

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                            |                                                                                     |                                                    |                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------|
| <b>Prüfbericht-Nr.:</b><br><i>Test report no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>ULR-</b><br><b>TC568820300000041F</b>                                                                                                                   | <b>Auftrags-Nr.:</b><br><i>Order no.:</i>                                           | 166468642 0030                                     | Seite 1 von 39<br>Page 1 of 39 |
| <b>Kunden-Referenz-Nr.:</b><br><i>Client reference no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                         | NA                                                                                                                                                         | <b>Auftragsdatum:</b><br><i>Order date:</i>                                         | 2020-07-27                                         |                                |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                              | Tejas Networks Limited, plot No.25<br>JP Software Park, Electronic city, Phase-1<br>Hosur Road, Bangalore-560100                                           |                                                                                     |                                                    |                                |
| <b>Prüfgegenstand:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                         | Optical Network Terminal                                                                                                                                   |                                                                                     |                                                    |                                |
| <b>Bezeichnung / Serien -Nr.:</b><br><i>Identification / Serial no.:</i>                                                                                                                                                                                                                                                                                                                                                                                            | TJ2100N-14ET                                                                                                                                               |                                                                                     |                                                    |                                |
| <b>Auftrags-Inhalt:</b><br><i>Order content:</i>                                                                                                                                                                                                                                                                                                                                                                                                                    | Testing & issue of test report                                                                                                                             |                                                                                     |                                                    |                                |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                 | FCC Part 15 Subpart C 15.247, 15.207                                                                                                                       |                                                                                     |                                                    |                                |
| <b>Wareneingangsdatum:</b><br><i>Date of sample receipt:</i>                                                                                                                                                                                                                                                                                                                                                                                                        | 2020-07-21                                                                                                                                                 |  |                                                    |                                |
| <b>Prüfmuster-Nr.:</b><br><i>Test sample no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                   | A002871314-001                                                                                                                                             |                                                                                     |                                                    |                                |
| <b>Prüfzeitraum:</b><br><i>Testing period:</i>                                                                                                                                                                                                                                                                                                                                                                                                                      | 2020-08-19 - 2020-08-26                                                                                                                                    |                                                                                     |                                                    |                                |
| <b>Ort der Prüfung:</b><br><i>Place of testing:</i>                                                                                                                                                                                                                                                                                                                                                                                                                 | Wireless laboratory,<br>Bangalore                                                                                                                          |                                                                                     |                                                    |                                |
| <b>Prüflaboratorium:</b><br><i>Testing laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                              | TÜV Rheinland (India) Pvt.<br>Ltd. 27/B, 2nd cross road,<br>Electronic city Phase1,<br>Bangalore-560100, India<br>FCC Test Site Registration<br>No: 496599 |                                                                                     |                                                    |                                |
| <b>Prüfergebnis*:</b><br><i>Test result*:</i>                                                                                                                                                                                                                                                                                                                                                                                                                       | Pass                                                                                                                                                       |                                                                                     |                                                    |                                |
| <b>geprüft von:</b><br><i>tested by:</i>                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>genehmigt von:</b><br><i>authorized by:</i>                                                                                                             |                                                                                     |                                                    |                                |
| <b>Datum:</b><br><i>Date:</i> 2020-28-08                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Ausstellatum:</b><br><i>Issue date:</i> 2021-01-11                                                                                                      |                                                                                     |                                                    |                                |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Rajesh M Gowda</b><br>Engineer                                                                                                                          | <b>Stellung / Position:</b>                                                         | <b>Mahammadgouse Kaladagi</b><br>Assistant Manager |                                |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contains FCC ID: 2AXV9-1638AA                                                                                                                              |                                                                                     |                                                    |                                |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br><i>Condition of the test item at delivery:</i>                                                                                                                                                                                                                                                                                                                                                              | <b>Prüfmuster vollständig und unbeschädigt</b><br><i>Test item complete and undamaged</i>                                                                  |                                                                                     |                                                    |                                |
| <p>* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft<br/>P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet</p> <p>* Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor<br/>P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</p>                    |                                                                                                                                                            |                                                                                     |                                                    |                                |
| <p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b><br/> <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p> |                                                                                                                                                            |                                                                                     |                                                    |                                |

V05

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## TEST SUMMARY

| Test Item                                                     | FCC Clause              | Remarks |
|---------------------------------------------------------------|-------------------------|---------|
| Maximum Average Conducted Power                               | FCC 15.247(b)(3)        | N/T     |
| Maximum Power Spectral Density                                | FCC 15.247(e)           | N/T     |
| DTS Bandwidth                                                 | FCC 15.247(a) (2)       | N/T     |
| Emissions in non-restricted frequency bands                   | FCC 15.247(d)           | N/T     |
| Spurious Radiated Emissions and Restricted Bands of Operation | FCC 15.209 / FCC 15.205 | Pass    |
| Conducted Emissions on a.c Power Lines                        | FCC 15.207              | Pass    |

Product Category: Electronics Testing  
Test Discipline: EMC Test Facility

### Note:

1. \*N/T: Not tested – These test cases are not tested, the product uses certified RF module from Eardatek With FCC ID: 2AMM6-1638AA, multiple listing is done to this module with Change in FCC ID process and listed under FCC ID: 2AXV9-1638AA
2. This product contains Wi-Fi 2.4 GHz, Wi-Fi 5GHz and Bluetooth module since client is not using Bluetooth module it is completely disabled by software.
3. Product TJ2100N-14ET has been integrated with following certified radio modules, each module is used for either 2.4 GHz or 5 GHz transmission, simultaneous transmission is possible, for results refer section 3.3 of this report

| SI No. | Radio Protocol supported | Radio protocol used in the Host | FCC ID       | No of transmitter | Original module Tested By |
|--------|--------------------------|---------------------------------|--------------|-------------------|---------------------------|
| 1      | Wi-Fi - 2.4 GHz & 5 GHz  | Wi-Fi 2.4 GHz only              | 2AXV9-1638AA | 1                 | Eardatek                  |
| 2      | Wi-Fi - 2.4 GHz & 5 GHz  | Wi-Fi 5 GHz only                | 2AXV9-1638AA | 1                 | Eardatek                  |

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## REVISION HISTORY OF THIS REPORT

| Report Number          | Version | Description                    | Issue date |
|------------------------|---------|--------------------------------|------------|
| ULR-TC568820300000041F | 01      | Initial issue of Report        | 2020-10-16 |
| ULR-TC568820300000041F | 02      | Change in ID updates to report | 2020-12-24 |
| ULR-TC568820300000041F | 03      | Reviewer comments updated      | 2021-01-11 |

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# 1 GENERAL REMARKS

## 1.1 Attachments

All attachments are integral part of this test report.

1. TEST SETUP PHOTOS
2. EUT EXTERNAL PHOTOS
3. EUT INTERNAL PHOTOS
4. FCC LABEL AND LABEL LOCATION
5. BLOCK DIAGRAM
6. SPECIFICATION OF EUT
7. SCHEMATIC DIAGRAMS
8. BILL OF MATERIAL
9. USER MANUAL
10. MAXIMUM PERMISSIBLE EXPOSURE INFORMATION

## 2 TEST SITES

### 2.1 Testing Facilities

1. TÜV Rheinland (India) Pvt.Ltd.,  
27/B, 2nd Cross,  
ElectronicCityPhase1  
Bangalore – 560 100,  
India
2. TUV Rheinland (India) Private Limited  
108 , Beside ISBR Business School,  
Electronic city Phase I  
Bangalore - 560 100.  
India

### 2.2 List of Test and Measurement Instruments

Table 1: List of test and measurement instruments

| Equipment                | Manufacturer    | Model Name         | Serial Number       | Firmware Versions | Calibration Due Date | Periodicity | Test Facility                    |
|--------------------------|-----------------|--------------------|---------------------|-------------------|----------------------|-------------|----------------------------------|
| EMI Receiver             | Rohde & Schwarz | ESU 40             | 100288              | 4.43 SP3          | 11.10.2020           | Yearly      | Radiated Spurious Emission       |
| Active loop antenna      | Schwarzbeck     | FMZB 1519 B        | 1519B-00111         | -                 | 31.01.2021           | Yearly      |                                  |
| Biconical Antenna        | Schwarzbeck     | VHBB91 24+BBA 9106 | 9124-1208+9106-0525 | -                 | 16.01.2021           | Yearly      |                                  |
| Log - Periodical Antenna | Schwarzbeck     | VUSLP 9118 A       | VULP911 8A-0733     | -                 | 17.01.2021           | Yearly      |                                  |
| Horn Antenna             | Schwarzbeck     | BBHA 9120 D        | 9120D-1944          | -                 | 30.01.2021           | Yearly      |                                  |
| Horn Antenna             | Schwarzbeck     | BBHA 9170          | BBHA 9170-0904      | -                 | 29.01.2021           | Yearly      |                                  |
| Semi Anechoic Chamber    | Frankonia       | -                  | -                   | -                 | -                    | -           |                                  |
| Fully Anechoic Chamber   | Albatross       | -                  | -                   | -                 | -                    | -           |                                  |
| USB Peak power sensor    | Boonton         | 55006              | 10231               | FW 3.2.4.0        | 09.01.2021           | Yearly      | Antenna - Port Measurements      |
| EMI Receiver             | Rohde & Schwarz | ESW 44             | 101732              | -                 | 10.12.2020           | Yearly      | AC Power line conducted emission |
| LISN                     | Rohde & Schwarz | ENV 216            | 100022              | -                 | 05.09.2020           | Yearly      |                                  |
| Pulse Limiter            | Rohde & Schwarz | ESH3-Z2            | 100811              | -                 | 09.01.2021           | Yearly      |                                  |

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**Table 2: Instrument application Software versions**

| SL. No. | Test Type                                     | Application software | Version  |
|---------|-----------------------------------------------|----------------------|----------|
| 1       | Radiated spurious emission measurement in SAC | EMC 32               | 10.60.00 |
| 2       | Radiated spurious emission measurement in FAC | EMC 32               | 10.60.00 |

### 3 GENERAL PRODUCT INFORMATION

#### 3.1 Product Function and Intended Use

TJ2100N-14ET system is an access node in FTTH architecture of GPON system. The system is a single card system and is designed to serve a single residential unit. ONT operates in Non-AC conditions and is powered by 12V power adaptor. AC-DC adaptor is provided to support working with 90-270V, 50Hz, AC supply. ONT can be installed on table top and wall mounted enclosure suitable for indoor environments. There are no restrictions on installing the ONT. On one side it has fiber (GPON) interface and on other side it has user interfaces with upto 4 LAN ports with RJ-45 interface supporting 10/100/1000 BaseT, 1 USB, 2x2 MIMO Wi-Fi (IEEE 802.11 a/b/g/n/ac), and 2 POTS interface.

#### 3.2 Ratings and System Details of Equipment under Test

Table 3: Ratings and System Details as declared by Client\*

|                                         |           |                                                                               |       |
|-----------------------------------------|-----------|-------------------------------------------------------------------------------|-------|
| <b>Radio Protocol</b>                   |           | Wi-Fi                                                                         |       |
| <b>Operating Frequency Range</b>        |           | 2412MHz to 2462MHz                                                            |       |
| <b>No. of Channels</b>                  |           | 11 (Refer Table 5)                                                            |       |
| <b>Channel Spacing</b>                  |           | 5MHz                                                                          |       |
| <b>Maximum Measured Power (e.i.r.p)</b> |           | 15.46 dBm (n mode HT40 MCS0 2437MHz)                                          |       |
| <b>Modulation</b>                       |           | 802.11b: DSSS (DBPSK/DQPSK/CCK)<br>802.11g/n: OFDM<br>(BPSK/QPSK/16QAM/64QAM) |       |
| <b>Number of antennas</b>               |           | 2*2 MIMO (2.4GHz)                                                             |       |
| <b>Antenna Gain</b>                     |           | Antenna 1, chain 1                                                            | 5 dBi |
|                                         |           | Antenna 2, chain 2                                                            | 5 dBi |
| <b>Antenna Type</b>                     |           | FPC                                                                           |       |
| <b>Supply Voltage to Product</b>        |           | 1.5A @ 12V DC                                                                 |       |
| <b>Environmental conditions</b>         | Storage   | -40°C to +70°C Relative Humidity <95%                                         |       |
|                                         | Operating | 0°C to + 45°C Relative Humidity <95%                                          |       |
| <b>EUT Dimension</b>                    |           | 240 x 61 x 170 mm (LxWxH)                                                     |       |

**\*Disclaimer:** The information/data is supplied by the client and the same is considered to arrive at the final value. Any changes made apart from the specified specification, can directly impact on the tests results. Refer the products user manual for more details.



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**Note:** Product Optical Network Terminal has multiple protocols. All the supported wireless protocols and their respective test results are issued in separate test reports, refer clause 4.6 Report references

### 3.3 Simultaneous operation

|                                                        |                                      |
|--------------------------------------------------------|--------------------------------------|
| <b>Mode of Combinations of Simultaneous Operations</b> | <b>Wi-Fi -2.4 GHz and Wi-Fi 5GHz</b> |
|--------------------------------------------------------|--------------------------------------|

**Note:** Simultaneous Operation was performed with the above mentioned combination and worst case test results are mentioned in section 8 of this report.

### 3.4 Measurement Uncertainty:

Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$

**Table 4: Measurement Uncertainty**

| <b>Parameter</b>                  | <b>Uncertainty</b>               |
|-----------------------------------|----------------------------------|
| Occupied Channel Bandwidth        | $\pm 5 \%$                       |
| RF output power, conducted        | $\pm 1.5 \text{ dB}$             |
| Power Spectral Density, conducted | $\pm 3 \text{ dB}$               |
| Unwanted Emissions, conducted     | $\pm 3 \text{ dB}$               |
| All emissions, radiated           | $\pm 6 \text{ dB}$               |
| Temperature                       | $\pm 3 \text{ }^{\circ}\text{C}$ |
| Supply Voltages                   | $\pm 3 \%$                       |
| Time                              | $\pm 5 \%$                       |

**Note:** The Listed Measurement Uncertainties are the worst-case uncertainty, for the respective test cases. Above Table is for reporting purpose only and not used in determining Final Pass/Fail verdict.

## 4 TEST SET-UP AND OPERATION MODE

### 4.1 Principle of Configuration Selection

- Transmission enabled with highest possible duty cycle transmission on low, mid and high channel.

### 4.2 Test Operation and Test Software

- Software Version: 2.3.4.14
- Hardware Version: Rev3

### 4.3 Special Accessories and Auxiliary Equipment

- None

### 4.4 Countermeasures to achieve EMC Compliance

- None

### 4.5 List of frequencies

| Frequency Band (MHz) | Channel No. | Channel Frequency (MHz) |
|----------------------|-------------|-------------------------|
| 2412 – 2462          | <b>1</b>    | <b>2412</b>             |
|                      | 2           | 2417                    |
|                      | <b>3</b>    | <b>2422</b>             |
|                      | 4           | 2427                    |
|                      | 5           | 2432                    |
|                      | <b>6</b>    | <b>2437</b>             |
|                      | 7           | 2442                    |
|                      | 8           | 2447                    |
|                      | <b>9</b>    | <b>2452</b>             |
|                      | 10          | 2457                    |
|                      | <b>11</b>   | <b>2462</b>             |

Table 5: List of Wi-Fi center Frequencies

#### Channel used for Wi-Fi testing

Channel Bandwidth 20MHz

Channel low : 2412MHz

Channel mid : 2437MHz

Channel high : 2462MHz

Channel Bandwidth 40MHz

Channel low : 2422MHz

Channel mid : 2437MHz

Channel high : 2462MHz

#### Note:

TUV Sample Identification number : A002871314-001 -Radiated & Conducted test Sample

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## 4.6 Report references

**Note:** Product Optical Network Terminal has multiple protocols. All the supported wireless protocols and their respective test results are issued in separate test reports, following table lists the report numbers.

