

# **CTC Laboratories**, Inc.

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| TEST REPORT  |  |                                 |  |  |
|--|--|---------------------------------|--|--|
| Report No. ·····:  | CTC20232165E04   |                                 |  |  |
| FCC ID······:  | 2AUKMMTMAXPLUS   |                                 |  |  |
| Applicant·····:  | Matco Tools  |                                 |  |  |
| Address······  | 4403 Allen Rd. Stow, OH 44224, USA                                     |                                 |  |  |
| Manufacturer:  | Matco Tools  |                                 |  |  |
| Address······  | 4403 Allen Rd. Stow, OH 44224, USA                                     |                                 |  |  |
| Product Name······   | Automotive Diagnostic Scan Tool  |                                 |  |  |
| Trade Mark······   |  |                                 |  |  |
| Model/Type reference······:  | MAXIMUSPLUS  |                                 |  |  |
| Listed Model(s) ······:  | /  |                                 |  |  |
| Standard:  | FCC CFR Title 47 Part 15 Subpart C S                                   | Section 15.247                  |  |  |
| Date of receipt of test sample:  | Nov. 17, 2023  |                                 |  |  |
| Date of testing  | Nov. 17, 2023 ~ Dec. 11, 2023  |                                 |  |  |
| Date of issue  | Dec. 12, 2023  |                                 |  |  |
| Result:  | PASS   |                                 |  |  |
| Compiled by:   |  | -T C                            |  |  |
| (Printed name+signature)   | Terry Su   | Jerry Su                        |  |  |
| Supervised by:   |  | Tin shang                       |  |  |
| (Printed name+signature)   | Eric Zhang   | Terry Su<br>Zic zhang<br>Johnas |  |  |
| Approved by:   |  | 1 mas                           |  |  |
| (Printed name+signature)   | Totti Zhao   | / see                           |  |  |
| Testing Laboratory Name:   | CTC Laboratories, Inc.   |                                 |  |  |
| Address  | 1-2/F., Building 2, Jiaquan Building, Gu<br>Shenzhen, Guangdong, China | anlan High-Tech Park,           |  |  |
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not be taken into consideration beyond this limit. The test report merely correspond to the test sample.



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# 1. TEST SUMMARY

# 1.1. Test Standards

The tests were performed according to following standards:

FCC Rules Part 15.247: Operation within the bands of 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz.

<u>RSS 247 Issue 3:</u> Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.

# 1.2. Report version

| Revised No. | Date of issue | Description |
|-------------|---------------|-------------|
| 01          | Dec. 09, 2023 | Original    |
|             |               |             |
|             |               |             |
|             |               |             |



# 1.3. Test Description

| FCC Part 15 Subpart C (15.247) / RSS 247 Issue 3 |                             |                             |        |             |  |
|--|-----------------------------|-----------------------------|--------|-------------|--|
| Test Item  | Standard Section            |                             | Result | Test        |  |
| rest item  | FCC                         | IC                          | Result | Engineer    |  |
| Antenna Requirement                              | 15.203                      | /                           | Pass   | Alicia Liu  |  |
| Conducted Emission                               | 15.207                      | RSS-Gen 8.8                 | Pass   | Cecilia Luo |  |
| Radiated Band Edge and<br>Spurious Emissions     | 15.205&15.209&<br>15.247(d) | RSS 247 5.5                 | Pass   | Alicia Liu  |  |
| Conducted Band Edge and<br>Spurious Emissions    | 15.247(d)                   | RSS 247 5.5                 | Pass   | Alicia Liu  |  |
| 6dB Bandwidth                                    | 15.247(a)(2)                | RSS 247 5.2 (a)             | Pass   | Alicia Liu  |  |
| Conducted Max Output Power                       | 15.247(b)(3)                | RSS 247 5.4 (d)             | Pass   | Alicia Liu  |  |
| Power Spectral Density                           | 15.247(e)                   | RSS 247 5.2 (b)             | Pass   | Alicia Liu  |  |
| Transmitter Radiated Spurious                    | 15.209&15.247(d)            | RSS 247 5.5&<br>RSS-Gen 8.9 | Pass   | Alicia Liu  |  |

Note: The measurement uncertainty is not included in the test result.



## 1.4. Test Facility

### CTC Laboratories, Inc.

Add: 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

### Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

### A2LA-Lab Cert. No.: 4340.01

CTC Laboratories, Inc. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

### Industry Canada (Registration No.: 9783A, CAB Identifier: CN0029)

CTC Laboratories, Inc. EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Jan, 2016.

### FCC (Registration No.: 951311, Designation Number CN1208)

CTC Laboratories, Inc. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained inour files. Registration 951311, Aug 26, 2017.

## 1.5. Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties radio equipment characteristics; Part 2" and is documented in the CTC Laboratories, Inc. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Below is the best measurement capability for CTC Laboratories, Inc.



| Test Items                                      | Measurement Uncertainty                     | Notes |
|---|---|-------|
| DTS Bandwidth                                   | ±0.0196%                                    | (1)   |
| Maximum Conducted Output Power                  | ±0.686 dB                                   | (1)   |
| Maximum Power Spectral Density Level            | ±0.743 dB                                   | (1)   |
| Band-edge Compliance                            | ±1.328 dB                                   | (1)   |
| Unwanted Emissions In Non-restricted Freq Bands | 9kHz-1GHz: ±0.746dB<br>1GHz-26GHz: ±1.328dB | (1)   |
| Conducted Emissions 9kHz~30MHz                  | ±3.08 dB                                    | (1)   |
| Radiated Emissions 30~1000MHz                   | ±4.51 dB                                    | (1)   |
| Radiated Emissions 1~18GHz                      | ±5.84 dB                                    | (1)   |
| Radiated Emissions 18~40GHz                     | ±6.12 dB                                    | (1)   |

Note (1): This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

# **1.6. Environmental conditions**

During the measurement the environmental conditions were within the listed ranges:

| Temperature:       | 21°C ~ 27°C |
|--------------------|-------------|
| Relative Humidity: | 40% ~ 60%   |
| Air Pressure:      | 101kPa      |



EN

# 2. GENERAL INFORMATION

# 2.1. Client Information

| Applicant:    | Matco Tools                        |
|---------------|------------------------------------|
| Address:      | 4403 Allen Rd. Stow, OH 44224, USA |
| Manufacturer: | Matco Tools                        |
| Address:      | 4403 Allen Rd. Stow, OH 44224, USA |

# 2.2. General Description of EUT

| Product Name:                      | Automotive Diagnostic Scan Tool   |  |  |
|------------------------------------|---|--|--|
| Trade Mark:                        |   |  |  |
| Model/Type reference:              | MAXIMUSPLUS   |  |  |
| Listed Model(s):                   | /   |  |  |
| Power supply:                      | 5Vdc/5A from AC/DC Adapter<br>7.6Vdc from 6300mAh Li-ion Battery              |  |  |
| Adapter Model:                     | XDJ361R-050500<br>Input: 100-240V~ 50/60Hz 0.9A<br>Output: 5Vdc/5A            |  |  |
| Hardware version:                  | 1   |  |  |
| Software version:                  | /   |  |  |
| WIFI 802.11b/ g/ n(HT20) / n(HT40) |   |  |  |
| Modulation:                        | 802.11b: DSSS(CCK, DQPSK, DBPSK)<br>802.11g/n: OFDM(BPSK, QPSK, 16QAM, 64QAM) |  |  |
| Operation frequency:               | 802.11b/g/n(HT20): 2412MHz~2462MHz<br>802.11n(HT40): 2422MHz~2452MHz          |  |  |
| Channel number:                    | 802.11b/g/n(HT20):11channels<br>802.11n(HT40): 7channels                      |  |  |
| Channel separation:                | 5MHz  |  |  |
| Antenna type:                      | FPC Antenna   |  |  |
| Antenna gain:                      | 3.09dBi Max   |  |  |
|                                    |   |  |  |



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# 2.3. Accessory Equipment information

| Equipment Information     |               |              |              |  |
|---------------------------|---------------|--------------|--------------|--|
| Name                      | Model         | S/N          | Manufacturer |  |
| 1                         | 1             | 1            | 1            |  |
| Cable Information         |               |              |              |  |
| Name                      | Shielded Type | Ferrite Core | Length       |  |
| 1                         | 1             | 1            | 1            |  |
| Test Software Information |               |              |              |  |
| Name                      | Versions      | 1            | 1            |  |
| Engineering mode          | 1             | 1            | 1            |  |



# 2.4. Operation state

Operation Frequency List: The EUT has been tested under typical operating condition. The Applicant provides communication tools software to control the EUT for staying in continuous transmitting and receiving mode for testing.

**Operation Frequency List:** 

| Channel | Frequency (MHz) |
|---------|-----------------|
| 01      | 2412            |
| 02      | 2417            |
| 03      | 2422            |
| 04      | 2427            |
| 05      | 2432            |
| 06      | 2437            |
| 07      | 2442            |
| 08      | 2447            |
| 09      | 2452            |
| 10      | 2457            |
| 11      | 2462            |

Note: CH 01~CH 11 for 802.11b/g/n(HT20), CH 03~CH 09 for 802.11n(HT40).

### Data Rated

Preliminary tests were performed in different data rate, and found which the below bit rate is worst case mode, so only show data which it is a worst case mode.

| Mode          | Data rate (worst mode) |
|---------------|------------------------|
| 802.11b       | 1Mbps                  |
| 802.11g       | 6Mbps                  |
| 802.11n(HT20) | HT-MCS0                |
| 802.11n(HT40) | HT-MCS0                |

#### Test mode

For RF test items: The engineering test program was provided and enabled to make EUT continuous transmit. For AC power line conducted emissions:

The EUT was set to connect with the WLAN AP under large package sizes transmission.

For Radiated spurious emissions test item:

The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data Recorded in the report.



## 2.5. Measurement Instruments List

| RF Test System |   |              |           |            |                  |
|----------------|---|--------------|-----------|------------|------------------|
| Item           | Test Equipment                              | Manufacturer | Model No. | Serial No. | Calibrated Until |
| 1              | Spectrum Analyzer                           | R&S          | FSV40-N   | 101331     | Mar. 14, 2024    |
| 2              | Spectrum Analyzer                           | R&S          | FSV40-N   | 101654     | Aug. 07, 2024    |
| 3              | Spectrum Analyzer                           | R&S          | FSU26     | 100105     | Dec. 16, 2023    |
| 4              | MXA Signal Analyzer                         | Keysight     | N9020A    | MY46471737 | Dec. 16, 2023    |
| 5              | MXA Signal Analyzer                         | Keysight     | N9020A    | MY52091402 | Aug. 22, 2024    |
| 6              | MXG Vector Signal<br>Generator              | Agilent      | N5182A    | MY47420864 | Dec. 16, 2023    |
| 7              | PSG Analog Signal<br>Generator              | Agilent      | E8257D    | MY46521908 | Dec. 16, 2023    |
| 8              | EXG Analog Signal<br>Generator              | Keysight     | N5173B    | MY59100842 | Dec. 16, 2023    |
| 9              | MXG Vector Signal<br>Generator              | Keysight     | N5182B    | MY59100212 | Dec. 16, 2023    |
| 10             | Wideband Radio<br>Communication Tester      | R&S          | CMW500    | 102257     | May 25, 2024     |
| 11             | Wideband Radio<br>Communication Tester      | R&S          | CMW500    | 102414     | Dec. 16, 2023    |
| 12             | High and low<br>temperature test<br>chamber | ESPEC        | MT3035    | 1          | Mar. 24, 2024    |
| 13             | RF Control Unit                             | Tonscend     | JS0806-2  | /          | Aug. 22, 2024    |
| 14             | Test Software                               | Tonscend     | JS1120-3  | V3.3.38    | /                |

| Radiate | d Emission (3m chamber 2    | 2)           |            |            |                  |
|---------|-----------------------------|--------------|------------|------------|------------------|
| Item    | Test Equipment              | Manufacturer | Model No.  | Serial No. | Calibrated Until |
| 1       | Trilog-Broadband<br>Antenna | Schwarzbeck  | VULB 9168  | 9168-1013  | Dec. 07, 2024    |
| 2       | Horn Antenna                | Schwarzbeck  | BBHA 9120D | 9120D-648  | Dec. 07, 2024    |
| 3       | Spectrum Analyzer           | R&S          | FSU26      | 100105     | Dec. 16, 2023    |
| 4       | Spectrum Analyzer           | R&S          | FSV40-N    | 101331     | Mar. 14 2024     |
| 5       | Pre-Amplifier               | SONOMA       | 310        | 186194     | Dec. 16, 2023    |
| 6       | Low Noise Pre-Amplifier     | EMCI         | EMC051835  | 980075     | Dec. 16, 2023    |
| 7       | Test Receiver               | R&S          | ESCI7      | 100967     | Dec. 16, 2023    |
| 8       | 3m chamber 2                | Frankonia    | EE025      | 1          | Oct. 23, 2024    |
| 9       | Test Software               | FARA         | EZ-EMC     | FA-03A2    | 1                |

| Radiated Emission (3m chamber 3) |                             |              |            |            |                  |  |  |  |  |
|----------------------------------|-----------------------------|--------------|------------|------------|------------------|--|--|--|--|
| Item                             | Test Equipment              | Manufacturer | Model No.  | Serial No. | Calibrated Until |  |  |  |  |
| 1                                | Trilog-Broadband<br>Antenna | Schwarzbeck  | VULB 9163  | 01026      | Dec. 18, 2024    |  |  |  |  |
| 2                                | Horn Antenna                | Schwarzbeck  | BBHA 9120D | 9120D-647  | Dec. 01, 2024    |  |  |  |  |
| 3                                | Test Receiver               | Keysight     | N9038A     | MY56400071 | Dec. 16, 2023    |  |  |  |  |
| 4                                | Broadband Amplifier         | SCHWARZBECK  | BBV9743B   | 259        | Dec. 16, 2023    |  |  |  |  |
| 5                                | Mirowave Broadband          | SCHWARZBECK  | BBV9718C   | 111        | Dec. 16, 2023    |  |  |  |  |

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|   | Amplifier     |        |        |         |               |
|---|---------------|--------|--------|---------|---------------|
| 6 | 3m chamber 3  | YIHENG | EE106  | /       | Aug. 28, 2026 |
| 7 | Test Software | FARA   | EZ-EMC | FA-03A2 | /             |

| Conduc | Conducted Emission |              |           |                |                  |  |  |  |  |  |
|--------|--------------------|--------------|-----------|----------------|------------------|--|--|--|--|--|
| Item   | Test Equipment     | Manufacturer | Model No. | Serial No.     | Calibrated Until |  |  |  |  |  |
| 1      | LISN               | R&S          | ENV216    | 101112         | Dec. 16, 2023    |  |  |  |  |  |
| 2      | LISN               | R&S          | ENV216    | 101113         | Dec. 16, 2023    |  |  |  |  |  |
| 3      | EMI Test Receiver  | R&S          | ESCS30    | 100353         | Dec. 16, 2023    |  |  |  |  |  |
| 4      | ISN CAT6           | Schwarzbeck  | NTFM 8158 | CAT6-8158-0046 | Dec. 16, 2023    |  |  |  |  |  |
| 5      | ISN CAT5           | Schwarzbeck  | NTFM 8158 | CAT5-8158-0046 | Dec. 16, 2023    |  |  |  |  |  |
| 6      | Test Software      | R&S          | EMC32     | 6.10.10        | 1                |  |  |  |  |  |

Note: 1. The Cal. Interval was one year.

2. The Cal. Interval was three year of the chamber

3. The cable loss has calculated in test result which connection between each test instruments.



# **3.TEST ITEM AND RESULTS**

# 3.1. Conducted Emission

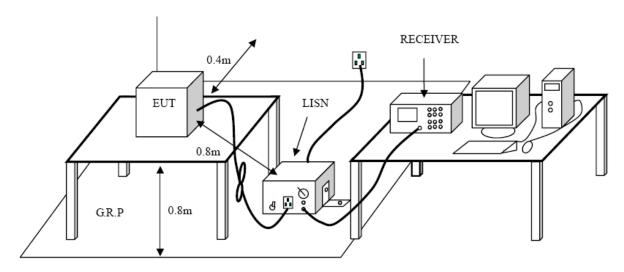
### <u>Limit</u>

### FCC CFR Title 47 Part 15 Subpart C Section 15.207/ RSS - Gen 8.8:

|                       | Limit (d   | BuV)      |
|-----------------------|------------|-----------|
| Frequency range (MHz) | 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.

### Test Configuration



### Test Procedure

1. The EUT was setup according to ANSI C63.10:2013 requirements.

2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.

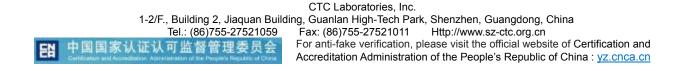
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

7. During the above scans, the emissions were maximized by cable manipulation.

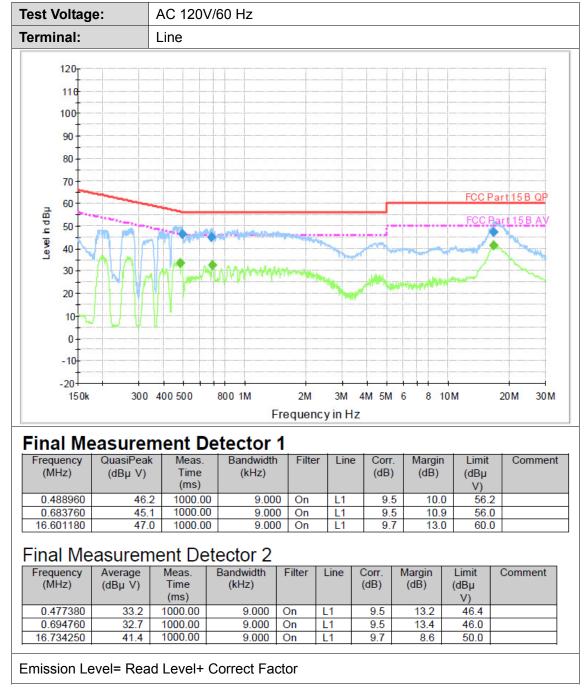




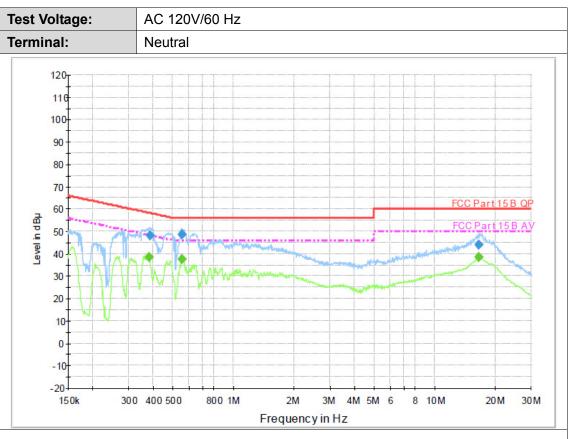
### Test Mode:

Please refer to the clause 2.4.

