

|                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                           |                                                            |                                                                     |                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Prüfbericht-Nr.:</b><br><i>Test report no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                         | IN2482UN 001                                                                                                                                                                                              | <b>Auftrags-Nr.:</b><br><i>Order no.:</i>                  | 146785551 010                                                       | Seite 1 von 48<br>Page 1 of 48                                                        |
| <b>Kunden-Referenz-Nr.:</b><br><i>Client reference no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                | 2269507                                                                                                                                                                                                   | <b>Auftragsdatum:</b><br><i>Order date:</i>                | 2023-04-26                                                          |                                                                                       |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                     | Trimble Inc.<br>5475 Kellenburger Road , Building 2,Dayton,<br>Ohio 45424, United States                                                                                                                  |                                                            |                                                                     |                                                                                       |
| <b>Prüfgegenstand:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                | Wireless Cable Reel Sensor                                                                                                                                                                                |                                                            |                                                                     |                                                                                       |
| <b>Bezeichnung</b><br><i>Identification</i>                                                                                                                                                                                                                                                                                                                                                                                                                | GS112-V2                                                                                                                                                                                                  | <b>Serien -Nr.:</b><br><i>Serial no.:</i>                  | Engineering Sample                                                  |                                                                                       |
| <b>Auftrags-Inhalt:</b><br><i>Order content:</i>                                                                                                                                                                                                                                                                                                                                                                                                           | Testing and issue of Test Report and Grant Certificate                                                                                                                                                    |                                                            |                                                                     |                                                                                       |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                        | FCC Part 15 Subpart C 15.247,15.205, 15.207 & 15.209<br>RSS 247 Issue 3, RSS Gen Issue 5                                                                                                                  |                                                            |                                                                     |                                                                                       |
| <b>Wareneingangsdatum:</b><br><i>Date of sample receipt:</i>                                                                                                                                                                                                                                                                                                                                                                                               | 2023-10-18                                                                                                                                                                                                |                                                            |                                                                     |                                                                                       |
| <b>Prüfmuster-Nr.:</b><br><i>Test sample no:</i>                                                                                                                                                                                                                                                                                                                                                                                                           | A003584412-032<br>A003584412-033                                                                                                                                                                          |                                                            |                                                                     |                                                                                       |
| <b>Prüfzeitraum:</b><br><i>Testing period:</i>                                                                                                                                                                                                                                                                                                                                                                                                             | 2023-10-19 - 2023-11-05                                                                                                                                                                                   |                                                            |                                                                     |                                                                                       |
| <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><br>FCC Test Site Registration<br>No: 496599<br>IC Test Site Registration No:<br>3466E-1 |                                                            |                                                                     |                                                                                       |
| <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>                                                                                                                                                                                                                                                                                                                                                                                                                              | 2024-08-12                                                                                                                                                                                                |                                                            | <b>Ausstellatum:</b><br><i>Issue date:</i>                          | 2024-08-12                                                                            |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Yogesh V</b><br>Senior Engineer                                                                                                                                                                        |                                                            | <b>Stellung / Position:</b>                                         | <b>Madhu K N</b><br>Asst. Manager                                                     |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  | FCC ID: S9E-GS200F<br>IC: 5817A-GS000F                                                                                                                                                                    |                                                            |                                                                     |                                                                                       |
| <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>                                                                                                                 |                                                            |                                                                     |                                                                                       |
| <b>* Legende:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 = sehr gut<br>P(ass) = entspricht o.g. Prüfgrundlage(n)                                                                                                                                                 | 2 = gut<br>F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | 3 = befriedigend<br>F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | 4 = ausreichend<br>N/A = nicht anwendbar                                              |
| <b>* Legend:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1 = very good<br>P(ass) = passed a.m. test specification(s)                                                                                                                                               | 2 = good<br>F(ail) = failed a.m. test specification(s)     | 3 = satisfactory<br>F(ail) = failed a.m. test specification(s)      | 4 = sufficient<br>N/A = not applicable                                                |
| <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> |                                                                                                                                                                                                           |                                                            |                                                                     |                                                                                       |

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|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</p> <p>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>                                                                         |
| 2 | <p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</i></p> |
| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.</p> <p>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird.</p> <p><i>The decision rule for statements of conformity in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report.</i></p>                                                                                                                                                                                                             |

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## TEST SUMMARY

| Test Item                                                     | FCC                     | ISED                             | Result |
|---------------------------------------------------------------|-------------------------|----------------------------------|--------|
| Maximum conducted (average) output power                      | FCC 15.247(b)(3)        | RSS 247 Issue 3, Section 5.4 (d) | Pass   |
| Maximum Power Spectral Density                                | FCC 15.247(e)           | RSS 247 Issue 3, Section 5.2 (b) | Pass   |
| Occupied bandwidth and 6dB Bandwidth                          | 15.247 (a) (2)          | RSS-247 issue 3 5.1 (c)          | Pass   |
| Emissions in non-restricted frequency bands                   | 15.247 (d)              | RSS-247 issue 3 5.5              | Pass   |
| Spurious Radiated Emissions and Restricted Bands of Operation | FCC 15.209 / FCC 15.205 | RSS-GEN issue 3 Clause 8.9, 8.10 | Pass   |
| Conducted Spurious Emission on AC Power lines                 | FCC 15.207              | RSS-Gen Issue 5,Section 8.8      | Pass   |

Product Category: Electronics Testing  
Test Discipline: EMC Test Facility

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## REVISION HISTORY OF THIS REPORT

| Report Number | Version | Description             | Issue date |
|---------------|---------|-------------------------|------------|
| IN2482UN 001  | 01      | Initial issue of report | 2024-08-12 |

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# 1 GENERAL REMARKS

## 1.1 Attachments

All attachments are part of this test report and are issued in separate document

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

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## 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) Pvt.Ltd.,  
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             | ESW 44             | 101732        | 4.73 SP5          | 04.08.2024           | Yearly      | Radiated Spurious Emission    |
| EMI Receiver              | Rohde & Schwarz             | ESW 44             | 101733        | 1.72SP1           | 15.02.2024           | Yearly      |                               |
| Horn Antenna              | Schwarzbeck                 | HAX-18             | HAX18-802     | -                 | 03.09.2024           | Yearly      |                               |
| Balun & Biconical Antenna | Schwarzbeck Mess-Elektronik | BBA 9106+VHBB 9124 | 9124-1117     | -                 | 05.05.2024           | Yearly      |                               |
| Log-Periodic Antenna      | Schwarzbeck mess-elektronik | VUSLP 9111B        | 9111B-111     | -                 | 17.02.2024           | Yearly      |                               |
| Fully Anechoic Chamber    | Albatross                   | -                  | -             | -                 | -                    | -           | Antenna – Port Conducted Test |
| Signal Analyser           | Anritsu Corporation         | MS2830A            | 6261983953    | -                 | 31.10.2024           | Yearly      |                               |
| Spectrum Analyzer         | Agilent                     | E4407B             | US41192772    | A.14.06           | 27.12.2023           | Yearly      |                               |

Table 2: Instrument application Software versions

| SL. No. | Test Type                                           | Application software | Version   |
|---------|-----------------------------------------------------|----------------------|-----------|
| 1       | Radiated spurious emission measurement in FAC       | EMC 32               | 10.60.20  |
| 2       | Radiated spurious emission measurement in 10mtr SAC | BAT EMC              | 3.20.0.17 |

## 3 GENERAL PRODUCT INFORMATION

### 3.1 Product Function and Intended Use

The sensor is used in crane lifting applications. This battery-operated device measures the crane boom length, crane boom angle to horizontal and reports the data to be displayed on GS920 Display.

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

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

|                             |                                              |
|-----------------------------|----------------------------------------------|
| Protocol                    | Sub-GHz                                      |
| Operating Frequency Range   | 902MHz to 928MHz                             |
| Channel Spacing             | 1MHz                                         |
| Tx Transmitting Power       | 10 dBm                                       |
| Maximum measured e.i.r.p    | 9.04 dBm @ 903MHz                            |
| Modulation                  | 2FSK                                         |
| Data Rate                   | 19.2Kbps                                     |
| Number of antennas          | 1                                            |
| Antenna Gain & Antenna Type | Monopole & refer clause 4.7 for antenna gain |
| Supply Voltage to Product   | 3.6VDC                                       |
| Environmental conditions    | -30 to 65°C<br>humidity range 0% to 100%     |
| EUT Dimension (LXWXH)       | 4.9*3.2*5.1 inches                           |

**\*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.

### 3.3 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**

| Parameter                         | Uncertainty                      |
|-----------------------------------|----------------------------------|
| 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                              | $\pm 5 \%$                       |

## 4 TEST SET-UP AND OPERATION MODE

### 4.1 Principle of Configuration Selection

Transmission was enabled with highest possible duty cycle on low, mid and high channels

### 4.2 Test Operation and Test Software

Hardware Version : MB129-01-SD-A

Software version : 3104

Software Name: CableReel\_FCC

Hardware Name: wireless Cable reel sensor

### 4.3 Special Accessories and Auxiliary Equipment

- None

### 4.4 Countermeasures to achieve EMC Compliance

- None

### 4.5 Simultaneous Transmission

This product does not supports Simultaneous operation.

### 4.6 List of frequencies

| Frequency Band (GHz)           | Channel No. | Frequency (MHz) |
|--------------------------------|-------------|-----------------|
| Sub-GHz<br>(902 MHz – 928 MHz) | Low         | 903             |
|                                | :           | :               |
|                                | Mid         | 916             |
|                                | :           | :               |
|                                | High        | 927             |

Table 5: List of SubGHz Center frequencies

#### Channel used for SubGHz testing

Channel Low : 903MHz

Channel Mid : 916MHz

Channel High : 927MHz

### 4.7 Antenna Gain

| Frequency (MHz) | Antenna Gain TUV |
|-----------------|------------------|
| 902             | 1.68             |
| 916             | 0.40             |
| 927             | 0.38             |

Table 6: Antenna Gain

#### Note:

1. TUV Sample Identification number : A003584412-032 - A003584412-033 Radiated & Conducted test Sample

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## 5 OPERATIONAL DESCRIPTION

The Wireless Cable Reel Sensor sends the data to the gateway using the sub-GHz band. The sub-GHz module is a communication module that works within the frequency band of 902 MHz to 928 MHz and uses 2-FSK modulation to communicate. Data rate is 19.2kbps.

The sensor is used in crane lifting applications. This battery-operated device measures the crane boom length, crane boom angle to horizontal and reports the data to be displayed on GS920 Display.

## 6 TEST METHODOLOGY

### 6.1 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

#### 6.1.1 Test Setup Configuration

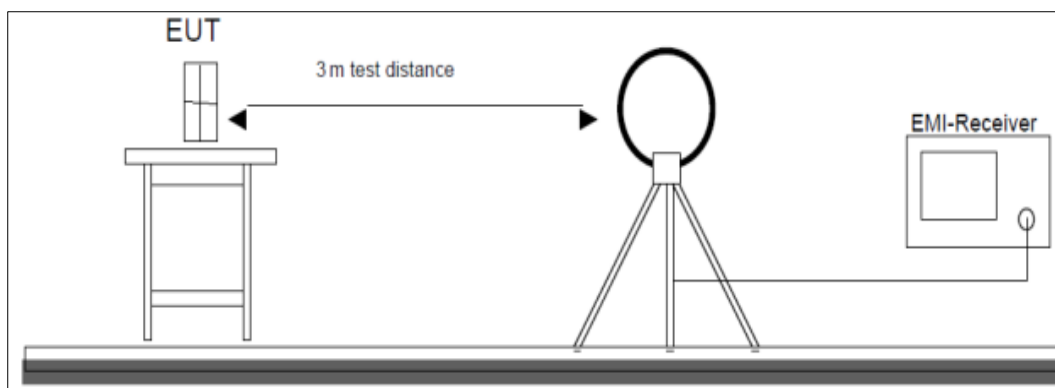


Figure 1: Frequency Range 9 kHz- 30 MHz

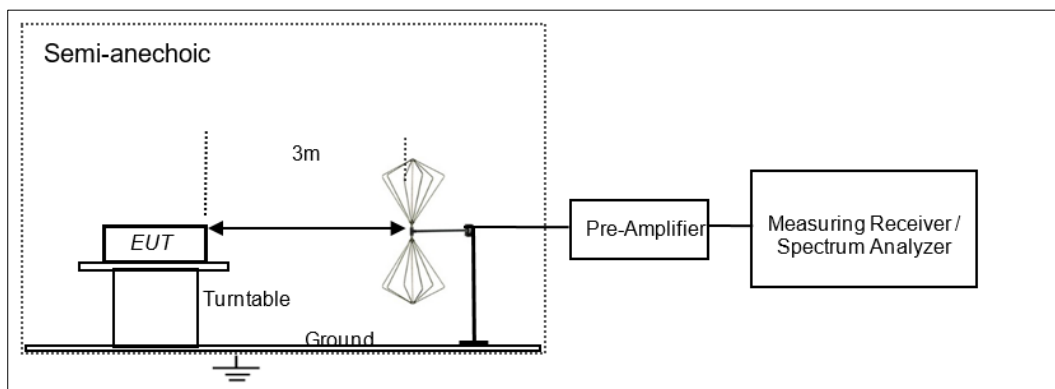
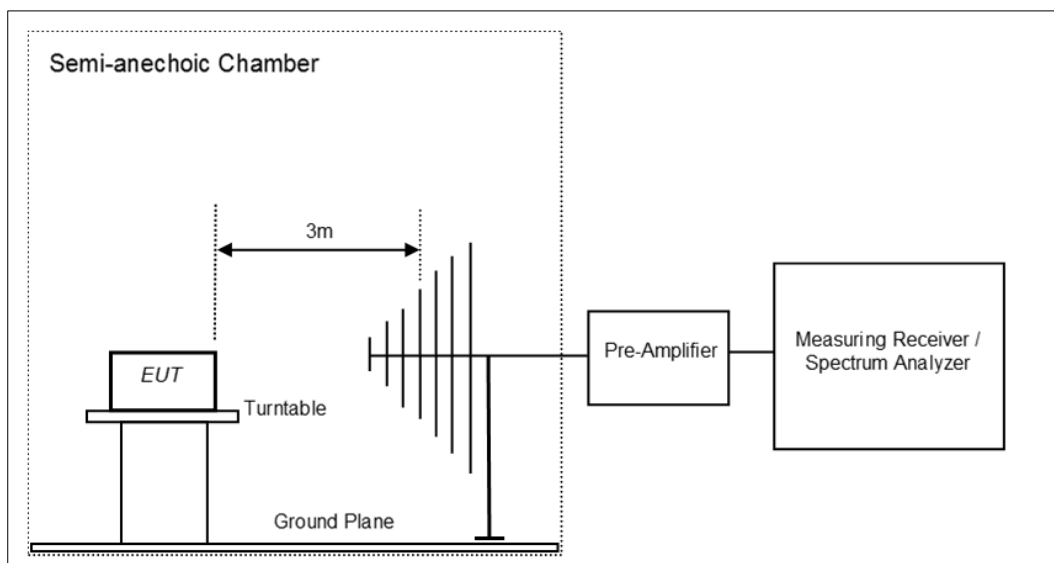
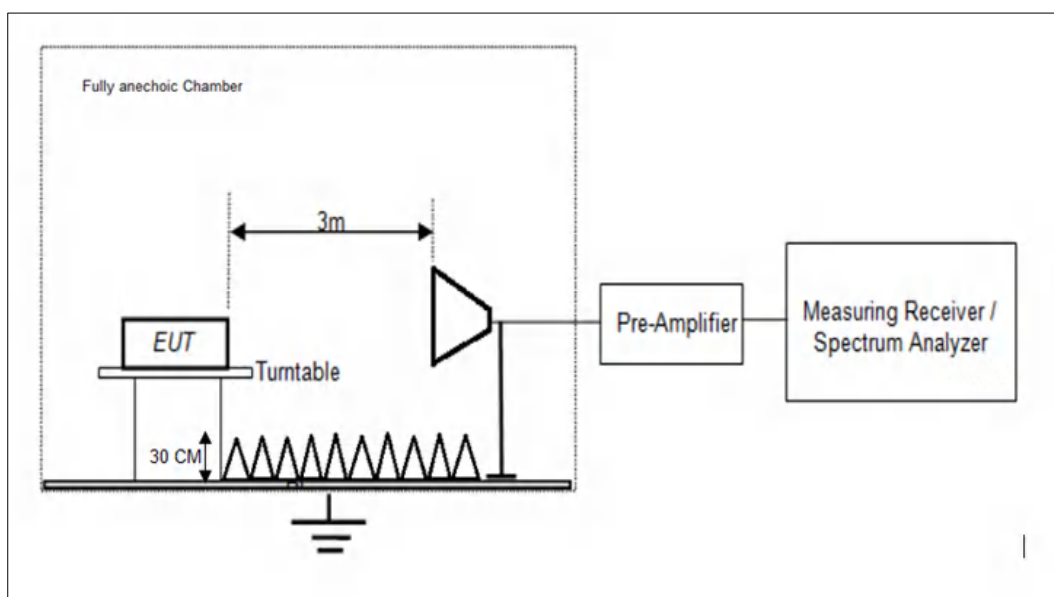


Figure 2: Frequency Range 30 MHz – 200 MHz



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



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

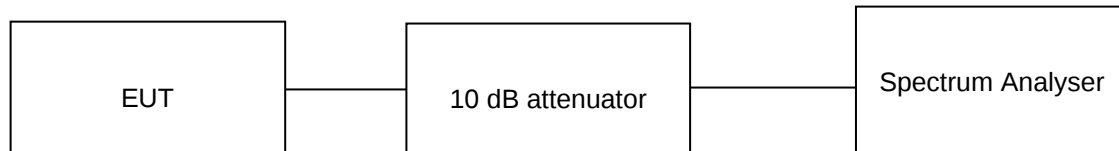
## 7 TEST RESULTS

### 7.1 Maximum Average Conducted Output Power

**Result**

**Pass**

|                       |                                                                         |
|-----------------------|-------------------------------------------------------------------------|
| Test Specification    | FCC part 15 Subpart C 15.247 (b)(2)<br>RSS-247 issue 3, section 5.4 (d) |
| Test Method           | Subclause 11.9.2.2.2 of ANSI C63.10                                     |
| Measurement Bandwidth | 10kHz                                                                   |
| Detector              | Average sample detector method                                          |
| Port of testing       | Antenna port                                                            |
| Requirement           | Power $\leq 1$ W (30 dBm) & e.i.r.p $\leq 4$ W (36 dBm)                 |



**Test Condition**

**Normal Test Condition:**

Temperature (Norm) = + 21.5 °C      Voltage = 3.6VDC      Relative humidity: 63%

**KDB Guidelines applied:**

Measurements were made as per section 9(b) in KDB 558074 D01 15.247 Measurement Guidance v05r02.