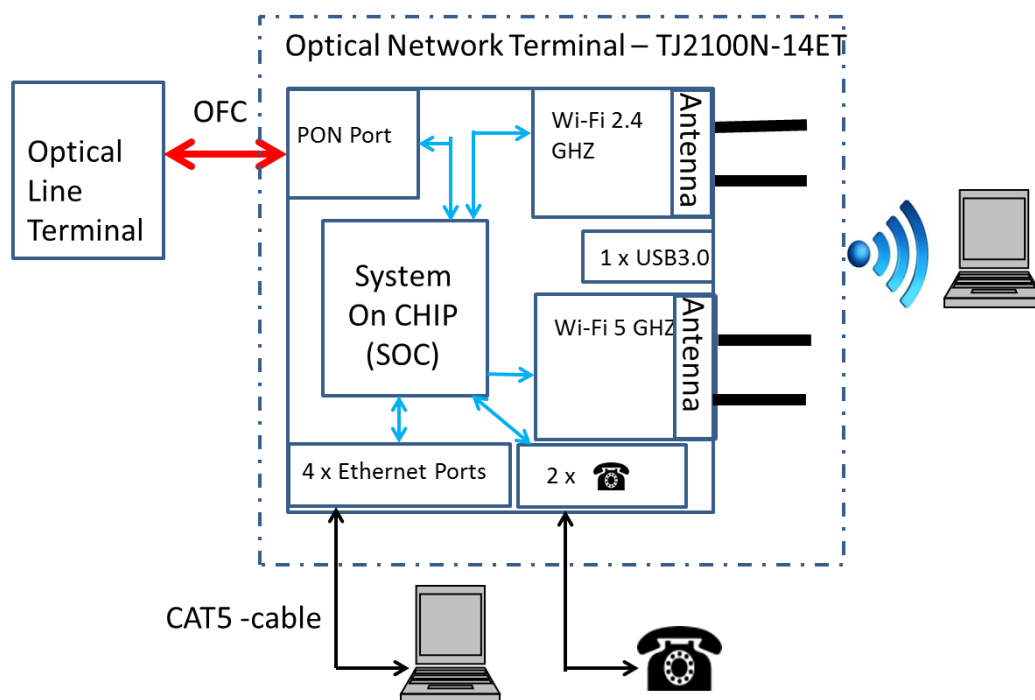
| Radio Protocol                                    | Report Number          |
|---------------------------------------------------|------------------------|
| RF test report for Wi-Fi (2.4GHz) – (This report) | ULR-TC568820300000041F |
| RF test report for Wi-Fi (5GHz)                   | ULR-TC568820300000042F |

## 5 Operational Description

TJ2100N-14ET system is an access node in FTTH architecture of GPON system. The system is a single card system and is designed to serve a single residential unit. ONT operates in Non-AC conditions and is powered by 12V power adaptor. AC-DC adaptor is provided to support working with 90-270V, 50Hz, AC supply. ONT can be installed on table top and wall mounted enclosure suitable for indoor environments. There are no restrictions on installing the ONT.

On one side it has fiber (GPON) interface and on other side it has user interfaces with upto 4 LAN ports with RJ-45 interface supporting 10/100/1000 BaseT, 1 USB, 2x2 MIMO Wi-Fi (IEEE 802.11 a/b/g/n/ac) , and 2 POTS interfaces. Interfaces

## 6 Block Diagram



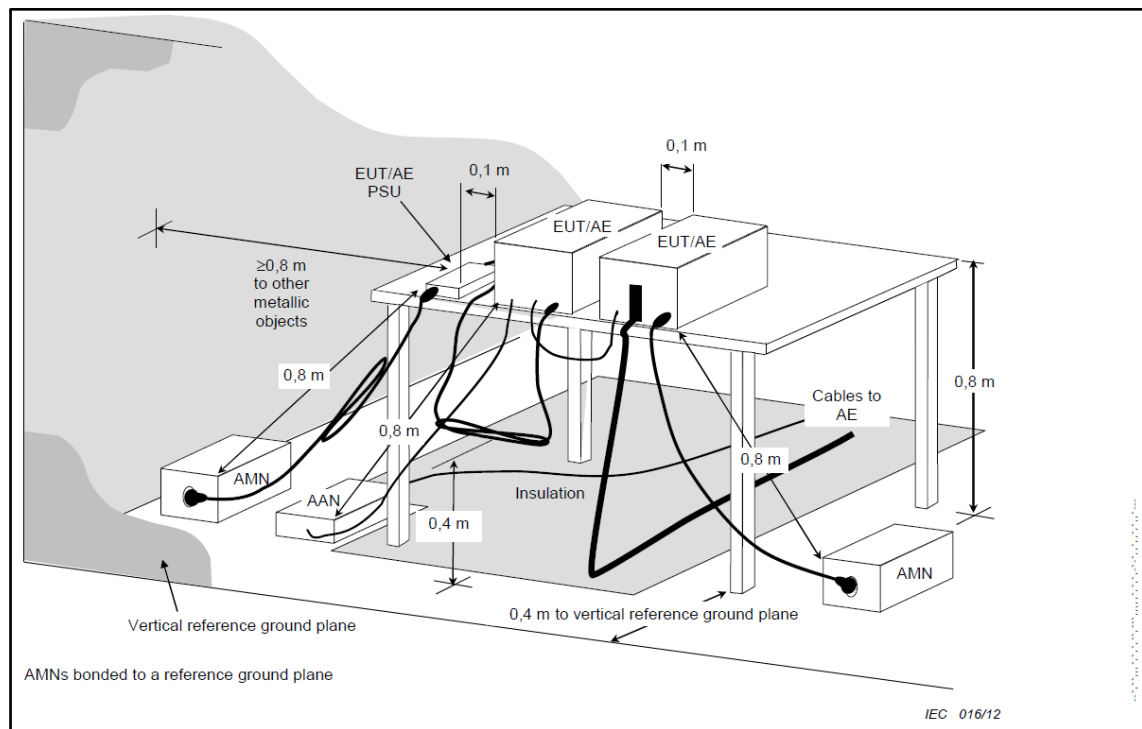
## 7 TEST METHODOLOGY

## 7.1 Conducted Spurious Emission Test on AC Power Line

Measured levels of ac power-line conducted emission across the 50Ω LISN port (to which the EUT is connected). All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer.

The device is placed on the test table, raised 80cm above the reference ground plane. The vertical conducting plane is located 40cm to the rear of the device. AC Conducted emission measurement is made over frequency range from 150kHz to 30MHz, this measurement was performed with EUT powered by 2 methods and both method are tested individually, one with an AC adaptor with 110V AC 60Hz supply and second with Wireless charger with supply 110V AC 60Hz.

### 7.1.1 Test Setup Configuration



## 7.2 Radiated Emission Test

The radiated emission measurement was performed according to the procedures in ANSI C63.10-2013. The equipment under test (EUT) was placed at the middle of the 80 cm high turntable for below 1 GHz & 1.5 m height for above 1 GHz measurement, and the EUT is 3 meters far from the measuring antenna. The turntable was rotated 360° for obtaining the maximum emission. The height of the measuring antennas was scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations. Repeat the measurement steps until the maximum emissions were obtained. The measurement above 1000 MHz was performed by horn antenna, The measurement below 30 MHz was performed by loop antenna, Measurement from 30 MHz to 200 MHz was performed by Baloon and Biconical Antenna, and measurement from 200 MHz to 1 GHz was performed by Log-Periodic Antenna.

The EUT was rotated around the X-, Y-, and Z-Axis and the results from worst case axis are recorded

### 7.2.1 Test Setup Configuration

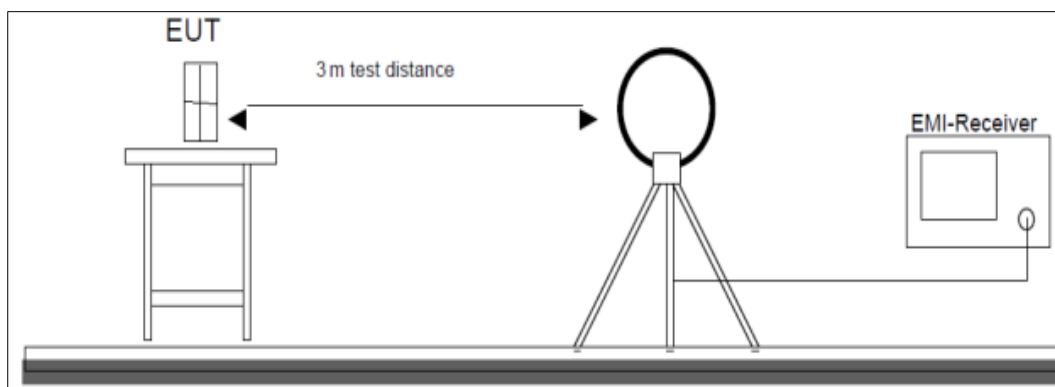


Figure 1: Frequency Range 9 kHz- 30 MHz

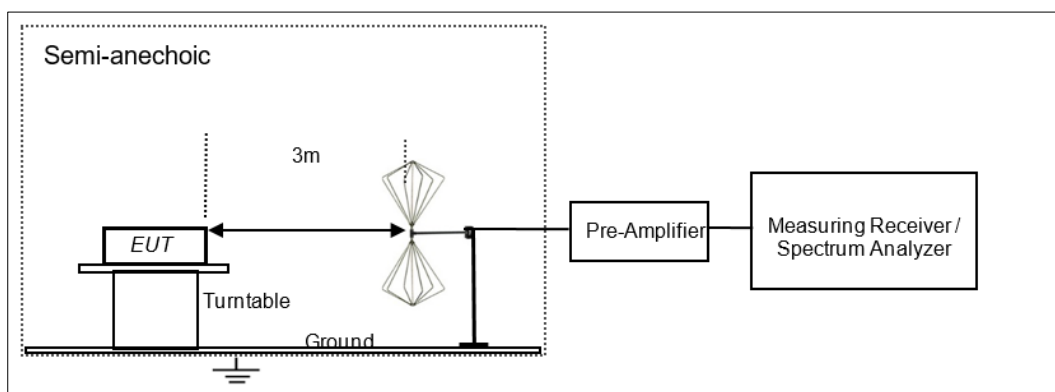
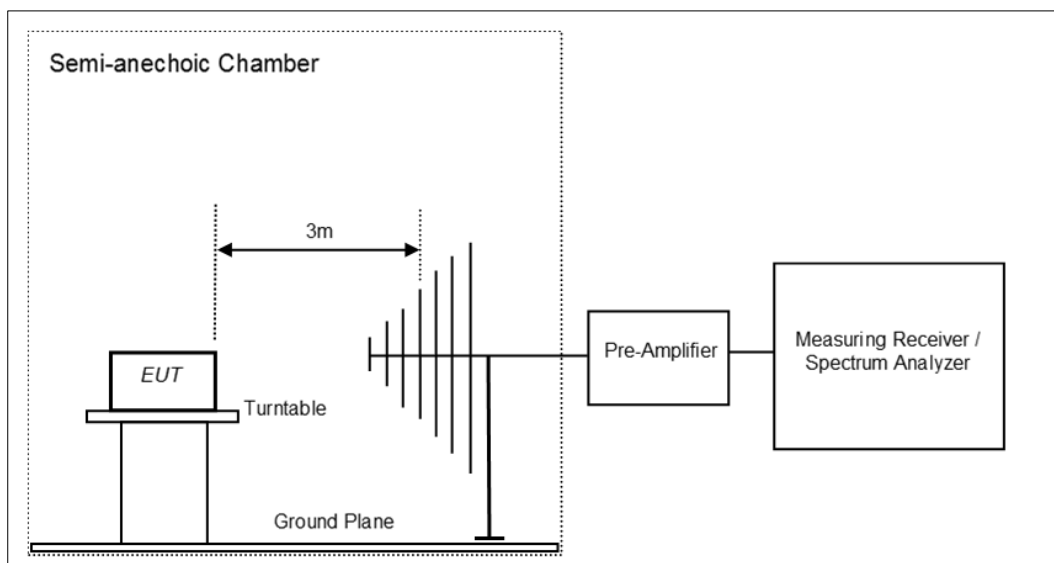
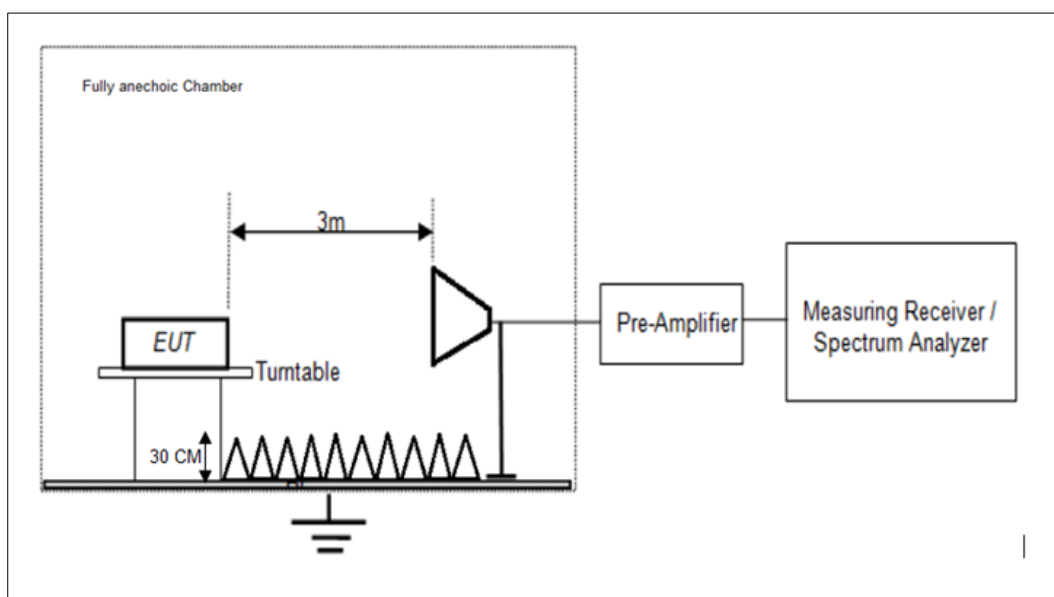


Figure 2: Frequency Range 30 MHz – 200 MHz



**Figure 3: Frequency Range 200 MHz - 1GHz**



**Figure 4: Frequency Range above 1 GHz**

## 8 TEST RESULTS FOR Wi-Fi

### 8.1 Spurious Radiated Emissions & Restricted Bands of Operation

| <b>Result</b>         | <b>Pass</b>                                                                 |
|-----------------------|-----------------------------------------------------------------------------|
| Test Specification    | FCC part 15 Subpart C 15.247 (d) / (15.209 & 15.205)                        |
| Test Method           | ANSI C63.10                                                                 |
| Measurement Location  | Semi Anechoic Chamber 30MHz - 1 GHz<br>Fully Anechoic Chamber 1 GHz - 40GHz |
| Measurement Bandwidth | 100 kHz for frequency range < 1GHz<br>1 MHz for Frequency range >1GHz       |
| Detector              | Refer remarks below                                                         |
| Measuring Distance    | 3 m                                                                         |
| Requirement           | As per the limits mentioned in the below table                              |
| Test setup            | Refer Clause 7 TEST METHODOLOGY                                             |

**Table 6: Transmitter limits for Radiated emission**

| <b>Frequency (MHz)</b> | <b>Field strength (μV/m)</b> | <b>Field strength (dBμV/m)</b> | <b>Distance of Measurement (m)</b> |
|------------------------|------------------------------|--------------------------------|------------------------------------|
| 0.009 – 0.490          | 2400/F(kHz)                  | 48.50 – 13.80                  | 300*                               |
| 0.490 – 1.705          | 24000/F(kHz)                 | 33.80 – 23.00                  | 30*                                |
| 1.705 -30              | 30                           | 29.54                          | 30*                                |
| 30-88                  | 100                          | 40.0                           | 3                                  |
| 88-216                 | 150                          | 43.5                           | 3                                  |
| 216-960                | 200                          | 46.0                           | 3                                  |
| Above 960              | 500                          | 54.0                           | 3                                  |

Remark: \* The limit shows in the table above of frequency range 0.009 – 0.490, 0.490 – 1.705 MHz and 1.705-30MHz is at 300 meter, 30 meter and 30 meter range respectively, which corresponds to 128.51 – 93.80, 73.80 – 62.96 and 69.54 dBμV/m at 3m range by extrapolation calculation and the measurement of loop antenna.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

