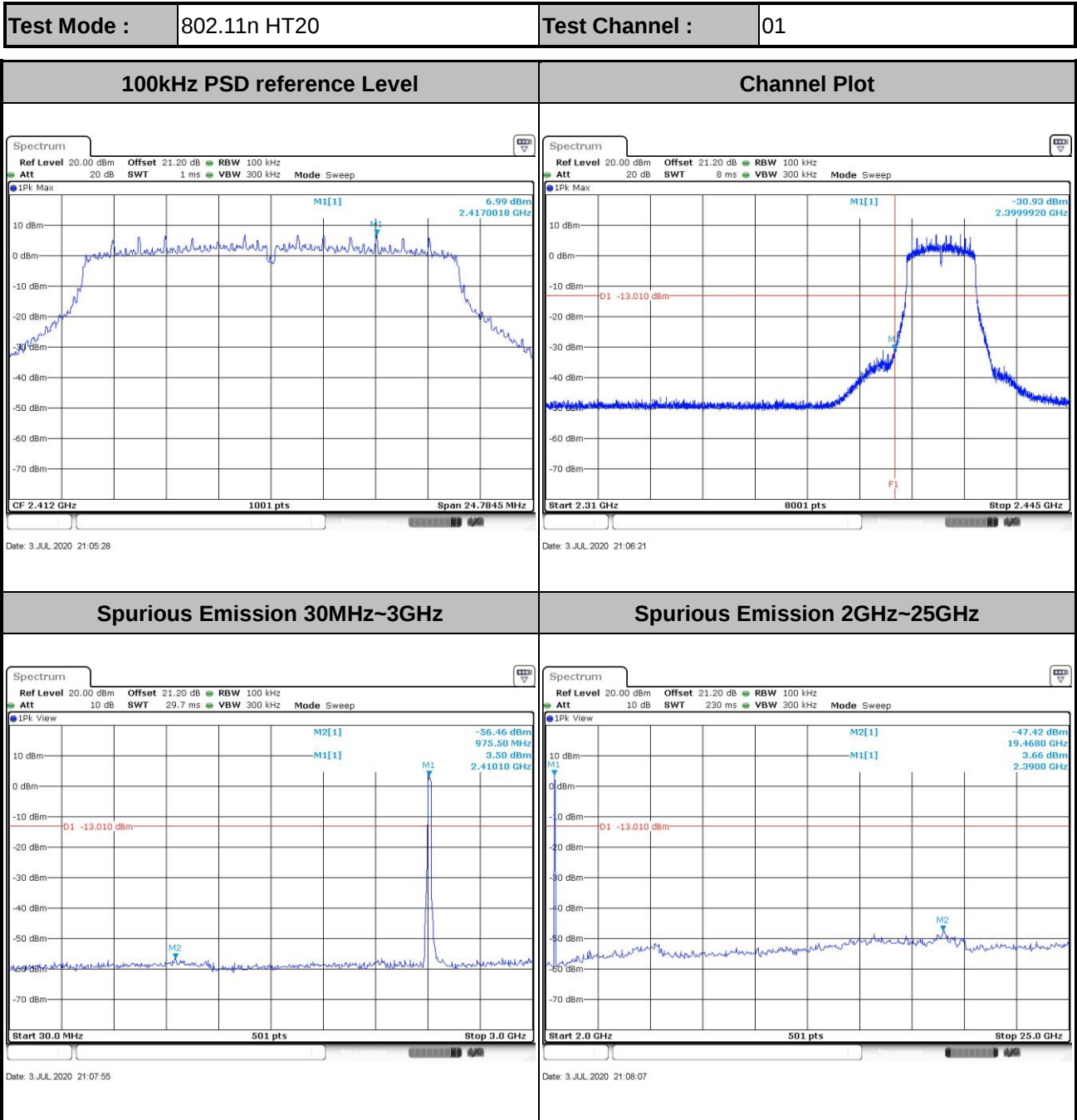
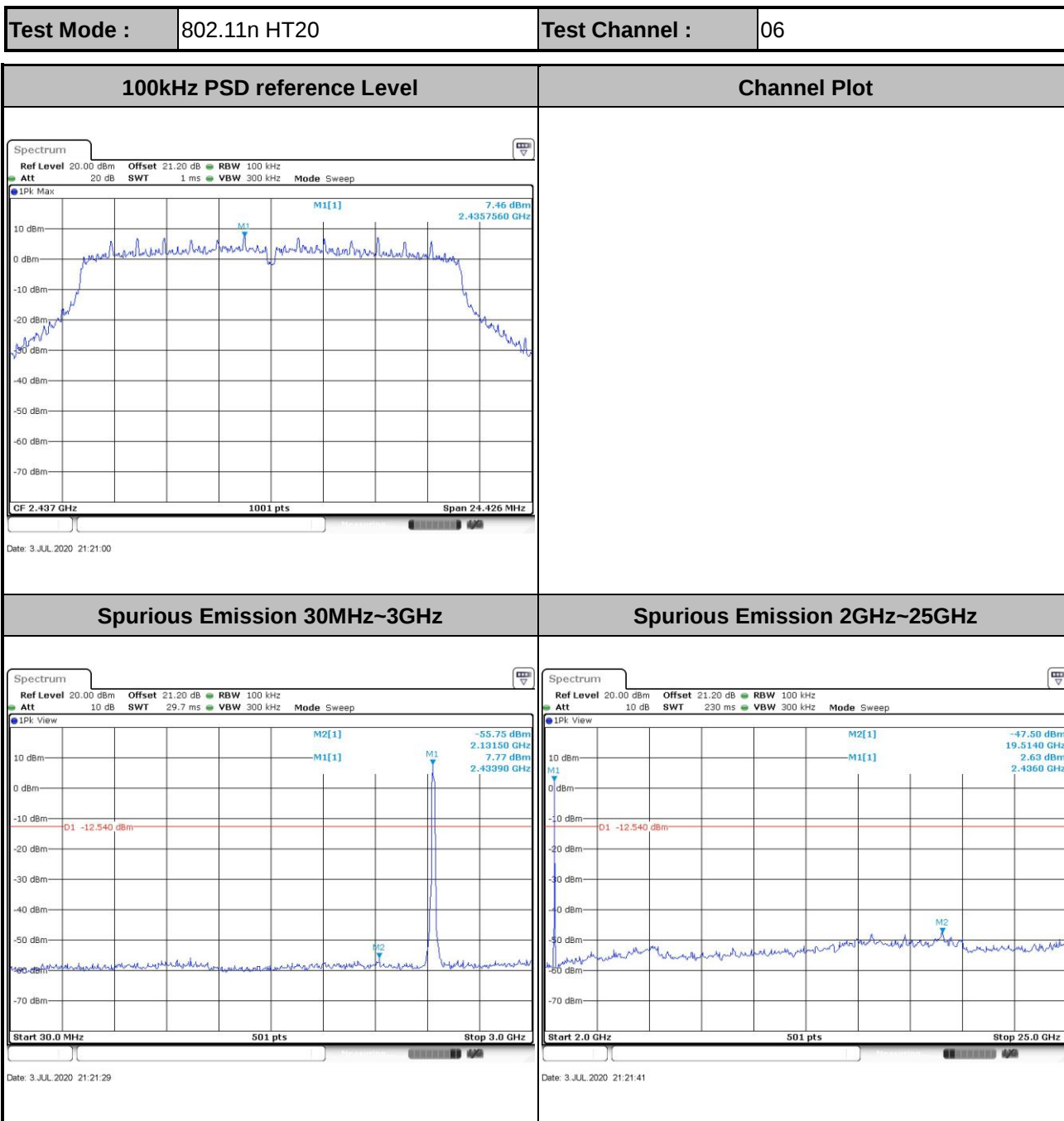