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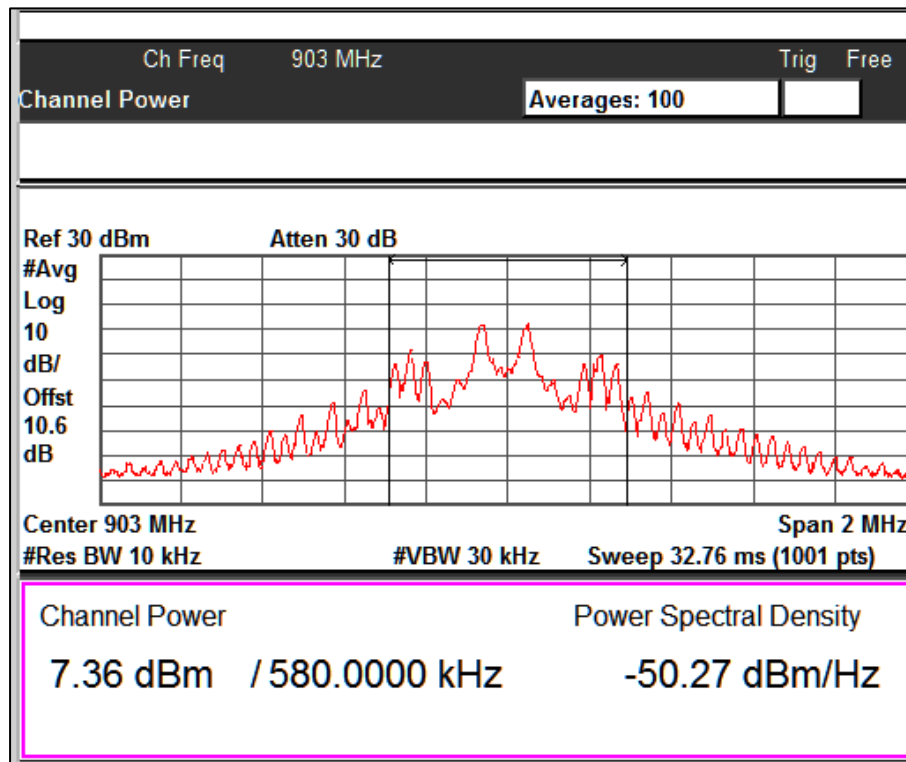
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**Test results:**

**Note:**

1. All the losses are included during measurement and final values are mentioned in the test report
2. Total Output power (dBm) = Measured power (dBm) + Attenuator factor (10dB) + Cable loss (0.6dB)
3. This product do not support additional beamforming gain / directional gain, it uses single antenna and hence Directional gain of the single antenna can be referred in clause 4.7 Antenna Gain

| Channel Frequency (MHz) | Measured Average power (dBm) | e.i.r.p (dBm) | Power Limit (dBm) | e.i.r.p Limit (dBm) |
|-------------------------|------------------------------|---------------|-------------------|---------------------|
| 903                     | 7.36                         | 9.04          | 30.00             | 36.00               |
| 916                     | 6.99                         | 7.39          | 30.00             | 36.00               |
| 927                     | 6.64                         | 7.02          | 30.00             | 36.00               |

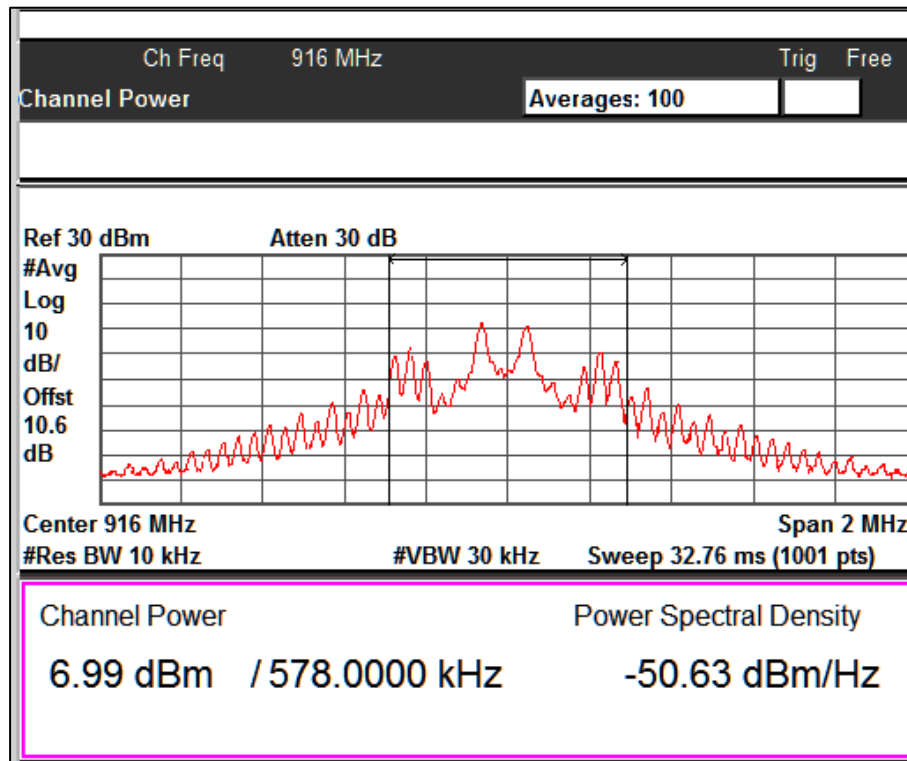


Channel Frequency: 903MHz

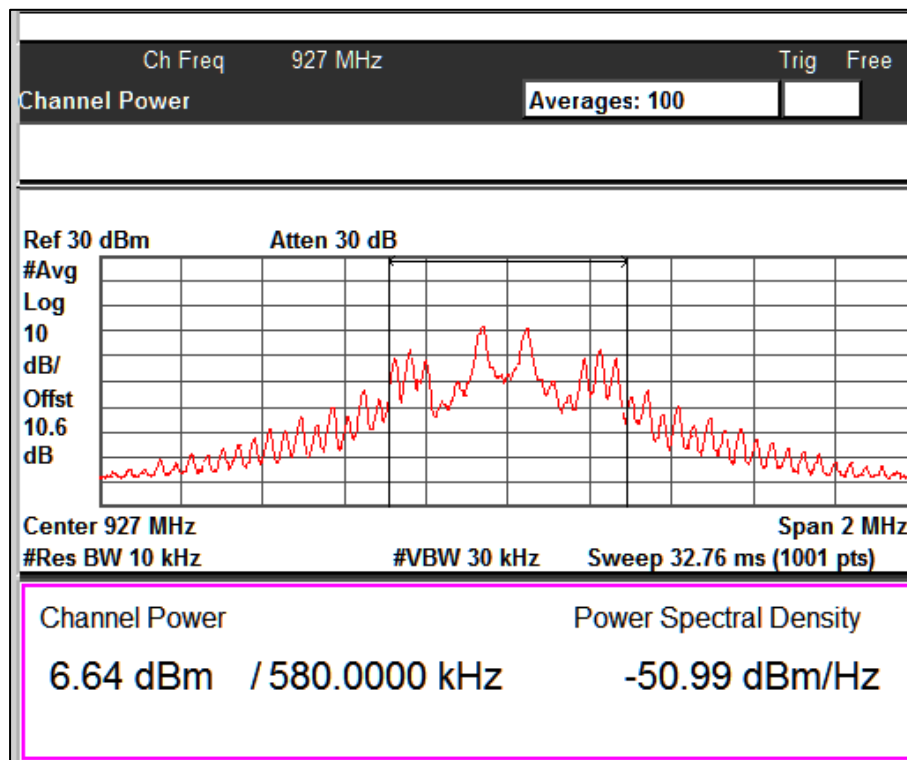
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Channel Frequency: 916MHz



Channel Frequency: 927MHz

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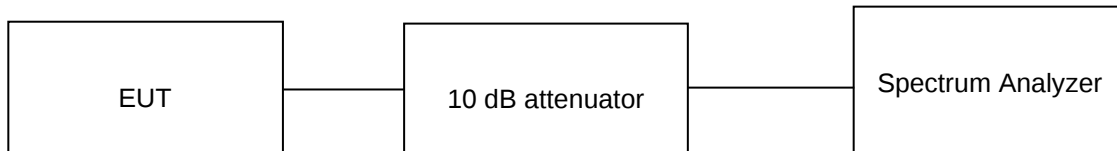
## 7.1 Maximum Power Spectral Density

### Result

### Pass

|                       |                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Specification    | FCC part 15 Subpart C 15.247 (e) / RSS 247 Issue 3, Section 5.2 (b)                                                                                |
| Test Method           | Subclause 11.10.3 of ANSI C63.10                                                                                                                   |
| Measurement Bandwidth | 100 kHz                                                                                                                                            |
| Detector              | Average sample detector mode                                                                                                                       |
| Port of testing       | Antenna port                                                                                                                                       |
| Requirement           | For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm |

### Test Method:



### Test Condition

#### Normal Test Condition:

Temperature (Norm) = + 21.5 °C      Voltage = 3.6VDC      Relative humidity: 63%

### KDB Guidelines applied:

Measurements were made as per section 8.4 in KDB 558074 D01 15.247 Measurement Guidance v05r02.

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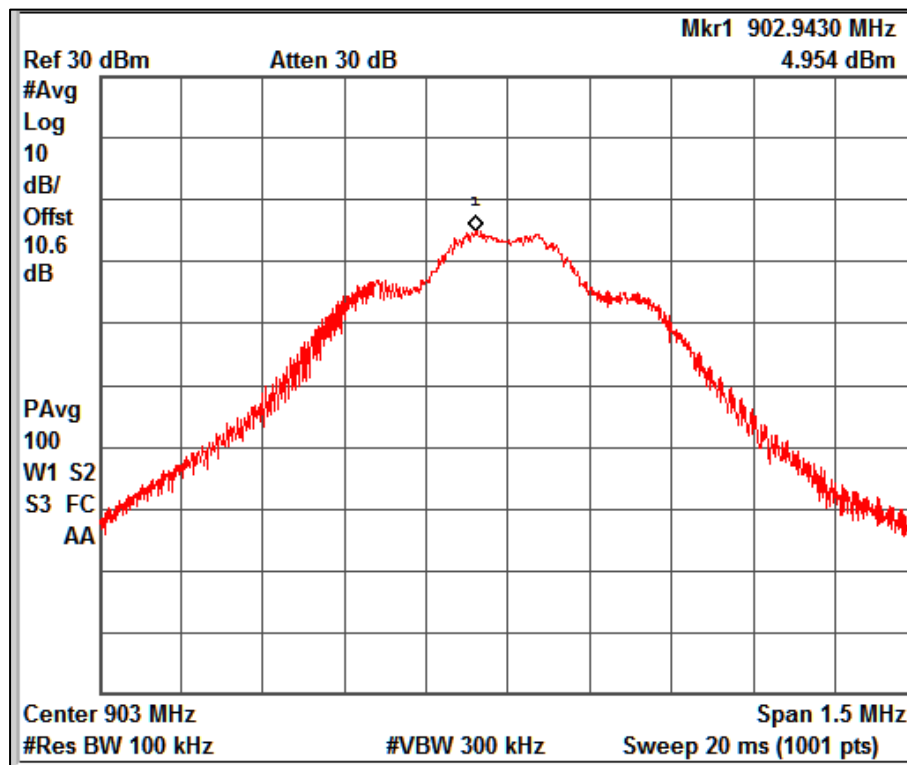
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**Test results:**

**Note:**

1. All the losses are included during measurement and final values are mentioned in the test report.
2. Total Average PSD (dBm) = Measured Average PSD (dBm) + Attenuator factor (10dB) + Cable loss (0.6dB)
3. This product do not support additional beamforming gain / directional gain, it uses signal antenna and hence directional gain of the single antenna can be referred in clause 4.7 Antenna Gain

| Channel Frequency (MHz) | Measured PSD (dBm) | e.i.r.p PSD (dBm) | PSD Limit (dBm/100KHz) |
|-------------------------|--------------------|-------------------|------------------------|
| 903                     | 4.95               | 6.63              | 8                      |
| 916                     | 5.06               | 5.46              | 8                      |
| 927                     | 4.26               | 4.64              | 8                      |

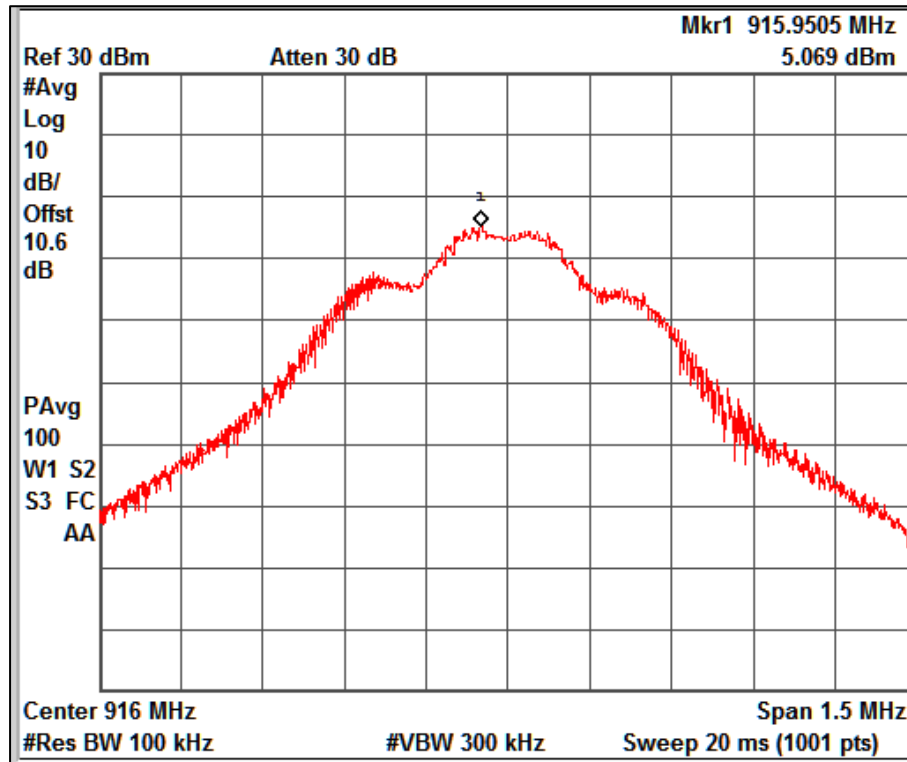


Channel Frequency: 903MHz

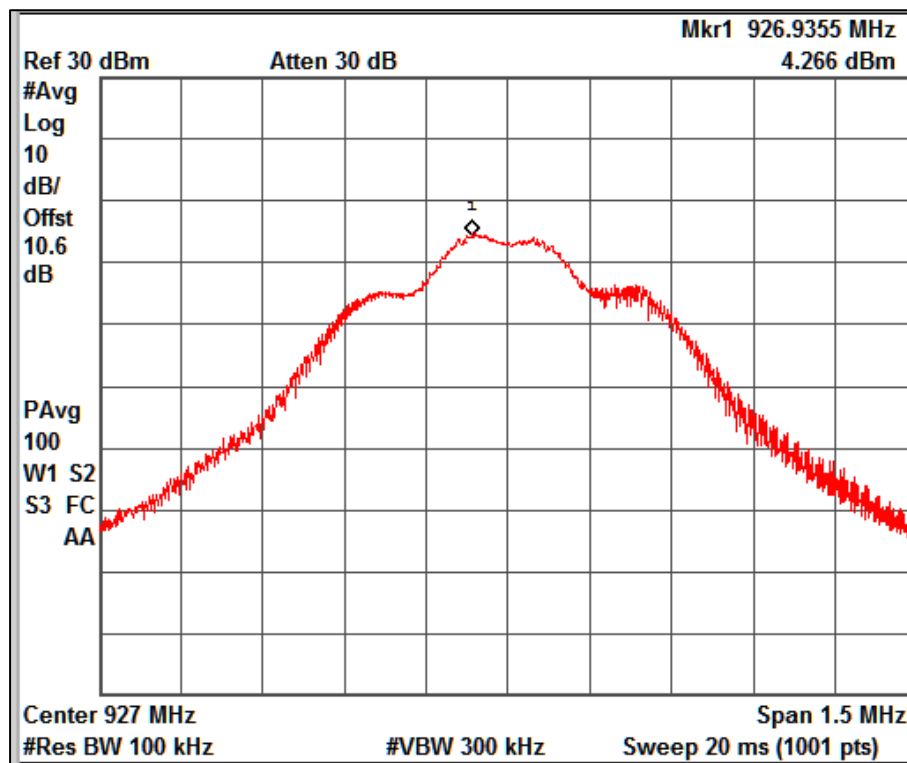
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Channel Frequency: 916MHz



