



# FCC RF Test Report

**APPLICANT** : Bullitt Group  
**EQUIPMENT** : Smartphone  
**BRAND NAME** : KODAK  
**MODEL NAME** : EKTRA  
**MARKETING NAME** : KODAK EKTRA Smartphone  
**FCC ID** : ZL5EKTRA  
**STANDARD** : FCC Part 15 Subpart E §15.407  
**CLASSIFICATION** : (NII) Unlicensed National Information Infrastructure

The product was received on Mar. 07, 2017 and testing was completed on Apr. 13, 2017. We, Sporton International (KunShan) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (KunShan) INC., the test report shall not be reproduced except in full.

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**Prepared by: James Huang / Manager**

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**Approved by: Jones Tsai / Manager**



***Sporton International (KunShan) INC.***

***No.3-2, Pingxiang Road, Kunshan Development Zone, Jiangsu, China***



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## REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FR730704E  | Rev. 01 | Initial issue of report | Apr. 14, 2017 |
|            |         |                         |               |
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|            |         |                         |               |

## SUMMARY OF TEST RESULT

| Report Section | FCC Rule              | Description                            | Limit                               | Result | Remark                                    |
|----------------|-----------------------|----------------------------------------|-------------------------------------|--------|-------------------------------------------|
| 3.1            | 2.1049<br>15.403(i)   | 26dB & 99% Bandwidth                   | -                                   | Pass   | -                                         |
| 3.2            | 15.407(a)             | Maximum Conducted Output Power         | FCC<br>≤ 24 dBm<br>(depend on band) | Pass   | -                                         |
| 3.3            | 15.407(a)             | Power Spectral Density                 | FCC<br>≤ 11 dBm<br>(depend on band) | Pass   | -                                         |
| 3.4            | 15.407(b)             | Unwanted Emissions                     | 15.407(b)<br>15.209(a)              | Pass   | Under limit<br>3.10 dB at<br>5469.760 MHz |
| 3.5            | 15.207                | AC Conducted Emission                  | 15.207(a)                           | Pass   | Under limit<br>11.69 dB at<br>0.567 MHz   |
| 3.6            | 15.407(g)             | Frequency Stability                    | Within Operation Band               | Pass   | -                                         |
| 3.7            | 15.407(c)             | Automatically Discontinue Transmission | Discontinue Transmission            | Pass   | -                                         |
| 3.8            | 15.203 &<br>15.407(a) | Antenna Requirement                    | N/A                                 | Pass   | -                                         |



# 1 General Description

## 1.1 Applicant

**Bullitt Group**

One Valpy, Valpy Street, Reading, Berkshire, RG1 1AR, UK

## 1.2 Manufacturer

**Shanghai Sunrise Simcom Limited**

No. 888, Shengli Rd., Qingpu, Shanghai, P.R.China 201700

## 1.3 Product Feature of Equipment Under Test

| Product Feature                        |                                                                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Equipment</b>                       | Smartphone                                                                                                                                                                                                                     |
| <b>Brand Name</b>                      | KODAK                                                                                                                                                                                                                          |
| <b>Model Name</b>                      | EKTRA                                                                                                                                                                                                                          |
| <b>Marketing Name</b>                  | KODAK EKTRA Smartphone                                                                                                                                                                                                         |
| <b>FCC ID</b>                          | ZL5EKTRA                                                                                                                                                                                                                       |
| <b>EUT supports Radios application</b> | GSM/GPRS/EGPRS/WCDMA/HSPA/<br>DC-HSDPA/HSPA+/LTE/NFC<br>WLAN 2.4GHz 802.11b/g/n HT20/HT40<br>WLAN 5GHz 802.11a/n HT20/HT40<br>WLAN 5GHz 802.11ac VHT20/VHT40/VHT80<br>Bluetooth v3.0 + EDR/Bluetooth v4.0 LE/Bluetooth v4.1 LE |
| <b>IMEI Code</b>                       | Conducted: 357682080001005<br>Conduction: 357682080000874<br>Radiation: NA                                                                                                                                                     |
| <b>EUT Stage</b>                       | Identical Prototype                                                                                                                                                                                                            |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 1.4 Product Specification of Equipment Under Test

| Standards-related Product Specification                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tx/Rx Frequency Range</b>                                | 5180 MHz ~ 5240 MHz<br>5260 MHz ~ 5320 MHz<br>5500 MHz ~ 5720 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Maximum Output Power to Antenna</b>                      | <b>&lt;5180 MHz ~ 5240 MHz&gt;</b><br>802.11a : 12.19 dBm / 0.0166 W<br>802.11n HT20 : 12.18 dBm / 0.0165 W<br>802.11n HT40 : 12.31 dBm / 0.0170 W<br>802.11ac VHT80 : 8.69 dBm / 0.0074 W<br><b>&lt;5260 MHz ~ 5320 MHz&gt;</b><br>802.11a : 12.10 dBm / 0.0162 W<br>802.11n HT20 : 12.08 dBm / 0.0161 W<br>802.11n HT40 : 9.70 dBm / 0.0093 W<br>802.11ac VHT80 : 4.94 dBm / 0.0031 W<br><b>&lt;5500 MHz ~ 5720 MHz &gt;</b><br>802.11a : 12.32 dBm / 0.0171 W<br>802.11n HT20 : 12.24 dBm / 0.0167 W<br>802.11n HT40 : 10.92 dBm / 0.0124 W<br>802.11ac VHT80 : 4.62 dBm / 0.0029 W |
| <b>Maximum Output Power to Antenna for Straddle Channel</b> | 802.11a : 11.32 dBm / 0.0136 W<br>802.11n HT20 : 11.47 dBm / 0.0140 W<br>802.11n HT40 : 11.31 dBm / 0.0135 W<br>802.11ac VHT80 : 11.52 dBm / 0.0142 W                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>99% Occupied Bandwidth</b>                               | <b>&lt;5180 MHz ~ 5240 MHz&gt;</b><br>802.11a : 17.73 MHz<br>802.11n HT20 : 18.48 MHz<br>802.11n HT40 : 36.36 MHz<br>802.11ac VHT80 : 75.52 MHz<br><b>&lt;5260 MHz ~ 5320 MHz&gt;</b><br>802.11a : 17.98 MHz<br>802.11n HT20 : 18.48 MHz<br>802.11n HT40 : 36.16 MHz<br>802.11ac VHT80 : 75.64 MHz<br><b>&lt;5500 MHz ~ 5720 MHz &gt;</b><br>802.11a : 17.98 MHz<br>802.11n HT20 : 18.28 MHz<br>802.11n HT40 : 36.16 MHz<br>802.11ac VHT80 : 75.64 MHz                                                                                                                                 |
| <b>99% Occupied Bandwidth for Straddle Channel</b>          | 802.11a : 17.93 MHz<br>802.11n HT20 : 18.28 MHz<br>802.11n HT40 : 36.36 MHz<br>802.11ac VHT80 : 75.52 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Antenna Type / Gain</b>                                  | <b>&lt;5180 MHz ~ 5240 MHz &gt;</b><br>PIFA Antenna with gain -4.1 dBi<br><b>&lt;5260 MHz ~ 5320 MHz &gt;</b><br>PIFA Antenna with gain -3.5 dBi<br><b>&lt;5500 MHz ~ 5720 MHz &gt;</b><br>PIFA Antenna with gain -0.5 dBi                                                                                                                                                                                                                                                                                                                                                             |
| <b>Type of Modulation</b>                                   | 802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)<br>802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



**Note:**

1. WLAN operation in 5600 MHz ~ 5650 MHz is notched.
2. For 802.11n HT20 / ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing have assessed only 802.11n HT20/ HT40 by referring to their maximum conducted power.

## **1.5 Modification of EUT**

No modifications are made to the EUT during all test items.

## 1.6 Testing Location

|                           |                                                                                                                        |         |
|---------------------------|------------------------------------------------------------------------------------------------------------------------|---------|
| <b>Test Site</b>          | Sporton International (KunShan) INC.                                                                                   |         |
| <b>Test Site Location</b> | No.3-2, Pingxiang Road, Kunshan Development Zone, Jiangsu, China<br>TEL: +86-0512-5790-0158<br>FAX: +86-0512-5790-0958 |         |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>                                                                                                |         |
|                           | TH01-KS                                                                                                                | CO01-KS |

|                           |                                                                                                                                                                 |                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>Test Site</b>          | SPORTON International (ShenZhen) INC.                                                                                                                           |                             |
| <b>Test Site Location</b> | No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China<br>TEL: +86-755- 3320-2398 |                             |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>                                                                                                                                         | <b>FCC Registration No.</b> |
|                           | 03CH03-SZ                                                                                                                                                       | 565805                      |

**Note:** The test site complies with ANSI C63.4 2014 requirement.

## 1.7 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03
- ♦ FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
- ♦ ANSI C63.10-2013

### Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

## 2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

### 2.1 Carrier Frequency Channel

| Frequency Band                       | Channel         | Freq. (MHz) | Channel | Freq. (MHz) |
|--------------------------------------|-----------------|-------------|---------|-------------|
| 5180-5240 MHz<br>Band 1<br>(U-NII-1) | 36              | 5180        | 44      | 5220        |
|                                      | 38*             | 5190        | 46*     | 5230        |
|                                      | 40              | 5200        | 48      | 5240        |
|                                      | 42 <sup>#</sup> | 5210        | -       | -           |

| Frequency Band                        | Channel         | Freq. (MHz) | Channel | Freq. (MHz) |
|---------------------------------------|-----------------|-------------|---------|-------------|
| 5260-5320 MHz<br>Band 2<br>(U-NII-2A) | 52              | 5260        | 60      | 5300        |
|                                       | 54*             | 5270        | 62*     | 5310        |
|                                       | 56              | 5280        | 64      | 5320        |
|                                       | 58 <sup>#</sup> | 5290        |         |             |

| Frequency Band                        | Channel          | Freq. (MHz) | Channel | Freq. (MHz) |
|---------------------------------------|------------------|-------------|---------|-------------|
| 5500-5720 MHz<br>Band 3<br>(U-NII-2C) | 100              | 5500        | 112     | 5560        |
|                                       | 102*             | 5510        | 116     | 5580        |
|                                       | 104              | 5520        | 132     | 5660        |
|                                       | 106 <sup>#</sup> | 5530        | 134*    | 5670        |
|                                       | 108              | 5540        | 136     | 5680        |
|                                       | 110*             | 5550        | 140     | 5700        |

| Frequency Band   | Channel          | Freq. (MHz) | Channel | Freq. (MHz) |
|------------------|------------------|-------------|---------|-------------|
| Straddle Channel | 138 <sup>#</sup> | 5690        | 144     | 5720        |
|                  | 142*             | 5710        | -       | -           |

**Note:**

1. The above Frequency and Channel in "" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "<sup>#</sup>" were 802.11ac VHT80.

## 2.2 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates from the power table described in section 2.2.

| Modulation     | Data Rate |
|----------------|-----------|
| 802.11a        | 6 Mbps    |
| 802.11n HT20   | MCS0      |
| 802.11n HT40   | MCS0      |
| 802.11ac VHT80 | MCS0      |

|                                                                                                        |                                                                                                         |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>AC Conducted Emission</b>                                                                           | Mode 1 : GSM850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable (Charging from Adapter 1) + Earphone |
| <b>Remark:</b><br>1. For Radiated TCs, the tests were performed with Adapter, Earphone, and USB Cable. |                                                                                                         |



| Ch. #    |        | Band I : 5180-5240 MHz | Band II : 5260-5320 MHz | Band III : 5500-5720MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 802.11a                | 802.11a                 | 802.11a                 |
| L        | Low    | 36                     | 52                      | 100                     |
| M        | Middle | 44                     | 60                      | 116                     |
| H        | High   | 48                     | 64                      | 140                     |
| Straddle |        | -                      | -                       | 144                     |

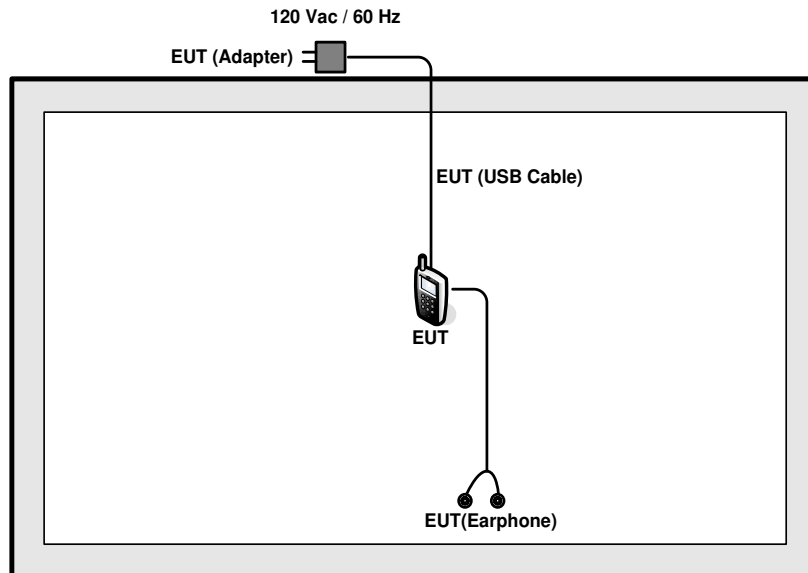
| Ch. #    |        | Band I : 5180-5240 MHz | Band II : 5260-5320 MHz | Band III : 5500-5720MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 802.11n HT20           | 802.11n HT20            | 802.11n HT20            |
| L        | Low    | 36                     | 52                      | 100                     |
| M        | Middle | 44                     | 60                      | 116                     |
| H        | High   | 48                     | 64                      | 140                     |
| Straddle |        | -                      | -                       | 144                     |

| Ch. #    |        | Band I : 5180-5240 MHz | Band II : 5260-5320 MHz | Band III : 5500-5720MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 802.11n HT40           | 802.11n HT40            | 802.11n HT40            |
| L        | Low    | 38                     | 54                      | 102                     |
| M        | Middle | -                      | -                       | 110                     |
| H        | High   | 46                     | 62                      | 134                     |
| Straddle |        | -                      | -                       | 142                     |

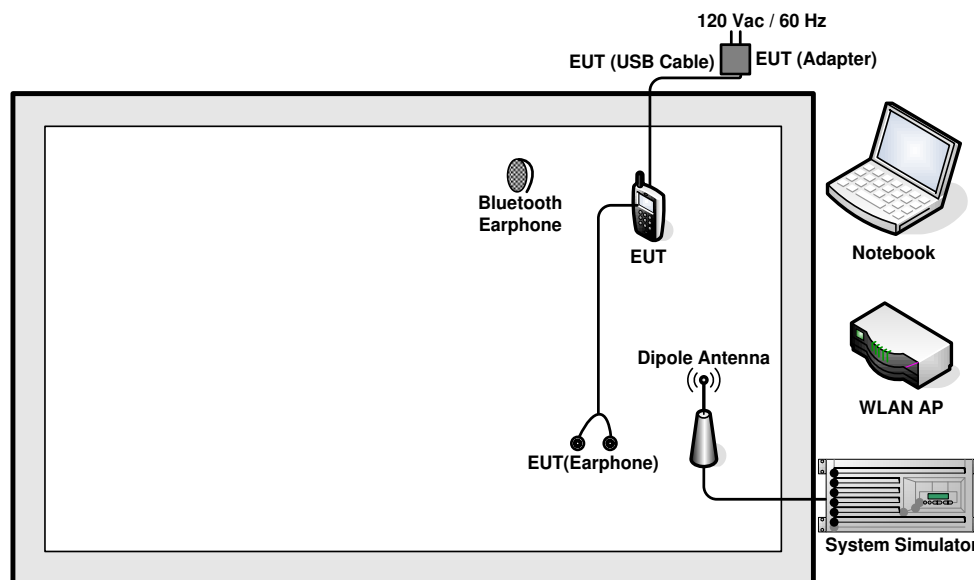
| Ch. #    |        | Band I : 5180-5240 MHz | Band II : 5260-5320 MHz | Band III : 5500-5720MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 802.11ac VHT80         | 802.11ac VHT80          | 802.11ac VHT80          |
| L        | Low    | -                      | -                       | -                       |
| M        | Middle | 42                     | 58                      | 106                     |
| H        | High   | -                      | -                       | -                       |
| Straddle |        | -                      | -                       | 138                     |

## 2.3 Connection Diagram of Test System

### <WLAN Tx Mode>



### <AC Conducted Emission Mode>



## 2.4 Support Unit used in test configuration and system

| Item | Equipment          | Trade Name | Model Name | FCC ID         | Data Cable | Power Cord                                                 |
|------|--------------------|------------|------------|----------------|------------|------------------------------------------------------------|
| 1.   | System Simulator   | R&S        | CMU 200    | N/A            | N/A        | Unshielded, 1.8 m                                          |
| 2.   | WLAN AP            | LINKSYS    | WRT600N    | Q87-WRT600NV11 | N/A        | Unshielded, 1.8 m                                          |
| 3.   | Notebook           | Lenovo     | G480       | N/A            | N/A        | AC I/P:<br>Unshielded, 1.8 m<br>DC O/P:<br>Shielded, 1.8 m |
| 4.   | Bluetooth Earphone | Lenovo     | LBH308     | N/A            | N/A        | N/A                                                        |

## 2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuously transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the Notebook under large package sizes transmission.

## 2.6 Measurement Results Explanation Example

**For all conducted test items:**

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 6.9 dB.

Offset (dB) = RF cable loss(dB).  
= 6.9 (dB)

### 3 Test Result

#### 3.1 26dB & 99% Occupied Bandwidth Measurement

##### 3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

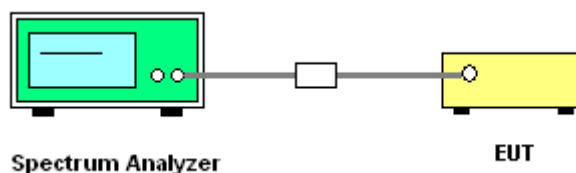
##### 3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

##### 3.1.3 Test Procedures

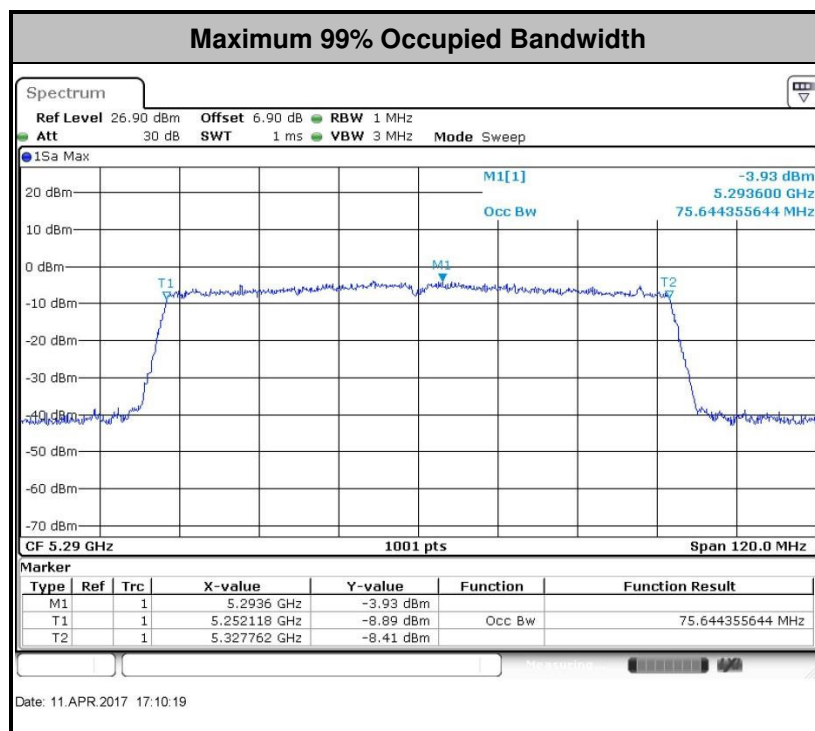
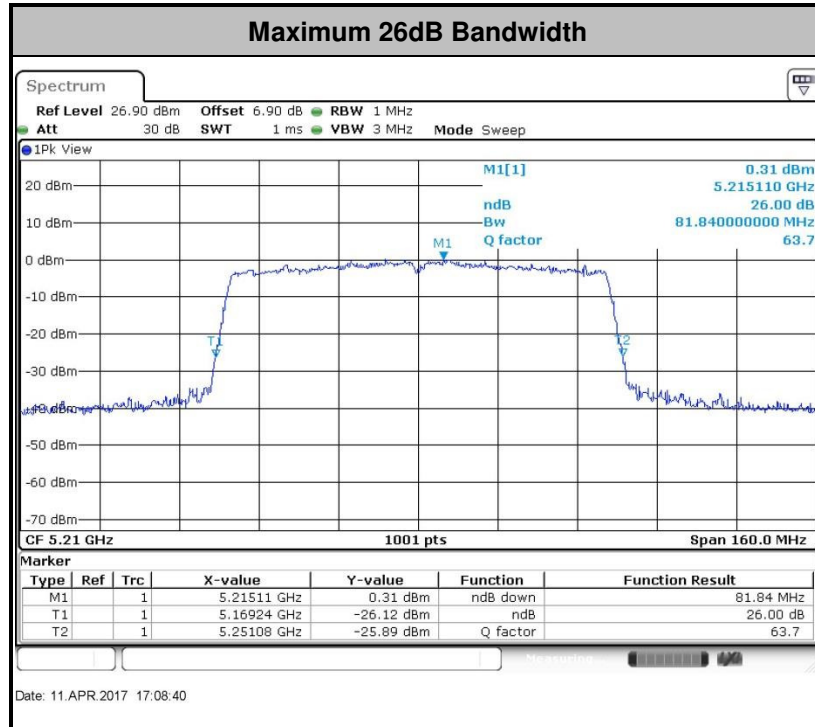
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.  
Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.  
Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW)  $\geq 3 * RBW$ .
8. Measure and record the results in the test report.

##### 3.1.4 Test Setup

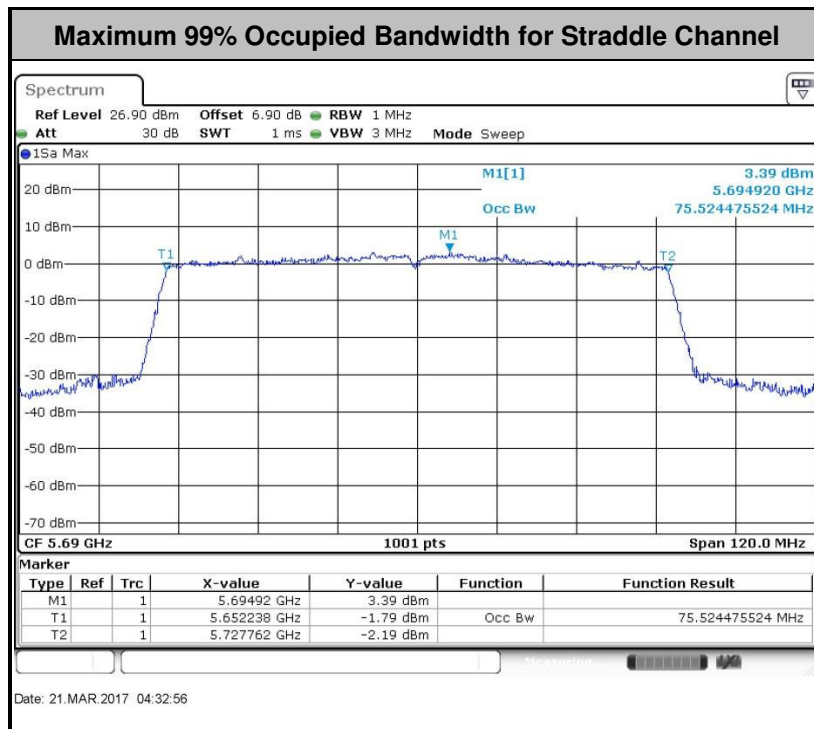
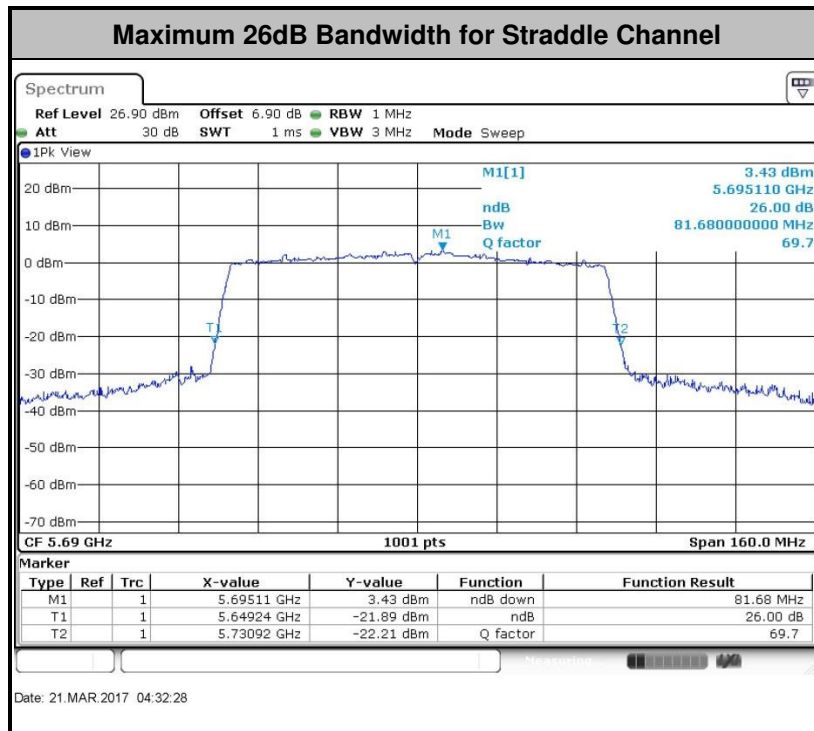


### 3.1.5 Test Result of 26dB & 99% Occupied Bandwidth Plots

Please refer to Appendix A.



Note : The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



**Note:** The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



## **3.2 Maximum Conducted Output Power Measurement**

### **3.2.1 Limit of Maximum Conducted Output Power**

#### **<FCC 14-30 CFR 15.407>**

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For the 5.25–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

### **3.2.2 Measuring Instruments**

The measuring equipment is listed in the section 4 of this test report.

### 3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.

Method PM (Measurement using an RF average power meter):

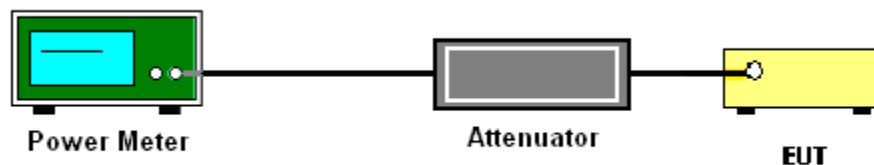
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor,  $10 \log(1/x)$ , where  $x$  is the duty cycle.

For straddle channel, the testing follows Method SA-3 (RMS detection with max hold) of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.

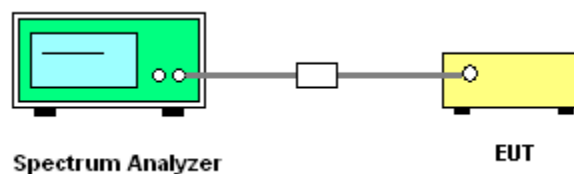
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

### 3.2.4 Test Setup

For normal channel:



For straddle channel:





### 3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

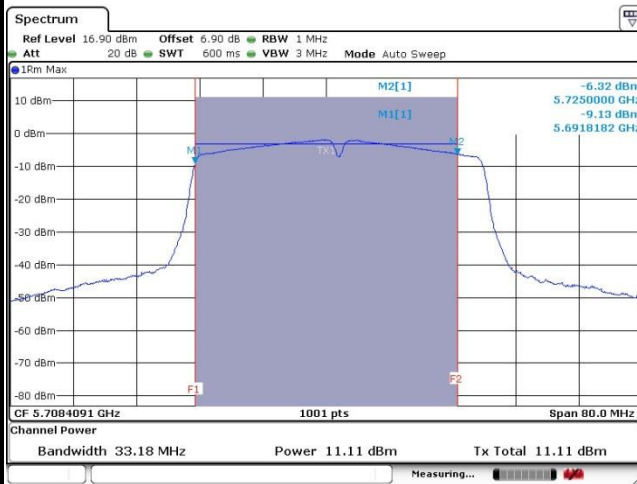




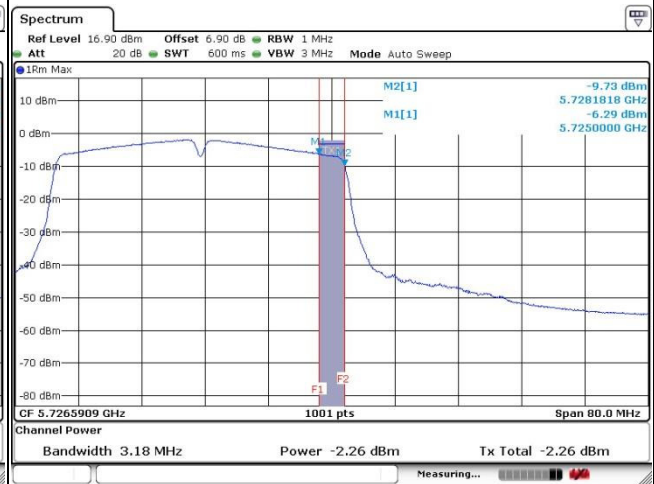
## Maximum Straddle Channel Power

## 802.11n-HT40

## NII-2C Band

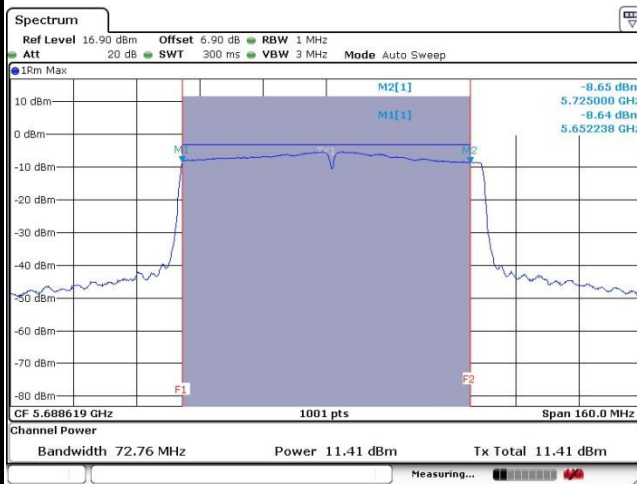


## NII-3 Band

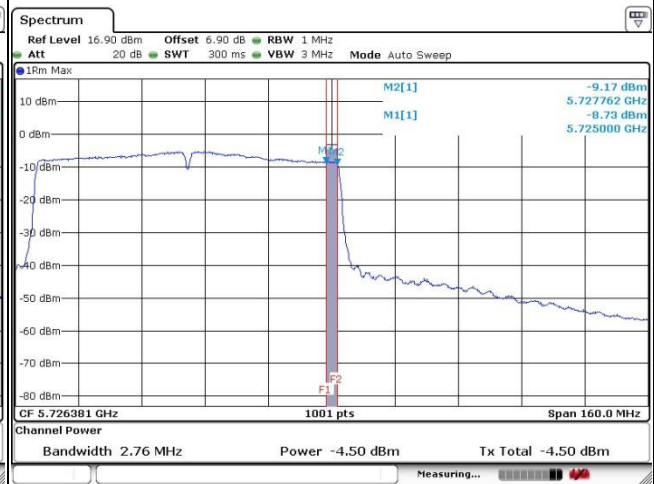


## 802.11ac VHT80

## NII-2C Band



## NII-3 Band





### **3.3 Power Spectral Density Measurement**

#### **3.3.1 Limit of Power Spectral Density**

**<FCC 14-30 CFR 15.407>**

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **3.3.2 Measuring Instruments**

The measuring equipment is listed in the section 4 of this test report.