### Test Results







### **Final Measurement Detector 1**

| Frequency | QuasiPeak | Meas.   | Bandwidth | Filter | Line | Corr. | Margin | Limit | Comment |
|-----------|-----------|---------|-----------|--------|------|-------|--------|-------|---------|
|           |           |         |           | TILLET | LINE |       | 5      |       | Comment |
| (MHz)     | (dBµ V)   | Time    | (kHz)     |        |      | (dB)  | (dB)   | (dBµ  |         |
|           |           | (ms)    |           |        |      |       |        | V)    |         |
| 0.384810  | 48.3      | 1000.00 | 9.000     | On     | N    | 9.4   | 9.9    | 58.2  |         |
| 0.551170  | 48.5      | 1000.00 | 9.000     | On     | Ν    | 9.4   | 7.5    | 56.0  |         |
| 16.469160 | 44.0      | 1000.00 | 9.000     | On     | Ν    | 9.5   | 16.0   | 60.0  |         |

### Final Measurement Detector 2

| Frequency<br>(MHz) | Average<br>(dBµ V) | Meas.<br>Time<br>(ms) | Bandwidth<br>(kHz) | Filter | Line | Corr.<br>(dB) | Margin<br>(dB) | Limit<br>(dBµ<br>V) | Comment |
|--------------------|--------------------|-----------------------|--------------------|--------|------|---------------|----------------|---------------------|---------|
| 0.378720           | 38.5               | 1000.00               | 9.000              | On     | N    | 9.4           | 9.8            | 48.3                |         |
| 0.555580           | 37.5               | 1000.00               | 9.000              | On     | N    | 9.4           | 8.5            | 46.0                |         |
| 16.535040          | 38.5               | 1000.00               | 9.000              | On     | Ν    | 9.5           | 11.5           | 50.0                |         |

Emission Level= Read Level+ Correct Factor



# 3.2. Radiated Emission

<u>Limit</u>

### FCC CFR Title 47 Part 15 Subpart C Section 15.209/ RSS – Gen 8.9:

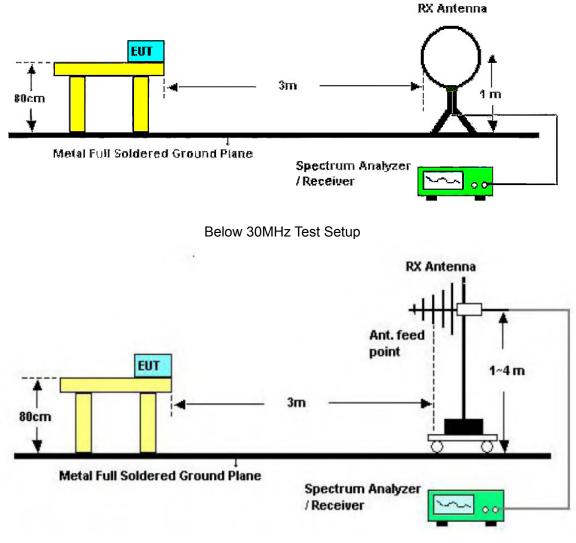
| Frequency         | Limit (dBuV/m @3m) | Value      |  |  |
|-------------------|--------------------|------------|--|--|
| 30 MHz ~ 88 MHz   | 40.00              | Quasi-peak |  |  |
| 88 MHz ~ 216 MHz  | 43.50              | Quasi-peak |  |  |
| 216 MHz ~ 960 MHz | 46.00              | Quasi-peak |  |  |
| 960 MHz ~ 1 GHz   | 54.00              | Quasi-peak |  |  |
| Above 1 GHz       | 54.00              | Average    |  |  |
| Above i Grz       | 74.00              | Peak       |  |  |

### Note:

(1) The tighter limit applies at the band edges.

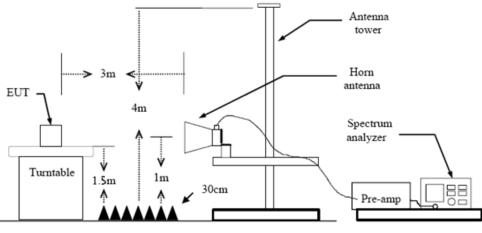
(2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

### Test Configuration



Below 1000MHz Test Setup





Above 1GHz Test Setup

### Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013

2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.

3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.

4. For each suspected emission, 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 to comply with the guidelines.

5. Set to the maximum power setting and enable the EUT transmit continuously.

6. Use the following spectrum analyzer settings

(1) Span shall wide enough to fully capture the emission being measured

(2) Below 30 MHz:

9kHz – 150kHz, RBW=200Hz, VBW≥RBW, Sweep=auto, Detector function=peak, Trace=max hold; 150kHz – 30MHz, RBW=9kHz, VBW≥RBW, Sweep=auto, Detector function=peak, Trace=max hold; If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the guasi-peak detector and reported.

(3) 30 MHz - 1 GHz:

RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;

If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

(4) From 1 GHz to  $10^{\text{th}}$  harmonic:

RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW $\geq$ 1/T Peak detector for Average value.

Note 1: For the 1/T& Duty Cycle please refer to clause 3.8 Duty Cycle.

### <u>Test Mode</u>

Please refer to the clause 2.4.

### Test Result

### 9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

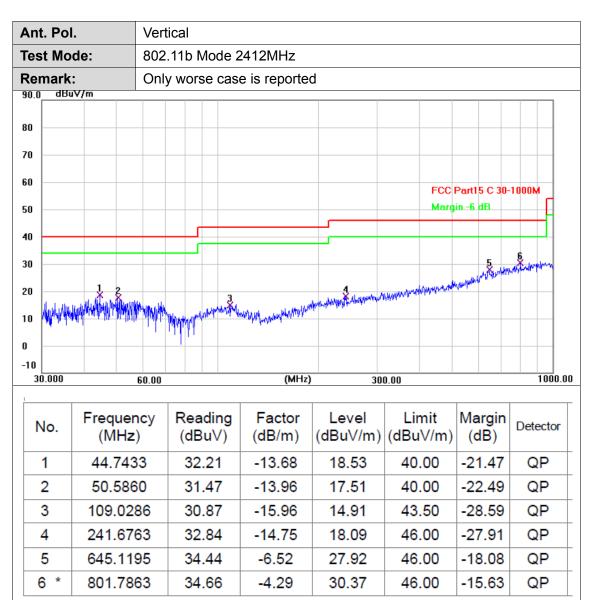
Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

CTC Laboratories, Inc.

|                            | I.   | Hori                         | lorizontal                                   |   |  |  |  |                            |  |  |
|----------------------------|--|------------------------------|--|---|--|--|--|----------------------------|--|--|
| est Mo                     | ode:   | 802.                         | 11b Mode                                     | 2412MHz   |  |  |  |                            |  |  |
| emark                      | <b>:</b>   | Only                         | / worse ca                                   | se is reported  | d  |  |  |                            |  |  |
| 0.0 dE                     | 3uV/m  |                              |  |   |  |  |  |                            |  |  |
| o                          |  |                              |  |   |  |  |  |                            |  |  |
| o                          |  |                              |  |   |  |  |  |                            |  |  |
| o                          |  |                              |  |   |  | FCC F  | Part15 C 30-1                                | 1000M                      |  |  |
| o                          |  |                              |  |   |  | Margi  | n -6 dB                                      |                            |  |  |
| o 🖵                        |  |                              |  |   |  |  |  |                            |  |  |
|                            |  |                              |  |   |  |  | 5  | 6                          |  |  |
|                            |  |                              |  |   |  |  | wind the wind with                           | INTRA AND AND              |  |  |
|                            |  | ni hayanan ka                | WHILL WITH MANY                              | William Million of Million                                      | upper the second from                        | an the paper of the street in the            | ~~~·   |                            |  |  |
| -<br>M Aller               | wywere and a second | <sup>ov h</sup> typp y p     | plyper portron bear the                      | helloch-opphilococcession                                       | up with a second from                        | n Shrapen Nontra Carre                       |  |                            |  |  |
| o Willia                   | ang dalamati da  | 60.00                        | hyper and the star                           | hullhadi.gythjuder <sup>agen</sup> ty <sup>riggh</sup><br>(MHz) |  | р., 28-учу (Манука)<br>1.00                  |  | 1000.                      |  |  |
|                            | Freque<br>(MHz   | ncy                          | Reading<br>(dBuV)                            | (MHz)   |  | Limit  | Margin                                       | 1000.                      |  |  |
| 0                          |  | ncy<br>z)                    | Reading                                      | (MHz)   | Level  | Limit  | Margin                                       | 1000.                      |  |  |
| 0 10 30.000<br>No.         | (MHz   | ncy<br>2)<br>57              | Reading<br>(dBuV)                            | (MHz)<br>Factor<br>(dB/m)                                       | Level<br>(dBuV/m)                            | Limit<br>(dBuV/m)                            | Margin<br>(dB)                               | 1000.                      |  |  |
| 0 10<br>30.000<br>No.<br>1 | (MHz<br>39.57  | ncy<br>2)<br>57<br>15        | Reading<br>(dBuV)<br>33.76                   | (MHz)<br>Factor<br>(dB/m)<br>-14.50                             | 300<br>Level<br>(dBuV/m)<br>19.26            | Limit<br>(dBuV/m)<br>40.00                   | Margin<br>(dB)<br>-20.74                     | 1000.<br>Detector          |  |  |
| No.                        | (MHz<br>39.57<br>51.66   | ncy<br>2)<br>57<br>15        | Reading<br>(dBuV)<br>33.76<br>31.62          | (MHz)<br>Factor<br>(dB/m)<br>-14.50<br>-14.03                   | 300<br>Level<br>(dBuV/m)<br>19.26<br>17.59   | Limit<br>(dBuV/m)<br>40.00<br>40.00          | Margin<br>(dB)<br>-20.74<br>-22.41           | Detector<br>QP<br>QP       |  |  |
| No.                        | (MHz<br>39.57<br>51.66<br>102.75   | ncy<br>2)<br>57<br>15<br>500 | Reading<br>(dBuV)<br>33.76<br>31.62<br>31.72 | (MHz)<br>Factor<br>(dB/m)<br>-14.50<br>-14.03<br>-15.90         | Level<br>(dBuV/m)<br>19.26<br>17.59<br>15.82 | Limit<br>(dBuV/m)<br>40.00<br>40.00<br>43.50 | Margin<br>(dB)<br>-20.74<br>-22.41<br>-27.68 | Detector<br>QP<br>QP<br>QP |  |  |

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| Adobe 1GHz | Adobe | 1GHz |
|------------|-------|------|
|------------|-------|------|

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| nt. Po | ol.   | Horizontal<br>TX 802.11b Mode 2412MHz |                   |                  |                   |                   |                |           |  |
|--------|---|---------------------------------------|-------------------|------------------|-------------------|-------------------|----------------|-----------|--|
| est M  | ode:  |                                       |                   |                  |                   |                   |                |           |  |
| emar   | emark: No report for the emission which more than 10 dB below the prescribed limit. |                                       |                   |                  |                   |                   |                | !         |  |
| 00.0 d | BuV/m   |                                       |                   |                  |                   |                   |                |           |  |
| 0      |   |                                       |                   |                  |                   |                   |                |           |  |
|        |   |                                       |                   |                  |                   |                   |                |           |  |
|        |   |                                       |                   |                  |                   | FCC Part15 (      | C - Above 1    | g pk      |  |
|        |   |                                       |                   |                  |                   |                   |                |           |  |
| 0      |   |                                       |                   |                  |                   | FCC Part15 (      | C - Above 1    | GAV       |  |
| 0      | 2   |                                       |                   |                  |                   |                   |                |           |  |
| o      | Š   |                                       |                   |                  |                   |                   |                |           |  |
| 0      | 1<br>×  |                                       |                   |                  |                   |                   |                |           |  |
| 0      | ^   |                                       |                   |                  |                   |                   |                |           |  |
| o 📃    |   |                                       |                   |                  |                   |                   |                |           |  |
| 0.0    |   |                                       |                   |                  |                   |                   |                |           |  |
| 1000.0 | 00 3500.00 6  | 000.00                                | 8500.00 11        | 000.00 (MHz)     | 16000.00 1        | 8500.00 21000     | 0.00 23500     | .00 26000 |  |
| No.    | Freque<br>(MHz  |                                       | Reading<br>(dBu∀) | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector  |  |
| 1 *    | 4823.3  | 58                                    | 25.02             | 2.11             | 27.13             | 54.00             | -26.87         | AVG       |  |
| 2      | 4823.4  | 96                                    | 41.10             | 2.11             | 43.21             | 74.00             | -30.79         | peak      |  |
| emar   |   |                                       |                   |                  |                   |                   |                |           |  |



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| An   | t. Pol  |                | Vertic   | Vertical          |                  |            |                   |                |             |  |  |
|------|---------|----------------|--|-------------------|------------------|------------|-------------------|----------------|-------------|--|--|
| Tes  | st Mo   | de:            | TX 80  | 2.11b Mod         | de 2412MH        | z          |                   |                |             |  |  |
| Re   | mark    | :              | No report for the emission which more than 10 dB below the prescribed limit. |                   |                  |            |                   |                |             |  |  |
| 100. | 0 dBu   | dBuV/m         |  |                   |                  |            |                   |                |             |  |  |
| 90   |         |                |  |                   |                  |            |                   |                |             |  |  |
|      |         |                |  |                   |                  |            |                   |                |             |  |  |
| 80   |         |                |  |                   |                  |            | FCC Part15 (      | C - Above 1    | G PK        |  |  |
| 70   |         |                |  |                   |                  |            |                   |                |             |  |  |
| 60   |         |                |  |                   |                  |            |                   |                |             |  |  |
| 50   |         |                |  |                   |                  |            | FCC Part15 (      | C - Above 1    | <u>G AV</u> |  |  |
|      |         | ş              |  |                   |                  |            |                   |                |             |  |  |
| 40   |         |                |  |                   |                  |            |                   |                |             |  |  |
| 30   |         | <u></u>        |  |                   |                  |            |                   |                |             |  |  |
| 20   |         |                |  |                   |                  |            |                   |                |             |  |  |
| 10   |         |                |  |                   |                  |            |                   |                |             |  |  |
| 0.0  |         |                |  |                   |                  |            |                   |                |             |  |  |
| 10   | 000.000 | 3500.00 6      | 000.00   | 8500.00 11        | 000.00 (MHz)     | 16000.00 1 | 8500.00 21000     | 0.00 23500     | .00 26000.0 |  |  |
|      |         |                |  |                   |                  |            |                   |                |             |  |  |
|      |         |                |  |                   |                  |            |                   |                |             |  |  |
|      |         | F              |  |                   | <b>F</b> (       |            | 1.1               |                |             |  |  |
| 1    | No.     | Freque<br>(MHz |  | Reading<br>(dBuV) | Factor<br>(dB/m) | Level      | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector    |  |  |
|      |         | `              | ·  | . ,               | ` '              |            |                   |                |             |  |  |
| _    | 1 *     | 4823.5         |  | 25.16             | 2.11             | 27.27      | 54.00             | -26.73         | AVG         |  |  |
|      | 2       | 4824.0         | 87   | 40.64             | 2.11             | 42.75      | 74.00             | -31.25         | peak        |  |  |
|      |         |                |  |                   |                  |            |                   |                |             |  |  |
|      |         |                |  |                   |                  |            |                   |                |             |  |  |
| -    |         | _              |  |                   |                  |            |                   |                |             |  |  |
| Rei  | marks   | S:             |  |                   |                  |            |                   | _              |             |  |  |

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| nt. Po  | I.             | Horiz          | contal                         |                  |                   |                   |                |           |
|---------|----------------|----------------|--------------------------------|------------------|-------------------|-------------------|----------------|-----------|
| est Mo  | ode:           | -              |                                | de 2437MHz       |                   |                   |                |           |
| emark   | K:             | No re<br>prese | eport for the<br>cribed limit. | e emission v     | vhich more t      | han 10 dB t       | pelow the      | ;         |
| )0.0 dB | uV/m           |                |                                |                  |                   |                   |                |           |
| n       |                |                |                                |                  |                   |                   |                |           |
|         |                |                |                                |                  |                   |                   |                |           |
| '       |                |                |                                |                  |                   | FCC Part15        | C - Above 1    | G PK      |
| )       |                |                |                                |                  |                   |                   |                |           |
| )       |                |                |                                |                  |                   |                   |                |           |
| , 📛     |                |                |                                |                  |                   | FCC Part15        | C-Above I      | GAV       |
| , 📃     | 1×             |                |                                |                  |                   |                   |                |           |
|         |                |                |                                |                  |                   |                   |                |           |
| )       | Š              |                |                                |                  |                   |                   |                |           |
| )       |                |                |                                |                  |                   |                   |                |           |
| )       |                |                |                                |                  |                   |                   |                |           |
| 0.0     | 0 3500.00 6    | 000.00         | 8500.00 11                     | 000.00 (MHz)     | 16000.00 1        | 8500.00 21000     | 0.00 23500     | .00 26000 |
|         |                |                |                                | 1                |                   |                   |                |           |
| No.     | Freque<br>(MHz |                | Reading<br>(dBu∀)              | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector  |
| 1       | 4874.2         | 270            | 41.06                          | 2.18             | 43.24             | 74.00             | -30.76         | peak      |
| 2 *     | 4874.9         | 931            | 24.86                          | 2.18             | 27.04             | 54.00             | -26.96         | AVG       |
|         |                |                |                                |                  |                   |                   |                |           |



| Ant       | . Pol.      |                | Verti    | cal               |                     |                |          |         |             |                   |  |             |
|-----------|-------------|----------------|----------|-------------------|---------------------|----------------|----------|---------|-------------|-------------------|--|-------------|
| Tes       | t Mod       | de:            | TX 8     | 02.1 <sup>′</sup> | 1b Mod              | le 2437N       | ЛНz      | :       |             |                   |  |             |
| Ren       | nark:       |                |          |                   | for the<br>d limit. | emissio        | on w     | /hich r | nore t      | han 10 dB l       | below the                                    | !           |
| 100.0     | ) dBu'      | V/m            |          |                   |                     |                |          |         |             |                   |  |             |
| 90        |             |                |          |                   |                     |                |          |         |             |                   |  |             |
| 80        |             |                |          |                   |                     |                | -        |         |             | FCC Part15        | C - Above 1                                  | G PK        |
| 70        |             |                |          |                   |                     |                |          |         |             |                   |  |             |
| 60        |             |                |          |                   |                     |                |          |         |             |                   |  |             |
| 50        |             |                |          |                   |                     |                |          |         |             | FCC Part15        | C - Above 1                                  | <u>G AV</u> |
| 40        |             | 1×             |          |                   |                     |                |          |         |             |                   |  |             |
| 30        |             | 2              |          |                   |                     |                |          |         |             |                   |  |             |
|           |             | Š              |          |                   |                     |                |          |         |             |                   |  |             |
| 20        |             |                |          |                   |                     |                |          |         |             |                   |  |             |
| 10<br>0.0 |             |                |          |                   |                     |                |          |         |             |                   |  |             |
|           | 00.000      | 3500.00 6      | 000.00   | 8500              | ).00 11             | 000.00 (N      | /Hz)     | 160     | 00.00 1     | 18500.00 2100     | 0.00 23500                                   | .00 26000.0 |
|           | <b>ا</b> م. | Freque<br>(MHz |          |                   | ading<br>3uV)       | Facto<br>(dB/m |          |         | vel<br>V/m) | Limit<br>(dBuV/m) | Margin<br>(dB)                               | Detector    |
| -         | 1           | 4874.6         | <i>.</i> | `                 | ).70                | 2.18           | <u> </u> |         | .88         | 74.00             | -31.12                                       | peak        |
|           | 2 *         | 4874.9         |          |                   | 1.97                | 2.18           |          |         | .00         | 54.00             | -26.85                                       | AVG         |
|           | narks       |                |          |                   |                     |                |          |         |             |                   | <u>                                     </u> | I           |