#### Test Conditions:

Temperature (Norm) = + 25 °C

Voltage = 12V DC

Relative humidity = 62 %



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## Test results:

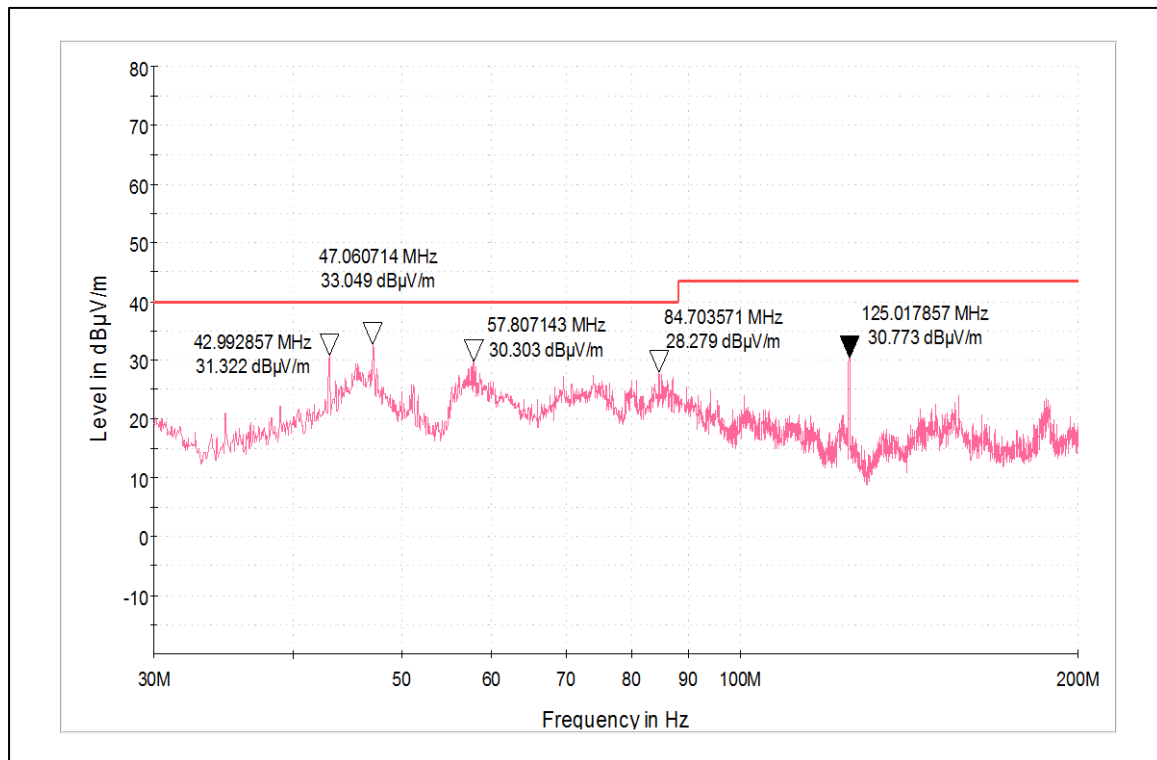
Note: All the losses are included during measurement and final values are mentioned in the test report. Refer Clause 7 TEST METHODOLOGY for more details

### Test results for frequency range 9kHz – 30MHz

No emissions found in frequency range 9 kHz to 30 MHz, and measured levels are below 20dB from the limit line, hence not reported

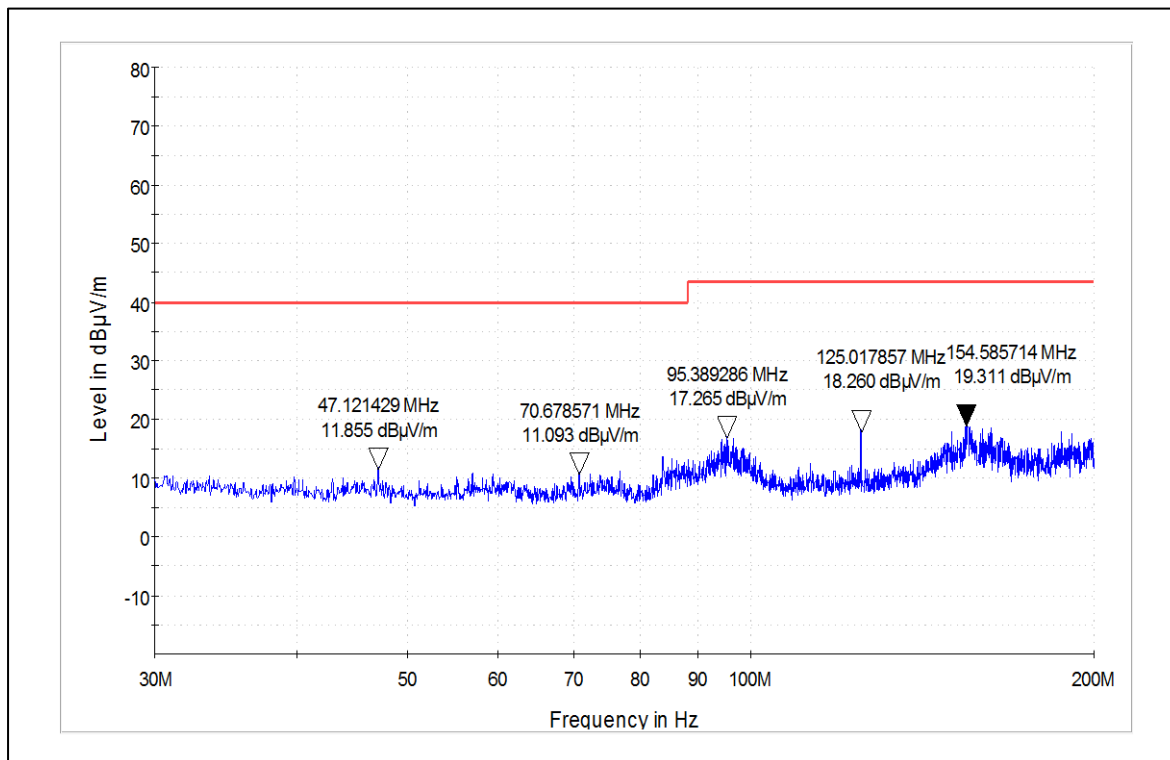
### Test results for frequency range 30MHz – 200MHz

| Antenna Polarization | Frequency (MHz) | Peak (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|----------------------|-----------------|---------------|----------------|-------------|
| Vertical             | 42.99           | 31.32         | 40             | -8.68       |
|                      | 47.06           | 33.04         | 40             | -6.96       |
|                      | 84.70           | 28.27         | 40             | -11.73      |
|                      | 125.01          | 30.77         | 43.5           | -12.73      |
|                      | 249.97          | 26.19         | 46             | -19.81      |
|                      | 381.50          | 25.82         | 46             | -20.18      |
|                      | 499.98          | 34.54         | 46             | -11.46      |
|                      | 907.27          | 36.22         | 46             | -9.78       |
| Horizontal           | 47.12           | 11.85         | 40             | -28.15      |
|                      | 95.38           | 17.26         | 43.5           | -26.24      |
|                      | 125.01          | 18.26         | 43.5           | -25.24      |
|                      | 154.58          | 19.31         | 43.5           | -24.19      |
|                      | 249.97          | 24.99         | 46             | -21.01      |
|                      | 290.80          | 30.30         | 46             | -15.70      |
|                      | 499.98          | 33.53         | 46             | -12.47      |
|                      | 896.48          | 34.67         | 46             | -11.33      |



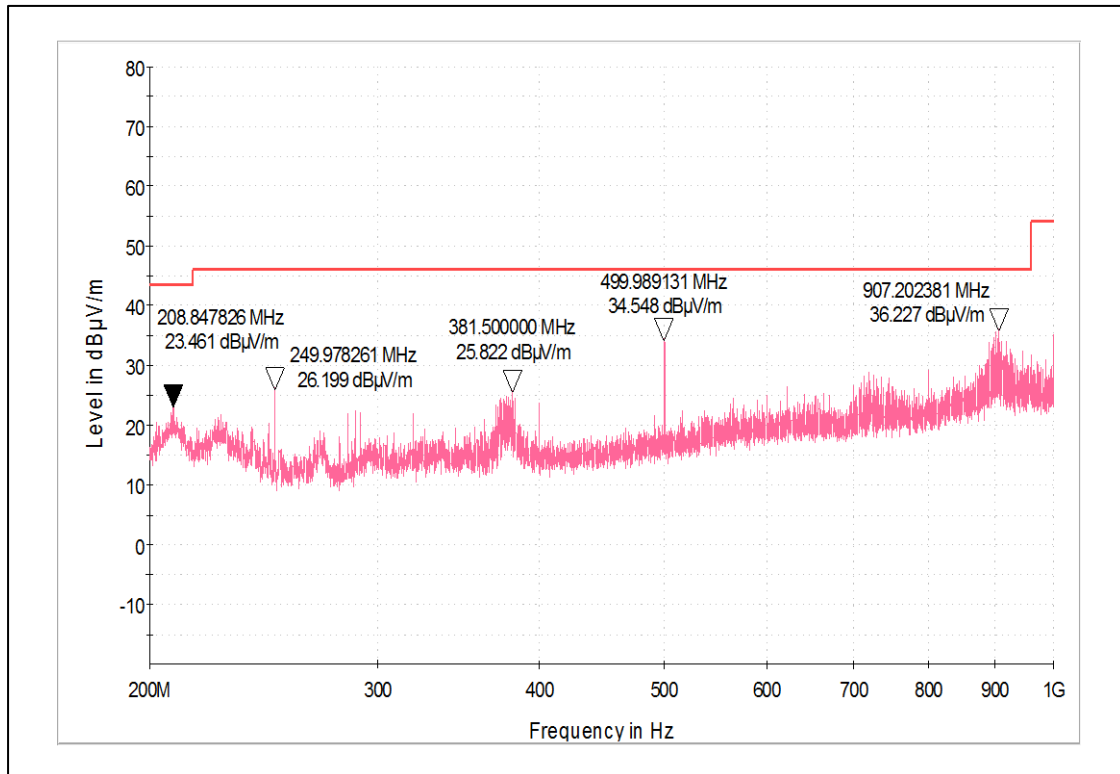
Frequency Range: 30MHz-200MHz

Polarization: Vertical



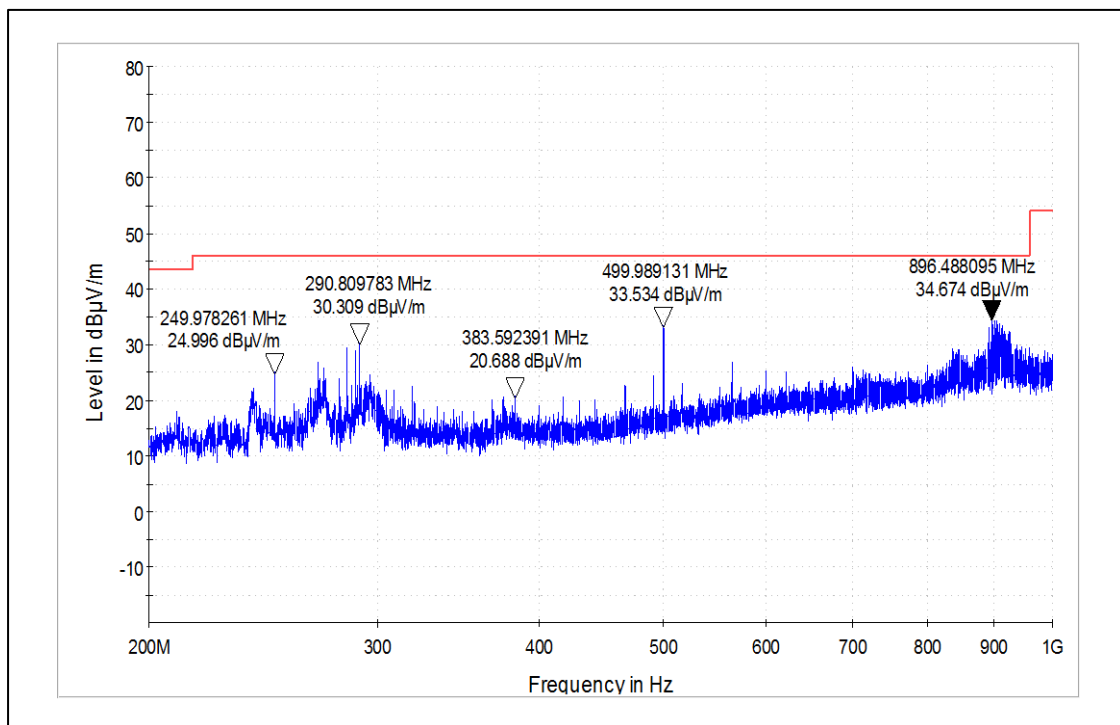
Frequency Range: 30MHz-200MHz

Polarization: Horizontal



**Frequency Range: 200MHz-1GHz**

**Polarization: Vertical**



**Frequency Range: 200MHz-1GHz**

**Polarization: Horizontal**

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**Test results for the frequencies in the range 1 GHz to 26.5 GHz**

**Modulation: 802.11b**  
**Data Rate: 1Mbps**

| Channel Frequency (MHz) | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-------------------------|--------------|-----------------|-------------------------|----------------|-------------|
| 2412                    | Vertical     | 2390(Pk)        | 60.77                   | 74*            | -13.23      |
|                         |              | 2390(Av)        | 30.88                   | 54*            | -23.12      |
|                         |              | 2412(Pk)        | 81.40                   | -              | -           |
|                         |              | 2412(Av)        | 78.61                   | -              | -           |
|                         |              | 4824(Pk)        | 58.80                   | 74             | -14.41      |
|                         |              | 4824(Av)        | 48.16                   | 54             | -6.33       |
|                         |              | 7236(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7236(Av)        |                         |                |             |
|                         | Horizontal   | 2390(Pk)        | 55.82                   | 74*            | -18.18      |
|                         |              | 2390(Av)        | 35.21                   | 54*            | -18.79      |
|                         |              | 2412(Pk)        | 96.07                   | -              | -           |
|                         |              | 2412(Av)        | 92.74                   | -              | -           |
|                         |              | 4824(Pk)        | 59.59                   | 74             | -14.41      |
|                         |              | 4824(Av)        | 47.67                   | 54             | -6.33       |
|                         |              | 7236(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7236(Av)        |                         |                |             |
| 2437                    | Vertical     | 2437(Pk)        | 83.16                   | -              | -           |
|                         |              | 2437(Av)        | 80.33                   | -              | -           |
|                         |              | 4874(Pk)        | 48.21                   | 74             | -25.79      |
|                         |              | 4874(Av)        | 34.80                   | 54             | -19.20      |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
|                         | Horizontal   | 2437(Pk)        | 95.27                   | -              | -           |
|                         |              | 2437(Av)        | 92.58                   | -              | -           |
|                         |              | 4874(Pk)        | 49.40                   | 74             | -24.60      |
|                         |              | 4874(Av)        | 36.21                   | 54             | -17.79      |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
| 2462                    | Vertical     | 2462(Pk)        | 80.03                   | -              | -           |
|                         |              | 2462(Av)        | 76.16                   | -              | -           |
|                         |              | 2483.5(Pk)      | 42.92                   | 74*            | -31.08      |
|                         |              | 2483.5(Av)      | 27.17                   | 54*            | -26.83      |
|                         |              | 4924(Pk)        | 47.90                   | 74             | -26.10      |
|                         |              | 4924(Av)        | 34.13                   | 54             | -19.87      |
|                         |              | 7386(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7386(Av)        |                         |                |             |
|                         | Horizontal   | 2462(Pk)        | 97.30                   | -              | -           |
|                         |              | 2462(Av)        | 94.58                   | -              | -           |
|                         |              | 2483.5(Pk)      | 43.28                   | 74*            | -30.72      |
|                         |              | 2483.5(Av)      | 30.72                   | 54*            | -23.28      |
|                         |              | 4924(Pk)        | 47.35                   | 74             | -26.65      |
|                         |              | 4924(Av)        | 34.71                   | 54             | -19.29      |
|                         |              | 7386(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7386(Av)        |                         |                |             |