### 3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.

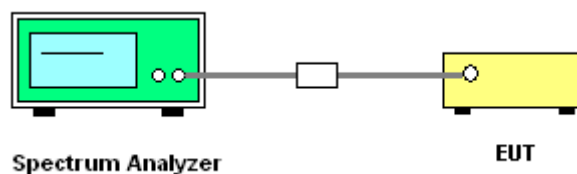
Section F) Maximum power spectral density.

#### # Method SA-2 #

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03.
  - Measure the duty cycle.
  - Set span to encompass the entire emission bandwidth (EBW) of the signal.
  - Set RBW = 1 MHz.
  - Set VBW  $\geq$  3 MHz.
  - Number of points in sweep  $\geq$  2 Span / RBW.
  - Sweep time = auto.
  - Detector = RMS
  - Trace average at least 100 traces in power averaging mode.
  - Add  $10 \log(1/x)$ , where  $x$  is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add  $10 \log(1/0.25) = 6$  dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

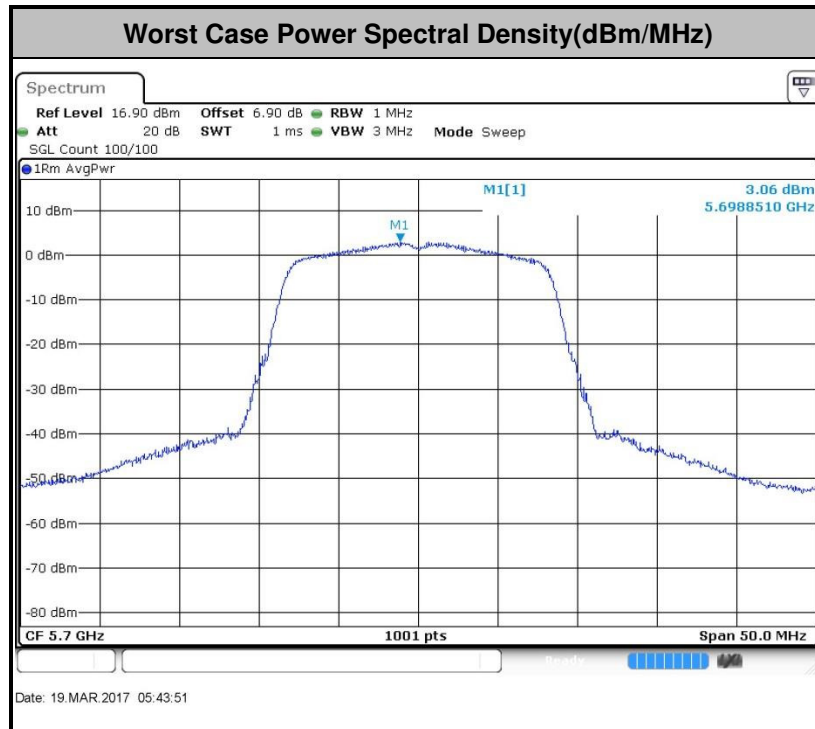
### 3.3.4 Test Setup





### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



**Note:** Average Power Density (dB) = Measured value+ Duty Factor

### 3.4 Unwanted Radiated Emission Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part 15.205.

#### 3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5725MHz band: all emissions outside of the 5470-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table

| Frequency<br>(MHz) | Field Strength<br>(microvolts/meter) | Measurement Distance<br>(meters) |
|--------------------|--------------------------------------|----------------------------------|
| 0.009 – 0.490      | 2400/F(kHz)                          | 300                              |
| 0.490 – 1.705      | 24000/F(kHz)                         | 30                               |
| 1.705 – 30.0       | 30                                   | 30                               |
| 30 – 88            | 100                                  | 3                                |
| 88 – 216           | 150                                  | 3                                |
| 216 - 960          | 200                                  | 3                                |
| Above 960          | 500                                  | 3                                |

**Note:** The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \text{ } \mu\text{V/m, where P is the eirp (Watts)}$$

| EIRP (dBm) | Field Strength at 3m (dB $\mu$ V/m) |
|------------|-------------------------------------|
| -17        | 78.3                                |
| -27        | 68.3                                |

- (3) KDB789033 D01 v01r03 G)2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

### 3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

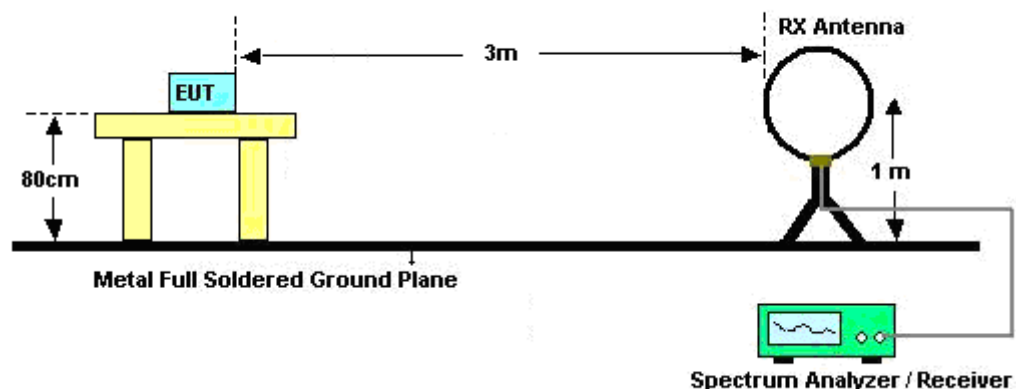
### 3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r03. Section G) Unwanted emissions measurement.
  - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
    - RBW = 120 kHz
    - VBW = 300 kHz
    - Detector = Peak
    - Trace mode = max hold
  - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
    - RBW = 1 MHz
    - VBW  $\geq$  3 MHz
    - Detector = Peak
    - Sweep time = auto
    - Trace mode = max hold
  - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
    - RBW = 1 MHz
    - VBW = 10 Hz, when duty cycle is no less than 98 percent.
    - VBW  $\geq$  1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

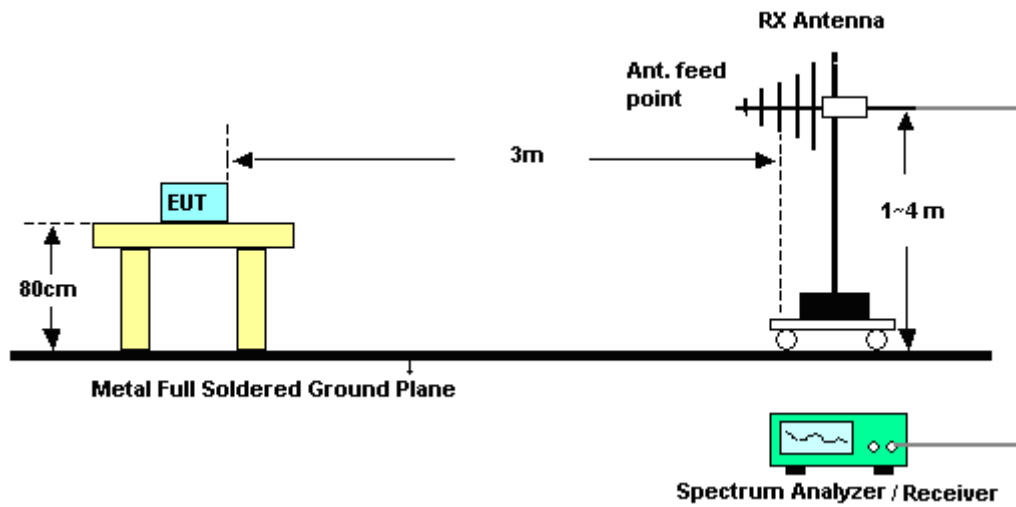
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

### 3.4.4 Test Setup

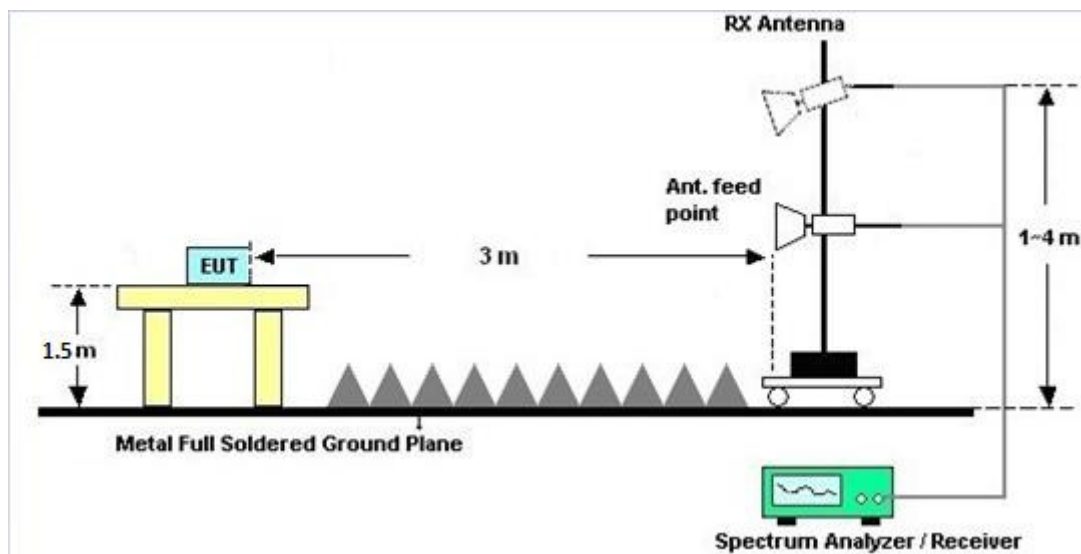
**For radiated emissions below 30MHz**



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



**3.4.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)**

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

**3.4.6 Test Result of Radiated Spurious at Band Edges**

Please refer to Appendix B.

**3.4.7 Duty Cycle**

Please refer to Appendix C.

**3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)**

Please refer to Appendix B.

### 3.5 AC Conducted Emission Measurement

#### 3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency of emission (MHz) | Conducted limit (dB $\mu$ V) |           |
|-----------------------------|------------------------------|-----------|
|                             | Quasi-peak                   | Average   |
| 0.15-0.5                    | 66 to 56*                    | 56 to 46* |
| 0.5-5                       | 56                           | 46        |
| 5-30                        | 60                           | 50        |

\*Decreases with the logarithm of the frequency.

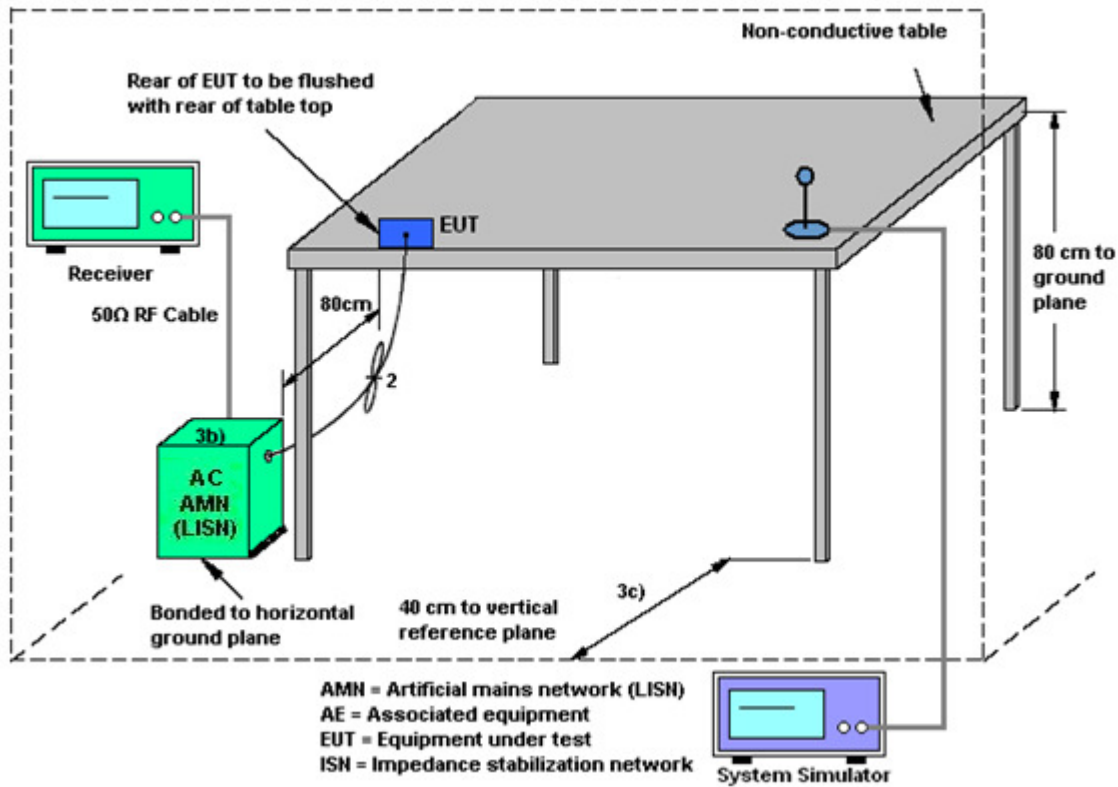
#### 3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

#### 3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

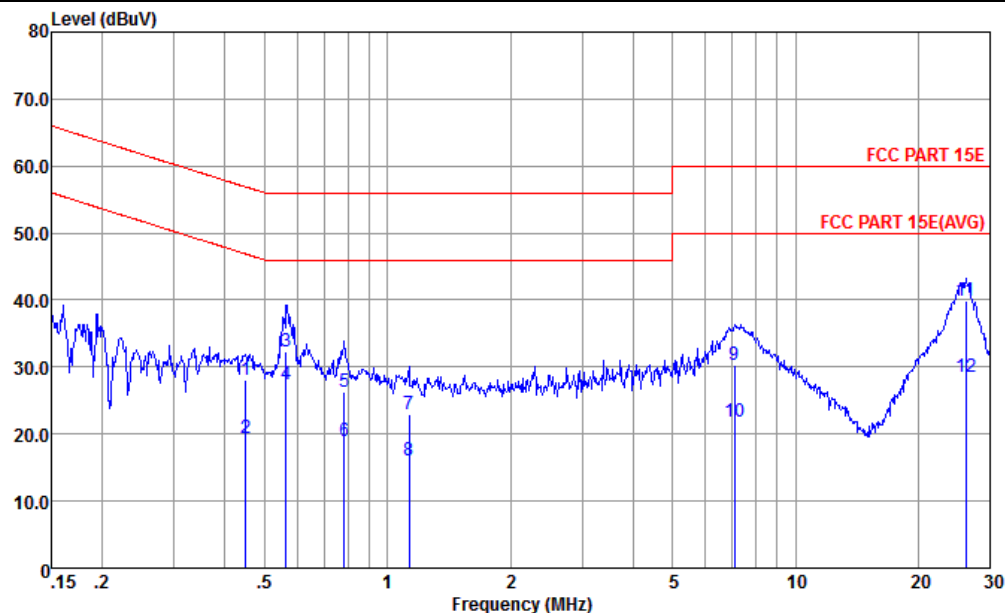
### 3.5.4 Test Setup





## 3.5.5 Test Result of AC Conducted Emission

|                 |                                                                                                |                     |        |
|-----------------|------------------------------------------------------------------------------------------------|---------------------|--------|
| Test Mode :     | Mode 1                                                                                         | Temperature :       | 22~24℃ |
| Test Engineer : | Amos Zhang                                                                                     | Relative Humidity : | 42~46% |
| Test Voltage :  | 120Vac / 60Hz                                                                                  | Phase :             | Line   |
| Function Type : | GSM850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable (Charging from Adapter 1) + Earphone |                     |        |



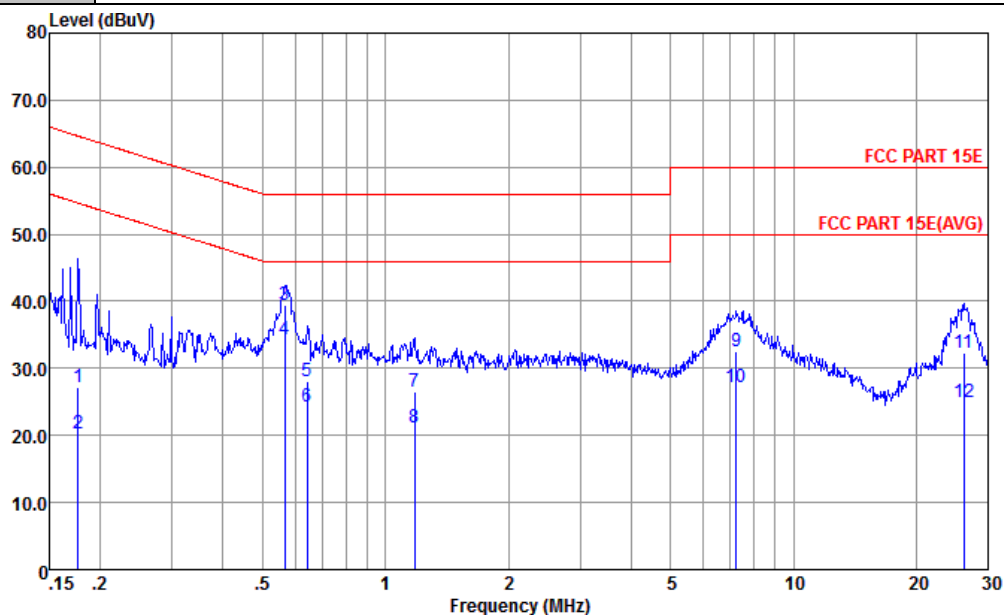
Site : CO01-KS  
Condition : FCC PART 15E LISN-L-20151024 LINE

mode : Mode 1  
IMEI : 357682080000874

|     | Freq   | Level | Over Limit | Limit Line | Read Level | LISN Factor | Cable Loss | Remark  |
|-----|--------|-------|------------|------------|------------|-------------|------------|---------|
|     | MHz    | dBuV  | dB         | dBuV       | dBuV       | dB          | dB         |         |
| 1   | 0.449  | 28.02 | -28.87     | 56.89      | 17.60      | 0.23        | 10.19      | QP      |
| 2   | 0.449  | 19.32 | -27.57     | 46.89      | 8.90       | 0.23        | 10.19      | Average |
| 3   | 0.564  | 32.32 | -23.68     | 56.00      | 21.91      | 0.23        | 10.18      | QP      |
| 4 * | 0.564  | 27.32 | -18.68     | 46.00      | 16.91      | 0.23        | 10.18      | Average |
| 5   | 0.783  | 26.32 | -29.68     | 56.00      | 15.91      | 0.24        | 10.17      | QP      |
| 6   | 0.783  | 19.02 | -26.98     | 46.00      | 8.61       | 0.24        | 10.17      | Average |
| 7   | 1.129  | 23.03 | -32.97     | 56.00      | 12.60      | 0.24        | 10.19      | QP      |
| 8   | 1.129  | 16.03 | -29.97     | 46.00      | 5.60       | 0.24        | 10.19      | Average |
| 9   | 7.100  | 30.42 | -29.58     | 60.00      | 19.90      | 0.23        | 10.29      | QP      |
| 10  | 7.100  | 21.82 | -28.18     | 50.00      | 11.30      | 0.23        | 10.29      | Average |
| 11  | 26.139 | 39.89 | -20.11     | 60.00      | 28.90      | 0.22        | 10.77      | QP      |
| 12  | 26.139 | 28.59 | -21.41     | 50.00      | 17.60      | 0.22        | 10.77      | Average |



|                        |                                                                                                |                            |         |
|------------------------|------------------------------------------------------------------------------------------------|----------------------------|---------|
| <b>Test Mode :</b>     | Mode 1                                                                                         | <b>Temperature :</b>       | 22~24℃  |
| <b>Test Engineer :</b> | Amos Zhang                                                                                     | <b>Relative Humidity :</b> | 42~46%  |
| <b>Test Voltage :</b>  | 120Vac / 60Hz                                                                                  | <b>Phase :</b>             | Neutral |
| <b>Function Type :</b> | GSM850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable (Charging from Adapter 1) + Earphone |                            |         |



Site : CO01-KS  
Condition : FCC PART 15E LISN-N-20151024 NEUTRAL

mode : Mode 1  
IMEI : 357682080000874

|     | Freq   | Level | Over Limit | Limit Line | Read Level | LISN Factor | Cable Loss | Remark  |
|-----|--------|-------|------------|------------|------------|-------------|------------|---------|
|     | MHz    | dBuV  | dB         | dBuV       | dBuV       | dB          | dB         |         |
| 1   | 0.177  | 27.26 | -37.38     | 64.64      | 16.59      | 0.31        | 10.36      | QP      |
| 2   | 0.177  | 20.26 | -34.38     | 54.64      | 9.59       | 0.31        | 10.36      | Average |
| 3   | 0.567  | 39.41 | -16.59     | 56.00      | 28.90      | 0.33        | 10.18      | QP      |
| 4 * | 0.567  | 34.31 | -11.69     | 46.00      | 23.80      | 0.33        | 10.18      | Average |
| 5   | 0.644  | 28.11 | -27.89     | 56.00      | 17.60      | 0.33        | 10.18      | QP      |
| 6   | 0.644  | 24.31 | -21.69     | 46.00      | 13.80      | 0.33        | 10.18      | Average |
| 7   | 1.178  | 26.46 | -29.54     | 56.00      | 15.90      | 0.37        | 10.19      | QP      |
| 8   | 1.178  | 21.16 | -24.84     | 46.00      | 10.60      | 0.37        | 10.19      | Average |
| 9   | 7.252  | 32.48 | -27.52     | 60.00      | 21.90      | 0.29        | 10.29      | QP      |
| 10  | 7.252  | 27.18 | -22.82     | 50.00      | 16.60      | 0.29        | 10.29      | Average |
| 11  | 26.139 | 32.21 | -27.79     | 60.00      | 21.20      | 0.24        | 10.77      | QP      |
| 12  | 26.139 | 24.91 | -25.09     | 50.00      | 13.90      | 0.24        | 10.77      | Average |

## 3.6 Frequency Stability Measurement

### 3.6.1 Limit of Frequency Stability

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

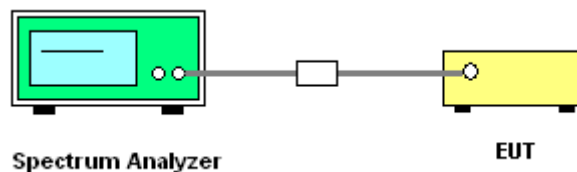
### 3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

### 3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

### 3.6.4 Test Setup



### 3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.



## **3.7 Automatically Discontinue Transmission**

### **3.7.1 Limit of Automatically Discontinue Transmission**

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

### **3.7.2 Measuring Instruments**

The measuring equipment is listed in the section 4 of this test report.

### **3.7.3 Test Result of Automatically Discontinue Transmission**

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



## **3.8 Antenna Requirements**

### **3.8.1 Standard Applicable**

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### **3.8.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

### **3.8.3 Antenna Gain**

The antenna gain is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



## 4 List of Measuring Equipments

| Instrument                        | Manufacturer         | Model No.     | Serial No.   | Characteristics         | Calibration Date | Test Date                       | Due Date      | Remark                |
|-----------------------------------|----------------------|---------------|--------------|-------------------------|------------------|---------------------------------|---------------|-----------------------|
| Spectrum Analyzer                 | R&S                  | FSV40         | 101040       | 10Hz~40GHz              | Aug. 09, 2016    | Mar. 16, 2017~<br>Apr. 11, 2017 | Aug. 08, 2017 | Conducted (TH01-KS)   |
| Pulse Power Sensor                | Anritsu              | MA2411B       | 0917070      | 300MHz~40GHz            | Jan. 19, 2017    | Mar. 16, 2017~<br>Apr. 11, 2017 | Jan. 18, 2018 | Conducted (TH01-KS)   |
| Power Meter                       | Anritsu              | ML2495A       | 1005002      | 50MHz Bandwidth         | Jan. 19, 2017    | Mar. 16, 2017~<br>Apr. 11, 2017 | Jan. 18, 2018 | Conducted (TH01-KS)   |
| Thermal Chamber                   | Ten Billion          | TTC-B3S       | TBN-960502   | -40~+150°C              | Oct. 13, 2016    | Mar. 16, 2017~<br>Apr. 11, 2017 | Oct. 12, 2017 | Conducted (TH01-KS)   |
| EMI Test Receiver&SA              | KEYSIGHT             | N9038A        | MY54450083   | 20Hz~8.4GHz             | May 07, 2016     | Mar. 16, 2017~<br>Apr. 13, 2017 | May 06, 2017  | Radiation (03CH03-SZ) |
| EXA Spectrum Analyzer             | KEYSIGHT             | N9010A        | MY55150246   | 10Hz~44GHz              | May 07, 2016     | Mar. 16, 2017~<br>Apr. 13, 2017 | May 06, 2017  | Radiation (03CH03-SZ) |
| Loop Antenna                      | R&S                  | HFH2-Z2       | 100354       | 9kHz~30MHz              | May 07, 2016     | Mar. 16, 2017~<br>Apr. 13, 2017 | May 06, 2017  | Radiation (03CH03-SZ) |
| Bilog Antenna                     | TeseQ                | CBL6112D      | 35408        | 30MHz~2GHz              | May 21, 2016     | Mar. 16, 2017~<br>Apr. 13, 2017 | May 20, 2017  | Radiation (03CH03-SZ) |
| Double Ridge Horn Antenna         | SCHWARZBECK          | BBHA9120D     | 9120D-1355   | 1GHz~18GHz              | May 07, 2016     | Mar. 16, 2017~<br>Apr. 13, 2017 | May 06, 2017  | Radiation (03CH03-SZ) |
| SHF-EHF Horn                      | com-power            | AH-840        | 101071       | 18GHz~40GHz             | Aug. 10, 2016    | Mar. 16, 2017~<br>Apr. 13, 2017 | Aug. 09, 2017 | Radiation (03CH03-SZ) |
| Amplifier                         | Burgeon              | BPA-530       | 102210       | 0.01Hz~3000MHz          | Oct. 11, 2016    | Mar. 16, 2017~<br>Apr. 13, 2017 | Oct. 10, 2017 | Radiation (03CH03-SZ) |
| Amplifier                         | Agilent Technologies | 83017A        | MY39501302   | 500MHz~26.5GHz          | Jan. 06, 2017    | Mar. 16, 2017~<br>Apr. 13, 2017 | Jan. 05, 2018 | Radiation (03CH03-SZ) |
| HF Amplifier                      | MITEQ                | TTA1840-35-HG | 1871923      | 18GHz~40GHz             | Jul. 16, 2016    | Mar. 16, 2017~<br>Apr. 13, 2017 | Jul. 15, 2017 | Radiation (03CH03-SZ) |
| AC Power Source                   | Chroma               | 61601         | 616010001985 | N/A                     | NCR              | Mar. 16, 2017~<br>Apr. 13, 2017 | NCR           | Radiation (03CH03-SZ) |
| Turn Table                        | EM                   | EM1000        | N/A          | 0~360 degree            | NCR              | Mar. 16, 2017~<br>Apr. 13, 2017 | NCR           | Radiation (03CH03-SZ) |
| Antenna Mast                      | EM                   | EM1000        | N/A          | 1 m~4 m                 | NCR              | Mar. 16, 2017~<br>Apr. 13, 2017 | NCR           | Radiation (03CH03-SZ) |
| EMI Receiver                      | R&S                  | ESCI7         | 100768       | 9kHz~7GHz               | Apr. 29, 2016    | Apr. 11, 2017                   | Apr. 28, 2017 | Conduction (CO01-KS)  |
| AC LISN                           | MessTec              | AN3016        | 060103       | 9kHz~30MHz              | Oct. 13, 2016    | Apr. 11, 2017                   | Oct. 12, 2017 | Conduction (CO01-KS)  |
| AC LISN (for auxiliary equipment) | MessTec              | AN3016        | 060105       | 9kHz~30MHz              | Oct. 13, 2016    | Apr. 11, 2017                   | Oct. 12, 2017 | Conduction (CO01-KS)  |
| AC Power Source                   | Chroma               | 61602         | ABP000000811 | AC 0V~300V, 45Hz~1000Hz | Oct. 13, 2016    | Apr. 11, 2017                   | Oct. 12, 2017 | Conduction (CO01-KS)  |

NCR: No Calibration Required

## 5 Uncertainty of Evaluation

### Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 2.3dB |
|-------------------------------------------------------------------------|-------|

### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.1dB |
|-------------------------------------------------------------------------|-------|

### Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.0dB |
|-------------------------------------------------------------------------|-------|

### Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 5.0dB |
|-------------------------------------------------------------------------|-------|



## **Appendix A. Conducted Test Results**

Report Number : FR730704E

|                |                     |                    |       |    |
|----------------|---------------------|--------------------|-------|----|
| Test Engineer: | Silent Hai          | Temperature:       | 21~25 | °C |
| Test Date:     | 2017/3/16~2017/4/11 | Relative Humidity: | 51~55 | %  |

**TEST RESULTS DATA**  
**26dB and 99% OBW**

| Band I |           |     |     |             |                     |                       |                                    |                                   |  |  |
|--------|-----------|-----|-----|-------------|---------------------|-----------------------|------------------------------------|-----------------------------------|--|--|
| Mod.   | Data Rate | NTX | CH. | Freq. (MHz) | 99% Bandwidth (MHz) | 26 dB Bandwidth (MHz) | IC 99% Bandwidth Power Limit (dBm) | IC 99% Bandwidth EIRP Limit (dBm) |  |  |
| 11a    | 6Mbps     | 1   | 36  | 5180        | 17.63               | 21.13                 | -                                  | 22.46                             |  |  |
| 11a    | 6Mbps     | 1   | 44  | 5220        | 17.63               | 21.43                 | -                                  | 22.46                             |  |  |
| 11a    | 6Mbps     | 1   | 48  | 5240        | 17.73               | 21.18                 | -                                  | 22.49                             |  |  |
| HT20   | MCS0      | 1   | 36  | 5180        | 18.43               | 25.18                 | -                                  | 22.66                             |  |  |
| HT20   | MCS0      | 1   | 44  | 5220        | 18.48               | 25.62                 | -                                  | 22.67                             |  |  |
| HT20   | MCS0      | 1   | 48  | 5240        | 18.48               | 25.48                 | -                                  | 22.67                             |  |  |
| HT40   | MCS0      | 1   | 38  | 5190        | 36.26               | 41.27                 | -                                  | 23.01                             |  |  |
| HT40   | MCS0      | 1   | 46  | 5230        | 36.36               | 41.63                 | -                                  | 23.01                             |  |  |
| VHT80  | MCS0      | 1   | 42  | 5210        | 75.52               | 81.84                 | -                                  | 23.01                             |  |  |

**TEST RESULTS DATA**  
**Average Power Table**

| FCC Band I |           |     |     |             |                  |                               |                                 |          |  |           |
|------------|-----------|-----|-----|-------------|------------------|-------------------------------|---------------------------------|----------|--|-----------|
| Mod.       | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | Average Conducted Power (dBm) | FCC Conducted Power Limit (dBm) | DG (dBi) |  | Pass/Fail |
| 11a        | 6Mbps     | 1   | 36  | 5180        | 0.11             | 12.19                         | 24.00                           | -4.10    |  | Pass      |
| 11a        | 6Mbps     | 1   | 44  | 5220        | 0.11             | 12.17                         | 24.00                           | -4.10    |  | Pass      |
| 11a        | 6Mbps     | 1   | 48  | 5240        | 0.11             | 12.09                         | 24.00                           | -4.10    |  | Pass      |
| HT20       | MCS0      | 1   | 36  | 5180        | 0.12             | 12.18                         | 24.00                           | -4.10    |  | Pass      |
| HT20       | MCS0      | 1   | 44  | 5220        | 0.12             | 12.15                         | 24.00                           | -4.10    |  | Pass      |
| HT20       | MCS0      | 1   | 48  | 5240        | 0.12             | 12.06                         | 24.00                           | -4.10    |  | Pass      |
| HT40       | MCS0      | 1   | 38  | 5190        | 0.24             | 12.31                         | 24.00                           | -4.10    |  | Pass      |
| HT40       | MCS0      | 1   | 46  | 5230        | 0.24             | 12.25                         | 24.00                           | -4.10    |  | Pass      |
| VHT80      | MCS0      | 1   | 42  | 5210        | 0.46             | 8.69                          | 24.00                           | -4.10    |  | Pass      |