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Remarks:



| nt. P          | ol.          | Hori    | zontal                         |                  |                   |                   |                |          |
|----------------|--------------|---------|--------------------------------|------------------|-------------------|-------------------|----------------|----------|
| est N          | lode:        | TX 8    | 802.11b Mod                    | le 2462MHz       | 2                 |                   |                |          |
| lema           | rk:          |         | eport for the<br>cribed limit. | emission v       | vhich more t      | han 10 dB t       | pelow the      | ;        |
| 00. <u>0</u> d | lBuV/m       | p.cc    |                                |                  | 1                 |                   |                |          |
| 0              |              |         |                                |                  |                   |                   |                |          |
|                |              |         |                                |                  |                   |                   |                |          |
|                |              |         |                                |                  |                   | FCC Part15        | C - Above 1    | g PK     |
|                |              |         |                                |                  |                   |                   |                |          |
|                |              |         |                                |                  |                   | FCC Part15        | C - Above 1    | GAV      |
| ) —            |              |         |                                |                  |                   |                   |                |          |
| o              | 1            | :       |                                |                  |                   |                   |                |          |
| •              | 2            |         |                                |                  |                   |                   |                |          |
| )              |              | -       |                                |                  |                   |                   |                |          |
| o              |              |         |                                |                  |                   |                   |                |          |
| 0.0            | 000 3500.00  | 6000.00 | 8500.00 11                     | 000.00 (MHz)     |                   |                   |                |          |
| 1              |              |         |                                |                  |                   |                   |                |          |
| No.            | Frequ<br>(Mi |         | Reading<br>(dBuV)              | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
| 1              | 4923         | .732    | 39.61                          | 2.26             | 41.87             | 74.00             | -32.13         | peak     |
| 2 '            | * 4923       | .917    | 24.34                          | 2.26             | 26.60             | 54.00             | -27.40         | AVG      |
| 2 '            | 4923         | .91/    | 24.34                          | 2.26             | 20.60             | 54.00             | -27.40         | AVG      |



| Ant. Pol | •               | Verti  | cal                            |                  |                   |                   |                |           |
|----------|-----------------|--------|--------------------------------|------------------|-------------------|-------------------|----------------|-----------|
| fest Mo  | de:             | TX 8   | 802.11b Mod                    | de 2462MHz       | z                 |                   |                |           |
| Remark   |                 |        | eport for the<br>cribed limit. | e emission v     | vhich more t      | han 10 dB b       | elow the       |           |
| 00.0 dBu | V/m             | P      |                                |                  |                   |                   |                |           |
| 10       |                 |        |                                |                  |                   |                   |                |           |
| 0        |                 |        |                                |                  |                   |                   |                |           |
|          |                 |        |                                |                  |                   | FCC Part15 0      | C-Above 10     | ) PK      |
| 0        |                 |        |                                |                  |                   |                   |                |           |
| 0        |                 |        |                                |                  |                   | FCC Part15 C      | C-Above 10     | AV        |
| 0        | 1               |        |                                |                  |                   |                   |                |           |
| 0        | X               |        |                                |                  |                   |                   |                |           |
| 0        | ş               |        |                                |                  |                   |                   |                |           |
| 0        |                 |        |                                |                  |                   |                   |                |           |
| 0        |                 |        |                                |                  |                   |                   |                |           |
| 0.0      | 3500.00 6       | 000.00 | 8500.00 11                     | 000.00 (MHz)     | 16000.00 1        | 8500.00 21000     | .00 23500.     | 00 26000. |
|          |                 |        |                                |                  |                   |                   |                |           |
| No.      | Frequer<br>(MHz |        | Reading<br>(dBuV)              | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector  |
| 1        | 4923.6          | 04     | 40.08                          | 2.26             | 42.34             | 74.00             | -31.66         | peak      |
|          | 4924.9          | 67     | 24.56                          | 2.26             | 26.82             | 54.00             | -27.18         | AVG       |



| Ant. Po          | l               | Horiz | zontal                         |                  |                   |                   |                |           |
|------------------|-----------------|-------|--------------------------------|------------------|-------------------|-------------------|----------------|-----------|
| lest Mo          | de:             | TX 8  | 02.11g Mod                     | de 2412MH        | Z                 |                   |                |           |
| Remark           | :               |       | eport for the<br>cribed limit. |                  | vhich more t      | han 10 dB t       | pelow the      | ;         |
| 00. <u>0</u> dBu | V/m             | 1     |                                |                  |                   |                   |                |           |
|                  |                 |       |                                |                  |                   |                   |                |           |
|                  |                 |       |                                |                  |                   |                   |                |           |
| )                |                 |       |                                |                  |                   | FCC Part15 C      | - Abovo 1G     | DK        |
| , ⊨              |                 |       |                                |                  |                   | recranse          |                |           |
|                  |                 |       |                                |                  |                   |                   |                |           |
| )                |                 |       |                                |                  |                   | FCC Part15 C      | - Above 1G     | AV        |
| )                |                 |       |                                |                  |                   |                   |                |           |
| , 📖              | ×               |       |                                |                  |                   |                   |                |           |
|                  |                 |       |                                |                  |                   |                   |                |           |
| )                | ş               |       |                                |                  |                   |                   |                |           |
| )                |                 |       |                                |                  |                   |                   |                |           |
| )                |                 |       |                                |                  |                   |                   |                |           |
| 0.0              |                 |       |                                |                  |                   |                   |                |           |
| 1000.000         | 3500.00 60      | 00.00 | 8500.00 11                     | 000.00 (MHz)     | 16000.00 1        | 8500.00 21000     | .00 23500.0    | 0 26000.0 |
| No.              | Frequer<br>(MHz |       | Reading<br>(dBuV)              | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector  |
| 4                | 4824.6          | 18    | 40.12                          | 2.11             | 42.23             | 74.00             | -31.77         | peak      |
| 1                |                 | 38    | 25.32                          | 2.11             | 27.43             | 54.00             | -26.57         | AVG       |

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| nt. Po  | •              | Verti   | cal                         |                  |                   |                   |                |            |
|---------|----------------|---------|-----------------------------|------------------|-------------------|-------------------|----------------|------------|
| est Mo  | de:            | TX 8    | 302.11g Mod                 | de 2412MH        | Z                 |                   |                |            |
| Remark  | :              | No r    | eport for the cribed limit. | emission v       | which more t      | han 10 dB t       | below the      | <u>;</u>   |
| 00.0 dB | ıV/m           |         |                             |                  |                   |                   |                |            |
|         |                |         |                             |                  |                   |                   |                |            |
| 0       |                |         |                             |                  |                   |                   |                |            |
| 0       |                |         |                             |                  |                   | FCC Part15        | C - Above 1    | G PK       |
| 0       |                |         |                             |                  |                   |                   | C-ADOVE I      |            |
| 0       |                |         |                             |                  |                   |                   |                |            |
|         |                |         |                             |                  |                   | FCC Part15        | C - Above 1    | G AV       |
| 0       | ş              |         |                             |                  |                   |                   |                |            |
| 0       | ^              |         |                             |                  |                   |                   |                |            |
| 0       |                |         |                             |                  |                   |                   |                |            |
| 0       |                |         |                             |                  |                   |                   |                |            |
| o       |                |         |                             |                  |                   |                   |                |            |
| 0.0     |                |         |                             |                  |                   |                   |                |            |
| 1000.00 | 0 3500.00 0    | 6000.00 | 8500.00 11                  | 1000.00 (MHz)    | 16000.00          | 18500.00 2100     | 0.00 23500     | 0.00 26000 |
|         |                |         |                             |                  |                   |                   |                |            |
| No.     | Freque<br>(MHz |         | Reading<br>(dBuV)           | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector   |
| No.     | •              | :)      |                             |                  |                   |                   |                | Detector   |



|          |         |           |        |                             | go 27 of   | 07    |           |           | opon     |            | . 02020   |    |
|----------|---------|-----------|--------|-----------------------------|------------|-------|-----------|-----------|----------|------------|-----------|----|
| An       | t. Pol. |           | Hori   | zontal                      |            |       |           |           |          |            |           |    |
| Tes      | st Mod  | de:       | ТХ 8   | 802.11g M                   | ode 2437   | 7MHz  |           |           |          |            |           |    |
| Re       | mark:   |           |        | report for t<br>scribed lim |            | ion w | hich more | e than 10 | ) dB k   | pelow the  | Э         |    |
| 100      | .0 dBu\ | //m       |        |                             |            |       |           |           |          |            |           |    |
| 90       |         |           |        |                             |            |       |           |           |          |            |           |    |
| 80       |         |           |        |                             |            |       |           | FCC F     | art15 C  | - Above 10 | G PK      |    |
| 70       |         |           |        |                             |            |       |           |           |          |            |           |    |
| 60       |         |           |        |                             |            |       |           | FCC F     | Part15 C | - Above 10 | GAV       |    |
| 50       |         | 1         |        |                             |            |       |           |           |          |            |           |    |
| 40       |         | ×         |        |                             |            |       |           |           |          |            |           |    |
| 30       |         | ş         |        |                             |            |       |           |           |          |            |           |    |
| 20       |         |           |        |                             |            |       |           |           |          |            |           |    |
| 10       |         |           |        |                             |            |       |           |           |          |            |           |    |
| 0.0<br>1 |         | 3500.00 6 | 000.00 | 8500.00                     | 11000.00 ( | (MHz) | 16000.00  | 18500.00  | 21000    | .00 23500  | .00 26000 | .0 |
| 1        |         |           |        |                             |            |       |           |           |          |            |           |    |
|          | No.     | Freque    |        | Reading                     |            |       |           |           |          | Margin     | Detecto   | r  |

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| No. | Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |   |
|-----|--------------------|-------------------|------------------|-------------------|-------------------|----------------|----------|---|
| 1   | 4873.519           | 41.60             | 2.18             | 43.78             | 74.00             | -30.22         | peak     | - |
| 2 * | 4874.883           | 24.88             | 2.18             | 27.06             | 54.00             | -26.94         | AVG      | - |

Remarks:

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| Ant. Po  | I.              | Verti  | cal                            |                  |                   |                   |                |            |
|----------|-----------------|--------|--------------------------------|------------------|-------------------|-------------------|----------------|------------|
| Fest Mo  | de:             | TX 8   | 02.11g Mo                      | de 2437MH        | z                 |                   |                |            |
| Remark   |                 |        | eport for the<br>cribed limit. |                  | which more t      | han 10 dB t       | pelow the      | !          |
| 100.0 dB | uV/m            | 1      |                                |                  |                   |                   |                |            |
| 90       |                 |        |                                |                  |                   |                   |                |            |
| 80       |                 |        |                                |                  |                   | FCC Part15        | C - Above 1    | G PK       |
| 70       |                 |        |                                |                  |                   |                   |                |            |
| 60       |                 |        |                                |                  |                   | FCC Part15        | C - Above 1    | GAV        |
| 50       | ş               |        |                                |                  |                   |                   |                |            |
| 10       |                 | _      |                                |                  |                   |                   |                |            |
| 30       | ×               |        |                                |                  |                   |                   |                |            |
| 20       |                 |        |                                |                  |                   |                   |                |            |
| 0.0      |                 |        |                                |                  |                   |                   |                |            |
| 1000.00  | 0 3500.00 6     | 000.00 | 8500.00 1                      | 1000.00 (MHz)    | 16000.00 1        | 8500.00 2100      | D.OO 23500     | .00 26000. |
|          |                 |        |                                |                  |                   |                   |                |            |
| No.      | Frequer<br>(MHz |        | Reading<br>(dBuV)              | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector   |
| 1 *      | 4873.5          | 77     | 25.56                          | 2.18             | 27.74             | 54.00             | -26.26         | AVG        |
| 2        | 4874.5          | 25     | 40.71                          | 2.18             | 42.89             | 74.00             | -31.11         | peak       |

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Remarks:



| le:     | No re                                  | eport | for the   |  |  |  |  |   |  |   |  |  |  |  |
|---------|--|-------|---|--|--|--|--|---|--|---|--|--|--|--|
|         |  |       |   | e emissi   | K 802.11g Mode 2462MHz<br>or report for the emission which more than 10 dB below the   |  |  |   |  |   |  |  |  |  |
|         | prescribed limit.                      |       |   |  |  |  |  |   |  | pelow the   | е  |  |  |  |
| //m     |  |       |   | 1  |  |  |  |   |  |   |  |  |  |  |
|         |  |       |   |  |  |  |  |   |  |   |  |  |  |  |
|         |  |       |   |  |  |  |  |   |  |   |  |  |  |  |
|         |  |       |   |  |  |  |  | FCC Pa  | art15 (  | C-Above 1   | G PK   |  |  |  |
|         |  |       |   |  |  |  |  |   | _  |   |  |  |  |  |
|         |  |       |   |  |  |  |  |   |  |   |  |  |  |  |
|         |  |       |   |  |  |  |  | FCC P   | art15 (  | C-Above 1   | GAV  |  |  |  |
| ş       |  |       |   |  |  |  |  |   |  |   |  |  |  |  |
|         |  |       |   |  |  |  |  |   |  |   |  |  |  |  |
| ×       |  |       |   |  |  |  |  |   |  |   |  |  |  |  |
|         |  |       |   |  |  |  |  |   | _  |   |  |  |  |  |
|         |  |       |   |  |  |  |  |   | _  |   |  |  |  |  |
| 2500.00 |  | 0500  |   | 000.00 4   |  | 100  |  | 0500.00   | 01000  | 00 00500  | .00 26000.   |  |  |  |
|         |  |       |   |  |  |  |  |   |  |   |  |  |  |  |
|         |  |       | <b>-</b>  |  |  | 1  |  |   |  | Margin<br>(dB)  | Detector   |  |  |  |
| 4924.8  | 71                                     | 24    | .15   | 2.26   | 6  | 26   | .41  | 54.0  | 0  | -27.59  | AVG  |  |  |  |
| 4924.9  | 20                                     | 39    | .79   | 2.26   | 5  | 42   | .05  | 74.0  | 0  | -31.95  | peak   |  |  |  |
|         | 3500.00 6<br>Frequer<br>(MHz<br>4924.8 | *     | 1         1           3500.00         6000.00         8500           Frequency<br>(MHz)         Rea<br>(dE<br>4924.871         24 | 1x         1           3500.00         6000.00         8500.00         11           Frequency<br>(MHz)         Reading<br>(dBuV)         14924.871         24.15 | Image: Non-state         Image: Non-state< | Image: Non-State       Image: Non-State       Image: Non-State         1x       1x       1x       1x         3500.00       6000.00       8500.00       11000.00       (MHz)         Frequency (MHz)       Reading (dBuV)       Factor (dB/m)         4924.871       24.15       2.26 | Image: Second | Image: Non-State       Image: Non-State       Image: Non-State       Image: Non-State         3500.00       6000.00       8500.00       11000.00       (MHz)       16000.00       1         3500.00       6000.00       8500.00       11000.00       (MHz)       16000.00       1         Frequency (MHz)       Reading (dBuV)       Factor (dB/m)       Level (dBuV/m)         4924.871       24.15       2.26       26.41 | Image: Second | Reading<br>(MHz)         Factor<br>(dBuV)         Level<br>(dBuV)         Limit<br>(dBuV)           4924.871         24.15         2.26         26.41         54.00 | Jx       Jx <thjx< th="">       Jx       Jx       <thj< th=""></thj<></thjx<> |  |  |  |

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| No re            | 302.11g Mod<br>eport for the<br>cribed limit. |   |   | FCC Part1 5 (   | C - Above 10   | G PK  |
|------------------|---|---|---|---|--|---|
| ğ pres           |   | emission w  | vhich more th   | FCC Part15 (  | C - Above 10   | G PK  |
| ž.               |   |   |   |   |  |   |
|                  |   |   |   |   |  |   |
|                  |   |   |   |   |  |   |
|                  |   |   |   |   |  |   |
|                  |   |   |   | FCC Part15 (  | C - Above 10   | 3 AV  |
|                  |   |   |   | FCC Part15 (  | C - Above 10   | <u>AV</u>   |
|                  |   |   |   |   |  | <u>3 AV</u>   |
|                  |   |   |   |   |  |   |
| ¥                |   |   |   |   |  |   |
| ×                |   |   |   |   |  |   |
|                  |   |   |   |   |  |   |
|                  |   |   |   |   |  |   |
|                  |   |   |   |   |  |   |
| 00 000 00        | 9500.00 110                                   |   | 16000.00 1  | 9500.00 21000   | 0.00 22500   | .00 26000   |
|                  | Pooding                                       | Fastar  | Lovel   | Limit   | Morgin   |   |
| equency<br>(MHz) | (dBuV)  | (dB/m)  |   |   |  | Detector  |
| 923.827          | 24.10   | 2.26  | 26.36   | 54.00   | -27.64   | AVG   |
| 924.716          | 40.10   | 2.26  | 42.36   | 74.00   | -31.64   | peak  |
| e<br>()          | 23.827  | equency<br>MHz) Reading<br>(dBuV)<br>23.827 24.10 | equency Reading Factor<br>MHz) (dBuV) (dB/m)<br>23.827 24.10 2.26 | equency Reading Factor Level (dBuV) (dBuV) (dB/m) 23.827 24.10 2.26 26.36 | equency Reading Factor Level Limit<br>(dBuV) (dB/m) (dBuV/m) (dBuV/m)<br>23.827 24.10 2.26 26.36 54.00 | equency Reading Factor Level Limit Margin (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) 23.827 24.10 2.26 26.36 54.00 -27.64 |

FCC Part15 C - Above 1G AV



Ant. Pol. **Test Mode:** Remark:

100.0 dBuV/m

ç

90

80

70 60

50

|                       | Page    | e 31 of 9 |         | Report No.: CTC20 |          |             |          |  |  |
|-----------------------|---------|-----------|---------|-------------------|----------|-------------|----------|--|--|
| <br>                  |         |           |         |                   |          |             |          |  |  |
| Horizont              | al      |           |         |                   |          |             |          |  |  |
| TX 802.2              | 11n(HT2 | 0) Mode   | e 2412M | Ηz                |          |             |          |  |  |
| No repor<br>prescribe |         | emissio   | n which | more th           | an 10 dE | 3 below     | the      |  |  |
|                       | 1       | 1         |         |                   |          |             |          |  |  |
|                       |         |           |         |                   |          |             |          |  |  |
|                       |         |           |         |                   |          |             |          |  |  |
|                       |         |           |         |                   | FCC Part | 15 C - Abov | /e 1G PK |  |  |
|                       |         |           |         |                   |          |             |          |  |  |

| 4 | 0       | ~                  |                   |                  |                   |                   |                |             |
|---|---------|--------------------|-------------------|------------------|-------------------|-------------------|----------------|-------------|
| 3 | 0       | 1                  |                   |                  |                   |                   |                |             |
| 2 | o       |                    |                   |                  |                   |                   |                |             |
| 1 | o       |                    |                   |                  |                   |                   |                |             |
|   | 0.0     |                    |                   |                  |                   |                   |                |             |
|   | 1000.00 | 0 3500.00 6000.00  | 8500.00 11        | 000.00 (MHz)     | 16000.00          | 8500.00 2100      | 0.00 23500     | .00 26000.0 |
| Ļ |         |                    | 1                 | 1                | 1                 | 1                 |                |             |
|   | No.     | Frequency<br>(MHz) | Reading<br>(dBuV) | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector    |
|   | 1 *     | 4823.219           | 25.16             | 2.10             | 27.26             | 54.00             | -26.74         | AVG         |
|   | 2       | 4824.611           | 39.83             | 2.11             | 41.94             | 74.00             | -32.06         | peak        |

Remarks:

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| Ant. Pol.<br>Test Mode: |                 | Vertical                      |  |                  |                   |                   |                |          |  |  |  |  |
|-------------------------|-----------------|-------------------------------|--|------------------|-------------------|-------------------|----------------|----------|--|--|--|--|
|                         |                 | TX 802.11n(HT20) Mode 2412MHz |  |                  |                   |                   |                |          |  |  |  |  |
| lemarl                  | <b>K</b> :      |                               | No report for the emission which more than 10 dB below the prescribed limit. |                  |                   |                   |                |          |  |  |  |  |
| 00.0 dB                 | uV/m            |                               |  |                  |                   |                   |                |          |  |  |  |  |
| , 📖                     |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
|                         |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
|                         |                 |                               |  |                  |                   | FCC Part15 (      | C-Above 10     | à PK     |  |  |  |  |
|                         |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
| 0                       |                 |                               |  |                  |                   | FCC Part15 (      | AV             |          |  |  |  |  |
|                         | 1               |                               |  |                  |                   |                   |                |          |  |  |  |  |
| ·                       | 1×              |                               |  |                  |                   |                   |                |          |  |  |  |  |
| ı                       | Ę               |                               |  |                  |                   |                   |                |          |  |  |  |  |
| ı                       |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
|                         |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
| 0.0                     |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
| 1000.00                 | 0 3500.00 6     | 000.00                        | 8500.00 11   | 000.00 (MHz)     | 16000.00 1        | 8500.00 21000     | .00 23500.     | 00 26000 |  |  |  |  |
|                         |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
|                         |                 |                               |  |                  |                   |                   |                |          |  |  |  |  |
| No.                     | Frequer<br>(MHz |                               | Reading<br>(dBuV)  | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detecto  |  |  |  |  |
| 1                       | 4823.8          | 85                            | 39.98  | 2.11             | 42.09             | 74.00             | -31.91         | peak     |  |  |  |  |
| 2 *                     | 4824.3          | 04                            | 25.48  | 2.11             | 27.59             | 54.00             | -26.41         | AVG      |  |  |  |  |
|                         | 1               |                               |  |                  | 1                 |                   | 1              |          |  |  |  |  |

