



# FCC RF Test Report

APPLICANT : Motorola Mobility, LLC  
EQUIPMENT : Mobile Cellular Phone  
BRAND NAME : Motorola  
MODEL NAME : 5136  
FCC ID : IHDT56UC1  
STANDARD : FCC Part 15 Subpart E §15.407  
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Apr. 16, 2015. We, SPORTON INTERNATIONAL 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 INC., the test report shall not be reproduced except in full.

*Louis Wu*

Reviewed by: Louis Wu / Manager

*Jones Tsai*

Approved by: Jones Tsai / Manager



**SPORTON INTERNATIONAL INC.**

No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.



## TABLE OF CONTENTS

|                                                         |          |
|---------------------------------------------------------|----------|
| <b>REVISION HISTORY .....</b>                           | <b>3</b> |
| <b>1 GENERAL DESCRIPTION .....</b>                      | <b>4</b> |
| 1.1 Applicant .....                                     | 4        |
| 1.2 Manufacturer .....                                  | 4        |
| 1.3 Feature of Equipment Under Test .....               | 4        |
| 1.4 Product Specification of Equipment Under Test ..... | 5        |
| 1.5 Modification of EUT .....                           | 5        |
| <b>APPENDIX A. ORIGINAL REPORT</b>                      |          |



## REVISION HISTORY

| REPORT NO.   | VERSION | DESCRIPTION                                                                                                                                                                     | ISSUED DATE   |
|--------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| FR541573-04E | Rev. 01 | The Bluetooth and WLAN circuitry of this variant model (5136) is identical to that of the parent product (5137), based on the product equality declaration by the manufacturer. | Jun. 18, 2015 |
|              |         |                                                                                                                                                                                 |               |
|              |         |                                                                                                                                                                                 |               |
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|              |         |                                                                                                                                                                                 |               |
|              |         |                                                                                                                                                                                 |               |
|              |         |                                                                                                                                                                                 |               |



# 1 General Description

## 1.1 Applicant

**Motorola Mobility, LLC**

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

## 1.2 Manufacturer

**Motorola Mobility, LLC**

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

## 1.3 Feature of Equipment Under Test

| Product Feature                 |                                                                                                                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment                       | Mobile Cellular Phone                                                                                                                                                                           |
| Brand Name                      | Motorola                                                                                                                                                                                        |
| Model Name                      | 5136                                                                                                                                                                                            |
| FCC ID                          | IHDT56UC1                                                                                                                                                                                       |
| EUT supports Radios application | CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE/NFC<br>2.4GHz WLAN 11b/g/n HT20<br>WLAN 11ac VHT20<br>5GHz WLAN 11a/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80<br>Bluetooth v3.0 EDR<br>Bluetooth v4.1 - LE |
| HW Version                      | P2B                                                                                                                                                                                             |
| EUT Stage                       | 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

| Product Specification subjective to this standard |        |                                                                                                                                                                                                                         |  |  |        |        |                    |   |   |                    |   |   |
|---------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--------|--------|--------------------|---|---|--------------------|---|---|
| Tx/Rx Channel Frequency Range                     |        | 5180 MHz ~ 5240 MHz<br>5260 MHz ~ 5320 MHz<br>5500 MHz ~ 5700 MHz                                                                                                                                                       |  |  |        |        |                    |   |   |                    |   |   |
| Type of Modulation                                |        | 802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)<br>802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)                                                                                                                |  |  |        |        |                    |   |   |                    |   |   |
| Antenna Type                                      |        | Antenna 1 : IFA Antenna<br>Antenna 2 : IFA Antenna                                                                                                                                                                      |  |  |        |        |                    |   |   |                    |   |   |
| Antenna Gain                                      |        | <5150 MHz ~ 5250 MHz><br>Antenna 1 : 0.50 dBi<br>Antenna 2 : 0.50 dBi<br><5250 MHz ~ 5350 MHz><br>Antenna 1 : 0.50 dBi<br>Antenna 2 : 0.50 dBi<br><5470 MHz ~ 5725 MHz><br>Antenna 1 : 0.00 dBi<br>Antenna 2 : 0.00 dBi |  |  |        |        |                    |   |   |                    |   |   |
| Antenna Function Description                      |        | <table><tr><td></td><td>Ant. 1</td><td>Ant. 2</td></tr><tr><td>802.11 a/n/ac SISO</td><td>V</td><td>V</td></tr><tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr></table>                                         |  |  | Ant. 1 | Ant. 2 | 802.11 a/n/ac SISO | V | V | 802.11 a/n/ac MIMO | V | V |
|                                                   | Ant. 1 | Ant. 2                                                                                                                                                                                                                  |  |  |        |        |                    |   |   |                    |   |   |
| 802.11 a/n/ac SISO                                | V      | V                                                                                                                                                                                                                       |  |  |        |        |                    |   |   |                    |   |   |
| 802.11 a/n/ac MIMO                                | V      | V                                                                                                                                                                                                                       |  |  |        |        |                    |   |   |                    |   |   |

## 1.5 Modification of EUT

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



## **Appendix A. Original Report**

Please refer to Sporton report number FR541573E as below.



# FCC RF Test Report

APPLICANT : Motorola Mobility, LLC  
EQUIPMENT : Mobile Cellular Phone  
BRAND NAME : Motorola  
MODEL NAME : 5137  
FCC ID : IHDT56UC2  
STANDARD : FCC Part 15 Subpart E §15.407  
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Apr. 15, 2015 and testing was completed on May 17, 2015. We, SPORTON INTERNATIONAL 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 INC., the test report shall not be reproduced except in full.

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Reviewed by: Louis Wu / Manager

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Approved by: Jones Tsai / Manager



## SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

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SPORTON INTERNATIONAL INC.

TEL : 886-3-327-3456

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FCC ID : IHDT56UC2

Page Number : 1 of 57

Report Issued Date : Jun. 18, 2015

Report Version : Rev. 01

Report Template No.: BU5-FR15EWLAC MA Version 1.0



## TABLE OF CONTENTS

|                                                              |           |
|--------------------------------------------------------------|-----------|
| <b>REVISION HISTORY .....</b>                                | <b>3</b>  |
| <b>SUMMARY OF TEST RESULT .....</b>                          | <b>4</b>  |
| <b>1 GENERAL DESCRIPTION .....</b>                           | <b>5</b>  |
| 1.1 Applicant .....                                          | 5         |
| 1.2 Manufacturer .....                                       | 5         |
| 1.3 Feature of Equipment Under Test .....                    | 5         |
| 1.4 Product Specification of Equipment Under Test .....      | 6         |
| 1.5 Modification of EUT .....                                | 8         |
| 1.6 Testing Location .....                                   | 9         |
| 1.7 Applicable Standards .....                               | 9         |
| <b>2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST .....</b>    | <b>10</b> |
| 2.1 Carrier Frequency and Channel .....                      | 11        |
| 2.2 Pre-Scanned RF Power .....                               | 12        |
| 2.3 Test Mode .....                                          | 27        |
| 2.4 Connection Diagram of Test System .....                  | 30        |
| 2.5 Support Unit used in test configuration and system ..... | 33        |
| 2.6 EUT Operation Test Setup .....                           | 33        |
| 2.7 Measurement Results Explanation Example .....            | 33        |
| <b>3 TEST RESULT .....</b>                                   | <b>34</b> |
| 3.1 26dB & 99% Occupied Bandwidth Measurement .....          | 34        |
| 3.2 Maximum Conducted Output Power Measurement .....         | 36        |
| 3.3 Power Spectral Density Measurement .....                 | 39        |
| 3.4 Unwanted Emissions Measurement .....                     | 43        |
| 3.5 AC Conducted Emission Measurement .....                  | 49        |
| 3.6 Frequency Stability Measurement .....                    | 53        |
| 3.7 Automatically Discontinue Transmission .....             | 54        |
| 3.8 Antenna Requirements .....                               | 55        |
| <b>4 LIST OF MEASURING EQUIPMENT .....</b>                   | <b>56</b> |
| <b>5 UNCERTAINTY OF EVALUATION .....</b>                     | <b>57</b> |
| <b>APPENDIX A. CONDUCTED TEST RESULTS</b>                    |           |
| <b>APPENDIX B. RADIATED TEST RESULTS</b>                     |           |



## REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FR541573E  | Rev. 01 | Initial issue of report | Jun. 18, 2015 |
|            |         |                         |               |
|            |         |                         |               |
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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>$\leq 24$ dBm<br>(depend on band)          | Pass   | -                                         |
| 3.3            | 15.407(a)             | Power Spectral Density                 | FCC<br>$\leq 11$ dBm<br>(depend on band)          | Pass   | -                                         |
| 3.4            | 15.407(b)             | Unwanted Emissions                     | $\leq -17, -27$ dBm<br>(depend on band)&15.209(a) | Pass   | Under limit<br>1.00 dB at<br>5148.650 MHz |
| 3.5            | 15.207                | AC Conducted Emission                  | 15.207(a)                                         | Pass   | Under limit<br>7.50 dB at<br>2.046 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

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## 1.2 Manufacturer

**Motorola Mobility, LLC**

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

## 1.3 Feature of Equipment Under Test

| Product Feature                 |                                                                                                                                                                                      |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment                       | Mobile Cellular Phone                                                                                                                                                                |
| Brand Name                      | Motorola                                                                                                                                                                             |
| Model Name                      | 5137                                                                                                                                                                                 |
| IMEI Code                       | 355486060017664 (Radiation)<br>355486060017805 (Conduction)                                                                                                                          |
| FCC ID                          | IHDT56UC2                                                                                                                                                                            |
| EUT supports Radios application | GSM/EGPRS/WCDMA/HSPA/LTE/NFC<br>2.4GHz WLAN 11b/g/n HT20<br>WLAN 11ac VHT20<br>5GHz WLAN 11a/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80<br>Bluetooth v3.0 EDR<br>Bluetooth v4.1 - LE |
| HW Version                      | P2                                                                                                                                                                                   |
| EUT Stage                       | 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.

| Accessory List |                        |
|----------------|------------------------|
| AC Adapter 1   | Brand Name : Motorola  |
|                | Model Name : SPN5791A  |
| AC Adapter 2   | Brand Name : Motorola  |
|                | Model Name : SPN5864A  |
| AC Adapter 3   | Brand Name : Motorola  |
|                | Model Name : SPN5886A  |
| Earphone       | Brand Name : Motorola  |
|                | Model Name : SJYN1305A |
| Battery        | Brand Name : Motorola  |
|                | Model Name : FX30      |
| USB cable      | Brand Name : Motorola  |
|                | Model Name : SKN6461A  |

## 1.4 Product Specification of Equipment Under Test

| Product Specification subjective to this standard |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tx/Rx Channel Frequency Range                     | 5180 MHz ~ 5240 MHz<br>5260 MHz ~ 5320 MHz<br>5500 MHz ~ 5700 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Maximum Output Power                              | <b>&lt;5180 MHz ~ 5240 MHz&gt;</b><br><b>SISO &lt;Ant. 1&gt;</b><br>802.11a : 14.16 dBm / 0.0261 W<br>802.11n HT20 : 14.24 dBm / 0.0265 W<br>802.11n HT40 : 14.09 dBm / 0.0256 W<br>802.11ac VHT20: 14.22 dBm / 0.0264 W<br>802.11ac VHT40: 14.18 dBm / 0.0262 W<br>802.11ac VHT80: 10.57 dBm / 0.0114 W<br><b>SISO &lt;Ant. 2&gt;</b><br>802.11a : 14.45 dBm / 0.0279 W<br>802.11n HT20 : 14.65 dBm / 0.0292 W<br>802.11n HT40 : 14.44 dBm / 0.0278 W<br>802.11ac VHT20: 14.46 dBm / 0.0279 W<br>802.11ac VHT40: 14.53 dBm / 0.0284 W<br>802.11ac VHT80: 10.86 dBm / 0.0122 W<br><b>MIMO &lt;Ant. 1 + 2&gt;</b><br>802.11a : 17.31 dBm / 0.0538 W<br>802.11n HT20 : 17.71 dBm / 0.0590 W<br>802.11n HT40 : 17.49 dBm / 0.0561 W<br>802.11ac VHT20: 17.60 dBm / 0.0575 W<br>802.11ac VHT40: 17.46 dBm / 0.0557 W<br>802.11ac VHT80: 13.67 dBm / 0.0233 W |



| Product Specification subjective to this standard |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Output Power                              | <b>&lt;5260 MHz ~ 5320 MHz&gt;</b><br><b>SISO &lt;Ant. 1&gt;</b><br>802.11a : 16.22 dBm / 0.0419 W<br>802.11n HT20 : 14.26 dBm / 0.0267 W<br>802.11n HT40 : 14.15 dBm / 0.0260 W<br>802.11ac VHT20: 14.18 dBm / 0.0262 W<br>802.11ac VHT40: 14.11 dBm / 0.0258 W<br>802.11ac VHT80: 12.01 dBm / 0.0159 W<br><b>SISO &lt;Ant. 2&gt;</b><br>802.11a : 16.78 dBm / 0.0476 W<br>802.11n HT20 : 15.03 dBm / 0.0318 W<br>802.11n HT40 : 15.01 dBm / 0.0317 W<br>802.11ac VHT20: 14.93 dBm / 0.0311 W<br>802.11ac VHT40: 14.98 dBm / 0.0315 W<br>802.11ac VHT80: 12.62 dBm / 0.0183 W<br><b>MIMO &lt;Ant. 1 + 2&gt;</b><br>802.11a : 19.29 dBm / 0.0849 W<br>802.11n HT20 : 17.75 dBm / 0.0596 W<br>802.11n HT40 : 17.64 dBm / 0.0581 W<br>802.11ac VHT20: 17.58 dBm / 0.0573 W<br>802.11ac VHT40: 17.51 dBm / 0.0564 W<br>802.11ac VHT80: 15.31 dBm / 0.0340 W |
|                                                   | <b>5500 MHz ~ 5700 MHz</b><br><b>SISO &lt;Ant. 1&gt;</b><br>802.11a : 16.53 dBm / 0.0450 W<br>802.11n HT20 : 14.79 dBm / 0.0301 W<br>802.11n HT40 : 14.48 dBm / 0.0281 W<br>802.11ac VHT20: 14.65 dBm / 0.0292 W<br>802.11ac VHT40: 14.56 dBm / 0.0286 W<br>802.11ac VHT80: 13.25 dBm / 0.0211 W<br><b>SISO &lt;Ant. 2&gt;</b><br>802.11a : 16.88 dBm / 0.0488 W<br>802.11n HT20 : 15.31 dBm / 0.0340 W<br>802.11n HT40 : 14.98 dBm / 0.0315 W<br>802.11ac VHT20: 15.09 dBm / 0.0323 W<br>802.11ac VHT40: 14.95 dBm / 0.0313 W<br>802.11ac VHT80: 13.71 dBm / 0.0235 W<br><b>MIMO &lt;Ant. 1 + 2&gt;</b><br>802.11a : 19.44 dBm / 0.0879 W<br>802.11n HT20 : 18.31 dBm / 0.0678 W<br>802.11n HT40 : 17.87 dBm / 0.0612 W<br>802.11ac VHT20: 18.06 dBm / 0.0640 W<br>802.11ac VHT40: 17.78 dBm / 0.0600 W<br>802.11ac VHT80: 16.49 dBm / 0.0446 W         |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Product Specification subjective to this standard |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |        |        |  |        |        |                    |   |   |                    |   |   |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--|--------|--------|--------------------|---|---|--------------------|---|---|
| 99% Occupied Bandwidth                            | <5150 MHz ~ 5250 MHz><br>802.11a : 17.10 MHz<br>802.11n HT20 : 18.20 MHz<br>802.11n HT40 : 36.30 MHz<br>802.11ac VHT20 : 18.15 MHz<br>802.11ac VHT40 : 36.30 MHz<br>802.11ac VHT80 : 75.00 MHz<br><5250 MHz ~ 5350 MHz><br>802.11a : 26.05 MHz<br>802.11n HT20 : 18.10 MHz<br>802.11n HT40 : 36.30 MHz<br>802.11ac VHT20 : 18.15 MHz<br>802.11ac VHT40 : 36.50 MHz<br>802.11ac VHT80 : 75.00 MHz<br><5470 MHz ~ 5725 MHz><br>802.11a : 18.85 MHz<br>802.11n HT20 : 18.05 MHz<br>802.11n HT40 : 36.30 MHz<br>802.11ac VHT20 : 18.05 MHz<br>802.11ac VHT40 : 36.40 MHz<br>802.11ac VHT80 : 75.12 MHz |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | Type of Modulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | 802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)<br>802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | Antenna Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | Antenna 1 : IFA Antenna<br>Antenna 2 : IFA Antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | Antenna Gain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | <5150 MHz ~ 5250 MHz><br>Antenna 1 : 0.50 dBi<br>Antenna 2 : 0.50 dBi<br><5250 MHz ~ 5350 MHz><br>Antenna 1 : 0.50 dBi<br>Antenna 2 : 0.50 dBi<br><5470 MHz ~ 5725 MHz><br>Antenna 1 : 0.00 dBi<br>Antenna 2 : 0.00 dBi                                                                                                                                                                                                                                                                                                                                                                            |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | Antenna Function Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |        |  |        |        |                    |   |   |                    |   |   |
|                                                   | <table><tr><td></td><td>Ant. 1</td><td>Ant. 2</td></tr><tr><td>802.11 a/n/ac SISO</td><td>V</td><td>V</td></tr><tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                    |        |        |  | Ant. 1 | Ant. 2 | 802.11 a/n/ac SISO | V | V | 802.11 a/n/ac MIMO | V | V |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ant. 1 | Ant. 2 |  |        |        |                    |   |   |                    |   |   |
|                                                   | 802.11 a/n/ac SISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | V      | V      |  |        |        |                    |   |   |                    |   |   |
|                                                   | 802.11 a/n/ac MIMO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | V      | V      |  |        |        |                    |   |   |                    |   |   |

## 1.5 Modification of EUT

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

## 1.6 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

|                           |                                                                                                                                                                  |         |           |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------|
| <b>Test Site</b>          | SPORTON INTERNATIONAL INC.                                                                                                                                       |         |           |
| <b>Test Site Location</b> | No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park,<br>Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |         |           |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>                                                                                                                                          |         |           |
|                           | TH02-HY                                                                                                                                                          | CO05-HY | 03CH07-HY |

**Note:** The test site complies with ANSI C63.4 2009 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 v01
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC KDB 644545 D03 Guidance for IEEE 802.11ac New Rules v01
- ♦ ANSI C63.10-2009

### Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. FCC permits the use of the 1.5 meter table as an alternative in C63.10-2013 through inquiry tracking number 961829.
3. 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.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.



## 2.1 Carrier Frequency and Channel

| Frequency Band                       | Channel   | Freq. (MHz) | Channel   | Freq. (MHz) |
|--------------------------------------|-----------|-------------|-----------|-------------|
| 5150-5250 MHz<br>Band 1<br>(U-NII-1) | 36        | 5180        | 44        | 5220        |
|                                      | <b>38</b> | <b>5190</b> | <b>46</b> | <b>5230</b> |
|                                      | 40        | 5200        | 48        | 5240        |
|                                      | 42        | 5210        |           |             |

| Frequency Band                        | Channel   | Freq. (MHz) | Channel   | Freq. (MHz) |
|---------------------------------------|-----------|-------------|-----------|-------------|
| 5250-5350 MHz<br>Band 2<br>(U-NII-2A) | 52        | 5260        | 60        | 5300        |
|                                       | <b>54</b> | <b>5270</b> | <b>62</b> | <b>5310</b> |
|                                       | 56        | 5280        | 64        | 5320        |
|                                       | 58        | 5290        |           |             |

| Frequency Band                        | Channel    | Freq. (MHz) | Channel    | Freq. (MHz) |
|---------------------------------------|------------|-------------|------------|-------------|
| 5470-5725 MHz<br>Band 3<br>(U-NII-2C) | 100        | 5500        | 120        | 5600        |
|                                       | <b>102</b> | <b>5510</b> | 122        | 5610        |
|                                       | 104        | 5520        | 124        | 5620        |
|                                       | 106        | 5530        | <b>126</b> | <b>5630</b> |
|                                       | 108        | 5540        | 128        | 5640        |
|                                       | <b>110</b> | <b>5550</b> | 132        | 5660        |
|                                       | 112        | 5560        | <b>134</b> | <b>5670</b> |
|                                       | 116        | 5580        | 136        | 5680        |
|                                       | <b>118</b> | <b>5590</b> | 140        | 5700        |

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

**Note:** The above Frequency and Channel in boldface were 802.11n HT40.

## 2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test in the following tables.

### SISO <Ant. 1>

| Channel | Frequency | 5GHz 802.11a Average Power (dBm) |        |         |         |         |         |         |         |
|---------|-----------|----------------------------------|--------|---------|---------|---------|---------|---------|---------|
|         |           | Data Rate                        |        |         |         |         |         |         |         |
|         |           | 6 Mbps                           | 9 Mbps | 12 Mbps | 18 Mbps | 24 Mbps | 36 Mbps | 48 Mbps | 54 Mbps |
| CH 36   | 5180 MHz  | 14.16                            | 14.15  | 14.13   | 14.12   | 14.14   | 13.81   | 13.05   | 12.98   |
| CH 44   | 5220 MHz  | 14.11                            | 14.08  | 14.00   | 14.05   | 14.04   | 13.67   | 12.91   | 12.89   |
| CH 48   | 5240 MHz  | 13.98                            | 13.94  | 13.92   | 13.92   | 13.92   | 13.59   | 12.83   | 12.80   |
| CH 52   | 5260 MHz  | 16.22                            | 16.18  | 16.18   | 16.20   | 16.15   | 13.69   | 12.87   | 12.88   |
| CH 60   | 5300 MHz  | 16.20                            | 16.03  | 16.03   | 16.11   | 16.12   | 13.63   | 12.87   | 12.83   |
| CH 64   | 5320 MHz  | 13.43                            | 13.42  | 13.40   | 13.39   | 13.38   | 13.23   | 12.89   | 12.82   |
| CH 100  | 5500 MHz  | 15.31                            | 15.30  | 15.29   | 15.29   | 15.26   | 13.97   | 13.19   | 13.15   |
| CH 116  | 5580 MHz  | 16.53                            | 16.21  | 16.18   | 16.31   | 16.18   | 13.89   | 13.07   | 13.00   |
| CH 140  | 5700 MHz  | 14.51                            | 14.44  | 14.43   | 14.41   | 14.40   | 13.78   | 12.91   | 12.92   |

| Channel | Frequency | 5GHz 802.11a Peak Power (dBm) |        |         |         |         |         |         |         |
|---------|-----------|-------------------------------|--------|---------|---------|---------|---------|---------|---------|
|         |           | Data Rate                     |        |         |         |         |         |         |         |
|         |           | 6 Mbps                        | 9 Mbps | 12 Mbps | 18 Mbps | 24 Mbps | 36 Mbps | 48 Mbps | 54 Mbps |
| CH 36   | 5180 MHz  | 19.72                         | 19.70  | 19.69   | 19.69   | 19.70   | 19.69   | 19.69   | 19.64   |
| CH 44   | 5220 MHz  | 19.71                         | 19.69  | 19.68   | 19.69   | 19.69   | 19.70   | 19.70   | 19.67   |
| CH 48   | 5240 MHz  | 19.60                         | 19.58  | 19.58   | 19.57   | 19.58   | 19.58   | 19.54   | 19.56   |
| CH 52   | 5260 MHz  | 20.18                         | 20.12  | 20.10   | 19.93   | 20.16   | 20.15   | 20.15   | 20.15   |
| CH 60   | 5300 MHz  | 20.02                         | 19.96  | 19.93   | 20.00   | 20.01   | 20.00   | 19.98   | 20.01   |
| CH 64   | 5320 MHz  | 19.80                         | 19.76  | 19.74   | 19.68   | 19.72   | 19.87   | 19.99   | 19.96   |
| CH 100  | 5500 MHz  | 20.10                         | 20.09  | 20.08   | 20.08   | 20.07   | 20.09   | 20.09   | 20.00   |
| CH 116  | 5580 MHz  | 20.34                         | 20.12  | 20.01   | 20.01   | 20.09   | 20.19   | 20.30   | 20.20   |
| CH 140  | 5700 MHz  | 19.54                         | 19.53  | 19.52   | 19.51   | 19.50   | 20.09   | 20.06   | 20.07   |

| Channel | Frequency | 5GHz 802.11n HT20 Average Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                             |       |       |       |       |       |       |       |
|         |           | MCS0                                  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 36   | 5180 MHz  | 13.96                                 | 13.82 | 13.80 | 13.51 | 13.44 | 13.15 | 13.09 | 12.06 |
| CH 44   | 5220 MHz  | 14.24                                 | 14.22 | 14.20 | 14.07 | 14.04 | 13.48 | 13.20 | 12.14 |
| CH 48   | 5240 MHz  | 14.19                                 | 14.16 | 14.14 | 13.60 | 13.59 | 12.84 | 12.80 | 11.78 |
| CH 52   | 5260 MHz  | 14.26                                 | 14.02 | 14.12 | 13.79 | 13.77 | 12.91 | 12.89 | 11.85 |
| CH 60   | 5300 MHz  | 14.10                                 | 14.04 | 14.09 | 13.77 | 13.76 | 12.86 | 12.90 | 11.81 |
| CH 64   | 5320 MHz  | 14.13                                 | 14.02 | 14.01 | 13.84 | 13.82 | 12.88 | 12.77 | 12.02 |
| CH 100  | 5500 MHz  | 14.79                                 | 14.63 | 14.72 | 13.99 | 14.35 | 13.46 | 13.41 | 12.32 |
| CH 116  | 5580 MHz  | 14.41                                 | 14.35 | 14.31 | 13.93 | 13.88 | 12.86 | 12.83 | 11.95 |
| CH 140  | 5700 MHz  | 14.35                                 | 14.34 | 14.32 | 13.87 | 13.79 | 12.96 | 12.89 | 11.90 |

| Channel | Frequency | 5GHz 802.11n HT20 Peak Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                          |       |       |       |       |       |       |       |
|         |           | MCS0                               | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 36   | 5180 MHz  | 19.61                              | 19.60 | 19.60 | 19.60 | 19.55 | 19.57 | 19.56 | 19.53 |
| CH 44   | 5220 MHz  | 19.85                              | 19.84 | 19.83 | 19.83 | 19.82 | 19.81 | 19.61 | 19.59 |
| CH 48   | 5240 MHz  | 19.71                              | 19.65 | 19.63 | 19.62 | 19.61 | 19.61 | 19.60 | 19.59 |
| CH 52   | 5260 MHz  | 19.83                              | 19.82 | 19.81 | 19.81 | 19.80 | 19.82 | 19.81 | 19.80 |
| CH 60   | 5300 MHz  | 19.73                              | 19.72 | 19.72 | 19.71 | 19.71 | 19.70 | 19.70 | 19.69 |
| CH 64   | 5320 MHz  | 19.75                              | 19.73 | 19.72 | 19.71 | 19.71 | 19.70 | 19.70 | 19.69 |
| CH 100  | 5500 MHz  | 20.20                              | 20.18 | 20.17 | 20.17 | 20.16 | 20.17 | 20.19 | 20.12 |
| CH 116  | 5580 MHz  | 19.90                              | 19.89 | 19.88 | 19.88 | 19.87 | 19.87 | 19.87 | 19.73 |
| CH 140  | 5700 MHz  | 19.88                              | 19.84 | 19.83 | 19.85 | 19.85 | 19.84 | 19.84 | 19.74 |



| Channel | Frequency | 5GHz 802.11n HT40 Average Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                             |       |       |       |       |       |       |       |
|         |           | MCS0                                  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 38   | 5190MHz   | 10.86                                 | 10.61 | 10.57 | 10.56 | 10.55 | 10.34 | 10.24 | 10.09 |
| CH 46   | 5230MHz   | 14.09                                 | 14.07 | 13.97 | 13.25 | 13.25 | 12.35 | 12.24 | 11.23 |
| CH 54   | 5270MHz   | 14.15                                 | 13.94 | 13.99 | 12.98 | 13.07 | 12.10 | 12.07 | 11.02 |
| CH 62   | 5310MHz   | 13.12                                 | 12.89 | 12.86 | 12.38 | 12.56 | 12.37 | 12.29 | 11.11 |
| CH 102  | 5510MHz   | 12.16                                 | 11.73 | 11.55 | 11.16 | 11.15 | 11.14 | 11.09 | 11.56 |
| CH 110  | 5550MHz   | 14.48                                 | 14.32 | 14.22 | 13.32 | 13.43 | 12.49 | 12.49 | 11.57 |
| CH 134  | 5670MHz   | 14.29                                 | 14.03 | 14.11 | 13.29 | 13.19 | 12.19 | 12.26 | 11.32 |

| Channel | Frequency | 5GHz 802.11n HT40 Peak Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                          |       |       |       |       |       |       |       |
|         |           | MCS0                               | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 38   | 5190MHz   | 17.62                              | 17.52 | 17.20 | 17.60 | 17.61 | 17.60 | 17.58 | 17.59 |
| CH 46   | 5230MHz   | 19.71                              | 19.59 | 19.62 | 19.70 | 19.70 | 19.68 | 19.63 | 18.76 |
| CH 54   | 5270MHz   | 19.77                              | 19.70 | 19.72 | 19.74 | 19.63 | 19.75 | 19.73 | 18.70 |
| CH 62   | 5310MHz   | 19.41                              | 19.10 | 19.05 | 19.67 | 19.67 | 19.70 | 19.70 | 18.84 |
| CH 102  | 5510MHz   | 18.78                              | 18.20 | 18.00 | 18.76 | 18.75 | 18.77 | 18.40 | 18.33 |
| CH 110  | 5550MHz   | 20.02                              | 19.96 | 19.97 | 20.00 | 19.92 | 19.97 | 19.87 | 19.22 |
| CH 134  | 5670MHz   | 19.92                              | 19.62 | 19.63 | 19.80 | 19.90 | 19.76 | 19.65 | 18.55 |



| Channel | Frequency | 5GHz 802.11ac VHT20 Average Power (dBm) |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  |
| CH 36   | 5180 MHz  | 13.51                                   | 13.50 | 13.37 | 13.39 | 13.43 | 13.03 | 12.92 | 11.89 | 11.88 |
| CH 44   | 5220 MHz  | 14.22                                   | 14.18 | 14.19 | 14.02 | 14.01 | 13.09 | 12.96 | 12.12 | 11.23 |
| CH 48   | 5240 MHz  | 14.14                                   | 14.03 | 14.11 | 13.90 | 13.83 | 13.08 | 12.97 | 11.98 | 11.17 |
| CH 52   | 5260 MHz  | 14.18                                   | 14.13 | 14.12 | 13.87 | 13.84 | 12.99 | 12.92 | 11.79 | 10.79 |
| CH 60   | 5300 MHz  | 14.10                                   | 14.06 | 14.09 | 13.90 | 13.83 | 13.04 | 12.98 | 12.01 | 11.28 |
| CH 64   | 5320 MHz  | 14.08                                   | 14.07 | 14.05 | 13.78 | 13.79 | 13.17 | 12.89 | 12.08 | 11.23 |
| CH 100  | 5500 MHz  | 14.65                                   | 14.54 | 14.54 | 14.23 | 14.20 | 13.18 | 13.32 | 12.10 | 11.21 |
| CH 116  | 5580 MHz  | 14.35                                   | 14.18 | 14.20 | 13.85 | 13.88 | 13.04 | 13.00 | 11.97 | 11.13 |
| CH 140  | 5700 MHz  | 14.27                                   | 14.15 | 14.25 | 13.82 | 13.79 | 12.94 | 12.93 | 11.96 | 11.07 |

| Channel | Frequency | 5GHz 802.11ac VHT20 Peak Power (dBm) |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  |
| CH 36   | 5180 MHz  | 19.54                                | 19.53 | 19.51 | 19.51 | 19.50 | 19.52 | 19.53 | 19.51 | 19.52 |
| CH 44   | 5220 MHz  | 19.90                                | 19.62 | 19.68 | 19.86 | 19.88 | 19.84 | 19.89 | 19.86 | 18.55 |
| CH 48   | 5240 MHz  | 19.75                                | 19.41 | 19.50 | 19.70 | 19.73 | 19.71 | 19.74 | 19.59 | 19.08 |
| CH 52   | 5260 MHz  | 19.86                                | 19.85 | 19.84 | 19.83 | 19.82 | 19.81 | 19.80 | 19.78 | 19.34 |
| CH 60   | 5300 MHz  | 19.80                                | 19.77 | 19.76 | 19.77 | 19.78 | 19.78 | 19.77 | 19.78 | 19.63 |
| CH 64   | 5320 MHz  | 19.74                                | 19.73 | 19.71 | 19.72 | 19.73 | 19.71 | 19.71 | 19.71 | 19.35 |
| CH 100  | 5500 MHz  | 20.14                                | 20.13 | 20.12 | 19.61 | 19.60 | 19.58 | 19.59 | 19.53 | 19.41 |
| CH 116  | 5580 MHz  | 19.90                                | 19.83 | 19.86 | 19.88 | 19.89 | 19.87 | 19.84 | 19.51 | 19.50 |
| CH 140  | 5700 MHz  | 19.76                                | 19.61 | 19.59 | 19.74 | 19.71 | 19.71 | 19.75 | 19.68 | 19.24 |



| Channel | Frequency | 5GHz 802.11ac VHT40 Average Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 38   | 5190MHz   | 10.88                                   | 10.54 | 10.51 | 10.50 | 10.49 | 10.40 | 10.11 | 10.05 | 10.06 | 9.62  |
| CH 46   | 5230MHz   | 14.18                                   | 14.00 | 14.02 | 13.16 | 13.37 | 12.32 | 12.30 | 11.33 | 10.62 | 9.71  |
| CH 54   | 5270MHz   | 14.11                                   | 14.04 | 14.06 | 13.26 | 13.43 | 12.40 | 12.39 | 11.48 | 10.71 | 9.95  |
| CH 62   | 5310MHz   | 12.63                                   | 12.40 | 12.39 | 12.35 | 12.59 | 12.20 | 12.31 | 11.35 | 10.50 | 9.69  |
| CH 102  | 5510MHz   | 12.13                                   | 11.89 | 11.89 | 11.93 | 12.09 | 12.12 | 12.12 | 11.99 | 11.20 | 10.30 |
| CH 110  | 5550MHz   | 14.56                                   | 14.31 | 14.54 | 13.60 | 13.86 | 12.61 | 12.51 | 11.82 | 10.95 | 9.99  |
| CH 134  | 5670MHz   | 14.35                                   | 14.28 | 14.28 | 13.43 | 13.57 | 12.55 | 12.52 | 11.52 | 10.67 | 9.73  |

| Channel | Frequency | 5GHz 802.11ac VHT40 Peak Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 38   | 5190MHz   | 17.64                                | 17.40 | 17.30 | 17.63 | 17.63 | 17.62 | 17.61 | 17.63 | 17.61 | 17.62 |
| CH 46   | 5230MHz   | 19.71                                | 19.53 | 19.57 | 19.70 | 19.68 | 19.69 | 19.59 | 18.48 | 18.41 | 18.48 |
| CH 54   | 5270MHz   | 19.76                                | 19.66 | 19.70 | 19.75 | 19.74 | 19.71 | 19.72 | 18.71 | 18.67 | 18.47 |
| CH 62   | 5310MHz   | 19.23                                | 18.93 | 18.91 | 19.09 | 19.22 | 19.22 | 19.21 | 19.22 | 18.30 | 18.40 |
| CH 102  | 5510MHz   | 19.03                                | 18.58 | 18.53 | 18.95 | 19.01 | 19.00 | 19.02 | 19.31 | 18.81 | 18.65 |
| CH 110  | 5550MHz   | 20.05                                | 19.87 | 19.78 | 19.88 | 19.96 | 19.94 | 19.99 | 19.24 | 18.81 | 18.73 |
| CH 134  | 5670MHz   | 19.65                                | 19.55 | 19.56 | 19.52 | 19.56 | 19.57 | 19.43 | 18.72 | 18.48 | 18.52 |

| Channel | Frequency | 5GHz 802.11ac VHT80 Average Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 42   | 5210MHz   | 10.57                                   | 10.25 | 10.22 | 10.43 | 10.40 | 10.43 | 10.56 | 10.04 | 10.32 | 10.34 |
| CH 58   | 5290MHz   | 12.01                                   | 11.80 | 11.71 | 11.97 | 11.93 | 11.64 | 11.69 | 10.86 | 10.22 | 10.25 |
| CH 106  | 5530MHz   | 10.66                                   | 10.41 | 10.34 | 10.62 | 10.54 | 10.63 | 10.60 | 9.84  | 10.42 | 10.43 |
| CH 122  | 5610MHz   | 13.25                                   | 13.14 | 13.22 | 12.59 | 12.59 | 11.61 | 11.69 | 10.87 | 10.12 | 10.05 |

| Channel | Frequency | 5GHz 802.11ac VHT80 Peak Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 42   | 5210MHz   | 17.04                                | 16.45 | 16.50 | 17.03 | 17.03 | 17.02 | 17.01 | 17.02 | 17.02 | 17.01 |
| CH 58   | 5290MHz   | 18.59                                | 18.41 | 18.24 | 18.58 | 18.56 | 18.55 | 18.58 | 18.52 | 18.41 | 18.46 |
| CH 106  | 5530MHz   | 17.24                                | 16.66 | 16.81 | 17.21 | 17.23 | 17.21 | 17.23 | 17.22 | 17.21 | 17.21 |
| CH 122  | 5610MHz   | 19.46                                | 19.20 | 19.00 | 19.41 | 19.42 | 19.25 | 19.20 | 18.91 | 18.33 | 18.35 |