Channel Frequency: 927MHz

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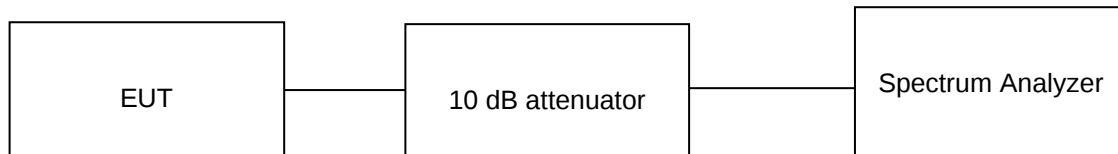
## 7.2 Occupied bandwidth

### Result

### Pass

|                       |                                                                          |
|-----------------------|--------------------------------------------------------------------------|
| Test Specification    | FCC part 15 Subpart C 15.247 (a) (i)<br>RSS-247 issue 3, section 5.1 (c) |
| Test Method           | Subclause 11.8.1 & 6.9.2 of ANSI C63.10                                  |
| Measurement Bandwidth | 100 kHz                                                                  |
| Detector              | Peak                                                                     |
| Port of testing       | Antenna port                                                             |
| Requirement           | The minimum 6 dB bandwidth shall be at least 500 kHz.s                   |

### Test Method:



### Test Condition

#### Normal Test Condition:

Temperature (Norm) = + 21.5 °C      Voltage = 3.6VDC      Relative humidity: 63%

### KDB Guidelines applied:

Measurements were made as per section 9(b) in KDB 558074 D01 15.247 Measurement Guidance v05r02.

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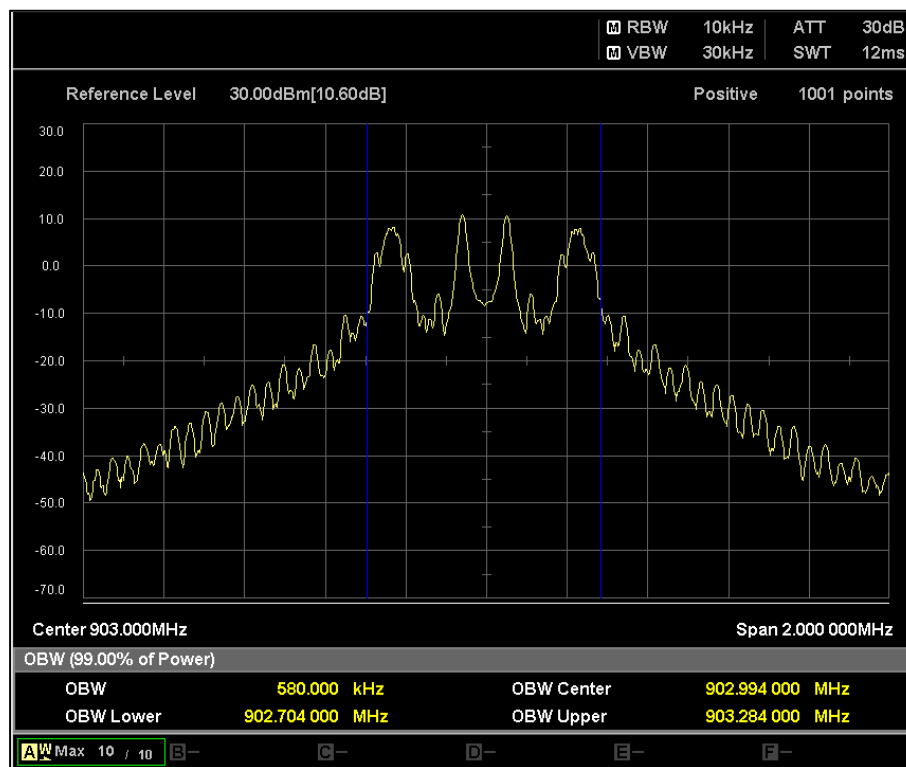
**Test results:**

**Note:**

1. All the losses are included during measurement and final values are mentioned in the test report.
2. Total Peak Output power (dBm) = Measured Peak power (dBm) + Attenuator factor (10dB) + Cable loss (0.6dB)
3. This product do not support additional beamforming gain / directional gain, it uses single antenna and hence Directional gain of the single antenna can be referred in clause 4.7 Antenna Gain.

| Channel Frequency (MHz) | 99% OBW (KHz) | 6dB BW (KHz) | Minimum Limit (KHz) |
|-------------------------|---------------|--------------|---------------------|
| 903                     | 580           | 832.97       | 250                 |
| 916                     | 578           | 822.37       | 250                 |
| 927                     | 580           | 823.14       | 250                 |

**99% Band width**

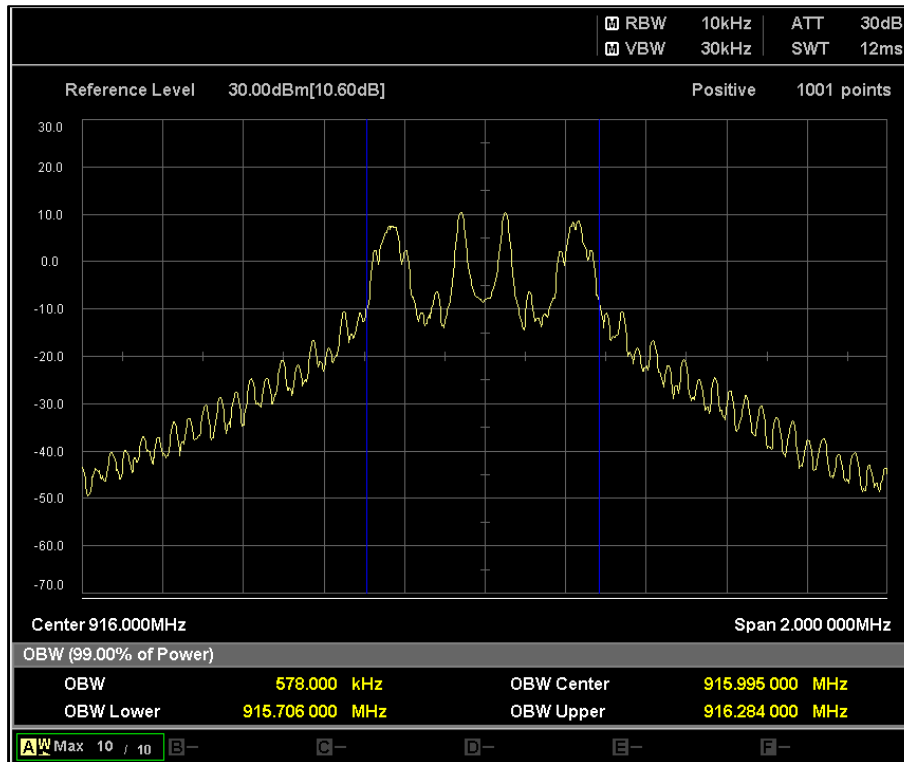


**Channel Frequency: 903MHz**

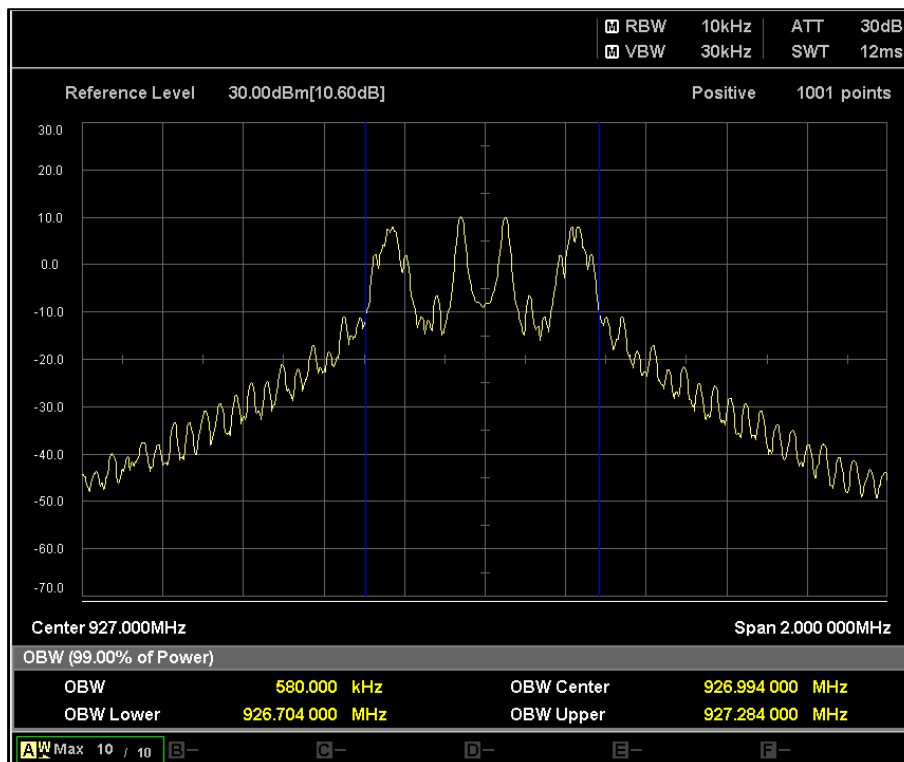
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**Channel Frequency: 916MHz**



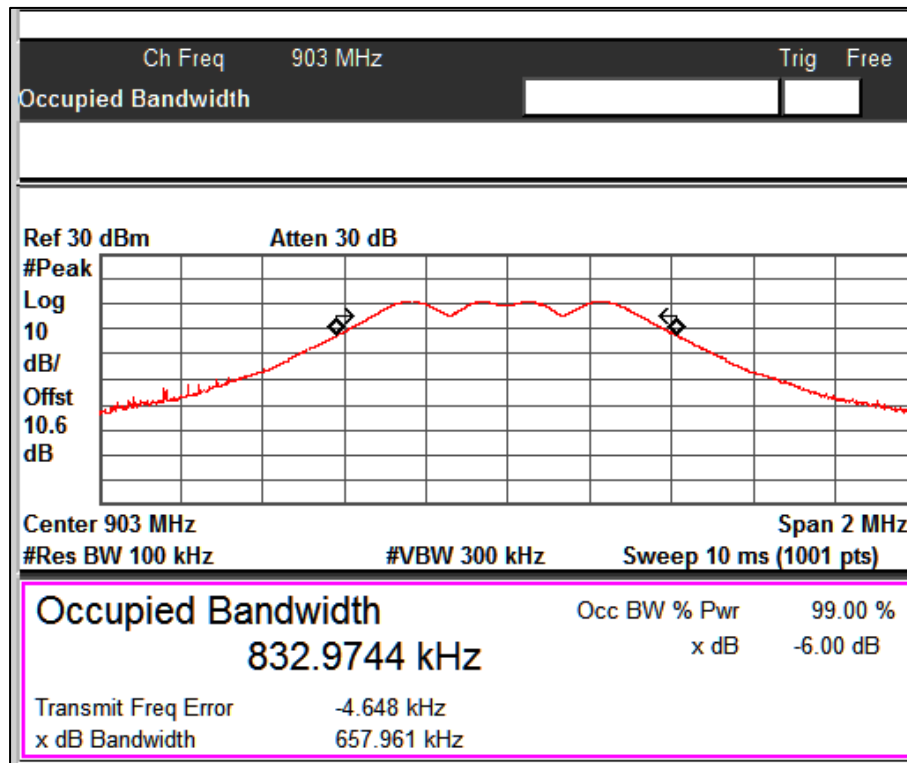
**Channel Frequency: 927MHz**

**Prüfbericht - Nr.:**  
Test Report No.:

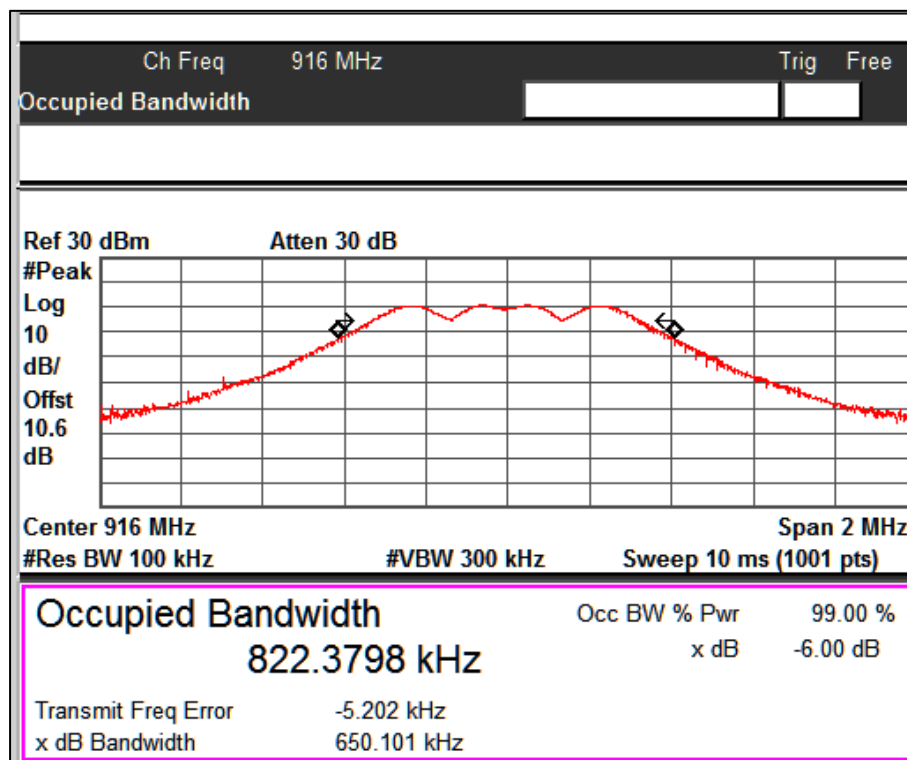
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**DTS Band width**



**Channel Frequency: 903MHz**

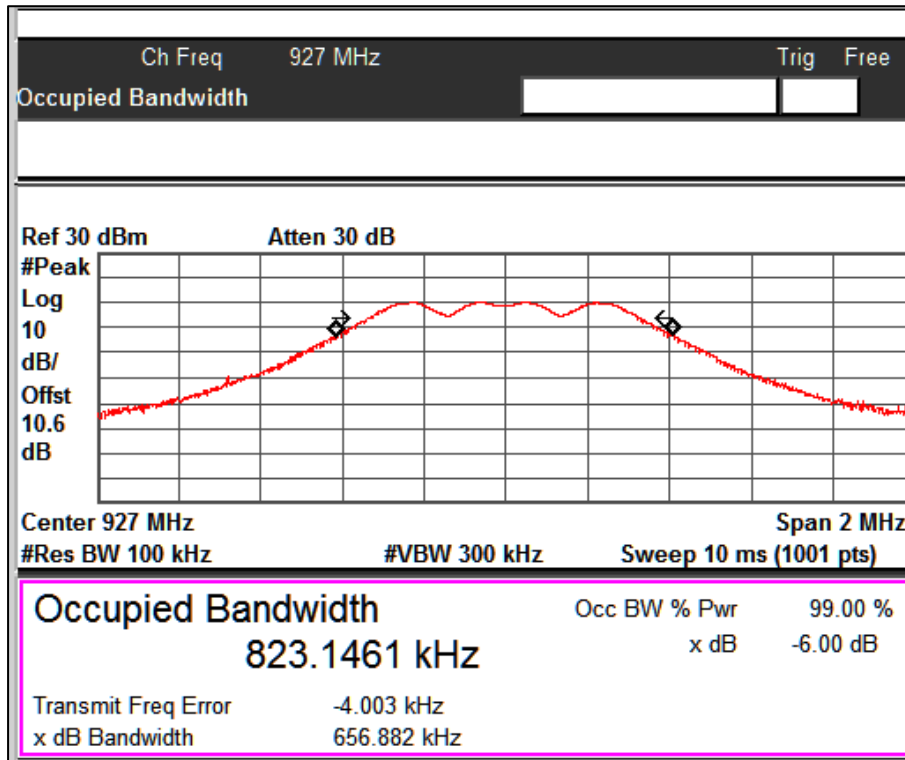


**Channel Frequency: 916MHz**

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Channel Frequency: 927MHz

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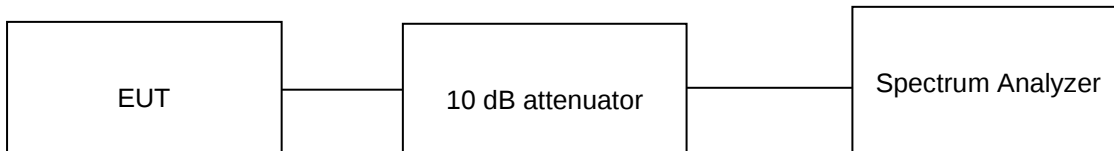
## 7.3 Emissions in non-restricted frequency bands and Conducted Spurious Emission

### Result

**Pass**

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Specification    | FCC part 15 Subpart C 15.247 (d)<br>RSS-247 issue 3, section 5.5                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Test Method           | Subclause 11.11.3 of ANSI C63.10                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Measurement Bandwidth | 100 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Detector              | Average                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Port of testing       | Antenna port                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Requirement           | In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits |

### Test Method:



### Test Condition

#### Normal Test Condition:

Temperature (Norm) = + 21.5 °C      Voltage = 3.6VDC      Relative humidity: 63%

### KDB Guidelines applied:

Measurements were made as per section 9(b) in KDB 558074 D01 15.247 Measurement Guidance v05r02.

