# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| Applicant…… | : | Robert Bosch GmbH |
| Address…….... | : | Robert-Bosch-Platz 1, 70839 Gerlingen, Germany |
| Manufacturer…….. | : | Robert Bosch GmbH |
| Address…….... | : | Robert-Bosch-Platz 1, 70839 Gerlingen, Germany |
| Factory 1..... | : | Robert Bosch Malaysia |
| Address ..... | : | Phase 1 – Free Industrial Zone, 11900 Bayan Lepas, Penang, Malaysia |
| Factory 2..... | : | Bosch Automotive Electronics India Pvt.Ltd. |
| Address ..... | : | Hangar 703 Naganathapura, Electronic city PO, Bengaluru - 560100 |
| Product Name…… | : | Multimedia device with Bluetooth and WLAN |
| Brand Name…….... | : | BOSCH |
| Model No. …….. | : | 71U0 |
| FCC ID…….... | : | 2AUXS-71U0 |
| Measurement Standard…. | : | 47 CFR FCC PART 15 Subpart E (section 407) |
| Receipt Date of Samples…. | : | February 18, 2025 |
| Date of Tested…… | : | February 18, 2025 to March 24, 2025 |
| Date of Report…… | : | March 25, 2025 |

This report shows that above equipment is technically compliant with the requirements of the standards above. All test results in this report apply only to the tested sample(s). Without prior written approval of Dongguan Nore Testing Center Co., Ltd, this report shall not be reproduced except in full.

Prepared by

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Approved by

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## Table of Contents

## Revision History

| Report Number | Description | Issued Date |
|---|---|---|
| NTC2502409FV00 | Initial Issue | 2025-03-25 |
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# 1. Summary of Test Result

| FCC Rules | Description of Test | Result | Remarks |
|---|---|---|---|
| §15.207 (a) | AC Power Conducted Emission | N/A | See Note |
| §15.407(a) | Max. Conducted Output Power | PASS | --- |
| §15.407(a) | 26dB Spectrum Bandwidth and 99% Occupied Bandwidth | PASS | --- |
| §15.407(e) | 6dB Bandwidth | PASS | --- |
| §15.407(a) | Power Spectral Density | PASS | --- |
| §15.407(b) §15.205 | Radiated Emissions | PASS | --- |
| §15.407(b) | Band Edge Emissions | PASS | --- |
| §15.407(g) | Frequency Stability | PASS | --- |
| §15.203 | Antenna Requirement | PASS | --- |
| §15.407(h) | Dynamic Frequency Selection | N/A | See Note |

Note 1: The device is designed for vehicle environment using and cannot connect to the public low-voltage network.

Note 2: This test only applies to the device support DFS band.

## 2. General Description of EUT

| Product Information | |
|---|---|
| Product name: | Multimedia device with Bluetooth and WLAN |
| Main Model Name: | 71U0 |
| Additional Model Name: | N/A |
| Model Difference: | N/A |
| S/N: | 4c8117b1 (conducted sample) / 60c50fde (radiated sample) |
| Brand Name | BOSCH |
| Hardware version: | DA3-002 |
| Software version: | D3I_51.6(S3R-01-00 (2024-51-6)) |
| Rating: | DC 10V to 16 V come from vehicle environment |
| Classification: | Class B |
| Typical arrangement: | Tabletop |
| I/O Port: | Refer to the user's manual |
| Accessories Information | |
| Adapter: | N/A |
| Cable: | N/A |
| Other: | N/A |
| Additional Information | |
| Note: | 1. The device has six variant versions, and all the versions have the same schematic, construction, PCB Layout, Bluetooth & WIFI RF module; the differences are software version and components populated in accordance with the function feature. Details refer to following the variant version description.<br>2. According to the version differences and the manufacturer, all tests were performed on version GEX w/DAB, deviation test of Radiated Emission was performed on version IND. |
| Remark: | All the information above are provided by the manufacturer. More detailed feature of the EUT please refers to the user manual. |

| Technical Specification | |
|---|---|
| Frequency Range: | 5190MHz for U-NII-1<br>5755MHz for U-NII-3 |
| Modulation Technology: | OFDM |
| Modulation Type: | BPSK, QPSK, 16QAM, 64QAM, 256QAM |
| Number of Channel: | 1 for U-NII-1<br>802.11n(HT40) / ac(VHT40)<br><br>1 for U-NII-3<br>802.11n(HT40) / ac(VHT40) |
| Antenna Type: | Chip Antenna |
| Number of Antenna | 2 (BT & 5G WIFI x1, 2.4G & 5G WIFI x 1) |
| Antenna Gain: | ANT 1: 0.59 dBi maximum<br>ANT 2: 2.96 dBi maximum |
| Beamforming Gain: | Not support |
| Transmission Mode: | SISO and MIMO |
| Note: | The information above declared by the manufacturer. |
| Remark: | This report only applies to 5GHz WLAN feature of the EUT. |

## Variant Version Description:

| Function | Versions | | | | | |
|---|---|---|---|---|---|---|
| | IND | GEX w/DAB | GEX with no 5GHz AP support | GEX w/o DAB | EU w/DAB | EU w/o DAB |
| AM | Yes | Yes | Yes | Yes | Yes | Yes |
| FM | Yes | Yes | Yes | Yes | Yes | Yes |
| DAB | --- | Yes | --- | --- | Yes | --- |
| DRM | Yes | --- | --- | --- | --- | --- |
| BT | Yes | Yes | Yes | Yes | Yes | Yes |
| BLE | Yes | Yes | Yes | Yes | Yes | Yes |
| Wifi Station (2.4 GHz) | Yes | Yes | Yes | Yes | Yes | Yes |
| GNSS | Yes | Yes | Yes | Yes | Yes | Yes |
| Wifi AP 2.4GHz | --- | --- | Yes | --- | --- | --- |
| Wifi AP 5GHz | Yes | Yes | --- | Yes | Yes | Yes |
| USB DCM | Yes | --- | --- | --- | Yes | Yes |
| USB | Yes | Yes | Yes | Yes | Yes | Yes |
| QZSS | Yes | Yes | Yes | Yes | Yes | Yes |
| RVC | Yes | Yes | Yes | Yes | Yes | Yes |
| Int SVS | Yes | Yes | Yes | Yes | --- | --- |
| Ext SVS | --- | --- | --- | --- | --- | --- |
| Audio (8 CH) | Yes | Yes | Yes | Yes | --- | --- |
| Audio (4 CH) | --- | --- | --- | --- | Yes | Yes |

Note: For wireless functions Bluetooth and WIFI, the hardware design is exactly the same. The WIFI bands and features are locked by the software at the factory and cannot be modified by the user.

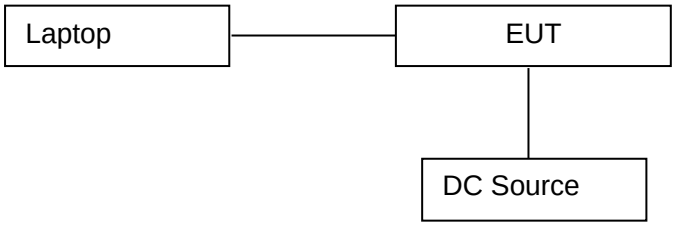
| Channel List | | | | | |
|---|---|---|---|---|---|
| U-NII-1 Band 5180-5240MHz | | | | | |
| IEEE 802.11a/n(HT20)/ac(VHT20)/ | | IEEE 802.11n(HT40)/ac(VHT40) | | IEEE 802.11 ac (VHT80)) | |
| Channel | Frequency MHz | Channel | Frequency MHz | Channel | Frequency MHz |
| - | - | 38 | 5190 | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |
| U-NII-3 Band 5745~5825MHz | | | | | |
| - | - | 151 | 5755 | - | - |
| - | - | - | - | - | - |
| - | - | - | - | | |
| - | - | - | - | | |
| - | - | - | - | | |

## 3. Test Channels and Modes Detail

| No. | Mode | Channel | Frequency (MHz) | Remark |
|---|---|---|---|---|
| 1 | TX | 38 | 5190 | IEEE 802.11n(HT40) /ac(VHT40) |
| | | 151 | 5755 | IEEE 802.11n(HT40) /ac(VHT40) |
| 2 | WIFI (CH 38) + Bluetooth Link | | | Co-transmitting |
| Note: TX mode means that the EUT was programmed to be in continuously transmitting mode. | | | | |

## 4. Configuration of EUT

**TX/ Mode**




## 5. Modification of EUT

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

# 6. Description of Support Device

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| No. | Equipment | Brand | M/N | S/N | Cable Specification | Remarks |
|---|---|---|---|---|---|---|
| 1. | Laptop | Lenovo | R720-151KBN | PF0Z35FH | --- | Provided by the lab |

| Software | Power Setting | | | | |
|---|---|---|---|---|---|
| ADB commands & MyFTM_GUI_v2.0.1m | Mode | Ant_1 | | Ant_2 | |
| | | U-NII-1 | U-NII-3 | U-NII-1 | U-NII-3 |
| | IEEE 802.11n(HT40) | 10 | 13 | 13 | 10 |
| | IEEE 802.11ac(VHT40) | 10 | 14 | 13 | 10 |

# 7. Test Facility and Location

| Test Site | : | Dongguan Nore Testing Center Co., Ltd. (Dongguan NTC Co., Ltd.) |
|---|---|---|
| Accreditations and Authorizations | : | The Laboratory has been assessed and proved to be in compliance with CNAS/CL01<br>Listed by CNAS, August 13, 2018<br>The Certificate Registration Number is L5795.<br>The Certificate is valid until August 13, 2030<br><br>The Laboratory has been assessed and proved to be in compliance with ISO17025<br>Listed by A2LA, November 01, 2017<br>The Certificate Registration Number is 4429.01<br>The Certificate is valid until December 31, 2025<br><br>Listed by FCC, November 06, 2017<br>Test Firm Registration Number is 907417<br><br>Listed by Industry Canada, June 08, 2017<br>The Certificate Registration Number is 46405-9743A |
| Test Site Location | : | Building D, Gaosheng Science and Technology Park, Hongtu Road, Nancheng District, Dongguan City, Guangdong Province, China |

# 8. Applicable Standards and References

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

**Test Standards:**

47 CFR Part 15, Subpart E, 15.407

ANSI C63.10-2013

**References Test Guidance:**

KDB 789033 D02 v02r01

KDB 905462 D03 v01r02

## 9. Deviations and Abnormalities from Standard Conditions

No additions, deviations and exclusions from the standard.

## 10. Test Conditions

| No. | Test Item | Test Mode | Test Voltage | Tested by | Remarks |
|---|---|---|---|---|---|
| 1. | AC Power Conducted Emission | --- | --- | --- | --- |
| 2. | Max. Conducted Output Power | 1 | DC 13.5V | Sean | See note 1 |
| 3. | 26dB Spectrum Bandwidth and 99% Occupied Bandwidth | 1 | DC 13.5V | Sean | See note 1 |
| 4. | 6dB Bandwidth | 1 | DC 13.5V | Sean | See note 1 |
| 5. | Power Spectral Density | 1 | DC 13.5V | Sean | See note 1 |
| 6. | Radiated Emissions | 1-2 | DC 13.5V | Sean | See note 1,3 |
| 7. | Band Edge Emissions | 1 | DC 13.5V | Sean | See note 1 |
| 8. | Frequency Stability | 1 | DC 13.5V | Sean | See note 1 |
| 9. | Antenna Requirement | --- | --- | --- | --- |
| 10. | Dynamic Frequency Selection | --- | --- | --- | --- |

**Note:**

1. The testing climatic conditions for temperature, humidity, and atmospheric pressure are within: 15~35℃, 30~70%, 86~106kPa
2. DC 13.5V comes from the external DC source.
3. The device is designed for vehicle environment using and cannot connect to the public low-voltage network.

# 11. Measurement Uncertainty

| No. | Test Item | Frequency | Uncertainty | Remarks |
|---|---|---|---|---|
| 1. | Conducted Emission | 150KHz ~ 30MHz | ±2.52 dB | --- |
| 2. | Radiated Emission | 9kHz ~ 30MHz | ±5.60 dB | |
| | | 30MHz ~ 1GHz | ±5.60 dB | --- |
| | | 1GHz ~ 18GHz | ±5.22 dB | --- |
| | | 18GHz ~ 40GHz | ±5.22 dB | |
| 3. | RF Conducted | 10Hz ~ 40GHz | ±1.18 dB | --- |
| 4. | Occupied Channel Bandwidth | --- | ±1.05% | --- |

**Note:**

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
2. The measurement uncertainly levels above are estimated and calculated according to CISPR 16-4-2.
3. The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

## 12. Sample Calculations

| Conducted Emission | | | | | | |
|---|---|---|---|---|---|---|
| **Freq. (MHz)** | **Reading Level (dBuV)** | **Correct Factor (dB)** | **Measurement (dBuV)** | **Limit (dBuV)** | **Over (dB)** | **Detector** |
| 0.1900 | 30.10 | 10.60 | 40.70 | 79.00 | -38.30 | QP |

Where,

| | |
|---|---|
| Freq. | = Emission frequency in MHz |
| Reading Level | = Spectrum Analyzer/Receiver Reading |
| Corrector Factor | = Insertion loss of LISN + Cable Loss + RF Switching Unit attenuation |
| Measurement | = Reading + Corrector Factor |
| Limit | = Limit stated in standard |
| Margin | = Measurement - Limit |
| Detector | = Reading for Quasi-Peak / Average / Peak |

| Radiated Spurious Emissions and Restricted Bands | | | | | | |
|---|---|---|---|---|---|---|
| **Freq. (MHz)** | **Reading Level (dBuV)** | **Correct Factor (dB/m)** | **Measurement (dBuV/m)** | **Limit (dBuV/m)** | **Over (dB)** | **Detector** |
| 60.0700 | 45.88 | -18.38 | 27.50 | 49.00 | -21.50 | QP |

Where,

| | |
|---|---|
| Freq. | = Emission frequency in MHz |
| Reading Level | = Spectrum Analyzer/Receiver Reading |
| Corrector Factor | = Antenna Factor + Cable Loss - Pre-amplifier |
| Measurement | = Reading + Corrector Factor |
| Limit | = Limit stated in standard |
| Over | = Margin, which calculated by Measurement - Limit |
| Detector | = Reading for Quasi-Peak / Average / Peak |

Note: For all conducted test items, the spectrum analyzer offset or transducer is derived from RF cable loss and attenuator factor. The offset or transducer is equal to the RF cable loss plus attenuator factor.