**SISO <Ant. 2>**

| Channel | Frequency | 5GHz 802.11a Average Power (dBm) |        |         |         |         |         |         |         |
|---------|-----------|----------------------------------|--------|---------|---------|---------|---------|---------|---------|
|         |           | Data Rate                        |        |         |         |         |         |         |         |
|         |           | 6 Mbps                           | 9 Mbps | 12 Mbps | 18 Mbps | 24 Mbps | 36 Mbps | 48 Mbps | 54 Mbps |
| CH 36   | 5180 MHz  | 14.45                            | 14.33  | 14.29   | 14.29   | 14.29   | 14.21   | 13.40   | 13.28   |
| CH 44   | 5220 MHz  | 14.44                            | 14.41  | 14.40   | 14.38   | 14.39   | 14.14   | 13.38   | 13.33   |
| CH 48   | 5240 MHz  | 14.41                            | 14.32  | 14.31   | 14.37   | 14.36   | 14.09   | 13.29   | 13.23   |
| CH 52   | 5260 MHz  | 16.78                            | 16.70  | 16.63   | 16.72   | 16.60   | 14.30   | 13.54   | 13.35   |
| CH 60   | 5300 MHz  | 16.71                            | 16.58  | 16.62   | 16.67   | 16.64   | 14.23   | 13.44   | 13.40   |
| CH 64   | 5320 MHz  | 15.09                            | 14.79  | 14.78   | 14.77   | 14.76   | 14.17   | 13.38   | 13.33   |
| CH 100  | 5500 MHz  | 15.71                            | 15.65  | 15.63   | 15.62   | 15.60   | 14.39   | 13.61   | 13.52   |
| CH 116  | 5580 MHz  | 16.88                            | 16.62  | 16.61   | 16.81   | 16.65   | 14.37   | 13.45   | 13.43   |
| CH 140  | 5700 MHz  | 14.75                            | 14.70  | 14.66   | 14.65   | 14.64   | 14.16   | 13.31   | 13.28   |

| Channel | Frequency | 5GHz 802.11a Peak Power (dBm) |        |         |         |         |         |         |         |
|---------|-----------|-------------------------------|--------|---------|---------|---------|---------|---------|---------|
|         |           | Data Rate                     |        |         |         |         |         |         |         |
|         |           | 6 Mbps                        | 9 Mbps | 12 Mbps | 18 Mbps | 24 Mbps | 36 Mbps | 48 Mbps | 54 Mbps |
| CH 36   | 5180 MHz  | 20.41                         | 20.39  | 20.34   | 20.30   | 20.40   | 20.39   | 20.38   | 20.38   |
| CH 44   | 5220 MHz  | 20.34                         | 20.26  | 20.24   | 20.25   | 20.32   | 20.33   | 20.30   | 20.31   |
| CH 48   | 5240 MHz  | 20.40                         | 20.19  | 20.31   | 20.16   | 20.39   | 20.37   | 20.36   | 20.37   |
| CH 52   | 5260 MHz  | 20.57                         | 20.33  | 20.29   | 20.46   | 20.36   | 20.45   | 20.44   | 20.45   |
| CH 60   | 5300 MHz  | 20.46                         | 20.44  | 20.41   | 20.37   | 20.45   | 20.45   | 20.45   | 20.14   |
| CH 64   | 5320 MHz  | 20.34                         | 20.32  | 20.32   | 20.31   | 20.30   | 20.30   | 20.32   | 20.32   |
| CH 100  | 5500 MHz  | 20.23                         | 20.22  | 20.21   | 20.22   | 20.21   | 20.22   | 20.22   | 20.22   |
| CH 116  | 5580 MHz  | 20.67                         | 20.45  | 20.52   | 20.56   | 20.56   | 20.44   | 20.63   | 20.62   |
| CH 140  | 5700 MHz  | 20.13                         | 20.12  | 20.11   | 20.10   | 20.08   | 20.11   | 20.11   | 20.12   |

| Channel | Frequency | 5GHz 802.11n HT20 Average Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                             |       |       |       |       |       |       |       |
|         |           | MCS0                                  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 36   | 5180 MHz  | 14.14                                 | 14.12 | 14.10 | 13.65 | 13.60 | 13.41 | 13.22 | 12.29 |
| CH 44   | 5220 MHz  | 14.64                                 | 14.63 | 14.62 | 14.20 | 14.18 | 13.41 | 13.35 | 12.44 |
| CH 48   | 5240 MHz  | 14.65                                 | 14.61 | 14.60 | 14.22 | 14.15 | 13.36 | 13.32 | 12.29 |
| CH 52   | 5260 MHz  | 15.03                                 | 14.88 | 14.90 | 14.28 | 14.34 | 13.57 | 13.51 | 12.52 |
| CH 60   | 5300 MHz  | 14.94                                 | 14.92 | 14.88 | 14.20 | 14.18 | 13.17 | 13.16 | 12.54 |
| CH 64   | 5320 MHz  | 14.91                                 | 14.65 | 14.63 | 14.37 | 14.28 | 13.36 | 13.34 | 12.49 |
| CH 100  | 5500 MHz  | 15.31                                 | 14.83 | 15.01 | 14.41 | 14.41 | 13.63 | 13.48 | 12.49 |
| CH 116  | 5580 MHz  | 15.28                                 | 14.89 | 14.88 | 14.27 | 14.26 | 14.25 | 14.24 | 12.37 |
| CH 140  | 5700 MHz  | 14.73                                 | 14.64 | 14.62 | 14.25 | 13.22 | 13.21 | 13.20 | 12.29 |

| Channel | Frequency | 5GHz 802.11n HT20 Peak Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                          |       |       |       |       |       |       |       |
|         |           | MCS0                               | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 36   | 5180 MHz  | 19.91                              | 19.90 | 19.90 | 19.90 | 19.85 | 19.87 | 19.86 | 19.87 |
| CH 44   | 5220 MHz  | 20.21                              | 20.20 | 20.19 | 20.19 | 20.18 | 20.18 | 20.18 | 19.94 |
| CH 48   | 5240 MHz  | 20.20                              | 20.18 | 20.16 | 20.15 | 20.15 | 20.14 | 20.14 | 20.14 |
| CH 52   | 5260 MHz  | 20.12                              | 20.10 | 20.09 | 20.10 | 20.11 | 20.10 | 20.11 | 20.08 |
| CH 60   | 5300 MHz  | 20.10                              | 20.09 | 20.09 | 20.08 | 20.07 | 12.07 | 20.06 | 19.96 |
| CH 64   | 5320 MHz  | 19.46                              | 19.44 | 19.44 | 19.43 | 19.43 | 19.42 | 19.42 | 19.41 |
| CH 100  | 5500 MHz  | 20.53                              | 20.45 | 20.43 | 20.50 | 20.51 | 20.50 | 20.50 | 20.32 |
| CH 116  | 5580 MHz  | 20.41                              | 20.21 | 20.20 | 20.19 | 20.19 | 20.18 | 20.18 | 19.94 |
| CH 140  | 5700 MHz  | 20.44                              | 20.37 | 20.36 | 20.36 | 20.36 | 20.35 | 20.35 | 20.30 |



| Channel | Frequency | 5GHz 802.11n HT40 Average Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                             |       |       |       |       |       |       |       |
|         |           | MCS0                                  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 38   | 5190MHz   | 10.94                                 | 10.73 | 10.71 | 10.69 | 10.68 | 10.67 | 10.40 | 10.37 |
| CH 46   | 5230MHz   | 14.44                                 | 14.43 | 14.43 | 13.48 | 12.72 | 12.83 | 12.81 | 11.95 |
| CH 54   | 5270MHz   | 15.01                                 | 14.97 | 14.91 | 13.57 | 13.70 | 12.72 | 12.83 | 11.84 |
| CH 62   | 5310MHz   | 13.69                                 | 13.49 | 13.38 | 13.62 | 11.47 | 11.26 | 11.50 | 12.14 |
| CH 102  | 5510MHz   | 12.34                                 | 11.77 | 11.87 | 11.87 | 11.48 | 11.16 | 11.10 | 11.08 |
| CH 110  | 5550MHz   | 14.98                                 | 14.83 | 14.92 | 13.56 | 13.64 | 12.77 | 12.64 | 11.72 |
| CH 134  | 5670MHz   | 14.67                                 | 14.54 | 14.40 | 13.28 | 13.43 | 12.56 | 12.55 | 11.48 |

| Channel | Frequency | 5GHz 802.11n HT40 Peak Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                          |       |       |       |       |       |       |       |
|         |           | MCS0                               | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 38   | 5190MHz   | 17.90                              | 17.50 | 17.40 | 17.88 | 17.86 | 17.87 | 17.88 | 17.88 |
| CH 46   | 5230MHz   | 20.31                              | 20.12 | 20.19 | 20.30 | 20.25 | 20.28 | 19.97 | 19.46 |
| CH 54   | 5270MHz   | 20.45                              | 20.22 | 20.35 | 20.44 | 20.33 | 19.89 | 19.81 | 19.26 |
| CH 62   | 5310MHz   | 19.93                              | 19.65 | 19.63 | 19.90 | 19.88 | 19.60 | 19.88 | 19.73 |
| CH 102  | 5510MHz   | 19.45                              | 18.70 | 18.50 | 18.40 | 19.40 | 19.43 | 19.10 | 19.00 |
| CH 110  | 5550MHz   | 20.41                              | 20.18 | 20.31 | 20.40 | 20.38 | 20.19 | 20.38 | 19.96 |
| CH 134  | 5670MHz   | 20.45                              | 20.01 | 20.17 | 20.36 | 20.44 | 19.75 | 19.74 | 19.73 |

| Channel | Frequency | 5GHz 802.11ac VHT20 Average Power (dBm) |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  |
| CH 36   | 5180 MHz  | 13.73                                   | 13.72 | 13.68 | 13.66 | 13.58 | 13.32 | 13.30 | 12.59 | 11.83 |
| CH 44   | 5220 MHz  | 14.42                                   | 14.40 | 14.40 | 14.25 | 14.35 | 13.50 | 13.52 | 12.59 | 11.83 |
| CH 48   | 5240 MHz  | 14.46                                   | 14.44 | 14.43 | 14.21 | 14.28 | 13.42 | 13.45 | 12.51 | 11.61 |
| CH 52   | 5260 MHz  | 14.93                                   | 14.80 | 14.92 | 14.33 | 14.33 | 13.48 | 13.49 | 12.76 | 11.96 |
| CH 60   | 5300 MHz  | 14.79                                   | 14.77 | 14.77 | 14.46 | 14.42 | 13.52 | 13.55 | 12.69 | 12.01 |
| CH 64   | 5320 MHz  | 14.72                                   | 14.63 | 14.70 | 14.42 | 14.41 | 13.55 | 13.57 | 12.66 | 11.97 |
| CH 100  | 5500 MHz  | 15.09                                   | 15.02 | 14.99 | 14.60 | 14.49 | 13.68 | 13.66 | 12.58 | 11.56 |
| CH 116  | 5580 MHz  | 14.91                                   | 14.86 | 14.87 | 14.20 | 14.18 | 13.30 | 13.32 | 12.41 | 11.56 |
| CH 140  | 5700 MHz  | 14.47                                   | 14.30 | 14.42 | 14.07 | 14.07 | 13.14 | 13.19 | 12.13 | 11.38 |

| Channel | Frequency | 5GHz 802.11ac VHT20 Peak Power (dBm) |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  |
| CH 36   | 5180 MHz  | 19.85                                | 19.84 | 19.84 | 19.84 | 19.82 | 19.83 | 19.84 | 19.82 | 19.83 |
| CH 44   | 5220 MHz  | 20.15                                | 20.11 | 20.12 | 20.14 | 20.12 | 20.14 | 20.14 | 20.13 | 20.10 |
| CH 48   | 5240 MHz  | 20.10                                | 20.06 | 20.07 | 20.08 | 20.03 | 20.05 | 20.09 | 20.00 | 19.98 |
| CH 52   | 5260 MHz  | 20.32                                | 20.31 | 20.22 | 20.25 | 20.30 | 20.28 | 20.30 | 19.95 | 19.93 |
| CH 60   | 5300 MHz  | 20.15                                | 20.10 | 20.11 | 20.14 | 20.13 | 20.14 | 20.10 | 20.12 | 19.99 |
| CH 64   | 5320 MHz  | 20.11                                | 20.07 | 20.08 | 20.07 | 20.10 | 20.10 | 20.10 | 20.04 | 19.98 |
| CH 100  | 5500 MHz  | 20.43                                | 20.42 | 20.41 | 20.40 | 20.39 | 20.37 | 20.36 | 20.35 | 20.33 |
| CH 116  | 5580 MHz  | 20.16                                | 20.03 | 20.06 | 20.11 | 20.08 | 20.07 | 20.05 | 19.92 | 19.77 |
| CH 140  | 5700 MHz  | 20.13                                | 20.10 | 20.08 | 20.10 | 20.09 | 20.11 | 20.09 | 20.10 | 19.87 |



| Channel | Frequency | 5GHz 802.11ac VHT40 Average Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 38   | 5190MHz   | 10.96                                   | 10.71 | 10.70 | 10.69 | 10.65 | 10.55 | 10.41 | 10.36 | 10.36 | 9.40  |
| CH 46   | 5230MHz   | 14.53                                   | 14.44 | 14.49 | 13.45 | 13.50 | 12.77 | 12.80 | 11.93 | 11.14 | 10.18 |
| CH 54   | 5270MHz   | 14.98                                   | 14.94 | 14.94 | 13.60 | 13.63 | 13.10 | 13.05 | 12.18 | 11.43 | 10.51 |
| CH 62   | 5310MHz   | 13.19                                   | 13.13 | 13.12 | 13.06 | 13.07 | 12.90 | 12.95 | 12.06 | 11.22 | 10.27 |
| CH 102  | 5510MHz   | 12.31                                   | 12.11 | 12.10 | 12.08 | 12.16 | 12.21 | 12.17 | 11.63 | 11.55 | 10.67 |
| CH 110  | 5550MHz   | 14.95                                   | 14.94 | 14.83 | 13.84 | 13.78 | 13.16 | 13.05 | 12.15 | 11.39 | 10.40 |
| CH 134  | 5670MHz   | 14.59                                   | 14.50 | 14.54 | 13.61 | 13.61 | 12.90 | 12.81 | 11.94 | 11.18 | 10.24 |

| Channel | Frequency | 5GHz 802.11ac VHT40 Peak Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 38   | 5190MHz   | 17.94                                | 17.65 | 17.51 | 17.92 | 17.93 | 17.92 | 17.92 | 17.93 | 17.92 | 17.91 |
| CH 46   | 5230MHz   | 20.22                                | 20.01 | 20.08 | 20.17 | 20.19 | 20.19 | 19.96 | 19.67 | 19.38 | 19.49 |
| CH 54   | 5270MHz   | 20.48                                | 20.20 | 20.14 | 20.44 | 20.45 | 19.84 | 20.01 | 19.59 | 19.23 | 19.28 |
| CH 62   | 5310MHz   | 19.69                                | 19.51 | 19.67 | 19.68 | 19.68 | 19.64 | 19.65 | 19.63 | 19.32 | 19.64 |
| CH 102  | 5510MHz   | 19.48                                | 19.12 | 19.25 | 19.45 | 19.46 | 19.47 | 19.45 | 19.65 | 19.94 | 19.55 |
| CH 110  | 5550MHz   | 20.54                                | 20.02 | 20.10 | 20.50 | 20.51 | 20.25 | 19.73 | 19.50 | 19.54 | 19.22 |
| CH 134  | 5670MHz   | 20.46                                | 19.96 | 20.07 | 20.40 | 20.41 | 19.96 | 19.88 | 19.61 | 19.55 | 19.58 |

| Channel | Frequency | 5GHz 802.11ac VHT80 Average Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 42   | 5210MHz   | 10.86                                   | 10.85 | 10.80 | 10.84 | 10.77 | 10.77 | 10.83 | 10.61 | 10.65 | 10.71 |
| CH 58   | 5290MHz   | 12.62                                   | 12.54 | 12.60 | 12.61 | 12.57 | 11.73 | 11.86 | 11.57 | 10.74 | 10.31 |
| CH 106  | 5530MHz   | 10.92                                   | 10.87 | 10.90 | 10.91 | 10.87 | 10.89 | 10.89 | 10.61 | 10.81 | 10.86 |
| CH 122  | 5610MHz   | 13.71                                   | 13.69 | 13.67 | 13.04 | 12.88 | 11.93 | 12.12 | 11.02 | 10.47 | 10.59 |

| Channel | Frequency | 5GHz 802.11ac VHT80 Peak Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 42   | 5210MHz   | 17.95                                | 17.73 | 17.58 | 17.94 | 17.94 | 17.93 | 17.91 | 17.94 | 17.93 | 17.92 |
| CH 58   | 5290MHz   | 19.26                                | 19.11 | 18.96 | 19.25 | 19.23 | 19.22 | 19.24 | 19.22 | 19.21 | 19.24 |
| CH 106  | 5530MHz   | 18.27                                | 17.91 | 17.65 | 18.21 | 18.25 | 18.23 | 18.20 | 18.25 | 18.24 | 18.26 |
| CH 122  | 5610MHz   | 20.02                                | 19.80 | 19.95 | 19.76 | 19.84 | 19.75 | 19.85 | 19.63 | 19.20 | 19.22 |

**MIMO <Ant. 1+2>**

| Channel | Frequency | 5GHz 802.11a Average Power (dBm) |        |         |         |         |         |         |         |
|---------|-----------|----------------------------------|--------|---------|---------|---------|---------|---------|---------|
|         |           | Data Rate                        |        |         |         |         |         |         |         |
|         |           | 6 Mbps                           | 9 Mbps | 12 Mbps | 18 Mbps | 24 Mbps | 36 Mbps | 48 Mbps | 54 Mbps |
| CH 36   | 5180 MHz  | 17.11                            | 17.10  | 17.08   | 17.08   | 17.04   | 17.00   | 16.19   | 16.12   |
| CH 44   | 5220 MHz  | 17.31                            | 17.26  | 17.24   | 17.27   | 17.23   | 17.02   | 16.13   | 16.06   |
| CH 48   | 5240 MHz  | 17.15                            | 17.07  | 17.06   | 17.05   | 17.03   | 17.00   | 15.99   | 16.01   |
| CH 52   | 5260 MHz  | 19.29                            | 19.16  | 19.15   | 19.27   | 19.17   | 16.96   | 16.16   | 16.10   |
| CH 60   | 5300 MHz  | 19.25                            | 19.11  | 19.13   | 19.08   | 19.08   | 16.93   | 16.14   | 16.10   |
| CH 64   | 5320 MHz  | 17.86                            | 17.69  | 17.66   | 17.14   | 17.13   | 16.85   | 15.94   | 15.43   |
| CH 100  | 5500 MHz  | 18.43                            | 18.39  | 18.35   | 18.34   | 18.31   | 17.19   | 16.33   | 16.35   |
| CH 116  | 5580 MHz  | 19.44                            | 19.26  | 19.19   | 19.19   | 19.18   | 17.09   | 16.15   | 16.10   |
| CH 140  | 5700 MHz  | 17.89                            | 17.84  | 17.78   | 17.78   | 17.70   | 16.95   | 16.05   | 16.00   |

| Channel | Frequency | 5GHz 802.11a Peak Power (dBm) (800ns) |        |         |         |         |         |         |         |
|---------|-----------|---------------------------------------|--------|---------|---------|---------|---------|---------|---------|
|         |           | Data Rate                             |        |         |         |         |         |         |         |
|         |           | 6 Mbps                                | 9 Mbps | 12 Mbps | 18 Mbps | 24 Mbps | 36 Mbps | 48 Mbps | 54 Mbps |
| CH 36   | 5180 MHz  | 22.75                                 | 22.74  | 22.70   | 22.65   | 22.72   | 22.74   | 22.73   | 22.73   |
| CH 44   | 5220 MHz  | 22.48                                 | 22.47  | 22.47   | 22.46   | 22.47   | 22.43   | 22.43   | 22.47   |
| CH 48   | 5240 MHz  | 22.42                                 | 22.41  | 22.41   | 22.40   | 22.40   | 22.41   | 22.39   | 22.40   |
| CH 52   | 5260 MHz  | 22.64                                 | 22.53  | 22.45   | 22.53   | 22.61   | 22.63   | 22.63   | 22.63   |
| CH 60   | 5300 MHz  | 22.61                                 | 22.48  | 22.41   | 22.41   | 22.53   | 22.55   | 22.55   | 22.56   |
| CH 64   | 5320 MHz  | 22.72                                 | 22.71  | 22.71   | 22.70   | 22.67   | 22.50   | 22.51   | 22.50   |
| CH 100  | 5500 MHz  | 22.80                                 | 22.79  | 22.78   | 22.78   | 22.78   | 22.76   | 22.75   | 22.76   |
| CH 116  | 5580 MHz  | 22.76                                 | 22.61  | 22.65   | 22.62   | 22.64   | 22.63   | 22.62   | 22.62   |
| CH 140  | 5700 MHz  | 22.63                                 | 22.62  | 22.61   | 22.60   | 22.60   | 22.60   | 22.60   | 22.57   |



| Channel | Frequency | 5GHz 802.11n HT20 Average Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                             |       |       |       |       |       |       |       |
|         |           | MCS0                                  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 36   | 5180 MHz  | 17.14                                 | 17.08 | 17.04 | 16.75 | 16.61 | 16.36 | 16.20 | 15.24 |
| CH 44   | 5220 MHz  | 17.71                                 | 17.68 | 17.70 | 17.29 | 17.11 | 16.52 | 16.31 | 15.40 |
| CH 48   | 5240 MHz  | 17.64                                 | 17.56 | 17.61 | 17.16 | 17.01 | 16.41 | 16.23 | 15.46 |
| CH 52   | 5260 MHz  | 17.75                                 | 17.64 | 17.68 | 17.17 | 17.12 | 16.31 | 16.15 | 15.30 |
| CH 60   | 5300 MHz  | 17.71                                 | 17.65 | 17.69 | 17.34 | 17.21 | 16.52 | 16.34 | 15.58 |
| CH 64   | 5320 MHz  | 17.68                                 | 17.66 | 17.63 | 17.28 | 17.15 | 16.44 | 16.28 | 15.48 |
| CH 100  | 5500 MHz  | 18.31                                 | 18.15 | 18.17 | 17.72 | 17.54 | 16.64 | 16.63 | 14.94 |
| CH 116  | 5580 MHz  | 17.93                                 | 17.82 | 17.81 | 17.43 | 17.34 | 16.53 | 16.48 | 15.53 |
| CH 140  | 5700 MHz  | 17.89                                 | 17.63 | 17.63 | 17.15 | 17.01 | 16.85 | 16.10 | 15.28 |

| Channel | Frequency | 5GHz 802.11n HT20 Peak Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                          |       |       |       |       |       |       |       |
|         |           | MCS0                               | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 36   | 5180 MHz  | 22.64                              | 22.62 | 22.62 | 22.63 | 22.60 | 22.59 | 22.58 | 22.59 |
| CH 44   | 5220 MHz  | 22.98                              | 22.64 | 22.72 | 22.90 | 22.95 | 22.90 | 22.94 | 22.91 |
| CH 48   | 5240 MHz  | 22.76                              | 22.60 | 22.63 | 22.73 | 22.75 | 22.74 | 22.74 | 22.68 |
| CH 52   | 5260 MHz  | 22.71                              | 22.70 | 22.69 | 22.68 | 22.70 | 22.69 | 22.68 | 22.68 |
| CH 60   | 5300 MHz  | 22.69                              | 22.63 | 22.67 | 22.68 | 22.67 | 22.67 | 22.67 | 22.66 |
| CH 64   | 5320 MHz  | 22.69                              | 22.67 | 22.66 | 22.66 | 22.67 | 22.68 | 22.68 | 22.68 |
| CH 100  | 5500 MHz  | 23.15                              | 23.11 | 23.09 | 23.12 | 23.12 | 23.13 | 23.14 | 22.93 |
| CH 116  | 5580 MHz  | 22.89                              | 22.68 | 22.71 | 22.85 | 22.83 | 22.87 | 22.84 | 22.68 |
| CH 140  | 5700 MHz  | 22.85                              | 22.50 | 22.57 | 22.77 | 22.80 | 22.80 | 22.79 | 22.74 |



| Channel | Frequency | 5GHz 802.11n HT40 Average Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                             |       |       |       |       |       |       |       |
|         |           | MCS0                                  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 38   | 5190MHz   | 14.18                                 | 14.17 | 14.15 | 14.14 | 14.12 | 14.12 | 13.83 | 13.69 |
| CH 46   | 5230MHz   | 17.49                                 | 17.46 | 17.45 | 16.36 | 16.54 | 15.80 | 15.78 | 14.81 |
| CH 54   | 5270MHz   | 17.64                                 | 17.54 | 17.47 | 16.37 | 16.42 | 15.53 | 15.46 | 14.44 |
| CH 62   | 5310MHz   | 16.54                                 | 16.50 | 16.54 | 16.50 | 16.32 | 15.87 | 15.81 | 14.89 |
| CH 102  | 5510MHz   | 15.37                                 | 15.33 | 15.23 | 15.03 | 14.99 | 14.98 | 14.86 | 14.80 |
| CH 110  | 5550MHz   | 17.87                                 | 17.69 | 17.58 | 16.65 | 16.69 | 15.88 | 15.83 | 14.86 |
| CH 134  | 5670MHz   | 17.78                                 | 17.75 | 17.60 | 16.40 | 16.49 | 15.64 | 15.59 | 14.66 |

| Channel | Frequency | 5GHz 802.11n HT40 Peak Power (dBm) |       |       |       |       |       |       |       |
|---------|-----------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                          |       |       |       |       |       |       |       |
|         |           | MCS0                               | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| CH 38   | 5190MHz   | 20.36                              | 20.21 | 20.26 | 20.19 | 20.06 | 20.34 | 20.34 | 20.34 |
| CH 46   | 5230MHz   | 22.74                              | 22.70 | 22.63 | 22.73 | 22.71 | 22.71 | 22.47 | 22.37 |
| CH 54   | 5270MHz   | 22.76                              | 22.71 | 22.67 | 22.74 | 22.73 | 22.53 | 22.69 | 22.18 |
| CH 62   | 5310MHz   | 22.42                              | 22.31 | 22.31 | 22.15 | 22.14 | 22.41 | 22.39 | 22.40 |
| CH 102  | 5510MHz   | 22.17                              | 22.14 | 21.81 | 21.27 | 21.00 | 22.15 | 22.14 | 22.14 |
| CH 110  | 5550MHz   | 23.06                              | 22.69 | 22.73 | 23.00 | 22.98 | 22.78 | 22.57 | 22.45 |
| CH 134  | 5670MHz   | 22.88                              | 22.58 | 22.67 | 22.85 | 22.84 | 22.66 | 22.32 | 22.21 |



| Channel | Frequency | 5GHz 802.11ac VHT20 Average Power (dBm) |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  |
| CH 36   | 5180 MHz  | 16.64                                   | 16.59 | 16.54 | 16.54 | 16.53 | 16.29 | 16.23 | 15.41 | 14.54 |
| CH 44   | 5220 MHz  | 17.60                                   | 17.45 | 17.49 | 17.09 | 17.09 | 16.37 | 16.20 | 15.42 | 14.53 |
| CH 48   | 5240 MHz  | 17.54                                   | 17.39 | 17.52 | 17.02 | 17.08 | 16.25 | 16.20 | 15.36 | 14.41 |
| CH 52   | 5260 MHz  | 17.58                                   | 17.46 | 17.54 | 17.02 | 17.13 | 16.31 | 16.24 | 15.40 | 14.55 |
| CH 60   | 5300 MHz  | 17.54                                   | 17.51 | 17.52 | 17.17 | 17.16 | 16.36 | 16.29 | 15.48 | 14.52 |
| CH 64   | 5320 MHz  | 17.55                                   | 17.41 | 17.51 | 17.05 | 17.09 | 16.29 | 16.17 | 15.39 | 14.47 |
| CH 100  | 5500 MHz  | 18.06                                   | 17.67 | 17.84 | 17.61 | 17.56 | 16.80 | 16.71 | 15.81 | 14.94 |
| CH 116  | 5580 MHz  | 18.01                                   | 17.55 | 17.81 | 17.32 | 17.38 | 16.54 | 16.45 | 15.33 | 14.57 |
| CH 140  | 5700 MHz  | 17.80                                   | 17.55 | 17.75 | 17.22 | 17.29 | 16.46 | 16.35 | 15.38 | 14.40 |

| Channel | Frequency | 5GHz 802.11ac VHT20 Peak Power (dBm) |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  |
| CH 36   | 5180 MHz  | 22.47                                | 22.46 | 22.46 | 22.46 | 22.45 | 22.41 | 22.40 | 22.25 | 22.12 |
| CH 44   | 5220 MHz  | 22.74                                | 22.72 | 22.71 | 22.73 | 22.71 | 22.73 | 22.70 | 22.68 | 22.21 |
| CH 48   | 5240 MHz  | 22.63                                | 22.61 | 22.59 | 22.61 | 22.61 | 22.61 | 22.62 | 22.60 | 22.28 |
| CH 52   | 5260 MHz  | 22.89                                | 22.86 | 22.81 | 22.87 | 22.83 | 22.85 | 22.88 | 22.47 | 22.30 |
| CH 60   | 5300 MHz  | 22.73                                | 22.72 | 22.70 | 22.71 | 22.71 | 22.70 | 22.69 | 22.70 | 22.43 |
| CH 64   | 5320 MHz  | 22.72                                | 22.69 | 22.66 | 22.69 | 22.70 | 22.69 | 22.71 | 22.62 | 22.37 |
| CH 100  | 5500 MHz  | 23.03                                | 22.84 | 22.77 | 22.89 | 22.94 | 22.99 | 23.01 | 22.90 | 22.75 |
| CH 116  | 5580 MHz  | 22.96                                | 22.50 | 22.48 | 22.78 | 22.81 | 22.82 | 22.94 | 22.42 | 22.45 |
| CH 140  | 5700 MHz  | 22.83                                | 22.49 | 22.55 | 22.71 | 22.80 | 22.80 | 22.77 | 22.72 | 22.37 |



| Channel | Frequency | 5GHz 802.11ac VHT40 Average Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 38   | 5190MHz   | 13.88                                   | 13.66 | 13.55 | 13.54 | 13.67 | 13.62 | 13.62 | 13.63 | 13.24 | 13.25 |
| CH 46   | 5230MHz   | 17.46                                   | 17.44 | 17.44 | 16.52 | 16.48 | 15.54 | 15.57 | 14.69 | 13.86 | 13.04 |
| CH 54   | 5270MHz   | 17.51                                   | 17.45 | 17.41 | 16.49 | 16.58 | 15.70 | 15.70 | 14.84 | 14.09 | 13.29 |
| CH 62   | 5310MHz   | 15.96                                   | 15.83 | 15.85 | 15.76 | 15.90 | 15.62 | 15.62 | 14.74 | 13.93 | 13.08 |
| CH 102  | 5510MHz   | 15.24                                   | 15.10 | 15.02 | 15.08 | 15.15 | 15.16 | 14.90 | 15.17 | 14.38 | 13.55 |
| CH 110  | 5550MHz   | 17.78                                   | 17.60 | 17.77 | 16.76 | 16.82 | 15.85 | 15.92 | 14.85 | 14.15 | 13.17 |
| CH 134  | 5670MHz   | 17.71                                   | 17.67 | 17.70 | 16.57 | 16.63 | 15.66 | 15.69 | 14.77 | 13.93 | 13.05 |

| Channel | Frequency | 5GHz 802.11ac VHT40 Peak Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 38   | 5190MHz   | 20.55                                | 20.13 | 20.25 | 20.53 | 20.53 | 20.53 | 20.53 | 20.52 | 20.52 | 22.04 |
| CH 46   | 5230MHz   | 22.78                                | 22.68 | 22.69 | 22.71 | 22.75 | 22.77 | 22.70 | 22.07 | 21.95 | 21.84 |
| CH 54   | 5270MHz   | 22.70                                | 22.66 | 22.60 | 22.68 | 22.68 | 22.69 | 22.61 | 22.07 | 21.96 | 21.93 |
| CH 62   | 5310MHz   | 22.37                                | 22.22 | 22.22 | 22.33 | 22.35 | 22.63 | 22.61 | 21.92 | 21.80 | 22.01 |
| CH 102  | 5510MHz   | 22.11                                | 21.96 | 21.81 | 22.10 | 22.10 | 22.09 | 22.07 | 22.46 | 22.14 | 22.37 |
| CH 110  | 5550MHz   | 22.91                                | 22.60 | 22.59 | 22.86 | 22.83 | 22.88 | 22.81 | 22.29 | 22.17 | 22.19 |
| CH 134  | 5670MHz   | 22.75                                | 22.53 | 22.48 | 22.71 | 22.68 | 22.69 | 22.63 | 21.92 | 21.85 | 21.90 |

| Channel | Frequency | 5GHz 802.11ac VHT80 Average Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                               |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                    | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 42   | 5210MHz   | 13.67                                   | 13.43 | 13.46 | 13.56 | 13.63 | 13.64 | 13.66 | 13.61 | 13.53 | 13.51 |
| CH 58   | 5290MHz   | 15.31                                   | 15.21 | 15.17 | 15.30 | 15.27 | 14.93 | 15.09 | 14.25 | 13.55 | 13.57 |
| CH 106  | 5530MHz   | 13.90                                   | 13.63 | 13.57 | 13.74 | 13.78 | 13.82 | 13.89 | 13.44 | 13.77 | 13.66 |
| CH 122  | 5610MHz   | 16.49                                   | 16.48 | 16.42 | 15.79 | 15.81 | 14.98 | 15.02 | 14.11 | 13.42 | 13.41 |

| Channel | Frequency | 5GHz 802.11ac VHT80 Peak Power (dBm) |       |       |       |       |       |       |       |       |       |
|---------|-----------|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         |           | Data Rate                            |       |       |       |       |       |       |       |       |       |
|         |           | MCS0                                 | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  | MCS8  | MCS9  |
| CH 42   | 5210MHz   | 20.45                                | 20.20 | 20.15 | 20.42 | 20.44 | 20.43 | 20.43 | 20.42 | 20.42 | 20.42 |
| CH 58   | 5290MHz   | 21.95                                | 21.72 | 21.64 | 21.93 | 21.93 | 22.30 | 21.93 | 21.91 | 21.64 | 21.77 |
| CH 106  | 5530MHz   | 20.68                                | 20.17 | 20.16 | 20.64 | 20.65 | 20.66 | 20.65 | 20.67 | 20.66 | 20.64 |
| CH 122  | 5610MHz   | 22.65                                | 22.27 | 22.27 | 22.49 | 22.64 | 22.60 | 22.42 | 22.21 | 21.76 | 21.56 |

**Note:** MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

## 2.3 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.

### Single Antenna

| Modulation     | Data Rate |
|----------------|-----------|
| 802.11a        | 6 Mbps    |
| 802.11n HT20   | MCS0      |
| 802.11n HT40   | MCS0      |
| 802.11ac VHT20 | MCS0      |
| 802.11ac VHT40 | MCS0      |
| 802.11ac VHT80 | MCS0      |

### MIMO Antenna

| Modulation     | Data Rate |
|----------------|-----------|
| 802.11a        | 6 Mbps    |
| 802.11n HT20   | MCS8      |
| 802.11n HT40   | MCS8      |
| 802.11ac VHT20 | MCS0      |
| 802.11ac VHT40 | MCS0      |
| 802.11ac VHT80 | MCS0      |

| Test Cases                                                                                            |                                                                                                                 |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>AC Conducted Emission</b>                                                                          | Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + MP3 + Earphone + USB Cable (Charging from Adapter 1) |
|                                                                                                       | Mode 2 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + MP3 + Earphone + USB Cable (Charging from Adapter 2) |
|                                                                                                       | Mode 3 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + MP3 + Earphone + USB Cable (Charging from Adapter 3) |
| <b>Remark:</b> The worst case of conducted emission is mode 3; only the test data of it was reported. |                                                                                                                 |



| Ch. #    |        | Band I : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 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 : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 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 : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 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 : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 802.11ac VHT20         | 802.11ac VHT20          | 802.11ac VHT20          |
| L        | Low    | 36                     | 52                      | 100                     |
| M        | Middle | 44                     | 60                      | 116                     |
| H        | High   | 48                     | 64                      | 140                     |
| Straddle |        |                        |                         | 144                     |

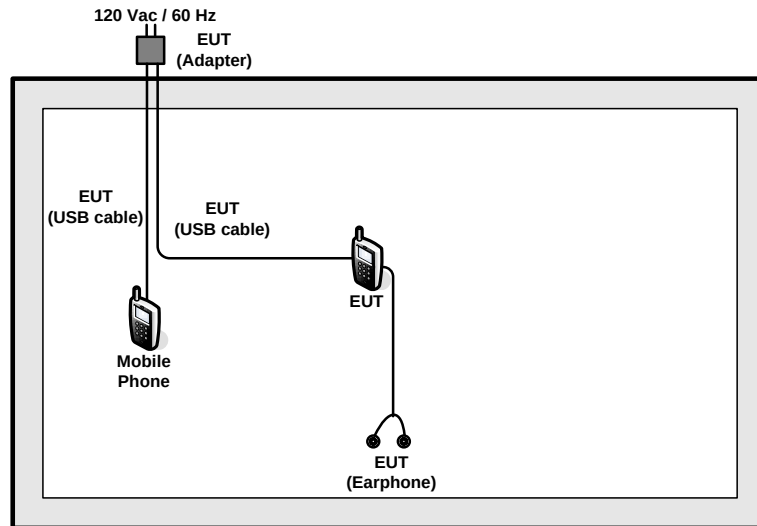
| Ch. #    |        | Band I : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 802.11ac VHT40         | 802.11ac VHT40          | 802.11ac VHT40          |
| L        | Low    | 38                     | 54                      | 102                     |
| M        | Middle | -                      | -                       | 110                     |
| H        | High   | 46                     | 62                      | 134                     |
| Straddle |        |                        |                         | 142                     |

| Ch. #    |        | Band I : 5150-5250 MHz | Band II : 5250-5350 MHz | Band III : 5470-5725MHz |
|----------|--------|------------------------|-------------------------|-------------------------|
|          |        | 802.11ac VHT80         | 802.11ac VHT80          | 802.11ac VHT80          |
| L        | Low    | -                      | -                       | -                       |
| M        | Middle | 42                     | 58                      | 106                     |
| H        | High   | -                      | -                       | -                       |
| Straddle |        |                        |                         | 138                     |