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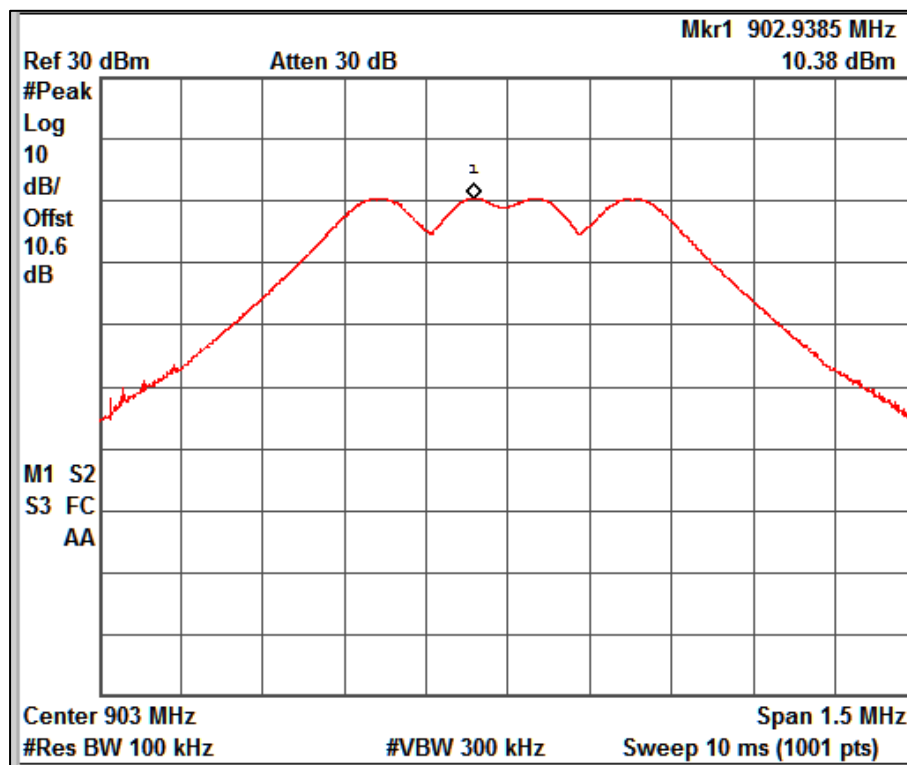
**Test results:**

**Note:**

1. All the losses are included during measurement and final values are mentioned in the test report
2. Final Value (dBm) = Measured Value (dBm) + Attenuator factor (10dB) + Cable loss (0.6dB)
3. This product do not support additional beamforming gain / directional gain, it uses single antenna and hence Directional gain of the single antenna can be referred in clause 4.7 Antenna Gain

**7.3.1 Band edge and reference plots**

| Channel Frequency (MHz) | Band edge frequency (MHz) | Value at band edge (A) (dBm) | Reference value (B) (dBm) | A-B (dBc) | Minimum Limit (dBc) |
|-------------------------|---------------------------|------------------------------|---------------------------|-----------|---------------------|
| 903                     | 902.00                    | -33.24                       | 10.38                     | -43.62    | -30                 |
| 927                     | 928.00                    | -34.18                       | 9.67                      | -43.85    | -30                 |

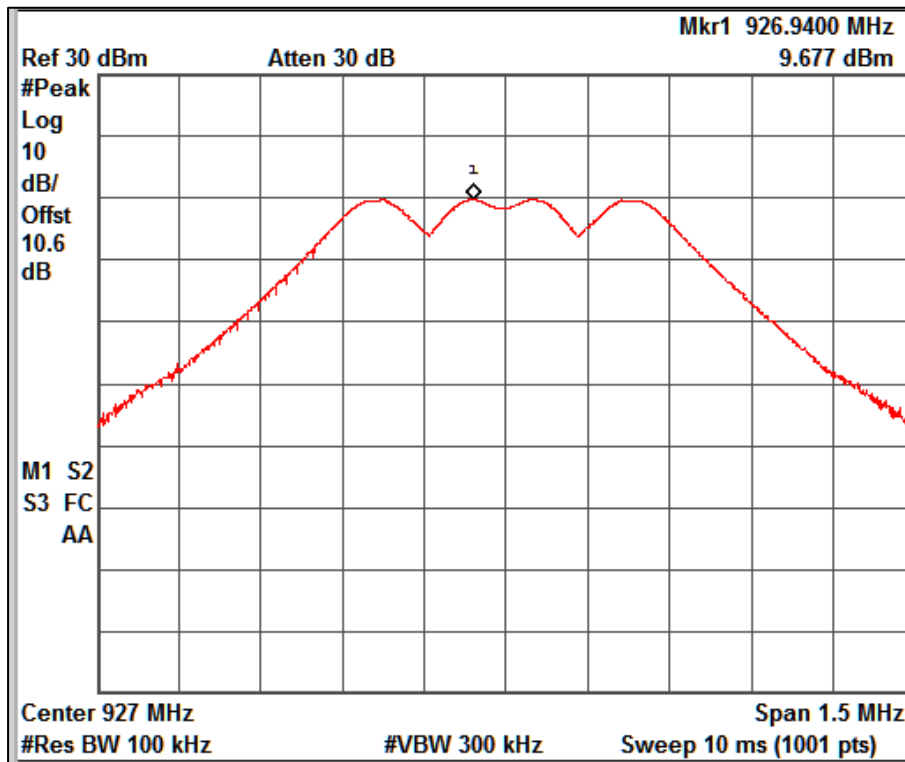


Reference plot for 903MHz

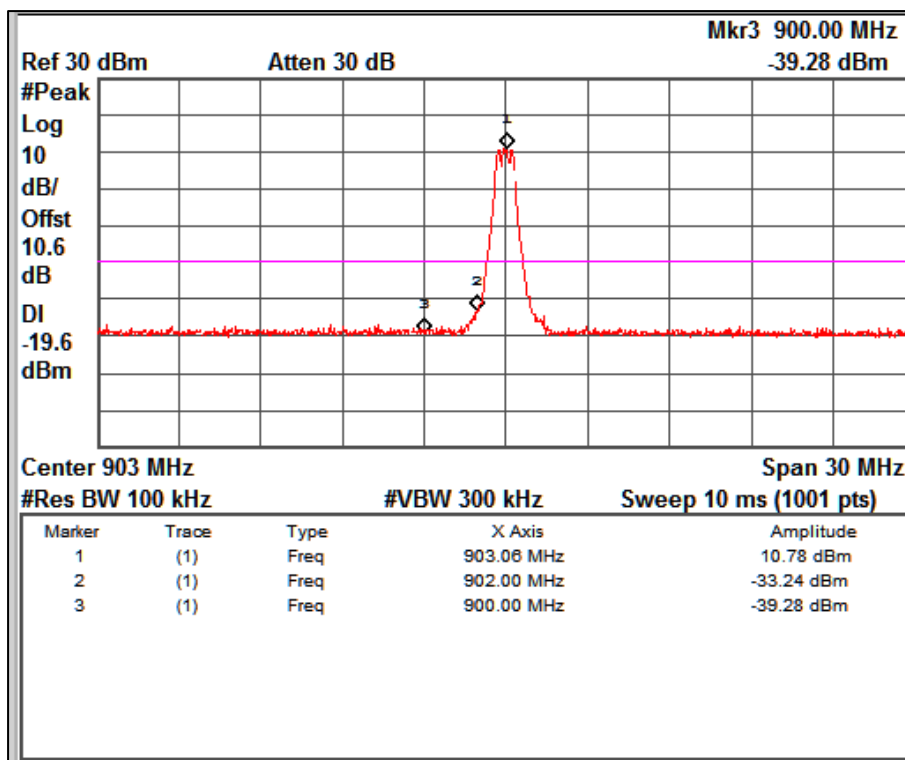
**Prüfbericht - Nr.:**  
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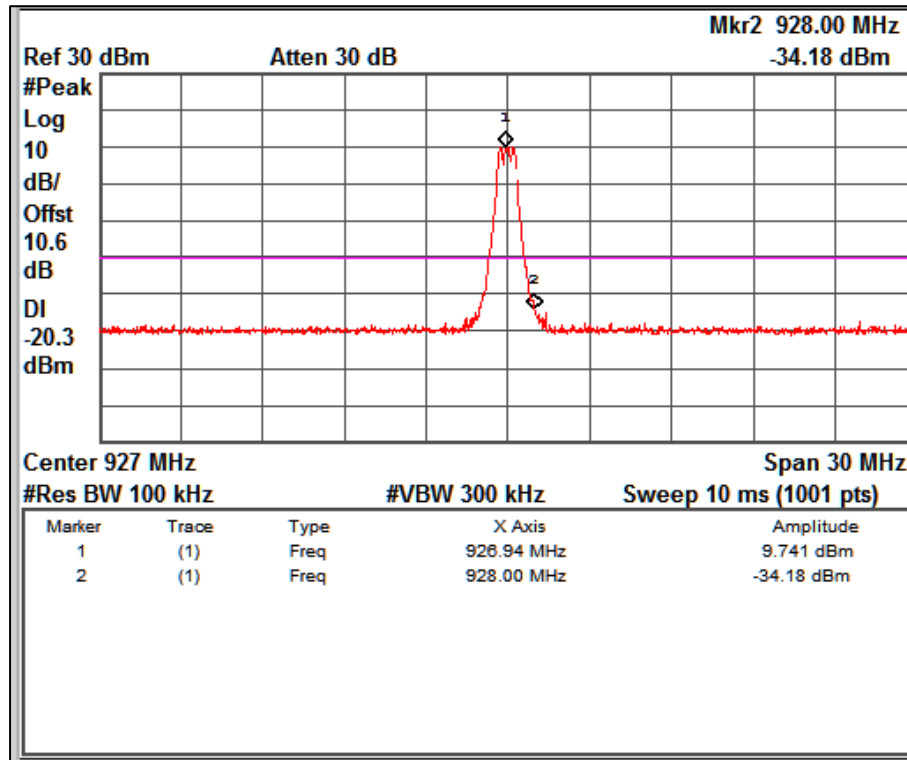
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Reference plot for 927MHz

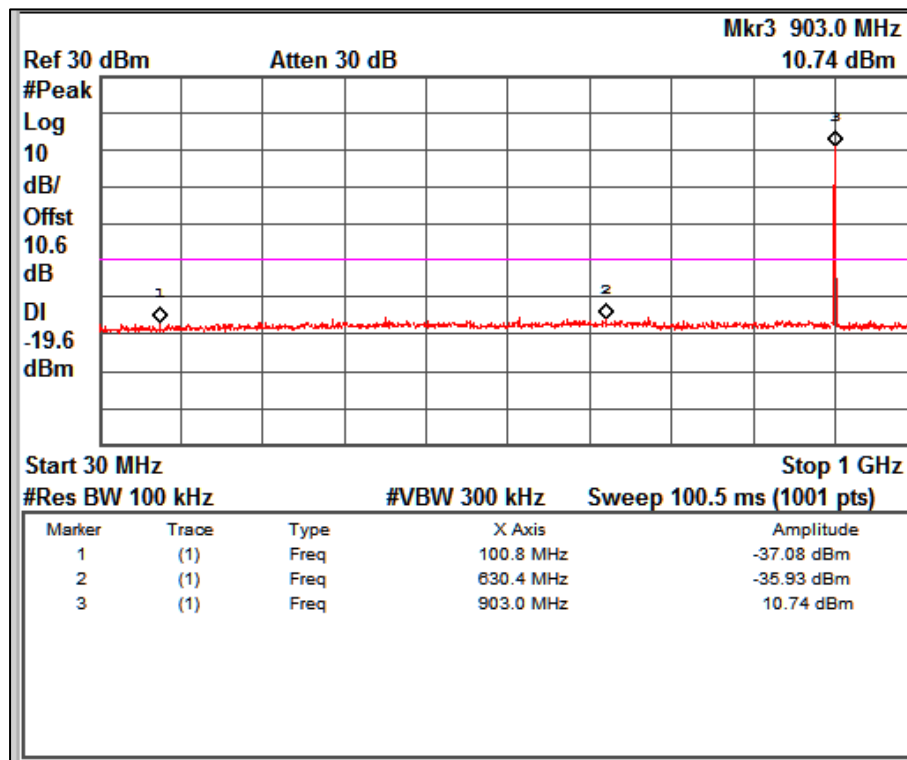


Band edge Channel Frequency 903MHz



Band edge Channel Frequency 927MHz

### 7.3.2 Out-Of-Band Emissions

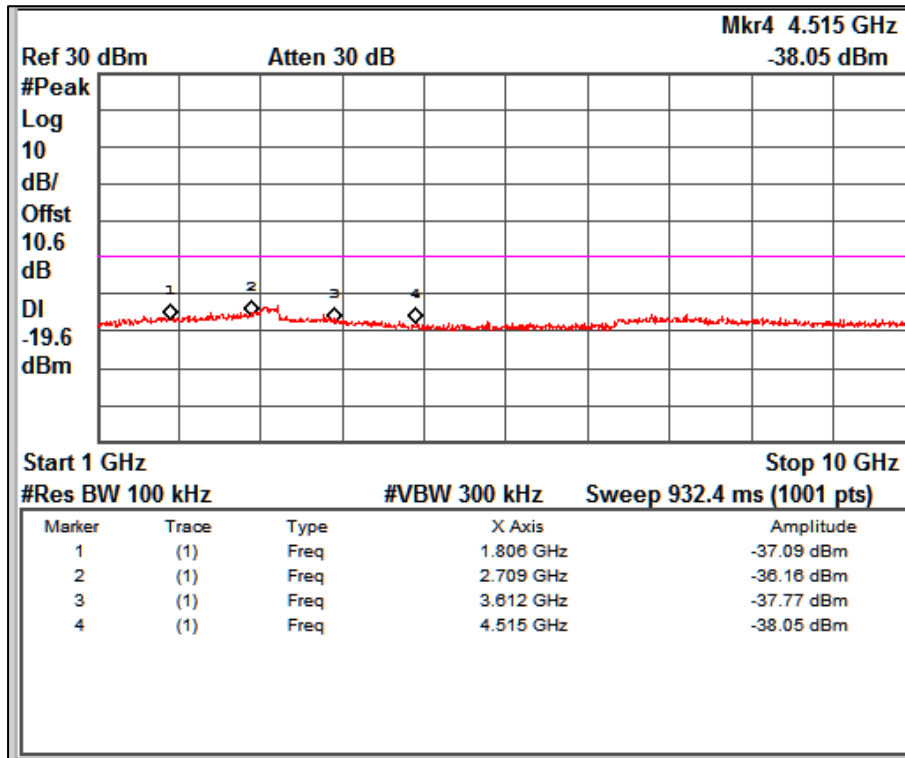


Channel Frequency 903MHz      Frequency Range 30MHz – 1GHz

**Prüfbericht - Nr.:**  
Test Report No.:

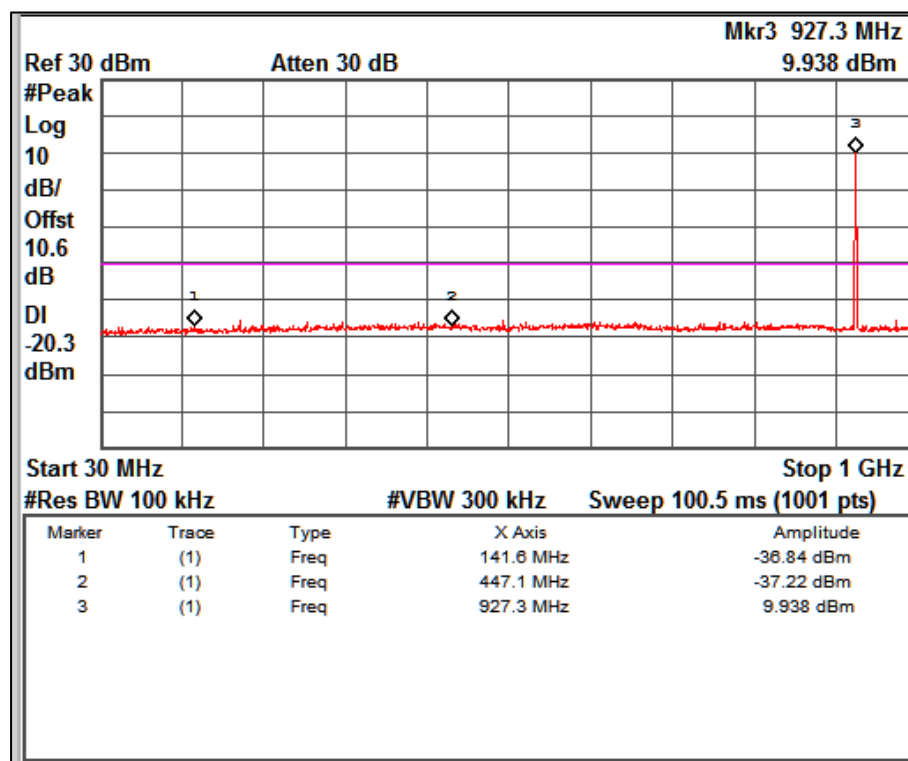
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Channel Frequency 903MHz