## 13. Duty cycle

| Operation Band (MHz) | Mode | Ton (ms) | Ton+off (ms) | Duty Cycle (%) | 1/T minimum VBW (kHz) | Duty Cycle Factor (dB) |
|---|---|---|---|---|---|---|
| U-NII-1 | 802.11n(HT40) | 0.9525 | 1.2565 | 75.81% | 1.05 | 1.20 |
| | 802.11ac(VHT40) | 0.9485 | 1.2305 | 77.08% | 1.05 | 1.13 |
| U-NII-3 | 802.11n(HT40) | 0.501 | 0.809 | 61.93% | 2.00 | 2.08 |
| | 802.11ac(VHT40) | 0.9485 | 1.2535 | 75.67% | 1.05 | 1.21 |
| Remark: Duty Cycle= (Ton/ Ton+off)*100%<br>Duty Cycle factor=10*log(1/ Duty cycle) | | | | | | |

## U-NII-1 Band

### IEEE 802.11n(HT40)


### IEEE 802.11ac(VHT40)


## U-NII-3 Band

### IEEE 802.11n(HT40)


### IEEE 802.11ac(VHT40)

# 14. Test Items and Results

## 14.1 Conducted Emissions Measurement

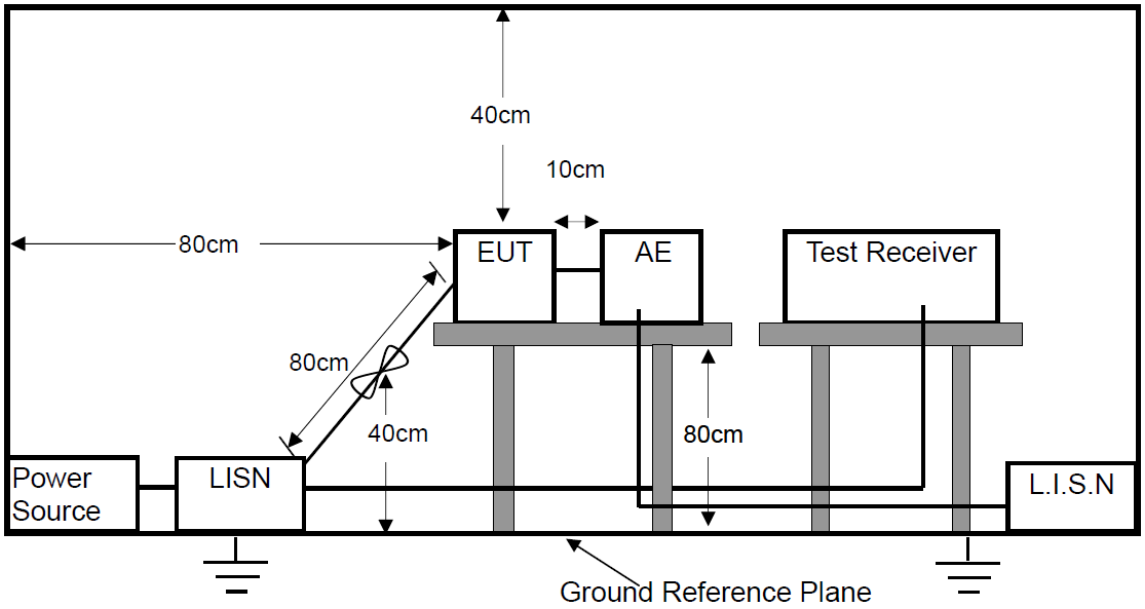
### LIMITS

According to the requirements of FCC PART 15.207, the limits are as follows:

| Frequency (MHz) | Quasi-peak | Average |
|---|---|---|
| 0.15 to 0.5 | 66 to 56 | 56 to 46 |
| 0.5 to 5 | 56 | 46 |
| 5 to 30 | 60 | 50 |

Note: 1. If the limits for the average detector are met when using the quasi-peak detector, then the limits for the measurements with the average detector are considered to be met.
2. The lower limit shall apply at the transition frequencies.
3. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5MHz.

### BLOCK DIAGRAM OF TEST SETUP



**TEST PROCEDURES**

a. The EUT was placed on a wooden table 0.8m height from the metal ground plan and 0.4m from the conducting wall of the shielding room and it was kept at 0.8m from any other grounded conducting surface.

b. All I/O cables and support devices were positioned as per ANSI C63.10.

c. Connect mains power port of the EUT to a line impedance stabilization network (LISN).

d. Connect all support devices to the other LISN and AAN, if needed.

e. Scan the frequency range from 150KHz to 30MHz at both sides of AC line for maximum conducted interference checking and record the test data.

**TEST RESULTS**

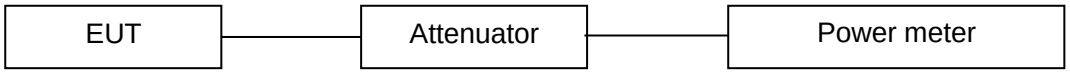
Not Applicable

## 14.2 Maximum Conducted Output Power Measurement

**LIMITS**

| Operation Band | EUT category | Limit |
|---|---|---|
| ☒5180~5240MHz | ☐Outdoor Access Point | 1 Watt (30dBm)<br>(Max. e.i.r.p ≤ 125mW( 21dBm) at any elevation angle above 30 degrees as measured from the horizon) |
| | ☐Fixed point-to-point Access Point | 1 Watt (30dBm) |
| | ☒Indoor Access Point | 1 Watt (30dBm) |
| | ☐Mobile and Portable client device | 250mW (24dBm) |
| ☐5260~5320MHz | - | 250mW (24dBm) |
| ☐5500~5700MHz | - | 250mW (24dBm) |
| ☒5745~5825MHz | - | 1 Watt (30dBm) |

**BLOCK DIAGRAM OF TEST SETUP**




**TEST PROCEDURES**

1. The transmitter output (antenna port) was connected to the power meter.
2. Test was performed in accordance with KDB789033 v02r01 for compliance testing of Unlicensed National Information Infrastructure (U-NII) Device -section (E) Maximum conducted output power.
3. Measurement using a power meter (PM) =b Method PM-G (Measurement using a gated RF average power meter).

**TEST RESULTS**

PASS

Please refer to the following table.

| U-NII-1 | | | | | |
|---|---|---|---|---|---|
| Frequency MHz | Data Rate Mbps | Average Output Power dBm | | | Limit dBm |
| IEEE 802.11n(HT40) | | | | | |
| Channel: 5190 | MCS 8 | ANT_1 | ANT_2 | Total | 30.00 |
| | | 8.962 | 4.833 | 10.38 | |
| IEEE 802.11ac (VHT40) | | | | | |
| Channel: 5190 | MCS 8 | ANT_1 | ANT_2 | Total | 30.00 |
| | | 8.124 | 4.083 | 9.57 | |

Note: 1. As for IEEE 802.11n/ac mode, EUT working in MIMO mode. Directional Gain for MIMO.

2. Directional gain = 10 log $[(10^{0.59/20} + 10^{2.96/20})^2 / 2]$= 4.87dBi < 6 dBi

3. Duty Cycle Factor has considered during the test.

| U-NII-3 | | | | | |
|---|---|---|---|---|---|
| Frequency MHz | Data Rate Mbps | Average Output Power dBm | | | Limit dBm |
| IEEE 802.11n(HT40) | | | | | |
| Channel: 5755 | MCS 8 | ANT_1 | ANT_2 | Total | 30.00 |
| | | 8.177 | 3.379 | 9.42 | |
| IEEE 802.11ac (VHT40) | | | | | |
| Channel: 5755 | MCS 8 | ANT_1 | ANT_2 | Total | 30.00 |
| | | 8.108 | 4.822 | 9.78 | |

Note: 1. As for IEEE 802.11n/ac mode, EUT working in MIMO mode.

3. Directional gain = 10 log $[(10^{0.59/20} + 10^{2.96/20})^2 / 2]$= 4.87dBi < 6 dBi

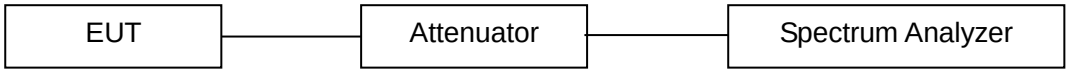
3. Duty Cycle Factor has considered during the test.

## 14.3 6dB Bandwidth Measurement

### LIMITS

The minimum 6dB bandwidth shall be at least 500 kHz

### BLOCK DIAGRAM OF TEST SETUP




### TEST PROCEDURES

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer was set as below according to ANSI C63.10 clause 11.8.1:

a. Set the RBW = 100KHz.

b. Set the VBW ≥ 3 x RBW

c. Set the Detector = peak.

d. Set the Sweep time = auto couple.

e. Set the Trace mode = max hold.

f. Allow trace to fully stabilize.

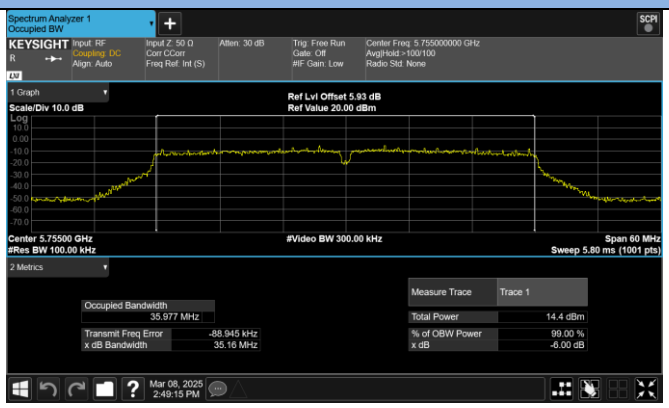
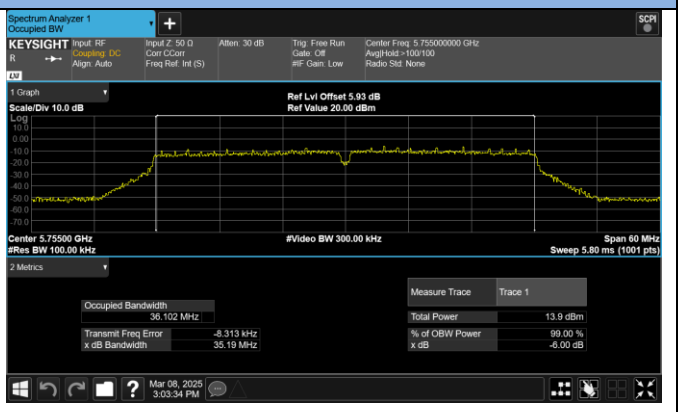
g. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### TEST RESULTS

PASS

Please refer to the following tables.

| U-NII-3 | | | |
|---|---|---|---|
| Frequency MHz | Data Rate Mbps | 6dB Bandwidth MHz | Limit |
| IEEE 802.11n(HT40) Mode (OFDM) | | | |
| Channel: 5755 | MCS0 | 35.16 | >500KHz |
| IEEE 802.11ac (VHT40) Mode (OFDM) | | | |
| Channel: 5755 | MCS0 | 35.19 | >500KHz |
| Note: Both of antennas have considered during pre-test, but only the worst case (ANT_1) was recorded. | | | |

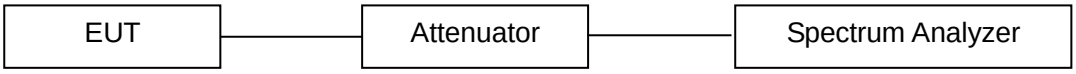
| U-NII-3 | |
|---|---|
| IEEE 802.11n(HT40) | IEEE 802.11ac(VHT40) |
|  |  |

## 14.4 26dB Bandwidth & 99% Occupied Bandwidth

### LIMITS

No restriction limits.

### BLOCK DIAGRAM OF TEST SETUP




### TEST PROCEDURES

The antenna port of the EUT was connected to the input of a spectrum analyzer.

Analyzer was set as below according to FCC KDB789033(v02r01):

a. For 26dB bandwidth, Set the RBW = Approximately 1% of the emission bandwidth

b. Set the VBW > RBW

c. Detector = peak.

d. Sweep time = auto couple.

e. Trace mode = max hold.

f. Allow trace to fully stabilize.

g. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

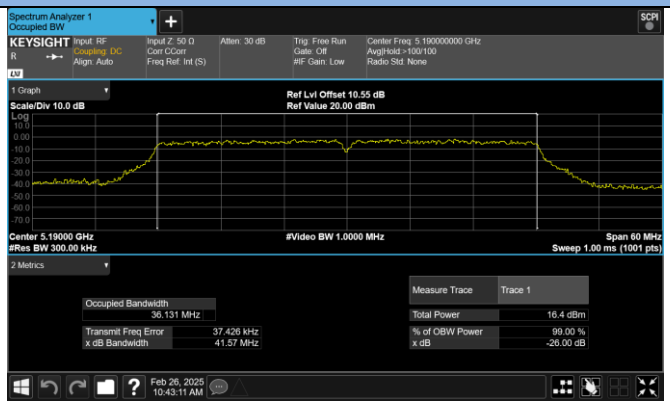
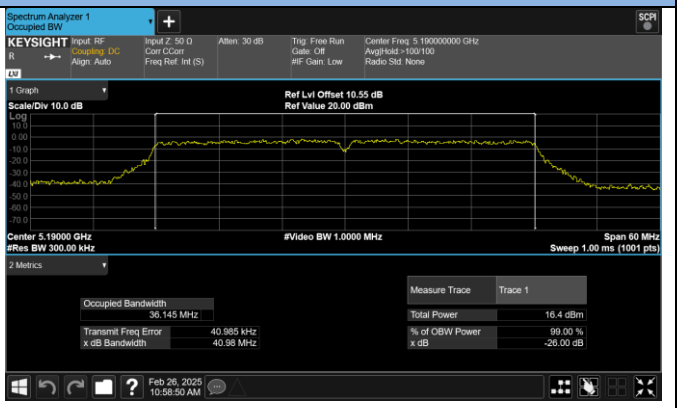
1. For 99% occupied bandwidth, Set the RBW = 1% to 5% of the OBW
2. Set the VBW ≥ 3 x RBW
3. Detector = peak.
4. Span = 1.5 times to 5.0 times the OBW
5. Sweep time = auto couple.
6. Trace mode = max hold. Allow trace to fully stabilize.
7. Use the 99% power bandwidth function of the spectrum analyzer measure the occupied bandwidth.

