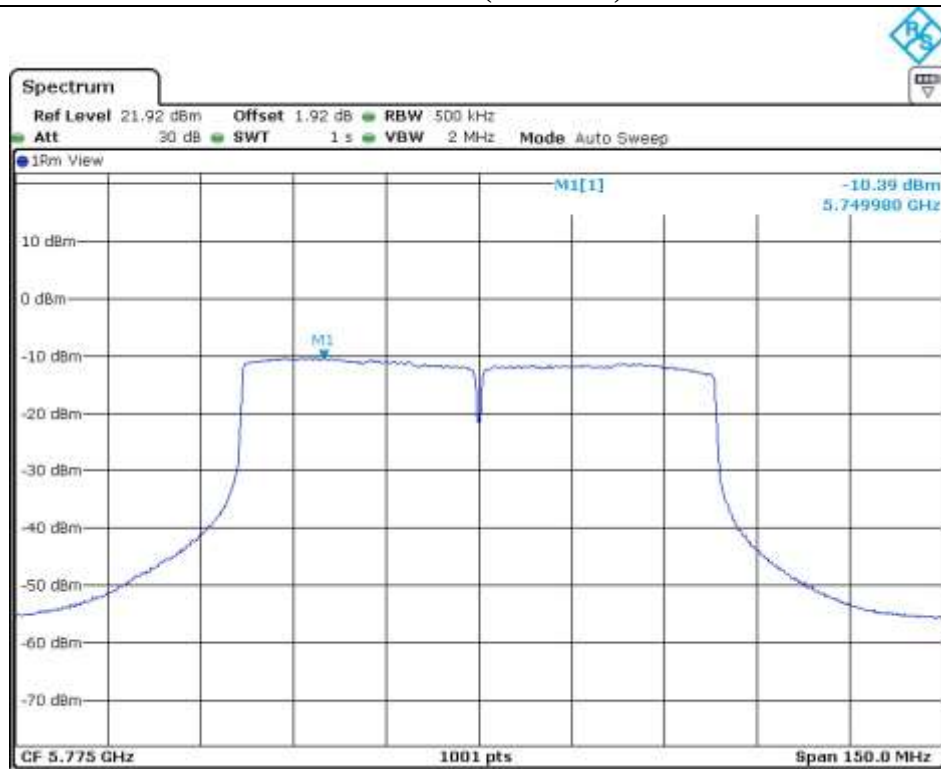
| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 210           | 6.533        | -7.90                | 10.00       | 11.37       | -1.37      |
| 5 725 ~ 5 825         | Low     | 5 775           | 6.415        | -10.39               | 29.59       | 39.98       | -          |

Remark: See next page for measurement data.

  
 Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 210 MHz)



Low Channel (5 775 MHz)

### 9.9.2 Test data for Antenna 1

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

#### -. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 210           | -8.49                | 16.47       | 24.96       |
| 5 725 ~ 5 850         | Low     | 5 775           | -10.82               | 29.59       | 40.41       |

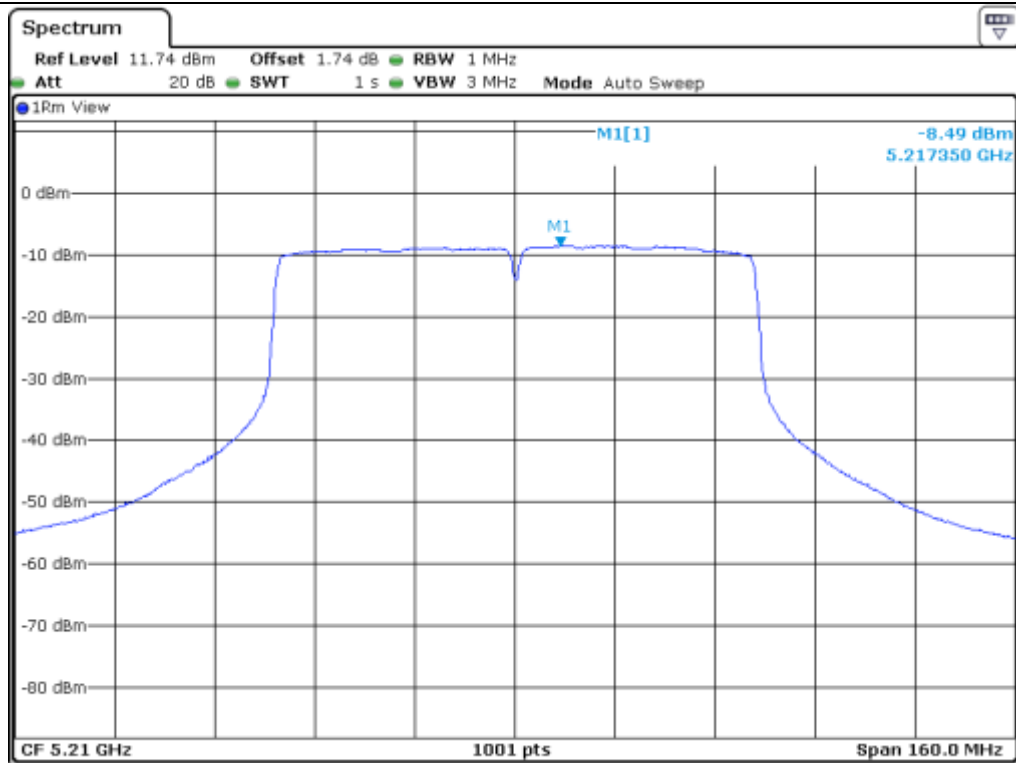
Remark: See next page for measurement data.

#### -. IC Test data

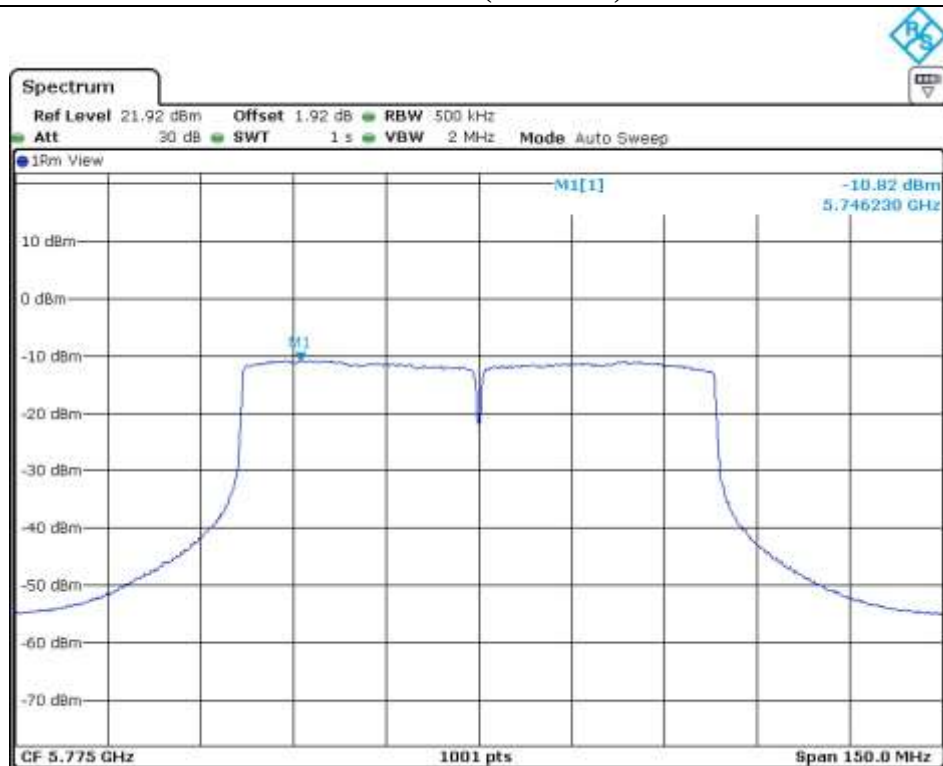
| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 210           | 6.533        | -8.49                | 10.00       | 11.96       | -1.96      |
| 5 725 ~ 5 825         | Low     | 5 775           | 6.415        | -10.82               | 29.59       | 40.41       | -          |

Remark: See next page for measurement data.

  
 Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 210 MHz)



Low Channel (5 775 MHz)

### 9.9.3 Test data for Antenna 2

-. Test Date : May 02, 2016  
 -. Operating condition : Highest Output Power Transmitting Mode  
 -. Test Result : Pass

-. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 210           | -8.43                | 16.47       | 24.90       |
| 5 725 ~ 5 850         | Low     | 5 775           | -10.09               | 29.59       | 39.68       |

Remark: See next page for measurement data.

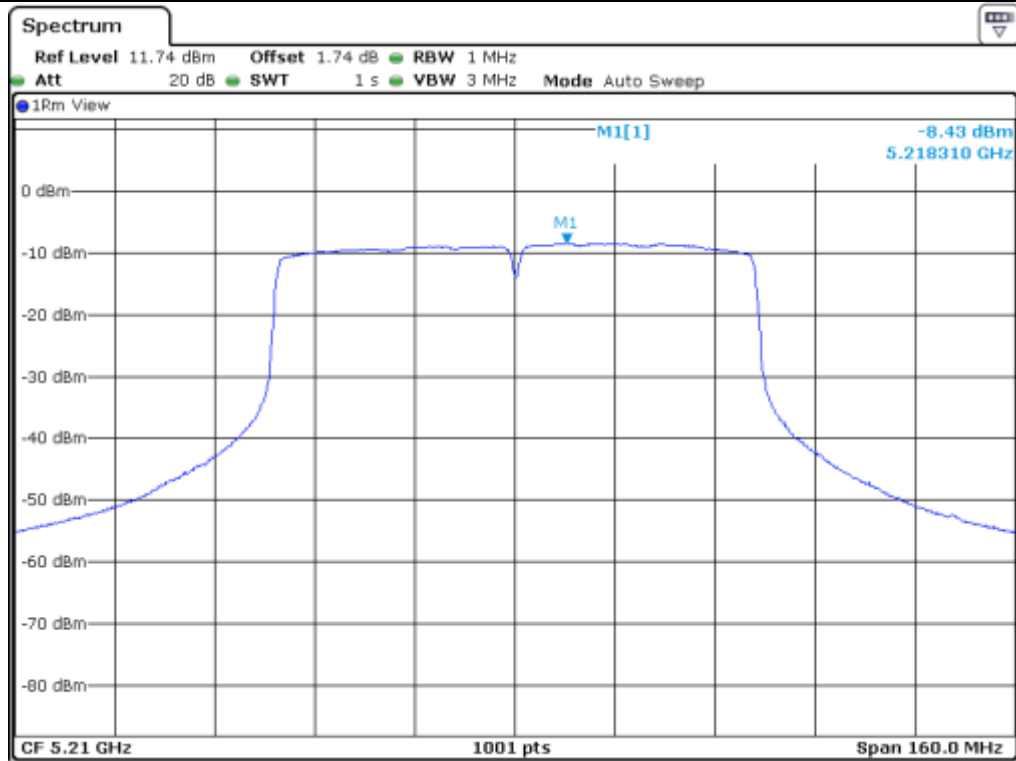
-. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 210           | 6.533        | -8.43                | 10.00       | 11.90       | -1.90      |
| 5 725 ~ 5 825         | Low     | 5 775           | 6.415        | -10.09               | 29.59       | 39.68       | -          |

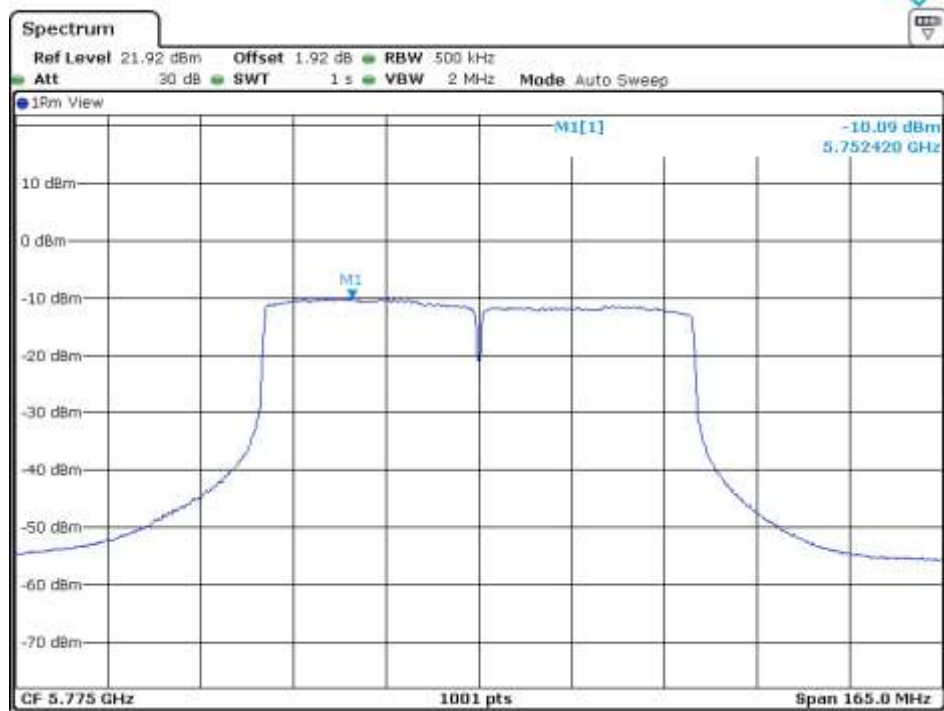
Remark: See next page for measurement data.



**Tested by: Jun-Hui, Lee / Senior Engineer**



Low Channel (5 210 MHz)



Low Channel (5 775 MHz)

#### 9.9.4 Test data for Multiple transmit

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

##### -. FCC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) |
|-----------------------|---------|-----------------|----------------------|-------------|-------------|
| 5 150 ~ 5 250         | Low     | 5 210           | -3.49                | 11.70       | 15.19       |
| 5 725 ~ 5 850         | Low     | 5 775           | -5.65                | 24.81       | 30.47       |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

##### -. IC Test data

| FREQUENCY RANGE (MHz) | CHANNEL | FREQUENCY (MHz) | Antenna Gain | MEASURED VLAUE (dBm) | LIMIT (dBm) | MARGIN (dB) | EIRP (dBm) |
|-----------------------|---------|-----------------|--------------|----------------------|-------------|-------------|------------|
| 5 150 ~ 5 250         | Low     | 5 210           | 11.304       | -3.49                | 10.00       | 2.19        | 7.81       |
| 5 725 ~ 5 825         | Low     | 5 775           | 11.186       | -5.65                | 24.81       | 30.47       | -          |

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density =  $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

  
Tested by: Jun-Hui, Lee / Senior Engineer

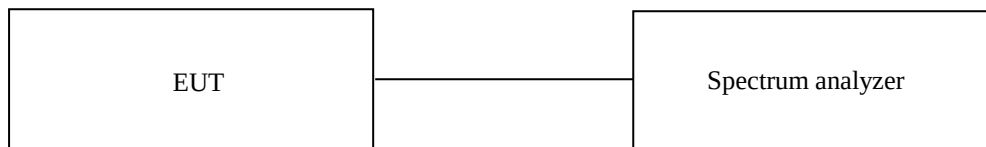
## 10. FREQUENCY STABILITY WITH TEMPERATURE VARIATION

### 10.1 Operating environment

Temperature : 22 °C  
Relative humidity : 57 % R.H.

### 10.2 Test set-up

Turn EUT off and set chamber temperature to -30 °C and then allow sufficient time (approximately 20 min to 30 min after chamber reach the assigned temperature) for EUT to stabilize. Turn on the EUT and measure the EUT operating frequency and then turn off the EUT after the measurement. The temperature in the chamber was raised 10 °C step from 0 °C to +65 °C. Repeat above method for frequency measurements every 10 °C step and then record all measured frequencies on each temperature step.



### 10.3 Test equipment used

|     | Model Number | Manufacturer    | Description                | Serial Number | Last Cal.(Interval) |
|-----|--------------|-----------------|----------------------------|---------------|---------------------|
| ■ - | FSV40        | Rohde & Schwarz | Signal Analyzer            | 101009        | Jul. 22, 2015 (1Y)  |
| ■ - | PSL-2KP      | ESPEC           | Environmental Test Chamber | 14009407      | Feb. 04, 2016 (1Y)  |
| ■ - | DH-60        | Dae Kwang Elec. | Slidacs                    | None          | Nov. 06, 2015 (1Y)  |

All test equipment used is calibrated on a regular basis.

#### 10.4 Test Data for 5 150 MHz ~ 5 250 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

| Temperature (°C) | Carrier Freq. (Hz) | Measured Freq. (Hz) | Frequency Error (kHz) |
|------------------|--------------------|---------------------|-----------------------|
| 5                | 5 180 000 000      | 5 179 985 413       | -14.587               |
| 10               |                    | 5 179 984 508       | -15.492               |
| 20               |                    | 5 179 983 841       | -16.159               |
| 30               |                    | 5 179 983 237       | -16.763               |
| 40               |                    | 5 179 982 725       | -17.275               |
| 5                | 5 190 000 000      | 5 189 985 433       | -14.567               |
| 10               |                    | 5 189 984 152       | -15.848               |
| 20               |                    | 5 189 983 468       | -16.532               |
| 30               |                    | 5 189 982 802       | -17.198               |
| 40               |                    | 5 189 982 381       | -17.619               |
| 5                | 5 210 000 000      | 5 209 984 161       | -15.839               |
| 10               |                    | 5 209 983 249       | -16.751               |
| 20               |                    | 5 209 982 674       | -17.326               |
| 30               |                    | 5 209 982 138       | -17.862               |
| 40               |                    | 5 209 981 784       | -18.216               |

| Temperature (°C) | Carrier Freq. (Hz) | Measured Freq. (Hz) | Frequency Error (kHz) |
|------------------|--------------------|---------------------|-----------------------|
| 5                | 5 220 000 000      | 5 219 983 618       | -16.382               |
| 10               |                    | 5 219 982 737       | -17.263               |
| 20               |                    | 5 219 982 089       | -17.911               |
| 30               |                    | 5 219 981 538       | -18.462               |
| 40               |                    | 5 219 981 036       | -18.964               |
| 5                | 5 230 000 000      | 5 229 983 962       | -16.038               |
| 10               |                    | 5 229 983 046       | -16.954               |
| 20               |                    | 5 229 982 346       | -17.654               |
| 30               |                    | 5 229 981 980       | -18.020               |
| 40               |                    | 5 229 981 412       | -18.588               |
| 5                | 5 240 000 000      | 5 239 983 634       | -16.366               |
| 10               |                    | 5 239 982 813       | -17.187               |
| 20               |                    | 5 239 982 294       | -17.706               |
| 30               |                    | 5 239 981 746       | -18.254               |
| 40               |                    | 5 239 981 185       | -18.815               |



Tested by: Jun-Hui, Lee / Senior Engineer

### 10.5 Test Data for 5 725 MHz ~ 5 850 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

| Temperature (°C) | Carrier Freq. (Hz) | Measured Freq. (Hz) | Frequency Error (kHz) |
|------------------|--------------------|---------------------|-----------------------|
| 5                | 5 745 000 000      | 5 744 981 227       | -18.773               |
| 10               |                    | 5 744 980 189       | -19.811               |
| 20               |                    | 5 744 979 565       | -20.435               |
| 30               |                    | 5 744 979 145       | -20.855               |
| 40               |                    | 5 744 978 657       | -21.343               |
| 5                | 5 755 000 000      | 5 754 980 936       | -19.064               |
| 10               |                    | 5 754 979 909       | -20.091               |
| 20               |                    | 5 754 979 305       | -20.695               |
| 30               |                    | 5 754 978 811       | -21.189               |
| 40               |                    | 5 754 978 356       | -21.644               |
| 5                | 5 775 000 000      | 5 774 980 483       | -19.517               |
| 10               |                    | 5 774 979 479       | -20.521               |
| 20               |                    | 5 774 978 838       | -21.162               |
| 30               |                    | 5 774 978 358       | -21.642               |
| 40               |                    | 5 774 977 901       | -22.099               |

| Temperature (°C) | Carrier Freq. (Hz) | Measured Freq. (Hz) | Frequency Error (kHz) |
|------------------|--------------------|---------------------|-----------------------|
| 5                | 5 785 000 000      | 5 784 979 943       | -20.057               |
| 10               |                    | 5 784 978 915       | -21.085               |
| 20               |                    | 5 784 978 311       | -21.689               |
| 30               |                    | 5 784 977 892       | -22.108               |
| 40               |                    | 5 784 977 409       | -22.591               |
| 5                | 5 795 000 000      | 5 794 979 890       | -20.110               |
| 10               |                    | 5 794 978 857       | -21.143               |
| 20               |                    | 5 794 978 208       | -21.792               |
| 30               |                    | 5 794 977 804       | -22.196               |
| 40               |                    | 5 794 977 356       | -22.644               |
| 5                | 5 825 000 000      | 5 824 980 107       | -19.893               |
| 10               |                    | 5 824 979 067       | -20.933               |
| 20               |                    | 5 824 978 443       | -21.557               |
| 30               |                    | 5 824 977 948       | -22.052               |
| 40               |                    | 5 824 977 448       | -22.552               |



Tested by: Jun-Hui, Lee / Senior Engineer

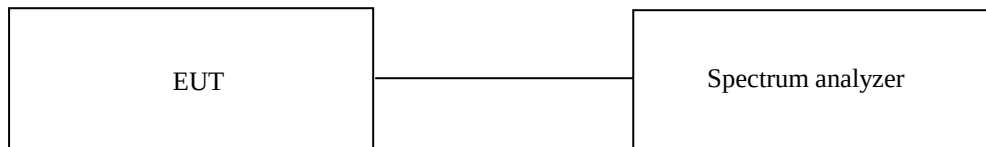
## 11. FREQUENCY STABILITY WITH VOLTAGE VARIATION

### 11.1 Operating environment

Temperature : 22 °C  
Relative humidity : 57 % R.H.

### 11.2 Test set-up

A Slidacs was connected to the input of the EUT. The voltage of EUT set to 115 % of the nominal value and then was reduced to 85 % of nominal voltage. The output frequency was recorded at each step.



### 11.3 Test equipment used

|     | Model Number | Manufacturer    | Description     | Serial Number | Last Cal.(Interval) |
|-----|--------------|-----------------|-----------------|---------------|---------------------|
| ■ - | FSV40        | Rohde & Schwarz | Signal Analyzer | 101009        | Jul. 22, 2015 (1Y)  |
| ■ - | DH-60        | Dae Kwang Elec. | Slidacs         | None          | Nov. 06, 2015 (1Y)  |

All test equipment used is calibrated on a regular basis.

#### 11.4 Test Data for 5 150 MHz ~ 5 250 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

| Voltage (Vac) | Carrier Freq. (Hz) | Measured Freq. (Hz) | Frequency Error (kHz) |
|---------------|--------------------|---------------------|-----------------------|
| 138           | 5 180 000 000      | 5 179 983 773       | -16.227               |
| 120           |                    | 5 179 983 841       | -16.159               |
| 102           |                    | 5 179 983 965       | -16.035               |
| 138           | 5 190 000 000      | 5 189 983 364       | -16.636               |
| 120           |                    | 5 189 983 468       | -16.532               |
| 102           |                    | 5 189 983 514       | -16.486               |
| 138           | 5 210 000 000      | 5 209 982 639       | -17.361               |
| 120           |                    | 5 209 982 674       | -17.326               |
| 102           |                    | 5 209 982 799       | -17.201               |
| 138           | 5 220 000 000      | 5 219 981 959       | -18.041               |
| 120           |                    | 5 219 982 089       | -17.911               |
| 102           |                    | 5 219 982 174       | -17.826               |
| 138           | 5 230 000 000      | 5 229 982 214       | -17.786               |
| 120           |                    | 5 229 982 346       | -17.654               |
| 102           |                    | 5 229 982 370       | -17.63                |
| 138           | 5 240 000 000      | 5 239 982 231       | -17.769               |
| 120           |                    | 5 239 982 294       | -17.706               |
| 102           |                    | 5 239 982 401       | -17.599               |

Tested by: Jun-Hui, Lee / Senior Engineer

### 11.5 Test Data for 5 725 MHz ~ 5 850 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

| Voltage (Vac) | Carrier Freq. (Hz) | Measured Freq. (Hz) | Frequency Error (kHz) |
|---------------|--------------------|---------------------|-----------------------|
| 138           | 5 745 000 000      | 5 744 979 492       | -20.508               |
| 120           |                    | 5 744 979 565       | -20.435               |
| 102           |                    | 5 744 979 585       | -20.415               |
| 138           | 5 755 000 000      | 5 754 979 259       | -20.741               |
| 120           |                    | 5 754 979 305       | -20.695               |
| 102           |                    | 5 754 979 411       | -20.589               |
| 138           | 5 775 000 000      | 5 774 978 759       | -21.241               |
| 120           |                    | 5 774 978 838       | -21.162               |
| 102           |                    | 5 774 978 971       | -21.029               |
| 138           | 5 785 000 000      | 5 784 978 290       | -21.71                |
| 120           |                    | 5 784 978 311       | -21.689               |
| 102           |                    | 5 784 978 428       | -21.572               |
| 138           | 5 795 000 000      | 5 794 978 113       | -21.887               |
| 120           |                    | 5 794 978 208       | -21.792               |
| 102           |                    | 5 794 978 257       | -21.743               |
| 138           | 5 825 000 000      | 5 824 978 412       | -21.588               |
| 120           |                    | 5 824 978 443       | -21.557               |
| 102           |                    | 5 824 978 480       | -21.52                |

Tested by: Jun-Hui, Lee / Senior Engineer

## 12. RADIATED SPURIOUS EMISSIONS

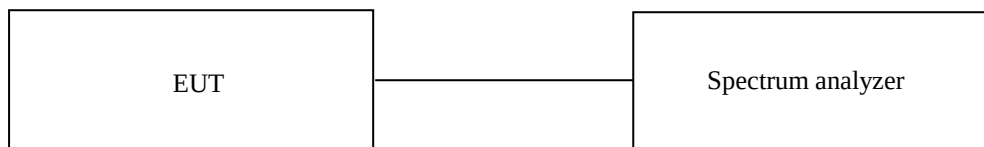
### 12.1 Operating environment

Temperature : (23 ~ 24) °C  
Relative humidity : (46 ~ 47) % R.H.

### 12.2 Test set-up for conducted measurement

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The frequency spectrum from 30 MHz to 40 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



### 12.3 Test equipment used

|     | Model Number | Manufacturer      | Description              | Serial Number | Last Cal.(Interval) |
|-----|--------------|-------------------|--------------------------|---------------|---------------------|
| ■ - | FSV40        | Rohde & Schwarz   | Signal Analyzer          | 101009        | Jul. 22, 2015 (1Y)  |
| ■ - | ESCI         | Rohde & Schwarz   | Test Receiver            | 101012        | Nov. 02, 2015 (1Y)  |
| ■ - | 310N         | Sonoma Instrument | Pre-Amplifier            | 312544        | Apr. 05, 2016 (1Y)  |
| ■ - | SCU-18       | Rohde & Schwarz   | Pre-Amplifier            | 10041         | Nov. 23, 2015 (1Y)  |
| ■ - | SCU40A       | Rohde & Schwarz   | Pre-Amplifier            | 100436        | Jun. 10, 2015 (1Y)  |
| ■ - | DT3000       | Innco System      | Turn Table               | 930611        | N/A                 |
| ■ - | MA4000-EP    | Innco System      | Antenna Master           | 3320611       | N/A                 |
| ■ - | VULB9163     | Schwarzbeck       | TRILOG Broadband Antenna | 9163-421      | Jul. 10, 2014 (2Y)  |
| ■ - | BBHA9120D    | Schwarzbeck       | Horn Antenna             | BBHA9120D295  | Aug. 31, 2015 (2Y)  |
| ■ - | BBHA9170     | Schwarzbeck       | Horn Antenna             | BBHA9170178   | Aug. 31, 2015 (2Y)  |

All test equipment used is calibrated on a regular basis.