**TEST RESULTS DATA**  
**Power Spectral Density**

| FCC Band I |           |     |     |             |                  |                                 |                             |          |   |           |
|------------|-----------|-----|-----|-------------|------------------|---------------------------------|-----------------------------|----------|---|-----------|
| Mod.       | Data Rate | NTx | CH. | Freq. (MHz) | Duty Factor (dB) | Average Power Density (dBm/MHz) | Average PSD Limit (dBm/MHz) | DG (dBi) | - | Pass/Fail |
| 11a        | 6Mbps     | 1   | 36  | 5180        | 0.11             | 3.05                            | 11.00                       | -4.10    |   | Pass      |
| 11a        | 6Mbps     | 1   | 44  | 5220        | 0.11             | 2.71                            | 11.00                       | -4.10    |   | Pass      |
| 11a        | 6Mbps     | 1   | 48  | 5240        | 0.11             | 2.83                            | 11.00                       | -4.10    |   | Pass      |
| HT20       | MCS0      | 1   | 36  | 5180        | 0.12             | 2.28                            | 11.00                       | -4.10    |   | Pass      |
| HT20       | MCS0      | 1   | 44  | 5220        | 0.12             | 2.60                            | 11.00                       | -4.10    |   | Pass      |
| HT20       | MCS0      | 1   | 48  | 5240        | 0.12             | 2.75                            | 11.00                       | -4.10    |   | Pass      |
| HT40       | MCS0      | 1   | 38  | 5190        | 0.24             | -0.56                           | 11.00                       | -4.10    |   | Pass      |
| HT40       | MCS0      | 1   | 46  | 5230        | 0.24             | -1.09                           | 11.00                       | -4.10    |   | Pass      |
| VHT80      | MCS0      | 1   | 42  | 5210        | 0.46             | -7.96                           | 11.00                       | -4.10    |   | Pass      |

**TEST RESULTS DATA**  
**26dB and 99% OBW**

| Band II |           |     |     |             |                     |                       |                                    |                                   |                                      |      |
|---------|-----------|-----|-----|-------------|---------------------|-----------------------|------------------------------------|-----------------------------------|--------------------------------------|------|
| Mod.    | Data Rate | NTx | CH. | Freq. (MHz) | 99% Bandwidth (MHz) | 26 dB Bandwidth (MHz) | IC 99% Bandwidth Power Limit (dBm) | IC 99% Bandwidth EIRP Limit (dBm) | FCC 26dB Bandwidth Power Limit (dBm) | Note |
| 11a     | 6M bps    | 1   | 52  | 5260        | 17.98               | 21.28                 | 23.55                              | 29.55                             | 23.98                                |      |
| 11a     | 6M bps    | 1   | 60  | 5300        | 17.88               | 21.38                 | 23.52                              | 29.52                             | 23.98                                |      |
| 11a     | 6M bps    | 1   | 64  | 5320        | 17.98               | 21.43                 | 23.55                              | 29.55                             | 23.98                                |      |
| HT20    | MCS 0     | 1   | 52  | 5260        | 18.43               | 25.52                 | 23.66                              | 29.66                             | 23.98                                |      |
| HT20    | MCS 0     | 1   | 60  | 5300        | 18.48               | 25.23                 | 23.67                              | 29.67                             | 23.98                                |      |
| HT20    | MCS 0     | 1   | 64  | 5320        | 18.48               | 24.88                 | 23.67                              | 29.67                             | 23.98                                |      |
| HT40    | MCS 0     | 1   | 54  | 5270        | 36.16               | 41.45                 | 23.98                              | 30.00                             | 23.98                                |      |
| HT40    | MCS 0     | 1   | 62  | 5310        | 36.16               | 41.36                 | 23.98                              | 30.00                             | 23.98                                |      |
| VHT80   | MCS 0     | 1   | 58  | 5290        | 75.64               | 81.84                 | 23.98                              | 30.00                             | 23.98                                |      |

**TEST RESULTS DATA**  
**Average Power Table**

| FCC Band II |           |     |     |             |                  |                               |                                 |          |                        |           |
|-------------|-----------|-----|-----|-------------|------------------|-------------------------------|---------------------------------|----------|------------------------|-----------|
| Mod.        | Data Rate | NTx | CH. | Freq. (MHz) | Duty Factor (dB) | Average Conducted Power (dBm) | FCC Conducted Power Limit (dBm) | DG (dBi) | EIRP Power Limit (dBm) | Pass/Fail |
| 11a         | 6M bps    | 1   | 52  | 5260        | 0.11             | 12.10                         | 23.98                           | -3.50    | 26.99                  | Pass      |
| 11a         | 6M bps    | 1   | 60  | 5300        | 0.11             | 12.02                         | 23.98                           | -3.50    | 26.99                  | Pass      |
| 11a         | 6M bps    | 1   | 64  | 5320        | 0.11             | 11.95                         | 23.98                           | -3.50    | 26.99                  | Pass      |
| HT20        | MCS 0     | 1   | 52  | 5260        | 0.12             | 12.08                         | 23.98                           | -3.50    | 26.99                  | Pass      |
| HT20        | MCS 0     | 1   | 60  | 5300        | 0.12             | 11.97                         | 23.98                           | -3.50    | 26.99                  | Pass      |
| HT20        | MCS 0     | 1   | 64  | 5320        | 0.12             | 11.94                         | 23.98                           | -3.50    | 26.99                  | Pass      |
| HT40        | MCS 0     | 1   | 54  | 5270        | 0.24             | 9.70                          | 23.98                           | -3.50    | 26.99                  | Pass      |
| HT40        | MCS 0     | 1   | 62  | 5310        | 0.24             | 9.35                          | 23.98                           | -3.50    | 26.99                  | Pass      |
| VHT80       | MCS 0     | 1   | 58  | 5290        | 0.46             | 4.94                          | 23.98                           | -3.50    | 26.99                  | Pass      |

**TEST RESULTS DATA**  
**Power Spectral Density**

| Band II |           |     |     |             |                  |                                 |                             |          |  |           |
|---------|-----------|-----|-----|-------------|------------------|---------------------------------|-----------------------------|----------|--|-----------|
| Mod.    | Data Rate | NTx | CH. | Freq. (MHz) | Duty Factor (dB) | Average Power Density (dBm/MHz) | Average PSD Limit (dBm/MHz) | DG (dBi) |  | Pass/Fail |
| 11a     | 6M bps    | 1   | 52  | 5260        | 0.11             | 2.95                            | 11.00                       | -3.50    |  | Pass      |
| 11a     | 6M bps    | 1   | 60  | 5300        | 0.11             | 2.66                            | 11.00                       | -3.50    |  | Pass      |
| 11a     | 6M bps    | 1   | 64  | 5320        | 0.11             | 2.69                            | 11.00                       | -3.50    |  | Pass      |
| HT20    | MCS 0     | 1   | 52  | 5260        | 0.12             | 2.69                            | 11.00                       | -3.50    |  | Pass      |
| HT20    | MCS 0     | 1   | 60  | 5300        | 0.12             | 2.25                            | 11.00                       | -3.50    |  | Pass      |
| HT20    | MCS 0     | 1   | 64  | 5320        | 0.12             | 2.08                            | 11.00                       | -3.50    |  | Pass      |
| HT40    | MCS 0     | 1   | 54  | 5270        | 0.24             | -3.94                           | 11.00                       | -3.50    |  | Pass      |
| HT40    | MCS 0     | 1   | 62  | 5310        | 0.24             | -3.83                           | 11.00                       | -3.50    |  | Pass      |
| VHT80   | MCS 0     | 1   | 58  | 5290        | 0.46             | -11.97                          | 11.00                       | -3.50    |  | Pass      |

**TEST RESULTS DATA**  
**26dB and 99% OBW**

| Band III |           |     |     |             |                     |                       |                                    |                                   |                                      |      |
|----------|-----------|-----|-----|-------------|---------------------|-----------------------|------------------------------------|-----------------------------------|--------------------------------------|------|
| Mod.     | Data Rate | NTx | CH. | Freq. (MHz) | 99% Bandwidth (MHz) | 26 dB Bandwidth (MHz) | IC 99% Bandwidth Power Limit (dBm) | IC 99% Bandwidth EIRP Limit (dBm) | FCC 26dB Bandwidth Power Limit (dBm) | Note |
| 11a      | 6M bps    | 1   | 100 | 5500        | 17.98               | 21.28                 | 23.55                              | 29.55                             | 23.98                                |      |
| 11a      | 6M bps    | 1   | 116 | 5580        | 17.88               | 21.28                 | 23.52                              | 29.52                             | 23.98                                |      |
| 11a      | 6M bps    | 1   | 140 | 5700        | 17.93               | 21.23                 | 23.54                              | 29.54                             | 23.98                                |      |
| HT20     | MCS 0     | 1   | 100 | 5500        | 18.28               | 21.33                 | 23.62                              | 29.62                             | 23.98                                |      |
| HT20     | MCS 0     | 1   | 116 | 5580        | 18.23               | 21.23                 | 23.61                              | 29.61                             | 23.98                                |      |
| HT20     | MCS 0     | 1   | 140 | 5700        | 18.23               | 21.78                 | 23.61                              | 29.61                             | 23.98                                |      |
| HT40     | MCS 0     | 1   | 102 | 5510        | 36.16               | 41.54                 | 23.98                              | 30.00                             | 23.98                                |      |
| HT40     | MCS 0     | 1   | 110 | 5550        | 36.16               | 41.45                 | 23.98                              | 30.00                             | 23.98                                |      |
| HT40     | MCS 0     | 1   | 134 | 5670        | 36.06               | 41.36                 | 23.98                              | 30.00                             | 23.98                                |      |
| VHT80    | MCS 0     | 1   | 106 | 5530        | 75.64               | 81.84                 | 23.98                              | 30.00                             | 23.98                                |      |

**TEST RESULTS DATA**  
**Average Power Table**

| FCC Band III |           |     |     |             |                  |                               |                                 |          |                        |           |
|--------------|-----------|-----|-----|-------------|------------------|-------------------------------|---------------------------------|----------|------------------------|-----------|
| Mod.         | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | Average Conducted Power (dBm) | FCC Conducted Power Limit (dBm) | DG (dBi) | EIRP Power Limit (dBm) | Pass/Fail |
| 11a          | 6M bps    | 1   | 100 | 5500        | 0.11             | 12.03                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| 11a          | 6M bps    | 1   | 116 | 5580        | 0.11             | 12.02                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| 11a          | 6M bps    | 1   | 140 | 5700        | 0.11             | 12.32                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| HT20         | MCS 0     | 1   | 100 | 5500        | 0.12             | 11.85                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| HT20         | MCS 0     | 1   | 116 | 5580        | 0.12             | 11.97                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| HT20         | MCS 0     | 1   | 140 | 5700        | 0.12             | 12.24                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| HT40         | MCS 0     | 1   | 102 | 5510        | 0.24             | 10.38                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| HT40         | MCS 0     | 1   | 110 | 5550        | 0.24             | 10.45                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| HT40         | MCS 0     | 1   | 134 | 5670        | 0.24             | 10.92                         | 23.98                           | -0.50    | 26.99                  | Pass      |
| VHT80        | MCS 0     | 1   | 106 | 5530        | 0.46             | 4.62                          | 23.98                           | -0.50    | 26.99                  | Pass      |

**TEST RESULTS DATA**  
**Power Spectral Density**

| Band III |           |     |     |             |                  |                                 |                             |          |  |           |
|----------|-----------|-----|-----|-------------|------------------|---------------------------------|-----------------------------|----------|--|-----------|
| Mod.     | Data Rate | NTx | CH. | Freq. (MHz) | Duty Factor (dB) | Average Power Density (dBm/MHz) | Average PSD Limit (dBm/MHz) | DG (dBi) |  | Pass/Fail |
| 11a      | 6M bps    | 1   | 100 | 5500        | 0.11             | 2.51                            | 11.00                       | -0.50    |  | Pass      |
| 11a      | 6M bps    | 1   | 116 | 5580        | 0.11             | 2.41                            | 11.00                       | -0.50    |  | Pass      |
| 11a      | 6M bps    | 1   | 140 | 5700        | 0.11             | 3.17                            | 11.00                       | -0.50    |  | Pass      |
| HT20     | MCS 0     | 1   | 100 | 5500        | 0.12             | 2.31                            | 11.00                       | -0.50    |  | Pass      |
| HT20     | MCS 0     | 1   | 116 | 5580        | 0.12             | 2.48                            | 11.00                       | -0.50    |  | Pass      |
| HT20     | MCS 0     | 1   | 140 | 5700        | 0.12             | 2.66                            | 11.00                       | -0.50    |  | Pass      |
| HT40     | MCS 0     | 1   | 102 | 5510        | 0.24             | -2.38                           | 11.00                       | -0.50    |  | Pass      |
| HT40     | MCS 0     | 1   | 110 | 5550        | 0.24             | -2.62                           | 11.00                       | -0.50    |  | Pass      |
| HT40     | MCS 0     | 1   | 134 | 5670        | 0.24             | -2.39                           | 11.00                       | -0.50    |  | Pass      |
| VHT80    | MCS 0     | 1   | 106 | 5530        | 0.46             | -12.62                          | 11.00                       | -0.50    |  | Pass      |

**TEST RESULTS DATA**  
**26dB and 99% OBW**

| Straddle Channel |           |     |     |             |                     |                               |                              |                                    |                                   |                                      |      |
|------------------|-----------|-----|-----|-------------|---------------------|-------------------------------|------------------------------|------------------------------------|-----------------------------------|--------------------------------------|------|
| Mod.             | Data Rate | NTX | CH. | Freq. (MHz) | 99% Bandwidth (MHz) | 26dB Emission Bandwidth (MHz) | 6dB Emission Bandwidth (MHz) | IC 99% Bandwidth Power Limit (dBm) | IC 99% Bandwidth EIRP Limit (dBm) | FCC 26dB Bandwidth Power Limit (dBm) | Note |
| 11a              | 6Mbps     | 1   | 144 | 5720        | 17.93               | 21.28                         | 15.10                        | -                                  | -                                 | -                                    |      |
|                  |           |     |     | NII-2C      | 14.041              | 15.639                        | 12.552                       | 22.47                              | 28.47                             | 22.94                                |      |
|                  |           |     |     | NII-3       | 3.8911              | 5.639                         | 2.5529                       | 30.00                              | 36.02                             | -                                    |      |
| HT20             | MCS0      | 1   | 144 | 5720        | 18.28               | 21.33                         | 15.10                        | -                                  | -                                 | -                                    |      |
|                  |           |     |     | NII-2C      | 14.1908             | 15.639                        | 12.552                       | 22.52                              | 28.52                             | 22.94                                |      |
|                  |           |     |     | NII-3       | 4.0909              | 5.689                         | 2.5529                       | 30.00                              | 36.02                             | -                                    |      |
| HT40             | MCS0      | 1   | 142 | 5710        | 36.36               | 41.63                         | 504.54                       | -                                  | -                                 | -                                    |      |
|                  |           |     |     | NII-2C      | 33.1818             | 35.859                        | 502                          | 23.98                              | 30.00                             | 23.98                                |      |
|                  |           |     |     | NII-3       | 3.1818              | 5.769                         | 2.543                        | 30.00                              | 36.02                             | -                                    |      |
| VHT80            | MCS0      | 1   | 138 | 5690        | 75.52               | 81.68                         | 75.12                        | -                                  | -                                 | -                                    |      |
|                  |           |     |     | NII-2C      | 72.762              | 75.76                         | 72.562                       | 23.98                              | 30.00                             | 23.98                                |      |
|                  |           |     |     | NII-3       | 2.762               | 5.92                          | 2.5629                       | 30.00                              | 36.02                             | -                                    |      |

**TEST RESULTS DATA**  
**Average Power Table**

| FCC Straddle Channel |           |     |     |             |                  |                               |                                 |          |  |           |
|----------------------|-----------|-----|-----|-------------|------------------|-------------------------------|---------------------------------|----------|--|-----------|
| Mod.                 | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | Average Conducted Power (dBm) | FCC Conducted Power Limit (dBm) | DG (dBi) |  | Pass/Fail |
| 11a                  | 6Mbps     | 1   | 144 | 5720        | 0.11             | 11.32                         | -                               | -0.50    |  | Pass      |
|                      |           |     |     | NII-2C      | 0.11             | 10.66                         | 22.94                           | -0.50    |  | Pass      |
|                      |           |     |     | NII-3       | 0.11             | 2.80                          | 30.00                           | -0.50    |  | Pass      |
| HT20                 | MCS0      | 1   | 144 | 5720        | 0.12             | 11.47                         | -                               | -0.50    |  | Pass      |
|                      |           |     |     | NII-2C      | 0.12             | 10.83                         | 22.94                           | -0.50    |  | Pass      |
|                      |           |     |     | NII-3       | 0.12             | 2.83                          | 30.00                           | -0.50    |  | Pass      |
| HT40                 | MCS0      | 1   | 142 | 5710        | 0.24             | 11.31                         | -                               | -0.50    |  | Pass      |
|                      |           |     |     | NII-2C      | 0.24             | 11.11                         | 23.98                           | -0.50    |  | Pass      |
|                      |           |     |     | NII-3       | 0.24             | -2.26                         | 30.00                           | -0.50    |  | Pass      |
| VHT80                | MCS0      | 1   | 138 | 5690        | 0.46             | 11.52                         | -                               | -0.50    |  | Pass      |
|                      |           |     |     | NII-2C      | 0.46             | 11.41                         | 23.98                           | -0.50    |  | Pass      |
|                      |           |     |     | NII-3       | 0.46             | -4.50                         | 30.00                           | -0.50    |  | Pass      |

**TEST RESULTS DATA**  
**Power Spectral Density**

| Straddle Channel |           |     |     |             |                  |                                 |                             |          |  |           |
|------------------|-----------|-----|-----|-------------|------------------|---------------------------------|-----------------------------|----------|--|-----------|
| Mod.             | Data Rate | NTX | CH. | Freq. (MHz) | Duty Factor (dB) | Average Power Density (dBm/MHz) | Average PSD Limit (dBm/MHz) | DG (dBi) |  | Pass/Fail |
| 11a              | 6Mbps     | 1   | 144 | NII-2C      | 0.11             | 1.19                            | 11.00                       | -0.50    |  | Pass      |
|                  |           |     |     | NII-3       | 0.11             | 1.19                            | 30.00                       | -0.50    |  | Pass      |
| HT20             | MCS0      | 1   | 144 | NII-2C      | 0.12             | 1.29                            | 11.00                       | -0.50    |  | Pass      |
|                  |           |     |     | NII-3       | 0.12             | 1.29                            | 30.00                       | -0.50    |  | Pass      |
| HT40             | MCS0      | 1   | 142 | NII-2C      | 0.24             | -1.48                           | 11.00                       | -0.50    |  | Pass      |
|                  |           |     |     | NII-3       | 0.24             | -1.48                           | 30.00                       | -0.50    |  | Pass      |
| VHT80            | MCS0      | 1   | 138 | NII-2C      | 0.46             | -5.06                           | 11.00                       | -0.50    |  | Pass      |
|                  |           |     |     | NII-3       | 0.46             | -5.06                           | 30.00                       | -0.50    |  | Pass      |

**TEST RESULTS DATA**  
**Frequency Stability**

| Band I |           |     |     |             |                        |                           |                            |                  |             |      |
|--------|-----------|-----|-----|-------------|------------------------|---------------------------|----------------------------|------------------|-------------|------|
| Mod.   | Data Rate | NTX | CH. | Freq. (MHz) | Center Frequency (MHz) | Frequency Deviation (MHz) | Frequency Stablility (ppm) | Temperature (°C) | Voltage (V) | Note |
| 11a    | 6Mbps     | 1   | 36  | 5180        | 5180.025               | 0.025                     | 4.83                       | 50               | 3.85        |      |
| 11a    | 6Mbps     | 1   | 36  | 5180        | 5180.025               | 0.025                     | 4.83                       | -30              | 3.85        |      |
| 11a    | 6Mbps     | 1   | 36  | 5180        | 5180.025               | 0.025                     | 4.83                       | 20               | 4.4         |      |
| 11a    | 6Mbps     | 1   | 36  | 5180        | 5180.025               | 0.025                     | 4.83                       | 20               | 3.5         |      |
| 11a    | 6Mbps     | 1   | 36  | 5180        | 5180.025               | 0.025                     | 4.83                       | 20               | 3.85        |      |

| Band II |           |     |     |             |                        |                           |                            |                  |             |      |
|---------|-----------|-----|-----|-------------|------------------------|---------------------------|----------------------------|------------------|-------------|------|
| Mod.    | Data Rate | NTX | CH. | Freq. (MHz) | Center Frequency (MHz) | Frequency Deviation (MHz) | Frequency Stablility (ppm) | Temperature (°C) | Voltage (V) | Note |
| 11a     | 6Mbps     | 1   | 64  | 5320        | 5320.025               | 0.025                     | 4.70                       | 50               | 3.85        |      |
| 11a     | 6Mbps     | 1   | 64  | 5320        | 5320.025               | 0.025                     | 4.70                       | -30              | 3.85        |      |
| 11a     | 6Mbps     | 1   | 64  | 5320        | 5320.025               | 0.025                     | 4.70                       | 20               | 4.4         |      |
| 11a     | 6Mbps     | 1   | 64  | 5320        | 5320.025               | 0.025                     | 4.70                       | 20               | 3.5         |      |
| 11a     | 6Mbps     | 1   | 64  | 5320        | 5320.025               | 0.025                     | 4.70                       | 20               | 3.85        |      |

| Band III |           |     |     |             |                        |                           |                            |                  |             |      |
|----------|-----------|-----|-----|-------------|------------------------|---------------------------|----------------------------|------------------|-------------|------|
| Mod.     | Data Rate | NTX | CH. | Freq. (MHz) | Center Frequency (MHz) | Frequency Deviation (MHz) | Frequency Stablility (ppm) | Temperature (°C) | Voltage (V) | Note |
| 11a      | 6Mbps     | 1   | 100 | 5500        | 5500.025               | 0.025                     | 4.55                       | 50               | 3.85        |      |
| 11a      | 6Mbps     | 1   | 100 | 5500        | 5500.025               | 0.025                     | 4.55                       | -30              | 3.85        |      |
| 11a      | 6Mbps     | 1   | 100 | 5500        | 5500.025               | 0.025                     | 4.55                       | 20               | 4.4         |      |
| 11a      | 6Mbps     | 1   | 100 | 5500        | 5500.025               | 0.025                     | 4.55                       | 20               | 3.5         |      |
| 11a      | 6Mbps     | 1   | 100 | 5500        | 5500.025               | 0.025                     | 4.55                       | 20               | 3.85        |      |



## Appendix B. Radiated Spurious Emission

### Band 1 - 5150~5250MHz

#### WIFI 802.11a (Band Edge @ 3m)

| WIFI Ant.                   | Note | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-----------------------------|------|-----------|------------|------------|------------|------------|----------------|------------|---------------|---------|-----------|-----------|---------|
| 1                           |      | ( MHz )   | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )     | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11a<br>CH 36<br>5180MHz |      | 5115.7    | 52.59      | -21.41     | 74         | 42.6       | 32.92          | 9.12       | 32.05         | 150     | 327       | P         | H       |
|                             |      | 5150      | 44.29      | -9.71      | 54         | 34.32      | 32.93          | 9.12       | 32.08         | 150     | 327       | A         | H       |
|                             | *    | 5180      | 104.22     | -          | -          | 94.14      | 32.94          | 9.24       | 32.1          | 150     | 327       | P         | H       |
|                             | *    | 5180      | 95.33      | -          | -          | 85.25      | 32.94          | 9.24       | 32.1          | 150     | 327       | A         | H       |
|                             |      | 5088.14   | 52.5       | -21.5      | 74         | 42.62      | 32.92          | 8.99       | 32.03         | 185     | 207       | P         | V       |
|                             |      | 5148.98   | 43.53      | -10.47     | 54         | 33.56      | 32.93          | 9.12       | 32.08         | 185     | 207       | A         | V       |
|                             | *    | 5180      | 102.04     | -          | -          | 91.96      | 32.94          | 9.24       | 32.1          | 185     | 207       | P         | V       |
|                             | *    | 5180      | 93.18      | -          | -          | 83.1       | 32.94          | 9.24       | 32.1          | 185     | 207       | A         | V       |
| 802.11a<br>CH 44<br>5220MHz |      | 5140.66   | 52.44      | -21.56     | 74         | 42.45      | 32.93          | 9.12       | 32.06         | 150     | 357       | P         | H       |
|                             |      | 5128.44   | 43.08      | -10.92     | 54         | 33.09      | 32.93          | 9.12       | 32.06         | 150     | 357       | A         | H       |
|                             |      | 5220      | 103.79     | -          | -          | 93.59      | 32.94          | 9.37       | 32.11         | 150     | 357       | P         | H       |
|                             |      | 5220      | 95.87      | -          | -          | 85.67      | 32.94          | 9.37       | 32.11         | 150     | 357       | A         | H       |
|                             |      | 5353.2    | 52.92      | -21.08     | 74         | 42.7       | 32.97          | 9.47       | 32.22         | 150     | 357       | P         | H       |
|                             |      | 5350.08   | 43.56      | -10.44     | 54         | 33.34      | 32.97          | 9.47       | 32.22         | 150     | 357       | A         | H       |
|                             |      | 5132.08   | 53.15      | -20.85     | 74         | 43.16      | 32.93          | 9.12       | 32.06         | 176     | 232       | P         | V       |
|                             |      | 5147.16   | 42.81      | -11.19     | 54         | 32.84      | 32.93          | 9.12       | 32.08         | 176     | 232       | A         | V       |
|                             |      | 5220      | 100.6      | -          | -          | 90.4       | 32.94          | 9.37       | 32.11         | 176     | 232       | P         | V       |
|                             |      | 5220      | 92.94      | -          | -          | 82.74      | 32.94          | 9.37       | 32.11         | 176     | 232       | A         | V       |
|                             |      | 5364.96   | 51.86      | -22.14     | 74         | 41.64      | 32.97          | 9.47       | 32.22         | 176     | 232       | P         | V       |
|                             |      | 5352.72   | 41.95      | -12.05     | 54         | 31.73      | 32.97          | 9.47       | 32.22         | 176     | 232       | A         | V       |



|                                      |                                                                                             |         |        |        |    |       |       |      |       |     |     |   |   |
|--------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11a<br/>CH 48<br/>5240MHz</b> |                                                                                             | 5068.12 | 51.57  | -22.43 | 74 | 41.82 | 32.91 | 8.87 | 32.03 | 165 | 357 | P | H |
|                                      |                                                                                             | 5148.98 | 42.79  | -11.21 | 54 | 32.82 | 32.93 | 9.12 | 32.08 | 165 | 357 | A | H |
|                                      | *                                                                                           | 5240    | 104.85 | -      | -  | 94.64 | 32.95 | 9.39 | 32.13 | 165 | 357 | P | H |
|                                      | *                                                                                           | 5240    | 96.3   | -      | -  | 86.09 | 32.95 | 9.39 | 32.13 | 165 | 357 | A | H |
|                                      |                                                                                             | 5432.64 | 52.29  | -21.71 | 74 | 42.15 | 32.99 | 9.42 | 32.27 | 165 | 357 | P | H |
|                                      |                                                                                             | 5360.16 | 44     | -10    | 54 | 33.78 | 32.97 | 9.47 | 32.22 | 165 | 357 | A | H |
|                                      |                                                                                             | 5123.5  | 51.74  | -22.26 | 74 | 41.75 | 32.93 | 9.12 | 32.06 | 183 | 215 | P | V |
|                                      |                                                                                             | 5150.02 | 42.79  | -11.21 | 54 | 32.82 | 32.93 | 9.12 | 32.08 | 183 | 215 | A | V |
|                                      | *                                                                                           | 5240    | 101.62 | -      | -  | 91.41 | 32.95 | 9.39 | 32.13 | 183 | 215 | P | V |
|                                      | *                                                                                           | 5240    | 93.43  | -      | -  | 83.22 | 32.95 | 9.39 | 32.13 | 183 | 215 | A | V |
|                                      |                                                                                             | 5402.88 | 50.58  | -23.42 | 74 | 40.36 | 32.98 | 9.49 | 32.25 | 183 | 215 | P | V |
|                                      |                                                                                             | 5351.76 | 42.24  | -11.76 | 54 | 32.02 | 32.97 | 9.47 | 32.22 | 183 | 215 | A | V |
| <b>Remark</b>                        | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |      |       |     |     |   |   |



