

**Prüfbericht – Produkte**  
Test Report - Products

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                            |                                            |                                       |                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------|--------------------------------|
| <b>Prüfbericht-Nr.:</b><br><i>Test report no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IN25DWD0 001</b>                                                                                                                                                                                        | <b>Auftrags-Nr.:</b><br><i>Order no.:</i>  | 146976468 010                         | Seite 1 von 46<br>Page 1 of 46 |
| <b>Kunden-Referenz-Nr.:</b><br><i>Client reference no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                     | 2384903                                                                                                                                                                                                    | <b>Auftragsdatum</b><br><i>Order date:</i> | 2024-10-22                            |                                |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                          | Devic Earth Private Limited<br>Villa 7, Ground Floor Parkway Tivoli Apartment.<br>Kadugodi Main Road.Seegehalli Whitefield Bangalore,560067.                                                               |                                            |                                       |                                |
| <b>Prüfgegenstand:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                     | Air Pollution Control Equipment                                                                                                                                                                            |                                            |                                       |                                |
| <b>Bezeichnung.:</b><br><i>Identification .:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                | Transmitter PSDEACE                                                                                                                                                                                        |                                            |                                       |                                |
| <b>Auftrags-Inhalt:</b><br><i>Order content:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                | Testing and issue of Test Report With Grant Certificate                                                                                                                                                    |                                            |                                       |                                |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                             | FCC Part 2 & Part 90 Subpart S, FCC Part15 Subpart C 15.207                                                                                                                                                |                                            |                                       |                                |
| <b>Wareneingangsdatum:</b><br><i>Date of sample receipt:</i>                                                                                                                                                                                                                                                                                                                                                                                                                    | 2024-11-04                                                                                                                                                                                                 |                                            |                                       |                                |
| <b>Prüfmuster-Nr &amp; Serien-Nr.:</b><br><i>Test sample no &amp; serial no.:</i>                                                                                                                                                                                                                                                                                                                                                                                               | A003846786-002<br>0036                                                                                                                                                                                     |                                            |                                       |                                |
| <b>Prüfzeitraum:</b><br><i>Testing period:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2024-11-04 - 2024-11-20                                                                                                                                                                                    |                                            |                                       |                                |
| <b>Ort der Prüfung:</b><br><i>Place of testing:</i>                                                                                                                                                                                                                                                                                                                                                                                                                             | Wireless laboratory, Bangalore                                                                                                                                                                             |                                            |                                       |                                |
| <b>Prüflaboratorium:</b><br><i>Testing laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                                          | TÜV Rheinland (India) Pvt.Ltd.,<br>27/B, 2nd Cross, Electronic<br>City Phase1 Bangalore -560<br>100, India<br>FCC Test site registration<br>number: 496599<br>ISED Test site registration<br>number: 27711 |                                            |                                       |                                |
| <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> 2025-01-17                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Ausstellatum:</b><br><i>Issue date:</i> 2025-01-17                                                                                                                                                      |                                            |                                       |                                |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>M.V.Naveen Kumar</b><br>Senior Engineer                                                                                                                                                                 | <b>Stellung / Position:</b>                | <b>Madhu K.N</b><br>Assistant Manager |                                |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       | FCC ID: 2BL5B-PSDEACE<br>IC: 33453-PSDEACE<br>HVIN: Transmitter PSDEACE                                                                                                                                    |                                            |                                       |                                |
| <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</i><br/> <i>reproduced in extracts. This test report does not entitle to carry any test mark.</i></p> |                                                                                                                                                                                                            |                                            |                                       |                                |

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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>                                                                         |
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| 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 Clause                          | Results |
|-----------------------------------------------------------------------------|-------------------------------------|---------|
| Conducted Output Average Power and Peak to Average Power ratio              | §2.1046                             | Pass    |
| Equivalent Isotropic Radiated Power (EIRP) / Effective Radiated Power (ERP) | §2.1046<br>§90.542                  | Pass    |
| Field strength of spurious radiation                                        | §2.1053<br>§90.543(c)<br>§90.543(f) | Pass    |
| Frequency Stability                                                         | §2.1055,<br>§90.213                 | N/T     |
| Emission Bandwidth and Occupied Bandwidth                                   | §2.1049<br>§2.1051<br>§90.210(n)    | N/T     |
| Band Edge                                                                   | §2.1051<br>§90.543(e)(2)(3)         | N/T     |
| Spurious emissions at antenna terminals                                     | §2.1051<br>§90.543(c)<br>§90.543(f) | N/T     |
| AC Powerlines Conducted emission                                            | FCC 15.207                          | Pass    |

**Note:**

N/T: Not Tested, since Air Pollution Control Equipment product uses certified RF modules Product Name:

**LTE/GNSS MODULE with FCC ID: 2AJYU-8PYA007 & IC: 23761-8PYA008** , Hence the above mentioned test cases are excluded and which can be found in the module test report of respective FCC ID & IC.

| Product | Applicant                         | FCC ID        | IC            | Report No     | IC Report No  | Issued By                            | FCC Grant Date | ISED Grant Date |
|---------|-----------------------------------|---------------|---------------|---------------|---------------|--------------------------------------|----------------|-----------------|
| SIMCom  | SIMCom Wireless Solutions Limited | 2AJYU-8PYA007 | 23761-8PYA008 | STS2006043W01 | STS2006043W02 | Shenzhen STS Test Services Co., Ltd. | 14-08-2020     | 02-09-2020      |

Product Category: Electronics Testing  
Test Discipline: EMC Test Facility

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## REVISION HISTORY OF THIS REPORT

| Report Number | Version | Description                  | Issue date |
|---------------|---------|------------------------------|------------|
| IN25DWD0 001  | 01      | Initial Issue of Test Report | 2025-01-17 |

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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 DIAGRAM

**8:** BILL OF MATERIAL

**9:** USER MANUAL

**10:** MAXIMUM PERMISSIBLE EXPOSURE INFORMATION

## 2 TEST SITES

### 2.1 Testing Facilities

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

### 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               | 101773        | 1.72 SP5          | 26.01.2025           | Yearly      | Radiated Spurious Emission |
| Horn Antenna                 | Schwarzbeck                 | BBHA 9120 D          | 2117          | -                 | 26.01.2025           | Yearly      |                            |
| Baloon and Biconical Antenna | Schwarzbeck mess-elektronik | VHBB-9124 / BBA-9106 | 01028         | -                 | 08.02.2025           | Yearly      |                            |
| Log-Periodic Antenna         | Schwarzbeck mess-elektronik | VUSLP-9111B          | 9111B-111     | -                 | 03.02.2025           | Yearly      |                            |
| Active loop antenna          | Frankonia                   | LAX-10               | LAX-10-800    | -                 | 23-03-2025           | Yearly      |                            |
| Fully Anechoic Chamber       | Albatross                   | -                    | -             | -                 | -                    | -           |                            |
| EMI Receiver                 | Rohde & Schwarz             | ESW 44               | 103384        | 4.73 SP5          | 10.05.2025           | Yearly      | Antenna – Port Conducted   |
| 10dB Attenuator              | H+S Electronics Pvt. Ltd    | 6810.17.A            | 770041        | -                 | 08-03-2025           | Yearly      |                            |
| Radio Communication tester   | Rohde & Schwarz             | CMW 500              | 1201.0002K50  | -                 | 29.11.2025           | Yearly      |                            |
| EMI Receiver                 | Rohde & Schwarz             | ESR7                 | 101133        | 3.48 SP3          | 16.09.2025           | Yearly      | AC Powerlines Test Case    |
| Two Line V-Network (LISN)    | Rohde & Schwarz             | ENV 216              | 100022        | -                 | 15-04-2025           | Yearly      |                            |
| Pulse Limiter                | Rohde & Schwarz             | ESH3-Z2              | 100811        | -                 | 08-07-2025           | Yearly      |                            |

Table 2: Instrument application Software versions

| SL. No. | Test Type                                         | Application software | Version      |
|---------|---------------------------------------------------|----------------------|--------------|
| 1       | Radiated spurious emission measurement in 10m-SAC | BATEMC               | V2022.0.11.0 |
| 2       | Radiated spurious emission measurement in FAC     | EMC 32               | 10.60.20     |

### 3 GENERAL PRODUCT INFORMATION

#### 3.1 Product Function and Intended Use

PURE SKIES IS AN ADVANCED AIR-CLEANING TECHNOLOGY THAT REDUCES PM2.5 AND PM10 PARTICULATE MATTER CONCENTRATIONS OVER A LARGE AREA IN AMBIENT CONDITIONS. IT IS ESPECIALLY SUITED FOR CITIES, HEAVY INDUSTRIES, POWER PLANTS, MINES, AIRPORTS, AND PORTS.

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

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

| Radio Protocol                  |           | LTE                                          |                      |                                      |                    |             |
|---------------------------------|-----------|----------------------------------------------|----------------------|--------------------------------------|--------------------|-------------|
| LTE E-UTRA operating bands      |           | Band                                         | Bandwidth (MHz)      | UL Frequency (MHz)                   | DL Frequency (MHz) | Modulation  |
|                                 |           | 26                                           | 1.4, 3, 5, 10        | 814 - 824                            | 859 - 869          | QPSK, 16QAM |
| Transmitted Power for LTE (dBm) |           | Band                                         | Power Class          | Max. Conducted Average. Output Power |                    |             |
|                                 |           | 26                                           | Power Class 3: 23dBm | 24.74dBm@10MHz_QPSK_Low Channel      |                    |             |
| Antenna Type                    |           | Main Antenna – Dipole Antenna                |                      |                                      |                    |             |
| Number of Antenna               |           | 1                                            |                      |                                      |                    |             |
| Antenna Gain                    |           | Refer Table 4                                |                      |                                      |                    |             |
| Supply Voltage to Product       |           | 110VAC through mains                         |                      |                                      |                    |             |
| Environmental conditions        | Storage   | -20°C to 85° C 30% to 65% RH, non-condensing |                      |                                      |                    |             |
|                                 | Operating | 15°C to 50° C 30% to 65% RH, non-condensing  |                      |                                      |                    |             |
| EUT Dimension (H x W x D)       |           | 10.14 x 8.26 x 4 inch                        |                      |                                      |                    |             |

| Antenna Type               | Frequency Bands (MHz) | Antenna Gain (dBi) |
|----------------------------|-----------------------|--------------------|
| Primary Antenna (External) | Band 2                | 1.87               |
|                            | Band 4                | 3.12               |
|                            | Band 5                | 0.91               |
|                            | Band 12               | 0.95               |
|                            | Band 13               | 2.23               |
|                            | Band 25               | 1.87               |
|                            | Band 26               | 0.91               |
|                            | Band 41               | 2.90               |
|                            | Band 66               | 3.12               |

**Table 4: Antenna Gain**

**\*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 5: 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 UUT Operation and Software

| Sl.No | Board Name     | Hardware Name         | Hardware Version                      | Software Name | Software Version     |
|-------|----------------|-----------------------|---------------------------------------|---------------|----------------------|
| 1     | RF Board       | MPLAB                 | PIC KIT TM4<br>in-CIRCUIT<br>DEBUGGER | MPLAB X       | IDE v6.20            |
| 2     | Security Board | Arduino<br>Programmer | IDE 2.3.2                             | Arduino       | Arduino IDE<br>2.3.2 |

Hardware version & Identification Number(HVIN): Refer the Cover Page

### 4.3 Special Accessories and Auxiliary Equipment

- None

### 4.4 Countermeasures to achieve EMC Compliance

- None

### 4.5 List of frequencies

Table 6: List of center frequencies

| Protocol | Band | UL Frequency (MHz) | DL Frequency (MHz) |
|----------|------|--------------------|--------------------|
| LTE      | 26   | 814 - 824          | 859 - 869          |

#### Note

TUV Sample Identification number: A003846786-002 – Radiated test Sample & Conducted test Sample

### 4.6 Report references

**Note:** Air Pollution Control Equipment 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 FCC Part22 Subpart H & RSS Gen Issue 5, RSS 132 Issue 4                                   | IN25CSFD 001        |
| RF test report for FCC Part24 Subpart E & RSS Gen Issue 5, RSS-133 Issue 6                                   | IN258K1F 001        |
| RF test report for FCC Part27 Subpart C & RSS Gen Issue 5, RSS 139 Issue 4, RSS 199 Issue 4, RSS 130 Issue 2 | IN258337 001        |
| <b>RF test report for FCC Part90 Subpart S &amp; RSS Gen Issue 5</b>                                         | <b>IN25DWD0 001</b> |
| RF Test report for FCC Part15 Subpart C & RSS 247 Issue 3, RSS Gen Issue 5                                   | IN25S64J 001        |

## 5 Operational Description of the product

THE PURE SKIES 2.0 SYSTEM INCLUDES BOTH A TRANSMITTER AND A RECEIVER UNIT. THE TRANSMITTER UNIT TRANSMITS PROPRIETARY ALGORITHM-BASED PULSED RADIO WAVES (2.4GHZ). THE RECEIVER UNIT HAS AN OMNIDIRECTIONAL ANTENNA TUNED TO THE ISM BAND (2.4GHZ) AND IT RECEIVES PULSED RADIO WAVES AND CREATES AN ELECTROMAGNETIC FIELD. THAT ACCELERATES THE CLEARANCE OF TARGET POLLUTANTS IN THE SURROUNDING AREA.

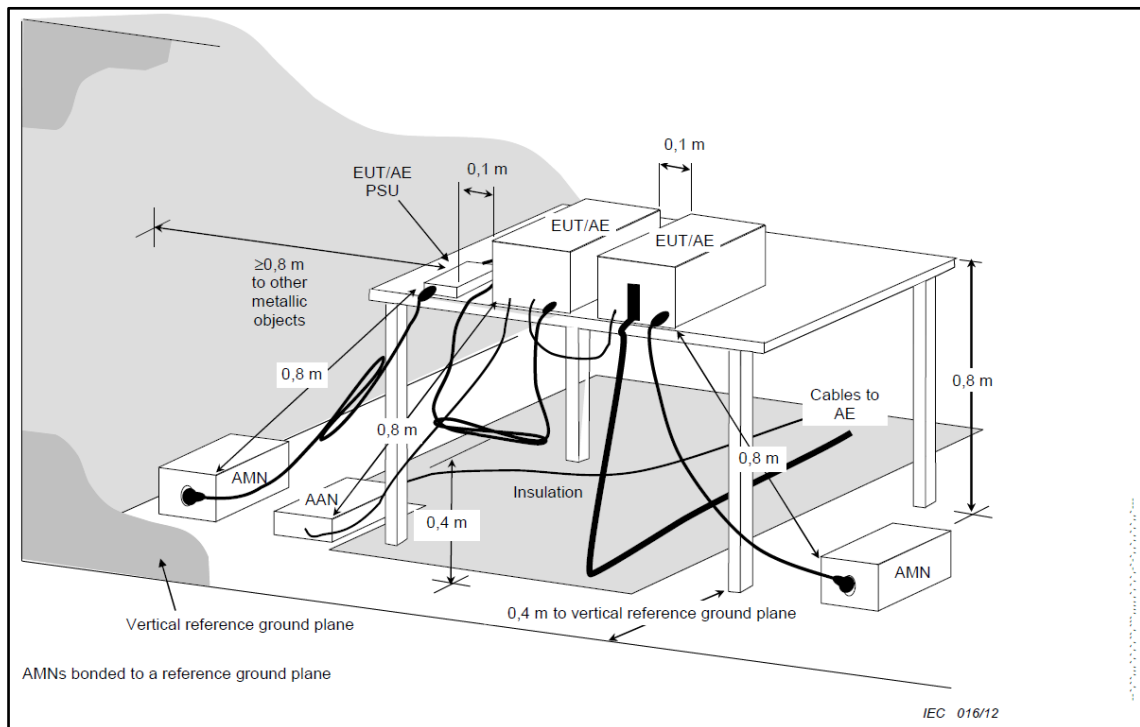
## 6 TEST METHODOLOGY

## 6.1 AC Power Line Conducted Emission

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 an AC adaptor with 110V AC 60Hz supply.

### 6.1.1 Test Setup Configuration



## 6.2 Radiated Emission Test

### Frequency Range 9 kHz - 30 MHz

#### Test performed as per ANSI C63.4-2014 section 8.3

The loop Antenna was placed at 1m above the ground plane & EUT is 3 meters far from the measuring antenna. With 3m measurement distance, correction data were applied to the measured results. The test arrangement, measuring antenna guidelines and operational configurations in 8.2.1 and 8.2.2, shall be followed. The measurement antenna shall be positioned with its plane perpendicular to the ground at the Specified distance, when perpendicular to the ground plane, the lowest height of the magnetic antenna shall be 1 m above the ground and shall be positioned at the specified distance from the EUT. EUT & its associates are placed on non-conducting table of 0.8m height which is placed on the turn table, For each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable. The report shall list worst case emission results, for each of the parallel & perpendicular orientations.