Frequency Range 1GHz – 10GHz



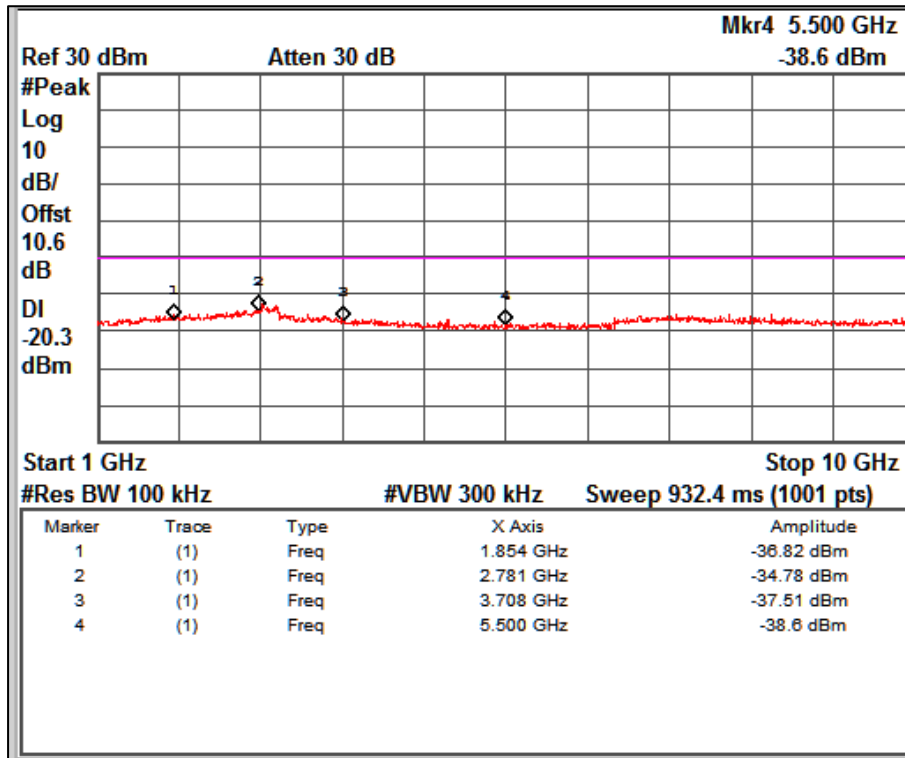
Channel Frequency 916MHz

Frequency Range 30MHz – 1GHz

**Prüfbericht - Nr.:**  
Test Report No.:

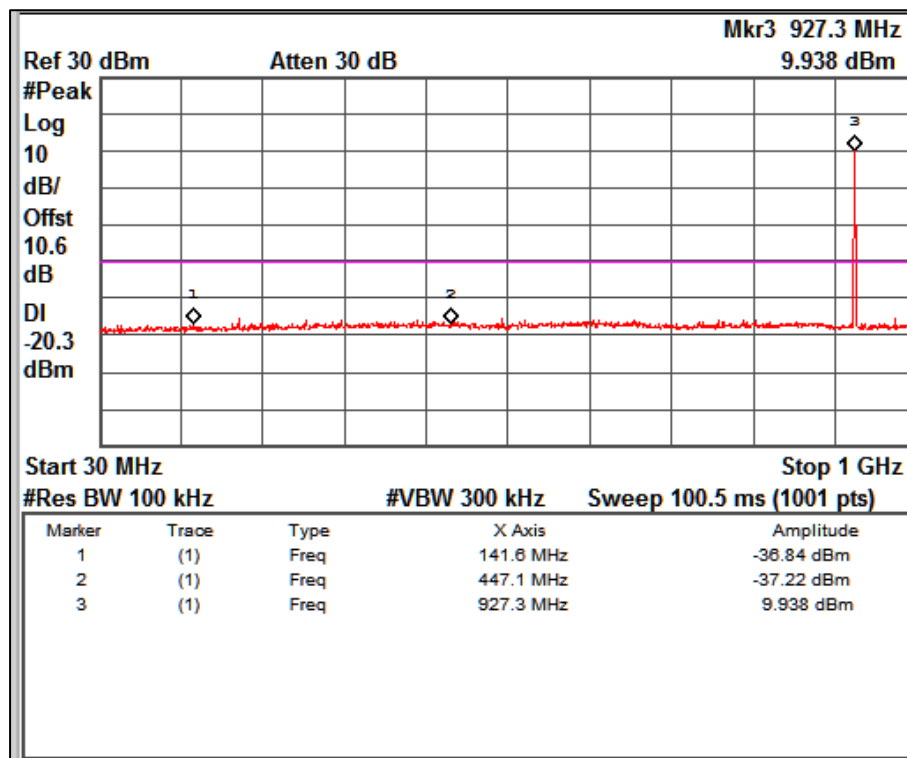
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Channel Frequency 916MHz

Frequency Range 1GHz – 10GHz



Channel Frequency 927MHz

Frequency Range 30MHz – 1GHz

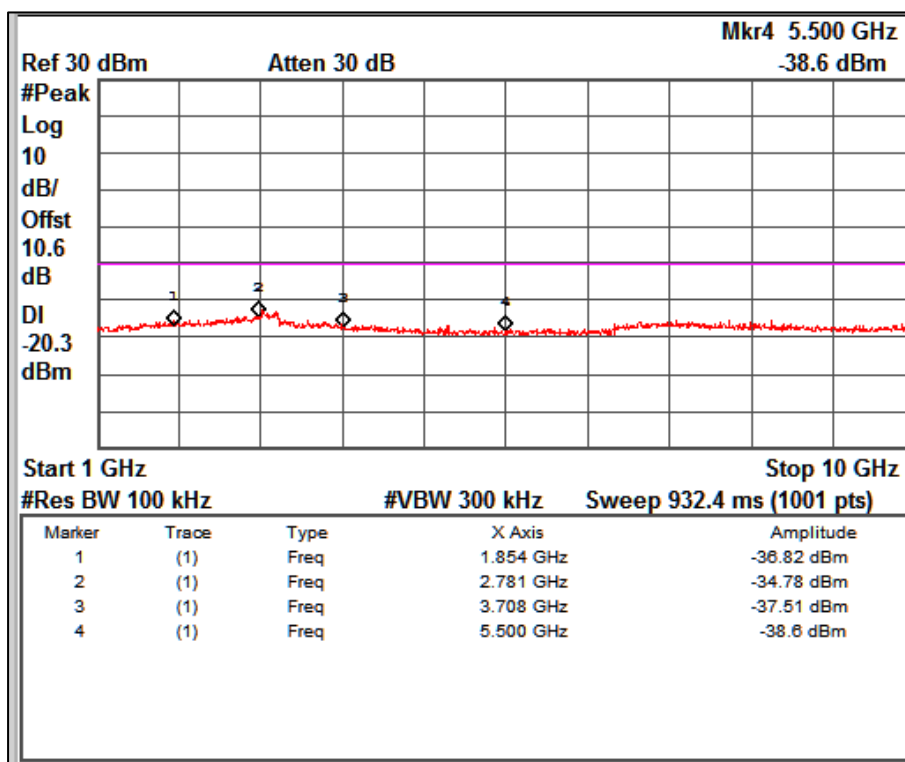
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Channel Frequency 927MHz

Frequency Range 1GHz – 10GHz

## 7.4 Spurious Radiated Emissions & Restricted Bands of Operation

### Result

### Pass

|                       |                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------|
| Test Specification    | FCC part 15 Subpart C 15.247 (d) / (15.209 & 15.205)<br>RSS-GEN issue 5 clause 8.9, 8.10 |
| Test Method           | ANSI C63.10                                                                              |
| Measurement Location  | Semi Anechoic Chamber 9kHz - 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 TEST METHODOLOGY                                                                   |

**Table 7: Transmitter limits for Radiated emission**

| Frequency (MHz) | Field strength (μV/m) | Field strength (dBμV/m) | Distance of Measurement (m) |
|-----------------|-----------------------|-------------------------|-----------------------------|
| 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) = + 23.2 °C

Voltage = 3.6VDC

Relative humidity: 64%

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## Test results:

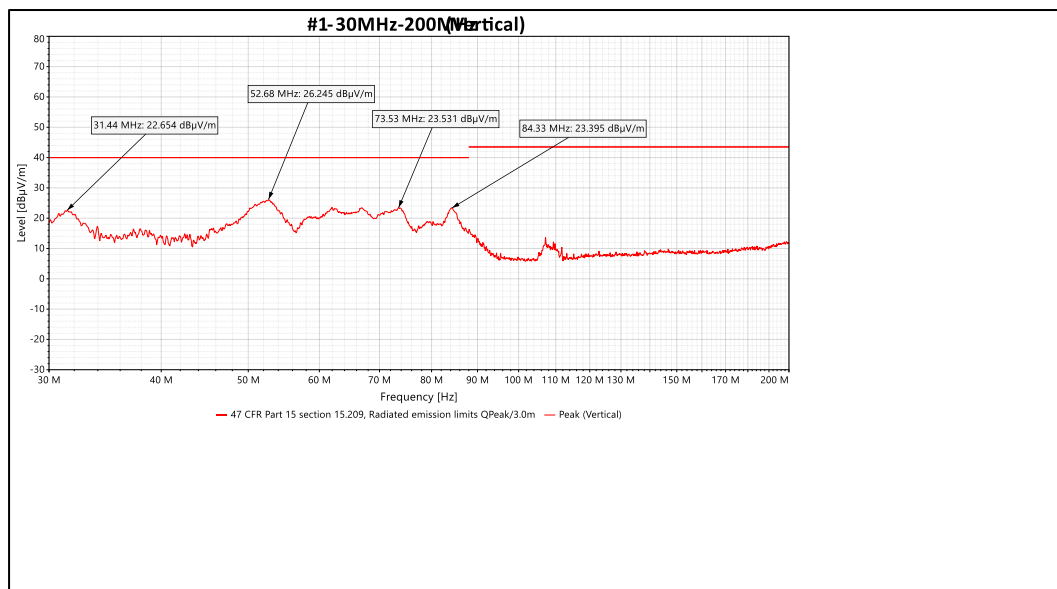
**Note:** All the losses are included during measurement and final values are mentioned in the test report. Refer TEST METHODOLOGY for more details

### 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

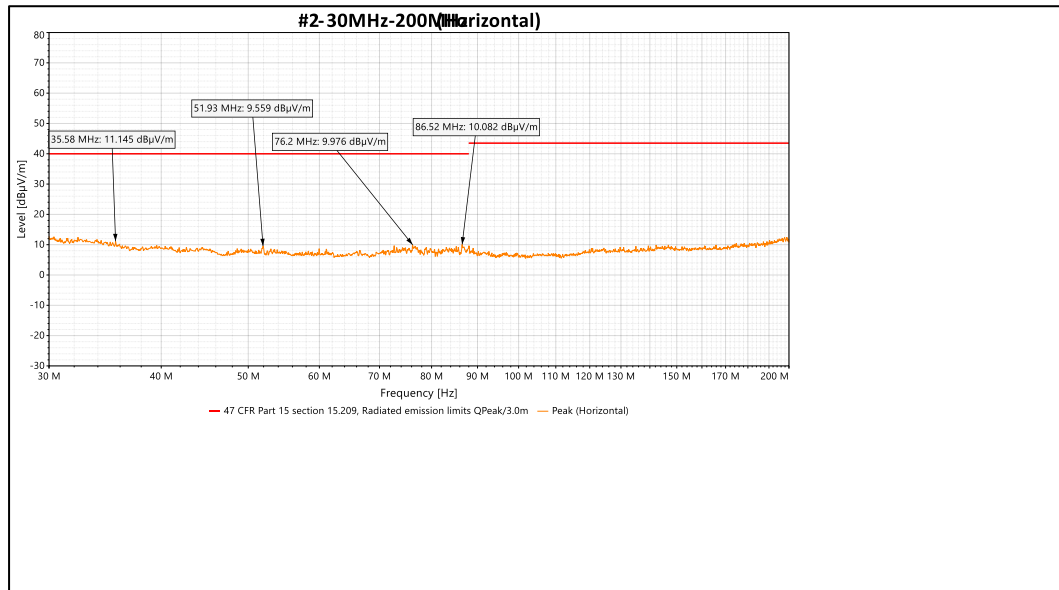
**Table 8: Test results for frequency range 30MHz – 200MHz**

| Antenna Polarization | Measured Frequency (MHz) | Measured Emission (dB $\mu$ V/m) | Limit (dB $\mu$ V/m) | Margin (dB) |
|----------------------|--------------------------|----------------------------------|----------------------|-------------|
| Vertical             | 31.44                    | 22.65                            | 40                   | -17.35      |
|                      | 52.68                    | 26.24                            | 40                   | -13.76      |
|                      | 73.53                    | 23.53                            | 40                   | -16.47      |
|                      | 84.33                    | 23.39                            | 40                   | -16.61      |
| Horizontal           | 35.58                    | 11.14                            | 40                   | -28.86      |
|                      | 51.93                    | 9.55                             | 40                   | -30.45      |
|                      | 76.20                    | 9.97                             | 40                   | -30.03      |
|                      | 86.52                    | 10.08                            | 40                   | -29.92      |



Channel Frequency 30MHz – 200MHz

Polarization Vertical



Channel Frequency 30MHz – 200MHz

Polarization Horizontal

**Table 9: Test results for frequency range 200MHz – 1GHz**

Channel Frequency: 903MHz

| Antenna Polarization | Measured Frequency (MHz) | Measured Emission (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|----------------------|--------------------------|----------------------------|----------------|-------------|
| Vertical             | 422.96                   | 24.57                      | 46             | -21.43      |
|                      | 863.06                   | 34.62                      | 46             | -11.38      |
|                      | 903.05                   | 104.10                     | -              | *           |
|                      | 943.04                   | 32.17                      | 46             | -13.83      |
| Horizontal           | 680.00                   | 26.31                      | 46             | -19.69      |
|                      | 863.06                   | 29.86                      | 46             | -16.14      |
|                      | 903.05                   | 95.45                      | -              | *           |

Channel Frequency: 916MHz

| Antenna Polarization | Measured Frequency (MHz) | Measured Emission (dBμV/m) | Limit (dBμV/m) | Margin (dB) |
|----------------------|--------------------------|----------------------------|----------------|-------------|
| Vertical             | 520.01                   | 26.49                      | 46             | -19.51      |
|                      | 876.05                   | 35.45                      | 46             | -10.55      |
|                      | 915.77                   | 102.90                     | -              | *           |
|                      | 956.21                   | 31.81                      | 46             | -14.19      |
| Horizontal           | 216.38                   | 16.85                      | 46             | -29.15      |
|                      | 413.84                   | 20.63                      | 46             | -25.37      |
|                      | 437.75                   | 20.73                      | 46             | -25.27      |
|                      | 916.04                   | 94.58                      | -              | *           |