## 12.4 Test data for Frequency 5 150 band

### 12.4.1 Test data for 802.11a RLAN Mode

#### 12.4.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

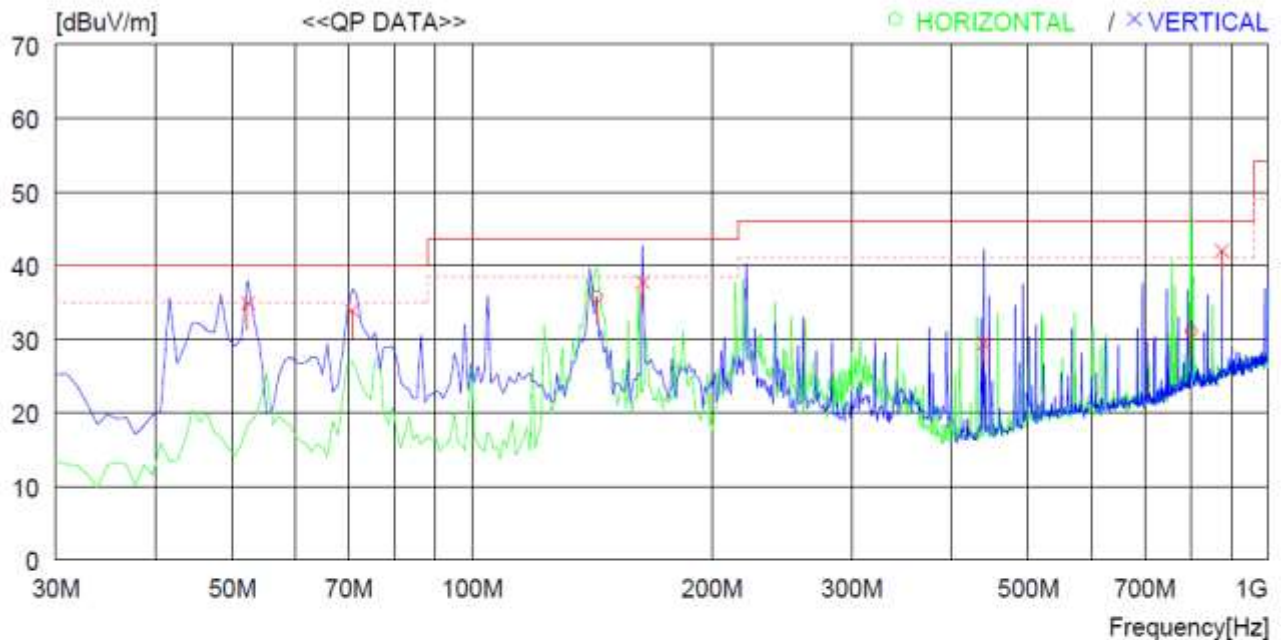
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 143.490 | 57.3    | 8.2    | 3.2  | 33.0 | 35.7     | 43.5     | 7.8    | 100     | 0     |
| 2                      | 802.112 | 35.4    | 20.9   | 8.0  | 33.3 | 31.0     | 46.0     | 15.0   | 200     | 248   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 3                      | 52.310  | 52.3    | 13.6   | 2.0  | 33.0 | 34.9     | 40.0     | 5.1    | 100     | 58    |
| 4                      | 70.740  | 55.0    | 9.6    | 2.3  | 33.1 | 33.8     | 40.0     | 6.2    | 200     | 110   |
| 5                      | 163.860 | 58.4    | 8.8    | 3.4  | 32.9 | 37.7     | 43.5     | 5.8    | 200     | 0     |
| 6                      | 439.341 | 40.1    | 16.4   | 5.7  | 32.8 | 29.4     | 46.0     | 16.6   | 100     | 19    |
| 7                      | 875.830 | 44.9    | 21.9   | 8.3  | 33.1 | 42.0     | 46.0     | 4.0    | 100     | 359   |

#### 12.4.1.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.4.1.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 10 360.00          | 41.70             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 54.10             | 73.98              | 19.88          |
|                    | 32.24             | Average          | H                  |                |               |             | 44.64             | 53.98              | 9.34           |
|                    | 43.47             | Peak             | V                  |                |               |             | 55.87             | 73.98              | 18.11          |
|                    | 32.51             | Average          | V                  |                |               |             | 44.91             | 53.98              | 9.07           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 10 400.00          | 42.14             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 54.54             | 73.98              | 19.44          |
|                    | 32.30             | Average          | H                  |                |               |             | 44.70             | 53.98              | 9.28           |
|                    | 42.59             | Peak             | V                  |                |               |             | 54.99             | 73.98              | 18.99          |
|                    | 32.98             | Average          | V                  |                |               |             | 45.38             | 53.98              | 8.60           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 10 480.00          | 41.85             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 54.25             | 73.98              | 19.73          |
|                    | 32.31             | Average          | H                  |                |               |             | 44.71             | 53.98              | 9.27           |
|                    | 43.58             | Peak             | V                  |                |               |             | 55.98             | 73.98              | 18.00          |
|                    | 32.77             | Average          | V                  |                |               |             | 45.17             | 53.98              | 8.81           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.4.2 Test data for 802.11n\_HT20 RLAN Mode

### 12.4.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

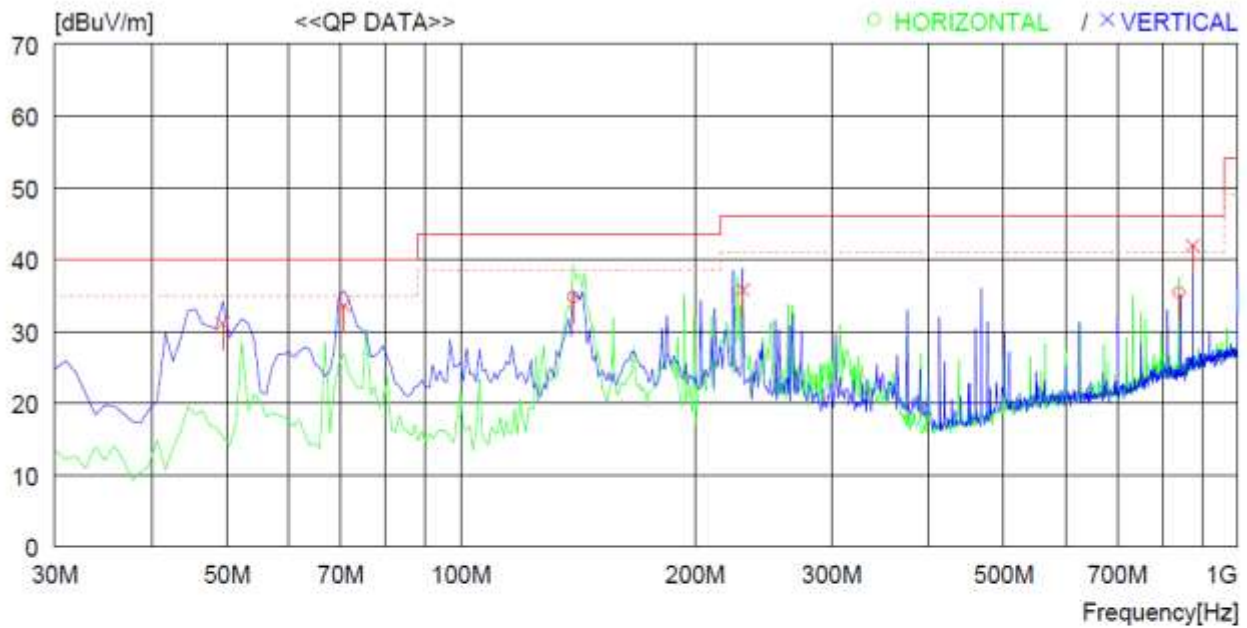
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 139.610 | 56.5    | 8.1    | 3.2  | 33.1 | 34.7     | 43.5     | 8.8    | 200     | 0     |
| 2                      | 839.941 | 39.2    | 21.4   | 8.2  | 33.4 | 35.4     | 46.0     | 10.6   | 300     | 359   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 3                      | 49.400  | 48.4    | 13.7   | 2.0  | 33.0 | 31.1     | 40.0     | 8.9    | 200     | 359   |
| 4                      | 70.740  | 54.8    | 9.6    | 2.3  | 33.1 | 33.6     | 40.0     | 6.4    | 200     | 359   |
| 5                      | 230.790 | 52.8    | 11.8   | 4.0  | 32.8 | 35.8     | 46.0     | 10.2   | 100     | 0     |
| 6                      | 875.830 | 44.8    | 21.9   | 8.3  | 33.1 | 41.9     | 46.0     | 4.1    | 100     | 134   |

#### 12.4.2.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.4.2.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 10 360.00          | 42.94             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.34             | 73.98              | 18.64          |
|                    | 32.84             | Average          | H                  |                |               |             | 45.24             | 53.98              | 8.74           |
|                    | 55.36             | Peak             | V                  |                |               |             | 67.76             | 73.98              | 6.22           |
|                    | 38.85             | Average          | V                  |                |               |             | 51.25             | 53.98              | 2.73           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 10 400.00          | 43.68             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 56.08             | 73.98              | 17.90          |
|                    | 32.91             | Average          | H                  |                |               |             | 45.31             | 53.98              | 8.67           |
|                    | 56.67             | Peak             | V                  |                |               |             | 69.07             | 73.98              | 4.91           |
|                    | 39.54             | Average          | V                  |                |               |             | 51.94             | 53.98              | 2.04           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 10 480.00          | 43.10             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.50             | 73.98              | 18.48          |
|                    | 33.11             | Average          | H                  |                |               |             | 45.51             | 53.98              | 8.47           |
|                    | 54.23             | Peak             | V                  |                |               |             | 66.63             | 73.98              | 7.35           |
|                    | 39.44             | Average          | V                  |                |               |             | 51.84             | 53.98              | 2.14           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

### 12.4.3 Test data for 802.11n\_HT40 RLAN Mode

#### 12.4.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

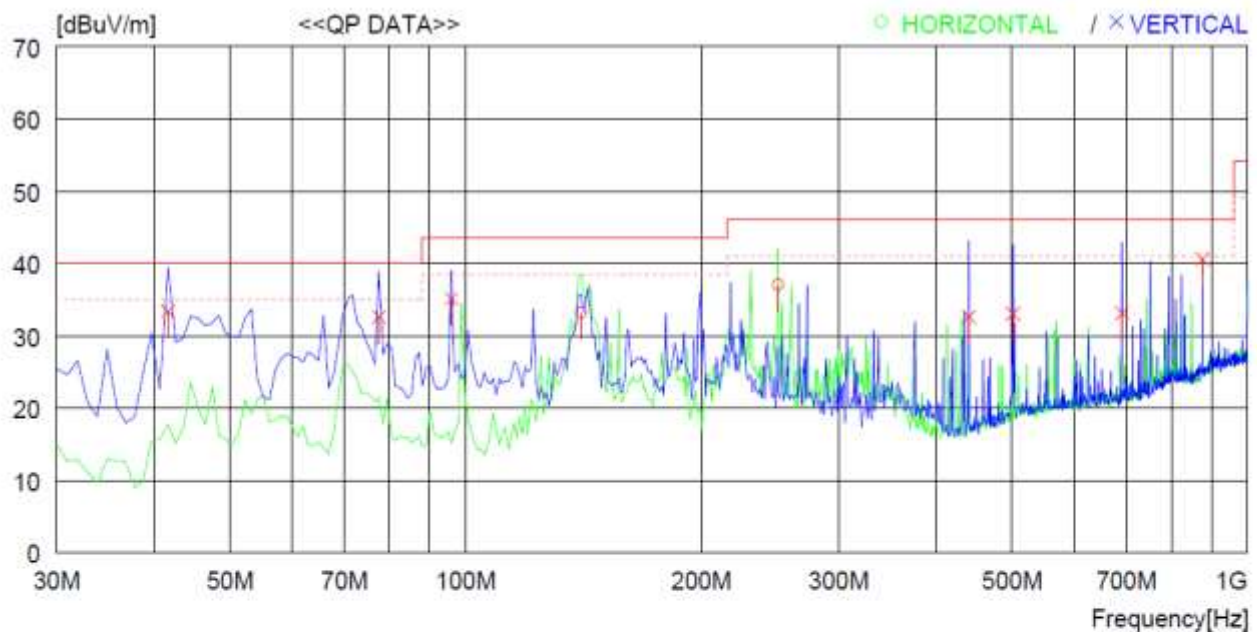
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA TABLE |       |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]          | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |               |       |
| 1                      | 140.580 | 55.0    | 8.1    | 3.2  | 33.1 | 33.2     | 43.5     | 10.3   | 200           | 0     |
| 2                      | 251.160 | 53.3    | 12.4   | 4.1  | 32.8 | 37.0     | 46.0     | 9.0    | 100           | 359   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |               |       |
| 3                      | 41.640  | 50.9    | 13.5   | 1.9  | 32.9 | 33.4     | 40.0     | 6.6    | 100           | 156   |
| 4                      | 77.530  | 55.4    | 8.0    | 2.4  | 33.2 | 32.6     | 40.0     | 7.4    | 100           | 180   |
| 5                      | 95.960  | 54.6    | 11.2   | 2.6  | 33.3 | 35.1     | 43.5     | 8.4    | 100           | 0     |
| 6                      | 440.311 | 43.2    | 16.5   | 5.7  | 32.8 | 32.6     | 46.0     | 13.4   | 100           | 0     |
| 7                      | 501.421 | 41.6    | 17.3   | 7.0  | 32.9 | 33.0     | 46.0     | 13.0   | 100           | 0     |
| 8                      | 690.565 | 39.9    | 19.6   | 7.2  | 33.6 | 33.1     | 46.0     | 12.9   | 100           | 0     |
| 9                      | 875.830 | 43.5    | 21.9   | 8.3  | 33.1 | 40.6     | 46.0     | 5.4    | 100           | 150   |

#### 12.4.3.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.4.3.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 10 380.00          | 43.12             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.52             | 73.98              | 18.46          |
|                    | 32.76             | Average          | H                  |                |               |             | 45.16             | 53.98              | 8.82           |
|                    | 54.00             | Peak             | V                  |                |               |             | 66.40             | 73.98              | 7.58           |
|                    | 39.38             | Average          | V                  |                |               |             | 51.78             | 53.98              | 2.20           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 10 460.00          | 43.22             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.62             | 73.98              | 18.36          |
|                    | 33.16             | Average          | H                  |                |               |             | 45.56             | 53.98              | 8.42           |
|                    | 52.38             | Peak             | V                  |                |               |             | 64.78             | 73.98              | 9.20           |
|                    | 38.49             | Average          | V                  |                |               |             | 50.89             | 53.98              | 3.09           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.4.4 Test data for 802.11ac20 RLAN Mode

### 12.4.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

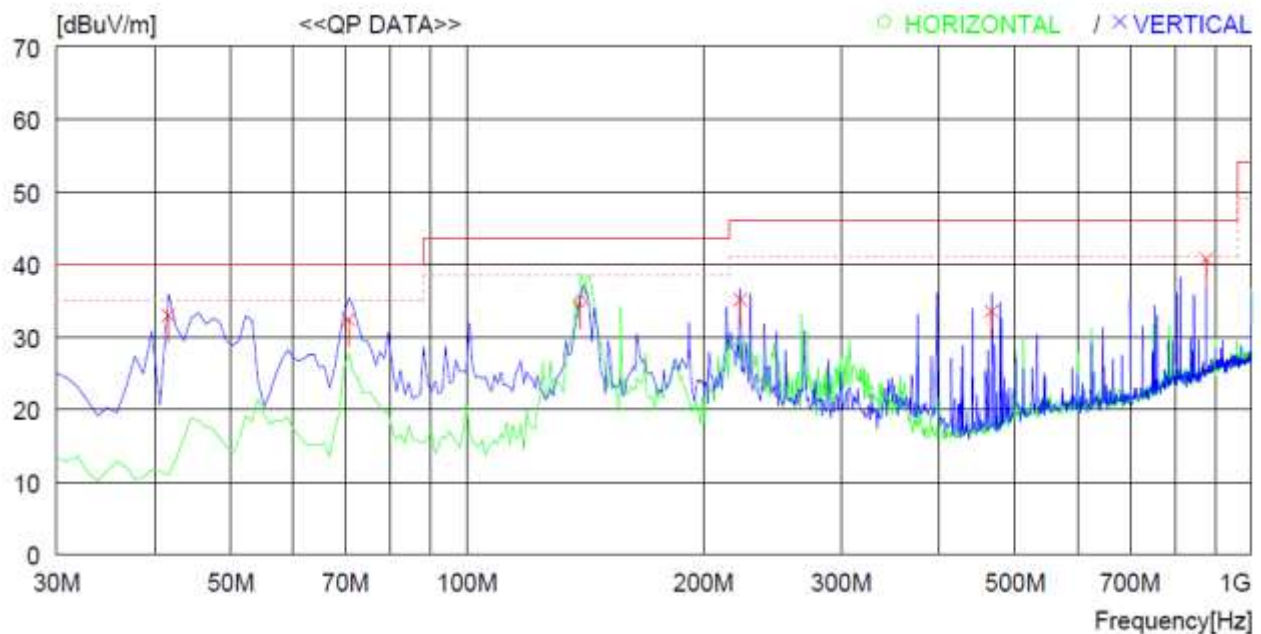
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 139.610 | 56.6    | 8.1    | 3.2  | 33.1 | 34.8     | 43.5     | 8.7    | 200     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 2                      | 41.640  | 50.4    | 13.5   | 1.9  | 32.9 | 32.9     | 40.0     | 7.1    | 200     | 71    |
| 3                      | 70.740  | 53.6    | 9.6    | 2.3  | 33.1 | 32.4     | 40.0     | 7.6    | 200     | 107   |
| 4                      | 223.030 | 52.4    | 11.5   | 4.0  | 32.8 | 35.1     | 46.0     | 10.9   | 100     | 0     |
| 5                      | 466.501 | 43.7    | 16.8   | 5.8  | 32.8 | 33.5     | 46.0     | 12.5   | 100     | 345   |
| 6                      | 875.830 | 43.6    | 21.9   | 8.3  | 33.1 | 40.7     | 46.0     | 5.3    | 100     | 0     |

#### 12.4.4.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

#### 12.4.4.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 10 360.00          | 42.88             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.28             | 73.98              | 18.70          |
|                    | 32.75             | Average          | H                  |                |               |             | 45.15             | 53.98              | 8.83           |
|                    | 53.43             | Peak             | V                  |                |               |             | 65.83             | 73.98              | 8.15           |
|                    | 38.89             | Average          | V                  |                |               |             | 51.29             | 53.98              | 2.69           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 10 400.00          | 43.21             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.61             | 73.98              | 18.37          |
|                    | 33.03             | Average          | H                  |                |               |             | 45.43             | 53.98              | 8.55           |
|                    | 55.29             | Peak             | V                  |                |               |             | 67.69             | 73.98              | 6.29           |
|                    | 39.34             | Average          | V                  |                |               |             | 51.74             | 53.98              | 2.24           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 10 480.00          | 42.79             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.19             | 73.98              | 18.79          |
|                    | 32.83             | Average          | H                  |                |               |             | 45.23             | 53.98              | 8.75           |
|                    | 53.11             | Peak             | V                  |                |               |             | 65.51             | 73.98              | 8.47           |
|                    | 39.30             | Average          | V                  |                |               |             | 51.70             | 53.98              | 2.28           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.4.5 Test data for 802.11ac40 RLAN Mode

### 12.4.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

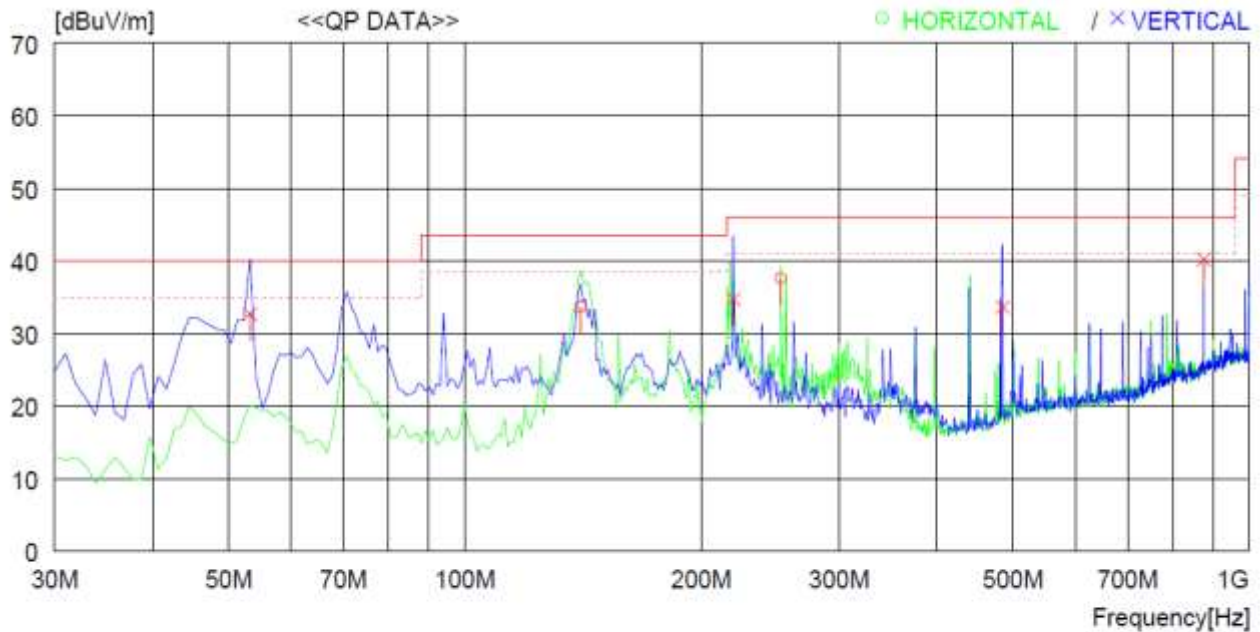
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA TABLE |       |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]          | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |               |       |
| 1                      | 140.580 | 55.5    | 8.1    | 3.2  | 33.1 | 33.7     | 43.5     | 9.8    | 200           | 0     |
| 2                      | 253.100 | 53.8    | 12.5   | 4.1  | 32.8 | 37.6     | 46.0     | 8.4    | 200           | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |               |       |
| 3                      | 53.280  | 50.1    | 13.6   | 2.0  | 33.0 | 32.7     | 40.0     | 7.3    | 100           | 350   |
| 4                      | 220.120 | 52.1    | 11.4   | 4.0  | 32.8 | 34.7     | 46.0     | 11.3   | 100           | 0     |
| 5                      | 484.931 | 43.2    | 17.1   | 6.1  | 32.8 | 33.6     | 46.0     | 12.4   | 100           | 0     |
| 6                      | 875.830 | 43.1    | 21.9   | 8.3  | 33.1 | 40.2     | 46.0     | 5.8    | 100           | 156   |

#### 12.4.5.2 Test data for Below 30 MHz

- . Test Date : April 26, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m
- . Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.4.5.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 10 380.00          | 43.28             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.68             | 73.98              | 18.30          |
|                    | 33.01             | Average          | H                  |                |               |             | 45.41             | 53.98              | 8.57           |
|                    | 53.26             | Peak             | V                  |                |               |             | 65.66             | 73.98              | 8.32           |
|                    | 38.67             | Average          | V                  |                |               |             | 51.07             | 53.98              | 2.91           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 10 460.00          | 42.85             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.25             | 73.98              | 18.73          |
|                    | 32.77             | Average          | H                  |                |               |             | 45.17             | 53.98              | 8.81           |
|                    | 52.10             | Peak             | V                  |                |               |             | 64.50             | 73.98              | 9.48           |
|                    | 37.85             | Average          | V                  |                |               |             | 50.25             | 53.98              | 3.73           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

## 12.4.6 Test data for 802.11ac80 RLAN Mode

### 12.4.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

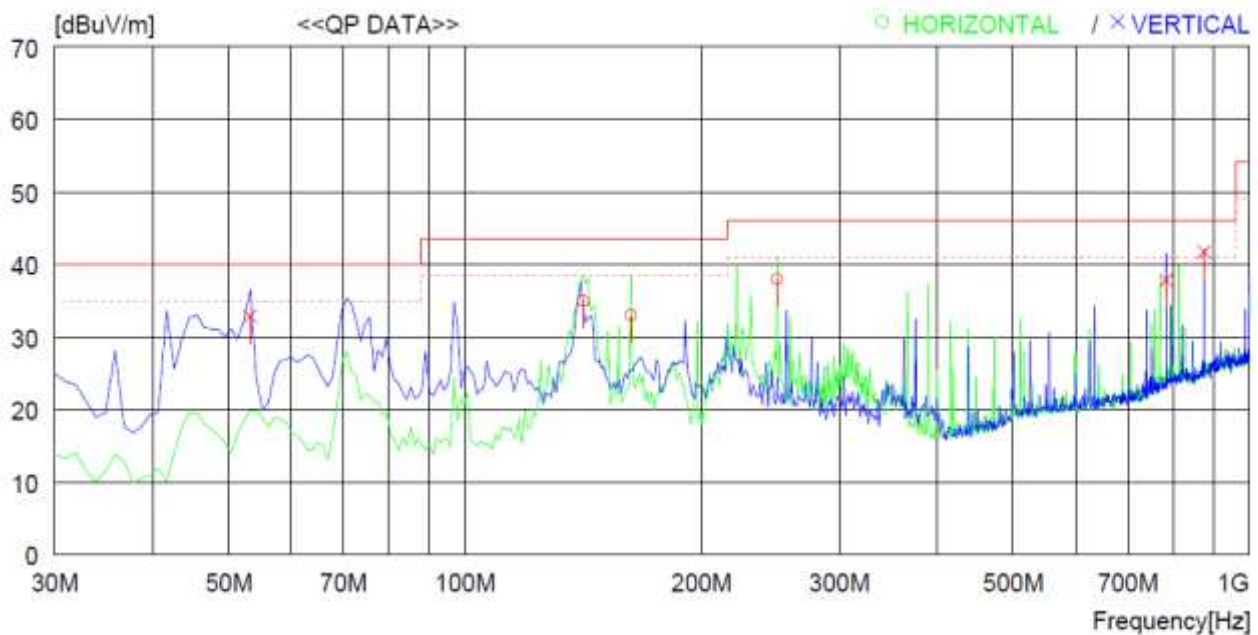
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 141.550 | 56.7    | 8.1    | 3.2  | 33.1 | 34.9     | 43.5     | 8.6    | 200     | 162   |
| 2                      | 162.890 | 53.7    | 8.8    | 3.4  | 32.9 | 33.0     | 43.5     | 10.5   | 100     | 211   |
| 3                      | 250.190 | 54.2    | 12.4   | 4.1  | 32.8 | 37.9     | 46.0     | 8.1    | 100     | 10    |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 4                      | 53.280  | 50.2    | 13.6   | 2.0  | 33.0 | 32.8     | 40.0     | 7.2    | 100     | 0     |
| 5                      | 782.712 | 42.7    | 20.6   | 7.9  | 33.4 | 37.8     | 46.0     | 8.2    | 100     | 0     |
| 6                      | 875.830 | 44.6    | 21.9   | 8.3  | 33.1 | 41.7     | 46.0     | 4.3    | 100     | 124   |

#### 12.4.6.2 Test data for Below 30 MHz

- . Test Date : April 26, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m
- . Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

#### 12.4.6.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| <b>Low Channel</b> |                   |                  |                    |                |               |             |                   |                    |                |
| 10 420.00          | 43.18             | Peak             | H                  | 38.60          | 16.30         | 42.50       | 55.58             | 73.98              | 18.40          |
|                    | 33.45             | Average          | H                  |                |               |             | 45.85             | 53.98              | 8.13           |
|                    | 52.76             | Peak             | V                  |                |               |             | 65.16             | 73.98              | 8.82           |
|                    | 38.29             | Average          | V                  |                |               |             | 50.69             | 53.98              | 3.29           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.5 Test data for Frequency 5 725 MHz Band

### 12.5.1 Test data for 802.11a RLAN Mode

#### 12.5.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

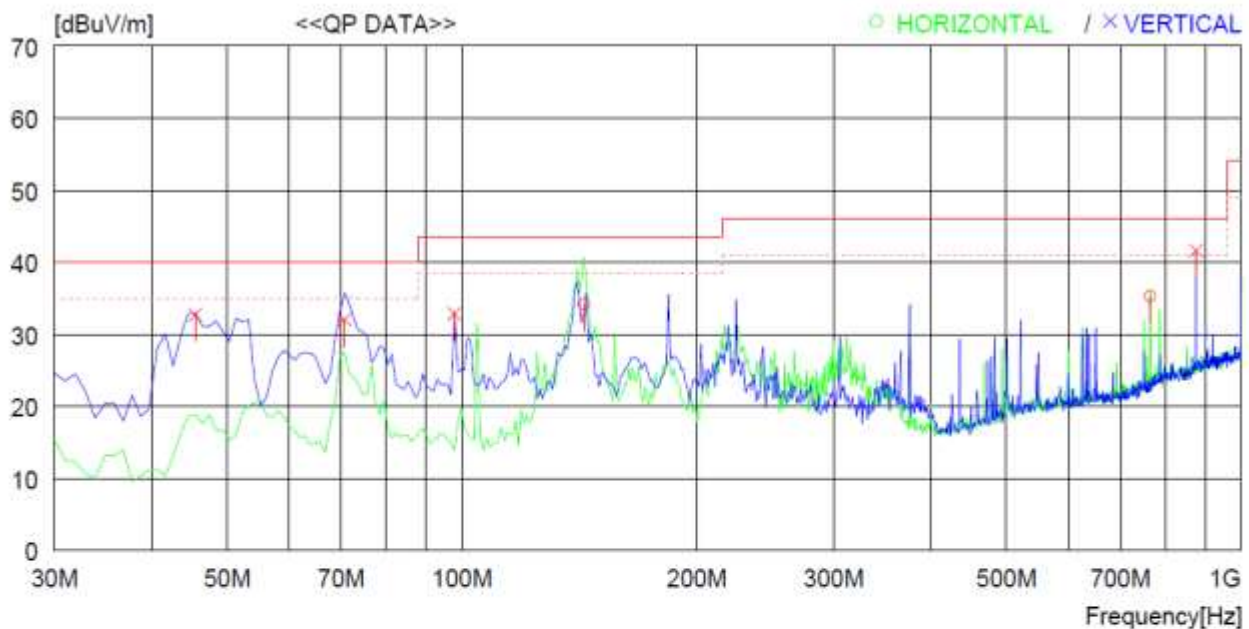
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 143.490 | 55.7    | 8.2    | 3.2  | 33.0 | 34.1     | 43.5     | 9.4    | 200     | 172   |
| 2                      | 764.283 | 40.8    | 20.4   | 7.7  | 33.6 | 35.3     | 46.0     | 10.7   | 400     | 356   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 3                      | 45.520  | 49.7    | 13.9   | 2.0  | 32.9 | 32.7     | 40.0     | 7.3    | 100     | 86    |
| 4                      | 70.740  | 53.2    | 9.6    | 2.3  | 33.1 | 32.0     | 40.0     | 8.0    | 200     | 132   |
| 5                      | 97.900  | 51.8    | 11.6   | 2.7  | 33.3 | 32.8     | 43.5     | 10.7   | 200     | 359   |
| 6                      | 875.830 | 44.5    | 21.9   | 8.3  | 33.1 | 41.6     | 46.0     | 4.4    | 100     | 0     |

### 12.5.1.2 Test data for Below 30 MHz

- . Test Date : April 26, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m
- . Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.5.1.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 11 490.00          | 45.62             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 59.92             | 73.98              | 14.06          |
|                    | 33.78             | Average          | H                  |                |               |             | 48.08             | 53.98              | 5.90           |
|                    | 52.44             | Peak             | V                  |                |               |             | 66.74             | 73.98              | 7.24           |
|                    | 38.83             | Average          | V                  |                |               |             | 53.13             | 53.98              | 0.85           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 11 570.00          | 45.31             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 59.61             | 73.98              | 14.37          |
|                    | 33.79             | Average          | H                  |                |               |             | 48.09             | 53.98              | 5.89           |
|                    | 52.04             | Peak             | V                  |                |               |             | 66.34             | 73.98              | 7.64           |
|                    | 38.28             | Average          | V                  |                |               |             | 52.58             | 53.98              | 1.40           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 11 650.00          | 45.59             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 59.89             | 73.98              | 14.09          |
|                    | 33.79             | Average          | H                  |                |               |             | 48.09             | 53.98              | 5.89           |
|                    | 52.73             | Peak             | V                  |                |               |             | 67.03             | 73.98              | 6.95           |
|                    | 38.34             | Average          | V                  |                |               |             | 52.64             | 53.98              | 1.34           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.5.2 Test data for 802.11n\_HT20 RLAN Mode

### 12.5.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

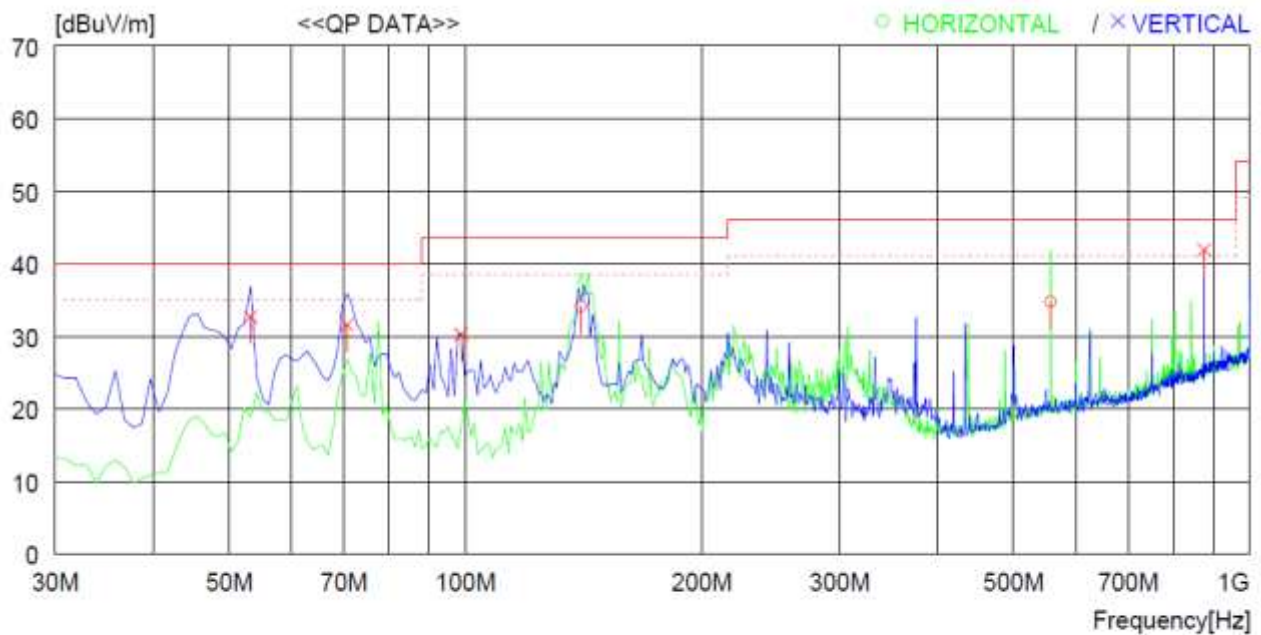
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA TABLE |       |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]          | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |               |       |
| 1                      | 140.580 | 55.9    | 8.1    | 3.2  | 33.1 | 34.1     | 43.5     | 9.4    | 200           | 184   |
| 2                      | 557.679 | 42.6    | 18.4   | 6.8  | 33.1 | 34.7     | 46.0     | 11.3   | 200           | 352   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |               |       |
| 3                      | 53.280  | 50.1    | 13.6   | 2.0  | 33.0 | 32.7     | 40.0     | 7.3    | 100           | 324   |
| 4                      | 70.740  | 52.8    | 9.6    | 2.3  | 33.1 | 31.6     | 40.0     | 8.4    | 200           | 119   |
| 5                      | 98.870  | 49.1    | 11.7   | 2.7  | 33.3 | 30.2     | 43.5     | 13.3   | 100           | 359   |
| 6                      | 875.830 | 44.8    | 21.9   | 8.3  | 33.1 | 41.9     | 46.0     | 4.1    | 100           | 0     |