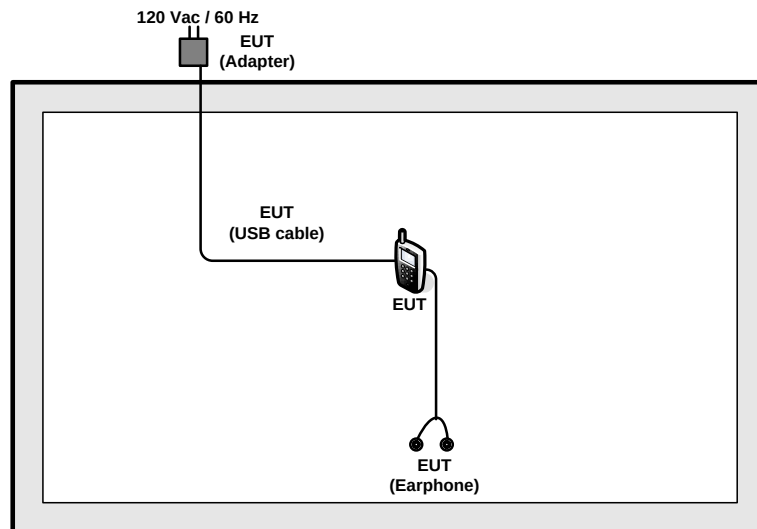
## 2.4 Connection Diagram of Test System

<WLAN Tx Mode>

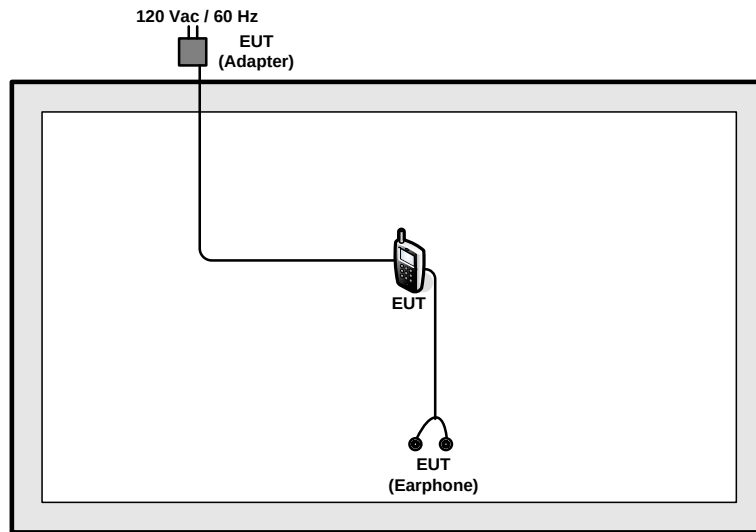
<for Adapter 1>



<for Adapter 2>

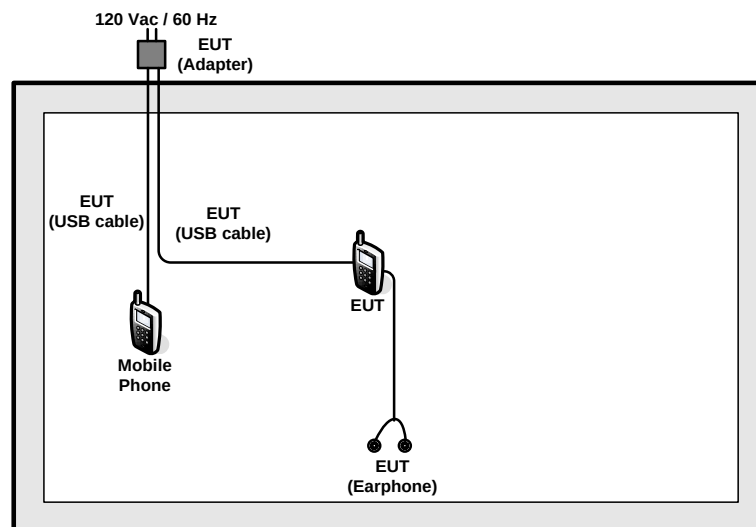


<for Adapter 3>

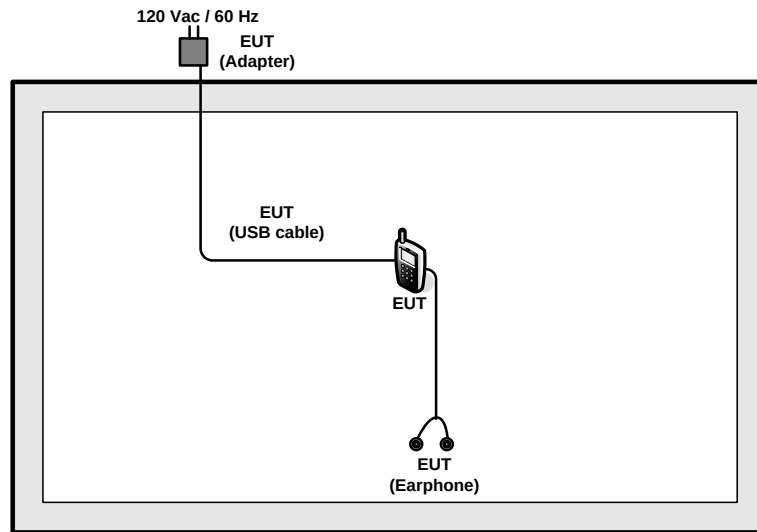


<AC Conducted Emission Mode>

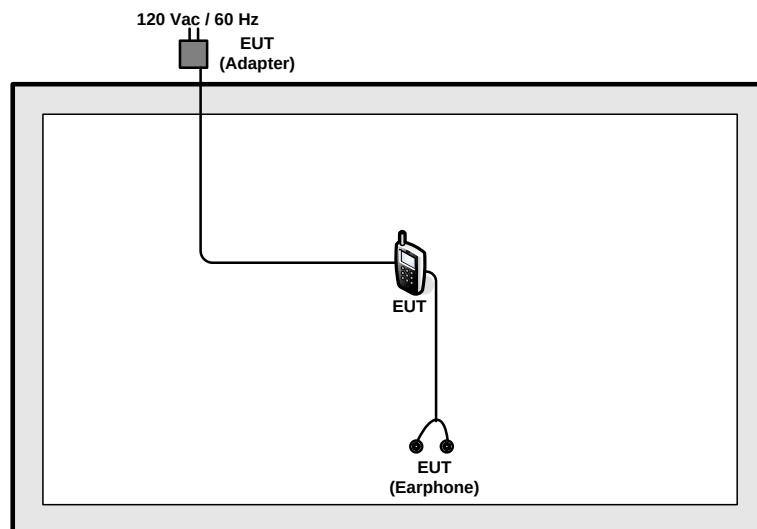
<for Adapter 1>



&lt;for Adapter 2&gt;



&lt;for Adapter 3&gt;



## 2.5 Support Unit used in test configuration and system

| Item | Equipment          | Trade Name             | Model Name     | FCC ID                                       | Data Cable | Power Cord                                                 |
|------|--------------------|------------------------|----------------|----------------------------------------------|------------|------------------------------------------------------------|
| 1.   | System Simulator   | Anritsu                | MT8820C        | N/A                                          | N/A        | Unshielded, 1.8 m                                          |
| 2.   | WLAN AP            | D-Link                 | DIR-865L       | KA2IR865LA1                                  | N/A        | Unshielded, 1.8 m                                          |
| 3.   | Bluetooth Earphone | Sony Ericsson          | MW600          | PY7DDA-2029                                  | N/A        | N/A                                                        |
| 4.   | Notebook           | DELL                   | Latitude E6320 | FCC DoC/<br>Contains FCC ID:<br>QDS-BRCM1054 | N/A        | AC I/P:<br>Unshielded, 1.2 m<br>DC O/P:<br>Shielded, 1.8 m |
| 5.   | Mobile Phone       | Motorola Mobility, LLC | 5137           | IHDT56UC2                                    | N/A        | N/A                                                        |
| 6.   | SD Card            | SanDisk                | MicroSD HC     | FCC DoC                                      | N/A        | N/A                                                        |

## 2.6 EUT Operation Test Setup

For WLAN function, programmed RF utility, "QRCT" installed in the EUT provide functions like channel selection and power level for continuous transmitting and receiving signals.

## 2.7 Measurement Results Explanation Example

**For all conducted test items:**

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor 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 and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 4.2 + 10 = 14.2 \text{ (dB)}
 \end{aligned}$$

### 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 were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

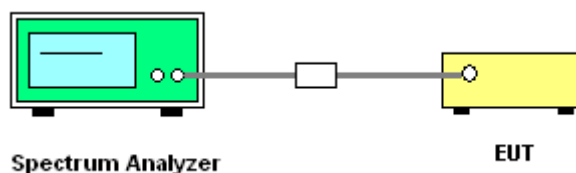
##### 3.1.2 Measuring Instruments

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 v01.  
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)  $\geq 3 * \text{RBW}$ .
8. Measure and record the results in the test report.

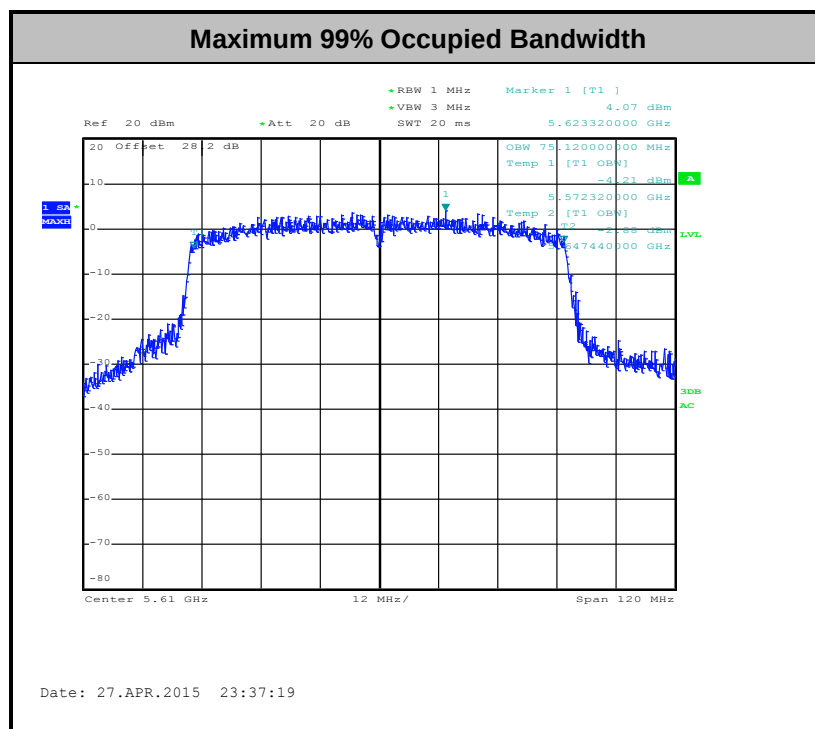
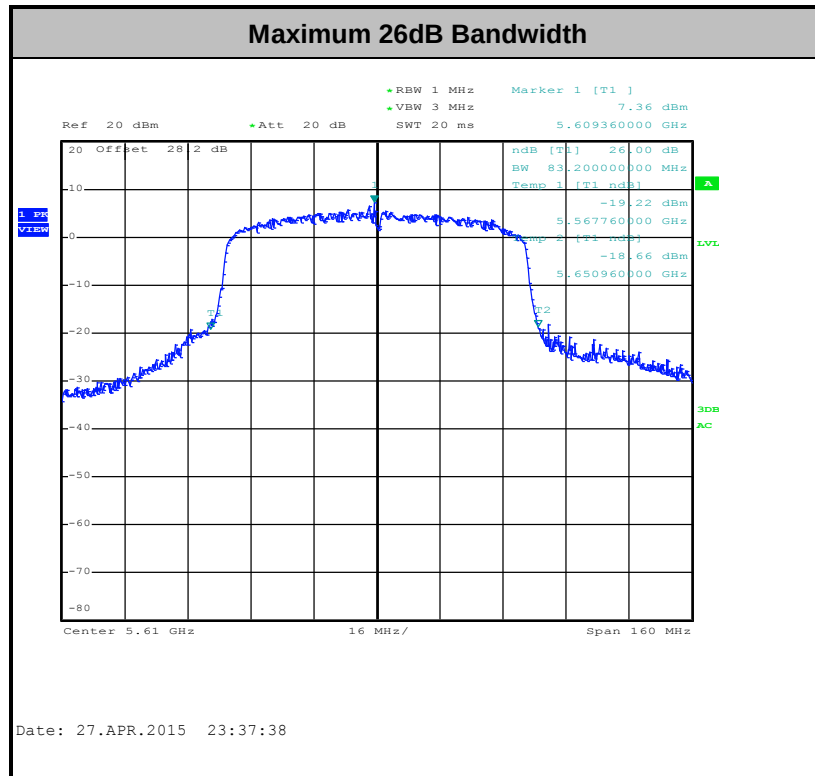
##### 3.1.4 Test Setup





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

Please refer to Appendix A.



**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 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 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 v01.

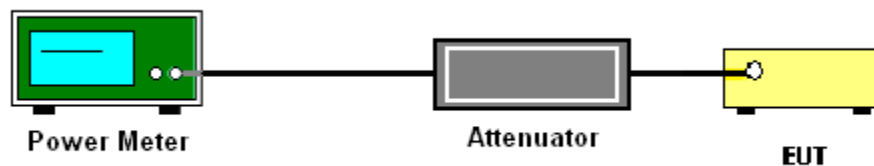
Method PM (Measurement using an RF average power meter):

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.

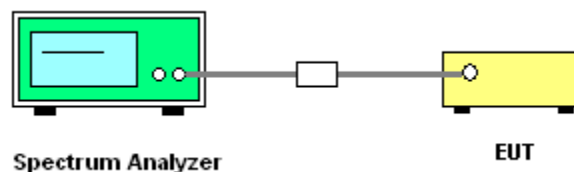
For straddle channel, the testing follows Method SA-3 (RMS detection with max hold) of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

### 3.2.4 Test Setup

For normal channel:



For straddle channel:



### 3.2.5 Test Result of Maximum Conducted Output Power

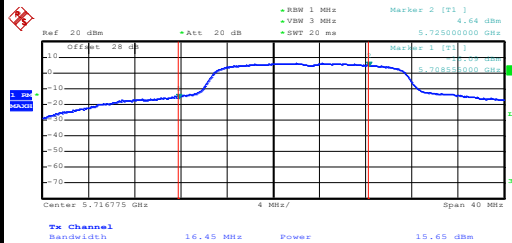
Please refer to Appendix A.



## Maximum Straddle Channel Power

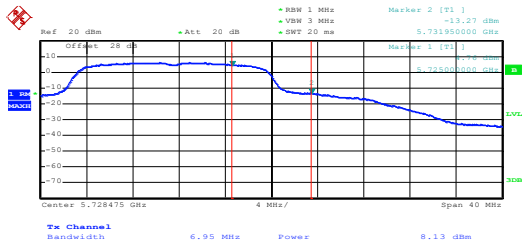
## Ant. 1

## NII-2C Band



Date: 24.APR.2015 22:16:28

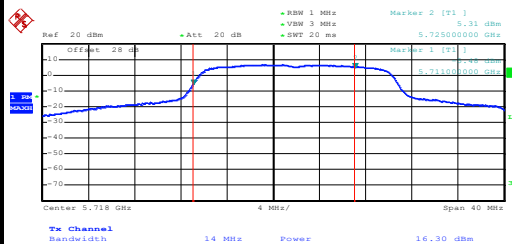
## DTS Band



Date: 24.APR.2015 22:18:01

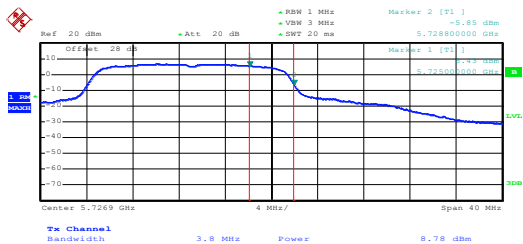
## Ant. 2

## NII-2C Band



Date: 24.APR.2015 22:22:26

## DTS Band



Date: 24.APR.2015 22:23:07



### **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 5.25–5.35 GHz and 5.47–5.725 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 v01.

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).

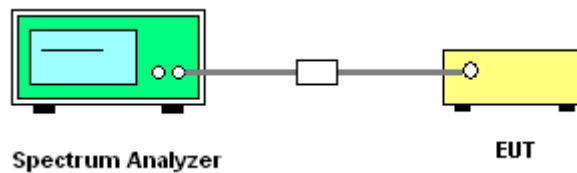
1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
  - Measure the duty cycle.
  - Set span to encompass the entire emission bandwidth (EBW) of the signal.
  - Set RBW = 1 MHz.
  - Set VBW  $\geq$  3 MHz.
  - Number of points in sweep  $\geq$  2 Span / 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 PSD and record it.
4. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (1): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

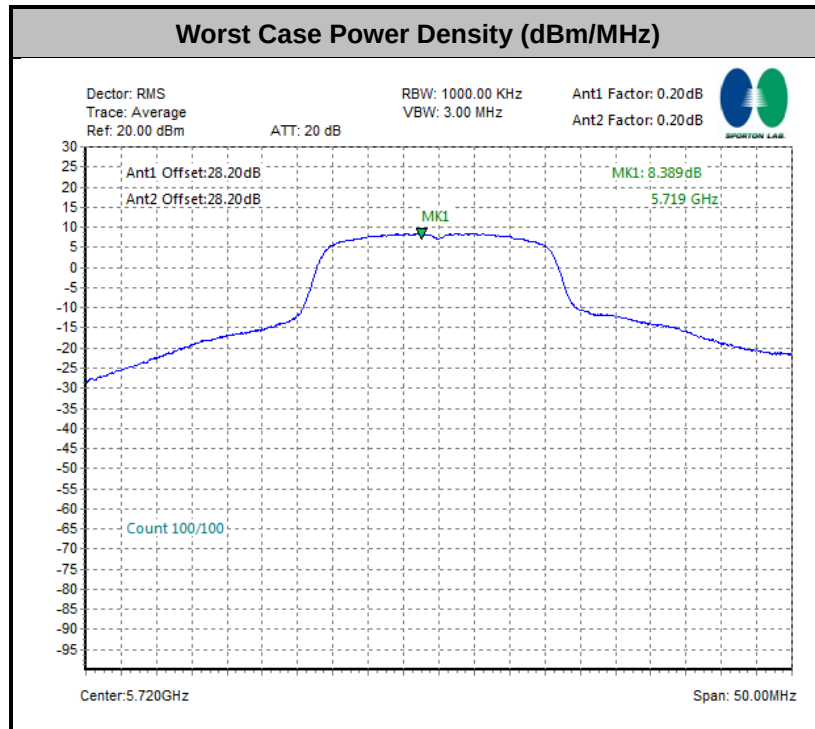
### 3.3.4 Test Setup





### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



### 3.4 Unwanted Emissions 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 Part15.205.

#### 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 per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (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.

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

| EIRP (dBm) | Field Strength at 3m (dBμV/m) |
|------------|-------------------------------|
| -17        | 78.3                          |
| - 27       | 68.3                          |

- (3) KDB789033 v01 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 v01.

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.



| Antenna | Band                          | Duty Cycle(%) | T(us) | 1/T(kHz)    | VBW Setting |
|---------|-------------------------------|---------------|-------|-------------|-------------|
| 1       | 802.11a                       | 95.39         | 2070  | 0.483091787 | 1kHz        |
| 1       | 5GHz 802.11n HT20             | 95.54         | 1930  | 0.518134715 | 1kHz        |
| 1       | 5GHz 802.11n HT40             | 90.48         | 950   | 1.052631579 | 3kHz        |
| 2       | 802.11a                       | 95.37         | 2060  | 0.485436893 | 1kHz        |
| 2       | 5GHz 802.11n HT20             | 94.61         | 1930  | 0.518134715 | 1kHz        |
| 2       | 5GHz 802.11n HT40             | 90.48         | 950   | 1.052631579 | 3kHz        |
| 1+2     | 5GHz 802.11a for Ant 1        | 95.39         | 2070  | 0.483091787 | 1kHz        |
| 1+2     | 5GHz 802.11a for Ant 2        | 95.39         | 2070  | 0.483091787 | 1kHz        |
| 1+2     | 5GHz 802.11n HT20 for Ant 1   | 90.83         | 990   | 1.01010101  | 3kHz        |
| 1+2     | 5GHz 802.11n HT20 for Ant 2   | 90.83         | 990   | 1.01010101  | 3kHz        |
| 1+2     | 5GHz 802.11n HT40 for Ant 1   | 83.22         | 496   | 2.016129032 | 3kHz        |
| 1+2     | 5GHz 802.11n HT40 for Ant 2   | 83.89         | 500   | 2           | 3kHz        |
| 1       | 5GHz 802.11ac VHT20           | 94.61         | 1930  | 0.518134715 | 1kHz        |
| 1       | 5GHz 802.11ac VHT40           | 90.57         | 960   | 1.041666667 | 3kHz        |
| 1       | 5GHz 802.11ac VHT80           | 82.27         | 464   | 2.155172414 | 3kHz        |
| 2       | 5GHz 802.11ac VHT20           | 95.07         | 1930  | 0.518134715 | 1kHz        |
| 2       | 5GHz 802.11ac VHT40           | 90.48         | 950   | 1.052631579 | 3kHz        |
| 2       | 5GHz 802.11ac VHT80           | 82.98         | 468   | 2.136752137 | 3kHz        |
| 1+2     | 5GHz 802.11ac VHT20 for Ant 1 | 94.61         | 1930  | 0.518134715 | 1kHz        |
| 1+2     | 5GHz 802.11ac VHT20 for Ant 2 | 95.57         | 1940  | 0.515463918 | 1kHz        |
| 1+2     | 5GHz 802.11ac VHT40 for Ant 1 | 90.48         | 950   | 1.052631579 | 3kHz        |
| 1+2     | 5GHz 802.11ac VHT40 for Ant 2 | 90.48         | 950   | 1.052631579 | 3kHz        |
| 1+2     | 5GHz 802.11ac VHT80 for Ant 1 | 82.98         | 468   | 2.136752137 | 3kHz        |
| 1+2     | 5GHz 802.11ac VHT80 for Ant 2 | 82.27         | 464   | 2.155172414 | 3kHz        |

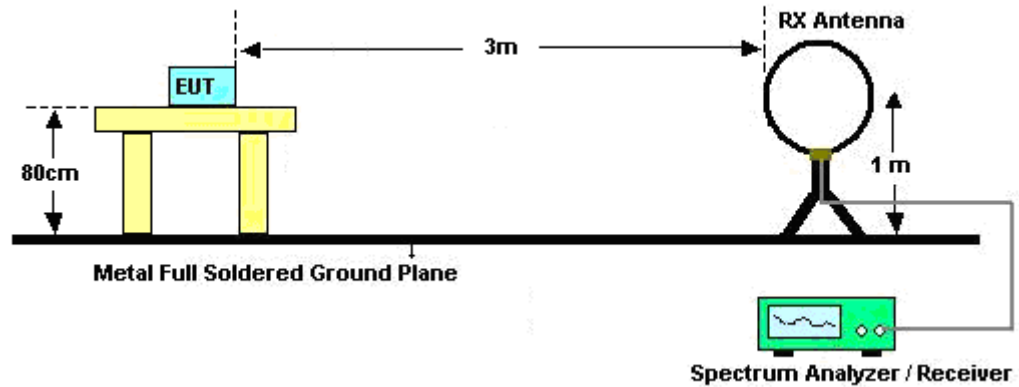
- The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The antenna is a broadband 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.
- 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.



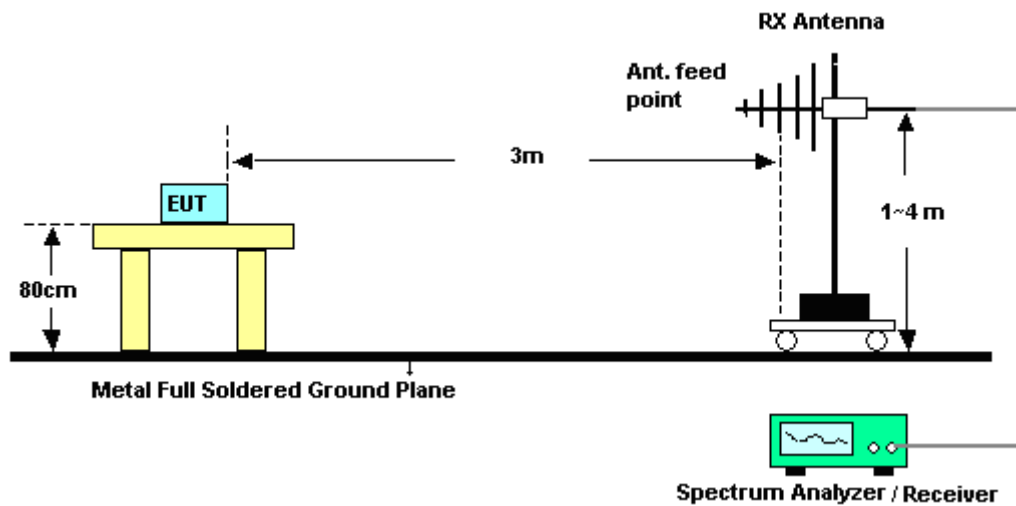
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level 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

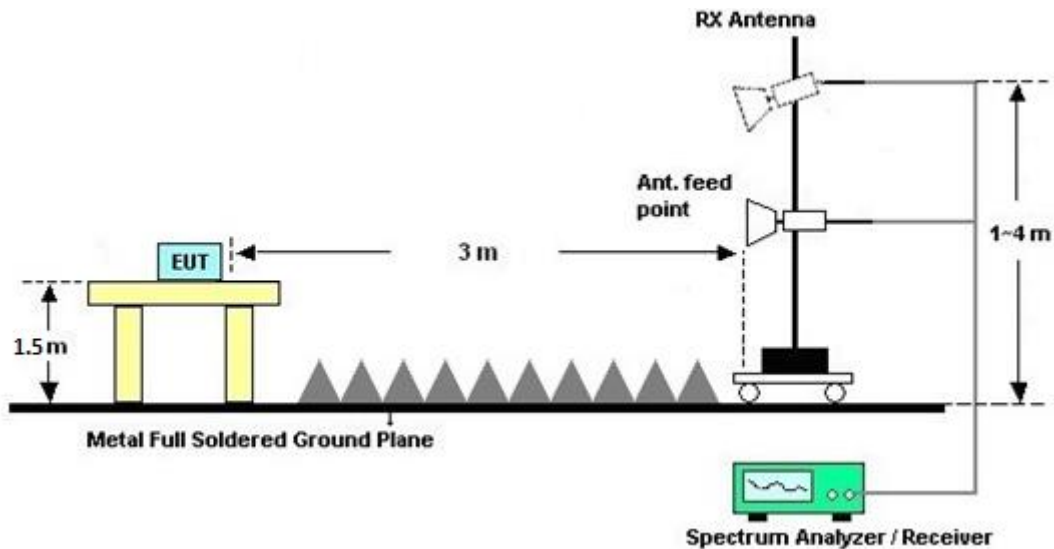
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



### 3.4.5 Test Results of Radiated 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 per 15.31(o) was not reported.

### 3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix A.

### 3.4.7 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix A.

### 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.

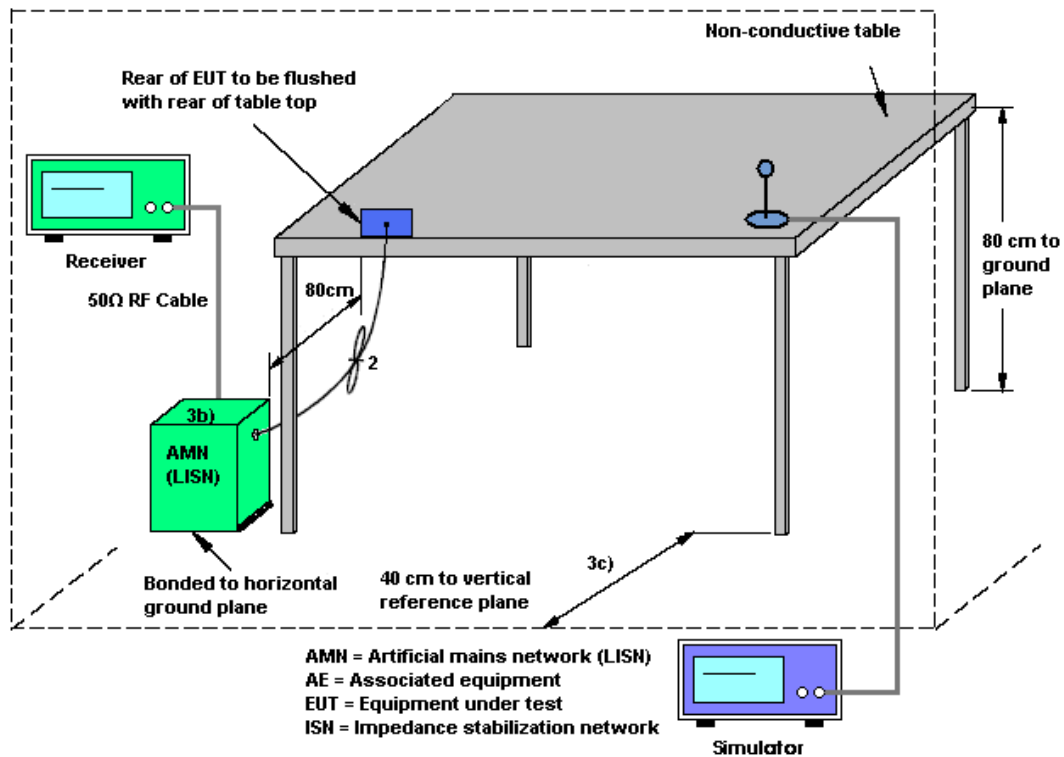
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

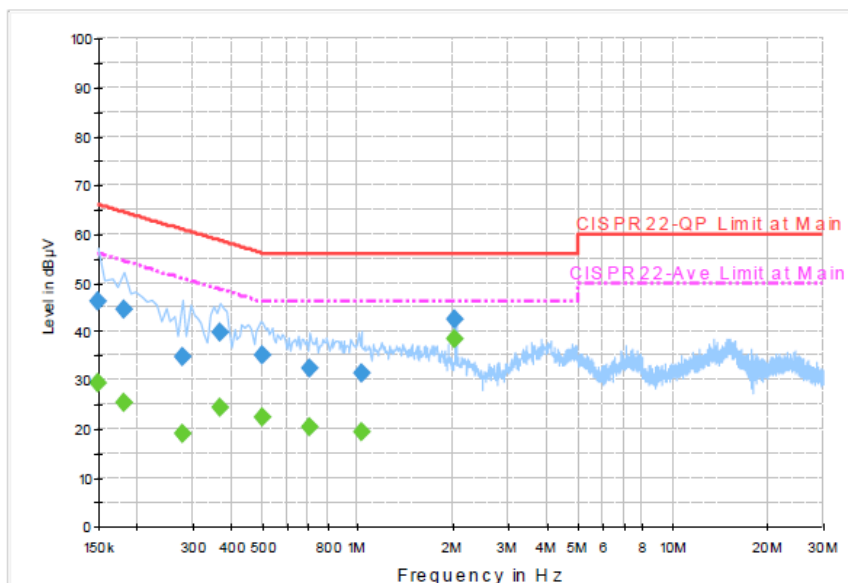
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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 3                                                                                                 | Temperature :       | 22~24°C |
| Test Engineer : | Eric Jeng                                                                                              | Relative Humidity : | 49~51%  |
| Test Voltage :  | 120Vac / 60Hz                                                                                          | Phase :             | Line    |
| Function Type : | GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + MP3 + Earphone + USB Cable (Charging from Adapter 3) |                     |         |



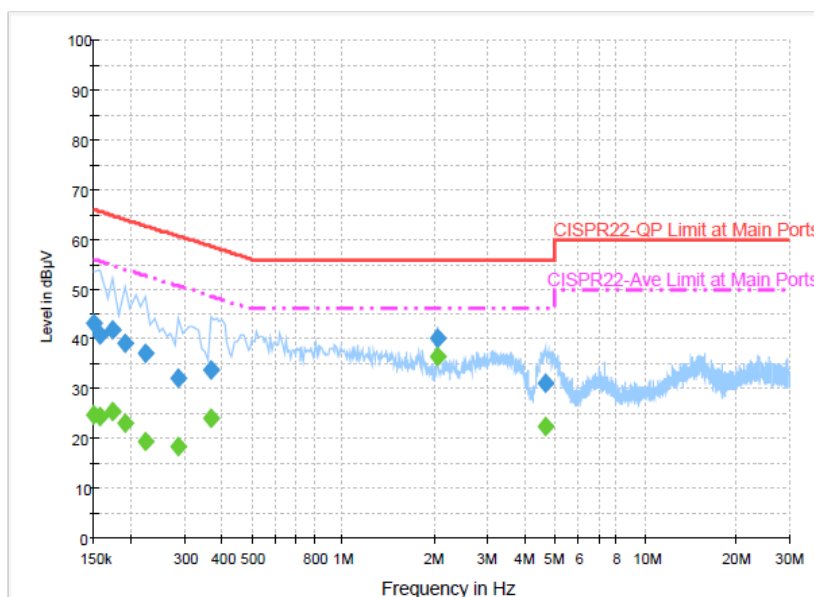
#### Final Result : QuasiPeak

| Frequency (MHz) | QuasiPeak (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|------------------|--------|------|------------|-------------|--------------|
| 0.150000        | 46.1             | Off    | L1   | 19.5       | 19.9        | 66.0         |
| 0.182000        | 44.6             | Off    | L1   | 19.5       | 19.8        | 64.4         |
| 0.278000        | 34.9             | Off    | L1   | 19.4       | 26.0        | 60.9         |
| 0.366000        | 39.8             | Off    | L1   | 19.5       | 18.8        | 58.6         |
| 0.502000        | 35.3             | Off    | L1   | 19.5       | 20.7        | 56.0         |
| 0.702000        | 32.4             | Off    | L1   | 19.6       | 23.6        | 56.0         |
| 1.030000        | 31.5             | Off    | L1   | 19.5       | 24.5        | 56.0         |
| 2.046000        | 42.5             | Off    | L1   | 19.7       | 13.5        | 56.0         |

#### Final Result : Average

| Frequency (MHz) | Average (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|----------------|--------|------|------------|-------------|--------------|
| 0.150000        | 29.4           | Off    | L1   | 19.5       | 26.6        | 56.0         |
| 0.182000        | 25.4           | Off    | L1   | 19.5       | 29.0        | 54.4         |
| 0.278000        | 19.1           | Off    | L1   | 19.4       | 31.8        | 50.9         |
| 0.366000        | 24.3           | Off    | L1   | 19.5       | 24.3        | 48.6         |
| 0.502000        | 22.4           | Off    | L1   | 19.5       | 23.6        | 46.0         |
| 0.702000        | 20.4           | Off    | L1   | 19.6       | 25.6        | 46.0         |
| 1.030000        | 19.4           | Off    | L1   | 19.5       | 26.6        | 46.0         |
| 2.046000        | 38.5           | Off    | L1   | 19.7       | 7.5         | 46.0         |

|                        |                                                                                                        |                            |         |
|------------------------|--------------------------------------------------------------------------------------------------------|----------------------------|---------|
| <b>Test Mode :</b>     | Mode 3                                                                                                 | <b>Temperature :</b>       | 22~24°C |
| <b>Test Engineer :</b> | Eric Jeng                                                                                              | <b>Relative Humidity :</b> | 49~51%  |
| <b>Test Voltage :</b>  | 120Vac / 60Hz                                                                                          | <b>Phase :</b>             | Neutral |
| <b>Function Type :</b> | GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + MP3 + Earphone + USB Cable (Charging from Adapter 3) |                            |         |


**Final Result : QuasiPeak**

| Frequency (MHz) | QuasiPeak (dBμV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBμV) |
|-----------------|------------------|--------|------|------------|-------------|--------------|
| 0.150000        | 43.1             | Off    | N    | 19.5       | 22.9        | 66.0         |
| 0.158000        | 40.7             | Off    | N    | 19.4       | 24.9        | 65.6         |
| 0.174000        | 41.9             | Off    | N    | 19.4       | 22.9        | 64.8         |
| 0.190000        | 39.3             | Off    | N    | 19.5       | 24.7        | 64.0         |
| 0.222000        | 37.0             | Off    | N    | 19.4       | 25.7        | 62.7         |
| 0.286000        | 32.1             | Off    | N    | 19.4       | 28.5        | 60.6         |
| 0.366000        | 33.7             | Off    | N    | 19.5       | 24.9        | 58.6         |
| 2.054000        | 40.1             | Off    | N    | 19.7       | 15.9        | 56.0         |
| 4.702000        | 31.1             | Off    | N    | 19.7       | 24.9        | 56.0         |

**Final Result : Average**

| Frequency (MHz) | Average (dBμV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBμV) |
|-----------------|----------------|--------|------|------------|-------------|--------------|
| 0.150000        | 24.8           | Off    | N    | 19.5       | 31.2        | 56.0         |
| 0.158000        | 24.5           | Off    | N    | 19.4       | 31.1        | 55.6         |
| 0.174000        | 25.4           | Off    | N    | 19.4       | 29.4        | 54.8         |
| 0.190000        | 23.0           | Off    | N    | 19.5       | 31.0        | 54.0         |
| 0.222000        | 19.5           | Off    | N    | 19.4       | 33.2        | 52.7         |
| 0.286000        | 18.4           | Off    | N    | 19.4       | 32.2        | 50.6         |
| 0.366000        | 24.1           | Off    | N    | 19.5       | 24.5        | 48.6         |
| 2.054000        | 36.4           | Off    | N    | 19.7       | 9.6         | 46.0         |
| 4.702000        | 22.4           | Off    | N    | 19.7       | 23.6        | 46.0         |

## 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.

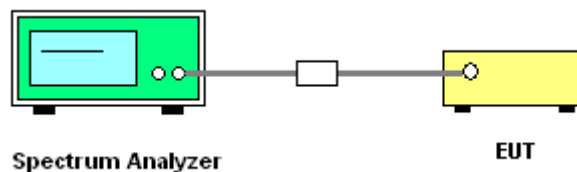
### 3.6.2 Measuring Instruments

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

According to FCC 47 CFR Section 15.407(a)(1)(2), 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

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain =  $G_{ANT}$  + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain =  $10 \log(N_{ANT}/N_{SS}=1)$  dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for  $N_{ANT} \leq 4$ .