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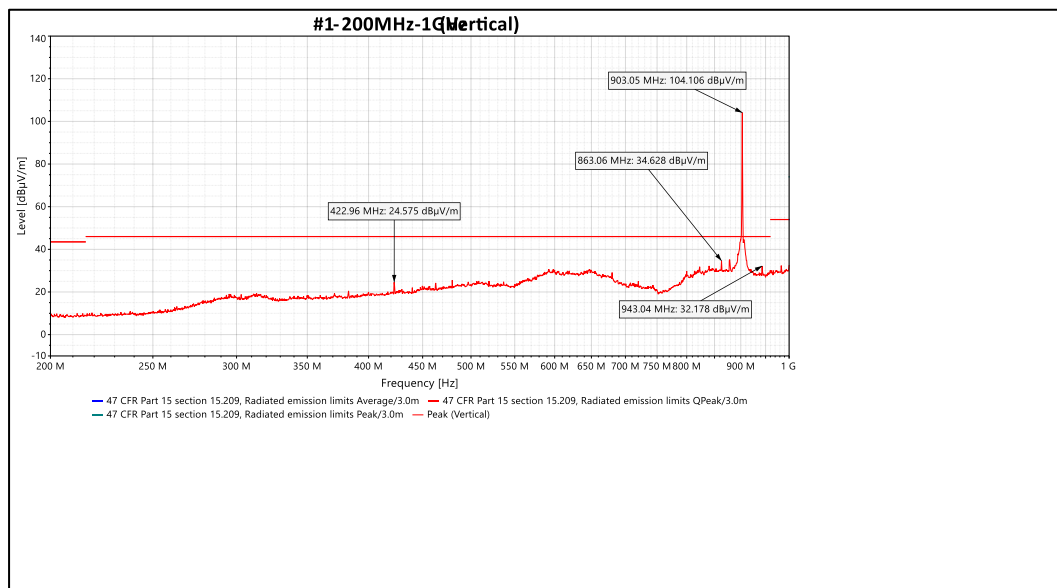
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**Channel Frequency: 927MHz**

| Antenna Polarization | Measured Frequency (MHz) | Measured Emission (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|----------------------|--------------------------|----------------------------|----------------|-------------|
| Vertical             | 887.06                   | 36.64                      | 46             | -9.36       |
|                      | 927.23                   | 102.19                     | -              | *           |
|                      | 959.99                   | 34.42                      | 46             | -11.58      |
| Horizontal           | 35.58                    | 11.14                      | 40             | -28.86      |
|                      | 927.23                   | 92.61                      | -              | *           |
|                      | 959.99                   | 25.08                      | 46             | -20.92      |

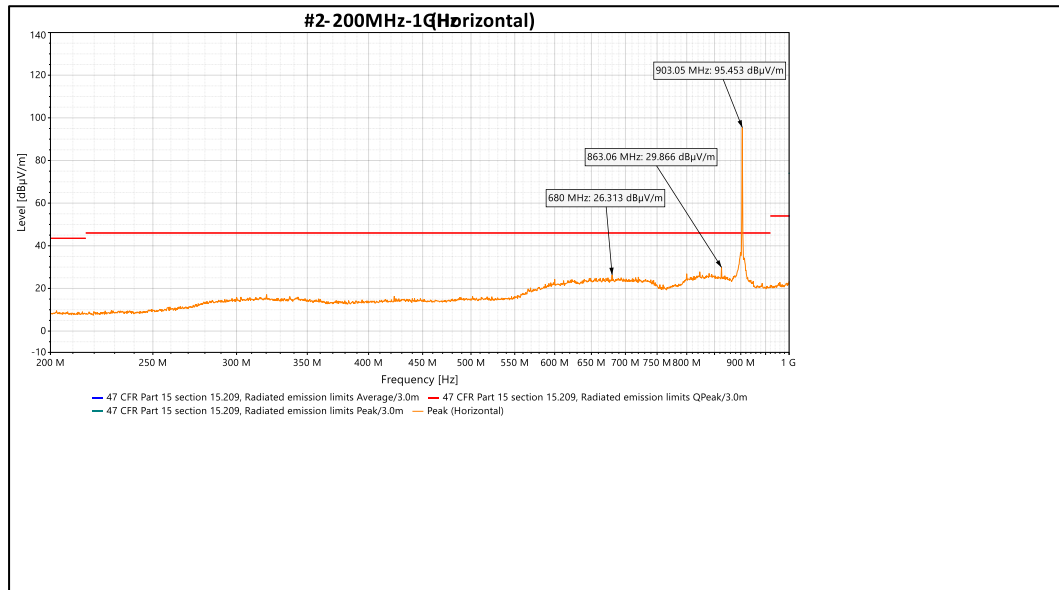
**Note: -\* indicates the Nominal Frequency of a device**

**Channel Frequency: 903MHz**



**Channel Frequency 200MHz – 1GHz**

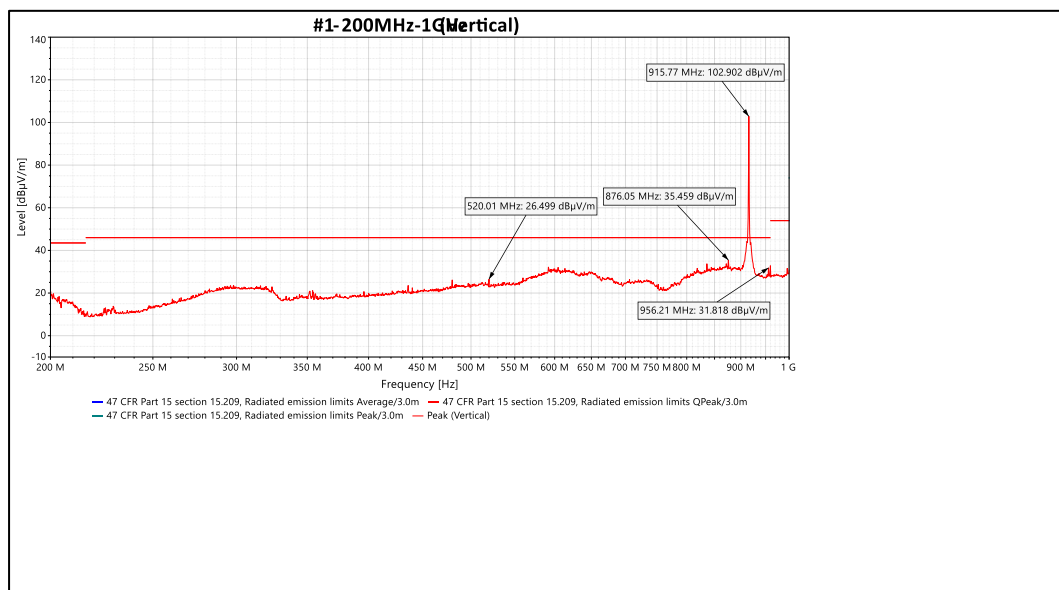
**Polarization Vertical**



**Channel Frequency 200MHz – 1GHz**

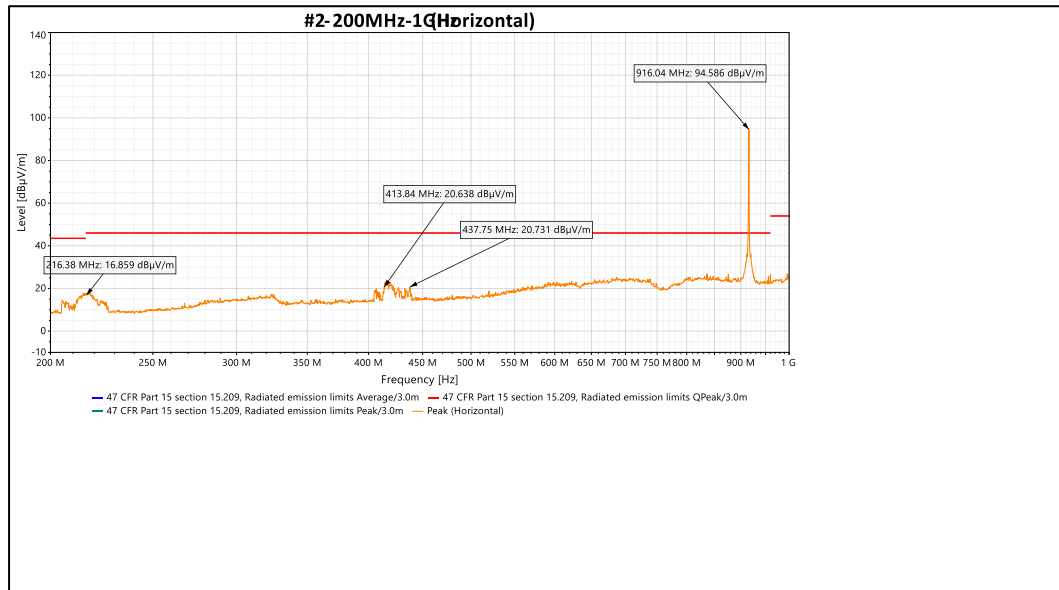
**Polarization Horizontal**

**Channel Frequency: 916MHz**



**Channel Frequency 200MHz – 1GHz**

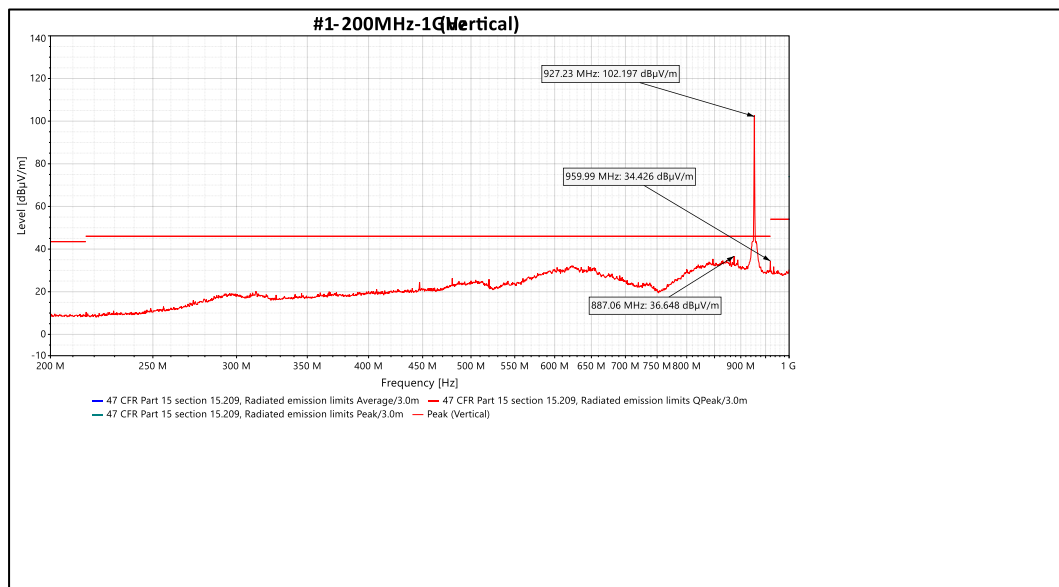
**Polarization Vertical**



**Channel Frequency 200MHz – 1GHz**

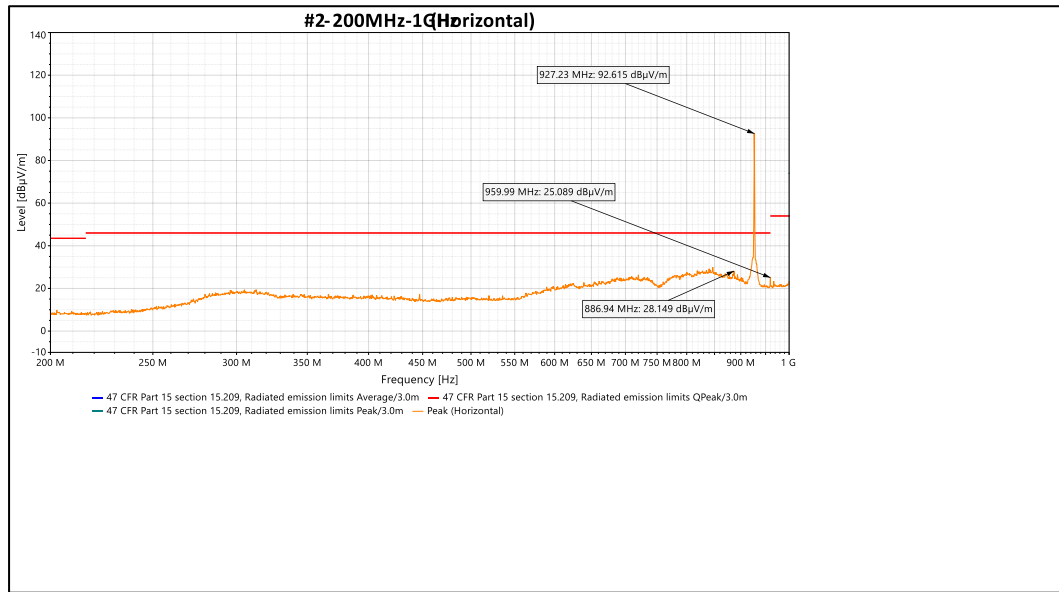
**Polarization Horizontal**

**Channel Frequency: 927MHz**



**Channel Frequency 200MHz – 1GHz**

**Polarization Vertical**



**Channel Frequency 200MHz – 1GHz**

**Polarization Horizontal**

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**Table 10: Test results for the frequencies above 1GHz:**

**Channel Frequency: 903MHz**

| Channel Frequency (MHz) | Measured Frequency (MHz) | Antenna Polarization | Measured Emission (dBµV/m) | Duty Correction Factor (dB) | Final Measured Value (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-------------------------|--------------------------|----------------------|----------------------------|-----------------------------|-------------------------------|----------------|-------------|
| 903                     | 1806(Pk)                 | Vertical             | 47.95                      | -                           | 47.95                         | 74             | -26.05      |
|                         | 1806(Av)                 |                      | 46.31                      | 17.72                       | 28.59                         | 54             | -25.41      |
|                         | 2709(Pk)                 |                      | 56.11                      | -                           | 56.11                         | 74             | -17.89      |
|                         | 2709(Av)                 |                      | 54.81                      | 17.72                       | 37.09                         | 54             | -16.91      |
|                         | 3612(Pk)                 |                      | 41.56                      | -                           | 41.56                         | 74             | -32.44      |
|                         | 3612(Av)                 |                      | 32.93                      | 17.72                       | 15.21                         | 54             | -38.79      |
|                         | 4515(Pk)                 |                      | 42.15                      | -                           | 42.15                         | 74             | -31.85      |
|                         | 4515(Av)                 |                      | 29.81                      | 17.72                       | 12.09                         | 54             | -41.91      |
|                         | 5418(Pk)                 |                      | 42.32                      | -                           | 42.32                         | 74             | -31.68      |
|                         | 5418(Av)                 |                      | 30.7                       | 17.72                       | 12.98                         | 54             | -41.02      |
|                         | 6321(Pk)                 |                      | 44.25                      | -                           | 44.25                         | 74             | -29.75      |
|                         | 6321(Av)                 |                      | 32.06                      | 17.72                       | 14.34                         | 54             | -39.66      |
|                         | 7224(Pk)                 |                      | 47.63                      | -                           | 47.63                         | 74             | -26.37      |
|                         | 7224(Av)                 |                      | 35.12                      | 17.72                       | 17.40                         | 54             | -36.60      |
|                         | 8127(Pk)                 |                      | 49.33                      | -                           | 49.33                         | 74             | -24.67      |
|                         | 8127(Av)                 |                      | 36.96                      | 17.72                       | 19.24                         | 54             | -34.76      |
|                         | 1806(Pk)                 | Horizontal           | 44.01                      | -                           | 44.01                         | 74             | -29.99      |
|                         | 1806(Av)                 |                      | 41.23                      | 17.72                       | 23.51                         | 54             | -30.49      |
|                         | 2709(Pk)                 |                      | 53.40                      | -                           | 53.40                         | 74             | -20.60      |
|                         | 2709(Av)                 |                      | 51.10                      | 17.72                       | 33.38                         | 54             | -20.62      |
|                         | 3612(Pk)                 |                      | 40.48                      | -                           | 40.48                         | 74             | -33.52      |
|                         | 3612(Av)                 |                      | 30.36                      | 17.72                       | 12.64                         | 54             | -41.36      |
|                         | 4515(Pk)                 |                      | 41.11                      | -                           | 41.11                         | 74             | -32.89      |
|                         | 4515(Av)                 |                      | 28.61                      | 17.72                       | 10.89                         | 54             | -43.11      |
|                         | 5418(Pk)                 |                      | 41.97                      | -                           | 41.97                         | 74             | -32.03      |
|                         | 5418(Av)                 |                      | 30                         | 17.72                       | 12.28                         | 54             | -41.72      |
|                         | 6321(Pk)                 |                      | 43.5                       | -                           | 43.50                         | 74             | -30.50      |
|                         | 6321(Av)                 |                      | 31.25                      | 17.72                       | 13.53                         | 54             | -40.47      |
|                         | 7224(Pk)                 |                      | 48.15                      | -                           | 48.15                         | 74             | -25.85      |
|                         | 7224(Av)                 |                      | 35.12                      | 17.72                       | 17.40                         | 54             | -36.60      |
|                         | 8127(Pk)                 |                      | 49.6                       | -                           | 49.60                         | 74             | -24.40      |
|                         | 8127(Av)                 |                      | 36.84                      | 17.72                       | 19.12                         | 54             | -34.88      |