### 12.5.2.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.5.2.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 11 490.00          | 43.53             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 57.83             | 73.98              | 16.15          |
|                    | 32.52             | Average          | H                  |                |               |             | 46.82             | 53.98              | 7.16           |
|                    | 52.75             | Peak             | V                  |                |               |             | 67.05             | 73.98              | 6.93           |
|                    | 38.02             | Average          | V                  |                |               |             | 52.32             | 53.98              | 1.66           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 11 570.00          | 43.30             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 57.60             | 73.98              | 16.38          |
|                    | 32.84             | Average          | H                  |                |               |             | 47.14             | 53.98              | 6.84           |
|                    | 53.65             | Peak             | V                  |                |               |             | 67.95             | 73.98              | 6.03           |
|                    | 38.08             | Average          | V                  |                |               |             | 52.38             | 53.98              | 1.60           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 11 650.00          | 43.78             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 58.08             | 73.98              | 15.90          |
|                    | 32.53             | Average          | H                  |                |               |             | 46.83             | 53.98              | 7.15           |
|                    | 53.02             | Peak             | V                  |                |               |             | 67.32             | 73.98              | 6.66           |
|                    | 37.97             | Average          | V                  |                |               |             | 52.27             | 53.98              | 1.71           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

### 12.5.3 Test data for 802.11n\_HT40 RLAN Mode

#### 12.5.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

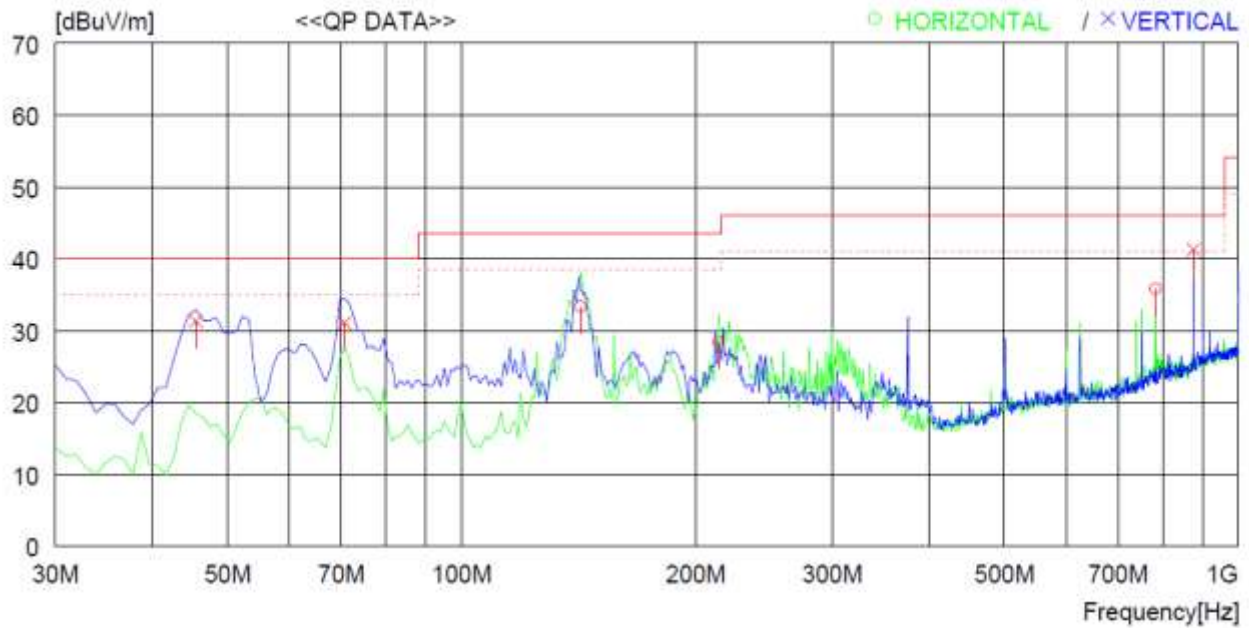
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ<br>[MHz] | READING<br>QP<br>[dBuV] | ANT<br>FACTOR<br>[dB] | LOSS<br>[dB] | GAIN<br>[dB] | RESULT<br>[dBuV/m] | LIMIT<br>[dBuV/m] | MARGIN<br>[dB] | ANTENNA<br>[cm] | TABLE<br>[DEG] |
|------------------------|---------------|-------------------------|-----------------------|--------------|--------------|--------------------|-------------------|----------------|-----------------|----------------|
| ----- Horizontal ----- |               |                         |                       |              |              |                    |                   |                |                 |                |
| 1                      | 142.520       | 54.9                    | 8.2                   | 3.2          | 33.0         | 33.3               | 43.5              | 10.2           | 200             | 2              |
| 2                      | 214.300       | 46.1                    | 11.2                  | 3.9          | 32.8         | 28.4               | 43.5              | 15.1           | 200             | 6              |
| 3                      | 781.742       | 40.7                    | 20.6                  | 7.9          | 33.4         | 35.8               | 46.0              | 10.2           | 300             | 359            |
| ----- Vertical -----   |               |                         |                       |              |              |                    |                   |                |                 |                |
| 4                      | 45.520        | 48.3                    | 13.9                  | 2.0          | 32.9         | 31.3               | 40.0              | 8.7            | 100             | 19             |
| 5                      | 70.740        | 52.3                    | 9.6                   | 2.3          | 33.1         | 31.1               | 40.0              | 8.9            | 200             | 0              |
| 6                      | 875.830       | 44.1                    | 21.9                  | 8.3          | 33.1         | 41.2               | 46.0              | 4.8            | 100             | 125            |

### 12.5.3.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.5.3.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 11 510.00          | 43.99             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 58.29             | 73.98              | 15.69          |
|                    | 32.77             | Average          | H                  |                |               |             | 47.07             | 53.98              | 6.91           |
|                    | 50.62             | Peak             | V                  |                |               |             | 64.92             | 73.98              | 9.06           |
|                    | 37.03             | Average          | V                  |                |               |             | 51.33             | 53.98              | 2.65           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 11 590.00          | 43.86             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 58.16             | 73.98              | 15.82          |
|                    | 32.63             | Average          | H                  |                |               |             | 46.93             | 53.98              | 7.05           |
|                    | 48.63             | Peak             | V                  |                |               |             | 62.93             | 73.98              | 11.05          |
|                    | 35.41             | Average          | V                  |                |               |             | 49.71             | 53.98              | 4.27           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.5.4 Test data for 802.11ac20 RLAN Mode

### 12.5.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

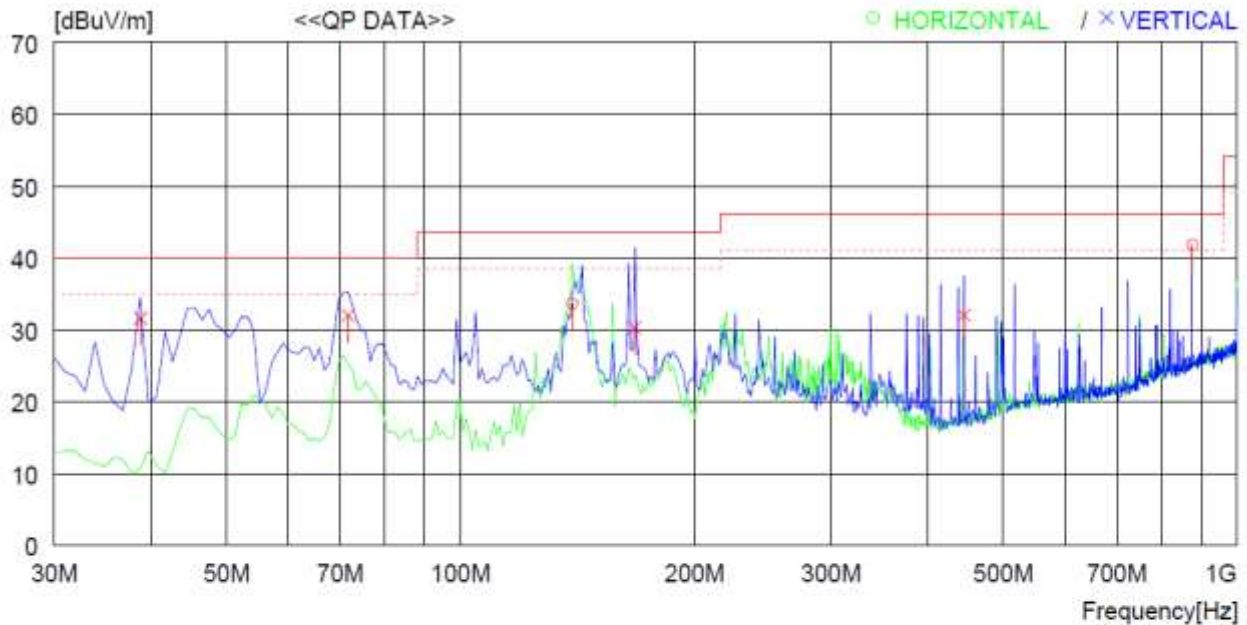
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA TABLE |       |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]          | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |               |       |
| 1                      | 139.610 | 55.4    | 8.1    | 3.2  | 33.1 | 33.6     | 43.5     | 9.9    | 200           | 199   |
| 2                      | 875.830 | 44.7    | 21.9   | 8.3  | 33.1 | 41.8     | 46.0     | 4.2    | 100           | 191   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |               |       |
| 3                      | 38.730  | 49.7    | 13.0   | 1.8  | 32.9 | 31.6     | 40.0     | 8.4    | 100           | 268   |
| 4                      | 71.710  | 53.4    | 9.4    | 2.3  | 33.1 | 32.0     | 40.0     | 8.0    | 200           | 359   |
| 5                      | 167.740 | 50.8    | 9.0    | 3.4  | 32.9 | 30.3     | 43.5     | 13.2   | 200           | 359   |
| 6                      | 445.161 | 42.6    | 16.5   | 5.7  | 32.8 | 32.0     | 46.0     | 14.0   | 200           | 20    |

#### 12.5.4.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.5.4.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 11 490.00          | 43.31             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 57.61             | 73.98              | 16.37          |
|                    | 33.20             | Average          | H                  |                |               |             | 47.50             | 53.98              | 6.48           |
|                    | 52.82             | Peak             | V                  |                |               |             | 67.12             | 73.98              | 6.86           |
|                    | 38.01             | Average          | V                  |                |               |             | 52.31             | 53.98              | 1.67           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 11 570.00          | 43.28             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 57.58             | 73.98              | 16.40          |
|                    | 32.59             | Average          | H                  |                |               |             | 46.89             | 53.98              | 7.09           |
|                    | 52.94             | Peak             | V                  |                |               |             | 67.24             | 73.98              | 6.74           |
|                    | 37.96             | Average          | V                  |                |               |             | 52.26             | 53.98              | 1.72           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 11 650.00          | 43.55             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 57.85             | 73.98              | 16.13          |
|                    | 32.60             | Average          | H                  |                |               |             | 46.90             | 53.98              | 7.08           |
|                    | 53.91             | Peak             | V                  |                |               |             | 68.21             | 73.98              | 5.77           |
|                    | 38.00             | Average          | V                  |                |               |             | 52.30             | 53.98              | 1.68           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.5.5 Test data for 802.11ac40 RLAN Mode

### 12.5.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

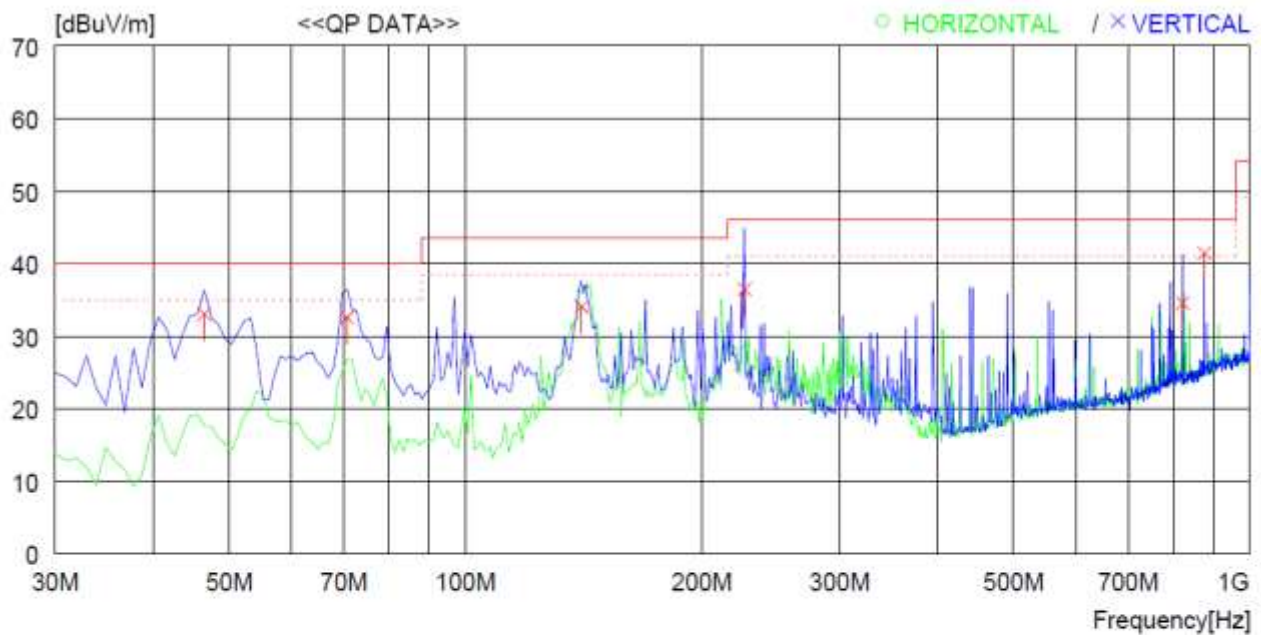
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                  | FREQ    | READING    | ANT         | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|----------------------|---------|------------|-------------|------|------|----------|----------|--------|---------|-------|
|                      | [MHz]   | Q P [dBuV] | FACTOR [dB] | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Vertical ----- |         |            |             |      |      |          |          |        |         |       |
| 1                    | 46.490  | 50.0       | 13.9        | 2.0  | 32.9 | 33.0     | 40.0     | 7.0    | 100     | 359   |
| 2                    | 70.740  | 53.8       | 9.6         | 2.3  | 33.1 | 32.6     | 40.0     | 7.4    | 200     | 0     |
| 3                    | 140.580 | 55.9       | 8.1         | 3.2  | 33.1 | 34.1     | 43.5     | 9.4    | 100     | 359   |
| 4                    | 226.910 | 53.7       | 11.6        | 4.0  | 32.8 | 36.5     | 46.0     | 9.5    | 100     | 359   |
| 5                    | 821.511 | 38.7       | 21.1        | 8.1  | 33.4 | 34.5     | 46.0     | 11.5   | 300     | 6     |
| 6                    | 875.830 | 44.3       | 21.9        | 8.3  | 33.1 | 41.4     | 46.0     | 4.6    | 100     | 131   |

### 12.5.5.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.5.5.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 11 510.00          | 43.64             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 57.94             | 73.98              | 16.04          |
|                    | 32.58             | Average          | H                  |                |               |             | 46.88             | 53.98              | 7.10           |
|                    | 50.16             | Peak             | V                  |                |               |             | 64.46             | 73.98              | 9.52           |
|                    | 36.21             | Average          | V                  |                |               |             | 50.51             | 53.98              | 3.47           |
| Middle Channel     |                   |                  |                    |                |               |             |                   |                    |                |
| 11 590.00          | 44.50             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 58.80             | 73.98              | 15.18          |
|                    | 32.61             | Average          | H                  |                |               |             | 46.91             | 53.98              | 7.07           |
|                    | 48.57             | Peak             | V                  |                |               |             | 62.87             | 73.98              | 11.11          |
|                    | 35.87             | Average          | V                  |                |               |             | 50.17             | 53.98              | 3.81           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 12.5.6 Test data for 802.11ac80 RLAN Mode

### 12.5.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

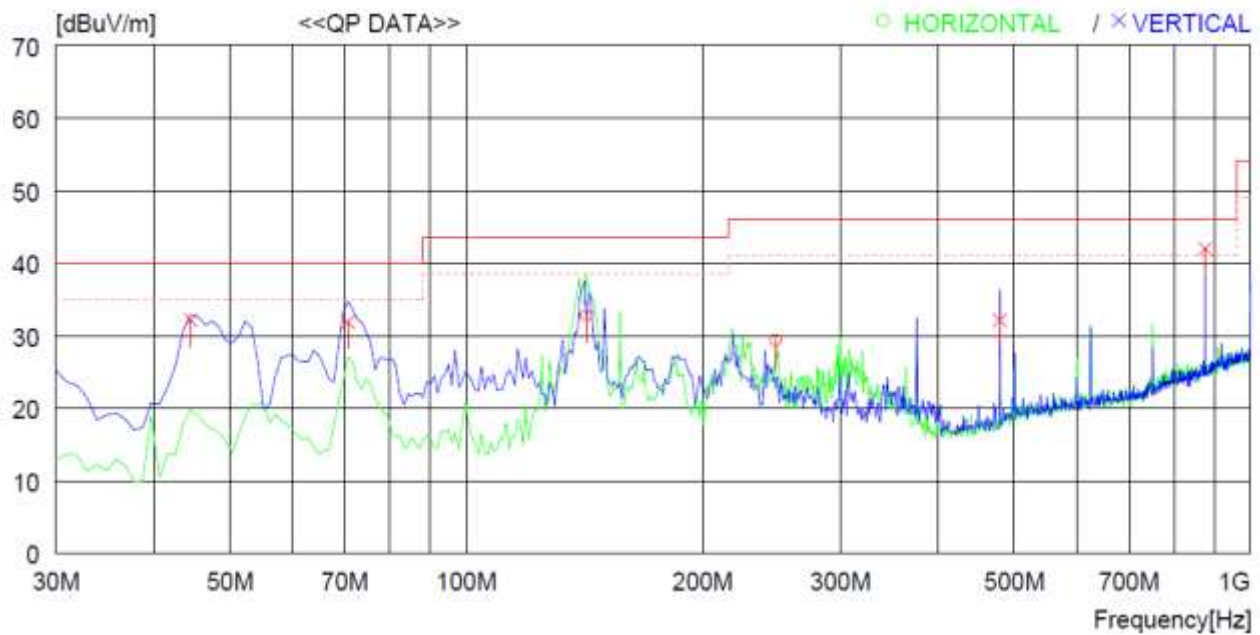
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 142.520 | 54.3    | 8.2    | 3.2  | 33.0 | 32.7     | 43.5     | 10.8   | 200     | 359   |
| 2                      | 248.250 | 45.6    | 12.4   | 4.1  | 32.8 | 29.3     | 46.0     | 16.7   | 100     | 206   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 3                      | 44.550  | 49.2    | 13.9   | 1.9  | 32.9 | 32.1     | 40.0     | 7.9    | 100     | 358   |
| 4                      | 70.740  | 53.1    | 9.6    | 2.3  | 33.1 | 31.9     | 40.0     | 8.1    | 100     | 125   |
| 5                      | 479.111 | 42.0    | 17.0   | 5.9  | 32.8 | 32.1     | 46.0     | 13.9   | 100     | 2     |
| 6                      | 875.830 | 44.9    | 21.9   | 8.3  | 33.1 | 42.0     | 46.0     | 4.0    | 100     | 130   |

### 12.5.6.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz)                            | Reading<br>(dB $\mu$ V) | Ant. Pol.<br>(H/V) | Ant.<br>Height (m) | Angle<br>(°) | Ant. Factor<br>(dB/m) | Cable<br>Loss | Emission<br>Level(dB $\mu$ V/m) | Limits<br>(dB $\mu$ V/m) | Margin<br>(dB) |
|-----------------------------------------------|-------------------------|--------------------|--------------------|--------------|-----------------------|---------------|---------------------------------|--------------------------|----------------|
| Any emissions were not observed from the EUT. |                         |                    |                    |              |                       |               |                                 |                          |                |

### 12.5.6.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| <b>Low Channel</b> |                   |                  |                    |                |               |             |                   |                    |                |
| 11 550.00          | 43.94             | Peak             | H                  | 39.50          | 17.50         | 42.70       | 58.24             | 73.98              | 15.74          |
|                    | 33.66             | Average          | H                  |                |               |             | 47.96             | 53.98              | 6.02           |
|                    | 45.86             | Peak             | V                  |                |               |             | 60.16             | 73.98              | 13.82          |
|                    | 34.51             | Average          | V                  |                |               |             | 48.81             | 53.98              | 5.17           |

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

  
Tested by: Jun-Hui, Lee / Senior Engineer

### 13. SPURIOUS EMISSION - RECEIVER

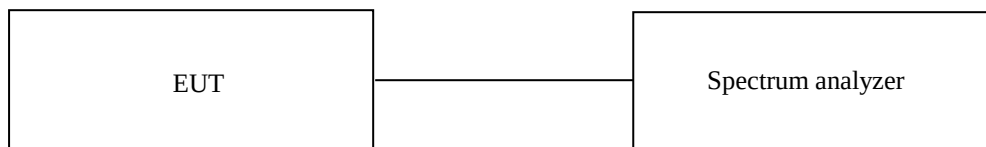
#### 13.1 Operating environment

Temperature : 24 °C

Relative humidity : 45 % R.H.

#### 13.2 Test set-up for conducted measurement

The antenna output of the EUT was connected to the spectrum analyzer. The resolution and video bandwidth is set to 100 kHz, and peak detection was used.



#### 13.3 Test set-up for radiated measurement

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The frequency spectrum from 30 MHz to 40 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.

#### 13.4 Test equipment used

|     | Model Number | Manufacturer      | Description              | Serial Number | Last Cal.(Interval) |
|-----|--------------|-------------------|--------------------------|---------------|---------------------|
| ■ - | FSV40        | Rohde & Schwarz   | Signal Analyzer          | 101009        | Jul. 22, 2015 (1Y)  |
| ■ - | ESCI         | Rohde & Schwarz   | Test Receiver            | 101012        | Nov. 02, 2015 (1Y)  |
| ■ - | 310N         | Sonoma Instrument | Pre-Amplifier            | 312544        | Apr. 05, 2016 (1Y)  |
| ■ - | SCU-18       | Rohde & Schwarz   | Pre-Amplifier            | 10041         | Nov. 23, 2015 (1Y)  |
| ■ - | DT3000       | Innco System      | Turn Table               | 930611        | N/A                 |
| ■ - | MA4000-EP    | Innco System      | Antenna Master           | 3320611       | N/A                 |
| ■ - | VULB9163     | Schwarzbeck       | TRILOG Broadband Antenna | 9163-421      | Jul. 10, 2014 (2Y)  |
| ■ - | BBHA9120D    | Schwarzbeck       | Horn Antenna             | BBHA9120D295  | Aug. 31, 2015 (2Y)  |
| ■ - | BBHA9170     | Schwarzbeck       | Horn Antenna             | BBHA9170178   | Aug. 31, 2015 (2Y)  |

All test equipment used is calibrated on a regular basis.

### 13.5 Test data for 5 150 MHz ~ 5 250 MHz Band

#### 13.5.1 Test data for 802.11a RLAN Mode

##### 13.5.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

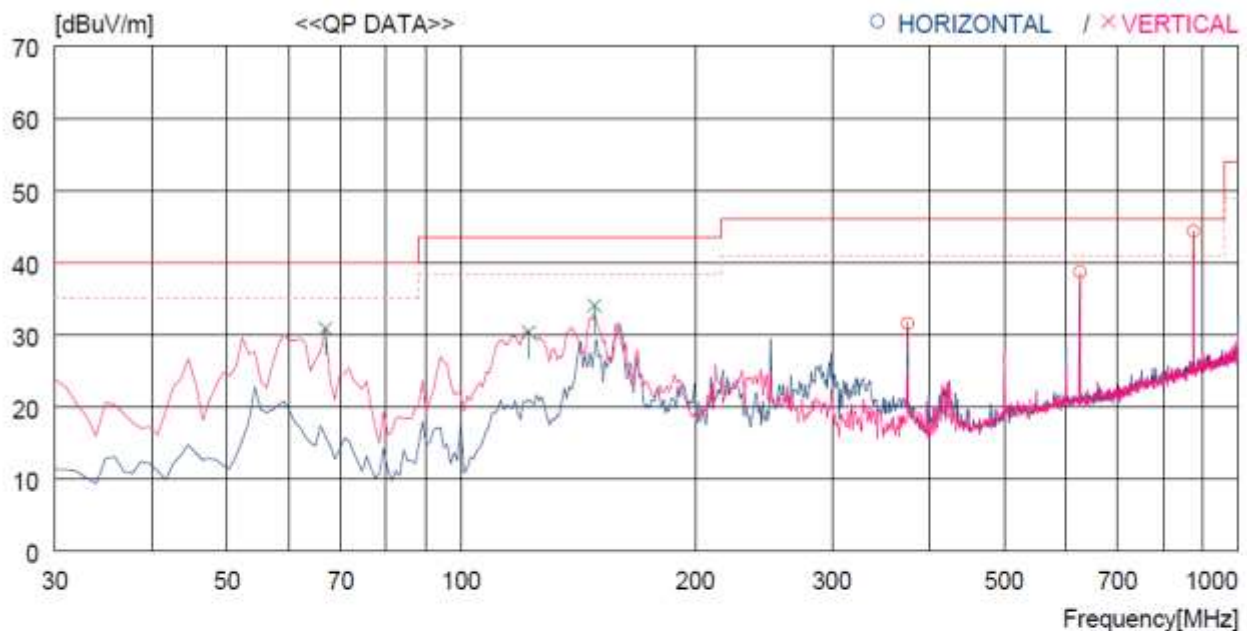
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1 Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | QP      | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 375.320 | 43.6    | 15.3   | 5.7  | 33.0 | 31.6     | 46.0     | 14.4   | 100     | 172   |
| 2                      | 625.577 | 45.2    | 19.3   | 7.5  | 33.3 | 38.7     | 46.0     | 7.3    | 100     | 0     |
| 3                      | 875.830 | 45.9    | 21.9   | 9.1  | 32.5 | 44.4     | 46.0     | 1.6    | 100     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 4                      | 66.860  | 51.1    | 10.7   | 2.2  | 33.1 | 30.9     | 40.0     | 9.1    | 100     | 359   |
| 5                      | 122.150 | 50.4    | 9.8    | 3.4  | 33.2 | 30.4     | 43.5     | 13.1   | 100     | 359   |
| 6                      | 148.340 | 55.3    | 8.3    | 3.5  | 33.0 | 34.1     | 43.5     | 9.4    | 100     | 359   |

### 13.5.1.2 Test data for Below 30 MHz

- Test Date : June 03, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |

### 13.5.1.3 Test data for above 1 GHz

- Test Date : June 03, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |



Tested by: Jun-Hui, Lee / Senior Engineer

### 13.5.2 Test data for 802.11n\_HT20 RLAN Mode

#### 13.5.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H. Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

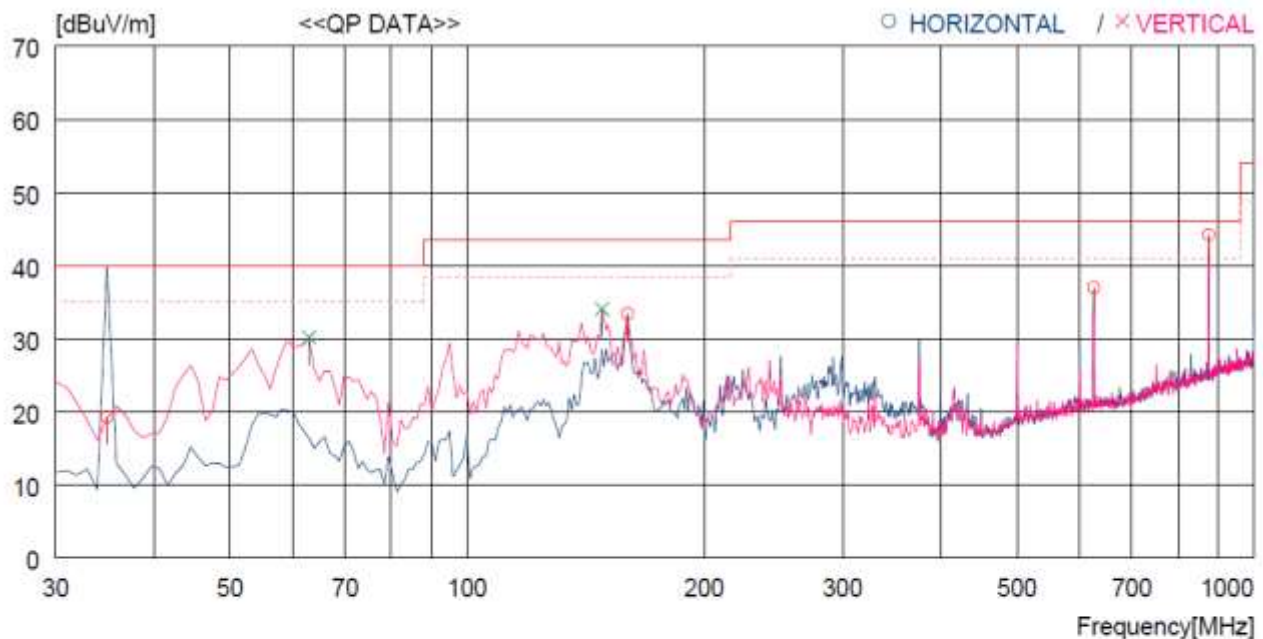
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 34.850  | 37.6    | 12.7   | 1.8  | 32.8 | 19.3     | 40.0     | 20.7   | 100     | 0     |
| 2                      | 159.980 | 54.7    | 8.3    | 3.4  | 33.0 | 33.4     | 43.5     | 10.1   | 200     | 85    |
| 3                      | 625.577 | 44.7    | 19.0   | 6.7  | 33.4 | 37.0     | 46.0     | 9.0    | 100     | 224   |
| 4                      | 875.830 | 47.5    | 21.5   | 8.3  | 33.1 | 44.2     | 46.0     | 1.8    | 100     | 208   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 5                      | 62.980  | 48.9    | 12.2   | 2.2  | 33.1 | 30.2     | 40.0     | 9.8    | 100     | 359   |
| 6                      | 148.340 | 56.2    | 7.7    | 3.2  | 33.0 | 34.1     | 43.5     | 9.4    | 100     | 358   |

### 13.5.2.1 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

### 13.5.2.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |



Tested by: Jun-Hui, Lee / Senior Engineer

### 13.5.3 Test data for 802.11n\_HT40 RLAN Mode

#### 13.5.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

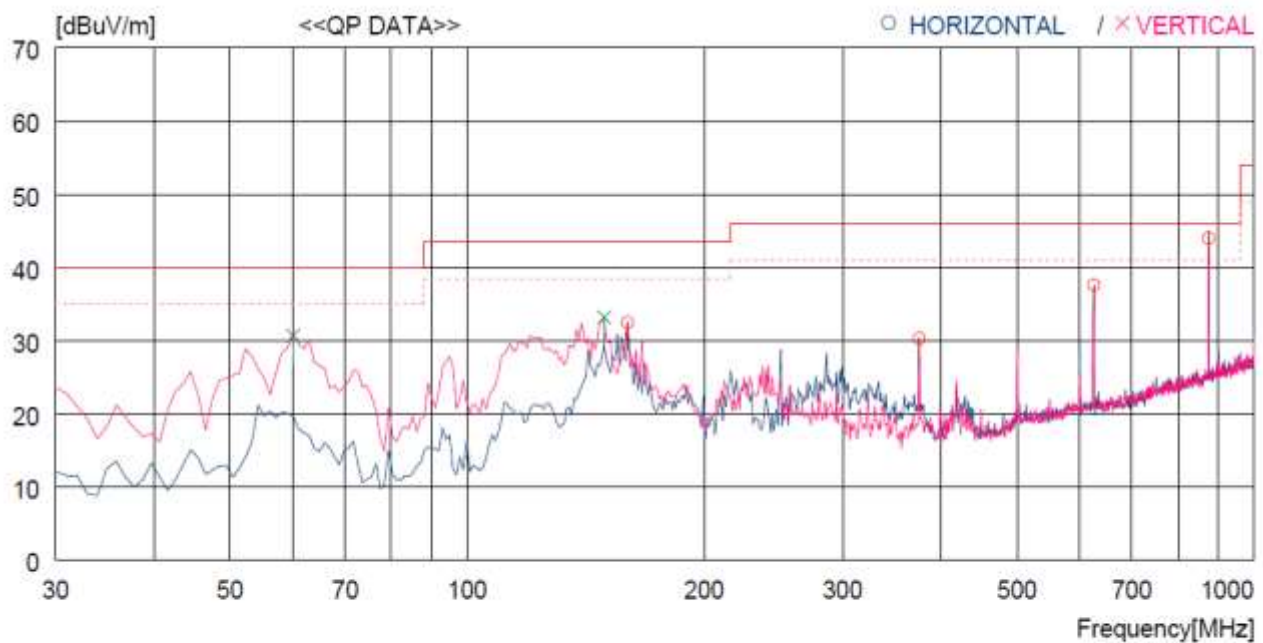
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | QP      | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
|                        |         | [dBuV]  | [dB]   |      |      |          |          |        |         |       |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 159.980 | 53.8    | 8.3    | 3.4  | 33.0 | 32.5     | 43.5     | 11.0   | 200     | 359   |
| 2                      | 375.320 | 43.1    | 14.7   | 5.2  | 32.7 | 30.3     | 46.0     | 15.7   | 100     | 0     |
| 3                      | 625.577 | 45.3    | 19.0   | 6.7  | 33.4 | 37.6     | 46.0     | 8.4    | 100     | 0     |
| 4                      | 875.830 | 47.3    | 21.5   | 8.3  | 33.1 | 44.0     | 46.0     | 2.0    | 100     | 201   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 5                      | 60.070  | 48.1    | 13.5   | 2.1  | 33.0 | 30.7     | 40.0     | 9.3    | 100     | 251   |
| 6                      | 149.310 | 55.3    | 7.7    | 3.2  | 33.0 | 33.2     | 43.5     | 10.3   | 100     | 359   |