The EUT supports CDD mode.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

|          |       |       | DG    | DG    | Power     | PSD       |
|----------|-------|-------|-------|-------|-----------|-----------|
|          |       |       | for   | for   | Limit     | Limit     |
|          | Ant 1 | Ant 2 | Power | PSD   | Reduction | Reduction |
|          | (dBi) | (dBi) | (dBi) | (dBi) | (dB)      | (dB)      |
| Band I   | 0.50  | 0.50  | 0.50  | 3.51  | 0.00      | 0.00      |
| Band II  | 0.50  | 0.50  | 0.50  | 3.51  | 0.00      | 0.00      |
| Band III | 0.00  | 0.00  | 0.00  | 3.01  | 0.00      | 0.00      |

Power limit reduction = Composite gain – 6dBi, ( min = 0 )

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, ( min = 0 )



## 4 List of Measuring Equipment

| Instrument                     | Manufacturer    | Model No.               | Serial No.  | Characteristics | Calibration Date | Test Date                    | Due Date      | Remark                |
|--------------------------------|-----------------|-------------------------|-------------|-----------------|------------------|------------------------------|---------------|-----------------------|
| Power Meter                    | Anritsu         | ML2495A                 | 1036004     | 300MHz~40GHz    | Aug. 09, 2014    | Apr. 21, 2015 ~ May 07, 2015 | Aug. 08, 2015 | Conducted (TH02-HY)   |
| Power Sensor                   | Anritsu         | MA2411B                 | 1027253     | 300MHz~40GHz    | Aug. 11, 2014    | Apr. 21, 2015 ~ May 07, 2015 | Aug. 10, 2015 | Conducted (TH02-HY)   |
| Spectrum Analyzer              | Rohde & Schwarz | FSP40                   | 100055      | 9kHz~40GHz      | Jun. 09, 2014    | Apr. 21, 2015 ~ May 07, 2015 | Jun. 08, 2015 | Conducted (TH02-HY)   |
| Bilog Antenna                  | Schaffner       | CBL6111C                | 2726        | 30MHz ~ 1GHz    | Sep. 27, 2014    | Apr. 29, 2015 ~ May 15, 2015 | Sep. 26, 2015 | Radiation (03CH07-HY) |
| Double Ridge Horn Antenna      | ESCO            | 3117                    | 00075962    | 1GHz ~ 18GHz    | Aug. 19, 2014    | Apr. 29, 2015 ~ May 15, 2015 | Aug. 18, 2015 | Radiation (03CH07-HY) |
| EMI Test Receiver              | Rohde & Schwarz | ESCI 7                  | 100724      | 9kHz~7GHz       | Aug. 30, 2014    | Apr. 29, 2015 ~ May 15, 2015 | Aug. 29, 2015 | Radiation (03CH07-HY) |
| Horn Antenna                   | SCHWARZBECK     | BBHA 9170               | BBHA9170584 | 18GHz- 40GHz    | Nov. 03, 2014    | Apr. 29, 2015 ~ May 15, 2015 | Nov. 02, 2015 | Radiation (03CH07-HY) |
| Loop Antenna                   | Rohde & Schwarz | HFH2-Z2                 | 100315      | 9 kHz~30 MHz    | Jul. 28, 2014    | Apr. 29, 2015 ~ May 15, 2015 | Jul. 27, 2015 | Radiation (03CH07-HY) |
| Preamplifier                   | MITEQ           | AMF-7D-0010 1800-30-10P | 1590075     | 1GHz ~ 18GHz    | Apr. 20, 2015    | Apr. 29, 2015 ~ May 15, 2015 | Apr. 19, 2016 | Radiation (03CH07-HY) |
| Preamplifier                   | COM-POWER       | PA-103A                 | 161241      | 10MHz-1000MHz   | Mar. 12, 2015    | Apr. 29, 2015 ~ May 15, 2015 | Mar. 11, 2016 | Radiation (03CH07-HY) |
| Preamplifier                   | Agilent         | 8449B                   | 3008A02362  | 1GHz~ 26.5GHz   | Oct. 21, 2014    | Apr. 29, 2015 ~ May 15, 2015 | Oct. 20, 2015 | Radiation (03CH07-HY) |
| Signal Analyzer                | Rohde & Schwarz | FSV 30                  | 101749      | 10Hz~30GHz      | Mar. 10, 2015    | Apr. 29, 2015 ~ May 15, 2015 | Mar. 09, 2016 | Radiation (03CH07-HY) |
| Antenna Mast                   | Max-Full        | MFA520BS                | N/A         | 1m~4m           | N/A              | Apr. 29, 2015 ~ May 15, 2015 | N/A           | Radiation (03CH07-HY) |
| Turn Table                     | ChainTek        | Chaintek 3000           | N/A         | 0~360 degree    | N/A              | Apr. 29, 2015 ~ May 15, 2015 | N/A           | Radiation (03CH07-HY) |
| Preamplifier                   | MITEQ           | JS44-1800400 0-33-8P    | 1840917     | 18GHz ~ 40GHz   | Jun. 09, 2014    | Apr. 29, 2015 ~ May 15, 2015 | Jun. 08, 2015 | Radiation (03CH07-HY) |
| EMI Test Receiver              | Rohde & Schwarz | ESCS 30                 | 100356      | 9kHz ~ 2.75GHz  | Dec. 01, 2014    | Apr. 21, 2015 ~ May 17, 2015 | Nov. 30, 2015 | Conduction (CO05-HY)  |
| LISN (for auxiliary equipment) | Rohde & Schwarz | ENV216                  | 100081      | 9kHz ~ 30MHz    | Dec. 08, 2014    | Apr. 21, 2015 ~ May 17, 2015 | Dec. 07, 2015 | Conduction (CO05-HY)  |
| LISN                           | Rohde & Schwarz | ENV216                  | 100080      | 9kHz~30MHz      | Dec. 02, 2014    | Apr. 21, 2015 ~ May 17, 2015 | Dec. 01, 2015 | Conduction (CO05-HY)  |
| AC Power Source                | ChainTek        | APC-1000W               | N/A         | N/A             | N/A              | Apr. 21, 2015 ~ May 17, 2015 | N/A           | Conduction (CO05-HY)  |



## 5 Uncertainty of Evaluation

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

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence<br>of 95% ( $U = 2Uc(y)$ ) | 2.26 |
|----------------------------------------------------------------------------|------|

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

|                                                                            |      |
|----------------------------------------------------------------------------|------|
| Measuring Uncertainty for a Level of Confidence<br>of 95% ( $U = 2Uc(y)$ ) | 4.50 |
|----------------------------------------------------------------------------|------|



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

Report Number : FR541573E

|                |                         |                    |       |    |
|----------------|-------------------------|--------------------|-------|----|
| Test Engineer: | Derek Hsu               | Temperature:       | 24~26 | °C |
| Test Date:     | 2015/04/21 ~ 2015/05/07 | Relative Humidity: | 45~49 | %  |

**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) |       | Note |
|        |           |     |     |             | Ant 1               | Ant 2 | Ant 1                 | Ant 2 | Ant 1                              | Ant 2 | Ant 1                             | Ant 2 |      |
| 11a    | 6Mbps     | 2   | 36  | 5180        | 16.95               | 17.05 | 21.25                 | 21.50 | -                                  | -     | 22.29                             | 22.29 |      |
| 11a    | 6Mbps     | 2   | 44  | 5220        | 16.95               | 17.10 | 21.25                 | 21.45 | -                                  | -     | 22.29                             | 22.29 |      |
| 11a    | 6Mbps     | 2   | 48  | 5240        | 16.95               | 17.10 | 21.25                 | 22.00 | -                                  | -     | 22.29                             | 22.29 |      |
| HT20   | MCS8      | 2   | 36  | 5180        | 17.95               | 18.20 | 22.75                 | 26.00 | -                                  | -     | 22.54                             | 22.54 |      |
| HT20   | MCS8      | 2   | 44  | 5220        | 18.05               | 18.05 | 22.50                 | 22.85 | -                                  | -     | 22.56                             | 22.56 |      |
| HT20   | MCS8      | 2   | 48  | 5240        | 18.00               | 18.05 | 22.55                 | 22.90 | -                                  | -     | 22.55                             | 22.55 |      |
| HT40   | MCS8      | 2   | 38  | 5190        | 36.20               | 36.10 | 41.76                 | 41.85 | -                                  | -     | 23.01                             | 23.01 |      |
| HT40   | MCS8      | 2   | 46  | 5230        | 36.10               | 36.30 | 41.49                 | 43.29 | -                                  | -     | 23.01                             | 23.01 |      |
| VHT20  | MCS0      | 2   | 36  | 5180        | 17.90               | 17.95 | 22.05                 | 22.05 | -                                  | -     | 22.53                             | 22.53 |      |
| VHT20  | MCS0      | 2   | 44  | 5220        | 17.95               | 18.10 | 23.30                 | 22.90 | -                                  | -     | 22.54                             | 22.54 |      |
| VHT20  | MCS0      | 2   | 48  | 5240        | 18.00               | 18.15 | 22.70                 | 26.25 | -                                  | -     | 22.55                             | 22.55 |      |
| VHT40  | MCS0      | 2   | 38  | 5190        | 36.10               | 36.10 | 42.12                 | 41.94 | -                                  | -     | 23.01                             | 23.01 |      |
| VHT40  | MCS0      | 2   | 46  | 5230        | 36.30               | 36.30 | 42.21                 | 43.29 | -                                  | -     | 23.01                             | 23.01 |      |
| VHT80  | MCS6      | 2   | 42  | 5210        | 75.00               | 74.76 | 81.12                 | 80.80 | -                                  | -     | 23.01                             | 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 |
|            |           |     |     |             | Ant 1            | Ant 2 | Ant 1                         | Ant 2 | SUM   | Ant 1                           | Ant 2 | Ant 1    | Ant 2 |  |           |
| 11a        | 6Mbps     | 2   | 36  | 5180        | 0.20             | 0.20  | 14.02                         | 14.17 | 17.11 | 24.00                           |       | 0.50     |       |  | Pass      |
| 11a        | 6Mbps     | 2   | 44  | 5220        | 0.20             | 0.20  | 13.94                         | 14.62 | 17.31 | 24.00                           |       | 0.50     |       |  | Pass      |
| 11a        | 6Mbps     | 2   | 48  | 5240        | 0.20             | 0.20  | 13.85                         | 14.40 | 17.15 | 24.00                           |       | 0.50     |       |  | Pass      |
| HT20       | MCS8      | 2   | 36  | 5180        | 0.42             | 0.42  | 14.02                         | 14.25 | 17.14 | 24.00                           |       | 0.50     |       |  | Pass      |
| HT20       | MCS8      | 2   | 44  | 5220        | 0.42             | 0.42  | 14.48                         | 14.92 | 17.71 | 24.00                           |       | 0.50     |       |  | Pass      |
| HT20       | MCS8      | 2   | 48  | 5240        | 0.42             | 0.42  | 14.32                         | 14.92 | 17.64 | 24.00                           |       | 0.50     |       |  | Pass      |
| HT40       | MCS8      | 2   | 38  | 5190        | 0.80             | 0.76  | 11.07                         | 11.27 | 14.18 | 24.00                           |       | 0.50     |       |  | Pass      |
| HT40       | MCS8      | 2   | 46  | 5230        | 0.80             | 0.76  | 14.06                         | 14.86 | 17.49 | 24.00                           |       | 0.50     |       |  | Pass      |
| VHT20      | MCS0      | 2   | 36  | 5180        | 0.24             | 0.20  | 13.48                         | 13.78 | 16.64 | 24.00                           |       | 0.50     |       |  | Pass      |
| VHT20      | MCS0      | 2   | 44  | 5220        | 0.24             | 0.20  | 14.34                         | 14.82 | 17.60 | 24.00                           |       | 0.50     |       |  | Pass      |
| VHT20      | MCS0      | 2   | 48  | 5240        | 0.24             | 0.20  | 14.24                         | 14.80 | 17.54 | 24.00                           |       | 0.50     |       |  | Pass      |
| VHT40      | MCS0      | 2   | 38  | 5190        | 0.43             | 0.43  | 10.78                         | 10.94 | 13.88 | 24.00                           |       | 0.50     |       |  | Pass      |
| VHT40      | MCS0      | 2   | 46  | 5230        | 0.43             | 0.43  | 14.12                         | 14.75 | 17.46 | 24.00                           |       | 0.50     |       |  | Pass      |
| VHT80      | MCS6      | 2   | 42  | 5210        | 0.81             | 0.85  | 10.42                         | 10.89 | 13.67 | 24.00                           |       | 0.50     |       |  | 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 |
|            |           |     |     |             | Ant 1            | Ant 2 | Ant 1                           | Ant 2 | SUM   | Ant 1                       | Ant 2 | Ant 1    | Ant 2 |            |
| 11a        | 6Mbps     | 2   | 36  | 5180        | 0.20             | 0.20  |                                 |       | 6.04  | 11.00                       | 3.51  |          |       | Pass       |
| 11a        | 6Mbps     | 2   | 44  | 5220        | 0.20             | 0.20  |                                 |       | 6.00  | 11.00                       | 3.51  |          |       | Pass       |
| 11a        | 6Mbps     | 2   | 48  | 5240        | 0.20             | 0.20  |                                 |       | 5.92  | 11.00                       | 3.51  |          |       | Pass       |
| HT20       | MCS8      | 2   | 36  | 5180        | 0.42             | 0.42  |                                 |       | 6.16  | 11.00                       | 3.51  |          |       | Pass       |
| HT20       | MCS8      | 2   | 44  | 5220        | 0.42             | 0.42  |                                 |       | 6.25  | 11.00                       | 3.51  |          |       | Pass       |
| HT20       | MCS8      | 2   | 48  | 5240        | 0.42             | 0.42  |                                 |       | 6.18  | 11.00                       | 3.51  |          |       | Pass       |
| HT40       | MCS8      | 2   | 38  | 5190        | 0.80             | 0.76  |                                 |       | -0.54 | 11.00                       | 3.51  |          |       | Pass       |
| HT40       | MCS8      | 2   | 46  | 5230        | 0.80             | 0.76  |                                 |       | 2.31  | 11.00                       | 3.51  |          |       | Pass       |
| VHT20      | MCS0      | 2   | 36  | 5180        | 0.24             | 0.20  |                                 |       | 6.02  | 11.00                       | 3.51  |          |       | Pass       |
| VHT20      | MCS0      | 2   | 44  | 5220        | 0.24             | 0.20  |                                 |       | 6.27  | 11.00                       | 3.51  |          |       | Pass       |
| VHT20      | MCS0      | 2   | 48  | 5240        | 0.24             | 0.20  |                                 |       | 6.06  | 11.00                       | 3.51  |          |       | Pass       |
| VHT40      | MCS0      | 2   | 38  | 5190        | 0.43             | 0.43  |                                 |       | -0.30 | 11.00                       | 3.51  |          |       | Pass       |
| VHT40      | MCS0      | 2   | 46  | 5230        | 0.43             | 0.43  |                                 |       | 2.61  | 11.00                       | 3.51  |          |       | Pass       |
| VHT80      | MCS6      | 2   | 42  | 5210        | 0.81             | 0.85  |                                 |       | -3.58 | 11.00                       | 3.51  |          |       | 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 |
|         |           |     |     |             | Ant 1               | Ant 2 | Ant 1                 | Ant 2 | Ant 1                              | Ant 2 | Ant 1                             | Ant 2 | Ant 1                                | Ant 2 |      |
| 11a     | 6Mbps     | 2   | 52  | 5260        | 21.80               | 26.05 | 37.65                 | 39.60 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| 11a     | 6Mbps     | 2   | 60  | 5300        | 22.00               | 23.40 | 39.35                 | 39.05 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| 11a     | 6Mbps     | 2   | 64  | 5320        | 17.05               | 17.10 | 23.20                 | 22.35 | 23.32                              |       | 29.32                             |       | 23.98                                |       |      |
| HT20    | MCS8      | 2   | 52  | 5260        | 18.00               | 18.10 | 22.50                 | 22.20 | 23.55                              |       | 29.55                             |       | 23.98                                |       |      |
| HT20    | MCS8      | 2   | 60  | 5300        | 18.05               | 18.10 | 23.00                 | 23.55 | 23.56                              |       | 29.56                             |       | 23.98                                |       |      |
| HT20    | MCS8      | 2   | 64  | 5320        | 18.05               | 18.05 | 22.40                 | 22.65 | 23.56                              |       | 29.56                             |       | 23.98                                |       |      |
| HT40    | MCS8      | 2   | 54  | 5270        | 36.20               | 36.30 | 41.94                 | 44.10 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| HT40    | MCS8      | 2   | 62  | 5310        | 36.20               | 36.20 | 42.21                 | 41.67 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT20   | MCS0      | 2   | 52  | 5260        | 18.00               | 18.15 | 22.85                 | 24.05 | 23.55                              |       | 29.55                             |       | 23.98                                |       |      |
| VHT20   | MCS0      | 2   | 60  | 5300        | 18.00               | 18.10 | 22.70                 | 25.00 | 23.55                              |       | 29.55                             |       | 23.98                                |       |      |
| VHT20   | MCS0      | 2   | 64  | 5320        | 18.00               | 18.10 | 22.75                 | 22.90 | 23.55                              |       | 29.55                             |       | 23.98                                |       |      |
| VHT40   | MCS0      | 2   | 54  | 5270        | 36.20               | 36.50 | 42.39                 | 44.46 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT40   | MCS0      | 2   | 62  | 5310        | 36.20               | 36.30 | 41.94                 | 41.58 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT80   | MCS6      | 2   | 58  | 5290        | 75.00               | 74.88 | 81.28                 | 81.12 | 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) |       |  | Pass/Fail |
|             |           |     |     |             | Ant 1            | Ant 2 | Ant 1                         | Ant 2 | SUM   | Ant 1                           | Ant 2 | Ant 1    | Ant 2 |  |           |
| 11a         | 6Mbps     | 2   | 52  | 5260        | 0.20             | 0.20  | 15.92                         | 16.61 | 19.29 | 23.98                           |       | 0.50     |       |  | Pass      |
| 11a         | 6Mbps     | 2   | 60  | 5300        | 0.20             | 0.20  | 15.90                         | 16.55 | 19.25 | 23.98                           |       | 0.50     |       |  | Pass      |
| 11a         | 6Mbps     | 2   | 64  | 5320        | 0.20             | 0.20  | 14.40                         | 15.24 | 17.86 | 23.98                           |       | 0.50     |       |  | Pass      |
| HT20        | MCS8      | 2   | 52  | 5260        | 0.42             | 0.42  | 14.30                         | 15.14 | 17.75 | 23.98                           |       | 0.50     |       |  | Pass      |
| HT20        | MCS8      | 2   | 60  | 5300        | 0.42             | 0.42  | 14.27                         | 15.09 | 17.71 | 23.98                           |       | 0.50     |       |  | Pass      |
| HT20        | MCS8      | 2   | 64  | 5320        | 0.42             | 0.42  | 14.24                         | 15.07 | 17.68 | 23.98                           |       | 0.50     |       |  | Pass      |
| HT40        | MCS8      | 2   | 54  | 5270        | 0.80             | 0.76  | 14.25                         | 14.98 | 17.64 | 23.98                           |       | 0.50     |       |  | Pass      |
| HT40        | MCS8      | 2   | 62  | 5310        | 0.80             | 0.76  | 13.19                         | 13.84 | 16.54 | 23.98                           |       | 0.50     |       |  | Pass      |
| VHT20       | MCS0      | 2   | 52  | 5260        | 0.24             | 0.20  | 14.23                         | 14.89 | 17.58 | 23.98                           |       | 0.50     |       |  | Pass      |
| VHT20       | MCS0      | 2   | 60  | 5300        | 0.24             | 0.20  | 14.17                         | 14.87 | 17.54 | 23.98                           |       | 0.50     |       |  | Pass      |
| VHT20       | MCS0      | 2   | 64  | 5320        | 0.24             | 0.20  | 14.19                         | 14.86 | 17.55 | 23.98                           |       | 0.50     |       |  | Pass      |
| VHT40       | MCS0      | 2   | 54  | 5270        | 0.43             | 0.43  | 14.04                         | 14.91 | 17.51 | 23.98                           |       | 0.50     |       |  | Pass      |
| VHT40       | MCS0      | 2   | 62  | 5310        | 0.43             | 0.43  | 12.61                         | 13.26 | 15.96 | 23.98                           |       | 0.50     |       |  | Pass      |
| VHT80       | MCS6      | 2   | 58  | 5290        | 0.81             | 0.85  | 11.86                         | 12.70 | 15.31 | 23.98                           |       | 0.50     |       |  | 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 |
|         |           |     |     |             | Ant 1            | Ant 2 | Ant 1                           | Ant 2 | SUM   | Ant 1                       | Ant 2 | Ant 1    | Ant 2 |            |
| 11a     | 6Mbps     | 2   | 52  | 5260        | 0.20             | 0.20  |                                 |       | 8.02  | 11.00                       | 3.51  |          |       | Pass       |
| 11a     | 6Mbps     | 2   | 60  | 5300        | 0.20             | 0.20  |                                 |       | 8.24  | 11.00                       | 3.51  |          |       | Pass       |
| 11a     | 6Mbps     | 2   | 64  | 5320        | 0.20             | 0.20  |                                 |       | 7.40  | 11.00                       | 3.51  |          |       | Pass       |
| HT20    | MCS8      | 2   | 52  | 5260        | 0.42             | 0.42  |                                 |       | 6.02  | 11.00                       | 3.51  |          |       | Pass       |
| HT20    | MCS8      | 2   | 60  | 5300        | 0.42             | 0.42  |                                 |       | 6.27  | 11.00                       | 3.51  |          |       | Pass       |
| HT20    | MCS8      | 2   | 64  | 5320        | 0.42             | 0.42  |                                 |       | 6.25  | 11.00                       | 3.51  |          |       | Pass       |
| HT40    | MCS8      | 2   | 54  | 5270        | 0.80             | 0.76  |                                 |       | 2.36  | 11.00                       | 3.51  |          |       | Pass       |
| HT40    | MCS8      | 2   | 62  | 5310        | 0.80             | 0.76  |                                 |       | 2.31  | 11.00                       | 3.51  |          |       | Pass       |
| VHT20   | MCS0      | 2   | 52  | 5260        | 0.24             | 0.20  |                                 |       | 6.02  | 11.00                       | 3.51  |          |       | Pass       |
| VHT20   | MCS0      | 2   | 60  | 5300        | 0.24             | 0.20  |                                 |       | 6.29  | 11.00                       | 3.51  |          |       | Pass       |
| VHT20   | MCS0      | 2   | 64  | 5320        | 0.24             | 0.20  |                                 |       | 6.27  | 11.00                       | 3.51  |          |       | Pass       |
| VHT40   | MCS0      | 2   | 54  | 5270        | 0.43             | 0.43  |                                 |       | 2.63  | 11.00                       | 3.51  |          |       | Pass       |
| VHT40   | MCS0      | 2   | 62  | 5310        | 0.43             | 0.43  |                                 |       | 1.87  | 11.00                       | 3.51  |          |       | Pass       |
| VHT80   | MCS6      | 2   | 58  | 5290        | 0.81             | 0.85  |                                 |       | -1.89 | 11.00                       | 3.51  |          |       | 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 |
|          |           |     |     |             | Ant 1               | Ant 2 | Ant 1                 | Ant 2 | Ant 1                              | Ant 2 | Ant 1                             | Ant 2 | Ant 1                                | Ant 2 |      |
| 11a      | 6Mbps     | 2   | 100 | 5500        | 17.20               | 17.15 | 23.45                 | 23.70 | 23.34                              |       | 29.34                             |       | 23.98                                |       |      |
| 11a      | 6Mbps     | 2   | 116 | 5580        | 18.85               | 18.85 | 38.80                 | 35.35 | 23.75                              |       | 29.75                             |       | 23.98                                |       |      |
| 11a      | 6Mbps     | 2   | 140 | 5700        | 17.05               | 17.05 | 22.45                 | 21.90 | 23.32                              |       | 29.32                             |       | 23.98                                |       |      |
| HT20     | MCS8      | 2   | 100 | 5500        | 17.95               | 18.05 | 22.20                 | 21.85 | 23.54                              |       | 29.54                             |       | 23.98                                |       |      |
| HT20     | MCS8      | 2   | 116 | 5580        | 18.00               | 18.05 | 22.20                 | 22.00 | 23.55                              |       | 29.55                             |       | 23.98                                |       |      |
| HT20     | MCS8      | 2   | 140 | 5700        | 18.00               | 18.00 | 22.40                 | 21.90 | 23.55                              |       | 29.55                             |       | 23.98                                |       |      |
| HT40     | MCS8      | 2   | 102 | 5510        | 36.10               | 36.10 | 41.76                 | 41.49 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| HT40     | MCS8      | 2   | 110 | 5550        | 36.30               | 36.30 | 41.85                 | 42.84 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| HT40     | MCS8      | 2   | 134 | 5670        | 36.30               | 36.30 | 42.12                 | 42.21 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT20    | MCS0      | 2   | 100 | 5500        | 18.05               | 18.05 | 23.85                 | 22.35 | 23.56                              |       | 29.56                             |       | 23.98                                |       |      |
| VHT20    | MCS0      | 2   | 116 | 5580        | 18.00               | 18.05 | 23.65                 | 22.45 | 23.55                              |       | 29.55                             |       | 23.98                                |       |      |
| VHT20    | MCS0      | 2   | 140 | 5700        | 17.95               | 17.95 | 22.90                 | 22.35 | 23.54                              |       | 29.54                             |       | 23.98                                |       |      |
| VHT40    | MCS0      | 2   | 102 | 5510        | 36.20               | 36.30 | 41.85                 | 42.03 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT40    | MCS0      | 2   | 110 | 5550        | 36.30               | 36.40 | 45.54                 | 44.01 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT40    | MCS0      | 2   | 134 | 5670        | 36.40               | 36.30 | 42.12                 | 43.29 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT80    | MCS6      | 2   | 106 | 5530        | 75.12               | 74.76 | 81.28                 | 81.44 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
| VHT80    | MCS6      | 2   | 122 | 5610        | 75.12               | 75.12 | 82.56                 | 83.20 | 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) |       |      | Pass/Fail |
|              |           |     |     |             | Ant 1            | Ant 2 | Ant 1                         | Ant 2 | SUM   | Ant 1                           | Ant 2 | Ant 1    | Ant 2 |      |           |
| 11a          | 6Mbps     | 2   | 100 | 5500        | 0.20             | 0.20  | 15.22                         | 15.60 | 18.43 | 23.98                           | 0.00  |          |       | Pass |           |
| 11a          | 6Mbps     | 2   | 116 | 5580        | 0.20             | 0.20  | 16.12                         | 16.71 | 19.44 | 23.98                           | 0.00  |          |       | Pass |           |
| 11a          | 6Mbps     | 2   | 140 | 5700        | 0.20             | 0.20  | 14.52                         | 15.20 | 17.89 | 23.98                           | 0.00  |          |       | Pass |           |
| HT20         | MCS8      | 2   | 100 | 5500        | 0.42             | 0.42  | 15.00                         | 15.59 | 18.31 | 23.98                           | 0.00  |          |       | Pass |           |
| HT20         | MCS8      | 2   | 116 | 5580        | 0.42             | 0.42  | 14.58                         | 15.24 | 17.93 | 23.98                           | 0.00  |          |       | Pass |           |
| HT20         | MCS8      | 2   | 140 | 5700        | 0.42             | 0.42  | 14.57                         | 15.18 | 17.89 | 23.98                           | 0.00  |          |       | Pass |           |
| HT40         | MCS8      | 2   | 102 | 5510        | 0.80             | 0.76  | 12.18                         | 12.54 | 15.37 | 23.98                           | 0.00  |          |       | Pass |           |
| HT40         | MCS8      | 2   | 110 | 5550        | 0.80             | 0.76  | 14.57                         | 15.13 | 17.87 | 23.98                           | 0.00  |          |       | Pass |           |
| HT40         | MCS8      | 2   | 134 | 5670        | 0.80             | 0.76  | 14.33                         | 15.17 | 17.78 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT20        | MCS0      | 2   | 100 | 5500        | 0.24             | 0.20  | 14.82                         | 15.28 | 18.06 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT20        | MCS0      | 2   | 116 | 5580        | 0.24             | 0.20  | 14.78                         | 15.21 | 18.01 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT20        | MCS0      | 2   | 140 | 5700        | 0.24             | 0.20  | 14.41                         | 15.15 | 17.80 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT40        | MCS0      | 2   | 102 | 5510        | 0.43             | 0.43  | 12.06                         | 12.38 | 15.24 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT40        | MCS0      | 2   | 110 | 5550        | 0.43             | 0.43  | 14.45                         | 15.06 | 17.78 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT40        | MCS0      | 2   | 134 | 5670        | 0.43             | 0.43  | 14.25                         | 15.09 | 17.71 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT80        | MCS6      | 2   | 106 | 5530        | 3.28             | 3.28  | 10.55                         | 11.20 | 13.90 | 23.98                           | 0.00  |          |       | Pass |           |
| VHT80        | MCS6      | 2   | 122 | 5610        | 3.28             | 3.28  | 13.18                         | 13.77 | 16.49 | 23.98                           | 0.00  |          |       | 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 |
|          |           |     |     |             | Ant 1            | Ant 2 | Ant 1                           | Ant 2 | SUM   | Ant 1                       | Ant 2 | Ant 1    | Ant 2 |            |
| 11a      | 6Mbps     | 2   | 100 | 5500        | 0.20             | 0.20  |                                 |       | 8.28  | 11.00                       |       | 3.01     |       | Pass       |
| 11a      | 6Mbps     | 2   | 116 | 5580        | 0.20             | 0.20  |                                 |       | 7.75  | 11.00                       |       | 3.01     |       | Pass       |
| 11a      | 6Mbps     | 2   | 140 | 5700        | 0.20             | 0.20  |                                 |       | 7.70  | 11.00                       |       | 3.01     |       | Pass       |
| HT20     | MCS8      | 2   | 100 | 5500        | 0.42             | 0.42  |                                 |       | 6.08  | 11.00                       |       | 3.01     |       | Pass       |
| HT20     | MCS8      | 2   | 116 | 5580        | 0.42             | 0.42  |                                 |       | 5.84  | 11.00                       |       | 3.01     |       | Pass       |
| HT20     | MCS8      | 2   | 140 | 5700        | 0.42             | 0.42  |                                 |       | 5.87  | 11.00                       |       | 3.01     |       | Pass       |
| HT40     | MCS8      | 2   | 102 | 5510        | 0.80             | 0.76  |                                 |       | 1.15  | 11.00                       |       | 3.01     |       | Pass       |
| HT40     | MCS8      | 2   | 110 | 5550        | 0.80             | 0.76  |                                 |       | 2.21  | 11.00                       |       | 3.01     |       | Pass       |
| HT40     | MCS8      | 2   | 134 | 5670        | 0.80             | 0.76  |                                 |       | 2.55  | 11.00                       |       | 3.01     |       | Pass       |
| VHT20    | MCS0      | 2   | 100 | 5500        | 0.24             | 0.20  |                                 |       | 6.00  | 11.00                       |       | 3.01     |       | Pass       |
| VHT20    | MCS0      | 2   | 116 | 5580        | 0.24             | 0.20  |                                 |       | 5.95  | 11.00                       |       | 3.01     |       | Pass       |
| VHT20    | MCS0      | 2   | 140 | 5700        | 0.24             | 0.20  |                                 |       | 5.97  | 11.00                       |       | 3.01     |       | Pass       |
| VHT40    | MCS0      | 2   | 102 | 5510        | 0.43             | 0.43  |                                 |       | 1.30  | 11.00                       |       | 3.01     |       | Pass       |
| VHT40    | MCS0      | 2   | 110 | 5550        | 0.43             | 0.43  |                                 |       | 2.37  | 11.00                       |       | 3.01     |       | Pass       |
| VHT40    | MCS0      | 2   | 134 | 5670        | 0.43             | 0.43  |                                 |       | 2.69  | 11.00                       |       | 3.01     |       | Pass       |
| VHT80    | MCS6      | 2   | 106 | 5530        | 0.81             | 0.85  |                                 |       | -3.26 | 11.00                       |       | 3.01     |       | Pass       |
| VHT80    | MCS6      | 2   | 122 | 5610        | 0.81             | 0.85  |                                 |       | -1.80 | 11.00                       |       | 3.01     |       | Pass       |

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

| Straddle Channel |           |     |     |             |                     |       |                          |       |                                    |       |                                   |       |                                      |       |      |
|------------------|-----------|-----|-----|-------------|---------------------|-------|--------------------------|-------|------------------------------------|-------|-----------------------------------|-------|--------------------------------------|-------|------|
| Mod.             | Data Rate | NTX | CH. | Freq. (MHz) | 99% Bandwidth (MHz) |       | Emission Bandwidth (MHz) |       | IC 99% Bandwidth Power Limit (dBm) |       | IC 99% Bandwidth EIRP Limit (dBm) |       | FCC 26dB Bandwidth Power Limit (dBm) |       | Note |
|                  |           |     |     |             | Ant 1               | Ant 2 | Ant 1                    | Ant 2 | Ant 1                              | Ant 2 | Ant 1                             | Ant 2 | Ant 1                                | Ant 2 |      |
| 11a              | 6Mbps     | 2   | 144 | 5720        | 23.40               | 17.80 | 36.72                    | 33.35 | -                                  |       | -                                 |       | -                                    |       |      |
|                  |           |     |     | NII-2C      | 16.45               | 14    | 22.04                    | 20.5  | 22.46                              |       | 28.46                             |       | 23.98                                |       |      |
|                  |           |     |     | NII-3       | 6.95                | 3.8   | 14.68                    | 12.85 | 22.80                              |       | 28.80                             |       | -                                    |       |      |
| HT20             | MCS0      | 2   | 144 | 5720        | 18.05               | 18.00 | 22.65                    | 21.85 | -                                  |       | -                                 |       | -                                    |       |      |
|                  |           |     |     | NII-2C      | 14.15               | 14.15 | 16.15                    | 15.95 | 22.51                              |       | 28.51                             |       | 23.03                                |       |      |
|                  |           |     |     | NII-3       | 3.9                 | 3.85  | 6.5                      | 5.9   | 22.85                              |       | 28.85                             |       | -                                    |       |      |
| HT40             | MCS0      | 2   | 142 | 5710        | 36.40               | 36.50 | 41.85                    | 41.85 | -                                  |       | -                                 |       | -                                    |       |      |
|                  |           |     |     | NII-2C      | 33.4                | 33.5  | 36.06                    | 35.88 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
|                  |           |     |     | NII-3       | 3                   | 3     | 5.79                     | 5.97  | 21.77                              |       | 27.77                             |       | -                                    |       |      |
| VHT20            | MCS0      | 2   | 144 | 5720        | 18.05               | 18.05 | 23.10                    | 22.45 | -                                  |       | -                                 |       | -                                    |       |      |
|                  |           |     |     | NII-2C      | 14.15               | 14.15 | 16.15                    | 16.2  | 22.51                              |       | 28.51                             |       | 23.08                                |       |      |
|                  |           |     |     | NII-3       | 3.9                 | 3.9   | 6.95                     | 6.25  | 22.91                              |       | 28.91                             |       | -                                    |       |      |
| VHT40            | MCS0      | 2   | 142 | 5710        | 36.30               | 36.40 | 44.19                    | 42.21 | -                                  |       | -                                 |       | -                                    |       |      |
|                  |           |     |     | NII-2C      | 33.3                | 33.4  | 36.87                    | 36.06 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
|                  |           |     |     | NII-3       | 3                   | 3     | 7.32                     | 6.15  | 21.77                              |       | 27.77                             |       | -                                    |       |      |
| VHT80            | MCS0      | 2   | 138 | 5690        | 75.00               | 75.00 | 81.44                    | 81.92 | -                                  |       | -                                 |       | -                                    |       |      |
|                  |           |     |     | NII-2C      | 72.8                | 72.8  | 75.8                     | 76.12 | 23.98                              |       | 30.00                             |       | 23.98                                |       |      |
|                  |           |     |     | NII-3       | 2.2                 | 2.2   | 5.64                     | 5.8   | 20.42                              |       | 26.42                             |       | -                                    |       |      |