## Band 1 5150~5250MHz

## WIFI 802.11a (Harmonic @ 3m)

| WIFI<br>Ant.<br>1           | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-----------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11a<br>CH 36<br>5180MHz |                                                                                             | 10360                | 52.28               | -21.72                  | 74                          | 60.67                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | P                       | H               |
|                             |                                                                                             | 10360                | 42.22               | -11.78                  | 54                          | 50.61                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | A                       | H               |
|                             |                                                                                             | 15540                | 49.27               | -24.73                  | 74                          | 58.24                     | 37.97                         | 15.21                   | 62.15                      | 189                  | 238                     | P                       | H               |
|                             |                                                                                             | 10360                | 52.04               | -21.96                  | 74                          | 60.43                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | P                       | V               |
|                             |                                                                                             | 10360                | 41.97               | -12.03                  | 54                          | 50.36                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | A                       | V               |
|                             |                                                                                             | 15540                | 49.3                | -24.7                   | 74                          | 58.27                     | 37.97                         | 15.21                   | 62.15                      | 189                  | 238                     | P                       | V               |
| 802.11a<br>CH 44<br>5220MHz |                                                                                             | 10440                | 51.12               | -22.88                  | 74                          | 59.28                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | P                       | H               |
|                             |                                                                                             | 10440                | 40.9                | -13.1                   | 54                          | 49.06                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | A                       | H               |
|                             |                                                                                             | 15660                | 50.49               | -23.51                  | 74                          | 59.51                     | 37.88                         | 15.3                    | 62.2                       | 150                  | 230                     | P                       | H               |
|                             |                                                                                             | 10440                | 52.07               | -21.93                  | 74                          | 60.23                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | P                       | V               |
|                             |                                                                                             | 10440                | 41.71               | -12.29                  | 54                          | 49.87                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | A                       | V               |
|                             |                                                                                             | 15660                | 50.05               | -23.95                  | 74                          | 59.07                     | 37.88                         | 15.3                    | 62.2                       | 150                  | 230                     | P                       | V               |
| 802.11a<br>CH 48<br>5240MHz |                                                                                             | 10480                | 50.91               | -23.09                  | 74                          | 58.89                     | 39.96                         | 12.82                   | 60.76                      | 150                  | 289                     | P                       | H               |
|                             |                                                                                             | 15720                | 49.67               | -24.33                  | 74                          | 58.76                     | 37.82                         | 15.33                   | 62.24                      | 150                  | 291                     | P                       | H               |
|                             |                                                                                             | 10480                | 51.68               | -22.32                  | 74                          | 59.66                     | 39.96                         | 12.82                   | 60.76                      | 150                  | 289                     | P                       | V               |
|                             |                                                                                             | 10480                | 42.23               | -11.77                  | 54                          | 50.21                     | 39.96                         | 12.82                   | 60.76                      | 150                  | 289                     | A                       | V               |
|                             |                                                                                             | 15720                | 50.27               | -23.73                  | 74                          | 59.36                     | 37.82                         | 15.33                   | 62.24                      | 150                  | 291                     | P                       | V               |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 1 5150~5250MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                   | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 36<br>5180MHz |      | 5073.58              | 52.27               | -21.73                  | 74                          | 42.51                     | 32.92                         | 8.87                    | 32.03                      | 150                  | 42                      | P                       | H               |
|                                     |      | 5148.72              | 44.01               | -9.99                   | 54                          | 34.04                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 42                      | A                       | H               |
|                                     | *    | 5180                 | 101.55              | -                       | -                           | 91.47                     | 32.94                         | 9.24                    | 32.1                       | 150                  | 42                      | P                       | H               |
|                                     | *    | 5180                 | 92.35               | -                       | -                           | 82.27                     | 32.94                         | 9.24                    | 32.1                       | 150                  | 42                      | A                       | H               |
|                                     |      | 5141.18              | 53.35               | -20.65                  | 74                          | 43.36                     | 32.93                         | 9.12                    | 32.06                      | 157                  | 299                     | P                       | V               |
|                                     |      | 5148.46              | 43.76               | -10.24                  | 54                          | 33.79                     | 32.93                         | 9.12                    | 32.08                      | 157                  | 299                     | A                       | V               |
|                                     | *    | 5180                 | 102.68              | -                       | -                           | 92.6                      | 32.94                         | 9.24                    | 32.1                       | 157                  | 299                     | P                       | V               |
|                                     | *    | 5180                 | 93.18               | -                       | -                           | 83.1                      | 32.94                         | 9.24                    | 32.1                       | 157                  | 299                     | A                       | V               |
| 802.11n<br>HT20<br>CH 44<br>5220MHz |      | 5046.8               | 52.01               | -21.99                  | 74                          | 42.24                     | 32.91                         | 8.87                    | 32.01                      | 175                  | 48                      | P                       | H               |
|                                     |      | 5145.86              | 42.87               | -11.13                  | 54                          | 32.9                      | 32.93                         | 9.12                    | 32.08                      | 175                  | 48                      | A                       | H               |
|                                     | *    | 5220                 | 102.34              | -                       | -                           | 92.14                     | 32.94                         | 9.37                    | 32.11                      | 175                  | 48                      | P                       | H               |
|                                     | *    | 5220                 | 93.88               | -                       | -                           | 83.68                     | 32.94                         | 9.37                    | 32.11                      | 175                  | 48                      | A                       | H               |
|                                     |      | 5361.84              | 51.74               | -22.26                  | 74                          | 41.52                     | 32.97                         | 9.47                    | 32.22                      | 175                  | 48                      | P                       | H               |
|                                     |      | 5358                 | 43.21               | -10.79                  | 54                          | 32.99                     | 32.97                         | 9.47                    | 32.22                      | 175                  | 48                      | A                       | H               |
|                                     |      | 5057.98              | 52.55               | -21.45                  | 74                          | 42.78                     | 32.91                         | 8.87                    | 32.01                      | 167                  | 277                     | P                       | V               |
|                                     |      | 5149.5               | 42.95               | -11.05                  | 54                          | 32.98                     | 32.93                         | 9.12                    | 32.08                      | 167                  | 277                     | A                       | V               |
|                                     | *    | 5220                 | 104.39              | -                       | -                           | 94.19                     | 32.94                         | 9.37                    | 32.11                      | 167                  | 277                     | P                       | V               |
|                                     | *    | 5220                 | 95.2                | -                       | -                           | 85                        | 32.94                         | 9.37                    | 32.11                      | 167                  | 277                     | A                       | V               |
|                                     |      | 5378.4               | 52.05               | -21.95                  | 74                          | 41.83                     | 32.98                         | 9.47                    | 32.23                      | 167                  | 277                     | P                       | V               |
|                                     |      | 5352.72              | 43.4                | -10.6                   | 54                          | 33.18                     | 32.97                         | 9.47                    | 32.22                      | 167                  | 277                     | A                       | V               |



|                                                                 |                                                                                             |         |        |        |    |       |       |      |       |     |     |   |   |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11n</b><br><b>HT20</b><br><b>CH 48</b><br><b>5240MHz</b> |                                                                                             | 5143.52 | 51.34  | -22.66 | 74 | 41.35 | 32.93 | 9.12 | 32.06 | 150 | 48  | P | H |
|                                                                 |                                                                                             | 5144.82 | 42.83  | -11.17 | 54 | 32.86 | 32.93 | 9.12 | 32.08 | 150 | 48  | A | H |
|                                                                 | *                                                                                           | 5240    | 103.9  | -      | -  | 93.69 | 32.95 | 9.39 | 32.13 | 150 | 48  | P | H |
|                                                                 | *                                                                                           | 5240    | 94.55  | -      | -  | 84.34 | 32.95 | 9.39 | 32.13 | 150 | 48  | A | H |
|                                                                 |                                                                                             | 5393.28 | 52.76  | -21.24 | 74 | 42.52 | 32.98 | 9.49 | 32.23 | 150 | 48  | P | H |
|                                                                 |                                                                                             | 5360.16 | 44.08  | -9.92  | 54 | 33.86 | 32.97 | 9.47 | 32.22 | 150 | 48  | A | H |
|                                                                 |                                                                                             | 5013.78 | 52.37  | -21.63 | 74 | 42.71 | 32.9  | 8.74 | 31.98 | 150 | 277 | P | V |
|                                                                 |                                                                                             | 5148.98 | 42.85  | -11.15 | 54 | 32.88 | 32.93 | 9.12 | 32.08 | 150 | 277 | A | V |
|                                                                 | *                                                                                           | 5240    | 104.97 | -      | -  | 94.76 | 32.95 | 9.39 | 32.13 | 150 | 277 | P | V |
|                                                                 | *                                                                                           | 5240    | 95.32  | -      | -  | 85.11 | 32.95 | 9.39 | 32.13 | 150 | 277 | A | V |
|                                                                 |                                                                                             | 5363.04 | 52.64  | -21.36 | 74 | 42.42 | 32.97 | 9.47 | 32.22 | 150 | 277 | P | V |
|                                                                 |                                                                                             | 5351.52 | 44     | -10    | 54 | 33.78 | 32.97 | 9.47 | 32.22 | 150 | 277 | A | V |
| <b>Remark</b>                                                   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |      |       |     |     |   |   |



**Band 1 5150~5250MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                   | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 36<br>5180MHz |                                                                                             | 10360                | 51.03               | -22.97                  | 74                          | 59.42                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | P                       | H               |
|                                     |                                                                                             | 10360                | 40.82               | -13.18                  | 54                          | 49.21                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | A                       | H               |
|                                     |                                                                                             | 15540                | 50.61               | -23.39                  | 74                          | 59.58                     | 37.97                         | 15.21                   | 62.15                      | 189                  | 238                     | P                       | H               |
|                                     |                                                                                             | 10360                | 51.83               | -22.17                  | 74                          | 60.22                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | P                       | V               |
|                                     |                                                                                             | 10360                | 41.45               | -12.55                  | 54                          | 49.84                     | 39.71                         | 12.75                   | 60.85                      | 152                  | 260                     | A                       | V               |
|                                     |                                                                                             | 15540                | 48.93               | -25.07                  | 74                          | 57.9                      | 37.97                         | 15.21                   | 62.15                      | 189                  | 238                     | P                       | V               |
| 802.11n<br>HT20<br>CH 44<br>5220MHz |                                                                                             | 10440                | 52.06               | -21.94                  | 74                          | 60.22                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | P                       | H               |
|                                     |                                                                                             | 10440                | 42.27               | -11.73                  | 54                          | 50.43                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | A                       | H               |
|                                     |                                                                                             | 15660                | 51.32               | -22.68                  | 74                          | 60.34                     | 37.88                         | 15.3                    | 62.2                       | 150                  | 230                     | P                       | H               |
|                                     |                                                                                             | 15660                | 40.84               | -13.16                  | 54                          | 49.86                     | 37.88                         | 15.3                    | 62.2                       | 150                  | 230                     | A                       | H               |
|                                     |                                                                                             | 10440                | 51.49               | -22.51                  | 74                          | 59.65                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | P                       | V               |
|                                     |                                                                                             | 10440                | 41.09               | -12.91                  | 54                          | 49.25                     | 39.85                         | 12.79                   | 60.8                       | 150                  | 230                     | A                       | V               |
| 802.11n<br>HT20<br>CH 48<br>5240MHz |                                                                                             | 10480                | 52.2                | -21.8                   | 74                          | 60.18                     | 39.96                         | 12.82                   | 60.76                      | 150                  | 289                     | P                       | H               |
|                                     |                                                                                             | 10480                | 41.54               | -12.46                  | 54                          | 49.52                     | 39.96                         | 12.82                   | 60.76                      | 150                  | 289                     | A                       | H               |
|                                     |                                                                                             | 15720                | 49.81               | -24.19                  | 74                          | 58.9                      | 37.82                         | 15.33                   | 62.24                      | 150                  | 291                     | P                       | H               |
|                                     |                                                                                             | 10480                | 52.48               | -21.52                  | 74                          | 60.46                     | 39.96                         | 12.82                   | 60.76                      | 150                  | 289                     | P                       | V               |
|                                     |                                                                                             | 10480                | 42.25               | -11.75                  | 54                          | 50.23                     | 39.96                         | 12.82                   | 60.76                      | 150                  | 289                     | A                       | V               |
|                                     |                                                                                             | 15720                | 49.62               | -24.38                  | 74                          | 58.71                     | 37.82                         | 15.33                   | 62.24                      | 150                  | 291                     | P                       | V               |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 1 5150~5250MHz

## WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                   | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 38<br>5190MHz |                                                                                             | 5148.72              | 53.95               | -20.05                  | 74                          | 43.98                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 41                      | P                       | H               |
|                                     |                                                                                             | 5149.76              | 47.19               | -6.81                   | 54                          | 37.22                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 41                      | A                       | H               |
|                                     | *                                                                                           | 5190                 | 100.51              | -                       | -                           | 90.43                     | 32.94                         | 9.24                    | 32.1                       | 150                  | 41                      | P                       | H               |
|                                     | *                                                                                           | 5190                 | 91.85               | -                       | -                           | 81.77                     | 32.94                         | 9.24                    | 32.1                       | 150                  | 41                      | A                       | H               |
|                                     |                                                                                             | 5442.96              | 51.5                | -22.5                   | 74                          | 41.36                     | 32.99                         | 9.42                    | 32.27                      | 150                  | 41                      | P                       | H               |
|                                     |                                                                                             | 5354.16              | 43.6                | -10.4                   | 54                          | 33.38                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 41                      | A                       | H               |
|                                     |                                                                                             | 5148.98              | 58.68               | -15.32                  | 74                          | 48.71                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 298                     | P                       | V               |
|                                     |                                                                                             | 5149.5               | 46.72               | -7.28                   | 54                          | 36.75                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 298                     | A                       | V               |
|                                     | *                                                                                           | 5190                 | 100.94              | -                       | -                           | 90.86                     | 32.94                         | 9.24                    | 32.1                       | 150                  | 298                     | P                       | V               |
|                                     | *                                                                                           | 5190                 | 91.98               | -                       | -                           | 81.9                      | 32.94                         | 9.24                    | 32.1                       | 150                  | 298                     | A                       | V               |
|                                     |                                                                                             | 5353.92              | 53.63               | -20.37                  | 74                          | 43.41                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 298                     | P                       | V               |
|                                     |                                                                                             | 5355.12              | 43.79               | -10.21                  | 54                          | 33.57                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 298                     | A                       | V               |
| 802.11n<br>HT40<br>CH 46<br>5230MHz |                                                                                             | 5055.12              | 51.57               | -22.43                  | 74                          | 41.8                      | 32.91                         | 8.87                    | 32.01                      | 153                  | 42                      | P                       | H               |
|                                     |                                                                                             | 5143.52              | 43.8                | -10.2                   | 54                          | 33.81                     | 32.93                         | 9.12                    | 32.06                      | 153                  | 42                      | A                       | H               |
|                                     | *                                                                                           | 5230                 | 101.5               | -                       | -                           | 91.31                     | 32.95                         | 9.37                    | 32.13                      | 153                  | 42                      | P                       | H               |
|                                     | *                                                                                           | 5230                 | 92.89               | -                       | -                           | 82.7                      | 32.95                         | 9.37                    | 32.13                      | 153                  | 42                      | A                       | H               |
|                                     |                                                                                             | 5381.28              | 52.36               | -21.64                  | 74                          | 42.14                     | 32.98                         | 9.47                    | 32.23                      | 153                  | 42                      | P                       | H               |
|                                     |                                                                                             | 5350.08              | 44.17               | -9.83                   | 54                          | 33.95                     | 32.97                         | 9.47                    | 32.22                      | 153                  | 42                      | A                       | H               |
|                                     |                                                                                             | 5034.58              | 51.83               | -22.17                  | 74                          | 42.18                     | 32.91                         | 8.74                    | 32                         | 183                  | 279                     | P                       | V               |
|                                     |                                                                                             | 5133.64              | 43.69               | -10.31                  | 54                          | 33.7                      | 32.93                         | 9.12                    | 32.06                      | 183                  | 279                     | A                       | V               |
|                                     | *                                                                                           | 5230                 | 102.15              | -                       | -                           | 91.96                     | 32.95                         | 9.37                    | 32.13                      | 183                  | 279                     | P                       | V               |
|                                     | *                                                                                           | 5230                 | 93.62               | -                       | -                           | 83.43                     | 32.95                         | 9.37                    | 32.13                      | 183                  | 279                     | A                       | V               |
|                                     |                                                                                             | 5369.76              | 52.68               | -21.32                  | 74                          | 42.46                     | 32.97                         | 9.47                    | 32.22                      | 183                  | 279                     | P                       | V               |
|                                     |                                                                                             | 5350.56              | 44.99               | -9.01                   | 54                          | 34.77                     | 32.97                         | 9.47                    | 32.22                      | 183                  | 279                     | A                       | V               |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**Band 1 5150~5250MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                   | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11n<br>HT40<br>CH 38<br>5190MHz |                                                                                             | 10380                | 51.39               | -22.61                  | 74                          | 59.72                   | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | P                     | H             |
|                                     |                                                                                             | 10380                | 41.27               | -12.73                  | 54                          | 49.6                    | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | A                     | H             |
|                                     |                                                                                             | 15570                | 49.62               | -24.38                  | 74                          | 58.6                    | 37.94                         | 15.24                   | 62.16                      | 150                  | 360                     | P                     | H             |
|                                     |                                                                                             | 10380                | 51.02               | -22.98                  | 74                          | 59.35                   | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | P                     | V             |
|                                     |                                                                                             | 10380                | 40.91               | -13.09                  | 54                          | 49.24                   | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | A                     | V             |
|                                     |                                                                                             | 15570                | 49.07               | -24.93                  | 74                          | 58.05                   | 37.94                         | 15.24                   | 62.16                      | 150                  | 360                     | P                     | V             |
| 802.11n<br>HT40<br>CH 46<br>5230MHz |                                                                                             | 10460                | 42.06               | -11.94                  | 54                          | 50.14                   | 39.89                         | 12.82                   | 60.79                      | 150                  | 360                     | A                     | H             |
|                                     |                                                                                             | 15690                | 50.28               | -23.72                  | 74                          | 59.32                   | 37.85                         | 15.33                   | 62.22                      | 150                  | 225                     | P                     | H             |
|                                     |                                                                                             | 10460                | 51.56               | -22.44                  | 74                          | 59.64                   | 39.89                         | 12.82                   | 60.79                      | 150                  | 360                     | P                     | V             |
|                                     |                                                                                             | 10460                | 41.43               | -12.57                  | 54                          | 49.51                   | 39.89                         | 12.82                   | 60.79                      | 150                  | 360                     | A                     | V             |
|                                     |                                                                                             | 15690                | 51.13               | -22.87                  | 74                          | 60.17                   | 37.85                         | 15.33                   | 62.22                      | 150                  | 225                     | P                     | V             |
|                                     |                                                                                             | 15690                | 40.83               | -13.17                  | 54                          | 49.87                   | 37.85                         | 15.33                   | 62.22                      | 150                  | 225                     | A                     | V             |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT20 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                     | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT20<br>CH 36<br>5180MHz |      | 5100.88              | 52.49               | -21.51                  | 74                          | 42.63                     | 32.92                         | 8.99                    | 32.05                      | 154                  | 115                     | P                       | H               |
|                                       |      | 5148.98              | 43.8                | -10.2                   | 54                          | 33.83                     | 32.93                         | 9.12                    | 32.08                      | 154                  | 115                     | A                       | H               |
|                                       | *    | 5180                 | 102.25              | -                       | -                           | 92.17                     | 32.94                         | 9.24                    | 32.1                       | 154                  | 115                     | P                       | H               |
|                                       | *    | 5180                 | 93.88               | -                       | -                           | 83.8                      | 32.94                         | 9.24                    | 32.1                       | 154                  | 115                     | A                       | H               |
|                                       |      | 5132.34              | 52.77               | -21.23                  | 74                          | 42.78                     | 32.93                         | 9.12                    | 32.06                      | 170                  | 271                     | P                       | V               |
|                                       |      | 5145.08              | 44.22               | -9.78                   | 54                          | 34.25                     | 32.93                         | 9.12                    | 32.08                      | 170                  | 271                     | A                       | V               |
|                                       | *    | 5180                 | 103.45              | -                       | -                           | 93.37                     | 32.94                         | 9.24                    | 32.1                       | 170                  | 271                     | P                       | V               |
|                                       | *    | 5180                 | 94.88               | -                       | -                           | 84.8                      | 32.94                         | 9.24                    | 32.1                       | 170                  | 271                     | A                       | V               |
| 802.11ac<br>VHT20<br>CH 44<br>5220MHz |      | 5071.5               | 52.18               | -21.82                  | 74                          | 42.42                     | 32.92                         | 8.87                    | 32.03                      | 155                  | 113                     | P                       | H               |
|                                       |      | 5139.88              | 43.38               | -10.62                  | 54                          | 33.39                     | 32.93                         | 9.12                    | 32.06                      | 155                  | 113                     | A                       | H               |
|                                       | *    | 5220                 | 103.06              | -                       | -                           | 92.86                     | 32.94                         | 9.37                    | 32.11                      | 155                  | 113                     | P                       | H               |
|                                       | *    | 5220                 | 94.22               | -                       | -                           | 84.02                     | 32.94                         | 9.37                    | 32.11                      | 155                  | 113                     | A                       | H               |
|                                       |      | 5352.24              | 51.46               | -22.54                  | 74                          | 41.24                     | 32.97                         | 9.47                    | 32.22                      | 155                  | 113                     | P                       | H               |
|                                       |      | 5353.2               | 43.19               | -10.81                  | 54                          | 32.97                     | 32.97                         | 9.47                    | 32.22                      | 155                  | 113                     | A                       | H               |
|                                       |      | 5056.94              | 51.45               | -22.55                  | 74                          | 41.68                     | 32.91                         | 8.87                    | 32.01                      | 165                  | 286                     | P                       | V               |
|                                       |      | 5150                 | 43.55               | -10.45                  | 54                          | 33.58                     | 32.93                         | 9.12                    | 32.08                      | 165                  | 286                     | A                       | V               |
|                                       | *    | 5220                 | 104.97              | -                       | -                           | 94.77                     | 32.94                         | 9.37                    | 32.11                      | 165                  | 286                     | P                       | V               |
|                                       | *    | 5220                 | 96.07               | -                       | -                           | 85.87                     | 32.94                         | 9.37                    | 32.11                      | 165                  | 286                     | A                       | V               |
|                                       |      | 5364.96              | 51.73               | -22.27                  | 74                          | 41.51                     | 32.97                         | 9.47                    | 32.22                      | 165                  | 286                     | P                       | V               |
|                                       |      | 5352.96              | 44.31               | -9.69                   | 54                          | 34.09                     | 32.97                         | 9.47                    | 32.22                      | 165                  | 286                     | A                       | V               |



|                                                                   |                                                                                             |         |        |        |    |       |       |      |       |     |     |   |   |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11ac</b><br><b>VHT20</b><br><b>CH 48</b><br><b>5240MHz</b> |                                                                                             | 5053.04 | 51.92  | -22.08 | 74 | 42.15 | 32.91 | 8.87 | 32.01 | 150 | 50  | P | H |
|                                                                   |                                                                                             | 5144.3  | 43.17  | -10.83 | 54 | 33.2  | 32.93 | 9.12 | 32.08 | 150 | 50  | A | H |
|                                                                   | *                                                                                           | 5240    | 102.9  | -      | -  | 92.69 | 32.95 | 9.39 | 32.13 | 150 | 50  | P | H |
|                                                                   | *                                                                                           | 5240    | 93.94  | -      | -  | 83.73 | 32.95 | 9.39 | 32.13 | 150 | 50  | A | H |
|                                                                   |                                                                                             | 5395.68 | 51.89  | -22.11 | 74 | 41.65 | 32.98 | 9.49 | 32.23 | 150 | 50  | P | H |
|                                                                   |                                                                                             | 5351.04 | 43.84  | -10.16 | 54 | 33.62 | 32.97 | 9.47 | 32.22 | 150 | 50  | A | H |
|                                                                   |                                                                                             | 5102.18 | 51.58  | -22.42 | 74 | 41.72 | 32.92 | 8.99 | 32.05 | 150 | 271 | P | V |
|                                                                   |                                                                                             | 5101.14 | 43.49  | -10.51 | 54 | 33.63 | 32.92 | 8.99 | 32.05 | 150 | 271 | A | V |
|                                                                   | *                                                                                           | 5240    | 103.63 | -      | -  | 93.42 | 32.95 | 9.39 | 32.13 | 150 | 271 | P | V |
|                                                                   | *                                                                                           | 5240    | 95.58  | -      | -  | 85.37 | 32.95 | 9.39 | 32.13 | 150 | 271 | A | V |
|                                                                   |                                                                                             | 5363.04 | 52.16  | -21.84 | 74 | 41.94 | 32.97 | 9.47 | 32.22 | 150 | 271 | P | V |
|                                                                   |                                                                                             | 5350.56 | 44.61  | -9.39  | 54 | 34.39 | 32.97 | 9.47 | 32.22 | 150 | 271 | A | V |
| <b>Remark</b>                                                     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |      |       |     |     |   |   |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT20 (Harmonic @ 3m)

| WIFI Ant. 1                  | Note                                                                                        | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|------------------------------|---------------------------------------------------------------------------------------------|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|-------------------|----------------------|----------------|-------------------|-----------------|------------|
| 802.11ac VHT20 CH 36 5180MHz |                                                                                             | 10360             | 51.81            | -22.19            | 74                    | 60.2              | 39.71                   | 12.75             | 60.85                | 152            | 260               | P               | H          |
|                              |                                                                                             | 10360             | 42.59            | -11.41            | 54                    | 50.98             | 39.71                   | 12.75             | 60.85                | 152            | 260               | A               | H          |
|                              |                                                                                             | 15540             | 49.39            | -24.61            | 74                    | 58.36             | 37.97                   | 15.21             | 62.15                | 189            | 238               | P               | H          |
|                              |                                                                                             | 10360             | 51.64            | -22.36            | 74                    | 60.03             | 39.71                   | 12.75             | 60.85                | 152            | 260               | P               | V          |
|                              |                                                                                             | 10360             | 42.91            | -11.09            | 54                    | 51.3              | 39.71                   | 12.75             | 60.85                | 152            | 260               | A               | V          |
|                              |                                                                                             | 15540             | 49.23            | -24.77            | 74                    | 58.2              | 37.97                   | 15.21             | 62.15                | 189            | 238               | P               | V          |
| 802.11ac VHT20 CH 44 5220MHz |                                                                                             | 10440             | 51.93            | -22.07            | 74                    | 60.09             | 39.85                   | 12.79             | 60.8                 | 150            | 230               | P               | H          |
|                              |                                                                                             | 10440             | 43.45            | -10.55            | 54                    | 51.61             | 39.85                   | 12.79             | 60.8                 | 150            | 230               | A               | H          |
|                              |                                                                                             | 15660             | 50.51            | -23.49            | 74                    | 59.53             | 37.88                   | 15.3              | 62.2                 | 150            | 230               | P               | H          |
|                              |                                                                                             | 10440             | 52.54            | -21.46            | 74                    | 60.7              | 39.85                   | 12.79             | 60.8                 | 150            | 230               | P               | V          |
|                              |                                                                                             | 10440             | 43.09            | -10.91            | 54                    | 51.25             | 39.85                   | 12.79             | 60.8                 | 150            | 230               | A               | V          |
|                              |                                                                                             | 15660             | 50.2             | -23.8             | 74                    | 59.22             | 37.88                   | 15.3              | 62.2                 | 150            | 230               | P               | V          |
| 802.11ac VHT20 CH 48 5240MHz |                                                                                             | 10480             | 51.84            | -22.16            | 74                    | 59.82             | 39.96                   | 12.82             | 60.76                | 150            | 289               | P               | H          |
|                              |                                                                                             | 10480             | 42.13            | -11.87            | 54                    | 50.11             | 39.96                   | 12.82             | 60.76                | 150            | 289               | A               | H          |
|                              |                                                                                             | 15720             | 50.42            | -23.58            | 74                    | 59.51             | 37.82                   | 15.33             | 62.24                | 150            | 291               | P               | H          |
|                              |                                                                                             | 10480             | 50.87            | -23.13            | 74                    | 58.85             | 39.96                   | 12.82             | 60.76                | 150            | 289               | P               | V          |
|                              |                                                                                             | 15720             | 49.78            | -24.22            | 74                    | 58.87             | 37.82                   | 15.33             | 62.24                | 150            | 291               | P               | V          |
| Remark                       | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                   |                  |                   |                       |                   |                         |                   |                      |                |                   |                 |            |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                     | Note                                                         | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------------|--------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT40<br>CH 38<br>5190MHz |                                                              | 5143.26              | 52.85               | -21.15                  | 74                          | 42.86                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 115                     | P                       | H               |
|                                       |                                                              | 5149.5               | 44.99               | -9.01                   | 54                          | 35.02                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 115                     | A                       | H               |
|                                       | *                                                            | 5190                 | 98.52               | -                       | -                           | 88.44                     | 32.94                         | 9.24                    | 32.1                       | 150                  | 115                     | P                       | H               |
|                                       | *                                                            | 5190                 | 90.09               | -                       | -                           | 80.01                     | 32.94                         | 9.24                    | 32.1                       | 150                  | 115                     | A                       | H               |
|                                       |                                                              | 5356.08              | 50.99               | -23.01                  | 74                          | 40.77                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 115                     | P                       | H               |
|                                       |                                                              | 5362.56              | 42.44               | -11.56                  | 54                          | 32.22                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 115                     | A                       | H               |
|                                       |                                                              | 5141.96              | 52.4                | -21.6                   | 74                          | 42.41                     | 32.93                         | 9.12                    | 32.06                      | 161                  | 262                     | P                       | V               |
|                                       |                                                              | 5150.02              | 44.62               | -9.38                   | 54                          | 34.65                     | 32.93                         | 9.12                    | 32.08                      | 161                  | 262                     | A                       | V               |
|                                       | *                                                            | 5190                 | 100.55              | -                       | -                           | 90.47                     | 32.94                         | 9.24                    | 32.1                       | 161                  | 262                     | P                       | V               |
|                                       | *                                                            | 5190                 | 91.78               | -                       | -                           | 81.7                      | 32.94                         | 9.24                    | 32.1                       | 161                  | 262                     | A                       | V               |
|                                       |                                                              | 5456.88              | 51.15               | -22.85                  | 74                          | 41.02                     | 32.99                         | 9.42                    | 32.28                      | 161                  | 262                     | P                       | V               |
|                                       |                                                              | 5354.64              | 43.56               | -10.44                  | 54                          | 33.34                     | 32.97                         | 9.47                    | 32.22                      | 161                  | 262                     | A                       | V               |
| 802.11ac<br>VHT40<br>CH 46<br>5230MHz |                                                              | 5143.52              | 52.43               | -21.57                  | 74                          | 42.44                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 114                     | P                       | H               |
|                                       |                                                              | 5145.86              | 43.42               | -10.58                  | 54                          | 33.45                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 114                     | A                       | H               |
|                                       | *                                                            | 5230                 | 99.87               | -                       | -                           | 89.68                     | 32.95                         | 9.37                    | 32.13                      | 150                  | 114                     | P                       | H               |
|                                       | *                                                            | 5230                 | 91.8                | -                       | -                           | 81.61                     | 32.95                         | 9.37                    | 32.13                      | 150                  | 114                     | A                       | H               |
|                                       |                                                              | 5353.2               | 51.42               | -22.58                  | 74                          | 41.2                      | 32.97                         | 9.47                    | 32.22                      | 150                  | 114                     | P                       | H               |
|                                       |                                                              | 5350.32              | 42.93               | -11.07                  | 54                          | 32.71                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 114                     | A                       | H               |
|                                       |                                                              | 5048.1               | 52.41               | -21.59                  | 74                          | 42.64                     | 32.91                         | 8.87                    | 32.01                      | 150                  | 266                     | P                       | V               |
|                                       |                                                              | 5145.86              | 43.32               | -10.68                  | 54                          | 33.35                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 266                     | A                       | V               |
|                                       | *                                                            | 5230                 | 101.22              | -                       | -                           | 91.03                     | 32.95                         | 9.37                    | 32.13                      | 150                  | 266                     | P                       | V               |
|                                       | *                                                            | 5230                 | 92.64               | -                       | -                           | 82.45                     | 32.95                         | 9.37                    | 32.13                      | 150                  | 266                     | A                       | V               |
|                                       |                                                              | 5362.56              | 52.5                | -21.5                   | 74                          | 42.28                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 266                     | P                       | V               |
|                                       |                                                              | 5350.08              | 44.77               | -9.23                   | 54                          | 34.55                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 266                     | A                       | V               |
| Remark                                | 1. No other spurious found.                                  |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |
|                                       | 2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT40 (Harmonic @ 3m)