#### 6.2.1 Test Setup Configuration

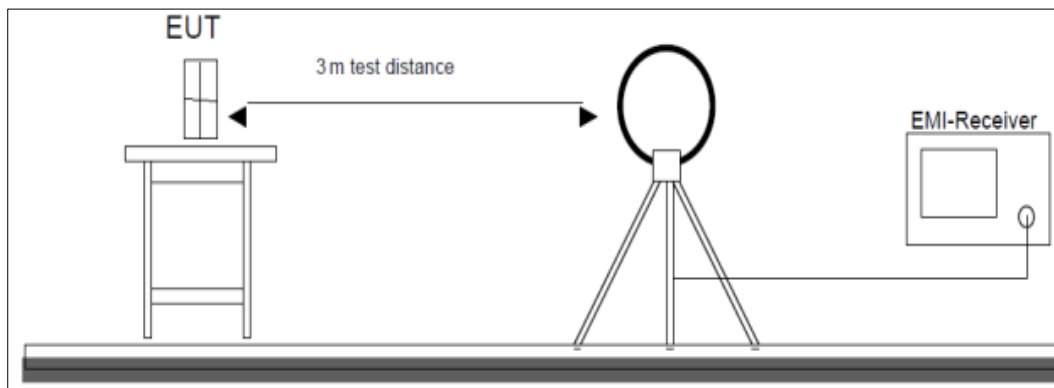


Figure 1: Frequency Range 9 kHz- 30 MHz

## Frequency Range 30MHz to 10<sup>th</sup> harmonics of the highest fundamental frequency

### Test performed as per ANSI C63.26-2015

Radiated spurious emission test are performed as below.

All the radiated emission measurements are performed in accordance with common requirement specified in 5.5.2 and Pre-test site path loss correction factors are used to adjust the EUT emission data in place of two step substitution method (as defined in Annex B of ANSI C63.26-2015).

The equipment under test is placed on non-conductive table at 3m away from the receive antenna in accordance with above mentioned standard. Turn table is rotated through 360 degree, and receiver antenna height is varied in order to determine the level of maximum emission. The maximum emission level and position of the maximized emission is recorded with use of spectrum analyser.

### Using pre-test site path loss to determine EUT emission power:

- 1) EUT emission powers are calculated using the following equation:

$$\text{Emission Power} = \text{EUT}_{\text{Prec}} [\text{dBm EIRP/ ERP}] + \text{PL} [\text{dB}]$$

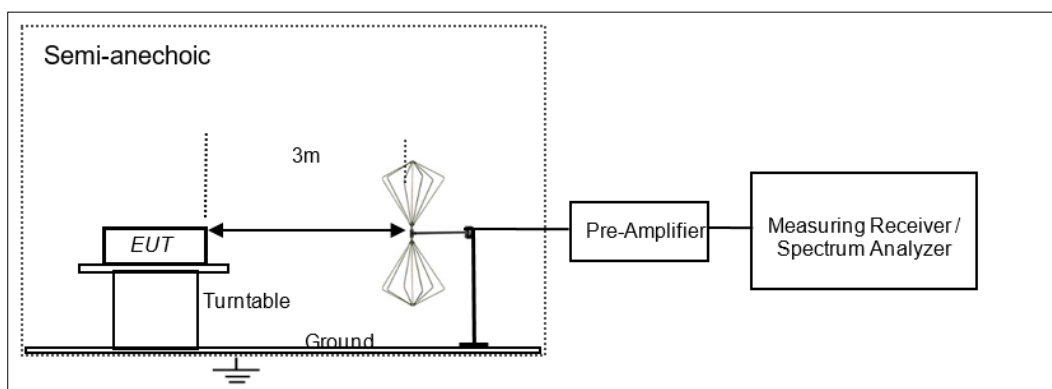
where

$\text{EUT}_{\text{Prec}}$  = power of the emission measured at the test receiver during EUT measurements.

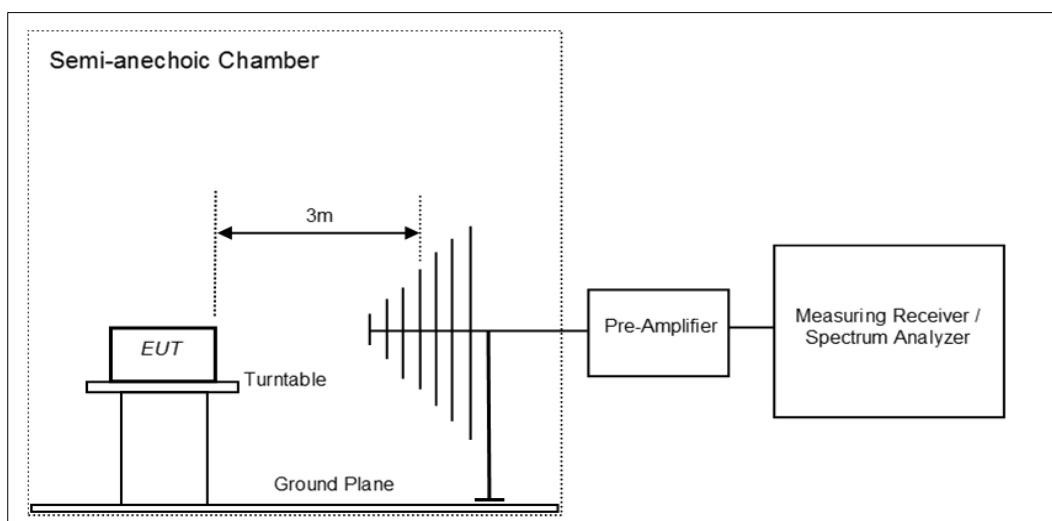
PL = path loss determined on the frequency of the EUT emission or calculated using linear interpolation between site characterization frequencies.

- 2) This is the level to be compared against the regulatory limit as it is the emission power referenced back to the EUT on the test site.

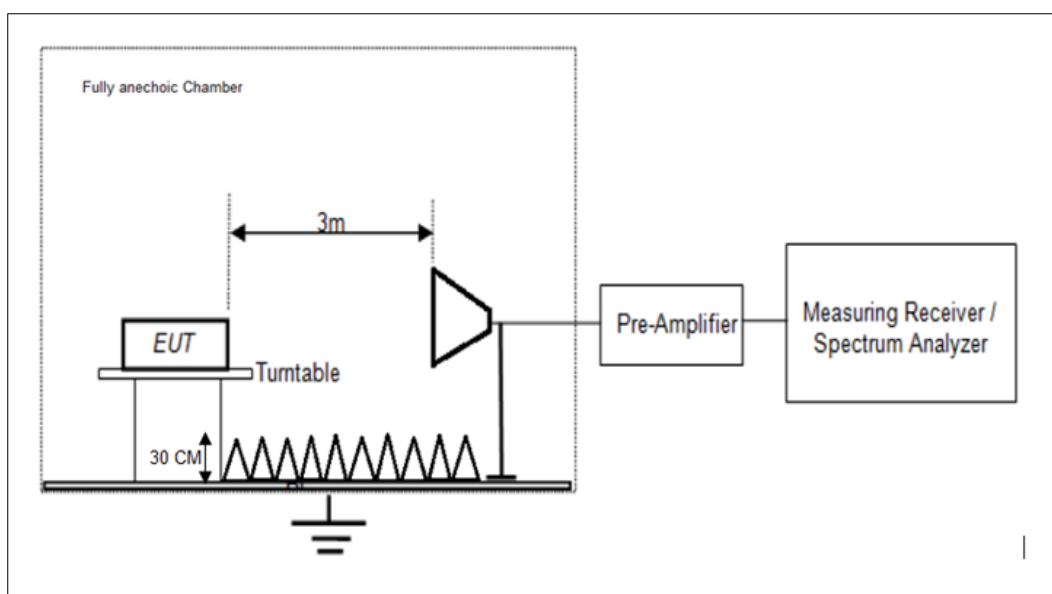
## Test site-up for radiated measurements



**Figure 2: Frequency Range 30 MHz – 200 MHz**

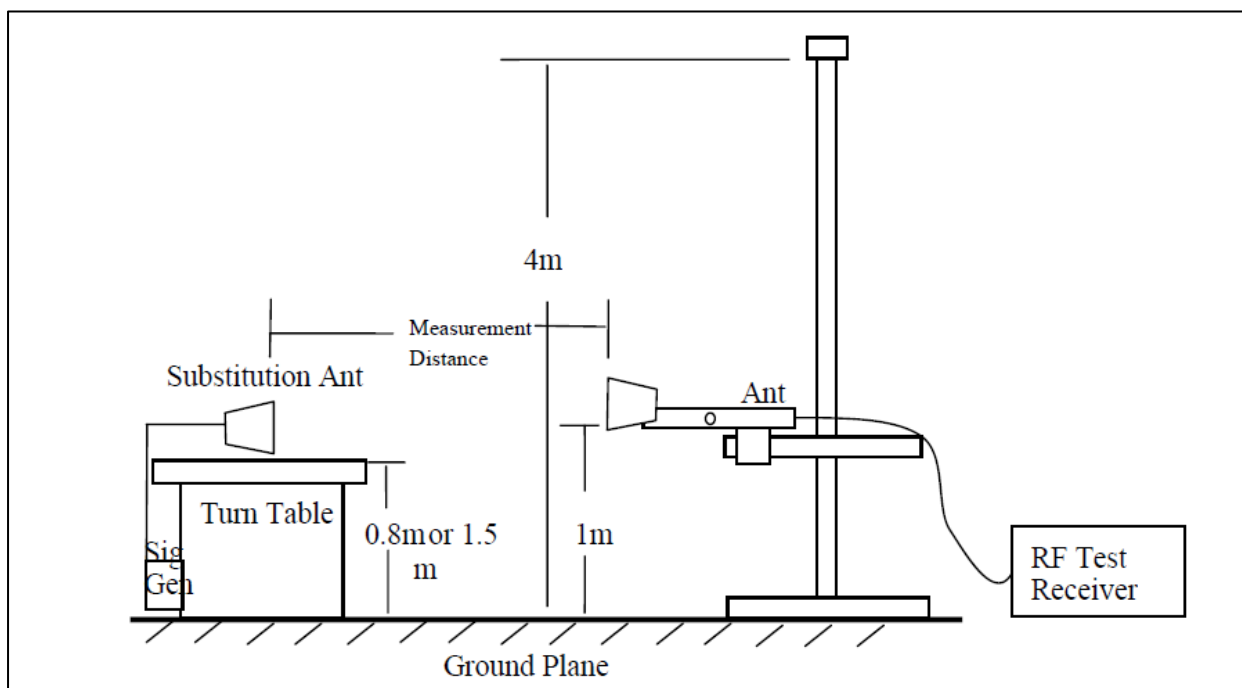


**Figure 3: Frequency Range 200 MHz - 1GHz**



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

**Substitution method set-up for radiated emission**





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## 7 TEST RESULTS

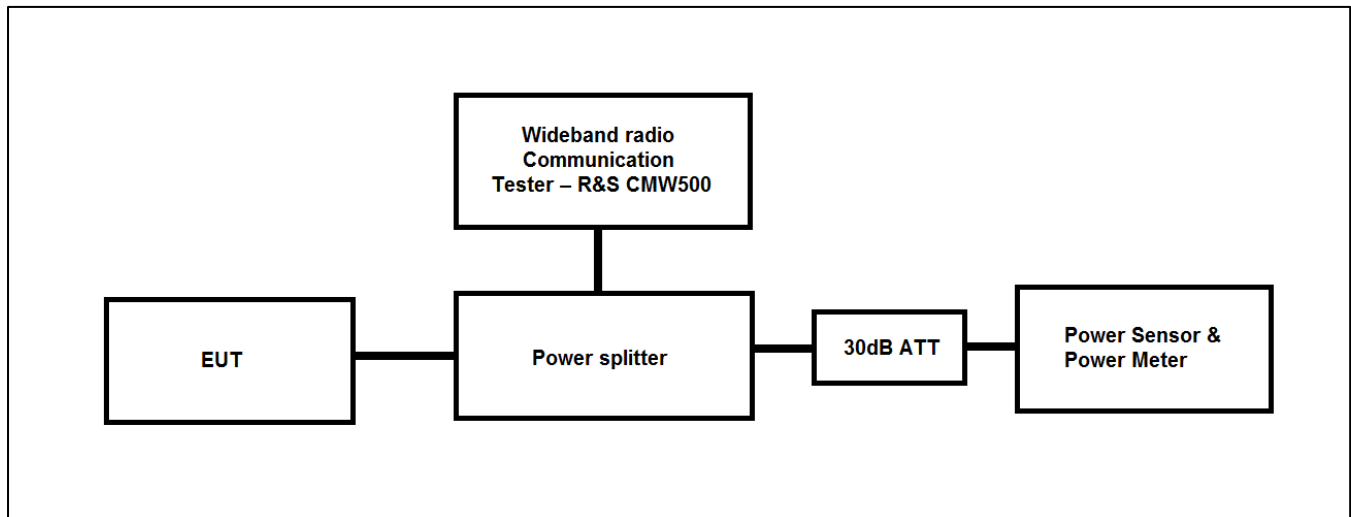
### 7.1 PEAK – AVERAGE RATIO

**Result**

**Pass**

|                         |                                                                            |
|-------------------------|----------------------------------------------------------------------------|
| Specification           | FCC Part §2.1046                                                           |
|                         | ANSI C63.26-2015                                                           |
| Test Method / Procedure | As per subclause 5 in 971168 D01 Power Meas License Digital Systems v03r01 |
| Detector Function       | Peak/Average                                                               |
| Requirement             | PAPR ≤ 13dB                                                                |

#### Test Setup:



#### Environmental Conditions:

**Temperature:** +22.5°C

**Voltage:** 110VAC through mains

**Relative Humidity:** 62%

#### KDB Guidelines applied:

Measurements were made as per section 5.2.4 in KDB 971168 D01 Power Meas License Digital Systems v03r01

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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 Output power (dBm) = Measured Average power (dBm) + Attenuator factor (30dB) + Power Splitter (6 dB) + Cable loss (1dB)
3. PAPR (dB) = Measured Peak Power(dBm) – Measured Average Power(dBm)

**PAPR Test Results**

| Band | Bandwidth | Modulation | Channel No | RB Position/RB allocation | Measured Peak Power (dBm) | Measured Average Power (dBm) | PAPR (dB) | Limit (dB) |
|------|-----------|------------|------------|---------------------------|---------------------------|------------------------------|-----------|------------|
| 26   | 1.4MHz    | QPSK       | 26697      | 1RB#0                     | 28.58                     | 22.95                        | 5.63      | 13.00      |
|      |           |            | 26697      | 1RB#2                     | 27.82                     | 22.92                        | 4.90      | 13.00      |
|      |           |            | 26697      | 1RB#5                     | 27.79                     | 22.82                        | 4.97      | 13.00      |
|      |           |            | 26697      | 3RB#0                     | 28.86                     | 23.77                        | 5.09      | 13.00      |
|      |           |            | 26697      | 3RB#1                     | 28.72                     | 23.62                        | 5.10      | 13.00      |
|      |           |            | 26697      | 3RB#3                     | 28.70                     | 23.60                        | 5.10      | 13.00      |
|      |           |            | 26697      | 6RB#0                     | 29.24                     | 23.61                        | 5.63      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 27.42                     | 22.74                        | 4.68      | 13.00      |
|      |           |            | 26740      | 1RB#5                     | 27.39                     | 22.55                        | 4.84      | 13.00      |
|      |           |            | 26740      | 1RB#2                     | 27.40                     | 22.42                        | 4.98      | 13.00      |
|      |           |            | 26740      | 3RB#0                     | 28.56                     | 23.57                        | 4.99      | 13.00      |
|      |           |            | 26740      | 3RB#1                     | 28.50                     | 23.41                        | 5.09      | 13.00      |
|      |           |            | 26740      | 3RB#3                     | 28.53                     | 23.45                        | 5.08      | 13.00      |
|      |           |            | 26740      | 6RB#0                     | 28.91                     | 24.37                        | 4.54      | 13.00      |
|      |           |            | 26783      | 1RB#5                     | 27.52                     | 22.56                        | 4.96      | 13.00      |
|      |           |            | 26783      | 1RB#0                     | 27.65                     | 22.87                        | 4.78      | 13.00      |
|      |           |            | 26783      | 1RB#2                     | 27.68                     | 22.81                        | 4.87      | 13.00      |
|      |           |            | 26783      | 3RB#0                     | 28.65                     | 23.53                        | 5.12      | 13.00      |
|      |           |            | 26783      | 3RB#1                     | 28.67                     | 23.66                        | 5.01      | 13.00      |
|      |           |            | 26783      | 3RB#3                     | 27.85                     | 23.55                        | 4.30      | 13.00      |
|      |           |            | 26783      | 6RB#0                     | 28.97                     | 23.57                        | 5.40      | 13.00      |
| 26   | 1.4MHz    | 16QAM      | 26697      | 1RB#0                     | 28.72                     | 22.87                        | 5.85      | 13.00      |
|      |           |            | 26697      | 1RB#2                     | 28.55                     | 22.74                        | 5.81      | 13.00      |
|      |           |            | 26697      | 1RB#5                     | 28.56                     | 22.59                        | 5.97      | 13.00      |
|      |           |            | 26697      | 3RB#1                     | 29.67                     | 23.54                        | 6.13      | 13.00      |
|      |           |            | 26697      | 3RB#0                     | 29.56                     | 23.79                        | 5.77      | 13.00      |
|      |           |            | 26697      | 3RB#3                     | 29.53                     | 23.76                        | 5.77      | 13.00      |
|      |           |            | 26697      | 6RB#0                     | 30.19                     | 23.86                        | 6.33      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 27.98                     | 22.54                        | 5.44      | 13.00      |
|      |           |            | 26740      | 1RB#2                     | 27.94                     | 22.62                        | 5.32      | 13.00      |
|      |           |            | 26740      | 1RB#5                     | 27.94                     | 22.95                        | 4.99      | 13.00      |
|      |           |            | 26740      | 3RB#3                     | 29.42                     | 23.91                        | 5.51      | 13.00      |
|      |           |            | 26740      | 3RB#0                     | 29.36                     | 23.38                        | 5.98      | 13.00      |
|      |           |            | 26740      | 3RB#1                     | 29.39                     | 23.28                        | 6.11      | 13.00      |
|      |           |            | 26740      | 6RB#0                     | 30.28                     | 24.01                        | 6.27      | 13.00      |
|      |           |            | 26783      | 1RB#2                     | 28.12                     | 22.14                        | 5.98      | 13.00      |
|      |           |            | 26783      | 1RB#0                     | 28.42                     | 22.75                        | 5.67      | 13.00      |
|      |           |            | 26783      | 1RB#5                     | 28.38                     | 22.73                        | 5.65      | 13.00      |
|      |           |            | 26783      | 3RB#0                     | 29.45                     | 23.94                        | 5.51      | 13.00      |
|      |           |            | 26783      | 3RB#1                     | 29.48                     | 24.02                        | 5.46      | 13.00      |
|      |           |            | 26783      | 3RB#3                     | 29.47                     | 24.01                        | 5.46      | 13.00      |
|      |           |            | 26783      | 6RB#0                     | 30.02                     | 24.00                        | 6.02      | 13.00      |