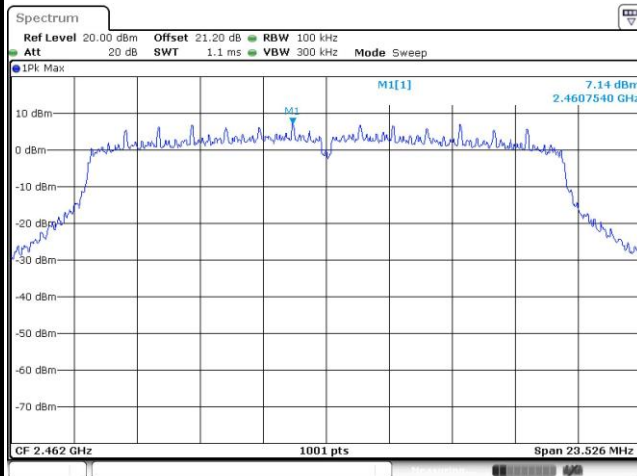




Test Mode : 802.11n HT20

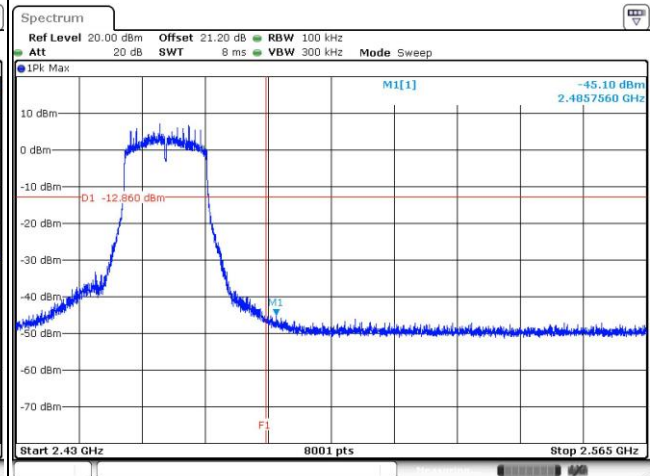
Test Channel : 11

## 100kHz PSD reference Level



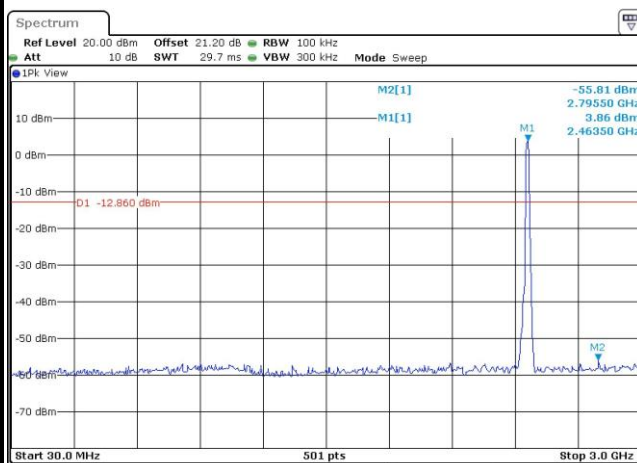
Date: 3 JUL 2020 21:43:43

## Channel Plot



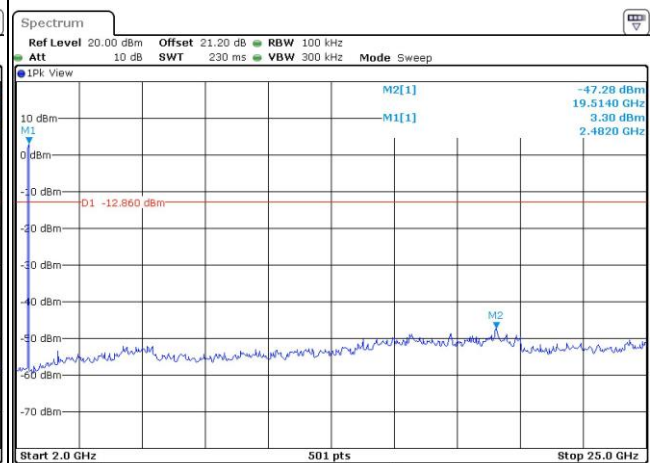
Date: 3 JUL 2020 21:44:34

## Spurious Emission 30MHz~3GHz



Date: 3 JUL 2020 21:45:53

## Spurious Emission 2GHz~25GHz



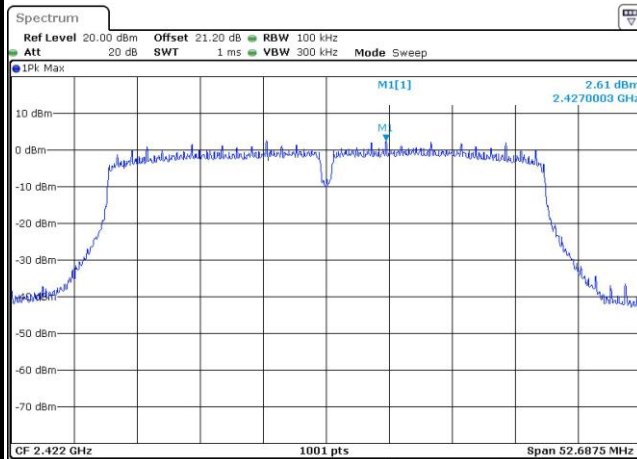
Date: 3 JUL 2020 21:46:08



Test Mode : 802.11n HT40

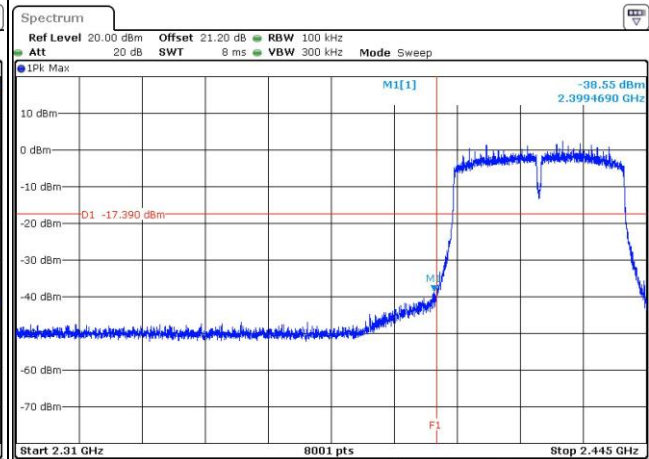
Test Channel : 03

## 100kHz PSD reference Level



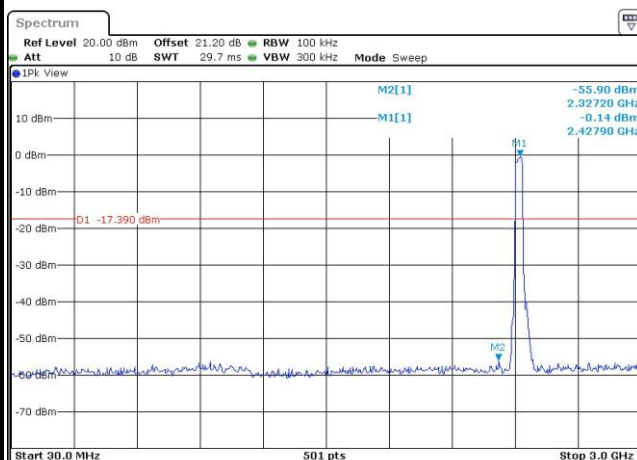
Date: 3 JUL 2020 22:01:16

## Channel Plot



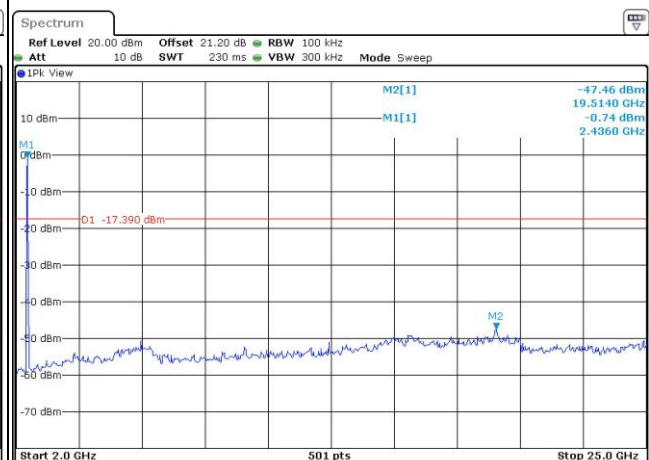
Date: 3 JUL 2020 22:01:31

## Spurious Emission 30MHz~3GHz



Date: 3 JUL 2020 22:02:27

## Spurious Emission 2GHz~25GHz



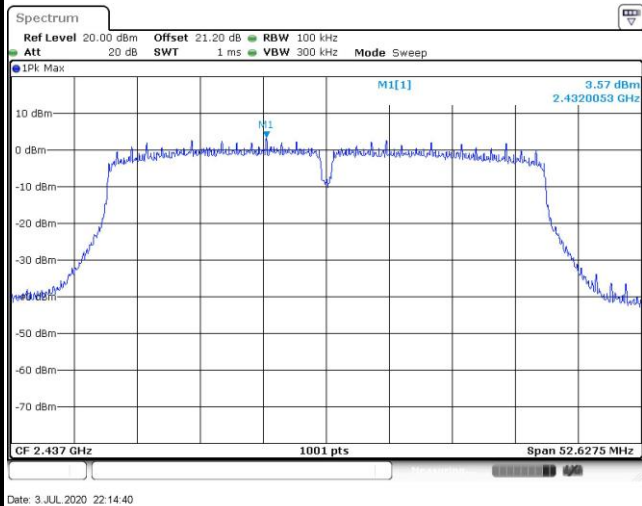
Date: 3 JUL 2020 22:03:10



Test Mode : 802.11n HT40

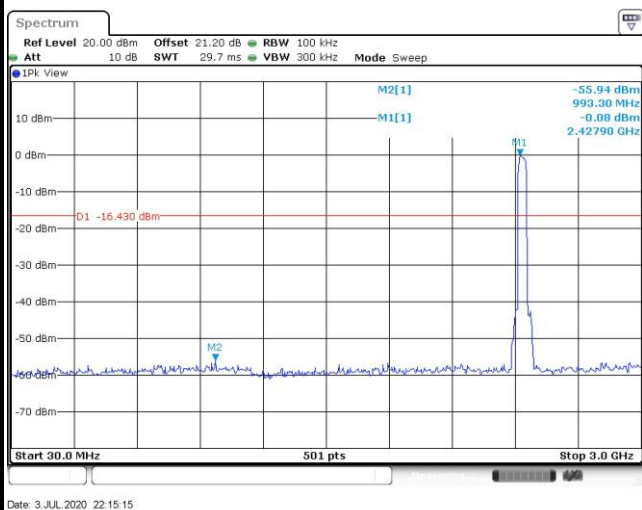
Test Channel : 06

## 100kHz PSD reference Level

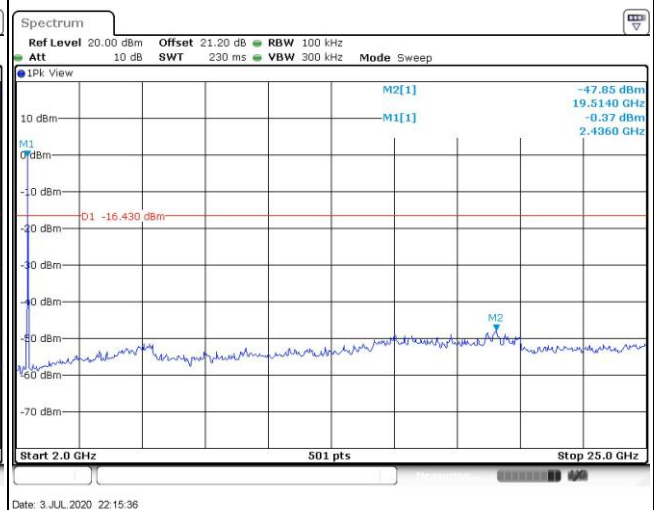


## Channel Plot

## Spurious Emission 30MHz~3GHz

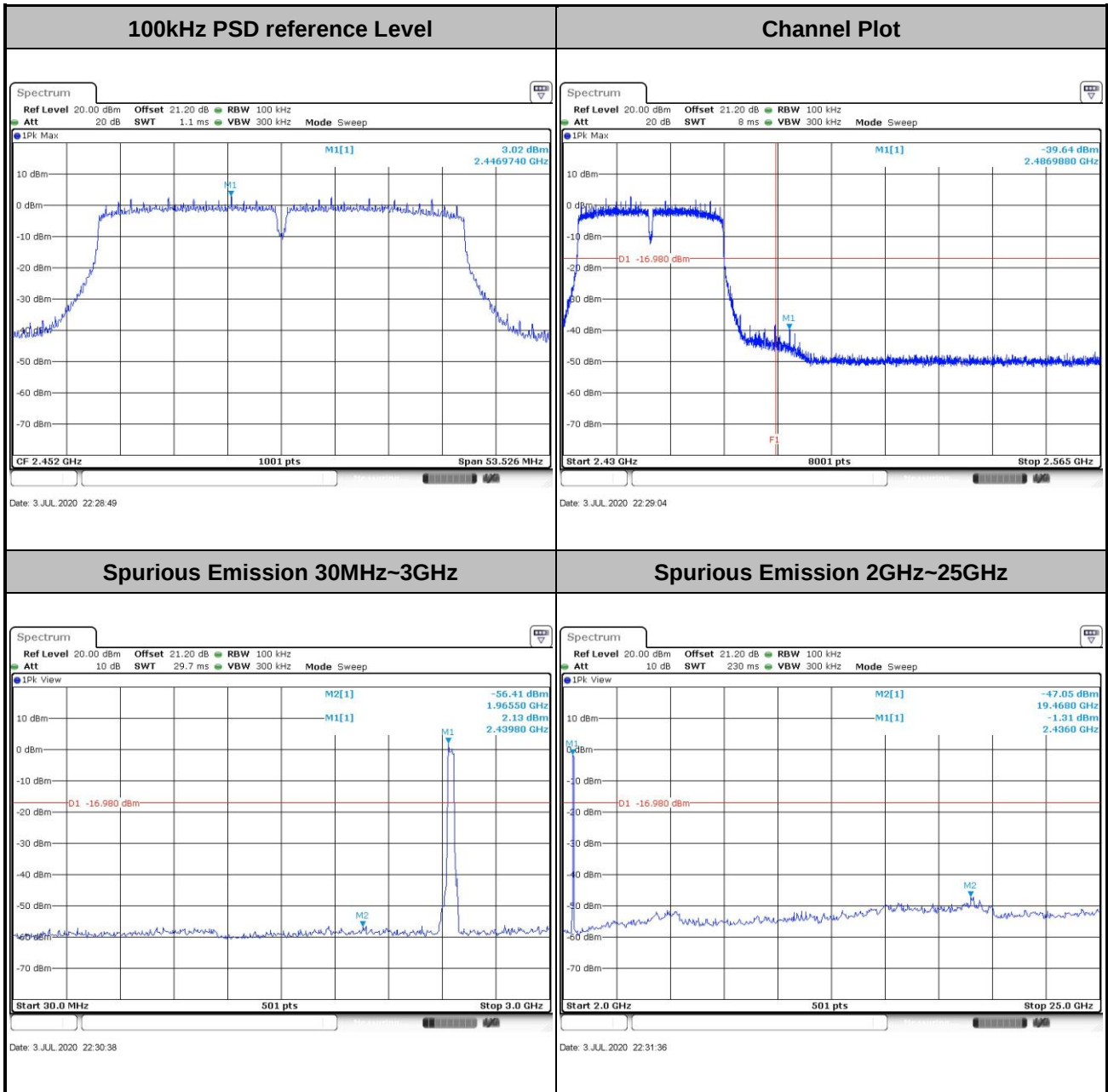


## Spurious Emission 2GHz~25GHz



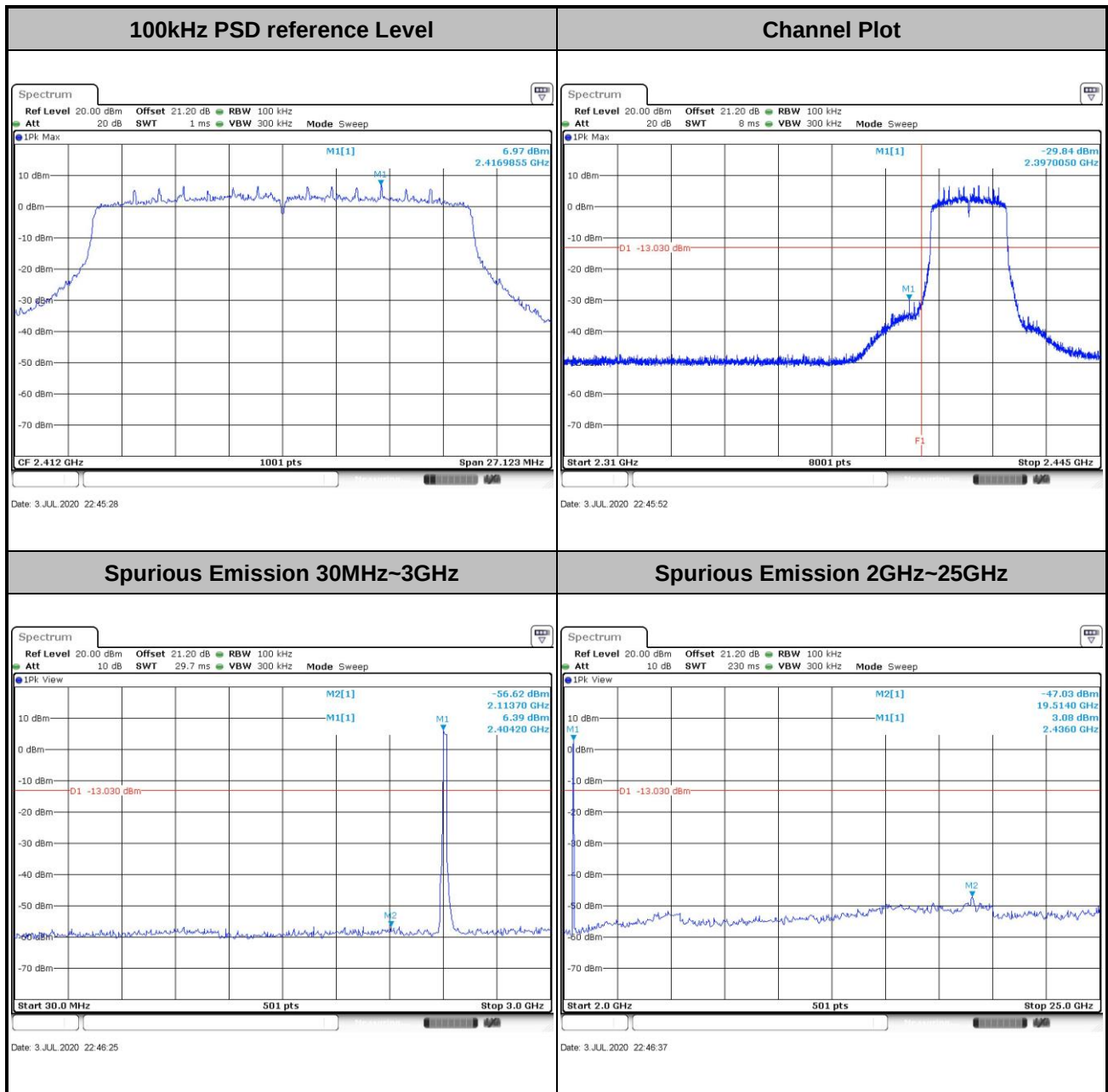


|             |              |                |    |
|-------------|--------------|----------------|----|
| Test Mode : | 802.11n HT40 | Test Channel : | 09 |
|-------------|--------------|----------------|----|



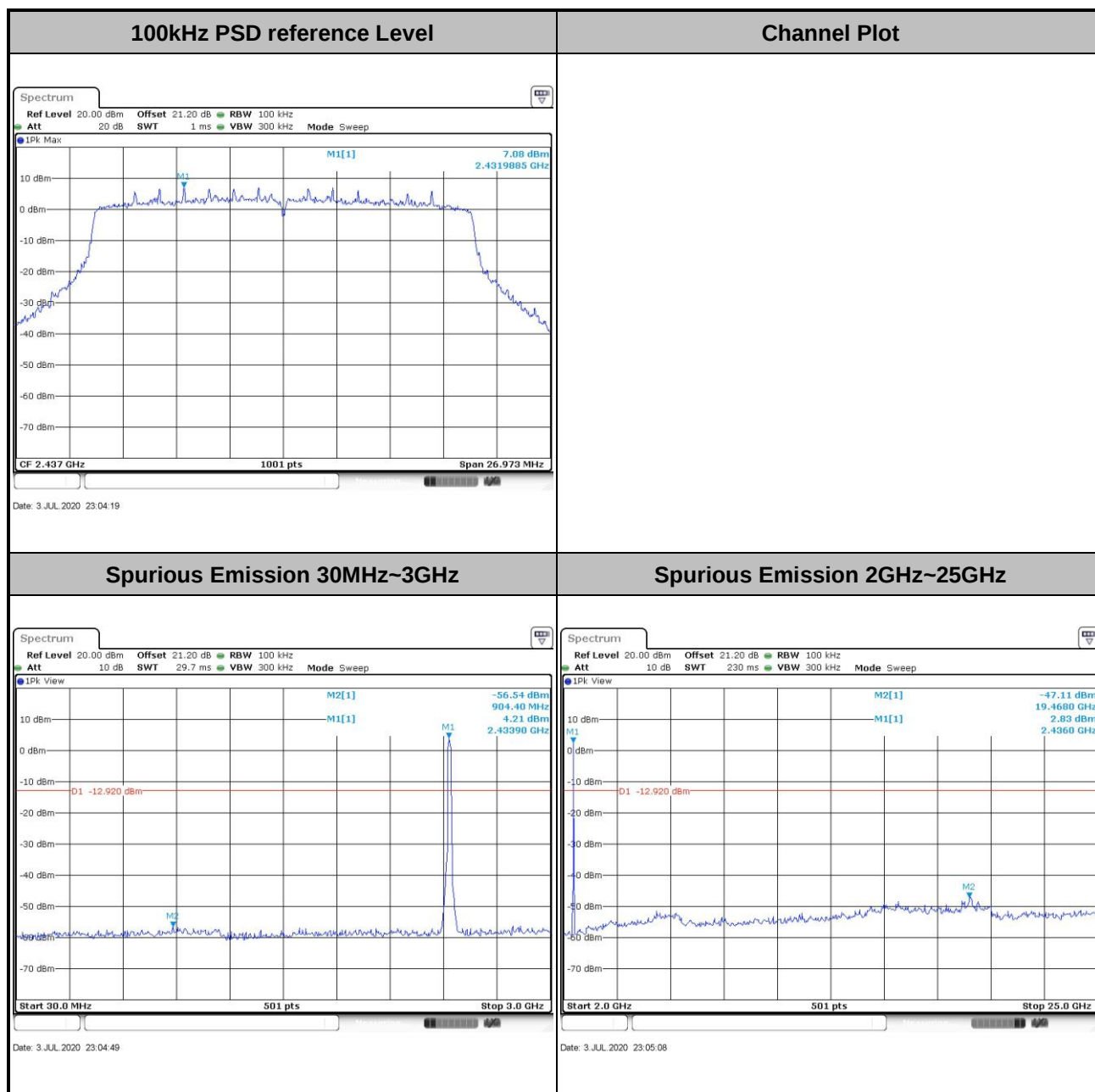


|             |               |                |    |
|-------------|---------------|----------------|----|
| Test Mode : | 802.11ax HE20 | Test Channel : | 01 |
|-------------|---------------|----------------|----|





|             |               |                |    |
|-------------|---------------|----------------|----|
| Test Mode : | 802.11ax HE20 | Test Channel : | 06 |
|-------------|---------------|----------------|----|

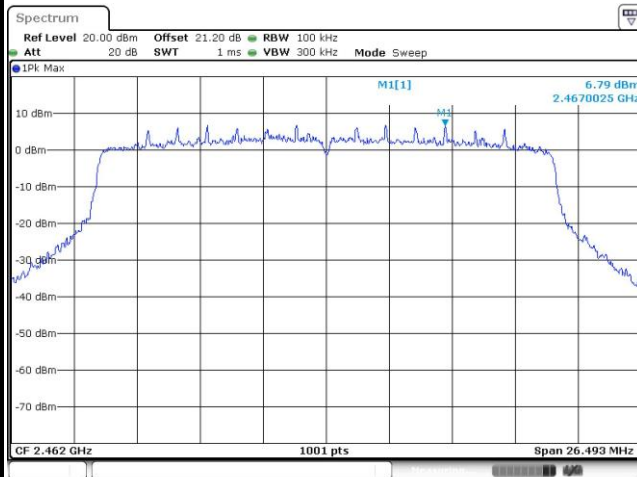




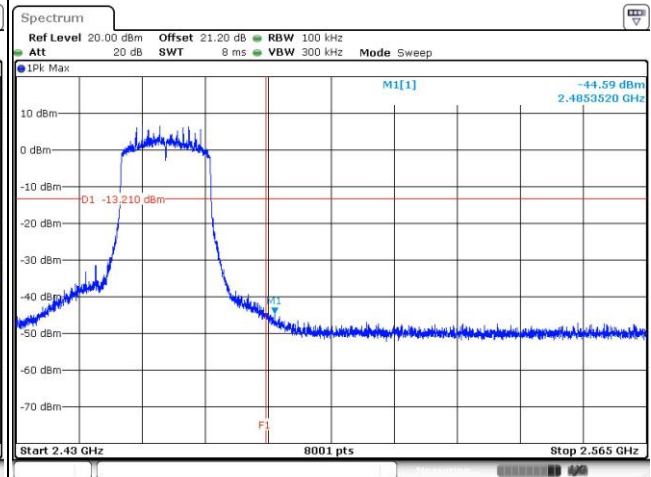
Test Mode : 802.11ax HE20

Test Channel : 11

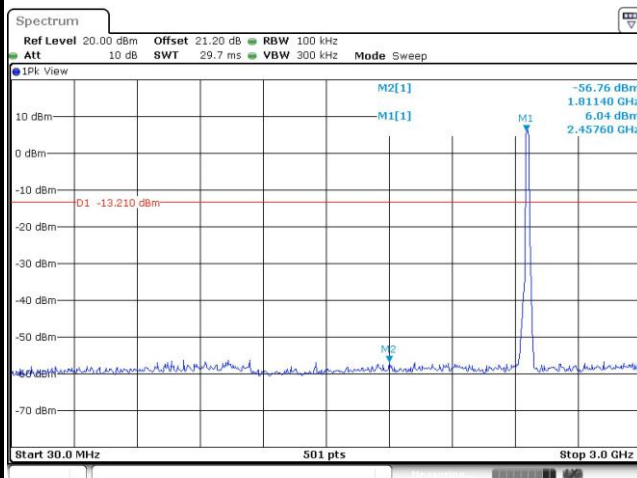
## 100kHz PSD reference Level



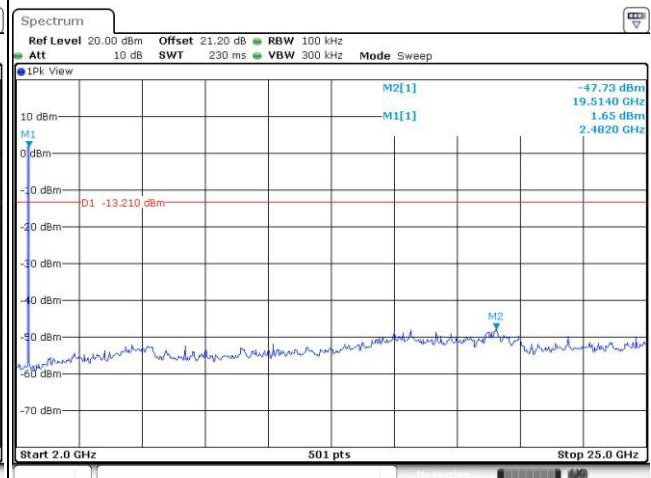
## Channel Plot



## Spurious Emission 30MHz~3GHz



## Spurious Emission 2GHz~25GHz

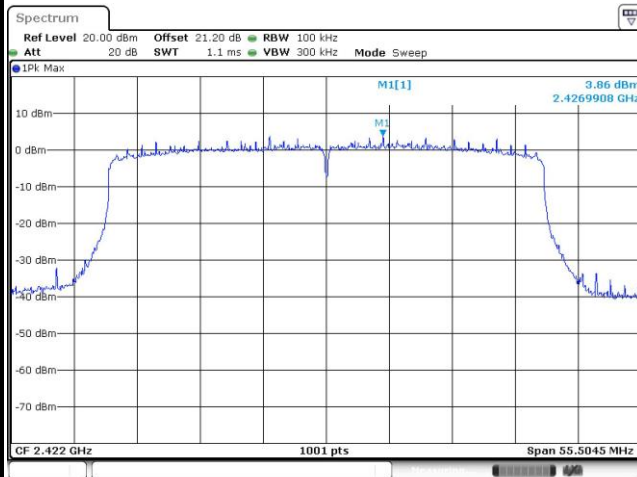




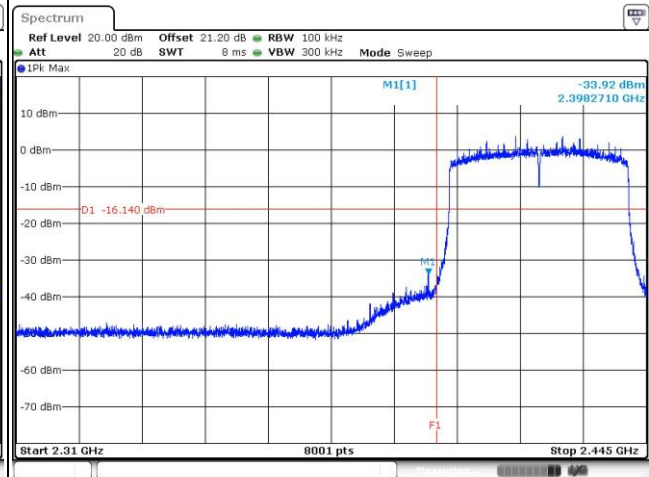
Test Mode : 802.11ax HE40

Test Channel : 03

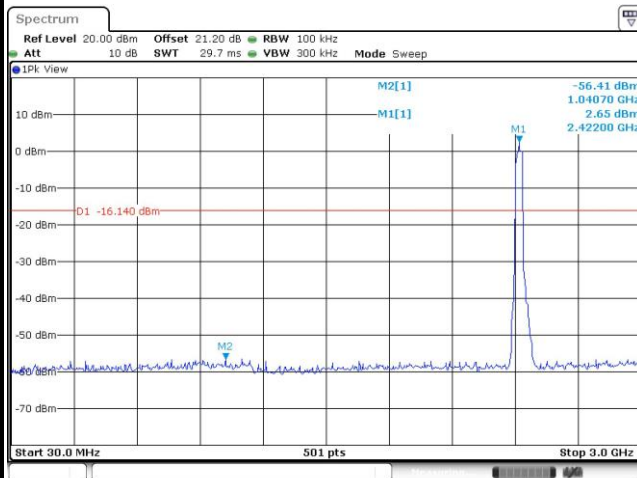
## 100kHz PSD reference Level



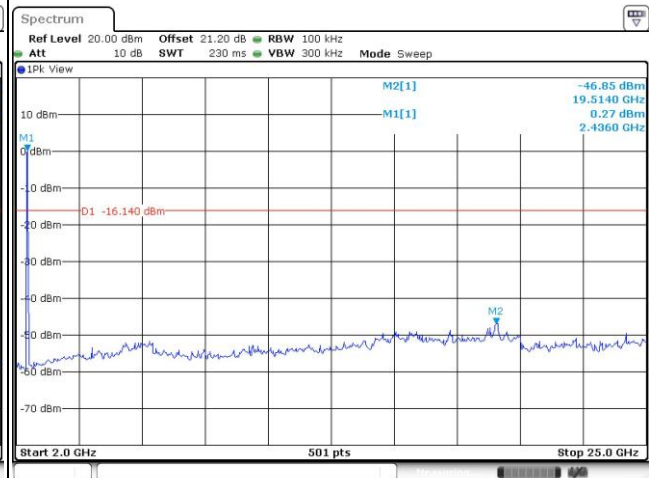
## Channel Plot



## Spurious Emission 30MHz~3GHz



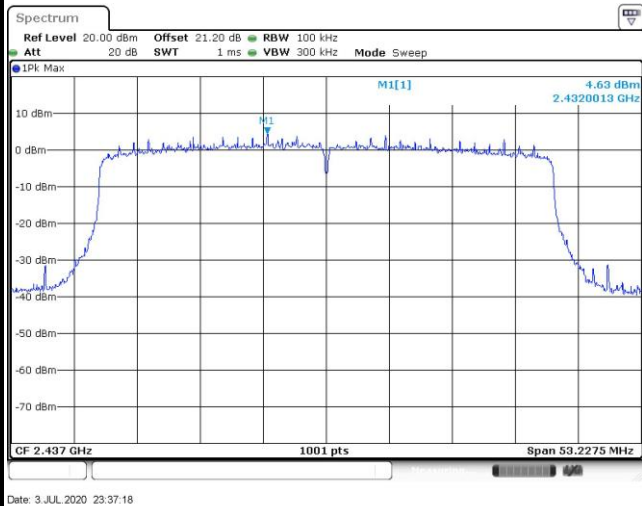
## Spurious Emission 2GHz~25GHz





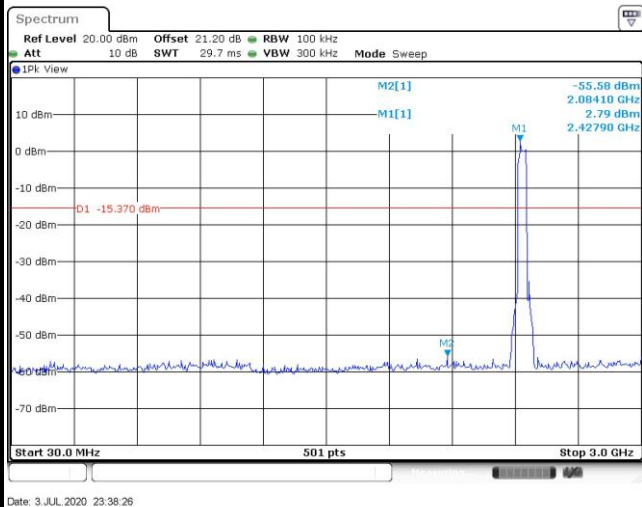
|             |               |                |    |
|-------------|---------------|----------------|----|
| Test Mode : | 802.11ax HE40 | Test Channel : | 06 |
|-------------|---------------|----------------|----|