**TEST RESULTS**

PASS

Please refer to the following table.

| U-NII-1 | | | |
|---|---|---|---|
| Frequency<br>MHz | Data Rate<br>Mbps | 26dB Bandwidth<br>MHz | 99% Occupied Bandwidth<br>MHz |
| IEEE 802.11n(HT40) Mode (OFDM) | | | |
| Channel: 5190 | MCS0 | 41.57 | --- |
| IEEE 802.11ac (VHT40) Mode (OFDM) | | | |
| Channel: 5190 | MCS0 | 40.98 | --- |
| Note: Both of antennas have considered during pre-test, but only the worst case (ANT_1) was recorded. | | | |

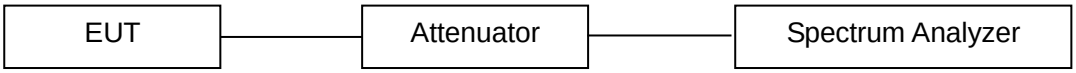
| U-NII-1 / 26dB Bandwidth | |
|---|---|
| IEEE 802.11n(HT40) | IEEE 802.11ac(VHT40) |
|  |  |

## 14.5 Power Spectral Density

**LIMITS**

| Operation Band | | Limit |
|---|---|---|
| ☒5180~5240MHz | ☐Outdoor access point | 17 dBm/MHz |
| | ☒Indoor access point | 17 dBm/MHz |
| | ☐Fixed point-to-point access points | 17 dBm/MHz |
| | ☐Client devices | 11 dBm/MHz |
| ☐5260~5320MHz | - | 11 dBm/MHz |
| ☐5500~5700MHz | - | 11 dBm/MHz |
| ☒5745~5825MHz | - | 30 dBm/500kHz |

**BLOCK DIAGRAM OF TEST SETUP**




**TEST PROCEDURES**

The antenna port of the EUT was connected to the input of a spectrum analyzer.

Analyzer was set as below according to FCC KDB789033 (v02r01):

a. Set analyzer center frequency to center frequency

b. Set the RBW to: 1MHz

c. Set the VBW to: 3MHz

d. Detector = RMS

e. Sweep time = auto couple

f. Trace Average = 100 times

g. If measured bandwidth of Maximum PSD is specified in 500kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (<500kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement. Allow trace to fully stabilize.

**TEST RESULTS**

PASS

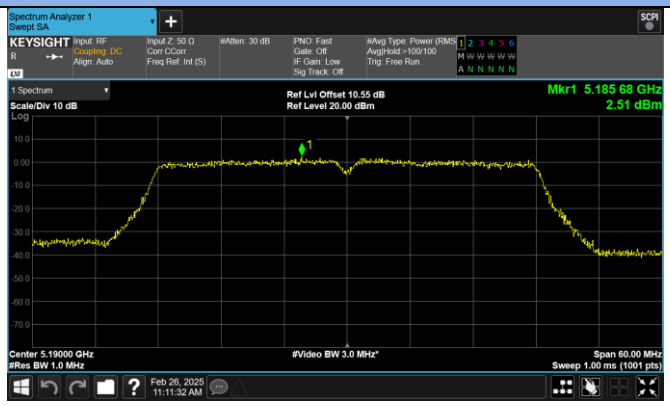
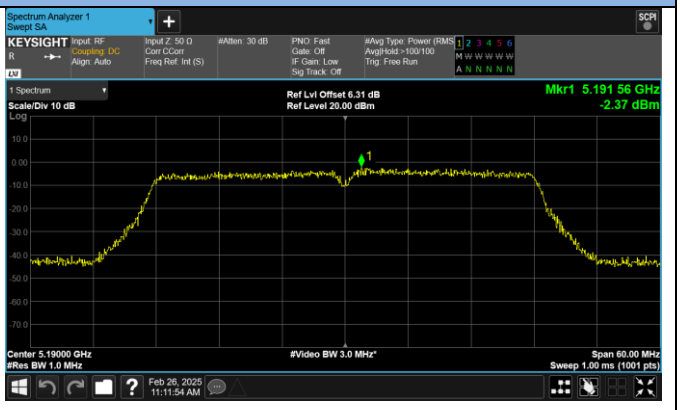
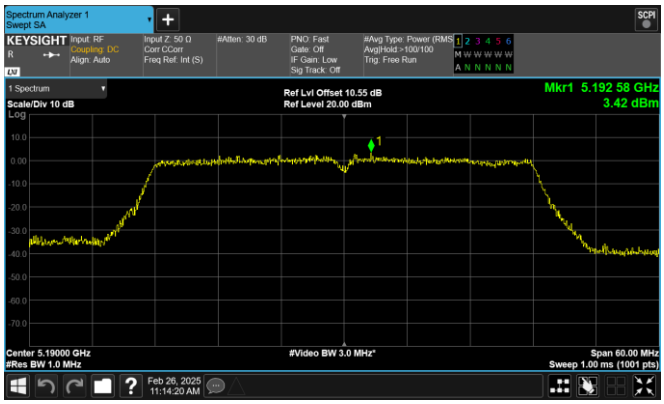
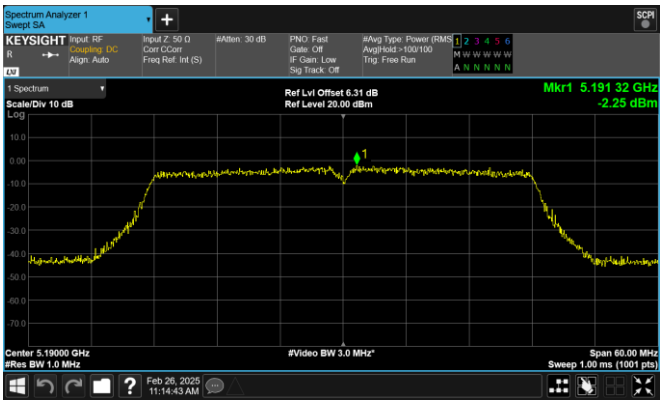
Please refer to the following test plots.

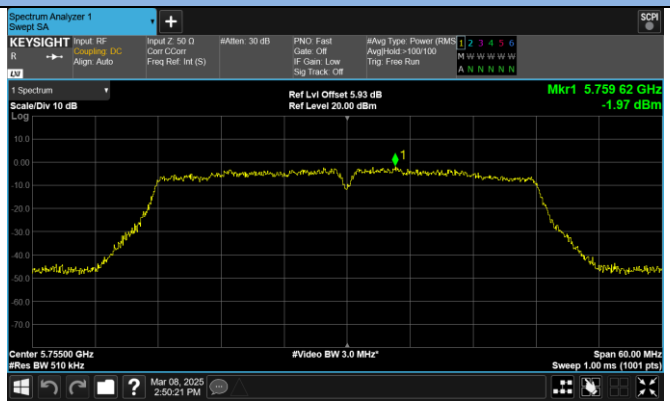
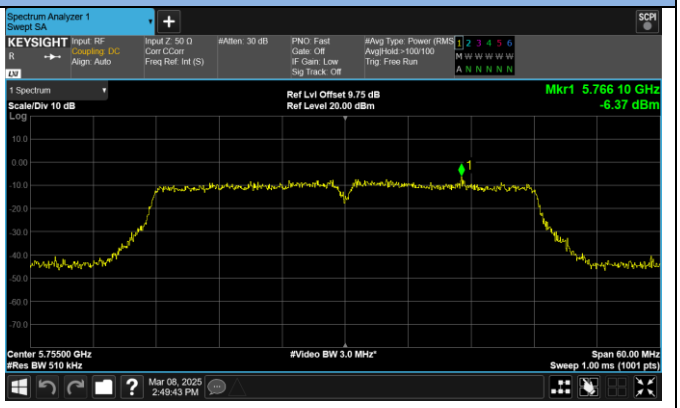
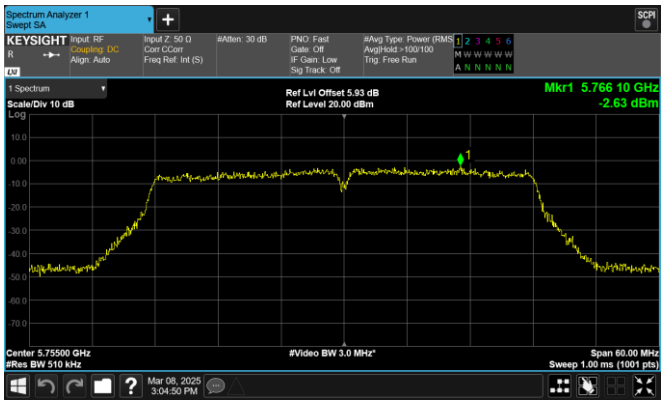
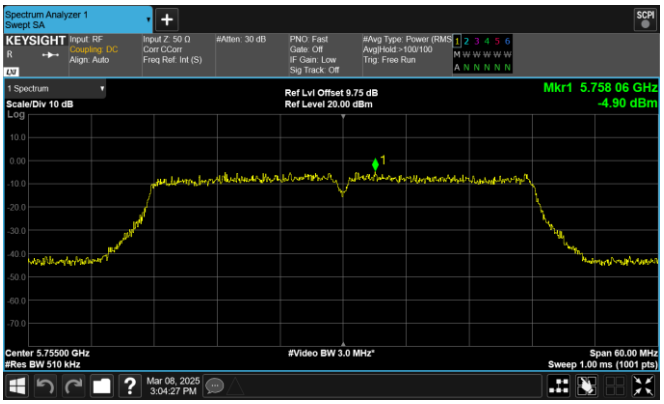
| U-NII-1 | | | | | | |
|---|---|---|---|---|---|---|
| Frequency MHz | Data Rate Mbps | Duty Cycle Factor (dB) | PSD dBm/MHz | | Total PSD with duty cycle factor | Limit dBm/ MHz |
| | | | ANT 1 | ANT 2 | | |
| IEEE 802.11n(HT40) | | | | | | |
| Channel: 5190 | MCS 8 | 1.20 | 2.51 | -2.37 | 4.93 | 17 |
| IEEE 802.11ac(VHT40) | | | | | | |
| Channel: 5190 | MCS 8 | 1.13 | 3.42 | -2.25 | 5.59 | 17 |

Note:
1. As for IEEE 802.11n/ac mode, EUT working in MIMO mode.
2. Please refer to section 13 for duty cycle factor
3. Directional gain = 10 log $[(10^{0.59/20} + 10^{2.96/20})^2 / 2]$= 4.87dBi < 6 dBi

| U-NII-3 | | | | | | |
|---|---|---|---|---|---|---|
| Frequency MHz | Data Rate Mbps | Duty Cycle Factor (dB) | PSD dBm/MHz | | Total PSD with duty cycle factor | Limit dBm/ 500KHz |
| | | | ANT 1 | ANT 2 | | |
| IEEE 802.11n(HT40) | | | | | | |
| Channel: 5755 | MCS 8 | 2.08 | -1.97 | -6.37 | 1.46 | 17 |
| IEEE 802.11ac(VHT40) | | | | | | |
| Channel: 5755 | MCS 8 | 1.21 | -2.63 | -4.90 | 0.60 | 17 |

Note:
1. As for IEEE 802.11n/ac mode, EUT working in MIMO mode.
2. Please refer to section 13 for duty cycle factor
3. Directional gain = 10 log $[(10^{0.59/20} + 10^{2.96/20})^2 / 2]$= 4.87dBi < 6 dBi

| U-NII-1 | |
|---|---|
| IEEE 802.11n(HT40) _ANT 1 | IEEE 802.11n(HT40) _ANT 2 |
|  |  |
| IEEE 802.11ac(VHT40) _ANT 1 | IEEE 802.11ac(VHT40) _ANT 2 |
|  |  |

| U-NII-3 | |
|---|---|
| IEEE 802.11n(HT40) _ANT 1 | IEEE 802.11n(HT40) _ANT 2 |
|  |  |
| IEEE 802.11ac(VHT40) _ANT 1 | IEEE 802.11ac(VHT40)_ANT 2 |
|  |  |

## 14.6 Band Edge

**LIMITS**

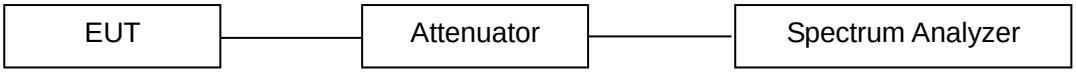
For transmitters operating in the 5.15-5.25 GHz band:
All emissions outside of the 5.15-5.35GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band:
All emissions outside of the 5.15-5.35GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band:
All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band:
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

**BLOCK DIAGRAM OF TEST SETUP**




**TEST PROCEDURES**

a. Check the calibration of the measuring instrument using either an internal calibration or a known signal from an external generator.
b. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable, then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
c. Set RBW to 1MHz and VBW to 3MHz of spectrum analyzer.
d. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
e. Repeat above procedures until all measured frequencies were complete.