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT40<br>CH 38<br>5190MHz |                                                                                             | 10380                | 52.87               | -21.13                  | 74                          | 61.2                    | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | P                     | H             |
|                                       |                                                                                             | 10380                | 43.3                | -10.7                   | 54                          | 51.63                   | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | A                     | H             |
|                                       |                                                                                             | 15570                | 49.11               | -24.89                  | 74                          | 58.09                   | 37.94                         | 15.24                   | 62.16                      | 150                  | 360                     | P                     | H             |
|                                       |                                                                                             | 10380                | 51.29               | -22.71                  | 74                          | 59.62                   | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | P                     | V             |
|                                       |                                                                                             | 10380                | 41.55               | -12.45                  | 54                          | 49.88                   | 39.74                         | 12.77                   | 60.84                      | 150                  | 360                     | A                     | V             |
|                                       |                                                                                             | 15570                | 49.78               | -24.22                  | 74                          | 58.76                   | 37.94                         | 15.24                   | 62.16                      | 150                  | 360                     | P                     | V             |
| 802.11ac<br>VHT40<br>CH 46<br>5230MHz |                                                                                             | 10460                | 52.33               | -21.67                  | 74                          | 60.41                   | 39.89                         | 12.82                   | 60.79                      | 150                  | 360                     | P                     | H             |
|                                       |                                                                                             | 10460                | 42.81               | -11.19                  | 54                          | 50.89                   | 39.89                         | 12.82                   | 60.79                      | 150                  | 360                     | A                     | H             |
|                                       |                                                                                             | 15690                | 49.7                | -24.3                   | 74                          | 58.74                   | 37.85                         | 15.33                   | 62.22                      | 150                  | 225                     | P                     | H             |
|                                       |                                                                                             | 10460                | 52.08               | -21.92                  | 74                          | 60.16                   | 39.89                         | 12.82                   | 60.79                      | 150                  | 360                     | P                     | V             |
|                                       |                                                                                             | 10460                | 42.34               | -11.66                  | 54                          | 50.42                   | 39.89                         | 12.82                   | 60.79                      | 150                  | 360                     | A                     | V             |
|                                       |                                                                                             | 15690                | 50.15               | -23.85                  | 74                          | 59.19                   | 37.85                         | 15.33                   | 62.22                      | 150                  | 225                     | P                     | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT80<br>CH 42<br>5210MHz |                                                                                             | 5144.82              | 62.01               | -11.99                  | 74                          | 52.04                   | 32.93                         | 9.12                    | 32.08                      | 152                  | 104                     | P                     | H             |
|                                       |                                                                                             | 5148.2               | 49.21               | -4.79                   | 54                          | 39.24                   | 32.93                         | 9.12                    | 32.08                      | 152                  | 104                     | A                     | H             |
|                                       | *                                                                                           | 5210                 | 93.21               | -                       | -                           | 83.01                   | 32.94                         | 9.37                    | 32.11                      | 152                  | 104                     | P                     | H             |
|                                       | *                                                                                           | 5210                 | 86.14               | -                       | -                           | 75.94                   | 32.94                         | 9.37                    | 32.11                      | 152                  | 104                     | A                     | H             |
|                                       |                                                                                             | 5389.92              | 53.1                | -20.9                   | 74                          | 42.86                   | 32.98                         | 9.49                    | 32.23                      | 152                  | 104                     | P                     | H             |
|                                       |                                                                                             | 5353.2               | 45.48               | -8.52                   | 54                          | 35.26                   | 32.97                         | 9.47                    | 32.22                      | 152                  | 104                     | A                     | H             |
|                                       |                                                                                             | 5111.28              | 58.99               | -15.01                  | 74                          | 49.13                   | 32.92                         | 8.99                    | 32.05                      | 150                  | 294                     | P                     | V             |
|                                       |                                                                                             | 5145.86              | 48.85               | -5.15                   | 54                          | 38.88                   | 32.93                         | 9.12                    | 32.08                      | 150                  | 294                     | A                     | V             |
|                                       | *                                                                                           | 5210                 | 93.9                | -                       | -                           | 83.7                    | 32.94                         | 9.37                    | 32.11                      | 150                  | 294                     | P                     | V             |
|                                       | *                                                                                           | 5210                 | 86.19               | -                       | -                           | 75.99                   | 32.94                         | 9.37                    | 32.11                      | 150                  | 294                     | A                     | V             |
|                                       |                                                                                             | 5366.16              | 57.13               | -16.87                  | 74                          | 46.91                   | 32.97                         | 9.47                    | 32.22                      | 150                  | 294                     | P                     | V             |
|                                       |                                                                                             | 5352                 | 49.17               | -4.83                   | 54                          | 38.95                   | 32.97                         | 9.47                    | 32.22                      | 150                  | 294                     | A                     | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT80<br>CH 42<br>5210MHz |                                                                                             | 10420                | 52.2                | -21.8                   | 74                          | 60.4                    | 39.82                         | 12.79                   | 60.81                      | 250                  | 0                       | P                     | H             |
|                                       |                                                                                             | 10420                | 42.54               | -11.46                  | 54                          | 50.74                   | 39.82                         | 12.79                   | 60.81                      | 250                  | 0                       | A                     | H             |
|                                       |                                                                                             | 15630                | 48.05               | -25.95                  | 74                          | 57.09                   | 37.89                         | 15.27                   | 62.2                       | 150                  | 0                       | P                     | H             |
|                                       |                                                                                             | 10420                | 51.61               | -22.39                  | 74                          | 59.81                   | 39.82                         | 12.79                   | 60.81                      | 250                  | 0                       | P                     | V             |
|                                       |                                                                                             | 10420                | 41.49               | -12.51                  | 54                          | 49.69                   | 39.82                         | 12.79                   | 60.81                      | 250                  | 0                       | A                     | V             |
|                                       |                                                                                             | 15630                | 47.62               | -26.38                  | 74                          | 56.66                   | 37.89                         | 15.27                   | 62.2                       | 150                  | 0                       | P                     | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 2 - 5250~5350MHz

## WIFI 802.11a (Band Edge @ 3m)

| WIFI                        | Note | Frequency | Level      | Over   | Limit      | Read     | Antenna  | Cable  | Preamp | Ant    | Table   | Peak    | Pol.    |
|-----------------------------|------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant.                        |      |           |            | Limit  | Line       | Level    | Factor   | Loss   | Factor | Pos    | Pos     | Avg.    |         |
| 1                           |      | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | ( P/A ) | ( H/V ) |
| 802.11a<br>CH 52<br>5260MHz |      | 5145.86   | 51.72      | -22.28 | 74         | 41.75    | 32.93    | 9.12   | 32.08  | 150    | 357     | P       | H       |
|                             |      | 5148.2    | 42.84      | -11.16 | 54         | 32.87    | 32.93    | 9.12   | 32.08  | 150    | 357     | A       | H       |
|                             | *    | 5260      | 105.92     | -      | -          | 95.73    | 32.95    | 9.39   | 32.15  | 150    | 357     | P       | H       |
|                             | *    | 5260      | 96.88      | -      | -          | 86.69    | 32.95    | 9.39   | 32.15  | 150    | 357     | A       | H       |
|                             |      | 5363.04   | 52.73      | -21.27 | 74         | 42.51    | 32.97    | 9.47   | 32.22  | 150    | 357     | P       | H       |
|                             |      | 5357.52   | 44.25      | -9.75  | 54         | 34.03    | 32.97    | 9.47   | 32.22  | 150    | 357     | A       | H       |
|                             |      | 5053.3    | 51.54      | -22.46 | 74         | 41.77    | 32.91    | 8.87   | 32.01  | 184    | 230     | P       | V       |
|                             |      | 5033.8    | 42.6       | -11.4  | 54         | 32.95    | 32.91    | 8.74   | 32     | 184    | 230     | A       | V       |
|                             | *    | 5260      | 101.87     | -      | -          | 91.68    | 32.95    | 9.39   | 32.15  | 184    | 230     | P       | V       |
|                             | *    | 5260      | 93.86      | -      | -          | 83.67    | 32.95    | 9.39   | 32.15  | 184    | 230     | A       | V       |
|                             |      | 5352.72   | 51.41      | -22.59 | 74         | 41.19    | 32.97    | 9.47   | 32.22  | 184    | 230     | P       | V       |
|                             |      | 5350.8    | 42.34      | -11.66 | 54         | 32.12    | 32.97    | 9.47   | 32.22  | 184    | 230     | A       | V       |
| 802.11a<br>CH 60<br>5300MHz |      | 5052.78   | 52.45      | -21.55 | 74         | 42.68    | 32.91    | 8.87   | 32.01  | 153    | 357     | P       | H       |
|                             |      | 5145.86   | 42.53      | -11.47 | 54         | 32.56    | 32.93    | 9.12   | 32.08  | 153    | 357     | A       | H       |
|                             | *    | 5300      | 105.07     | -      | -          | 94.87    | 32.96    | 9.42   | 32.18  | 153    | 357     | P       | H       |
|                             | *    | 5300      | 97.29      | -      | -          | 87.09    | 32.96    | 9.42   | 32.18  | 153    | 357     | A       | H       |
|                             |      | 5353.44   | 53.7       | -20.3  | 74         | 43.48    | 32.97    | 9.47   | 32.22  | 153    | 357     | P       | H       |
|                             |      | 5351.76   | 45.21      | -8.79  | 54         | 34.99    | 32.97    | 9.47   | 32.22  | 153    | 357     | A       | H       |
|                             |      | 5033.54   | 51.15      | -22.85 | 74         | 41.5     | 32.91    | 8.74   | 32     | 172    | 200     | P       | V       |
|                             |      | 5073.32   | 42.41      | -11.59 | 54         | 32.65    | 32.92    | 8.87   | 32.03  | 172    | 200     | A       | V       |
|                             | *    | 5300      | 102.53     | -      | -          | 92.33    | 32.96    | 9.42   | 32.18  | 172    | 200     | P       | V       |
|                             | *    | 5300      | 94.41      | -      | -          | 84.21    | 32.96    | 9.42   | 32.18  | 172    | 200     | A       | V       |
|                             |      | 5365.92   | 51.39      | -22.61 | 74         | 41.17    | 32.97    | 9.47   | 32.22  | 172    | 200     | P       | V       |
|                             |      | 5365.44   | 43.2       | -10.8  | 54         | 32.98    | 32.97    | 9.47   | 32.22  | 172    | 200     | A       | V       |



|                                                  |                                                                                             |         |        |       |    |       |       |      |       |     |     |   |   |
|--------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|-------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11a</b><br><b>CH 64</b><br><b>5320MHz</b> | *                                                                                           | 5320    | 104.91 | -     | -  | 94.69 | 32.96 | 9.44 | 32.18 | 150 | 357 | P | H |
|                                                  | *                                                                                           | 5320    | 96.91  | -     | -  | 86.69 | 32.96 | 9.44 | 32.18 | 150 | 357 | A | H |
|                                                  |                                                                                             | 5351.04 | 53.6   | -20.4 | 74 | 43.38 | 32.97 | 9.47 | 32.22 | 150 | 357 | P | H |
|                                                  |                                                                                             | 5350.72 | 46.15  | -7.85 | 54 | 35.93 | 32.97 | 9.47 | 32.22 | 150 | 357 | A | H |
|                                                  | *                                                                                           | 5320    | 102.01 | -     | -  | 91.79 | 32.96 | 9.44 | 32.18 | 182 | 226 | P | V |
|                                                  | *                                                                                           | 5320    | 93.31  | -     | -  | 83.09 | 32.96 | 9.44 | 32.18 | 182 | 226 | A | V |
|                                                  |                                                                                             | 5351.36 | 52.1   | -21.9 | 74 | 41.88 | 32.97 | 9.47 | 32.22 | 182 | 226 | P | V |
|                                                  |                                                                                             | 5351.04 | 44.19  | -9.81 | 54 | 33.97 | 32.97 | 9.47 | 32.22 | 182 | 226 | A | V |
| <b>Remark</b>                                    | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |       |    |       |       |      |       |     |     |   |   |



## Band 2 5250~5350MHz

## WIFI 802.11a (Harmonic @ 3m)

| WIFI<br>Ant.<br>1           | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-----------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11a<br>CH 52<br>5260MHz |                                                                                             | 10520                | 51.61               | -22.39                  | 74                          | 59.49                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | P                       | H               |
|                             |                                                                                             | 10520                | 41.1                | -12.9                   | 54                          | 48.98                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | A                       | H               |
|                             |                                                                                             | 15780                | 49.91               | -24.09                  | 74                          | 59                        | 37.78                         | 15.39                   | 62.26                      | 150                  | 345                     | P                       | H               |
|                             |                                                                                             | 10520                | 51.87               | -22.13                  | 74                          | 59.75                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | P                       | V               |
|                             |                                                                                             | 10520                | 41.37               | -12.63                  | 54                          | 49.25                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | A                       | V               |
|                             |                                                                                             | 15780                | 50                  | -24                     | 74                          | 59.09                     | 37.78                         | 15.39                   | 62.26                      | 150                  | 345                     | P                       | V               |
| 802.11a<br>CH 60<br>5300MHz |                                                                                             | 10600                | 53.09               | -20.91                  | 74                          | 60.77                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | P                       | H               |
|                             |                                                                                             | 10600                | 43.37               | -10.63                  | 54                          | 51.05                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | A                       | H               |
|                             |                                                                                             | 15900                | 50.04               | -23.96                  | 74                          | 59.2                      | 37.68                         | 15.48                   | 62.32                      | 196                  | 190                     | P                       | H               |
|                             |                                                                                             | 10600                | 51.83               | -22.17                  | 74                          | 59.51                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | P                       | V               |
|                             |                                                                                             | 10600                | 41                  | -13                     | 54                          | 48.68                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | A                       | V               |
|                             |                                                                                             | 15900                | 51.39               | -22.61                  | 74                          | 60.55                     | 37.68                         | 15.48                   | 62.32                      | 196                  | 190                     | P                       | V               |
|                             |                                                                                             | 15900                | 41.65               | -12.35                  | 54                          | 50.81                     | 37.68                         | 15.48                   | 62.32                      | 196                  | 190                     | A                       | V               |
| 802.11a<br>CH 64<br>5320MHz |                                                                                             | 10640                | 52.01               | -21.99                  | 74                          | 59.61                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | P                       | H               |
|                             |                                                                                             | 10640                | 41.52               | -12.48                  | 54                          | 49.12                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | A                       | H               |
|                             |                                                                                             | 15960                | 49.2                | -24.8                   | 74                          | 58.38                     | 37.63                         | 15.54                   | 62.35                      | 173                  | 245                     | P                       | H               |
|                             |                                                                                             | 10640                | 52.71               | -21.29                  | 74                          | 60.31                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | P                       | V               |
|                             |                                                                                             | 10640                | 42.28               | -11.72                  | 54                          | 49.88                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | A                       | V               |
|                             |                                                                                             | 15960                | 49.93               | -24.07                  | 74                          | 59.11                     | 37.63                         | 15.54                   | 62.35                      | 173                  | 245                     | P                       | V               |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 2 5250~5350MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                   | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 52<br>5260MHz |      | 5062.14              | 51.54               | -22.46                  | 74                          | 41.77                     | 32.91                         | 8.87                    | 32.01                      | 150                  | 40                      | P                       | H               |
|                                     |      | 5143.78              | 42.65               | -11.35                  | 54                          | 32.68                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 40                      | A                       | H               |
|                                     | *    | 5260                 | 103.03              | -                       | -                           | 92.84                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 40                      | P                       | H               |
|                                     | *    | 5260                 | 94.1                | -                       | -                           | 83.91                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 40                      | A                       | H               |
|                                     |      | 5364                 | 51.67               | -22.33                  | 74                          | 41.45                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 40                      | P                       | H               |
|                                     |      | 5350.32              | 43.23               | -10.77                  | 54                          | 33.01                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 40                      | A                       | H               |
|                                     |      | 5148.98              | 52.03               | -21.97                  | 74                          | 42.06                     | 32.93                         | 9.12                    | 32.08                      | 164                  | 277                     | P                       | V               |
|                                     |      | 5142.48              | 42.61               | -11.39                  | 54                          | 32.62                     | 32.93                         | 9.12                    | 32.06                      | 164                  | 277                     | A                       | V               |
|                                     | *    | 5260                 | 104.75              | -                       | -                           | 94.56                     | 32.95                         | 9.39                    | 32.15                      | 164                  | 277                     | P                       | V               |
|                                     | *    | 5260                 | 95.69               | -                       | -                           | 85.5                      | 32.95                         | 9.39                    | 32.15                      | 164                  | 277                     | A                       | V               |
|                                     |      | 5354.16              | 52.35               | -21.65                  | 74                          | 42.13                     | 32.97                         | 9.47                    | 32.22                      | 164                  | 277                     | P                       | V               |
|                                     |      | 5350.32              | 44.01               | -9.99                   | 54                          | 33.79                     | 32.97                         | 9.47                    | 32.22                      | 164                  | 277                     | A                       | V               |
| 802.11n<br>HT20<br>CH 60<br>5300MHz |      | 5116.74              | 51.71               | -22.29                  | 74                          | 41.72                     | 32.92                         | 9.12                    | 32.05                      | 172                  | 49                      | P                       | H               |
|                                     |      | 5074.36              | 42.54               | -11.46                  | 54                          | 32.78                     | 32.92                         | 8.87                    | 32.03                      | 172                  | 49                      | A                       | H               |
|                                     | *    | 5300                 | 104.98              | -                       | -                           | 94.78                     | 32.96                         | 9.42                    | 32.18                      | 172                  | 49                      | P                       | H               |
|                                     | *    | 5300                 | 95.31               | -                       | -                           | 85.11                     | 32.96                         | 9.42                    | 32.18                      | 172                  | 49                      | A                       | H               |
|                                     |      | 5350.32              | 53.04               | -20.96                  | 74                          | 42.82                     | 32.97                         | 9.47                    | 32.22                      | 172                  | 49                      | P                       | H               |
|                                     |      | 5355.84              | 44.89               | -9.11                   | 54                          | 34.67                     | 32.97                         | 9.47                    | 32.22                      | 172                  | 49                      | A                       | H               |
|                                     |      | 5053.3               | 52.02               | -21.98                  | 74                          | 42.25                     | 32.91                         | 8.87                    | 32.01                      | 152                  | 277                     | P                       | V               |
|                                     |      | 5118.3               | 42.48               | -11.52                  | 54                          | 32.5                      | 32.92                         | 9.12                    | 32.06                      | 152                  | 277                     | A                       | V               |
|                                     | *    | 5300                 | 105.58              | -                       | -                           | 95.38                     | 32.96                         | 9.42                    | 32.18                      | 152                  | 277                     | P                       | V               |
|                                     | *    | 5300                 | 96.02               | -                       | -                           | 85.82                     | 32.96                         | 9.42                    | 32.18                      | 152                  | 277                     | A                       | V               |
|                                     |      | 5361.6               | 53.6                | -20.4                   | 74                          | 43.38                     | 32.97                         | 9.47                    | 32.22                      | 152                  | 277                     | P                       | V               |
|                                     |      | 5351.04              | 44.83               | -9.17                   | 54                          | 34.61                     | 32.97                         | 9.47                    | 32.22                      | 152                  | 277                     | A                       | V               |



|                                                                 |                                                                                             |         |        |        |    |       |       |      |       |     |     |   |   |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11n</b><br><b>HT20</b><br><b>CH 64</b><br><b>5320MHz</b> | *                                                                                           | 5320    | 105.34 | -      | -  | 95.12 | 32.96 | 9.44 | 32.18 | 166 | 47  | P | H |
|                                                                 | *                                                                                           | 5320    | 95.92  | -      | -  | 85.7  | 32.96 | 9.44 | 32.18 | 166 | 47  | A | H |
|                                                                 |                                                                                             | 5350.4  | 59.05  | -14.95 | 74 | 48.83 | 32.97 | 9.47 | 32.22 | 166 | 47  | P | H |
|                                                                 |                                                                                             | 5350.08 | 45.48  | -8.52  | 54 | 35.26 | 32.97 | 9.47 | 32.22 | 166 | 47  | A | H |
|                                                                 | *                                                                                           | 5320    | 104.74 | -      | -  | 94.52 | 32.96 | 9.44 | 32.18 | 150 | 279 | P | V |
|                                                                 | *                                                                                           | 5320    | 96.2   | -      | -  | 85.98 | 32.96 | 9.44 | 32.18 | 150 | 279 | A | V |
|                                                                 |                                                                                             | 5354.56 | 57.25  | -16.75 | 74 | 47.03 | 32.97 | 9.47 | 32.22 | 150 | 279 | P | V |
|                                                                 |                                                                                             | 5351.04 | 45.66  | -8.34  | 54 | 35.44 | 32.97 | 9.47 | 32.22 | 150 | 279 | A | V |
| <b>Remark</b>                                                   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |      |       |     |     |   |   |



**Band 2 5250~5350MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                   | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 52<br>5260MHz |                                                                                             | 10520                | 51.37               | -22.63                  | 74                          | 59.25                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | P                       | H               |
|                                     |                                                                                             | 10520                | 41                  | -13                     | 54                          | 48.88                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | A                       | H               |
|                                     |                                                                                             | 15780                | 50.32               | -23.68                  | 74                          | 59.41                     | 37.78                         | 15.39                   | 62.26                      | 150                  | 345                     | P                       | H               |
|                                     |                                                                                             | 10520                | 51.14               | -22.86                  | 74                          | 59.02                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | P                       | V               |
|                                     |                                                                                             | 10520                | 41.39               | -12.61                  | 54                          | 49.27                     | 39.99                         | 12.84                   | 60.71                      | 150                  | 220                     | A                       | V               |
|                                     |                                                                                             | 15780                | 50.01               | -23.99                  | 74                          | 59.1                      | 37.78                         | 15.39                   | 62.26                      | 150                  | 345                     | P                       | V               |
| 802.11n<br>HT20<br>CH 60<br>5300MHz |                                                                                             | 10600                | 51.01               | -22.99                  | 74                          | 58.69                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | P                       | H               |
|                                     |                                                                                             | 10600                | 40.43               | -13.57                  | 54                          | 48.11                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | A                       | H               |
|                                     |                                                                                             | 15900                | 50.25               | -23.75                  | 74                          | 59.41                     | 37.68                         | 15.48                   | 62.32                      | 196                  | 190                     | P                       | H               |
|                                     |                                                                                             | 10600                | 51.77               | -22.23                  | 74                          | 59.45                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | P                       | V               |
|                                     |                                                                                             | 10600                | 41.58               | -12.42                  | 54                          | 49.26                     | 39.96                         | 12.88                   | 60.52                      | 185                  | 215                     | A                       | V               |
|                                     |                                                                                             | 15900                | 50.49               | -23.51                  | 74                          | 59.65                     | 37.68                         | 15.48                   | 62.32                      | 196                  | 190                     | P                       | V               |
| 802.11n<br>HT20<br>CH 64<br>5320MHz |                                                                                             | 10640                | 51.36               | -22.64                  | 74                          | 58.96                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | P                       | H               |
|                                     |                                                                                             | 10640                | 41.09               | -12.91                  | 54                          | 48.69                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | A                       | H               |
|                                     |                                                                                             | 15960                | 49.45               | -24.55                  | 74                          | 58.63                     | 37.63                         | 15.54                   | 62.35                      | 173                  | 245                     | P                       | H               |
|                                     |                                                                                             | 10640                | 51.29               | -22.71                  | 74                          | 58.89                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | P                       | V               |
|                                     |                                                                                             | 10640                | 40.91               | -13.09                  | 54                          | 48.51                     | 39.94                         | 12.91                   | 60.45                      | 152                  | 135                     | A                       | V               |
|                                     |                                                                                             | 15960                | 49.57               | -24.43                  | 74                          | 58.75                     | 37.63                         | 15.54                   | 62.35                      | 173                  | 245                     | P                       | V               |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 2 5250~5350MHz

## WIFI 802.11n HT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                   | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 54<br>5270MHz |                                                                                             | 5127.92              | 51.86               | -22.14                  | 74                          | 41.87                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 42                      | P                       | H               |
|                                     |                                                                                             | 5105.56              | 43.21               | -10.79                  | 54                          | 33.35                     | 32.92                         | 8.99                    | 32.05                      | 150                  | 42                      | A                       | H               |
|                                     | *                                                                                           | 5270                 | 101.01              | -                       | -                           | 90.82                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 42                      | P                       | H               |
|                                     | *                                                                                           | 5270                 | 92.73               | -                       | -                           | 82.54                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 42                      | A                       | H               |
|                                     |                                                                                             | 5362.08              | 52.39               | -21.61                  | 74                          | 42.17                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 42                      | P                       | H               |
|                                     |                                                                                             | 5350.08              | 44.79               | -9.21                   | 54                          | 34.57                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 42                      | A                       | H               |
|                                     |                                                                                             | 5015.08              | 51.81               | -22.19                  | 74                          | 42.15                     | 32.9                          | 8.74                    | 31.98                      | 176                  | 279                     | P                       | V               |
|                                     |                                                                                             | 5149.76              | 43.33               | -10.67                  | 54                          | 33.36                     | 32.93                         | 9.12                    | 32.08                      | 176                  | 279                     | A                       | V               |
|                                     | *                                                                                           | 5270                 | 102.8               | -                       | -                           | 92.61                     | 32.95                         | 9.39                    | 32.15                      | 176                  | 279                     | P                       | V               |
|                                     | *                                                                                           | 5270                 | 94.78               | -                       | -                           | 84.59                     | 32.95                         | 9.39                    | 32.15                      | 176                  | 279                     | A                       | V               |
|                                     |                                                                                             | 5352.48              | 53.79               | -20.21                  | 74                          | 43.57                     | 32.97                         | 9.47                    | 32.22                      | 176                  | 279                     | P                       | V               |
|                                     |                                                                                             | 5350.56              | 45.3                | -8.7                    | 54                          | 35.08                     | 32.97                         | 9.47                    | 32.22                      | 176                  | 279                     | A                       | V               |
|                                     |                                                                                             | 5070.7               | 52.12               | -21.88                  | 74                          | 42.37                     | 32.91                         | 8.87                    | 32.03                      | 192                  | 51                      | P                       | H               |
| 802.11n<br>HT40<br>CH 62<br>5310MHz |                                                                                             | 5066.85              | 42.89               | -11.11                  | 54                          | 33.12                     | 32.91                         | 8.87                    | 32.01                      | 192                  | 51                      | A                       | H               |
|                                     | *                                                                                           | 5310                 | 99.22               | -                       | -                           | 89                        | 32.96                         | 9.44                    | 32.18                      | 192                  | 51                      | P                       | H               |
|                                     | *                                                                                           | 5310                 | 92.09               | -                       | -                           | 81.87                     | 32.96                         | 9.44                    | 32.18                      | 192                  | 51                      | A                       | H               |
|                                     |                                                                                             | 5352.96              | 61.61               | -12.39                  | 74                          | 51.39                     | 32.97                         | 9.47                    | 32.22                      | 192                  | 51                      | P                       | H               |
|                                     |                                                                                             | 5350.8               | 49.43               | -4.57                   | 54                          | 39.21                     | 32.97                         | 9.47                    | 32.22                      | 192                  | 51                      | A                       | H               |
|                                     |                                                                                             | 5073.5               | 51.31               | -22.69                  | 74                          | 41.55                     | 32.92                         | 8.87                    | 32.03                      | 181                  | 286                     | P                       | V               |
|                                     |                                                                                             | 5120.05              | 42.65               | -11.35                  | 54                          | 32.67                     | 32.92                         | 9.12                    | 32.06                      | 181                  | 286                     | A                       | V               |
|                                     | *                                                                                           | 5310                 | 100.71              | -                       | -                           | 90.49                     | 32.96                         | 9.44                    | 32.18                      | 181                  | 286                     | P                       | V               |
|                                     | *                                                                                           | 5310                 | 91.66               | -                       | -                           | 81.44                     | 32.96                         | 9.44                    | 32.18                      | 181                  | 286                     | A                       | V               |
|                                     |                                                                                             | 5353.44              | 60.96               | -13.04                  | 74                          | 50.74                     | 32.97                         | 9.47                    | 32.22                      | 181                  | 286                     | P                       | V               |
|                                     |                                                                                             | 5350.56              | 48.9                | -5.1                    | 54                          | 38.68                     | 32.97                         | 9.47                    | 32.22                      | 181                  | 286                     | A                       | V               |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |
|                                     |                                                                                             |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**Band 2 5250~5350MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                   | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11n<br>HT40<br>CH 54<br>5270MHz |                                                                                             | 10540                | 51.42               | -22.58                  | 74                          | 59.24                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | P                     | H             |
|                                     |                                                                                             | 10540                | 40.96               | -13.04                  | 54                          | 48.78                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | A                     | H             |
|                                     |                                                                                             | 15810                | 50.35               | -23.65                  | 74                          | 59.46                   | 37.75                         | 15.42                   | 62.28                      | 150                  | 345                     | P                     | H             |
|                                     |                                                                                             | 10540                | 51.27               | -22.73                  | 74                          | 59.09                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | P                     | V             |
|                                     |                                                                                             | 10540                | 40.85               | -13.15                  | 54                          | 48.67                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | A                     | V             |
|                                     |                                                                                             | 15810                | 50.52               | -23.48                  | 74                          | 59.63                   | 37.75                         | 15.42                   | 62.28                      | 150                  | 345                     | P                     | V             |
| 802.11n<br>HT40<br>CH 62<br>5310MHz |                                                                                             | 10620                | 52.19               | -21.81                  | 74                          | 59.82                   | 39.95                         | 12.91                   | 60.49                      | 160                  | 220                     | P                     | H             |
|                                     |                                                                                             | 10620                | 47.63               | -6.37                   | 54                          | 55.26                   | 39.95                         | 12.91                   | 60.49                      | 160                  | 220                     | A                     | H             |
|                                     |                                                                                             | 15930                | 49.88               | -24.12                  | 74                          | 59.05                   | 37.66                         | 15.51                   | 62.34                      | 165                  | 100                     | P                     | H             |
|                                     |                                                                                             | 10620                | 52.12               | -21.88                  | 74                          | 59.75                   | 39.95                         | 12.91                   | 60.49                      | 172                  | 220                     | P                     | V             |
|                                     |                                                                                             | 10620                | 45.49               | -8.51                   | 54                          | 53.12                   | 39.95                         | 12.91                   | 60.49                      | 172                  | 220                     | A                     | V             |
|                                     |                                                                                             | 15930                | 48.29               | -25.71                  | 74                          | 57.46                   | 37.66                         | 15.51                   | 62.34                      | 155                  | 100                     | P                     | V             |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 2 5250~5350MHz

## WIFI 802.11ac VHT20 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                     | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT20<br>CH 52<br>5260MHz |      | 5138.84              | 52                  | -22                     | 74                          | 42.01                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 52                      | P                       | H               |
|                                       |      | 5130.26              | 42.77               | -11.23                  | 54                          | 32.78                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 52                      | A                       | H               |
|                                       | *    | 5260                 | 102.67              | -                       | -                           | 92.48                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 52                      | P                       | H               |
|                                       | *    | 5260                 | 94.85               | -                       | -                           | 84.66                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 52                      | A                       | H               |
|                                       |      | 5369.04              | 51.72               | -22.28                  | 74                          | 41.5                      | 32.97                         | 9.47                    | 32.22                      | 150                  | 52                      | P                       | H               |
|                                       |      | 5351.28              | 44.02               | -9.98                   | 54                          | 33.8                      | 32.97                         | 9.47                    | 32.22                      | 150                  | 52                      | A                       | H               |
|                                       |      | 5077.48              | 52.92               | -21.08                  | 74                          | 43.04                     | 32.92                         | 8.99                    | 32.03                      | 158                  | 262                     | P                       | V               |
|                                       |      | 5078.26              | 43.04               | -10.96                  | 54                          | 33.16                     | 32.92                         | 8.99                    | 32.03                      | 158                  | 262                     | A                       | V               |
|                                       | *    | 5260                 | 104.94              | -                       | -                           | 94.75                     | 32.95                         | 9.39                    | 32.15                      | 158                  | 262                     | P                       | V               |
|                                       | *    | 5260                 | 96.89               | -                       | -                           | 86.7                      | 32.95                         | 9.39                    | 32.15                      | 158                  | 262                     | A                       | V               |
|                                       |      | 5359.2               | 53.34               | -20.66                  | 74                          | 43.12                     | 32.97                         | 9.47                    | 32.22                      | 158                  | 262                     | P                       | V               |
|                                       |      | 5350.08              | 45.25               | -8.75                   | 54                          | 35.03                     | 32.97                         | 9.47                    | 32.22                      | 158                  | 262                     | A                       | V               |
| 802.11ac<br>VHT20<br>CH 60<br>5300MHz |      | 5140.4               | 50.71               | -23.29                  | 74                          | 40.72                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 79                      | P                       | H               |
|                                       |      | 5034.58              | 42.62               | -11.38                  | 54                          | 32.97                     | 32.91                         | 8.74                    | 32                         | 150                  | 79                      | A                       | H               |
|                                       | *    | 5300                 | 103.83              | -                       | -                           | 93.63                     | 32.96                         | 9.42                    | 32.18                      | 150                  | 79                      | P                       | H               |
|                                       | *    | 5300                 | 94.9                | -                       | -                           | 84.7                      | 32.96                         | 9.42                    | 32.18                      | 150                  | 79                      | A                       | H               |
|                                       |      | 5368.56              | 52.69               | -21.31                  | 74                          | 42.47                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 79                      | P                       | H               |
|                                       |      | 5352                 | 44.78               | -9.22                   | 54                          | 34.56                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 79                      | A                       | H               |
|                                       |      | 5060.84              | 51.82               | -22.18                  | 74                          | 42.05                     | 32.91                         | 8.87                    | 32.01                      | 156                  | 265                     | P                       | V               |
|                                       |      | 5146.12              | 42.81               | -11.19                  | 54                          | 32.84                     | 32.93                         | 9.12                    | 32.08                      | 156                  | 265                     | A                       | V               |
|                                       | *    | 5300                 | 105.22              | -                       | -                           | 95.02                     | 32.96                         | 9.42                    | 32.18                      | 156                  | 265                     | P                       | V               |
|                                       | *    | 5300                 | 96.75               | -                       | -                           | 86.55                     | 32.96                         | 9.42                    | 32.18                      | 156                  | 265                     | A                       | V               |
|                                       |      | 5351.04              | 54.25               | -19.75                  | 74                          | 44.03                     | 32.97                         | 9.47                    | 32.22                      | 156                  | 265                     | P                       | V               |
|                                       |      | 5352                 | 45.87               | -8.13                   | 54                          | 35.65                     | 32.97                         | 9.47                    | 32.22                      | 156                  | 265                     | A                       | V               |



|                                                                               |                                                                                             |         |        |        |    |       |       |      |       |     |     |   |   |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11ac</b><br><br><b>VHT20</b><br><br><b>CH 64</b><br><br><b>5320MHz</b> | *                                                                                           | 5320    | 103.29 | -      | -  | 93.07 | 32.96 | 9.44 | 32.18 | 150 | 79  | P | H |
|                                                                               | *                                                                                           | 5320    | 94.41  | -      | -  | 84.19 | 32.96 | 9.44 | 32.18 | 150 | 79  | A | H |
|                                                                               |                                                                                             | 5350.24 | 53.96  | -20.04 | 74 | 43.74 | 32.97 | 9.47 | 32.22 | 150 | 79  | P | H |
|                                                                               |                                                                                             | 5350.56 | 44.86  | -9.14  | 54 | 34.64 | 32.97 | 9.47 | 32.22 | 150 | 79  | A | H |
|                                                                               | *                                                                                           | 5320    | 105.48 | -      | -  | 95.26 | 32.96 | 9.44 | 32.18 | 154 | 263 | P | V |
|                                                                               | *                                                                                           | 5320    | 96.58  | -      | -  | 86.36 | 32.96 | 9.44 | 32.18 | 154 | 263 | A | V |
|                                                                               |                                                                                             | 5350.08 | 54.18  | -19.82 | 74 | 43.96 | 32.97 | 9.47 | 32.22 | 154 | 263 | P | V |
|                                                                               |                                                                                             | 5350.08 | 46.23  | -7.77  | 54 | 36.01 | 32.97 | 9.47 | 32.22 | 154 | 263 | A | V |
| <b>Remark</b>                                                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |      |       |     |     |   |   |