100kHz PSD reference Level

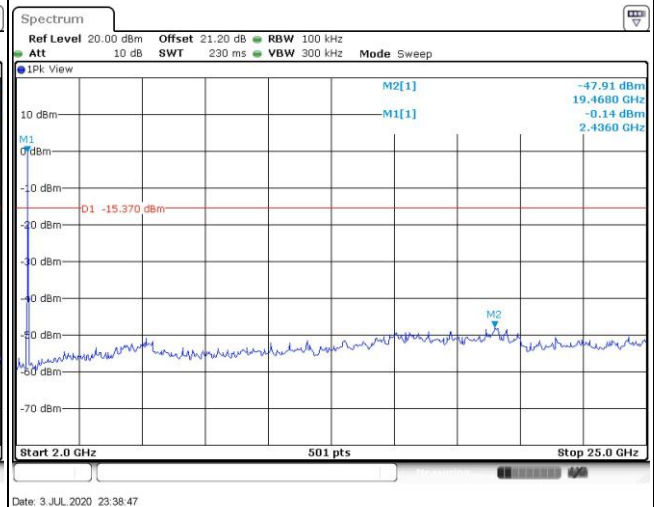


Channel Plot

Spurious Emission 30MHz~3GHz



Spurious Emission 2GHz~25GHz

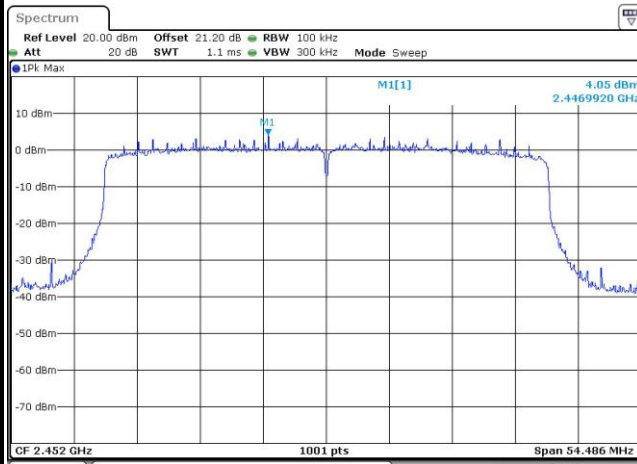




Test Mode : 802.11ax HE40

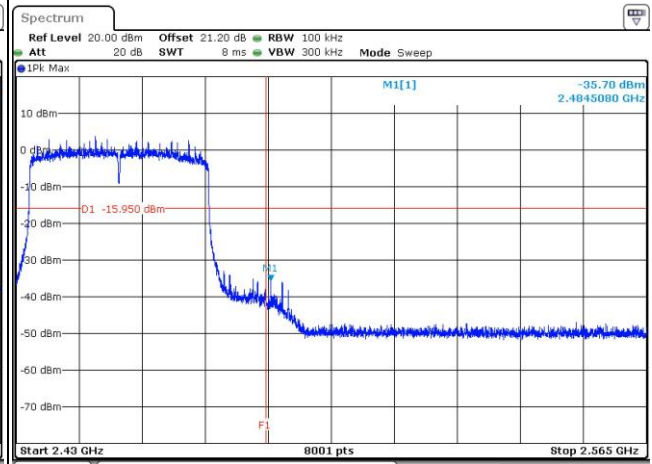
Test Channel : 09

## 100kHz PSD reference Level



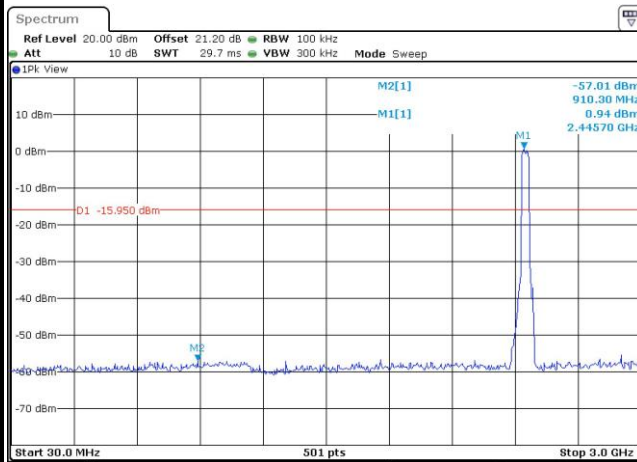
Date: 3 JUL 2020 23:53:51

## Channel Plot



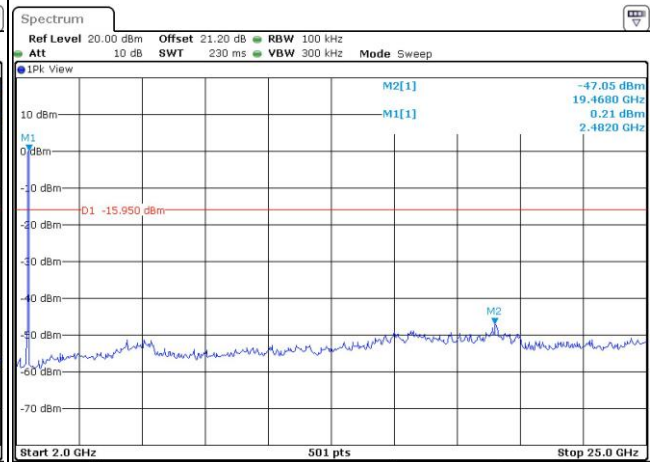
Date: 3 JUL 2020 23:54:07

## Spurious Emission 30MHz~3GHz



Date: 3 JUL 2020 23:54:34

## Spurious Emission 2GHz~25GHz



Date: 3 JUL 2020 23:54:47

### 3.5 Radiated Band Edges and Spurious Emission Measurement

#### 3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

#### 3.5.2 Measuring Instruments

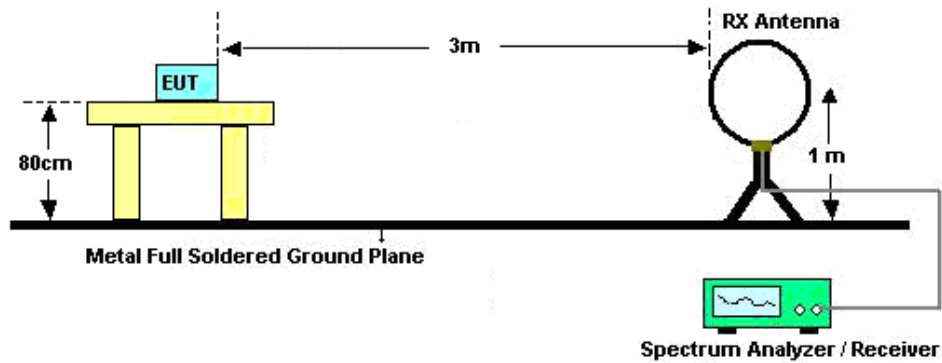
The measuring equipment is listed in the section 4 of this test report.

### 3.5.3 Test Procedures

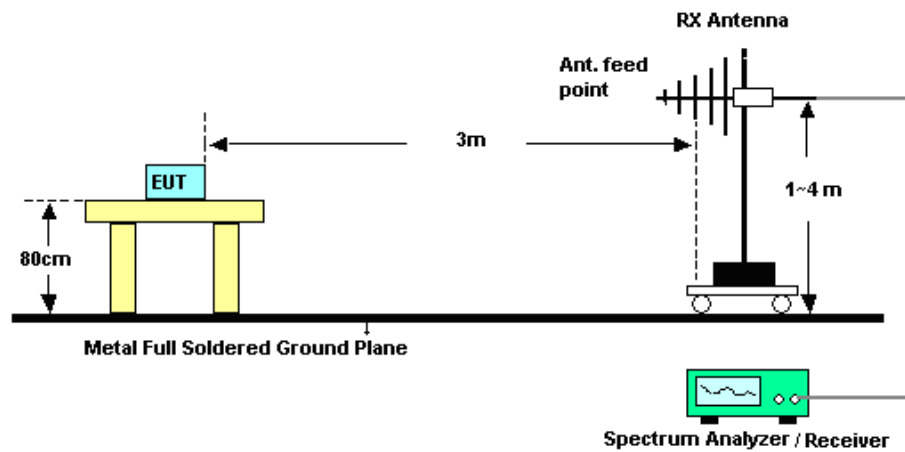
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. 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.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
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.
8. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW=100 kHz for  $f < 1$  GHz; VBW  $\geq$  RBW; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz, VBW= 3MHz for  $f \geq 1$  GHz for peak measurement.  
For average measurement:
    - 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.

### 3.5.4 Test Setup

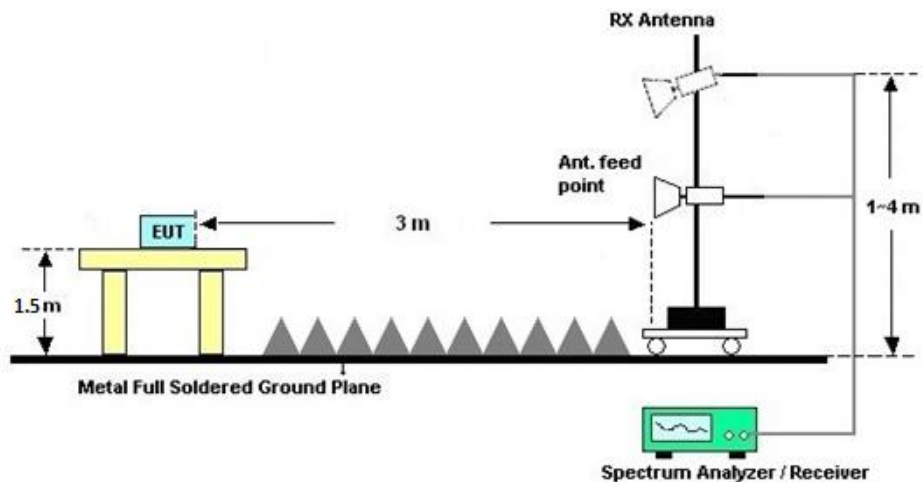
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





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

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

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

### **3.5.6 Test Result of Radiated Spurious at Band Edges**

Please refer to Appendix C.

### **3.5.7 Duty Cycle**

Please refer to Appendix D.

### **3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10<sup>th</sup> Harmonic)**

Please refer to Appendix C.

## 3.6 AC Conducted Emission Measurement

### 3.6.1 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<br>(MHz) | Conducted Limit (dBμV) |           |
|--------------------------------|------------------------|-----------|
|                                | 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.

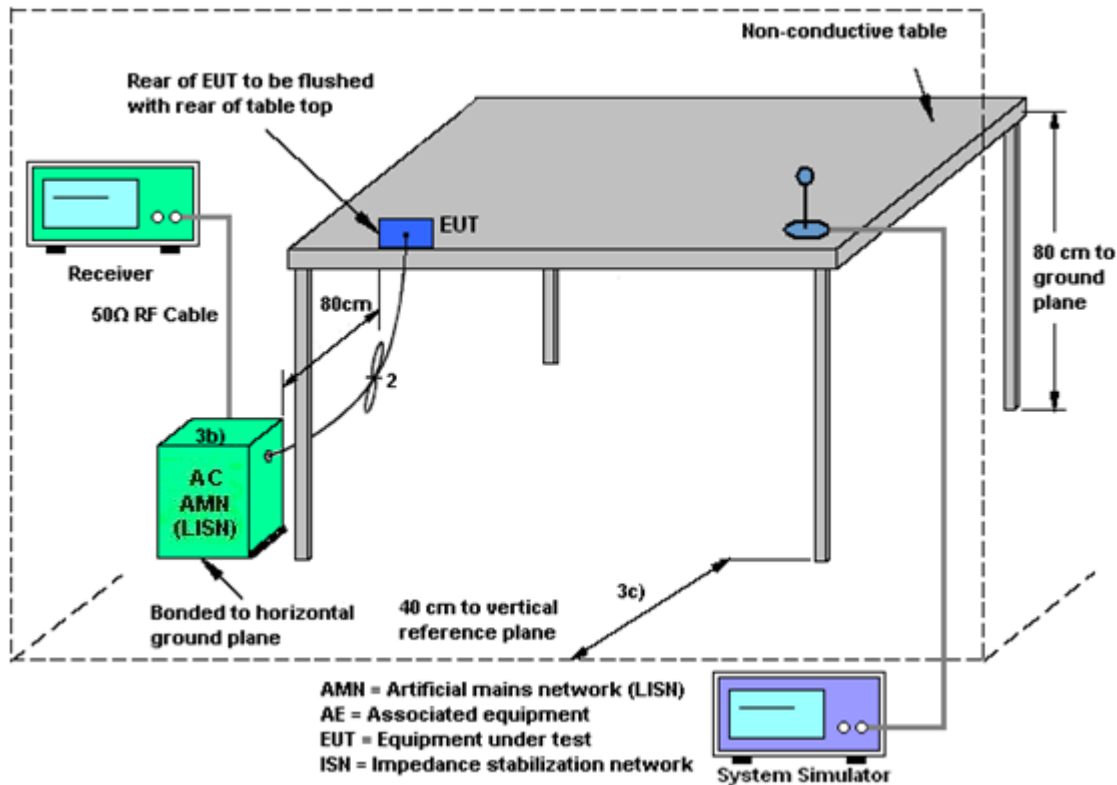
### 3.6.2 Measuring Instruments

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

### 3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it 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 (IF bandwidth = 9kHz) with Maximum Hold Mode.

### 3.6.4 Test Setup



### 3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

## 3.7 Antenna Requirements

### 3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

### 3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

### 3.7.3 Antenna Gain

<CDD Modes >

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  $N_{ANT} \leq 4$ .

Directional gain may be calculated by using the formulas applicable to equal gain antennas with  $G_{ANT}$  set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain  $G_{ANT}$  is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

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.

| <CDD Modes> |        |        |              |            |                       |                     |
|-------------|--------|--------|--------------|------------|-----------------------|---------------------|
|             | Ant. 1 | Ant. 2 | DG for Power | DG for PSD | Power Limit Reduction | PSD Limit Reduction |
|             | (dBi)  | (dBi)  | (dBi)        | (dBi)      | (dB)                  | (dB)                |
| 2.4 GHz     | -2.80  | -4.00  | -2.80        | -0.37      | 0.00                  | 0.00                |

$Power\ Limit\ Reduction = DG(Power) - 6dBi, (min = 0)$

$PSD\ Limit\ Reduction = DG(PSD) - 6dBi, (min = 0)$



## 4 List of Measuring Equipment

| Instrument                        | Manufacturer         | Model No.                | Serial No.   | Characteristics | Calibration Date | Test Date     | Due Date      | Remark                |
|-----------------------------------|----------------------|--------------------------|--------------|-----------------|------------------|---------------|---------------|-----------------------|
| Spectrum Analyzer                 | R&S                  | FSV40                    | 101078       | 10Hz~40GHz      | Apr. 17, 2020    | Jul. 03, 2020 | Apr. 16, 2021 | Conducted (TH01-SZ)   |
| Pulse Power Sensor                | Anritsu              | MA2411B                  | 1207253      | 30MHz~40GHz     | Dec. 26, 2019    | Jul. 03, 2020 | Dec. 25, 2020 | Conducted (TH01-SZ)   |
| Power Meter                       | Anritsu              | ML2495A                  | 1218010      | 50MHz Bandwidth | Dec. 26, 2019    | Jul. 03, 2020 | Dec. 25, 2020 | Conducted (TH01-SZ)   |
| EMI Test Receiver&SA              | KEYSIGHT             | N9038A                   | MY54450083   | 20Hz~8.4GHz     | Apr. 17, 2020    | Jul. 28, 2020 | Apr. 16, 2021 | Radiation (03CH03-SZ) |
| EXA Spectrum Analyzer             | KEYSIGHT             | N9010A                   | MY55150246   | 10Hz~44GHz;     | Apr. 17, 2020    | Jul. 28, 2020 | Apr. 16, 2021 | Radiation (03CH03-SZ) |
| Loop Antenna                      | R&S                  | HFH2-Z2                  | 100354       | 9kHz~30MHz      | May 28, 2020     | Jul. 28, 2020 | May 27, 2022  | Radiation (03CH03-SZ) |
| Bilog Antenna                     | TeseQ                | CBL6112D                 | 35408        | 30MHz~2GHz      | Apr. 17, 2020    | Jul. 28, 2020 | Apr. 16, 2021 | Radiation (03CH03-SZ) |
| Double Ridge Horn Antenna         | SCHWARZBECK          | BBHA9120D                | 9120D-1355   | 1GHz~18GHz      | Apr. 01 2020     | Jul. 28, 2020 | Mar. 31, 2021 | Radiation (03CH03-SZ) |
| HF Amplifier                      | MITEQ                | TTA1840-35-HG            | 1871923      | 18GHz~40GHz     | Jul. 21, 2020    | Jul. 28, 2020 | Jul. 20, 2021 | Radiation (03CH03-SZ) |
| SHF-EHF Horn                      | com-power            | AH-840                   | 101071       | 18GHz~40GHz     | Apr. 17, 2020    | Jul. 28, 2020 | Apr. 16, 2021 | Radiation (03CH03-SZ) |
| Amplifier                         | Burgeon              | BPA-530                  | 102210       | 0.01Hz~3000MHz  | Oct. 18, 2019    | Jul. 28, 2020 | Oct. 17, 2020 | Radiation (03CH03-SZ) |
| HF Amplifier                      | MITEQ                | AMF-7D-00101800-30-10P-R | 1943528      | 1GHz~18GHz      | Oct. 18, 2019    | Jul. 28, 2020 | Oct. 17, 2020 | Radiation (03CH03-SZ) |
| Amplifier                         | Agilent Technologies | 83017A                   | MY39501302   | 500MHz~26.5GHz  | Dec. 23, 2019    | Jul. 28, 2020 | Dec. 22, 2020 | Radiation (03CH03-SZ) |
| AC Power Source                   | Chroma               | 61601                    | 616010001985 | N/A             | NCR              | Jul. 28, 2020 | NCR           | Radiation (03CH03-SZ) |
| Turn Table                        | EM                   | EM1000                   | N/A          | 0~360 degree    | NCR              | Jul. 28, 2020 | NCR           | Radiation (03CH03-SZ) |
| Antenna Mast                      | EM                   | EM1000                   | N/A          | 1 m~4 m         | NCR              | Jul. 28, 2020 | NCR           | Radiation (03CH03-SZ) |
| EMI Receiver                      | R&S                  | ESR7                     | 101630       | 9kHz~7GHz;      | Dec. 26, 2018    | Jul. 10, 2020 | Dec. 25, 2020 | Conduction (CO01-SZ)  |
| AC LISN                           | EMCO                 | 3816/2SH                 | 00103912     | 9kHz~30MHz      | Oct. 17, 2019    | Jul. 10, 2020 | Oct. 16, 2020 | Conduction (CO01-SZ)  |
| AC LISN (for auxiliary equipment) | EMCO                 | 3816/2SH                 | 00103892     | 9kHz~30MHz      | Oct. 17, 2019    | Jul. 10, 2020 | Oct. 16, 2020 | Conduction (CO01-SZ)  |
| AC Power Source                   | Chroma               | 61602                    | 616020000891 | 100Vac~250Vac   | Jul. 22, 2019    | Jul. 10, 2020 | Jul. 21, 2020 | Conduction (CO01-SZ)  |

NCR: No Calibration Required

## 5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage  $K=2$  to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 2.7dB |
|-------------------------------------------------------------------------|-------|

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

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

### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

|                                                                         |       |
|-------------------------------------------------------------------------|-------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 4.9dB |
|-------------------------------------------------------------------------|-------|

### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

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



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

Report Number : FR061509C

|                |               |                    |       |    |
|----------------|---------------|--------------------|-------|----|
| Test Engineer: | Zeng Meng Hui | Temperature:       | 21~25 | °C |
| Test Date:     | 2020/7/3      | Relative Humidity: | 51~54 | %  |

**TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| 2.4GHz Band MIMO |           |     |     |             |                       |       |              |       |                    |           |
|------------------|-----------|-----|-----|-------------|-----------------------|-------|--------------|-------|--------------------|-----------|
| Mod.             | Data Rate | NTx | CH. | Freq. (MHz) | 99% Occupied BW (MHz) |       | 6dB BW (MHz) |       | 6dB BW Limit (MHz) | Pass/Fail |
|                  |           |     |     |             | Ant1                  | Ant2  | Ant1         | Ant2  |                    |           |
| 11b              | 1Mbps     | 2   | 1   | 2412        | 13.04                 | 12.84 | 8.05         | 8.05  | 0.50               | Pass      |
| 11b              | 1Mbps     | 2   | 6   | 2437        | 12.94                 | 12.89 | 8.07         | 8.05  | 0.50               | Pass      |
| 11b              | 1Mbps     | 2   | 11  | 2462        | 12.99                 | 12.89 | 7.55         | 8.07  | 0.50               | Pass      |
| 11g              | 6Mbps     | 2   | 1   | 2412        | 16.38                 | 16.38 | 15.52        | 16.26 | 0.50               | Pass      |
| 11g              | 6Mbps     | 2   | 6   | 2437        | 16.33                 | 16.38 | 15.64        | 15.72 | 0.50               | Pass      |
| 11g              | 6Mbps     | 2   | 11  | 2462        | 16.33                 | 16.38 | 15.46        | 15.70 | 0.50               | Pass      |
| HT20             | MCS0      | 2   | 1   | 2412        | 17.48                 | 17.53 | 16.56        | 16.52 | 0.50               | Pass      |
| HT20             | MCS0      | 2   | 6   | 2437        | 17.48                 | 17.53 | 16.48        | 16.28 | 0.50               | Pass      |
| HT20             | MCS0      | 2   | 11  | 2462        | 17.53                 | 17.48 | 15.96        | 15.68 | 0.50               | Pass      |
| HT40             | MCS0      | 2   | 3   | 2422        | 35.96                 | 35.96 | 35.68        | 35.12 | 0.50               | Pass      |
| HT40             | MCS0      | 2   | 6   | 2437        | 36.06                 | 35.96 | 35.52        | 35.08 | 0.50               | Pass      |
| HT40             | MCS0      | 2   | 9   | 2452        | 35.96                 | 36.06 | 35.36        | 35.68 | 0.50               | Pass      |

**TEST RESULTS DATA**  
**6dB and 99% Occupied Bandwidth**

| 2.4GHz Band MIMO |           |     |     |             |            |                       |       |              |       |                    |           |
|------------------|-----------|-----|-----|-------------|------------|-----------------------|-------|--------------|-------|--------------------|-----------|
| Mod.             | Data Rate | NTx | CH. | Freq. (MHz) | RU Config. | 99% Occupied BW (MHz) |       | 6dB BW (MHz) |       | 6dB BW Limit (MHz) | Pass/Fail |
|                  |           |     |     |             |            | Ant1                  | Ant2  | Ant1         | Ant2  |                    |           |
| HE20             | MCS0      | 2   | 1   | 2412        | Full       | 18.88                 | 18.88 | 18.18        | 18.08 | 0.50               | Pass      |
| HE20             | MCS0      | 2   | 6   | 2437        | Full       | 18.88                 | 18.83 | 18.16        | 17.98 | 0.50               | Pass      |
| HE20             | MCS0      | 2   | 11  | 2462        | Full       | 18.83                 | 18.83 | 17.70        | 17.66 | 0.50               | Pass      |
| HE40             | MCS0      | 2   | 3   | 2422        | Full       | 37.66                 | 37.66 | 37.64        | 37.00 | 0.50               | Pass      |
| HE40             | MCS0      | 2   | 6   | 2437        | Full       | 37.66                 | 37.66 | 37.32        | 35.48 | 0.50               | Pass      |
| HE40             | MCS0      | 2   | 9   | 2452        | Full       | 37.66                 | 37.76 | 36.72        | 36.32 | 0.50               | Pass      |

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

| 2.4GHz Band MIMO |           |     |     |             |                     |        |              |          |      |                           |      |           |
|------------------|-----------|-----|-----|-------------|---------------------|--------|--------------|----------|------|---------------------------|------|-----------|
| Mod.             | Data Rate | NTx | CH. | Freq. (MHz) | Peak PSD (dBm/3kHz) |        |              | DG (dBi) |      | Peak PSD Limit (dBm/3kHz) |      | Pass/Fail |
|                  |           |     |     |             | Ant1                | Ant2   | Worse + 3.01 | Ant1     | Ant2 | Ant1                      | Ant2 |           |
| 11b              | 1Mbps     | 2   | 1   | 2412        | -4.69               | -2.89  | 0.12         | -0.37    |      | 8.00                      |      | Pass      |
| 11b              | 1Mbps     | 2   | 6   | 2437        | -4.46               | -5.08  | -1.45        | -0.37    |      | 8.00                      |      | Pass      |
| 11b              | 1Mbps     | 2   | 11  | 2462        | -4.38               | -3.43  | -0.42        | -0.37    |      | 8.00                      |      | Pass      |
| 11g              | 6Mbps     | 2   | 1   | 2412        | -8.45               | -8.67  | -5.44        | -0.37    |      | 8.00                      |      | Pass      |
| 11g              | 6Mbps     | 2   | 6   | 2437        | -8.76               | -7.53  | -4.52        | -0.37    |      | 8.00                      |      | Pass      |
| 11g              | 6Mbps     | 2   | 11  | 2462        | -8.46               | -7.69  | -4.68        | -0.37    |      | 8.00                      |      | Pass      |
| HT20             | MCS0      | 2   | 1   | 2412        | -7.92               | -7.79  | -4.78        | -0.37    |      | 8.00                      |      | Pass      |
| HT20             | MCS0      | 2   | 6   | 2437        | -7.60               | -6.97  | -3.96        | -0.37    |      | 8.00                      |      | Pass      |
| HT20             | MCS0      | 2   | 11  | 2462        | -6.99               | -7.01  | -3.98        | -0.37    |      | 8.00                      |      | Pass      |
| HT40             | MCS0      | 2   | 3   | 2422        | -10.63              | -11.76 | -7.62        | -0.37    |      | 8.00                      |      | Pass      |
| HT40             | MCS0      | 2   | 6   | 2437        | -11.57              | -9.61  | -6.60        | -0.37    |      | 8.00                      |      | Pass      |
| HT40             | MCS0      | 2   | 9   | 2452        | -11.46              | -11.06 | -8.05        | -0.37    |      | 8.00                      |      | Pass      |

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

| 2.4GHz Band MIMO |           |     |     |             |            |                     |        |              |          |      |                           |      |           |
|------------------|-----------|-----|-----|-------------|------------|---------------------|--------|--------------|----------|------|---------------------------|------|-----------|
| Mod.             | Data Rate | NTx | CH. | Freq. (MHz) | RU Config. | Peak PSD (dBm/3kHz) |        |              | DG (dBi) |      | Peak PSD Limit (dBm/3kHz) |      | Pass/Fail |
|                  |           |     |     |             |            | Ant1                | Ant2   | Worse + 3.01 | Ant1     | Ant2 | Ant1                      | Ant2 |           |
| HE20             | MCS0      | 2   | 1   | 2412        | Full       | -8.04               | -9.12  | -5.03        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 1   | 2412        | 26/0       | -8.89               | -9.36  | -5.88        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 1   | 2412        | 52/37      | -9.76               | -10.14 | -6.75        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 1   | 2412        | 106/53     | -9.90               | -9.85  | -6.84        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 6   | 2437        | Full       | -8.60               | -8.38  | -5.37        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 11  | 2462        | Full       | -8.66               | -8.69  | -5.65        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 11  | 2462        | 26/8       | -8.81               | -10.82 | -5.80        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 11  | 2462        | 52/40      | -10.11              | -9.90  | -6.89        | -0.37    |      | 8.00                      |      | Pass      |
| HE20             | MCS0      | 2   | 11  | 2462        | 106/54     | -12.31              | -9.84  | -6.83        | -0.37    |      | 8.00                      |      | Pass      |
| HE40             | MCS0      | 2   | 3   | 2422        | Full       | -11.22              | -10.89 | -7.88        | -0.37    |      | 8.00                      |      | Pass      |
| HE40             | MCS0      | 2   | 3   | 2422        | 242/61     | -11.87              | -12.29 | -8.86        | -0.37    |      | 8.00                      |      | Pass      |
| HE40             | MCS0      | 2   | 6   | 2437        | Full       | -11.37              | -10.40 | -7.39        | -0.37    |      | 8.00                      |      | Pass      |
| HE40             | MCS0      | 2   | 9   | 2452        | Full       | -11.20              | -9.96  | -6.95        | -0.37    |      | 8.00                      |      | Pass      |
| HE40             | MCS0      | 2   | 9   | 2452        | 242/62     | -11.74              | -13.07 | -8.73        | -0.37    |      | 8.00                      |      | Pass      |

Measured power density (dBm) has offset with cable loss.

**TEST RESULTS DATA**  
**Peak Output Power**

| 2.4GHz Band MIMO |           |     |     |             |                            |       |       |                             |      |          |      |                  |      |                        |      |            |
|------------------|-----------|-----|-----|-------------|----------------------------|-------|-------|-----------------------------|------|----------|------|------------------|------|------------------------|------|------------|
| Mod.             | Data Rate | NTX | CH. | Freq. (MHz) | Peak Conducted Power (dBm) |       |       | Conducted Power Limit (dBm) |      | DG (dBi) |      | EIRP Power (dBm) |      | EIRP Power Limit (dBm) |      | Pass /Fail |
|                  |           |     |     |             | Ant1                       | Ant2  | SUM   | Ant1                        | Ant2 | Ant1     | Ant2 | Ant1             | Ant2 | Ant1                   | Ant2 |            |
| 11b              | 1Mbps     | 2   | 1   | 2412        | 20.93                      | 20.15 | 23.57 | 30.00                       |      | -2.80    |      | 20.77            |      | 36.00                  |      | Pass       |
| 11b              | 1Mbps     | 2   | 6   | 2437        | 20.80                      | 20.42 | 23.62 | 30.00                       |      | -2.80    |      | 20.82            |      | 36.00                  |      | Pass       |
| 11b              | 1Mbps     | 2   | 11  | 2462        | 20.73                      | 20.35 | 23.55 | 30.00                       |      | -2.80    |      | 20.75            |      | 36.00                  |      | Pass       |
| 11g              | 6Mbps     | 2   | 1   | 2412        | 23.30                      | 22.75 | 26.04 | 30.00                       |      | -2.80    |      | 23.24            |      | 36.00                  |      | Pass       |
| 11g              | 6Mbps     | 2   | 6   | 2437        | 23.11                      | 22.80 | 25.97 | 30.00                       |      | -2.80    |      | 23.17            |      | 36.00                  |      | Pass       |
| 11g              | 6Mbps     | 2   | 11  | 2462        | 23.15                      | 22.57 | 25.88 | 30.00                       |      | -2.80    |      | 23.08            |      | 36.00                  |      | Pass       |
| HT20             | MCS0      | 2   | 1   | 2412        | 23.35                      | 22.75 | 26.07 | 30.00                       |      | -2.80    |      | 23.27            |      | 36.00                  |      | Pass       |
| HT20             | MCS0      | 2   | 6   | 2437        | 23.24                      | 22.77 | 26.02 | 30.00                       |      | -2.80    |      | 23.22            |      | 36.00                  |      | Pass       |
| HT20             | MCS0      | 2   | 11  | 2462        | 23.13                      | 22.61 | 25.89 | 30.00                       |      | -2.80    |      | 23.09            |      | 36.00                  |      | Pass       |
| HT40             | MCS0      | 2   | 3   | 2422        | 23.05                      | 22.27 | 25.69 | 30.00                       |      | -2.80    |      | 22.89            |      | 36.00                  |      | Pass       |
| HT40             | MCS0      | 2   | 6   | 2437        | 22.75                      | 22.54 | 25.66 | 30.00                       |      | -2.80    |      | 22.86            |      | 36.00                  |      | Pass       |
| HT40             | MCS0      | 2   | 9   | 2452        | 22.91                      | 22.32 | 25.64 | 30.00                       |      | -2.80    |      | 22.84            |      | 36.00                  |      | Pass       |

**TEST RESULTS DATA**  
**Peak Output Power**

| 2.4GHz Band MIMO |           |     |     |             |            |                            |       |       |                             |      |          |      |                  |      |                        |      |            |
|------------------|-----------|-----|-----|-------------|------------|----------------------------|-------|-------|-----------------------------|------|----------|------|------------------|------|------------------------|------|------------|
| Mod.             | Data Rate | NTx | CH. | Freq. (MHz) | RU Config. | Peak Conducted Power (dBm) |       |       | Conducted Power Limit (dBm) |      | DG (dBi) |      | EIRP Power (dBm) |      | EIRP Power Limit (dBm) |      | Pass /Fail |
|                  |           |     |     |             |            | Ant1                       | Ant2  | SUM   | Ant1                        | Ant2 | Ant1     | Ant2 | Ant1             | Ant2 | Ant1                   | Ant2 |            |
| HE20             | MCS0      | 2   | 1   | 2412        | Full       | 23.91                      | 23.75 | 26.84 | 30.00                       |      | -2.80    |      | 24.04            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 1   | 2412        | 26/0       | 19.66                      | 19.44 | 22.56 | 30.00                       |      | -2.80    |      | 19.76            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 1   | 2412        | 52/37      | 20.56                      | 20.37 | 23.48 | 30.00                       |      | -2.80    |      | 20.68            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 1   | 2412        | 106/53     | 23.11                      | 22.04 | 25.62 | 30.00                       |      | -2.80    |      | 22.82            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 6   | 2437        | Full       | 23.88                      | 23.73 | 26.82 | 30.00                       |      | -2.80    |      | 24.02            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | Full       | 23.71                      | 23.43 | 26.58 | 30.00                       |      | -2.80    |      | 23.78            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | 26/8       | 18.90                      | 18.05 | 21.51 | 30.00                       |      | -2.80    |      | 18.71            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | 52/40      | 21.34                      | 20.35 | 23.88 | 30.00                       |      | -2.80    |      | 21.08            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | 106/54     | 20.62                      | 20.47 | 23.56 | 30.00                       |      | -2.80    |      | 20.76            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 3   | 2422        | Full       | 23.90                      | 23.33 | 26.63 | 30.00                       |      | -2.80    |      | 23.83            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 3   | 2422        | 242/61     | 22.25                      | 22.13 | 25.20 | 30.00                       |      | -2.80    |      | 22.40            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 6   | 2437        | Full       | 23.62                      | 23.55 | 26.60 | 30.00                       |      | -2.80    |      | 23.80            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 9   | 2452        | Full       | 23.71                      | 23.27 | 26.51 | 30.00                       |      | -2.80    |      | 23.71            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 9   | 2452        | 242/62     | 22.14                      | 22.06 | 25.11 | 30.00                       |      | -2.80    |      | 22.31            |      | 36.00                  |      | Pass       |

Note: Measured power (dBm) has offset with cable loss.

**TEST RESULTS DATA**  
**Average Output Power**

| 2.4GHz Band MIMO |           |     |     |             |                               |       |       |                             |      |          |      |                  |      |                        |      |            |
|------------------|-----------|-----|-----|-------------|-------------------------------|-------|-------|-----------------------------|------|----------|------|------------------|------|------------------------|------|------------|
| Mod.             | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) |       |       | Conducted Power Limit (dBm) |      | DG (dBi) |      | EIRP Power (dBm) |      | EIRP Power Limit (dBm) |      | Pass /Fail |
|                  |           |     |     |             | Ant1                          | Ant2  | SUM   | Ant1                        | Ant2 | Ant1     | Ant2 | Ant1             | Ant2 | Ant1                   | Ant2 |            |
| 11b              | 1Mbps     | 2   | 1   | 2412        | 19.80                         | 18.80 | 22.34 | 30.00                       |      | -2.80    |      | 19.54            |      | 36.00                  |      | Pass       |
| 11b              | 1Mbps     | 2   | 6   | 2437        | 19.50                         | 19.10 | 22.31 | 30.00                       |      | -2.80    |      | 19.51            |      | 36.00                  |      | Pass       |
| 11b              | 1Mbps     | 2   | 11  | 2462        | 19.40                         | 18.90 | 22.17 | 30.00                       |      | -2.80    |      | 19.37            |      | 36.00                  |      | Pass       |
| 11g              | 6Mbps     | 2   | 1   | 2412        | 18.00                         | 17.20 | 20.63 | 30.00                       |      | -2.80    |      | 17.83            |      | 36.00                  |      | Pass       |
| 11g              | 6Mbps     | 2   | 6   | 2437        | 17.70                         | 17.10 | 20.42 | 30.00                       |      | -2.80    |      | 17.62            |      | 36.00                  |      | Pass       |
| 11g              | 6Mbps     | 2   | 11  | 2462        | 17.70                         | 17.00 | 20.37 | 30.00                       |      | -2.80    |      | 17.57            |      | 36.00                  |      | Pass       |
| HT20             | MCS0      | 2   | 1   | 2412        | 17.60                         | 16.80 | 20.23 | 30.00                       |      | -2.80    |      | 17.43            |      | 36.00                  |      | Pass       |
| HT20             | MCS0      | 2   | 6   | 2437        | 17.30                         | 17.00 | 20.16 | 30.00                       |      | -2.80    |      | 17.36            |      | 36.00                  |      | Pass       |
| HT20             | MCS0      | 2   | 11  | 2462        | 17.30                         | 16.70 | 20.02 | 30.00                       |      | -2.80    |      | 17.22            |      | 36.00                  |      | Pass       |
| HT40             | MCS0      | 2   | 3   | 2422        | 17.10                         | 16.20 | 19.68 | 30.00                       |      | -2.80    |      | 16.88            |      | 36.00                  |      | Pass       |
| HT40             | MCS0      | 2   | 6   | 2437        | 16.70                         | 16.60 | 19.66 | 30.00                       |      | -2.80    |      | 16.86            |      | 36.00                  |      | Pass       |
| HT40             | MCS0      | 2   | 9   | 2452        | 16.90                         | 16.10 | 19.53 | 30.00                       |      | -2.80    |      | 16.73            |      | 36.00                  |      | Pass       |

Note: Measured power (dBm) has offset with cable loss.