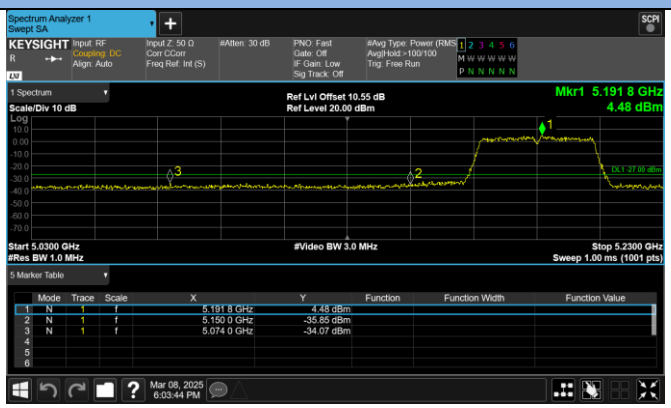
**TEST RESULTS**

PASS

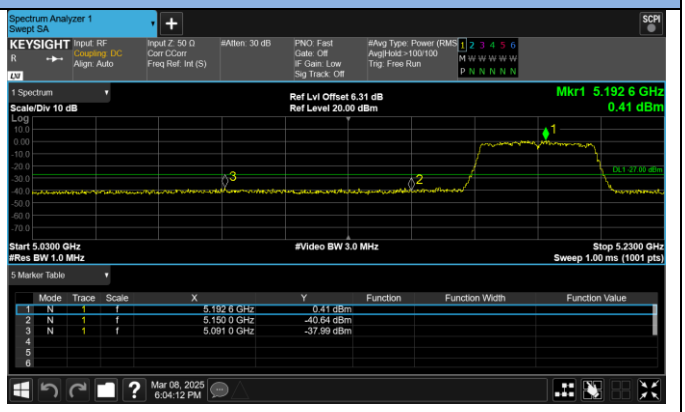
For 802.11a mode, both of ANT 1 & 2 has been tested, and only the worst case was recorded in the report. The EUT working at MIMO mode, and the worst case is about -31.24dBm.

## U-NII-1

### IEEE 802.11n(HT40) -ANT 1

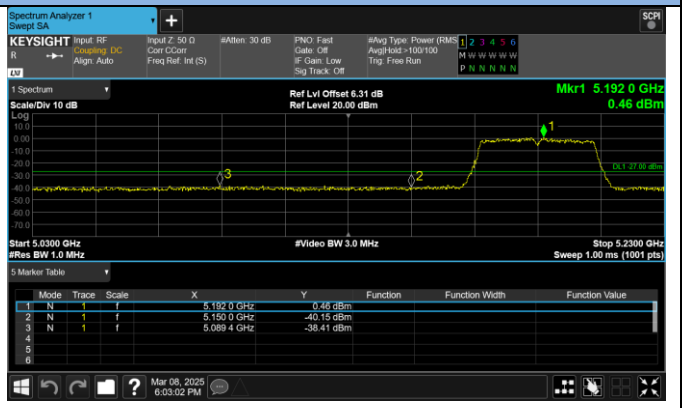


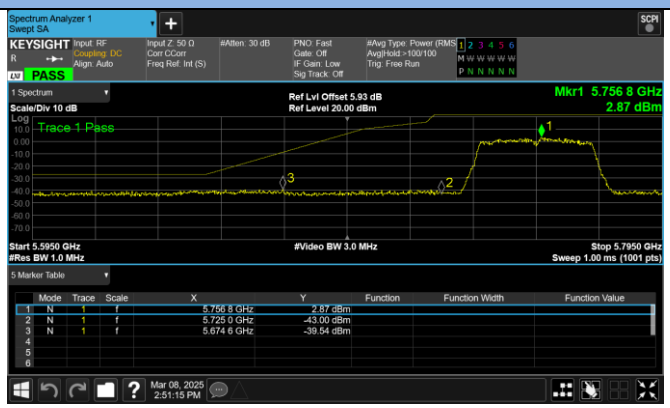
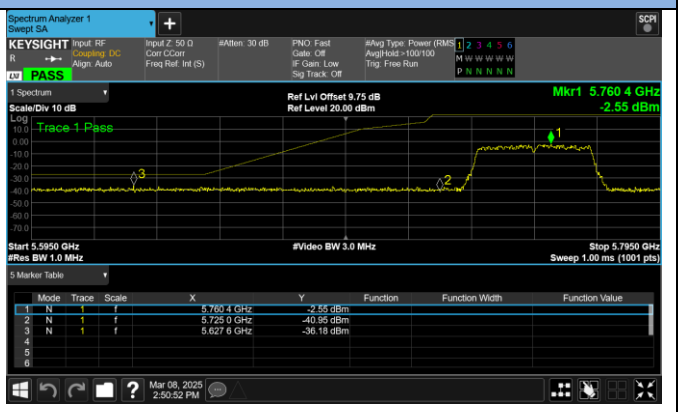
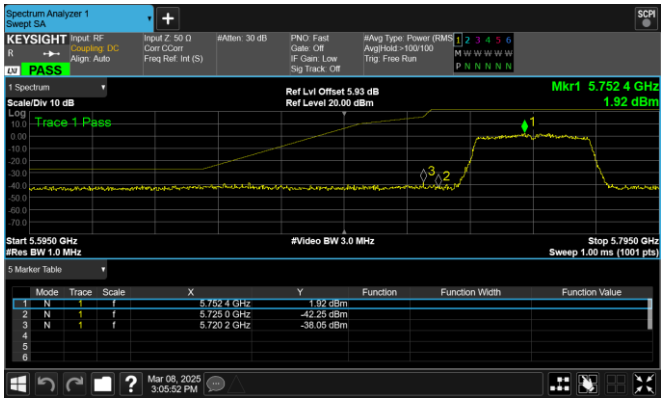
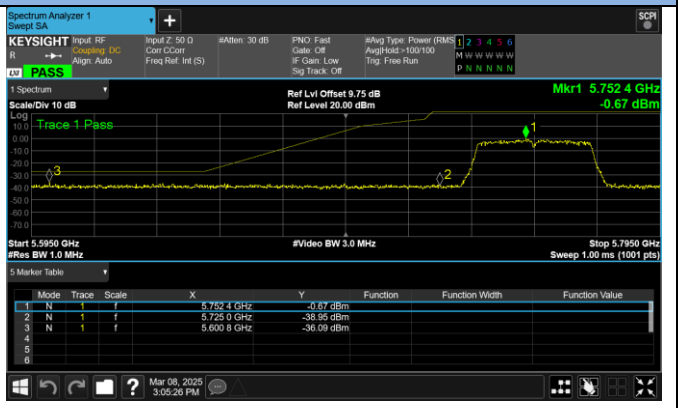

### IEEE 802.11n(HT40) -ANT 2




### IEEE 802.11ac(VHT40) -ANT 1


### IEEE 802.11ac(VHT40) -ANT 2



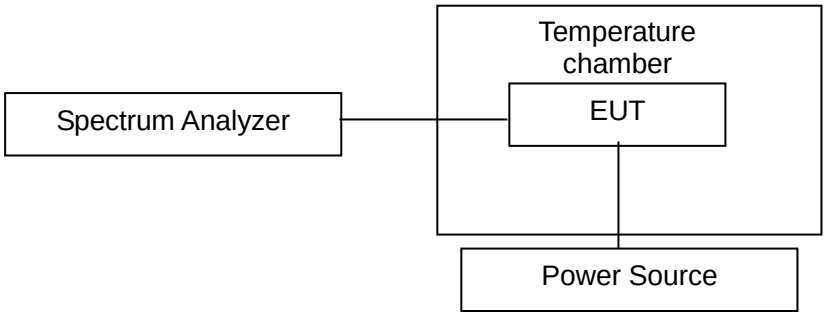
| U-NII-3 | |
|---|---|
| IEEE 802.11n(HT40) -ANT 1 | IEEE 802.11n(HT40) -ANT 2 |
|  |  |
| IEEE 802.11ac(VHT40) -ANT 1 | IEEE 802.11ac(VHT40) -ANT 2 |
|  |  |

## 14.7 Frequency Stability

**LIMITS**

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

**BLOCK DIAGRAM OF TEST SETUP**




**TEST PROCEDURES**

a. The EUT was placed inside the environmental test chamber and powered by Power source.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes

**e.** Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.

**f.** The chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

Note: The EUT set at un-modulation mode during frequency stability test.

**TEST RESULTS**

PASS

Please refer to the following pages of the worst case ANT_1.

| U-NII-1 | | | | | | |
|---|---|---|---|---|---|---|
| 5190MHz | | | | | | |
| Temperature (℃) | Power Supplied (Vdc) | Measured Frequency (MHz) | | | | Test Result |
| | | 0 Minute | 2 Minute | 5 Minute | 10 Minute | |
| -40 | 13.5 | 5189.994 | 5189.991 | 5189.990 | 5189.991 | Pass |
| -20 | | 5189.989 | 5189.986 | 5189.990 | 5189.990 | Pass |
| 0 | | 5189.991 | 5189.990 | 5189.992 | 5189.992 | Pass |
| 20 | | 5189.994 | 5189.993 | 5189.996 | 5189.992 | Pass |
| 40 | | 5189.983 | 5189.987 | 5189.988 | 5189.994 | Pass |
| 60 | | 5189.989 | 5189.992 | 5189.989 | 5189.988 | Pass |
| 70 | | 5189.992 | 5189.992 | 5189.990 | 5189.991 | Pass |
| 25 | 10.0 | 5189.995 | 5189.994 | 5189.992 | 5189.992 | Pass |
| 25 | 16.0 | 5189.991 | 5189.989 | 5189.994 | 5189.990 | Pass |

Note: EUT temperature working range is -40 to 70℃.

| U-NII-3 | | | | | | |
|---|---|---|---|---|---|---|
| 5755MHz | | | | | | |
| Temperature (℃) | Power Supplied (Vdc) | Measured Frequency (MHz) | | | | Test Result |
| | | 0 Minute | 2 Minute | 5 Minute | 10 Minute | |
| -40 | 13.5 | 5754.982 | 5754.981 | 5754.984 | 5754.982 | Pass |
| -20 | | 5754.985 | 5754.983 | 5754.984 | 5754.982 | Pass |
| 0 | | 5754.985 | 5754.982 | 5754.986 | 5754.984 | Pass |
| 20 | | 5754.989 | 5754.986 | 5754.985 | 5754.986 | Pass |
| 40 | | 5754.981 | 5754.982 | 5754.984 | 5754.988 | Pass |
| 60 | | 5754.986 | 5754.985 | 5754.982 | 5754.982 | Pass |
| 70 | | 5754.981 | 5754.982 | 5754.986 | 5754.982 | Pass |
| 25 | 10.0 | 5754.989 | 5754.990 | 5754.985 | 5754.986 | Pass |
| 25 | 16.0 | 5754.985 | 5754.986 | 5754.990 | 5754.984 | Pass |

Note: EUT temperature working range is -40 to 70℃.

## 14.8 Radiated Spurious Emissions and Restricted Bands Measurement and Band Edge

### LIMIT of Restricted bands

In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below:

| Frequency range MHz | Distance Meters | Field Strengths Limit (15.209) |
|---|---|---|
| | | μV/m |
| 0.009 ~ 0.490 | 300 | 2400/F(kHz) |
| 0.490 ~ 1.705 | 30 | 24000/F(kHz) |
| 1.705 ~ 30 | 30 | 30 |
| 30 ~ 88 | 3 | 100 |
| 88 ~ 216 | 3 | 150 |
| 216 ~ 960 | 3 | 200 |
| Above 960 | 3 | 500 |

Remark: (1) Emission level (dB)μV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

(4) The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower.

(5) §15.407 specifies that emissions which fall in the restricted bands, as defined in §15.205 comply with radiated emission limits specified in §15.209.

### LIMIT of Radiated Band Edges and non-restricted bands

For transmitters operating in the 5.15-5.25 GHz band:

All emissions outside of the 5.15-5.35GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band:

All emissions outside of the 5.15-5.35GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band:

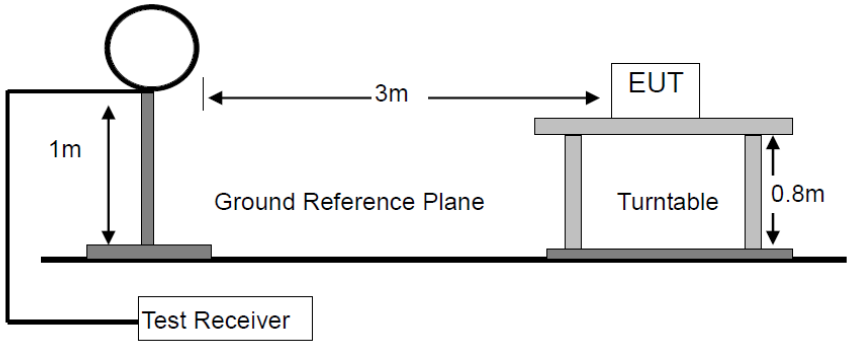
All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band:

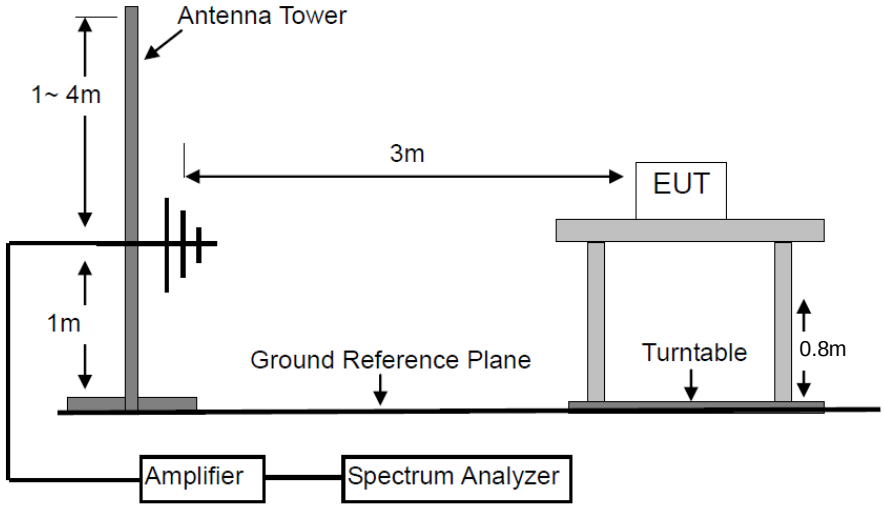
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27dBm/MHz at the band edge.