\*- : Indicate restricted band of operation §15.205  
Pk: Peak Detector; Av: Average Detector

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**Modulation: 802.11g**  
**Data Rate: 54Mbps**

| Channel Frequency (MHz) | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-------------------------|--------------|-----------------|-------------------------|----------------|-------------|
| 2412                    | Vertical     | 2390(Pk)        | 58.86                   | 74*            | -15.14      |
|                         |              | 2390(Av)        | 32.55                   | 54*            | -21.45      |
|                         |              | 2412(Pk)        | 79.98                   | -              | -           |
|                         |              | 2412(Av)        | 70.38                   | -              | -           |
|                         |              | 4824(Pk)        | 58.13                   | 74             | -15.87      |
|                         |              | 4824(Av)        | 44.93                   | 54             | -9.07       |
|                         |              | 7236(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7236(Av)        |                         |                |             |
|                         | Horizontal   | 2390(Pk)        | 63.24                   | 74*            | -10.76      |
|                         |              | 2390(Av)        | 48.19                   | 54*            | -5.81       |
|                         |              | 2412(Pk)        | 99.82                   | -              | -           |
|                         |              | 2412(Av)        | 90.78                   | -              | -           |
|                         |              | 4824(Pk)        | 50.71                   | 74             | -23.29      |
|                         |              | 4824(Av)        | 38.13                   | 54             | -15.87      |
|                         |              | 7236(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7236(Av)        |                         |                |             |
| 2437                    | Vertical     | 2437(Pk)        | 83.68                   | -              | -           |
|                         |              | 2437(Av)        | 73.95                   | -              | -           |
|                         |              | 4874(Pk)        | 50.16                   | 74             | -23.84      |
|                         |              | 4874(Av)        | 36.97                   | 54             | -17.03      |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
|                         | Horizontal   | 2437(Pk)        | 99.88                   | -              | -           |
|                         |              | 2437(Av)        | 90.85                   | -              | -           |
|                         |              | 4874(Pk)        | 57.76                   | 74             | -16.24      |
|                         |              | 4874(Av)        | 44.98                   | 54             | -9.02       |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
| 2462                    | Vertical     | 2462(Pk)        | 84.51                   | -              | -           |
|                         |              | 2462(Av)        | 75.36                   | -              | -           |
|                         |              | 2483.5(Pk)      | 48.53                   | 74*            | -25.47      |
|                         |              | 2483.5(Av)      | 33.89                   | 54*            | -20.11      |
|                         |              | 4924(Pk)        | 49.52                   | 74             | -24.48      |
|                         |              | 4924(Av)        | 36.71                   | 54             | -17.29      |
|                         |              | 7386(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7386(Av)        |                         |                |             |
|                         | Horizontal   | 2462(Pk)        | 100.81                  | -              | -           |
|                         |              | 2462(Av)        | 90.75                   | -              | -           |
|                         |              | 2483.5(Pk)      | 65.22                   | 74*            | -8.78       |
|                         |              | 2483.5(Av)      | 51.07                   | 54*            | -2.93       |
|                         |              | 4924(Pk)        | 57.77                   | 74             | -16.23      |
|                         |              | 4924(Av)        | 45.53                   | 54             | -8.47       |
|                         |              | 7386(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7386(Av)        |                         |                |             |

\*- : Indicate restricted band of operation §15.205  
Pk: Peak Detector; Av: Average Detector

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**Modulation: 802.11n\_HT20**

**Data Rate: MCS0**

| Channel Frequency (MHz) | Polarization | Frequency (MHz) | Emission level (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-------------------------|--------------|-----------------|-------------------------|----------------|-------------|
| 2412                    | Vertical     | 2390(Pk)        | 60.14                   | 74*            | -13.86      |
|                         |              | 2390(Av)        | 32.61                   | 54*            | -21.39      |
|                         |              | 2412(Pk)        | 82.78                   | -              | -           |
|                         |              | 2412(Av)        | 73.13                   | -              | -           |
|                         |              | 4824(Pk)        | 50.05                   | 74             | -23.95      |
|                         |              | 4824(Av)        | 36.74                   | 54             | -17.26      |
|                         |              | 7236(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7236(Av)        |                         |                |             |
|                         | Horizontal   | 2390(Pk)        | 61.93                   | 74*            | -12.07      |
|                         |              | 2390(Av)        | 47.59                   | 54*            | -6.41       |
|                         |              | 2412(Pk)        | 100.13                  | -              | -           |
|                         |              | 2412(Av)        | 90.03                   | -              | -           |
|                         |              | 4824(Pk)        | 55.84                   | 74             | -18.16      |
|                         |              | 4824(Av)        | 43.27                   | 54             | -10.73      |
|                         |              | 7236(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7236(Av)        |                         |                |             |
| 2437                    | Vertical     | 2437(Pk)        | 83.63                   | -              | -           |
|                         |              | 2437(Av)        | 74.13                   | -              | -           |
|                         |              | 4874(Pk)        | 49.84                   | 74             | -24.16      |
|                         |              | 4874(Av)        | 36.95                   | 54             | -17.05      |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
|                         | Horizontal   | 2437(Pk)        | 99.56                   | -              | -           |
|                         |              | 2437(Av)        | 89.58                   | -              | -           |
|                         |              | 4874(Pk)        | 57.33                   | 74             | -16.67      |
|                         |              | 4874(Av)        | 44.70                   | 54             | -9.30       |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
| 2462                    | Vertical     | 2462(Pk)        | 83.65                   | -              | -           |
|                         |              | 2462(Av)        | 74.75                   | -              | -           |
|                         |              | 2483.5(Pk)      | 48.18                   | 74*            | -25.82      |
|                         |              | 2483.5(Av)      | 33.46                   | 54*            | -20.54      |
|                         |              | 4924(Pk)        | 49.16                   | 74             | -24.84      |
|                         |              | 4924(Av)        | 35.75                   | 54             | -18.25      |
|                         |              | 7386(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7386(Av)        |                         |                |             |
|                         | Horizontal   | 2462(Pk)        | 100.68                  | -              | -           |
|                         |              | 2462(Av)        | 90.65                   | -              | -           |
|                         |              | 2483.5(Pk)      | 64.94                   | 74*            | -9.06       |
|                         |              | 2483.5(Av)      | 50.67                   | 54*            | -3.33       |
|                         |              | 4924(Pk)        | 57.34                   | 74             | -16.66      |
|                         |              | 4924(Av)        | 44.69                   | 54             | -9.31       |
|                         |              | 7386(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7386(Av)        |                         |                |             |

\*- : Indicate restricted band of operation §15.205

Pk: Peak Detector; Av: Average Detector

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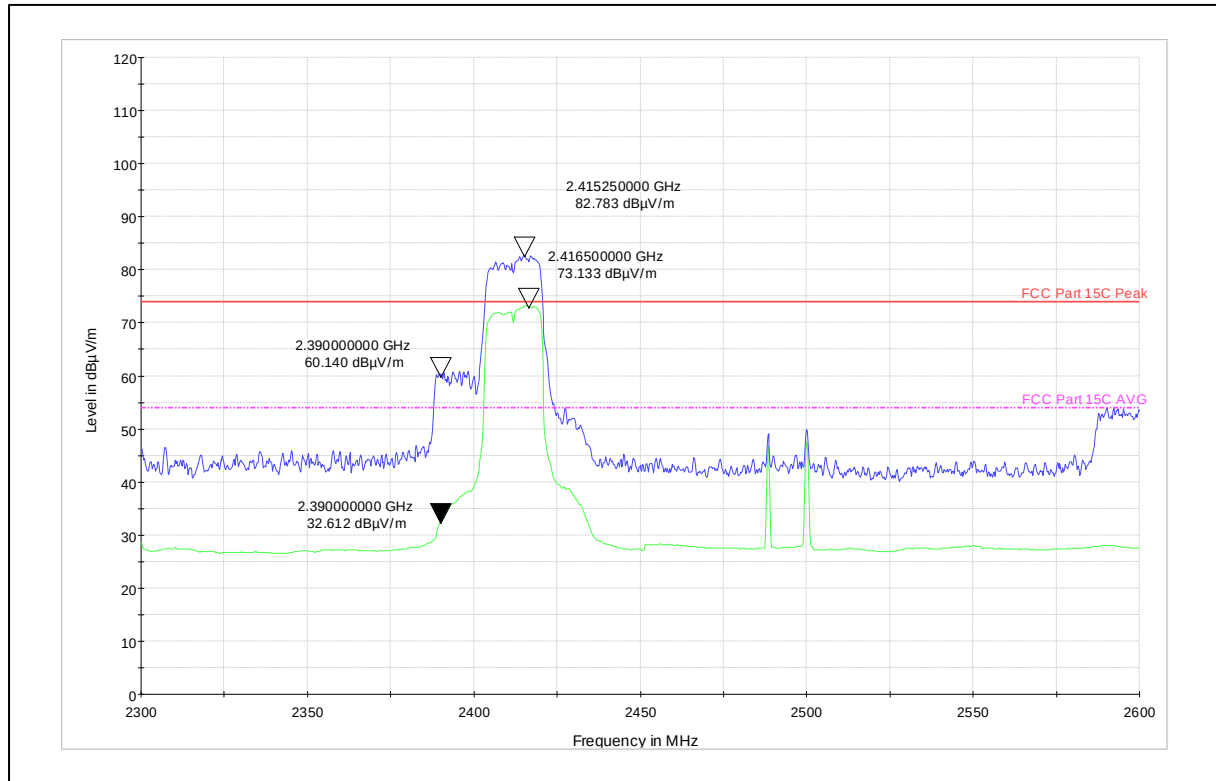
**Modulation: 802.11n\_HT40**  
**Data Rate: MCS7**

| Channel Frequency (MHz) | Polarization | Frequency (MHz) | Emission level (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|-------------------------|--------------|-----------------|-------------------------|----------------|-------------|
| 2422                    | Vertical     | 2390(Pk)        | 60.46                   | 74*            | -13.54      |
|                         |              | 2390(Av)        | 33.67                   | 54*            | -20.33      |
|                         |              | 2422(Pk)        | 77.14                   | -              | -           |
|                         |              | 2422(Av)        | 66.23                   | -              | -           |
|                         |              | 4844(Pk)        | 49.93                   | 74             | -28.54      |
|                         |              | 4844(Av)        | 37.82                   | 54             | -21.4       |
|                         |              | 7266(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7266(Av)        |                         |                |             |
|                         | Horizontal   | 2390(Pk)        | 64.69                   | 74*            | -9.31       |
|                         |              | 2390(Av)        | 52.33                   | 54*            | -1.67       |
|                         |              | 2422(Pk)        | 96.70                   | -              | -           |
|                         |              | 2422(Av)        | 85.46                   | -              | -           |
|                         |              | 4844(Pk)        | 45.46                   | 74             | -28.54      |
|                         |              | 4844(Av)        | 32.60                   | 54             | -21.40      |
|                         |              | 7266(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7266(Av)        |                         |                |             |
| 2437                    | Vertical     | 2437(Pk)        | 80.45                   | -              | -           |
|                         |              | 2437(Av)        | 69.32                   | -              | -           |
|                         |              | 4874(Pk)        | 44.29                   | 74             | -29.71      |
|                         |              | 4874(Av)        | 30.78                   | 54             | -23.22      |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
|                         | Horizontal   | 2437(Pk)        | 94.62                   | -              | -           |
|                         |              | 2437(Av)        | 83.47                   | -              | -           |
|                         |              | 4874(Pk)        | 45.04                   | 74             | -28.96      |
|                         |              | 4874(Av)        | 31.65                   | 54             | -22.35      |
|                         |              | 7311(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7311(Av)        |                         |                |             |
| 2452                    | Vertical     | 2452(Pk)        | 80.45                   | -              | -           |
|                         |              | 2452(Av)        | 69.27                   | -              | -           |
|                         |              | 2483.5(Pk)      | 47.81                   | 74*            | -26.19      |
|                         |              | 2483.5(Av)      | 35.85                   | 54*            | -18.15      |
|                         |              | 4904(Pk)        | 44.37                   | 74             | -29.63      |
|                         |              | 4904(Av)        | 30.80                   | 54             | -23.20      |
|                         |              | 7356(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7356(Av)        |                         |                |             |
|                         | Horizontal   | 2452(Pk)        | 94.39                   | -              | -           |
|                         |              | 2452(Av)        | 83.26                   | -              | -           |
|                         |              | 2483.5(Pk)      | 62.86                   | 74*            | -11.14      |
|                         |              | 2483.5(Av)      | 51.70                   | 54*            | -2.30       |
|                         |              | 4904(Pk)        | 45.09                   | 74             | -28.91      |
|                         |              | 4904(Av)        | 31.14                   | 54             | -22.86      |
|                         |              | 7356(Pk)        | No Harmonics Found      |                |             |
|                         |              | 7356(Av)        |                         |                |             |

\*- : Indicate restricted band of operation §15.205  
Pk: Peak Detector; Av: Average Detector