**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 |
|                      |           |     |     |             | Ant 1            | Ant 2 | Ant 1                         | Ant 2 | SUM   | Ant 1                           | Ant 2 | Ant 1    | Ant 2 |           |
| 11a                  | 6Mbps     | 2   | 144 | 5720        | 0.20             | 0.20  | 16.36                         | 17.01 | 19.71 | -                               |       | 0.00     |       | -         |
|                      |           |     |     | NII-2C      | 0.20             | 0.20  | 15.65                         | 16.30 | 19.00 | 23.98                           |       | 0.00     |       | Pass      |
|                      |           |     |     | NII-3       | 0.20             | 0.20  | 8.13                          | 8.78  | 11.48 | -                               |       | 0.00     |       | Pass      |
| HT20                 | MCS8      | 2   | 144 | 5720        | 0.42             | 0.42  | 14.74                         | 15.70 | 18.26 | -                               |       | 0.00     |       | -         |
|                      |           |     |     | NII-2C      | 0.42             | 0.42  | 14.01                         | 14.96 | 17.52 | 23.03                           |       | 0.00     |       | Pass      |
|                      |           |     |     | NII-3       | 0.42             | 0.42  | 6.66                          | 7.63  | 10.18 | -                               |       | 0.00     |       | Pass      |
| HT40                 | MCS8      | 2   | 142 | 5710        | 0.80             | 0.76  | 14.21                         | 15.20 | 17.74 | -                               |       | 0.00     |       | -         |
|                      |           |     |     | NII-2C      | 0.80             | 0.76  | 13.99                         | 14.99 | 17.53 | 23.98                           |       | 0.00     |       | Pass      |
|                      |           |     |     | NII-3       | 0.80             | 0.76  | 1.05                          | 2.01  | 4.57  | -                               |       | 0.00     |       | Pass      |
| VHT20                | MCS0      | 2   | 144 | 5720        | 0.24             | 0.20  | 14.63                         | 15.34 | 18.01 | -                               |       | 0.00     |       | -         |
|                      |           |     |     | NII-2C      | 0.24             | 0.20  | 13.92                         | 14.59 | 17.28 | 23.08                           |       | 0.00     |       | Pass      |
|                      |           |     |     | NII-3       | 0.24             | 0.20  | 6.44                          | 7.32  | 9.91  | -                               |       | 0.00     |       | Pass      |
| VHT40                | MCS0      | 2   | 142 | 5710        | 0.43             | 0.43  | 14.09                         | 15.03 | 17.59 | -                               |       | 0.00     |       | -         |
|                      |           |     |     | NII-2C      | 0.43             | 0.43  | 13.87                         | 14.81 | 12.39 | 23.98                           |       | 0.00     |       | Pass      |
|                      |           |     |     | NII-3       | 0.43             | 0.43  | 0.98                          | 1.88  | 1.69  | -                               |       | 0.00     |       | Pass      |
| VHT80                | MCS0      | 2   | 138 | 5690        | 0.81             | 0.85  | 13.73                         | 13.64 | 16.69 | -                               |       | 0.00     |       | -         |
|                      |           |     |     | NII-2C      | 0.81             | 0.85  | 13.67                         | 13.58 | 16.64 | 23.98                           |       | 0.00     |       | Pass      |
|                      |           |     |     | NII-3       | 0.81             | 0.85  | -5.04                         | -5.14 | -2.08 | -                               |       | 0.00     |       | 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 |
|                  |           |     |     |             | Ant 1            | Ant 2 | Ant 1                           | Ant 2 | SUM   | Ant 1                       | Ant 2 | Ant 1    | Ant 2 |      |            |
| 11a              | 6Mbps     | 2   | 144 | NII-2C      | 0.20             | 0.20  |                                 |       | 8.39  | 11.00                       | 3.01  |          |       | Pass |            |
|                  |           |     |     | NII-3       | 0.20             | 0.20  |                                 |       | 8.39  | 30.00                       | 3.01  |          |       | Pass |            |
| HT20             | MCS0      | 2   | 144 | NII-2C      | 0.42             | 0.42  |                                 |       | 6.34  | 11.00                       | 3.01  |          |       | Pass |            |
|                  |           |     |     | NII-3       | 0.42             | 0.42  |                                 |       | 6.34  | 30.00                       | 3.01  |          |       | Pass |            |
| HT40             | MCS0      | 2   | 142 | NII-2C      | 0.80             | 0.76  |                                 |       | 2.85  | 11.00                       | 3.01  |          |       | Pass |            |
|                  |           |     |     | NII-3       | 0.80             | 0.76  |                                 |       | 2.85  | 30.00                       | 3.01  |          |       | Pass |            |
| VHT20            | MCS0      | 2   | 144 | NII-2C      | 0.24             | 0.20  |                                 |       | 6.45  | 11.00                       | 3.01  |          |       | Pass |            |
|                  |           |     |     | NII-3       | 0.24             | 0.20  |                                 |       | 6.45  | 30.00                       | 3.01  |          |       | Pass |            |
| VHT40            | MCS0      | 2   | 142 | NII-2C      | 0.43             | 0.43  |                                 |       | 2.98  | 11.00                       | 3.01  |          |       | Pass |            |
|                  |           |     |     | NII-3       | 0.43             | 0.43  |                                 |       | 2.98  | 30.00                       | 3.01  |          |       | Pass |            |
| VHT80            | MCS0      | 2   | 138 | NII-2C      | 0.81             | 0.85  |                                 |       | -1.38 | 11.00                       | 3.01  |          |       | Pass |            |
|                  |           |     |     | NII-3       | 0.81             | 0.85  |                                 |       | -1.38 | 30.00                       | 3.01  |          |       | Pass |            |

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

| Band I |           |     |     |             |                        |                           |                           |                  |             |      |
|--------|-----------|-----|-----|-------------|------------------------|---------------------------|---------------------------|------------------|-------------|------|
| Mod.   | Data Rate | NTX | CH. | Freq. (MHz) | Center Frequency (MHz) | Frequency Deviation (MHz) | Frequency Stability (ppm) | Temperature (°C) | Voltage (V) | Note |
| 11a    | 6Mbps     | 2   | 36  | 5180        | 5179.950               | -0.050                    | -9.65                     | 20               | 3.4         |      |
| 11a    | 6Mbps     | 2   | 36  | 5180        | 5179.950               | -0.050                    | -9.65                     | 20               | 4.35        |      |
| 11a    | 6Mbps     | 2   | 36  | 5180        | 5179.950               | -0.050                    | -9.65                     | 20               | 3.9         |      |
| 11a    | 6Mbps     | 2   | 36  | 5180        | 5180.050               | 0.050                     | 9.65                      | -30              | 3.9         |      |
| 11a    | 6Mbps     | 2   | 36  | 5180        | 5180.000               | 0.000                     | 0.00                      | 55               | 3.9         |      |

| Band II |           |     |     |             |                        |                           |                           |                  |             |      |
|---------|-----------|-----|-----|-------------|------------------------|---------------------------|---------------------------|------------------|-------------|------|
| Mod.    | Data Rate | NTX | CH. | Freq. (MHz) | Center Frequency (MHz) | Frequency Deviation (MHz) | Frequency Stability (ppm) | Temperature (°C) | Voltage (V) | Note |
| 11a     | 6Mbps     | 2   | 64  | 5320        | 5319.950               | -0.050                    | -9.40                     | 20               | 3.4         |      |
| 11a     | 6Mbps     | 2   | 64  | 5320        | 5319.950               | -0.050                    | -9.40                     | 20               | 4.35        |      |
| 11a     | 6Mbps     | 2   | 64  | 5320        | 5319.950               | -0.050                    | -9.40                     | 20               | 3.9         |      |
| 11a     | 6Mbps     | 2   | 64  | 5320        | 5320.000               | 0.000                     | 0.00                      | -30              | 3.9         |      |
| 11a     | 6Mbps     | 2   | 64  | 5320        | 5319.950               | -0.050                    | -9.40                     | 55               | 3.9         |      |

| Band III |           |     |     |             |                        |                           |                           |                  |             |      |
|----------|-----------|-----|-----|-------------|------------------------|---------------------------|---------------------------|------------------|-------------|------|
| Mod.     | Data Rate | NTX | CH. | Freq. (MHz) | Center Frequency (MHz) | Frequency Deviation (MHz) | Frequency Stability (ppm) | Temperature (°C) | Voltage (V) | Note |
| 11a      | 6Mbps     | 2   | 100 | 5500        | 5499.900               | -0.100                    | -18.18                    | 20               | 3.4         |      |
| 11a      | 6Mbps     | 2   | 100 | 5500        | 5499.950               | -0.050                    | -9.09                     | 20               | 4.35        |      |
| 11a      | 6Mbps     | 2   | 100 | 5500        | 5499.900               | -0.100                    | -18.18                    | 20               | 3.9         |      |
| 11a      | 6Mbps     | 2   | 100 | 5500        | 5500.050               | 0.050                     | 9.09                      | -30              | 3.9         |      |
| 11a      | 6Mbps     | 2   | 100 | 5500        | 5499.950               | -0.050                    | -9.09                     | 55               | 3.9         |      |



## Appendix B. Radiated Spurious Emission

|                 |                                 |                     |         |
|-----------------|---------------------------------|---------------------|---------|
| Test Engineer : | Nick Yu, Ken Wu, and James Chiu | Temperature :       | 21~23°C |
|                 |                                 | Relative Humidity : | 60~63%  |

### 15E Band 1 - 5150~5250MHz

#### WIFI 802.11a (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11a<br>CH 36<br>5180MHz |      | 5148.8    | 72.59      | -1.41  | 74         | 58.92    | 34.61    | 11.55  | 32.49  | 207    | 323     | P       | H       |
|                             |      | 5150      | 52.83      | -1.17  | 54         | 39.16    | 34.61    | 11.55  | 32.49  | 207    | 323     | A       | H       |
|                             | *    | 5183      | 111.07     | -      | -          | 97.34    | 34.66    | 11.59  | 32.52  | 207    | 323     | P       | H       |
|                             | *    | 5183      | 101.85     | -      | -          | 88.12    | 34.66    | 11.59  | 32.52  | 207    | 323     | A       | H       |
|                             |      |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |      |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |      | 5146.85   | 65.74      | -8.26  | 74         | 52.07    | 34.61    | 11.55  | 32.49  | 308    | 77      | P       | V       |
|                             |      | 5150      | 49.59      | -4.41  | 54         | 35.92    | 34.61    | 11.55  | 32.49  | 308    | 77      | A       | V       |
|                             | *    | 5177      | 107.36     | -      | -          | 93.67    | 34.66    | 11.55  | 32.52  | 308    | 77      | P       | V       |
|                             | *    | 5177      | 97.93      | -      | -          | 84.24    | 34.66    | 11.55  | 32.52  | 308    | 77      | A       | V       |
|                             |      |           |            |        |            |          |          |        |        |        |         |         | V       |
|                             |      |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11a<br>CH 44<br>5220MHz |      | 5140.55   | 58.14      | -15.86 | 74         | 44.43    | 34.61    | 11.55  | 32.45  | 116    | 328     | P       | H       |
|                             |      | 5149.1    | 44.6       | -9.4   | 54         | 30.93    | 34.61    | 11.55  | 32.49  | 116    | 328     | A       | H       |
|                             | *    | 5216      | 112.08     | -      | -          | 98.34    | 34.7     | 11.59  | 32.55  | 116    | 328     | P       | H       |
|                             | *    | 5216      | 102.61     | -      | -          | 88.87    | 34.7     | 11.59  | 32.55  | 116    | 328     | A       | H       |
|                             |      | 5350.33   | 58.41      | -15.59 | 74         | 44.99    | 34.89    | 11.71  | 33.18  | 116    | 328     | P       | H       |
|                             |      | 5408.41   | 44.56      | -9.44  | 54         | 31.25    | 34.96    | 11.74  | 33.39  | 116    | 328     | A       | H       |
|                             |      | 5135.75   | 57.75      | -16.25 | 74         | 44.11    | 34.59    | 11.5   | 32.45  | 287    | 74      | P       | V       |
|                             |      | 5140.4    | 44.26      | -9.74  | 54         | 30.55    | 34.61    | 11.55  | 32.45  | 287    | 74      | A       | V       |
|                             | *    | 5220      | 105.42     | -      | -          | 91.68    | 34.7     | 11.59  | 32.55  | 287    | 74      | P       | V       |
|                             | *    | 5220      | 96.43      | -      | -          | 82.69    | 34.7     | 11.59  | 32.55  | 287    | 74      | A       | V       |
|                             |      | 5361.22   | 57.95      | -16.05 | 74         | 44.51    | 34.91    | 11.71  | 33.18  | 287    | 74      | P       | V       |
|                             |      | 5377.83   | 44.53      | -9.47  | 54         | 31.16    | 34.94    | 11.71  | 33.28  | 287    | 74      | A       | V       |



|                                                  |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|--------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11a</b><br><b>CH 48</b><br><b>5240MHz</b> |                                                                                             | 5111.6  | 57.38  | -16.62 | 74 | 43.74 | 34.56 | 11.5  | 32.42 | 126 | 326 | P | H |
|                                                  |                                                                                             | 5143.55 | 44.65  | -9.35  | 54 | 30.94 | 34.61 | 11.55 | 32.45 | 126 | 326 | A | H |
|                                                  | *                                                                                           | 5236    | 112.62 | -      | -  | 98.92 | 34.73 | 11.62 | 32.65 | 126 | 326 | P | H |
|                                                  | *                                                                                           | 5236    | 102.01 | -      | -  | 88.31 | 34.73 | 11.62 | 32.65 | 126 | 326 | A | H |
|                                                  |                                                                                             | 5418.09 | 57.34  | -16.66 | 74 | 44.01 | 34.98 | 11.74 | 33.39 | 126 | 326 | P | H |
|                                                  |                                                                                             | 5354.95 | 44.72  | -9.28  | 54 | 31.3  | 34.89 | 11.71 | 33.18 | 126 | 326 | A | H |
|                                                  |                                                                                             | 5149.25 | 57.51  | -16.49 | 74 | 43.84 | 34.61 | 11.55 | 32.49 | 300 | 89  | P | V |
|                                                  |                                                                                             | 5143.1  | 44.41  | -9.59  | 54 | 30.7  | 34.61 | 11.55 | 32.45 | 300 | 89  | A | V |
|                                                  | *                                                                                           | 5243    | 106.98 | -      | -  | 93.26 | 34.75 | 11.62 | 32.65 | 300 | 89  | P | V |
|                                                  | *                                                                                           | 5243    | 96.74  | -      | -  | 83.02 | 34.75 | 11.62 | 32.65 | 300 | 89  | A | V |
|                                                  |                                                                                             | 5420.95 | 57.8   | -16.2  | 74 | 44.41 | 34.98 | 11.8  | 33.39 | 300 | 89  | P | V |
|                                                  |                                                                                             | 5389.38 | 44.52  | -9.48  | 54 | 31.12 | 34.94 | 11.74 | 33.28 | 300 | 89  | A | V |
| Remark                                           | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 1 5150~5250MHz

## WIFI 802.11a (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11a<br>CH 36<br>5180MHz |                                                                                             | 10359     | 41.81      | -32.19 | 74         | 48.16    | 37.22    | 16.34  | 59.91  | 100    | 0       | P       | H       |
|                             |                                                                                             | 15540     | 47.53      | -26.47 | 74         | 44.71    | 40.34    | 20.36  | 57.88  | 100    | 0       | P       | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             | 10359     | 42.26      | -31.74 | 74         | 48.61    | 37.22    | 16.34  | 59.91  | 100    | 0       | P       | V       |
|                             |                                                                                             | 15540     | 47.43      | -26.57 | 74         | 44.61    | 40.34    | 20.36  | 57.88  | 100    | 0       | P       | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11a<br>CH 44<br>5220MHz |                                                                                             | 10440     | 43.04      | -30.96 | 74         | 49.22    | 37.26    | 16.41  | 59.85  | 100    | 0       | P       | H       |
|                             |                                                                                             | 15660     | 47.15      | -26.85 | 74         | 44.06    | 40.49    | 20.41  | 57.81  | 100    | 0       | P       | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             | 10440     | 43.14      | -30.86 | 74         | 49.32    | 37.26    | 16.41  | 59.85  | 100    | 0       | P       | V       |
|                             |                                                                                             | 15660     | 47.96      | -26.04 | 74         | 44.87    | 40.49    | 20.41  | 57.81  | 100    | 0       | P       | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11a<br>CH 48<br>5240MHz |                                                                                             | 10480     | 42.5       | -31.5  | 74         | 48.57    | 37.29    | 16.45  | 59.81  | 100    | 0       | P       | H       |
|                             |                                                                                             | 15720     | 48.13      | -25.87 | 74         | 44.88    | 40.57    | 20.45  | 57.77  | 100    | 0       | P       | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             | 10480     | 41.91      | -32.09 | 74         | 47.98    | 37.29    | 16.45  | 59.81  | 100    | 0       | P       | V       |
|                             |                                                                                             | 15720     | 49.46      | -24.54 | 74         | 46.21    | 40.57    | 20.45  | 57.77  | 100    | 0       | P       | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 1 5150~5250MHz

## WIFI 802.11n HT20 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT20<br>CH 36<br>5180MHz |      | 5148.65   | 73         | -1     | 74         | 59.33    | 34.61    | 11.55  | 32.49  | 165    | 313     | P       | H       |
|                                     |      | 5149.85   | 52.92      | -1.08  | 54         | 39.25    | 34.61    | 11.55  | 32.49  | 165    | 313     | A       | H       |
|                                     | *    | 5183      | 110.29     | -      | -          | 96.56    | 34.66    | 11.59  | 32.52  | 165    | 313     | P       | H       |
|                                     | *    | 5183      | 99.78      | -      | -          | 86.05    | 34.66    | 11.59  | 32.52  | 165    | 313     | A       | H       |
|                                     |      |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |      |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |      | 5149.7    | 68.07      | -5.93  | 74         | 54.4     | 34.61    | 11.55  | 32.49  | 306    | 77      | P       | V       |
|                                     |      | 5150      | 47.78      | -6.22  | 54         | 34.11    | 34.61    | 11.55  | 32.49  | 306    | 77      | A       | V       |
|                                     | *    | 5182      | 107.04     | -      | -          | 93.31    | 34.66    | 11.59  | 32.52  | 306    | 77      | P       | V       |
|                                     | *    | 5182      | 95.95      | -      | -          | 82.22    | 34.66    | 11.59  | 32.52  | 306    | 77      | A       | V       |
|                                     |      |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |      |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 44<br>5220MHz |      | 5101.1    | 58.06      | -15.94 | 74         | 44.44    | 34.54    | 11.5   | 32.42  | 120    | 320     | P       | H       |
|                                     |      | 5142.65   | 45.07      | -8.93  | 54         | 31.36    | 34.61    | 11.55  | 32.45  | 120    | 320     | A       | H       |
|                                     | *    | 5220      | 109.62     | -      | -          | 95.88    | 34.7     | 11.59  | 32.55  | 120    | 320     | P       | H       |
|                                     | *    | 5220      | 99.59      | -      | -          | 85.85    | 34.7     | 11.59  | 32.55  | 120    | 320     | A       | H       |
|                                     |      | 5359.02   | 57.62      | -16.38 | 74         | 44.2     | 34.89    | 11.71  | 33.18  | 120    | 320     | P       | H       |
|                                     |      | 5382.67   | 44.84      | -9.16  | 54         | 31.44    | 34.94    | 11.74  | 33.28  | 120    | 320     | A       | H       |
|                                     |      | 5003.15   | 58.07      | -15.93 | 74         | 44.59    | 34.4     | 11.37  | 32.29  | 300    | 74      | P       | V       |
|                                     |      | 5148.8    | 44.76      | -9.24  | 54         | 31.09    | 34.61    | 11.55  | 32.49  | 300    | 74      | A       | V       |
|                                     | *    | 5223      | 106.2      | -      | -          | 92.53    | 34.7     | 11.62  | 32.65  | 300    | 74      | P       | V       |
|                                     | *    | 5223      | 95.56      | -      | -          | 81.89    | 34.7     | 11.62  | 32.65  | 300    | 74      | A       | V       |
|                                     |      | 5408.41   | 57.55      | -16.45 | 74         | 44.24    | 34.96    | 11.74  | 33.39  | 300    | 74      | P       | V       |
|                                     |      | 5413.25   | 44.84      | -9.16  | 54         | 31.51    | 34.98    | 11.74  | 33.39  | 300    | 74      | A       | V       |



|                                                                 |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11n</b><br><b>HT20</b><br><b>CH 48</b><br><b>5240MHz</b> |                                                                                             | 5078.45 | 58.41  | -15.59 | 74 | 44.82 | 34.52 | 11.46 | 32.39 | 112 | 320 | P | H |
|                                                                 |                                                                                             | 5149.7  | 44.97  | -9.03  | 54 | 31.3  | 34.61 | 11.55 | 32.49 | 112 | 320 | A | H |
|                                                                 | *                                                                                           | 5237    | 109.95 | -      | -  | 96.25 | 34.73 | 11.62 | 32.65 | 112 | 320 | P | H |
|                                                                 | *                                                                                           | 5237    | 99.34  | -      | -  | 85.64 | 34.73 | 11.62 | 32.65 | 112 | 320 | A | H |
|                                                                 |                                                                                             | 5397.52 | 58.25  | -15.75 | 74 | 44.83 | 34.96 | 11.74 | 33.28 | 112 | 320 | P | H |
|                                                                 |                                                                                             | 5392.35 | 44.77  | -9.23  | 54 | 31.37 | 34.94 | 11.74 | 33.28 | 112 | 320 | A | H |
|                                                                 |                                                                                             | 5136.65 | 57.05  | -16.95 | 74 | 43.41 | 34.59 | 11.5  | 32.45 | 300 | 74  | P | V |
|                                                                 |                                                                                             | 5149.7  | 44.64  | -9.36  | 54 | 30.97 | 34.61 | 11.55 | 32.49 | 300 | 74  | A | V |
|                                                                 | *                                                                                           | 5242    | 106.57 | -      | -  | 92.85 | 34.75 | 11.62 | 32.65 | 300 | 74  | P | V |
|                                                                 | *                                                                                           | 5242    | 95.61  | -      | -  | 81.89 | 34.75 | 11.62 | 32.65 | 300 | 74  | A | V |
|                                                                 |                                                                                             | 5370.02 | 57.35  | -16.65 | 74 | 43.91 | 34.91 | 11.71 | 33.18 | 300 | 74  | P | V |
|                                                                 |                                                                                             | 5380.69 | 44.88  | -9.12  | 54 | 31.48 | 34.94 | 11.74 | 33.28 | 300 | 74  | A | V |
| Remark                                                          | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 1 5150~5250MHz

## WIFI 802.11n HT20 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT20<br>CH 36<br>5180MHz |                                                                                             | 10360     | 42.34      | -31.66 | 74         | 48.69    | 37.22    | 16.34  | 59.91  | 100    | 0       | P       | H       |
|                                     |                                                                                             | 15540     | 47.68      | -26.32 | 74         | 44.86    | 40.34    | 20.36  | 57.88  | 100    | 0       | P       | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             | 10360     | 42.02      | -31.98 | 74         | 48.37    | 37.22    | 16.34  | 59.91  | 100    | 0       | P       | V       |
|                                     |                                                                                             | 15540     | 47.11      | -26.89 | 74         | 44.29    | 40.34    | 20.36  | 57.88  | 100    | 0       | P       | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 44<br>5220MHz |                                                                                             | 10440     | 43.21      | -30.79 | 74         | 49.39    | 37.26    | 16.41  | 59.85  | 100    | 0       | P       | H       |
|                                     |                                                                                             | 15660     | 46.92      | -27.08 | 74         | 43.83    | 40.49    | 20.41  | 57.81  | 100    | 0       | P       | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             | 10440     | 43.27      | -30.73 | 74         | 49.45    | 37.26    | 16.41  | 59.85  | 100    | 0       | P       | V       |
|                                     |                                                                                             | 15660     | 46.62      | -27.38 | 74         | 43.53    | 40.49    | 20.41  | 57.81  | 100    | 0       | P       | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 48<br>5240MHz |                                                                                             | 10480     | 43.19      | -30.81 | 74         | 49.26    | 37.29    | 16.45  | 59.81  | 100    | 0       | P       | H       |
|                                     |                                                                                             | 15720     | 48.62      | -25.38 | 74         | 45.37    | 40.57    | 20.45  | 57.77  | 100    | 0       | P       | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             | 10480     | 42.88      | -31.12 | 74         | 48.95    | 37.29    | 16.45  | 59.81  | 100    | 0       | P       | V       |
|                                     |                                                                                             | 15720     | 47.81      | -26.19 | 74         | 44.56    | 40.57    | 20.45  | 57.77  | 100    | 0       | P       | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 1 5150~5250MHz

## WIFI 802.11n HT40 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT40<br>CH 38<br>5190MHz |                                                                                             | 5149.7    | 72.43      | -1.57  | 74         | 58.76    | 34.61    | 11.55  | 32.49  | 164    | 312     | P       | H       |
|                                     |                                                                                             | 5149.85   | 50.87      | -3.13  | 54         | 37.2     | 34.61    | 11.55  | 32.49  | 164    | 312     | A       | H       |
|                                     | *                                                                                           | 5190      | 104.13     | -      | -          | 90.4     | 34.66    | 11.59  | 32.52  | 164    | 312     | P       | H       |
|                                     | *                                                                                           | 5190      | 94.02      | -      | -          | 80.29    | 34.66    | 11.59  | 32.52  | 164    | 312     | A       | H       |
|                                     |                                                                                             | 5409.84   | 57.8       | -16.2  | 74         | 44.49    | 34.96    | 11.74  | 33.39  | 164    | 312     | P       | H       |
|                                     |                                                                                             | 5393.89   | 44.89      | -9.11  | 54         | 31.49    | 34.94    | 11.74  | 33.28  | 164    | 312     | A       | H       |
|                                     |                                                                                             | 5147.15   | 65.08      | -8.92  | 74         | 51.41    | 34.61    | 11.55  | 32.49  | 229    | 64      | P       | V       |
|                                     |                                                                                             | 5149.85   | 47.12      | -6.88  | 54         | 33.45    | 34.61    | 11.55  | 32.49  | 229    | 64      | A       | V       |
|                                     | *                                                                                           | 5190      | 98.43      | -      | -          | 84.7     | 34.66    | 11.59  | 32.52  | 229    | 64      | P       | V       |
|                                     | *                                                                                           | 5190      | 88.23      | -      | -          | 74.5     | 34.66    | 11.59  | 32.52  | 229    | 64      | A       | V       |
|                                     |                                                                                             | 5437.78   | 57.96      | -16.04 | 74         | 44.63    | 35.01    | 11.8   | 33.48  | 229    | 64      | P       | V       |
|                                     |                                                                                             | 5379.15   | 44.83      | -9.17  | 54         | 31.46    | 34.94    | 11.71  | 33.28  | 229    | 64      | A       | V       |
| 802.11n<br>HT40<br>CH 46<br>5230MHz |                                                                                             | 5149.7    | 65.62      | -8.38  | 74         | 51.95    | 34.61    | 11.55  | 32.49  | 160    | 313     | P       | H       |
|                                     |                                                                                             | 5149.55   | 47.87      | -6.13  | 54         | 34.2     | 34.61    | 11.55  | 32.49  | 160    | 313     | A       | H       |
|                                     | *                                                                                           | 5234      | 108.34     | -      | -          | 94.64    | 34.73    | 11.62  | 32.65  | 160    | 313     | P       | H       |
|                                     | *                                                                                           | 5234      | 97.37      | -      | -          | 83.67    | 34.73    | 11.62  | 32.65  | 160    | 313     | A       | H       |
|                                     |                                                                                             | 5352.64   | 63.27      | -10.73 | 74         | 49.85    | 34.89    | 11.71  | 33.18  | 160    | 313     | P       | H       |
|                                     |                                                                                             | 5355.72   | 44.92      | -9.08  | 54         | 31.5     | 34.89    | 11.71  | 33.18  | 160    | 313     | A       | H       |
|                                     |                                                                                             | 5142.05   | 60.97      | -13.03 | 74         | 47.26    | 34.61    | 11.55  | 32.45  | 114    | 26      | P       | V       |
|                                     |                                                                                             | 5148.35   | 44.99      | -9.01  | 54         | 31.32    | 34.61    | 11.55  | 32.49  | 114    | 26      | A       | V       |
|                                     | *                                                                                           | 5234      | 101.74     | -      | -          | 88.04    | 34.73    | 11.62  | 32.65  | 114    | 26      | P       | V       |
|                                     | *                                                                                           | 5234      | 90.47      | -      | -          | 76.77    | 34.73    | 11.62  | 32.65  | 114    | 26      | A       | V       |
|                                     |                                                                                             | 5382.45   | 58.09      | -15.91 | 74         | 44.69    | 34.94    | 11.74  | 33.28  | 114    | 26      | P       | V       |
|                                     |                                                                                             | 5400.16   | 45.04      | -8.96  | 54         | 31.73    | 34.96    | 11.74  | 33.39  | 114    | 26      | A       | V       |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 1 5150~5250MHz

## WIFI 802.11n HT40 (Harmonic @ 3m) (with adapter1)

| 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) |
| 802.11n<br>HT40<br>CH 38<br>5190MHz |                                                                                             | 10380     | 43.46      | -30.54 | 74         | 49.78  | 37.23    | 16.34  | 59.89  | 100    | 0       | P     | H     |
|                                     |                                                                                             | 15570     | 48.78      | -25.22 | 74         | 45.88  | 40.38    | 20.38  | 57.86  | 100    | 0       | P     | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             | 10380     | 43.17      | -30.83 | 74         | 49.49  | 37.23    | 16.34  | 59.89  | 100    | 0       | P     | V     |
|                                     |                                                                                             | 15570     | 47.39      | -26.61 | 74         | 44.49  | 40.38    | 20.38  | 57.86  | 100    | 0       | P     | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| 802.11n<br>HT40<br>CH 46<br>5230MHz |                                                                                             | 10460     | 42.88      | -31.12 | 74         | 49.04  | 37.27    | 16.41  | 59.84  | 100    | 0       | P     | H     |
|                                     |                                                                                             | 15690     | 47.54      | -26.46 | 74         | 44.37  | 40.53    | 20.43  | 57.79  | 100    | 0       | P     | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             | 10460     | 43.18      | -30.82 | 74         | 49.34  | 37.27    | 16.41  | 59.84  | 100    | 0       | P     | V     |
|                                     |                                                                                             | 15690     | 48.47      | -25.53 | 74         | 45.3   | 40.53    | 20.43  | 57.79  | 100    | 0       | P     | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E band 1 5150~5250MHz

## WIFI 802.11ac VHT20 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT20<br>CH 36<br>5180MHz |      | 5147.75   | 72.51      | -1.49  | 74         | 58.84    | 34.61    | 11.55  | 32.49  | 135    | 323     | P       | H       |
|                                       |      | 5150      | 52.35      | -1.65  | 54         | 38.68    | 34.61    | 11.55  | 32.49  | 135    | 323     | A       | H       |
|                                       | *    | 5177      | 111.34     | -      | -          | 97.65    | 34.66    | 11.55  | 32.52  | 135    | 323     | P       | H       |
|                                       | *    | 5177      | 101.15     | -      | -          | 87.46    | 34.66    | 11.55  | 32.52  | 135    | 323     | A       | H       |
|                                       |      | 5402.8    | 57.82      | -16.18 | 74         | 44.51    | 34.96    | 11.74  | 33.39  | 135    | 323     | P       | H       |
|                                       |      | 5407.97   | 45.02      | -8.98  | 54         | 31.71    | 34.96    | 11.74  | 33.39  | 135    | 323     | A       | H       |
|                                       |      | 5148.8    | 68.1       | -5.9   | 74         | 54.43    | 34.61    | 11.55  | 32.49  | 324    | 98      | P       | V       |
|                                       |      | 5149.7    | 46.87      | -7.13  | 54         | 33.2     | 34.61    | 11.55  | 32.49  | 324    | 98      | A       | V       |
|                                       | *    | 5181      | 106.04     | -      | -          | 92.31    | 34.66    | 11.59  | 32.52  | 324    | 98      | P       | V       |
|                                       | *    | 5181      | 95.97      | -      | -          | 82.24    | 34.66    | 11.59  | 32.52  | 324    | 98      | A       | V       |
|                                       |      | 5400.05   | 57.66      | -16.34 | 74         | 44.35    | 34.96    | 11.74  | 33.39  | 324    | 98      | P       | V       |
| 802.11ac<br>VHT20<br>CH 44<br>5220MHz |      | 5128.7    | 58.08      | -15.92 | 74         | 44.44    | 34.59    | 11.5   | 32.45  | 119    | 326     | P       | H       |
|                                       |      | 5148.95   | 45.31      | -8.69  | 54         | 31.64    | 34.61    | 11.55  | 32.49  | 119    | 326     | A       | H       |
|                                       | *    | 5218      | 111.3      | -      | -          | 97.56    | 34.7     | 11.59  | 32.55  | 119    | 326     | P       | H       |
|                                       | *    | 5218      | 101.35     | -      | -          | 87.61    | 34.7     | 11.59  | 32.55  | 119    | 326     | A       | H       |
|                                       |      | 5351.43   | 57.93      | -16.07 | 74         | 44.51    | 34.89    | 11.71  | 33.18  | 119    | 326     | P       | H       |
|                                       |      | 5386.52   | 45.18      | -8.82  | 54         | 31.78    | 34.94    | 11.74  | 33.28  | 119    | 326     | A       | H       |
|                                       |      | 5045.15   | 57.59      | -16.41 | 74         | 44.06    | 34.47    | 11.41  | 32.35  | 100    | 344     | P       | V       |
|                                       |      | 5148.35   | 44.58      | -9.42  | 54         | 30.91    | 34.61    | 11.55  | 32.49  | 100    | 344     | A       | V       |
|                                       | *    | 5218      | 102.91     | -      | -          | 89.17    | 34.7     | 11.59  | 32.55  | 100    | 344     | P       | V       |
|                                       | *    | 5218      | 93.22      | -      | -          | 79.48    | 34.7     | 11.59  | 32.55  | 100    | 344     | A       | V       |
|                                       |      | 5401.26   | 57.39      | -16.61 | 74         | 44.08    | 34.96    | 11.74  | 33.39  | 100    | 344     | P       | V       |
|                                       |      | 5444.16   | 44.85      | -9.15  | 54         | 31.52    | 35.01    | 11.8   | 33.48  | 100    | 344     | A       | V       |



|                                                                   |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11ac</b><br><b>VHT20</b><br><b>CH 48</b><br><b>5240MHz</b> |                                                                                             | 5127.8  | 57.6   | -16.4  | 74 | 43.96 | 34.59 | 11.5  | 32.45 | 134 | 321 | P | H |
|                                                                   |                                                                                             | 5144.15 | 44.88  | -9.12  | 54 | 31.21 | 34.61 | 11.55 | 32.49 | 134 | 321 | A | H |
|                                                                   | *                                                                                           | 5241    | 111.12 | -      | -  | 97.42 | 34.73 | 11.62 | 32.65 | 134 | 321 | P | H |
|                                                                   | *                                                                                           | 5241    | 101.61 | -      | -  | 87.91 | 34.73 | 11.62 | 32.65 | 134 | 321 | A | H |
|                                                                   |                                                                                             | 5423.59 | 58.02  | -15.98 | 74 | 44.63 | 34.98 | 11.8  | 33.39 | 134 | 321 | P | H |
|                                                                   |                                                                                             | 5383.88 | 45.18  | -8.82  | 54 | 31.78 | 34.94 | 11.74 | 33.28 | 134 | 321 | A | H |
|                                                                   |                                                                                             | 5143.4  | 57.59  | -16.41 | 74 | 43.88 | 34.61 | 11.55 | 32.45 | 108 | 28  | P | V |
|                                                                   |                                                                                             | 5145.05 | 44.65  | -9.35  | 54 | 30.98 | 34.61 | 11.55 | 32.49 | 108 | 28  | A | V |
|                                                                   | *                                                                                           | 5242    | 103.43 | -      | -  | 89.71 | 34.75 | 11.62 | 32.65 | 108 | 28  | P | V |
|                                                                   | *                                                                                           | 5242    | 93.62  | -      | -  | 79.9  | 34.75 | 11.62 | 32.65 | 108 | 28  | A | V |
|                                                                   |                                                                                             | 5394.22 | 57.6   | -16.4  | 74 | 44.2  | 34.94 | 11.74 | 33.28 | 108 | 28  | P | V |
|                                                                   |                                                                                             | 5378.49 | 44.84  | -9.16  | 54 | 31.47 | 34.94 | 11.71 | 33.28 | 108 | 28  | A | V |
| Remark                                                            | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 1 5150~5250MHz

## WIFI 802.11ac VHT20 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT20<br>CH 36<br>5180MHz |                                                                                             | 10360     | 42.83      | -31.17 | 74         | 49.18    | 37.22    | 16.34  | 59.91  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15540     | 46.94      | -27.06 | 74         | 44.12    | 40.34    | 20.36  | 57.88  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10360     | 41.92      | -32.08 | 74         | 48.27    | 37.22    | 16.34  | 59.91  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15540     | 47.24      | -26.76 | 74         | 44.42    | 40.34    | 20.36  | 57.88  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT20<br>CH 44<br>5220MHz |                                                                                             | 10440     | 42.9       | -31.1  | 74         | 49.08    | 37.26    | 16.41  | 59.85  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15660     | 46.82      | -27.18 | 74         | 43.73    | 40.49    | 20.41  | 57.81  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10440     | 43.9       | -30.1  | 74         | 50.08    | 37.26    | 16.41  | 59.85  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15660     | 47.5       | -26.5  | 74         | 44.41    | 40.49    | 20.41  | 57.81  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT20<br>CH 48<br>5240MHz |                                                                                             | 10480     | 42.68      | -31.32 | 74         | 48.75    | 37.29    | 16.45  | 59.81  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15720     | 48.36      | -25.64 | 74         | 45.11    | 40.57    | 20.45  | 57.77  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10480     | 43.1       | -30.9  | 74         | 49.17    | 37.29    | 16.45  | 59.81  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15720     | 48.42      | -25.58 | 74         | 45.17    | 40.57    | 20.45  | 57.77  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 1 5150~5250MHz