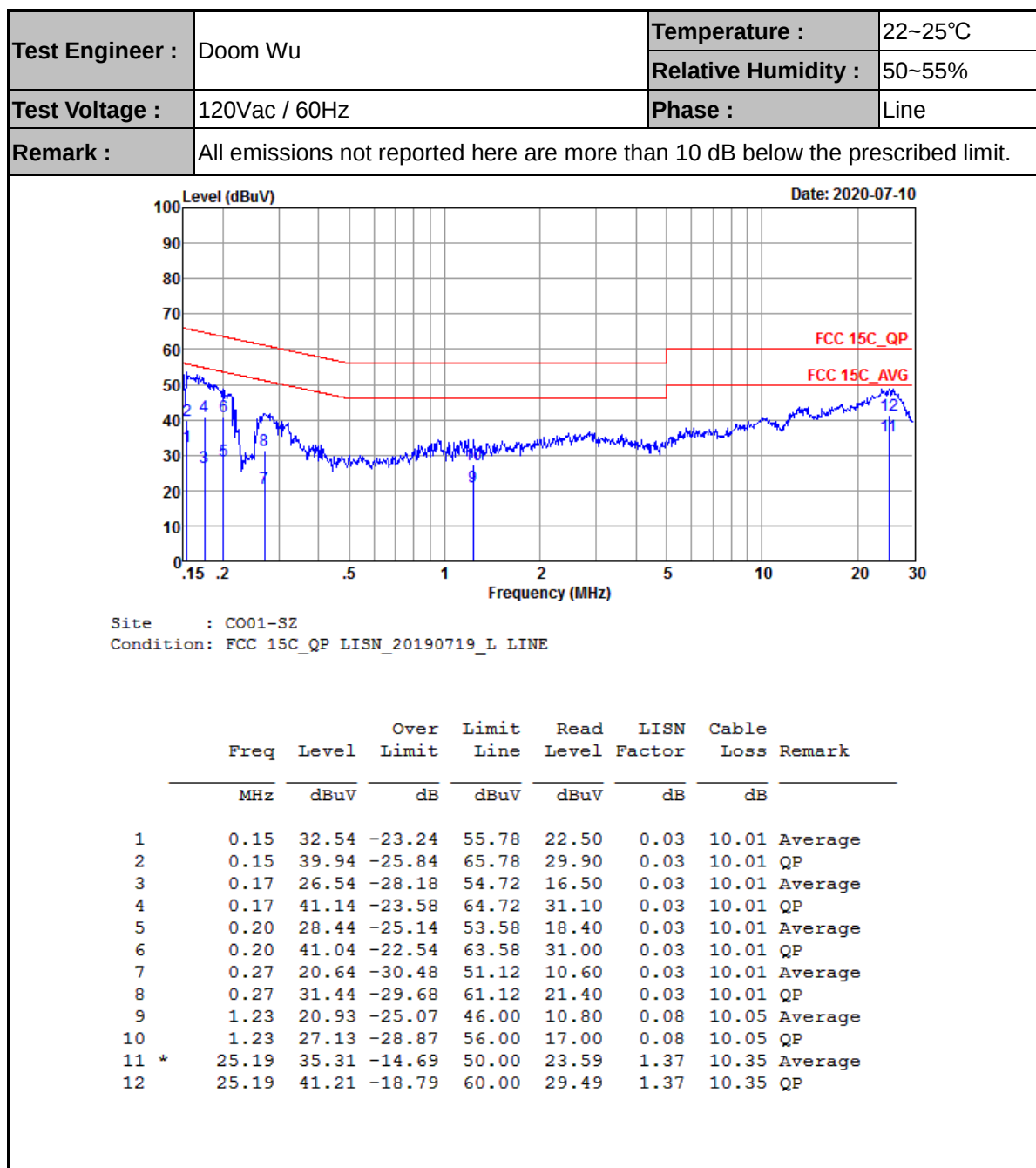
**TEST RESULTS DATA**  
**Average Output Power**

| 2.4GHz Band MIMO |           |     |     |             |            |                               |       |       |                             |      |          |      |                  |      |                        |      |            |
|------------------|-----------|-----|-----|-------------|------------|-------------------------------|-------|-------|-----------------------------|------|----------|------|------------------|------|------------------------|------|------------|
| Mod.             | Data Rate | NTx | CH. | Freq. (MHz) | RU Config. | Average Conducted Power (dBm) |       |       | Conducted Power Limit (dBm) |      | DG (dBi) |      | EIRP Power (dBm) |      | EIRP Power Limit (dBm) |      | Pass /Fail |
|                  |           |     |     |             |            | Ant1                          | Ant2  | SUM   | Ant1                        | Ant2 | Ant1     | Ant2 | Ant1             | Ant2 | Ant1                   | Ant2 |            |
| HE20             | MCS0      | 2   | 1   | 2412        | Full       | 17.60                         | 16.90 | 20.27 | 30.00                       |      | -2.80    |      | 17.47            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 1   | 2412        | 26/0       | 8.30                          | 7.90  | 11.11 | 30.00                       |      | -2.80    |      | 8.31             |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 1   | 2412        | 52/37      | 9.50                          | 9.00  | 12.27 | 30.00                       |      | -2.80    |      | 9.47             |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 1   | 2412        | 106/53     | 13.10                         | 12.30 | 15.73 | 30.00                       |      | -2.80    |      | 12.93            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 6   | 2437        | Full       | 17.30                         | 17.10 | 20.21 | 30.00                       |      | -2.80    |      | 17.41            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | Full       | 17.40                         | 16.80 | 20.12 | 30.00                       |      | -2.80    |      | 17.32            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | 26/8       | 7.10                          | 6.40  | 9.77  | 30.00                       |      | -2.80    |      | 6.97             |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | 52/40      | 10.30                         | 9.30  | 12.84 | 30.00                       |      | -2.80    |      | 10.04            |      | 36.00                  |      | Pass       |
| HE20             | MCS0      | 2   | 11  | 2462        | 106/54     | 10.50                         | 9.70  | 13.13 | 30.00                       |      | -2.80    |      | 10.33            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 3   | 2422        | Full       | 17.80                         | 16.80 | 20.34 | 30.00                       |      | -2.80    |      | 17.54            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 3   | 2422        | 242/61     | 14.20                         | 13.20 | 16.74 | 30.00                       |      | -2.80    |      | 13.94            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 6   | 2437        | Full       | 17.50                         | 17.20 | 20.36 | 30.00                       |      | -2.80    |      | 17.56            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 9   | 2452        | Full       | 17.60                         | 16.90 | 20.27 | 30.00                       |      | -2.80    |      | 17.47            |      | 36.00                  |      | Pass       |
| HE40             | MCS0      | 2   | 9   | 2452        | 242/62     | 13.90                         | 13.20 | 16.57 | 30.00                       |      | -2.80    |      | 13.77            |      | 36.00                  |      | Pass       |

Note: Measured power (dBm) has offset with cable loss.

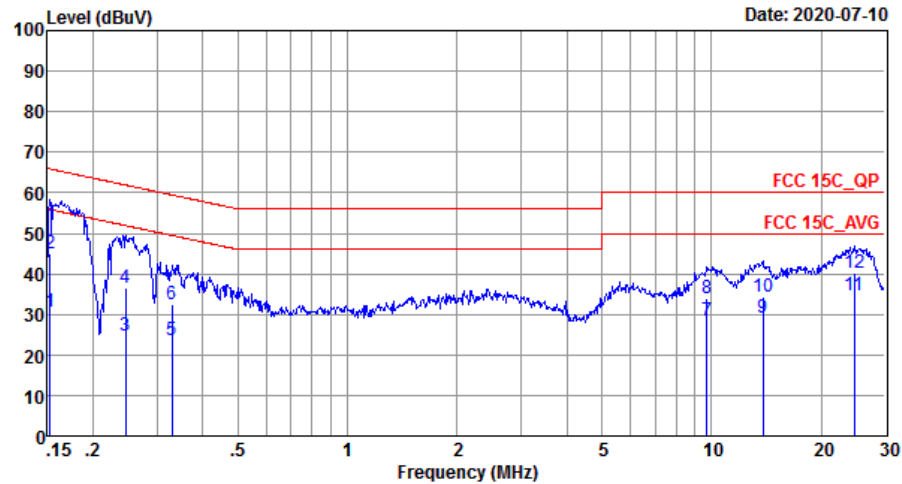


## Appendix B. AC Conducted Emission Test Results





|                 |                                                                                 |                     |         |
|-----------------|---------------------------------------------------------------------------------|---------------------|---------|
| Test Engineer : | Doom Wu                                                                         | Temperature :       | 22~25°C |
|                 |                                                                                 | Relative Humidity : | 50~55%  |
| Test Voltage :  | 120Vac / 60Hz                                                                   | Phase :             | Neutral |
| Remark :        | All emissions not reported here are more than 10 dB below the prescribed limit. |                     |         |



Site : CO01-SZ  
Condition: FCC 15C QP LISN\_20190719\_N NEUTRAL

|      | Freq  | Level | Over   | Limit | Read  | LISN   | Cable |         |
|------|-------|-------|--------|-------|-------|--------|-------|---------|
|      | MHz   | dBuV  | Limit  | Line  | Level | Factor | Loss  | Remark  |
|      |       |       | dB     | dBuV  | dBuV  | dB     | dB    |         |
| 1    | 0.15  | 30.54 | -25.33 | 55.87 | 20.50 | 0.03   | 10.01 | Average |
| 2    | 0.15  | 44.84 | -21.03 | 65.87 | 34.80 | 0.03   | 10.01 | QP      |
| 3    | 0.25  | 24.54 | -27.37 | 51.91 | 14.50 | 0.03   | 10.01 | Average |
| 4    | 0.25  | 36.54 | -25.37 | 61.91 | 26.50 | 0.03   | 10.01 | QP      |
| 5    | 0.33  | 23.64 | -25.80 | 49.44 | 13.60 | 0.03   | 10.01 | Average |
| 6    | 0.33  | 32.54 | -26.90 | 59.44 | 22.50 | 0.03   | 10.01 | QP      |
| 7    | 9.71  | 28.30 | -21.70 | 50.00 | 17.90 | 0.15   | 10.25 | Average |
| 8    | 9.71  | 33.80 | -26.20 | 60.00 | 23.40 | 0.15   | 10.25 | QP      |
| 9    | 13.84 | 28.98 | -21.02 | 50.00 | 18.40 | 0.30   | 10.28 | Average |
| 10   | 13.84 | 34.38 | -25.62 | 60.00 | 23.80 | 0.30   | 10.28 | QP      |
| 11 * | 24.66 | 34.81 | -15.19 | 50.00 | 23.50 | 0.97   | 10.34 | Average |
| 12   | 24.66 | 40.31 | -19.69 | 60.00 | 29.00 | 0.97   | 10.34 | QP      |

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



## Appendix C. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

| WIFI Ant.                   | Note | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-----------------------------|------|-----------|------------|------------|------------|------------|----------------|------------|---------------|---------|-----------|-----------|---------|
| 1+2                         |      | ( MHz )   | ( dBμV/m ) | ( dB )     | ( dBμV/m ) | ( dBμV )   | ( dB/m )       | ( dB )     | ( dB )        | ( cm )  | ( deg )   | ( P/A )   | ( H/V ) |
| 802.11b<br>CH 01<br>2412MHz |      | 2325.96   | 50.8       | -23.2      | 74         | 51.74      | 27.91          | 4.75       | 33.6          | 220     | 308       | P         | H       |
|                             |      | 2387.28   | 42.36      | -11.64     | 54         | 43.32      | 27.8           | 4.82       | 33.58         | 220     | 308       | A         | H       |
|                             | *    | 2412      | 107.92     | -          | -          | 108.89     | 27.77          | 4.82       | 33.56         | 220     | 308       | P         | H       |
|                             | *    | 2412      | 106.19     | -          | -          | 107.16     | 27.77          | 4.82       | 33.56         | 220     | 308       | A         | H       |
|                             |      | 2389.17   | 50.58      | -23.42     | 74         | 51.54      | 27.8           | 4.82       | 33.58         | 229     | 9         | P         | V       |
|                             |      | 2388.33   | 41.05      | -12.95     | 54         | 42.01      | 27.8           | 4.82       | 33.58         | 229     | 9         | A         | V       |
|                             | *    | 2412      | 105.83     | -          | -          | 106.8      | 27.77          | 4.82       | 33.56         | 229     | 9         | P         | V       |
|                             | *    | 2412      | 104.15     | -          | -          | 105.12     | 27.77          | 4.82       | 33.56         | 229     | 9         | A         | V       |
| 802.11b<br>CH 06<br>2437MHz |      | 2386.02   | 50.48      | -23.52     | 74         | 51.44      | 27.8           | 4.82       | 33.58         | 232     | 360       | P         | H       |
|                             |      | 2389.94   | 39.44      | -14.56     | 54         | 40.38      | 27.8           | 4.82       | 33.56         | 232     | 360       | A         | H       |
|                             | *    | 2437      | 107.22     | -          | -          | 108.19     | 27.71          | 4.86       | 33.54         | 232     | 360       | P         | H       |
|                             | *    | 2437      | 105.43     | -          | -          | 106.4      | 27.71          | 4.86       | 33.54         | 232     | 360       | A         | H       |
|                             |      | 2486.21   | 50.63      | -23.37     | 74         | 51.58      | 27.66          | 4.9        | 33.51         | 232     | 360       | P         | H       |
|                             |      | 2483.55   | 39.25      | -14.75     | 54         | 40.2       | 27.66          | 4.9        | 33.51         | 232     | 360       | A         | H       |
|                             |      | 2363.9    | 51.78      | -22.22     | 74         | 52.74      | 27.85          | 4.78       | 33.59         | 220     | 7         | P         | V       |
|                             |      | 2389.94   | 39.46      | -14.54     | 54         | 40.4       | 27.8           | 4.82       | 33.56         | 220     | 7         | A         | V       |
|                             | *    | 2437      | 104.52     | -          | -          | 105.49     | 27.71          | 4.86       | 33.54         | 220     | 7         | P         | V       |
|                             | *    | 2437      | 102.72     | -          | -          | 103.69     | 27.71          | 4.86       | 33.54         | 220     | 7         | A         | V       |
|                             |      | 2492.72   | 50.54      | -23.46     | 74         | 51.51      | 27.63          | 4.9        | 33.5          | 220     | 7         | P         | V       |
|                             |      | 2483.5    | 39.17      | -14.83     | 54         | 40.12      | 27.66          | 4.9        | 33.51         | 220     | 7         | A         | V       |



| WIFI<br>Ant.<br>1+2         | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-----------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11b<br>CH 11<br>2462MHz | *                                                                                           | 2462                 | 108.09              | -                       | -                           | 109.07                    | 27.69                         | 4.86                    | 33.53                      | 117                  | 303                     | P                       | H               |
|                             | *                                                                                           | 2462                 | 106.35              | -                       | -                           | 107.33                    | 27.69                         | 4.86                    | 33.53                      | 117                  | 303                     | A                       | H               |
|                             |                                                                                             | 2487.08              | 52.07               | -21.93                  | 74                          | 53.02                     | 27.66                         | 4.9                     | 33.51                      | 117                  | 303                     | P                       | H               |
|                             |                                                                                             | 2486.56              | 41.91               | -12.09                  | 54                          | 42.86                     | 27.66                         | 4.9                     | 33.51                      | 117                  | 303                     | A                       | H               |
|                             | *                                                                                           | 2462                 | 102.41              | -                       | -                           | 103.39                    | 27.69                         | 4.86                    | 33.53                      | 135                  | 32                      | P                       | V               |
|                             | *                                                                                           | 2462                 | 100.67              | -                       | -                           | 101.65                    | 27.69                         | 4.86                    | 33.53                      | 135                  | 32                      | A                       | V               |
|                             |                                                                                             | 2492.52              | 51.04               | -22.96                  | 74                          | 52.01                     | 27.63                         | 4.9                     | 33.5                       | 135                  | 32                      | P                       | V               |
|                             |                                                                                             | 2486.76              | 39.59               | -14.41                  | 54                          | 40.54                     | 27.66                         | 4.9                     | 33.51                      | 135                  | 32                      | A                       | V               |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11b (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2         | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-----------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11b<br>CH 01<br>2412MHz |                                                                                             | 4824                 | 41.25               | -32.75                  | 74                          | 60.08                     | 31.12                         | 7.53                    | 57.48                      | 145                  | 274                     | P                       | H               |
|                             |                                                                                             | 4824                 | 41.94               | -32.06                  | 74                          | 60.77                     | 31.12                         | 7.53                    | 57.48                      | 191                  | 220                     | P                       | V               |
| 802.11b<br>CH 06<br>2437MHz |                                                                                             | 4874                 | 40.23               | -33.77                  | 74                          | 59                        | 31.17                         | 7.58                    | 57.52                      | 112                  | 229                     | P                       | H               |
|                             |                                                                                             | 7311                 | 44.87               | -29.13                  | 74                          | 58.7                      | 36.03                         | 9.06                    | 58.92                      | 174                  | 100                     | P                       | H               |
|                             |                                                                                             | 4874                 | 41.14               | -32.86                  | 74                          | 59.91                     | 31.17                         | 7.58                    | 57.52                      | 157                  | 360                     | P                       | V               |
|                             |                                                                                             | 7311                 | 45.31               | -28.69                  | 74                          | 59.14                     | 36.03                         | 9.06                    | 58.92                      | 120                  | 106                     | P                       | V               |
| 802.11b<br>CH 11<br>2462MHz |                                                                                             | 4924                 | 39.23               | -34.77                  | 74                          | 57.89                     | 31.22                         | 7.67                    | 57.55                      | 133                  | 180                     | P                       | H               |
|                             |                                                                                             | 7386                 | 44.51               | -29.49                  | 74                          | 58.14                     | 36.29                         | 9.04                    | 58.96                      | 145                  | 274                     | P                       | H               |
|                             |                                                                                             | 4924                 | 39.53               | -34.47                  | 74                          | 58.19                     | 31.22                         | 7.67                    | 57.55                      | 153                  | 360                     | P                       | V               |
|                             |                                                                                             | 7386                 | 44.81               | -29.19                  | 74                          | 58.44                     | 36.29                         | 9.04                    | 58.96                      | 166                  | 210                     | P                       | V               |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11g (Band Edge @ 3m)**

| WIFI<br>Ant.<br>1+2         | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-----------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11g<br>CH 01<br>2412MHz |      | 2387.805             | 55.7                | -18.3                   | 74                          | 56.66                     | 27.8                          | 4.82                    | 33.58                      | 143                  | 64                      | P                       | H               |
|                             |      | 2390                 | 46.31               | -7.69                   | 54                          | 47.25                     | 27.8                          | 4.82                    | 33.56                      | 143                  | 64                      | A                       | H               |
|                             | *    | 2412                 | 108.87              | -                       | -                           | 109.84                    | 27.77                         | 4.82                    | 33.56                      | 143                  | 64                      | P                       | H               |
|                             | *    | 2412                 | 101.58              | -                       | -                           | 102.55                    | 27.77                         | 4.82                    | 33.56                      | 143                  | 64                      | A                       | H               |
|                             |      | 2389.17              | 53.42               | -20.58                  | 74                          | 54.38                     | 27.8                          | 4.82                    | 33.58                      | 136                  | 270                     | P                       | V               |
|                             |      | 2389.485             | 43.93               | -10.07                  | 54                          | 44.89                     | 27.8                          | 4.82                    | 33.58                      | 136                  | 270                     | A                       | V               |
|                             | *    | 2412                 | 105.82              | -                       | -                           | 106.79                    | 27.77                         | 4.82                    | 33.56                      | 136                  | 270                     | P                       | V               |
|                             | *    | 2412                 | 99.12               | -                       | -                           | 100.09                    | 27.77                         | 4.82                    | 33.56                      | 136                  | 270                     | A                       | V               |
| 802.11g<br>CH 06<br>2437MHz |      | 2380.84              | 50.65               | -23.35                  | 74                          | 51.62                     | 27.83                         | 4.78                    | 33.58                      | 136                  | 65                      | P                       | H               |
|                             |      | 2388.82              | 39.66               | -14.34                  | 54                          | 40.62                     | 27.8                          | 4.82                    | 33.58                      | 136                  | 65                      | A                       | H               |
|                             | *    | 2437                 | 109.3               | -                       | -                           | 110.27                    | 27.71                         | 4.86                    | 33.54                      | 136                  | 65                      | P                       | H               |
|                             | *    | 2437                 | 102.98              | -                       | -                           | 103.95                    | 27.71                         | 4.86                    | 33.54                      | 136                  | 65                      | A                       | H               |
|                             |      | 2493                 | 51.25               | -22.75                  | 74                          | 52.22                     | 27.63                         | 4.9                     | 33.5                       | 136                  | 65                      | P                       | H               |
|                             |      | 2484.04              | 39.4                | -14.6                   | 54                          | 40.35                     | 27.66                         | 4.9                     | 33.51                      | 136                  | 65                      | A                       | H               |
|                             |      | 2343.46              | 50.01               | -23.99                  | 74                          | 50.97                     | 27.88                         | 4.75                    | 33.59                      | 100                  | 285                     | P                       | V               |
|                             |      | 2389.8               | 39.76               | -14.24                  | 54                          | 40.7                      | 27.8                          | 4.82                    | 33.56                      | 100                  | 285                     | A                       | V               |
|                             | *    | 2437                 | 105.7               | -                       | -                           | 106.67                    | 27.71                         | 4.86                    | 33.54                      | 100                  | 285                     | P                       | V               |
|                             | *    | 2437                 | 98.51               | -                       | -                           | 99.48                     | 27.71                         | 4.86                    | 33.54                      | 100                  | 285                     | A                       | V               |
|                             |      | 2494.54              | 49.67               | -24.33                  | 74                          | 50.64                     | 27.63                         | 4.9                     | 33.5                       | 100                  | 285                     | P                       | V               |
|                             |      | 2483.83              | 39.26               | -14.74                  | 54                          | 40.21                     | 27.66                         | 4.9                     | 33.51                      | 100                  | 285                     | A                       | V               |



| WIFI<br>Ant.<br>1+2         | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-----------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11g<br>CH 11<br>2462MHz | *                                                                                           | 2462                 | 109.38              | -                       | -                           | 110.36                    | 27.69                         | 4.86                    | 33.53                      | 124                  | 59                      | P                       | H               |
|                             | *                                                                                           | 2462                 | 102.08              | -                       | -                           | 103.06                    | 27.69                         | 4.86                    | 33.53                      | 124                  | 59                      | A                       | H               |
|                             |                                                                                             | 2483.52              | 53.93               | -20.07                  | 74                          | 54.88                     | 27.66                         | 4.9                     | 33.51                      | 124                  | 59                      | P                       | H               |
|                             |                                                                                             | 2483.52              | 45.04               | -8.96                   | 54                          | 45.99                     | 27.66                         | 4.9                     | 33.51                      | 124                  | 59                      | A                       | H               |
|                             | *                                                                                           | 2462                 | 104.1               | -                       | -                           | 105.08                    | 27.69                         | 4.86                    | 33.53                      | 122                  | 272                     | P                       | V               |
|                             | *                                                                                           | 2462                 | 96.88               | -                       | -                           | 97.86                     | 27.69                         | 4.86                    | 33.53                      | 122                  | 272                     | A                       | V               |
|                             |                                                                                             | 2483.64              | 52.73               | -21.27                  | 74                          | 53.68                     | 27.66                         | 4.9                     | 33.51                      | 122                  | 272                     | P                       | V               |
|                             |                                                                                             | 2483.52              | 42.75               | -11.25                  | 54                          | 43.7                      | 27.66                         | 4.9                     | 33.51                      | 122                  | 272                     | A                       | V               |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11g (Harmonic @ 3m)

| WIFI Ant. 1+2               | Note                                                                                        | Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. ( P/A ) | Pol. ( H/V ) |
|-----------------------------|---------------------------------------------------------------------------------------------|-------------------|------------------|-------------------|-----------------------|---------------------|-------------------------|-------------------|----------------------|----------------|-------------------|-------------------|--------------|
| 802.11g<br>CH 01<br>2412MHz |                                                                                             | 4824              | 40.72            | -33.28            | 74                    | 59.55               | 31.12                   | 7.53              | 57.48                | 145            | 274               | P                 | H            |
|                             |                                                                                             | 4824              | 41.09            | -32.91            | 74                    | 59.92               | 31.12                   | 7.53              | 57.48                | 191            | 220               | P                 | V            |
| 802.11g<br>CH 06<br>2437MHz |                                                                                             | 4874              | 39.95            | -34.05            | 74                    | 58.72               | 31.17                   | 7.58              | 57.52                | 112            | 229               | P                 | H            |
|                             |                                                                                             | 7311              | 45.25            | -28.75            | 74                    | 59.08               | 36.03                   | 9.06              | 58.92                | 174            | 100               | P                 | H            |
|                             |                                                                                             | 4874              | 40.32            | -33.68            | 74                    | 59.09               | 31.17                   | 7.58              | 57.52                | 153            | 360               | P                 | V            |
|                             |                                                                                             | 7311              | 44.48            | -29.52            | 74                    | 58.31               | 36.03                   | 9.06              | 58.92                | 120            | 106               | P                 | V            |
| 802.11g<br>CH 11<br>2462MHz |                                                                                             | 4924              | 38.51            | -35.49            | 74                    | 57.17               | 31.22                   | 7.67              | 57.55                | 133            | 180               | P                 | H            |
|                             |                                                                                             | 7386              | 44.75            | -29.25            | 74                    | 58.38               | 36.29                   | 9.04              | 58.96                | 145            | 274               | P                 | H            |
|                             |                                                                                             | 4924              | 38.67            | -35.33            | 74                    | 57.33               | 31.22                   | 7.67              | 57.55                | 153            | 360               | P                 | V            |
|                             |                                                                                             | 7386              | 44.4             | -29.6             | 74                    | 58.03               | 36.29                   | 9.04              | 58.96                | 166            | 210               | P                 | V            |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                   |                  |                   |                       |                     |                         |                   |                      |                |                   |                   |              |