## Band 2 5250~5350MHz

## WIFI 802.11ac VHT20 (Harmonic @ 3m)

| WIFI Ant. 1                  | Note                                                                                        | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level (dBμV) | Antenna Factor ( dB/m ) | Cable Loss ( dB ) | Preamplifier Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|------------------------------|---------------------------------------------------------------------------------------------|-------------------|------------------|-------------------|-----------------------|-------------------|-------------------------|-------------------|----------------------------|----------------|-------------------|-----------------|------------|
| 802.11ac VHT20 CH 52 5260MHz |                                                                                             | 10520             | 51.64            | -22.36            | 74                    | 59.52             | 39.99                   | 12.84             | 60.71                      | 150            | 220               | P               | H          |
|                              |                                                                                             | 10520             | 41.64            | -12.36            | 54                    | 49.52             | 39.99                   | 12.84             | 60.71                      | 150            | 220               | A               | H          |
|                              |                                                                                             | 15780             | 49.83            | -24.17            | 74                    | 58.92             | 37.78                   | 15.39             | 62.26                      | 150            | 345               | P               | H          |
|                              |                                                                                             | 10520             | 51.55            | -22.45            | 74                    | 59.43             | 39.99                   | 12.84             | 60.71                      | 150            | 220               | P               | V          |
|                              |                                                                                             | 10520             | 41               | -13               | 54                    | 48.88             | 39.99                   | 12.84             | 60.71                      | 150            | 220               | A               | V          |
|                              |                                                                                             | 15780             | 50.15            | -23.85            | 74                    | 59.24             | 37.78                   | 15.39             | 62.26                      | 150            | 345               | P               | V          |
| 802.11ac VHT20 CH 60 5300MHz |                                                                                             | 10600             | 51.29            | -22.71            | 74                    | 58.97             | 39.96                   | 12.88             | 60.52                      | 185            | 215               | P               | H          |
|                              |                                                                                             | 10600             | 41.28            | -12.72            | 54                    | 48.96             | 39.96                   | 12.88             | 60.52                      | 185            | 215               | A               | H          |
|                              |                                                                                             | 15900             | 50.84            | -23.16            | 74                    | 60                | 37.68                   | 15.48             | 62.32                      | 196            | 190               | P               | H          |
|                              |                                                                                             | 10600             | 51.41            | -22.59            | 74                    | 59.09             | 39.96                   | 12.88             | 60.52                      | 185            | 215               | P               | V          |
|                              |                                                                                             | 10600             | 41.2             | -12.8             | 54                    | 48.88             | 39.96                   | 12.88             | 60.52                      | 185            | 215               | A               | V          |
|                              |                                                                                             | 15900             | 49.73            | -24.27            | 74                    | 58.89             | 37.68                   | 15.48             | 62.32                      | 196            | 190               | P               | V          |
| 802.11ac VHT20 CH 64 5320MHz |                                                                                             | 10640             | 52.27            | -21.73            | 74                    | 59.87             | 39.94                   | 12.91             | 60.45                      | 152            | 135               | P               | H          |
|                              |                                                                                             | 10640             | 42.1             | -11.9             | 54                    | 49.7              | 39.94                   | 12.91             | 60.45                      | 152            | 135               | A               | H          |
|                              |                                                                                             | 15960             | 48.52            | -25.48            | 74                    | 57.7              | 37.63                   | 15.54             | 62.35                      | 173            | 245               | P               | H          |
|                              |                                                                                             | 10640             | 51.58            | -22.42            | 74                    | 59.18             | 39.94                   | 12.91             | 60.45                      | 152            | 135               | P               | V          |
|                              |                                                                                             | 10640             | 42.52            | -11.48            | 54                    | 50.12             | 39.94                   | 12.91             | 60.45                      | 152            | 135               | A               | V          |
|                              |                                                                                             | 15960             | 49.1             | -24.9             | 74                    | 58.28             | 37.63                   | 15.54             | 62.35                      | 173            | 245               | P               | V          |
| Remark                       | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                   |                  |                   |                       |                   |                         |                   |                            |                |                   |                 |            |



## Band 2 5250~5350MHz

## WIFI 802.11ac VHT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT40<br>CH 54<br>5270MHz |                                                                                             | 5043.42              | 51.51               | -22.49                  | 74                          | 41.74                     | 32.91                         | 8.87                    | 32.01                      | 150                  | 54                      | P                       | H               |
|                                       |                                                                                             | 5131.3               | 42.91               | -11.09                  | 54                          | 32.92                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 54                      | A                       | H               |
|                                       | *                                                                                           | 5270                 | 100.24              | -                       | -                           | 90.05                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 54                      | P                       | H               |
|                                       | *                                                                                           | 5270                 | 92.17               | -                       | -                           | 81.98                     | 32.95                         | 9.39                    | 32.15                      | 150                  | 54                      | A                       | H               |
|                                       |                                                                                             | 5378.16              | 51.48               | -22.52                  | 74                          | 41.26                     | 32.98                         | 9.47                    | 32.23                      | 150                  | 54                      | P                       | H               |
|                                       |                                                                                             | 5351.76              | 44.26               | -9.74                   | 54                          | 34.04                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 54                      | A                       | H               |
|                                       |                                                                                             | 5042.64              | 51.89               | -22.11                  | 74                          | 42.12                     | 32.91                         | 8.87                    | 32.01                      | 158                  | 266                     | P                       | V               |
|                                       |                                                                                             | 5150.02              | 42.85               | -11.15                  | 54                          | 32.88                     | 32.93                         | 9.12                    | 32.08                      | 158                  | 266                     | A                       | V               |
|                                       | *                                                                                           | 5270                 | 101.75              | -                       | -                           | 91.56                     | 32.95                         | 9.39                    | 32.15                      | 158                  | 266                     | P                       | V               |
|                                       | *                                                                                           | 5270                 | 93.73               | -                       | -                           | 83.54                     | 32.95                         | 9.39                    | 32.15                      | 158                  | 266                     | A                       | V               |
|                                       |                                                                                             | 5380.8               | 53.36               | -20.64                  | 74                          | 43.14                     | 32.98                         | 9.47                    | 32.23                      | 158                  | 266                     | P                       | V               |
|                                       |                                                                                             | 5362.08              | 45                  | -9                      | 54                          | 34.78                     | 32.97                         | 9.47                    | 32.22                      | 158                  | 266                     | A                       | V               |
| 802.11ac<br>VHT40<br>CH 62<br>5310MHz |                                                                                             | 5126.1               | 51.57               | -22.43                  | 74                          | 41.58                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 53                      | P                       | H               |
|                                       |                                                                                             | 5130.26              | 42.78               | -11.22                  | 54                          | 32.79                     | 32.93                         | 9.12                    | 32.06                      | 150                  | 53                      | A                       | H               |
|                                       | *                                                                                           | 5310                 | 98.26               | -                       | -                           | 88.04                     | 32.96                         | 9.44                    | 32.18                      | 150                  | 53                      | P                       | H               |
|                                       | *                                                                                           | 5310                 | 91.62               | -                       | -                           | 81.4                      | 32.96                         | 9.44                    | 32.18                      | 150                  | 53                      | A                       | H               |
|                                       |                                                                                             | 5353.92              | 57.34               | -16.66                  | 74                          | 47.12                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 53                      | P                       | H               |
|                                       |                                                                                             | 5350.8               | 48.57               | -5.43                   | 54                          | 38.35                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 53                      | A                       | H               |
|                                       |                                                                                             | 5049.4               | 52.01               | -21.99                  | 74                          | 42.24                     | 32.91                         | 8.87                    | 32.01                      | 150                  | 264                     | P                       | V               |
|                                       |                                                                                             | 5145.86              | 42.82               | -11.18                  | 54                          | 32.85                     | 32.93                         | 9.12                    | 32.08                      | 150                  | 264                     | A                       | V               |
|                                       | *                                                                                           | 5310                 | 100.91              | -                       | -                           | 90.69                     | 32.96                         | 9.44                    | 32.18                      | 150                  | 264                     | P                       | V               |
|                                       | *                                                                                           | 5310                 | 93.25               | -                       | -                           | 83.03                     | 32.96                         | 9.44                    | 32.18                      | 150                  | 264                     | A                       | V               |
|                                       |                                                                                             | 5352.72              | 60                  | -14                     | 74                          | 49.78                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 264                     | P                       | V               |
|                                       |                                                                                             | 5351.28              | 49.9                | -4.1                    | 54                          | 39.68                     | 32.97                         | 9.47                    | 32.22                      | 150                  | 264                     | A                       | V               |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 2 5250~5350MHz

## WIFI 802.11ac VHT40 (Harmonic @ 3m)

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT40<br>CH 54<br>5270MHz |                                                                                             | 10540                | 53.16               | -20.84                  | 74                          | 60.98                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | P                     | H             |
|                                       |                                                                                             | 10540                | 42.63               | -11.37                  | 54                          | 50.45                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | A                     | H             |
|                                       |                                                                                             | 15810                | 50.28               | -23.72                  | 74                          | 59.39                   | 37.75                         | 15.42                   | 62.28                      | 150                  | 345                     | P                     | H             |
|                                       |                                                                                             | 10540                | 51.16               | -22.84                  | 74                          | 58.98                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | P                     | V             |
|                                       |                                                                                             | 10540                | 40.99               | -13.01                  | 54                          | 48.81                   | 39.99                         | 12.86                   | 60.67                      | 150                  | 220                     | A                     | V             |
|                                       |                                                                                             | 15810                | 49.68               | -24.32                  | 74                          | 58.79                   | 37.75                         | 15.42                   | 62.28                      | 150                  | 345                     | P                     | V             |
| 802.11ac<br>VHT40<br>CH 62<br>5310MHz |                                                                                             | 10620                | 51.54               | -22.46                  | 74                          | 59.17                   | 39.95                         | 12.91                   | 60.49                      | 150                  | 220                     | P                     | H             |
|                                       |                                                                                             | 10620                | 41.33               | -12.67                  | 54                          | 48.96                   | 39.95                         | 12.91                   | 60.49                      | 150                  | 220                     | A                     | H             |
|                                       |                                                                                             | 15930                | 49.9                | -24.1                   | 74                          | 59.07                   | 37.66                         | 15.51                   | 62.34                      | 150                  | 100                     | P                     | H             |
|                                       |                                                                                             | 10620                | 51.89               | -22.11                  | 74                          | 59.52                   | 39.95                         | 12.91                   | 60.49                      | 150                  | 220                     | P                     | V             |
|                                       |                                                                                             | 10620                | 41.9                | -12.1                   | 54                          | 49.53                   | 39.95                         | 12.91                   | 60.49                      | 150                  | 220                     | A                     | V             |
|                                       |                                                                                             | 15930                | 49.28               | -24.72                  | 74                          | 58.45                   | 37.66                         | 15.51                   | 62.34                      | 150                  | 100                     | P                     | V             |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT80<br>CH 58<br>5290MHz |                                                                                             | 5054.08              | 51.68               | -22.32                  | 74                          | 41.91                     | 32.91                         | 8.87                    | 32.01                      | 167                  | 57                      | P                       | H               |
|                                       |                                                                                             | 5048.62              | 43.84               | -10.16                  | 54                          | 34.07                     | 32.91                         | 8.87                    | 32.01                      | 167                  | 57                      | A                       | H               |
|                                       | *                                                                                           | 5297                 | 91.69               | -                       | -                           | 81.49                     | 32.96                         | 9.42                    | 32.18                      | 167                  | 57                      | P                       | H               |
|                                       | *                                                                                           | 5297                 | 83.09               | -                       | -                           | 72.89                     | 32.96                         | 9.42                    | 32.18                      | 167                  | 57                      | A                       | H               |
|                                       |                                                                                             | 5353.44              | 65                  | -9                      | 74                          | 54.78                     | 32.97                         | 9.47                    | 32.22                      | 167                  | 57                      | P                       | H               |
|                                       |                                                                                             | 5357.28              | 50.8                | -3.2                    | 54                          | 40.58                     | 32.97                         | 9.47                    | 32.22                      | 167                  | 57                      | A                       | H               |
|                                       |                                                                                             | 5031.98              | 51.31               | -22.69                  | 74                          | 41.66                     | 32.91                         | 8.74                    | 32                         | 152                  | 254                     | P                       | V               |
|                                       |                                                                                             | 5048.1               | 44.02               | -9.98                   | 54                          | 34.25                     | 32.91                         | 8.87                    | 32.01                      | 152                  | 254                     | A                       | V               |
|                                       | *                                                                                           | 5290                 | 91.55               | -                       | -                           | 81.34                     | 32.96                         | 9.42                    | 32.17                      | 152                  | 254                     | P                       | V               |
|                                       | *                                                                                           | 5290                 | 83.58               | -                       | -                           | 73.37                     | 32.96                         | 9.42                    | 32.17                      | 152                  | 254                     | A                       | V               |
|                                       |                                                                                             | 5350.8               | 65.26               | -8.74                   | 74                          | 55.04                     | 32.97                         | 9.47                    | 32.22                      | 152                  | 254                     | P                       | V               |
|                                       |                                                                                             | 5351.04              | 50.69               | -3.31                   | 54                          | 40.47                     | 32.97                         | 9.47                    | 32.22                      | 152                  | 254                     | A                       | V               |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI<br>Ant.<br>1 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac          |                                                                                             | 10580                | 49.9                | -24.1                   | 74                          | 57.61                   | 39.97                         | 12.88                   | 60.56                      | 250                  | 0                       | P                     | H             |
| VHT80             |                                                                                             | 15870                | 48.63               | -25.37                  | 74                          | 57.79                   | 37.7                          | 15.45                   | 62.31                      | 150                  | 0                       | P                     | H             |
| CH 58             |                                                                                             | 10580                | 50.28               | -23.72                  | 74                          | 57.99                   | 39.97                         | 12.88                   | 60.56                      | 250                  | 0                       | P                     | V             |
| 5290MHz           |                                                                                             | 15870                | 49.07               | -24.93                  | 74                          | 58.23                   | 37.7                          | 15.45                   | 62.31                      | 150                  | 0                       | P                     | V             |
| Remark            | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 3 - 5470~5725MHz

## WIFI 802.11a (Band Edge @ 3m)

| WIFI                         | Note | Frequency | Level      | Over   | Limit      | Read     | Antenna  | Cable  | Preamp | Ant    | Table   | Peak    | Pol.    |
|------------------------------|------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant.                         |      |           |            | Limit  | Line       | Level    | Factor   | Loss   | Factor | Pos    | Pos     | Avg.    |         |
| 1                            |      | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | ( P/A ) | ( H/V ) |
| 802.11a<br>CH 100<br>5500MHz |      | 5470      | 54.28      | -19.72 | 74         | 44.22    | 32.99    | 9.35   | 32.28  | 150    | 59      | P       | H       |
|                              |      | 5469.52   | 45.57      | -8.43  | 54         | 35.51    | 32.99    | 9.35   | 32.28  | 150    | 59      | A       | H       |
|                              | *    | 5500      | 103.79     | -      | -          | 93.74    | 33       | 9.35   | 32.3   | 150    | 59      | P       | H       |
|                              | *    | 5500      | 97.11      | -      | -          | 87.06    | 33       | 9.35   | 32.3   | 150    | 59      | A       | H       |
|                              |      | 5469.04   | 53.1       | -20.9  | 74         | 43.04    | 32.99    | 9.35   | 32.28  | 150    | 278     | P       | V       |
|                              |      | 5470      | 45.67      | -8.33  | 54         | 35.61    | 32.99    | 9.35   | 32.28  | 150    | 278     | A       | V       |
|                              | *    | 5500      | 104.31     | -      | -          | 94.26    | 33       | 9.35   | 32.3   | 150    | 278     | P       | V       |
|                              | *    | 5500      | 96.33      | -      | -          | 86.28    | 33       | 9.35   | 32.3   | 150    | 278     | A       | V       |
| 802.11a<br>CH 116<br>5580MHz |      | 5464.24   | 53.92      | -20.08 | 74         | 43.79    | 32.99    | 9.42   | 32.28  | 150    | 53      | P       | H       |
|                              |      | 5459.92   | 44.19      | -9.81  | 54         | 34.06    | 32.99    | 9.42   | 32.28  | 150    | 53      | A       | H       |
|                              | *    | 5580      | 106.05     | -      | -          | 95.91    | 33.08    | 9.22   | 32.16  | 150    | 53      | P       | H       |
|                              | *    | 5580      | 97.94      | -      | -          | 87.8     | 33.08    | 9.22   | 32.16  | 150    | 53      | A       | H       |
|                              |      | 5765      | 52.27      | -21.73 | 74         | 41.32    | 33.31    | 9.54   | 31.9   | 150    | 53      | P       | H       |
|                              |      | 5747.325  | 43         | -11    | 54         | 32.11    | 33.29    | 9.54   | 31.94  | 150    | 53      | A       | H       |
|                              |      | 5466.88   | 52.19      | -21.81 | 74         | 42.13    | 32.99    | 9.35   | 32.28  | 161    | 270     | P       | V       |
|                              |      | 5464.96   | 44.14      | -9.86  | 54         | 34.01    | 32.99    | 9.42   | 32.28  | 161    | 270     | A       | V       |
|                              | *    | 5580      | 105.03     | -      | -          | 94.89    | 33.08    | 9.22   | 32.16  | 161    | 270     | P       | V       |
|                              | *    | 5580      | 96.14      | -      | -          | 86       | 33.08    | 9.22   | 32.16  | 161    | 270     | A       | V       |
|                              |      | 5757.125  | 52.14      | -21.86 | 74         | 41.19    | 33.31    | 9.54   | 31.9   | 161    | 270     | P       | V       |
|                              |      | 5727.025  | 43.15      | -10.85 | 54         | 32.42    | 33.27    | 9.44   | 31.98  | 161    | 270     | A       | V       |



|                                                   |                                                                                             |         |        |        |    |       |       |      |       |     |     |   |   |
|---------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11a</b><br><b>CH 140</b><br><b>5700MHz</b> | *                                                                                           | 5700    | 105.57 | -      | -  | 94.91 | 33.23 | 9.44 | 32.01 | 150 | 55  | P | H |
|                                                   | *                                                                                           | 5700    | 97.28  | -      | -  | 86.62 | 33.23 | 9.44 | 32.01 | 150 | 55  | A | H |
|                                                   |                                                                                             | 5747    | 54.73  | -19.27 | 74 | 43.84 | 33.29 | 9.54 | 31.94 | 150 | 55  | P | H |
|                                                   |                                                                                             | 5725    | 46.38  | -7.62  | 54 | 35.65 | 33.27 | 9.44 | 31.98 | 150 | 55  | A | H |
|                                                   | *                                                                                           | 5700    | 105.49 | -      | -  | 94.83 | 33.23 | 9.44 | 32.01 | 150 | 271 | P | V |
|                                                   | *                                                                                           | 5700    | 97.63  | -      | -  | 86.97 | 33.23 | 9.44 | 32.01 | 150 | 271 | A | V |
|                                                   |                                                                                             | 5731.32 | 55.78  | -18.22 | 74 | 45.01 | 33.27 | 9.44 | 31.94 | 150 | 271 | P | V |
|                                                   |                                                                                             | 5726.92 | 46.27  | -7.73  | 54 | 35.54 | 33.27 | 9.44 | 31.98 | 150 | 271 | A | V |
| <b>Remark</b>                                     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |      |       |     |     |   |   |



## Band 3 - 5470~5725MHz

## WIFI 802.11a (Harmonic @ 3m)

| WIFI<br>Ant.<br>1            | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11a<br>CH 100<br>5500MHz |                                                                                             | 11000                | 55.14               | -18.86                  | 74                          | 61.89                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | P                       | H               |
|                              |                                                                                             | 11000                | 44.51               | -9.49                   | 54                          | 51.26                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | A                       | H               |
|                              |                                                                                             | 16500                | 50.54               | -23.46                  | 74                          | 57.45                     | 38.5                          | 15.85                   | 61.26                      | 178                  | 296                     | P                       | H               |
|                              |                                                                                             | 11000                | 52.88               | -21.12                  | 74                          | 59.63                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | P                       | V               |
|                              |                                                                                             | 11000                | 42.04               | -11.96                  | 54                          | 48.79                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | A                       | V               |
|                              |                                                                                             | 16500                | 50.55               | -23.45                  | 74                          | 57.46                     | 38.5                          | 15.85                   | 61.26                      | 178                  | 296                     | P                       | V               |
| 802.11a<br>CH 116<br>5580MHz |                                                                                             | 11160                | 55.44               | -18.56                  | 74                          | 62.09                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | P                       | H               |
|                              |                                                                                             | 11160                | 44.7                | -9.3                    | 54                          | 51.35                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | A                       | H               |
|                              |                                                                                             | 16740                | 51.04               | -22.96                  | 74                          | 56.74                     | 38.98                         | 16.01                   | 60.69                      | 156                  | 350                     | P                       | H               |
|                              |                                                                                             | 16740                | 40.62               | -13.38                  | 54                          | 46.32                     | 38.98                         | 16.01                   | 60.69                      | 156                  | 350                     | A                       | H               |
|                              |                                                                                             | 11160                | 54.53               | -19.47                  | 74                          | 61.18                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | P                       | V               |
|                              |                                                                                             | 11160                | 44.22               | -9.78                   | 54                          | 50.87                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | A                       | V               |
|                              |                                                                                             | 16740                | 50.91               | -23.09                  | 74                          | 56.61                     | 38.98                         | 16.01                   | 60.69                      | 156                  | 350                     | P                       | V               |
| 802.11a<br>CH 140<br>5700MHz |                                                                                             | 11400                | 56.55               | -17.45                  | 74                          | 63.1                      | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | P                       | H               |
|                              |                                                                                             | 11400                | 47.06               | -6.94                   | 54                          | 53.61                     | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | A                       | H               |
|                              |                                                                                             | 17100                | 52.15               | -21.85                  | 74                          | 56.27                     | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | P                       | H               |
|                              |                                                                                             | 17100                | 42.41               | -11.59                  | 54                          | 46.53                     | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | A                       | H               |
|                              |                                                                                             | 11400                | 57.19               | -16.81                  | 74                          | 63.74                     | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | P                       | V               |
|                              |                                                                                             | 11400                | 46.4                | -7.6                    | 54                          | 52.95                     | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | A                       | V               |
|                              |                                                                                             | 17100                | 52.38               | -21.62                  | 74                          | 56.5                      | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | P                       | V               |
|                              |                                                                                             | 17100                | 42.04               | -11.96                  | 54                          | 46.16                     | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | A                       | V               |
| Remark                       | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 3 - 5470~5725MHz

## WIFI 802.11n HT20 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                    | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|--------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11n<br>HT20<br>CH 100<br>5500MHz |      | 5426                 | 53.23               | -20.77                  | 74                          | 43.03                   | 32.98                         | 9.49                    | 32.27                      | 150                  | 51                      | P                     | H             |
|                                      |      | 5468.88              | 45.67               | -8.33                   | 54                          | 35.61                   | 32.99                         | 9.35                    | 32.28                      | 150                  | 51                      | A                     | H             |
|                                      | *    | 5500                 | 104.63              | -                       | -                           | 94.58                   | 33                            | 9.35                    | 32.3                       | 150                  | 51                      | P                     | H             |
|                                      | *    | 5500                 | 96.78               | -                       | -                           | 86.73                   | 33                            | 9.35                    | 32.3                       | 150                  | 51                      | A                     | H             |
|                                      |      | 5432.72              | 52.97               | -21.03                  | 74                          | 42.83                   | 32.99                         | 9.42                    | 32.27                      | 174                  | 279                     | P                     | V             |
|                                      |      | 5468.56              | 45.45               | -8.55                   | 54                          | 35.39                   | 32.99                         | 9.35                    | 32.28                      | 174                  | 279                     | A                     | V             |
|                                      | *    | 5500                 | 104.23              | -                       | -                           | 94.18                   | 33                            | 9.35                    | 32.3                       | 174                  | 279                     | P                     | V             |
|                                      | *    | 5500                 | 96.11               | -                       | -                           | 86.06                   | 33                            | 9.35                    | 32.3                       | 174                  | 279                     | A                     | V             |
| 802.11n<br>HT20<br>CH 116<br>5580MHz |      | 5464.96              | 52.63               | -21.37                  | 74                          | 42.5                    | 32.99                         | 9.42                    | 32.28                      | 150                  | 51                      | P                     | H             |
|                                      |      | 5459.68              | 44.24               | -9.76                   | 54                          | 34.11                   | 32.99                         | 9.42                    | 32.28                      | 150                  | 51                      | A                     | H             |
|                                      | *    | 5580                 | 104.82              | -                       | -                           | 94.68                   | 33.08                         | 9.22                    | 32.16                      | 150                  | 51                      | P                     | H             |
|                                      | *    | 5580                 | 97.03               | -                       | -                           | 86.89                   | 33.08                         | 9.22                    | 32.16                      | 150                  | 51                      | A                     | H             |
|                                      |      | 5758.525             | 52.09               | -21.91                  | 74                          | 41.14                   | 33.31                         | 9.54                    | 31.9                       | 150                  | 51                      | P                     | H             |
|                                      |      | 5745.4               | 42.91               | -11.09                  | 54                          | 32.02                   | 33.29                         | 9.54                    | 31.94                      | 150                  | 51                      | A                     | H             |
|                                      |      | 5460.4               | 51.86               | -22.14                  | 74                          | 41.73                   | 32.99                         | 9.42                    | 32.28                      | 168                  | 279                     | P                     | V             |
|                                      |      | 5459.92              | 44.15               | -9.85                   | 54                          | 34.02                   | 32.99                         | 9.42                    | 32.28                      | 168                  | 279                     | A                     | V             |
|                                      | *    | 5580                 | 104.41              | -                       | -                           | 94.27                   | 33.08                         | 9.22                    | 32.16                      | 168                  | 279                     | P                     | V             |
|                                      | *    | 5580                 | 95.83               | -                       | -                           | 85.69                   | 33.08                         | 9.22                    | 32.16                      | 168                  | 279                     | A                     | V             |
|                                      |      | 5729.125             | 53.45               | -20.55                  | 74                          | 42.72                   | 33.27                         | 9.44                    | 31.98                      | 168                  | 279                     | P                     | V             |
|                                      |      | 5729.125             | 42.99               | -11.01                  | 54                          | 32.26                   | 33.27                         | 9.44                    | 31.98                      | 168                  | 279                     | A                     | V             |



|                                                |                                                                                                                                                  |         |        |        |    |       |       |      |       |     |     |   |   |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11n<br/>HT20<br/>CH 140<br/>5700MHz</b> | *                                                                                                                                                | 5700    | 105.71 | -      | -  | 95.05 | 33.23 | 9.44 | 32.01 | 154 | 56  | P | H |
|                                                | *                                                                                                                                                | 5700    | 96.55  | -      | -  | 85.89 | 33.23 | 9.44 | 32.01 | 154 | 56  | A | H |
|                                                |                                                                                                                                                  | 5725.64 | 54.82  | -19.18 | 74 | 44.09 | 33.27 | 9.44 | 31.98 | 154 | 56  | P | H |
|                                                |                                                                                                                                                  | 5725.32 | 46.78  | -7.22  | 54 | 36.05 | 33.27 | 9.44 | 31.98 | 154 | 56  | A | H |
|                                                | *                                                                                                                                                | 5700    | 105.49 | -      | -  | 94.83 | 33.23 | 9.44 | 32.01 | 150 | 271 | P | V |
|                                                | *                                                                                                                                                | 5700    | 96.55  | -      | -  | 85.89 | 33.23 | 9.44 | 32.01 | 150 | 271 | A | V |
|                                                |                                                                                                                                                  | 5733.8  | 55.09  | -18.91 | 74 | 44.32 | 33.27 | 9.44 | 31.94 | 150 | 271 | P | V |
|                                                |                                                                                                                                                  | 5725    | 46.68  | -7.32  | 54 | 35.95 | 33.27 | 9.44 | 31.98 | 150 | 271 | A | V |
| <b>Remark</b>                                  | <ol style="list-style-type: none"><li>1. No other spurious found.</li><li>2. All results are PASS against Peak and Average limit line.</li></ol> |         |        |        |    |       |       |      |       |     |     |   |   |