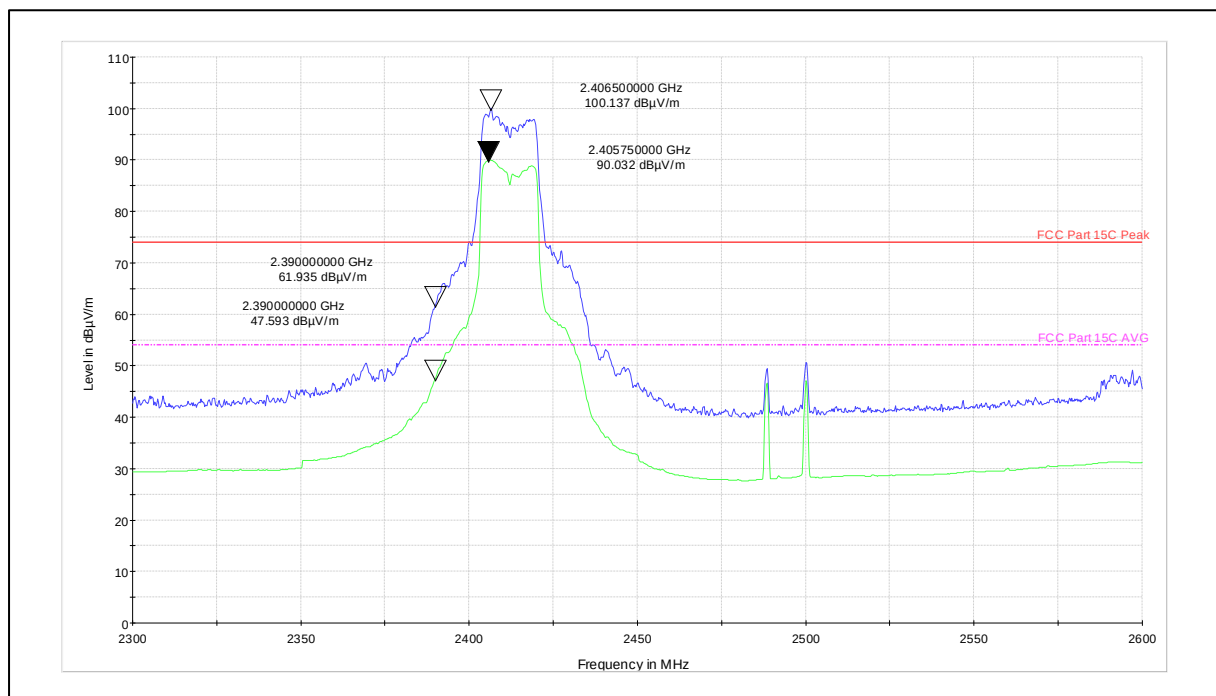
**Worst case Plots**

Data Rate: n mode HT20 MCS0



**Channel Frequency: 2412MHz**

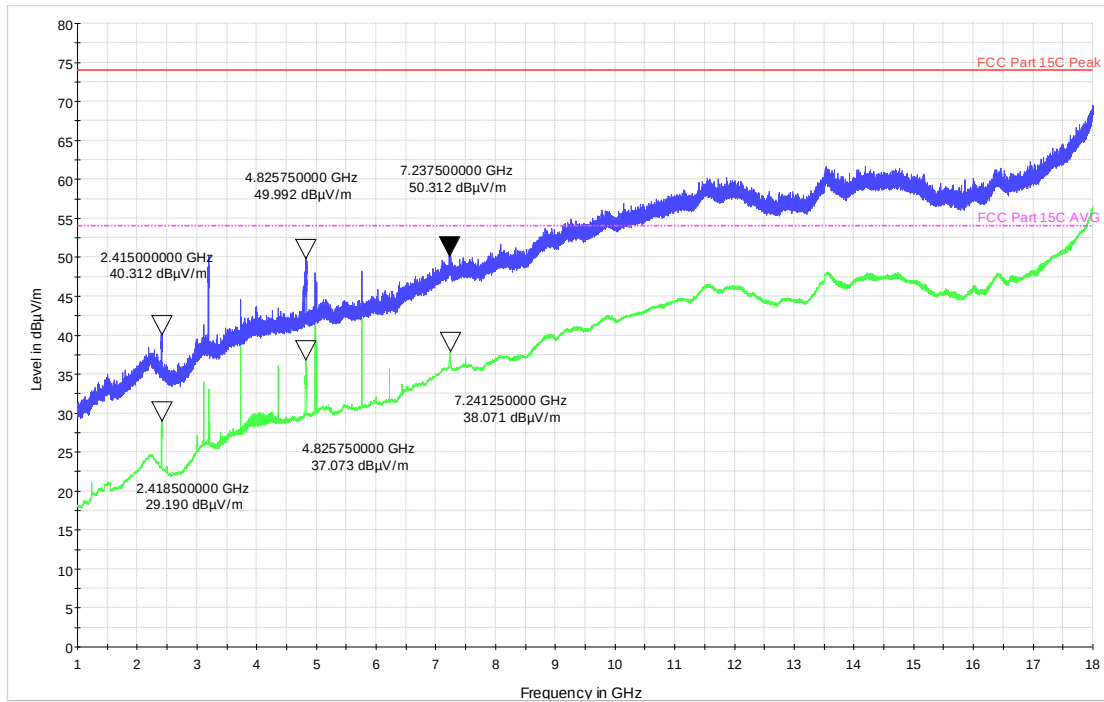
**Polarization: Vertical**



**Channel Frequency: 2412MHz**

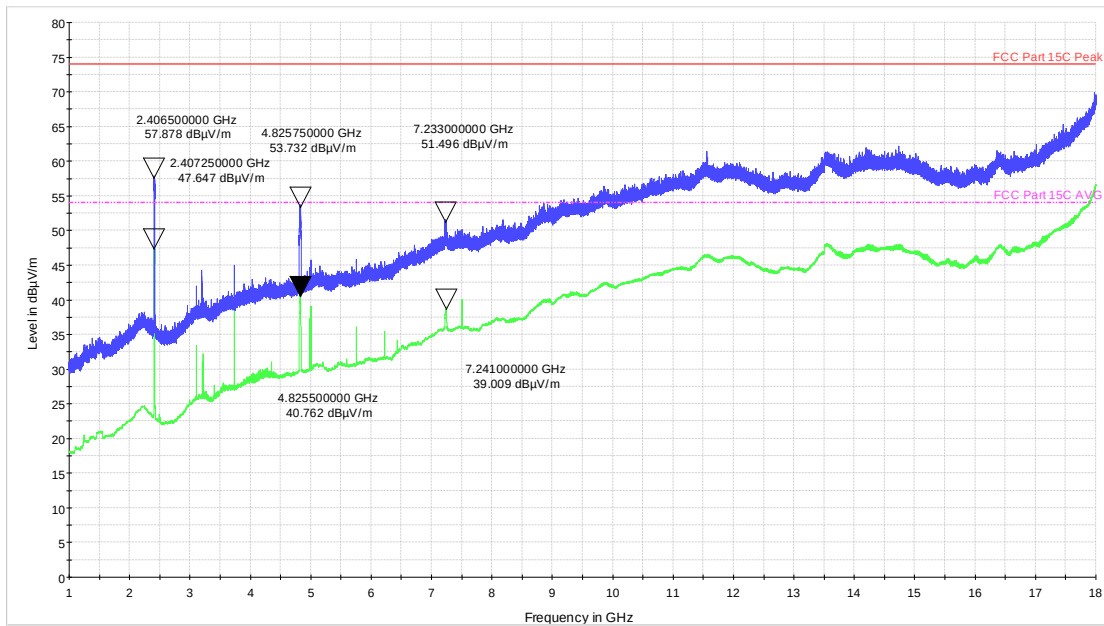
**Polarization: Horizontal**





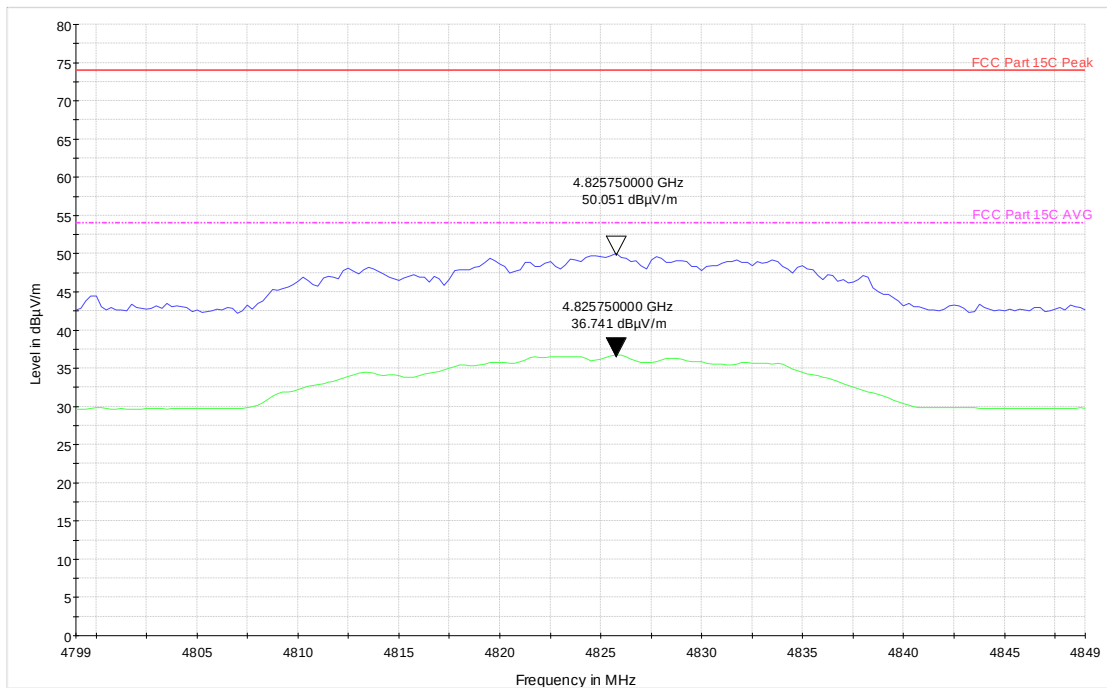
Frequency Range: 1-18GHz

Polarization: Vertical



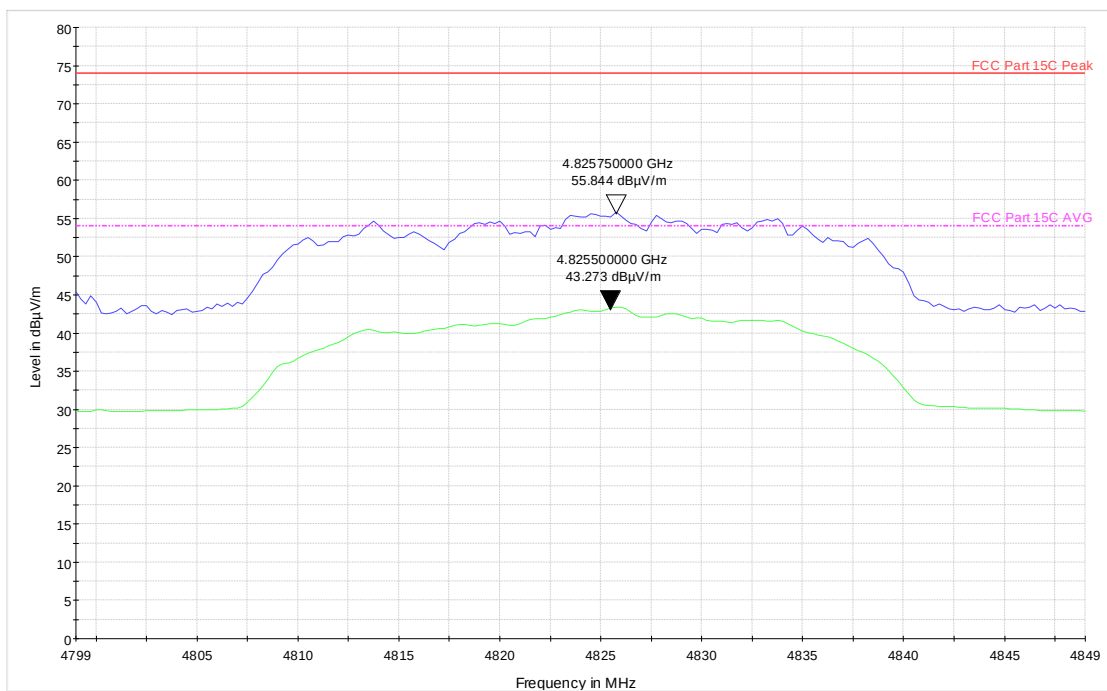
Frequency Range: 1-18GHz

Polarization: Horizontal



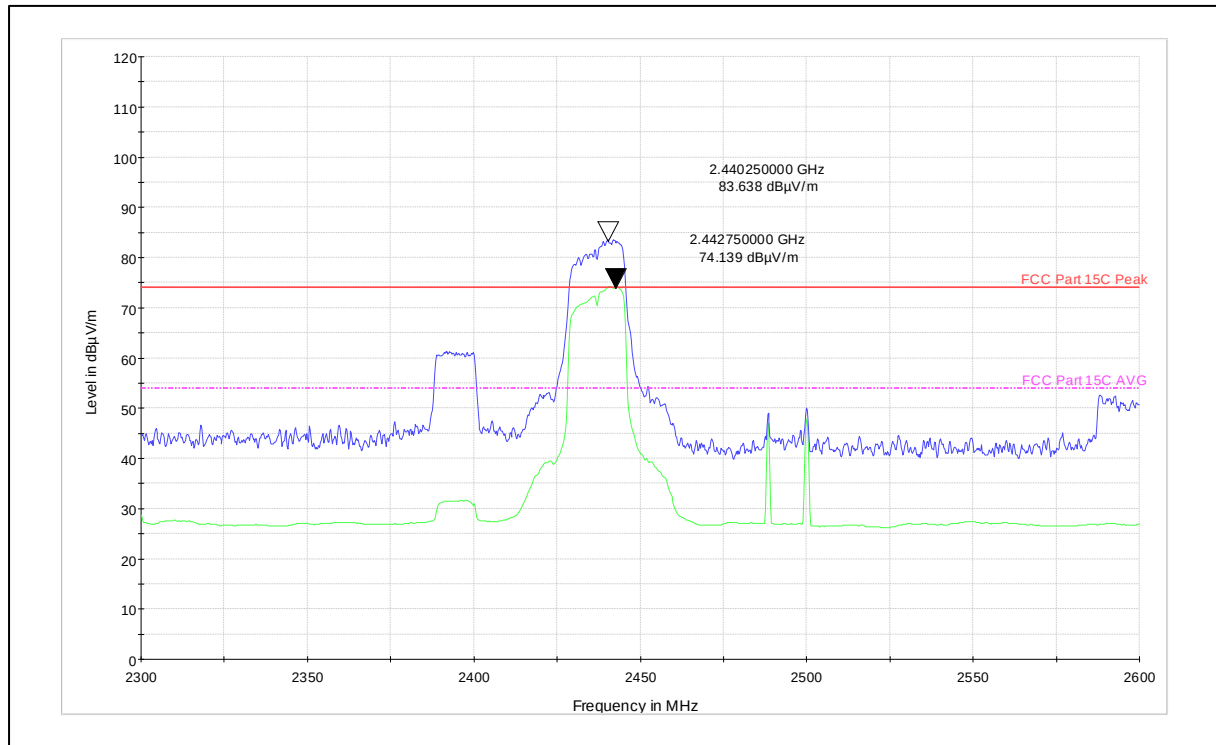
Harmonics2

Polarization: Vertical



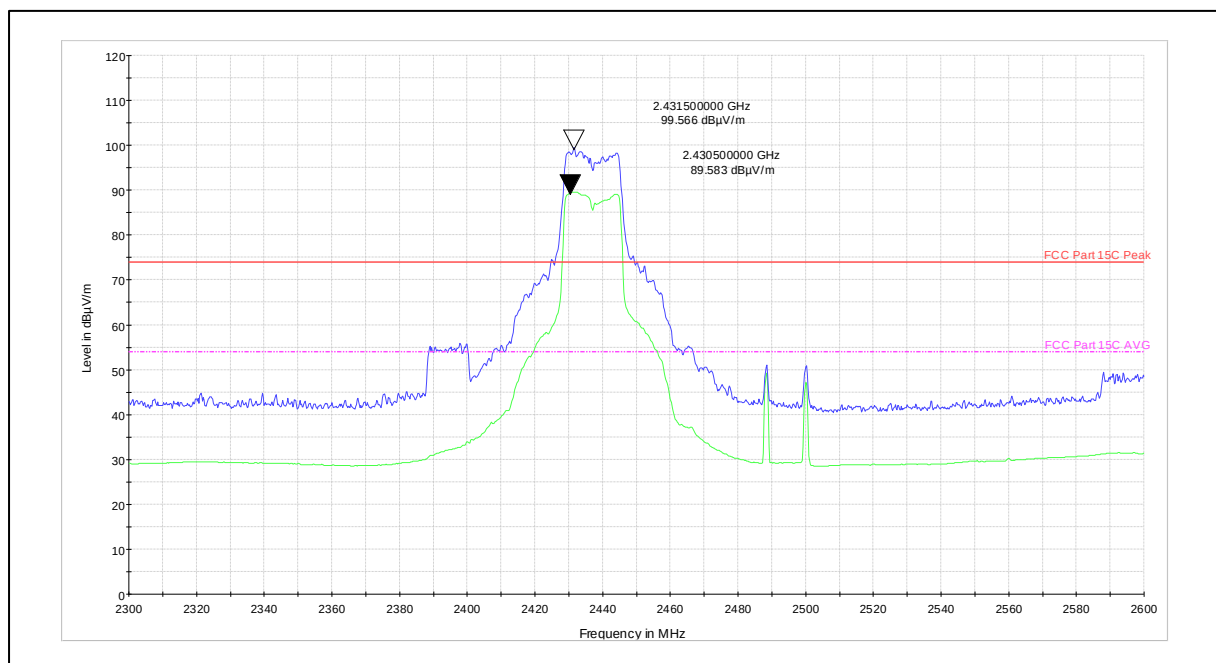
Harmonics2

Polarization: Horizontal



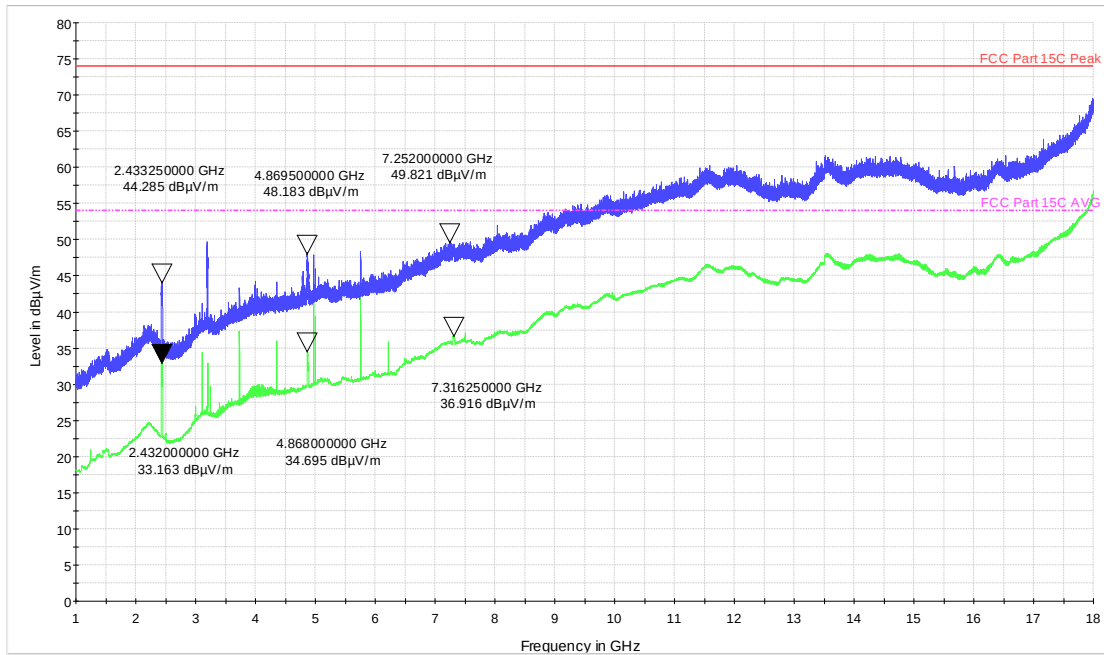
**Channel Frequency: 2437MHz**

**Polarization: Vertical**



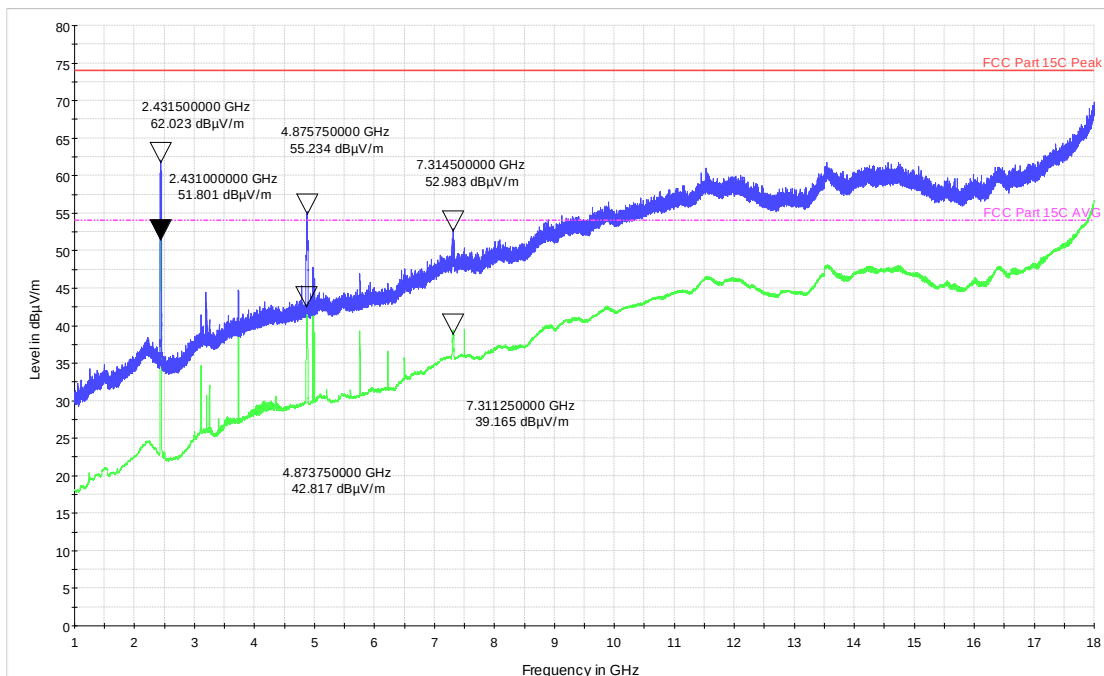
**Channel Frequency: 2437MHz**

**Polarization: Horizontal**



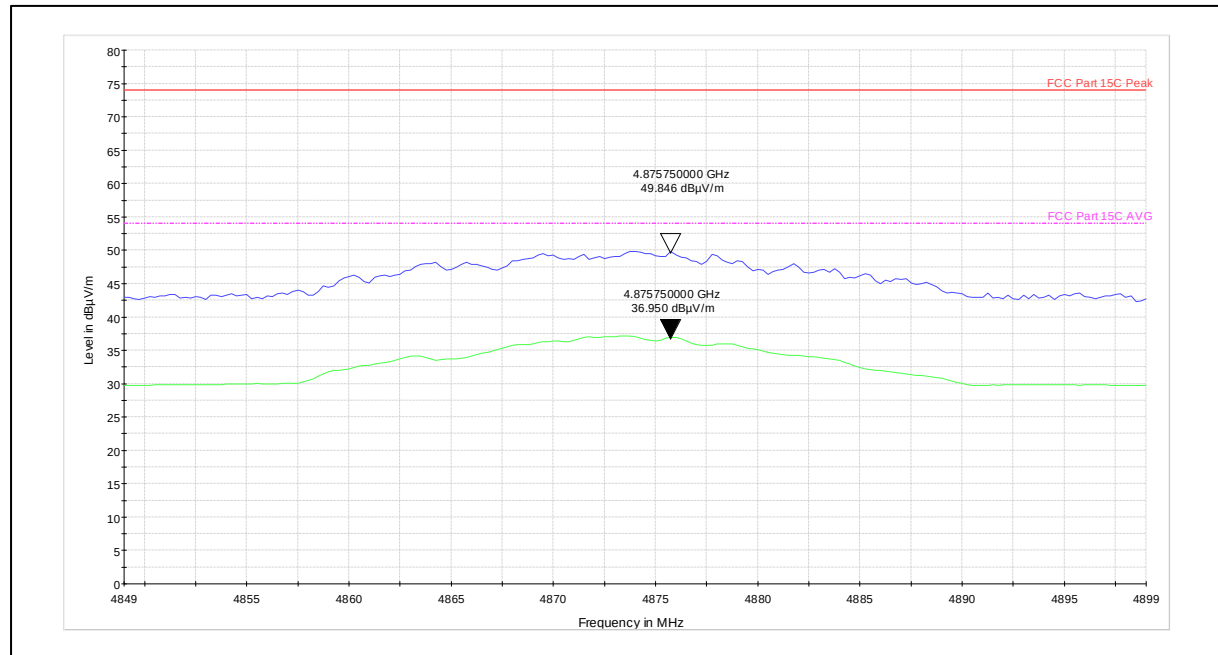
Frequency Range: 1-18GHz

Polarization: Vertical



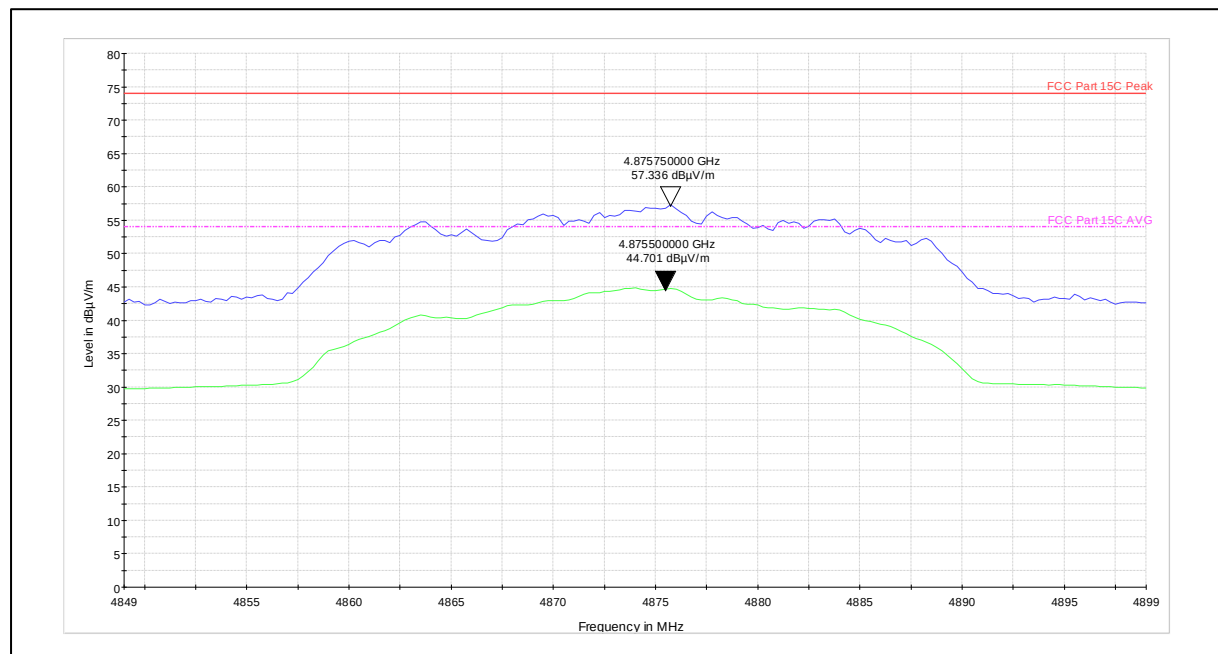
Frequency Range: 1-18GHz

Polarization: Horizontal



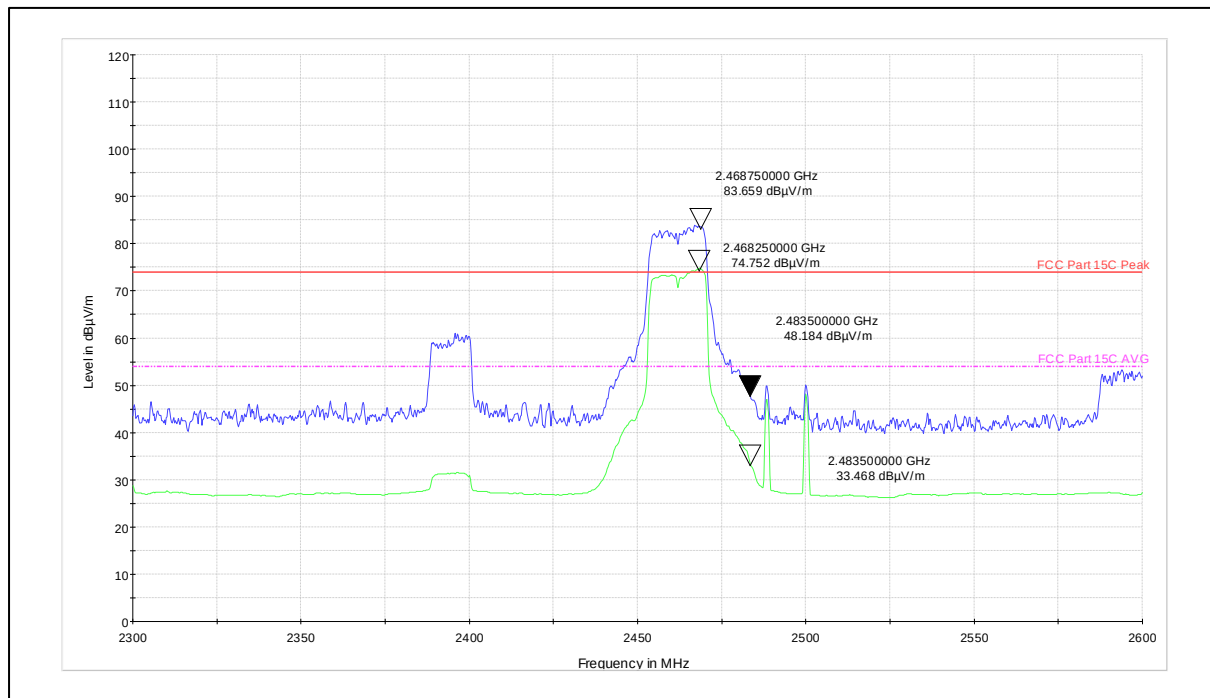
Harmonics2

Polarization: Vertical



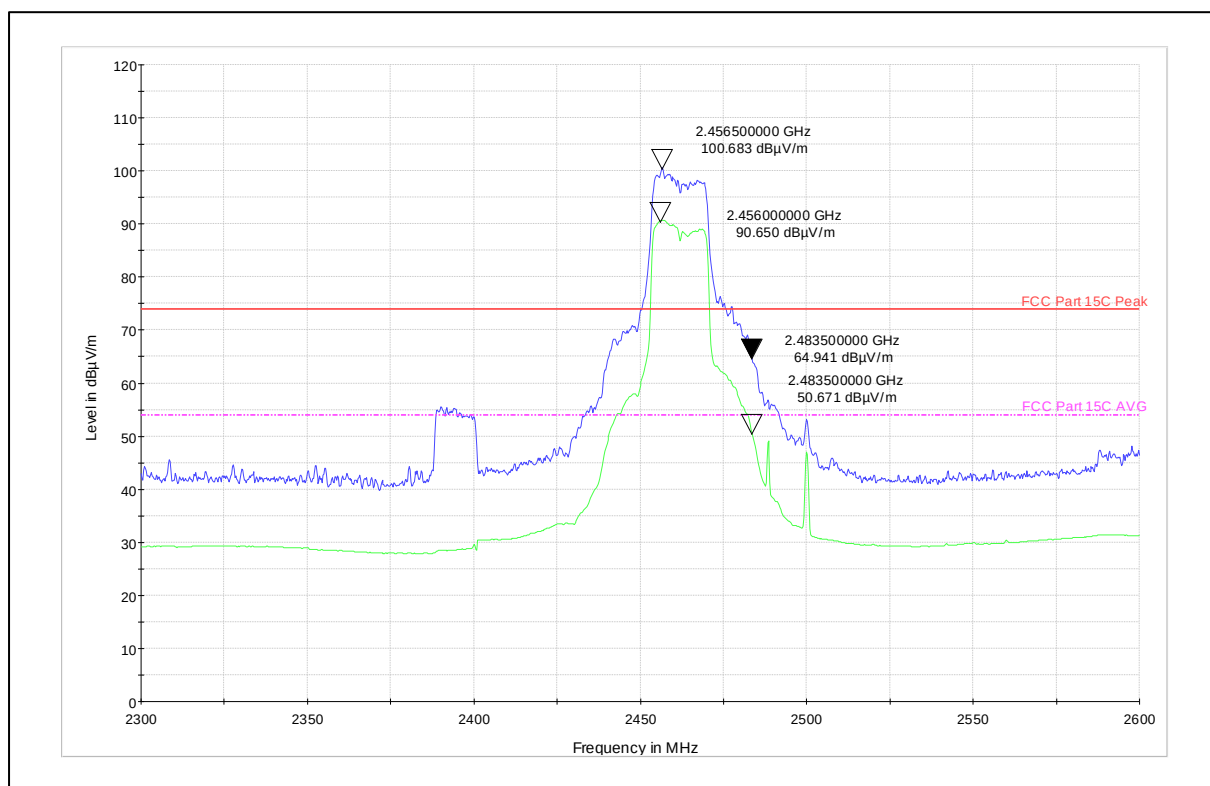
Harmonics2

Polarization: Horizontal



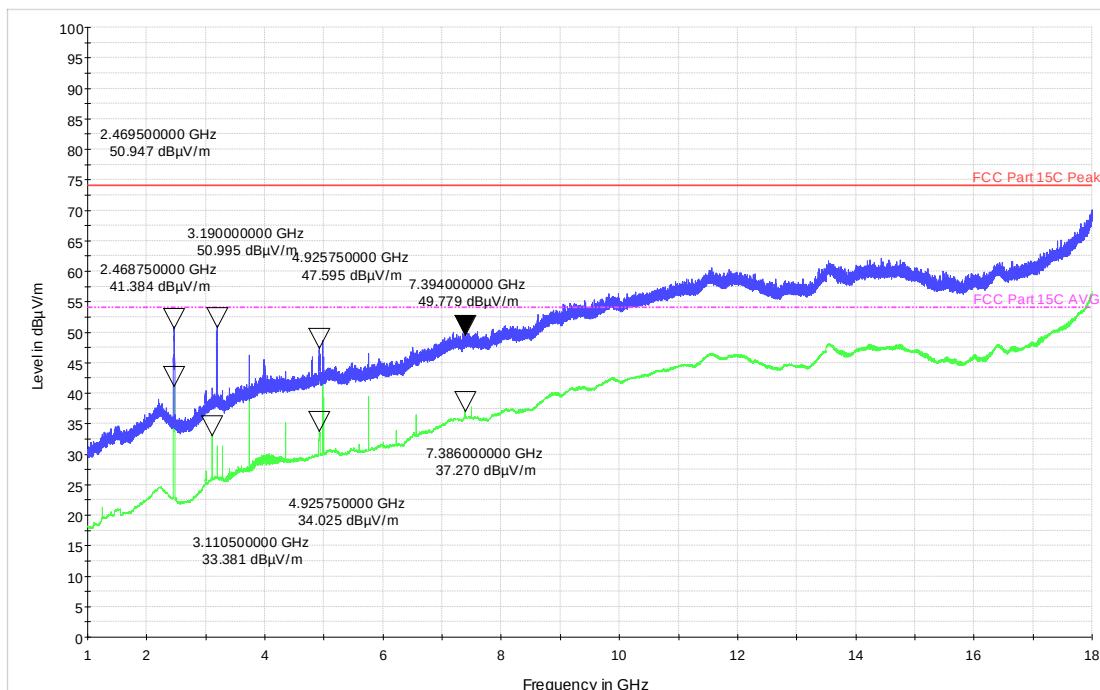
**Channel Frequency: 2462MHz**

**Polarization: Vertical**



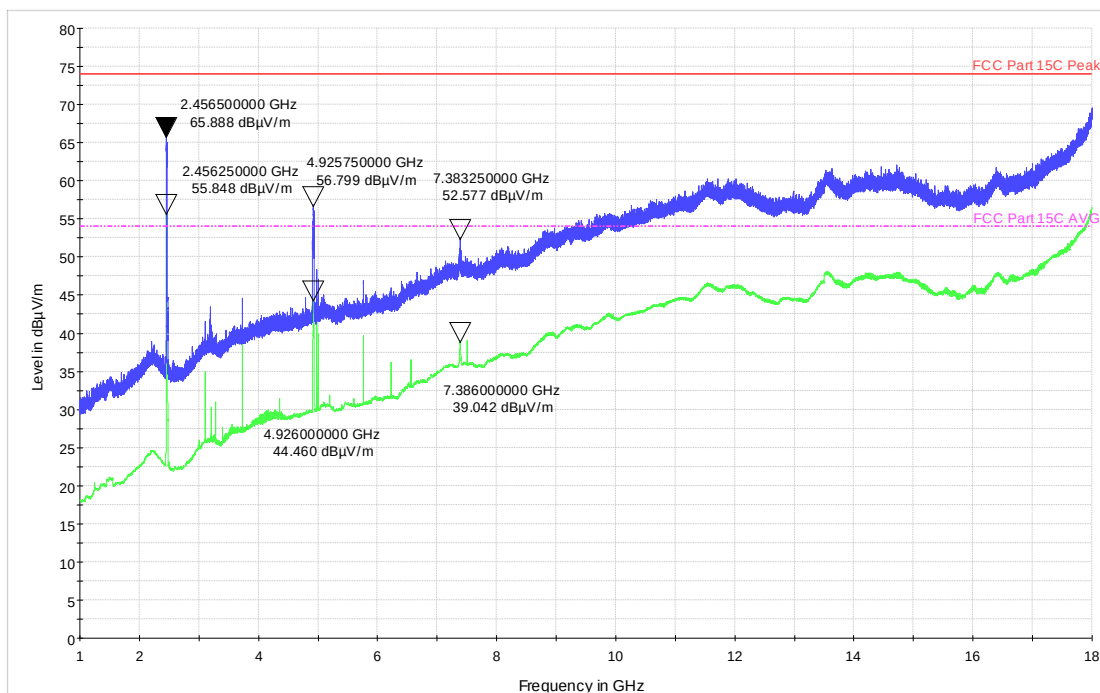
**Channel Frequency: 2462MHz**

**Polarization: Horizontal**



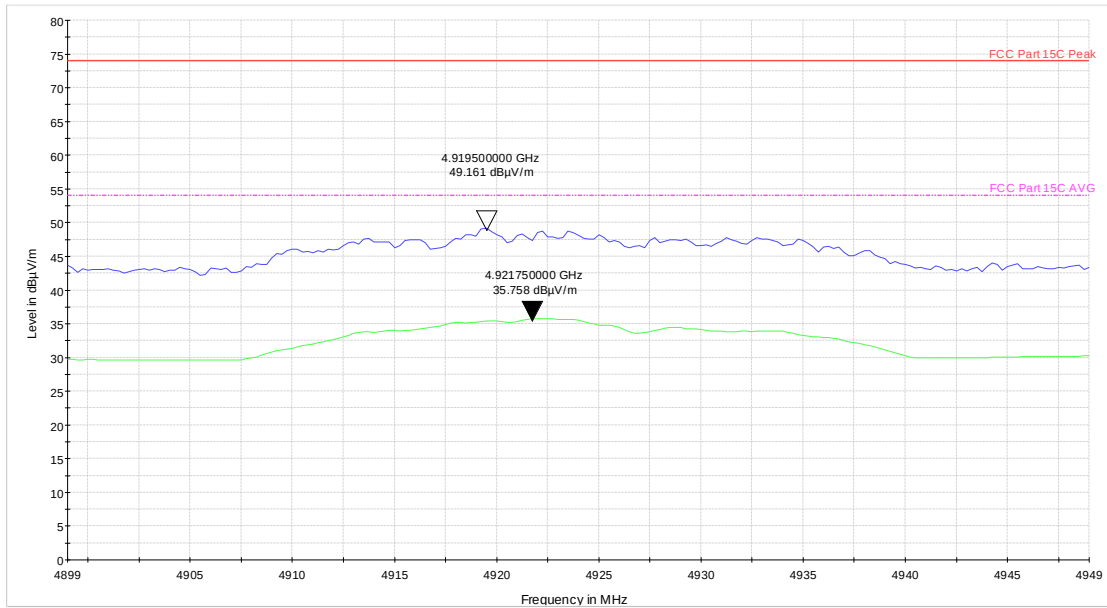
Frequency Range: 1-18GHz

Polarization: Vertical



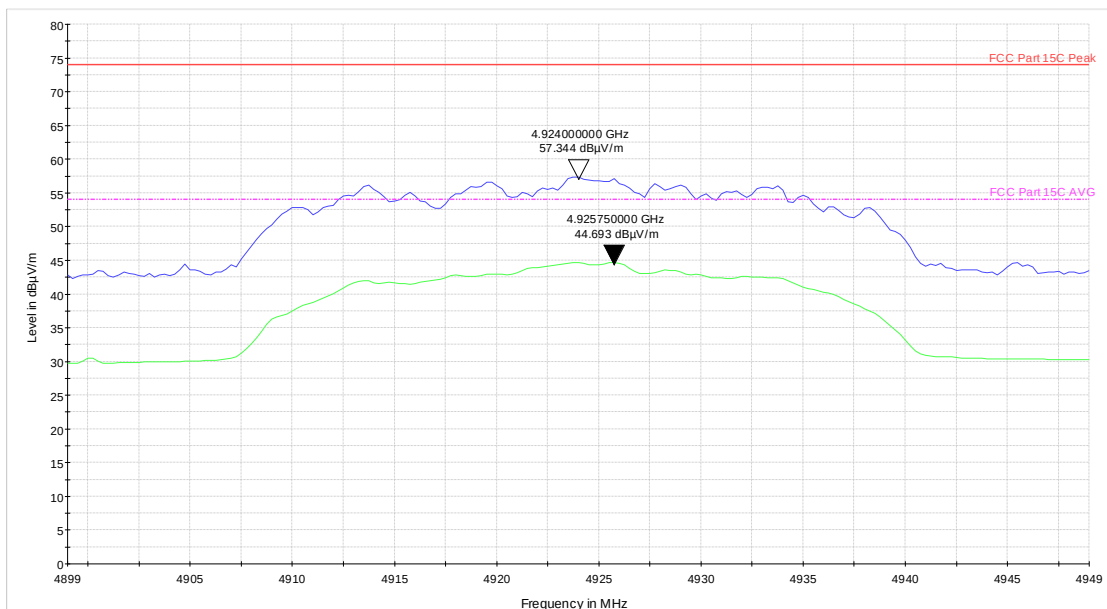
Frequency Range: 1-18GHz

Polarization: Horizontal



**Harmonics2**

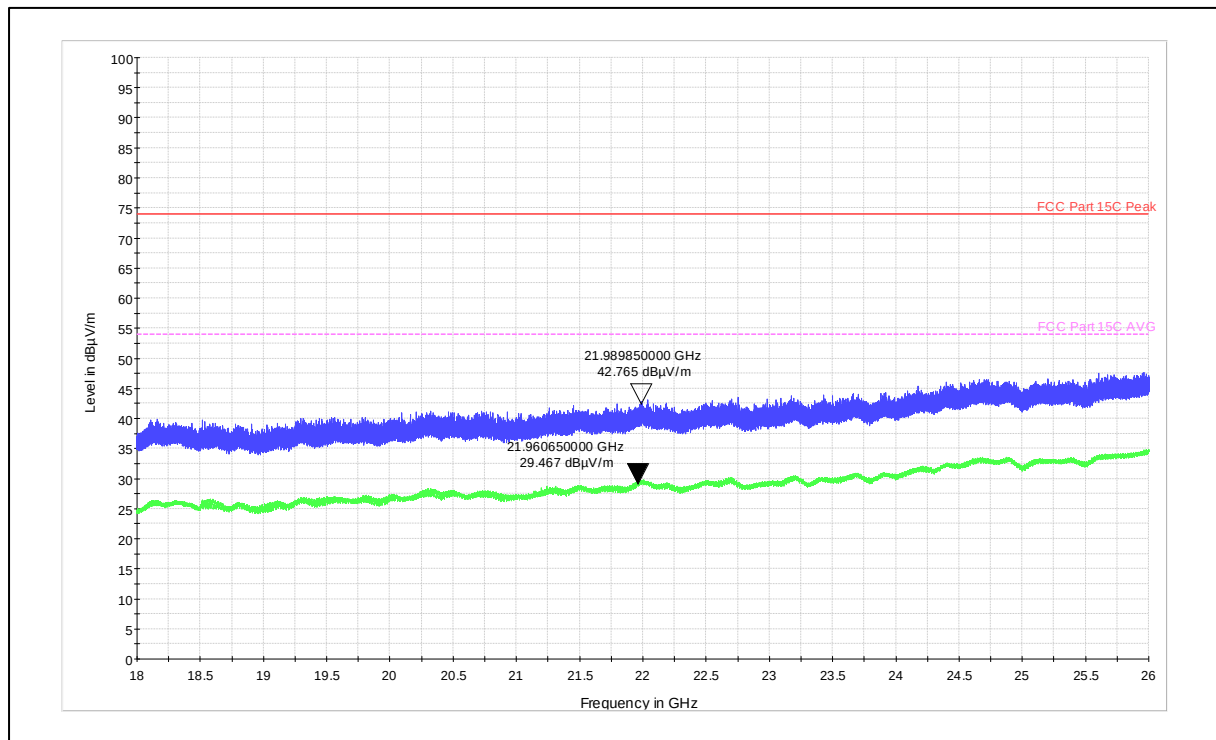
**Polarization: Vertical**



**Harmonics2**

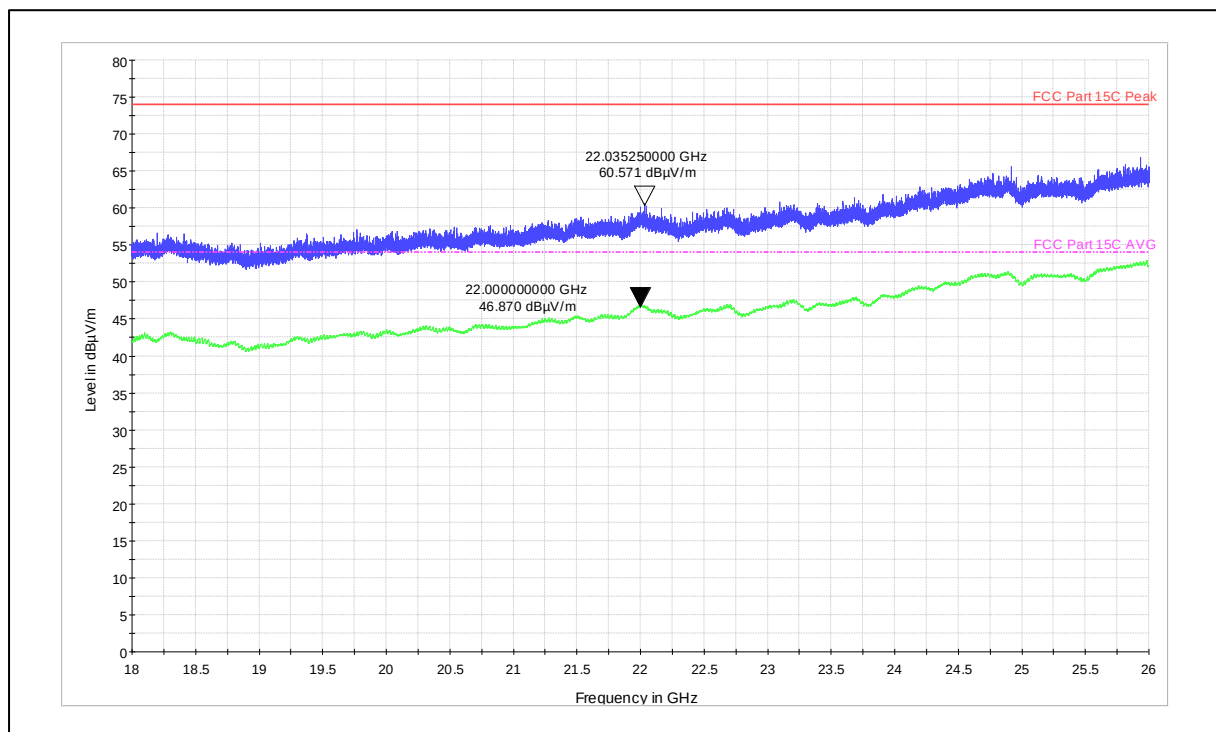
**Polarization: Horizontal**





Frequency Range: 18-26GHz

Polarization: Vertical

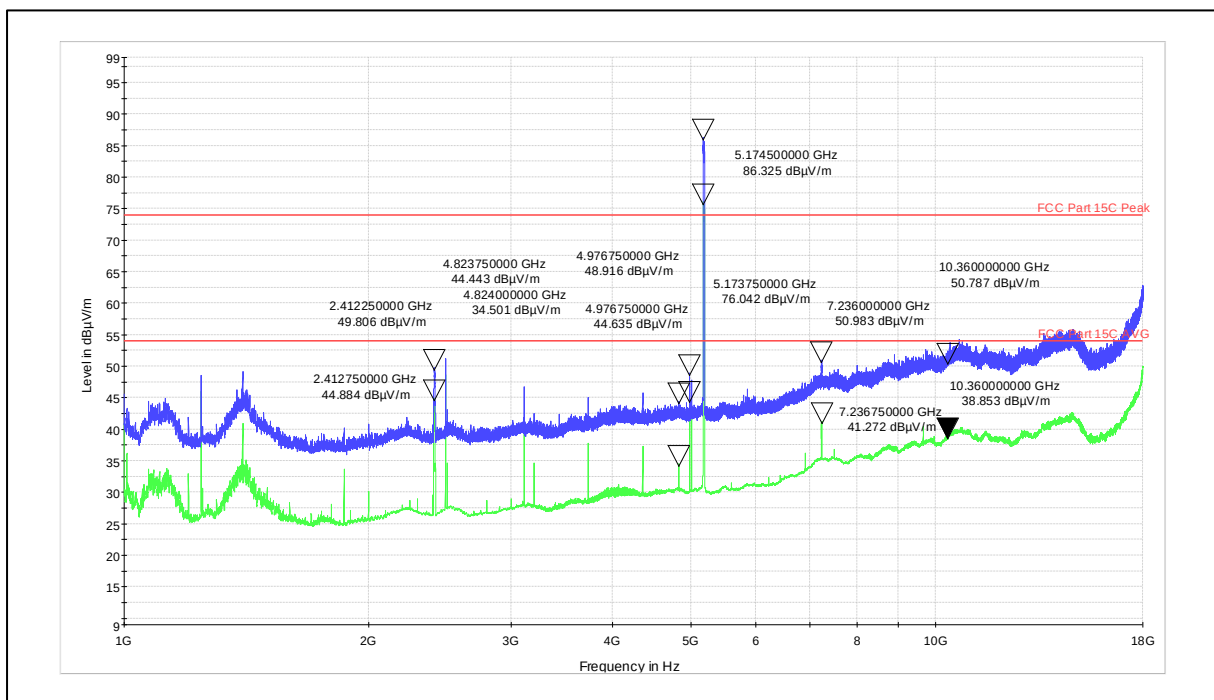


Frequency Range: 18-26GHz

Polarization: Horizontal

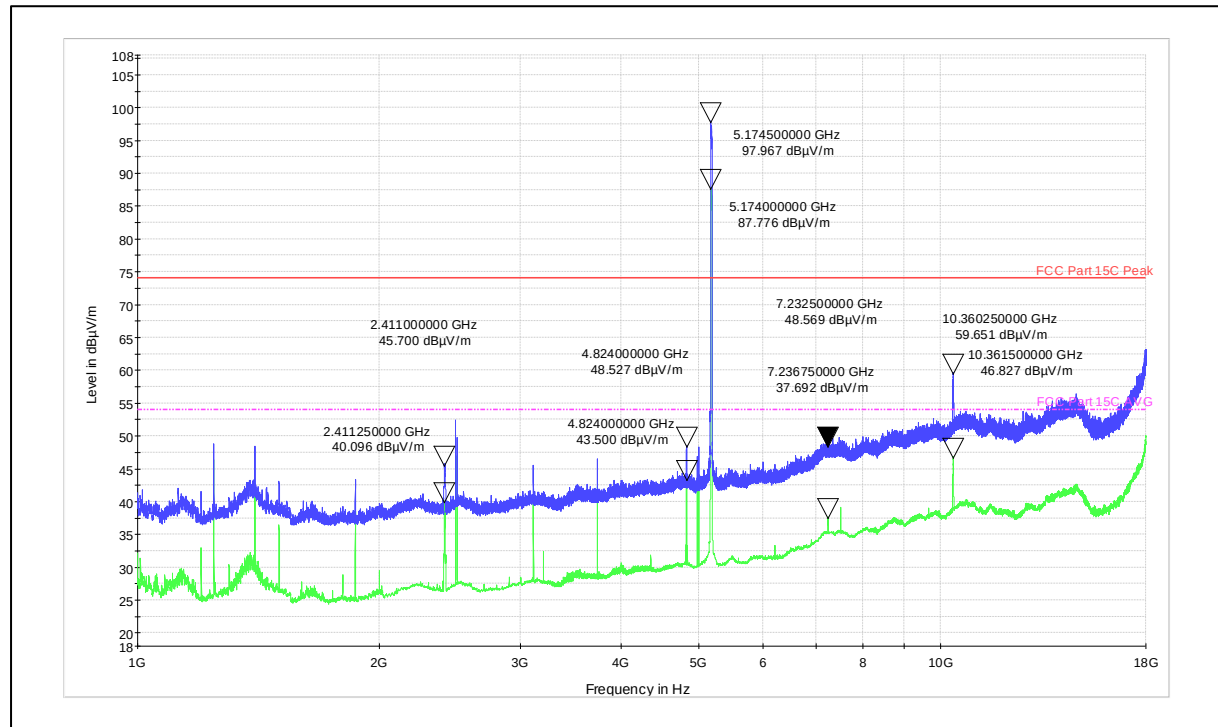
## 8.2 Simultaneous Mode of Operation

| Simultaneous transmission frequencies (MHz) | Polarization | Frequency (MHz) | Emission level (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|---------------------------------------------|--------------|-----------------|-------------------------|----------------|-------------|