### 13.5.3.2 Test data for 30 MHz ~ 1 000 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

### 13.5.3.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Factor (dB/m) | Cable Loss | Amp Gain | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|--------------------|------------|----------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                    |            |          |                        |                 |             |

  
 Tested by: Jun-Hui, Lee / Senior Engineer

### 13.5.4 Test data for 802.11ac\_HT20 RLAN Mode

#### 13.5.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

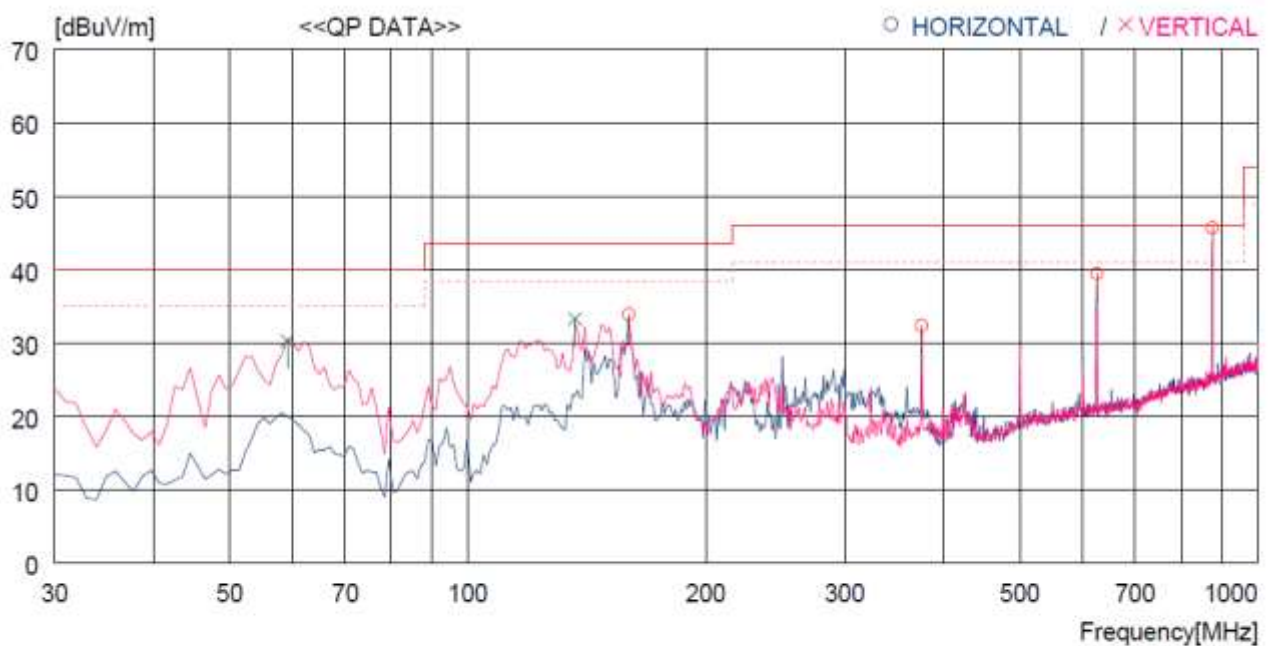
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA TABLE |       |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]          | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |               |       |
| 1                      | 159.980 | 54.7    | 8.6    | 3.6  | 33.0 | 33.9     | 43.5     | 9.6    | 200           | 359   |
| 2                      | 375.320 | 44.4    | 15.3   | 5.7  | 33.0 | 32.4     | 46.0     | 13.6   | 100           | 0     |
| 3                      | 625.577 | 46.0    | 19.3   | 7.5  | 33.3 | 39.5     | 46.0     | 6.5    | 100           | 0     |
| 4                      | 875.830 | 47.2    | 21.9   | 9.1  | 32.5 | 45.7     | 46.0     | 0.3    | 100           | 181   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |               |       |
| 5                      | 59.100  | 47.9    | 13.3   | 2.2  | 33.1 | 30.3     | 40.0     | 9.7    | 100           | 228   |
| 6                      | 136.700 | 54.5    | 8.4    | 3.4  | 33.0 | 33.3     | 43.5     | 10.2   | 100           | 349   |

### 13.5.4.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

### 13.5.4.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |



Tested by: Jun-Hui, Lee / Senior Engineer

### 13.5.5 Test data for 802.11ac\_HT40 RLAN Mode

#### 13.5.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

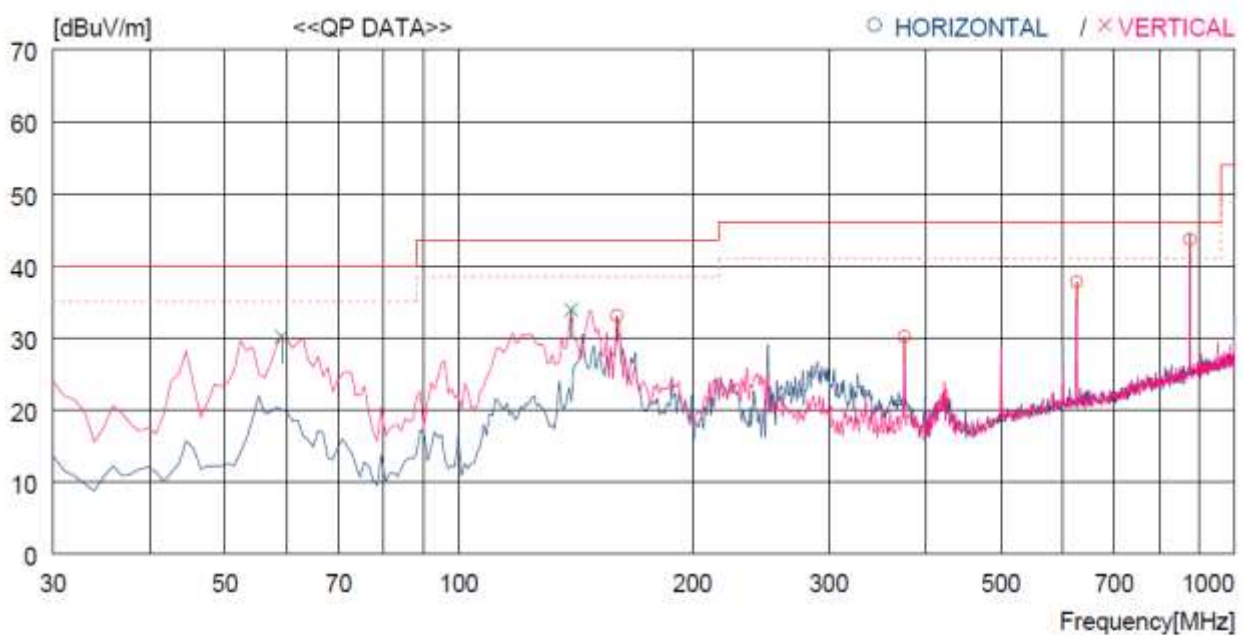
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 159.980 | 54.4    | 8.3    | 3.4  | 33.0 | 33.1     | 43.5     | 10.4   | 200     | 359   |
| 2                      | 375.320 | 43.0    | 14.7   | 5.2  | 32.7 | 30.2     | 46.0     | 15.8   | 100     | 163   |
| 3                      | 625.577 | 45.5    | 19.0   | 6.7  | 33.4 | 37.8     | 46.0     | 8.2    | 100     | 220   |
| 4                      | 875.830 | 47.0    | 21.5   | 8.3  | 33.1 | 43.7     | 46.0     | 2.3    | 100     | 205   |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 5                      | 59.100  | 47.5    | 13.6   | 2.1  | 33.0 | 30.2     | 40.0     | 9.8    | 100     | 359   |
| 6                      | 139.610 | 55.9    | 7.9    | 3.2  | 33.1 | 33.9     | 43.5     | 9.6    | 100     | 359   |

### 13.5.5.2 Test data for Below 30 MHz

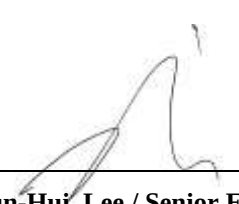
- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |

### 13.5.5.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |

  
 Tested by: Jun-Hui, Lee / Senior Engineer

### 13.5.6 Test data for 802.11ac\_HT80 RLAN Mode

#### 13.5.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

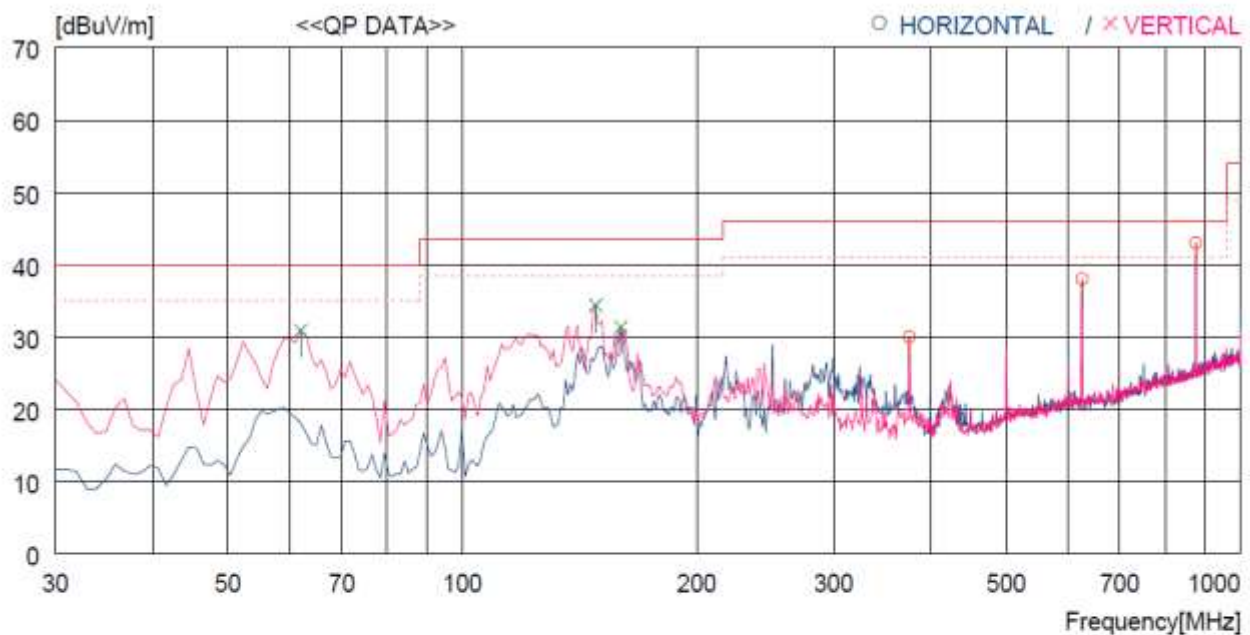
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 375.320 | 42.8    | 14.7   | 5.2  | 32.7 | 30.0     | 46.0     | 16.0   | 100     | 162   |
| 2                      | 625.577 | 45.7    | 19.0   | 6.7  | 33.4 | 38.0     | 46.0     | 8.0    | 100     | 170   |
| 3                      | 875.830 | 46.3    | 21.5   | 8.3  | 33.1 | 43.0     | 46.0     | 3.0    | 100     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 4                      | 62.010  | 49.1    | 12.7   | 2.2  | 33.1 | 30.9     | 40.0     | 9.1    | 100     | 202   |
| 5                      | 148.340 | 56.5    | 7.7    | 3.2  | 33.0 | 34.4     | 43.5     | 9.1    | 100     | 359   |
| 6                      | 159.980 | 52.7    | 8.3    | 3.4  | 33.0 | 31.4     | 43.5     | 12.1   | 200     | 150   |

### 13.5.6.2 Test data for 30 MHz ~ 1 000 MHz

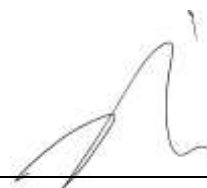
- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |

### 13.5.6.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Factor (dB/m) | Cable Loss | Amp Gain | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|--------------------|------------|----------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                    |            |          |                              |                       |             |



Tested by: Jun-Hui, Lee / Senior Engineer

## 13.6 Test data for 5 725 MHz ~ 5 850 MHz Band

### 13.6.1 Test data for 802.11a RLAN Mode

#### 13.6.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

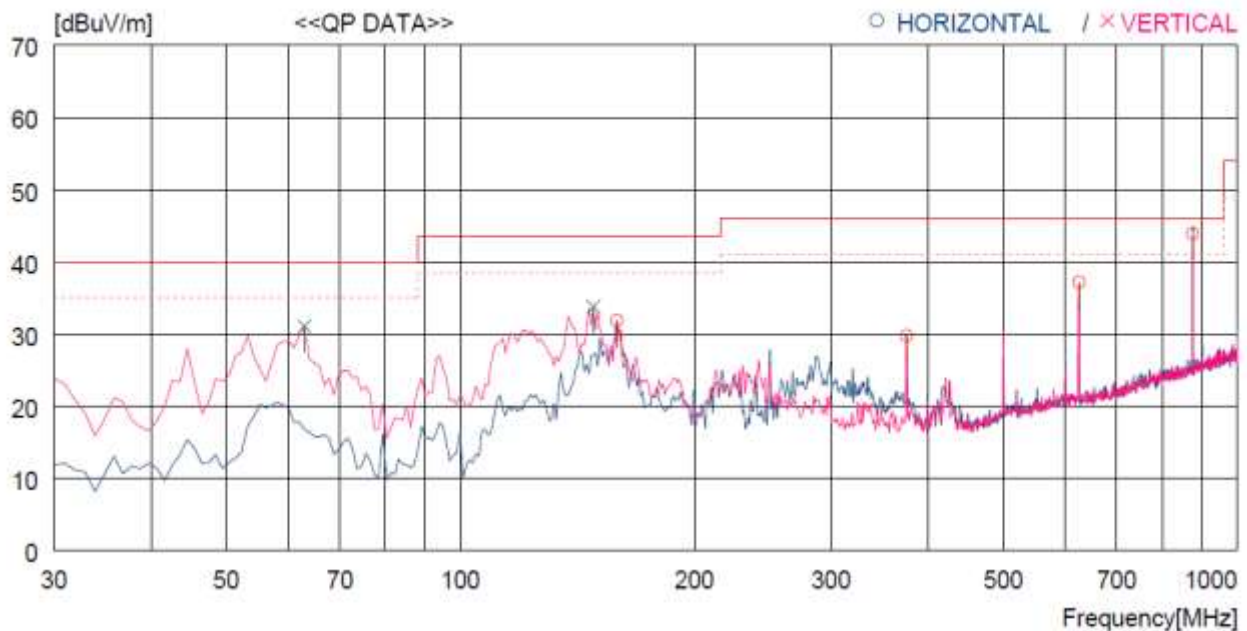
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1 Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | QP      | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
|                        |         | [dBuV]  |        |      |      |          |          |        |         |       |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 159.010 | 53.3    | 8.2    | 3.4  | 33.0 | 31.9     | 43.5     | 11.6   | 200     | 98    |
| 2                      | 375.320 | 42.6    | 14.7   | 5.2  | 32.7 | 29.8     | 46.0     | 16.2   | 100     | 158   |
| 3                      | 625.577 | 44.9    | 19.0   | 6.7  | 33.4 | 37.2     | 46.0     | 8.8    | 100     | 227   |
| 4                      | 875.830 | 47.2    | 21.5   | 8.3  | 33.1 | 43.9     | 46.0     | 2.1    | 100     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 5                      | 62.980  | 49.8    | 12.2   | 2.2  | 33.1 | 31.1     | 40.0     | 8.9    | 100     | 168   |
| 6                      | 148.340 | 55.9    | 7.7    | 3.2  | 33.0 | 33.8     | 43.5     | 9.7    | 100     | 334   |

### 13.6.1.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

### 13.6.1.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

  
 Tested by: Jun-Hui, Lee / Senior Engineer

### 13.6.2 Test data for 802.11n\_HT20 RLAN Mode

#### 13.6.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H. Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

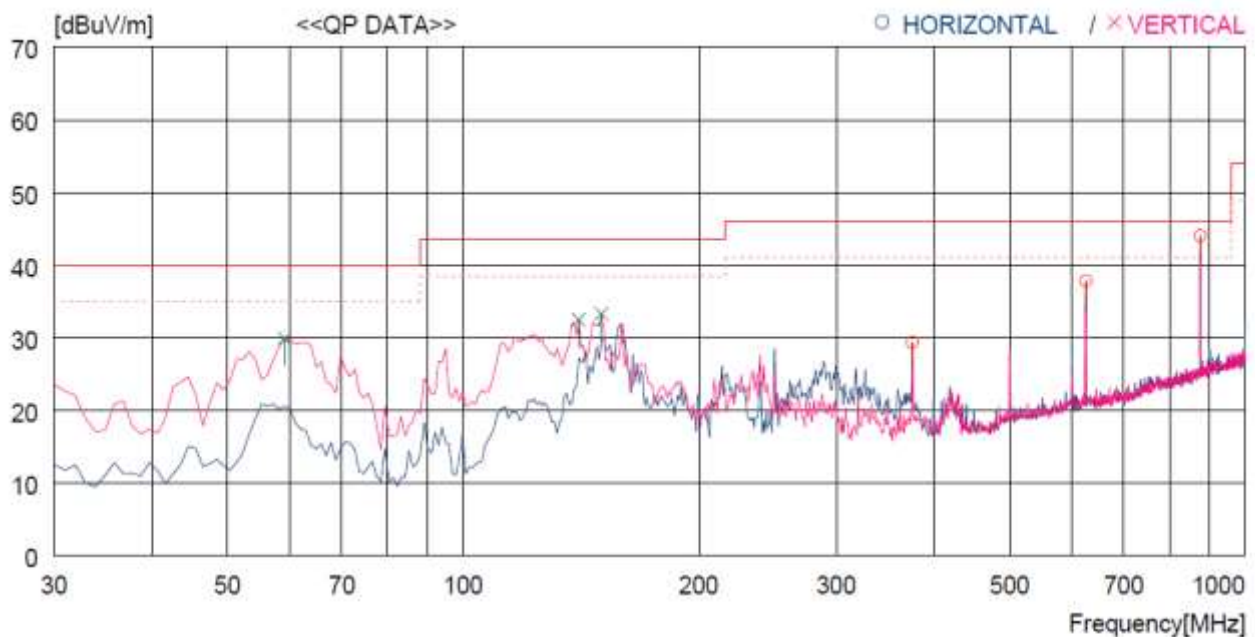
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 375.320 | 42.2    | 14.7   | 5.2  | 32.7 | 29.4     | 46.0     | 16.6   | 100     | 0     |
| 2                      | 625.577 | 45.6    | 19.0   | 6.7  | 33.4 | 37.9     | 46.0     | 8.1    | 100     | 0     |
| 3                      | 875.830 | 47.3    | 21.5   | 8.3  | 33.1 | 44.0     | 46.0     | 2.0    | 100     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 4                      | 59.100  | 47.2    | 13.6   | 2.1  | 33.0 | 29.9     | 40.0     | 10.1   | 100     | 250   |
| 5                      | 140.580 | 54.5    | 7.9    | 3.2  | 33.1 | 32.5     | 43.5     | 11.0   | 100     | 152   |
| 6                      | 150.280 | 55.3    | 7.7    | 3.3  | 33.0 | 33.3     | 43.5     | 10.2   | 100     | 350   |

### 13.6.2.1 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |

### 13.6.2.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |



Tested by: Jun-Hui, Lee / Senior Engineer

### 13.6.3 Test data for 802.11n\_HT40 RLAN Mode

#### 13.6.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

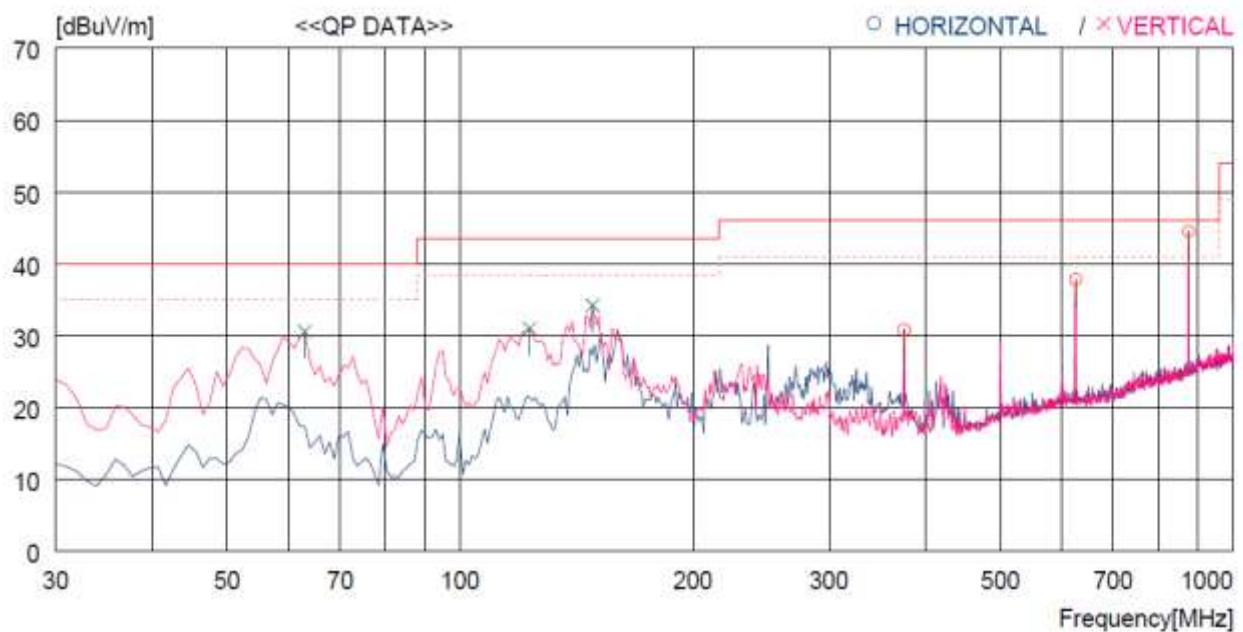
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ<br>[MHz] | READING<br>QP<br>[dBuV] | ANT<br>FACTOR<br>[dB] | LOSS<br>[dB] | GAIN<br>[dB] | RESULT<br>[dBuV/m] | LIMIT<br>[dBuV/m] | MARGIN<br>[dB] | ANTENNA<br>[cm] | TABLE<br>[DEG] |
|------------------------|---------------|-------------------------|-----------------------|--------------|--------------|--------------------|-------------------|----------------|-----------------|----------------|
| ----- Horizontal ----- |               |                         |                       |              |              |                    |                   |                |                 |                |
| 1                      | 375.320       | 43.6                    | 14.7                  | 5.2          | 32.7         | 30.8               | 46.0              | 15.2           | 100             | 175            |
| 2                      | 625.577       | 45.5                    | 19.0                  | 6.7          | 33.4         | 37.8               | 46.0              | 8.2            | 100             | 226            |
| 3                      | 875.830       | 47.8                    | 21.5                  | 8.3          | 33.1         | 44.5               | 46.0              | 1.5            | 100             | 199            |
| ----- Vertical -----   |               |                         |                       |              |              |                    |                   |                |                 |                |
| 4                      | 62.980        | 49.3                    | 12.2                  | 2.2          | 33.1         | 30.6               | 40.0              | 9.4            | 100             | 359            |
| 5                      | 123.120       | 51.2                    | 9.6                   | 3.4          | 33.2         | 31.0               | 43.5              | 12.5           | 100             | 359            |
| 6                      | 148.340       | 56.3                    | 7.7                   | 3.2          | 33.0         | 34.2               | 43.5              | 9.3            | 100             | 359            |

### 13.6.3.2 Test data for 30 MHz ~ 1 000 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |

### 13.6.3.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Factor (dB/m) | Cable Loss | Amp Gain | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|--------------------|------------|----------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                    |            |          |                              |                       |             |

  
 Tested by: Jun-Hui, Lee / Senior Engineer

### 13.6.4 Test data for 802.11ac\_HT20 RLAN Mode

#### 13.6.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

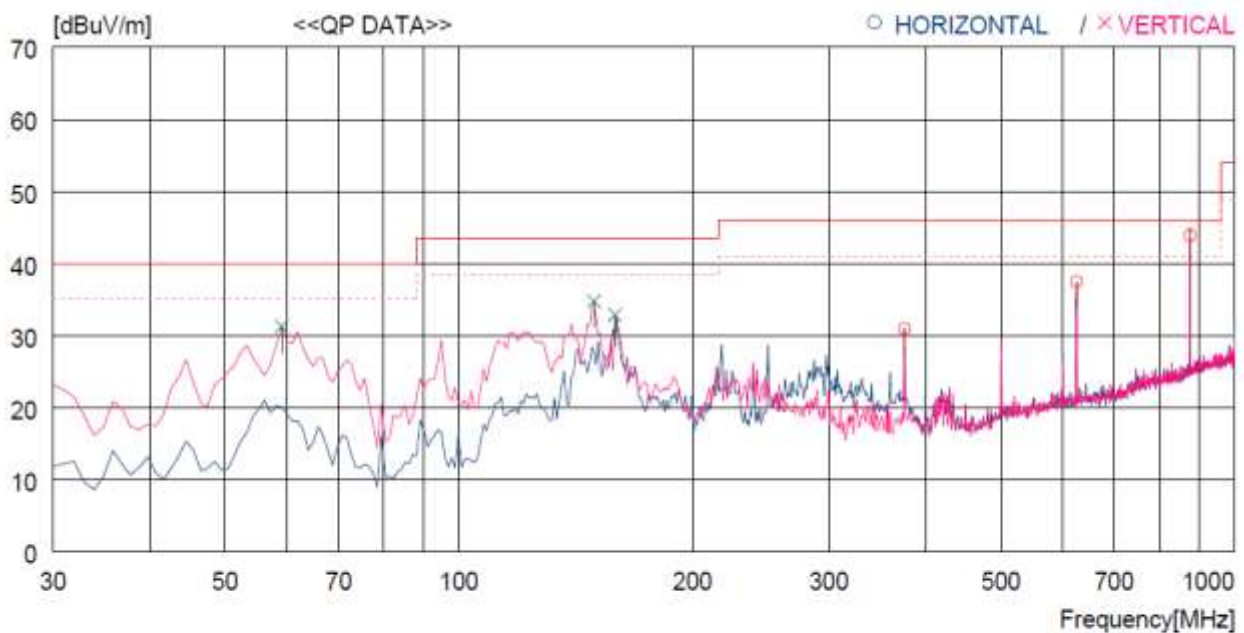
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 375.320 | 43.8    | 14.7   | 5.2  | 32.7 | 31.0     | 46.0     | 15.0   | 100     | 180   |
| 2                      | 625.577 | 45.2    | 19.0   | 6.7  | 33.4 | 37.5     | 46.0     | 8.5    | 100     | 0     |
| 3                      | 875.830 | 47.2    | 21.5   | 8.3  | 33.1 | 43.9     | 46.0     | 2.1    | 100     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 4                      | 59.100  | 48.6    | 13.6   | 2.1  | 33.0 | 31.3     | 40.0     | 8.7    | 100     | 257   |
| 5                      | 149.310 | 56.9    | 7.7    | 3.2  | 33.0 | 34.8     | 43.5     | 8.7    | 100     | 310   |
| 6                      | 159.010 | 54.3    | 8.2    | 3.4  | 33.0 | 32.9     | 43.5     | 10.6   | 200     | 139   |

#### 13.6.4.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

#### 13.6.4.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

Tested by: Jun-Hui, Lee / Senior Engineer

### 13.6.5 Test data for 802.11ac\_HT40 RLAN Mode

#### 13.6.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

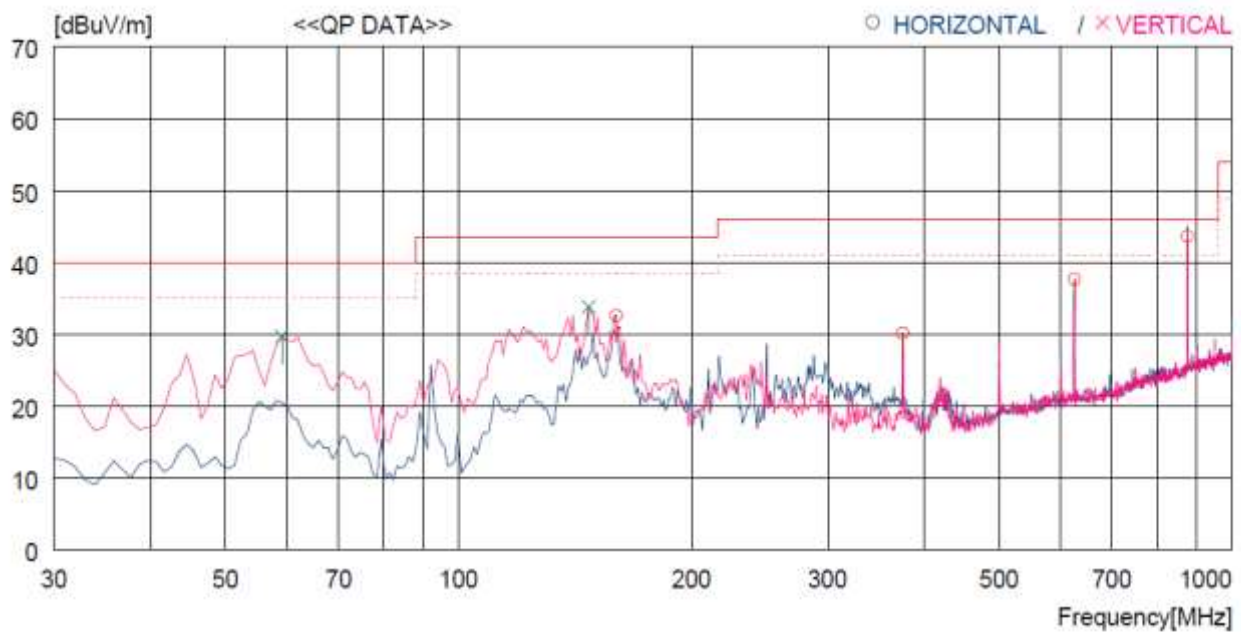
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | [dBuV]  | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 159.980 | 53.9    | 8.3    | 3.4  | 33.0 | 32.6     | 43.5     | 10.9   | 200     | 72    |
| 2                      | 375.320 | 43.0    | 14.7   | 5.2  | 32.7 | 30.2     | 46.0     | 15.8   | 100     | 0     |
| 3                      | 625.577 | 45.4    | 19.0   | 6.7  | 33.4 | 37.7     | 46.0     | 8.3    | 100     | 0     |
| 4                      | 875.830 | 47.0    | 21.5   | 8.3  | 33.1 | 43.7     | 46.0     | 2.3    | 100     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 5                      | 59.100  | 47.0    | 13.6   | 2.1  | 33.0 | 29.7     | 40.0     | 10.3   | 100     | 359   |
| 6                      | 147.370 | 55.9    | 7.7    | 3.2  | 33.0 | 33.8     | 43.5     | 9.7    | 100     | 6     |

### 13.6.5.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

### 13.6.5.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dBμV) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dBμV/m) | Limits (dBμV/m) | Margin (dB) |
|-----------------------------------------------|----------------|-----------------|-----------------|-----------|--------------------|------------|------------------------|-----------------|-------------|
| Any emissions were not observed from the EUT. |                |                 |                 |           |                    |            |                        |                 |             |