FN





| nt. Pol.<br>est Mode: |          | Horiz                         | Horizontal   |      |           |                  |     |                   |         |                   |             |                |          |
|-----------------------|----------|-------------------------------|--|------|-----------|------------------|-----|-------------------|---------|-------------------|-------------|----------------|----------|
|                       |          | TX 802.11n(HT20) Mode 2437MHz |  |      |           |                  |     |                   |         |                   |             |                |          |
| emark:                | :        |                               | No report for the emission which more than 10 dB below the prescribed limit. |      |           |                  |     |                   |         |                   |             |                |          |
| 0.0 dBu               | V/m      |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           | -                |     |                   | FCC F   | Part15            | C - Above 1 | G PK           |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           |                  |     |                   | FCC F   | Part15            | C - Above 1 | GAV            |          |
|                       | 2        |                               |  |      |           | -                |     |                   |         |                   |             |                |          |
|                       | Ę        |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       | ×        |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
|                       |          |                               |  |      |           |                  |     |                   | _       |                   |             |                |          |
| .0<br>1000.000        | 200.00 0 | 000.00                        | 8500.0   | 0 11 | 000.00 (M | Hz)              | 100 | 00.00 1           | 8500.00 | 2100              | 0.00 23500  | .00 26000      |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |
| No.                   |          | requency<br>(MHz)             |  |      |           | Factor<br>(dB/m) |     | Level<br>(dBuV/m) |         | Limit<br>(dBuV/m) |             | Margin<br>(dB) | Detector |
| 1 *                   | 4874.0   | 029 25.17                     |  | 2.18 |           | 27               | .35 | 54.0              | 00      | -26.65            | AVG         |                |          |
| 2                     | 4874.8   | 04                            | 40.  | 29   | 2.18      |                  | 42  | .47               | 74.(    | 00                | -31.53      | peak           |          |
|                       |          |                               |  |      |           |                  |     |                   |         |                   |             |                |          |

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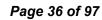
| Ant       | . Pol |                    | Vertic                        | al                            |                  |                   |                   |                |                   |  |  |  |
|-----------|-------|--------------------|-------------------------------|-------------------------------|------------------|-------------------|-------------------|----------------|-------------------|--|--|--|
|           |       | TX 80              | TX 802.11n(HT20) Mode 2437MHz |                               |                  |                   |                   |                |                   |  |  |  |
| Rer       | nark: |                    |                               | port for the<br>cribed limit. | e emission v     | which more t      | han 10 dB l       | below the      | ;                 |  |  |  |
| 100.      | 0 dBu | V/m                |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 90        |       |                    |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 80        |       |                    |                               |                               |                  |                   | FCC Part15        | C - Above 1    | G PK              |  |  |  |
| 70        |       |                    |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 60        |       |                    |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 50        |       |                    |                               |                               |                  |                   | FCC Part15        | C - Above 1    | <u>G AV</u>       |  |  |  |
| 40        |       | ş                  |                               |                               |                  |                   |                   |                |                   |  |  |  |
|           |       |                    |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 30        |       | ×                  |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 20        |       |                    |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 10        |       |                    |                               |                               |                  |                   |                   |                |                   |  |  |  |
| 0.0<br>10 |       | 3500.00 6          | 000.00                        | 8500.00 11                    | 000.00 (MHz)     | 16000.00          | 18500.00 2100     | 0.00 23500     | ).00 26000.Q      |  |  |  |
| 1         |       |                    |                               |                               |                  | Γ                 |                   |                | · · · · · · · · · |  |  |  |
| N         | ۱o.   | Frequency<br>(MHz) |                               | Reading<br>(dBuV)             | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector          |  |  |  |
| -         | 1 *   | 4873.6             | 09                            | 25.16                         | 2.18             | 27.34             | 54.00             | -26.66         | AVG               |  |  |  |
|           | 2     | 4874.9             | 83                            | 39.85                         | 2.18             | 42.03             | 74.00             | -31.97         | peak              |  |  |  |
|           | marka |                    |                               |                               |                  |                   |                   |                |                   |  |  |  |

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Remarks:



| nt. Pol.<br>est Mode: |             | Horizontal                    |  |    |                |      |       |              |               |       |                |           |
|-----------------------|-------------|-------------------------------|--|----|----------------|------|-------|--------------|---------------|-------|----------------|-----------|
| est Mode:<br>Remark:  |             | TX 802.11n(HT20) Mode 2462MHz |  |    |                |      |       |              |               |       |                |           |
| emarr                 | K:          |                               | No report for the emission which more than 10 dB below the prescribed limit. |    |                |      |       |              |               |       |                |           |
| 0.0 dB                | uV/m        | preo                          |  |    |                |      |       |              |               |       |                |           |
|                       |             |                               |  |    |                |      |       |              |               |       |                |           |
|                       |             |                               |  |    |                | -    |       |              |               | -     |                |           |
|                       |             |                               |  |    |                |      |       |              |               |       |                |           |
|                       |             |                               |  |    |                | -    |       |              | FCC Pa        | art15 | C - Above 1    | G PK      |
|                       |             |                               |  |    |                |      |       |              |               |       |                |           |
|                       |             |                               |  |    |                | -    |       |              | 500 D         |       | o              |           |
|                       |             |                               |  |    |                |      |       |              | FUU Pi        | 1115  | C - Above 1    | GAV       |
|                       | ş           |                               |  |    |                |      |       |              |               |       |                |           |
|                       | ^           |                               |  |    |                | -    |       |              |               |       |                |           |
|                       | 1           |                               |  |    |                |      |       |              |               | _     |                |           |
|                       | ×           |                               |  |    |                |      |       |              |               |       |                |           |
|                       |             |                               |  |    |                |      |       |              |               |       |                |           |
|                       |             |                               |  |    |                |      |       |              |               |       |                |           |
| .0                    |             |                               |  |    |                |      |       |              |               |       |                |           |
| 1000.00               | 0 3500.00 6 | 000.00                        | 8500.00  | 11 | 000.00 (M      | IHz) | 160   | 00.00 1      | 8500.00       | 2100  | 0.00 23500     | .00 26000 |
| No. Freque            |             |                               | Read<br>(dBu   | -  | Facto<br>(dB/m |      |       | vel<br>iV/m) | Limi<br>(dBuV |       | Margin<br>(dB) | Detector  |
| 1 *                   | 4924.8      | 91                            | 23.6   | 9  | 2.26           |      | 25.95 |              | 54.0          | 0     | -28.05         | AVG       |
| 2                     | 4924.9      | 43                            | 40.07  |    | 2.26           |      | 42    | .33          | 74.00 -31     |       | -31.67         | peak      |
|                       |             |                               |  |    |                |      |       |              |               |       |                |           |





| nt. Po         | Vertical        |         |  |               |                  |     |     |             |                   |                |           |  |  |
|----------------|-----------------|---------|--|---------------|------------------|-----|-----|-------------|-------------------|----------------|-----------|--|--|
| est Mo         | de:             | TX 8    | TX 802.11n(HT20) Mode 2462MHz  |               |                  |     |     |             |                   |                |           |  |  |
| emark          |                 |         | No report for the emission which more than 10 dB below the prescribed limit. |               |                  |     |     |             |                   |                |           |  |  |
| 00.0 dB        | uV/m            |         |  |               |                  |     |     |             |                   |                |           |  |  |
|                |                 |         |  |               |                  |     |     |             |                   |                |           |  |  |
|                |                 |         |  |               |                  |     |     |             |                   |                |           |  |  |
|                |                 |         |  |               |                  |     |     |             | FCC Part15        | C - Above 1    | G PK      |  |  |
| ) 🕅            |                 |         |  |               |                  |     |     |             |                   |                |           |  |  |
|                |                 |         |  |               |                  |     |     |             |                   |                |           |  |  |
|                |                 |         |  |               |                  |     |     |             | FCC Part15        | C - Above 1    | G AV      |  |  |
| )              | 1×              |         |  |               |                  |     |     |             |                   |                |           |  |  |
| 0              | ×               |         |  |               |                  |     |     |             |                   |                |           |  |  |
| ) —            | ş               |         |  |               |                  |     |     |             |                   |                |           |  |  |
| ,              | ×               |         |  |               |                  |     |     |             |                   |                |           |  |  |
|                |                 |         |  |               |                  |     |     |             |                   |                |           |  |  |
|                |                 |         |  |               |                  |     |     |             |                   |                |           |  |  |
| 0.0<br>1000.00 | 0 3500.00 6     | 5000.00 | 850  | 0.00 11       | 000.00 (M        | Hz) | 160 | 00.00       | 18500.00 2100     | 0.00 23500     | .00 26000 |  |  |
| No.            | Frequer<br>(MHz | -       |  | ading<br>BuV) | Factor<br>(dB/m) |     |     | vel<br>V/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector  |  |  |
| 1              | 4923.7          | 15      | 4(   | 0.09          | 2.26             |     | 42  | .35         | 74.00             | -31.65         | peak      |  |  |
| 2 *            | 4924.8          | 74      | 24   | 4.12          | 2.26             |     | 26  | .38         | 54.00             | -27.62         | AVG       |  |  |
|                |                 |         |  |               |                  |     |     |             |                   |                |           |  |  |



| Ant  | . Pol  |                 | Hori   | zonta | al                     |               |      |       |              |                  |                   |          |      |
|------|--------|-----------------|--------|-------|------------------------|---------------|------|-------|--------------|------------------|-------------------|----------|------|
| Tes  | t Mo   | de:             |        |       | •                      | l0) Mod       |      |       |              | _                |                   |          | _    |
| Rer  | nark   | :               |        |       | t for the<br>ed limit. | emissi        | on v | vhich | more         | than 10 d        | B below th        | е        |      |
| 100. | ) dBu  | V/m             | pres   | CHDE  |                        |               |      |       |              |                  |                   |          |      |
|      | -      |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
| 90   |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
| 80   |        |                 |        |       |                        |               | -    |       |              | FCC Par          | t15 C - Above     | 1G PK    |      |
| 70   |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
| 60   |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
| 50   |        |                 |        |       |                        |               | _    |       |              | FCC Par          | t15 C - Above     | 1G AV    |      |
| 50   |        | 1×              |        |       |                        |               |      |       |              |                  |                   |          |      |
| 40   |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
| 30   |        | Š               |        |       |                        |               | -    |       |              |                  |                   |          |      |
| 20   |        |                 |        |       |                        |               | _    |       |              |                  |                   |          |      |
| 10   |        |                 |        |       |                        |               | _    |       |              |                  |                   |          |      |
| 0.0  |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
| 10   | 00.000 | 3500.00 6       | 000.00 | 850   | 0.00 11                | 000.00 (1     | MHz) | 160   | 00.00        | 18500.00 2       | 1000.00 2350      | 0.00 260 | 00.0 |
|      |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
|      |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |
| N    | ۱o.    | Frequer<br>(MHz |        |       | ading<br>BuV)          | Fact<br>(dB/n |      |       | vel<br>IV/m) | Limit<br>(dBuV/r | Margin<br>n) (dB) | Detecto  | or   |
|      | 1      | 4843.4          | 29     | 4(    | 0.58                   | 2.13          | 3    | 42    | .71          | 74.00            | -31.29            | peak     | :    |
| 2    | 2 *    | 4844.6          | 21     | 2     | 5.03                   | 2.13          | }    | 27    | .16          | 54.00            | -26.84            | AVG      |      |
|      |        |                 |        |       |                        |               |      |       |              | 1                |                   |          |      |
|      |        |                 |        |       |                        |               |      |       |              |                  |                   |          |      |

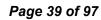
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Remarks:





|         | No re                    |  |   | 122MHz<br>which more t   | han 10 dB k   | C-Above 10  | 3 PK   |
|---------|--------------------------|--|---|--|---|---|--|
| Š.      |                          |  |   | vhich more t   | FCC Part15 (  | C-Above 10  | 3 PK   |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  | FCC Part15 (  | C - Above 10  | AV   |
|         |                          |  |   |  | FCC Part1 5 (   | C-Above 10  | AV .   |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
| ×       |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
|         |                          |  |   |  |   |   |  |
| 0.00 60 | 00.00                    | 8500.00 11                             | 000.00 (MHz)  | 16000.00 1   | 8500.00 21000   | .00 23500.  | 00 26000.  |
|         | -                        | Reading<br>(dBuV)                      | Factor<br>(dB/m)                                    | Level<br>(dBuV/m)  | Limit<br>(dBuV/m)   | Margin<br>(dB)  | Detector   |
| 844.05  | 53                       | 25.46                                  | 2.13  | 27.59  | 54.00   | -26.41  | AVG  |
| 844.58  | 39                       | 41.00                                  | 2.13  | 43.13  | 74.00   | -30.87  | peak   |
|         | equen<br>(MHz)<br>844.05 | equency<br>(MHz)<br>844.053<br>844.589 | equency<br>(MHz) Reading<br>(dBuV)<br>844.053 25.46 | equency<br>(MHz) Reading Factor<br>(dBuV) (dB/m)<br>844.053 25.46 2.13 | equency<br>(MHz) Reading<br>(dBuV) Factor Level<br>(dBuV/m)<br>844.053 25.46 2.13 27.59 | equency Reading Factor Level Limit (dBuV) (dB/m) (dBuV/m) (dBuV/m) 844.053 25.46 2.13 27.59 54.00 | equency Reading Factor Level Limit (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB)<br>344.053 25.46 2.13 27.59 54.00 -26.41 |





| nt. Pol.      |           | Horizo  | ontal                     |              |              |               |             |            |
|---------------|-----------|---------|---------------------------|--------------|--------------|---------------|-------------|------------|
| st Moo        | de:       | TX 80   | )2.11n(HT4                | 0) Mode 24   | I37MHz       |               |             |            |
| emark:        |           |         | port for the ribed limit. | emission v   | vhich more t | han 10 dB t   | pelow the   | •          |
| 0.0 dBu\      | V/m       |         |                           |              |              |               |             |            |
|               |           |         |                           |              |              |               |             |            |
|               |           |         |                           |              |              |               |             |            |
|               |           |         |                           |              |              | FCC Part15    | C - Above 1 | g PK       |
|               |           |         |                           |              |              |               |             |            |
|               |           |         |                           |              |              | FCC Part15    | C - Above 1 |            |
|               |           |         |                           |              |              | Teerants      |             |            |
|               | 1<br>X    |         |                           |              |              |               |             |            |
|               |           |         |                           |              |              |               |             |            |
|               | Š         |         |                           |              |              |               |             |            |
|               |           |         |                           |              |              |               |             |            |
|               |           |         |                           |              |              |               |             |            |
| 0<br>1000.000 | 3500.00 6 | 000.00  | 8500.00 11                | 000.00 (MHz) | 16000.00 1   | 8500.00 21000 | 0.00 23500  | .00 26000. |
|               | Fraguer   |         | Pooding                   | Factor       | Loval        | Limit         | Margin      |            |
| No.           | (MHz      |         | (dBuV)                    | (dB/m)       | (dBuV/m)     |               | (dB)        | Detector   |
| 1             | 4873.5    | 57      | 40.25                     | 2.18         | 42.43        | 74.00         | -31.57      | peak       |
| 2 *           | 4874.0    | 87      | 25.29                     | 2.18         | 27.47        | 54.00         | -26.53      | AVG        |
| 1             | 4873.5    | )<br>57 | 40.25                     | 2.18         | 42.43        | 74.00         | -31.57      | p          |





| nt. Pol   |                | Verti  | cal                            |                  |                   |                   |                |           |
|-----------|----------------|--------|--------------------------------|------------------|-------------------|-------------------|----------------|-----------|
| est Mo    | de:            | TX 8   | 02.11n(HT4                     | 40) Mode 24      | 37MHz             |                   |                |           |
| emark:    | :              |        | eport for the<br>cribed limit. |                  | vhich more t      | han 10 dB b       | elow the       |           |
| )0.0 dBu\ | √/m            |        |                                |                  |                   |                   |                |           |
|           |                |        |                                |                  |                   |                   |                |           |
|           |                |        |                                |                  |                   |                   |                |           |
|           |                |        |                                |                  |                   | FCC Part15 C      | - Above 1G     | i PK      |
|           |                |        |                                |                  |                   |                   |                |           |
|           |                |        |                                |                  |                   | FCC Part15 C      | - Above 1G     | AV        |
|           |                |        |                                |                  |                   |                   |                |           |
|           | Š              |        |                                |                  |                   |                   |                |           |
|           | 1              |        |                                |                  |                   |                   |                |           |
|           | ×              |        |                                |                  |                   |                   |                |           |
|           |                |        |                                |                  |                   |                   |                |           |
| .0        |                |        |                                |                  |                   |                   |                |           |
| 1000.000  | 3500.00 6      | 000.00 | 8500.00 11                     | 000.00 (MHz)     | 16000.00 1        | 8500.00 21000     | .00 23500.0    | 00 26000. |
| No.       | Freque<br>(MHz |        | Reading<br>(dBuV)              | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector  |
|           | N N            |        | -                              |                  |                   |                   |                |           |
| 1 *       | 4873.6         | 648    | 25.14                          | 2.18             | 27.32             | 54.00             | -26.68         | AVG       |

EN



| Ant. Po  | Ι.              | Horiz | zontal                        |                  |            |                   |                |           |
|----------|-----------------|-------|-------------------------------|------------------|------------|-------------------|----------------|-----------|
| est Mo   | de:             |       | •                             | 40) Mode 24      |            |                   |                |           |
| Remark   |                 |       | eport for the<br>cribed limit |                  | which more | than 10 dB l      | below the      | 9         |
| 00.0 dBu | uV/m            |       |                               |                  | 1          |                   |                |           |
|          |                 |       |                               |                  |            |                   |                |           |
| 0        |                 |       |                               |                  |            |                   |                |           |
| 0        |                 |       |                               |                  |            | FCC Part15        | C - Ahove 1    | G PK      |
| , 🗖      |                 |       |                               |                  |            |                   |                |           |
|          |                 |       |                               |                  |            |                   |                |           |
|          |                 |       |                               |                  |            | FCC Part15        | C - Above 1    | GAV       |
| 0        |                 |       |                               |                  |            |                   |                |           |
| o        | ×               |       |                               |                  |            |                   |                |           |
|          |                 |       |                               |                  |            |                   |                |           |
| 0        | Š               |       |                               |                  |            |                   |                |           |
| o        |                 |       |                               |                  |            |                   |                |           |
| o        |                 |       |                               |                  |            |                   |                |           |
| 0.0      |                 |       |                               |                  |            |                   |                |           |
|          | 0 3500.00 6     | 00.00 | 8500.00 1                     | 1000.00 (MHz)    | 16000.00   | 18500.00 2100     | 0.00 23500     | .00 26000 |
| No.      | Frequer<br>(MHz |       | Reading<br>(dBuV)             | Factor<br>(dB/m) |            | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector  |
| 1        | `               | ,<br> | · · · · ·                     | · · ·            |            | . ,               |                | maak      |
|          | 4904.7          |       | 40.05                         | 2.22             | 42.27      | 74.00             | -31.73         | peak      |
| 2 *      | 4904.9          | 37    | 24.66                         | 2.22             | 26.88      | 54.00             | -27.12         | AVG       |