| 2412 MHz & 5180 MHz                         | Vertical     | 4824(Pk)        | 44.44                   | 74             | -29.56      |
|                                             |              | 4824(Av)        | 34.50                   | 54             | -19.50      |
|                                             |              | 7236(Pk)        | 50.98                   | 74             | -23.02      |
|                                             |              | 7236(Av)        | 41.27                   | 54             | -12.73      |
|                                             |              | 10360(Pk)       | 50.78                   | 74             | -25.48      |
|                                             |              | 10360(Av)       | 38.85                   | 54             | -10.50      |
|                                             | Horizontal   | 4824(Pk)        | 48.52                   | 74             | -25.44      |
|                                             |              | 4824(Av)        | 43.50                   | 54             | -16.31      |
|                                             |              | 7236(Pk)        | 48.56                   | 74             | -23.22      |
|                                             |              | 7236(Av)        | 37.69                   | 54             | -15.15      |
|                                             | Horizontal   | 10360(Pk)       | 59.65                   | 74             | -14.35      |
|                                             |              | 10360(Av)       | 46.82                   | 54             | -7.18       |



Frequency Range: 1-18GHz

Polarization: Vertical



Frequency Range: 1-18GHz

Polarization: Horizontal

**Prüfbericht - Nr.:**  
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## 9 Conducted Spurious Emission Test on AC Power Line

**Result**

**Pass**

Test Specification : FCC Part 15 Section 15.207  
Test Method : ANSI C 63.10-2013  
Testing Location : Screened room  
Measurement Bandwidth : 9kHz  
Frequency Range : 150kHz – 30MHz  
Supply Voltage : 110VAC,60Hz  
Test Method : Refer TEST METHODOLOGY

**\*Note: The product has tested with AC to DC adapter**

**Limits of section 15.207**

| Frequency of emission<br>(MHz) | QP Limit<br>(dBμV) | AV Limit<br>(dBμV/m) |
|--------------------------------|--------------------|----------------------|