Tested by: Jun-Hui, Lee / Senior Engineer

### 13.6.6 Test data for 802.11ac\_HT80 RLAN Mode

#### 13.6.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

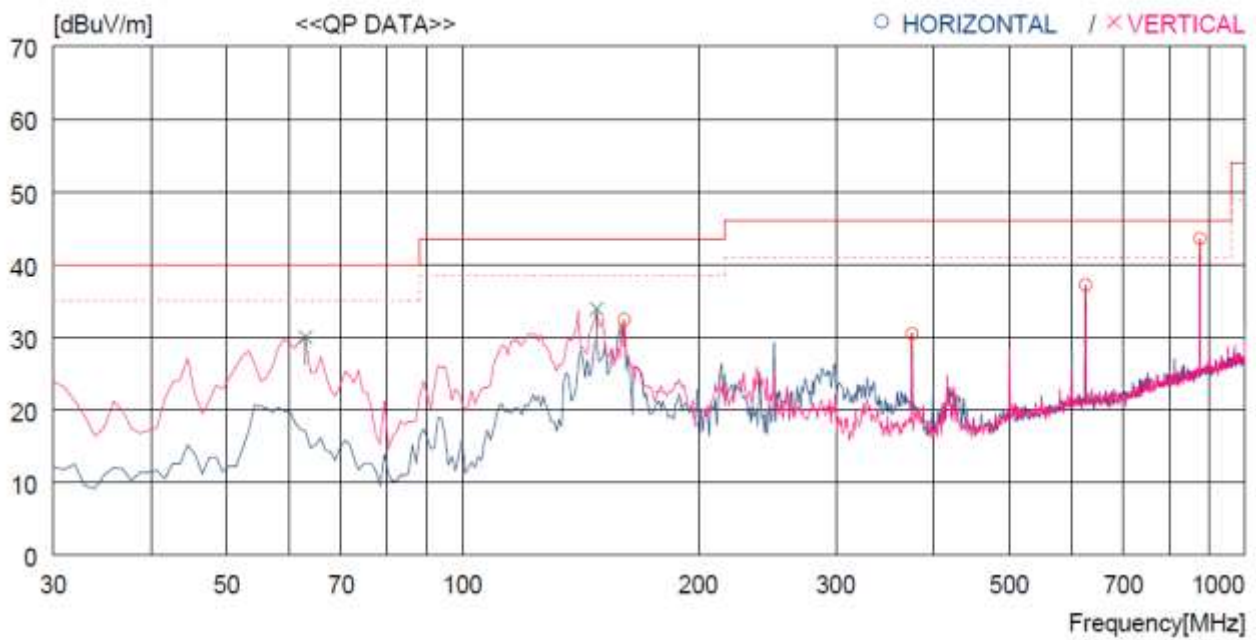
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



| No.                    | FREQ    | READING | ANT    | LOSS | GAIN | RESULT   | LIMIT    | MARGIN | ANTENNA | TABLE |
|------------------------|---------|---------|--------|------|------|----------|----------|--------|---------|-------|
|                        | [MHz]   | QF      | FACTOR | [dB] | [dB] | [dBuV/m] | [dBuV/m] | [dB]   | [cm]    | [DEG] |
| ----- Horizontal ----- |         |         |        |      |      |          |          |        |         |       |
| 1                      | 160.950 | 53.6    | 8.3    | 3.4  | 32.9 | 32.4     | 43.5     | 11.1   | 200     | 73    |
| 2                      | 375.320 | 43.3    | 14.7   | 5.2  | 32.7 | 30.5     | 46.0     | 15.5   | 100     | 0     |
| 3                      | 625.577 | 44.9    | 19.0   | 6.7  | 33.4 | 37.2     | 46.0     | 8.8    | 100     | 219   |
| 4                      | 875.830 | 46.9    | 21.5   | 8.3  | 33.1 | 43.6     | 46.0     | 2.4    | 100     | 0     |
| ----- Vertical -----   |         |         |        |      |      |          |          |        |         |       |
| 5                      | 62.980  | 48.7    | 12.2   | 2.2  | 33.1 | 30.0     | 40.0     | 10.0   | 100     | 161   |
| 6                      | 148.340 | 56.0    | 7.7    | 3.2  | 33.0 | 33.9     | 43.5     | 9.6    | 100     | 359   |

### 13.6.6.2 Test data for 30 MHz ~ 1 000 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Height (m) | Angle (°) | Ant. Factor (dB/m) | Cable Loss | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|-----------------|-----------|--------------------|------------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                 |           |                    |            |                              |                       |             |

### 13.6.6.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

| Frequency (MHz)                               | Reading (dB $\mu$ V) | Ant. Pol. (H/V) | Ant. Factor (dB/m) | Cable Loss | Amp Gain | Emission Level(dB $\mu$ V/m) | Limits (dB $\mu$ V/m) | Margin (dB) |
|-----------------------------------------------|----------------------|-----------------|--------------------|------------|----------|------------------------------|-----------------------|-------------|
| Any emissions were not observed from the EUT. |                      |                 |                    |            |          |                              |                       |             |



Tested by: Jun-Hui, Lee / Senior Engineer

## 14. RADIATED RESTRICTED BAND EDGE MEASUREMENTS

### 14.1 Operating environment

Temperature : 23 °C  
Relative humidity : 43 % R.H.

### 14.2 Test set-up for conducted measurement

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



### 14.3 Test equipment used

|     | Model Number | Manufacturer      | Description              | Serial Number | Last Cal.(Interval) |
|-----|--------------|-------------------|--------------------------|---------------|---------------------|
| ■ - | FSV40        | Rohde & Schwarz   | Signal Analyzer          | 101009        | Jul. 22, 2015 (1Y)  |
| ■ - | ESCI         | Rohde & Schwarz   | Test Receiver            | 101012        | Nov. 02, 2015 (1Y)  |
| ■ - | 310N         | Sonoma Instrument | Pre-Amplifier            | 312544        | Apr. 05, 2016 (1Y)  |
| ■ - | SCU-18       | Rohde & Schwarz   | Pre-Amplifier            | 10041         | Nov. 23, 2015 (1Y)  |
| ■ - | DT3000       | Innco System      | Turn Table               | 930611        | N/A                 |
| ■ - | MA4000-EP    | Innco System      | Antenna Master           | 3320611       | N/A                 |
| ■ - | VULB9163     | Schwarzbeck       | TRILOG Broadband Antenna | 9163-421      | Jul. 10, 2014 (2Y)  |
| ■ - | BBHA9120D    | Schwarzbeck       | Horn Antenna             | BBHA9120D295  | Aug. 31, 2015 (2Y)  |
| ■ - | BBHA9170     | Schwarzbeck       | Horn Antenna             | BBHA9170178   | Aug. 31, 2015 (2Y)  |

All test equipment used is calibrated on a regular basis.

#### 14.4 Test data for Frequency 5 150 band

##### 14.4.1 Test data for 802.11a RLAN Mode

##### 14.4.1.1 Test data for Antenna 0 (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 5 150.00           | 57.28             | Peak             | H                  | 31.00          | 11.50         | 42.20       | 57.58             | 74.00              | 16.42          |
|                    | 46.78             | Average          | H                  |                |               |             | 47.08             | 54.00              | 6.92           |
|                    | 59.19             | Peak             | V                  |                |               |             | 59.49             | 74.00              | 14.51          |
|                    | 46.80             | Average          | V                  |                |               |             | 47.10             | 54.00              | 6.90           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 350.00           | 43.82             | Peak             | H                  | 31.30          | 11.70         | 42.20       | 44.62             | 74.00              | 29.38          |
|                    | 32.80             | Average          | H                  |                |               |             | 33.60             | 54.00              | 20.40          |
|                    | 45.11             | Peak             | V                  |                |               |             | 45.91             | 74.00              | 28.09          |
|                    | 33.24             | Average          | V                  |                |               |             | 34.04             | 54.00              | 19.96          |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

#### 14.4.2 Test data for 802.11n\_HT20 RLAN Mode

##### 14.4.2.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| 5 150.00           | 56.65             | Peak             | H                  | 31.00          | 11.50         | 42.20       | 56.95             | 74.00              | 17.05          |
|                    | 46.80             | Average          | H                  |                |               |             | 47.10             | 54.00              | 6.90           |
|                    | 61.75             | Peak             | V                  |                |               |             | 62.05             | 74.00              | 11.95          |
|                    | 48.65             | Average          | V                  |                |               |             | 48.95             | 54.00              | 5.05           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 350.00           | 43.84             | Peak             | H                  | 31.30          | 11.70         | 42.20       | 44.64             | 74.00              | 29.36          |
|                    | 32.91             | Average          | H                  |                |               |             | 33.71             | 54.00              | 20.29          |
|                    | 45.20             | Peak             | V                  |                |               |             | 46.00             | 74.00              | 28.00          |
|                    | 33.29             | Average          | V                  |                |               |             | 34.09             | 54.00              | 19.91          |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

### 14.4.3 Test data for 802.11n\_HT40 RLAN Mode

#### 14.4.3.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| 5 150.00           | 57.18             | Peak             | H                  | 31.00          | 11.50         | 42.20       | 57.48             | 74.00              | 16.52          |
|                    | 46.82             | Average          | H                  |                |               |             | 47.12             | 54.00              | 6.88           |
|                    | 70.80             | Peak             | V                  |                |               |             | 71.10             | 74.00              | 2.90           |
|                    | 53.16             | Average          | V                  |                |               |             | 53.46             | 54.00              | 0.54           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 350.00           | 44.15             | Peak             | H                  | 31.30          | 11.70         | 42.20       | 44.95             | 74.00              | 29.05          |
|                    | 32.94             | Average          | H                  |                |               |             | 33.74             | 54.00              | 20.26          |
|                    | 45.28             | Peak             | V                  |                |               |             | 46.08             | 74.00              | 27.92          |
|                    | 33.22             | Average          | V                  |                |               |             | 34.02             | 54.00              | 19.98          |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

#### 14.4.4 Test data for 802.11ac20 RLAN Mode

##### 14.4.4.1 Test data for Multiple transmit (Worst case)

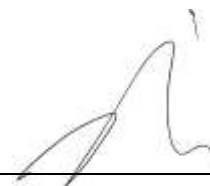
- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| 5150.00            | 56.55             | Peak             | H                  | 31.00          | 11.50         | 42.20       | 56.85             | 74.00              | 17.15          |
|                    | 46.79             | Average          | H                  |                |               |             | 47.09             | 54.00              | 6.91           |
|                    | 62.04             | Peak             | V                  |                |               |             | 62.34             | 74.00              | 11.66          |
|                    | 48.45             | Average          | V                  |                |               |             | 48.75             | 54.00              | 5.25           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 350.00           | 43.61             | Peak             | H                  | 31.30          | 11.70         | 42.20       | 44.41             | 74.00              | 29.59          |
|                    | 32.76             | Average          | H                  |                |               |             | 33.56             | 54.00              | 20.44          |
|                    | 45.02             | Peak             | V                  |                |               |             | 45.82             | 74.00              | 28.18          |
|                    | 33.24             | Average          | V                  |                |               |             | 34.04             | 54.00              | 19.96          |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

#### 14.4.5 Test data for 802.11ac40 RLAN Mode

##### 14.4.5.1 Test data for Multiple transmit (Worst case)

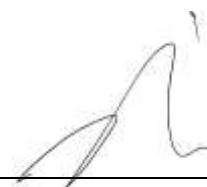
- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| 5 150.00           | 57.10             | Peak             | H                  | 31.00          | 11.50         | 42.20       | 57.40             | 74.00              | 16.60          |
|                    | 46.80             | Average          | H                  |                |               |             | 47.10             | 54.00              | 6.90           |
|                    | 68.67             | Peak             | V                  |                |               |             | 68.97             | 74.00              | 5.03           |
|                    | 53.53             | Average          | V                  |                |               |             | 53.83             | 54.00              | 0.17           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 350.00           | 44.42             | Peak             | H                  | 31.30          | 11.70         | 42.20       | 45.22             | 74.00              | 28.78          |
|                    | 32.57             | Average          | H                  |                |               |             | 33.37             | 54.00              | 20.63          |
|                    | 45.14             | Peak             | V                  |                |               |             | 45.94             | 74.00              | 28.06          |
|                    | 33.19             | Average          | V                  |                |               |             | 33.99             | 54.00              | 20.01          |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

#### 14.4.6 Test data for 802.11ac80 RLAN Mode

##### 14.4.6.1 Test data for Antenna 0

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| 5 150.00           | 47.49             | Peak             | H                  | 31.00          | 11.50         | 42.20       | 47.79             | 74.00              | 26.21          |
|                    | 33.65             | Average          | H                  |                |               |             | 33.95             | 54.00              | 20.05          |
|                    | 70.19             | Peak             | V                  |                |               |             | 70.49             | 74.00              | 3.51           |
|                    | 50.67             | Average          | V                  |                |               |             | 50.97             | 54.00              | 3.03           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 350.00           | 44.29             | Peak             | H                  | 31.30          | 11.70         | 42.20       | 45.09             | 74.00              | 28.91          |
|                    | 32.64             | Average          | H                  |                |               |             | 33.44             | 54.00              | 20.56          |
|                    | 47.50             | Peak             | V                  |                |               |             | 48.30             | 74.00              | 25.70          |
|                    | 34.09             | Average          | V                  |                |               |             | 34.89             | 54.00              | 19.11          |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

## 14.5 Test data for Frequency 5 725 MHz Band

### 14.5.1 Test data for 802.11a RLAN Mode

#### 14.5.1.1 Test data for Antenna 0 (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 5 725.00           | 56.86             | Peak             | H                  | 31.90          | 12.10         | 42.20       | 58.66             | 74.00              | 15.34          |
|                    | 46.77             | Average          | H                  |                |               |             | 48.57             | 54.00              | 5.43           |
|                    | 70.86             | Peak             | V                  |                |               |             | 72.66             | 74.00              | 1.34           |
|                    | 51.91             | Average          | V                  |                |               |             | 53.71             | 54.00              | 0.29           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 850.00           | 55.87             | Peak             | H                  | 32.10          | 12.20         | 42.20       | 57.97             | 74.00              | 16.03          |
|                    | 46.73             | Average          | H                  |                |               |             | 48.83             | 54.00              | 5.17           |
|                    | 68.27             | Peak             | V                  |                |               |             | 70.37             | 74.00              | 3.63           |
|                    | 50.48             | Average          | V                  |                |               |             | 52.58             | 54.00              | 1.42           |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

## 14.5.2 Test data for 802.11n\_HT20 RLAN Mode

### 14.5.2.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 5 725.00           | 56.73             | Peak             | H                  | 31.90          | 12.10         | 42.20       | 58.53             | 74.00              | 15.47          |
|                    | 46.78             | Average          | H                  |                |               |             | 48.58             | 54.00              | 5.42           |
|                    | 70.79             | Peak             | V                  |                |               |             | 72.59             | 74.00              | 1.41           |
|                    | 50.84             | Average          | V                  |                |               |             | 52.64             | 54.00              | 1.36           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 850.00           | 56.81             | Peak             | H                  | 32.10          | 12.20         | 42.20       | 58.91             | 74.00              | 15.09          |
|                    | 46.80             | Average          | H                  |                |               |             | 48.90             | 54.00              | 5.10           |
|                    | 68.17             | Peak             | V                  |                |               |             | 70.27             | 74.00              | 3.73           |
|                    | 51.35             | Average          | V                  |                |               |             | 53.45             | 54.00              | 0.55           |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

### 14.5.3 Test data for 802.11n\_HT40 RLAN Mode

#### 14.5.3.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 5 725.00           | 56.44             | Peak             | H                  | 31.90          | 12.10         | 42.20       | 58.24             | 74.00              | 15.76          |
|                    | 48.80             | Average          | H                  |                |               |             | 50.60             | 54.00              | 3.40           |
|                    | 70.26             | Peak             | V                  |                |               |             | 72.06             | 74.00              | 1.94           |
|                    | 51.95             | Average          | V                  |                |               |             | 53.75             | 54.00              | 0.25           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 850.00           | 56.00             | Peak             | H                  | 32.10          | 12.20         | 42.20       | 58.10             | 74.00              | 15.90          |
|                    | 46.77             | Average          | H                  |                |               |             | 48.87             | 54.00              | 5.13           |
|                    | 56.49             | Peak             | V                  |                |               |             | 58.59             | 74.00              | 15.41          |
|                    | 48.79             | Average          | V                  |                |               |             | 50.89             | 54.00              | 3.11           |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

#### 14.5.4 Test data for 802.11ac20 RLAN Mode

##### 14.5.4.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 5 725.00           | 56.39             | Peak             | H                  | 31.90          | 12.10         | 42.20       | 58.19             | 74.00              | 15.81          |
|                    | 46.82             | Average          | H                  |                |               |             | 48.62             | 54.00              | 5.38           |
|                    | 68.05             | Peak             | V                  |                |               |             | 69.85             | 74.00              | 4.15           |
|                    | 50.86             | Average          | V                  |                |               |             | 52.66             | 54.00              | 1.34           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 850.00           | 56.80             | Peak             | H                  | 32.10          | 12.20         | 42.20       | 58.90             | 74.00              | 15.10          |
|                    | 46.81             | Average          | H                  |                |               |             | 48.91             | 54.00              | 5.09           |
|                    | 61.53             | Peak             | V                  |                |               |             | 63.63             | 74.00              | 10.37          |
|                    | 48.89             | Average          | V                  |                |               |             | 50.99             | 54.00              | 3.01           |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

### 14.5.5 Test data for 802.11ac40 RLAN Mode

#### 14.5.5.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 5 725.00           | 56.56             | Peak             | H                  | 31.90          | 12.10         | 42.20       | 58.36             | 74.00              | 15.64          |
|                    | 46.83             | Average          | H                  |                |               |             | 48.63             | 54.00              | 5.37           |
|                    | 68.59             | Peak             | V                  |                |               |             | 70.39             | 74.00              | 3.61           |
|                    | 51.85             | Average          | V                  |                |               |             | 53.65             | 54.00              | 0.35           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 850.00           | 56.51             | Peak             | H                  | 32.10          | 12.20         | 42.20       | 58.61             | 74.00              | 15.39          |
|                    | 46.81             | Average          | H                  |                |               |             | 48.91             | 54.00              | 5.09           |
|                    | 56.70             | Peak             | V                  |                |               |             | 58.80             | 74.00              | 15.20          |
|                    | 46.82             | Average          | V                  |                |               |             | 48.92             | 54.00              | 5.08           |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

#### 14.5.6 Test data for 802.11ac80 RLAN Mode

##### 14.5.6.1 Test data for Antenna 0

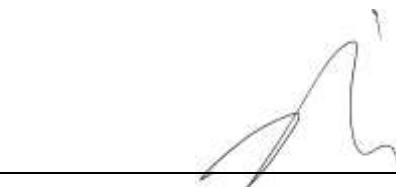
- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,  
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

| Frequency<br>(MHz) | Reading<br>(dBμV) | Detector<br>Mode | Ant. Pol.<br>(H/V) | Ant.<br>Factor | Cable<br>Loss | Amp<br>Gain | Total<br>(dBμV/m) | Limits<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|-------------------|------------------|--------------------|----------------|---------------|-------------|-------------------|--------------------|----------------|
| Low Channel        |                   |                  |                    |                |               |             |                   |                    |                |
| 5 725.00           | 54.89             | Peak             | H                  | 31.90          | 12.10         | 42.20       | 56.69             | 74.00              | 17.31          |
|                    | 36.54             | Average          | H                  |                |               |             | 38.34             | 54.00              | 15.66          |
|                    | 70.26             | Peak             | V                  |                |               |             | 72.06             | 74.00              | 1.94           |
|                    | 49.48             | Average          | V                  |                |               |             | 51.28             | 54.00              | 2.72           |
| High Channel       |                   |                  |                    |                |               |             |                   |                    |                |
| 5 850.00           | 44.45             | Peak             | H                  | 32.10          | 12.20         | 42.20       | 46.55             | 74.00              | 27.45          |
|                    | 32.71             | Average          | H                  |                |               |             | 34.81             | 54.00              | 19.19          |
|                    | 63.78             | Peak             | V                  |                |               |             | 65.88             | 74.00              | 8.12           |
|                    | 44.61             | Average          | V                  |                |               |             | 46.71             | 54.00              | 7.29           |

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

## 15. CONDUCTED EMISSION TEST

### 15.1 Operating environment

Temperature : (21 ~ 23) °C  
Relative humidity : (44 ~ 47) % R.H.

### 15.2 Test set-up

The EUT was placed on a wooden table, 0.8 m height above the floor. Power was fed to the EUT through a 50  $\Omega$  / 50  $\mu$ H + 5  $\Omega$  Artificial Mains Network (AMN). The ground plane was electrically bonded to the reference ground system and all power lines were filtered from ambient.

### 15.3 Test equipment used

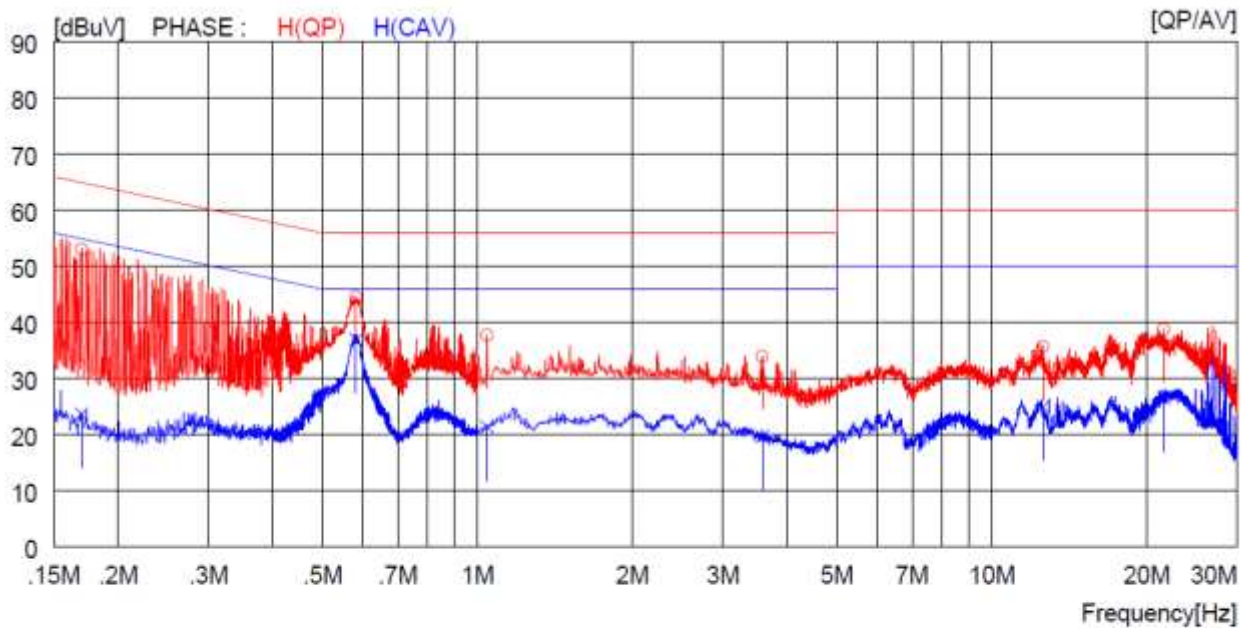
|     | Model Number | Manufacturer    | Description   | Serial Number | Last Cal. (Interval) |
|-----|--------------|-----------------|---------------|---------------|----------------------|
| ■ - | ESPI         | Rohde & Schwarz | Test Receiver | 101012        | Nov. 02, 2015 (1Y)   |
| □ - | ESHS10       | Rohde & Schwarz | Test Receiver | 834467/007    | Apr. 05, 2016 (1Y)   |
| □ - | NSLK8128     | Schwarzbeck     | AMN           | 8128-216      | Apr. 06, 2016 (1Y)   |
| ■ - | NSLK8126     | Schwarzbeck     | AMN           | 8126-404      | Apr. 05, 2016 (1Y)   |
| □ - | 3825/2       | EMCO            | AMN           | 9109-1869     | Apr. 06, 2016 (1Y)   |
| ■ - | 3825/2       | EMCO            | AMN           | 9109-1867     | Apr. 06, 2016 (1Y)   |

All test equipment used is calibrated on a regular basis.

## 15.4 Test data for Frequency 5 150 band

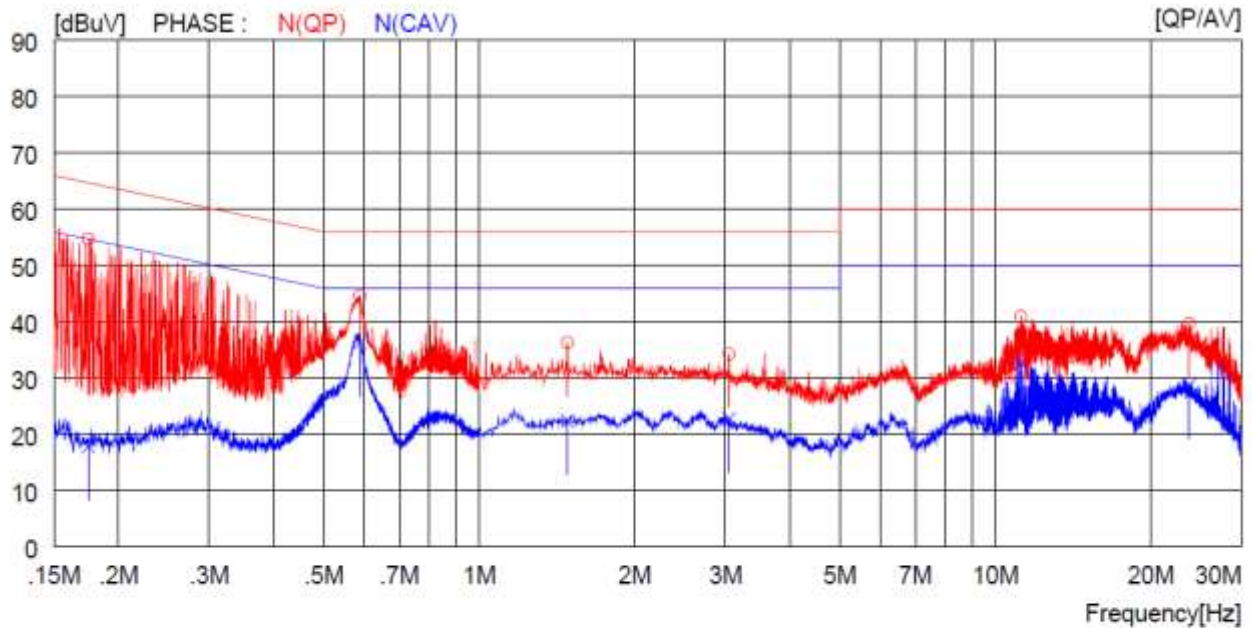
### 15.4.1 Test data for 802.11a RLAN Mode

- . Test Date : April 28, 2016
- . Resolution bandwidth : 9 kHz
- . Frequency range : 0.15 MHz ~ 30 MHz
- . Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.17000       | 43.0         | ----         | 10.1             | 53.1         | ----         | 65.0         | ----         | 11.9         | ----         | H (QP)  |
| 2  | 0.58100       | 34.5         | ----         | 10.1             | 44.6         | ----         | 56.0         | ----         | 11.4         | ----         | H (QP)  |
| 3  | 1.04400       | 27.7         | ----         | 10.1             | 37.8         | ----         | 56.0         | ----         | 18.2         | ----         | H (QP)  |
| 4  | 3.58000       | 23.9         | ----         | 10.1             | 34.0         | ----         | 56.0         | ----         | 22.0         | ----         | H (QP)  |
| 5  | 12.58000      | 25.3         | ----         | 10.4             | 35.7         | ----         | 60.0         | ----         | 24.3         | ----         | H (QP)  |
| 6  | 21.60000      | 28.4         | ----         | 10.5             | 38.9         | ----         | 60.0         | ----         | 21.1         | ----         | H (QP)  |
| 7  | 0.17000       | ----         | 13.6         | 10.1             | ----         | 23.7         | ----         | 55.0         | ----         | 31.3         | H (CAV) |
| 8  | 0.58100       | ----         | 26.9         | 10.1             | ----         | 37.0         | ----         | 46.0         | ----         | 9.0          | H (CAV) |
| 9  | 1.04400       | ----         | 11.3         | 10.1             | ----         | 21.4         | ----         | 46.0         | ----         | 24.6         | H (CAV) |
| 10 | 3.58000       | ----         | 9.6          | 10.1             | ----         | 19.7         | ----         | 46.0         | ----         | 26.3         | H (CAV) |
| 11 | 12.58000      | ----         | 14.6         | 10.4             | ----         | 25.0         | ----         | 50.0         | ----         | 25.0         | H (CAV) |
| 12 | 21.60000      | ----         | 16.1         | 10.5             | ----         | 26.6         | ----         | 50.0         | ----         | 23.4         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.17500       | 44.6         | ----         | 10.1             | 54.7         | ----         | 64.7         | ----         | 10.0         | ----         | N (QP)  |
| 2  | 0.58800       | 34.5         | ----         | 10.1             | 44.6         | ----         | 56.0         | ----         | 11.4         | ----         | N (QP)  |
| 3  | 1.48400       | 26.2         | ----         | 10.1             | 36.3         | ----         | 56.0         | ----         | 19.7         | ----         | N (QP)  |
| 4  | 3.05200       | 24.2         | ----         | 10.1             | 34.3         | ----         | 56.0         | ----         | 21.7         | ----         | N (QP)  |
| 5  | 11.22000      | 30.6         | ----         | 10.4             | 41.0         | ----         | 60.0         | ----         | 19.0         | ----         | N (QP)  |
| 6  | 23.77000      | 29.1         | ----         | 10.6             | 39.7         | ----         | 60.0         | ----         | 20.3         | ----         | N (QP)  |
| 7  | 0.17500       | ----         | 7.7          | 10.1             | ----         | 17.8         | ----         | 54.7         | ----         | 36.9         | N (CAV) |
| 8  | 0.58800       | ----         | 26.2         | 10.1             | ----         | 36.3         | ----         | 46.0         | ----         | 9.7          | N (CAV) |
| 9  | 1.48400       | ----         | 12.3         | 10.1             | ----         | 22.4         | ----         | 46.0         | ----         | 23.6         | N (CAV) |
| 10 | 3.05200       | ----         | 12.7         | 10.1             | ----         | 22.8         | ----         | 46.0         | ----         | 23.2         | N (CAV) |
| 11 | 11.22000      | ----         | 22.2         | 10.4             | ----         | 32.6         | ----         | 50.0         | ----         | 17.4         | N (CAV) |
| 12 | 23.77000      | ----         | 18.2         | 10.6             | ----         | 28.8         | ----         | 50.0         | ----         | 21.2         | N (CAV) |

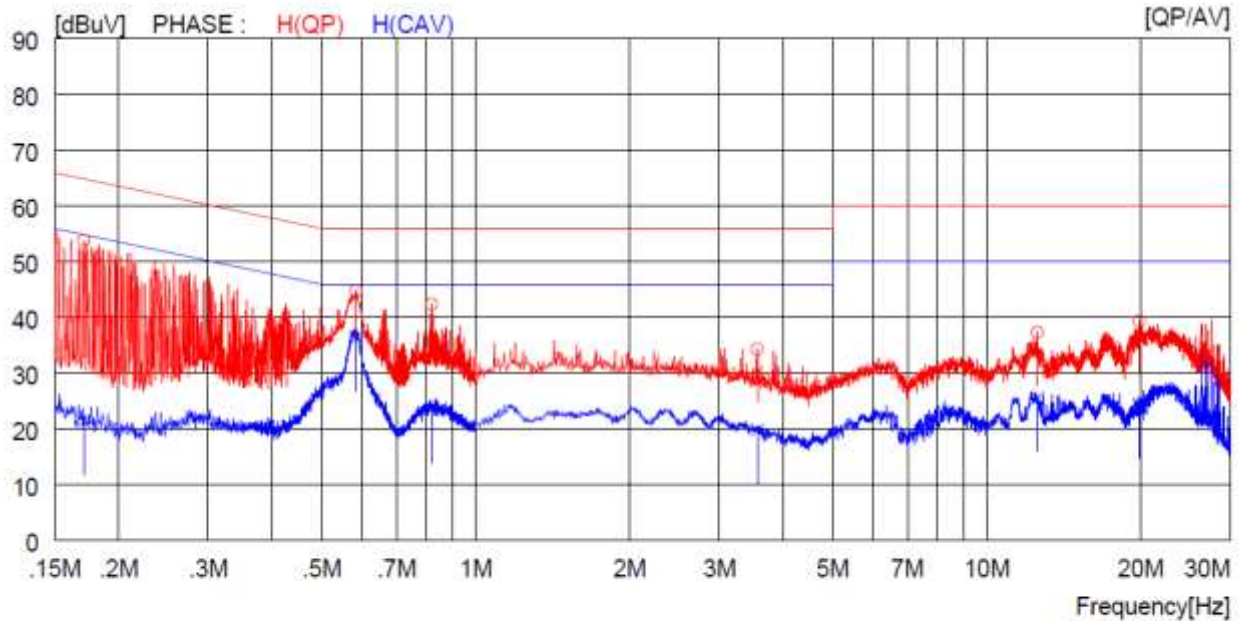
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