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|------|-----------|------------|------------|---------------------------|---------------------------|------------------------------|-----------|------------|
| 26   | 3MHz      | QPSK       | 26705      | 1RB#8                     | 27.52                     | 22.53                        | 4.99      | 13.00      |
|      |           |            | 26705      | 1RB#14                    | 27.68                     | 22.74                        | 4.94      | 13.00      |
|      |           |            | 26705      | 1RB#0                     | 27.72                     | 22.58                        | 5.14      | 13.00      |
|      |           |            | 26705      | 8RB#0                     | 28.96                     | 23.68                        | 5.28      | 13.00      |
|      |           |            | 26705      | 8RB#4                     | 28.64                     | 23.30                        | 5.34      | 13.00      |
|      |           |            | 26705      | 8RB#7                     | 28.41                     | 23.26                        | 5.15      | 13.00      |
|      |           |            | 26705      | 15RB#0                    | 29.61                     | 24.12                        | 5.49      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 27.45                     | 22.47                        | 4.98      | 13.00      |
|      |           |            | 26740      | 1RB#14                    | 27.51                     | 22.67                        | 4.84      | 13.00      |
|      |           |            | 26740      | 1RB#8                     | 27.46                     | 22.62                        | 4.84      | 13.00      |
|      |           |            | 26740      | 8RB#7                     | 28.93                     | 23.81                        | 5.12      | 13.00      |
|      |           |            | 26740      | 8RB#0                     | 28.91                     | 23.53                        | 5.38      | 13.00      |
|      |           |            | 26740      | 8RB#4                     | 28.90                     | 23.47                        | 5.43      | 13.00      |
|      |           |            | 26740      | 15RB#0                    | 29.11                     | 23.50                        | 5.61      | 13.00      |
|      |           |            | 26775      | 1RB#8                     | 28.11                     | 23.24                        | 4.87      | 13.00      |
|      |           |            | 26775      | 1RB#0                     | 27.86                     | 23.04                        | 4.82      | 13.00      |
|      |           |            | 26775      | 1RB#14                    | 27.79                     | 22.82                        | 4.97      | 13.00      |
|      |           |            | 26775      | 8RB#0                     | 29.24                     | 24.04                        | 5.20      | 13.00      |
|      |           |            | 26775      | 8RB#7                     | 28.92                     | 23.68                        | 5.24      | 13.00      |
|      |           |            | 26775      | 8RB#4                     | 28.93                     | 23.67                        | 5.26      | 13.00      |
|      |           |            | 26775      | 15RB#0                    | 29.41                     | 23.83                        | 5.58      | 13.00      |
| 26   | 3MHz      | 16QAM      | 26705      | 1RB#14                    | 28.41                     | 23.03                        | 5.38      | 13.00      |
|      |           |            | 26705      | 1RB#0                     | 28.89                     | 23.55                        | 5.34      | 13.00      |
|      |           |            | 26705      | 1RB#8                     | 29.05                     | 23.46                        | 5.59      | 13.00      |
|      |           |            | 26705      | 8RB#7                     | 29.99                     | 24.01                        | 5.98      | 13.00      |
|      |           |            | 26705      | 8RB#4                     | 29.91                     | 23.97                        | 5.94      | 13.00      |
|      |           |            | 26705      | 8RB#0                     | 29.92                     | 23.90                        | 6.02      | 13.00      |
|      |           |            | 26705      | 15RB#0                    | 30.15                     | 23.69                        | 6.46      | 13.00      |
|      |           |            | 26740      | 1RB#14                    | 28.08                     | 22.64                        | 5.44      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 28.14                     | 22.83                        | 5.31      | 13.00      |
|      |           |            | 26740      | 1RB#8                     | 28.03                     | 22.59                        | 5.44      | 13.00      |
|      |           |            | 26740      | 8RB#7                     | 30.05                     | 23.81                        | 6.24      | 13.00      |
|      |           |            | 26740      | 8RB#0                     | 29.79                     | 23.61                        | 6.18      | 13.00      |
|      |           |            | 26740      | 8RB#4                     | 29.81                     | 23.67                        | 6.14      | 13.00      |
|      |           |            | 26740      | 15RB#0                    | 29.87                     | 23.68                        | 6.19      | 13.00      |
|      |           |            | 26775      | 1RB#8                     | 28.71                     | 23.10                        | 5.61      | 13.00      |
|      |           |            | 26775      | 1RB#0                     | 28.45                     | 22.89                        | 5.56      | 13.00      |
|      |           |            | 26775      | 1RB#14                    | 28.42                     | 22.70                        | 5.72      | 13.00      |
|      |           |            | 26775      | 8RB#0                     | 29.75                     | 23.45                        | 6.30      | 13.00      |
|      |           |            | 26775      | 8RB#4                     | 29.63                     | 23.75                        | 5.88      | 13.00      |
|      |           |            | 26775      | 8RB#7                     | 29.66                     | 23.81                        | 5.85      | 13.00      |
|      |           |            | 26775      | 15RB#0                    | 30.17                     | 24.04                        | 6.13      | 13.00      |

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| Band | Bandwidth | Modulation | Channel No | RB Position/RB allocation | Measured Peak Power (dBm) | Measured Average Power (dBm) | PAPR (dB) | Limit (dB) |
|------|-----------|------------|------------|---------------------------|---------------------------|------------------------------|-----------|------------|
| 26   | 5MHz      | QPSK       | 26715      | 1RB#0                     | 29.34                     | 23.41                        | 5.93      | 13.00      |
|      |           |            | 26715      | 1RB#12                    | 27.43                     | 22.51                        | 4.92      | 13.00      |
|      |           |            | 26715      | 1RB#24                    | 28.55                     | 23.35                        | 5.20      | 13.00      |
|      |           |            | 26715      | 12RB#0                    | 28.64                     | 23.39                        | 5.25      | 13.00      |
|      |           |            | 26715      | 12RB#6                    | 28.62                     | 23.37                        | 5.25      | 13.00      |
|      |           |            | 26715      | 12RB#13                   | 29.05                     | 23.39                        | 5.66      | 13.00      |
|      |           |            | 26715      | 25RB#0                    | 28.96                     | 23.29                        | 5.67      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 28.74                     | 23.07                        | 5.67      | 13.00      |
|      |           |            | 26740      | 1RB#24                    | 29.21                     | 23.64                        | 5.57      | 13.00      |
|      |           |            | 26740      | 1RB#12                    | 29.11                     | 23.85                        | 5.26      | 13.00      |
|      |           |            | 26740      | 12RB#0                    | 29.92                     | 23.68                        | 6.24      | 13.00      |
|      |           |            | 26740      | 12RB#6                    | 30.01                     | 23.78                        | 6.23      | 13.00      |
|      |           |            | 26740      | 12RB#13                   | 29.96                     | 23.81                        | 6.15      | 13.00      |
|      |           |            | 26740      | 25RB#0                    | 30.64                     | 23.85                        | 6.79      | 13.00      |
|      |           |            | 26765      | 1RB#24                    | 28.13                     | 23.30                        | 4.83      | 13.00      |
|      |           |            | 26765      | 1RB#0                     | 28.19                     | 23.13                        | 5.06      | 13.00      |
|      |           |            | 26765      | 1RB#12                    | 27.67                     | 23.57                        | 4.10      | 13.00      |
|      |           |            | 26765      | 12RB#0                    | 29.33                     | 24.01                        | 5.32      | 13.00      |
|      |           |            | 26765      | 12RB#6                    | 29.79                     | 23.55                        | 6.24      | 13.00      |
|      |           |            | 26765      | 12RB#13                   | 29.01                     | 23.77                        | 5.24      | 13.00      |
| 26   | 5MHz      | 16QAM      | 26765      | 25RB#0                    | 29.76                     | 23.97                        | 5.79      | 13.00      |
|      |           |            | 26715      | 1RB#0                     | 28.95                     | 23.28                        | 5.67      | 13.00      |
|      |           |            | 26715      | 1RB#12                    | 29.03                     | 23.29                        | 5.74      | 13.00      |
|      |           |            | 26715      | 1RB#24                    | 29.05                     | 23.26                        | 5.79      | 13.00      |
|      |           |            | 26715      | 12RB#6                    | 30.51                     | 23.61                        | 6.90      | 13.00      |
|      |           |            | 26715      | 12RB#0                    | 29.01                     | 23.33                        | 5.68      | 13.00      |
|      |           |            | 26715      | 12RB#13                   | 29.71                     | 23.32                        | 6.39      | 13.00      |
|      |           |            | 26715      | 25RB#0                    | 30.95                     | 24.15                        | 6.80      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 26.61                     | 23.12                        | 3.49      | 13.00      |
|      |           |            | 26740      | 1RB#12                    | 27.97                     | 23.89                        | 4.08      | 13.00      |
|      |           |            | 26740      | 1RB#24                    | 27.73                     | 22.91                        | 4.82      | 13.00      |
|      |           |            | 26740      | 12RB#13                   | 28.97                     | 23.72                        | 5.25      | 13.00      |
|      |           |            | 26740      | 12RB#0                    | 28.97                     | 23.17                        | 5.80      | 13.00      |
|      |           |            | 26740      | 12RB#6                    | 28.93                     | 23.67                        | 5.26      | 13.00      |
|      |           |            | 26740      | 25RB#0                    | 29.41                     | 23.63                        | 5.78      | 13.00      |
|      |           |            | 26765      | 1RB#12                    | 28.86                     | 23.05                        | 5.81      | 13.00      |
|      |           |            | 26765      | 1RB#0                     | 28.94                     | 23.58                        | 5.36      | 13.00      |
|      |           |            | 26765      | 1RB#24                    | 28.45                     | 22.87                        | 5.58      | 13.00      |
|      |           |            | 26765      | 12RB#0                    | 29.65                     | 23.70                        | 5.95      | 13.00      |
|      |           |            | 26765      | 12RB#6                    | 29.67                     | 23.82                        | 5.85      | 13.00      |
|      |           |            | 26765      | 12RB#13                   | 29.67                     | 23.90                        | 5.77      | 13.00      |
|      |           |            | 26765      | 25RB#0                    | 30.45                     | 23.95                        | 6.50      | 13.00      |

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|------|-----------|------------|------------|---------------------------|---------------------------|------------------------------|-----------|------------|
| 26   | 10MHz     | QPSK       | 26740      | 1RB#49                    | 27.66                     | 24.74                        | 2.92      | 13.00      |
|      |           |            | 26740      | 1RB#24                    | 28.48                     | 23.52                        | 4.96      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 27.78                     | 22.86                        | 4.92      | 13.00      |
|      |           |            | 26740      | 25RB#0                    | 29.31                     | 23.85                        | 5.46      | 13.00      |
|      |           |            | 26740      | 25RB#12                   | 29.60                     | 24.10                        | 5.50      | 13.00      |
|      |           |            | 26740      | 25RB#25                   | 29.56                     | 24.05                        | 5.51      | 13.00      |
|      |           |            | 26740      | 50RB#0                    | 29.34                     | 23.79                        | 5.55      | 13.00      |
|      |           |            | 26915      | 1RB#0                     | 27.66                     | 22.72                        | 4.94      | 13.00      |
|      |           |            | 26915      | 1RB#49                    | 28.75                     | 23.80                        | 4.95      | 13.00      |
|      |           |            | 26915      | 1RB#24                    | 27.86                     | 22.93                        | 4.93      | 13.00      |
|      |           |            | 26915      | 25RB#25                   | 29.51                     | 24.18                        | 5.33      | 13.00      |
|      |           |            | 26915      | 25RB#0                    | 28.86                     | 23.50                        | 5.36      | 13.00      |
|      |           |            | 26915      | 25RB#12                   | 28.84                     | 23.49                        | 5.35      | 13.00      |
|      |           |            | 26915      | 50RB#0                    | 29.16                     | 23.44                        | 5.72      | 13.00      |
|      |           |            | 26990      | 1RB#24                    | 27.96                     | 23.00                        | 4.96      | 13.00      |
|      |           |            | 26990      | 1RB#0                     | 28.34                     | 23.59                        | 4.75      | 13.00      |
|      |           |            | 26990      | 1RB#49                    | 27.85                     | 22.99                        | 4.86      | 13.00      |
|      |           |            | 26990      | 25RB#0                    | 29.60                     | 24.24                        | 5.36      | 13.00      |
|      |           |            | 26990      | 25RB#25                   | 29.21                     | 23.93                        | 5.28      | 13.00      |
|      |           |            | 26990      | 25RB#12                   | 29.17                     | 23.91                        | 5.26      | 13.00      |
| 26   | 10MHz     | 16QAM      | 26990      | 50RB#0                    | 30.01                     | 24.02                        | 5.99      | 13.00      |
|      |           |            | 26740      | 1RB#49                    | 29.33                     | 23.94                        | 5.39      | 13.00      |
|      |           |            | 26740      | 1RB#0                     | 29.22                     | 23.72                        | 5.50      | 13.00      |
|      |           |            | 26740      | 1RB#24                    | 29.55                     | 24.08                        | 5.47      | 13.00      |
|      |           |            | 26740      | 25RB#25                   | 30.05                     | 23.67                        | 6.38      | 13.00      |
|      |           |            | 26740      | 25RB#12                   | 30.44                     | 23.99                        | 6.45      | 13.00      |
|      |           |            | 26740      | 25RB#0                    | 30.37                     | 23.94                        | 6.43      | 13.00      |
|      |           |            | 26740      | 50RB#0                    | 31.09                     | 23.66                        | 7.43      | 13.00      |
|      |           |            | 26915      | 1RB#49                    | 30.12                     | 23.67                        | 6.45      | 13.00      |
|      |           |            | 26915      | 1RB#0                     | 29.30                     | 23.98                        | 5.32      | 13.00      |
|      |           |            | 26915      | 1RB#24                    | 28.41                     | 23.02                        | 5.39      | 13.00      |
|      |           |            | 26915      | 25RB#25                   | 30.11                     | 23.80                        | 6.31      | 13.00      |
|      |           |            | 26915      | 25RB#0                    | 30.15                     | 23.93                        | 6.22      | 13.00      |
|      |           |            | 26915      | 25RB#12                   | 30.02                     | 23.78                        | 6.24      | 13.00      |
|      |           |            | 26915      | 50RB#0                    | 30.14                     | 23.84                        | 6.30      | 13.00      |
|      |           |            | 26990      | 1RB#24                    | 28.62                     | 22.87                        | 5.75      | 13.00      |
|      |           |            | 26990      | 1RB#0                     | 29.01                     | 23.42                        | 5.59      | 13.00      |
|      |           |            | 26990      | 1RB#49                    | 28.86                     | 23.31                        | 5.55      | 13.00      |
|      |           |            | 26990      | 25RB#0                    | 30.04                     | 24.21                        | 5.83      | 13.00      |
|      |           |            | 26990      | 25RB#12                   | 29.95                     | 24.13                        | 5.82      | 13.00      |
|      |           |            | 26990      | 25RB#25                   | 29.93                     | 24.21                        | 5.72      | 13.00      |
|      |           |            | 26990      | 50RB#0                    | 30.19                     | 23.93                        | 6.26      | 13.00      |

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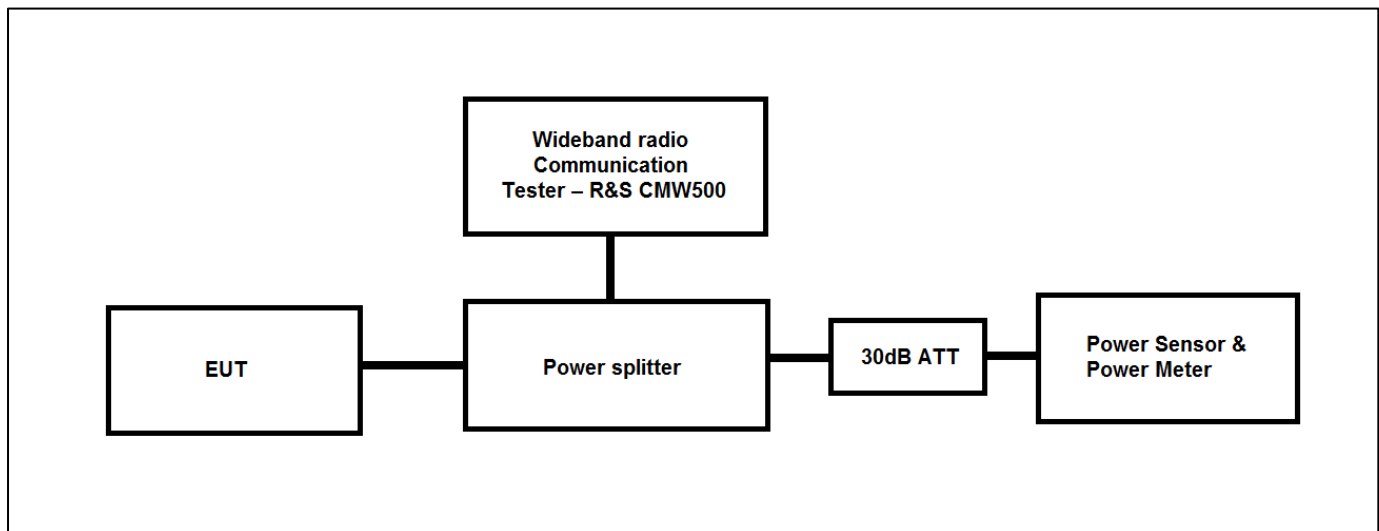
## 7.2 EFFECTIVE (ISOTROPIC) RADIATED POWER