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| nt. F   | Pol.       |          | Verti  | cal                            |                |                   |                   |                |           |
|---------|------------|----------|--------|--------------------------------|----------------|-------------------|-------------------|----------------|-----------|
|         | Mode       | :        |        | •                              | 40) Mode 24    |                   |                   |                |           |
| ema     | ark:       |          |        | eport for the<br>cribed limit. |                | vhich more t      | han 10 dB b       | elow the       |           |
| 00.0    | dBuV/⊧     | m        |        |                                |                |                   |                   |                |           |
|         |            |          |        |                                |                |                   |                   |                |           |
|         |            |          |        |                                |                |                   |                   |                |           |
|         |            |          |        |                                |                |                   | FCC Part15        | C - Above 1    | G PK      |
|         |            |          |        |                                |                |                   |                   |                |           |
|         |            |          |        |                                |                |                   | FCC Part15        | C - Above 1    | G AV      |
|         |            | 1        |        |                                |                |                   |                   |                |           |
|         |            | X        |        |                                |                |                   |                   |                |           |
|         |            | ş        |        |                                |                |                   |                   |                |           |
|         |            | ^        |        |                                |                |                   |                   |                |           |
|         |            |          |        |                                |                |                   |                   |                |           |
| .0      |            |          |        |                                |                |                   |                   |                |           |
| 1000    | 0.000 3!   | 500.00 6 | 000.00 | 8500.00 1                      | 1000.00 (MHz)  | 16000.00          | 18500.00 2100     | 0.00 23500     | .00 26000 |
|         |            | Frequer  |        | Reading                        | Factor         | Level             | Limit             | Margin         |           |
|         |            |          |        | rteaung                        |                |                   |                   |                | Detector  |
| No      | D.         | (MHz     |        | (dBuV)                         | (dB/m)         | (dBuV/m)          | (dBuV/m)          | (dB)           |           |
| No<br>1 | <b>D</b> . |          | )      | (dBuV)<br>39.97                | (dB/m)<br>2.22 | (dBuV/m)<br>42.19 | (dBuV/m)<br>74.00 | (dB)<br>-31.81 | peak      |

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Remarks:

EN



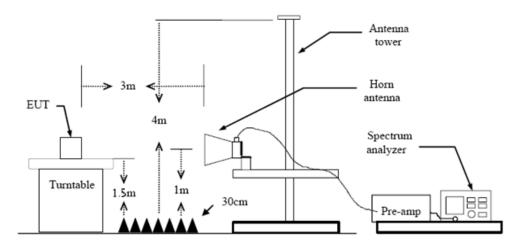
# 3.3. Band Edge Emissions (Radiated)

<u>Limit</u>

## FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d)/ RSS 247 5.5:

| Restricted Frequency Band | (dBuV/m | n)(at 3m) |
|---------------------------|---------|-----------|
| (MHz)                     | Peak    | Average   |
| 2310 ~2390                | 74      | 54        |
| 2483.5 ~2500              | 74      | 54        |

## **Test Configuration**



## Test Procedure

- 1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
- 2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
- 3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
- 4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
- 5. The receiver set as follow:
  - RBW=1MHz, VBW=3MHz Peak detector for Peak value.

RBW=1MHz, VBW see note 1 with Peak Detector for Average Value.

Note 1: For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 3.8 Duty Cycle.

## Test Mode

Please refer to the clause 2.4.

## Test Results

CTC Laboratories, Inc. 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn





| Ant        | . Pol.  |                | Horiz    | cont  | al              |        |               |       |          |               |          |                |       |                |           |   |
|------------|---------|----------------|----------|-------|-----------------|--------|---------------|-------|----------|---------------|----------|----------------|-------|----------------|-----------|---|
| Tes        | t Mod   | le:            | 802.2    | 11b   | Mode 24         | 412N   | /Hz           |       |          |               |          |                |       |                |           |   |
| 110.       | o dBu∖  | //m            |          |       |                 |        |               |       |          |               |          |                |       |                |           |   |
| 100        |         |                |          |       |                 |        |               |       |          |               |          |                |       | M              |           |   |
| 90         |         |                |          |       |                 |        |               |       |          |               |          |                |       | $\bigwedge$    | h         |   |
| 80         |         |                |          |       |                 |        |               |       |          |               | FC       | C Part         | 15 (  | - Above 10     | ) PK      |   |
| 70         |         |                |          |       |                 |        |               |       |          |               |          |                | Π     |                |           |   |
| 60         |         |                |          |       |                 |        |               |       |          |               |          |                | 1     |                |           |   |
| 50         |         |                |          |       |                 |        |               |       |          |               | 1FC<br>X | C Part         | 190   | C-Above 10     |           |   |
|            |         |                |          |       |                 |        |               |       |          |               |          | N              | Y     |                | v         |   |
| 40         | mallann | -              | manthmat | hined | when the second | motore | monard        | watch | w.w.k.en | norman        | - Ser    | Sand a         |       |                |           |   |
| 30         |         |                |          |       |                 |        |               |       |          |               |          |                | +     |                |           |   |
| 20         |         |                |          |       |                 |        |               |       |          |               |          |                | -     |                |           |   |
| 10.0       | 804.800 | 2210.00 2      | 328.80   | 024   | 10.80 23        | 52.80  |               |       | 0.0      | 76.80 2       | 388.8    | 0 04           | 0.0.1 | 80 2412.8      | 0 2424.80 |   |
| 23         | 04.000  | 2310.00 2      | 320.00   | 234   | 10.00 23:       | 32.00  | (MHz          | 9     | 231      | 0.00 2        | 300.0    | 0 24           | 00.1  | 00 2412.0      | 0 2424.00 |   |
|            |         |                |          |       |                 |        |               |       |          |               |          |                |       |                |           |   |
|            |         |                |          |       |                 |        |               |       |          |               |          |                |       |                |           |   |
| I          |         |                |          |       |                 |        |               |       |          |               |          |                |       |                |           | - |
| 1          | No.     | Freque<br>(MHz |          |       | eading<br>dBuV) |        | actor<br>B/m) |       |          | evel<br>uV/m) |          | .imit<br>8uV/n | n)    | Margin<br>(dB) | Detector  |   |
|            | 1       | 2390.0         | 00       | 2     | 21.87           | 31     | 1.31          | +     | 53       | 3.18          | 7        | 4.00           |       | -20.82         | peak      | - |
|            | 2 *     | 2390.0         | 00       |       | 6.46            | 31     | 1.31          | 1     | 37       | 7.77          | 5        | 4.00           |       | -16.23         | AVG       | - |
|            |         |                |          |       |                 |        |               |       |          |               |          |                |       |                |           | - |
|            |         |                |          |       |                 |        |               |       |          |               |          |                |       |                |           |   |
| <b>D</b> - |         |                |          |       |                 |        |               |       |          |               |          |                |       |                |           |   |
| ĸer        | narks   |                |          |       | _               |        | _             |       |          |               |          |                |       |                |           |   |

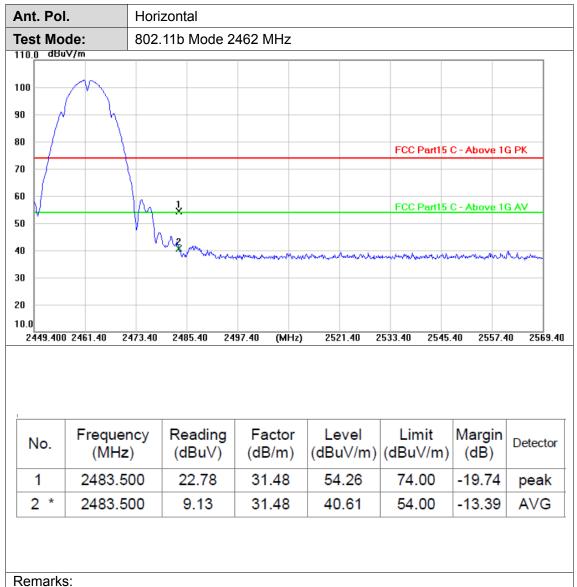
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| 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 |  | 80                     | 02.11b Mode                                  | e 2412MF  |           |                 | FCC Part1 5 C     |                |          |
|--|--|------------------------|--|---|-----------|-----------------|-------------------|----------------|----------|
| No. Fre  |  |                        |  |   |           |                 |                   |                |          |
| 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 |  |                        |  |   |           |                 |                   |                |          |
| 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | meetrurketur   | etransministramana     |  |   |           |                 |                   |                |          |
| 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | مردر کرد. به راید  | etrace and a second    | entrenentuel week Madrur                     |   |           |                 |                   |                |          |
| 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | medanta  | etranon abeter record  |  |   |           |                 |                   |                |          |
| 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>2304.000 2316.<br>No.      | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  |                        |  |   | werenew   |                 | ICC Part15 C      | - Above 1G     |          |
| 0<br>0<br>0<br>0<br>0<br>0<br>0<br>2304.000 2316.<br>No.           | - and an and a second | etranon destancianas   |  | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  |           |                 | ECC Part15 C      | - Above 1G     | AV       |
| No.  | - and an   | etmen determinent      | er manan kan kan kan kan kan kan kan kan kan | antes and a second s | 1000 - To |                 | 1                 |                | 1 1      |
| No.  | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-                      | etruritado terresponse | ernesennlisensen/histori                     | ~Pufland-~~   | wanne     |                 |                   |                |          |
| No.  |  |                        |  |   |           | water many      | Burnan            |                | V        |
| No.  |  |                        |  |   |           |                 |                   |                |          |
| No.  |  |                        |  |   |           |                 |                   |                |          |
| No.  |  |                        |  |   |           |                 |                   |                |          |
| 2304.000 2316.<br>No. Fre  |  |                        |  |   |           |                 |                   |                |          |
| INO. (   | 6.00 2   | .00 2328.0             | 00 2340.00                                   | 2352.00 (   | MHz)      | 2376.00 23      | 88.00 2400.0      | 0 2412.00      | ) 2424.0 |
| 1 23   |  | equency<br>MHz)        | Readin<br>(dBuV)                             | -   |           | Level<br>BuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
|  | 390.0  | 90.000                 | 22.37  | 31.3  | 51        | 53.68           | 74.00             | -20.32         | peak     |
| 2 * 23   | 390.0  | 90.000                 | 6.31   | 31.3  | 31        | 37.62           | 54.00             | -16.38         | AVG      |
| emarks:  |  |                        | I  |   |           |                 |                   |                |          |

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| nt. Pol.          |                 | Verti  | cal               |                  |                   |                   |                |          |
|-------------------|-----------------|--------|-------------------|------------------|-------------------|-------------------|----------------|----------|
| est Mod           | le:             | 802.   | 11b Mode          | 2462 MHz         |                   |                   |                |          |
| 00. <u>0</u> dBuV | //m             |        |                   |                  |                   |                   |                |          |
|                   | h               |        |                   |                  |                   | FCC Part15        | C - Above 1    | G PK     |
| ) 🖵               |                 |        |                   |                  |                   |                   |                |          |
|                   |                 |        | - <u>1</u>        |                  |                   | FCC Part15        | C - Above 1    | G AV     |
|                   |                 | M      | ×                 |                  |                   |                   |                |          |
|                   |                 | 1 6    | man               | mature           | mohenne           | ungua have marked | nareteriterite | mann     |
| 0                 |                 |        |                   |                  |                   |                   |                |          |
|                   |                 |        |                   |                  |                   |                   |                |          |
|                   |                 |        |                   |                  |                   |                   |                |          |
|                   |                 |        |                   |                  |                   |                   |                |          |
| ).0<br>2449.400   | 2461.40 24      | 173.40 | 2485.40 2         | 2497.40 (MHz)    | 2521.40           | 2533.40 2545      | .40 2557.      | 40 2569  |
| No.               | Frequer<br>(MHz |        | Reading<br>(dBu∀) | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
| 1                 | 2483.5          | 00     | 21.27             | 31.48            | 52.75             | 74.00             | -21.25         | peak     |
| 2 *               | 2483.5          | 00     | 5.46              | 31.48            | 36.94             | 54.00             | -17.06         | AVG      |
| 2 *               | 2483.5          | 00     | 5.46              | 31.48            | 36.94             | 54.00             | -17.06         | AV       |

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2.Margin value = Level -Limit value

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| Ant        | . Pol.     |                              | Horiz       | zont | al                |             |                |                |                 |                 |        |                |            |
|------------|------------|------------------------------|-------------|------|-------------------|-------------|----------------|----------------|-----------------|-----------------|--------|----------------|------------|
| Tes        | t Moc      | de:                          | 802.        | 11g  | Mode 2            | 412MI       | Hz             |                |                 |                 |        |                |            |
| 110.       | 0 dBu      | V/m                          |             |      |                   |             |                |                |                 |                 |        |                |            |
| 100        |            |                              |             |      |                   |             |                |                |                 |                 |        |                |            |
| 90         |            |                              |             |      |                   |             |                |                |                 |                 |        | $\frown$       |            |
| 80         |            |                              |             |      |                   |             |                |                |                 | FCC Pa          | rt15   | C - Above 1    | G PK       |
| 70         |            |                              |             |      |                   |             |                |                |                 |                 | -/     |                |            |
| 60         |            |                              |             |      |                   |             |                |                |                 | X<br>FCC Pá     | rt15 ( | C - Above 1    | G AV       |
| 50         |            |                              |             |      |                   |             |                |                |                 | 2               |        |                |            |
| 40         | herenature | naand the only in the second | Angerathers |      | erryanus and anno | man         | aller Arter of | and the second | est-lating-area | -               | _      |                |            |
| 30         |            |                              |             |      |                   |             |                |                |                 |                 |        |                |            |
| 20         |            |                              |             |      |                   |             |                |                |                 |                 | _      |                |            |
| 10.0<br>23 |            | 2316.80 2                    | 328.80      | 234  | 10.80 23          | 52.80       | (MHz)          | 237            | 6.80 2          | 2388.80 2       | 2400.  | .80 2412.0     | 30 2424.80 |
|            |            |                              |             |      |                   |             |                |                |                 |                 |        |                |            |
| N          | lo.        | Frequer<br>(MHz              |             |      | ading<br>BuV)     | Fac<br>(dB/ |                |                | vel<br>V/m)     | Limit<br>(dBuV/ |        | Margin<br>(dB) | Detector   |
|            | 1          | 2390.0                       | 00          | 3    | 0.18              | 31.         | 31             | 61             | .49             | 74.00           | )      | -12.51         | peak       |
| 2          | 2 *        | 2390.0                       | 00          | 1    | 2.38              | 31.         | 31             | 43             | .69             | 54.00           | )      | -10.31         | AVG        |
|            |            |                              |             |      |                   |             |                |                |                 |                 |        |                |            |
|            | narks      | (dR/m) = l                   |             | _    |                   |             | <u> </u>       |                |                 |                 |        | <b>.</b>       |            |

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| nt. Po   | Ι.                        | Vert         | ical  |                           |                                  |  |                |          |
|----------|---------------------------|--------------|---|---------------------------|----------------------------------|--|----------------|----------|
| est Mo   | ode:                      | 802          | .11g Mode 2   | 2412MHz                   |                                  |  |                |          |
| 10.0 dBi | uV/m                      | -            |   |                           |                                  |  |                |          |
|          |                           |              |   |                           |                                  |  |                |          |
|          |                           |              |   |                           |                                  |  | ~~             |          |
|          |                           |              |   |                           |                                  | FCC Part15   | ( 1) - 1       |          |
|          |                           |              |   |                           |                                  | FCC Partis   | C-ADOVE I      | GPK      |
|          |                           |              |   |                           |                                  |  |                |          |
|          |                           | _            |   |                           |                                  | FCC Part15   | C - Above 1    | GAV      |
|          |                           | _            |   |                           |                                  | ×  |                |          |
|          |                           |              |   |                           |                                  | 2.   |                |          |
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|          |                           |              |   |                           |                                  |  |                |          |
|          |                           |              |   |                           |                                  |  |                |          |
|          |                           |              |   |                           |                                  |  |                |          |
| .0       |                           |              |   |                           |                                  |  |                |          |
| 2304.00  | 0 2316.00 2               | 2328.00      | 2340.00 23  | 852.00 (MHz)              | 2376.00                          | 2388.00 2400   | .00 2412.      | 00 2424. |
| No.      | Freque<br>(MHz            |              | Reading<br>(dBuV)   | Factor<br>(dB/m)          | Level<br>(dBuV/m)                | Limit<br>(dBuV/m)  | Margin<br>(dB) | Detector |
| 1        | 2390.0                    | 00           | 21.06   | 31.31                     | 52.37                            | 74.00  | -21.63         | peak     |
| 2 *      | 2390.0                    | 00           | 7.08  | 31.31                     | 38.39                            | 54.00  | -15.61         | AVG      |
|          |                           |              |   |                           |                                  |  |                |          |



| 802             | .11g Mode 2       |  |   |  | C - Above 1   |   |
|-----------------|-------------------|--|---|--|---|---|
|                 | 1×                |  |   |  |   |   |
|                 | 1×                |  |   |  |   |   |
|                 | 1×<br>×           |  |   |  |   |   |
|                 | 1×<br>            |  |   |  |   |   |
|                 | *                 |  |   |  |   |   |
|                 | *                 |  |   |  |   |   |
|                 | 1×<br>×           |  |   | FCC Part15   | <u>C - Above 1</u>  | <u>G AV</u>   |
|                 | 2 martine         | and a second and a |   | FCC Part15   | C - Above 1   | <u>G AV</u>   |
|                 |                   | nunenge Martine mutar politice   |   |  |   |   |
|                 | . www.where       | many Mallon and a sold with a  |   |  |   |   |
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|                 |                   |  |   |  |   |   |
|                 |                   |  |   |  |   |   |
|                 |                   |  |   |  |   |   |
| 2473.40         | 2485.40 24        | 197.40 (MHz)   | 2521.40                                 | 2533.40 2545   | 5.40 2557.4   | 40 2569.4   |
| quency<br>/IHz) | Reading<br>(dBu∀) | Factor<br>(dB/m)   | Level<br>(dBuV/m)                       | Limit<br>(dBuV/m)                                      | Margin<br>(dB)  | Detector  |
| 3.500           | 32.54             | 31.48  | 64.02                                   | 74.00  | -9.98   | peak  |
| 3 500           | 20.83             | 31.48  | 52.31                                   | 54.00  | -1.69   | AVG   |
| 8               | lHz)              | IHz) (dBu∨)<br>3.500 32.54   | IHz) (dBuV) (dB/m)<br>3.500 32.54 31.48 | IHz) (dBuV) (dB/m) (dBuV/m)<br>3.500 32.54 31.48 64.02 | IHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m)<br>3.500 32.54 31.48 64.02 74.00 | IHz)       (dBuV)       (dB/m)       (dBuV/m)       (dBuV/m)       (dB)         3.500       32.54       31.48       64.02       74.00       -9.98 |



| ΠC        | . Pol.   |                | Vert   | ical  |                |                       |             |      |                |                  |               |            |
|-----------|----------|----------------|--------|-------|----------------|-----------------------|-------------|------|----------------|------------------|---------------|------------|
| es        | t Mod    | le:            | 802    | 11g N | Node 2         | 2462MI                | Hz          |      |                |                  |               |            |
| 00.0      | ) dBu∖   | /m             |        |       |                |                       |             |      |                |                  |               |            |
| 0         |          | ~~~            |        |       |                |                       |             |      |                |                  |               |            |
| 0         | ſ        |                |        |       |                |                       |             |      |                | FCC Pa           | t15 C - Above | 1G PK      |
| 0         |          |                |        |       |                |                       |             |      |                |                  |               |            |
| 0         |          |                |        | 1×    |                |                       |             |      |                | FCC Par          | t15 C - Above | 1G AV      |
| o         |          |                |        |       |                |                       |             |      |                |                  |               |            |
| 0         |          |                |        | ¥.    | mound          | and the second second | mehan       | hand | Yee, Wayner Ma | herebenner       | normantani    | www.       |
| 0         |          |                |        |       |                |                       |             |      |                |                  |               |            |
| 0         |          |                |        |       |                |                       |             |      |                |                  |               |            |
| 0         |          |                |        |       |                |                       |             |      |                |                  |               |            |
| 0.0<br>24 | 49.400   | 2461.40 2      | 473.40 | 2485  | <b>.40 2</b> / | 497.40                | (MHz)       | 252  | 1.40           | 2533.40 2        | 545.40 255    | 7.40 2569. |
|           |          |                |        |       |                |                       |             |      |                |                  |               |            |
|           |          |                |        | _     |                |                       |             |      |                |                  |               |            |
| N         | lo.      | Freque<br>(MHz |        |       | ading<br>3u∨)  | Fac<br>(dB/           | ctor<br>/m) |      | vel<br>V/m)    | Limit<br>(dBuV/r |               | Detector   |
|           | lo.<br>1 |                | :)     | (dE   |                |                       | /m)         | (dBu |                |                  | m) (dB)       | Delector   |