**BLOCK DIAGRAM OF TEST SETUP**

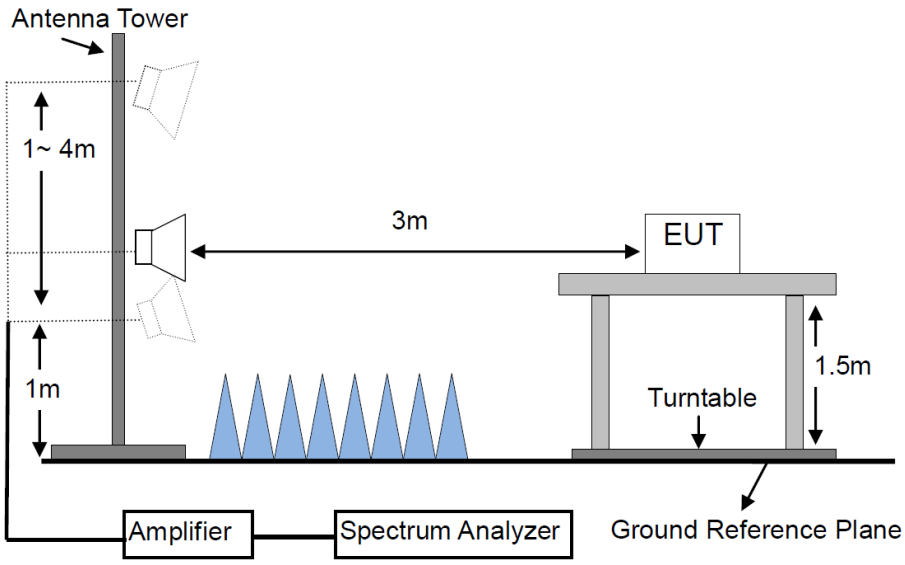
For Radiated Emission below 30MHz




For Radiated Emission 30-1000MHz



For Radiated Emission Above 1000MHz.




**TEST PROCEDURES**

a. Below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi- anechoic chamber room.

b. For the radiated emission test above 1GHz:

The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter full anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

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

d. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode.

f. A Quasi-peak measurement was then made for that frequency point for below 1GHz test. PK and AV for above 1GHz emission test.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

| Frequency Band (MHz) | Detector | Resolution Bandwidth | Video Bandwidth |
|---|---|---|---|
| 0.009 to 0.090 | AVG | 300 Hz | 1 KHz |
| 0.091 to 0.109 | QP | 300 Hz | 1 KHz |
| 0.110 to 0.490 | AVG | 300 Hz / 10 KHz | 1 KHz / 30 KHz |
| 0.15 to 30 | QP, AVG | 10 KHz | 30 KHz |
| 30 to 1000 | QP | 120 kHz | 300 kHz |
| Above 1000 | Peak | 1 MHz | 3 MHz |
| | Average | 1 MHz | 10 Hz |

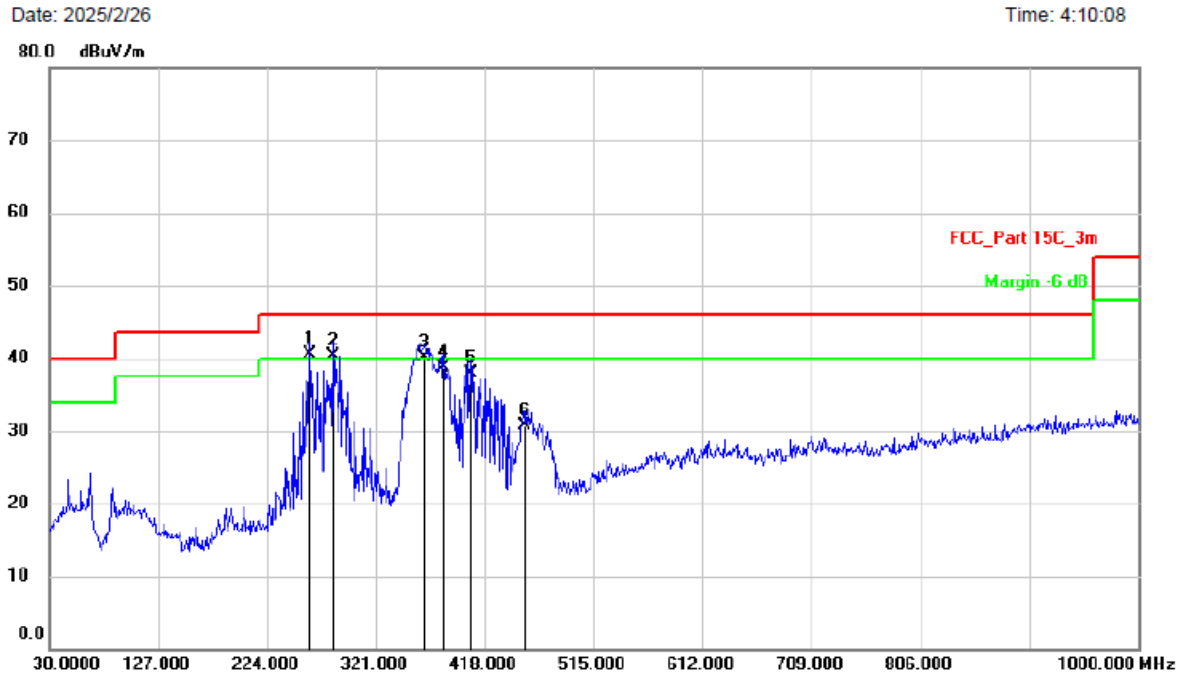
**TEST RESULTS**

PASS

Please refer to the following pages of the worst case.

| | |
|---|---|
| M/N: 71U0 (GEX w/DAB version) | Testing Voltage: DC 13.5V |
| Polarization: Horizontal | Detector: QP |
| Test Mode: 1 (802.11n40, CH 38) | Distance: 3m |

## Radiated Emission Measurement



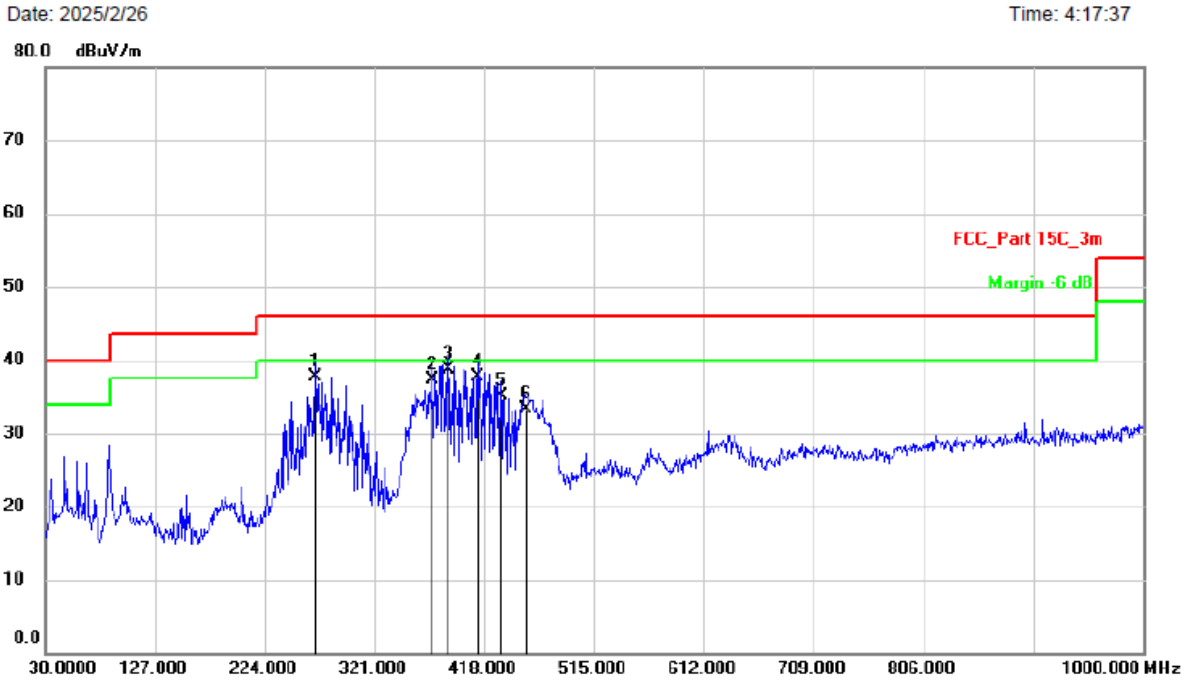

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 261.8299 | 46.55 | -6.13 | 40.42 | 46.00 | -5.58 | QP | |
| 2 | ! | 282.2000 | 46.23 | -5.84 | 40.39 | 46.00 | -5.61 | QP | |
| 3 | ! | 364.6500 | 44.11 | -3.94 | 40.17 | 46.00 | -5.83 | QP | |
| 4 | | 381.1400 | 42.37 | -3.73 | 38.64 | 46.00 | -7.36 | QP | |
| 5 | | 405.3900 | 41.11 | -3.25 | 37.86 | 46.00 | -8.14 | QP | |
| 6 | | 453.8900 | 33.26 | -2.49 | 30.77 | 46.00 | -15.23 | QP | |

Note 1: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

Note 2: *:Maximum data x:Over limit !:over margin

| | |
|---|---|
| M/N: 71U0 (GEX w/DAB version) | Testing Voltage: DC 13.5V |
| Polarization: Vertical | Detector: QP |
| Test Mode: 1 (802.11n40, CH 38) | Distance: 3m |

## Radiated Emission Measurement



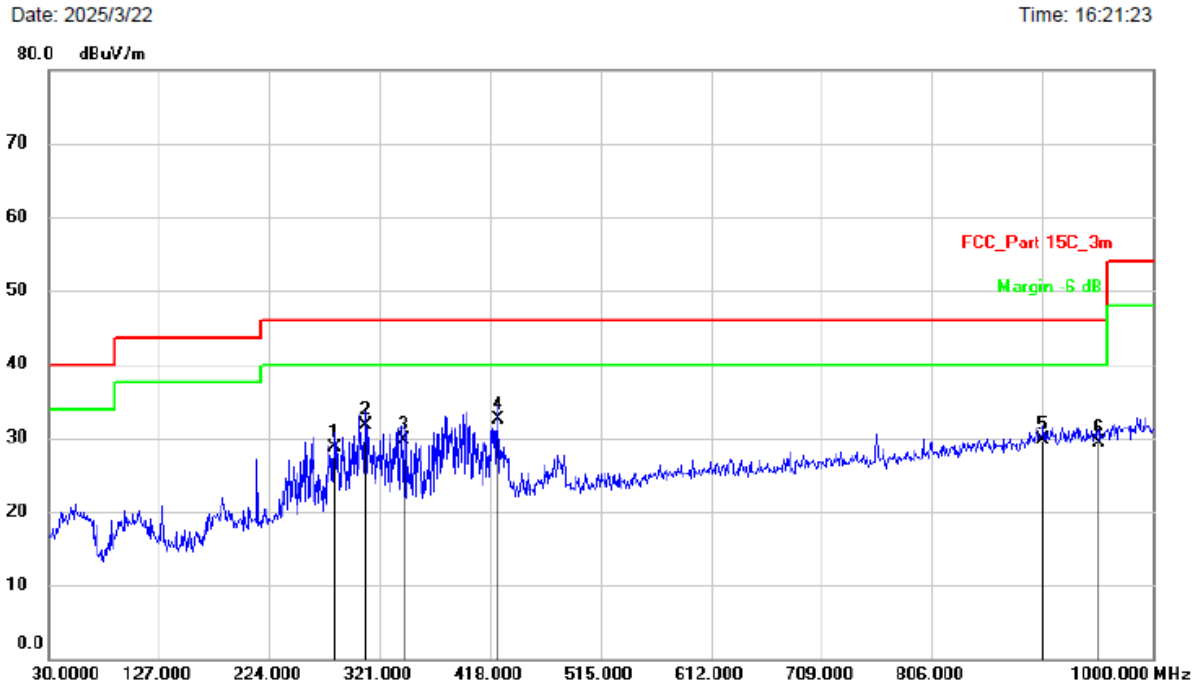

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 268.6200 | 44.64 | -7.03 | 37.61 | 46.00 | -8.39 | QP | |
| 2 | | 372.4100 | 42.20 | -4.84 | 37.36 | 46.00 | -8.64 | QP | |
| 3 | * | 385.9900 | 43.24 | -4.62 | 38.62 | 46.00 | -7.38 | QP | |
| 4 | | 412.1800 | 41.85 | -4.12 | 37.73 | 46.00 | -8.27 | QP | |
| 5 | | 432.5500 | 38.96 | -3.83 | 35.13 | 46.00 | -10.87 | QP | |
| 6 | | 454.8600 | 36.81 | -3.46 | 33.35 | 46.00 | -12.65 | QP | |

Note 1: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

Note 2: *:Maximum data x:Over limit !:over margin

| | |
|---|---|
| M/N: 71U0 (GEX w/DAB version) | Testing Voltage: DC 13.5V |
| Polarization: Horizontal | Detector: QP |
| Test Mode: 2 | Distance: 3m |

## Radiated Emission Measurement



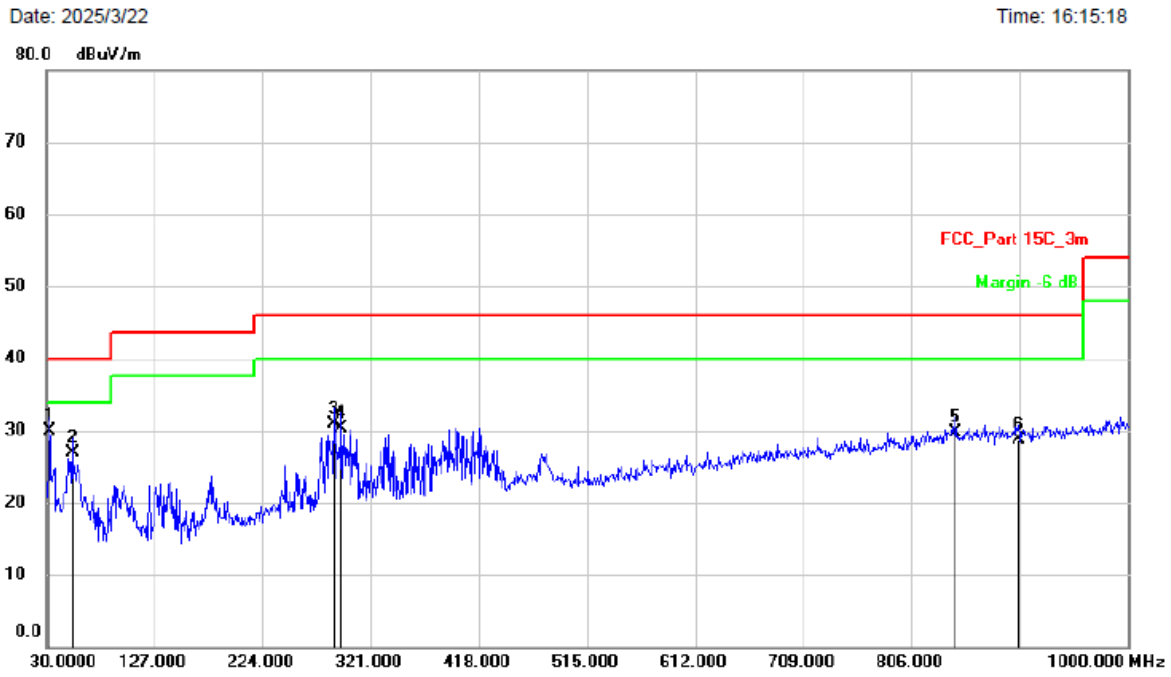

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 281.2300 | 34.56 | -5.86 | 28.70 | 46.00 | -17.30 | QP | |
| 2 | | 308.3900 | 36.99 | -5.29 | 31.70 | 46.00 | -14.30 | QP | |
| 3 | | 342.3400 | 34.09 | -4.29 | 29.80 | 46.00 | -16.20 | QP | |
| 4 | * | 424.7900 | 35.44 | -2.94 | 32.50 | 46.00 | -13.50 | QP | |
| 5 | | 903.9700 | 23.50 | 6.20 | 29.70 | 46.00 | -16.30 | QP | |
| 6 | | 952.4700 | 23.02 | 6.28 | 29.30 | 46.00 | -16.70 | QP | |