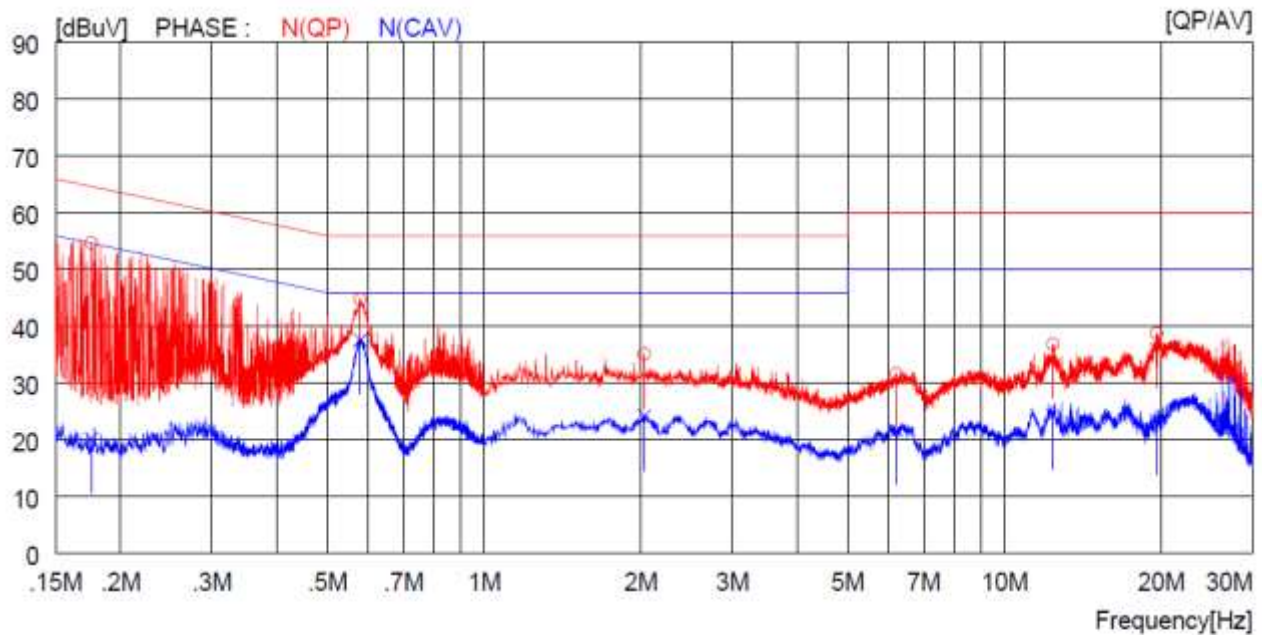
### 15.4.2 Test data for 802.11n\_HT20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.17100       | 43.7         | ----         | 10.1             | 53.8         | ----         | 64.9         | ----         | 11.1         | ----         | H (QP)  |
| 2  | 0.58300       | 34.7         | ----         | 10.1             | 44.8         | ----         | 56.0         | ----         | 11.2         | ----         | H (QP)  |
| 3  | 0.82000       | 32.3         | ----         | 10.1             | 42.4         | ----         | 56.0         | ----         | 13.6         | ----         | H (QP)  |
| 4  | 3.55600       | 24.3         | ----         | 10.1             | 34.4         | ----         | 56.0         | ----         | 21.6         | ----         | H (QP)  |
| 5  | 12.57000      | 27.0         | ----         | 10.4             | 37.4         | ----         | 60.0         | ----         | 22.6         | ----         | H (QP)  |
| 6  | 19.92000      | 28.9         | ----         | 10.5             | 39.4         | ----         | 60.0         | ----         | 20.6         | ----         | H (QP)  |
| 7  | 0.17100       | ----         | 11.3         | 10.1             | ----         | 21.4         | ----         | 54.9         | ----         | 33.5         | H (CAV) |
| 8  | 0.58300       | ----         | 26.3         | 10.1             | ----         | 36.4         | ----         | 46.0         | ----         | 9.6          | H (CAV) |
| 9  | 0.82000       | ----         | 13.5         | 10.1             | ----         | 23.6         | ----         | 46.0         | ----         | 22.4         | H (CAV) |
| 10 | 3.55600       | ----         | 9.7          | 10.1             | ----         | 19.8         | ----         | 46.0         | ----         | 26.2         | H (CAV) |
| 11 | 12.57000      | ----         | 15.2         | 10.4             | ----         | 25.6         | ----         | 50.0         | ----         | 24.4         | H (CAV) |
| 12 | 19.92000      | ----         | 13.9         | 10.5             | ----         | 24.4         | ----         | 50.0         | ----         | 25.6         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.17600       | 44.6         | ----         | 10.1             | 54.7         | ----         | 64.7         | ----         | 10.0         | ----         | N (QP)  |
| 2  | 0.57800       | 34.7         | ----         | 10.1             | 44.8         | ----         | 56.0         | ----         | 11.2         | ----         | N (QP)  |
| 3  | 2.03200       | 25.0         | ----         | 10.1             | 35.1         | ----         | 56.0         | ----         | 20.9         | ----         | N (QP)  |
| 4  | 6.19500       | 21.5         | ----         | 10.2             | 31.7         | ----         | 60.0         | ----         | 28.3         | ----         | N (QP)  |
| 5  | 12.39000      | 26.5         | ----         | 10.4             | 36.9         | ----         | 60.0         | ----         | 23.1         | ----         | N (QP)  |
| 6  | 19.64000      | 28.3         | ----         | 10.5             | 38.8         | ----         | 60.0         | ----         | 21.2         | ----         | N (QP)  |
| 7  | 0.17600       | ----         | 10.1         | 10.1             | ----         | 20.2         | ----         | 54.7         | ----         | 34.5         | N (CAV) |
| 8  | 0.57800       | ----         | 27.5         | 10.1             | ----         | 37.6         | ----         | 46.0         | ----         | 8.4          | N (CAV) |
| 9  | 2.03200       | ----         | 14.1         | 10.1             | ----         | 24.2         | ----         | 46.0         | ----         | 21.8         | N (CAV) |
| 10 | 6.19500       | ----         | 11.5         | 10.2             | ----         | 21.7         | ----         | 50.0         | ----         | 28.3         | N (CAV) |
| 11 | 12.39000      | ----         | 14.0         | 10.4             | ----         | 24.4         | ----         | 50.0         | ----         | 25.6         | N (CAV) |
| 12 | 19.64000      | ----         | 12.9         | 10.5             | ----         | 23.4         | ----         | 50.0         | ----         | 26.6         | N (CAV) |

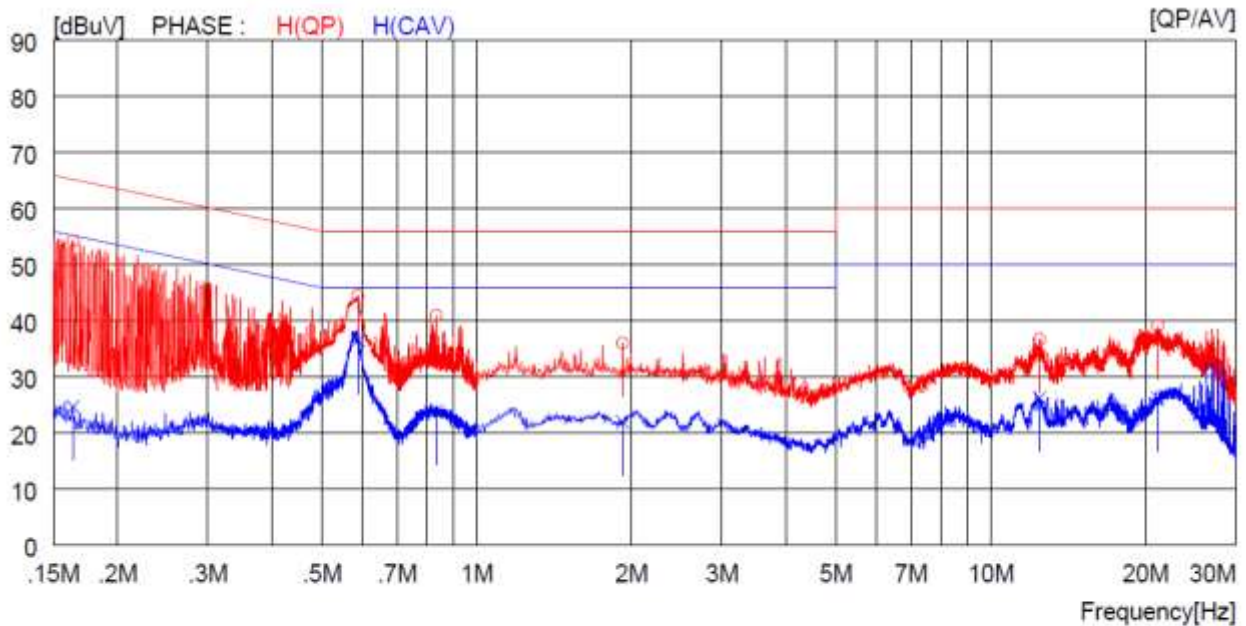
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

  
Tested by: Jun-Hui, Lee / Senior Engineer

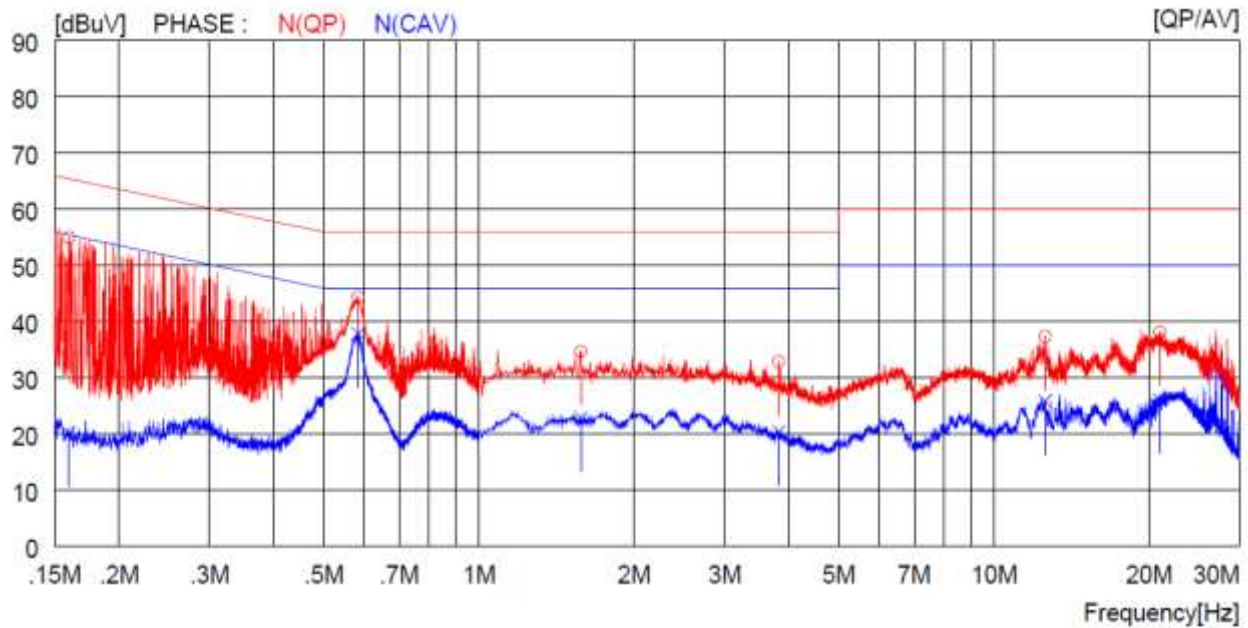
### 15.4.3 Test data for 802.11n\_HT40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE  |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |        |
| 1  | 0.16400       | 44.2         | ----         | 10.1             | 54.3         | ----         | 65.3         | ----         | 11.0         | ----         | H(QP)  |
| 2  | 0.58700       | 34.4         | ----         | 10.1             | 44.5         | ----         | 56.0         | ----         | 11.5         | ----         | H(QP)  |
| 3  | 0.83400       | 30.9         | ----         | 10.1             | 41.0         | ----         | 56.0         | ----         | 15.0         | ----         | H(QP)  |
| 4  | 1.92400       | 26.0         | ----         | 10.1             | 36.1         | ----         | 56.0         | ----         | 19.9         | ----         | H(QP)  |
| 5  | 12.44000      | 26.3         | ----         | 10.4             | 36.7         | ----         | 60.0         | ----         | 23.3         | ----         | H(QP)  |
| 6  | 21.14000      | 28.6         | ----         | 10.5             | 39.1         | ----         | 60.0         | ----         | 20.9         | ----         | H(QP)  |
| 7  | 0.16400       | ----         | 14.6         | 10.1             | ----         | 24.7         | ----         | 55.3         | ----         | 30.6         | H(CAV) |
| 8  | 0.58700       | ----         | 26.5         | 10.1             | ----         | 36.6         | ----         | 46.0         | ----         | 9.4          | H(CAV) |
| 9  | 0.83400       | ----         | 13.8         | 10.1             | ----         | 23.9         | ----         | 46.0         | ----         | 22.1         | H(CAV) |
| 10 | 1.92400       | ----         | 11.9         | 10.1             | ----         | 22.0         | ----         | 46.0         | ----         | 24.0         | H(CAV) |
| 11 | 12.44000      | ----         | 15.9         | 10.4             | ----         | 26.3         | ----         | 50.0         | ----         | 23.7         | H(CAV) |
| 12 | 21.14000      | ----         | 15.8         | 10.5             | ----         | 26.3         | ----         | 50.0         | ----         | 23.7         | H(CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.16000       | 44.9         | ----         | 10.1             | 55.0         | ----         | 65.5         | ----         | 10.5         | ----         | N (QP)  |
| 2  | 0.58300       | 34.3         | ----         | 10.1             | 44.4         | ----         | 56.0         | ----         | 11.6         | ----         | N (QP)  |
| 3  | 1.57600       | 24.6         | ----         | 10.1             | 34.7         | ----         | 56.0         | ----         | 21.3         | ----         | N (QP)  |
| 4  | 3.82400       | 22.8         | ----         | 10.1             | 32.9         | ----         | 56.0         | ----         | 23.1         | ----         | N (QP)  |
| 5  | 12.58000      | 27.0         | ----         | 10.4             | 37.4         | ----         | 60.0         | ----         | 22.6         | ----         | N (QP)  |
| 6  | 21.01000      | 27.7         | ----         | 10.5             | 38.2         | ----         | 60.0         | ----         | 21.8         | ----         | N (QP)  |
| 7  | 0.16000       | ----         | 10.1         | 10.1             | ----         | 20.2         | ----         | 55.5         | ----         | 35.3         | N (CAV) |
| 8  | 0.58300       | ----         | 27.8         | 10.1             | ----         | 37.9         | ----         | 46.0         | ----         | 8.1          | N (CAV) |
| 9  | 1.57600       | ----         | 12.8         | 10.1             | ----         | 22.9         | ----         | 46.0         | ----         | 23.1         | N (CAV) |
| 10 | 3.82400       | ----         | 10.3         | 10.1             | ----         | 20.4         | ----         | 46.0         | ----         | 25.6         | N (CAV) |
| 11 | 12.58000      | ----         | 15.5         | 10.4             | ----         | 25.9         | ----         | 50.0         | ----         | 24.1         | N (CAV) |
| 12 | 21.01000      | ----         | 15.5         | 10.5             | ----         | 26.0         | ----         | 50.0         | ----         | 24.0         | N (CAV) |

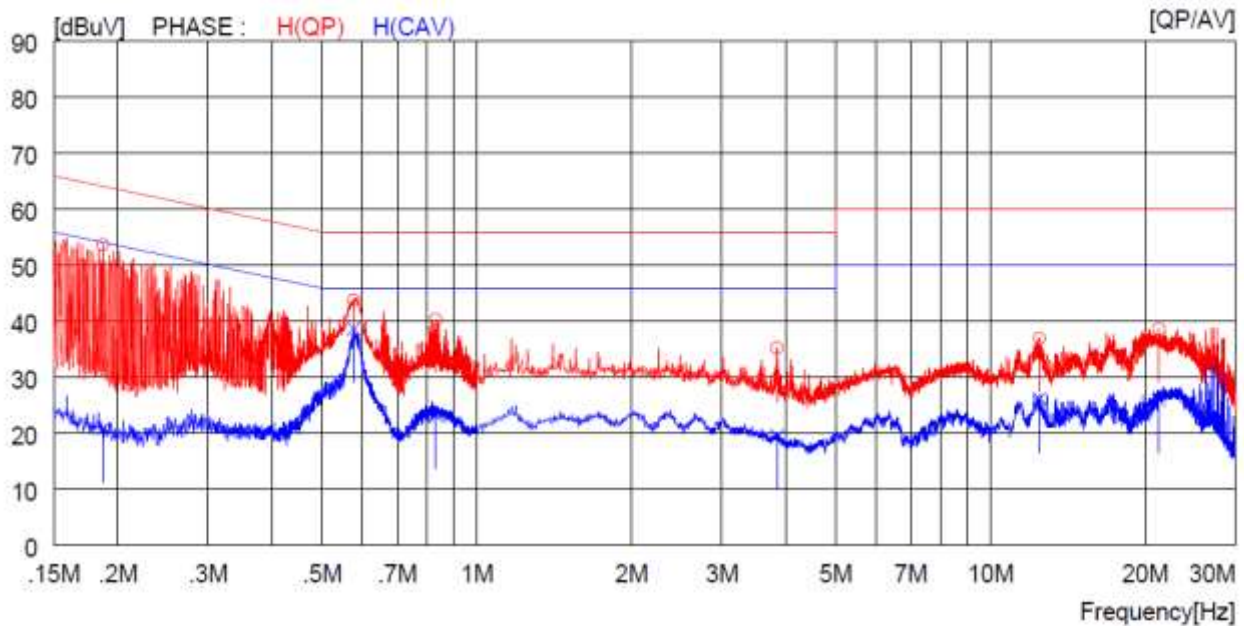
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

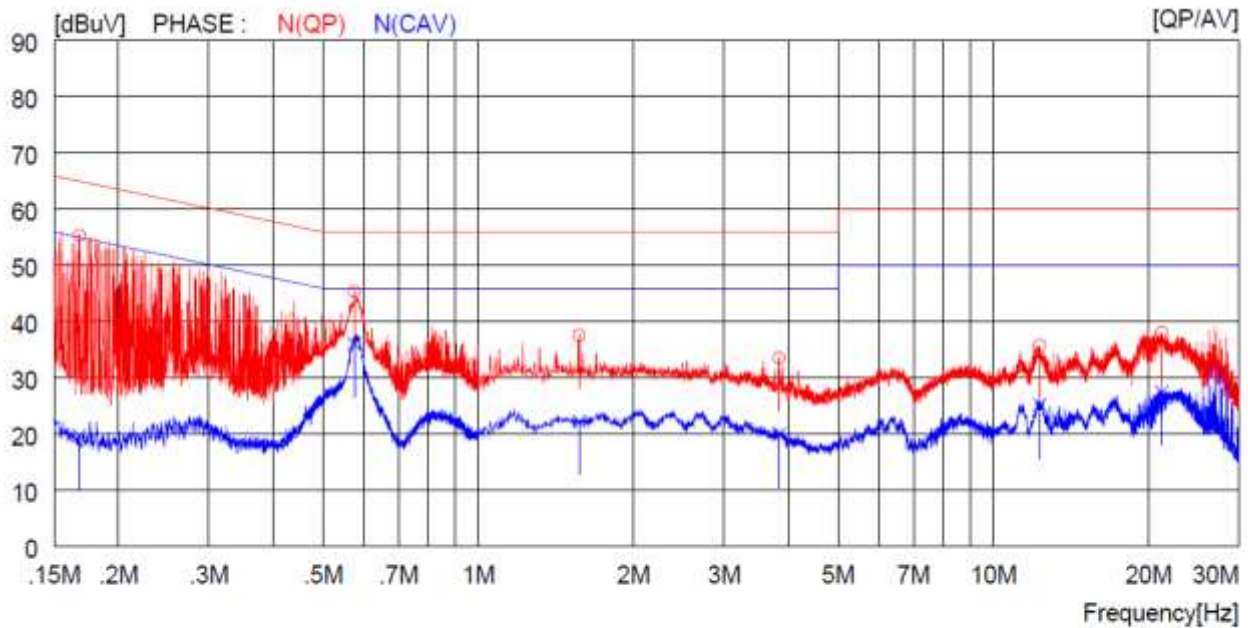
#### 15.4.4 Test data for 802.11ac20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.18700       | 43.6         | ----         | 10.1             | 53.7         | ----         | 64.2         | ----         | 10.5         | ----         | H (QP)  |
| 2  | 0.57600       | 33.7         | ----         | 10.1             | 43.8         | ----         | 56.0         | ----         | 12.2         | ----         | H (QP)  |
| 3  | 0.83200       | 30.3         | ----         | 10.1             | 40.4         | ----         | 56.0         | ----         | 15.6         | ----         | H (QP)  |
| 4  | 3.84400       | 25.2         | ----         | 10.1             | 35.3         | ----         | 56.0         | ----         | 20.7         | ----         | H (QP)  |
| 5  | 12.47000      | 26.6         | ----         | 10.4             | 37.0         | ----         | 60.0         | ----         | 23.0         | ----         | H (QP)  |
| 6  | 21.30000      | 28.2         | ----         | 10.5             | 38.7         | ----         | 60.0         | ----         | 21.3         | ----         | H (QP)  |
| 7  | 0.18700       | ----         | 10.8         | 10.1             | ----         | 20.9         | ----         | 54.2         | ----         | 33.3         | H (CAV) |
| 8  | 0.57600       | ----         | 28.6         | 10.1             | ----         | 38.7         | ----         | 46.0         | ----         | 7.3          | H (CAV) |
| 9  | 0.83200       | ----         | 13.1         | 10.1             | ----         | 23.2         | ----         | 46.0         | ----         | 22.8         | H (CAV) |
| 10 | 3.84400       | ----         | 9.5          | 10.1             | ----         | 19.6         | ----         | 46.0         | ----         | 26.4         | H (CAV) |
| 11 | 12.47000      | ----         | 15.8         | 10.4             | ----         | 26.2         | ----         | 50.0         | ----         | 23.8         | H (CAV) |
| 12 | 21.30000      | ----         | 15.5         | 10.5             | ----         | 26.0         | ----         | 50.0         | ----         | 24.0         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.16800       | 45.3         | ----         | 10.1             | 55.4         | ----         | 65.1         | ----         | 9.7          | ----         | N (QP)  |
| 2  | 0.57500       | 35.3         | ----         | 10.1             | 45.4         | ----         | 56.0         | ----         | 10.6         | ----         | N (QP)  |
| 3  | 1.57200       | 27.5         | ----         | 10.1             | 37.6         | ----         | 56.0         | ----         | 18.4         | ----         | N (QP)  |
| 4  | 3.84000       | 23.5         | ----         | 10.1             | 33.6         | ----         | 56.0         | ----         | 22.4         | ----         | N (QP)  |
| 5  | 12.30000      | 25.4         | ----         | 10.4             | 35.8         | ----         | 60.0         | ----         | 24.2         | ----         | N (QP)  |
| 6  | 21.23000      | 27.6         | ----         | 10.5             | 38.1         | ----         | 60.0         | ----         | 21.9         | ----         | N (QP)  |
| 7  | 0.16800       | ----         | 9.7          | 10.1             | ----         | 19.8         | ----         | 55.1         | ----         | 35.3         | N (CAV) |
| 8  | 0.57500       | ----         | 26.0         | 10.1             | ----         | 36.1         | ----         | 46.0         | ----         | 9.9          | N (CAV) |
| 9  | 1.57200       | ----         | 12.2         | 10.1             | ----         | 22.3         | ----         | 46.0         | ----         | 23.7         | N (CAV) |
| 10 | 3.84000       | ----         | 9.9          | 10.1             | ----         | 20.0         | ----         | 46.0         | ----         | 26.0         | N (CAV) |
| 11 | 12.30000      | ----         | 14.8         | 10.4             | ----         | 25.2         | ----         | 50.0         | ----         | 24.8         | N (CAV) |
| 12 | 21.23000      | ----         | 17.1         | 10.5             | ----         | 27.6         | ----         | 50.0         | ----         | 22.4         | N (CAV) |

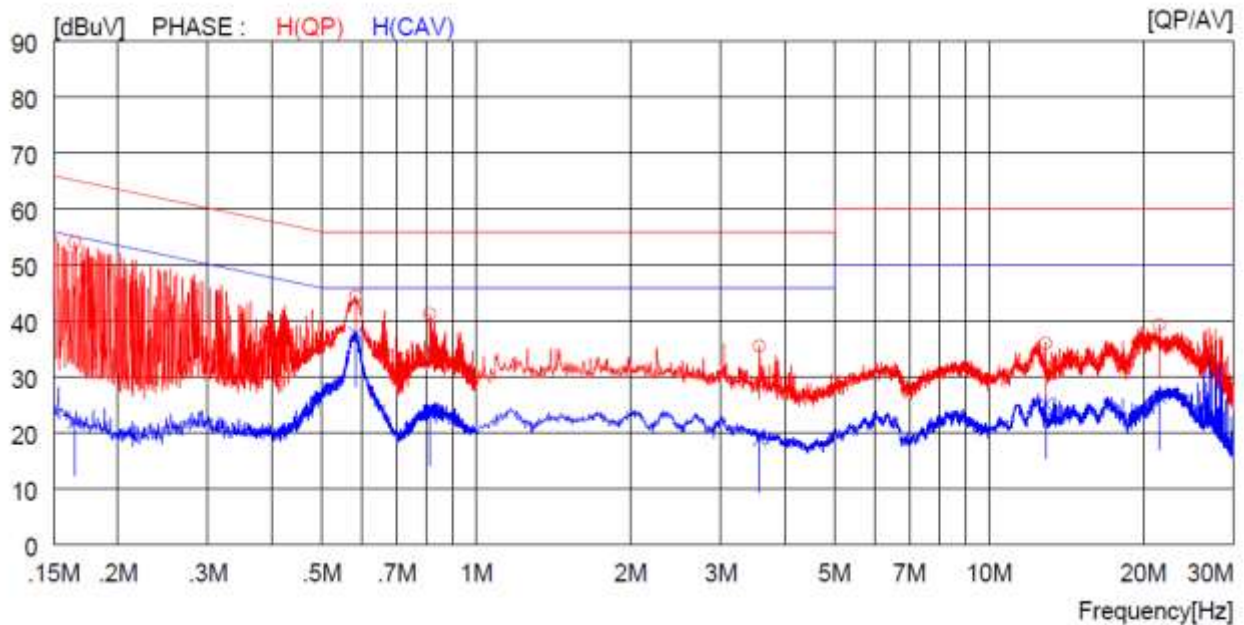
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

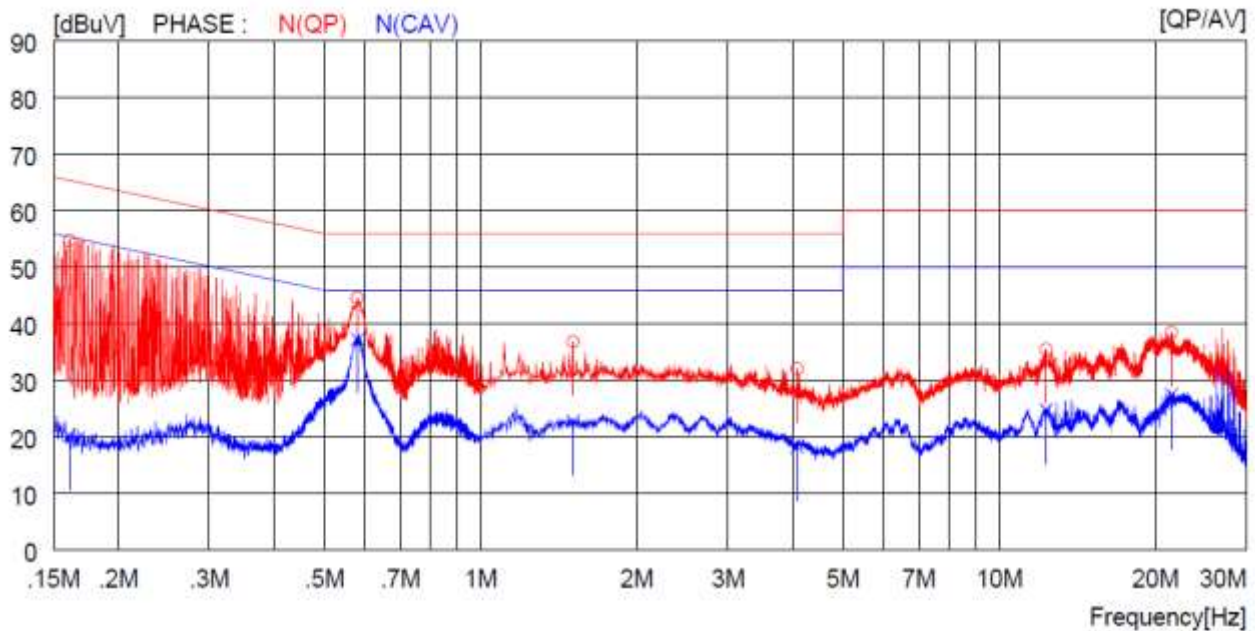
### 15.4.5 Test data for 802.11ac40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.16500       | 44.0         | ----         | 10.1             | 54.1         | ----         | 65.2         | ----         | 11.1         | ----         | H (QP)  |
| 2  | 0.58300       | 34.4         | ----         | 10.1             | 44.5         | ----         | 56.0         | ----         | 11.5         | ----         | H (QP)  |
| 3  | 0.81200       | 31.2         | ----         | 10.1             | 41.3         | ----         | 56.0         | ----         | 14.7         | ----         | H (QP)  |
| 4  | 3.57200       | 25.5         | ----         | 10.1             | 35.6         | ----         | 56.0         | ----         | 20.4         | ----         | H (QP)  |
| 5  | 12.91000      | 25.7         | ----         | 10.4             | 36.1         | ----         | 60.0         | ----         | 23.9         | ----         | H (QP)  |
| 6  | 21.52000      | 28.9         | ----         | 10.5             | 39.4         | ----         | 60.0         | ----         | 20.6         | ----         | H (QP)  |
| 7  | 0.16500       | ----         | 11.9         | 10.1             | ----         | 22.0         | ----         | 55.2         | ----         | 33.2         | H (CAV) |
| 8  | 0.58300       | ----         | 27.7         | 10.1             | ----         | 37.8         | ----         | 46.0         | ----         | 8.2          | H (CAV) |
| 9  | 0.81200       | ----         | 13.6         | 10.1             | ----         | 23.7         | ----         | 46.0         | ----         | 22.3         | H (CAV) |
| 10 | 3.57200       | ----         | 8.9          | 10.1             | ----         | 19.0         | ----         | 46.0         | ----         | 27.0         | H (CAV) |
| 11 | 12.91000      | ----         | 14.7         | 10.4             | ----         | 25.1         | ----         | 50.0         | ----         | 24.9         | H (CAV) |
| 12 | 21.52000      | ----         | 16.0         | 10.5             | ----         | 26.5         | ----         | 50.0         | ----         | 23.5         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.16100       | 44.7         | ----         | 10.1             | 54.8         | ----         | 65.4         | ----         | 10.6         | ----         | N (QP)  |
| 2  | 0.57900       | 34.5         | ----         | 10.1             | 44.6         | ----         | 56.0         | ----         | 11.4         | ----         | N (QP)  |
| 3  | 1.50800       | 26.8         | ----         | 10.1             | 36.9         | ----         | 56.0         | ----         | 19.1         | ----         | N (QP)  |
| 4  | 4.08400       | 22.0         | ----         | 10.1             | 32.1         | ----         | 56.0         | ----         | 23.9         | ----         | N (QP)  |
| 5  | 12.33000      | 25.1         | ----         | 10.4             | 35.5         | ----         | 60.0         | ----         | 24.5         | ----         | N (QP)  |
| 6  | 21.50000      | 28.0         | ----         | 10.5             | 38.5         | ----         | 60.0         | ----         | 21.5         | ----         | N (QP)  |
| 7  | 0.16100       | ----         | 10.2         | 10.1             | ----         | 20.3         | ----         | 55.4         | ----         | 35.1         | N (CAV) |
| 8  | 0.57900       | ----         | 27.2         | 10.1             | ----         | 37.3         | ----         | 46.0         | ----         | 8.7          | N (CAV) |
| 9  | 1.50800       | ----         | 12.7         | 10.1             | ----         | 22.8         | ----         | 46.0         | ----         | 23.2         | N (CAV) |
| 10 | 4.08400       | ----         | 8.2          | 10.1             | ----         | 18.3         | ----         | 46.0         | ----         | 27.7         | N (CAV) |
| 11 | 12.33000      | ----         | 14.4         | 10.4             | ----         | 24.8         | ----         | 50.0         | ----         | 25.2         | N (CAV) |
| 12 | 21.50000      | ----         | 17.0         | 10.5             | ----         | 27.5         | ----         | 50.0         | ----         | 22.5         | N (CAV) |