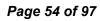
| Ant. | Pol.   |                   | Hori   | zonta     | al                     |                    |              |          |                        |                         |        |                |           |
|------|--------|-------------------|--------|-----------|------------------------|--------------------|--------------|----------|------------------------|-------------------------|--------|----------------|-----------|
| Test | Mod    | de:               | 802.   | 11n(      | HT20)                  | Mode               | 2412         | ИНz      |                        |                         |        |                |           |
| 110. | ) dBu  | V/m               |        |           |                        |                    |              |          |                        |                         |        |                |           |
| 100  |        |                   |        |           |                        |                    |              |          |                        |                         |        |                |           |
| 90   |        |                   |        |           |                        |                    |              |          |                        |                         |        | $\frown$       |           |
| 80   |        |                   |        |           |                        |                    |              |          |                        | FCC                     | Part15 | C - Above 10   | G PK      |
| 70   |        |                   |        |           |                        |                    |              |          |                        |                         |        |                | - L       |
| 60   |        |                   |        |           |                        |                    |              |          |                        | ↓<br>¥ <mark>FCC</mark> | Part15 | C - Above 1    | GAV       |
| 50   |        |                   |        |           |                        |                    |              |          |                        | 3                       |        |                |           |
| 40   |        | unter months with | manun  | week-come | and and a second state | Kneen              | mandlehre    | Lundmahn | والمعراب ليعطر وروادهم | and a second            |        |                |           |
| 30   |        |                   |        |           |                        |                    |              |          |                        | _                       |        |                |           |
| 20   |        |                   |        |           |                        |                    |              |          |                        | _                       |        |                |           |
| 10.0 | 04 800 | 2316.80 2         | 328.80 | 234       | 10.80 2                | 352.80             | (MHz)        | 237      | 6.80 2                 | 2388.80                 | 2400.  | 80 2412.8      | 0 2424.80 |
|      |        |                   |        |           |                        | 1                  |              | 1        |                        |                         |        |                |           |
| N    | o.     | Frequer<br>(MHz   |        |           | ading<br>BuV)          |                    | ctor<br>8/m) |          | vel<br>iV/m)           | Lin<br>(dBu)            |        | Margin<br>(dB) | Detector  |
| 1    |        | 2390.0            | 00     | 2         | 7.06                   | 31                 | .31          | 58       | .37                    | 74.                     | 00     | -15.63         | peak      |
| 2    | *      | 2390.0            | 00     | 14        | 4.28                   | 31                 | .31          | 45       | .59                    | 54.                     | 00     | -8.41          | AVG       |
|      |        |                   |        |           |                        |                    |              |          |                        |                         |        |                |           |
|      | narks  | :<br>(dD/ma) = /  |        |           |                        | ( <del>م</del> ه / |              |          |                        |                         |        | fier Feet      |           |

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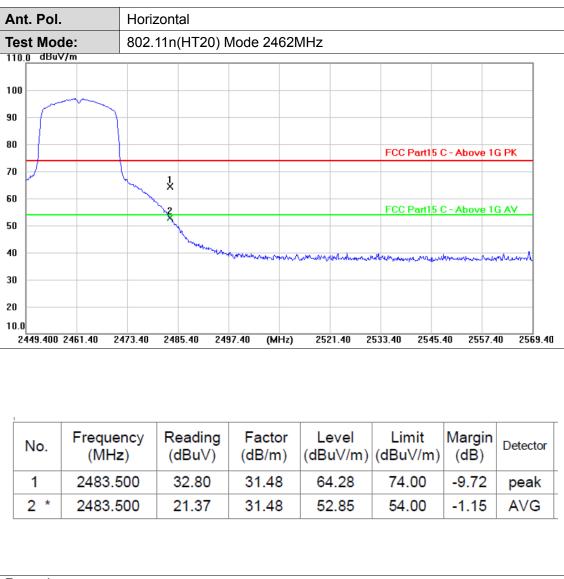


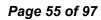
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| Ant. Pol. |            |                | Verti  | cal                                      |                      |                              |                   |                |          |
|-----------|------------|----------------|--|--|----------------------|------------------------------|-------------------|----------------|----------|
| es        | t Mo       | de:            | 802.   | 11n(HT20) l                              | Mode 2412            | MHz                          |                   |                |          |
| 00.0      | ) dBu      | V/m            |  |  |                      |                              |                   |                |          |
|           |            |                |  |  |                      |                              |                   |                |          |
| 0         |            |                |  |  |                      |                              |                   |                |          |
| 0         |            |                |  |  |                      |                              | FCC Part15 (      | - Ahove 1(     | 3 PK     |
| 0         |            |                |  |  |                      |                              |                   |                |          |
|           |            |                |  |  |                      |                              |                   |                |          |
| 0         |            |                |  |  |                      |                              | CC Part15         | C-Above 10     | SAV      |
| 0         |            |                |  |  |                      |                              |                   |                |          |
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|           | R. Mar Mar | mangeneration  | and the second | an a | www.alline.com.allin | algen and the second and the | www.              |                |          |
| 0         |            |                |  |  |                      |                              |                   |                |          |
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| 0.0       |            |                |  |  |                      |                              |                   |                |          |
| 23        | 04.000     | 2316.00 2      | 328.00   | 2340.00 23                               | 52.00 (MHz)          | 2376.00 2                    | 388.00 2400.      | 00 2412.0      | 0 2424.0 |
| N         | 10.        | Freque<br>(MHz |  | Reading<br>(dBuV)                        | Factor<br>(dB/m)     | Level<br>(dBuV/m)            | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
|           | 1          | 2390.0         | 00   | 23.88                                    | 31.31                | 55.19                        | 74.00             | -18.81         | peak     |
| 2         | 2 *        | 2390.0         | 00   | 6.90                                     | 31.31                | 38.21                        | 54.00             | -15.79         | AVG      |
|           |            |                |  |  |                      |                              |                   |                |          |











| nt. Po    | I.             | Verti  | cal               |                  |                                   |                   |                |                   |
|-----------|----------------|--------|-------------------|------------------|-----------------------------------|-------------------|----------------|-------------------|
| est Mo    | ode:           | 802.   | 11n(HT20)         | Mode 2462        | MHz                               |                   |                |                   |
| 0.0 dB    | uV/m           |        |                   |                  |                                   |                   |                |                   |
|           |                |        |                   |                  |                                   |                   |                |                   |
| $\square$ |                |        |                   |                  |                                   | FCC Part15        | C - Above 1    | G PK              |
|           |                |        |                   |                  |                                   |                   |                |                   |
|           |                | L      | 1×                |                  |                                   | FCC Part15        | C - Above 1    | GAV               |
|           |                | - No   | Lu                |                  |                                   |                   |                |                   |
|           |                |        | ₹.                |                  |                                   |                   |                |                   |
|           |                |        | March and and     | umanue Malahana  | Mar Mar and a second and a second | maruhanahanah     | manun          | en and the second |
|           |                |        |                   |                  |                                   |                   |                |                   |
|           |                |        |                   |                  |                                   |                   |                |                   |
|           |                |        |                   |                  |                                   |                   |                |                   |
| .0        |                |        |                   |                  |                                   |                   |                |                   |
|           | 0 2461.40 2    | 473.40 | 2485.40 2         | 497.40 (MHz)     | 2521.40                           | 2533.40 2545      | .40 2557.      | 40 2569.          |
| No.       | Freque<br>(MHz | -      | Reading<br>(dBuV) | Factor<br>(dB/m) | Level<br>(dBuV/m)                 | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector          |
| 1         | 2483.5         | 00     | 24.70             | 31.48            | 56.18                             | 74.00             | -17.82         | peak              |
|           | 2483.5         | 00     | 11.33             | 31.48            | 42.81                             | 54.00             | -11.19         | AVG               |
| 2 *       |                |        |                   |                  |                                   |                   |                |                   |
| 2 *       |                |        |                   |                  |                                   |                   |                |                   |

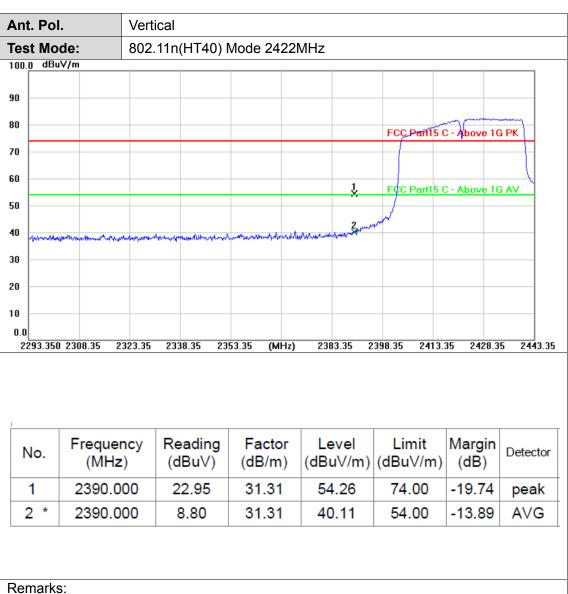
2.Margin value = Level -Limit value

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| nt. Po | I.                      | Horiz      | zontal                          |                                     |                     |                   |                |          |
|--------|-------------------------|------------|---------------------------------|-------------------------------------|---------------------|-------------------|----------------|----------|
| est Mo | de:                     | 802.       | 11n(HT40)                       | Mode 2422                           | MHz                 |                   |                |          |
| 0.0 dB | uV/m                    |            | ,                               |                                     |                     |                   |                |          |
|        |                         |            |                                 |                                     |                     |                   |                |          |
| 00     |                         |            |                                 |                                     |                     |                   |                |          |
| ı      |                         |            |                                 |                                     |                     |                   | ~~~            |          |
| ı      |                         |            |                                 |                                     |                     | FCC Part15        | C. About 1     | C DK     |
| , ⊨    |                         |            |                                 |                                     |                     | FGC Partis        | C-ADOVE I      |          |
|        |                         |            |                                 |                                     | 1                   |                   |                | 1        |
| )      |                         |            |                                 |                                     | ×                   | FCC Part15        | C - Above 1    | G AV     |
| )      |                         |            |                                 |                                     | 3mm                 |                   |                |          |
| )      | Mandar Marchar Marchart | 1000 maria | when have been the of the owned | sh malada and an a far and a second | + Langer and Longer |                   |                |          |
| ,      |                         |            |                                 |                                     |                     |                   |                |          |
|        |                         |            |                                 |                                     |                     |                   |                |          |
| ).0    |                         |            |                                 |                                     |                     |                   |                |          |
|        | 0 2308.75               | 2323.75    | 2338.75 23                      | 53.75 (MHz)                         | 2383.75             | 2398.75 2413      | .75 2428.      | 75 2443. |
| No.    | Freque<br>(MH:          |            | Reading<br>(dBuV)               | Factor<br>(dB/m)                    | Level<br>(dBuV/m)   | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
| 1      | 2390.0                  | 000        | 27.95                           | 31.31                               | 59.26               | 74.00             | -14.74         | peak     |
| 2 *    | 2390.0                  | 000        | 15.27                           | 31.31                               | 46.58               | 54.00             | -7.42          | AVG      |
|        |                         |            |                                 |                                     |                     |                   |                |          |

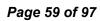




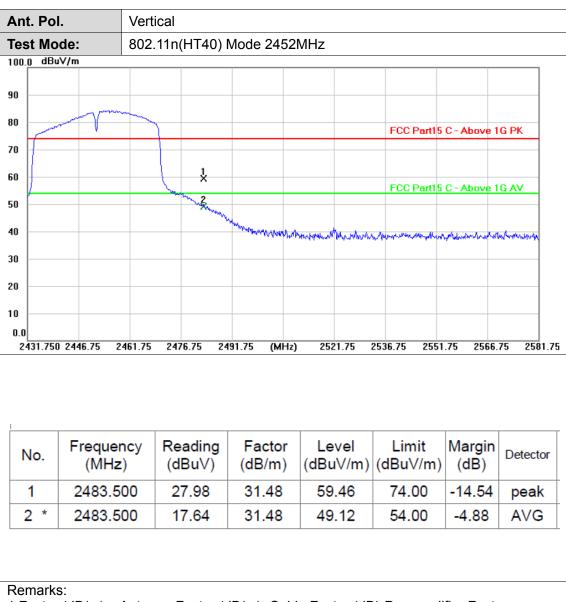


| nt. Po               | I.              | Horiz  | ontal        |        |                  |                   |                                |                      |              |
|----------------------|-----------------|--------|--------------|--------|------------------|-------------------|--------------------------------|----------------------|--------------|
| est Mo               | ode:            | 802.1  | 1n(H         | Γ40) I | Mode 2452        | 2MHz              |                                |                      |              |
| 10. <u>0</u> dB      | uV/m            |        |              |        |                  | 1                 |                                |                      |              |
| 00                   |                 |        |              |        |                  |                   |                                |                      |              |
|                      |                 |        | 7            |        |                  |                   |                                |                      |              |
| )   <del>   </del> - |                 |        |              |        |                  |                   | FCC Part15                     | C - Above 1          | G PK         |
|                      |                 |        |              | ł      |                  |                   |                                |                      |              |
| )                    |                 |        | L.           | ~      |                  |                   | FCC Part15                     | C - Above 1          | GAV          |
| · Ě                  |                 |        |              | - Aler | v,               |                   |                                |                      |              |
| ı                    |                 |        |              |        | mar and sugar    | -                 | water and a state of the state | drama na mana ang ka | handbortoman |
|                      |                 |        |              |        |                  |                   |                                |                      |              |
| ı                    |                 |        |              |        |                  |                   |                                |                      |              |
| ).0                  | 0 2444.50 2     | 459.50 | 2474.5       |        | 189.50 (MHz      | ) 2519.50         |                                |                      |              |
|                      |                 |        |              |        |                  |                   |                                |                      |              |
| No.                  | Frequer<br>(MHz |        | Read<br>(dBu |        | Factor<br>(dB/m) | Level<br>(dBuV/m) | Limit<br>(dBuV/m)              | Margin<br>(dB)       | Detector     |
| 1                    | 2483.5          | 00     | 34.3         | 33     | 31.48            | 65.81             | 74.00                          | -8.19                | peak         |
| 2 *                  | 2483.5          | 00     | 19.9         | 93     | 31.48            | 51.41             | 54.00                          | -2.59                | AVG          |
|                      |                 |        |              |        |                  |                   |                                |                      |              |

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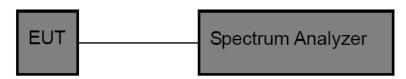


# 3.4. Band edge and Spurious Emissions (Conducted)

## <u>Limit</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

## Test Configuration



## Test Procedure

- 1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
- 2. Set to the maximum power setting and enable the EUT transmit continuously
- Use the following spectrum analyzer settings: RBW = 100 kHz, VBW ≥ RBW, scan up through 10<sup>th</sup> harmonic. Sweep = auto, Detector function = peak, Trace = max hold
- Measure and record the results in the test report.

## Test Mode

Please refer to the clause 2.4.

## Test Results

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## (1) Band edge Conducted Test

| Test Mode     | Test Frequency | Ref Level[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---------------|----------------|----------------|-------------|------------|---------|
| 902 11b       | 2412           | 9.38           | -38.17      | ≤-20.62    | PASS    |
| 802.11b       | 2462           | 8.75           | -51.83      | ≤-21.25    | PASS    |
| 902 11 a      | 2412           | 6.05           | -26.36      | ≤-23.95    | PASS    |
| 802.11g       | 2462           | 5.99           | -32.28      | ≤-24.02    | PASS    |
| 902 11p(UT20) | 2412           | 5.97           | -27.33      | ≤-24.03    | PASS    |
| 802.11n(HT20) | 2462           | 5.49           | -35.66      | ≤-24.51    | PASS    |
| 902 11p(UT40) | 2422           | 2.14           | -31.62      | ≤-27.86    | PASS    |
| 802.11n(HT40) | 2452           | 2.15           | -29.14      | ≤-27.85    | PASS    |







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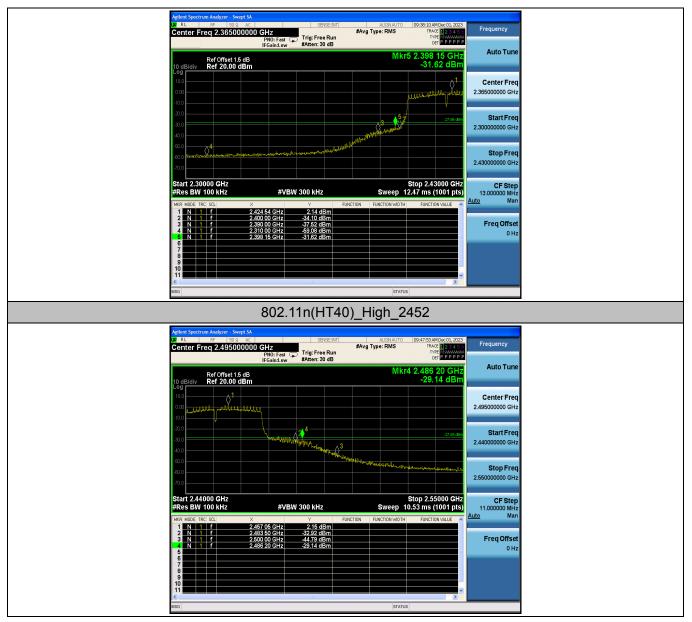






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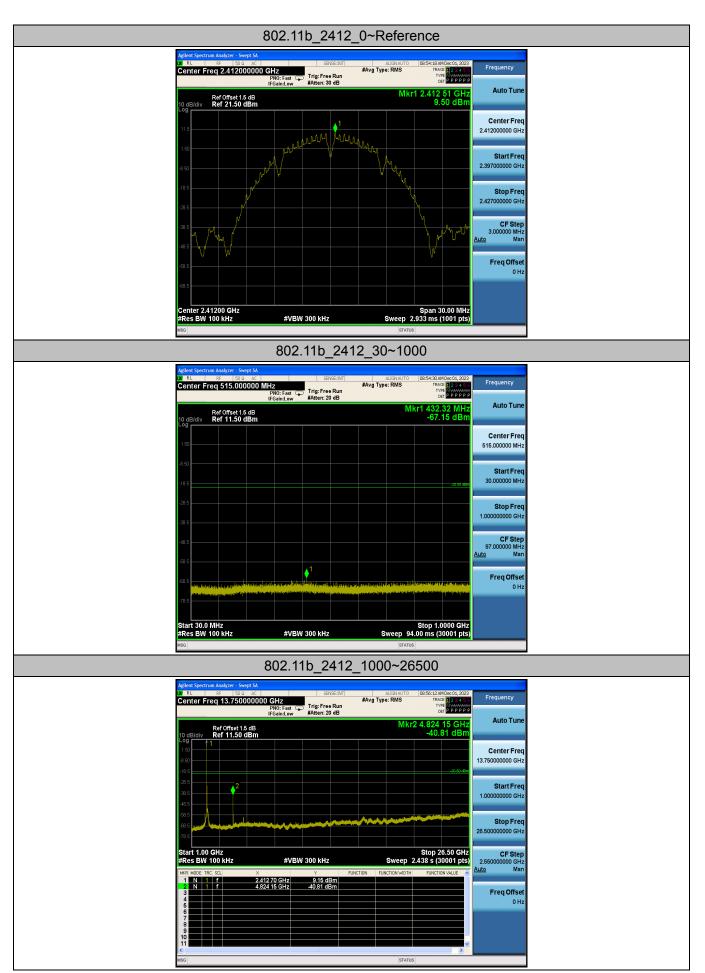