Note 1: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

Note 2: *:Maximum data x:Over limit !:over margin

| | |
|---|---|
| M/N: 71U0 (GEX w/DAB version) | Testing Voltage: DC 13.5V |
| Polarization: Vertical | Detector: QP |
| Test Mode: 2 | Distance: 3m |

## Radiated Emission Measurement

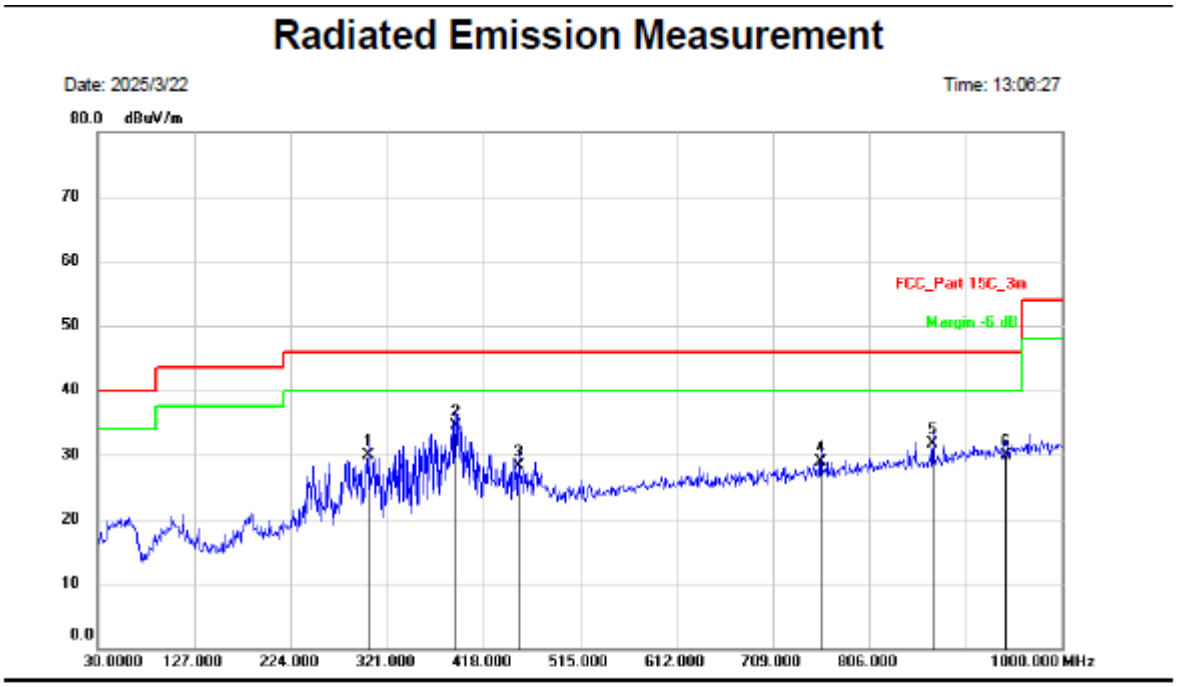



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 32.9100 | 39.39 | -9.49 | 29.90 | 40.00 | -10.10 | QP | |
| 2 | | 53.2800 | 34.37 | -7.47 | 26.90 | 40.00 | -13.10 | QP | |
| 3 | | 288.0200 | 37.76 | -6.76 | 31.00 | 46.00 | -15.00 | QP | |
| 4 | | 294.8100 | 37.02 | -6.62 | 30.40 | 46.00 | -15.60 | QP | |
| 5 | | 845.7700 | 25.08 | 4.72 | 29.80 | 46.00 | -16.20 | QP | |
| 6 | | 902.0300 | 23.74 | 4.96 | 28.70 | 46.00 | -17.30 | QP | |

Note 1: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

Note 2: *:Maximum data x:Over limit !:over margin

| | |
|---|---|
| M/N: 71U0 (IND version) | Testing Voltage: DC 13.5V |
| Polarization: Horizontal | Detector: QP |
| Test Mode: 2 | Distance: 3m |



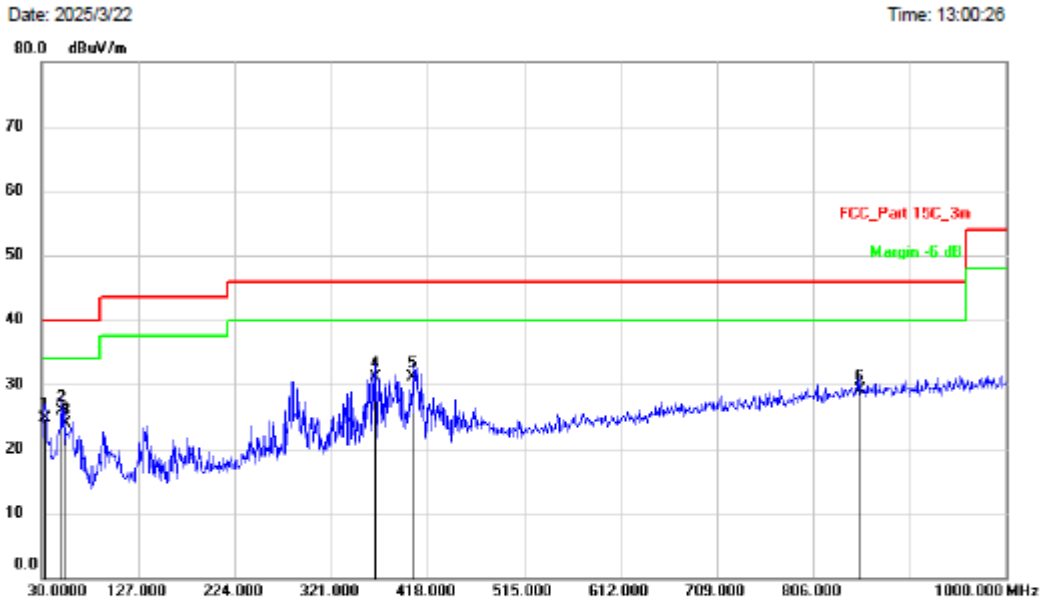

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 302.5700 | 35.34 | -5.44 | 29.90 | 46.00 | -16.10 | QP | |
| 2 | * | 389.8700 | 38.14 | -3.54 | 34.60 | 46.00 | -11.40 | QP | |
| 3 | | 452.9200 | 30.89 | -2.49 | 28.40 | 46.00 | -17.60 | QP | |
| 4 | | 757.5000 | 25.73 | 3.17 | 28.90 | 46.00 | -17.10 | QP | |
| 5 | | 870.0200 | 26.79 | 4.91 | 31.70 | 46.00 | -14.30 | QP | |
| 6 | | 943.7400 | 23.74 | 6.26 | 30.00 | 46.00 | -16.00 | QP | |

Note 1: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

Note 2: *:Maximum data x:Over limit !:over margin

| | |
|---|---|
| M/N: 71U0 (IND version) | Testing Voltage: DC 13.5V |
| Polarization: Vertical | Detector: QP |
| Test Mode: 2 | Distance: 3m |

## Radiated Emission Measurement




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 32.9100 | 34.29 | -9.49 | 24.80 | 40.00 | -15.20 | QP | |
| 2 | * | 49.4000 | 33.00 | -7.00 | 26.00 | 40.00 | -14.00 | QP | |
| 3 | | 53.2800 | 31.47 | -7.47 | 24.00 | 40.00 | -16.00 | QP | |
| 4 | | 365.6200 | 36.03 | -4.93 | 31.10 | 46.00 | -14.90 | QP | |
| 5 | | 403.4500 | 35.38 | -4.28 | 31.10 | 46.00 | -14.90 | QP | |
| 6 | | 852.5600 | 24.38 | 4.82 | 29.20 | 46.00 | -16.80 | QP | |

Note 1: Below 30MHz, the emissions are lower than 20dB below the allowable limit.

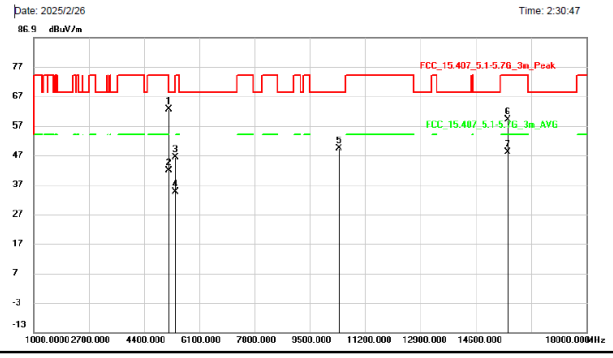
Note 2: *:Maximum data x:Over limit !:over margin

| Modulation:U-NII-1(5190 MHz) TX (802.11n(HT40) the worst case) | | | | Test Result: PASS | | | Test frequency range: 1-40GHz | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Freq. (MHz) | Ant. Pol. (H/V) | Reading Level(dBuV) | | Factor (dB/m) | Emission Level (dBuV/m) | | Limit 3m (dBuV/m) | | Margin (dB) | |
| | | PK | AV | | PK | AV | PK | AV | PK | AV |
| **Operation Mode: TX Mode** | | | | | | | | | | |
| 5150 | H | 55.65 | 34.84 | 6.91 | 62.56 | 41.75 | 68.20 | 54.00 | -5.64 | -12.25 |
| 5350 | H | 39.59 | 27.64 | 6.81 | 46.40 | 34.45 | 68.20 | 54.00 | -21.80 | -19.55 |
| 10380 | H | 35.14 | --- | 14.08 | 49.22 | --- | 68.20 | --- | -18.98 | --- |
| 15570 | H | 38.07 | 27.15 | 20.96 | 59.03 | 48.11 | 74.00 | 54.00 | -14.97 | -5.89 |
| 20760 | H | 40.28 | 28.42 | 18.94 | 59.22 | 47.36 | 74.00 | 54.00 | -14.78 | -6.64 |
| 25950 | H | 36.61 | --- | 23.23 | 59.84 | --- | 68.20 | --- | -8.36 | --- |
| | | | | | | | | | | |
| 5150 | V | 57.80 | 38.58 | 6.91 | 64.71 | 45.49 | 68.20 | 54.00 | -3.49 | -8.51 |
| 5350 | V | 40.66 | 28.27 | 6.81 | 47.47 | 35.08 | 68.20 | 54.00 | -20.73 | -18.92 |
| 10380 | V | 35.95 | --- | 14.08 | 50.03 | --- | 68.20 | --- | -18.17 | --- |
| 15570 | V | 38.20 | 27.15 | 20.96 | 59.10 | 48.05 | 74.00 | 54.00 | -14.90 | -5.95 |
| 20760 | V | 39.40 | 27.73 | 18.94 | 58.34 | 46.67 | 74.00 | 54.00 | -15.66 | -7.33 |
| 25950 | V | 36.09 | --- | 23.23 | 59.32 | -- | 68.20 | --- | -8.88 | --- |
| | | | | | | | | | | |

Remark: 1. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits.