**Band 3 - 5470~5725MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                    | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 100<br>5500MHz |                                                                                             | 11000                | 54.59               | -19.41                  | 74                          | 61.34                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | P                       | H               |
|                                      |                                                                                             | 11000                | 44.67               | -9.33                   | 54                          | 51.42                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | A                       | H               |
|                                      |                                                                                             | 16500                | 52.32               | -21.68                  | 74                          | 59.23                     | 38.5                          | 15.85                   | 61.26                      | 178                  | 296                     | P                       | H               |
|                                      |                                                                                             | 16500                | 41.77               | -12.23                  | 54                          | 48.68                     | 38.5                          | 15.85                   | 61.26                      | 178                  | 296                     | A                       | H               |
|                                      |                                                                                             | 11000                | 53.86               | -20.14                  | 74                          | 60.61                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | P                       | V               |
|                                      |                                                                                             | 11000                | 43.49               | -10.51                  | 54                          | 50.24                     | 39.8                          | 13.11                   | 59.66                      | 163                  | 230                     | A                       | V               |
|                                      |                                                                                             | 16500                | 50.92               | -23.08                  | 74                          | 57.83                     | 38.5                          | 15.85                   | 61.26                      | 178                  | 296                     | P                       | V               |
| 802.11n<br>HT20<br>CH 116<br>5580MHz |                                                                                             | 11160                | 55.49               | -18.51                  | 74                          | 62.14                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | P                       | H               |
|                                      |                                                                                             | 11160                | 44.93               | -9.07                   | 54                          | 51.58                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | A                       | H               |
|                                      |                                                                                             | 16740                | 50.98               | -23.02                  | 74                          | 56.68                     | 38.98                         | 16.01                   | 60.69                      | 156                  | 350                     | P                       | H               |
|                                      |                                                                                             | 11160                | 56.78               | -17.22                  | 74                          | 63.43                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | P                       | V               |
|                                      |                                                                                             | 11160                | 46.52               | -7.48                   | 54                          | 53.17                     | 39.77                         | 13.23                   | 59.65                      | 170                  | 200                     | A                       | V               |
|                                      |                                                                                             | 16740                | 51.03               | -22.97                  | 74                          | 56.73                     | 38.98                         | 16.01                   | 60.69                      | 156                  | 350                     | P                       | V               |
|                                      |                                                                                             | 16740                | 40.89               | -13.11                  | 54                          | 46.59                     | 38.98                         | 16.01                   | 60.69                      | 156                  | 350                     | A                       | V               |
| 802.11n<br>HT20<br>CH 140<br>5700MHz |                                                                                             | 11400                | 56.58               | -17.42                  | 74                          | 63.13                     | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | P                       | H               |
|                                      |                                                                                             | 11400                | 46.18               | -7.82                   | 54                          | 52.73                     | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | A                       | H               |
|                                      |                                                                                             | 17100                | 52.32               | -21.68                  | 74                          | 56.44                     | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | P                       | H               |
|                                      |                                                                                             | 17100                | 42.76               | -11.24                  | 54                          | 46.88                     | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | A                       | H               |
|                                      |                                                                                             | 11400                | 58.21               | -15.79                  | 74                          | 64.76                     | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | P                       | V               |
|                                      |                                                                                             | 11400                | 47.76               | -6.24                   | 54                          | 54.31                     | 39.72                         | 13.37                   | 59.64                      | 150                  | 285                     | A                       | V               |
|                                      |                                                                                             | 17100                | 51.49               | -22.51                  | 74                          | 55.61                     | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | P                       | V               |
|                                      |                                                                                             | 17100                | 41.75               | -12.25                  | 54                          | 45.87                     | 39.74                         | 16.22                   | 60.08                      | 165                  | 246                     | A                       | V               |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**Band 3 - 5470~5725MHz**  
**WIFI 802.11n HT40 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1                    | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 102<br>5510MHz |      | 5470                 | 62.86               | -11.14                  | 74                          | 52.8                      | 32.99                         | 9.35                    | 32.28                      | 167                  | 58                      | P                       | H               |
|                                      |      | 5469.76              | 50.9                | -3.1                    | 54                          | 40.84                     | 32.99                         | 9.35                    | 32.28                      | 167                  | 58                      | A                       | H               |
|                                      | *    | 5510                 | 101.25              | -                       | -                           | 91.22                     | 33                            | 9.29                    | 32.26                      | 167                  | 58                      | P                       | H               |
|                                      | *    | 5510                 | 92.97               | -                       | -                           | 82.94                     | 33                            | 9.29                    | 32.26                      | 167                  | 58                      | A                       | H               |
|                                      |      | 5758.7               | 51.92               | -22.08                  | 74                          | 40.97                     | 33.31                         | 9.54                    | 31.9                       | 167                  | 58                      | P                       | H               |
|                                      |      | 5752.4               | 42.81               | -11.19                  | 54                          | 31.9                      | 33.31                         | 9.54                    | 31.94                      | 167                  | 58                      | A                       | H               |
|                                      |      | 5466.88              | 55.67               | -18.33                  | 74                          | 45.61                     | 32.99                         | 9.35                    | 32.28                      | 170                  | 272                     | P                       | V               |
|                                      |      | 5469.76              | 49.87               | -4.13                   | 54                          | 39.81                     | 32.99                         | 9.35                    | 32.28                      | 170                  | 272                     | A                       | V               |
|                                      | *    | 5510                 | 99.91               | -                       | -                           | 89.88                     | 33                            | 9.29                    | 32.26                      | 170                  | 272                     | P                       | V               |
|                                      | *    | 5510                 | 92.04               | -                       | -                           | 82.01                     | 33                            | 9.29                    | 32.26                      | 170                  | 272                     | A                       | V               |
|                                      |      | 5764.37              | 50.76               | -23.24                  | 74                          | 39.81                     | 33.31                         | 9.54                    | 31.9                       | 170                  | 272                     | P                       | V               |
|                                      |      | 5739.17              | 42.74               | -11.26                  | 54                          | 31.85                     | 33.29                         | 9.54                    | 31.94                      | 170                  | 272                     | A                       | V               |
| 802.11n<br>HT40<br>CH 110<br>5550MHz |      | 5465.2               | 53.97               | -20.03                  | 74                          | 43.84                     | 32.99                         | 9.42                    | 32.28                      | 165                  | 57                      | P                       | H               |
|                                      |      | 5468.56              | 46.46               | -7.54                   | 54                          | 36.4                      | 32.99                         | 9.35                    | 32.28                      | 165                  | 57                      | A                       | H               |
|                                      | *    | 5550                 | 104.8               | -                       | -                           | 94.75                     | 33.06                         | 9.22                    | 32.23                      | 165                  | 57                      | P                       | H               |
|                                      | *    | 5550                 | 95.77               | -                       | -                           | 85.72                     | 33.06                         | 9.22                    | 32.23                      | 165                  | 57                      | A                       | H               |
|                                      |      | 5739.17              | 51.96               | -22.04                  | 74                          | 41.07                     | 33.29                         | 9.54                    | 31.94                      | 165                  | 57                      | P                       | H               |
|                                      |      | 5726.57              | 44.08               | -9.92                   | 54                          | 33.35                     | 33.27                         | 9.44                    | 31.98                      | 165                  | 57                      | A                       | H               |
|                                      |      | 5469.52              | 53.22               | -20.78                  | 74                          | 43.16                     | 32.99                         | 9.35                    | 32.28                      | 172                  | 275                     | P                       | V               |
|                                      |      | 5466.4               | 45.59               | -8.41                   | 54                          | 35.53                     | 32.99                         | 9.35                    | 32.28                      | 172                  | 275                     | A                       | V               |
|                                      | *    | 5550                 | 100.89              | -                       | -                           | 90.84                     | 33.06                         | 9.22                    | 32.23                      | 172                  | 275                     | P                       | V               |
|                                      | *    | 5550                 | 92.92               | -                       | -                           | 82.87                     | 33.06                         | 9.22                    | 32.23                      | 172                  | 275                     | A                       | V               |
|                                      |      | 5731.295             | 51.6                | -22.4                   | 74                          | 40.83                     | 33.27                         | 9.44                    | 31.94                      | 172                  | 275                     | P                       | V               |
|                                      |      | 5746.1               | 43.19               | -10.81                  | 54                          | 32.3                      | 33.29                         | 9.54                    | 31.94                      | 172                  | 275                     | A                       | V               |



|                                                                  |                                                                                             |          |        |        |    |       |       |      |       |     |     |   |   |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11n</b><br><b>HT40</b><br><b>CH 134</b><br><b>5670MHz</b> |                                                                                             | 5430.5   | 52.17  | -21.83 | 74 | 42.03 | 32.99 | 9.42 | 32.27 | 167 | 55  | P | H |
|                                                                  |                                                                                             | 5467.95  | 43.7   | -10.3  | 54 | 33.64 | 32.99 | 9.35 | 32.28 | 167 | 55  | A | H |
|                                                                  | *                                                                                           | 5670     | 105.29 | -      | -  | 94.78 | 33.21 | 9.35 | 32.05 | 167 | 55  | P | H |
|                                                                  | *                                                                                           | 5670     | 97.64  | -      | -  | 87.13 | 33.21 | 9.35 | 32.05 | 167 | 55  | A | H |
|                                                                  |                                                                                             | 5732.555 | 53.95  | -20.05 | 74 | 43.18 | 33.27 | 9.44 | 31.94 | 167 | 55  | P | H |
|                                                                  |                                                                                             | 5724.995 | 46.96  | -7.04  | 54 | 36.23 | 33.27 | 9.44 | 31.98 | 167 | 55  | A | H |
|                                                                  |                                                                                             | 5456.4   | 51.09  | -22.91 | 74 | 40.96 | 32.99 | 9.42 | 32.28 | 171 | 273 | P | V |
|                                                                  |                                                                                             | 5467.6   | 43.22  | -10.78 | 54 | 33.16 | 32.99 | 9.35 | 32.28 | 171 | 273 | A | V |
|                                                                  | *                                                                                           | 5670     | 103.33 | -      | -  | 92.82 | 33.21 | 9.35 | 32.05 | 171 | 273 | P | V |
|                                                                  | *                                                                                           | 5670     | 94.79  | -      | -  | 84.28 | 33.21 | 9.35 | 32.05 | 171 | 273 | A | V |
|                                                                  |                                                                                             | 5739.485 | 54.63  | -19.37 | 74 | 43.74 | 33.29 | 9.54 | 31.94 | 171 | 273 | P | V |
|                                                                  |                                                                                             | 5729.09  | 44.96  | -9.04  | 54 | 34.23 | 33.27 | 9.44 | 31.98 | 171 | 273 | A | V |
| <b>Remark</b>                                                    | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |          |        |        |    |       |       |      |       |     |     |   |   |



**Band 3 - 5470~5725MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                    | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 102<br>5510MHz |                                                                                             | 11020                | 51.57               | -22.43                  | 74                          | 58.29                     | 39.8                          | 13.14                   | 59.66                      | 156                  | 230                     | P                       | H               |
|                                      |                                                                                             | 11020                | 46.53               | -7.47                   | 54                          | 53.25                     | 39.8                          | 13.14                   | 59.66                      | 156                  | 230                     | A                       | H               |
|                                      |                                                                                             | 16530                | 50.51               | -23.49                  | 74                          | 57.25                     | 38.57                         | 15.87                   | 61.18                      | 162                  | 300                     | P                       | H               |
|                                      |                                                                                             | 11020                | 53.74               | -20.26                  | 74                          | 60.46                     | 39.8                          | 13.14                   | 59.66                      | 155                  | 230                     | P                       | V               |
|                                      |                                                                                             | 11020                | 47.53               | -6.47                   | 54                          | 54.25                     | 39.8                          | 13.14                   | 59.66                      | 155                  | 230                     | A                       | V               |
|                                      |                                                                                             | 16530                | 49.94               | -24.06                  | 74                          | 56.68                     | 38.57                         | 15.87                   | 61.18                      | 185                  | 300                     | P                       | V               |
| 802.11n<br>HT40<br>CH 110<br>5550MHz |                                                                                             | 11100                | 51.58               | -22.42                  | 74                          | 58.27                     | 39.78                         | 13.18                   | 59.65                      | 150                  | 200                     | P                       | H               |
|                                      |                                                                                             | 11100                | 41.14               | -12.86                  | 54                          | 47.83                     | 39.78                         | 13.18                   | 59.65                      | 150                  | 200                     | A                       | H               |
|                                      |                                                                                             | 16650                | 50.75               | -23.25                  | 74                          | 56.89                     | 38.81                         | 15.94                   | 60.89                      | 150                  | 350                     | P                       | H               |
|                                      |                                                                                             | 11100                | 52.06               | -21.94                  | 74                          | 58.75                     | 39.78                         | 13.18                   | 59.65                      | 150                  | 200                     | P                       | V               |
|                                      |                                                                                             | 11100                | 41.51               | -12.49                  | 54                          | 48.2                      | 39.78                         | 13.18                   | 59.65                      | 150                  | 200                     | A                       | V               |
|                                      |                                                                                             | 16650                | 51.25               | -22.75                  | 74                          | 57.39                     | 38.81                         | 15.94                   | 60.89                      | 150                  | 350                     | P                       | V               |
| 802.11n<br>HT40<br>CH 134<br>5670MHz |                                                                                             | 11340                | 54.32               | -19.68                  | 74                          | 60.91                     | 39.73                         | 13.32                   | 59.64                      | 200                  | 360                     | P                       | H               |
|                                      |                                                                                             | 11340                | 43.75               | -10.25                  | 54                          | 50.34                     | 39.73                         | 13.32                   | 59.64                      | 200                  | 360                     | A                       | H               |
|                                      |                                                                                             | 17010                | 51.14               | -22.86                  | 74                          | 55.49                     | 39.54                         | 16.18                   | 60.07                      | 200                  | 360                     | P                       | H               |
|                                      |                                                                                             | 17010                | 41.67               | -12.33                  | 54                          | 46.02                     | 39.54                         | 16.18                   | 60.07                      | 200                  | 360                     | A                       | H               |
|                                      |                                                                                             | 11340                | 55.35               | -18.65                  | 74                          | 61.94                     | 39.73                         | 13.32                   | 59.64                      | 200                  | 360                     | P                       | V               |
|                                      |                                                                                             | 11340                | 45.1                | -8.9                    | 54                          | 51.69                     | 39.73                         | 13.32                   | 59.64                      | 200                  | 360                     | A                       | V               |
|                                      |                                                                                             | 17010                | 52.34               | -21.66                  | 74                          | 56.69                     | 39.54                         | 16.18                   | 60.07                      | 200                  | 360                     | P                       | V               |
|                                      |                                                                                             | 17010                | 42.49               | -11.51                  | 54                          | 46.84                     | 39.54                         | 16.18                   | 60.07                      | 200                  | 360                     | A                       | V               |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## Band 3 - 5470~5725MHz

## WIFI 802.11ac VHT20 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                      | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|----------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT20<br>CH 100<br>5500MHz |      | 5470                 | 52.63               | -21.37                  | 74                          | 42.57                     | 32.99                         | 9.35                    | 32.28                      | 150                  | 84                      | P                       | H               |
|                                        |      | 5469.04              | 44.92               | -9.08                   | 54                          | 34.86                     | 32.99                         | 9.35                    | 32.28                      | 150                  | 84                      | A                       | H               |
|                                        | *    | 5500                 | 103.36              | -                       | -                           | 93.31                     | 33                            | 9.35                    | 32.3                       | 150                  | 84                      | P                       | H               |
|                                        | *    | 5500                 | 94.83               | -                       | -                           | 84.78                     | 33                            | 9.35                    | 32.3                       | 150                  | 84                      | A                       | H               |
|                                        |      | 5463.44              | 54.06               | -19.94                  | 74                          | 43.93                     | 32.99                         | 9.42                    | 32.28                      | 150                  | 263                     | P                       | V               |
|                                        |      | 5469.84              | 45.96               | -8.04                   | 54                          | 35.9                      | 32.99                         | 9.35                    | 32.28                      | 150                  | 263                     | A                       | V               |
|                                        | *    | 5500                 | 104.32              | -                       | -                           | 94.27                     | 33                            | 9.35                    | 32.3                       | 150                  | 263                     | P                       | V               |
|                                        | *    | 5500                 | 95.67               | -                       | -                           | 85.62                     | 33                            | 9.35                    | 32.3                       | 150                  | 263                     | A                       | V               |
| 802.11ac<br>VHT20<br>CH 116<br>5580MHz |      | 5469.52              | 52.7                | -21.3                   | 74                          | 42.64                     | 32.99                         | 9.35                    | 32.28                      | 158                  | 74                      | P                       | H               |
|                                        |      | 5460.64              | 43.16               | -10.84                  | 54                          | 33.03                     | 32.99                         | 9.42                    | 32.28                      | 158                  | 74                      | A                       | H               |
|                                        | *    | 5580                 | 103.67              | -                       | -                           | 93.53                     | 33.08                         | 9.22                    | 32.16                      | 158                  | 74                      | P                       | H               |
|                                        | *    | 5580                 | 95.71               | -                       | -                           | 85.57                     | 33.08                         | 9.22                    | 32.16                      | 158                  | 74                      | A                       | H               |
|                                        |      | 5726.5               | 51.39               | -22.61                  | 74                          | 40.66                     | 33.27                         | 9.44                    | 31.98                      | 158                  | 74                      | P                       | H               |
|                                        |      | 5763.25              | 42.85               | -11.15                  | 54                          | 31.9                      | 33.31                         | 9.54                    | 31.9                       | 158                  | 74                      | A                       | H               |
|                                        |      | 5456.32              | 51.79               | -22.21                  | 74                          | 41.66                     | 32.99                         | 9.42                    | 32.28                      | 150                  | 265                     | P                       | V               |
|                                        |      | 5459.92              | 44.1                | -9.9                    | 54                          | 33.97                     | 32.99                         | 9.42                    | 32.28                      | 150                  | 265                     | A                       | V               |
|                                        | *    | 5580                 | 103.84              | -                       | -                           | 93.7                      | 33.08                         | 9.22                    | 32.16                      | 150                  | 265                     | P                       | V               |
|                                        | *    | 5580                 | 96.3                | -                       | -                           | 86.16                     | 33.08                         | 9.22                    | 32.16                      | 150                  | 265                     | A                       | V               |
|                                        |      | 5748.025             | 52.03               | -21.97                  | 74                          | 41.14                     | 33.29                         | 9.54                    | 31.94                      | 150                  | 265                     | P                       | V               |
|                                        |      | 5732.275             | 43.29               | -10.71                  | 54                          | 32.52                     | 33.27                         | 9.44                    | 31.94                      | 150                  | 265                     | A                       | V               |



|                                                                                |                                                                                             |         |        |        |    |       |       |      |       |     |     |   |   |
|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| <b>802.11ac</b><br><br><b>VHT20</b><br><br><b>CH 140</b><br><br><b>5700MHz</b> | *                                                                                           | 5700    | 104.96 | -      | -  | 94.3  | 33.23 | 9.44 | 32.01 | 163 | 57  | P | H |
|                                                                                | *                                                                                           | 5700    | 96.69  | -      | -  | 86.03 | 33.23 | 9.44 | 32.01 | 163 | 57  | A | H |
|                                                                                |                                                                                             | 5725.32 | 54.02  | -19.98 | 74 | 43.29 | 33.27 | 9.44 | 31.98 | 163 | 57  | P | H |
|                                                                                |                                                                                             | 5725    | 45.73  | -8.27  | 54 | 35    | 33.27 | 9.44 | 31.98 | 163 | 57  | A | H |
|                                                                                | *                                                                                           | 5700    | 105.01 | -      | -  | 94.35 | 33.23 | 9.44 | 32.01 | 150 | 266 | P | V |
|                                                                                | *                                                                                           | 5700    | 96.65  | -      | -  | 85.99 | 33.23 | 9.44 | 32.01 | 150 | 266 | A | V |
|                                                                                |                                                                                             | 5729.72 | 54.3   | -19.7  | 74 | 43.57 | 33.27 | 9.44 | 31.98 | 150 | 266 | P | V |
|                                                                                |                                                                                             | 5725.16 | 45.87  | -8.13  | 54 | 35.14 | 33.27 | 9.44 | 31.98 | 150 | 266 | A | V |
| <b>Remark</b>                                                                  | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |      |       |     |     |   |   |



## Band 3 - 5470~5725MHz

## WIFI 802.11ac VHT20 (Harmonic @ 3m)

| WIFI Ant. 1                   | Note                                                                                        | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. ( P/A ) | Pol. ( H/V ) |
|-------------------------------|---------------------------------------------------------------------------------------------|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|-------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11ac VHT20 CH 100 5500MHz |                                                                                             | 11000             | 54.12            | -19.88            | 74                    | 60.87               | 39.8                    | 13.11             | 59.66                | 163            | 230               | P                 | H            |
|                               |                                                                                             | 11000             | 43.66            | -10.34            | 54                    | 50.41               | 39.8                    | 13.11             | 59.66                | 163            | 230               | A                 | H            |
|                               |                                                                                             | 16500             | 50.27            | -23.73            | 74                    | 57.18               | 38.5                    | 15.85             | 61.26                | 178            | 296               | P                 | H            |
|                               |                                                                                             | 11000             | 54.2             | -19.8             | 74                    | 60.95               | 39.8                    | 13.11             | 59.66                | 163            | 230               | P                 | V            |
|                               |                                                                                             | 11000             | 43.88            | -10.12            | 54                    | 50.63               | 39.8                    | 13.11             | 59.66                | 163            | 230               | A                 | V            |
|                               |                                                                                             | 16500             | 49.95            | -24.05            | 74                    | 56.86               | 38.5                    | 15.85             | 61.26                | 178            | 296               | P                 | V            |
| 802.11ac VHT20 CH 116 5580MHz |                                                                                             | 11160             | 56.31            | -17.69            | 74                    | 62.96               | 39.77                   | 13.23             | 59.65                | 170            | 200               | P                 | H            |
|                               |                                                                                             | 11160             | 46.49            | -7.51             | 54                    | 53.14               | 39.77                   | 13.23             | 59.65                | 170            | 200               | A                 | H            |
|                               |                                                                                             | 16740             | 50.96            | -23.04            | 74                    | 56.66               | 38.98                   | 16.01             | 60.69                | 156            | 350               | P                 | H            |
|                               |                                                                                             | 11160             | 55.25            | -18.75            | 74                    | 61.9                | 39.77                   | 13.23             | 59.65                | 170            | 200               | P                 | V            |
|                               |                                                                                             | 11160             | 45.03            | -8.97             | 54                    | 51.68               | 39.77                   | 13.23             | 59.65                | 170            | 200               | A                 | V            |
|                               |                                                                                             | 16740             | 51.27            | -22.73            | 74                    | 56.97               | 38.98                   | 16.01             | 60.69                | 156            | 350               | P                 | V            |
| 802.11ac VHT20 CH 140 5700MHz |                                                                                             | 11400             | 58.63            | -15.37            | 74                    | 65.18               | 39.72                   | 13.37             | 59.64                | 150            | 285               | P                 | H            |
|                               |                                                                                             | 11400             | 48.68            | -5.32             | 54                    | 55.23               | 39.72                   | 13.37             | 59.64                | 150            | 285               | A                 | H            |
|                               |                                                                                             | 17100             | 51.19            | -22.81            | 74                    | 55.31               | 39.74                   | 16.22             | 60.08                | 165            | 246               | P                 | H            |
|                               |                                                                                             | 17100             | 41.5             | -12.5             | 54                    | 45.62               | 39.74                   | 16.22             | 60.08                | 165            | 246               | A                 | H            |
|                               |                                                                                             | 11400             | 58.59            | -15.41            | 74                    | 65.14               | 39.72                   | 13.37             | 59.64                | 150            | 285               | P                 | V            |
|                               |                                                                                             | 11400             | 48.33            | -5.67             | 54                    | 54.88               | 39.72                   | 13.37             | 59.64                | 150            | 285               | A                 | V            |
|                               |                                                                                             | 17100             | 51.14            | -22.86            | 74                    | 55.26               | 39.74                   | 16.22             | 60.08                | 165            | 246               | P                 | V            |
|                               |                                                                                             | 17100             | 42.09            | -11.91            | 54                    | 46.21               | 39.74                   | 16.22             | 60.08                | 165            | 246               | A                 | V            |
| Remark                        | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                   |                  |                   |                       |                     |                         |                   |                      |                |                   |                   |              |



## Band 3 - 5470~5725MHz

## WIFI 802.11ac VHT40 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                      | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|----------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT40<br>CH 102<br>5510MHz |      | 5466.64              | 56.37               | -17.63                  | 74                          | 46.31                     | 32.99                         | 9.35                    | 32.28                      | 150                  | 64                      | P                       | H               |
|                                        |      | 5470                 | 50.21               | -3.79                   | 54                          | 40.15                     | 32.99                         | 9.35                    | 32.28                      | 150                  | 64                      | A                       | H               |
|                                        | *    | 5510                 | 99.57               | -                       | -                           | 89.54                     | 33                            | 9.29                    | 32.26                      | 150                  | 64                      | P                       | H               |
|                                        | *    | 5510                 | 92.67               | -                       | -                           | 82.64                     | 33                            | 9.29                    | 32.26                      | 150                  | 64                      | A                       | H               |
|                                        |      | 5760.975             | 50.52               | -23.48                  | 74                          | 39.57                     | 33.31                         | 9.54                    | 31.9                       | 150                  | 64                      | P                       | H               |
|                                        |      | 5749.95              | 42.58               | -11.42                  | 54                          | 31.69                     | 33.29                         | 9.54                    | 31.94                      | 150                  | 64                      | A                       | H               |
|                                        |      | 5469.52              | 56.94               | -17.06                  | 74                          | 46.88                     | 32.99                         | 9.35                    | 32.28                      | 150                  | 268                     | P                       | V               |
|                                        |      | 5470                 | 50.75               | -3.25                   | 54                          | 40.69                     | 32.99                         | 9.35                    | 32.28                      | 150                  | 268                     | A                       | V               |
|                                        | *    | 5510                 | 100.12              | -                       | -                           | 90.09                     | 33                            | 9.29                    | 32.26                      | 150                  | 268                     | P                       | V               |
|                                        | *    | 5510                 | 92.45               | -                       | -                           | 82.42                     | 33                            | 9.29                    | 32.26                      | 150                  | 268                     | A                       | V               |
|                                        |      | 5748.725             | 51.59               | -22.41                  | 74                          | 40.7                      | 33.29                         | 9.54                    | 31.94                      | 150                  | 268                     | P                       | V               |
|                                        |      | 5750.3               | 42.76               | -11.24                  | 54                          | 31.87                     | 33.29                         | 9.54                    | 31.94                      | 150                  | 268                     | A                       | V               |
| 802.11ac<br>VHT40<br>CH 110<br>5550MHz |      | 5468.08              | 53.11               | -20.89                  | 74                          | 43.05                     | 32.99                         | 9.35                    | 32.28                      | 156                  | 64                      | P                       | H               |
|                                        |      | 5468.32              | 44.9                | -9.1                    | 54                          | 34.84                     | 32.99                         | 9.35                    | 32.28                      | 156                  | 64                      | A                       | H               |
|                                        | *    | 5550                 | 101.52              | -                       | -                           | 91.47                     | 33.06                         | 9.22                    | 32.23                      | 156                  | 64                      | P                       | H               |
|                                        | *    | 5550                 | 93.48               | -                       | -                           | 83.43                     | 33.06                         | 9.22                    | 32.23                      | 156                  | 64                      | A                       | H               |
|                                        |      | 5749.6               | 52.21               | -21.79                  | 74                          | 41.32                     | 33.29                         | 9.54                    | 31.94                      | 156                  | 64                      | P                       | H               |
|                                        |      | 5729.125             | 42.58               | -11.42                  | 54                          | 31.85                     | 33.27                         | 9.44                    | 31.98                      | 156                  | 64                      | A                       | H               |
|                                        |      | 5439.52              | 53.49               | -20.51                  | 74                          | 43.35                     | 32.99                         | 9.42                    | 32.27                      | 150                  | 264                     | P                       | V               |
|                                        |      | 5460.88              | 45.37               | -8.63                   | 54                          | 35.24                     | 32.99                         | 9.42                    | 32.28                      | 150                  | 264                     | A                       | V               |
|                                        | *    | 5550                 | 102.39              | -                       | -                           | 92.34                     | 33.06                         | 9.22                    | 32.23                      | 150                  | 264                     | P                       | V               |
|                                        | *    | 5550                 | 93.46               | -                       | -                           | 83.41                     | 33.06                         | 9.22                    | 32.23                      | 150                  | 264                     | A                       | V               |
|                                        |      | 5750.475             | 51.09               | -22.91                  | 74                          | 40.2                      | 33.29                         | 9.54                    | 31.94                      | 150                  | 264                     | P                       | V               |
|                                        |      | 5727.9               | 42.83               | -11.17                  | 54                          | 32.1                      | 33.27                         | 9.44                    | 31.98                      | 150                  | 264                     | A                       | V               |



|                                        |                                                                                             |          |        |        |    |       |       |      |       |     |     |   |   |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------|--------|--------|----|-------|-------|------|-------|-----|-----|---|---|
| 802.11ac<br>VHT40<br>CH 134<br>5670MHz |                                                                                             | 5452.96  | 50.27  | -23.73 | 74 | 40.14 | 32.99 | 9.42 | 32.28 | 204 | 55  | P | H |
|                                        |                                                                                             | 5462.32  | 42.16  | -11.84 | 54 | 32.03 | 32.99 | 9.42 | 32.28 | 204 | 55  | A | H |
|                                        | *                                                                                           | 5670     | 102.2  | -      | -  | 91.69 | 33.21 | 9.35 | 32.05 | 204 | 55  | P | H |
|                                        | *                                                                                           | 5670     | 93.91  | -      | -  | 83.4  | 33.21 | 9.35 | 32.05 | 204 | 55  | A | H |
|                                        |                                                                                             | 5747.675 | 53.47  | -20.53 | 74 | 42.58 | 33.29 | 9.54 | 31.94 | 204 | 55  | P | H |
|                                        |                                                                                             | 5728.25  | 45.26  | -8.74  | 54 | 34.53 | 33.27 | 9.44 | 31.98 | 204 | 55  | A | H |
|                                        |                                                                                             | 5429.2   | 50.47  | -23.53 | 74 | 40.33 | 32.99 | 9.42 | 32.27 | 150 | 242 | P | V |
|                                        |                                                                                             | 5465.2   | 42.54  | -11.46 | 54 | 32.41 | 32.99 | 9.42 | 32.28 | 150 | 242 | A | V |
|                                        | *                                                                                           | 5670     | 102.76 | -      | -  | 92.25 | 33.21 | 9.35 | 32.05 | 150 | 242 | P | V |
|                                        | *                                                                                           | 5670     | 94.38  | -      | -  | 83.87 | 33.21 | 9.35 | 32.05 | 150 | 242 | A | V |
|                                        |                                                                                             | 5731.05  | 52.8   | -21.2  | 74 | 42.03 | 33.27 | 9.44 | 31.94 | 150 | 242 | P | V |
|                                        |                                                                                             | 5725.8   | 44.82  | -9.18  | 54 | 34.09 | 33.27 | 9.44 | 31.98 | 150 | 242 | A | V |
| <b>Remark</b>                          | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |          |        |        |    |       |       |      |       |     |     |   |   |



## Band 3 - 5470~5725MHz

## WIFI 802.11ac VHT40 (Harmonic @ 3m)

| WIFI Ant. 1                   | Note                                                                                        | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. ( P/A ) | Pol. ( H/V ) |
|-------------------------------|---------------------------------------------------------------------------------------------|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|-------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11ac VHT40 CH 102 5510MHz |                                                                                             | 11020             | 52.76            | -21.24            | 74                    | 59.48               | 39.8                    | 13.14             | 59.66                | 150            | 230               | P                 | H            |
|                               |                                                                                             | 11020             | 43.9             | -10.1             | 54                    | 50.62               | 39.8                    | 13.14             | 59.66                | 150            | 230               | A                 | H            |
|                               |                                                                                             | 16530             | 50.35            | -23.65            | 74                    | 57.09               | 38.57                   | 15.87             | 61.18                | 150            | 300               | P                 | H            |
|                               |                                                                                             | 11020             | 52.89            | -21.11            | 74                    | 59.61               | 39.8                    | 13.14             | 59.66                | 150            | 230               | P                 | V            |
|                               |                                                                                             | 11020             | 42.79            | -11.21            | 54                    | 49.51               | 39.8                    | 13.14             | 59.66                | 150            | 230               | A                 | V            |
|                               |                                                                                             | 16530             | 50.26            | -23.74            | 74                    | 57                  | 38.57                   | 15.87             | 61.18                | 150            | 300               | P                 | V            |
| 802.11ac VHT40 CH 110 5550MHz |                                                                                             | 11100             | 52.8             | -21.2             | 74                    | 59.49               | 39.78                   | 13.18             | 59.65                | 150            | 200               | P                 | H            |
|                               |                                                                                             | 11100             | 43.33            | -10.67            | 54                    | 50.02               | 39.78                   | 13.18             | 59.65                | 150            | 200               | A                 | H            |
|                               |                                                                                             | 16650             | 51.05            | -22.95            | 74                    | 57.19               | 38.81                   | 15.94             | 60.89                | 150            | 350               | P                 | H            |
|                               |                                                                                             | 16650             | 40.66            | -13.34            | 54                    | 46.8                | 38.81                   | 15.94             | 60.89                | 150            | 350               | A                 | H            |
|                               |                                                                                             | 11100             | 53.87            | -20.13            | 74                    | 60.56               | 39.78                   | 13.18             | 59.65                | 150            | 200               | P                 | V            |
|                               |                                                                                             | 11100             | 44.16            | -9.84             | 54                    | 50.85               | 39.78                   | 13.18             | 59.65                | 150            | 200               | A                 | V            |
| 802.11ac VHT40 CH 134 5670MHz |                                                                                             | 16650             | 50.91            | -23.09            | 74                    | 57.05               | 38.81                   | 15.94             | 60.89                | 150            | 350               | P                 | V            |
|                               |                                                                                             | 11340             | 52.21            | -21.79            | 74                    | 58.8                | 39.73                   | 13.32             | 59.64                | 200            | 360               | P                 | H            |
|                               |                                                                                             | 11340             | 42.05            | -11.95            | 54                    | 48.64               | 39.73                   | 13.32             | 59.64                | 200            | 360               | A                 | H            |
|                               |                                                                                             | 17010             | 51.19            | -22.81            | 74                    | 55.54               | 39.54                   | 16.18             | 60.07                | 200            | 360               | P                 | H            |
|                               |                                                                                             | 17010             | 41.49            | -12.51            | 54                    | 45.84               | 39.54                   | 16.18             | 60.07                | 200            | 360               | A                 | H            |
|                               |                                                                                             | 11340             | 54.58            | -19.42            | 74                    | 61.17               | 39.73                   | 13.32             | 59.64                | 200            | 360               | P                 | V            |
|                               |                                                                                             | 11340             | 44.21            | -9.79             | 54                    | 50.8                | 39.73                   | 13.32             | 59.64                | 200            | 360               | A                 | V            |
|                               |                                                                                             | 17010             | 51.68            | -22.32            | 74                    | 56.03               | 39.54                   | 16.18             | 60.07                | 200            | 360               | P                 | V            |
|                               |                                                                                             | 17010             | 42.06            | -11.94            | 54                    | 46.41               | 39.54                   | 16.18             | 60.07                | 200            | 360               | A                 | V            |
| Remark                        | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                   |                  |                   |                       |                     |                         |                   |                      |                |                   |                   |              |