## 2.4GHz 2400~2483.5MHz

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

| WIFI<br>Ant.<br>1+2                 | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 01<br>2412MHz |      | 2389.905             | 58.28               | -15.72                  | 74                          | 59.22                     | 27.8                          | 4.82                    | 33.56                      | 221                  | 308                     | P                       | H               |
|                                     |      | 2390                 | 48.81               | -5.19                   | 54                          | 49.75                     | 27.8                          | 4.82                    | 33.56                      | 221                  | 308                     | A                       | H               |
|                                     | *    | 2412                 | 108.42              | -                       | -                           | 109.39                    | 27.77                         | 4.82                    | 33.56                      | 221                  | 308                     | P                       | H               |
|                                     | *    | 2412                 | 100.69              | -                       | -                           | 101.66                    | 27.77                         | 4.82                    | 33.56                      | 221                  | 308                     | A                       | H               |
|                                     |      | 2389.485             | 56.12               | -17.88                  | 74                          | 57.08                     | 27.8                          | 4.82                    | 33.58                      | 135                  | 32                      | P                       | V               |
|                                     |      | 2390                 | 46.03               | -7.97                   | 54                          | 46.97                     | 27.8                          | 4.82                    | 33.56                      | 135                  | 32                      | A                       | V               |
|                                     | *    | 2412                 | 105.78              | -                       | -                           | 106.75                    | 27.77                         | 4.82                    | 33.56                      | 135                  | 32                      | P                       | V               |
|                                     | *    | 2412                 | 98.78               | -                       | -                           | 99.75                     | 27.77                         | 4.82                    | 33.56                      | 135                  | 32                      | A                       | V               |
| 802.11n<br>HT20<br>CH 06<br>2437MHz |      | 2332.68              | 50.42               | -23.58                  | 74                          | 51.36                     | 27.91                         | 4.75                    | 33.6                       | 261                  | 307                     | P                       | H               |
|                                     |      | 2389.8               | 39.46               | -14.54                  | 54                          | 40.4                      | 27.8                          | 4.82                    | 33.56                      | 261                  | 307                     | A                       | H               |
|                                     | *    | 2437                 | 107.95              | -                       | -                           | 108.92                    | 27.71                         | 4.86                    | 33.54                      | 261                  | 307                     | P                       | H               |
|                                     | *    | 2437                 | 100.23              | -                       | -                           | 101.2                     | 27.71                         | 4.86                    | 33.54                      | 261                  | 307                     | A                       | H               |
|                                     |      | 2493.28              | 49.13               | -24.87                  | 74                          | 50.1                      | 27.63                         | 4.9                     | 33.5                       | 261                  | 307                     | P                       | H               |
|                                     |      | 2483.83              | 39.23               | -14.77                  | 54                          | 40.18                     | 27.66                         | 4.9                     | 33.51                      | 261                  | 307                     | A                       | H               |
|                                     |      | 2366.7               | 50.32               | -23.68                  | 74                          | 51.27                     | 27.85                         | 4.78                    | 33.58                      | 257                  | 253                     | P                       | V               |
|                                     |      | 2358.3               | 39.33               | -14.67                  | 54                          | 40.29                     | 27.85                         | 4.78                    | 33.59                      | 257                  | 253                     | A                       | V               |
|                                     | *    | 2437                 | 105.2               | -                       | -                           | 106.17                    | 27.71                         | 4.86                    | 33.54                      | 257                  | 253                     | P                       | V               |
|                                     | *    | 2437                 | 98.25               | -                       | -                           | 99.22                     | 27.71                         | 4.86                    | 33.54                      | 257                  | 253                     | A                       | V               |
|                                     |      | 2485.72              | 49.46               | -24.54                  | 74                          | 50.41                     | 27.66                         | 4.9                     | 33.51                      | 257                  | 253                     | P                       | V               |
|                                     |      | 2483.76              | 39.1                | -14.9                   | 54                          | 40.05                     | 27.66                         | 4.9                     | 33.51                      | 257                  | 253                     | A                       | V               |



| WIFI<br>Ant.<br>1+2                 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT20<br>CH 11<br>2462MHz | *                                                                                           | 2462                 | 107.53              | -                       | -                           | 108.51                    | 27.69                         | 4.86                    | 33.53                      | 270                  | 360                     | P                       | H               |
|                                     | *                                                                                           | 2462                 | 99.89               | -                       | -                           | 100.87                    | 27.69                         | 4.86                    | 33.53                      | 270                  | 360                     | A                       | H               |
|                                     |                                                                                             | 2483.8               | 54.86               | -19.14                  | 74                          | 55.81                     | 27.66                         | 4.9                     | 33.51                      | 270                  | 360                     | P                       | H               |
|                                     |                                                                                             | 2483.52              | 44.87               | -9.13                   | 54                          | 45.82                     | 27.66                         | 4.9                     | 33.51                      | 270                  | 360                     | A                       | H               |
|                                     | *                                                                                           | 2462                 | 105.45              | -                       | -                           | 106.43                    | 27.69                         | 4.86                    | 33.53                      | 250                  | 252                     | P                       | V               |
|                                     | *                                                                                           | 2462                 | 98.59               | -                       | -                           | 99.57                     | 27.69                         | 4.86                    | 33.53                      | 250                  | 252                     | A                       | V               |
|                                     |                                                                                             | 2483.52              | 52.48               | -21.52                  | 74                          | 53.43                     | 27.66                         | 4.9                     | 33.51                      | 250                  | 252                     | P                       | V               |
|                                     |                                                                                             | 2483.52              | 43.04               | -10.96                  | 54                          | 43.99                     | 27.66                         | 4.9                     | 33.51                      | 250                  | 252                     | A                       | V               |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11n HT20 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1+2                 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| 802.11n<br>HT20<br>CH 01<br>2412MHz |                                                                                             | 4824                 | 41.16               | -32.84                  | 74                          | 59.99                     | 31.12                         | 7.53                    | 57.48                      | 145                  | 274                     | P                     | H             |
|                                     |                                                                                             | 4824                 | 39.9                | -34.1                   | 74                          | 58.73                     | 31.12                         | 7.53                    | 57.48                      | 191                  | 220                     | P                     | V             |
| 802.11n<br>HT20<br>CH 06<br>2437MHz |                                                                                             | 4874                 | 40.6                | -33.4                   | 74                          | 59.37                     | 31.17                         | 7.58                    | 57.52                      | 112                  | 229                     | P                     | H             |
|                                     |                                                                                             | 7311                 | 44.82               | -29.18                  | 74                          | 58.65                     | 36.03                         | 9.06                    | 58.92                      | 174                  | 100                     | P                     | H             |
|                                     |                                                                                             | 4874                 | 39.51               | -34.49                  | 74                          | 58.28                     | 31.17                         | 7.58                    | 57.52                      | 156                  | 360                     | P                     | V             |
|                                     |                                                                                             | 7311                 | 44.77               | -29.23                  | 74                          | 58.6                      | 36.03                         | 9.06                    | 58.92                      | 120                  | 106                     | P                     | V             |
| 802.11n<br>HT20<br>CH 11<br>2462MHz |                                                                                             | 4924                 | 38.88               | -35.12                  | 74                          | 57.54                     | 31.22                         | 7.67                    | 57.55                      | 133                  | 180                     | P                     | H             |
|                                     |                                                                                             | 7386                 | 44.61               | -29.39                  | 74                          | 58.24                     | 36.29                         | 9.04                    | 58.96                      | 145                  | 274                     | P                     | H             |
|                                     |                                                                                             | 4924                 | 38.89               | -35.11                  | 74                          | 57.55                     | 31.22                         | 7.67                    | 57.55                      | 157                  | 360                     | P                     | V             |
|                                     |                                                                                             | 7386                 | 45.45               | -28.55                  | 74                          | 59.08                     | 36.29                         | 9.04                    | 58.96                      | 166                  | 210                     | P                     | V             |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                       |               |



## 2.4GHz 2400~2483.5MHz

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

| WIFI<br>Ant.<br>1+2                 | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 03<br>2422MHz |      | 2389.94              | 56.54               | -17.46                  | 74                          | 57.48                     | 27.8                          | 4.82                    | 33.56                      | 330                  | 298                     | P                       | H               |
|                                     |      | 2389.94              | 47.21               | -6.79                   | 54                          | 48.15                     | 27.8                          | 4.82                    | 33.56                      | 330                  | 298                     | A                       | H               |
|                                     | *    | 2422                 | 103.63              | -                       | -                           | 104.61                    | 27.74                         | 4.82                    | 33.54                      | 330                  | 298                     | P                       | H               |
|                                     | *    | 2422                 | 97.06               | -                       | -                           | 98.04                     | 27.74                         | 4.82                    | 33.54                      | 330                  | 298                     | A                       | H               |
|                                     |      | 2498.88              | 50.8                | -23.2                   | 74                          | 51.77                     | 27.63                         | 4.9                     | 33.5                       | 330                  | 298                     | P                       | H               |
|                                     |      | 2483.5               | 40.37               | -13.63                  | 54                          | 41.32                     | 27.66                         | 4.9                     | 33.51                      | 330                  | 298                     | A                       | H               |
|                                     |      | 2388.96              | 54.25               | -19.75                  | 74                          | 55.21                     | 27.8                          | 4.82                    | 33.58                      | 255                  | 263                     | P                       | V               |
|                                     |      | 2389.94              | 45.17               | -8.83                   | 54                          | 46.11                     | 27.8                          | 4.82                    | 33.56                      | 255                  | 263                     | A                       | V               |
|                                     | *    | 2422                 | 100.5               | -                       | -                           | 101.48                    | 27.74                         | 4.82                    | 33.54                      | 255                  | 263                     | P                       | V               |
|                                     | *    | 2422                 | 93.87               | -                       | -                           | 94.85                     | 27.74                         | 4.82                    | 33.54                      | 255                  | 263                     | A                       | V               |
|                                     |      | 2494.47              | 49.22               | -24.78                  | 74                          | 50.19                     | 27.63                         | 4.9                     | 33.5                       | 255                  | 263                     | P                       | V               |
|                                     |      | 2483.5               | 39.7                | -14.3                   | 54                          | 40.65                     | 27.66                         | 4.9                     | 33.51                      | 255                  | 263                     | A                       | V               |
| 802.11n<br>HT40<br>CH 06<br>2437MHz |      | 2388.4               | 51.3                | -22.7                   | 74                          | 52.26                     | 27.8                          | 4.82                    | 33.58                      | 100                  | 304                     | P                       | H               |
|                                     |      | 2388.4               | 41.4                | -12.6                   | 54                          | 42.36                     | 27.8                          | 4.82                    | 33.58                      | 100                  | 304                     | A                       | H               |
|                                     | *    | 2437                 | 104.95              | -                       | -                           | 105.92                    | 27.71                         | 4.86                    | 33.54                      | 100                  | 304                     | P                       | H               |
|                                     | *    | 2437                 | 97.35               | -                       | -                           | 98.32                     | 27.71                         | 4.86                    | 33.54                      | 100                  | 304                     | A                       | H               |
|                                     |      | 2487.26              | 52.37               | -21.63                  | 74                          | 53.32                     | 27.66                         | 4.9                     | 33.51                      | 100                  | 304                     | P                       | H               |
|                                     |      | 2486.63              | 41.41               | -12.59                  | 54                          | 42.36                     | 27.66                         | 4.9                     | 33.51                      | 100                  | 304                     | A                       | H               |
|                                     |      | 2311.54              | 50.03               | -23.97                  | 74                          | 50.96                     | 27.94                         | 4.75                    | 33.62                      | 260                  | 250                     | P                       | V               |
|                                     |      | 2388.4               | 40.85               | -13.15                  | 54                          | 41.81                     | 27.8                          | 4.82                    | 33.58                      | 260                  | 250                     | A                       | V               |
|                                     | *    | 2437                 | 101.38              | -                       | -                           | 102.35                    | 27.71                         | 4.86                    | 33.54                      | 260                  | 250                     | P                       | V               |
|                                     | *    | 2437                 | 94.81               | -                       | -                           | 95.78                     | 27.71                         | 4.86                    | 33.54                      | 260                  | 250                     | A                       | V               |
|                                     |      | 2486.63              | 51.43               | -22.57                  | 74                          | 52.38                     | 27.66                         | 4.9                     | 33.51                      | 260                  | 250                     | P                       | V               |
|                                     |      | 2485.72              | 40.32               | -13.68                  | 54                          | 41.27                     | 27.66                         | 4.9                     | 33.51                      | 260                  | 250                     | A                       | V               |



| WIFI<br>Ant.<br>1+2                 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|-------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n<br>HT40<br>CH 09<br>2452MHz |                                                                                             | 2343.46              | 51                  | -23                     | 74                          | 51.96                     | 27.88                         | 4.75                    | 33.59                      | 100                  | 307                     | P                       | H               |
|                                     |                                                                                             | 2389.94              | 41.12               | -12.88                  | 54                          | 42.06                     | 27.8                          | 4.82                    | 33.56                      | 100                  | 307                     | A                       | H               |
|                                     | *                                                                                           | 2452                 | 104.12              | -                       | -                           | 105.08                    | 27.71                         | 4.86                    | 33.53                      | 100                  | 307                     | P                       | H               |
|                                     | *                                                                                           | 2452                 | 97.43               | -                       | -                           | 98.39                     | 27.71                         | 4.86                    | 33.53                      | 100                  | 307                     | A                       | H               |
|                                     |                                                                                             | 2484.11              | 60.42               | -13.58                  | 74                          | 61.37                     | 27.66                         | 4.9                     | 33.51                      | 100                  | 307                     | P                       | H               |
|                                     |                                                                                             | 2483.5               | 50.36               | -3.64                   | 54                          | 51.31                     | 27.66                         | 4.9                     | 33.51                      | 100                  | 307                     | A                       | H               |
|                                     |                                                                                             | 2381.54              | 50.15               | -23.85                  | 74                          | 51.12                     | 27.83                         | 4.78                    | 33.58                      | 231                  | 257                     | P                       | V               |
|                                     |                                                                                             | 2389.94              | 40.38               | -13.62                  | 54                          | 41.32                     | 27.8                          | 4.82                    | 33.56                      | 231                  | 257                     | A                       | V               |
|                                     | *                                                                                           | 2452                 | 100.91              | -                       | -                           | 101.87                    | 27.71                         | 4.86                    | 33.53                      | 231                  | 257                     | P                       | V               |
|                                     | *                                                                                           | 2452                 | 94.26               | -                       | -                           | 95.22                     | 27.71                         | 4.86                    | 33.53                      | 231                  | 257                     | A                       | V               |
|                                     |                                                                                             | 2483.69              | 57.16               | -16.84                  | 74                          | 58.11                     | 27.66                         | 4.9                     | 33.51                      | 231                  | 257                     | P                       | V               |
|                                     |                                                                                             | 2483.5               | 46.63               | -7.37                   | 54                          | 47.58                     | 27.66                         | 4.9                     | 33.51                      | 231                  | 257                     | A                       | V               |
| Remark                              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



**2.4GHz 2400~2483.5MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

| WIFI<br>Ant.<br>1+2 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11n             |                                                                                             | 4844                 | 40.35               | -33.65                  | 74                          | 59.13                     | 31.13                         | 7.58                    | 57.49                      | 156                  | 360                     | P                       | H               |
| HT40                |                                                                                             | 7266                 | 44.39               | -29.61                  | 74                          | 58.31                     | 35.93                         | 9.06                    | 58.91                      | 200                  | 360                     | P                       | H               |
| CH 03               |                                                                                             | 4844                 | 40.17               | -33.83                  | 74                          | 58.95                     | 31.13                         | 7.58                    | 57.49                      | 156                  | 360                     | P                       | V               |
| 2422MHz             |                                                                                             | 7266                 | 45.11               | -28.89                  | 74                          | 59.03                     | 35.93                         | 9.06                    | 58.91                      | 200                  | 360                     | P                       | V               |
| 802.11n             |                                                                                             | 4874                 | 40.16               | -33.84                  | 74                          | 58.93                     | 31.17                         | 7.58                    | 57.52                      | 157                  | 360                     | P                       | H               |
| HT40                |                                                                                             | 7311                 | 44.79               | -29.21                  | 74                          | 58.62                     | 36.03                         | 9.06                    | 58.92                      | 157                  | 360                     | P                       | H               |
| CH 06               |                                                                                             | 4874                 | 40.44               | -33.56                  | 74                          | 59.21                     | 31.17                         | 7.58                    | 57.52                      | 157                  | 360                     | P                       | V               |
| 2437MHz             |                                                                                             | 7311                 | 44.38               | -29.62                  | 74                          | 58.21                     | 36.03                         | 9.06                    | 58.92                      | 157                  | 360                     | P                       | V               |
| 802.11n             |                                                                                             | 4904                 | 38.53               | -35.47                  | 74                          | 57.25                     | 31.2                          | 7.62                    | 57.54                      | 157                  | 360                     | P                       | H               |
| HT40                |                                                                                             | 7356                 | 44.87               | -29.13                  | 74                          | 58.57                     | 36.19                         | 9.05                    | 58.94                      | 157                  | 360                     | P                       | H               |
| CH 09               |                                                                                             | 4904                 | 38.53               | -35.47                  | 74                          | 57.25                     | 31.2                          | 7.62                    | 57.54                      | 157                  | 360                     | P                       | V               |
| 2452MHz             |                                                                                             | 7356                 | 44.67               | -29.33                  | 74                          | 58.37                     | 36.19                         | 9.05                    | 58.94                      | 157                  | 360                     | P                       | V               |
| Remark              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE20 Full Ru (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2                  | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br>HE20<br>CH 01<br>2412MHz |      | 2389.59              | 58.74               | -15.26                  | 74                          | 59.7                      | 27.8                          | 4.82                    | 33.58                      | 278                  | 302                     | P                       | H               |
|                                      |      | 2390                 | 49.45               | -4.55                   | 54                          | 50.39                     | 27.8                          | 4.82                    | 33.56                      | 278                  | 302                     | A                       | H               |
|                                      |      | 2412                 | 108.48              | -                       | -                           | 109.45                    | 27.77                         | 4.82                    | 33.56                      | 278                  | 302                     | P                       | H               |
|                                      |      | 2412                 | 98.74               | -                       | -                           | 99.71                     | 27.77                         | 4.82                    | 33.56                      | 278                  | 302                     | A                       | H               |
|                                      |      | 2389.905             | 55.67               | -18.33                  | 74                          | 56.61                     | 27.8                          | 4.82                    | 33.56                      | 100                  | 69                      | P                       | V               |
|                                      |      | 2390                 | 47.28               | -6.72                   | 54                          | 48.22                     | 27.8                          | 4.82                    | 33.56                      | 100                  | 69                      | A                       | V               |
|                                      |      | 2412                 | 107.89              | -                       | -                           | 108.86                    | 27.77                         | 4.82                    | 33.56                      | 100                  | 69                      | P                       | V               |
|                                      |      | 2412                 | 97.62               | -                       | -                           | 98.59                     | 27.77                         | 4.82                    | 33.56                      | 100                  | 69                      | A                       | V               |
| 802.11ax<br>HE20<br>CH 06<br>2437MHz |      | 2375.52              | 50.82               | -23.18                  | 74                          | 51.79                     | 27.83                         | 4.78                    | 33.58                      | 100                  | 307                     | P                       | H               |
|                                      |      | 2389.94              | 39.57               | -14.43                  | 54                          | 40.51                     | 27.8                          | 4.82                    | 33.56                      | 100                  | 307                     | A                       | H               |
|                                      |      | 2437                 | 107.33              | -                       | -                           | 108.3                     | 27.71                         | 4.86                    | 33.54                      | 100                  | 307                     | P                       | H               |
|                                      |      | 2437                 | 97.54               | -                       | -                           | 98.51                     | 27.71                         | 4.86                    | 33.54                      | 100                  | 307                     | A                       | H               |
|                                      |      | 2495.17              | 49.51               | -24.49                  | 74                          | 50.48                     | 27.63                         | 4.9                     | 33.5                       | 100                  | 307                     | P                       | H               |
|                                      |      | 2484.53              | 39.35               | -14.65                  | 54                          | 40.3                      | 27.66                         | 4.9                     | 33.51                      | 100                  | 307                     | A                       | H               |
|                                      |      | 2314.34              | 50.42               | -23.58                  | 74                          | 51.33                     | 27.94                         | 4.75                    | 33.6                       | 103                  | 66                      | P                       | V               |
|                                      |      | 2389.66              | 39.49               | -14.51                  | 54                          | 40.45                     | 27.8                          | 4.82                    | 33.58                      | 103                  | 66                      | A                       | V               |
|                                      |      | 2437                 | 105.03              | -                       | -                           | 106                       | 27.71                         | 4.86                    | 33.54                      | 103                  | 66                      | P                       | V               |
|                                      |      | 2437                 | 96.43               | -                       | -                           | 97.4                      | 27.71                         | 4.86                    | 33.54                      | 103                  | 66                      | A                       | V               |
|                                      |      | 2488.03              | 49.29               | -24.71                  | 74                          | 50.27                     | 27.63                         | 4.9                     | 33.51                      | 103                  | 66                      | P                       | V               |
|                                      |      | 2484.39              | 39.12               | -14.88                  | 54                          | 40.07                     | 27.66                         | 4.9                     | 33.51                      | 103                  | 66                      | A                       | V               |