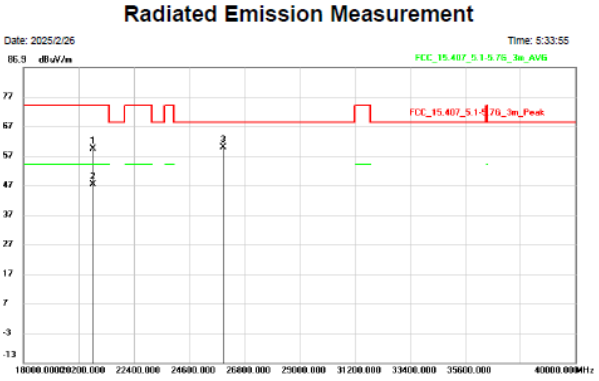
## Horizontal

### Radiated Emission Measurement




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 5150.000 | 55.65 | 6.91 | 62.56 | 68.20 | -5.64 | peak | |
| 2 | | 5150.000 | 34.84 | 6.91 | 41.75 | 54.00 | -12.25 | AVG | |
| 3 | | 5350.000 | 39.59 | 6.81 | 46.40 | 68.20 | -21.80 | peak | |
| 4 | | 5350.000 | 27.64 | 6.81 | 34.45 | 54.00 | -19.55 | AVG | |
| 5 | | 10380.000 | 35.14 | 14.08 | 49.22 | 68.20 | -18.98 | peak | |
| 6 | | 15570.000 | 38.07 | 20.96 | 59.03 | 74.00 | -14.97 | peak | |
| 7 | | 15570.000 | 27.15 | 20.96 | 48.11 | 54.00 | -5.89 | AVG | |

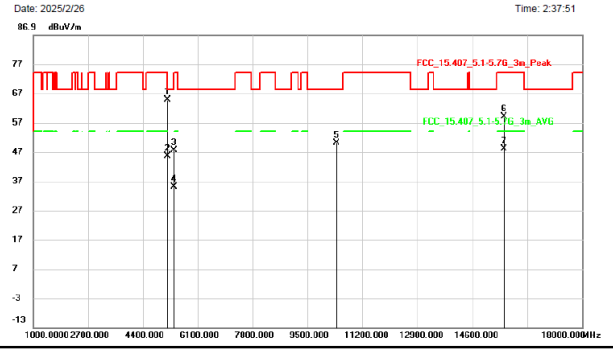
### Radiated Emission Measurement




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 20760.000 | 40.28 | 18.94 | 59.22 | 74.00 | -14.78 | peak | |
| 2 | * | 20760.000 | 28.42 | 18.94 | 47.36 | 54.00 | -6.64 | AVG | |
| 3 | | 25950.000 | 36.61 | 23.23 | 59.84 | 68.20 | -8.36 | peak | |

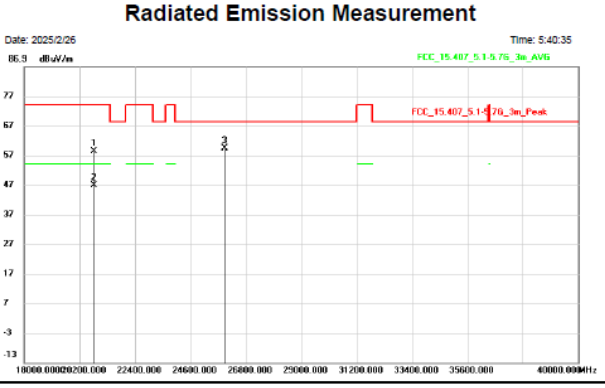
## Vertical

### Radiated Emission Measurement




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 5150.000 | 57.80 | 6.91 | 64.71 | 68.20 | -3.49 | peak | |
| 2 | | 5150.000 | 38.58 | 6.91 | 45.49 | 54.00 | -8.51 | AVG | |
| 3 | | 5350.000 | 40.66 | 6.81 | 47.47 | 68.20 | -20.73 | peak | |
| 4 | | 5350.000 | 28.27 | 6.81 | 35.08 | 54.00 | -18.92 | AVG | |
| 5 | | 10380.000 | 35.95 | 14.08 | 50.03 | 68.20 | -18.17 | peak | |
| 6 | | 15570.000 | 38.14 | 20.96 | 59.10 | 74.00 | -14.90 | peak | |
| 7 | | 15570.000 | 27.09 | 20.96 | 48.05 | 54.00 | -5.95 | AVG | |

### Radiated Emission Measurement



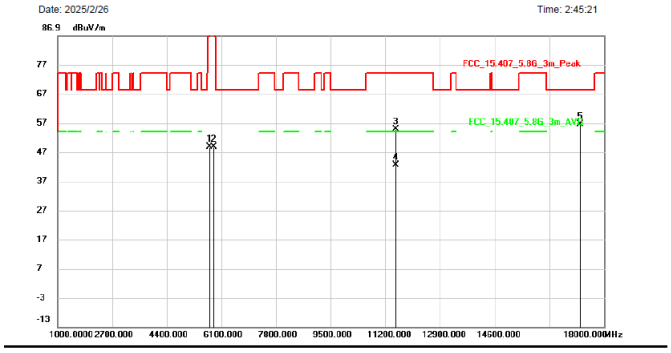

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 20760.000 | 39.40 | 18.94 | 58.34 | 74.00 | -15.66 | peak | |
| 2 | * | 20760.000 | 27.73 | 18.94 | 46.67 | 54.00 | -7.33 | AVG | |
| 3 | | 25950.000 | 36.09 | 23.23 | 59.32 | 68.20 | -8.88 | peak | |

| Modulation: U-NII-3(5755 MHz) TX (802.11ac(VHT40) the worst case) | | | | Test Result: PASS | | | Test frequency range: 1-40GHz | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Freq. (MHz) | Ant. Pol. (H/V) | Reading Level(dBuV) | | Factor (dB/m) | Emission Level (dBuV/m) | | Limit 3m (dBuV/m) | | Margin (dB) | |
| | | PK | AV | | PK | AV | PK | AV | PK | AV |
| **Operation Mode: TX Mode** | | | | | | | | | | |
| 5725 | H | 41.84 | --- | 6.90 | 48.74 | --- | 122.20 | --- | -73.46 | --- |
| 5850 | H | 41.84 | --- | 6.98 | 48.82 | --- | 122.20 | --- | -73.38 | --- |
| 11510 | H | 37.80 | 25.52 | 16.91 | 54.71 | 42.43 | 74.00 | 54.00 | -19.29 | -11.57 |
| 17265 | H | 34.28 | --- | 22.31 | 56.59 | --- | 68.20 | --- | -11.61 | --- |
| 23020 | H | 39.89 | 27.32 | 19.72 | 59.61 | 47.04 | 74.00 | 54.00 | -14.39 | -6.96 |
| 28775 | H | 34.62 | --- | 25.32 | 59.94 | --- | 68.20 | --- | -8.26 | --- |
| | | | | | | | | | | |
| 5725 | V | 41.60 | --- | 6.90 | 48.50 | --- | 122.20 | --- | -73.70 | --- |
| 5850 | V | 38.92 | --- | 6.98 | 45.90 | --- | 122.20 | --- | -76.30 | --- |
| 11510 | V | 37.69 | 25.15 | 16.91 | 54.60 | 42.06 | 74.00 | 54.00 | -19.40 | -11.94 |
| 17265 | V | 34.31 | --- | 22.31 | 56.62 | --- | 68.20 | --- | -11.58 | --- |
| 23020 | V | 38.34 | 27.00 | 19.72 | 58.06 | 46.72 | 74.00 | 54.00 | -15.94 | -7.28 |
| 28775 | V | 34.02 | --- | 25.32 | 59.34 | --- | 68.20 | --- | -8.86 | --- |
| | | | | | | | | | | |

Remark: 1. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits.

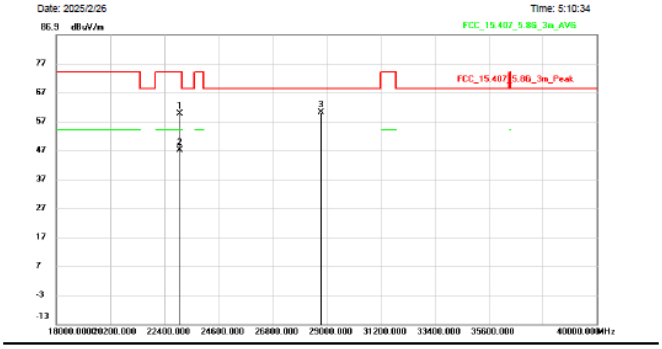
## Horizontal

### Radiated Emission Measurement




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 5725.000 | 41.84 | 6.90 | 48.74 | 122.20 | -73.46 | peak | |
| 2 | | 5850.000 | 41.84 | 6.98 | 48.82 | 122.20 | -73.38 | peak | |
| 3 | | 11510.000 | 37.80 | 16.91 | 54.71 | 74.00 | -19.29 | peak | |
| 4 | * | 11510.000 | 25.52 | 16.91 | 42.43 | 54.00 | -11.57 | AVG | |
| 5 | | 17265.000 | 34.28 | 22.31 | 56.59 | 68.20 | -11.61 | peak | |

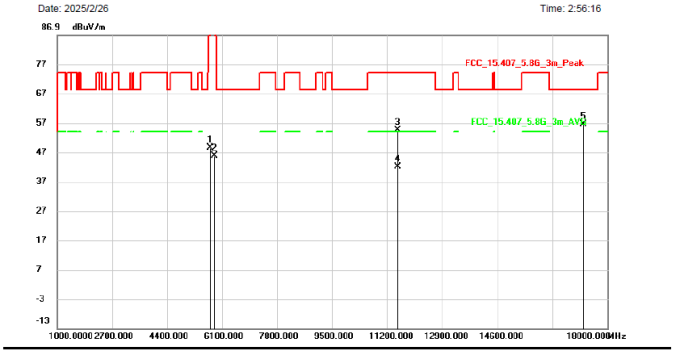
### Radiated Emission Measurement




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 23020.000 | 39.89 | 19.72 | 59.61 | 74.00 | -14.39 | peak | |
| 2 | * | 23020.000 | 27.32 | 19.72 | 47.04 | 54.00 | -6.96 | AVG | |
| 3 | | 28775.000 | 34.62 | 25.32 | 59.94 | 68.20 | -8.26 | peak | |

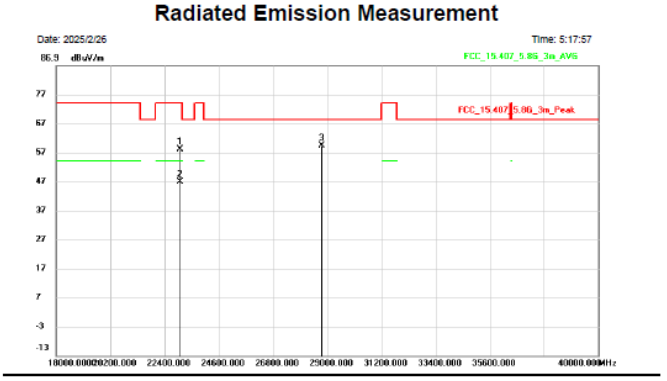
## Vertical

### Radiated Emission Measurement




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 5725.000 | 41.60 | 6.90 | 48.50 | 122.20 | -73.70 | peak | |
| 2 | | 5850.000 | 38.92 | 6.98 | 45.90 | 122.20 | -76.30 | peak | |
| 3 | | 11510.000 | 37.69 | 16.91 | 54.60 | 74.00 | -19.40 | peak | |
| 4 | | 11510.000 | 25.15 | 16.91 | 42.06 | 54.00 | -11.94 | AVG | |
| 5 | * | 17265.000 | 34.31 | 22.31 | 56.62 | 68.20 | -11.58 | peak | |

### Radiated Emission Measurement

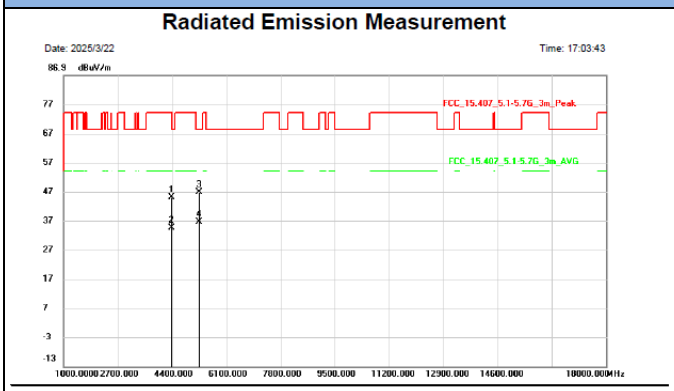



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 23020.000 | 38.34 | 19.72 | 58.06 | 74.00 | -15.94 | peak | |
| 2 | * | 23020.000 | 27.00 | 19.72 | 46.72 | 54.00 | -7.28 | AVG | |
| 3 | | 28775.000 | 34.02 | 25.32 | 59.34 | 68.20 | -8.86 | peak | |

| Test Mode:2 | | | | Test Result: PASS | | | Test frequency range: 1-18GHz | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Freq. (MHz) | Ant. Pol. (H/V) | Reading Level(dBuV) | | Factor (dB/m) | Emission Level (dBuV/m) | | Limit 3m (dBuV/m) | | Margin (dB) | |
| | | PK | AV | | PK | AV | PK | AV | PK | AV |
| **Operation Mode: Co-transmitting Mode** | | | | | | | | | | |
| 4383 | H | 40.13 | 29.79 | 4.84 | 44.97 | 34.63 | 74.00 | 54.00 | -29.03 | -19.37 |
| 5250 | H | 39.97 | --- | 6.82 | 46.79 | --- | 68.20 | --- | -21.41 | --- |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 4689 | V | 41.74 | 30.29 | 5.87 | 47.61 | 36.16 | 74.00 | 54.00 | -26.39 | -17.84 |
| 5148 | V | 42.33 | 29.34 | 6.91 | 49.24 | 36.25 | 74.00 | 54.00 | -24.76 | -17.75 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Remark: 1. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits.

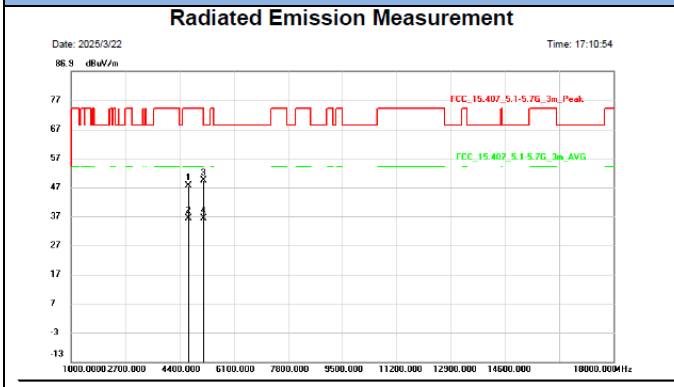
## Horizontal




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4383.000 | 40.13 | 4.84 | 44.97 | 74.00 | -29.03 | peak | |
| 2 | * | 4383.000 | 29.79 | 4.84 | 34.63 | 54.00 | -19.37 | AVG | |
| 3 | | 5250.000 | 39.97 | 6.82 | 46.79 | 68.20 | -21.41 | peak | |
| 4 | | 5250.000 | 29.66 | 6.82 | 36.48 | 68.20 | -31.72 | AVG | |

---

## Vertical




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4689.000 | 41.74 | 5.87 | 47.61 | 74.00 | -26.39 | peak | |
| 2 | | 4689.000 | 30.29 | 5.87 | 36.16 | 54.00 | -17.84 | AVG | |
| 3 | | 5148.000 | 42.33 | 6.91 | 49.24 | 74.00 | -24.76 | peak | |
| 4 | * | 5148.000 | 29.34 | 6.91 | 36.25 | 54.00 | -17.75 | AVG | |

---

## 14.9 Dynamic Frequency Selection

### List of Measurement and Examinations

EUT Operational mode:

| DFS Operational mode | Operating Frequency Range | |
|---|---|---|
| | U-NII-2A | U-NII-2C |
| Slave without radar Interference detection function | √ | √ |

Devices with radar detection

| Maximum Transmit Power | Value (See Note 1 and 2) |
|---|---|
| ≥200 mw | -64 dBm |
| EIRP < 200 mw and power spectral density < 10 dBm/MHz | -62 dBm |
| EIRP < 200 mw that do not meet the power spectral density requirement | -64 dBm |

Note:
1. This is the level at the input of the receiver assuming a 0 dBi receive antenna.
2. Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.
3. EIRP is based on the highest antenna gain. For MIMO devise refer to KDB Publication 662911 D01.