**Result**

**Pass**

|                         |                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------|
| Specification           | FCC Part §2.1046 & §90.542<br>RSS-Gen, §6.12; RSS-132, §5.4<br>ANSI C63.26-2015               |
| Test Method / Procedure | As per subclause 5 in 971168 D01 Power Meas License Digital Systems v03r01                    |
| Detector Function       | Average                                                                                       |
| Requirement             | The EIRP & ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts |

### Test Setup:



### Environmental Conditions:

**Temperature:** +22.5°C

**Voltage:** 12VDC through AC-DC Adapter

**Relative Humidity:** 62%

### KDB Guidelines applied:

Measurements were made as per section 5.2.4 in KDB 971168 D01 Power Meas License Digital Systems v03r01

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**Note:**

1. All the losses are included during measurement and final values are mentioned in the test report.
2. Total Average Output power (dBm) = Measured Average power (dBm) + Attenuator factor (30dB) + Power Splitter (3.3 dB) + Cable loss (1dB)
3. For getting the EIRP(Equivalent Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP (dBm) = Conducted power (dBm) + Antenna gain (dBd)

EIRP (dBm) = Conducted power (dBm) + Antenna gain (dBi)

**Test Results:**

| Band | Bandwidth | Modulation | Channel No | RB Position/RB allocation | Measured Average Power (dBm) | e.r.p (dBm) | Limit (dBm) |
|------|-----------|------------|------------|---------------------------|------------------------------|-------------|-------------|
| 26   | 1.4MHz    | QPSK       | 26697      | 1RB#0                     | 22.95                        | 21.71       | 38.45       |
|      |           |            | 26697      | 1RB#2                     | 22.92                        | 21.68       | 38.45       |
|      |           |            | 26697      | 1RB#5                     | 22.82                        | 21.58       | 38.45       |
|      |           |            | 26697      | 3RB#0                     | 23.77                        | 22.53       | 38.45       |
|      |           |            | 26697      | 3RB#1                     | 23.62                        | 22.38       | 38.45       |
|      |           |            | 26697      | 3RB#3                     | 23.60                        | 22.36       | 38.45       |
|      |           |            | 26697      | 6RB#0                     | 23.61                        | 22.37       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 22.74                        | 21.50       | 38.45       |
|      |           |            | 26740      | 1RB#5                     | 22.55                        | 21.31       | 38.45       |
|      |           |            | 26740      | 1RB#2                     | 22.42                        | 21.18       | 38.45       |
|      |           |            | 26740      | 3RB#0                     | 23.57                        | 22.33       | 38.45       |
|      |           |            | 26740      | 3RB#1                     | 23.41                        | 22.17       | 38.45       |
|      |           |            | 26740      | 3RB#3                     | 23.45                        | 22.21       | 38.45       |
|      |           |            | 26740      | 6RB#0                     | 24.37                        | 23.13       | 38.45       |
|      |           |            | 26783      | 1RB#5                     | 22.56                        | 21.32       | 38.45       |
|      |           |            | 26783      | 1RB#0                     | 22.87                        | 21.63       | 38.45       |
|      |           |            | 26783      | 1RB#2                     | 22.81                        | 21.57       | 38.45       |
|      |           |            | 26783      | 3RB#0                     | 23.53                        | 22.29       | 38.45       |
|      |           |            | 26783      | 3RB#1                     | 23.66                        | 22.42       | 38.45       |
|      |           |            | 26783      | 3RB#3                     | 23.55                        | 22.31       | 38.45       |
|      |           |            | 26783      | 6RB#0                     | 23.57                        | 22.33       | 38.45       |
| 26   | 1.4MHz    | 16QAM      | 26697      | 1RB#0                     | 22.87                        | 21.63       | 38.45       |
|      |           |            | 26697      | 1RB#2                     | 22.74                        | 21.50       | 38.45       |
|      |           |            | 26697      | 1RB#5                     | 22.59                        | 21.35       | 38.45       |
|      |           |            | 26697      | 3RB#1                     | 23.54                        | 22.30       | 38.45       |
|      |           |            | 26697      | 3RB#0                     | 23.79                        | 22.55       | 38.45       |
|      |           |            | 26697      | 3RB#3                     | 23.76                        | 22.52       | 38.45       |
|      |           |            | 26697      | 6RB#0                     | 23.86                        | 22.62       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 22.54                        | 21.30       | 38.45       |
|      |           |            | 26740      | 1RB#2                     | 22.62                        | 21.38       | 38.45       |
|      |           |            | 26740      | 1RB#5                     | 22.95                        | 21.71       | 38.45       |
|      |           |            | 26740      | 3RB#3                     | 23.91                        | 22.67       | 38.45       |
|      |           |            | 26740      | 3RB#0                     | 23.38                        | 22.14       | 38.45       |
|      |           |            | 26740      | 3RB#1                     | 23.28                        | 22.04       | 38.45       |
|      |           |            | 26740      | 6RB#0                     | 24.01                        | 22.77       | 38.45       |
|      |           |            | 26783      | 1RB#2                     | 22.14                        | 20.90       | 38.45       |
|      |           |            | 26783      | 1RB#0                     | 22.75                        | 21.51       | 38.45       |
|      |           |            | 26783      | 1RB#5                     | 22.73                        | 21.49       | 38.45       |
|      |           |            | 26783      | 3RB#0                     | 23.94                        | 22.70       | 38.45       |
|      |           |            | 26783      | 3RB#1                     | 24.02                        | 22.78       | 38.45       |
|      |           |            | 26783      | 3RB#3                     | 24.01                        | 22.77       | 38.45       |
|      |           |            | 26783      | 6RB#0                     | 24.00                        | 22.76       | 38.45       |

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| Band | Bandwidth | Modulation | Channel No | RB Position/RB allocation | Measured Average Power (dBm) | e.r.p (dBm) | Limit (dBm) |
|------|-----------|------------|------------|---------------------------|------------------------------|-------------|-------------|
| 26   | 3MHz      | QPSK       | 26705      | 1RB#8                     | 22.53                        | 21.29       | 38.45       |
|      |           |            | 26705      | 1RB#14                    | 22.74                        | 21.50       | 38.45       |
|      |           |            | 26705      | 1RB#0                     | 22.58                        | 21.34       | 38.45       |
|      |           |            | 26705      | 8RB#0                     | 23.68                        | 22.44       | 38.45       |
|      |           |            | 26705      | 8RB#4                     | 23.30                        | 22.06       | 38.45       |
|      |           |            | 26705      | 8RB#7                     | 23.26                        | 22.02       | 38.45       |
|      |           |            | 26705      | 15RB#0                    | 24.12                        | 22.88       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 22.47                        | 21.23       | 38.45       |
|      |           |            | 26740      | 1RB#14                    | 22.67                        | 21.43       | 38.45       |
|      |           |            | 26740      | 1RB#8                     | 22.62                        | 21.38       | 38.45       |
|      |           |            | 26740      | 8RB#7                     | 23.81                        | 22.57       | 38.45       |
|      |           |            | 26740      | 8RB#0                     | 23.53                        | 22.29       | 38.45       |
|      |           |            | 26740      | 8RB#4                     | 23.47                        | 22.23       | 38.45       |
|      |           |            | 26740      | 15RB#0                    | 23.50                        | 22.26       | 38.45       |
|      |           |            | 26775      | 1RB#8                     | 23.24                        | 22.00       | 38.45       |
|      |           |            | 26775      | 1RB#0                     | 23.04                        | 21.80       | 38.45       |
|      |           |            | 26775      | 1RB#14                    | 22.82                        | 21.58       | 38.45       |
|      |           |            | 26775      | 8RB#0                     | 24.04                        | 22.80       | 38.45       |
|      |           |            | 26775      | 8RB#7                     | 23.68                        | 22.44       | 38.45       |
|      |           |            | 26775      | 8RB#4                     | 23.67                        | 22.43       | 38.45       |
|      |           |            | 26775      | 15RB#0                    | 23.83                        | 22.59       | 38.45       |
| 26   | 3MHz      | 16QAM      | 26705      | 1RB#14                    | 23.03                        | 21.79       | 38.45       |
|      |           |            | 26705      | 1RB#0                     | 23.55                        | 22.31       | 38.45       |
|      |           |            | 26705      | 1RB#8                     | 23.46                        | 22.22       | 38.45       |
|      |           |            | 26705      | 8RB#7                     | 24.01                        | 22.77       | 38.45       |
|      |           |            | 26705      | 8RB#4                     | 23.97                        | 22.73       | 38.45       |
|      |           |            | 26705      | 8RB#0                     | 23.90                        | 22.66       | 38.45       |
|      |           |            | 26705      | 15RB#0                    | 23.69                        | 22.45       | 38.45       |
|      |           |            | 26740      | 1RB#14                    | 22.64                        | 21.40       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 22.83                        | 21.59       | 38.45       |
|      |           |            | 26740      | 1RB#8                     | 22.59                        | 21.35       | 38.45       |
|      |           |            | 26740      | 8RB#7                     | 23.81                        | 22.57       | 38.45       |
|      |           |            | 26740      | 8RB#0                     | 23.61                        | 22.37       | 38.45       |
|      |           |            | 26740      | 8RB#4                     | 23.67                        | 22.43       | 38.45       |
|      |           |            | 26740      | 15RB#0                    | 23.68                        | 22.44       | 38.45       |
|      |           |            | 26775      | 1RB#8                     | 23.10                        | 21.86       | 38.45       |
|      |           |            | 26775      | 1RB#0                     | 22.89                        | 21.65       | 38.45       |
|      |           |            | 26775      | 1RB#14                    | 22.70                        | 21.46       | 38.45       |
|      |           |            | 26775      | 8RB#0                     | 23.45                        | 22.21       | 38.45       |
|      |           |            | 26775      | 8RB#4                     | 23.75                        | 22.51       | 38.45       |
|      |           |            | 26775      | 8RB#7                     | 23.81                        | 22.57       | 38.45       |
|      |           |            | 26775      | 15RB#0                    | 24.04                        | 22.80       | 38.45       |



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| Band | Bandwidth | Modulation | Channel No | RB Position/RB allocation | Measured Average Power (dBm) | e.r.p (dBm) | Limit (dBm) |
|------|-----------|------------|------------|---------------------------|------------------------------|-------------|-------------|
| 26   | 5MHz      | QPSK       | 26715      | 1RB#0                     | 23.41                        | 22.17       | 38.45       |
|      |           |            | 26715      | 1RB#12                    | 22.51                        | 21.27       | 38.45       |
|      |           |            | 26715      | 1RB#24                    | 23.35                        | 22.11       | 38.45       |
|      |           |            | 26715      | 12RB#0                    | 23.39                        | 22.15       | 38.45       |
|      |           |            | 26715      | 12RB#6                    | 23.37                        | 22.13       | 38.45       |
|      |           |            | 26715      | 12RB#13                   | 23.39                        | 22.15       | 38.45       |
|      |           |            | 26715      | 25RB#0                    | 23.29                        | 22.05       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 23.07                        | 21.83       | 38.45       |
|      |           |            | 26740      | 1RB#24                    | 23.64                        | 22.40       | 38.45       |
|      |           |            | 26740      | 1RB#12                    | 23.85                        | 22.61       | 38.45       |
|      |           |            | 26740      | 12RB#0                    | 23.68                        | 22.44       | 38.45       |
|      |           |            | 26740      | 12RB#6                    | 23.78                        | 22.54       | 38.45       |
|      |           |            | 26740      | 12RB#13                   | 23.81                        | 22.57       | 38.45       |
|      |           |            | 26740      | 25RB#0                    | 23.85                        | 22.61       | 38.45       |
|      |           |            | 26765      | 1RB#24                    | 23.30                        | 22.06       | 38.45       |
|      |           |            | 26765      | 1RB#0                     | 23.13                        | 21.89       | 38.45       |
|      |           |            | 26765      | 1RB#12                    | 23.57                        | 22.33       | 38.45       |
|      |           |            | 26765      | 12RB#0                    | 24.01                        | 22.77       | 38.45       |
|      |           |            | 26765      | 12RB#6                    | 23.55                        | 22.31       | 38.45       |
|      |           |            | 26765      | 12RB#13                   | 23.77                        | 22.53       | 38.45       |
| 26   | 5MHz      | 16QAM      | 26765      | 25RB#0                    | 23.97                        | 22.73       | 38.45       |
|      |           |            | 26715      | 1RB#0                     | 23.28                        | 22.04       | 38.45       |
|      |           |            | 26715      | 1RB#12                    | 23.29                        | 22.05       | 38.45       |
|      |           |            | 26715      | 1RB#24                    | 23.26                        | 22.02       | 38.45       |
|      |           |            | 26715      | 12RB#6                    | 23.61                        | 22.37       | 38.45       |
|      |           |            | 26715      | 12RB#0                    | 23.33                        | 22.09       | 38.45       |
|      |           |            | 26715      | 12RB#13                   | 23.32                        | 22.08       | 38.45       |
|      |           |            | 26715      | 25RB#0                    | 24.15                        | 22.91       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 23.12                        | 21.88       | 38.45       |
|      |           |            | 26740      | 1RB#12                    | 23.89                        | 22.65       | 38.45       |
|      |           |            | 26740      | 1RB#24                    | 22.91                        | 21.67       | 38.45       |
|      |           |            | 26740      | 12RB#13                   | 23.72                        | 22.48       | 38.45       |
|      |           |            | 26740      | 12RB#0                    | 23.17                        | 21.93       | 38.45       |
|      |           |            | 26740      | 12RB#6                    | 23.67                        | 22.43       | 38.45       |
|      |           |            | 26740      | 25RB#0                    | 23.63                        | 22.39       | 38.45       |
|      |           |            | 26765      | 1RB#12                    | 23.05                        | 21.81       | 38.45       |
|      |           |            | 26765      | 1RB#0                     | 23.58                        | 22.34       | 38.45       |
|      |           |            | 26765      | 1RB#24                    | 22.87                        | 21.63       | 38.45       |
|      |           |            | 26765      | 12RB#0                    | 23.70                        | 22.46       | 38.45       |
|      |           |            | 26765      | 12RB#6                    | 23.82                        | 22.58       | 38.45       |
|      |           |            | 26765      | 12RB#13                   | 23.90                        | 22.66       | 38.45       |
|      |           |            | 26765      | 25RB#0                    | 23.95                        | 22.71       | 38.45       |