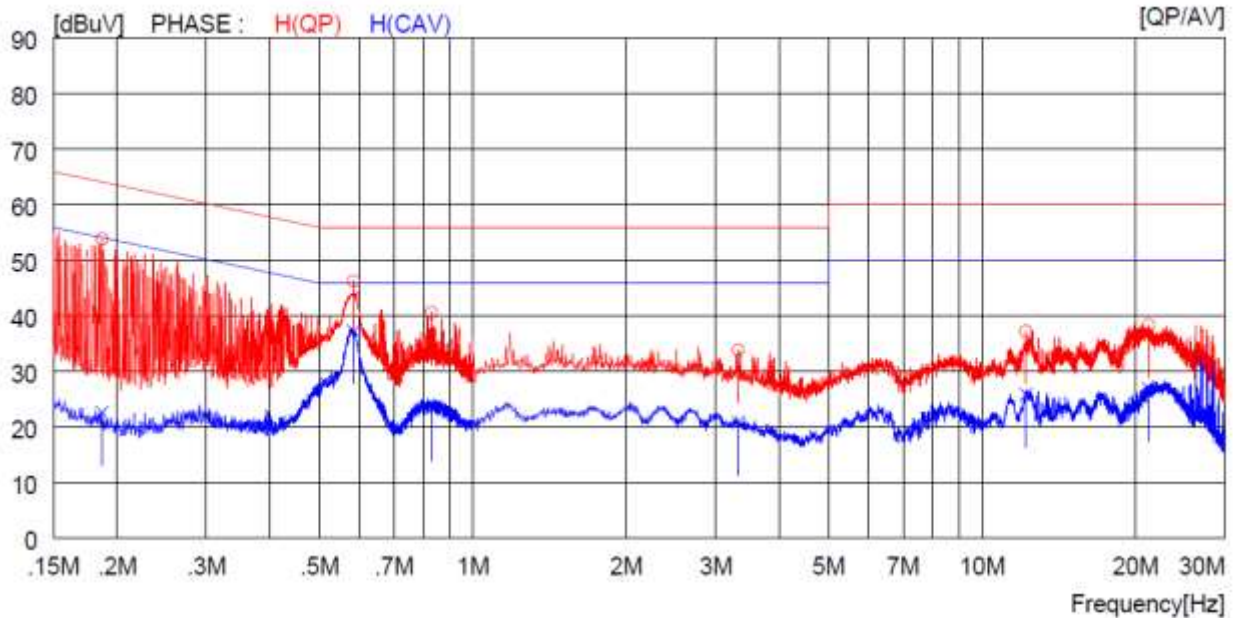
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

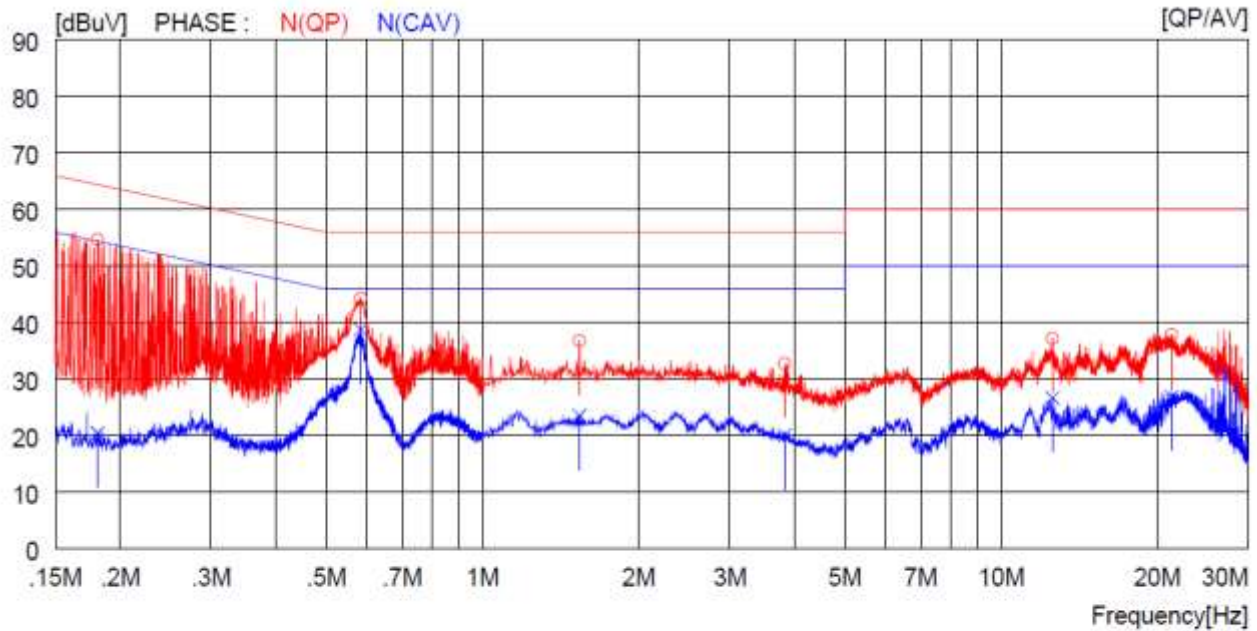
### 15.4.6 Test data for 802.11ac80 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.18700       | 43.8         | ----         | 10.1             | 53.9         | ----         | 64.2         | ----         | 10.3         | ----         | H (QP)  |
| 2  | 0.58300       | 36.2         | ----         | 10.1             | 46.3         | ----         | 56.0         | ----         | 9.7          | ----         | H (QP)  |
| 3  | 0.82900       | 30.6         | ----         | 10.1             | 40.7         | ----         | 56.0         | ----         | 15.3         | ----         | H (QP)  |
| 4  | 3.32400       | 23.8         | ----         | 10.1             | 33.9         | ----         | 56.0         | ----         | 22.1         | ----         | H (QP)  |
| 5  | 12.19000      | 26.9         | ----         | 10.4             | 37.3         | ----         | 60.0         | ----         | 22.7         | ----         | H (QP)  |
| 6  | 21.27000      | 27.9         | ----         | 10.5             | 38.4         | ----         | 60.0         | ----         | 21.6         | ----         | H (QP)  |
| 7  | 0.18700       | ----         | 12.6         | 10.1             | ----         | 22.7         | ----         | 54.2         | ----         | 31.5         | H (CAV) |
| 8  | 0.58300       | ----         | 27.2         | 10.1             | ----         | 37.3         | ----         | 46.0         | ----         | 8.7          | H (CAV) |
| 9  | 0.82900       | ----         | 13.3         | 10.1             | ----         | 23.4         | ----         | 46.0         | ----         | 22.6         | H (CAV) |
| 10 | 3.32400       | ----         | 10.8         | 10.1             | ----         | 20.9         | ----         | 46.0         | ----         | 25.1         | H (CAV) |
| 11 | 12.19000      | ----         | 15.5         | 10.4             | ----         | 25.9         | ----         | 50.0         | ----         | 24.1         | H (CAV) |
| 12 | 21.27000      | ----         | 16.4         | 10.5             | ----         | 26.9         | ----         | 50.0         | ----         | 23.1         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE  |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |        |
| 1  | 0.18100       | 44.6         | ----         | 10.1             | 54.7         | ----         | 64.4         | ----         | 9.7          | ----         | N(QP)  |
| 2  | 0.58300       | 34.2         | ----         | 10.1             | 44.3         | ----         | 56.0         | ----         | 11.7         | ----         | N(QP)  |
| 3  | 1.54000       | 26.7         | ----         | 10.1             | 36.8         | ----         | 56.0         | ----         | 19.2         | ----         | N(QP)  |
| 4  | 3.82800       | 22.7         | ----         | 10.1             | 32.8         | ----         | 56.0         | ----         | 23.2         | ----         | N(QP)  |
| 5  | 12.58000      | 26.8         | ----         | 10.4             | 37.2         | ----         | 60.0         | ----         | 22.8         | ----         | N(QP)  |
| 6  | 21.32000      | 27.4         | ----         | 10.5             | 37.9         | ----         | 60.0         | ----         | 22.1         | ----         | N(QP)  |
| 7  | 0.18100       | ----         | 10.4         | 10.1             | ----         | 20.5         | ----         | 54.4         | ----         | 33.9         | N(CAV) |
| 8  | 0.58300       | ----         | 28.7         | 10.1             | ----         | 38.8         | ----         | 46.0         | ----         | 7.2          | N(CAV) |
| 9  | 1.54000       | ----         | 13.5         | 10.1             | ----         | 23.6         | ----         | 46.0         | ----         | 22.4         | N(CAV) |
| 10 | 3.82800       | ----         | 10.0         | 10.1             | ----         | 20.1         | ----         | 46.0         | ----         | 25.9         | N(CAV) |
| 11 | 12.58000      | ----         | 16.3         | 10.4             | ----         | 26.7         | ----         | 50.0         | ----         | 23.3         | N(CAV) |
| 12 | 21.32000      | ----         | 16.4         | 10.5             | ----         | 26.9         | ----         | 50.0         | ----         | 23.1         | N(CAV) |

Remark: Margin (dB) = Limit – Level (Result)

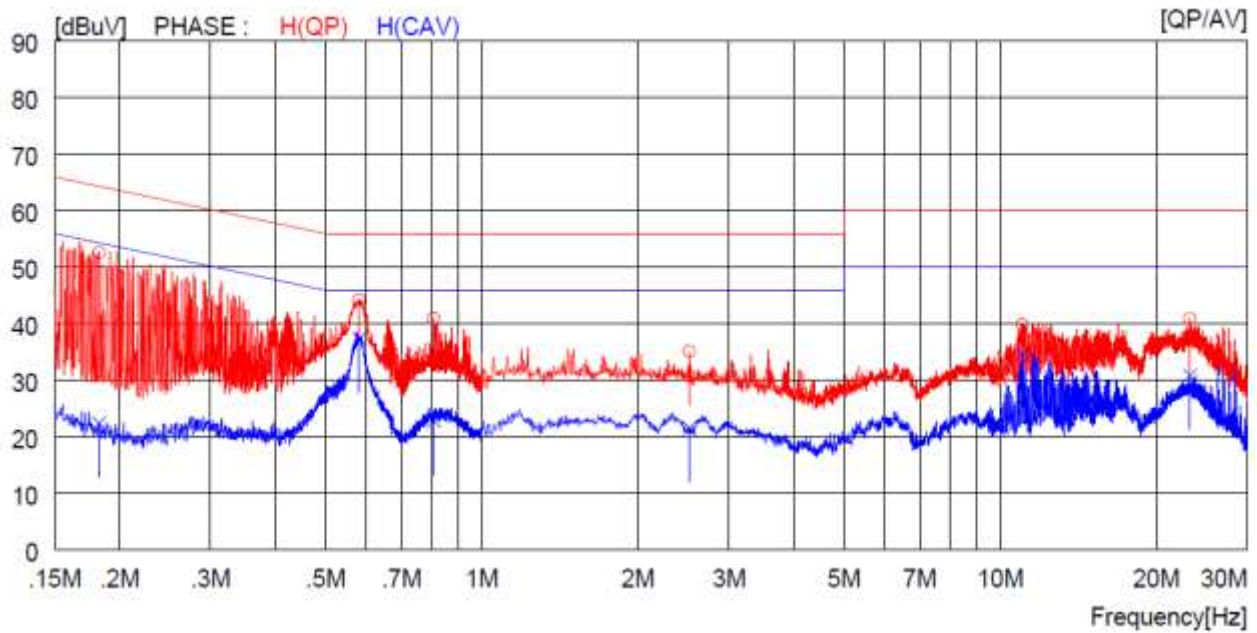
The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

## 15.5 Test data for Frequency 5 725 MHz Band

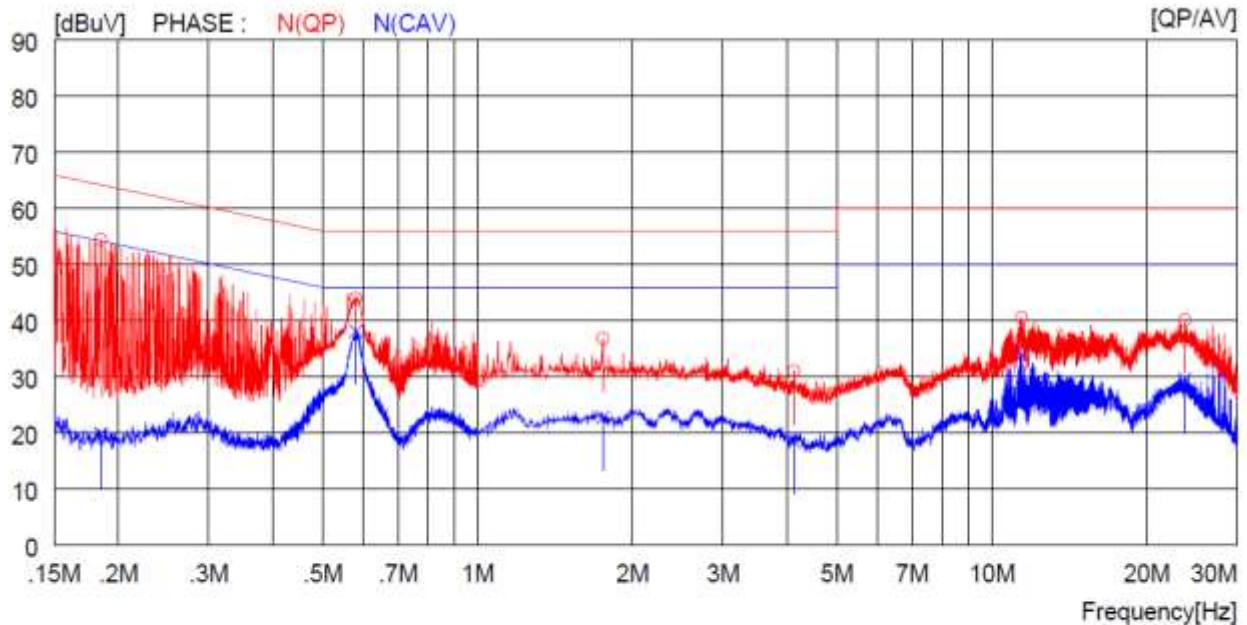
### 15.5.1 Test data for 802.11a RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.18300       | 42.5         | ----         | 10.1             | 52.6         | ----         | 64.3         | ----         | 11.7         | ----         | H (QP)  |
| 2  | 0.58100       | 34.2         | ----         | 10.1             | 44.3         | ----         | 56.0         | ----         | 11.7         | ----         | H (QP)  |
| 3  | 0.80900       | 30.9         | ----         | 10.1             | 41.0         | ----         | 56.0         | ----         | 15.0         | ----         | H (QP)  |
| 4  | 2.51600       | 25.1         | ----         | 10.1             | 35.2         | ----         | 56.0         | ----         | 20.8         | ----         | H (QP)  |
| 5  | 11.04000      | 29.5         | ----         | 10.4             | 39.9         | ----         | 60.0         | ----         | 20.1         | ----         | H (QP)  |
| 6  | 23.22000      | 30.3         | ----         | 10.6             | 40.9         | ----         | 60.0         | ----         | 19.1         | ----         | H (QP)  |
| 7  | 0.18300       | ----         | 12.4         | 10.1             | ----         | 22.5         | ----         | 54.3         | ----         | 31.8         | H (CAV) |
| 8  | 0.58100       | ----         | 27.3         | 10.1             | ----         | 37.4         | ----         | 46.0         | ----         | 8.6          | H (CAV) |
| 9  | 0.80900       | ----         | 12.8         | 10.1             | ----         | 22.9         | ----         | 46.0         | ----         | 23.1         | H (CAV) |
| 10 | 2.51600       | ----         | 11.5         | 10.1             | ----         | 21.6         | ----         | 46.0         | ----         | 24.4         | H (CAV) |
| 11 | 11.04000      | ----         | 24.3         | 10.4             | ----         | 34.7         | ----         | 50.0         | ----         | 15.3         | H (CAV) |
| 12 | 23.22000      | ----         | 20.3         | 10.6             | ----         | 30.9         | ----         | 50.0         | ----         | 19.1         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBUV] | AV<br>[dBUV] |                  | QP<br>[dBUV] | AV<br>[dBUV] | QP<br>[dBUV] | AV<br>[dBUV] | QP<br>[dBUV] | AV<br>[dBUV] |         |
| 1  | 0.18500       | 44.4         | ----         | 10.1             | 54.5         | ----         | 64.3         | ----         | 9.8          | ----         | N (QP)  |
| 2  | 0.58000       | 33.9         | ----         | 10.1             | 44.0         | ----         | 56.0         | ----         | 12.0         | ----         | N (QP)  |
| 3  | 1.75200       | 26.8         | ----         | 10.1             | 36.9         | ----         | 56.0         | ----         | 19.1         | ----         | N (QP)  |
| 4  | 4.12400       | 21.0         | ----         | 10.1             | 31.1         | ----         | 56.0         | ----         | 24.9         | ----         | N (QP)  |
| 5  | 11.42000      | 30.2         | ----         | 10.4             | 40.6         | ----         | 60.0         | ----         | 19.4         | ----         | N (QP)  |
| 6  | 23.74000      | 29.6         | ----         | 10.6             | 40.2         | ----         | 60.0         | ----         | 19.8         | ----         | N (QP)  |
| 7  | 0.18500       | ----         | 9.8          | 10.1             | ----         | 19.9         | ----         | 54.3         | ----         | 34.4         | N (CAV) |
| 8  | 0.58000       | ----         | 28.1         | 10.1             | ----         | 38.2         | ----         | 46.0         | ----         | 7.8          | N (CAV) |
| 9  | 1.75200       | ----         | 12.7         | 10.1             | ----         | 22.8         | ----         | 46.0         | ----         | 23.2         | N (CAV) |
| 10 | 4.12400       | ----         | 8.5          | 10.1             | ----         | 18.6         | ----         | 46.0         | ----         | 27.4         | N (CAV) |
| 11 | 11.42000      | ----         | 23.5         | 10.4             | ----         | 33.9         | ----         | 50.0         | ----         | 16.1         | N (CAV) |
| 12 | 23.74000      | ----         | 19.1         | 10.6             | ----         | 29.7         | ----         | 50.0         | ----         | 20.3         | N (CAV) |

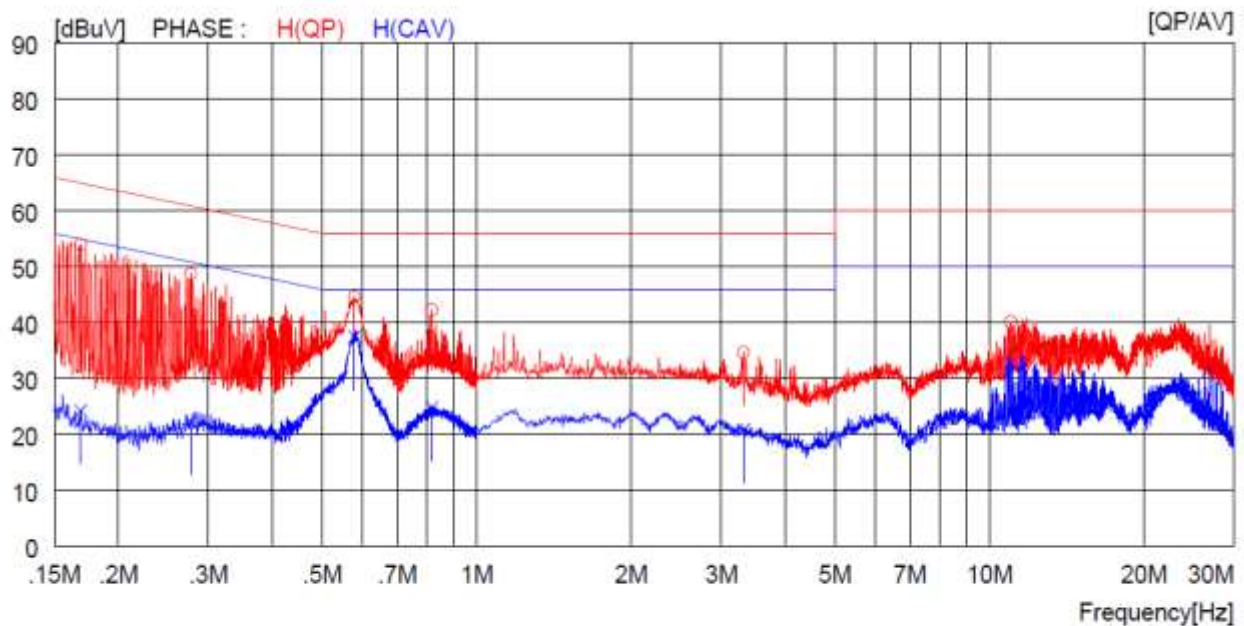
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

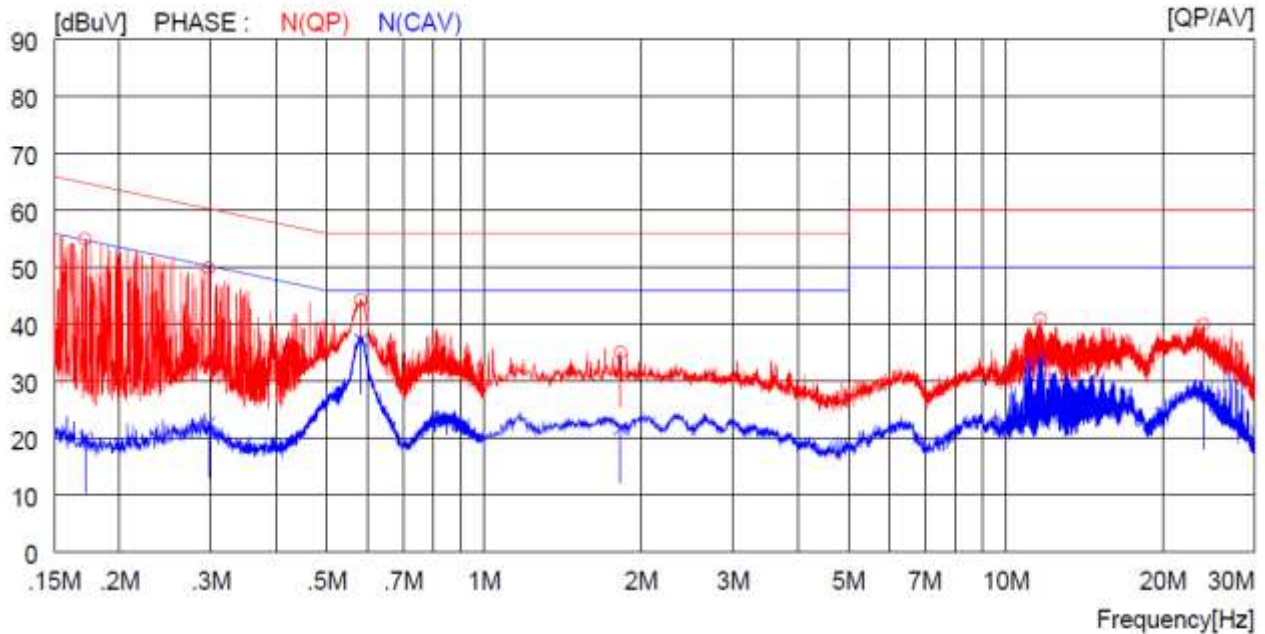
### 15.5.2 Test data for 802.11n\_HT20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.16900       | 43.9         | ----         | 10.1             | 54.0         | ----         | 65.0         | ----         | 11.0         | ----         | H (QP)  |
| 2  | 0.27700       | 38.7         | ----         | 10.1             | 48.8         | ----         | 60.9         | ----         | 12.1         | ----         | H (QP)  |
| 3  | 0.57800       | 34.6         | ----         | 10.1             | 44.7         | ----         | 56.0         | ----         | 11.3         | ----         | H (QP)  |
| 4  | 0.81800       | 32.2         | ----         | 10.1             | 42.3         | ----         | 56.0         | ----         | 13.7         | ----         | H (QP)  |
| 5  | 3.31600       | 24.6         | ----         | 10.1             | 34.7         | ----         | 56.0         | ----         | 21.3         | ----         | H (QP)  |
| 6  | 11.01000      | 29.8         | ----         | 10.4             | 40.2         | ----         | 60.0         | ----         | 19.8         | ----         | H (QP)  |
| 7  | 0.16900       | ----         | 14.2         | 10.1             | ----         | 24.3         | ----         | 55.0         | ----         | 30.7         | H (CAV) |
| 8  | 0.27700       | ----         | 12.3         | 10.1             | ----         | 22.4         | ----         | 50.9         | ----         | 28.5         | H (CAV) |
| 9  | 0.57800       | ----         | 27.4         | 10.1             | ----         | 37.5         | ----         | 46.0         | ----         | 8.5          | H (CAV) |
| 10 | 0.81800       | ----         | 14.8         | 10.1             | ----         | 24.9         | ----         | 46.0         | ----         | 21.1         | H (CAV) |
| 11 | 3.31600       | ----         | 10.8         | 10.1             | ----         | 20.9         | ----         | 46.0         | ----         | 25.1         | H (CAV) |
| 12 | 11.01000      | ----         | 22.5         | 10.4             | ----         | 32.9         | ----         | 50.0         | ----         | 17.1         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE  |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |        |
| 1  | 0.17200       | 44.9         | ----         | 10.1             | 55.0         | ----         | 64.9         | ----         | 9.9          | ----         | N(QP)  |
| 2  | 0.29700       | 39.8         | ----         | 10.1             | 49.9         | ----         | 60.3         | ----         | 10.4         | ----         | N(QP)  |
| 3  | 0.58100       | 34.2         | ----         | 10.1             | 44.3         | ----         | 56.0         | ----         | 11.7         | ----         | N(QP)  |
| 4  | 1.82800       | 25.0         | ----         | 10.1             | 35.1         | ----         | 56.0         | ----         | 20.9         | ----         | N(QP)  |
| 5  | 11.64000      | 30.6         | ----         | 10.4             | 41.0         | ----         | 60.0         | ----         | 19.0         | ----         | N(QP)  |
| 6  | 23.93000      | 29.4         | ----         | 10.6             | 40.0         | ----         | 60.0         | ----         | 20.0         | ----         | N(QP)  |
| 7  | 0.17200       | ----         | 10.0         | 10.1             | ----         | 20.1         | ----         | 54.9         | ----         | 34.8         | N(CAV) |
| 8  | 0.29700       | ----         | 12.6         | 10.1             | ----         | 22.7         | ----         | 50.3         | ----         | 27.6         | N(CAV) |
| 9  | 0.58100       | ----         | 27.2         | 10.1             | ----         | 37.3         | ----         | 46.0         | ----         | 8.7          | N(CAV) |
| 10 | 1.82800       | ----         | 11.7         | 10.1             | ----         | 21.8         | ----         | 46.0         | ----         | 24.2         | N(CAV) |
| 11 | 11.64000      | ----         | 23.5         | 10.4             | ----         | 33.9         | ----         | 50.0         | ----         | 16.1         | N(CAV) |
| 12 | 23.93000      | ----         | 17.0         | 10.6             | ----         | 27.6         | ----         | 50.0         | ----         | 22.4         | N(CAV) |

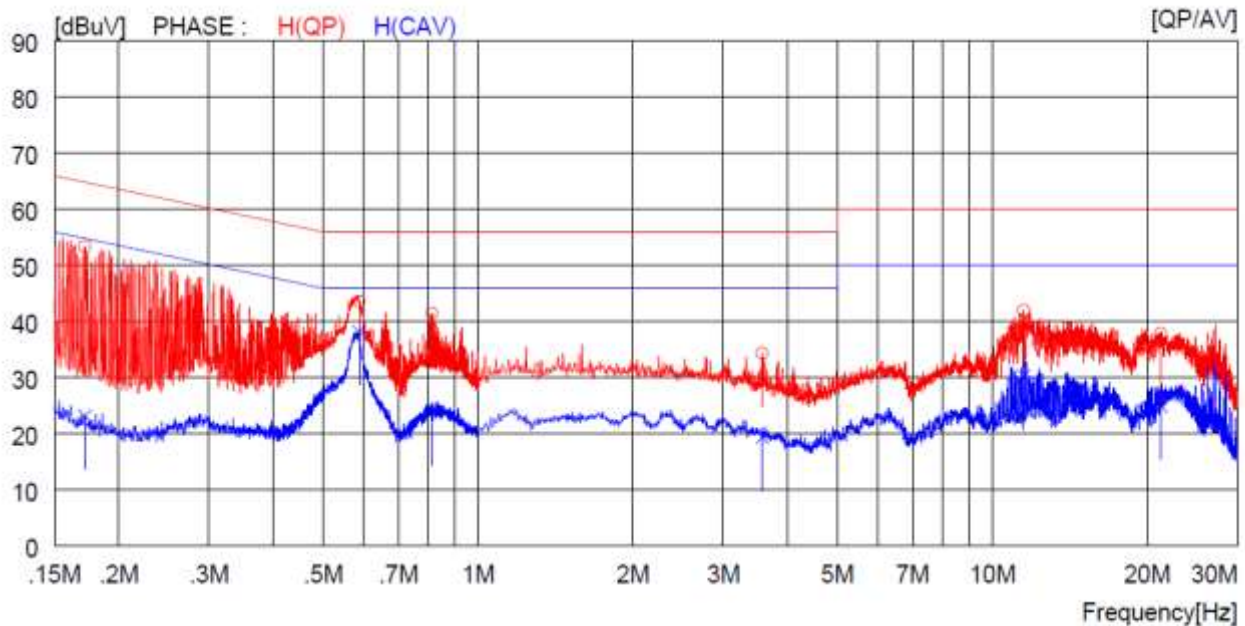
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