Applicability of DFS requirements prior to use of a channel

| Requirement Radar | Operational Mode | | |
|---|---|---|---|
| | Master | Client without Radar Detecion | Client with Radar Detection |
| Non-Occupancy Period | √ | Not required | Yes |
| DFS Detection Threshold | √ | Not required | Yes |
| Channel Availability Check Time | √ | Not required | Not Required |
| U-NII Detection Bandwidth | √ | Not required | Yes |

Note: Regarding KDB 905462 D03 Client Without DFS New Rules section (b)(5/6), If the client moves with the master, the device is considered compliant if nothing appears in the client non- occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear. An analyzer plot that contains a single 30-minute sweep on the original channel.

Applicability of DFS requirements during normal operation

| Requirement<br>Radar | Operational Mode | | |
|---|---|---|---|
| | Master | Client without Radar Detection | Client with Radar Detection |
| DFS Detection Threshold | √ | Not required | Yes |
| Channel Closing Transmission Time | √ | Yes | Yes |
| Channel Move Time | √ | Yes | Yes |
| U-NII Detection Bandwidth | √ | Not required | Yes |
| Note: Regarding KDB 905462 D03 Client Without DFS New Rules section (b)(5/6), If the client moves with the master, the device is considered compliant if nothing appears in the client non- occupancy period test. For devices that shut down (rather than moving channels), no beacons should appear. An analyzer plot that contains a single 30-minute sweep on the original channel. | | | |

| Additional requirements for devices with multiple bandwidth modes | Master or Client with radar detection | Client without radar detection |
|---|---|---|
| U-NII Detection Bandwidth and Statistical Performance Check | All BW modes must be tested | Not required |
| Channel Move Time and Channel Closing Channel Move Time and Channel Closing Transmission Time | Test using widest BW mode available | Test using the widest Test using the widest BW mode available for the link |
| All other | Any single BW mode | Not required |
| Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency. | | |

DFS Radar Signal Parameter Values:

| Parameter | Value |
|---|---|
| Non-occupancy period | Minimum 30 minutes |
| Channel Availability Check Time | 60 seconds |
| Channel Move Time | 10 seconds (See Note 1) |
| Channel Closing Transmission Time | 200 milliseconds + an aggregate of 60ms over remaining 10 second period (See Notes 1 and 2) |
| U-NII Detection Bandwidth | Minimum 100% of the U-NII 99% transmission power bandwidth (See Note 3.) |

Note:
1. Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.
2. The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.
3. During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

DFS Radar Signal Parameter:

Radar Type 0 was used in the evaluation of the Client device for the purpose of measuring the Channel Move Time and the Channel Closing Transmission Time

Table 1: Short Pulse Radar Test Waveforms

| Radar Type | Pulse Width (μsec) | PRI (μsec) | Number of Pulses | Minimum Percentage of Successful Detection | Minimum Trials |
|---|---|---|---|---|---|
| 0 | 1 | 1428 | 18 | See Note 1 | See Note 1 |
| 1 | 1 | Test A, Test B | $\text{Roundup}\left\{\left(\frac{1}{360}\right)\left(\frac{19\cdot 10^6}{\text{PRI}_{\mu sec}}\right)\right\}$ | 60% | 30 |
| 2 | 1-5 | 150-230 | 23-29 | 60% | 30 |
| 3 | 6-10 | 200-500 | 16-18 | 60% | 30 |
| 4 | 11-20 | 200-500 | 12-16 | 60% | 30 |
| Aggregate (Radar Types 1-4) | | | | 80% | 120 |

Note: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.

Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a

Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A.

Remark1: A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms.

Remark2: If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

Remark3: The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

Table 2: Long Pulse Radar Test Waveform

| Radar Type | Pulse Width (μsec) | Chirp Width (MHz) | PRI (μsec) | Number of Pulses per Burst | Number of Bursts | Minimum Percentage of Successful Detection | Minimum Trials |
|---|---|---|---|---|---|---|---|
| 5 | 50-100 | 5-20 | 1000-2000 | 1-3 | 8-20 | 80% | 30 |

Table 3: Frequency Hopping Radar Test Waveform

| Radar Type | Pulse Width (μsec) | PRI (μsec) | Pulses per Hop | Hopping Rate (kHz) | Hopping Sequence Length (msec) | Minimum Percentage of Successful Detection | Minimum Trials |
|---|---|---|---|---|---|---|---|
| 6 | 1 | 333 | 9 | 0.333 | 300 | 70% | 30 |

In-Service Monitoring: Channel Move Time, Channel Closing Transmission Time and Non-Occupancy Period

**Limit of In-Service Monitoring**

Reference to DFS Radar Signal Parameter Values.

**Test Procedures**

One frequency will be chosen from the Operating Channels of the EUT within the 5250-5350 MHz or 5470-5725 MHz bands. For 802.11 devices, the test frequency must contain control signals. This can be verified by disabling channel loading and monitoring the spectrum analyzer. If no control signals are detected, another frequency must be selected within the emission bandwidth where control signals are detected.

In case the EUT is a Master Device, a U-NII device operating as a Client Device will be used and it is assumed that the Client will associate with the EUT (Master). For radiated tests, the emissions of the Radar Waveform generator will be directed towards the Master Device. If the Master Device has antenna gain, the main beam of the antenna will be directed toward the radar emitter. Vertical polarization is used for testing.

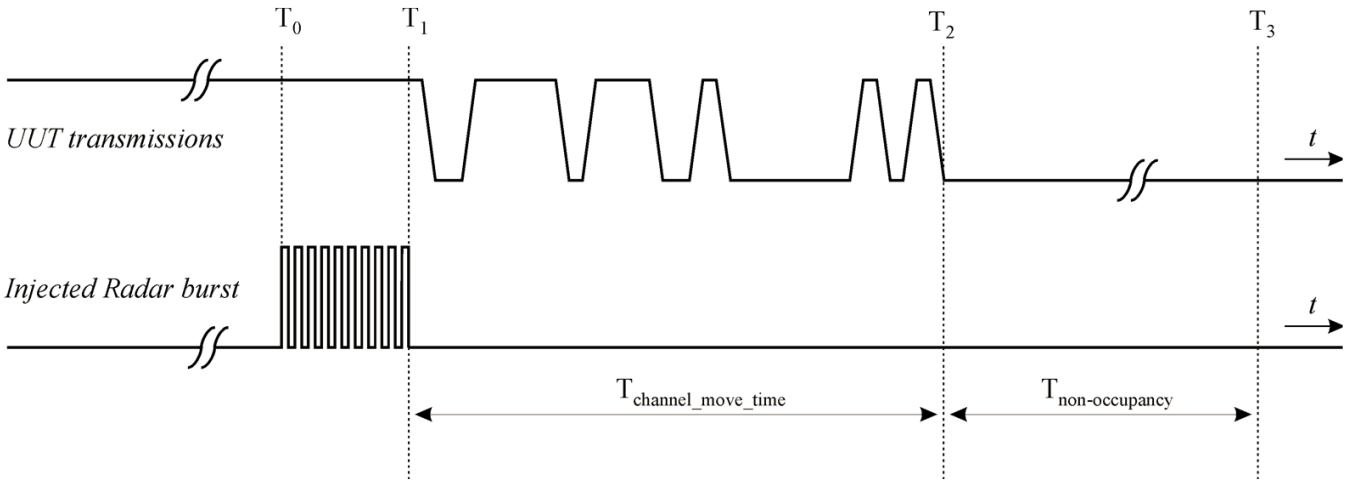
The TCP protocol unicast data stream was generated by the iperf software command line with at least 17% activity ratio over any 100ms period.

Timing plots are reported with calculations demonstrating a minimum channel loading of approximately 17% or greater. For example, channel loading can be estimated by setting the spectrum analyzer for zero span and approximate the Time On/ (Time On + Off Time).

At time T0 the Radar Waveform generator sends a Burst of pulses for one of the Short Pulse Radar Types 1-4 at DFS Detection Threshold levels on the Operating Channel. An additional 1dB is added to the radar test signal to ensure it is at or above the DFS Detection Threshold, accounting for equipment variations/errors.

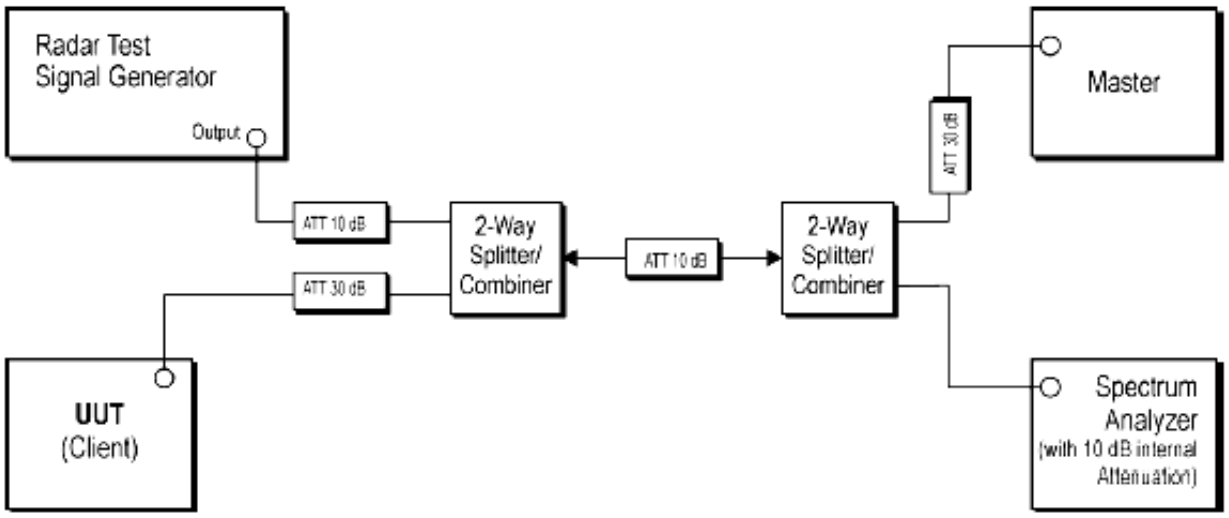
Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Measure and record the Channel Move Time and Channel Closing Transmission Time if radar detection occurs.

When operating as a Master Device, monitor the EUT for more than 30 minutes following instant T2 to verify that the EUT does not resume any transmissions on this Channel. Perform this test once and record the measurement result.




Channel Closing Transmission Time, Channel Move Time and Non-Occupancy Period

## Test Set-Up




Setup for Client with injection at the Master

**Measurement Results**

Not Applicable

## 14.10 Antenna Requirement

**STANDARD APPLICABLE**

According to of FCC part 15C section 15.203:

furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section 15.203 of the rules.

And according to 47 CFR section 15.407(a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

**ANTENNA CONNECTED CONSTRUCTION**

The antenna is chip antenna that no antenna other than furnished by the responsible party shall be used with the device, and the best case gain of the antenna is 2.96 dBi, therefore, the antenna is considered to meet the requirement.

# 15. Test Equipment List

| Item | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Interval |
|---|---|---|---|---|---|---|
| 1. | Test Receiver | Rohde & Schwarz | ESCI7 | 100837 | Mar. 12, 2025 | 1 Year |
| 2. | Antenna | Schwarzbeck | VULB9162 | 9162-010 | Mar. 23, 2024 | 2 Year |
| 3. | Spectrum Analyzer | Keysight | N9010B | MY62170254 | Aug. 14, 2024 | 1 Year |
| 4. | Spectrum Analyzer | Keysight | N9020A | MY54200831 | Mar. 12, 2025 | 1 Year |
| 5. | Horn Antenna+Amplifier | COM-Power | AHA-840 | 10100020 | Mar. 23, 2024 | 2 Year |
| 6. | Horn Antenna | COM-Power | AH-118 | 071078 | Mar. 23, 2024 | 2 Year |
| 7. | Pre-Amplifier | HP | HP 8449B | 3008A00964 | Mar. 12, 2025 | 1 Year |
| 8. | Pre-Amplifier | HP | HP 8447D | 1145A00203 | Mar. 12, 2025 | 1 Year |
| 9. | Power Meter | Agilent | N1912A | MY41497159 | Aug.14, 2024 | 1 Year |
| 10. | Power Sensor | Agilent | N1921A | MY48251036 | Aug.14, 2024 | 1 Year |
| 11. | Loop Antenna | Schwarzbeck | FMZB 1513 | 1513-272 | Mar. 23, 2024 | 2 Year |
| 12. | Test Receiver | Rohde & Schwarz | ESCI | 101152 | Mar. 12, 2025 | 1 Year |
| 13. | L.I.S.N | Rohde & Schwarz | ENV 216 | 101317 | Mar. 12, 2025 | 1 Year |
| 14. | L.I.S.N | Rohde & Schwarz | ESH2-Z5 | 893606/014 | Mar. 12, 2025 | 1 Year |
| 15. | RF Switching Unit | Compliance Direction Systems Inc. | RSU-M2 | 38311 | Mar. 12, 2025 | 1 Year |
| 16. | Temperature & Humidity Chamber | REMAFEE | SYHR225L | N/A | Mar. 12, 2025 | 1 Year |
| 17. | DC Source | Maynuo | MY8811 | N/A | Mar. 12, 2025 | 1 Year |
| 18. | Temporary antenna connector | TESCOM | SS402 | N/A | N/A | N/A |
| 19. | Chamber | SAEMC | 9*7*7m | N/A | Apr. 21, 2023 | 2 Year |
| 20. | Test Software | EZ | EZ_EMC | N/A | N/A | N/A |

Note: For photographs of EUT and measurement, please refer to appendix in separate documents.

---End---