| WIFI<br>Ant.<br>1+2                  | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br>HE20<br>CH 11<br>2462MHz |                                                                                             | 2462                 | 107.43              | -                       | -                           | 108.41                    | 27.69                         | 4.86                    | 33.53                      | 268                  | 304                     | P                       | H               |
|                                      |                                                                                             | 2462                 | 97.61               | -                       | -                           | 98.59                     | 27.69                         | 4.86                    | 33.53                      | 268                  | 304                     | A                       | H               |
|                                      |                                                                                             | 2484.28              | 54.61               | -19.39                  | 74                          | 55.56                     | 27.66                         | 4.9                     | 33.51                      | 268                  | 304                     | P                       | H               |
|                                      |                                                                                             | 2483.52              | 45.23               | -8.77                   | 54                          | 46.18                     | 27.66                         | 4.9                     | 33.51                      | 268                  | 304                     | A                       | H               |
|                                      |                                                                                             | 2462                 | 104.77              | -                       | -                           | 105.75                    | 27.69                         | 4.86                    | 33.53                      | 100                  | 55                      | P                       | V               |
|                                      |                                                                                             | 2462                 | 94.86               | -                       | -                           | 95.84                     | 27.69                         | 4.86                    | 33.53                      | 100                  | 55                      | A                       | V               |
|                                      |                                                                                             | 2484.88              | 51.48               | -22.52                  | 74                          | 52.43                     | 27.66                         | 4.9                     | 33.51                      | 100                  | 55                      | P                       | V               |
|                                      |                                                                                             | 2483.52              | 41.44               | -12.56                  | 54                          | 42.39                     | 27.66                         | 4.9                     | 33.51                      | 100                  | 55                      | A                       | V               |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE20 Full Ru (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2                  | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br>HE20<br>CH 01<br>2412MHz |                                                                                             | 4824                 | 41.47               | -32.53                  | 74                          | 60.3                      | 31.12                         | 7.53                    | 57.48                      | 145                  | 274                     | P                       | H               |
|                                      |                                                                                             | 4824                 | 42.5                | -31.5                   | 74                          | 61.33                     | 31.12                         | 7.53                    | 57.48                      | 191                  | 220                     | P                       | V               |
| 802.11ax<br>HE20<br>CH 06<br>2437MHz |                                                                                             | 4874                 | 41.62               | -32.38                  | 74                          | 60.39                     | 31.17                         | 7.58                    | 57.52                      | 112                  | 229                     | P                       | H               |
|                                      |                                                                                             | 7311                 | 45.32               | -28.68                  | 74                          | 59.15                     | 36.03                         | 9.06                    | 58.92                      | 174                  | 100                     | P                       | H               |
|                                      |                                                                                             | 4874                 | 41.99               | -32.01                  | 74                          | 60.76                     | 31.17                         | 7.58                    | 57.52                      | 153                  | 360                     | P                       | V               |
|                                      |                                                                                             | 7311                 | 45.88               | -28.12                  | 74                          | 59.71                     | 36.03                         | 9.06                    | 58.92                      | 120                  | 106                     | P                       | V               |
| 802.11ax<br>HE20<br>CH 11<br>2462MHz |                                                                                             | 4924                 | 41.02               | -32.98                  | 74                          | 59.68                     | 31.22                         | 7.67                    | 57.55                      | 153                  | 360                     | P                       | H               |
|                                      |                                                                                             | 7386                 | 45.46               | -28.54                  | 74                          | 59.09                     | 36.29                         | 9.04                    | 58.96                      | 145                  | 274                     | P                       | H               |
|                                      |                                                                                             | 4924                 | 40.17               | -33.83                  | 74                          | 58.83                     | 31.22                         | 7.67                    | 57.55                      | 153                  | 360                     | P                       | V               |
|                                      |                                                                                             | 7386                 | 46.17               | -27.83                  | 74                          | 59.8                      | 36.29                         | 9.04                    | 58.96                      | 166                  | 210                     | P                       | V               |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE40 Full Ru (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2                  | Note | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br>HE40<br>CH 03<br>2422MHz |      | 2388.54              | 59.89               | -14.11                  | 74                          | 60.85                     | 27.8                          | 4.82                    | 33.58                      | 271                  | 312                     | P                       | H               |
|                                      |      | 2389.94              | 50.96               | -3.04                   | 54                          | 51.9                      | 27.8                          | 4.82                    | 33.56                      | 271                  | 312                     | A                       | H               |
|                                      |      | 2422                 | 105.19              | -                       | -                           | 106.17                    | 27.74                         | 4.82                    | 33.54                      | 271                  | 312                     | P                       | H               |
|                                      |      | 2422                 | 96.43               | -                       | -                           | 97.41                     | 27.74                         | 4.82                    | 33.54                      | 271                  | 312                     | A                       | H               |
|                                      |      | 2483.5               | 51.46               | -22.54                  | 74                          | 52.41                     | 27.66                         | 4.9                     | 33.51                      | 271                  | 312                     | P                       | H               |
|                                      |      | 2483.5               | 41.1                | -12.9                   | 54                          | 42.05                     | 27.66                         | 4.9                     | 33.51                      | 271                  | 312                     | A                       | H               |
|                                      |      | 2388.96              | 55.47               | -18.53                  | 74                          | 56.43                     | 27.8                          | 4.82                    | 33.58                      | 112                  | 338                     | P                       | V               |
|                                      |      | 2389.94              | 47.46               | -6.54                   | 54                          | 48.4                      | 27.8                          | 4.82                    | 33.56                      | 112                  | 338                     | A                       | V               |
|                                      |      | 2422                 | 97.17               | -                       | -                           | 98.15                     | 27.74                         | 4.82                    | 33.54                      | 112                  | 338                     | P                       | V               |
|                                      |      | 2422                 | 90.63               | -                       | -                           | 91.61                     | 27.74                         | 4.82                    | 33.54                      | 112                  | 338                     | A                       | V               |
|                                      |      | 2484.18              | 50                  | -24                     | 74                          | 50.95                     | 27.66                         | 4.9                     | 33.51                      | 112                  | 338                     | P                       | V               |
|                                      |      | 2485.65              | 41.61               | -12.39                  | 54                          | 42.56                     | 27.66                         | 4.9                     | 33.51                      | 112                  | 338                     | A                       | V               |
| 802.11ax<br>HE40<br>CH 06<br>2437MHz |      | 2388.96              | 52.83               | -21.17                  | 74                          | 53.79                     | 27.8                          | 4.82                    | 33.58                      | 320                  | 17                      | P                       | H               |
|                                      |      | 2388.54              | 45.84               | -8.16                   | 54                          | 46.8                      | 27.8                          | 4.82                    | 33.58                      | 320                  | 17                      | A                       | H               |
|                                      |      | 2437                 | 102.28              | -                       | -                           | 103.25                    | 27.71                         | 4.86                    | 33.54                      | 320                  | 17                      | P                       | H               |
|                                      |      | 2437                 | 95.62               | -                       | -                           | 96.59                     | 27.71                         | 4.86                    | 33.54                      | 320                  | 17                      | A                       | H               |
|                                      |      | 2483.69              | 59.98               | -14.02                  | 74                          | 60.93                     | 27.66                         | 4.9                     | 33.51                      | 320                  | 17                      | P                       | H               |
|                                      |      | 2483.5               | 49.59               | -4.41                   | 54                          | 50.54                     | 27.66                         | 4.9                     | 33.51                      | 320                  | 17                      | A                       | H               |
|                                      |      | 2389.8               | 54.89               | -19.11                  | 74                          | 55.83                     | 27.8                          | 4.82                    | 33.56                      | 115                  | 341                     | P                       | V               |
|                                      |      | 2388.82              | 46.29               | -7.71                   | 54                          | 47.25                     | 27.8                          | 4.82                    | 33.58                      | 115                  | 341                     | A                       | V               |
|                                      |      | 2437                 | 98.36               | -                       | -                           | 99.33                     | 27.71                         | 4.86                    | 33.54                      | 115                  | 341                     | P                       | V               |
|                                      |      | 2437                 | 92.17               | -                       | -                           | 93.14                     | 27.71                         | 4.86                    | 33.54                      | 115                  | 341                     | A                       | V               |
|                                      |      | 2485.3               | 53.13               | -20.87                  | 74                          | 54.08                     | 27.66                         | 4.9                     | 33.51                      | 115                  | 341                     | P                       | V               |
|                                      |      | 2483.5               | 44.67               | -9.33                   | 54                          | 45.62                     | 27.66                         | 4.9                     | 33.51                      | 115                  | 341                     | A                       | V               |



| WIFI<br>Ant.<br>1+2                      | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|------------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br><br>HE40<br>CH 09<br>2452MHz |                                                                                             | 2387.28              | 50.41               | -23.59                  | 74                          | 51.37                     | 27.8                          | 4.82                    | 33.58                      | 347                  | 19                      | P                       | H               |
|                                          |                                                                                             | 2389.66              | 42.13               | -11.87                  | 54                          | 43.09                     | 27.8                          | 4.82                    | 33.58                      | 347                  | 19                      | A                       | H               |
|                                          |                                                                                             | 2452                 | 101.29              | -                       | -                           | 102.25                    | 27.71                         | 4.86                    | 33.53                      | 347                  | 19                      | P                       | H               |
|                                          |                                                                                             | 2452                 | 94.35               | -                       | -                           | 95.31                     | 27.71                         | 4.86                    | 33.53                      | 347                  | 19                      | A                       | H               |
|                                          |                                                                                             | 2483.5               | 57.8                | -16.2                   | 74                          | 58.75                     | 27.66                         | 4.9                     | 33.51                      | 347                  | 19                      | P                       | H               |
|                                          |                                                                                             | 2483.5               | 50.91               | -3.09                   | 54                          | 51.86                     | 27.66                         | 4.9                     | 33.51                      | 347                  | 19                      | A                       | H               |
|                                          |                                                                                             | 2363.48              | 50.2                | -23.8                   | 74                          | 51.16                     | 27.85                         | 4.78                    | 33.59                      | 187                  | 335                     | P                       | V               |
|                                          |                                                                                             | 2388.4               | 42.04               | -11.96                  | 54                          | 43                        | 27.8                          | 4.82                    | 33.58                      | 187                  | 335                     | A                       | V               |
|                                          |                                                                                             | 2452                 | 97.9                | -                       | -                           | 98.86                     | 27.71                         | 4.86                    | 33.53                      | 187                  | 335                     | P                       | V               |
|                                          |                                                                                             | 2452                 | 91.2                | -                       | -                           | 92.16                     | 27.71                         | 4.86                    | 33.53                      | 187                  | 335                     | A                       | V               |
|                                          |                                                                                             | 2483.69              | 55.97               | -18.03                  | 74                          | 56.92                     | 27.66                         | 4.9                     | 33.51                      | 187                  | 335                     | P                       | V               |
|                                          |                                                                                             | 2483.5               | 47.43               | -6.57                   | 54                          | 48.38                     | 27.66                         | 4.9                     | 33.51                      | 187                  | 335                     | A                       | V               |
| Remark                                   | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE40 Full Ru (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax            |                                                                                             | 4844                 | 41.41               | -32.59                  | 74                          | 60.19                     | 31.13                         | 7.58                    | 57.49                      | 153                  | 360                     | P                       | H               |
| HE40                |                                                                                             | 7266                 | 46.55               | -27.45                  | 74                          | 60.47                     | 35.93                         | 9.06                    | 58.91                      | 200                  | 360                     | P                       | H               |
| CH 03               |                                                                                             | 4844                 | 42.11               | -31.89                  | 74                          | 60.89                     | 31.13                         | 7.58                    | 57.49                      | 153                  | 360                     | P                       | V               |
| 2422MHz             |                                                                                             | 7266                 | 45.5                | -28.5                   | 74                          | 59.42                     | 35.93                         | 9.06                    | 58.91                      | 200                  | 360                     | P                       | V               |
| 802.11ax            |                                                                                             | 4874                 | 42.3                | -31.7                   | 74                          | 61.07                     | 31.17                         | 7.58                    | 57.52                      | 153                  | 360                     | P                       | H               |
| HE40                |                                                                                             | 7311                 | 45.45               | -28.55                  | 74                          | 59.28                     | 36.03                         | 9.06                    | 58.92                      | 153                  | 360                     | P                       | H               |
| CH 06               |                                                                                             | 4874                 | 42.25               | -31.75                  | 74                          | 61.02                     | 31.17                         | 7.58                    | 57.52                      | 153                  | 360                     | P                       | V               |
| 2437MHz             |                                                                                             | 7311                 | 45.71               | -28.29                  | 74                          | 59.54                     | 36.03                         | 9.06                    | 58.92                      | 153                  | 360                     | P                       | V               |
| 802.11ax            |                                                                                             | 4904                 | 40.73               | -33.27                  | 74                          | 59.45                     | 31.2                          | 7.62                    | 57.54                      | 153                  | 360                     | P                       | H               |
| HE40                |                                                                                             | 7356                 | 45.43               | -28.57                  | 74                          | 59.13                     | 36.19                         | 9.05                    | 58.94                      | 153                  | 360                     | P                       | H               |
| CH 09               |                                                                                             | 4904                 | 41.07               | -32.93                  | 74                          | 59.79                     | 31.2                          | 7.62                    | 57.54                      | 153                  | 360                     | P                       | V               |
| 2452MHz             |                                                                                             | 7356                 | 45.72               | -28.28                  | 74                          | 59.42                     | 36.19                         | 9.05                    | 58.94                      | 153                  | 360                     | P                       | V               |
| Remark              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE20 Partial Ru (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2                  | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br>HE20<br>CH 01<br>2412MHz |                                                                                             | 2370.06              | 52.69               | -21.31                  | 74                          | 53.66                     | 27.83                         | 4.78                    | 33.58                      | 160                  | 13                      | P                       | H               |
|                                      |                                                                                             | 2390                 | 41.65               | -12.35                  | 54                          | 42.59                     | 27.8                          | 4.82                    | 33.56                      | 160                  | 13                      | A                       | H               |
|                                      |                                                                                             | 2412                 | 107.97              | -                       | -                           | 108.94                    | 27.77                         | 4.82                    | 33.56                      | 160                  | 13                      | P                       | H               |
|                                      |                                                                                             | 2412                 | 99.87               | -                       | -                           | 100.84                    | 27.77                         | 4.82                    | 33.56                      | 160                  | 13                      | A                       | H               |
|                                      |                                                                                             | 2327.115             | 52.53               | -21.47                  | 74                          | 53.47                     | 27.91                         | 4.75                    | 33.6                       | 114                  | 60                      | P                       | V               |
|                                      |                                                                                             | 2389.695             | 41.5                | -12.5                   | 54                          | 42.46                     | 27.8                          | 4.82                    | 33.58                      | 114                  | 60                      | A                       | V               |
|                                      |                                                                                             | 2412                 | 105.93              | -                       | -                           | 106.9                     | 27.77                         | 4.82                    | 33.56                      | 114                  | 60                      | P                       | V               |
|                                      |                                                                                             | 2412                 | 98.16               | -                       | -                           | 99.13                     | 27.77                         | 4.82                    | 33.56                      | 114                  | 60                      | A                       | V               |
| 802.11ax<br>HE20<br>CH 11<br>2462MHz |                                                                                             | 2462                 | 106.87              | -                       | -                           | 107.85                    | 27.69                         | 4.86                    | 33.53                      | 159                  | 39                      | P                       | H               |
|                                      |                                                                                             | 2462                 | 98.6                | -                       | -                           | 99.58                     | 27.69                         | 4.86                    | 33.53                      | 159                  | 39                      | A                       | H               |
|                                      |                                                                                             | 2489.72              | 52.09               | -21.91                  | 74                          | 53.07                     | 27.63                         | 4.9                     | 33.51                      | 159                  | 39                      | P                       | H               |
|                                      |                                                                                             | 2485.04              | 41.13               | -12.87                  | 54                          | 42.08                     | 27.66                         | 4.9                     | 33.51                      | 159                  | 39                      | A                       | H               |
|                                      |                                                                                             | 2462                 | 105.8               | -                       | -                           | 106.78                    | 27.69                         | 4.86                    | 33.53                      | 144                  | 15                      | P                       | V               |
|                                      |                                                                                             | 2462                 | 97.5                | -                       | -                           | 98.48                     | 27.69                         | 4.86                    | 33.53                      | 144                  | 15                      | A                       | V               |
|                                      |                                                                                             | 2485.16              | 52.35               | -21.65                  | 74                          | 53.3                      | 27.66                         | 4.9                     | 33.51                      | 144                  | 15                      | P                       | V               |
|                                      |                                                                                             | 2484.32              | 41.31               | -12.69                  | 54                          | 42.26                     | 27.66                         | 4.9                     | 33.51                      | 144                  | 15                      | A                       | V               |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE20 Partial Ru (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2                  | Note | Frequency<br>( MHz )                                                                        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|------|---------------------------------------------------------------------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br>HE20<br>CH 01<br>2412MHz |      | 4824                                                                                        | 41.01               | -32.99                  | 74                          | 59.84                     | 31.12                         | 7.53                    | 57.48                      | 145                  | 274                     | P                       | H               |
|                                      |      | 4824                                                                                        | 40.67               | -33.33                  | 74                          | 59.5                      | 31.12                         | 7.53                    | 57.48                      | 191                  | 220                     | P                       | V               |
| 802.11ax<br>HE20<br>CH 11<br>2462MHz |      | 4924                                                                                        | 39.49               | -34.51                  | 74                          | 58.15                     | 31.22                         | 7.67                    | 57.55                      | 133                  | 180                     | P                       | H               |
|                                      |      | 7386                                                                                        | 45.68               | -28.32                  | 74                          | 59.31                     | 36.29                         | 9.04                    | 58.96                      | 145                  | 274                     | P                       | H               |
|                                      |      | 4924                                                                                        | 39.47               | -34.53                  | 74                          | 58.13                     | 31.22                         | 7.67                    | 57.55                      | 153                  | 360                     | P                       | V               |
|                                      |      | 7386                                                                                        | 45.2                | -28.8                   | 74                          | 58.83                     | 36.29                         | 9.04                    | 58.96                      | 166                  | 210                     | P                       | V               |
| Remark                               |      | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE40 Partial Ru (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2                  | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|--------------------------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax<br>HE40<br>CH 03<br>2422MHz |                                                                                             | 2387.84              | 61.61               | -12.39                  | 74                          | 62.57                     | 27.8                          | 4.82                    | 33.58                      | 266                  | 332                     | P                       | H               |
|                                      |                                                                                             | 2389.94              | 44.43               | -9.57                   | 54                          | 45.37                     | 27.8                          | 4.82                    | 33.56                      | 266                  | 332                     | A                       | H               |
|                                      |                                                                                             | 2422                 | 105.62              | -                       | -                           | 106.6                     | 27.74                         | 4.82                    | 33.54                      | 266                  | 332                     | P                       | H               |
|                                      |                                                                                             | 2422                 | 95.98               | -                       | -                           | 96.96                     | 27.74                         | 4.82                    | 33.54                      | 266                  | 332                     | A                       | H               |
|                                      |                                                                                             | 2487.82              | 53.91               | -20.09                  | 74                          | 54.89                     | 27.63                         | 4.9                     | 33.51                      | 266                  | 333                     | P                       | H               |
|                                      |                                                                                             | 2484.04              | 41.76               | -12.24                  | 54                          | 42.71                     | 27.66                         | 4.9                     | 33.51                      | 266                  | 333                     | A                       | H               |
|                                      |                                                                                             | 2389.94              | 62.2                | -11.8                   | 74                          | 63.14                     | 27.8                          | 4.82                    | 33.56                      | 254                  | 59                      | P                       | V               |
|                                      |                                                                                             | 2389.8               | 44.48               | -9.52                   | 54                          | 45.42                     | 27.8                          | 4.82                    | 33.56                      | 254                  | 59                      | A                       | V               |
|                                      |                                                                                             | 2422                 | 105.7               | -                       | -                           | 106.68                    | 27.74                         | 4.82                    | 33.54                      | 254                  | 59                      | P                       | V               |
|                                      |                                                                                             | 2422                 | 96.11               | -                       | -                           | 97.09                     | 27.74                         | 4.82                    | 33.54                      | 254                  | 59                      | A                       | V               |
|                                      |                                                                                             | 2489.36              | 52.82               | -21.18                  | 74                          | 53.8                      | 27.63                         | 4.9                     | 33.51                      | 254                  | 59                      | P                       | V               |
|                                      |                                                                                             | 2484.39              | 41.58               | -12.42                  | 54                          | 42.53                     | 27.66                         | 4.9                     | 33.51                      | 254                  | 59                      | A                       | V               |
| 802.11ax<br>HE40<br>CH 09<br>2452MHz |                                                                                             | 2349.76              | 52.62               | -21.38                  | 74                          | 53.55                     | 27.88                         | 4.78                    | 33.59                      | 153                  | 223                     | P                       | H               |
|                                      |                                                                                             | 2388.96              | 41.74               | -12.26                  | 54                          | 42.7                      | 27.8                          | 4.82                    | 33.58                      | 153                  | 223                     | A                       | H               |
|                                      |                                                                                             | 2452                 | 106.23              | -                       | -                           | 107.19                    | 27.71                         | 4.86                    | 33.53                      | 153                  | 223                     | P                       | H               |
|                                      |                                                                                             | 2452                 | 98.28               | -                       | -                           | 99.24                     | 27.71                         | 4.86                    | 33.53                      | 153                  | 223                     | A                       | H               |
|                                      |                                                                                             | 2487.12              | 60.26               | -13.74                  | 74                          | 61.21                     | 27.66                         | 4.9                     | 33.51                      | 153                  | 223                     | P                       | H               |
|                                      |                                                                                             | 2483.5               | 43.86               | -10.14                  | 54                          | 44.81                     | 27.66                         | 4.9                     | 33.51                      | 153                  | 223                     | A                       | H               |
|                                      |                                                                                             | 2321.62              | 52.79               | -21.21                  | 74                          | 53.73                     | 27.91                         | 4.75                    | 33.6                       | 159                  | 81                      | P                       | V               |
|                                      |                                                                                             | 2389.8               | 41.76               | -12.24                  | 54                          | 42.7                      | 27.8                          | 4.82                    | 33.56                      | 159                  | 81                      | A                       | V               |
|                                      |                                                                                             | 2452                 | 105                 | -                       | -                           | 105.96                    | 27.71                         | 4.86                    | 33.53                      | 159                  | 81                      | P                       | V               |
|                                      |                                                                                             | 2452                 | 95.9                | -                       | -                           | 96.86                     | 27.71                         | 4.86                    | 33.53                      | 159                  | 81                      | A                       | V               |
|                                      |                                                                                             | 2487.61              | 61.53               | -12.47                  | 74                          | 62.51                     | 27.63                         | 4.9                     | 33.51                      | 159                  | 81                      | P                       | V               |
|                                      |                                                                                             | 2483.5               | 44.14               | -9.86                   | 54                          | 45.09                     | 27.66                         | 4.9                     | 33.51                      | 159                  | 81                      | A                       | V               |
| Remark                               | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11n HE40 Partial Ru (Harmonic @ 3m)