**Pk: Peak Detector;**  
**Av: Average Detect**

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**Channel Frequency: 916MHz**

| Channel Frequency (MHz) | Measured Frequency (MHz) | Antenna Polarization | Measured Emission (dBµV/m) | Duty Correction Factor (dB) | Final Measured Value (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-------------------------|--------------------------|----------------------|----------------------------|-----------------------------|-------------------------------|----------------|-------------|
| 916                     | 1832(Pk)                 | Vertical             | 47.08                      | -                           | 47.08                         | 74             | -26.92      |
|                         | 1832(Av)                 |                      | 45.06                      | 17.72                       | 27.34                         | 54             | -26.66      |
|                         | 2748(Pk)                 |                      | 57.34                      | -                           | 57.34                         | 74             | -16.66      |
|                         | 2748(Av)                 |                      | 55.82                      | 17.72                       | 38.10                         | 54             | -15.90      |
|                         | 3664(Pk)                 |                      | 42.90                      | -                           | 42.90                         | 74             | -31.10      |
|                         | 3664(Av)                 |                      | 35.57                      | 17.72                       | 17.85                         | 54             | -36.15      |
|                         | 4580(Pk)                 |                      | 42.33                      | -                           | 42.33                         | 74             | -31.67      |
|                         | 4580(Av)                 |                      | 28.53                      | 17.72                       | 10.81                         | 54             | -43.19      |
|                         | 5496(Pk)                 |                      | 42.73                      | -                           | 42.73                         | 74             | -31.27      |
|                         | 5496(Av)                 |                      | 29.99                      | 17.72                       | 12.27                         | 54             | -41.73      |
|                         | 6412(Pk)                 |                      | 44                         | -                           | 44.00                         | 74             | -30.00      |
|                         | 6412(Av)                 |                      | 31.91                      | 17.72                       | 14.19                         | 54             | -39.81      |
|                         | 7328(Pk)                 |                      | 47.53                      | -                           | 47.53                         | 74             | -26.47      |
|                         | 7328(Av)                 |                      | 34.65                      | 17.72                       | 16.93                         | 54             | -37.07      |
|                         | 8244(Pk)                 |                      | 48.73                      | -                           | 48.73                         | 74             | -25.27      |
|                         | 8244(Av)                 |                      | 36.48                      | 17.72                       | 18.76                         | 54             | -35.24      |
|                         | 1832(Pk)                 | Horizontal           | 43.16                      | -                           | 43.16                         | 74             | -30.84      |
|                         | 1832(Av)                 |                      | 39.90                      | 17.72                       | 22.18                         | 54             | -31.82      |
|                         | 2748(Pk)                 |                      | 51.55                      | -                           | 51.55                         | 74             | -22.45      |
|                         | 2748(Av)                 |                      | 53.22                      | 17.72                       | 35.50                         | 54             | -18.50      |
|                         | 3664(Pk)                 |                      | 40.68                      | -                           | 40.68                         | 74             | -33.32      |
|                         | 3664(Av)                 |                      | 30.40                      | 17.72                       | 12.68                         | 54             | -41.32      |
|                         | 4580(Pk)                 |                      | 41.29                      | -                           | 41.29                         | 74             | -32.71      |
|                         | 4580(Av)                 |                      | 28.50                      | 17.72                       | 10.78                         | 54             | -43.22      |
|                         | 5496(Pk)                 |                      | 42.6                       | -                           | 42.60                         | 74             | -31.40      |
|                         | 5496(Av)                 |                      | 29.79                      | 17.72                       | 12.07                         | 54             | -41.93      |
|                         | 6412(Pk)                 |                      | 44.13                      | -                           | 44.13                         | 74             | -29.87      |
|                         | 6412(Av)                 |                      | 31.37                      | 17.72                       | 13.65                         | 54             | -40.35      |
|                         | 7328(Pk)                 |                      | 47.36                      | -                           | 47.36                         | 74             | -26.64      |
|                         | 7328(Av)                 |                      | 34.67                      | 17.72                       | 16.95                         | 54             | -37.05      |
|                         | 8244(Pk)                 |                      | 49.16                      | -                           | 49.16                         | 74             | -24.84      |
|                         | 8244(Av)                 |                      | 36.58                      | 17.72                       | 18.86                         | 54             | -35.14      |

Pk: Peak Detector;  
Av: Average Detector

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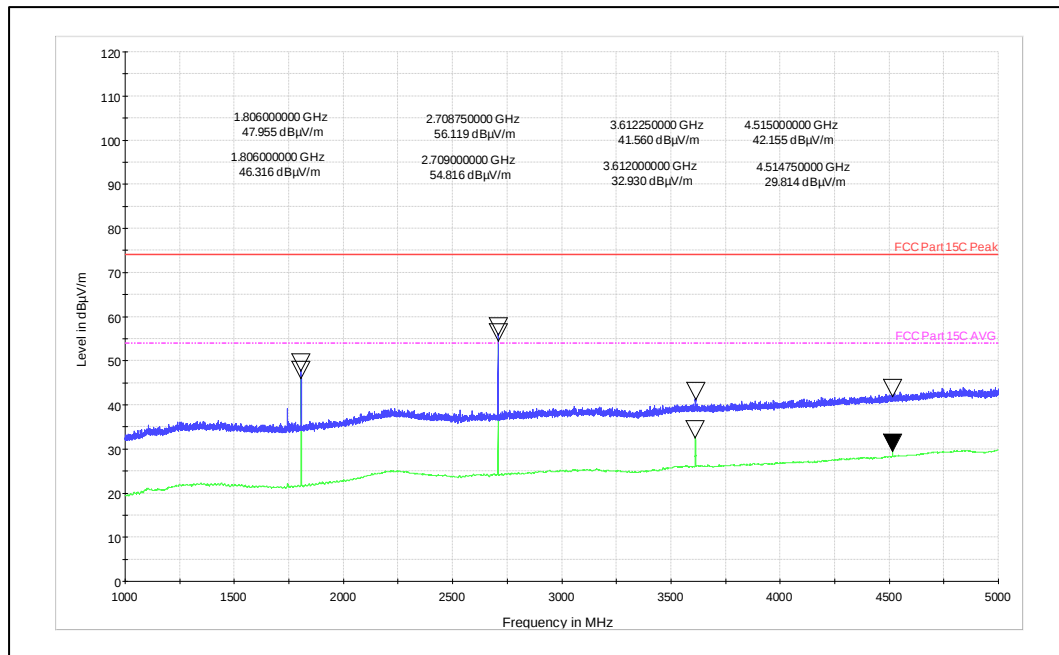
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**Channel Frequency: 927MHz**

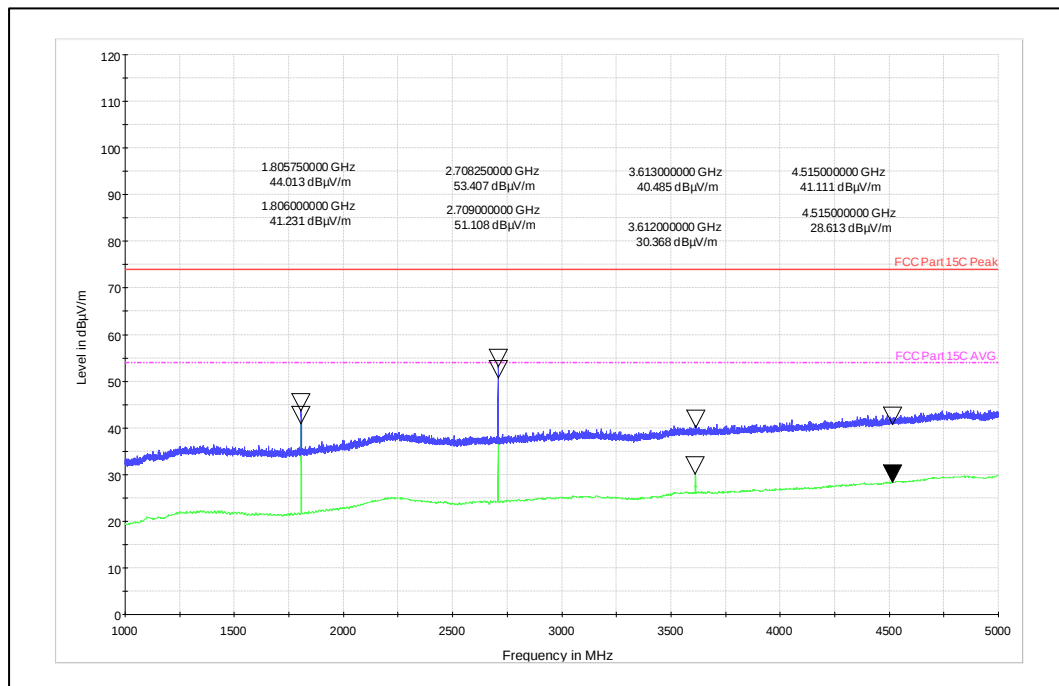
| Channel Frequency (MHz) | Measured Frequency (MHz) | Antenna Polarization | Measured Emission (dBµV/m) | Duty Correction Factor (dB) | Final Measured Value (dBµV/m) | Limit (dBµV/m) | Margin (dB) |
|-------------------------|--------------------------|----------------------|----------------------------|-----------------------------|-------------------------------|----------------|-------------|
| 927                     | 1854(Pk)                 | Vertical             | 48.82                      | -                           | 48.82                         | 74             | -25.18      |
|                         | 1854(Av)                 |                      | 47.05                      | 17.72                       | 29.33                         | 54             | -24.67      |
|                         | 2781(Pk)                 |                      | 55.95                      | -                           | 55.95                         | 74             | -18.05      |
|                         | 2781(Av)                 |                      | 54.32                      | 17.72                       | 36.60                         | 54             | -17.40      |
|                         | 3708(Pk)                 |                      | 42.24                      | -                           | 42.24                         | 74             | -31.76      |
|                         | 3708(Av)                 |                      | 33.27                      | 17.72                       | 15.55                         | 54             | -38.45      |
|                         | 4635(Pk)                 |                      | 41.36                      | -                           | 41.36                         | 74             | -32.64      |
|                         | 4635(Av)                 |                      | 28.49                      | 17.72                       | 10.77                         | 54             | -43.23      |
|                         | 5562(Pk)                 |                      | 42.28                      | -                           | 42.28                         | 74             | -31.72      |
|                         | 5562(Av)                 |                      | 29.92                      | 17.72                       | 12.20                         | 54             | -41.80      |
|                         | 6489(Pk)                 |                      | 44.74                      | -                           | 44.74                         | 74             | -29.26      |
|                         | 6489(Av)                 |                      | 32.28                      | 17.72                       | 14.56                         | 54             | -39.44      |
|                         | 7416(Pk)                 |                      | 48.49                      | -                           | 48.49                         | 74             | -25.51      |
|                         | 7416(Av)                 |                      | 35.07                      | 17.72                       | 17.35                         | 54             | -36.65      |
|                         | 8343(Pk)                 |                      | 48.85                      | -                           | 48.85                         | 74             | -25.15      |
|                         | 8343(Av)                 |                      | 36.39                      | 17.72                       | 18.67                         | 54             | -35.33      |
|                         | 1854(Pk)                 | Horizontal           | 43.74                      | -                           | 43.74                         | 74             | -30.26      |
|                         | 1854(Av)                 |                      | 40.54                      | 17.72                       | 22.82                         | 54             | -31.18      |
|                         | 2781(Pk)                 |                      | 53.34                      | -                           | 53.34                         | 74             | -20.66      |
|                         | 2781(Av)                 |                      | 51.73                      | 17.72                       | 34.01                         | 54             | -19.99      |
|                         | 3708(Pk)                 |                      | 40.02                      | -                           | 40.02                         | 74             | -33.98      |
|                         | 3708(Av)                 |                      | 29.94                      | 17.72                       | 12.22                         | 54             | -41.78      |
|                         | 4635(Pk)                 |                      | 41.25                      | -                           | 41.25                         | 74             | -32.75      |
|                         | 4635(Av)                 |                      | 28.47                      | 17.72                       | 10.75                         | 54             | -43.25      |
|                         | 5562(Pk)                 |                      | 42.47                      | -                           | 42.47                         | 74             | -31.53      |
|                         | 5562(Av)                 |                      | 29.68                      | 17.72                       | 11.96                         | 54             | -42.04      |
|                         | 6489(Pk)                 |                      | 45.14                      | -                           | 45.14                         | 74             | -28.86      |
|                         | 6489(Av)                 |                      | 31.93                      | 17.72                       | 14.21                         | 54             | -39.79      |
|                         | 7416(Pk)                 |                      | 47.91                      | -                           | 47.91                         | 74             | -26.09      |
|                         | 7416(Av)                 |                      | 35.06                      | 17.72                       | 17.34                         | 54             | -36.66      |
|                         | 8343(Pk)                 |                      | 49.32                      | -                           | 49.32                         | 74             | -24.68      |
|                         | 8343(Av)                 |                      | 36.41                      | 17.72                       | 18.69                         | 54             | -35.31      |

Pk: Peak Detector;  
Av: Average Detector

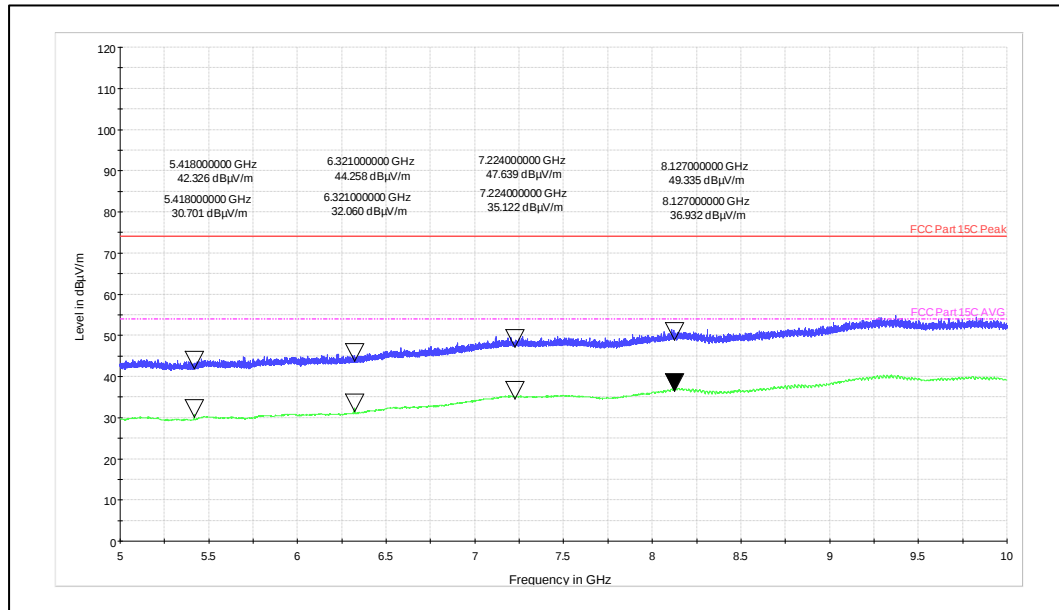
**Ch-903MHz\_PWR-10.5dBm\_1-5GHz\_Vertical**



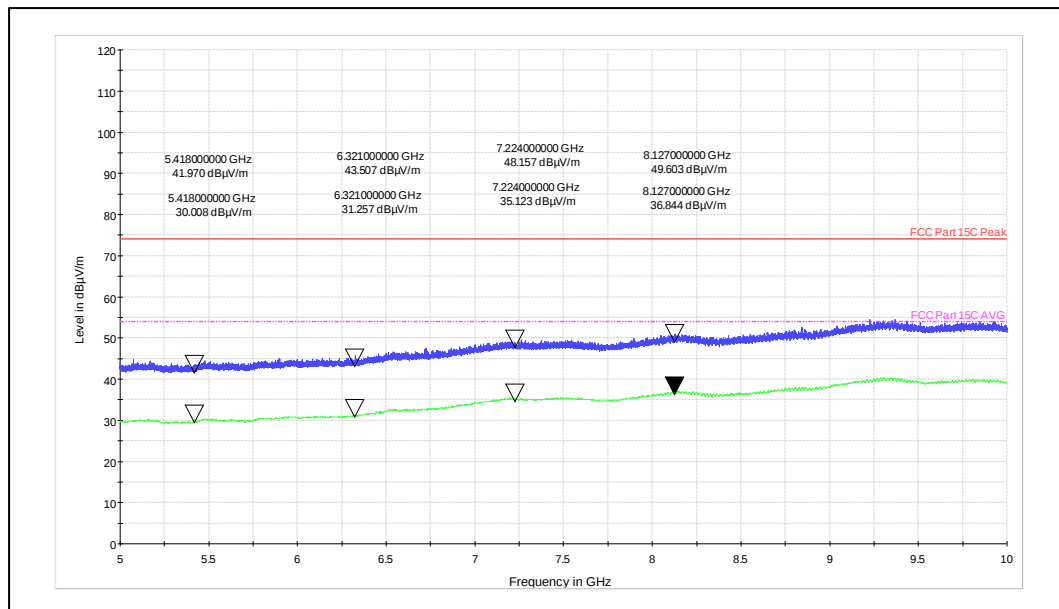
**Ch-903MHz\_PWR-10.5dBm\_1-5GHz\_Horizontal**