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| Band | Bandwidth | Modulation | Channel No | RB Position/RB allocation | Measured Average Power (dBm) | e.r.p (dBm) | Limit (dBm) |
|------|-----------|------------|------------|---------------------------|------------------------------|-------------|-------------|
| 26   | 10MHz     | QPSK       | 26740      | 1RB#49                    | 24.74                        | 23.50       | 38.45       |
|      |           |            | 26740      | 1RB#24                    | 23.52                        | 22.28       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 22.86                        | 21.62       | 38.45       |
|      |           |            | 26740      | 25RB#0                    | 23.85                        | 22.61       | 38.45       |
|      |           |            | 26740      | 25RB#12                   | 24.10                        | 22.86       | 38.45       |
|      |           |            | 26740      | 25RB#25                   | 24.05                        | 22.81       | 38.45       |
|      |           |            | 26740      | 50RB#0                    | 23.79                        | 22.55       | 38.45       |
|      |           |            | 26915      | 1RB#0                     | 22.72                        | 21.48       | 38.45       |
|      |           |            | 26915      | 1RB#49                    | 23.80                        | 22.56       | 38.45       |
|      |           |            | 26915      | 1RB#24                    | 22.93                        | 21.69       | 38.45       |
|      |           |            | 26915      | 25RB#25                   | 24.18                        | 22.94       | 38.45       |
|      |           |            | 26915      | 25RB#0                    | 23.50                        | 22.26       | 38.45       |
|      |           |            | 26915      | 25RB#12                   | 23.49                        | 22.25       | 38.45       |
|      |           |            | 26915      | 50RB#0                    | 23.44                        | 22.20       | 38.45       |
|      |           |            | 26990      | 1RB#24                    | 23.00                        | 21.76       | 38.45       |
|      |           |            | 26990      | 1RB#0                     | 23.59                        | 22.35       | 38.45       |
|      |           |            | 26990      | 1RB#49                    | 22.99                        | 21.75       | 38.45       |
|      |           |            | 26990      | 25RB#0                    | 24.24                        | 23.00       | 38.45       |
|      |           |            | 26990      | 25RB#25                   | 23.93                        | 22.69       | 38.45       |
|      |           |            | 26990      | 25RB#12                   | 23.91                        | 22.67       | 38.45       |
| 26   | 10MHz     | 16QAM      | 26990      | 50RB#0                    | 24.02                        | 22.78       | 38.45       |
|      |           |            | 26740      | 1RB#49                    | 23.94                        | 22.70       | 38.45       |
|      |           |            | 26740      | 1RB#0                     | 23.72                        | 22.48       | 38.45       |
|      |           |            | 26740      | 1RB#24                    | 24.08                        | 22.84       | 38.45       |
|      |           |            | 26740      | 25RB#25                   | 23.67                        | 22.43       | 38.45       |
|      |           |            | 26740      | 25RB#12                   | 23.99                        | 22.75       | 38.45       |
|      |           |            | 26740      | 25RB#0                    | 23.94                        | 22.70       | 38.45       |
|      |           |            | 26740      | 50RB#0                    | 23.66                        | 22.42       | 38.45       |
|      |           |            | 26915      | 1RB#49                    | 23.67                        | 22.43       | 38.45       |
|      |           |            | 26915      | 1RB#0                     | 23.98                        | 22.74       | 38.45       |
|      |           |            | 26915      | 1RB#24                    | 23.02                        | 21.78       | 38.45       |
|      |           |            | 26915      | 25RB#25                   | 23.80                        | 22.56       | 38.45       |
|      |           |            | 26915      | 25RB#0                    | 23.93                        | 22.69       | 38.45       |
|      |           |            | 26915      | 25RB#12                   | 23.78                        | 22.54       | 38.45       |
|      |           |            | 26915      | 50RB#0                    | 23.84                        | 22.60       | 38.45       |
|      |           |            | 26990      | 1RB#24                    | 22.87                        | 21.63       | 38.45       |
|      |           |            | 26990      | 1RB#0                     | 23.42                        | 22.18       | 38.45       |
|      |           |            | 26990      | 1RB#49                    | 23.31                        | 22.07       | 38.45       |
|      |           |            | 26990      | 25RB#0                    | 24.21                        | 22.97       | 38.45       |
|      |           |            | 26990      | 25RB#12                   | 24.13                        | 22.89       | 38.45       |
|      |           |            | 26990      | 25RB#25                   | 24.21                        | 22.97       | 38.45       |
|      |           |            | 26990      | 50RB#0                    | 23.93                        | 22.69       | 38.45       |

### 7.3 Field Strength of Spurious Radiation

#### Result

**Pass**

|                             |                                                                                                                                                                |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Specification               | FCC Part §2.1053 & §90.543 (c) (f)                                                                                                                             |
| Test Method / Procedure     | As per subclause 5.5 of ANSI C63.26-2015<br>As per subclause 7 in 971168 D01 Power Meas License Digital Systems v03r01                                         |
| Measurement Bandwidth (RBW) | 100 kHz for frequency range < 1GHz<br>1 MHz for Frequency range >1GHz                                                                                          |
| Detector Function           | Peak                                                                                                                                                           |
| Measuring Distance          | 3 m                                                                                                                                                            |
| Requirement                 | The power of any emission outside the authorized frequency range must be attenuated below the transmitting power (P) by a factor of at least $43+10\log(P)$ dB |
| Test setup                  | Refer TEST METHODOLOGY                                                                                                                                         |

#### Environmental conditions:

Temperature (Norm) = + 24 °C      Voltage =110VAC through mains      Relative humidity = 62 %

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

1. All the losses are included during measurement and final values are mentioned in the test report.
2. Spurious emission limit is derived using the following equation:  $43 + 10*\log(P) = 43 + 10*\log(P) = -13$   
P is average power in W

#### Test results:

##### 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

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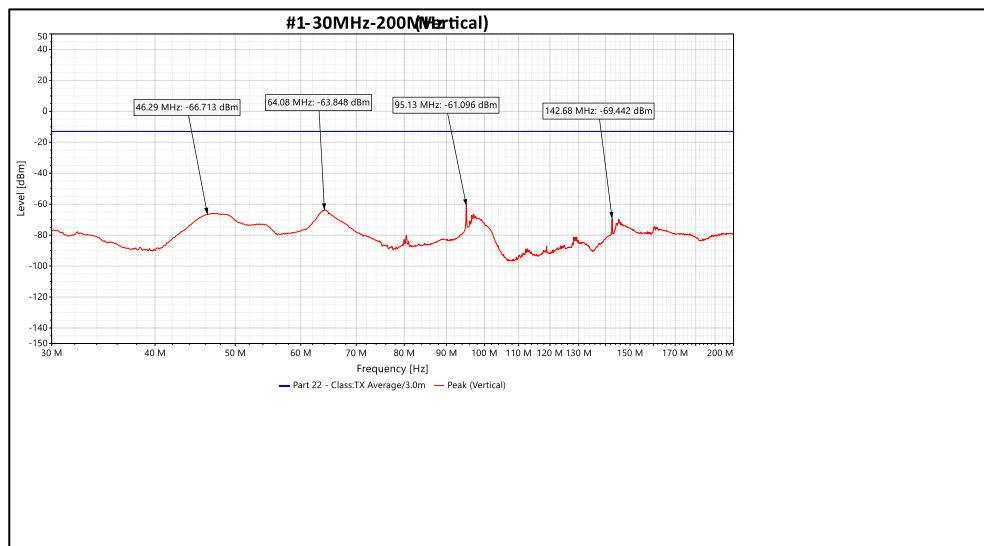
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**Test results for frequency range 30MHz – 200MHz**

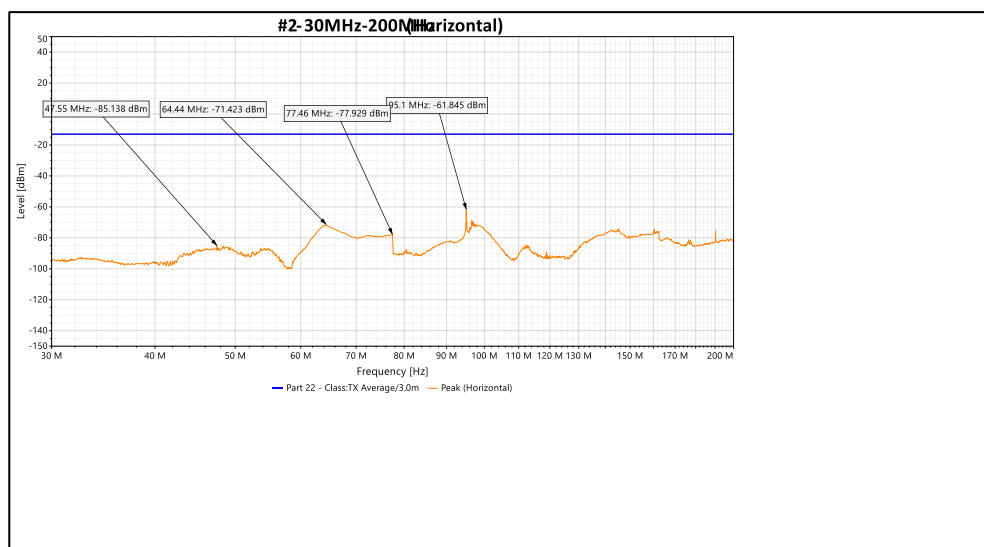
| Antenna Polarization | Measured Frequency (MHz) | Measured emission (dBm) | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------|-------------------------|-------------|-------------|
| Vertical             | 46.29                    | -66.71                  | -13.00      | -53.71      |
|                      | 64.08                    | -63.84                  | -13.00      | -50.84      |
|                      | 95.13                    | -61.09                  | -13.00      | -48.09      |
|                      | 142.68                   | -69.44                  | -13.00      | -56.44      |
| Horizontal           | 47.55                    | -85.13                  | -13.00      | -72.13      |
|                      | 64.44                    | -71.42                  | -13.00      | -58.42      |
|                      | 77.46                    | -77.92                  | -13.00      | -64.92      |
|                      | 95.10                    | -61.84                  | -13.00      | -48.84      |

**Plots for frequency range 30MHz to 200MHz**



**Frequency Range: 30MHz-200MHz**

**Polarization: Vertical**



**Frequency Range: 30MHz-200MHz**

**Polarization: Horizontal**

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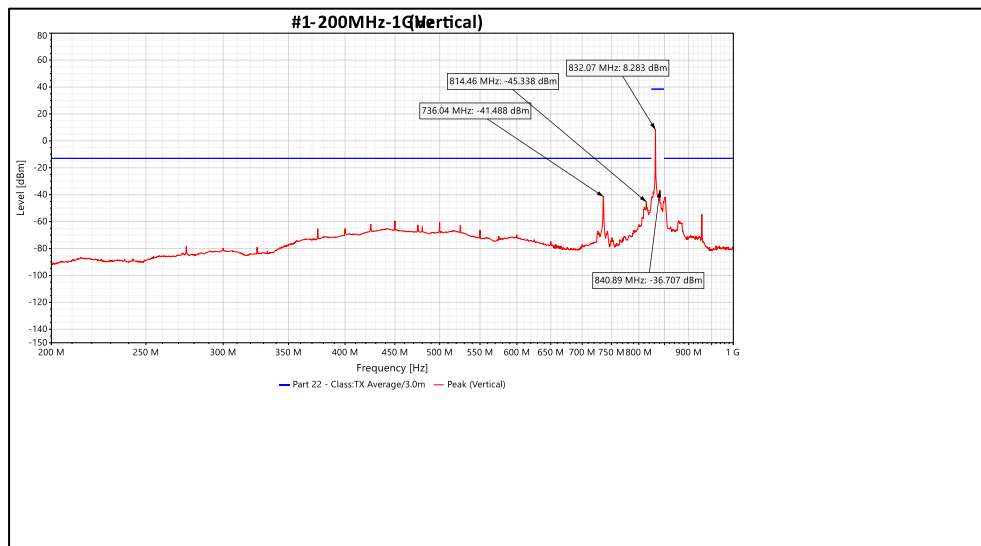
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**Test results for frequency range 200MHz – 1GHz**

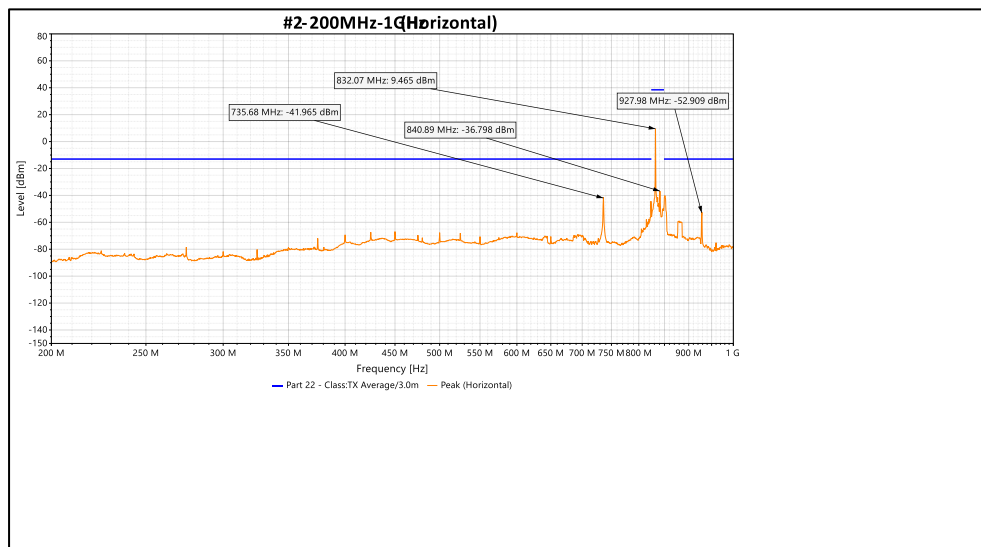
| Antenna Polarization | Measured Frequency (MHz) | Measured emission (dBm) | Limit (dBm) | Margin (dB) |
|----------------------|--------------------------|-------------------------|-------------|-------------|
| Vertical             | 736.04                   | -41.48                  | -13.00      | -28.48      |
|                      | 814.46                   | -45.33                  | -13.00      | -32.33      |
|                      | 832.07*                  | 8.28                    | -           | -           |
|                      | 840.89                   | -36.70                  | -13.00      | -23.70      |
| Horizontal           | 735.68                   | -41.96                  | -13.00      | -28.96      |
|                      | 832.07*                  | 9.46                    | -           | -           |
|                      | 840.89                   | -36.79                  | -13.00      | -23.79      |
|                      | 927.98                   | -52.90                  | -13.00      | -39.90      |

**Test Plots:**



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

**Polarization: Vertical**



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

**Polarization: Horizontal**

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**Above 1GHz Test results:**

**Band 26: 814MHz to 824MHz**

| Band | Modulation | CB  | No.fo<br>RB | RB<br>Pos | Channel<br>Frequency<br>(MHz) | Measured<br>Frequency<br>(MHz) | Antenna<br>Polarization | Emission<br>Level<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) |
|------|------------|-----|-------------|-----------|-------------------------------|--------------------------------|-------------------------|----------------------------|----------------|----------------|
| 26   | QPSK       | 1.4 | 3           | 1         | 814.70                        | 1629.40                        | Vertical                | -35.93                     | -13.00         | -22.93         |
|      |            |     |             |           |                               | 2444.10                        |                         | -26.76                     | -13.00         | -13.76         |
|      |            |     |             |           |                               | 3258.80                        |                         | -50.50                     | -13.00         | -37.50         |
|      |            |     | 3           | 0         | 819.00                        | 1629.40                        | Horizontal              | -35.11                     | -13.00         | -22.11         |
|      |            |     |             |           |                               | 2444.10                        |                         | -29.03                     | -13.00         | -16.03         |
|      |            |     |             |           |                               | 3258.80                        |                         | -53.30                     | -13.00         | -40.30         |
|      |            | 1.4 | 3           | 0         | 819.00                        | 1638.00                        | Vertical                | -37.42                     | -13.00         | -24.42         |
|      |            |     |             |           |                               | 2457.00                        |                         | -29.12                     | -13.00         | -16.12         |
|      |            |     |             |           |                               | 3276.00                        |                         | -50.98                     | -13.00         | -37.98         |
|      |            |     | 3           | 0         | 823.30                        | 1638.00                        | Horizontal              | -36.75                     | -13.00         | -23.75         |
|      |            |     |             |           |                               | 2457.00                        |                         | -31.17                     | -13.00         | -18.17         |
|      |            |     |             |           |                               | 3276.00                        |                         | -52.91                     | -13.00         | -39.91         |
|      | 16QAM      | 3   | 8           | 0         | 815.50                        | 1646.60                        | Vertical                | -33.92                     | -13.00         | -20.92         |
|      |            |     |             |           |                               | 2469.90                        |                         | -26.72                     | -13.00         | -13.72         |
|      |            |     |             |           |                               | 3293.20                        |                         | -50.34                     | -13.00         | -37.34         |
|      |            |     | 8           | 0         | 815.50                        | 1646.60                        | Horizontal              | -35.51                     | -13.00         | -22.51         |
|      |            |     |             |           |                               | 2469.90                        |                         | -29.01                     | -13.00         | -16.01         |
|      |            |     |             |           |                               | 3293.20                        |                         | -53.38                     | -13.00         | -40.38         |
|      |            | 3   | 8           | 0         | 815.50                        | 1631.00                        | Vertical                | -37.16                     | -13.00         | -24.16         |
|      |            |     |             |           |                               | 2446.50                        |                         | -27.55                     | -13.00         | -14.55         |
|      |            |     |             |           |                               | 3262.00                        |                         | -51.98                     | -13.00         | -38.98         |
|      |            |     | 8           | 0         | 815.50                        | 1631.00                        | Horizontal              | -35.25                     | -13.00         | -22.25         |
|      |            |     |             |           |                               | 2446.50                        |                         | -28.15                     | -13.00         | -15.15         |
|      |            |     |             |           |                               | 3262.00                        |                         | -55.52                     | -13.00         | -42.52         |
|      |            | 3   | 8           | 7         | 819.00                        | 1638.00                        | Vertical                | -36.21                     | -13.00         | -23.21         |
|      |            |     |             |           |                               | 2457.00                        |                         | -28.83                     | -13.00         | -15.83         |
|      |            |     |             |           |                               | 3276.00                        |                         | -52.19                     | -13.00         | -39.19         |
|      |            |     | 8           | 7         | 819.00                        | 1638.00                        | Horizontal              | -37.32                     | -13.00         | -24.32         |
|      |            |     |             |           |                               | 2457.00                        |                         | -31.59                     | -13.00         | -18.59         |
|      |            |     |             |           |                               | 3276.00                        |                         | -53.33                     | -13.00         | -40.33         |
|      | 16QAM      | 3   | 15          | 0         | 822.50                        | 1645.00                        | Vertical                | -35.39                     | -13.00         | -22.39         |
|      |            |     |             |           |                               | 2467.50                        |                         | -29.29                     | -13.00         | -16.29         |
|      |            |     |             |           |                               | 3290.00                        |                         | -54.48                     | -13.00         | -41.48         |
|      |            |     | 15          | 0         | 822.50                        | 1645.00                        | Horizontal              | -35.86                     | -13.00         | -22.86         |
|      |            |     |             |           |                               | 2467.50                        |                         | -30.42                     | -13.00         | -17.42         |
|      |            |     |             |           |                               | 3290.00                        |                         | -55.55                     | -13.00         | -42.55         |