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# (2) Conducted Spurious Emissions Test

| Test Mode     | Frequency[MHz] | Freq Range<br>[Mhz] | RefLevel<br>[dBm]  | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|---------------|----------------|---------------------|--|-----------------|----------------|---------|
|               |                | Reference           | 9.50   | 9.50            |                | PASS    |
|               | 2412           | 30~1000             | 9.50   | -67.15          | ≤-20.5         | PASS    |
|               |                | 1000~26500          | 9.50   | -40.81          | ≤-20.5         | PASS    |
|               |                | Reference           | 8.95   | 8.95            |                | PASS    |
| 802.11b       | 2437           | 30~1000             | 8.95   | -66.64          | ≤-21.05        | PASS    |
|               |                | 1000~26500          | 8.95   | -41.41          | ≤-21.05        | PASS    |
|               |                | Reference           | 9.23   | 9.23            |                | PASS    |
|               | 2462           | 30~1000             | 9.23   | -67.37          | ≤-20.77        | PASS    |
|               |                | 1000~26500          | 9.23   | -44.3           | ≤-20.77        | PASS    |
|               |                | Reference           | 6.08   | 6.08            |                | PASS    |
|               | 2412           | 30~1000             | 6.08   | -67.38          | ≤-23.92        | PASS    |
|               |                | 1000~26500          | 6.08   | -51.09          | ≤-23.92        | PASS    |
|               |                | Reference           | 6.31   | 6.31            |                | PASS    |
| 802.11g       | 2437           | 30~1000             | $6.31$ $6.31$ $$ $6.31$ $-67.16$ $\leq -23.6$ $6.31$ $-53.37$ $\leq -23.6$ $5.57$ $5.57$ $$ $5.57$ $-67.74$ $\leq -24.6$ | ≤-23.69         | PASS           |         |
|               |                | 1000~26500          | 6.31   | -53.37          | ≤-23.69        | PASS    |
|               |                | Reference           | 5.57   | 5.57            |                | PASS    |
|               | 2462           | 30~1000             | 5.57   | -67.74          | ≤-24.43        | PASS    |
|               |                | 1000~26500          | 5.57   | -54.89          | ≤-24.43        | PASS    |
|               |                | Reference           |  |                 | PASS           |         |
|               | 2412           | 30~1000             | 6.08   | -67.59          | ≤-23.92        | PASS    |
|               |                | 1000~26500          | 6.08   | -51.95          | ≤-23.92        | PASS    |
|               |                | Reference           | 5.73   | 5.73            |                | PASS    |
| 802.11n(HT20) | 2437           | 30~1000             | 5.73   | -68.02          | ≤-24.27        | PASS    |
|               |                | 1000~26500          | 5.73   | -55.1           | ≤-24.27        | PASS    |
|               |                | Reference           | 5.86   | 5.86            |                | PASS    |
|               | 2462           | 30~1000             | 5.86   | -67.67          | ≤-24.14        | PASS    |
|               |                | 1000~26500          | 5.86   | -54.83          | ≤-24.14        | PASS    |
|               |                | Reference           | 2.00   | 2.00            |                | PASS    |
|               | 2422           | 30~1000             | 2.00   | -68.34          | ≤-28           | PASS    |
|               |                | 1000~26500          | 2.00   | -55.07          | ≤-28           | PASS    |
|               |                | Reference           | 1.98   | 1.98            |                | PASS    |
| 802.11n(HT40) | 2437           | 30~1000             | 1.98   | -68.41          | ≤-28.02        | PASS    |
|               |                | 1000~26500          | 1.98   | -54.52          | ≤-28.02        | PASS    |
|               |                | Reference           | 2.14   | 2.14            |                | PASS    |
|               | 2452           | 30~1000             | 2.14   | -67.05          | ≤-27.86        | PASS    |
|               |                | 1000~26500          | 2.14   | -55.19          | ≤-27.86        | PASS    |



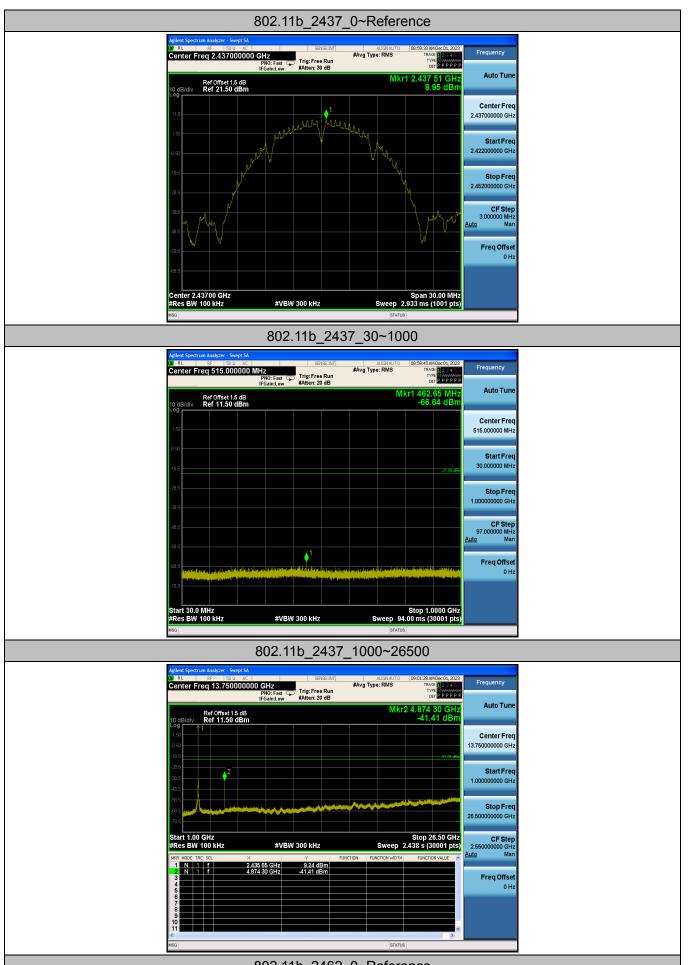




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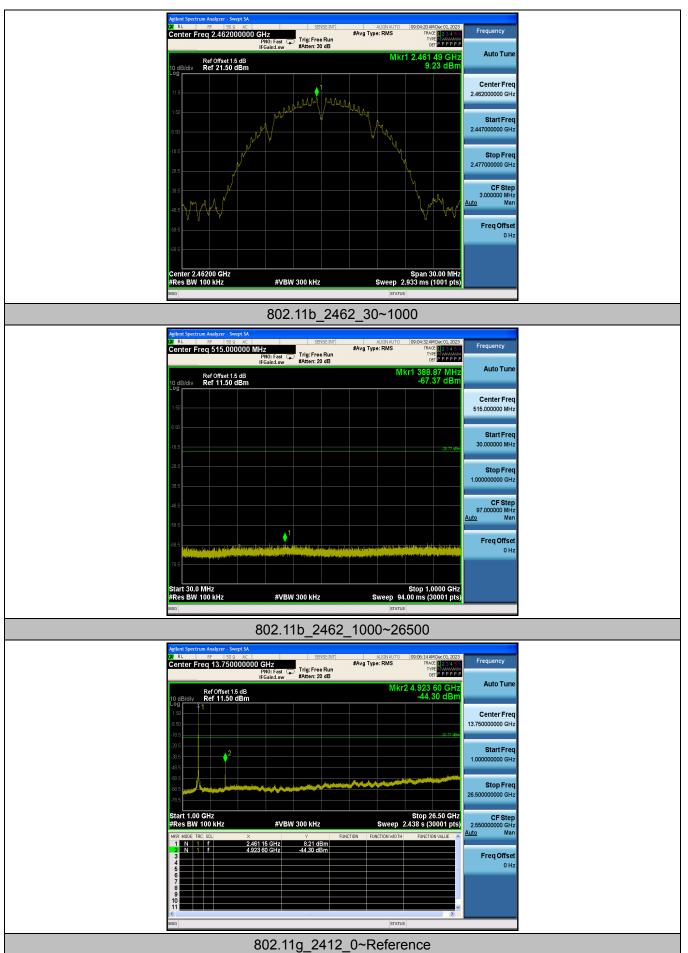


802.11b\_2462\_0~Reference

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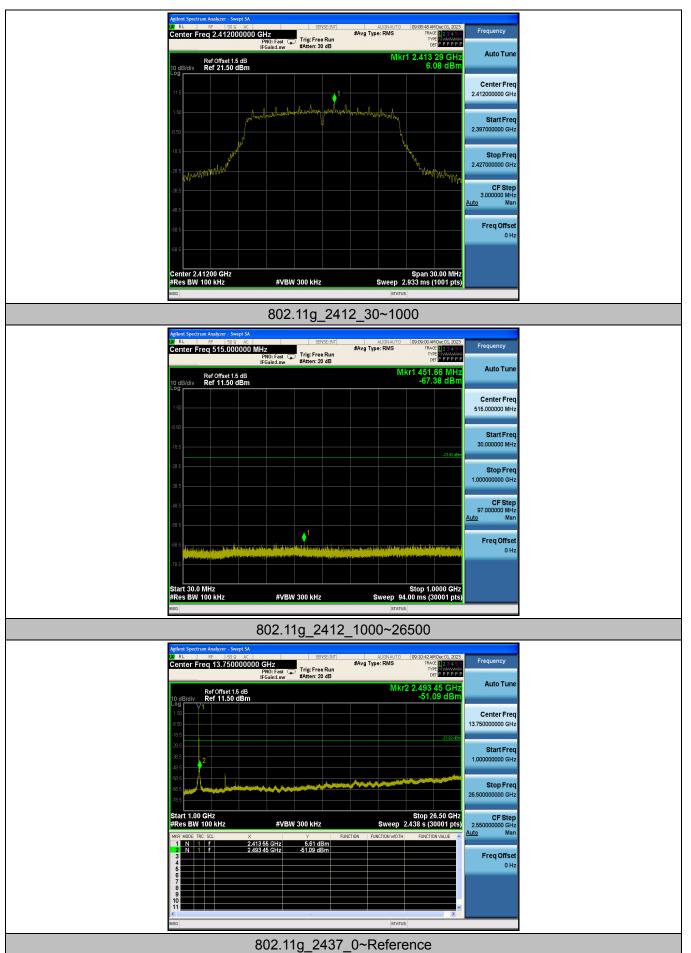
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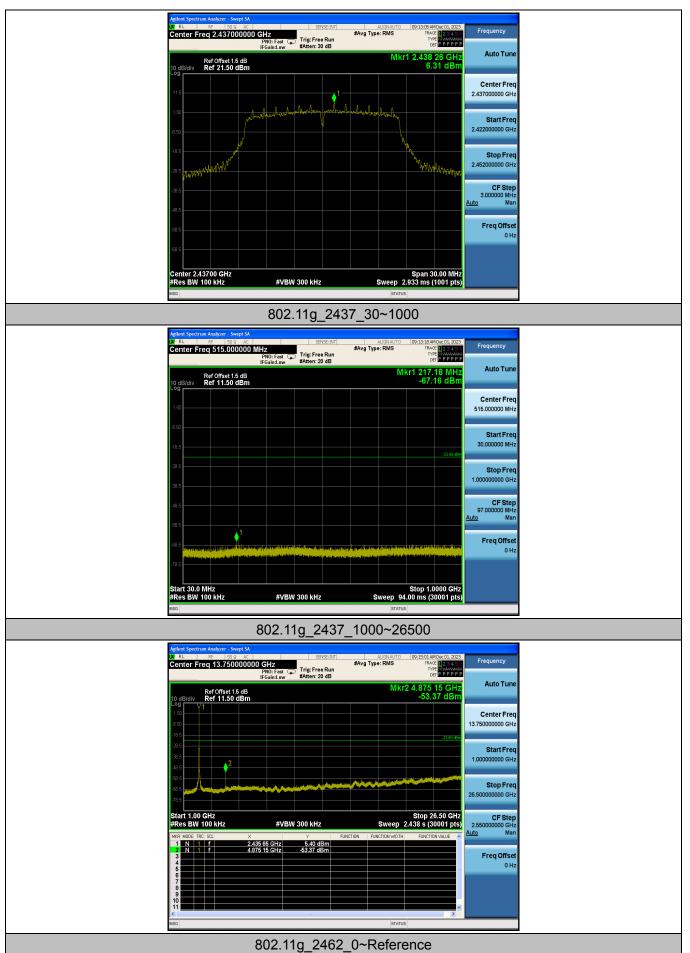