| 0.15 – 0.5                     | 66 – 56*           | 56 – 46*             |
| 0.5 – 5                        | 56                 | 46                   |
| 5 – 30                         | 60                 | 50                   |

\* Decreases with the logarithm of the frequency

**Test Conditions:**

Normal Temperature = +24°C      Voltage (V norm) = 110V AC (Through AC to DC)  
RH = 64 %

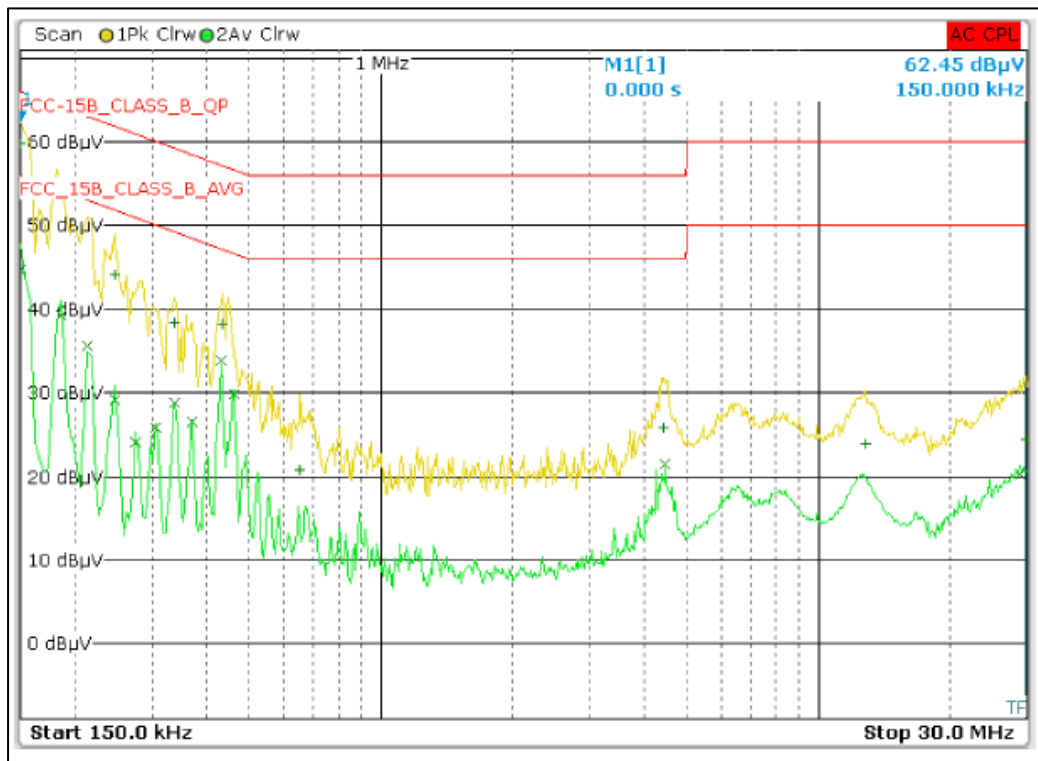
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## Test result:

Power: 110V 60Hz\_LINE



Graph: Line

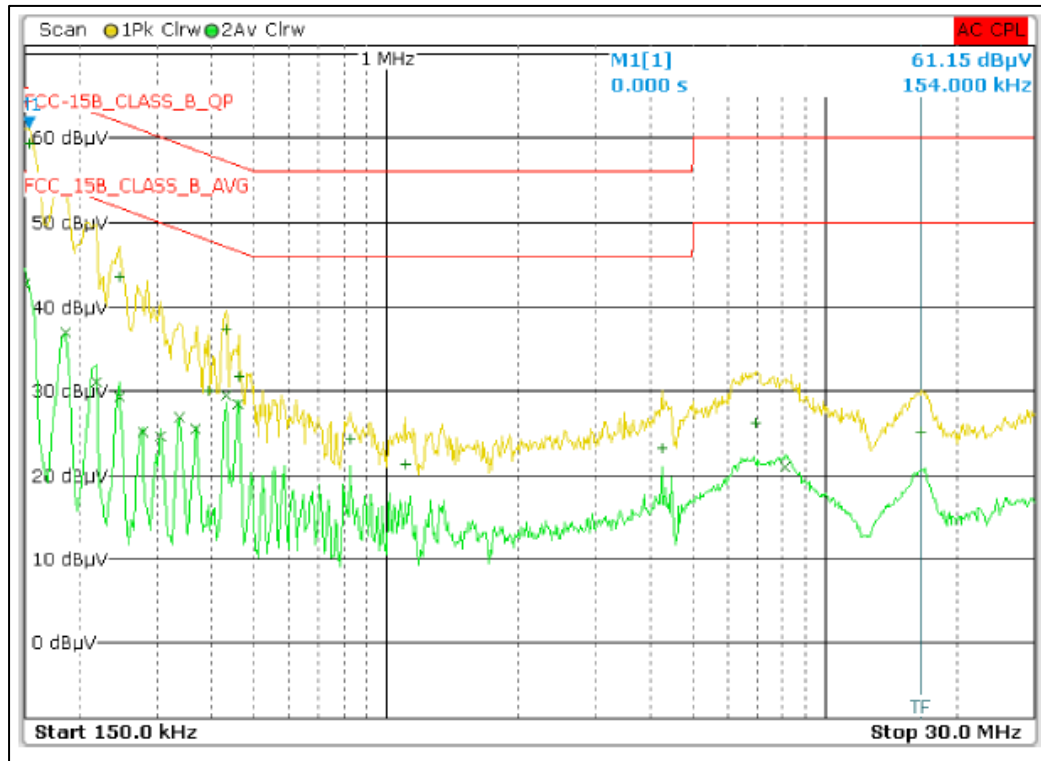
| Trace | Frequency         | Level (dBµV) | Phase | Detector   | Delta Limit/dB |
|-------|-------------------|--------------|-------|------------|----------------|
| 1     | 150.000000000 kHz | 59.82        |       | Quasi Peak | -6.18          |
| 1     | 150.000000000 kHz | 59.77        |       | Quasi Peak | -6.23          |
| 1     | 182.000000000 kHz | 53.89        |       | Quasi Peak | -10.50         |
| 1     | 182.000000000 kHz | 53.81        |       | Quasi Peak | -10.58         |
| 2     | 150.000000000 kHz | 44.62        |       | Average    | -11.38         |
| 2     | 430.000000000 kHz | 33.82        |       | Average    | -13.43         |
| 2     | 186.000000000 kHz | 39.26        |       | Average    | -14.95         |
| 2     | 462.000000000 kHz | 29.81        |       | Average    | -16.85         |
| 2     | 214.000000000 kHz | 35.56        |       | Average    | -17.49         |
| 1     | 246.000000000 kHz | 44.15        |       | Quasi Peak | -17.74         |
| 1     | 434.000000000 kHz | 38.17        |       | Quasi Peak | -19.01         |
| 2     | 338.000000000 kHz | 28.85        |       | Average    | -20.40         |
| 1     | 338.000000000 kHz | 38.48        |       | Quasi Peak | -20.77         |
| 2     | 370.000000000 kHz | 26.54        |       | Average    | -21.96         |
| 2     | 246.000000000 kHz | 29.16        |       | Average    | -22.73         |
| 2     | 306.000000000 kHz | 25.86        |       | Average    | -24.22         |
| 2     | 4.474000000 MHz   | 21.45        |       | Average    | -24.55         |
| 2     | 274.000000000 kHz | 24.03        |       | Average    | -26.97         |
| 2     | 28.782000000 MHz  | 20.20        |       | Average    | -29.80         |