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| Band | Modulation | CB | No.fo<br>RB | RB<br>Pos | Channel<br>Frequency<br>(MHz) | Measured<br>Frequency<br>(MHz) | Antenna<br>Polarization | Emission<br>Level<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) |
|------|------------|----|-------------|-----------|-------------------------------|--------------------------------|-------------------------|----------------------------|----------------|----------------|
| 26   | 16QAM      | 5  | 1           | 24        | 816.50                        | 1633.00                        | Vertical                | -35.05                     | -13.00         | -22.05         |
|      |            |    |             |           |                               | 2449.50                        |                         | -26.61                     | -13.00         | -13.61         |
|      |            |    |             |           |                               | 3266.00                        |                         | -49.51                     | -13.00         | -36.51         |
|      |            |    |             |           |                               | 1633.00                        | Horizontal              | -34.28                     | -13.00         | -21.28         |
|      |            |    |             |           |                               | 2449.50                        |                         | -28.29                     | -13.00         | -15.29         |
|      |            |    |             |           |                               | 3266.00                        |                         | -52.81                     | -13.00         | -39.81         |
|      |            |    | 25          | 0         | 819.00                        | 1638.00                        | Vertical                | -39.85                     | -13.00         | -26.85         |
|      |            |    |             |           |                               | 2457.00                        |                         | -30.30                     | -13.00         | -17.30         |
|      |            |    |             |           |                               | 3276.00                        |                         | -54.80                     | -13.00         | -41.80         |
|      |            |    |             |           |                               | 1638.00                        | Horizontal              | -39.26                     | -13.00         | -26.26         |
|      |            |    |             |           |                               | 2457.00                        |                         | -32.29                     | -13.00         | -19.29         |
|      |            |    |             |           |                               | 3276.00                        |                         | -54.89                     | -13.00         | -41.89         |
|      |            |    | 25          | 0         | 821.50                        | 1643.00                        | Vertical                | -37.97                     | -13.00         | -24.97         |
|      |            |    |             |           |                               | 2464.50                        |                         | -30.57                     | -13.00         | -17.57         |
|      |            |    |             |           |                               | 3286.00                        |                         | -54.18                     | -13.00         | -41.18         |
|      |            |    |             |           |                               | 1643.00                        | Horizontal              | -38.77                     | -13.00         | -25.77         |
|      |            |    |             |           |                               | 2464.50                        |                         | -33.59                     | -13.00         | -20.59         |
|      |            |    |             |           |                               | 3286.00                        |                         | -55.18                     | -13.00         | -42.18         |
|      | 16QAM      | 10 | 50          | 0         | 819.00                        | 1638.00                        | Vertical                | -42.54                     | -13.00         | -29.54         |
|      |            |    |             |           |                               | 2457.00                        |                         | -35.93                     | -13.00         | -22.93         |
|      |            |    |             |           |                               | 3276.00                        |                         | -55.57                     | -13.00         | -42.57         |
|      |            |    |             |           |                               | 1638.00                        | Horizontal              | -42.43                     | -13.00         | -29.43         |
|      |            |    |             |           |                               | 2457.00                        |                         | -38.54                     | -13.00         | -25.54         |
|      |            |    |             |           |                               | 3276.00                        |                         | -55.77                     | -13.00         | -42.77         |

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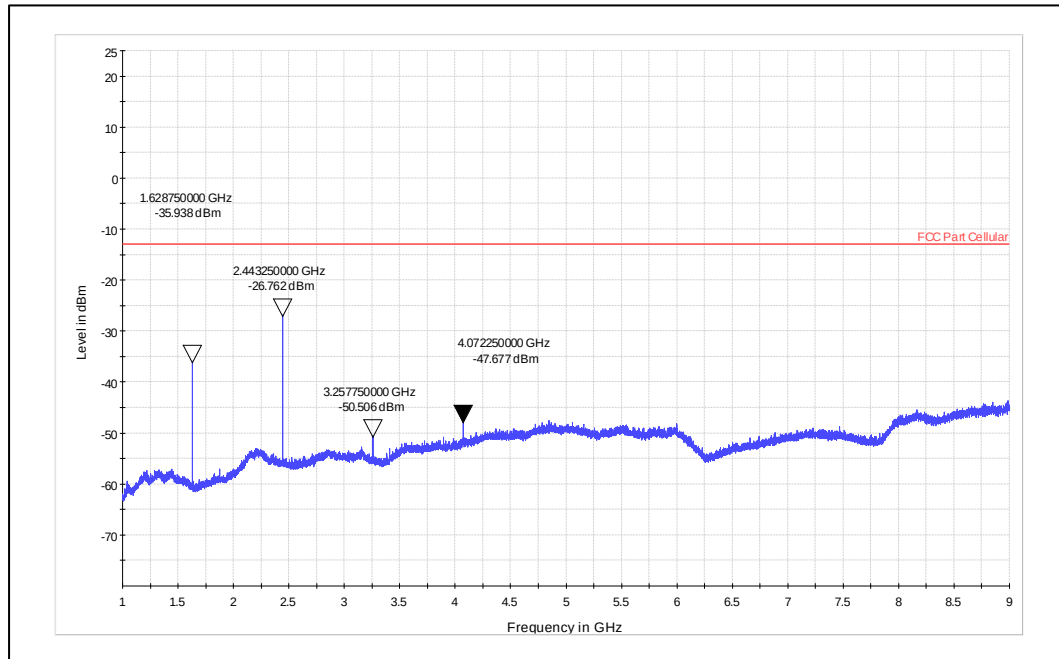
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## Test Plots:

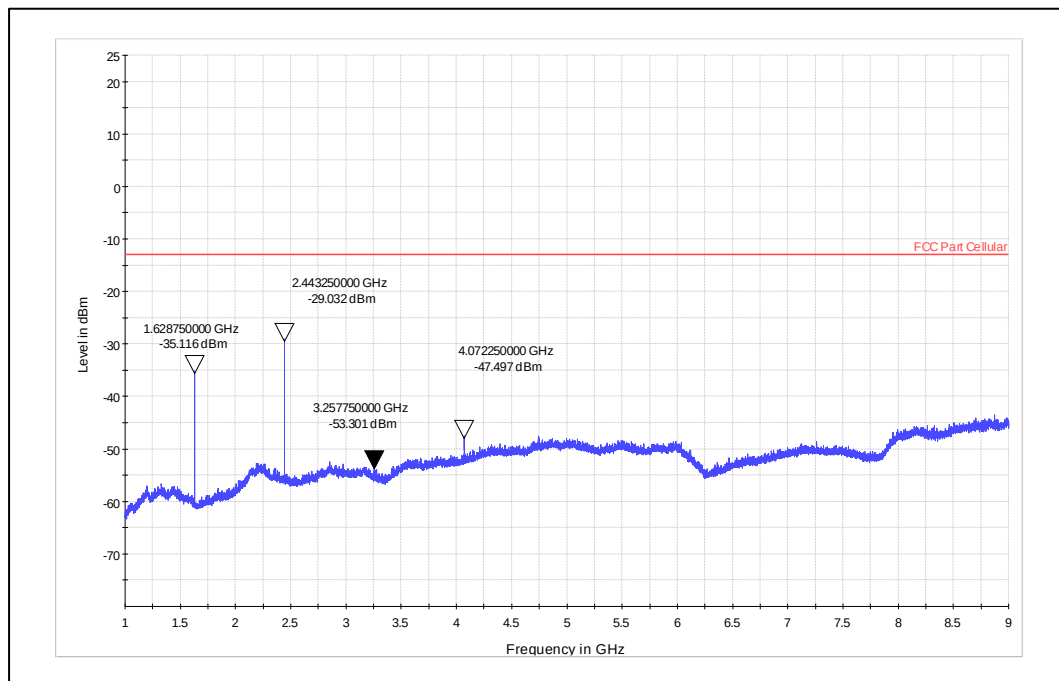
Cell Bandwidth: 1.4MHz

Channel Frequency: 814.7MHz; Modulation: QPSK; 3RB#1



Frequency Range: 1GHz – 9GHz

Antenna Polarization: Vertical



Frequency Range: 1GHz – 9GHz

Antenna Polarization: Horizontal

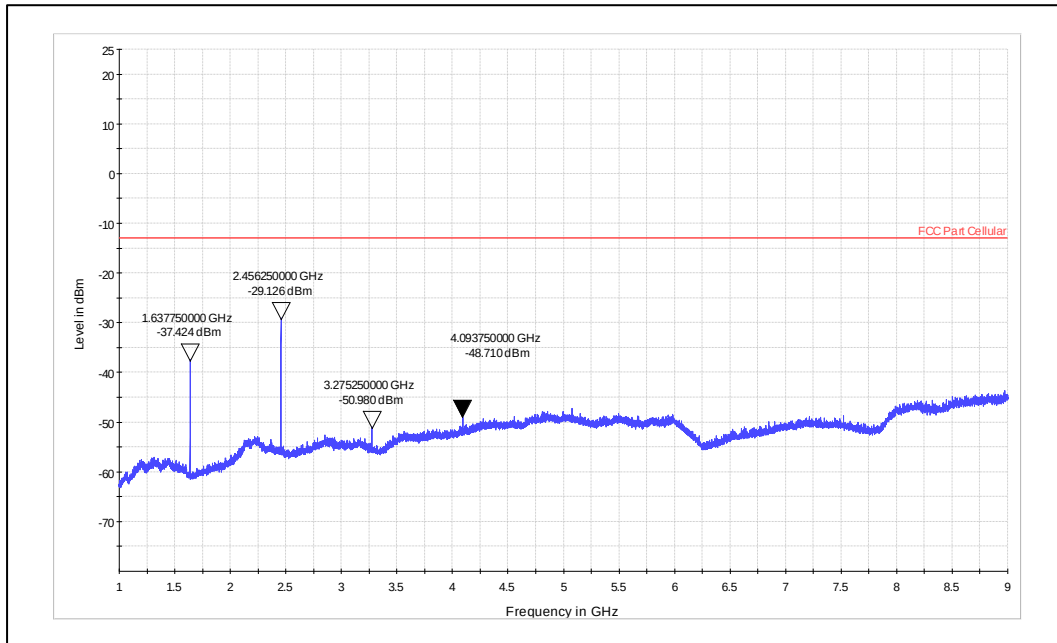


**Prüfbericht - Nr.:**  
Test Report No.:

**IN25DWD0 001**

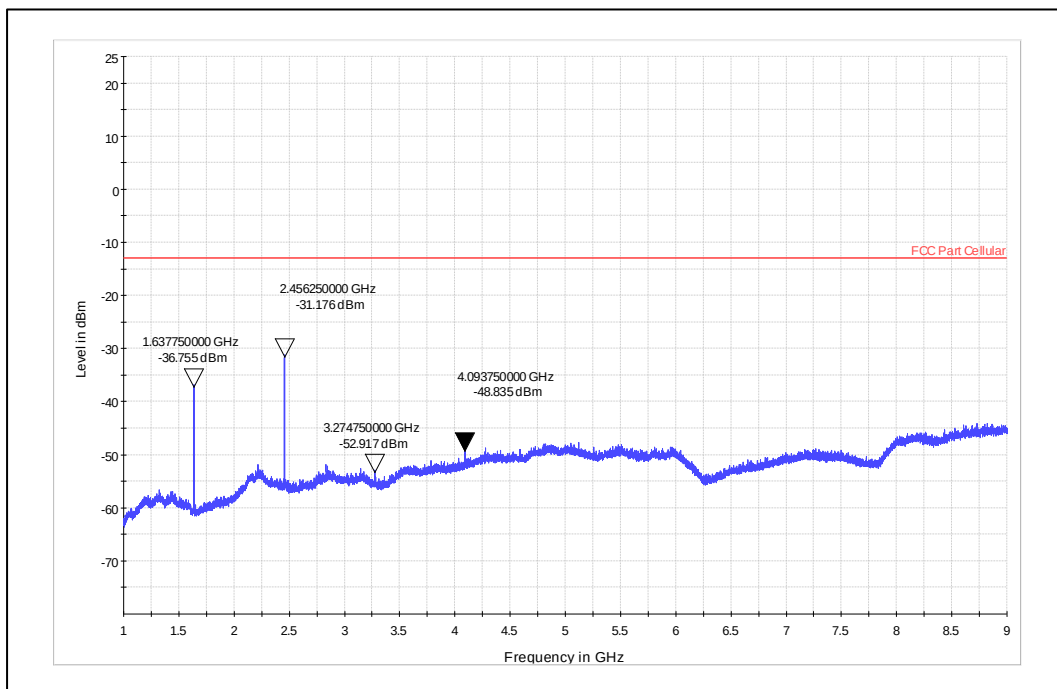
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**Channel Frequency: 819MHz; Modulation: QPSK; 3RB#0**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

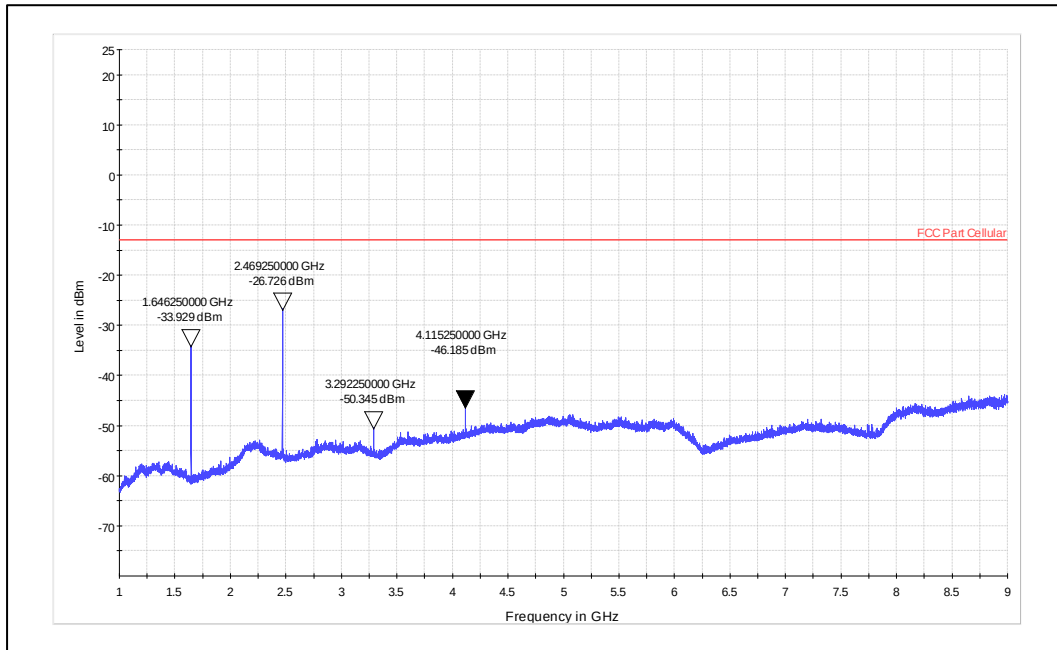
**Antenna Polarization: Horizontal**

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

**IN25DWD0 001**

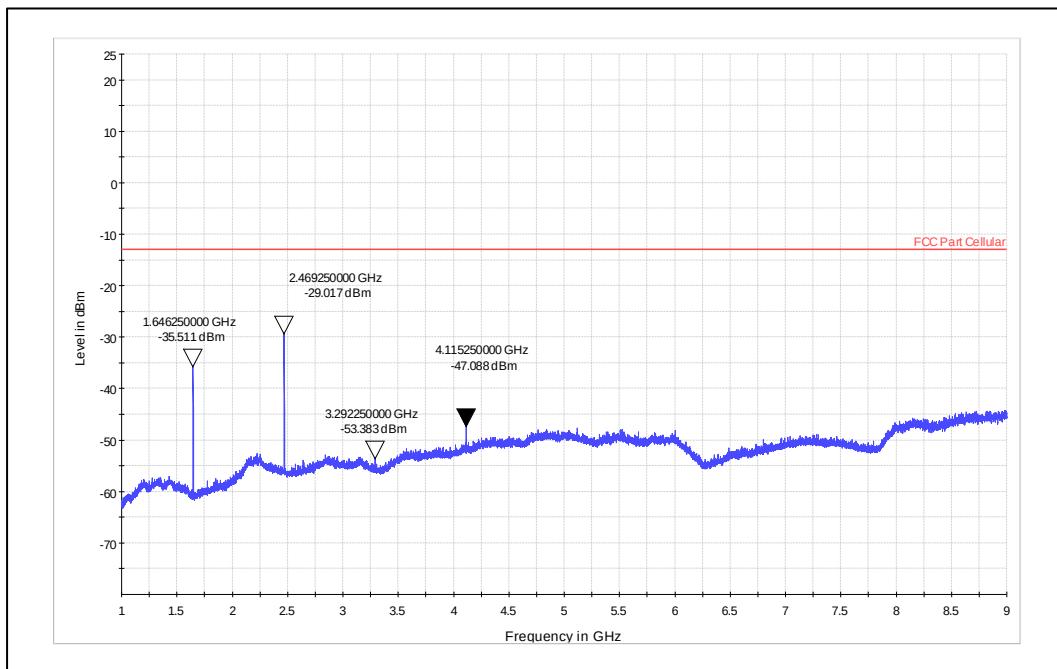
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**Channel Frequency: 823.3MHz; Modulation: QPSK; 3RB#0**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Horizontal**