| WIFI<br>Ant.<br>1+2 | Note                                                                                        | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>( P/A ) | Pol.<br>( H/V ) |
|---------------------|---------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-------------------------|-----------------|
| 802.11ax            |                                                                                             | 4844                 | 42.15               | -31.85                  | 74                          | 60.93                     | 31.13                         | 7.58                    | 57.49                      | 100                  | 268                     | P                       | H               |
| HE40                |                                                                                             | 7266                 | 45.99               | -28.01                  | 74                          | 59.91                     | 35.93                         | 9.06                    | 58.91                      | 200                  | 360                     | P                       | H               |
| CH 03               |                                                                                             | 4844                 | 42.39               | -31.61                  | 74                          | 61.17                     | 31.13                         | 7.58                    | 57.49                      | 214                  | 86                      | P                       | V               |
| 2422MHz             |                                                                                             | 7266                 | 44.94               | -29.06                  | 74                          | 58.86                     | 35.93                         | 9.06                    | 58.91                      | 200                  | 360                     | P                       | V               |
| 802.11ax            |                                                                                             | 4904                 | 41.82               | -32.18                  | 74                          | 60.54                     | 31.2                          | 7.62                    | 57.54                      | 152                  | 177                     | P                       | H               |
| HE40                |                                                                                             | 7356                 | 46.46               | -27.54                  | 74                          | 60.16                     | 36.19                         | 9.05                    | 58.94                      | 251                  | 0                       | P                       | H               |
| CH 09               |                                                                                             | 4904                 | 41.66               | -32.34                  | 74                          | 60.38                     | 31.2                          | 7.62                    | 57.54                      | 130                  | 74                      | P                       | V               |
| 2452MHz             |                                                                                             | 7356                 | 45.3                | -28.7                   | 74                          | 59                        | 36.19                         | 9.05                    | 58.94                      | 114                  | 211                     | P                       | V               |
| Remark              | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. |                      |                     |                         |                             |                           |                               |                         |                            |                      |                         |                         |                 |



## 2.4GHz 2400~2483.5MHz

## WIFI 802.11ax HE40 LF (Band Edge @ 3m)

| WIFI<br>Ant.<br>1+2         | Note                                                                       | Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | Antenna<br>Factor<br>( dB/m ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Peak<br>Avg.<br>(P/A) | Pol.<br>(H/V) |
|-----------------------------|----------------------------------------------------------------------------|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-------------------------------|-------------------------|----------------------------|----------------------|-------------------------|-----------------------|---------------|
| WIFI<br>802.11ax<br>HE40 LF |                                                                            | 30.97                | 27.76               | -12.24                  | 40                          | 35.45                   | 24.18                         | 0.53                    | 32.4                       | -                    | -                       | P                     | H             |
|                             |                                                                            | 87.23                | 28.56               | -11.44                  | 40                          | 45.35                   | 14.73                         | 0.88                    | 32.4                       | 110                  | 93                      | P                     | H             |
|                             |                                                                            | 205.57               | 25.01               | -18.49                  | 43.5                        | 40.48                   | 15.23                         | 1.36                    | 32.06                      | -                    | -                       | P                     | H             |
|                             |                                                                            | 299.66               | 32.23               | -13.77                  | 46                          | 43.07                   | 19.2                          | 1.66                    | 31.7                       | -                    | -                       | P                     | H             |
|                             |                                                                            | 653.71               | 27.83               | -18.17                  | 46                          | 31.24                   | 24.91                         | 2.48                    | 30.8                       | -                    | -                       | P                     | H             |
|                             |                                                                            | 885.54               | 29.69               | -16.31                  | 46                          | 31.83                   | 26.46                         | 2.87                    | 31.47                      | -                    | -                       | P                     | H             |
|                             |                                                                            | 42.61                | 25.25               | -14.75                  | 40                          | 38.87                   | 18.14                         | 0.64                    | 32.4                       | -                    | -                       | P                     | V             |
|                             |                                                                            | 87.23                | 23.63               | -16.37                  | 40                          | 40.42                   | 14.73                         | 0.88                    | 32.4                       | -                    | -                       | P                     | V             |
|                             |                                                                            | 195.87               | 22.94               | -20.56                  | 43.5                        | 38.5                    | 15.22                         | 1.33                    | 32.11                      | -                    | -                       | P                     | V             |
|                             |                                                                            | 299.66               | 32.79               | -13.21                  | 46                          | 43.63                   | 19.2                          | 1.66                    | 31.7                       | 132                  | 77                      | P                     | V             |
|                             |                                                                            | 609.09               | 28.09               | -17.91                  | 46                          | 31.62                   | 24.82                         | 2.37                    | 30.72                      | -                    | -                       | P                     | V             |
|                             |                                                                            | 917.55               | 28.97               | -17.03                  | 46                          | 30.88                   | 26.67                         | 2.92                    | 31.5                       | -                    | -                       | P                     | V             |
| Remark                      | 1. No other spurious found.<br>2. All results are PASS against limit line. |                      |                     |                         |                             |                         |                               |                         |                            |                      |                         |                       |               |



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

| WIFI Ant. | Note | Frequency | Level      | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Ant Pos | Table Pos | Peak Avg. | Pol.    |
|-----------|------|-----------|------------|------------|------------|------------|----------------|------------|---------------|---------|-----------|-----------|---------|
| 1+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     |      | 2390      | 43.54      | -10.46     | 54         | 42.6       | 32.22          | 4.58       | 35.86         | 103     | 308       | A         | H       |
| 2412MHz   |      |           |            |            |            |            |                |            |               |         |           |           |         |

1. Level(dBμV/m) =

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

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

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

**For Average Limit @ 2390MHz:**

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

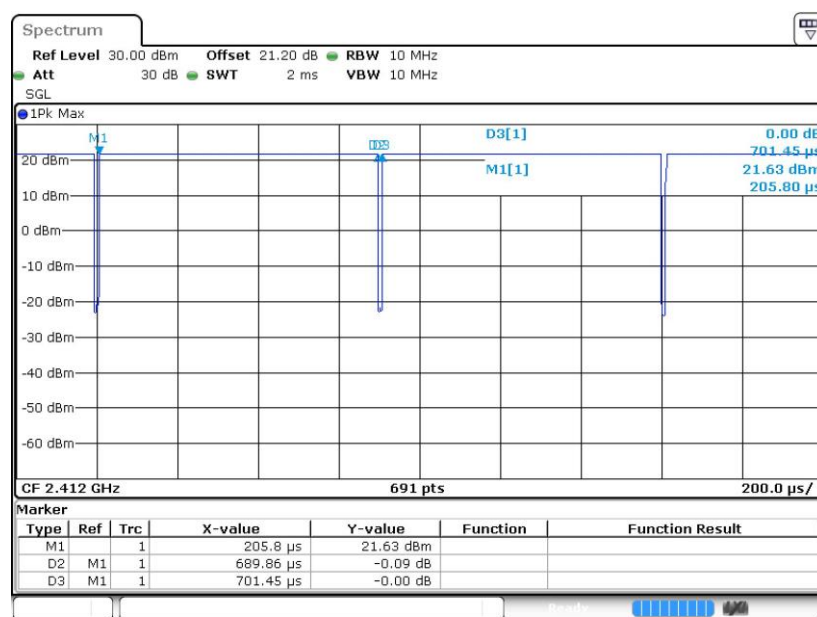
Both peak and average measured complies with the limit line, so test result is “PASS”.

## Appendix D. Duty Cycle Plots

| Antenna | Band          | Duty Cycle(%) | T(ms) | 1/T(kHz) | VBW Setting |
|---------|---------------|---------------|-------|----------|-------------|
| 1+2     | 802.11b       | 98.35         | -     | -        | 10Hz        |
| 1+2     | 802.11g       | 98.63         | -     | -        | 10Hz        |
| 1+2     | 802.11n HT20  | 100           | -     | -        | 10Hz        |
| 1+2     | 802.11n HT40  | 100           | -     | -        | 10Hz        |
| 1+2     | 802.11ax HE20 | 100           | -     | -        | 10Hz        |
| 1+2     | 802.11ax HE40 | 100           | -     | -        | 10Hz        |

<MIMO Ant. 1+2>

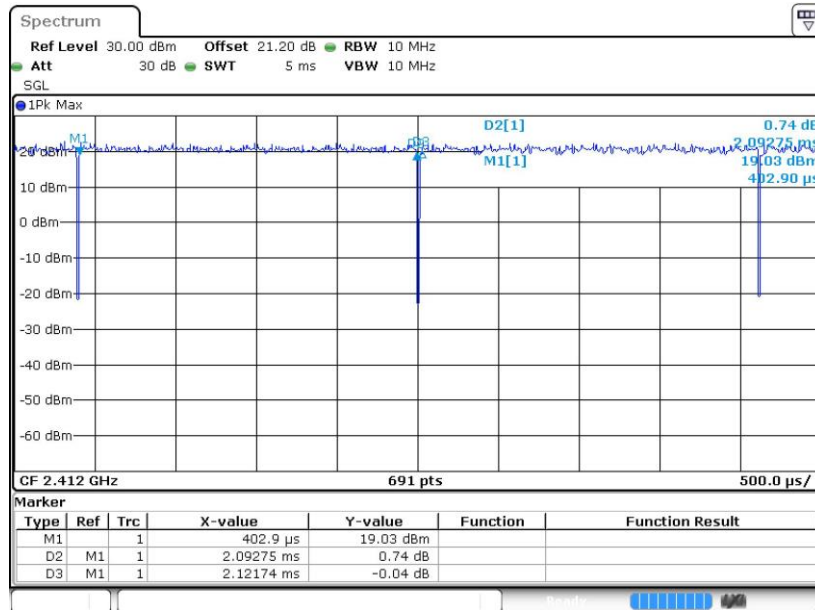
**802.11b**



Date: 2 JUL 2020 19:19:12

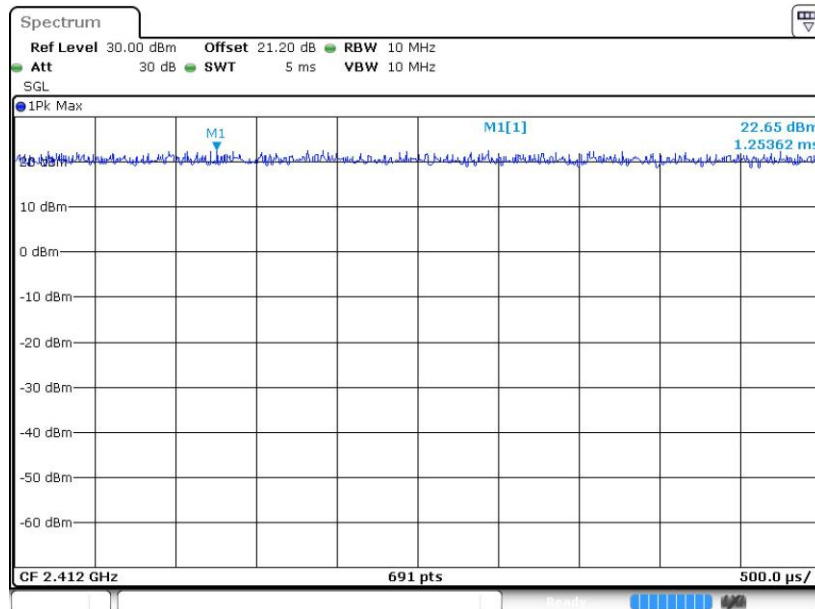


### 802.11g



Date: 2 JUL 2020 19:24:32

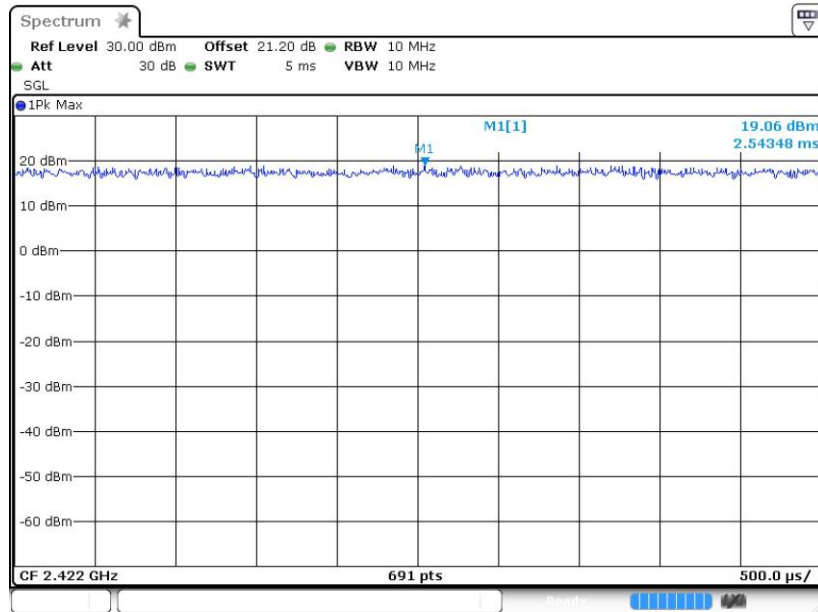
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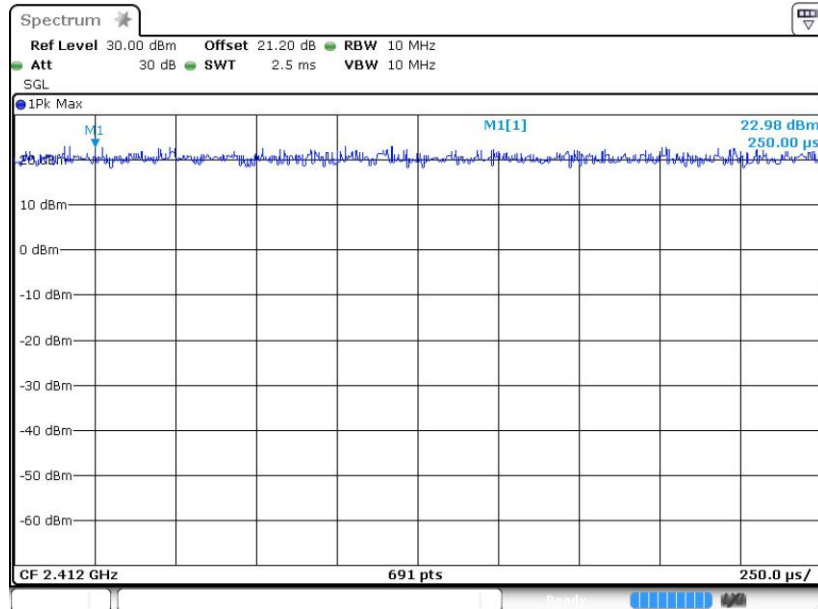


### 802.11n HT40



Date: 2 JUL 2020 19:30:31

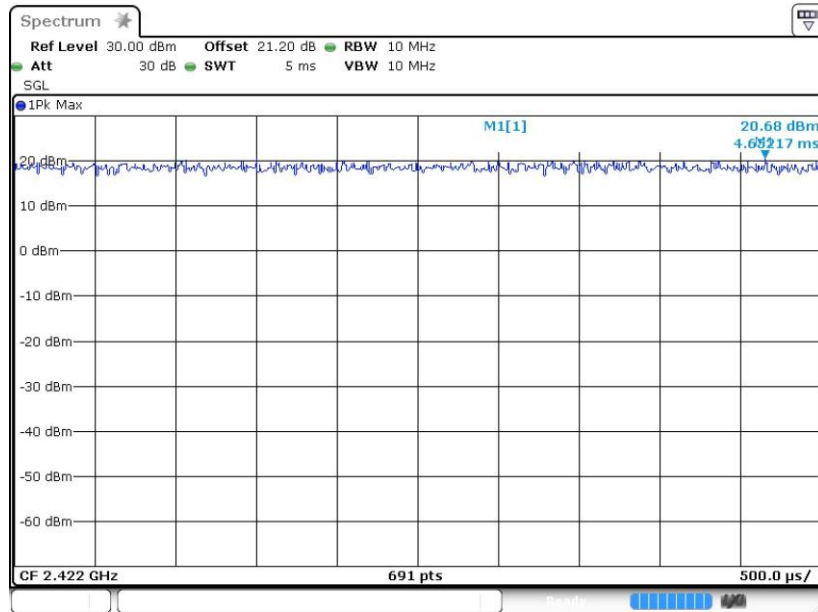
### 802.11ax HE20



Date: 2 JUL 2020 19:13:54



802.11ax HE40



Date: 2 JUL 2020 19:08:20