## WIFI 802.11ac VHT40 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT40<br>CH 38<br>5190MHz |                                                                                             | 5143.85   | 72.05      | -1.95  | 74         | 58.38    | 34.61    | 11.55  | 32.49  | 108    | 329     | P       | H       |
|                                       |                                                                                             | 5149.7    | 51.35      | -2.65  | 54         | 37.68    | 34.61    | 11.55  | 32.49  | 108    | 329     | A       | H       |
|                                       | *                                                                                           | 5193      | 104.14     | -      | -          | 90.39    | 34.68    | 11.59  | 32.52  | 108    | 329     | P       | H       |
|                                       | *                                                                                           | 5193      | 94.7       | -      | -          | 80.95    | 34.68    | 11.59  | 32.52  | 108    | 329     | A       | H       |
|                                       |                                                                                             | 5351.98   | 58.39      | -15.61 | 74         | 44.97    | 34.89    | 11.71  | 33.18  | 108    | 329     | P       | H       |
|                                       |                                                                                             | 5378.93   | 45         | -9     | 54         | 31.63    | 34.94    | 11.71  | 33.28  | 108    | 329     | A       | H       |
|                                       |                                                                                             | 5149.85   | 67.63      | -6.37  | 74         | 53.96    | 34.61    | 11.55  | 32.49  | 307    | 91      | P       | V       |
|                                       |                                                                                             | 5148.65   | 47.64      | -6.36  | 54         | 33.97    | 34.61    | 11.55  | 32.49  | 307    | 91      | A       | V       |
|                                       | *                                                                                           | 5191      | 100.65     | -      | -          | 86.9     | 34.68    | 11.59  | 32.52  | 307    | 91      | P       | V       |
|                                       | *                                                                                           | 5191      | 90.03      | -      | -          | 76.28    | 34.68    | 11.59  | 32.52  | 307    | 91      | A       | V       |
|                                       |                                                                                             | 5414.02   | 57.2       | -16.8  | 74         | 43.87    | 34.98    | 11.74  | 33.39  | 307    | 91      | P       | V       |
|                                       |                                                                                             | 5419.52   | 44.85      | -9.15  | 54         | 31.52    | 34.98    | 11.74  | 33.39  | 307    | 91      | A       | V       |
| 802.11ac<br>VHT40<br>CH 46<br>5230MHz |                                                                                             | 5148.8    | 66.8       | -7.2   | 74         | 53.13    | 34.61    | 11.55  | 32.49  | 134    | 326     | P       | H       |
|                                       |                                                                                             | 5149.85   | 47.73      | -6.27  | 54         | 34.06    | 34.61    | 11.55  | 32.49  | 134    | 326     | A       | H       |
|                                       | *                                                                                           | 5234      | 107.94     | -      | -          | 94.24    | 34.73    | 11.62  | 32.65  | 134    | 326     | P       | H       |
|                                       | *                                                                                           | 5234      | 98.17      | -      | -          | 84.47    | 34.73    | 11.62  | 32.65  | 134    | 326     | A       | H       |
|                                       |                                                                                             | 5351.98   | 63.63      | -10.37 | 74         | 50.21    | 34.89    | 11.71  | 33.18  | 134    | 326     | P       | H       |
|                                       |                                                                                             | 5394.33   | 44.91      | -9.09  | 54         | 31.51    | 34.94    | 11.74  | 33.28  | 134    | 326     | A       | H       |
|                                       |                                                                                             | 5145.05   | 58.64      | -15.36 | 74         | 44.97    | 34.61    | 11.55  | 32.49  | 100    | 354     | P       | V       |
|                                       |                                                                                             | 5150      | 45.06      | -8.94  | 54         | 31.39    | 34.61    | 11.55  | 32.49  | 100    | 354     | A       | V       |
|                                       | *                                                                                           | 5227      | 99.23      | -      | -          | 85.53    | 34.73    | 11.62  | 32.65  | 100    | 354     | P       | V       |
|                                       | *                                                                                           | 5227      | 89.67      | -      | -          | 75.97    | 34.73    | 11.62  | 32.65  | 100    | 354     | A       | V       |
|                                       |                                                                                             | 5405.22   | 58.49      | -15.51 | 74         | 45.18    | 34.96    | 11.74  | 33.39  | 100    | 354     | P       | V       |
|                                       |                                                                                             | 5380.91   | 44.96      | -9.04  | 54         | 31.56    | 34.94    | 11.74  | 33.28  | 100    | 354     | A       | V       |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 1 5150~5250MHz

## WIFI 802.11ac VHT40 (Harmonic @ 3m) (with adapter1)

| 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) |
| 802.11ac<br>VHT40<br>CH 38<br>5190MHz |                                                                                             | 10380     | 42.17      | -31.83 | 74         | 48.49  | 37.23    | 16.34  | 59.89  | 100    | 0       | P     | H     |
|                                       |                                                                                             | 15570     | 48.42      | -25.58 | 74         | 45.52  | 40.38    | 20.38  | 57.86  | 100    | 0       | P     | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             | 10380     | 42.18      | -31.82 | 74         | 48.5   | 37.23    | 16.34  | 59.89  | 100    | 0       | P     | V     |
|                                       |                                                                                             | 15570     | 48         | -26    | 74         | 45.1   | 40.38    | 20.38  | 57.86  | 100    | 0       | P     | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| 802.11ac<br>VHT40<br>CH 46<br>5230MHz |                                                                                             | 10460     | 42.76      | -31.24 | 74         | 48.92  | 37.27    | 16.41  | 59.84  | 100    | 0       | P     | H     |
|                                       |                                                                                             | 15690     | 47.3       | -26.7  | 74         | 44.13  | 40.53    | 20.43  | 57.79  | 100    | 0       | P     | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             | 10460     | 43.07      | -30.93 | 74         | 49.23  | 37.27    | 16.41  | 59.84  | 100    | 0       | P     | V     |
|                                       |                                                                                             | 15690     | 47.53      | -26.47 | 74         | 44.36  | 40.53    | 20.43  | 57.79  | 100    | 0       | P     | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E band 1 5150~5250MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m) (with adapter1)

| 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) |
| 802.11ac<br>VHT80<br>CH 42<br>5210MHz |                                                                                             | 5147.15   | 68.88      | -5.12  | 74         | 55.21  | 34.61    | 11.55  | 32.49  | 114    | 327     | P     | H     |
|                                       |                                                                                             | 5148.5    | 52.45      | -1.55  | 54         | 38.78  | 34.61    | 11.55  | 32.49  | 114    | 327     | A     | H     |
|                                       | *                                                                                           | 5210      | 101.78     | -      | -          | 88.04  | 34.7     | 11.59  | 32.55  | 114    | 327     | P     | H     |
|                                       | *                                                                                           | 5210      | 90.17      | -      | -          | 76.43  | 34.7     | 11.59  | 32.55  | 114    | 327     | A     | H     |
|                                       |                                                                                             | 5353.19   | 58.57      | -15.43 | 74         | 45.15  | 34.89    | 11.71  | 33.18  | 114    | 327     | P     | H     |
|                                       |                                                                                             | 5350.22   | 46.16      | -7.84  | 54         | 32.74  | 34.89    | 11.71  | 33.18  | 114    | 327     | A     | H     |
|                                       |                                                                                             | 5148.95   | 63.79      | -10.21 | 74         | 50.12  | 34.61    | 11.55  | 32.49  | 263    | 79      | P     | V     |
|                                       |                                                                                             | 5146.25   | 48.91      | -5.09  | 54         | 35.24  | 34.61    | 11.55  | 32.49  | 263    | 79      | A     | V     |
|                                       | *                                                                                           | 5210      | 98.17      | -      | -          | 84.43  | 34.7     | 11.59  | 32.55  | 263    | 79      | P     | V     |
|                                       | *                                                                                           | 5210      | 87.29      | -      | -          | 73.55  | 34.7     | 11.59  | 32.55  | 263    | 79      | A     | V     |
|                                       |                                                                                             | 5401.37   | 57.91      | -16.09 | 74         | 44.6   | 34.96    | 11.74  | 33.39  | 263    | 79      | P     | V     |
|                                       |                                                                                             | 5350.11   | 46.04      | -7.96  | 54         | 32.62  | 34.89    | 11.71  | 33.18  | 263    | 79      | A     | V     |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |


**15E band 1 5150~5250MHz**
**WIFI 802.11ac VHT80 (Harmonic @ 3m) (with adapter1)**

| 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 ) |
| 802.11ac<br>VHT80<br>CH 42<br>5210MHz |                                                                                             | 10420     | 42.29      | -31.71 | 74         | 48.54    | 37.25    | 16.37  | 59.87  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15630     | 46.37      | -27.63 | 74         | 43.31    | 40.47    | 20.41  | 57.82  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10420     | 42.53      | -31.47 | 74         | 48.78    | 37.25    | 16.37  | 59.87  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15630     | 47.01      | -26.99 | 74         | 43.95    | 40.47    | 20.41  | 57.82  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E Band 2 - 5250~5350MHz

## WIFI 802.11a (Band Edge @ 3m) (with adapter1)

| 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) |
| 802.11a<br>CH 52<br>5260MHz |      | 5138      | 58         | -16    | 74         | 44.36  | 34.59    | 11.5   | 32.45  | 124    | 318     | P     | H     |
|                             |      | 5141.9    | 44.34      | -9.66  | 54         | 30.63  | 34.61    | 11.55  | 32.45  | 124    | 318     | A     | H     |
|                             | *    | 5259      | 113.03     | -      | -          | 99.4   | 34.77    | 11.62  | 32.76  | 124    | 318     | P     | H     |
|                             | *    | 5259      | 103.64     | -      | -          | 90.01  | 34.77    | 11.62  | 32.76  | 124    | 318     | A     | H     |
|                             |      | 5396.09   | 57.78      | -16.22 | 74         | 44.36  | 34.96    | 11.74  | 33.28  | 124    | 318     | P     | H     |
|                             |      | 5377.28   | 44.47      | -9.53  | 54         | 31.13  | 34.91    | 11.71  | 33.28  | 124    | 318     | A     | H     |
|                             |      | 5126.45   | 57.44      | -16.56 | 74         | 43.8   | 34.59    | 11.5   | 32.45  | 300    | 66      | P     | V     |
|                             |      | 5150      | 44.13      | -9.87  | 54         | 30.46  | 34.61    | 11.55  | 32.49  | 300    | 66      | A     | V     |
|                             | *    | 5263      | 108.6      | -      | -          | 94.94  | 34.77    | 11.65  | 32.76  | 300    | 66      | P     | V     |
|                             | *    | 5263      | 98.76      | -      | -          | 85.1   | 34.77    | 11.65  | 32.76  | 300    | 66      | A     | V     |
|                             |      | 5378.49   | 57.79      | -16.21 | 74         | 44.42  | 34.94    | 11.71  | 33.28  | 300    | 66      | P     | V     |
|                             |      | 5395.1    | 44.45      | -9.55  | 54         | 31.03  | 34.96    | 11.74  | 33.28  | 300    | 66      | A     | V     |
| 802.11a<br>CH 60<br>5300MHz |      | 5140.85   | 57.15      | -16.85 | 74         | 43.44  | 34.61    | 11.55  | 32.45  | 200    | 319     | P     | H     |
|                             |      | 5143.55   | 44.18      | -9.82  | 54         | 30.47  | 34.61    | 11.55  | 32.45  | 200    | 319     | A     | H     |
|                             | *    | 5297      | 111.85     | -      | -          | 98.35  | 34.82    | 11.65  | 32.97  | 200    | 319     | P     | H     |
|                             | *    | 5297      | 102.3      | -      | -          | 88.8   | 34.82    | 11.65  | 32.97  | 200    | 319     | A     | H     |
|                             |      | 5353.3    | 65.94      | -8.06  | 74         | 52.52  | 34.89    | 11.71  | 33.18  | 200    | 319     | P     | H     |
|                             |      | 5350.77   | 48.84      | -5.16  | 54         | 35.42  | 34.89    | 11.71  | 33.18  | 200    | 319     | A     | H     |
|                             |      | 5024.6    | 57.76      | -16.24 | 74         | 44.22  | 34.45    | 11.41  | 32.32  | 373    | 72      | P     | V     |
|                             |      | 5148.5    | 44.07      | -9.93  | 54         | 30.4   | 34.61    | 11.55  | 32.49  | 373    | 72      | A     | V     |
|                             | *    | 5302      | 107.82     | -      | -          | 94.29  | 34.82    | 11.68  | 32.97  | 373    | 72      | P     | V     |
|                             | *    | 5302      | 98.43      | -      | -          | 84.9   | 34.82    | 11.68  | 32.97  | 373    | 72      | A     | V     |
|                             |      | 5356.93   | 58.53      | -15.47 | 74         | 45.11  | 34.89    | 11.71  | 33.18  | 373    | 72      | P     | V     |
|                             |      | 5350      | 45.11      | -8.89  | 54         | 31.69  | 34.89    | 11.71  | 33.18  | 373    | 72      | A     | V     |



|                                                  |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|--------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11a</b><br><b>CH 64</b><br><b>5320MHz</b> | *                                                                                           | 5318    | 111.42 | -      | -  | 97.87 | 34.84 | 11.68 | 32.97 | 164 | 308 | P | H |
|                                                  | *                                                                                           | 5318    | 101.7  | -      | -  | 88.15 | 34.84 | 11.68 | 32.97 | 164 | 308 | A | H |
|                                                  |                                                                                             | 5354.62 | 72.67  | -1.33  | 74 | 59.25 | 34.89 | 11.71 | 33.18 | 164 | 308 | P | H |
|                                                  |                                                                                             | 5350.11 | 52.37  | -1.63  | 54 | 38.95 | 34.89 | 11.71 | 33.18 | 164 | 308 | A | H |
|                                                  |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | H |
|                                                  |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | H |
|                                                  | *                                                                                           | 5318    | 106.43 | -      | -  | 92.88 | 34.84 | 11.68 | 32.97 | 371 | 74  | P | V |
|                                                  | *                                                                                           | 5318    | 96.82  | -      | -  | 83.27 | 34.84 | 11.68 | 32.97 | 371 | 74  | A | V |
|                                                  |                                                                                             | 5353.08 | 62.62  | -11.38 | 74 | 49.2  | 34.89 | 11.71 | 33.18 | 371 | 74  | P | V |
|                                                  |                                                                                             | 5350.66 | 45.85  | -8.15  | 54 | 32.43 | 34.89 | 11.71 | 33.18 | 371 | 74  | A | V |
|                                                  |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | V |
|                                                  |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | V |
| Remark                                           | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 2 5250~5350MHz

## WIFI 802.11a (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11a<br>CH 52<br>5260MHz |                                                                                             | 10520     | 42.36      | -31.64 | 74         | 48.33    | 37.32    | 16.49  | 59.78  | 100    | 0       | P       | H       |
|                             |                                                                                             | 15780     | 49.67      | -24.33 | 74         | 46.31    | 40.63    | 20.46  | 57.73  | 100    | 0       | P       | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             | 10520     | 41.83      | -32.17 | 74         | 47.8     | 37.32    | 16.49  | 59.78  | 100    | 0       | P       | V       |
|                             |                                                                                             | 15780     | 50.59      | -23.41 | 74         | 47.23    | 40.63    | 20.46  | 57.73  | 100    | 0       | P       | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11a<br>CH 60<br>5300MHz |                                                                                             | 10600     | 42.58      | -31.42 | 74         | 48.26    | 37.42    | 16.56  | 59.66  | 100    | 0       | P       | H       |
|                             |                                                                                             | 15900     | 49.06      | -24.94 | 74         | 45.42    | 40.78    | 20.52  | 57.66  | 100    | 0       | P       | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             | 10600     | 43.74      | -30.26 | 74         | 49.42    | 37.42    | 16.56  | 59.66  | 100    | 0       | P       | V       |
|                             |                                                                                             | 15900     | 49.04      | -24.96 | 74         | 45.4     | 40.78    | 20.52  | 57.66  | 100    | 0       | P       | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11a<br>CH 64<br>5320MHz |                                                                                             | 10640     | 42.52      | -31.48 | 74         | 48.06    | 37.47    | 16.6   | 59.61  | 100    | 0       | P       | H       |
|                             |                                                                                             | 15960     | 49.02      | -24.98 | 74         | 45.23    | 40.86    | 20.55  | 57.62  | 100    | 0       | P       | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                             |                                                                                             | 10640     | 42.39      | -31.61 | 74         | 47.93    | 37.47    | 16.6   | 59.61  | 1000   | 0       | P       | V       |
|                             |                                                                                             | 15960     | 48.73      | -25.27 | 74         | 44.94    | 40.86    | 20.55  | 57.62  | 100    | 0       | P       | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                             |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 2 5250~5350MHz

## WIFI 802.11n HT20 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT20<br>CH 52<br>5260MHz |      | 5140.4    | 57.14      | -16.86 | 74         | 43.43    | 34.61    | 11.55  | 32.45  | 124    | 318     | P       | H       |
|                                     |      | 5143.85   | 44.6       | -9.4   | 54         | 30.93    | 34.61    | 11.55  | 32.49  | 124    | 318     | A       | H       |
|                                     | *    | 5263      | 110.27     | -      | -          | 96.61    | 34.77    | 11.65  | 32.76  | 124    | 318     | P       | H       |
|                                     | *    | 5263      | 99.68      | -      | -          | 86.02    | 34.77    | 11.65  | 32.76  | 124    | 318     | A       | H       |
|                                     |      | 5427.11   | 57.64      | -16.36 | 74         | 44.34    | 34.98    | 11.8   | 33.48  | 124    | 318     | P       | H       |
|                                     |      | 5362.76   | 44.87      | -9.13  | 54         | 31.43    | 34.91    | 11.71  | 33.18  | 124    | 318     | A       | H       |
|                                     |      | 5128.4    | 57.98      | -16.02 | 74         | 44.34    | 34.59    | 11.5   | 32.45  | 300    | 66      | P       | V       |
|                                     |      | 5142.35   | 44.4       | -9.6   | 54         | 30.69    | 34.61    | 11.55  | 32.45  | 300    | 66      | A       | V       |
|                                     | *    | 5258      | 105.56     | -      | -          | 91.95    | 34.75    | 11.62  | 32.76  | 300    | 66      | P       | V       |
|                                     | *    | 5258      | 95.25      | -      | -          | 81.64    | 34.75    | 11.62  | 32.76  | 300    | 66      | A       | V       |
|                                     |      | 5416.55   | 58.4       | -15.6  | 74         | 45.07    | 34.98    | 11.74  | 33.39  | 300    | 66      | P       | V       |
|                                     |      | 5395.87   | 44.86      | -9.14  | 54         | 31.44    | 34.96    | 11.74  | 33.28  | 300    | 66      | A       | V       |
| 802.11n<br>HT20<br>CH 60<br>5300MHz |      | 5102.75   | 57.6       | -16.4  | 74         | 43.98    | 34.54    | 11.5   | 32.42  | 200    | 319     | P       | H       |
|                                     |      | 5144.15   | 44.39      | -9.61  | 54         | 30.72    | 34.61    | 11.55  | 32.49  | 200    | 319     | A       | H       |
|                                     | *    | 5302      | 108.47     | -      | -          | 94.94    | 34.82    | 11.68  | 32.97  | 200    | 319     | P       | H       |
|                                     | *    | 5302      | 98.09      | -      | -          | 84.56    | 34.82    | 11.68  | 32.97  | 200    | 319     | A       | H       |
|                                     |      | 5350.55   | 63.84      | -10.16 | 74         | 50.42    | 34.89    | 11.71  | 33.18  | 200    | 319     | P       | H       |
|                                     |      | 5350      | 45.75      | -8.25  | 54         | 32.33    | 34.89    | 11.71  | 33.18  | 200    | 319     | A       | H       |
|                                     |      | 5136.8    | 57.37      | -16.63 | 74         | 43.73    | 34.59    | 11.5   | 32.45  | 373    | 72      | P       | V       |
|                                     |      | 5141.6    | 44.52      | -9.48  | 54         | 30.81    | 34.61    | 11.55  | 32.45  | 373    | 72      | A       | V       |
|                                     | *    | 5303      | 104.97     | -      | -          | 91.44    | 34.82    | 11.68  | 32.97  | 373    | 72      | P       | V       |
|                                     | *    | 5303      | 94.24      | -      | -          | 80.71    | 34.82    | 11.68  | 32.97  | 373    | 72      | A       | V       |
|                                     |      | 5410.39   | 57.96      | -16.04 | 74         | 44.65    | 34.96    | 11.74  | 33.39  | 373    | 72      | P       | V       |
|                                     |      | 5395.1    | 44.85      | -9.15  | 54         | 31.43    | 34.96    | 11.74  | 33.28  | 373    | 72      | A       | V       |



|                                                                             |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11n</b><br><br><b>HT20</b><br><br><b>CH 64</b><br><br><b>5320MHz</b> | *                                                                                           | 5318    | 109.25 | -      | -  | 95.7  | 34.84 | 11.68 | 32.97 | 112 | 318 | P | H |
|                                                                             | *                                                                                           | 5318    | 99     | -      | -  | 85.45 | 34.84 | 11.68 | 32.97 | 112 | 318 | A | H |
|                                                                             |                                                                                             | 5351.54 | 70.43  | -3.57  | 74 | 57.01 | 34.89 | 11.71 | 33.18 | 112 | 318 | P | H |
|                                                                             |                                                                                             | 5350.55 | 51.22  | -2.78  | 54 | 37.8  | 34.89 | 11.71 | 33.18 | 112 | 318 | A | H |
|                                                                             |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | H |
|                                                                             |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | H |
|                                                                             | *                                                                                           | 5322    | 105.19 | -      | -  | 91.64 | 34.84 | 11.68 | 32.97 | 371 | 77  | P | V |
|                                                                             | *                                                                                           | 5322    | 94.66  | -      | -  | 81.11 | 34.84 | 11.68 | 32.97 | 371 | 77  | A | V |
|                                                                             |                                                                                             | 5350.77 | 63.97  | -10.03 | 74 | 50.55 | 34.89 | 11.71 | 33.18 | 371 | 77  | P | V |
|                                                                             |                                                                                             | 5350.55 | 45.86  | -8.14  | 54 | 32.44 | 34.89 | 11.71 | 33.18 | 371 | 77  | A | V |
|                                                                             |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | V |
|                                                                             |                                                                                             |         |        |        |    |       |       |       |       |     |     |   | V |
| Remark                                                                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 2 5250~5350MHz

## WIFI 802.11n HT20 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT20<br>CH 52<br>5260MHz |                                                                                             | 10520     | 42.43      | -31.57 | 74         | 48.4     | 37.32    | 16.49  | 59.78  | 100    | 0       | P       | H       |
|                                     |                                                                                             | 15780     | 49.76      | -24.24 | 74         | 46.4     | 40.63    | 20.46  | 57.73  | 100    | 0       | P       | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             | 10520     | 42.33      | -31.67 | 74         | 48.3     | 37.32    | 16.49  | 59.78  | 100    | 0       | P       | V       |
|                                     |                                                                                             | 15780     | 49.95      | -24.05 | 74         | 46.59    | 40.63    | 20.46  | 57.73  | 100    | 0       | P       | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 60<br>5300MHz |                                                                                             | 10600     | 43.91      | -30.09 | 74         | 49.59    | 37.42    | 16.56  | 59.66  | 100    | 0       | P       | H       |
|                                     |                                                                                             | 15900     | 48.57      | -25.43 | 74         | 44.93    | 40.78    | 20.52  | 57.66  | 100    | 0       | P       | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             | 10600     | 43.19      | -30.81 | 74         | 48.87    | 37.42    | 16.56  | 59.66  | 100    | 0       | P       | V       |
|                                     |                                                                                             | 15900     | 48.32      | -25.68 | 74         | 44.68    | 40.78    | 20.52  | 57.66  | 100    | 0       | P       | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 64<br>5320MHz |                                                                                             | 10640     | 42.5       | -31.5  | 74         | 48.04    | 37.47    | 16.6   | 59.61  | 100    | 0       | P       | H       |
|                                     |                                                                                             | 15960     | 47.79      | -26.21 | 74         | 44       | 40.86    | 20.55  | 57.62  | 100    | 0       | P       | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             | 10640     | 42.52      | -31.48 | 74         | 48.06    | 37.47    | 16.6   | 59.61  | 100    | 0       | P       | V       |
|                                     |                                                                                             | 15960     | 48.36      | -25.64 | 74         | 44.57    | 40.86    | 20.55  | 57.62  | 100    | 0       | P       | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 2 5250~5350MHz

## WIFI 802.11n HT40 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT40<br>CH 54<br>5270MHz |                                                                                             | 5112.2    | 61.43      | -12.57 | 74         | 47.79    | 34.56    | 11.5   | 32.42  | 122    | 322     | P       | H       |
|                                     |                                                                                             | 5147      | 44.77      | -9.23  | 54         | 31.1     | 34.61    | 11.55  | 32.49  | 122    | 322     | A       | H       |
|                                     | *                                                                                           | 5270      | 107.27     | -      | -          | 93.61    | 34.77    | 11.65  | 32.76  | 122    | 322     | P       | H       |
|                                     | *                                                                                           | 5270      | 96.95      | -      | -          | 83.29    | 34.77    | 11.65  | 32.76  | 122    | 322     | A       | H       |
|                                     |                                                                                             | 5351.43   | 65.18      | -8.82  | 74         | 51.76    | 34.89    | 11.71  | 33.18  | 122    | 322     | P       | H       |
|                                     |                                                                                             | 5350.33   | 47.47      | -6.53  | 54         | 34.05    | 34.89    | 11.71  | 33.18  | 122    | 322     | A       | H       |
|                                     |                                                                                             | 5070.5    | 57.5       | -16.5  | 74         | 43.94    | 34.49    | 11.46  | 32.39  | 108    | 28      | P       | V       |
|                                     |                                                                                             | 5149.7    | 44.61      | -9.39  | 54         | 30.94    | 34.61    | 11.55  | 32.49  | 108    | 28      | A       | V       |
|                                     | *                                                                                           | 5273      | 100.19     | -      | -          | 86.63    | 34.77    | 11.65  | 32.86  | 108    | 28      | P       | V       |
|                                     | *                                                                                           | 5273      | 89.7       | -      | -          | 76.14    | 34.77    | 11.65  | 32.86  | 108    | 28      | A       | V       |
|                                     |                                                                                             | 5354.84   | 60.12      | -13.88 | 74         | 46.7     | 34.89    | 11.71  | 33.18  | 108    | 28      | P       | V       |
|                                     |                                                                                             | 5350.11   | 45.11      | -8.89  | 54         | 31.69    | 34.89    | 11.71  | 33.18  | 108    | 28      | A       | V       |
| 802.11n<br>HT40<br>CH 62<br>5310MHz |                                                                                             | 5141.45   | 60.87      | -13.13 | 74         | 47.16    | 34.61    | 11.55  | 32.45  | 101    | 324     | P       | H       |
|                                     |                                                                                             | 5141.45   | 44.71      | -9.29  | 54         | 31       | 34.61    | 11.55  | 32.45  | 101    | 324     | A       | H       |
|                                     | *                                                                                           | 5307      | 104.96     | -      | -          | 91.43    | 34.82    | 11.68  | 32.97  | 101    | 324     | P       | H       |
|                                     | *                                                                                           | 5307      | 95.02      | -      | -          | 81.49    | 34.82    | 11.68  | 32.97  | 101    | 324     | A       | H       |
|                                     |                                                                                             | 5355.83   | 71.32      | -2.68  | 74         | 57.9     | 34.89    | 11.71  | 33.18  | 101    | 324     | P       | H       |
|                                     |                                                                                             | 5353.3    | 52.43      | -1.57  | 54         | 39.01    | 34.89    | 11.71  | 33.18  | 101    | 324     | A       | H       |
|                                     |                                                                                             | 5148.8    | 57.61      | -16.39 | 74         | 43.94    | 34.61    | 11.55  | 32.49  | 107    | 30      | P       | V       |
|                                     |                                                                                             | 5123      | 44.64      | -9.36  | 54         | 31       | 34.59    | 11.5   | 32.45  | 107    | 30      | A       | V       |
|                                     | *                                                                                           | 5308      | 98.69      | -      | -          | 85.16    | 34.82    | 11.68  | 32.97  | 107    | 30      | P       | V       |
|                                     | *                                                                                           | 5308      | 88.25      | -      | -          | 74.72    | 34.82    | 11.68  | 32.97  | 107    | 30      | A       | V       |
|                                     |                                                                                             | 5352.53   | 65.73      | -8.27  | 74         | 52.31    | 34.89    | 11.71  | 33.18  | 107    | 30      | P       | V       |
|                                     |                                                                                             | 5354.84   | 47.65      | -6.35  | 54         | 34.23    | 34.89    | 11.71  | 33.18  | 107    | 30      | A       | V       |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 2 5250~5350MHz

## WIFI 802.11n HT40 (Harmonic @ 3m) (with adapter1)

| 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) |
| 802.11n<br>HT40<br>CH 54<br>5270MHz |                                                                                             | 10540     | 44.16      | -29.84 | 74         | 50.08  | 37.34    | 16.49  | 59.75  | 100    | 0       | P     | H     |
|                                     |                                                                                             | 15810     | 49.11      | -24.89 | 74         | 45.67  | 40.67    | 20.48  | 57.71  | 100    | 0       | P     | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             | 10540     | 43.06      | -30.94 | 74         | 48.98  | 37.34    | 16.49  | 59.75  | 100    | 0       | P     | V     |
|                                     |                                                                                             | 15810     | 49.14      | -24.86 | 74         | 45.7   | 40.67    | 20.48  | 57.71  | 100    | 0       | P     | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| 802.11n<br>HT40<br>CH 62<br>5310MHz |                                                                                             | 10620     | 42.28      | -31.72 | 74         | 47.91  | 37.44    | 16.56  | 59.63  | 100    | 0       | P     | H     |
|                                     |                                                                                             | 15930     | 49.09      | -24.91 | 74         | 45.38  | 40.82    | 20.53  | 57.64  | 100    | 0       | P     | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             | 10620     | 43.33      | -30.67 | 74         | 48.96  | 37.44    | 16.56  | 59.63  | 100    | 0       | P     | V     |
|                                     |                                                                                             | 15930     | 48.43      | -25.57 | 74         | 44.72  | 40.82    | 20.53  | 57.64  | 100    | 0       | P     | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E band 2 5250~5350MHz

## WIFI 802.11ac VHT20 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT20<br>CH 52<br>5260MHz |      | 5124.35   | 57.87      | -16.13 | 74         | 44.23    | 34.59    | 11.5   | 32.45  | 104    | 328     | P       | H       |
|                                       |      | 5144.6    | 44.68      | -9.32  | 54         | 31.01    | 34.61    | 11.55  | 32.49  | 104    | 328     | A       | H       |
|                                       | *    | 5264      | 110.58     | -      | -          | 96.92    | 34.77    | 11.65  | 32.76  | 104    | 328     | P       | H       |
|                                       | *    | 5264      | 100.9      | -      | -          | 87.24    | 34.77    | 11.65  | 32.76  | 104    | 328     | A       | H       |
|                                       |      | 5384.98   | 57.97      | -16.03 | 74         | 44.57    | 34.94    | 11.74  | 33.28  | 104    | 328     | P       | H       |
|                                       |      | 5378.82   | 44.92      | -9.08  | 54         | 31.55    | 34.94    | 11.71  | 33.28  | 104    | 328     | A       | H       |
|                                       |      | 5133.35   | 57.54      | -16.46 | 74         | 43.9     | 34.59    | 11.5   | 32.45  | 101    | 28      | P       | V       |
|                                       |      | 5146.7    | 44.81      | -9.19  | 54         | 31.14    | 34.61    | 11.55  | 32.49  | 101    | 28      | A       | V       |
|                                       | *    | 5257      | 102.56     | -      | -          | 88.95    | 34.75    | 11.62  | 32.76  | 101    | 28      | P       | V       |
|                                       | *    | 5257      | 93.38      | -      | -          | 79.77    | 34.75    | 11.62  | 32.76  | 101    | 28      | A       | V       |
|                                       |      | 5406.54   | 57.63      | -16.37 | 74         | 44.32    | 34.96    | 11.74  | 33.39  | 101    | 28      | P       | V       |
|                                       |      | 5394.55   | 44.92      | -9.08  | 54         | 31.5     | 34.96    | 11.74  | 33.28  | 101    | 28      | A       | V       |
| 802.11ac<br>VHT20<br>CH 60<br>5300MHz |      | 5145.5    | 57.75      | -16.25 | 74         | 44.08    | 34.61    | 11.55  | 32.49  | 147    | 324     | P       | H       |
|                                       |      | 5149.4    | 44.57      | -9.43  | 54         | 30.9     | 34.61    | 11.55  | 32.49  | 147    | 324     | A       | H       |
|                                       | *    | 5298      | 110.63     | -      | -          | 97.13    | 34.82    | 11.65  | 32.97  | 147    | 324     | P       | H       |
|                                       | *    | 5298      | 100.78     | -      | -          | 87.28    | 34.82    | 11.65  | 32.97  | 147    | 324     | A       | H       |
|                                       |      | 5350.44   | 65.81      | -8.19  | 74         | 52.39    | 34.89    | 11.71  | 33.18  | 147    | 324     | P       | H       |
|                                       |      | 5350.11   | 46.61      | -7.39  | 54         | 33.19    | 34.89    | 11.71  | 33.18  | 147    | 324     | A       | H       |
|                                       |      | 5088.2    | 57.26      | -16.74 | 74         | 43.67    | 34.52    | 11.46  | 32.39  | 101    | 27      | P       | V       |
|                                       |      | 5143.1    | 44.62      | -9.38  | 54         | 30.91    | 34.61    | 11.55  | 32.45  | 101    | 27      | A       | V       |
|                                       | *    | 5299      | 102.61     | -      | -          | 89.11    | 34.82    | 11.65  | 32.97  | 101    | 27      | P       | V       |
|                                       | *    | 5299      | 92.92      | -      | -          | 79.42    | 34.82    | 11.65  | 32.97  | 101    | 27      | A       | V       |
|                                       |      | 5355.61   | 57.91      | -16.09 | 74         | 44.49    | 34.89    | 11.71  | 33.18  | 101    | 27      | P       | V       |
|                                       |      | 5353.08   | 44.9       | -9.1   | 54         | 31.48    | 34.89    | 11.71  | 33.18  | 101    | 27      | A       | V       |



|                                                                   |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11ac</b><br><b>VHT20</b><br><b>CH 64</b><br><b>5320MHz</b> |                                                                                             | 5121.05 | 57.56  | -16.44 | 74 | 43.95 | 34.56 | 11.5  | 32.45 | 122 | 326 | P | H |
|                                                                   |                                                                                             | 5143.1  | 44.54  | -9.46  | 54 | 30.83 | 34.61 | 11.55 | 32.45 | 122 | 326 | A | H |
|                                                                   | *                                                                                           | 5317    | 110.27 | -      | -  | 96.72 | 34.84 | 11.68 | 32.97 | 122 | 326 | P | H |
|                                                                   | *                                                                                           | 5317    | 100.57 | -      | -  | 87.02 | 34.84 | 11.68 | 32.97 | 122 | 326 | A | H |
|                                                                   |                                                                                             | 5352.97 | 72.94  | -1.06  | 74 | 59.52 | 34.89 | 11.71 | 33.18 | 122 | 326 | P | H |
|                                                                   |                                                                                             | 5350.11 | 51.56  | -2.44  | 54 | 38.14 | 34.89 | 11.71 | 33.18 | 122 | 326 | A | H |
|                                                                   |                                                                                             | 5072.3  | 57.95  | -16.05 | 74 | 44.36 | 34.52 | 11.46 | 32.39 | 108 | 28  | P | V |
|                                                                   |                                                                                             | 5140.7  | 44.65  | -9.35  | 54 | 30.94 | 34.61 | 11.55 | 32.45 | 108 | 28  | A | V |
|                                                                   | *                                                                                           | 5317    | 102.72 | -      | -  | 89.17 | 34.84 | 11.68 | 32.97 | 108 | 28  | P | V |
|                                                                   | *                                                                                           | 5317    | 93.18  | -      | -  | 79.63 | 34.84 | 11.68 | 32.97 | 108 | 28  | A | V |
|                                                                   |                                                                                             | 5350.44 | 67.94  | -6.06  | 74 | 54.52 | 34.89 | 11.71 | 33.18 | 108 | 28  | P | V |
|                                                                   |                                                                                             | 5350.88 | 46.61  | -7.39  | 54 | 33.19 | 34.89 | 11.71 | 33.18 | 108 | 28  | A | V |
| Remark                                                            | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 2 5250~5350MHz

## WIFI 802.11ac VHT20 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT20<br>CH 52<br>5260MHz |                                                                                             | 10520     | 41.89      | -32.11 | 74         | 47.86    | 37.32    | 16.49  | 59.78  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15780     | 49.81      | -24.19 | 74         | 46.45    | 40.63    | 20.46  | 57.73  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10520     | 43.36      | -30.64 | 74         | 49.33    | 37.32    | 16.49  | 59.78  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15780     | 49.95      | -24.05 | 74         | 46.59    | 40.63    | 20.46  | 57.73  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT20<br>CH 60<br>5300MHz |                                                                                             | 10600     | 43.08      | -30.92 | 74         | 48.76    | 37.42    | 16.56  | 59.66  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15900     | 48.89      | -25.11 | 74         | 45.25    | 40.78    | 20.52  | 57.66  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10600     | 43.84      | -30.16 | 74         | 49.52    | 37.42    | 16.56  | 59.66  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15900     | 47.95      | -26.05 | 74         | 44.31    | 40.78    | 20.52  | 57.66  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT20<br>CH 64<br>5320MHz |                                                                                             | 10640     | 42.5       | -31.5  | 74         | 48.04    | 37.47    | 16.6   | 59.61  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15960     | 48.31      | -25.69 | 74         | 44.52    | 40.86    | 20.55  | 57.62  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10640     | 42.22      | -31.78 | 74         | 47.76    | 37.47    | 16.6   | 59.61  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15960     | 48.23      | -25.77 | 74         | 44.44    | 40.86    | 20.55  | 57.62  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 2 5250~5350MHz