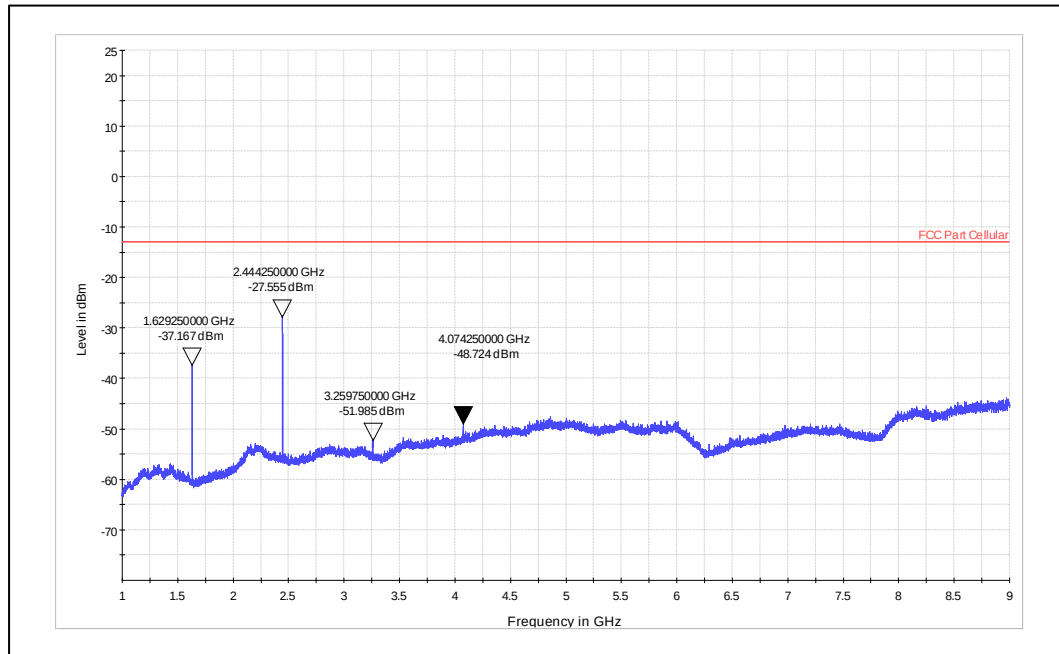
**Prüfbericht - Nr.:**  
Test Report No.:

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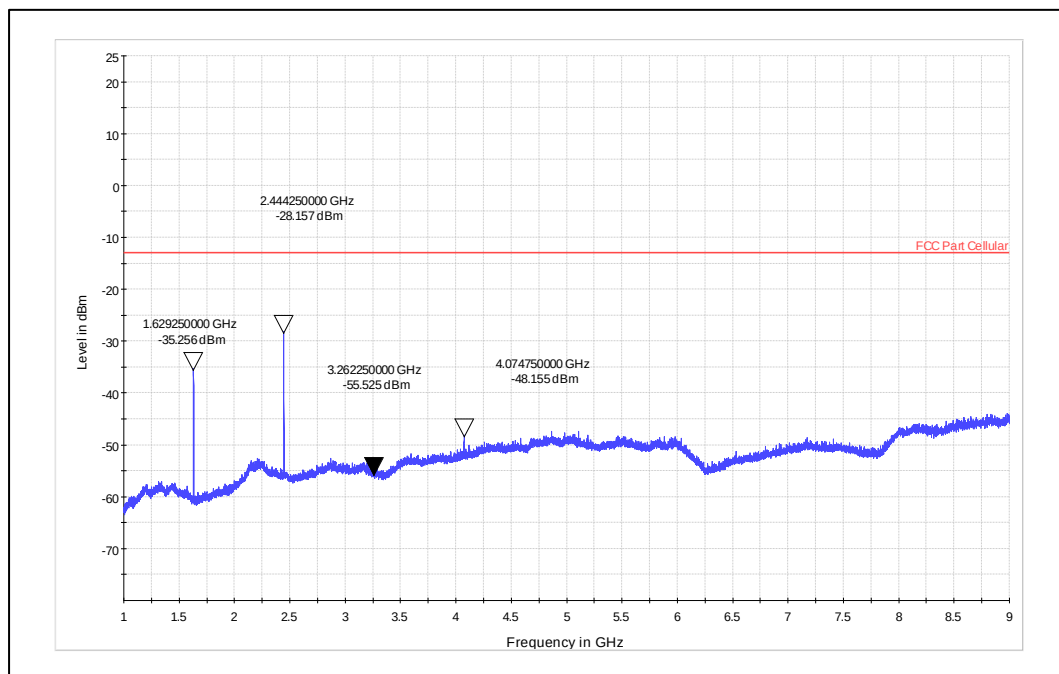
**Cell Bandwidth: 3MHz**

**Channel Frequency: 815.5MHz; Modulation: 16QAM; 8RB#0**



**Frequency Range: 1GHz – 9GHz**

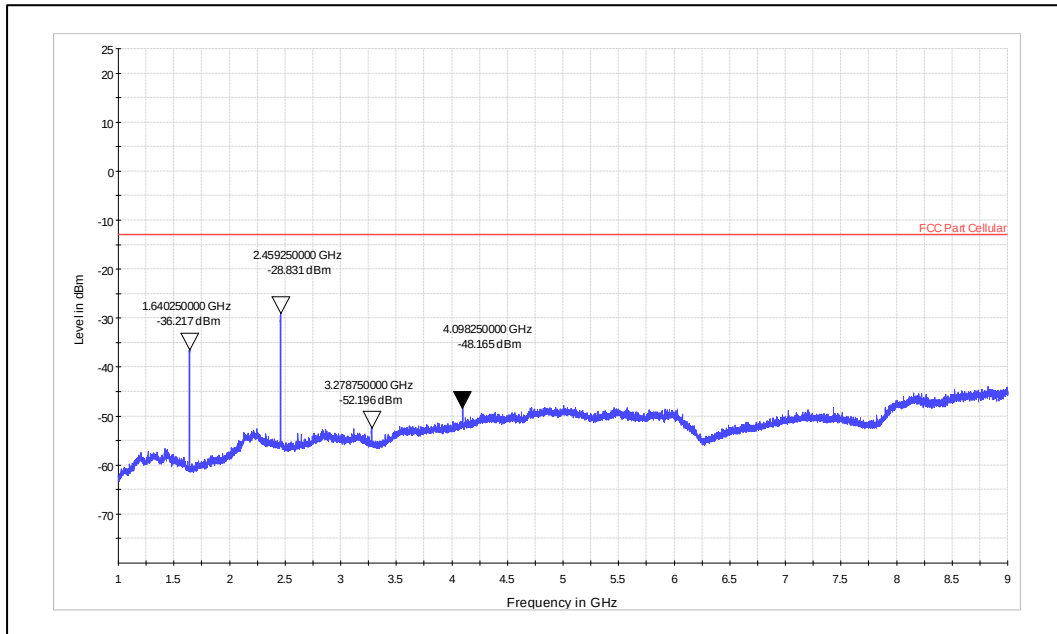
**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

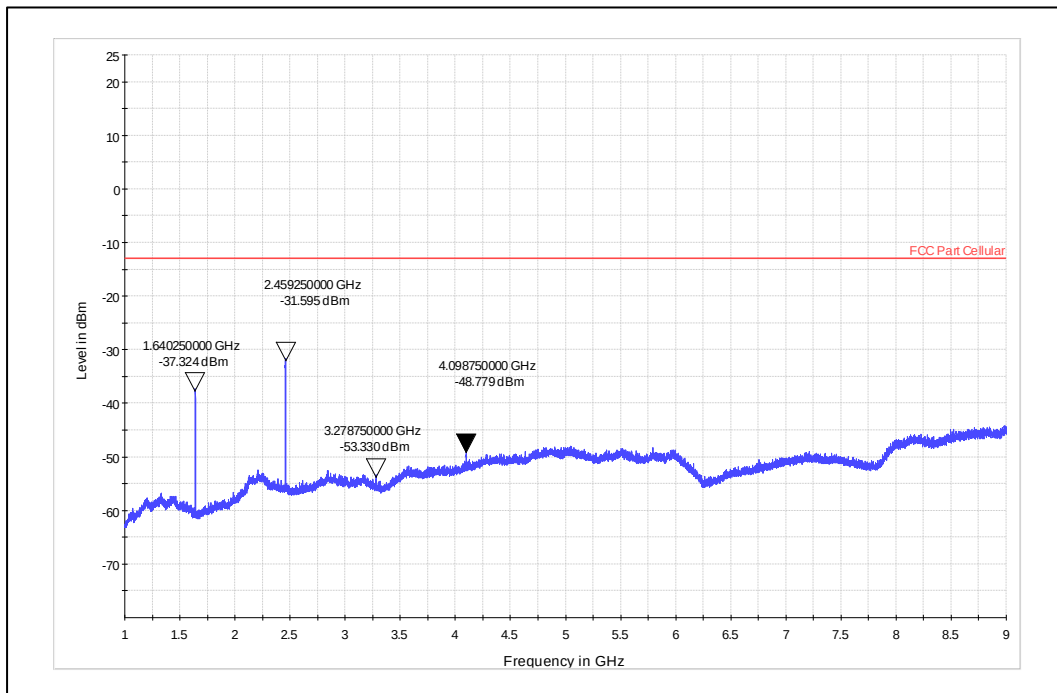
**Antenna Polarization: Horizontal**

**Channel Frequency: 819MHz; Modulation: 16QAM; 8RB#7**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

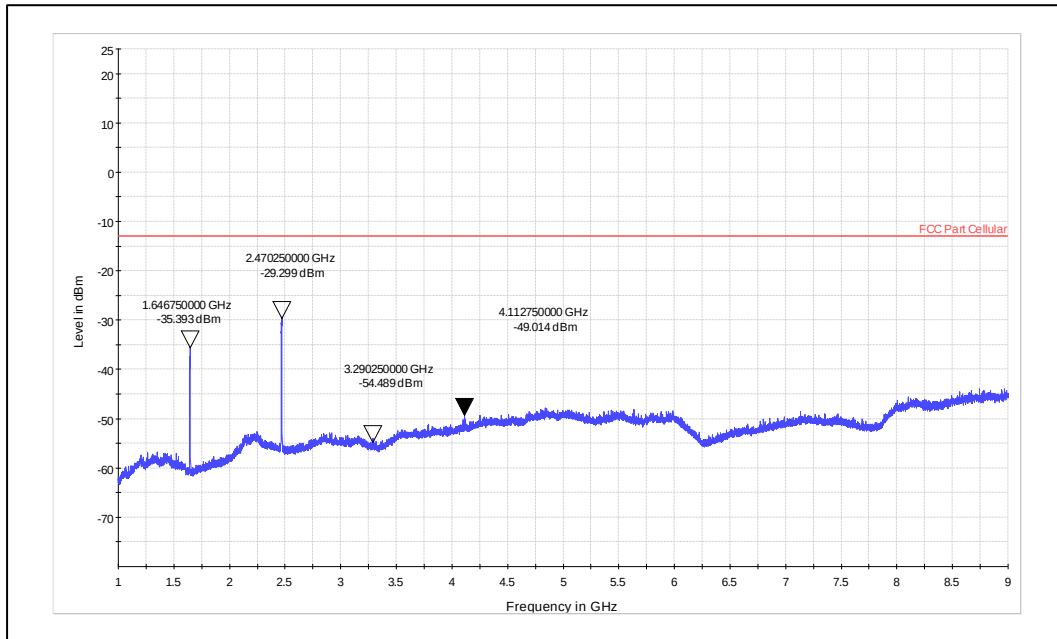
**Antenna Polarization: Horizontal**

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

**IN25DWD0 001**

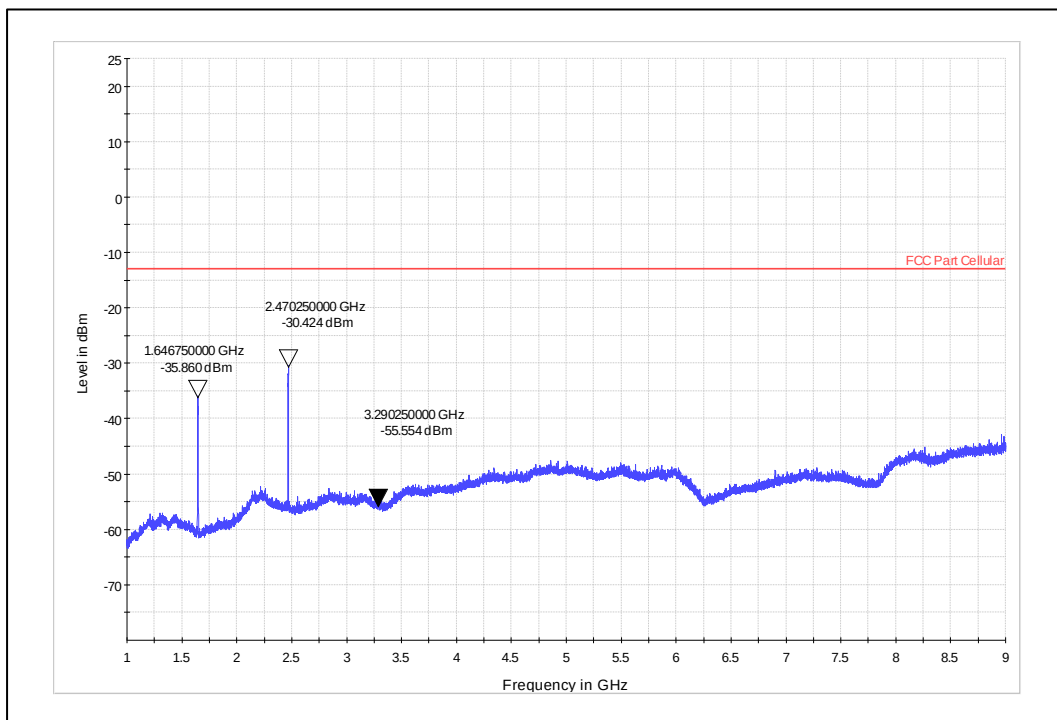
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**Channel Frequency: 823.3MHz; Modulation: 16QAM; 15RB#0**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Horizontal**

**Prüfbericht - Nr.:**

Test Report No.:

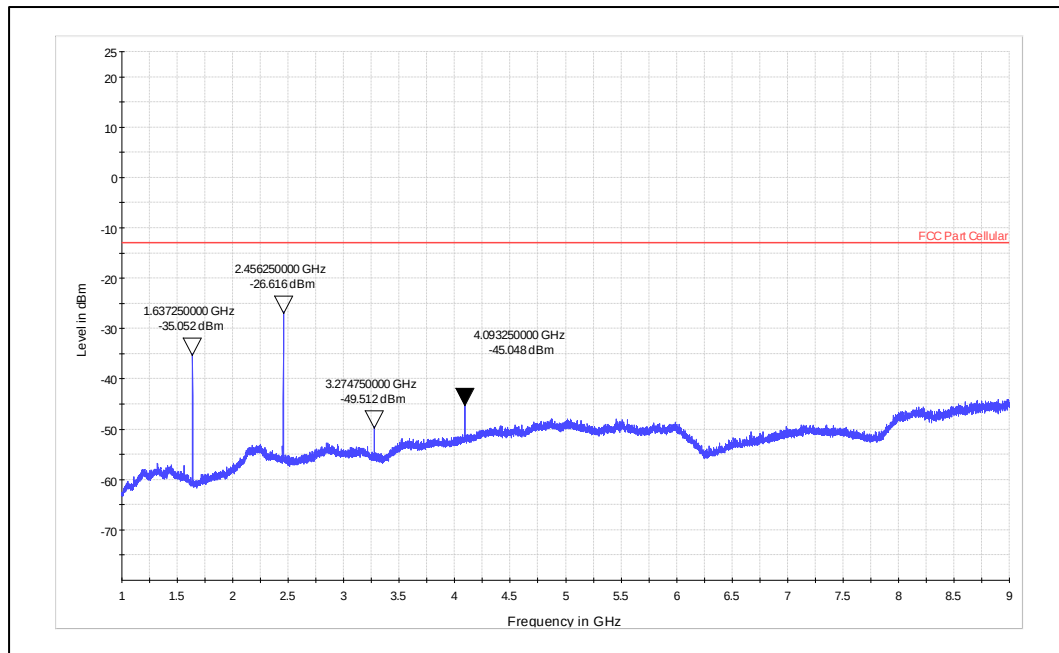
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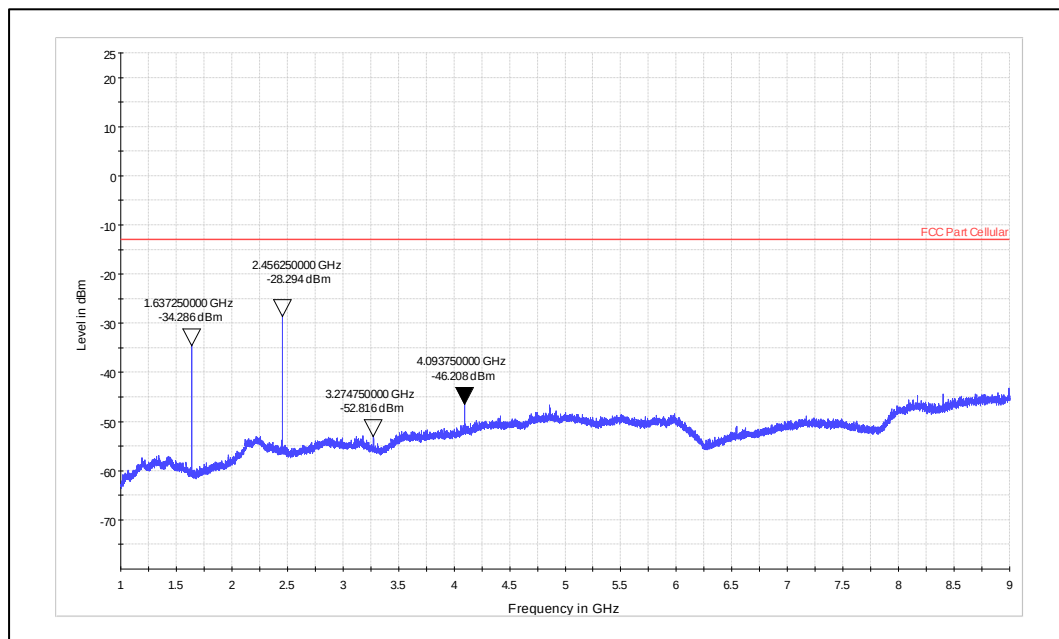
**Cell Bandwidth: 5MHz**