## Band 3 5470~5725MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m)

| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT80<br>CH 106<br>5530MHz |                                                                                             | 5470                 | 51.86               | -22.14                  | 74                          | 41.8                    | 32.99                         | 9.35                    | 32.28                      | 172                  | 50                      | P                     | H             |
|                                        |                                                                                             | 5468.8               | 50.24               | -3.76                   | 54                          | 40.18                   | 32.99                         | 9.35                    | 32.28                      | 172                  | 50                      | A                     | H             |
|                                        | *                                                                                           | 5530                 | 92.5                | -                       | -                           | 82.42                   | 33.02                         | 9.29                    | 32.23                      | 172                  | 50                      | P                     | H             |
|                                        | *                                                                                           | 5530                 | 84.76               | -                       | -                           | 74.68                   | 33.02                         | 9.29                    | 32.23                      | 172                  | 50                      | A                     | H             |
|                                        |                                                                                             | 5730.035             | 50.64               | -23.36                  | 74                          | 39.91                   | 33.27                         | 9.44                    | 31.98                      | 172                  | 50                      | P                     | H             |
|                                        |                                                                                             | 5728.145             | 43.59               | -10.41                  | 54                          | 32.86                   | 33.27                         | 9.44                    | 31.98                      | 172                  | 50                      | A                     | H             |
|                                        |                                                                                             | 5462.8               | 62.96               | -11.04                  | 74                          | 52.83                   | 32.99                         | 9.42                    | 32.28                      | 161                  | 257                     | P                     | V             |
|                                        |                                                                                             | 5415.52              | 49.92               | -4.08                   | 54                          | 39.7                    | 32.98                         | 9.49                    | 32.25                      | 161                  | 257                     | A                     | V             |
|                                        | *                                                                                           | 5530                 | 91.02               | -                       | -                           | 80.94                   | 33.02                         | 9.29                    | 32.23                      | 161                  | 257                     | P                     | V             |
|                                        | *                                                                                           | 5530                 | 83.74               | -                       | -                           | 73.66                   | 33.02                         | 9.29                    | 32.23                      | 161                  | 257                     | A                     | V             |
|                                        |                                                                                             | 5743.895             | 50.55               | -23.45                  | 74                          | 39.66                   | 33.29                         | 9.54                    | 31.94                      | 161                  | 257                     | P                     | V             |
|                                        |                                                                                             | 5748.62              | 43.32               | -10.68                  | 54                          | 32.43                   | 33.29                         | 9.54                    | 31.94                      | 161                  | 257                     | A                     | V             |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 3 5470~5725MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m)

| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT80<br>CH 106<br>5530MHz |                                                                                             | 11060                | 50.97               | -23.03                  | 74                          | 57.68                   | 39.79                         | 13.16                   | 59.66                      | 250                  | 0                       | P                     | H             |
|                                        |                                                                                             | 16590                | 50.37               | -23.63                  | 74                          | 56.83                   | 38.67                         | 15.92                   | 61.05                      | 150                  | 0                       | P                     | H             |
|                                        |                                                                                             | 11060                | 51.87               | -22.13                  | 74                          | 58.58                   | 39.79                         | 13.16                   | 59.66                      | 250                  | 0                       | P                     | V             |
|                                        |                                                                                             | 11060                | 42.29               | -11.71                  | 54                          | 49                      | 39.79                         | 13.16                   | 59.66                      | 250                  | 0                       | A                     | V             |
|                                        |                                                                                             | 16590                | 49.91               | -24.09                  | 74                          | 56.37                   | 38.67                         | 15.92                   | 61.05                      | 150                  | 0                       | P                     | V             |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Band 3 - Straddle Channel

## WIFI 802.11a (Band Edge @ 3m)

| WIFI                         | Note                                                                                        | Frequency | Level      | Over   | Limit      | Read     | Antenna  | Cable  | Preamp | Ant    | Table   | Peak    | Pol.    |
|------------------------------|---------------------------------------------------------------------------------------------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant.                         |                                                                                             |           |            | Limit  | Line       | Level    | Factor   | Loss   | Factor | Pos    | Pos     | Avg.    |         |
| 1                            |                                                                                             | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | ( P/A ) | ( H/V ) |
| 802.11a<br>CH 144<br>5720MHz | *                                                                                           | 5720      | 106.71     | -      | -          | 95.98    | 33.27    | 9.44   | 31.98  | 176    | 48      | P       | H       |
|                              |                                                                                             | 5720      | 98.8       | -      | -          | 88.07    | 33.27    | 9.44   | 31.98  | 176    | 48      | A       | H       |
|                              | *                                                                                           | 5722      | 106.55     | -      | -          | 95.82    | 33.27    | 9.44   | 31.98  | 157    | 279     | P       | V       |
|                              |                                                                                             | 5722      | 98.33      | -      | -          | 87.6     | 33.27    | 9.44   | 31.98  | 157    | 279     | A       | V       |
| Remark                       | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



**Band 3 - Straddle Channel**  
**WIFI 802.11a (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                     | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| <b>802.11a<br/>CH 144<br/>5720MHz</b> |                                                                                             | 11440                | 59.3                | -14.7                   | 74                          | 65.83                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | P                     | H             |
|                                       |                                                                                             | 11440                | 49.03               | -4.97                   | 54                          | 55.56                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | A                     | H             |
|                                       |                                                                                             | 17160                | 50.53               | -23.47                  | 74                          | 54.47                   | 39.9                          | 16.25                   | 60.09                      | 150                  | 0                       | P                     | H             |
|                                       |                                                                                             | 11440                | 60.32               | -13.68                  | 74                          | 66.85                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | P                     | V             |
|                                       |                                                                                             | 11440                | 49.44               | -4.56                   | 54                          | 55.97                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | A                     | V             |
|                                       |                                                                                             | 17160                | 50.18               | -23.82                  | 74                          | 54.12                   | 39.9                          | 16.25                   | 60.09                      | 150                  | 0                       | P                     | V             |
| <b>Remark</b>                         | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 - Straddle Channel**  
**WIFI 802.11n HT20 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11n           | *                                                                                           | 5720                 | 106.11              | -                       | -                           | 95.38                   | 33.27                         | 9.44                    | 31.98                      | 189                  | 60                      | P                     | H             |
| HT20              |                                                                                             | 5720                 | 98.12               | -                       | -                           | 87.39                   | 33.27                         | 9.44                    | 31.98                      | 189                  | 60                      | A                     | H             |
| CH 144            | *                                                                                           | 5720                 | 105.1               | -                       | -                           | 94.37                   | 33.27                         | 9.44                    | 31.98                      | 151                  | 252                     | P                     | V             |
| 5720MHz           |                                                                                             | 5720                 | 97.48               | -                       | -                           | 86.75                   | 33.27                         | 9.44                    | 31.98                      | 151                  | 252                     | A                     | V             |
| <b>Remark</b>     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 - Straddle Channel**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                    | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11n<br>HT20<br>CH 144<br>5720MHz |                                                                                             | 11440                | 58.14               | -15.86                  | 74                          | 64.67                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | P                     | H             |
|                                      |                                                                                             | 11440                | 47.7                | -6.3                    | 54                          | 54.23                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | A                     | H             |
|                                      |                                                                                             | 17160                | 50.52               | -23.48                  | 74                          | 54.46                   | 39.9                          | 16.25                   | 60.09                      | 150                  | 0                       | P                     | H             |
|                                      |                                                                                             | 11440                | 59.59               | -14.41                  | 74                          | 66.12                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | P                     | V             |
|                                      |                                                                                             | 11440                | 49.48               | -4.52                   | 54                          | 56.01                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | A                     | V             |
|                                      |                                                                                             | 17160                | 50.89               | -23.11                  | 74                          | 54.83                   | 39.9                          | 16.25                   | 60.09                      | 150                  | 0                       | P                     | V             |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 - Straddle Channel**  
**WIFI 802.11n HT40 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n           | *                                                                                           | 5710                 | 104.87              | -                       | -                           | 94.16                     | 33.25                         | 9.44                    | 31.98                      | 178                  | 46                      | P                       | H               |
| HT40              | *                                                                                           | 5710                 | 94.46               | -                       | -                           | 83.75                     | 33.25                         | 9.44                    | 31.98                      | 178                  | 46                      | A                       | H               |
| CH 142            | *                                                                                           | 5710                 | 102.6               | -                       | -                           | 91.89                     | 33.25                         | 9.44                    | 31.98                      | 192                  | 292                     | P                       | V               |
| 5710MHz           |                                                                                             | 5710                 | 93.07               | -                       | -                           | 82.36                     | 33.25                         | 9.44                    | 31.98                      | 192                  | 292                     | A                       | V               |
| <b>Remark</b>     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**Band 3 - Straddle Channel**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                    | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 142<br>5710MHz |                                                                                             | 11420                | 55.72               | -18.28                  | 74                          | 62.27                     | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | P                       | H               |
|                                      |                                                                                             | 11420                | 45.81               | -8.19                   | 54                          | 52.36                     | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | A                       | H               |
|                                      |                                                                                             | 17130                | 50.82               | -23.18                  | 74                          | 54.83                     | 39.82                         | 16.25                   | 60.08                      | 150                  | 0                       | P                       | H               |
|                                      |                                                                                             | 11420                | 56.63               | -17.37                  | 74                          | 63.18                     | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | P                       | V               |
|                                      |                                                                                             | 11420                | 47.24               | -6.76                   | 54                          | 53.79                     | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | A                       | V               |
|                                      |                                                                                             | 17130                | 50                  | -24                     | 74                          | 54.01                     | 39.82                         | 16.25                   | 60.08                      | 150                  | 0                       | P                       | V               |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**Band 3 - Straddle Channel**  
**WIFI 802.11ac VHT20 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac          | *                                                                                           | 5720                 | 104.18              | -                       | -                           | 95.21                   | 33.27                         | 7.68                    | 31.98                      | 233                  | 51                      | P                     | H             |
| VHT20             | *                                                                                           | 5720                 | 96.37               | -                       | -                           | 87.4                    | 33.27                         | 7.68                    | 31.98                      | 233                  | 51                      | A                     | H             |
| CH 144            | *                                                                                           | 5720                 | 102.37              | -                       | -                           | 93.4                    | 33.27                         | 7.68                    | 31.98                      | 221                  | 264                     | P                     | V             |
| 5720MHz           | *                                                                                           | 5720                 | 94.5                | -                       | -                           | 85.53                   | 33.27                         | 7.68                    | 31.98                      | 221                  | 264                     | A                     | V             |
| <b>Remark</b>     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 - Straddle Channel**  
**WIFI 802.11ac VHT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT20<br>CH 144<br>5720MHz |                                                                                             | 11440                | 57.83               | -16.17                  | 74                          | 64.36                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | P                     | H             |
|                                        |                                                                                             | 11440                | 47.73               | -6.27                   | 54                          | 54.26                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | A                     | H             |
|                                        |                                                                                             | 17160                | 50.21               | -23.79                  | 74                          | 54.15                   | 39.9                          | 16.25                   | 60.09                      | 150                  | 0                       | P                     | H             |
|                                        |                                                                                             | 11440                | 61.1                | -12.9                   | 74                          | 67.63                   | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | P                     | V             |
|                                        |                                                                                             | 11440                | 50.07               | -3.93                   | 54                          | 56.6                    | 39.71                         | 13.39                   | 59.63                      | 250                  | 0                       | A                     | V             |
|                                        |                                                                                             | 17160                | 50.53               | -23.47                  | 74                          | 54.47                   | 39.9                          | 16.25                   | 60.09                      | 150                  | 0                       | P                     | V             |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 - Straddle Channel**  
**WIFI 802.11ac VHT40 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac          | *                                                                                           | 5710                 | 102.94              | -                       | -                           | 92.23                     | 33.25                         | 9.44                    | 31.98                      | 217                  | 52                      | P                       | H               |
| VHT40             |                                                                                             | 5710                 | 95.6                | -                       | -                           | 84.89                     | 33.25                         | 9.44                    | 31.98                      | 217                  | 52                      | A                       | H               |
| CH 142            | *                                                                                           | 5710                 | 102.82              | -                       | -                           | 92.11                     | 33.25                         | 9.44                    | 31.98                      | 250                  | 279                     | P                       | V               |
| 5710MHz           |                                                                                             | 5710                 | 93.56               | -                       | -                           | 82.85                     | 33.25                         | 9.44                    | 31.98                      | 250                  | 279                     | A                       | V               |
| <b>Remark</b>     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**Band 3 - Straddle Channel**  
**WIFI 802.11ac VHT40 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ac<br>VHT40<br>CH 142<br>5710MHz |                                                                                             | 11420                | 55.65               | -18.35                  | 74                          | 62.2                      | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | P                       | H               |
|                                        |                                                                                             | 11420                | 46.66               | -7.34                   | 54                          | 53.21                     | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | A                       | H               |
|                                        |                                                                                             | 17130                | 50.84               | -23.16                  | 74                          | 54.85                     | 39.82                         | 16.25                   | 60.08                      | 150                  | 0                       | P                       | H               |
|                                        |                                                                                             | 11420                | 57.2                | -16.8                   | 74                          | 63.75                     | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | P                       | V               |
|                                        |                                                                                             | 11420                | 47.86               | -6.14                   | 54                          | 54.41                     | 39.72                         | 13.37                   | 59.64                      | 250                  | 0                       | A                       | V               |
|                                        |                                                                                             | 17130                | 50.62               | -23.38                  | 74                          | 54.63                     | 39.82                         | 16.25                   | 60.08                      | 150                  | 0                       | P                       | V               |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**Band 3 - Straddle Channel**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac          | *                                                                                           | 5690                 | 100.29              | -                       | -                           | 89.72                   | 33.23                         | 9.35                    | 32.01                      | 231                  | 56                      | P                     | H             |
| VHT80             |                                                                                             | 5690                 | 92.3                | -                       | -                           | 81.73                   | 33.23                         | 9.35                    | 32.01                      | 231                  | 56                      | A                     | H             |
| CH 138            | *                                                                                           | 5690                 | 99.06               | -                       | -                           | 88.49                   | 33.23                         | 9.35                    | 32.01                      | 190                  | 255                     | P                     | V             |
| 5690MHz           |                                                                                             | 5690                 | 91.05               | -                       | -                           | 80.48                   | 33.23                         | 9.35                    | 32.01                      | 190                  | 255                     | A                     | V             |
| <b>Remark</b>     | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



**Band 3 - Straddle Channel**  
**WIFI 802.11ac VHT80 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|----------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11ac<br>VHT80<br>CH 138<br>5690MHz |                                                                                             | 11380                | 51.85               | -22.15                  | 74                          | 58.43                   | 39.72                         | 13.34                   | 59.64                      | 250                  | 0                       | P                     | H             |
|                                        |                                                                                             | 11380                | 44.69               | -9.31                   | 54                          | 51.27                   | 39.72                         | 13.34                   | 59.64                      | 250                  | 0                       | A                     | H             |
|                                        |                                                                                             | 17070                | 50.07               | -23.93                  | 74                          | 54.29                   | 39.66                         | 16.2                    | 60.08                      | 150                  | 0                       | P                     | H             |
|                                        |                                                                                             | 11380                | 51.5                | -22.5                   | 74                          | 58.08                   | 39.72                         | 13.34                   | 59.64                      | 250                  | 0                       | P                     | V             |
|                                        |                                                                                             | 11380                | 43.72               | -10.28                  | 54                          | 50.3                    | 39.72                         | 13.34                   | 59.64                      | 250                  | 0                       | A                     | V             |
|                                        |                                                                                             | 17070                | 50.1                | -23.9                   | 74                          | 54.32                   | 39.66                         | 16.2                    | 60.08                      | 150                  | 0                       | P                     | V             |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



## Emission below 1GHz

## WIFI 802.11n HT40 (LF @ 3m)

| WIFI                  | Note | Frequency                                                                  | Level      | Over   | Limit      | Read   | Antenna  | Cable  | Preamp | Ant    | Table   | Peak  | Pol.  |
|-----------------------|------|----------------------------------------------------------------------------|------------|--------|------------|--------|----------|--------|--------|--------|---------|-------|-------|
| Ant.                  |      |                                                                            |            | Limit  | Line       | Level  | Factor   | Loss   | Factor | Pos    | Pos     | Avg.  |       |
| 1                     |      | ( MHz )                                                                    | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | (dBμV) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11n<br>HT40<br>LF |      | 101.78                                                                     | 24.61      | -18.89 | 43.5       | 36.79  | 18.76    | 0.8    | 31.74  | -      | -       | P     | H     |
|                       |      | 159.01                                                                     | 29.8       | -13.7  | 43.5       | 42.79  | 17.41    | 1.09   | 31.49  | -      | -       | P     | H     |
|                       |      | 201.69                                                                     | 34.73      | -8.77  | 43.5       | 49.11  | 15.69    | 1.26   | 31.33  | 100    | 60      | P     | H     |
|                       |      | 296.75                                                                     | 26.16      | -19.84 | 46         | 36.86  | 19.04    | 1.62   | 31.36  | -      | -       | P     | H     |
|                       |      | 450.98                                                                     | 30.68      | -15.32 | 46         | 34.94  | 24.86    | 2.03   | 31.15  | -      | -       | P     | H     |
|                       |      | 938.89                                                                     | 31.72      | -14.28 | 46         | 30.66  | 29.21    | 3.05   | 31.2   | -      | -       | P     | H     |
|                       |      | 37.76                                                                      | 28.71      | -11.29 | 40         | 36.95  | 23.34    | 0.41   | 31.99  | 150    | 200     | P     | V     |
|                       |      | 103.72                                                                     | 27.29      | -16.21 | 43.5       | 39.49  | 18.72    | 0.81   | 31.73  | -      | -       | P     | V     |
|                       |      | 203.63                                                                     | 31.33      | -12.17 | 43.5       | 45.61  | 15.78    | 1.27   | 31.33  | -      | -       | P     | V     |
|                       |      | 422.85                                                                     | 28.75      | -17.25 | 46         | 32.48  | 25.49    | 1.99   | 31.21  | -      | -       | P     | V     |
|                       |      | 679.9                                                                      | 30.38      | -15.62 | 46         | 32.31  | 26.73    | 2.58   | 31.24  | -      | -       | P     | V     |
|                       |      | 991.27                                                                     | 33.47      | -20.53 | 54         | 31.29  | 30.23    | 3.18   | 31.23  | -      | -       | P     | V     |
| Remark                |      | 1. No other spurious found.<br>2. All results are PASS against limit line. |            |        |            |        |          |        |        |        |         |       |       |



**Note symbol**

|     |                                                                                                                                                          |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| *   | <b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| !   | Test result is <b>over limit</b> line.                                                                                                                   |
| P/A | <b>P</b> eak or <b>A</b> verage                                                                                                                          |
| H/V | <b>H</b> orizontal or <b>V</b> ertical                                                                                                                   |



A calculation example for radiated spurious emission is shown as below:

| WIFI    | Note | Frequency | Level      | Over   | Limit      | Read     | Antenna  | Cable  | Preamp | Ant    | Table   | Peak    | Pol.    |
|---------|------|-----------|------------|--------|------------|----------|----------|--------|--------|--------|---------|---------|---------|
| Ant.    |      |           |            | Limit  | Line       | Level    | Factor   | Loss   | Factor | Pos    | Pos     | Avg.    |         |
| 1+2     |      | ( MHz )   | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | ( P/A ) | ( H/V ) |
| 802.11b |      | 2390      | 55.45      | -18.55 | 74         | 54.51    | 32.22    | 4.58   | 35.86  | 103    | 308     | P       | H       |
| CH 01   |      |           |            |        |            |          |          |        |        |        |         |         |         |
| 2412MHz |      | 2390      | 43.54      | -10.46 | 54         | 42.6     | 32.22    | 4.58   | 35.86  | 103    | 308     | A       | H       |

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

#### For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

#### For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

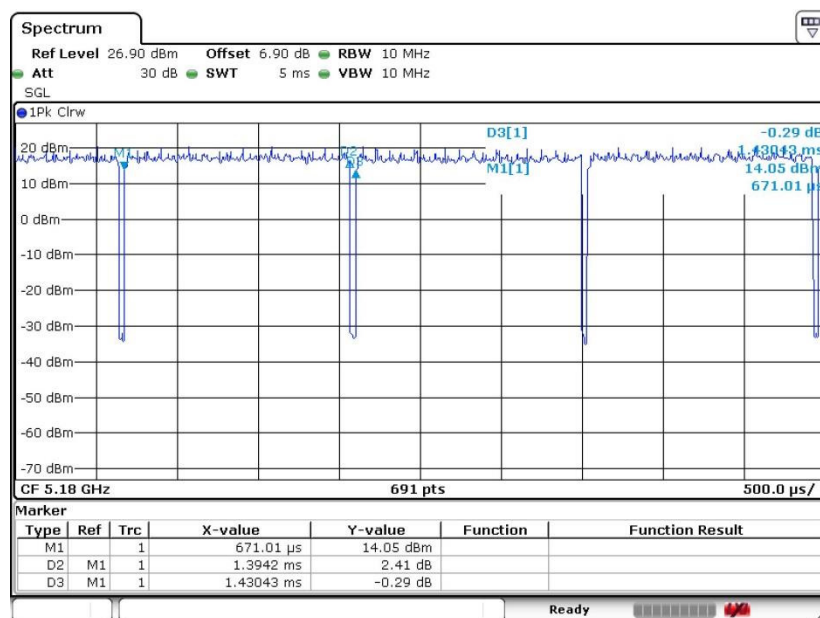
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.

## Appendix C. Duty Cycle Plots

| Band           | Duty Cycle(%) | T(ms) | 1/T(kHz) | VBW Setting |
|----------------|---------------|-------|----------|-------------|
| 802.11a        | 97.47         | 1.394 | 0.717    | 1kHz        |
| 802.11n HT20   | 97.30         | 1.307 | 0.765    | 1kHz        |
| 802.11n HT40   | 94.71         | 0.649 | 1.540    | 3kHz        |
| 802.11ac VHT20 | 94.52         | 0.675 | 1.481    | 3kHz        |
| 802.11ac VHT40 | 94.74         | 0.652 | 1.533    | 3kHz        |
| 802.11ac VHT80 | 89.96         | 0.325 | 3.080    | 10kHz       |

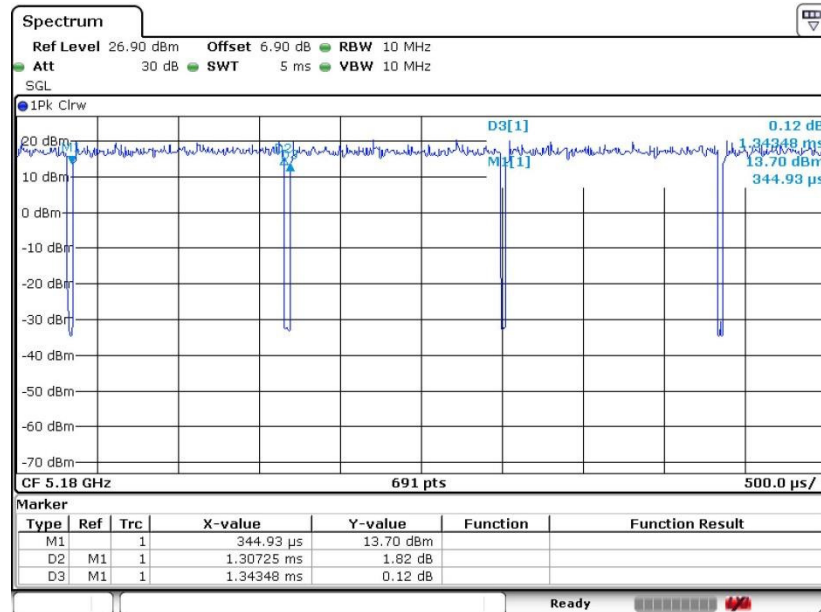
### 802.11a



Date: 16.MAR.2017 17:10:50

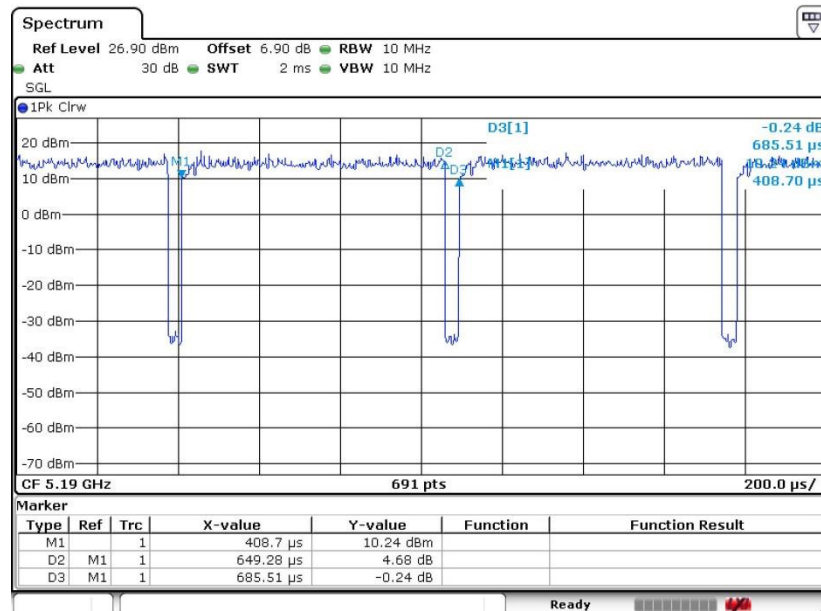


802.11n HT20



Date: 16.MAR.2017 17:11:37

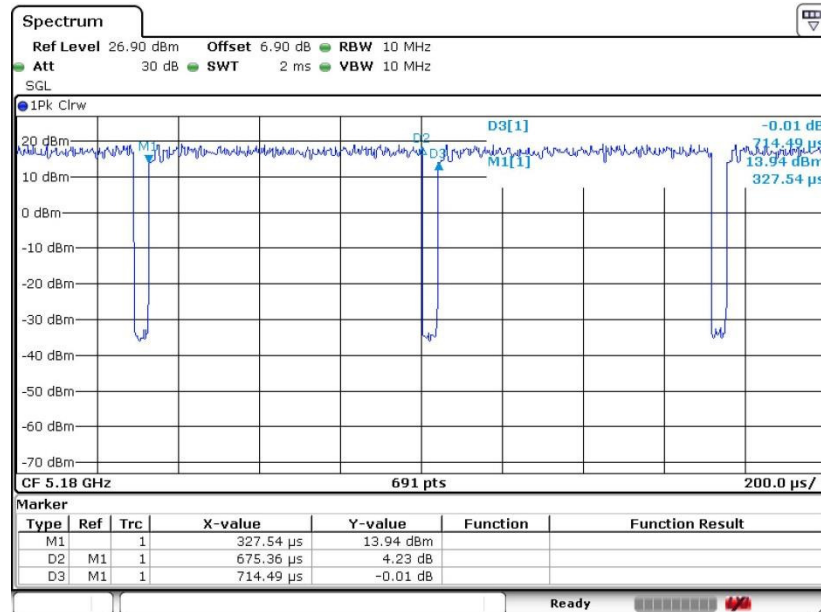
802.11n HT40



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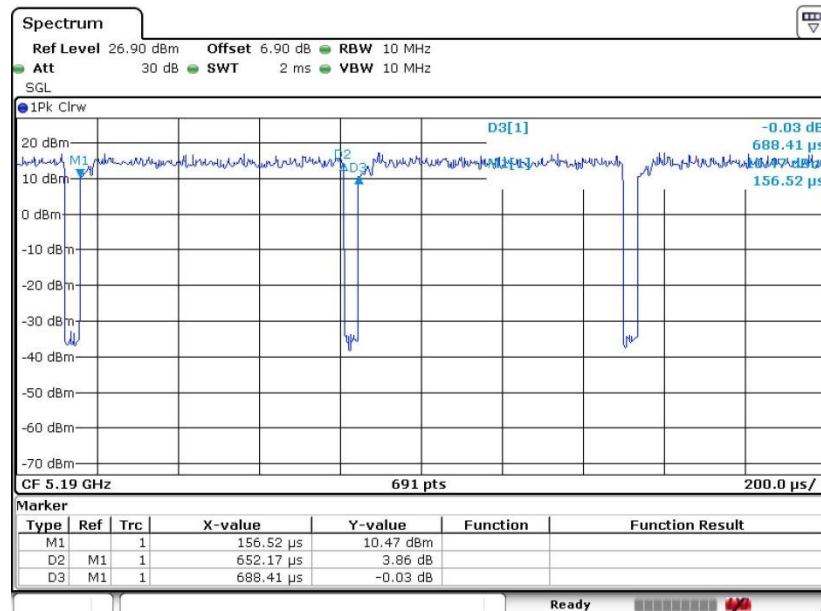


802.11ac VHT20



Date: 16.MAR.2017 18:06:31

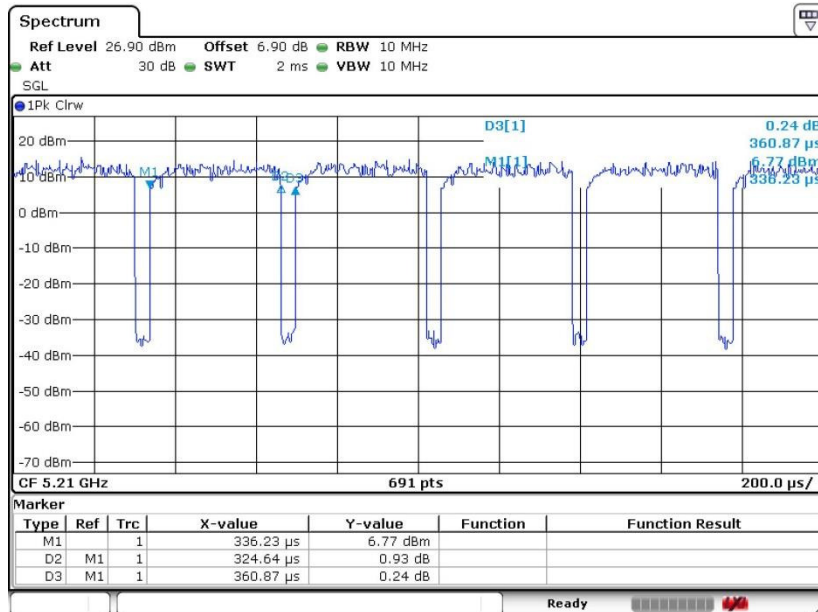
802.11ac VHT40



Date: 16.MAR.2017 18:07:24



802.11ac VHT80



Date: 16.MAR.2017 18:08:36