## WIFI 802.11ac VHT40 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT40<br>CH 54<br>5270MHz                                                       |      | 5150      | 62.64      | -11.36 | 74         | 48.97    | 34.61    | 11.55  | 32.49  | 102    | 328     | P       | H       |
|                                                                                             |      | 5147      | 45.08      | -8.92  | 54         | 31.41    | 34.61    | 11.55  | 32.49  | 102    | 328     | A       | H       |
|                                                                                             | *    | 5270      | 107.12     | -      | -          | 93.46    | 34.77    | 11.65  | 32.76  | 102    | 328     | P       | H       |
|                                                                                             | *    | 5270      | 97.66      | -      | -          | 84       | 34.77    | 11.65  | 32.76  | 102    | 328     | A       | H       |
|                                                                                             |      | 5359.02   | 64.38      | -9.62  | 74         | 50.96    | 34.89    | 11.71  | 33.18  | 102    | 328     | P       | H       |
|                                                                                             |      | 5350.22   | 48.25      | -5.75  | 54         | 34.83    | 34.89    | 11.71  | 33.18  | 102    | 328     | A       | H       |
|                                                                                             |      | 5134.4    | 58.83      | -15.17 | 74         | 45.19    | 34.59    | 11.5   | 32.45  | 311    | 90      | P       | V       |
|                                                                                             |      | 5147.9    | 44.82      | -9.18  | 54         | 31.15    | 34.61    | 11.55  | 32.49  | 311    | 90      | A       | V       |
|                                                                                             | *    | 5270      | 103.32     | -      | -          | 89.66    | 34.77    | 11.65  | 32.76  | 311    | 90      | P       | V       |
|                                                                                             | *    | 5270      | 92.78      | -      | -          | 79.12    | 34.77    | 11.65  | 32.76  | 311    | 90      | A       | V       |
|                                                                                             |      | 5374.2    | 60.67      | -13.33 | 74         | 47.33    | 34.91    | 11.71  | 33.28  | 311    | 90      | P       | V       |
| 802.11ac<br>VHT40<br>CH 62<br>5310MHz                                                       |      | 5351.54   | 45.06      | -8.94  | 54         | 31.64    | 34.89    | 11.71  | 33.18  | 311    | 90      | A       | V       |
|                                                                                             |      | 5139.05   | 60.04      | -13.96 | 74         | 46.4     | 34.59    | 11.5   | 32.45  | 130    | 324     | P       | H       |
|                                                                                             |      | 5124.8    | 44.66      | -9.34  | 54         | 31.02    | 34.59    | 11.5   | 32.45  | 130    | 324     | A       | H       |
|                                                                                             | *    | 5312      | 105.06     | -      | -          | 91.51    | 34.84    | 11.68  | 32.97  | 130    | 324     | P       | H       |
|                                                                                             | *    | 5312      | 94.8       | -      | -          | 81.25    | 34.84    | 11.68  | 32.97  | 130    | 324     | A       | H       |
|                                                                                             |      | 5350.33   | 72.35      | -1.65  | 74         | 58.93    | 34.89    | 11.71  | 33.18  | 130    | 324     | P       | H       |
|                                                                                             |      | 5354.07   | 52.18      | -1.82  | 54         | 38.76    | 34.89    | 11.71  | 33.18  | 130    | 324     | A       | H       |
|                                                                                             |      | 5143.1    | 57.39      | -16.61 | 74         | 43.68    | 34.61    | 11.55  | 32.45  | 377    | 78      | P       | V       |
|                                                                                             |      | 5140.55   | 44.65      | -9.35  | 54         | 30.94    | 34.61    | 11.55  | 32.45  | 377    | 78      | A       | V       |
|                                                                                             | *    | 5308      | 100.98     | -      | -          | 87.45    | 34.82    | 11.68  | 32.97  | 377    | 78      | P       | V       |
|                                                                                             | *    | 5308      | 90.53      | -      | -          | 77       | 34.82    | 11.68  | 32.97  | 377    | 78      | A       | V       |
| Remark                                                                                      |      | 5350      | 65.12      | -8.88  | 74         | 51.7     | 34.89    | 11.71  | 33.18  | 377    | 78      | P       | V       |
|                                                                                             |      | 5350.88   | 46.18      | -7.82  | 54         | 32.76    | 34.89    | 11.71  | 33.18  | 377    | 78      | A       | V       |
| 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |      |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 2 5250~5350MHz

## WIFI 802.11ac VHT40 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT40<br>CH 54<br>5270MHz |                                                                                             | 10540     | 43.22      | -30.78 | 74         | 49.14    | 37.34    | 16.49  | 59.75  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15810     | 49.44      | -24.56 | 74         | 46       | 40.67    | 20.48  | 57.71  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10540     | 42.93      | -31.07 | 74         | 48.85    | 37.34    | 16.49  | 59.75  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15810     | 49.67      | -24.33 | 74         | 46.23    | 40.67    | 20.48  | 57.71  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT40<br>CH 62<br>5310MHz |                                                                                             | 10620     | 43.46      | -30.54 | 74         | 49.09    | 37.44    | 16.56  | 59.63  | 100    | 0       | P       | H       |
|                                       |                                                                                             | 15930     | 47.98      | -26.02 | 74         | 44.27    | 40.82    | 20.53  | 57.64  | 100    | 0       | P       | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                       |                                                                                             | 10620     | 42.28      | -31.72 | 74         | 47.91    | 37.44    | 16.56  | 59.63  | 100    | 0       | P       | V       |
|                                       |                                                                                             | 15930     | 48.92      | -25.08 | 74         | 45.21    | 40.82    | 20.53  | 57.64  | 100    | 0       | P       | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                       |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m) (with adapter1)

| 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) |
| 802.11ac<br>VHT80<br>CH 58<br>5290MHz |                                                                                             | 5145.5    | 60.53      | -13.47 | 74         | 46.86  | 34.61    | 11.55  | 32.49  | 100    | 333     | P     | H     |
|                                       |                                                                                             | 5149.4    | 47.68      | -6.32  | 54         | 34.01  | 34.61    | 11.55  | 32.49  | 100    | 333     | A     | H     |
|                                       | *                                                                                           | 5290      | 101.55     | -      | -          | 87.96  | 34.8     | 11.65  | 32.86  | 100    | 333     | P     | H     |
|                                       | *                                                                                           | 5290      | 91.23      | -      | -          | 77.64  | 34.8     | 11.65  | 32.86  | 100    | 333     | A     | H     |
|                                       |                                                                                             | 5352.64   | 66.66      | -7.34  | 74         | 53.24  | 34.89    | 11.71  | 33.18  | 100    | 333     | P     | H     |
|                                       |                                                                                             | 5350.99   | 52.76      | -1.24  | 54         | 39.34  | 34.89    | 11.71  | 33.18  | 100    | 333     | A     | H     |
|                                       |                                                                                             | 5120.45   | 57.66      | -16.34 | 74         | 44.05  | 34.56    | 11.5   | 32.45  | 361    | 81      | P     | V     |
|                                       |                                                                                             | 5146.7    | 46.59      | -7.41  | 54         | 32.92  | 34.61    | 11.55  | 32.49  | 361    | 81      | A     | V     |
|                                       | *                                                                                           | 5290      | 97.88      | -      | -          | 84.29  | 34.8     | 11.65  | 32.86  | 361    | 81      | P     | V     |
|                                       | *                                                                                           | 5290      | 86.91      | -      | -          | 73.32  | 34.8     | 11.65  | 32.86  | 361    | 81      | A     | V     |
|                                       |                                                                                             | 5390.59   | 61.13      | -12.87 | 74         | 47.73  | 34.94    | 11.74  | 33.28  | 361    | 81      | P     | V     |
|                                       |                                                                                             | 5377.06   | 47.52      | -6.48  | 54         | 34.18  | 34.91    | 11.71  | 33.28  | 361    | 81      | A     | V     |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E band 2 5250~5350MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m) (with adapter1)

| 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) |
| 802.11ac<br>VHT80<br>CH 58<br>5290MHz |                                                                                             | 10580     | 42.13      | -31.87 | 74         | 47.89  | 37.4     | 16.52  | 59.68  | 100    | 0       | P     | H     |
|                                       |                                                                                             | 15870     | 47.93      | -26.07 | 74         | 44.32  | 40.76    | 20.52  | 57.67  | 100    | 0       | P     | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             | 10580     | 42.45      | -31.55 | 74         | 48.21  | 37.4     | 16.52  | 59.68  | 100    | 0       | P     | V     |
|                                       |                                                                                             | 15870     | 47.81      | -26.19 | 74         | 44.2   | 40.76    | 20.52  | 57.67  | 100    | 0       | P     | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E Band 3 - 5470~5725MHz

## WIFI 802.11a (Band Edge @ 3m) (with adapter1)

| 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) |
| 802.11a<br>CH 100<br>5500MHz |      | 5467.12   | 67.55      | -6.45  | 74         | 54.21  | 35.05    | 11.86  | 33.57  | 197    | 324     | P     | H     |
|                              |      | 5470      | 51.94      | -2.06  | 54         | 38.6   | 35.05    | 11.86  | 33.57  | 197    | 324     | A     | H     |
|                              | *    | 5503      | 107.89     | -      | -          | 94.61  | 35.1     | 11.92  | 33.74  | 197    | 324     | P     | H     |
|                              | *    | 5503      | 98.33      | -      | -          | 85.05  | 35.1     | 11.92  | 33.74  | 197    | 324     | A     | H     |
|                              |      |           |            |        |            |        |          |        |        |        |         |       | H     |
|                              |      |           |            |        |            |        |          |        |        |        |         |       | H     |
|                              |      | 5463.44   | 63.5       | -10.5  | 74         | 50.16  | 35.05    | 11.86  | 33.57  | 365    | 62      | P     | V     |
|                              |      | 5470      | 47.55      | -6.45  | 54         | 34.21  | 35.05    | 11.86  | 33.57  | 365    | 62      | A     | V     |
|                              | *    | 5498      | 104.4      | -      | -          | 91.1   | 35.1     | 11.86  | 33.66  | 365    | 62      | P     | V     |
|                              | *    | 5498      | 94.64      | -      | -          | 81.34  | 35.1     | 11.86  | 33.66  | 365    | 62      | A     | V     |
|                              |      |           |            |        |            |        |          |        |        |        |         |       | V     |
|                              |      |           |            |        |            |        |          |        |        |        |         |       | V     |
| 802.11a<br>CH 116<br>5580MHz |      | 5391.12   | 57.76      | -16.24 | 74         | 44.36  | 34.94    | 11.74  | 33.28  | 200    | 324     | P     | H     |
|                              |      | 5398.64   | 44.38      | -9.62  | 54         | 30.96  | 34.96    | 11.74  | 33.28  | 200    | 324     | A     | H     |
|                              | *    | 5583      | 107.24     | -      | -          | 94.06  | 35.15    | 12.04  | 34.01  | 200    | 324     | P     | H     |
|                              | *    | 5583      | 98.19      | -      | -          | 85.01  | 35.15    | 12.04  | 34.01  | 200    | 324     | A     | H     |
|                              |      | 5729.56   | 58         | -16    | 74         | 44.66  | 35.23    | 12.26  | 34.15  | 200    | 324     | P     | H     |
|                              |      | 5761.56   | 44.26      | -9.74  | 54         | 30.87  | 35.26    | 12.33  | 34.2   | 200    | 324     | A     | H     |
|                              |      | 5398.64   | 57.38      | -16.62 | 74         | 43.96  | 34.96    | 11.74  | 33.28  | 369    | 82      | P     | V     |
|                              |      | 5401.52   | 44.32      | -9.68  | 54         | 31.01  | 34.96    | 11.74  | 33.39  | 369    | 82      | A     | V     |
|                              | *    | 5580      | 106.21     | -      | -          | 93.1   | 35.14    | 11.98  | 34.01  | 369    | 82      | P     | V     |
|                              | *    | 5580      | 96.22      | -      | -          | 83.11  | 35.14    | 11.98  | 34.01  | 369    | 82      | A     | V     |
|                              |      | 5729.24   | 57.57      | -16.43 | 74         | 44.23  | 35.23    | 12.26  | 34.15  | 369    | 82      | P     | V     |
|                              |      | 5738.76   | 44.02      | -9.98  | 54         | 30.69  | 35.24    | 12.26  | 34.17  | 369    | 82      | A     | V     |



|                                                   |                                                                                             |         |        |       |    |       |       |       |       |     |     |   |   |
|---------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|-------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11a</b><br><b>CH 140</b><br><b>5700MHz</b> | *                                                                                           | 5698    | 105.83 | -     | -  | 92.56 | 35.21 | 12.18 | 34.12 | 110 | 300 | P | H |
|                                                   | *                                                                                           | 5698    | 96.5   | -     | -  | 83.23 | 35.21 | 12.18 | 34.12 | 110 | 300 | A | H |
|                                                   |                                                                                             | 5726.84 | 70.43  | -3.57 | 74 | 57.09 | 35.23 | 12.26 | 34.15 | 110 | 300 | P | H |
|                                                   |                                                                                             | 5725.48 | 50.67  | -3.33 | 54 | 37.33 | 35.23 | 12.26 | 34.15 | 110 | 300 | A | H |
|                                                   |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | H |
|                                                   |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | H |
|                                                   | *                                                                                           | 5697    | 103.85 | -     | -  | 90.58 | 35.21 | 12.18 | 34.12 | 351 | 118 | P | V |
|                                                   | *                                                                                           | 5697    | 93.8   | -     | -  | 80.53 | 35.21 | 12.18 | 34.12 | 351 | 118 | A | V |
|                                                   |                                                                                             | 5725.48 | 68.36  | -5.64 | 74 | 55.02 | 35.23 | 12.26 | 34.15 | 351 | 118 | P | V |
|                                                   |                                                                                             | 5725.32 | 47.62  | -6.38 | 54 | 34.28 | 35.23 | 12.26 | 34.15 | 351 | 118 | A | V |
|                                                   |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | V |
|                                                   |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | V |
| Remark                                            | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |       |    |       |       |       |       |     |     |   |   |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11a (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11a<br>CH 100<br>5500MHz |                                                                                             | 11000     | 43.56      | -30.44 | 74         | 47.82    | 37.9     | 16.94  | 59.1   | 100    | 0       | P       | H       |
|                              |                                                                                             | 16500     | 48.99      | -25.01 | 74         | 43.51    | 41.4     | 20.88  | 56.8   | 100    | 0       | P       | H       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                              |                                                                                             | 11000     | 49.73      | -24.27 | 74         | 53.99    | 37.9     | 16.94  | 59.1   | 100    | 0       | P       | V       |
|                              |                                                                                             | 16500     | 49.81      | -24.19 | 74         | 44.33    | 41.4     | 20.88  | 56.8   | 100    | 0       | P       | V       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11a<br>CH 116<br>5580MHz |                                                                                             | 11160     | 44.62      | -29.38 | 74         | 48.21    | 38       | 17.08  | 58.67  | 100    | 0       | P       | H       |
|                              |                                                                                             | 16740     | 50.24      | -23.76 | 74         | 43.93    | 41.88    | 21.04  | 56.61  | 100    | 0       | P       | H       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                              |                                                                                             | 11160     | 47.84      | -26.16 | 74         | 51.43    | 38       | 17.08  | 58.67  | 100    | 0       | P       | V       |
|                              |                                                                                             | 16740     | 50.07      | -23.93 | 74         | 43.76    | 41.88    | 21.04  | 56.61  | 100    | 0       | P       | V       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11a<br>CH 140<br>5700MHz |                                                                                             | 11400     | 44.54      | -29.46 | 74         | 47.15    | 38.14    | 17.31  | 58.06  | 100    | 0       | P       | H       |
|                              |                                                                                             | 17100     | 50.65      | -23.35 | 74         | 43.52    | 42.32    | 21.27  | 56.46  | 100    | 0       | P       | H       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                              |                                                                                             | 11400     | 50.77      | -23.23 | 74         | 53.38    | 38.14    | 17.31  | 58.06  | 100    | 0       | P       | V       |
|                              |                                                                                             | 17100     | 50.44      | -23.56 | 74         | 43.31    | 42.32    | 21.27  | 56.46  | 100    | 0       | P       | V       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                              |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                       | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11n HT20 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT20<br>CH 100<br>5500MHz |      | 5466.32   | 67.87      | -6.13  | 74         | 54.53    | 35.05    | 11.86  | 33.57  | 198    | 324     | P       | H       |
|                                      |      | 5469.84   | 49.17      | -4.83  | 54         | 35.83    | 35.05    | 11.86  | 33.57  | 198    | 324     | A       | H       |
|                                      | *    | 5503      | 106.89     | -      | -          | 93.61    | 35.1     | 11.92  | 33.74  | 198    | 324     | P       | H       |
|                                      | *    | 5503      | 96.06      | -      | -          | 82.78    | 35.1     | 11.92  | 33.74  | 198    | 324     | A       | H       |
|                                      |      |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |      |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |      | 5468.72   | 65.52      | -8.48  | 74         | 52.18    | 35.05    | 11.86  | 33.57  | 300    | 59      | P       | V       |
|                                      |      | 5470      | 47.3       | -6.7   | 54         | 33.96    | 35.05    | 11.86  | 33.57  | 300    | 59      | A       | V       |
|                                      | *    | 5498      | 102.66     | -      | -          | 89.36    | 35.1     | 11.86  | 33.66  | 300    | 59      | P       | V       |
|                                      | *    | 5498      | 93.35      | -      | -          | 80.05    | 35.1     | 11.86  | 33.66  | 300    | 59      | A       | V       |
|                                      |      |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |      |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 116<br>5580MHz |      | 5436.88   | 57.98      | -16.02 | 74         | 44.65    | 35.01    | 11.8   | 33.48  | 200    | 320     | P       | H       |
|                                      |      | 5383.12   | 44.77      | -9.23  | 54         | 31.37    | 34.94    | 11.74  | 33.28  | 200    | 320     | A       | H       |
|                                      | *    | 5578      | 104.29     | -      | -          | 91.18    | 35.14    | 11.98  | 34.01  | 200    | 320     | P       | H       |
|                                      | *    | 5578      | 94.16      | -      | -          | 81.05    | 35.14    | 11.98  | 34.01  | 200    | 320     | A       | H       |
|                                      |      | 5758.12   | 57.73      | -16.27 | 74         | 44.34    | 35.26    | 12.33  | 34.2   | 200    | 320     | P       | H       |
|                                      |      | 5749.16   | 44.61      | -9.39  | 54         | 31.21    | 35.24    | 12.33  | 34.17  | 200    | 320     | A       | H       |
|                                      |      | 5464.4    | 57.37      | -16.63 | 74         | 44.03    | 35.05    | 11.86  | 33.57  | 369    | 82      | P       | V       |
|                                      |      | 5401.2    | 44.93      | -9.07  | 54         | 31.62    | 34.96    | 11.74  | 33.39  | 369    | 82      | A       | V       |
|                                      | *    | 5579      | 102.78     | -      | -          | 89.67    | 35.14    | 11.98  | 34.01  | 369    | 82      | P       | V       |
|                                      | *    | 5579      | 92.07      | -      | -          | 78.96    | 35.14    | 11.98  | 34.01  | 369    | 82      | A       | V       |
|                                      |      | 5764.92   | 57.36      | -16.64 | 74         | 43.97    | 35.26    | 12.33  | 34.2   | 369    | 82      | P       | V       |
|                                      |      | 5756.76   | 44.48      | -9.52  | 54         | 31.09    | 35.26    | 12.33  | 34.2   | 369    | 82      | A       | V       |



|                                                |                                                                                             |         |        |       |    |       |       |       |       |     |     |   |   |
|------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|-------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11n<br/>HT20<br/>CH 140<br/>5700MHz</b> | *                                                                                           | 5697    | 105.07 | -     | -  | 91.8  | 35.21 | 12.18 | 34.12 | 161 | 306 | P | H |
|                                                | *                                                                                           | 5697    | 94.64  | -     | -  | 81.37 | 35.21 | 12.18 | 34.12 | 161 | 306 | A | H |
|                                                |                                                                                             | 5726.6  | 71.91  | -2.09 | 74 | 58.57 | 35.23 | 12.26 | 34.15 | 161 | 306 | P | H |
|                                                |                                                                                             | 5725.24 | 51.3   | -2.7  | 54 | 37.96 | 35.23 | 12.26 | 34.15 | 161 | 306 | A | H |
|                                                |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | H |
|                                                |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | H |
|                                                | *                                                                                           | 5703    | 102.01 | -     | -  | 88.65 | 35.22 | 12.26 | 34.12 | 100 | 28  | P | V |
|                                                | *                                                                                           | 5703    | 90.74  | -     | -  | 77.38 | 35.22 | 12.26 | 34.12 | 100 | 28  | A | V |
|                                                |                                                                                             | 5730.92 | 66.48  | -7.52 | 74 | 53.16 | 35.23 | 12.26 | 34.17 | 100 | 28  | P | V |
|                                                |                                                                                             | 5725.24 | 49.1   | -4.9  | 54 | 35.76 | 35.23 | 12.26 | 34.15 | 100 | 28  | A | V |
|                                                |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | V |
|                                                |                                                                                             |         |        |       |    |       |       |       |       |     |     |   | V |
| Remark                                         | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |       |    |       |       |       |       |     |     |   |   |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11n HT20 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT20<br>CH 100<br>5500MHz |                                                                                             | 11000     | 43.83      | -30.17 | 74         | 48.09    | 37.9     | 16.94  | 59.1   | 100    | 0       | P       | H       |
|                                      |                                                                                             | 16500     | 49.12      | -24.88 | 74         | 43.64    | 41.4     | 20.88  | 56.8   | 100    | 0       | P       | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             | 11000     | 42.96      | -31.04 | 74         | 47.22    | 37.9     | 16.94  | 59.1   | 100    | 0       | P       | V       |
|                                      |                                                                                             | 16500     | 49.04      | -24.96 | 74         | 43.56    | 41.4     | 20.88  | 56.8   | 100    | 0       | P       | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 116<br>5580MHz |                                                                                             | 11160     | 45.31      | -28.69 | 74         | 48.9     | 38       | 17.08  | 58.67  | 100    | 0       | P       | H       |
|                                      |                                                                                             | 16740     | 49.97      | -24.03 | 74         | 43.66    | 41.88    | 21.04  | 56.61  | 100    | 0       | P       | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             | 11160     | 47.08      | -26.92 | 74         | 50.67    | 38       | 17.08  | 58.67  | 100    | 0       | P       | V       |
|                                      |                                                                                             | 16740     | 50.7       | -23.3  | 74         | 44.39    | 41.88    | 21.04  | 56.61  | 100    | 0       | P       | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11n<br>HT20<br>CH 140<br>5700MHz |                                                                                             | 11400     | 43.86      | -30.14 | 74         | 46.47    | 38.14    | 17.31  | 58.06  | 100    | 0       | P       | H       |
|                                      |                                                                                             | 17100     | 50.32      | -23.68 | 74         | 43.19    | 42.32    | 21.27  | 56.46  | 100    | 0       | P       | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             | 11400     | 44.25      | -29.75 | 74         | 46.86    | 38.14    | 17.31  | 58.06  | 100    | 0       | P       | V       |
|                                      |                                                                                             | 17100     | 50.63      | -23.37 | 74         | 43.5     | 42.32    | 21.27  | 56.46  | 100    | 0       | P       | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11n HT40 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT40<br>CH 102<br>5510MHz |      | 5469.84   | 69.59      | -4.41  | 74         | 56.25    | 35.05    | 11.86  | 33.57  | 206    | 329     | P       | H       |
|                                      |      | 5469.84   | 52.6       | -1.4   | 54         | 39.26    | 35.05    | 11.86  | 33.57  | 206    | 329     | A       | H       |
|                                      | *    | 5507      | 100.95     | -      | -          | 87.67    | 35.1     | 11.92  | 33.74  | 206    | 329     | P       | H       |
|                                      | *    | 5507      | 90.4       | -      | -          | 77.12    | 35.1     | 11.92  | 33.74  | 206    | 329     | A       | H       |
|                                      |      | 5748.84   | 57.24      | -16.76 | 74         | 43.84    | 35.24    | 12.33  | 34.17  | 206    | 329     | P       | H       |
|                                      |      | 5763.96   | 44.69      | -9.31  | 54         | 31.3     | 35.26    | 12.33  | 34.2   | 206    | 329     | A       | H       |
|                                      |      | 5464.08   | 62.23      | -11.77 | 74         | 48.89    | 35.05    | 11.86  | 33.57  | 100    | 28      | P       | V       |
|                                      |      | 5469.68   | 47.42      | -6.58  | 54         | 34.08    | 35.05    | 11.86  | 33.57  | 100    | 28      | A       | V       |
|                                      | *    | 5512      | 96.46      | -      | -          | 83.18    | 35.1     | 11.92  | 33.74  | 100    | 28      | P       | V       |
|                                      | *    | 5512      | 85.39      | -      | -          | 72.11    | 35.1     | 11.92  | 33.74  | 100    | 28      | A       | V       |
|                                      |      | 5750.76   | 57.19      | -16.81 | 74         | 43.79    | 35.24    | 12.33  | 34.17  | 100    | 28      | P       | V       |
|                                      |      | 5763.32   | 44.62      | -9.38  | 54         | 31.23    | 35.26    | 12.33  | 34.2   | 100    | 28      | A       | V       |
| 802.11n<br>HT40<br>CH 110<br>5550MHz |      | 5469.68   | 63.73      | -10.27 | 74         | 50.39    | 35.05    | 11.86  | 33.57  | 183    | 330     | P       | H       |
|                                      |      | 5467.28   | 45.63      | -8.37  | 54         | 32.29    | 35.05    | 11.86  | 33.57  | 183    | 330     | A       | H       |
|                                      | *    | 5554      | 103.09     | -      | -          | 89.9     | 35.13    | 11.98  | 33.92  | 183    | 330     | P       | H       |
|                                      | *    | 5554      | 92.42      | -      | -          | 79.23    | 35.13    | 11.98  | 33.92  | 183    | 330     | A       | H       |
|                                      |      | 5746.6    | 57.69      | -16.31 | 74         | 44.29    | 35.24    | 12.33  | 34.17  | 183    | 330     | P       | H       |
|                                      |      | 5753.16   | 44.76      | -9.24  | 54         | 31.34    | 35.26    | 12.33  | 34.17  | 183    | 330     | A       | H       |
|                                      |      | 5464.4    | 58.72      | -15.28 | 74         | 45.38    | 35.05    | 11.86  | 33.57  | 100    | 29      | P       | V       |
|                                      |      | 5381.2    | 44.99      | -9.01  | 54         | 31.59    | 34.94    | 11.74  | 33.28  | 100    | 29      | A       | V       |
|                                      | *    | 5550      | 98.71      | -      | -          | 85.43    | 35.13    | 11.98  | 33.83  | 100    | 29      | P       | V       |
|                                      | *    | 5550      | 88.6       | -      | -          | 75.32    | 35.13    | 11.98  | 33.83  | 100    | 29      | A       | V       |
|                                      |      | 5749.08   | 57.24      | -16.76 | 74         | 43.84    | 35.24    | 12.33  | 34.17  | 100    | 29      | P       | V       |
|                                      |      | 5764.04   | 44.63      | -9.37  | 54         | 31.24    | 35.26    | 12.33  | 34.2   | 100    | 29      | A       | V       |



|                                                                  |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11n</b><br><b>HT40</b><br><b>CH 134</b><br><b>5670MHz</b> |                                                                                             | 5401.36 | 58.05  | -15.95 | 74 | 44.74 | 34.96 | 11.74 | 33.39 | 101 | 315 | P | H |
|                                                                  |                                                                                             | 5393.84 | 44.83  | -9.17  | 54 | 31.43 | 34.94 | 11.74 | 33.28 | 101 | 315 | A | H |
|                                                                  | *                                                                                           | 5663    | 102.19 | -      | -  | 88.91 | 35.19 | 12.18 | 34.09 | 101 | 315 | P | H |
|                                                                  | *                                                                                           | 5663    | 91.59  | -      | -  | 78.31 | 35.19 | 12.18 | 34.09 | 101 | 315 | A | H |
|                                                                  |                                                                                             | 5725.64 | 64.07  | -9.93  | 74 | 50.73 | 35.23 | 12.26 | 34.15 | 101 | 315 | P | H |
|                                                                  |                                                                                             | 5725    | 49.56  | -4.44  | 54 | 36.22 | 35.23 | 12.26 | 34.15 | 101 | 315 | A | H |
|                                                                  |                                                                                             | 5370.32 | 57.18  | -16.82 | 74 | 43.74 | 34.91 | 11.71 | 33.18 | 101 | 29  | P | V |
|                                                                  |                                                                                             | 5405.68 | 44.81  | -9.19  | 54 | 31.5  | 34.96 | 11.74 | 33.39 | 101 | 29  | A | V |
|                                                                  | *                                                                                           | 5672    | 99.75  | -      | -  | 86.46 | 35.2  | 12.18 | 34.09 | 101 | 29  | P | V |
|                                                                  | *                                                                                           | 5672    | 88.58  | -      | -  | 75.29 | 35.2  | 12.18 | 34.09 | 101 | 29  | A | V |
|                                                                  |                                                                                             | 5727.64 | 62.31  | -11.69 | 74 | 48.97 | 35.23 | 12.26 | 34.15 | 101 | 29  | P | V |
|                                                                  |                                                                                             | 5725.32 | 47.35  | -6.65  | 54 | 34.01 | 35.23 | 12.26 | 34.15 | 101 | 29  | A | V |
| Remark                                                           | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11n HT40 (Harmonic @ 3m) (with adapter1)

| 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) |
| 802.11n<br>HT40<br>CH 102<br>5510MHz |                                                                                             | 11020     | 43.45      | -30.55 | 74         | 47.66    | 37.91    | 16.94  | 59.06  | 100    | 0       | P     | H     |
|                                      |                                                                                             | 16530     | 48.99      | -25.01 | 74         | 43.38    | 41.47    | 20.91  | 56.77  | 100    | 0       | P     | H     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                      |                                                                                             | 11020     | 43.94      | -30.06 | 74         | 48.15    | 37.91    | 16.94  | 59.06  | 100    | 0       | P     | V     |
|                                      |                                                                                             | 16530     | 48.79      | -25.21 | 74         | 43.18    | 41.47    | 20.91  | 56.77  | 100    | 0       | P     | V     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
| 802.11n<br>HT40<br>CH 110<br>5550MHz |                                                                                             | 11100     | 42.89      | -31.11 | 74         | 46.76    | 37.96    | 17.01  | 58.84  | 100    | 0       | P     | H     |
|                                      |                                                                                             | 16650     | 47.9       | -26.1  | 74         | 41.88    | 41.71    | 20.99  | 56.68  | 100    | 0       | P     | H     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                      |                                                                                             | 11100     | 44.05      | -29.95 | 74         | 47.92    | 37.96    | 17.01  | 58.84  | 100    | 0       | P     | V     |
|                                      |                                                                                             | 16650     | 49.09      | -24.91 | 74         | 43.07    | 41.71    | 20.99  | 56.68  | 100    | 0       | P     | V     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
| 802.11n<br>HT40<br>CH 134<br>5670MHz |                                                                                             | 11340     | 44.57      | -29.43 | 74         | 47.47    | 38.1     | 17.23  | 58.23  | 100    | 0       | P     | H     |
|                                      |                                                                                             | 17010     | 50.58      | -23.42 | 74         | 43.38    | 42.39    | 21.22  | 56.41  | 100    | 0       | P     | H     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                      |                                                                                             | 11340     | 46.51      | -27.49 | 74         | 49.41    | 38.1     | 17.23  | 58.23  | 100    | 0       | P     | V     |
|                                      |                                                                                             | 17010     | 49.66      | -24.34 | 74         | 42.46    | 42.39    | 21.22  | 56.41  | 100    | 0       | P     | V     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |       |       |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11ac VHT20 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT20<br>CH 100<br>5500MHz |      | 5468.08   | 72.23      | -1.77  | 74         | 58.89    | 35.05    | 11.86  | 33.57  | 141    | 322     | P       | H       |
|                                        |      | 5470      | 50.23      | -3.77  | 54         | 36.89    | 35.05    | 11.86  | 33.57  | 141    | 322     | A       | H       |
|                                        | *    | 5496      | 108.02     | -      | -          | 94.74    | 35.08    | 11.86  | 33.66  | 141    | 322     | P       | H       |
|                                        | *    | 5496      | 97.97      | -      | -          | 84.69    | 35.08    | 11.86  | 33.66  | 141    | 322     | A       | H       |
|                                        |      | 5755.16   | 57.69      | -16.31 | 74         | 44.27    | 35.26    | 12.33  | 34.17  | 141    | 322     | P       | H       |
|                                        |      | 5746.52   | 44.6       | -9.4   | 54         | 31.2     | 35.24    | 12.33  | 34.17  | 141    | 322     | A       | H       |
|                                        |      | 5463.12   | 64.97      | -9.03  | 74         | 51.63    | 35.05    | 11.86  | 33.57  | 102    | 28      | P       | V       |
|                                        |      | 5469.68   | 46.25      | -7.75  | 54         | 32.91    | 35.05    | 11.86  | 33.57  | 102    | 28      | A       | V       |
|                                        | *    | 5498      | 101.53     | -      | -          | 88.23    | 35.1     | 11.86  | 33.66  | 102    | 28      | P       | V       |
|                                        | *    | 5498      | 91.32      | -      | -          | 78.02    | 35.1     | 11.86  | 33.66  | 102    | 28      | A       | V       |
|                                        |      | 5731.08   | 57.77      | -16.23 | 74         | 44.45    | 35.23    | 12.26  | 34.17  | 102    | 28      | P       | V       |
|                                        |      | 5755.64   | 44.75      | -9.25  | 54         | 31.33    | 35.26    | 12.33  | 34.17  | 102    | 28      | A       | V       |
| 802.11ac<br>VHT20<br>CH 116<br>5580MHz |      | 5400.72   | 57.96      | -16.04 | 74         | 44.65    | 34.96    | 11.74  | 33.39  | 138    | 322     | P       | H       |
|                                        |      | 5398      | 44.95      | -9.05  | 54         | 31.53    | 34.96    | 11.74  | 33.28  | 138    | 322     | A       | H       |
|                                        | *    | 5584      | 105.84     | -      | -          | 92.66    | 35.15    | 12.04  | 34.01  | 138    | 322     | P       | H       |
|                                        | *    | 5584      | 96.2       | -      | -          | 83.02    | 35.15    | 12.04  | 34.01  | 138    | 322     | A       | H       |
|                                        |      | 5762.36   | 58.23      | -15.77 | 74         | 44.84    | 35.26    | 12.33  | 34.2   | 138    | 322     | P       | H       |
|                                        |      | 5759.56   | 44.74      | -9.26  | 54         | 31.35    | 35.26    | 12.33  | 34.2   | 138    | 322     | A       | H       |
|                                        |      | 5388.72   | 57.28      | -16.72 | 74         | 43.88    | 34.94    | 11.74  | 33.28  | 105    | 28      | P       | V       |
|                                        |      | 5390.64   | 44.86      | -9.14  | 54         | 31.46    | 34.94    | 11.74  | 33.28  | 105    | 28      | A       | V       |
|                                        | *    | 5580      | 101.13     | -      | -          | 88.02    | 35.14    | 11.98  | 34.01  | 105    | 28      | P       | V       |
|                                        | *    | 5580      | 91.52      | -      | -          | 78.41    | 35.14    | 11.98  | 34.01  | 105    | 28      | A       | V       |
|                                        |      | 5760.44   | 57.63      | -16.37 | 74         | 44.24    | 35.26    | 12.33  | 34.2   | 105    | 28      | P       | V       |
|                                        |      | 5751.4    | 44.75      | -9.25  | 54         | 31.35    | 35.24    | 12.33  | 34.17  | 105    | 28      | A       | V       |