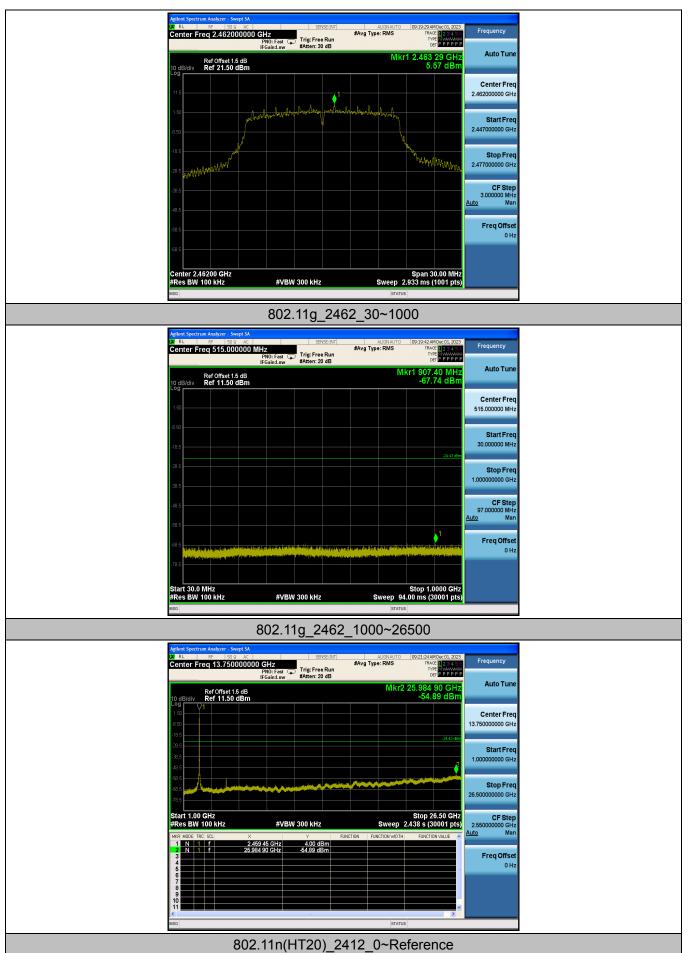








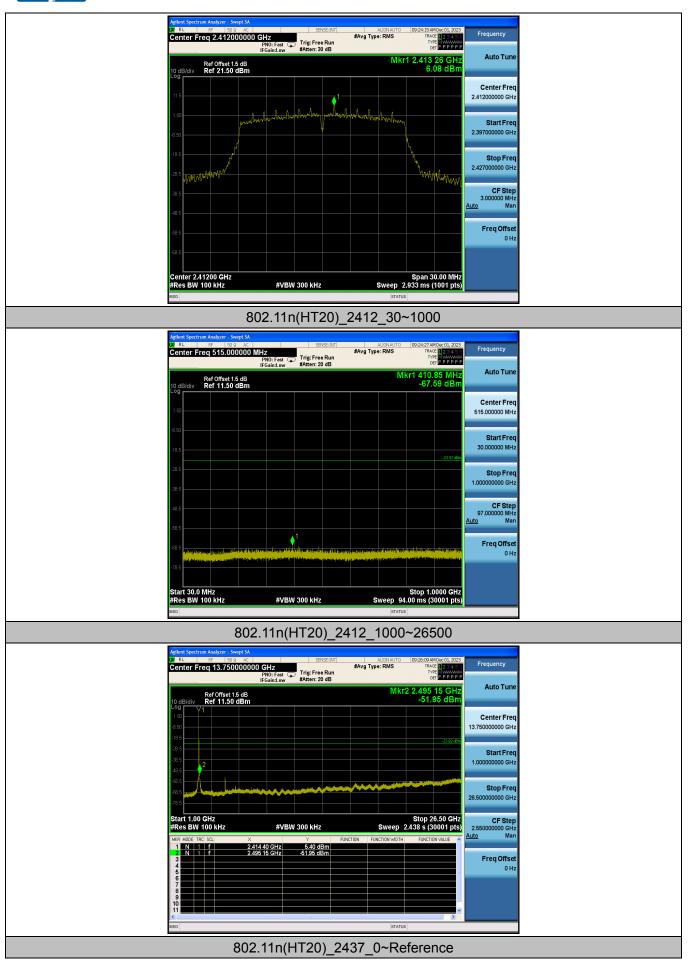






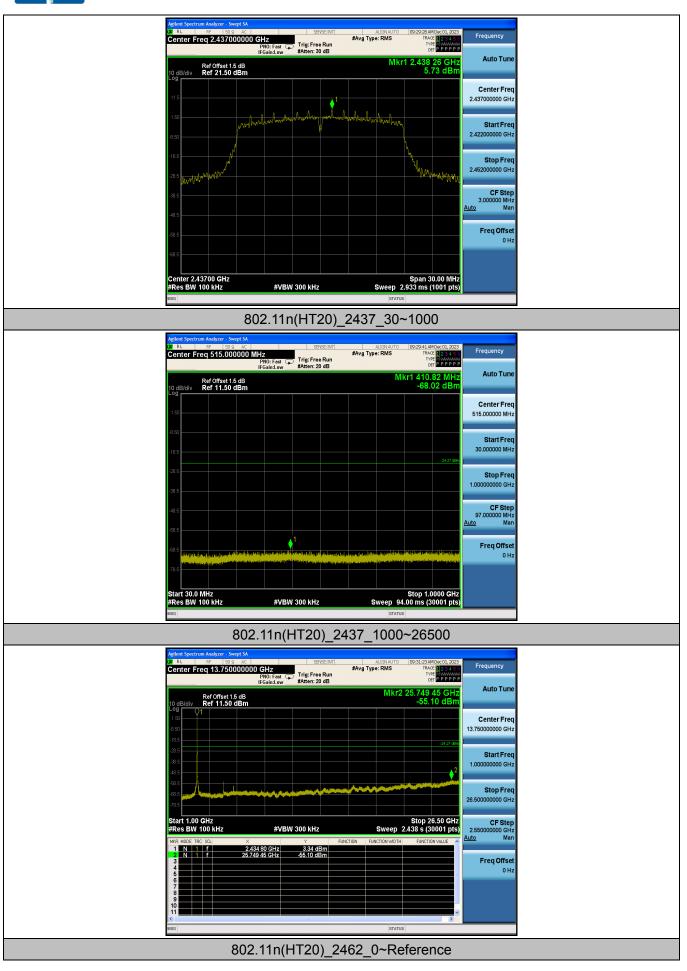








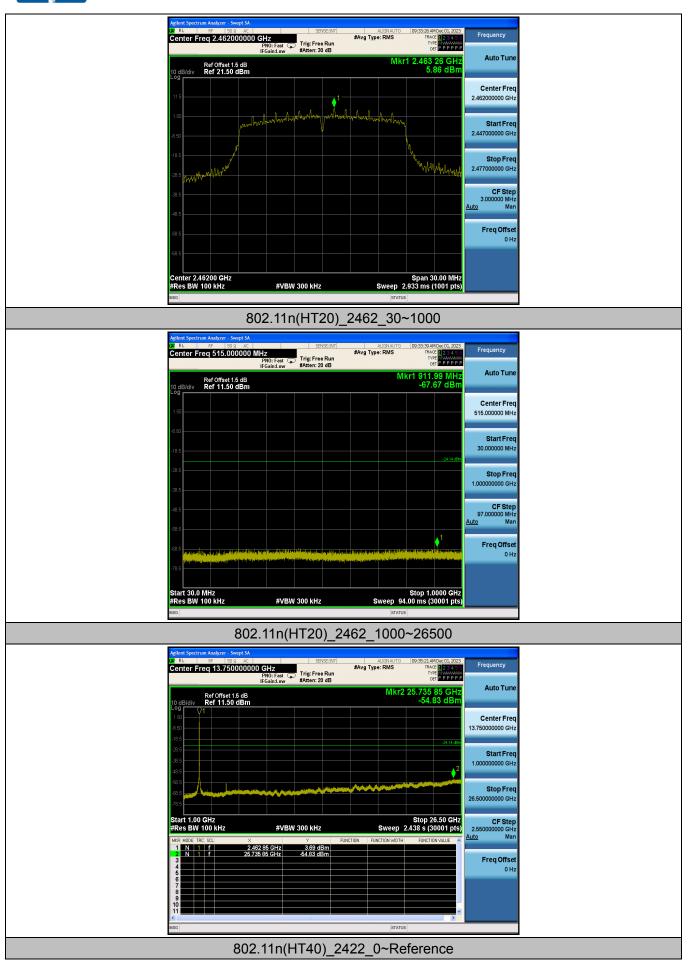






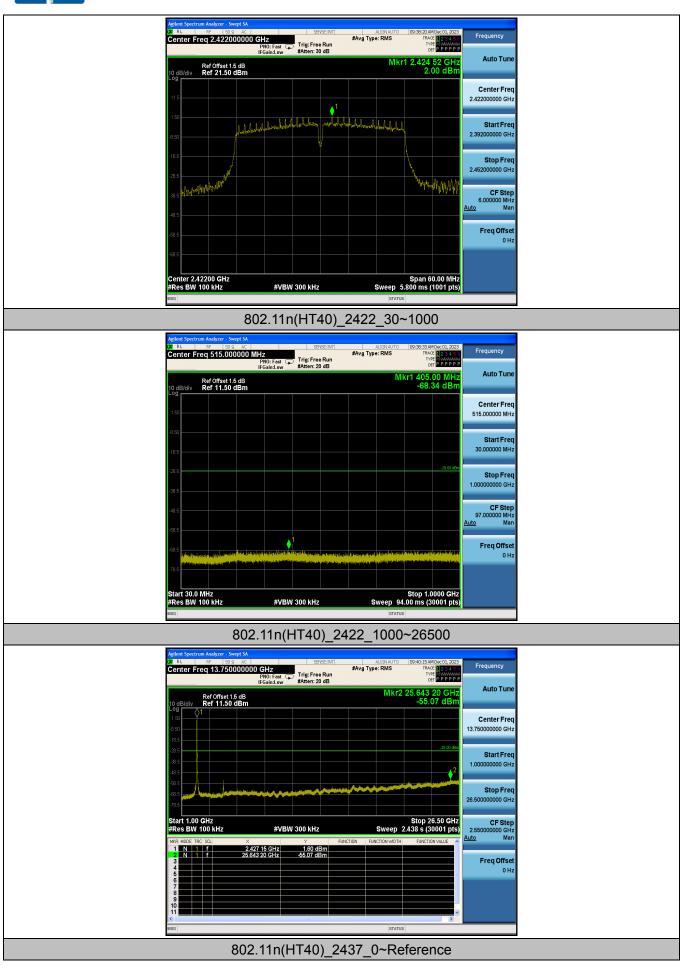






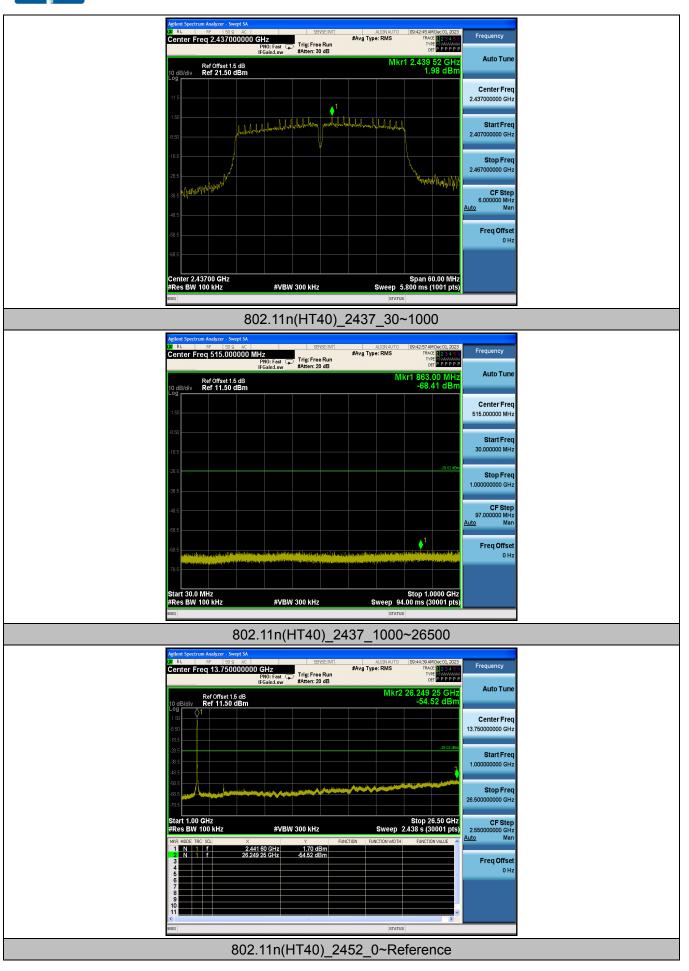










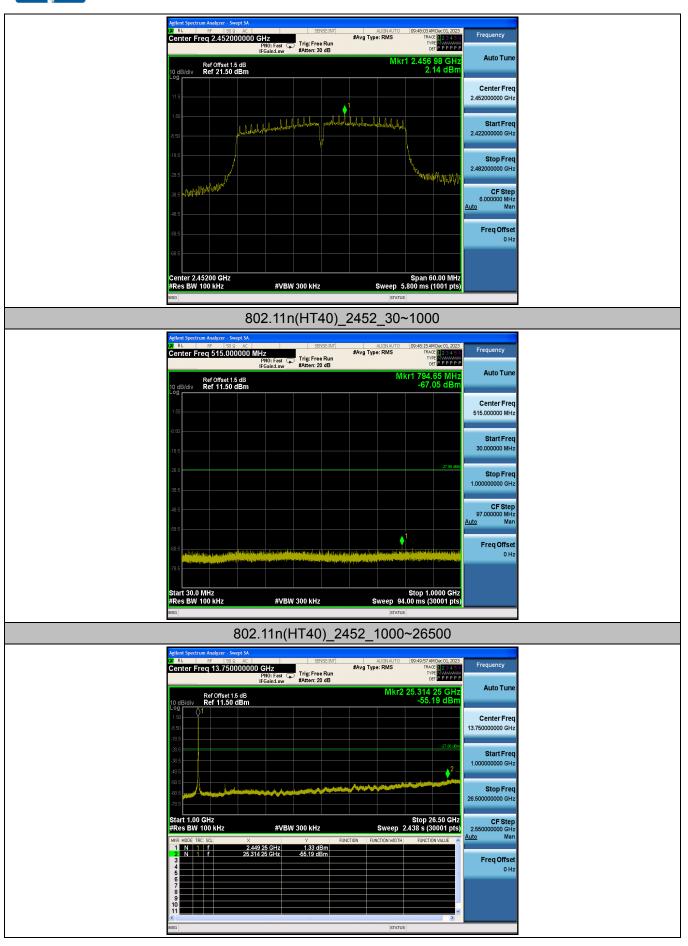








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## 3.5. DTS Bandwidth

<u>Limit</u>

#### FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2)/ RSS-247 5.2 a:

| Test Item     | Limit                        | Frequency Range(MHz) |
|---------------|------------------------------|----------------------|
| DTS Bandwidth | >=500 KHz<br>(6dB bandwidth) | 2400~2483.5          |

### Test Configuration



#### Test Procedure

- 5. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- 6. DTS Spectrum Setting:
  - (1) Set RBW = 100 kHz.
  - (2) Set the video bandwidth (VBW)  $\geq$  3 RBW.
  - (3) Detector = Peak.
  - (4) Trace mode = Max hold.
  - (5) Sweep = Auto couple.
  - OCB Spectrum Setting:
  - (1) Set RBW =  $1\% \sim 5\%$  occupied bandwidth.
  - (2) Set the video bandwidth (VBW)  $\ge$  3 RBW.
  - (3) Detector = Peak.
  - (4) Trace mode = Max hold.
  - (5) Sweep = Auto couple.

NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

#### Test Mode

Please refer to the clause 2.4.



#### **Test Results**

| Test Mode     | Channel | DTS BW [MHz] | Limit [MHz] | Verdict |
|---------------|---------|--------------|-------------|---------|
| 802.11b       | 2412    | 8.080        | >=0.5       | PASS    |
|               | 2437    | 8.080        | >=0.5       | PASS    |
|               | 2462    | 7.600        | >=0.5       | PASS    |
| 802.11g       | 2412    | 15.080       | >=0.5       | PASS    |
|               | 2437    | 15.120       | >=0.5       | PASS    |
|               | 2462    | 15.120       | >=0.5       | PASS    |
| 802.11n(HT20) | 2412    | 15.120       | >=0.5       | PASS    |
|               | 2437    | 15.640       | >=0.5       | PASS    |
|               | 2462    | 15.120       | >=0.5       | PASS    |
| 802.11n(HT40) | 2422    | 35.120       | >=0.5       | PASS    |
|               | 2437    | 35.360       | >=0.5       | PASS    |
|               | 2452    | 35.120       | >=0.5       | PASS    |







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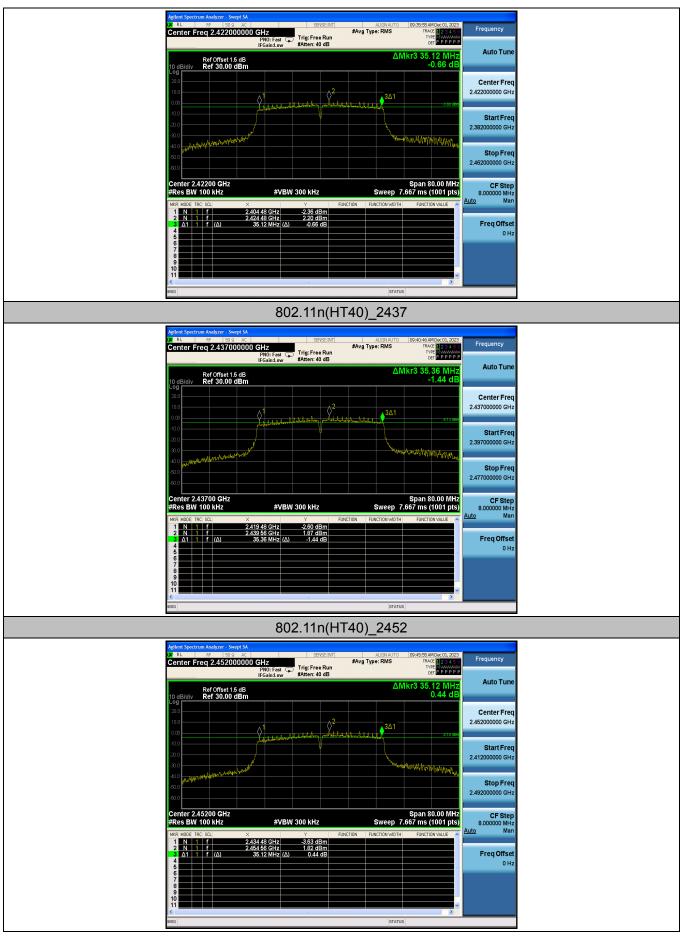
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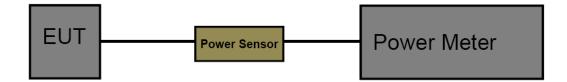
# 3.6. Maximum Conducted Output Power

<u>Limit</u>

#### FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3)/ RSS-247 5.4:

| Section                 | Test Item                         | Limit           | Frequency Range(MHz) |
|-------------------------|-----------------------------------|-----------------|----------------------|
| CFR 47 FCC 15.247(b)(3) | Maximum conducted<br>output power | 1 Watt or 30dBm | 2400~2483.5          |
| ISED RSS-247 5.4 d      | EIRP                              | 4 Watt or 36dBm | 2400~2483.5          |

### Test Configuration



#### Test Procedure

- 1. The maximum conducted output power may be measured using a broadband RF power meter.
- 2. Power measurements were performed only when the EUT was transmitting at its AVG power control level using a broadband power meter with a pulse sensor.
- 3. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.
- 4. Record the measurement data.

#### <u>Test Mode</u>

Please refer to the clause 2.4.

#### Test Result



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| Test Mode     | Channel | Result Avg [dBm] | Limit [dBm] | Verdict |
|---------------|---------|------------------|-------------|---------|
| 802.11b       | 2412    | 15.41            | <=30        | PASS    |
|               | 2437    | 15.22            | <=30        | PASS    |
|               | 2462    | 15.22            | <=30        | PASS    |
| 802.11g       | 2412    | 14.12            | <=30        | PASS    |
|               | 2437    | 14.33            | <=30        | PASS    |
|               | 2462    | 14.13            | <=30        | PASS    |
| 802.11n(HT20) | 2412    | 14.00            | <=30        | PASS    |
|               | 2437    | 13.74            | <=30        | PASS    |
|               | 2462    | 13.57            | <=30        | PASS    |
| 802.11n(HT40) | 2422    | 13.19            | <=30        | PASS    |
|               | 2437    | 13.13            | <=30        | PASS    |
|               | 2452    | 12.83            | <=30        | PASS    |

Note: Test results increased RF cable loss by 1.5dB and Duty Cycle Factor.



# 3.7. Power Spectral Density

### <u>Limit</u>

#### FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e)/ RSS-247 5.2 b:

| Test Item              | Limit              | Frequency Range(MHz) |
|------------------------|--------------------|----------------------|
| Power Spectral Density | 8dBm(in any 3 kHz) | 2400~2483.5          |

#### **Test Configuration**



#### Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

2. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v05r02.

3. Spectrum Setting:

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: 3 kHz

Set the VBW to: 10 kHz

Detector: PK

Sweep time: Auto

Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

#### Test Mode

Please refer to the clause 2.4.

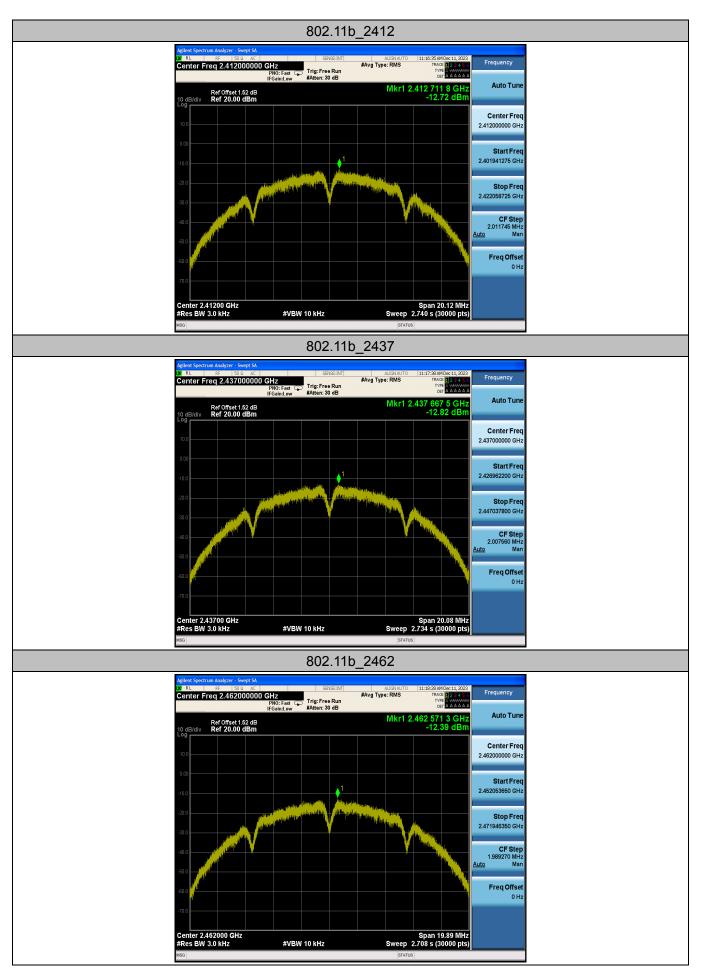


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| Test Mode     | Channel | Result [dBm/3kHz] | Limit [dBm/3kHz] | Verdict |
|---------------|---------|-------------------|------------------|---------|
| 802.11b       | 2412    | -12.72            | <=8              | PASS    |
|               | 2437    | -12.82            | <=8              | PASS    |
|               | 2462    | -12.40            | <=8              | PASS    |
| 802.11g       | 2412    | -15.98            | <=8              | PASS    |
|               | 2437    | -16.00            | <=8              | PASS    |
|               | 2462    | -15.76            | <=8              | PASS    |
| 802.11n(HT20) | 2412    | -16.37            | <=8              | PASS    |
|               | 2437    | -16.27            | <=8              | PASS    |
|               | 2462    | -16.15            | <=8              | PASS    |
| 802.11n(HT40) | 2422    | -19.23            | <=8              | PASS    |
|               | 2437    | -19.25            | <=8              | PASS    |
|               | 2452    | -18.75            | <=8              | PASS    |

Note: Test results increased Duty Cycle Factor.

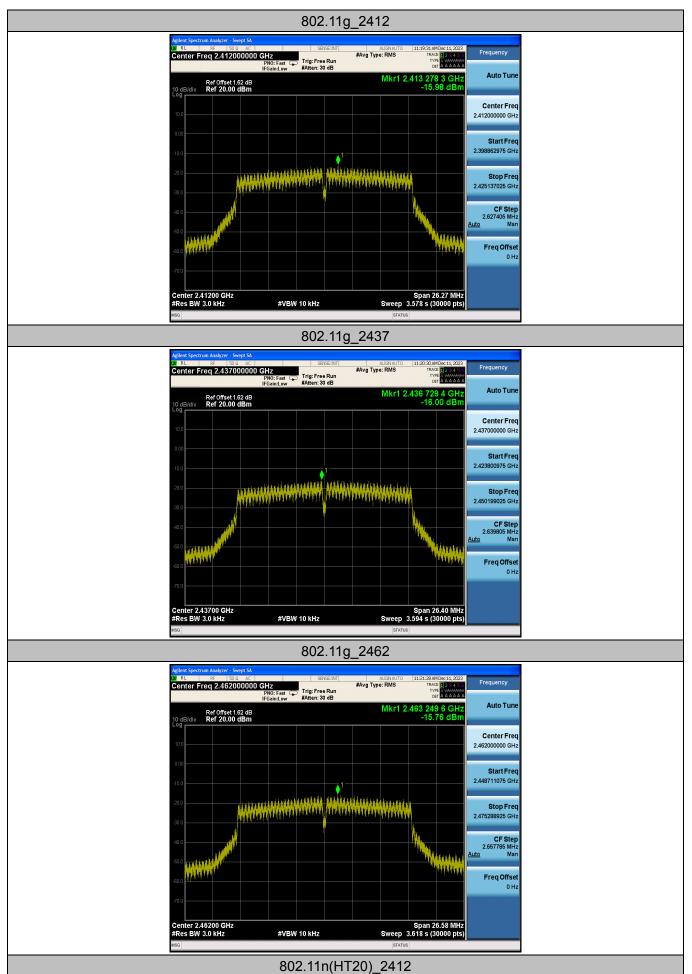






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