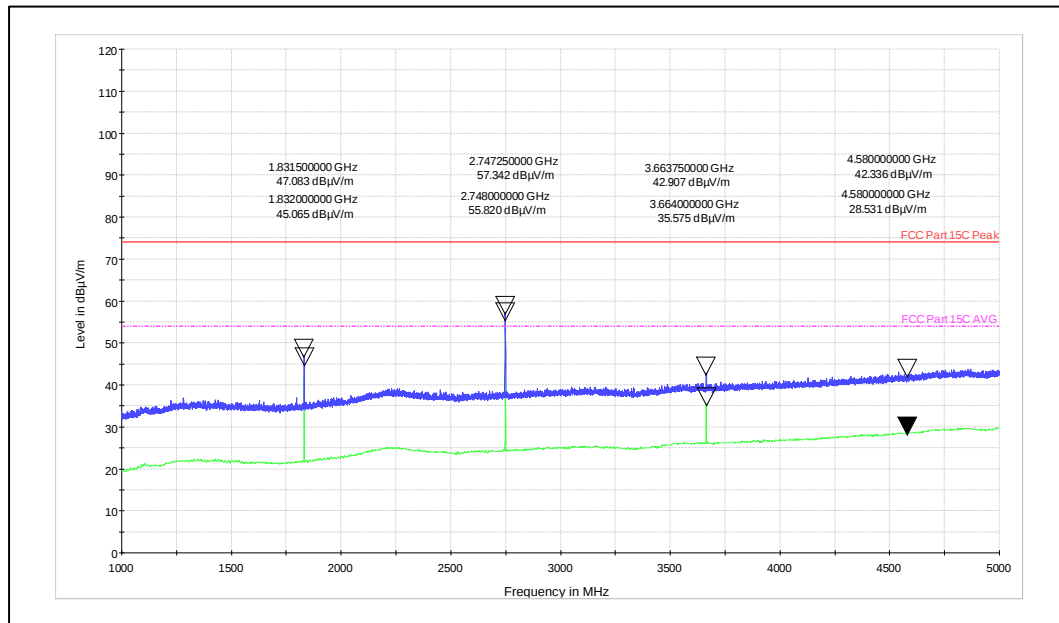
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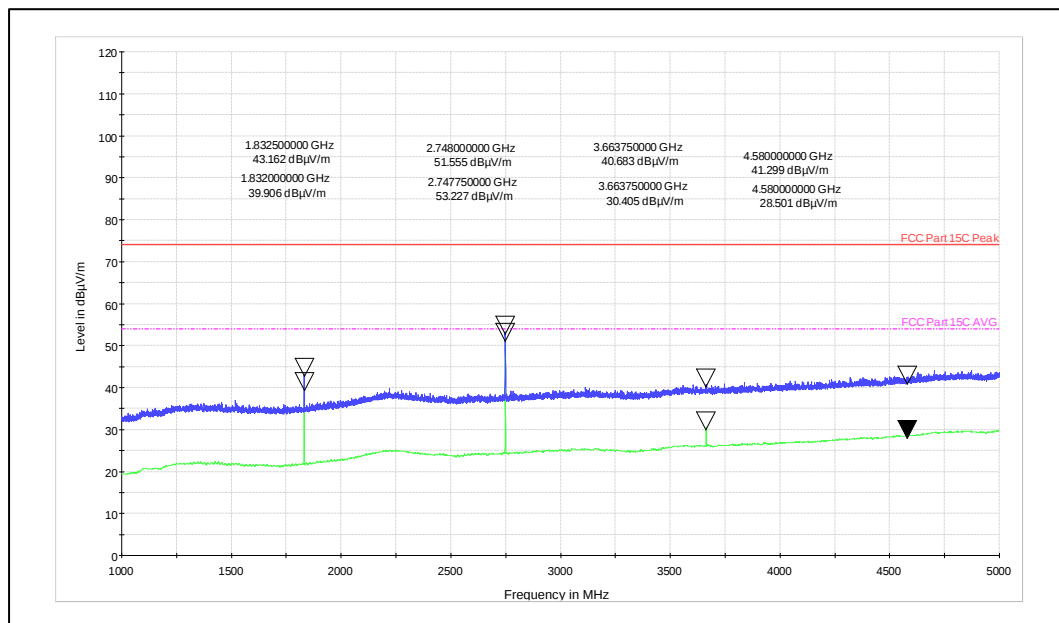
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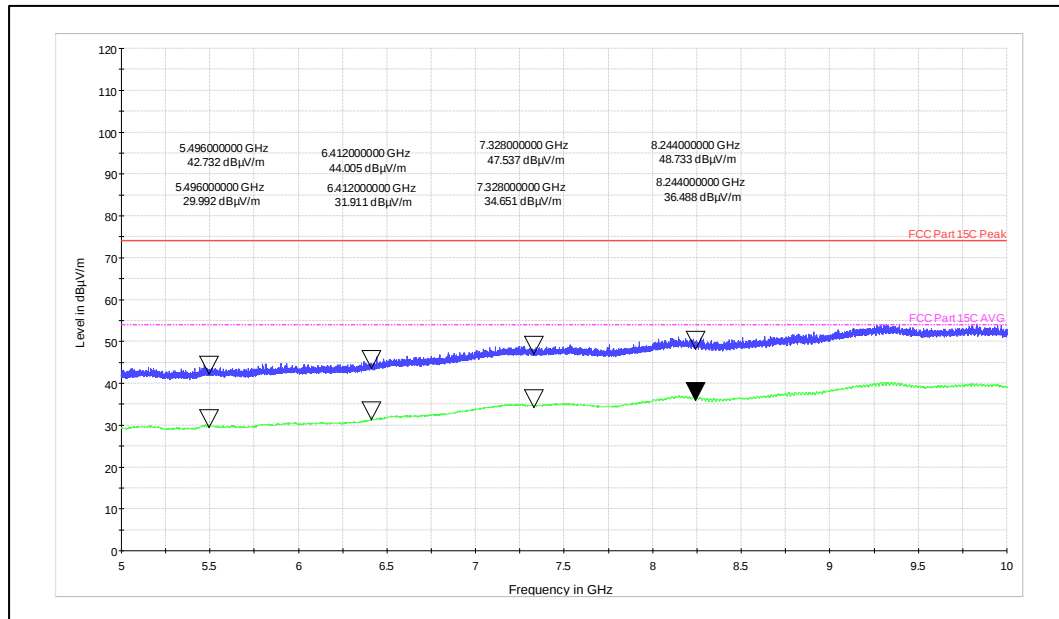
**Ch-916MHz\_PWR-10.5dBm\_1-5GHz\_Vertical**



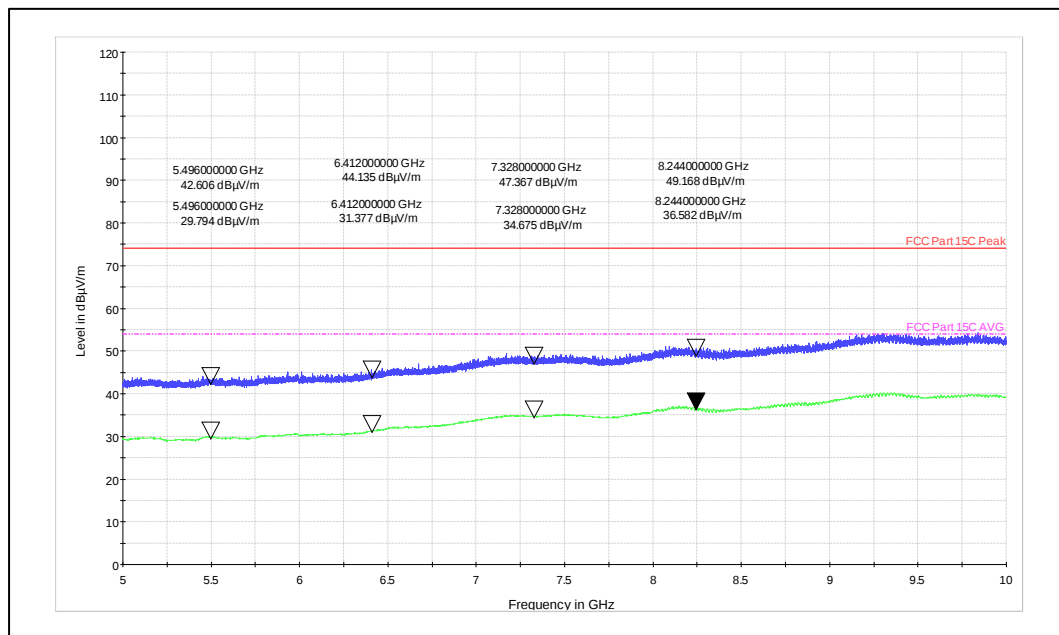
**Ch-916MHz\_PWR-10.5dBm\_1-5GHz\_Horizontal**



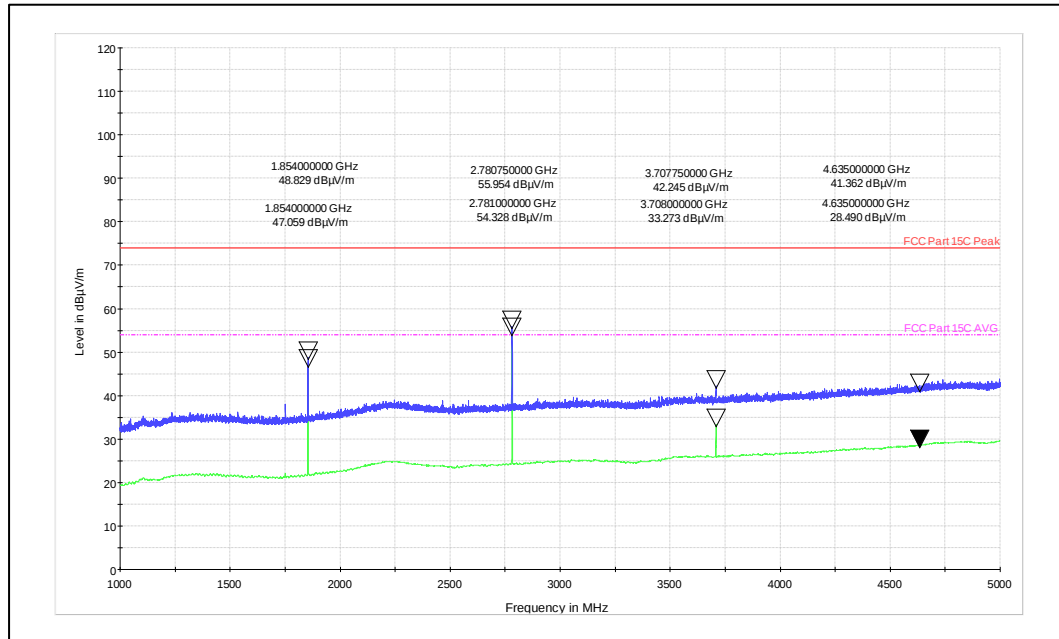
**Ch-916MHz\_PWR-10.5dBm\_5-10GHz\_Vertical**



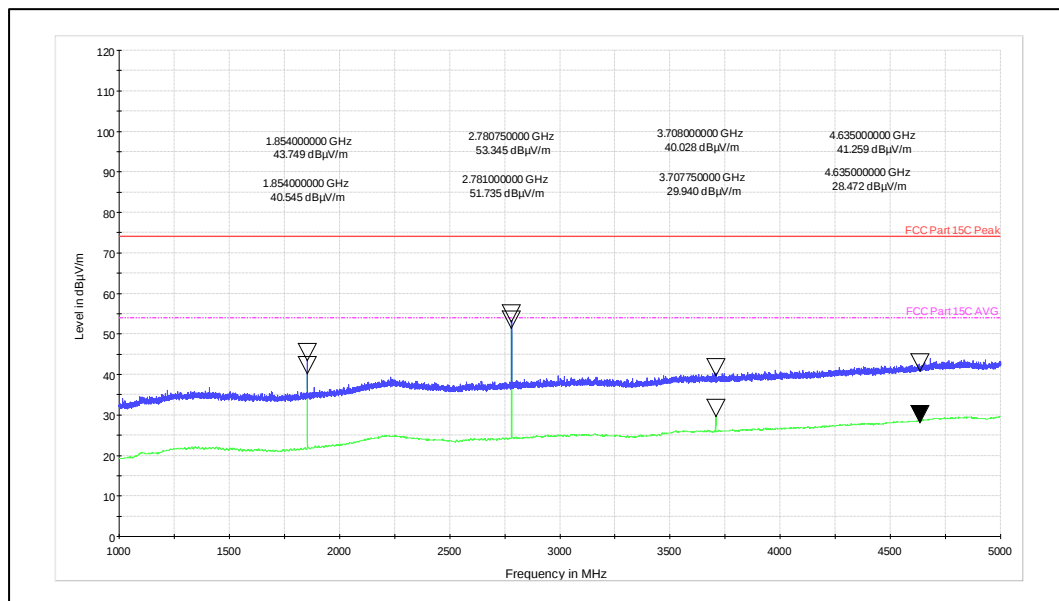
**Ch-916MHz\_PWR-10.5dBm\_5-10GHz\_Horizontal**



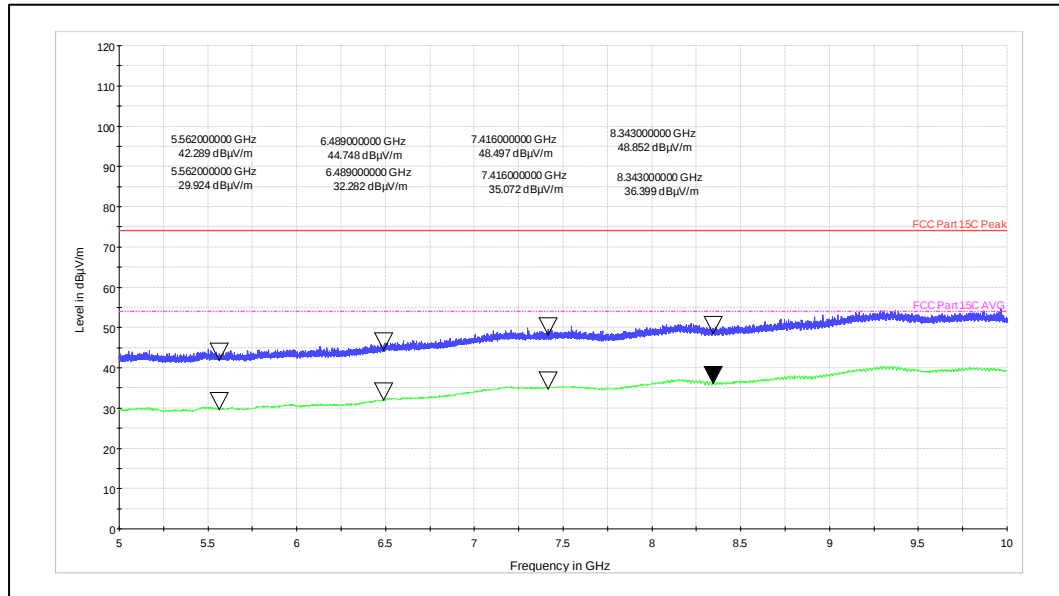
**Ch-927MHz\_ PWR-10.5dBm 1-5GHz\_Vertical**



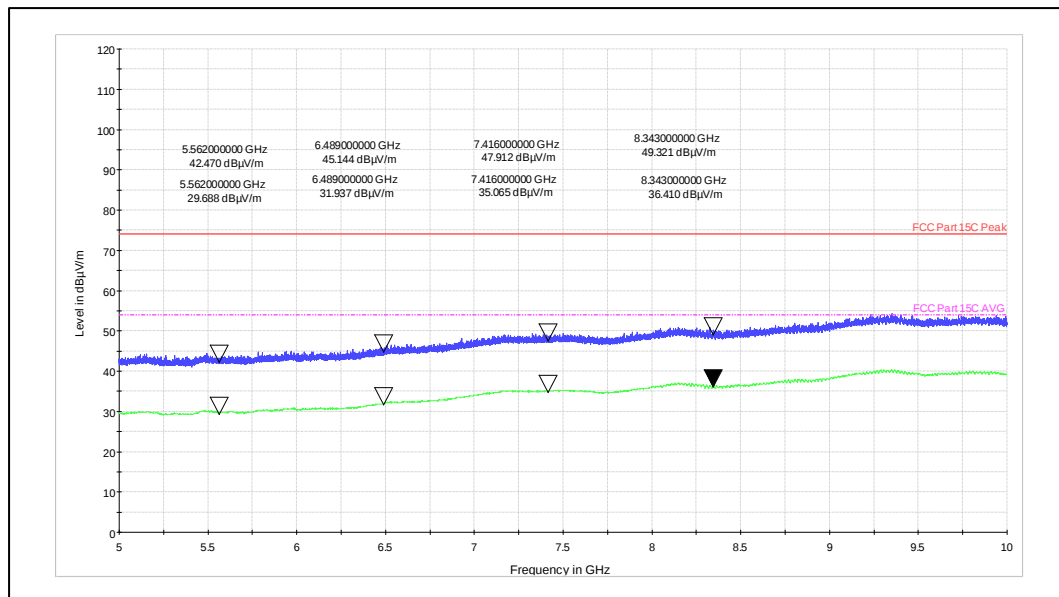
**Ch-927MHz\_ PWR-10.5dBm 1-5GHz\_Horizontal**



**Ch-927MHz\_ PWR-10.5dBm 5-10GHz\_Vertical**



**Ch-927MHz\_ PWR-10.5dBm 5-10GHz\_Horizontal**



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**\*\*\*End of test report\*\*\***