|                                                                    |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11ac</b><br><b>VHT20</b><br><b>CH 140</b><br><b>5700MHz</b> |                                                                                             | 5385.36 | 57.73  | -16.27 | 74 | 44.33 | 34.94 | 11.74 | 33.28 | 129 | 315 | P | H |
|                                                                    |                                                                                             | 5392.88 | 44.91  | -9.09  | 54 | 31.51 | 34.94 | 11.74 | 33.28 | 129 | 315 | A | H |
|                                                                    | *                                                                                           | 5700    | 106.27 | -      | -  | 93    | 35.21 | 12.18 | 34.12 | 129 | 315 | P | H |
|                                                                    | *                                                                                           | 5700    | 95.89  | -      | -  | 82.62 | 35.21 | 12.18 | 34.12 | 129 | 315 | A | H |
|                                                                    |                                                                                             | 5727.4  | 71     | -3     | 74 | 57.66 | 35.23 | 12.26 | 34.15 | 129 | 315 | P | H |
|                                                                    |                                                                                             | 5725    | 51.5   | -2.5   | 54 | 38.16 | 35.23 | 12.26 | 34.15 | 129 | 315 | A | H |
|                                                                    |                                                                                             | 5386.64 | 57.33  | -16.67 | 74 | 43.93 | 34.94 | 11.74 | 33.28 | 100 | 14  | P | V |
|                                                                    |                                                                                             | 5394.48 | 45     | -9     | 54 | 31.6  | 34.94 | 11.74 | 33.28 | 100 | 14  | A | V |
|                                                                    | *                                                                                           | 5700    | 100.61 | -      | -  | 87.34 | 35.21 | 12.18 | 34.12 | 100 | 14  | P | V |
|                                                                    | *                                                                                           | 5700    | 90.87  | -      | -  | 77.6  | 35.21 | 12.18 | 34.12 | 100 | 14  | A | V |
|                                                                    |                                                                                             | 5727.48 | 64.87  | -9.13  | 74 | 51.53 | 35.23 | 12.26 | 34.15 | 100 | 14  | P | V |
|                                                                    |                                                                                             | 5725    | 47.71  | -6.29  | 54 | 34.37 | 35.23 | 12.26 | 34.15 | 100 | 14  | A | V |
| Remark                                                             | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11ac VHT20 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT20<br>CH 100<br>5500MHz |                                                                                             | 11000     | 44.27      | -29.73 | 74         | 48.53    | 37.9     | 16.94  | 59.1   | 100    | 0       | P       | H       |
|                                        |                                                                                             | 16500     | 48.36      | -25.64 | 74         | 42.88    | 41.4     | 20.88  | 56.8   | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11000     | 45.22      | -28.78 | 74         | 49.48    | 37.9     | 16.94  | 59.1   | 100    | 0       | P       | V       |
|                                        |                                                                                             | 16500     | 48.72      | -25.28 | 74         | 43.24    | 41.4     | 20.88  | 56.8   | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT20<br>CH 116<br>5580MHz |                                                                                             | 11160     | 45.89      | -28.11 | 74         | 49.48    | 38       | 17.08  | 58.67  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 16740     | 49.75      | -24.25 | 74         | 43.44    | 41.88    | 21.04  | 56.61  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11160     | 46.48      | -27.52 | 74         | 50.07    | 38       | 17.08  | 58.67  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 16740     | 49.79      | -24.21 | 74         | 43.48    | 41.88    | 21.04  | 56.61  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT20<br>CH 140<br>5700MHz |                                                                                             | 11400     | 45.86      | -28.14 | 74         | 48.47    | 38.14    | 17.31  | 58.06  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 17100     | 50.09      | -23.91 | 74         | 42.96    | 42.32    | 21.27  | 56.46  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11400     | 47.63      | -26.37 | 74         | 50.24    | 38.14    | 17.31  | 58.06  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 17100     | 50.9       | -23.1  | 74         | 43.77    | 42.32    | 21.27  | 56.46  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11ac VHT40 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT40<br>CH 102<br>5510MHz |      | 5470      | 68.36      | -5.64  | 74         | 55.02    | 35.05    | 11.86  | 33.57  | 138    | 328     | P       | H       |
|                                        |      | 5470      | 52.37      | -1.63  | 54         | 39.03    | 35.05    | 11.86  | 33.57  | 138    | 328     | A       | H       |
|                                        | *    | 5508      | 100.08     | -      | -          | 86.8     | 35.1     | 11.92  | 33.74  | 138    | 328     | P       | H       |
|                                        | *    | 5508      | 90.25      | -      | -          | 76.97    | 35.1     | 11.92  | 33.74  | 138    | 328     | A       | H       |
|                                        |      | 5744.44   | 57.36      | -16.64 | 74         | 43.96    | 35.24    | 12.33  | 34.17  | 138    | 328     | P       | H       |
|                                        |      | 5758.52   | 45         | -9     | 54         | 31.61    | 35.26    | 12.33  | 34.2   | 138    | 328     | A       | H       |
|                                        |      | 5468.24   | 61.94      | -12.06 | 74         | 48.6     | 35.05    | 11.86  | 33.57  | 366    | 69      | P       | V       |
|                                        |      | 5470      | 46.45      | -7.55  | 54         | 33.11    | 35.05    | 11.86  | 33.57  | 366    | 69      | A       | V       |
|                                        | *    | 5508      | 96.47      | -      | -          | 83.19    | 35.1     | 11.92  | 33.74  | 366    | 69      | P       | V       |
|                                        | *    | 5508      | 86.35      | -      | -          | 73.07    | 35.1     | 11.92  | 33.74  | 366    | 69      | A       | V       |
|                                        |      | 5750.92   | 57.66      | -16.34 | 74         | 44.26    | 35.24    | 12.33  | 34.17  | 366    | 69      | P       | V       |
| 802.11ac<br>VHT40<br>CH 110<br>5550MHz |      | 5467.44   | 63.99      | -10.01 | 74         | 50.65    | 35.05    | 11.86  | 33.57  | 170    | 323     | P       | H       |
|                                        |      | 5464.08   | 45.77      | -8.23  | 54         | 32.43    | 35.05    | 11.86  | 33.57  | 170    | 323     | A       | H       |
|                                        | *    | 5554      | 103.64     | -      | -          | 90.45    | 35.13    | 11.98  | 33.92  | 170    | 323     | P       | H       |
|                                        | *    | 5554      | 93.34      | -      | -          | 80.15    | 35.13    | 11.98  | 33.92  | 170    | 323     | A       | H       |
|                                        |      | 5763.96   | 57.34      | -16.66 | 74         | 43.95    | 35.26    | 12.33  | 34.2   | 170    | 323     | P       | H       |
|                                        |      | 5746.84   | 44.59      | -9.41  | 54         | 31.19    | 35.24    | 12.33  | 34.17  | 170    | 323     | A       | H       |
|                                        |      | 5454.48   | 57.99      | -16.01 | 74         | 44.73    | 35.03    | 11.8   | 33.57  | 297    | 69      | P       | V       |
|                                        |      | 5396.24   | 45.01      | -8.99  | 54         | 31.59    | 34.96    | 11.74  | 33.28  | 297    | 69      | A       | V       |
|                                        | *    | 5552      | 99         | -      | -          | 85.81    | 35.13    | 11.98  | 33.92  | 297    | 69      | P       | V       |
|                                        | *    | 5552      | 88.98      | -      | -          | 75.79    | 35.13    | 11.98  | 33.92  | 297    | 69      | A       | V       |
|                                        |      | 5731      | 57.82      | -16.18 | 74         | 44.5     | 35.23    | 12.26  | 34.17  | 297    | 69      | P       | V       |
|                                        |      | 5763.64   | 44.68      | -9.32  | 54         | 31.29    | 35.26    | 12.33  | 34.2   | 297    | 69      | A       | V       |



|                                                                    |                                                                                             |         |        |        |    |       |       |       |       |     |     |   |   |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------|--------|--------|----|-------|-------|-------|-------|-----|-----|---|---|
| <b>802.11ac</b><br><b>VHT40</b><br><b>CH 134</b><br><b>5670MHz</b> |                                                                                             | 5387.92 | 58.33  | -15.67 | 74 | 44.93 | 34.94 | 11.74 | 33.28 | 200 | 241 | P | H |
|                                                                    |                                                                                             | 5381.68 | 44.84  | -9.16  | 54 | 31.44 | 34.94 | 11.74 | 33.28 | 200 | 241 | A | H |
|                                                                    | *                                                                                           | 5667    | 102.98 | -      | -  | 89.69 | 35.2  | 12.18 | 34.09 | 200 | 241 | P | H |
|                                                                    | *                                                                                           | 5667    | 93.34  | -      | -  | 80.05 | 35.2  | 12.18 | 34.09 | 200 | 241 | A | H |
|                                                                    |                                                                                             | 5725.88 | 64.65  | -9.35  | 74 | 51.31 | 35.23 | 12.26 | 34.15 | 200 | 241 | P | H |
|                                                                    |                                                                                             | 5725    | 48     | -6     | 54 | 34.66 | 35.23 | 12.26 | 34.15 | 200 | 241 | A | H |
|                                                                    |                                                                                             | 5401.04 | 57.69  | -16.31 | 74 | 44.38 | 34.96 | 11.74 | 33.39 | 300 | 120 | P | V |
|                                                                    |                                                                                             | 5416.88 | 44.92  | -9.08  | 54 | 31.59 | 34.98 | 11.74 | 33.39 | 300 | 120 | A | V |
|                                                                    | *                                                                                           | 5668    | 99.25  | -      | -  | 85.96 | 35.2  | 12.18 | 34.09 | 300 | 120 | P | V |
|                                                                    | *                                                                                           | 5668    | 88.64  | -      | -  | 75.35 | 35.2  | 12.18 | 34.09 | 300 | 120 | A | V |
|                                                                    |                                                                                             | 5726.92 | 60.05  | -13.95 | 74 | 46.71 | 35.23 | 12.26 | 34.15 | 300 | 120 | P | V |
|                                                                    |                                                                                             | 5725.56 | 46.35  | -7.65  | 54 | 33.01 | 35.23 | 12.26 | 34.15 | 300 | 120 | A | V |
| Remark                                                             | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |         |        |        |    |       |       |       |       |     |     |   |   |



## 15E band 3 - 5470~5725MHz

## WIFI 802.11ac VHT40 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT40<br>CH 102<br>5510MHz |                                                                                             | 11020     | 43.39      | -30.61 | 74         | 47.6     | 37.91    | 16.94  | 59.06  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 16530     | 48.23      | -25.77 | 74         | 42.62    | 41.47    | 20.91  | 56.77  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11020     | 44.3       | -29.7  | 74         | 48.51    | 37.91    | 16.94  | 59.06  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 16530     | 48.41      | -25.59 | 74         | 42.8     | 41.47    | 20.91  | 56.77  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT40<br>CH 110<br>5550MHz |                                                                                             | 11100     | 43.46      | -30.54 | 74         | 47.33    | 37.96    | 17.01  | 58.84  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 16650     | 48.7       | -25.3  | 74         | 42.68    | 41.71    | 20.99  | 56.68  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11100     | 45.39      | -28.61 | 74         | 49.26    | 37.96    | 17.01  | 58.84  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 16650     | 48.28      | -25.72 | 74         | 42.26    | 41.71    | 20.99  | 56.68  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT40<br>CH 134<br>5670MHz |                                                                                             | 11340     | 45.17      | -28.83 | 74         | 48.07    | 38.1     | 17.23  | 58.23  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 17010     | 49.37      | -24.63 | 74         | 42.17    | 42.39    | 21.22  | 56.41  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11340     | 46.87      | -27.13 | 74         | 49.77    | 38.1     | 17.23  | 58.23  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 17010     | 49.8       | -24.2  | 74         | 42.6     | 42.39    | 21.22  | 56.41  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 3 5470~5725MHz

## WIFI 802.11ac VHT80 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT80<br>CH 106<br>5530MHz |                                                                                             | 5460.08   | 64.9       | -9.1   | 74         | 51.58    | 35.03    | 11.86  | 33.57  | 147    | 322     | P       | H       |
|                                        |                                                                                             | 5468.24   | 52.79      | -1.21  | 54         | 39.45    | 35.05    | 11.86  | 33.57  | 147    | 322     | A       | H       |
|                                        | *                                                                                           | 5530      | 97.65      | -      | -          | 84.45    | 35.11    | 11.92  | 33.83  | 147    | 322     | P       | H       |
|                                        | *                                                                                           | 5530      | 86.27      | -      | -          | 73.07    | 35.11    | 11.92  | 33.83  | 147    | 322     | A       | H       |
|                                        |                                                                                             | 5727      | 57.27      | -16.73 | 74         | 43.93    | 35.23    | 12.26  | 34.15  | 147    | 322     | P       | H       |
|                                        |                                                                                             | 5743.64   | 45.91      | -8.09  | 54         | 32.51    | 35.24    | 12.33  | 34.17  | 147    | 322     | A       | H       |
|                                        |                                                                                             | 5466.16   | 60.14      | -13.86 | 74         | 46.8     | 35.05    | 11.86  | 33.57  | 300    | 110     | P       | V       |
|                                        |                                                                                             | 5468.88   | 46.48      | -7.52  | 54         | 33.14    | 35.05    | 11.86  | 33.57  | 300    | 110     | A       | V       |
|                                        | *                                                                                           | 5530      | 92.34      | -      | -          | 79.14    | 35.11    | 11.92  | 33.83  | 300    | 110     | P       | V       |
|                                        | *                                                                                           | 5530      | 82.22      | -      | -          | 69.02    | 35.11    | 11.92  | 33.83  | 300    | 110     | A       | V       |
|                                        |                                                                                             | 5747.24   | 57.23      | -16.77 | 74         | 43.83    | 35.24    | 12.33  | 34.17  | 300    | 110     | P       | V       |
| 802.11ac<br>VHT80<br>CH 122<br>5610MHz |                                                                                             | 5407.12   | 58.29      | -15.71 | 74         | 44.98    | 34.96    | 11.74  | 33.39  | 201    | 249     | P       | H       |
|                                        |                                                                                             | 5437.36   | 45.73      | -8.27  | 54         | 32.4     | 35.01    | 11.8   | 33.48  | 201    | 249     | A       | H       |
|                                        | *                                                                                           | 5610      | 100.35     | -      | -          | 87.19    | 35.16    | 12.04  | 34.04  | 201    | 249     | P       | H       |
|                                        | *                                                                                           | 5610      | 88.82      | -      | -          | 75.66    | 35.16    | 12.04  | 34.04  | 201    | 249     | A       | H       |
|                                        |                                                                                             | 5745      | 57.49      | -16.51 | 74         | 44.09    | 35.24    | 12.33  | 34.17  | 201    | 249     | P       | H       |
|                                        |                                                                                             | 5748.68   | 45.43      | -8.57  | 54         | 32.03    | 35.24    | 12.33  | 34.17  | 201    | 249     | A       | H       |
|                                        |                                                                                             | 5407.92   | 57.13      | -16.87 | 74         | 43.82    | 34.96    | 11.74  | 33.39  | 346    | 116     | P       | V       |
|                                        |                                                                                             | 5351.76   | 45.82      | -8.18  | 54         | 32.4     | 34.89    | 11.71  | 33.18  | 346    | 116     | A       | V       |
|                                        | *                                                                                           | 5610      | 94.74      | -      | -          | 81.58    | 35.16    | 12.04  | 34.04  | 346    | 116     | P       | V       |
|                                        | *                                                                                           | 5610      | 84.68      | -      | -          | 71.52    | 35.16    | 12.04  | 34.04  | 346    | 116     | A       | V       |
|                                        |                                                                                             | 5759.96   | 58.04      | -15.96 | 74         | 44.65    | 35.26    | 12.33  | 34.2   | 346    | 116     | P       | V       |
|                                        |                                                                                             | 5725.24   | 46.05      | -7.95  | 54         | 32.71    | 35.23    | 12.26  | 34.15  | 346    | 116     | A       | V       |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 3 5470~5725MHz

## WIFI 802.11ac VHT80 (Harmonic @ 3m) (with adapter1)

| 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 ) |
| 802.11ac<br>VHT80<br>CH 106<br>5530MHz |                                                                                             | 11060     | 43.34      | -30.66 | 74         | 47.36    | 37.94    | 16.97  | 58.93  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 16590     | 48.75      | -25.25 | 74         | 42.95    | 41.57    | 20.96  | 56.73  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11060     | 43.68      | -30.32 | 74         | 47.7     | 37.94    | 16.97  | 58.93  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 16590     | 48.64      | -25.36 | 74         | 42.84    | 41.57    | 20.96  | 56.73  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| 802.11ac<br>VHT80<br>CH 122<br>5610MHz |                                                                                             | 11220     | 43.79      | -30.21 | 74         | 47.18    | 38.03    | 17.12  | 58.54  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 16830     | 48.63      | -25.37 | 74         | 41.99    | 42.06    | 21.12  | 56.54  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11220     | 45.28      | -28.72 | 74         | 48.67    | 38.03    | 17.12  | 58.54  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 16830     | 49.28      | -24.72 | 74         | 42.64    | 42.06    | 21.12  | 56.54  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E Band 3 - Straddle Channel

## WIFI 802.11a (Band Edge @ 3m) (with adapter1)

| 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) |
| 802.11a<br>CH 144<br>5720MHz | *                                                                                           | 5720      | 108.85     | -      | -          | 95.51  | 35.23    | 12.26  | 34.15  | 139    | 314     | P     | H     |
|                              | *                                                                                           | 5720      | 98.37      | -      | -          | 85.03  | 35.23    | 12.26  | 34.15  | 139    | 314     | A     | H     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                              | *                                                                                           | 5720      | 107.25     | -      | -          | 93.91  | 35.23    | 12.26  | 34.15  | 384    | 89      | P     | V     |
|                              | *                                                                                           | 5720      | 96.66      | -      | -          | 83.32  | 35.23    | 12.26  | 34.15  | 384    | 89      | A     | V     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                              |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                       | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



**15E band 3 - Straddle Channel**

**WIFI 802.11a (Harmonic @ 3m) (with adapter1)**

| 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) |
| <b>802.11a<br/>CH 144<br/>5720MHz</b> |                                                                                             | 11440     | 44.41      | -29.59 | 74         | 46.87  | 38.16    | 17.35  | 57.97  | 100    | 0       | P     | H     |
|                                       |                                                                                             | 17160     | 50.51      | -23.49 | 74         | 43.42  | 42.27    | 21.32  | 56.5   | 100    | 0       | P     | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                       |                                                                                             | 11440     | 48.99      | -25.01 | 74         | 51.45  | 38.16    | 17.35  | 57.97  | 100    | 0       | P     | V     |
|                                       |                                                                                             | 17160     | 50.73      | -23.27 | 74         | 43.64  | 42.27    | 21.32  | 56.5   | 100    | 0       | P     | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                       |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                                | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E band 3 - Straddle Channel

## WIFI 802.11n HT20 (Band Edge @ 3m) (with adapter1)

| 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) |
| 802.11n<br>HT20<br>CH 144<br>5720MHz | *                                                                                           | 5720      | 106.16     | -      | -          | 92.82  | 35.23    | 12.26  | 34.15  | 155    | 312     | P     | H     |
|                                      | *                                                                                           | 5720      | 94.5       | -      | -          | 81.16  | 35.23    | 12.26  | 34.15  | 155    | 312     | A     | H     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                      | *                                                                                           | 5720      | 103.25     | -      | -          | 89.91  | 35.23    | 12.26  | 34.15  | 293    | 97      | P     | V     |
|                                      | *                                                                                           | 5720      | 91.29      | -      | -          | 77.95  | 35.23    | 12.26  | 34.15  | 293    | 97      | A     | V     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                      |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |


**15E band 3 - Straddle Channel**
**WIFI 802.11n HT20 (Harmonic @ 3m) (with adapter1)**

| 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 ) |
| 802.11n<br>HT20<br>CH 144<br>5720MHz |                                                                                             | 11440     | 44.59      | -29.41 | 74         | 47.05    | 38.16    | 17.35  | 57.97  | 100    | 0       | P       | H       |
|                                      |                                                                                             | 17160     | 50.22      | -23.78 | 74         | 43.13    | 42.27    | 21.32  | 56.5   | 100    | 0       | P       | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             | 11440     | 47.05      | -26.95 | 74         | 49.51    | 38.16    | 17.35  | 57.97  | 100    | 0       | P       | V       |
|                                      |                                                                                             | 17160     | 50.7       | -23.3  | 74         | 43.61    | 42.27    | 21.32  | 56.5   | 100    | 0       | P       | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 3 - Straddle Channel

## WIFI 802.11n HT40 (Band Edge @ 3m) (with adapter1)

| 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 ) |
| 802.11n<br>HT40<br>CH 142<br>5710MHz | *                                                                                           | 5710      | 101.8      | -      | -          | 88.47    | 35.22    | 12.26  | 34.15  | 134    | 316     | P       | H       |
|                                      | *                                                                                           | 5710      | 90.24      | -      | -          | 76.91    | 35.22    | 12.26  | 34.15  | 134    | 316     | A       | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                      | *                                                                                           | 5710      | 101.55     | -      | -          | 88.22    | 35.22    | 12.26  | 34.15  | 368    | 74      | P       | V       |
|                                      | *                                                                                           | 5710      | 87.45      | -      | -          | 74.12    | 35.22    | 12.26  | 34.15  | 368    | 74      | A       | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                      |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |

**15E band 3 - Straddle Channel****WIFI 802.11n HT40 (Harmonic @ 3m) (with adapter1)**

| 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 ) |
| <b>802.11n<br/>HT40<br/>CH 142<br/>5710MHz</b> |                                                                                             | 11420     | 44.21      | -29.79 | 74         | 46.77    | 38.15    | 17.31  | 58.02  | 100    | 0       | P       | H       |
|                                                |                                                                                             | 17130     | 49.65      | -24.35 | 74         | 42.54    | 42.29    | 21.3   | 56.48  | 100    | 0       | P       | H       |
|                                                |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                                |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                                |                                                                                             | 11420     | 45.43      | -28.57 | 74         | 47.99    | 38.15    | 17.31  | 58.02  | 100    | 0       | P       | V       |
|                                                |                                                                                             | 17130     | 50.77      | -23.23 | 74         | 43.66    | 42.29    | 21.3   | 56.48  | 100    | 0       | P       | V       |
|                                                |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                                |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                         | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



**15E band 3 - Straddle Channel**

**WIFI 802.11ac VHT20 (Band Edge @ 3m) (with adapter1)**

| 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) |
| 802.11ac<br>VHT20<br>CH 144<br>5720MHz | *                                                                                           | 5716      | 105.17     | -      | -          | 91.84  | 35.22    | 12.26  | 34.15  | 150    | 307     | P     | H     |
|                                        | *                                                                                           | 5716      | 95.51      | -      | -          | 82.18  | 35.22    | 12.26  | 34.15  | 150    | 307     | A     | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        | *                                                                                           | 5718      | 100.62     | -      | -          | 87.28  | 35.23    | 12.26  | 34.15  | 100    | 9       | P     | V     |
|                                        | *                                                                                           | 5718      | 90.37      | -      | -          | 77.03  | 35.23    | 12.26  | 34.15  | 100    | 9       | A     | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |


**15E band 3 - Straddle Channel**
**WIFI 802.11ac VHT20 (Harmonic @ 3m) (with adapter1)**

| 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 ) |
| 802.11ac<br>VHT20<br>CH 144<br>5720MHz |                                                                                             | 11440     | 43.39      | -30.61 | 74         | 45.85    | 38.16    | 17.35  | 57.97  | 100    | 0       | P       | H       |
|                                        |                                                                                             | 17160     | 50.04      | -23.96 | 74         | 42.95    | 42.27    | 21.32  | 56.5   | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11440     | 46.57      | -27.43 | 74         | 49.03    | 38.16    | 17.35  | 57.97  | 100    | 0       | P       | V       |
|                                        |                                                                                             | 17160     | 50.45      | -23.55 | 74         | 43.36    | 42.27    | 21.32  | 56.5   | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



**15E band 3 - Straddle Channel**

**WIFI 802.11ac VHT40 (Band Edge @ 3m) (with adapter1)**

| 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) |
| 802.11ac<br>VHT40<br>CH 142<br>5710MHz | *                                                                                           | 5707      | 101.98     | -      | -          | 88.65    | 35.22    | 12.26  | 34.15  | 128    | 315     | P     | H     |
|                                        | *                                                                                           | 5707      | 91.84      | -      | -          | 78.51    | 35.22    | 12.26  | 34.15  | 128    | 315     | A     | H     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | H     |
|                                        | *                                                                                           | 5710      | 97.37      | -      | -          | 84.04    | 35.22    | 12.26  | 34.15  | 100    | 21      | P     | V     |
|                                        | *                                                                                           | 5710      | 87.49      | -      | -          | 74.16    | 35.22    | 12.26  | 34.15  | 100    | 21      | A     | V     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |       | V     |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |       |       |

**15E band 3 - Straddle Channel****WIFI 802.11ac VHT40 (Harmonic @ 3m) (with adapter1)**

| 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 ) |
| <b>802.11ac<br/>VHT40<br/>CH 142<br/>5710MHz</b> |                                                                                             | 11420     | 43.42      | -30.58 | 74         | 45.98    | 38.15    | 17.31  | 58.02  | 100    | 0       | P       | H       |
|                                                  |                                                                                             | 17130     | 49.61      | -24.39 | 74         | 42.5     | 42.29    | 21.3   | 56.48  | 100    | 0       | P       | H       |
|                                                  |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                                  |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                                  |                                                                                             | 11420     | 44.43      | -29.57 | 74         | 46.99    | 38.15    | 17.31  | 58.02  | 100    | 0       | P       | V       |
|                                                  |                                                                                             | 17130     | 50.69      | -23.31 | 74         | 43.58    | 42.29    | 21.3   | 56.48  | 100    | 0       | P       | V       |
|                                                  |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                                  |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                           | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |


**15E band 3 - Straddle Channel**
**WIFI 802.11ac VHT80 (Band Edge @ 3m) (with adapter1)**

| 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) |
| 802.11ac<br>VHT80<br>CH 138<br>5690MHz | *                                                                                           | 5690      | 98.27      | -      | -          | 85     | 35.21    | 12.18  | 34.12  | 102    | 318     | P     | H     |
|                                        | *                                                                                           | 5690      | 87.49      | -      | -          | 74.22  | 35.21    | 12.18  | 34.12  | 102    | 318     | A     | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                        | *                                                                                           | 5690      | 94.23      | -      | -          | 80.96  | 35.21    | 12.18  | 34.12  | 103    | 18      | P     | V     |
|                                        | *                                                                                           | 5690      | 83.51      | -      | -          | 70.24  | 35.21    | 12.18  | 34.12  | 103    | 18      | A     | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                        |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



**15E band 3 - Straddle Channel**

**WIFI 802.11ac VHT80 (Harmonic @ 3m) (with adapter1)**

| 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 ) |
| 802.11ac<br>VHT80<br>CH 138<br>5690MHz |                                                                                             | 11380     | 44.79      | -29.21 | 74         | 47.49    | 38.13    | 17.27  | 58.1   | 100    | 0       | P       | H       |
|                                        |                                                                                             | 17070     | 50.52      | -23.48 | 74         | 43.34    | 42.35    | 21.27  | 56.44  | 100    | 0       | P       | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                        |                                                                                             | 11380     | 45.31      | -28.69 | 74         | 48.01    | 38.13    | 17.27  | 58.1   | 100    | 0       | P       | V       |
|                                        |                                                                                             | 17070     | 50.56      | -23.44 | 74         | 43.38    | 42.35    | 21.27  | 56.44  | 100    | 0       | P       | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                        |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                                 | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E Emission below 1GHz

## WIFI 802.11n HT20 (LF @ 3m) (with adapter1)

| 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) |
| 802.11n<br>HT20<br>LF |                                                                            | 43.5      | 29.76      | -10.24 | 40         | 47.99  | 11.2     | 1.77   | 31.2   | 267    | 199     | P     | H     |
|                       |                                                                            | 59.97     | 27.55      | -12.45 | 40         | 51.08  | 6        | 1.77   | 31.3   |        |         | P     | H     |
|                       |                                                                            | 207.93    | 31.99      | -11.51 | 43.5       | 51.23  | 9.17     | 2.69   | 31.1   |        |         | P     | H     |
|                       |                                                                            | 487.6     | 20.37      | -25.63 | 46         | 29.49  | 17.84    | 3.77   | 30.73  |        |         | P     | H     |
|                       |                                                                            | 610.8     | 22.76      | -23.24 | 46         | 29.33  | 19.93    | 4.08   | 30.58  |        |         | P     | H     |
|                       |                                                                            | 769.7     | 25.02      | -20.98 | 46         | 28.8   | 22.1     | 4.48   | 30.36  |        |         | P     | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            | 30.54     | 32.59      | -7.41  | 40         | 44     | 18.28    | 1.77   | 31.46  |        |         | P     | V     |
|                       |                                                                            | 36.21     | 32.17      | -7.83  | 40         | 45.92  | 15.76    | 1.77   | 31.28  |        |         | P     | V     |
|                       |                                                                            | 45.93     | 34.57      | -5.43  | 40         | 53.85  | 10.15    | 1.77   | 31.2   | 127    | 130     | P     | V     |
|                       |                                                                            | 413.4     | 29.23      | -16.77 | 46         | 40.19  | 16.35    | 3.52   | 30.83  |        |         | P     | V     |
|                       |                                                                            | 783       | 26.81      | -19.19 | 46         | 30.56  | 21.97    | 4.62   | 30.34  |        |         | P     | V     |
|                       |                                                                            | 832.7     | 26.78      | -19.22 | 46         | 29.52  | 22.92    | 4.7    | 30.36  |        |         | P     | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                | 1. No other spurious found.<br>2. All results are PASS against limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E band 1 5150~5250MHz

## WIFI 802.11n HT20 (Band Edge @ 3m) (with adapter2)

| 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) |
| 802.11n<br>HT20<br>CH 36<br>5180MHz |                                                                                             | 5146.55   | 72.83      | -1.17  | 74         | 59.16  | 34.61    | 11.55  | 32.49  | 163    | 322     | P     | H     |
|                                     |                                                                                             | 5150      | 52.33      | -1.67  | 54         | 38.66  | 34.61    | 11.55  | 32.49  | 163    | 322     | A     | H     |
|                                     | *                                                                                           | 5180      | 110.85     | -      | -          | 97.16  | 34.66    | 11.55  | 32.52  | 163    | 322     | P     | H     |
|                                     | *                                                                                           | 5180      | 100.29     | -      | -          | 86.6   | 34.66    | 11.55  | 32.52  | 163    | 322     | A     | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             | 5150      | 69.88      | -4.12  | 74         | 56.21  | 34.61    | 11.55  | 32.49  | 322    | 78      | P     | V     |
|                                     |                                                                                             | 5149.85   | 49.99      | -4.01  | 54         | 36.32  | 34.61    | 11.55  | 32.49  | 322    | 78      | A     | V     |
|                                     | *                                                                                           | 5177      | 106.29     | -      | -          | 92.6   | 34.66    | 11.55  | 32.52  | 322    | 78      | P     | V     |
|                                     | *                                                                                           | 5177      | 95.84      | -      | -          | 82.15  | 34.66    | 11.55  | 32.52  | 322    | 78      | A     | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |


**15E band 1 5150~5250MHz**
**WIFI 802.11n HT20 (Harmonic @ 3m) (with adapter2)**

| 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) |
| 802.11n<br>HT20<br>CH 36<br>5180MHz |                                                                                             | 10359     | 41.48      | -32.52 | 74         | 47.83  | 37.22    | 16.34  | 59.91  | 100    | 0       | P     | H     |
|                                     |                                                                                             | 15540     | 47.2       | -26.8  | 74         | 44.38  | 40.34    | 20.36  | 57.88  | 100    | 0       | P     | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                     |                                                                                             | 10359     | 41.58      | -32.42 | 74         | 47.93  | 37.22    | 16.34  | 59.91  | 100    | 0       | P     | V     |
|                                     |                                                                                             | 15540     | 46.51      | -27.49 | 74         | 43.69  | 40.34    | 20.36  | 57.88  | 100    | 0       | P     | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                     |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E Emission below 1GHz

## WIFI 802.11n HT20 (LF @ 3m) (with adapter2)

| 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 ) |
| 802.11n<br>HT20<br>LF |                                                                            | 79.41     | 32.14      | -7.86  | 40         | 54.31    | 6.97     | 2.06   | 31.2   |        |         | P       | H       |
|                       |                                                                            | 102.36    | 35.68      | -7.82  | 43.5       | 53.96    | 10.46    | 2.38   | 31.12  | 105    | 216     | P       | H       |
|                       |                                                                            | 158.52    | 35.24      | -8.26  | 43.5       | 53.24    | 10.58    | 2.61   | 31.19  |        |         | P       | H       |
|                       |                                                                            | 434.4     | 28.26      | -17.74 | 46         | 38.41    | 16.95    | 3.63   | 30.73  |        |         | P       | H       |
|                       |                                                                            | 520.5     | 28.81      | -17.19 | 46         | 37.48    | 18.12    | 3.89   | 30.68  |        |         | P       | H       |
|                       |                                                                            | 911.1     | 28.39      | -17.61 | 46         | 30.36    | 23.55    | 4.8    | 30.32  |        |         | P       | H       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | H       |
|                       |                                                                            | 75.36     | 38.24      | -1.76  | 40         | 60.55    | 6.83     | 2.06   | 31.2   | 101    | 257     | P       | V       |
|                       |                                                                            | 170.13    | 37         | -6.5   | 43.5       | 55.79    | 9.7      | 2.61   | 31.1   |        |         | P       | V       |
|                       |                                                                            | 266.52    | 22.14      | -23.86 | 46         | 36.75    | 13.23    | 3.16   | 31     |        |         | P       | V       |
|                       |                                                                            | 428.1     | 29.27      | -16.73 | 46         | 39.54    | 16.86    | 3.63   | 30.76  |        |         | P       | V       |
|                       |                                                                            | 747.3     | 26.75      | -19.25 | 46         | 30.54    | 22.13    | 4.48   | 30.4   |        |         | P       | V       |
|                       |                                                                            | 874       | 29.64      | -16.36 | 46         | 32.37    | 22.96    | 4.66   | 30.35  |        |         | P       | V       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
|                       |                                                                            |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                | 1. No other spurious found.<br>2. All results are PASS against limit line. |           |            |        |            |          |          |        |        |        |         |         |         |



## 15E band 1 5150~5250MHz

## WIFI 802.11n HT20 (Band Edge @ 3m) (with adapter3)

| 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 ) |
| 802.11n<br>HT20<br>CH 36<br>5180MHz |                                                                                             | 5149.55   | 72.97      | -1.03  | 74         | 59.3     | 34.61    | 11.55  | 32.49  | 163    | 322     | P       | H       |
|                                     |                                                                                             | 5150      | 52.59      | -1.41  | 54         | 38.92    | 34.61    | 11.55  | 32.49  | 163    | 322     | A       | H       |
|                                     | *                                                                                           | 5180      | 110.97     | -      | -          | 97.28    | 34.66    | 11.55  | 32.52  | 163    | 322     | P       | H       |
|                                     | *                                                                                           | 5180      | 100.23     | -      | -          | 86.54    | 34.66    | 11.55  | 32.52  | 163    | 322     | A       | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | H       |
|                                     |                                                                                             | 5146.55   | 68.11      | -5.89  | 74         | 54.44    | 34.61    | 11.55  | 32.49  | 322    | 78      | P       | V       |
|                                     |                                                                                             | 5149.55   | 50.17      | -3.83  | 54         | 36.5     | 34.61    | 11.55  | 32.49  | 322    | 78      | A       | V       |
|                                     | *                                                                                           | 5180      | 106.3      | -      | -          | 92.61    | 34.66    | 11.55  | 32.52  | 322    | 78      | P       | V       |
|                                     | *                                                                                           | 5180      | 95.71      | -      | -          | 82.02    | 34.66    | 11.55  | 32.52  | 322    | 78      | A       | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
|                                     |                                                                                             |           |            |        |            |          |          |        |        |        |         |         | V       |
| Remark                              | 3. No other spurious found.<br>4. All results are PASS against Peak and Average limit line. |           |            |        |            |          |          |        |        |        |         |         |         |

**15E band 1 5150~5250MHz****WIFI 802.11n HT20 (Harmonic @ 3m) (with adapter3)**

| 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) |
| <b>802.11n<br/>HT20<br/>CH 36<br/>5180MHz</b> |                                                                                             | 10360     | 41.57      | -32.43 | 74         | 47.92  | 37.22    | 16.34  | 59.91  | 100    | 0       | P     | H     |
|                                               |                                                                                             | 15540     | 46.71      | -27.29 | 74         | 43.89  | 40.34    | 20.36  | 57.88  | 100    | 0       | P     | H     |
|                                               |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                               |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | H     |
|                                               |                                                                                             | 10360     | 41.24      | -32.76 | 74         | 47.59  | 37.22    | 16.34  | 59.91  | 100    | 0       | P     | V     |
|                                               |                                                                                             | 15540     | 46.51      | -27.49 | 74         | 43.69  | 40.34    | 20.36  | 57.88  | 100    | 0       | P     | V     |
|                                               |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
|                                               |                                                                                             |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                                        | 3. No other spurious found.<br>4. All results are PASS against Peak and Average limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



## 15E Emission below 1GHz

## WIFI 802.11n HT20 (LF @ 3m) (with adapter3)

| 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) |
| 802.11n<br>HT20<br>LF |                                                                            | 79.68     | 35.66      | -4.34  | 40         | 57.83  | 6.97     | 2.06   | 31.2   | 106    | 214     | P     | H     |
|                       |                                                                            | 148.8     | 34.08      | -9.42  | 43.5       | 51.49  | 11.08    | 2.61   | 31.1   |        |         | P     | H     |
|                       |                                                                            | 242.76    | 33.2       | -12.8  | 46         | 49.64  | 11.6     | 2.96   | 31     |        |         | P     | H     |
|                       |                                                                            | 342       | 31.08      | -14.92 | 46         | 44.54  | 14.16    | 3.39   | 31.01  |        |         | P     | H     |
|                       |                                                                            | 510.7     | 34.8       | -11.2  | 46         | 43.45  | 18.1     | 3.89   | 30.64  |        |         | P     | H     |
|                       |                                                                            | 902.7     | 30.06      | -15.94 | 46         | 32.28  | 23.29    | 4.8    | 30.31  |        |         | P     | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | H     |
|                       |                                                                            | 76.98     | 33.33      | -6.67  | 40         | 55.6   | 6.87     | 2.06   | 31.2   | 101    | 269     | P     | V     |
|                       |                                                                            | 149.07    | 28.54      | -14.96 | 43.5       | 46.09  | 10.94    | 2.61   | 31.1   |        |         | P     | V     |
|                       |                                                                            | 241.95    | 31.6       | -14.4  | 46         | 48.04  | 11.6     | 2.96   | 31     |        |         | P     | V     |
|                       |                                                                            | 401.5     | 35.58      | -10.42 | 46         | 47.01  | 15.95    | 3.52   | 30.9   |        |         | P     | V     |
|                       |                                                                            | 563.2     | 31.31      | -14.69 | 46         | 38.16  | 19.89    | 4.01   | 30.75  |        |         | P     | V     |
|                       |                                                                            | 861.4     | 27.54      | -18.46 | 46         | 30.08  | 23.18    | 4.66   | 30.38  |        |         | P     | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
|                       |                                                                            |           |            |        |            |        |          |        |        |        |         |       | V     |
| Remark                | 3. No other spurious found.<br>4. All results are PASS against limit line. |           |            |        |            |        |          |        |        |        |         |       |       |



**15E Emission below 1GHz**

**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 per 15.209(c). |
| !   | Test result is <b>over limit</b> line.                                                                                                                                 |
| P/A | <b>Peak</b> or <b>Average</b>                                                                                                                                          |
| H/V | <b>Horizontal</b> or <b>Vertical</b>                                                                                                                                   |



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”.**