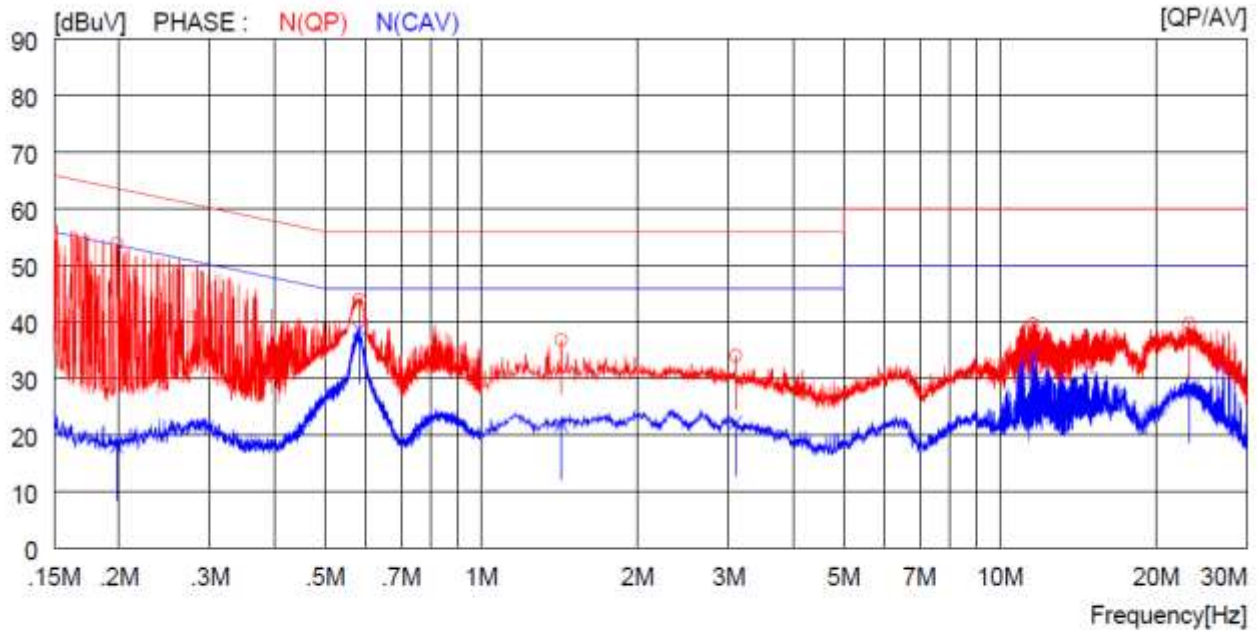
### 15.5.3 Test data for 802.11n\_HT40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.17200       | 43.3         | ----         | 10.1             | 53.4         | ----         | 64.9         | ----         | 11.5         | ----         | H (QP)  |
| 2  | 0.58700       | 33.5         | ----         | 10.1             | 43.6         | ----         | 56.0         | ----         | 12.4         | ----         | H (QP)  |
| 3  | 0.81300       | 31.4         | ----         | 10.1             | 41.5         | ----         | 56.0         | ----         | 14.5         | ----         | H (QP)  |
| 4  | 3.57200       | 24.3         | ----         | 10.1             | 34.4         | ----         | 56.0         | ----         | 21.6         | ----         | H (QP)  |
| 5  | 11.51000      | 31.6         | ----         | 10.4             | 42.0         | ----         | 60.0         | ----         | 18.0         | ----         | H (QP)  |
| 6  | 21.28000      | 27.4         | ----         | 10.5             | 37.9         | ----         | 60.0         | ----         | 22.1         | ----         | H (QP)  |
| 7  | 0.17200       | ----         | 13.1         | 10.1             | ----         | 23.2         | ----         | 54.9         | ----         | 31.7         | H (CAV) |
| 8  | 0.58700       | ----         | 28.1         | 10.1             | ----         | 38.2         | ----         | 46.0         | ----         | 7.8          | H (CAV) |
| 9  | 0.81300       | ----         | 13.9         | 10.1             | ----         | 24.0         | ----         | 46.0         | ----         | 22.0         | H (CAV) |
| 10 | 3.57200       | ----         | 9.3          | 10.1             | ----         | 19.4         | ----         | 46.0         | ----         | 26.6         | H (CAV) |
| 11 | 11.51000      | ----         | 19.9         | 10.4             | ----         | 30.3         | ----         | 50.0         | ----         | 19.7         | H (CAV) |
| 12 | 21.28000      | ----         | 14.5         | 10.5             | ----         | 25.0         | ----         | 50.0         | ----         | 25.0         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.19800       | 43.8         | ----         | 10.1             | 53.9         | ----         | 63.7         | ----         | 9.8          | ----         | N (QP)  |
| 2  | 0.58200       | 33.9         | ----         | 10.1             | 44.0         | ----         | 56.0         | ----         | 12.0         | ----         | N (QP)  |
| 3  | 1.42800       | 26.8         | ----         | 10.1             | 36.9         | ----         | 56.0         | ----         | 19.1         | ----         | N (QP)  |
| 4  | 3.09200       | 24.0         | ----         | 10.1             | 34.1         | ----         | 56.0         | ----         | 21.9         | ----         | N (QP)  |
| 5  | 11.59000      | 29.3         | ----         | 10.4             | 39.7         | ----         | 60.0         | ----         | 20.3         | ----         | N (QP)  |
| 6  | 23.16000      | 29.2         | ----         | 10.6             | 39.8         | ----         | 60.0         | ----         | 20.2         | ----         | N (QP)  |
| 7  | 0.19800       | ----         | 7.9          | 10.1             | ----         | 18.0         | ----         | 53.7         | ----         | 35.7         | N (CAV) |
| 8  | 0.58200       | ----         | 28.6         | 10.1             | ----         | 38.7         | ----         | 46.0         | ----         | 7.3          | N (CAV) |
| 9  | 1.42800       | ----         | 11.7         | 10.1             | ----         | 21.8         | ----         | 46.0         | ----         | 24.2         | N (CAV) |
| 10 | 3.09200       | ----         | 12.2         | 10.1             | ----         | 22.3         | ----         | 46.0         | ----         | 23.7         | N (CAV) |
| 11 | 11.59000      | ----         | 23.6         | 10.4             | ----         | 34.0         | ----         | 50.0         | ----         | 16.0         | N (CAV) |
| 12 | 23.16000      | ----         | 17.6         | 10.6             | ----         | 28.2         | ----         | 50.0         | ----         | 21.8         | N (CAV) |

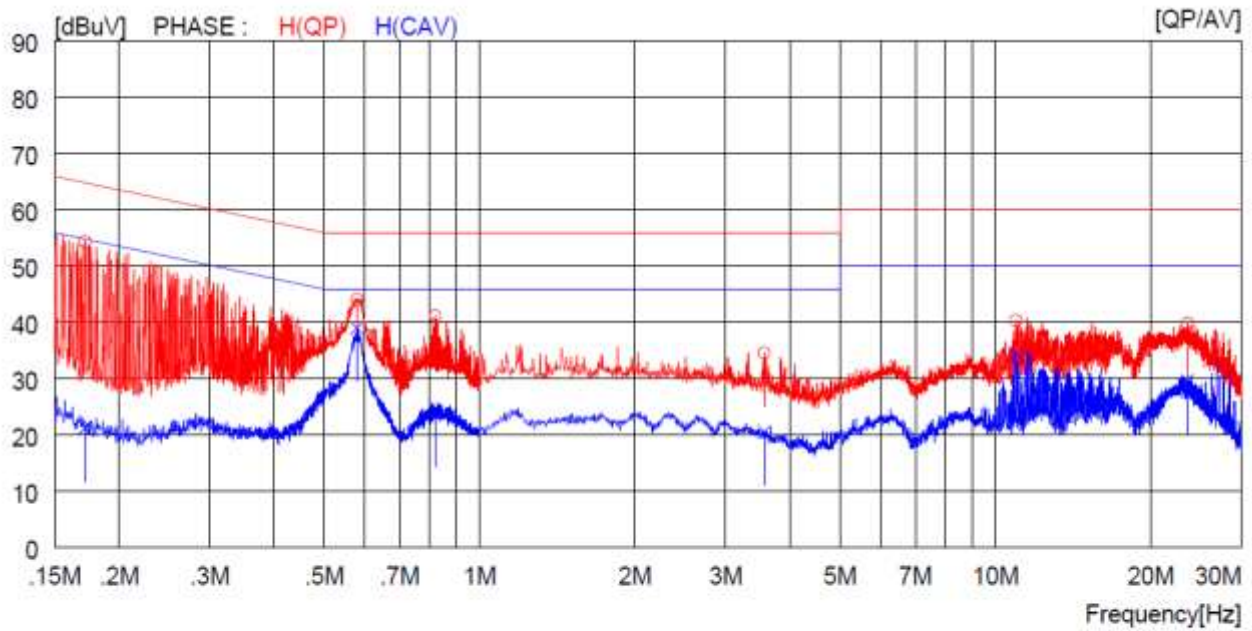
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

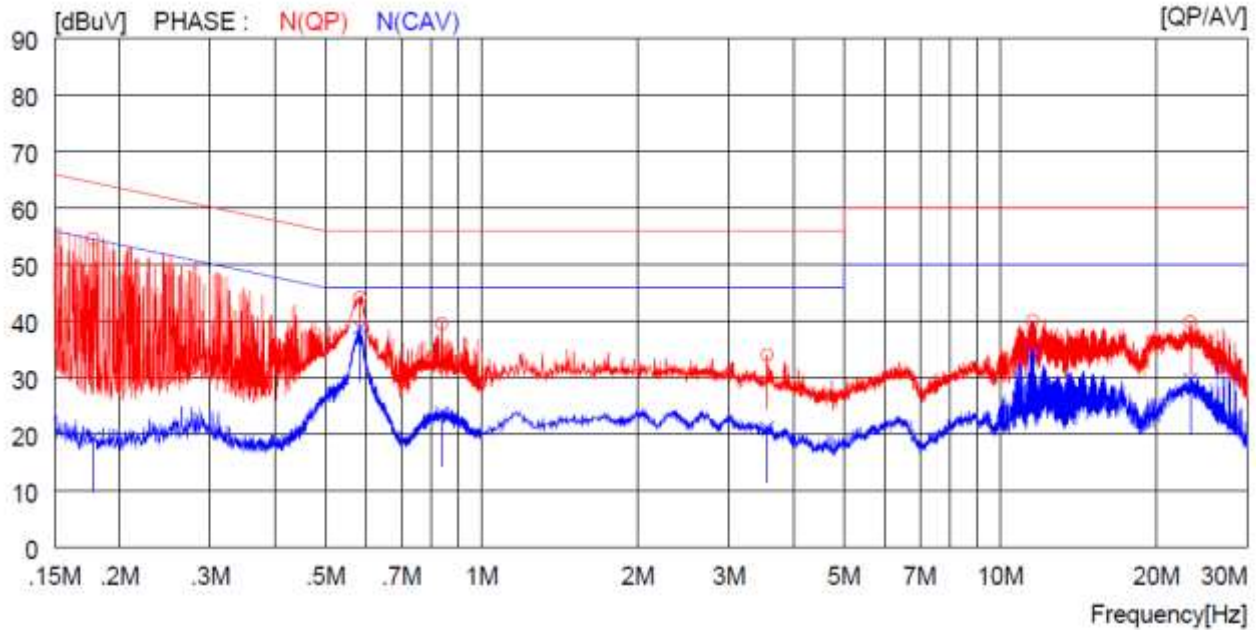
### 15.5.4 Test data for 802.11ac20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.17200       | 44.3         | ----         | 10.1             | 54.4         | ----         | 64.9         | ----         | 10.5         | ----         | H (QP)  |
| 2  | 0.57900       | 34.0         | ----         | 10.1             | 44.1         | ----         | 56.0         | ----         | 11.9         | ----         | H (QP)  |
| 3  | 0.82100       | 31.1         | ----         | 10.1             | 41.2         | ----         | 56.0         | ----         | 14.8         | ----         | H (QP)  |
| 4  | 3.56400       | 24.5         | ----         | 10.1             | 34.6         | ----         | 56.0         | ----         | 21.4         | ----         | H (QP)  |
| 5  | 10.97000      | 30.0         | ----         | 10.4             | 40.4         | ----         | 60.0         | ----         | 19.6         | ----         | H (QP)  |
| 6  | 23.59000      | 29.3         | ----         | 10.6             | 39.9         | ----         | 60.0         | ----         | 20.1         | ----         | H (QP)  |
| 7  | 0.17200       | ----         | 11.2         | 10.1             | ----         | 21.3         | ----         | 54.9         | ----         | 33.6         | H (CAV) |
| 8  | 0.57900       | ----         | 28.9         | 10.1             | ----         | 39.0         | ----         | 46.0         | ----         | 7.0          | H (CAV) |
| 9  | 0.82100       | ----         | 13.9         | 10.1             | ----         | 24.0         | ----         | 46.0         | ----         | 22.0         | H (CAV) |
| 10 | 3.56400       | ----         | 10.5         | 10.1             | ----         | 20.6         | ----         | 46.0         | ----         | 25.4         | H (CAV) |
| 11 | 10.97000      | ----         | 24.1         | 10.4             | ----         | 34.5         | ----         | 50.0         | ----         | 15.5         | H (CAV) |
| 12 | 23.59000      | ----         | 19.1         | 10.6             | ----         | 29.7         | ----         | 50.0         | ----         | 20.3         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE  |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |        |
| 1  | 0.17800       | 44.5         | ----         | 10.1             | 54.6         | ----         | 64.6         | ----         | 10.0         | ----         | N(QP)  |
| 2  | 0.58300       | 34.1         | ----         | 10.1             | 44.2         | ----         | 56.0         | ----         | 11.8         | ----         | N(QP)  |
| 3  | 0.83800       | 29.5         | ----         | 10.1             | 39.6         | ----         | 56.0         | ----         | 16.4         | ----         | N(QP)  |
| 4  | 3.55200       | 24.0         | ----         | 10.1             | 34.1         | ----         | 56.0         | ----         | 21.9         | ----         | N(QP)  |
| 5  | 11.55000      | 29.8         | ----         | 10.4             | 40.2         | ----         | 60.0         | ----         | 19.8         | ----         | N(QP)  |
| 6  | 23.28000      | 29.3         | ----         | 10.6             | 39.9         | ----         | 60.0         | ----         | 20.1         | ----         | N(QP)  |
| 7  | 0.17800       | ----         | 9.3          | 10.1             | ----         | 19.4         | ----         | 54.6         | ----         | 35.2         | N(CAV) |
| 8  | 0.58300       | ----         | 28.8         | 10.1             | ----         | 38.9         | ----         | 46.0         | ----         | 7.1          | N(CAV) |
| 9  | 0.83800       | ----         | 13.8         | 10.1             | ----         | 23.9         | ----         | 46.0         | ----         | 22.1         | N(CAV) |
| 10 | 3.55200       | ----         | 11.1         | 10.1             | ----         | 21.2         | ----         | 46.0         | ----         | 24.8         | N(CAV) |
| 11 | 11.55000      | ----         | 24.2         | 10.4             | ----         | 34.6         | ----         | 50.0         | ----         | 15.4         | N(CAV) |
| 12 | 23.28000      | ----         | 19.1         | 10.6             | ----         | 29.7         | ----         | 50.0         | ----         | 20.3         | N(CAV) |

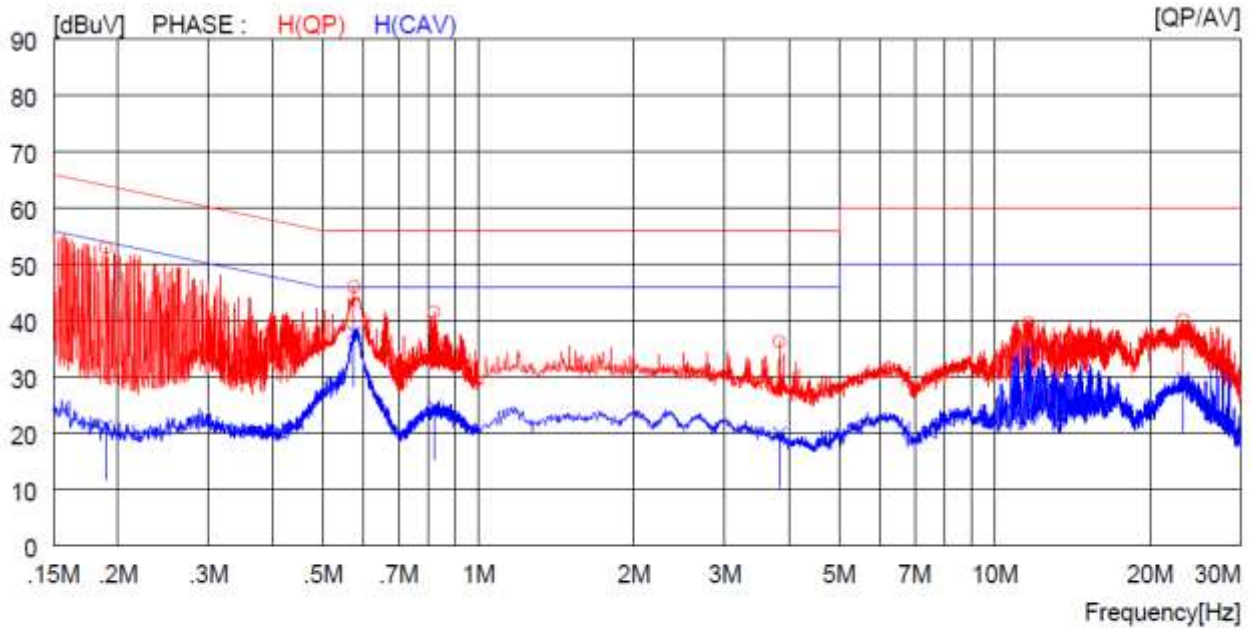
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

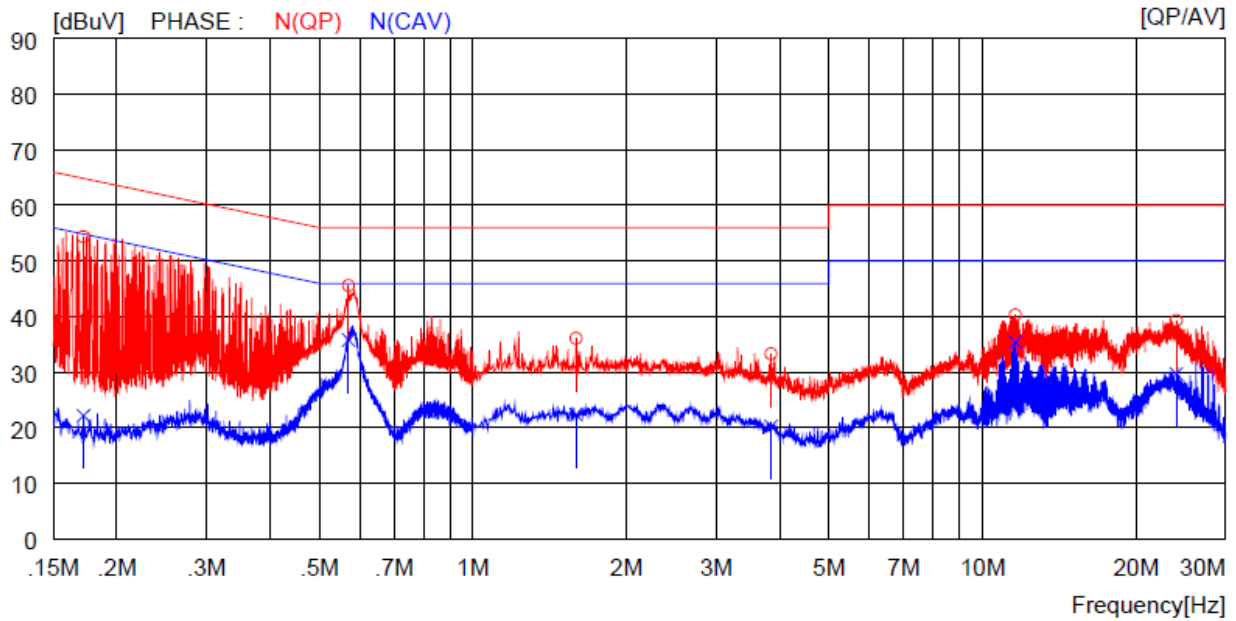
### 15.5.5 Test data for 802.11ac40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.19000       | 42.9         | ----         | 10.1             | 53.0         | ----         | 64.0         | ----         | 11.0         | ----         | H (QP)  |
| 2  | 0.57400       | 36.0         | ----         | 10.1             | 46.1         | ----         | 56.0         | ----         | 9.9          | ----         | H (QP)  |
| 3  | 0.82100       | 31.5         | ----         | 10.1             | 41.6         | ----         | 56.0         | ----         | 14.4         | ----         | H (QP)  |
| 4  | 3.82800       | 26.2         | ----         | 10.1             | 36.3         | ----         | 56.0         | ----         | 19.7         | ----         | H (QP)  |
| 5  | 11.63000      | 29.2         | ----         | 10.4             | 39.6         | ----         | 60.0         | ----         | 20.4         | ----         | H (QP)  |
| 6  | 23.19000      | 29.6         | ----         | 10.6             | 40.2         | ----         | 60.0         | ----         | 19.8         | ----         | H (QP)  |
| 7  | 0.19000       | ----         | 11.2         | 10.1             | ----         | 21.3         | ----         | 54.0         | ----         | 32.7         | H (CAV) |
| 8  | 0.57400       | ----         | 27.8         | 10.1             | ----         | 37.9         | ----         | 46.0         | ----         | 8.1          | H (CAV) |
| 9  | 0.82100       | ----         | 14.7         | 10.1             | ----         | 24.8         | ----         | 46.0         | ----         | 21.2         | H (CAV) |
| 10 | 3.82800       | ----         | 9.9          | 10.1             | ----         | 20.0         | ----         | 46.0         | ----         | 26.0         | H (CAV) |
| 11 | 11.63000      | ----         | 24.3         | 10.4             | ----         | 34.7         | ----         | 50.0         | ----         | 15.3         | H (CAV) |
| 12 | 23.19000      | ----         | 19.2         | 10.6             | ----         | 29.8         | ----         | 50.0         | ----         | 20.2         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE  |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |        |
| 1  | 0.17200       | 44.2         | ----         | 10.1             | 54.3         | ----         | 64.9         | ----         | 10.6         | ----         | N(QP)  |
| 2  | 0.57000       | 35.5         | ----         | 10.1             | 45.6         | ----         | 56.0         | ----         | 10.4         | ----         | N(QP)  |
| 3  | 1.59200       | 26.0         | ----         | 10.1             | 36.1         | ----         | 56.0         | ----         | 19.9         | ----         | N(QP)  |
| 4  | 3.84400       | 23.2         | ----         | 10.1             | 33.3         | ----         | 56.0         | ----         | 22.7         | ----         | N(QP)  |
| 5  | 11.59000      | 29.9         | ----         | 10.4             | 40.3         | ----         | 60.0         | ----         | 19.7         | ----         | N(QP)  |
| 6  | 24.00000      | 28.7         | ----         | 10.6             | 39.3         | ----         | 60.0         | ----         | 20.7         | ----         | N(QP)  |
| 7  | 0.17200       | ----         | 12.1         | 10.1             | ----         | 22.2         | ----         | 54.9         | ----         | 32.7         | N(CAV) |
| 8  | 0.57000       | ----         | 25.7         | 10.1             | ----         | 35.8         | ----         | 46.0         | ----         | 10.2         | N(CAV) |
| 9  | 1.59200       | ----         | 12.3         | 10.1             | ----         | 22.4         | ----         | 46.0         | ----         | 23.6         | N(CAV) |
| 10 | 3.84400       | ----         | 10.2         | 10.1             | ----         | 20.3         | ----         | 46.0         | ----         | 25.7         | N(CAV) |
| 11 | 11.59000      | ----         | 25.0         | 10.4             | ----         | 35.4         | ----         | 50.0         | ----         | 14.6         | N(CAV) |
| 12 | 24.00000      | ----         | 19.1         | 10.6             | ----         | 29.7         | ----         | 50.0         | ----         | 20.3         | N(CAV) |

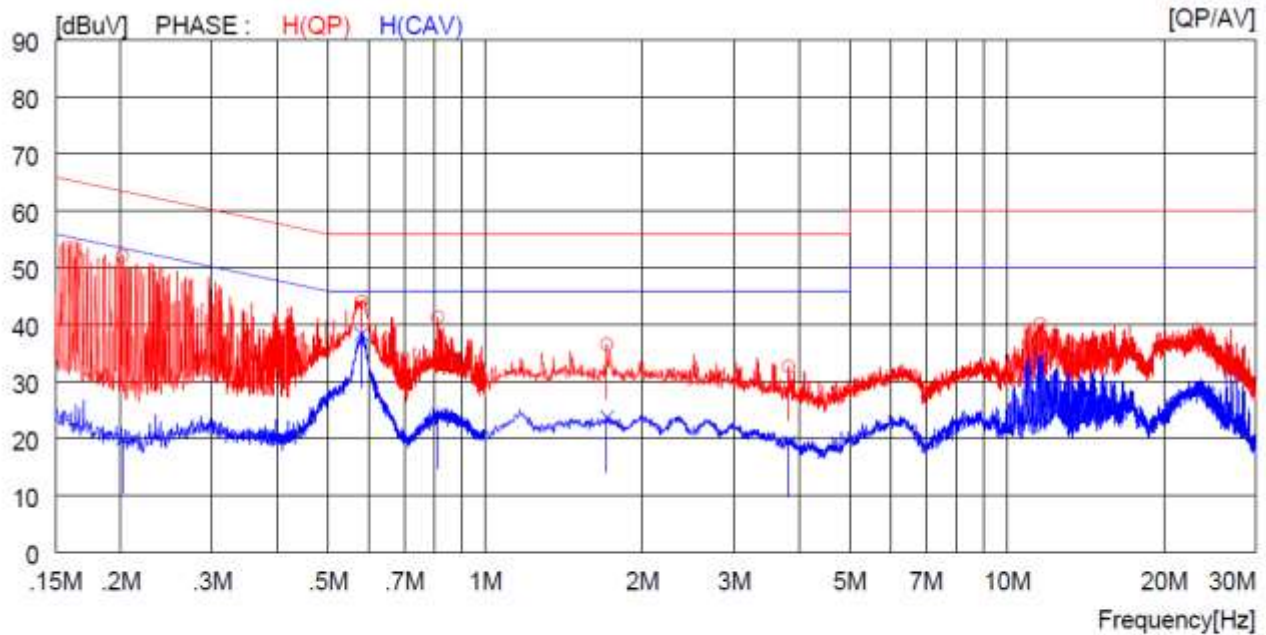
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

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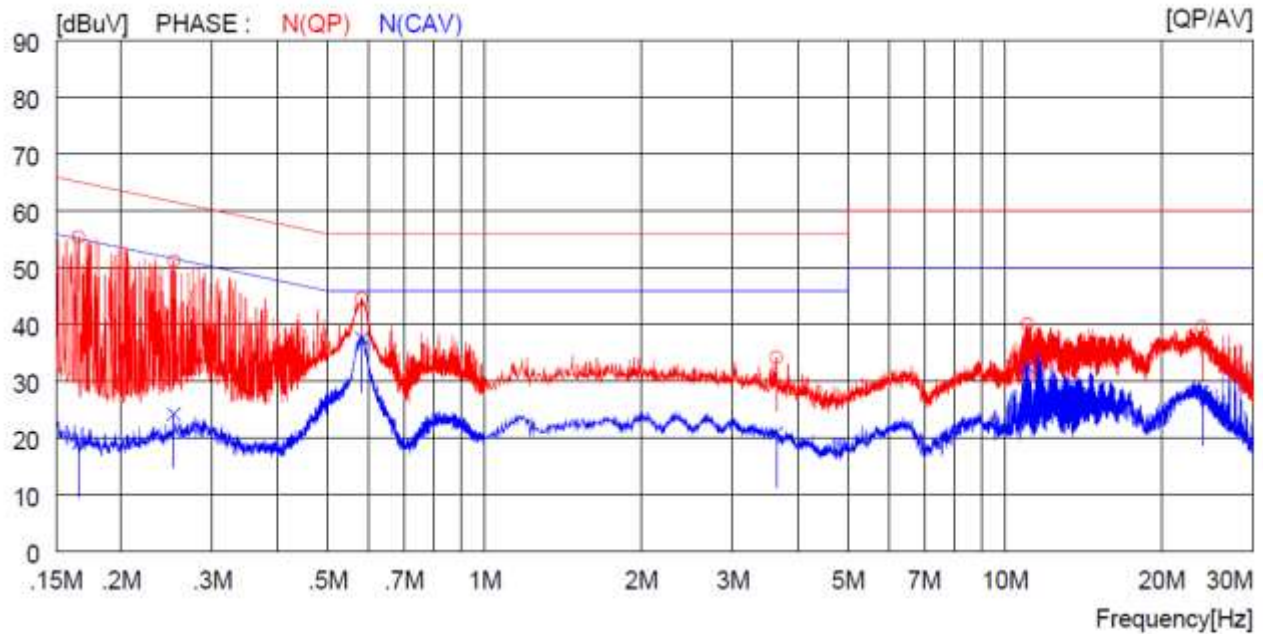
### 15.5.6 Test data for 802.11ac80 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE   |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |         |
| 1  | 0.20200       | 42.1         | ----         | 10.1             | 52.2         | ----         | 63.5         | ----         | 11.3         | ----         | H (QP)  |
| 2  | 0.57900       | 34.0         | ----         | 10.1             | 44.1         | ----         | 56.0         | ----         | 11.9         | ----         | H (QP)  |
| 3  | 0.81200       | 31.3         | ----         | 10.1             | 41.4         | ----         | 56.0         | ----         | 14.6         | ----         | H (QP)  |
| 4  | 1.71200       | 26.5         | ----         | 10.1             | 36.6         | ----         | 56.0         | ----         | 19.4         | ----         | H (QP)  |
| 5  | 3.81600       | 22.6         | ----         | 10.1             | 32.7         | ----         | 56.0         | ----         | 23.3         | ----         | H (QP)  |
| 6  | 11.57000      | 29.8         | ----         | 10.4             | 40.2         | ----         | 60.0         | ----         | 19.8         | ----         | H (QP)  |
| 7  | 0.20200       | ----         | 9.9          | 10.1             | ----         | 20.0         | ----         | 53.5         | ----         | 33.5         | H (CAV) |
| 8  | 0.57900       | ----         | 28.3         | 10.1             | ----         | 38.4         | ----         | 46.0         | ----         | 7.6          | H (CAV) |
| 9  | 0.81200       | ----         | 14.2         | 10.1             | ----         | 24.3         | ----         | 46.0         | ----         | 21.7         | H (CAV) |
| 10 | 1.71200       | ----         | 13.7         | 10.1             | ----         | 23.8         | ----         | 46.0         | ----         | 22.2         | H (CAV) |
| 11 | 3.81600       | ----         | 9.3          | 10.1             | ----         | 19.4         | ----         | 46.0         | ----         | 26.6         | H (CAV) |
| 12 | 11.57000      | ----         | 23.6         | 10.4             | ----         | 34.0         | ----         | 50.0         | ----         | 16.0         | H (CAV) |

-. Tested Line : NEUTRAL LINE



| NO | FREQ<br>[MHz] | READING      |              | C.FACTOR<br>[dB] | RESULT       |              | LIMIT        |              | MARGIN       |              | PHASE  |
|----|---------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------|
|    |               | QP<br>[dBuV] | AV<br>[dBuV] |                  | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] | QP<br>[dBuV] | AV<br>[dBuV] |        |
| 1  | 0.16600       | 45.4         | ----         | 10.1             | 55.5         | ----         | 65.2         | ----         | 9.7          | ----         | N(QP)  |
| 2  | 0.25300       | 41.1         | ----         | 10.1             | 51.2         | ----         | 61.7         | ----         | 10.5         | ----         | N(QP)  |
| 3  | 0.58100       | 34.5         | ----         | 10.1             | 44.6         | ----         | 56.0         | ----         | 11.4         | ----         | N(QP)  |
| 4  | 3.63600       | 24.2         | ----         | 10.1             | 34.3         | ----         | 56.0         | ----         | 21.7         | ----         | N(QP)  |
| 5  | 11.05000      | 29.7         | ----         | 10.4             | 40.1         | ----         | 60.0         | ----         | 19.9         | ----         | N(QP)  |
| 6  | 23.90000      | 29.1         | ----         | 10.6             | 39.7         | ----         | 60.0         | ----         | 20.3         | ----         | N(QP)  |
| 7  | 0.16600       | ----         | 9.1          | 10.1             | ----         | 19.2         | ----         | 55.2         | ----         | 36.0         | N(CAV) |
| 8  | 0.25300       | ----         | 14.2         | 10.1             | ----         | 24.3         | ----         | 51.7         | ----         | 27.4         | N(CAV) |
| 9  | 0.58100       | ----         | 27.5         | 10.1             | ----         | 37.6         | ----         | 46.0         | ----         | 8.4          | N(CAV) |
| 10 | 3.63600       | ----         | 10.8         | 10.1             | ----         | 20.9         | ----         | 46.0         | ----         | 25.1         | N(CAV) |
| 11 | 11.05000      | ----         | 22.2         | 10.4             | ----         | 32.6         | ----         | 50.0         | ----         | 17.4         | N(CAV) |
| 12 | 23.90000      | ----         | 17.6         | 10.6             | ----         | 28.2         | ----         | 50.0         | ----         | 21.8         | N(CAV) |

Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

  
Tested by: Jun-Hui, Lee / Senior Engineer