| 1     | 4.434000000 MHz   | 25.91        |       | Quasi Peak | -30.09         |
| 1     | 654.000000000 kHz | 20.75        |       | Quasi Peak | -35.25         |
| 1     | 29.746000000 MHz  | 24.54        |       | Quasi Peak | -35.46         |
| 1     | 12.814000000 MHz  | 23.94        |       | Quasi Peak | -36.06         |

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**Power: 110V60Hz\_NEUTRAL**



**Graph: Neutral**

| Trace | Frequency         | Level (dBµV) | Phase | Detector   | Delta Limit/dB |
|-------|-------------------|--------------|-------|------------|----------------|
| 1     | 154.000000000 kHz | 59.29        |       | Quasi Peak | -6.49          |
| 2     | 150.000000000 kHz | 42.83        |       | Average    | -13.17         |
| 2     | 186.000000000 kHz | 37.03        |       | Average    | -17.18         |
| 2     | 430.000000000 kHz | 29.46        |       | Average    | -17.79         |
| 2     | 458.000000000 kHz | 28.47        |       | Average    | -18.26         |
| 1     | 246.000000000 kHz | 43.63        |       | Quasi Peak | -18.26         |
| 1     | 430.000000000 kHz | 37.34        |       | Quasi Peak | -19.91         |
| 2     | 218.000000000 kHz | 31.09        |       | Average    | -21.80         |
| 2     | 338.000000000 kHz | 26.88        |       | Average    | -22.37         |
| 2     | 246.000000000 kHz | 29.35        |       | Average    | -22.54         |
| 2     | 366.000000000 kHz | 25.56        |       | Average    | -23.03         |
| 1     | 462.000000000 kHz | 31.81        |       | Quasi Peak | -24.85         |
| 2     | 306.000000000 kHz | 24.59        |       | Average    | -25.49         |
| 2     | 278.000000000 kHz | 25.22        |       | Average    | -25.66         |
| 1     | 394.000000000 kHz | 30.10        |       | Quasi Peak | -27.88         |
| 2     | 8.122000000 MHz   | 20.95        |       | Average    | -29.05         |
| 1     | 826.000000000 kHz | 24.30        |       | Quasi Peak | -31.70         |
| 1     | 4.246000000 MHz   | 23.31        |       | Quasi Peak | -32.69         |
| 1     | 6.974000000 MHz   | 26.19        |       | Quasi Peak | -33.81         |
| 1     | 1.106000000 MHz   | 21.30        |       | Quasi Peak | -34.70         |
| 1     | 16.558000000 MHz  | 25.12        |       | Quasi Peak | -34.88         |

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