**Channel Frequency: 816.5MHz; Modulation: 16QAM; 1RB#24**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

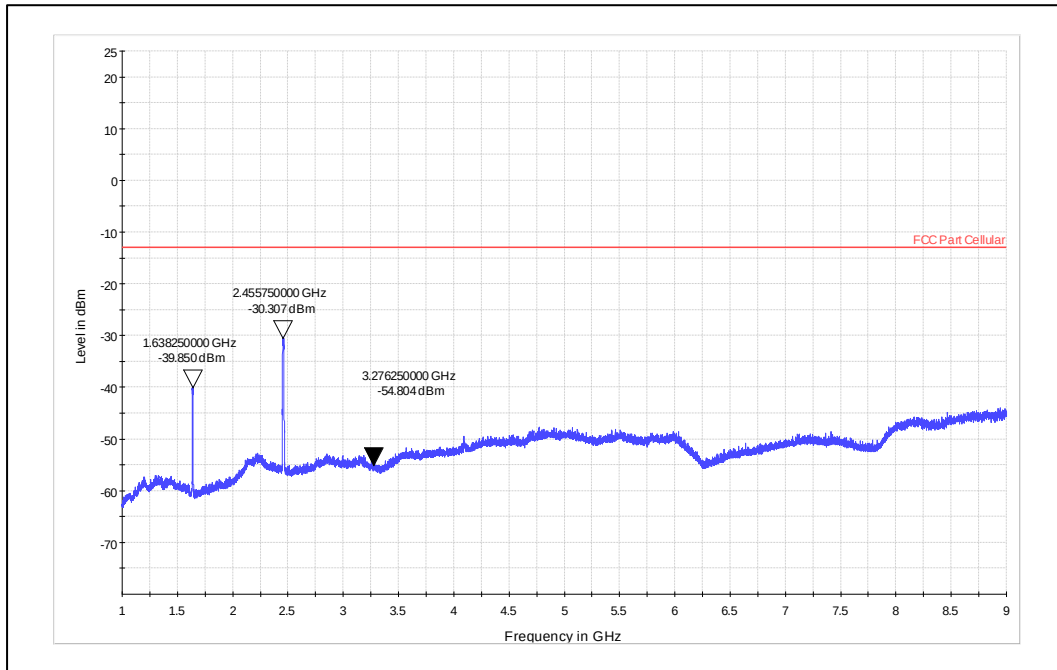
**Antenna Polarization: Horizontal**

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

**IN25DWD0 001**

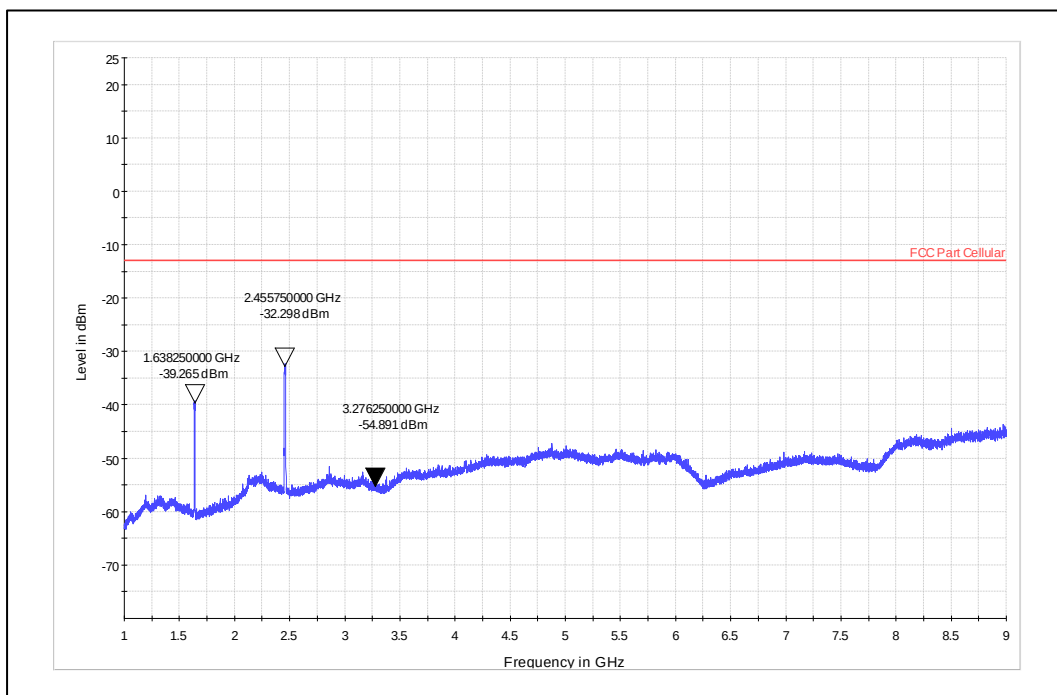
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**Channel Frequency: 819MHz; Modulation: 16QAM; 25RB#0**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

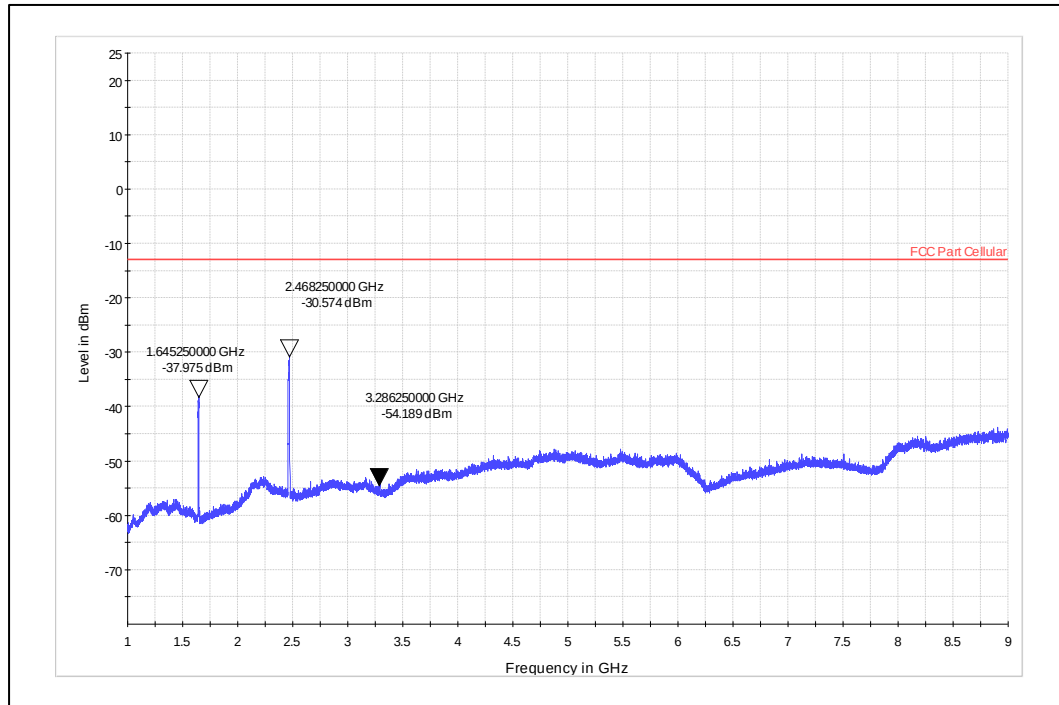
**Antenna Polarization: Horizontal**

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

**IN25DWD0 001**

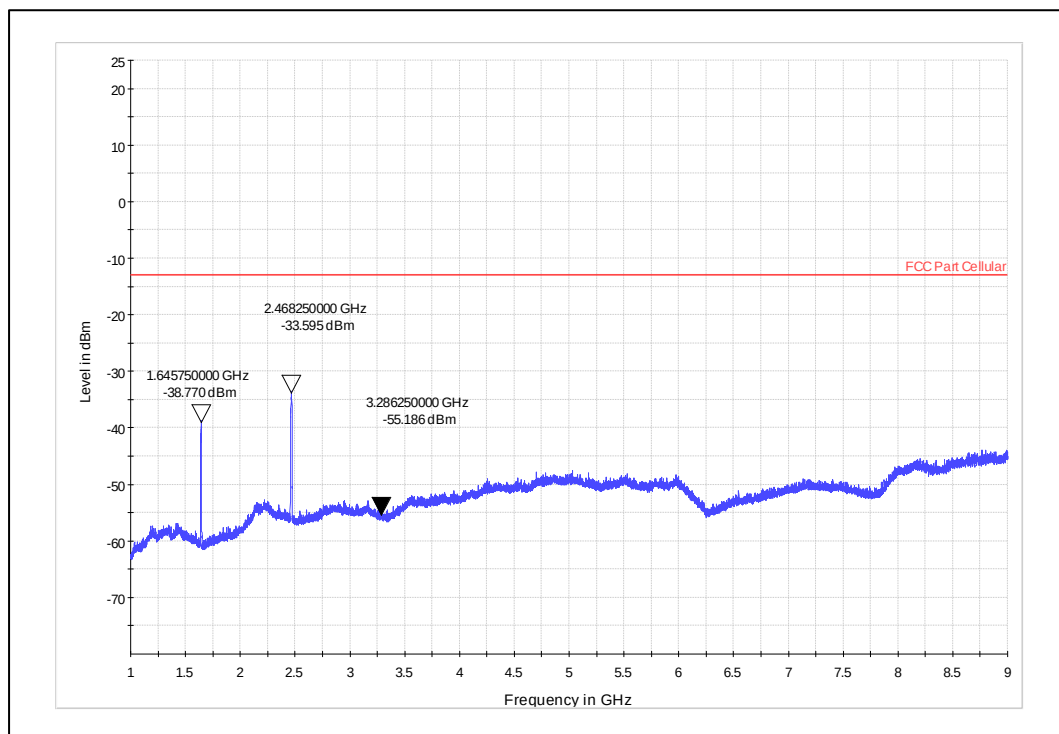
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**Channel Frequency: 821.5MHz; Modulation: 16QAM; 25#0**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Horizontal**



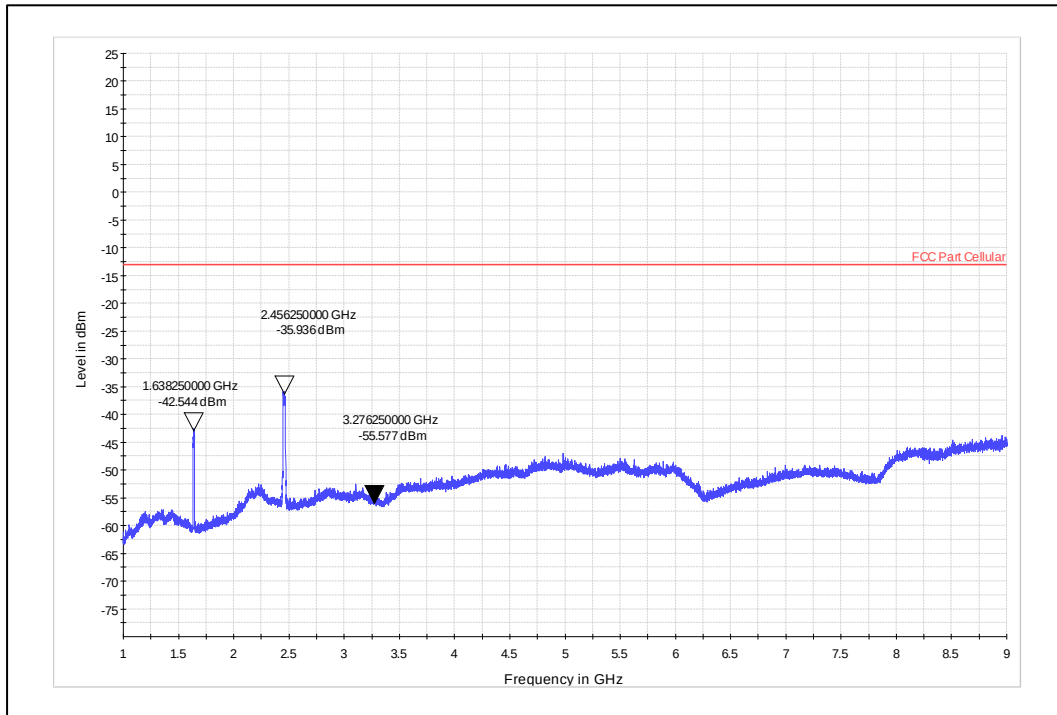
**Prüfbericht - Nr.:**  
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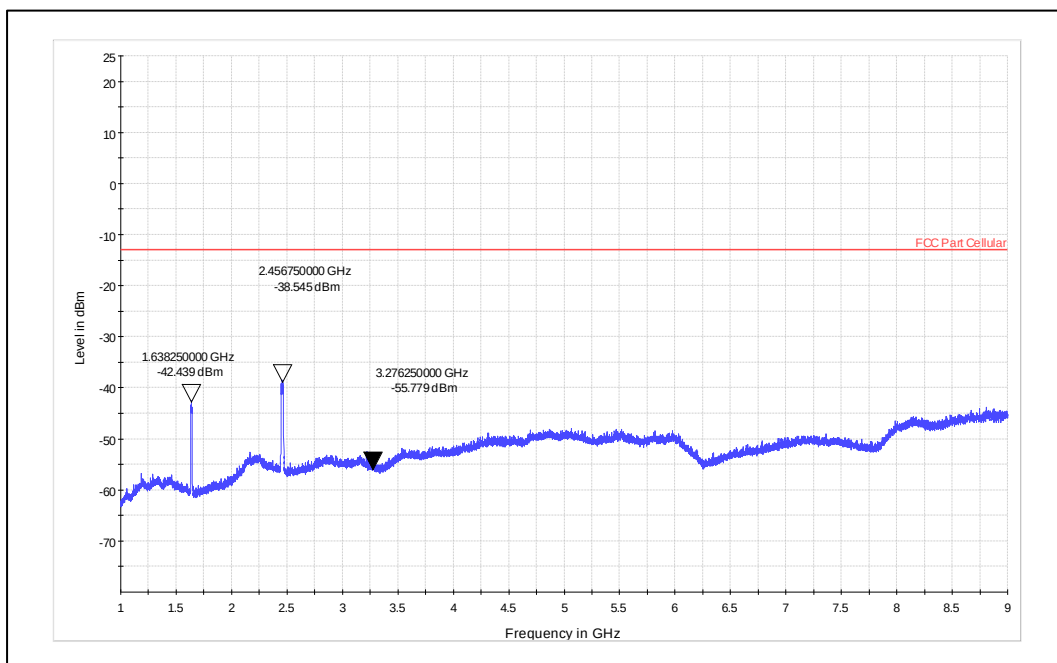
**Cell Bandwidth: 10MHz**

**Channel Frequency: 819MHz; Modulation: 16QAM; 50RB#0**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Vertical**



**Frequency Range: 1GHz – 9GHz**

**Antenna Polarization: Horizontal**

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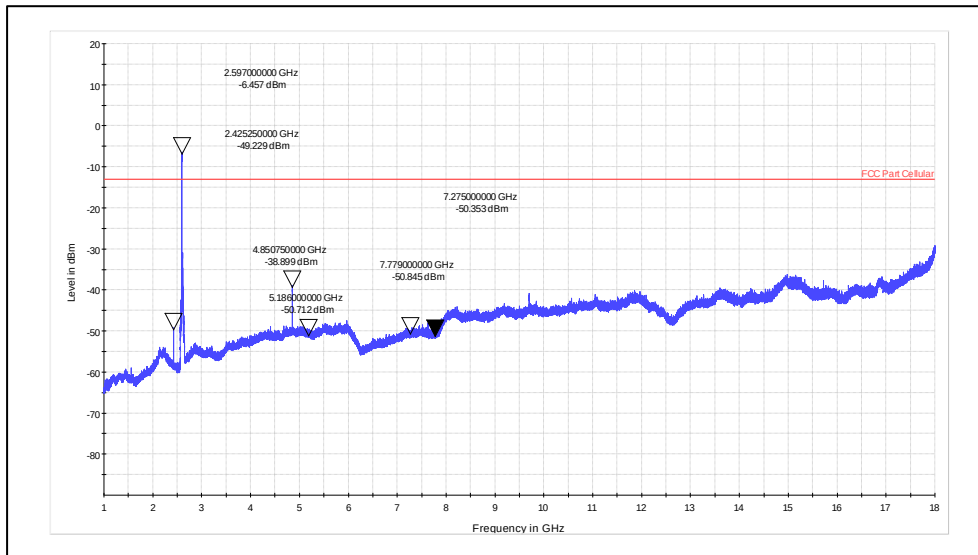
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Simultaneous Operation: Proprietary Protocol (2425) with LTE Band

Simultaneous Operation: Proprietary protocol + LTE

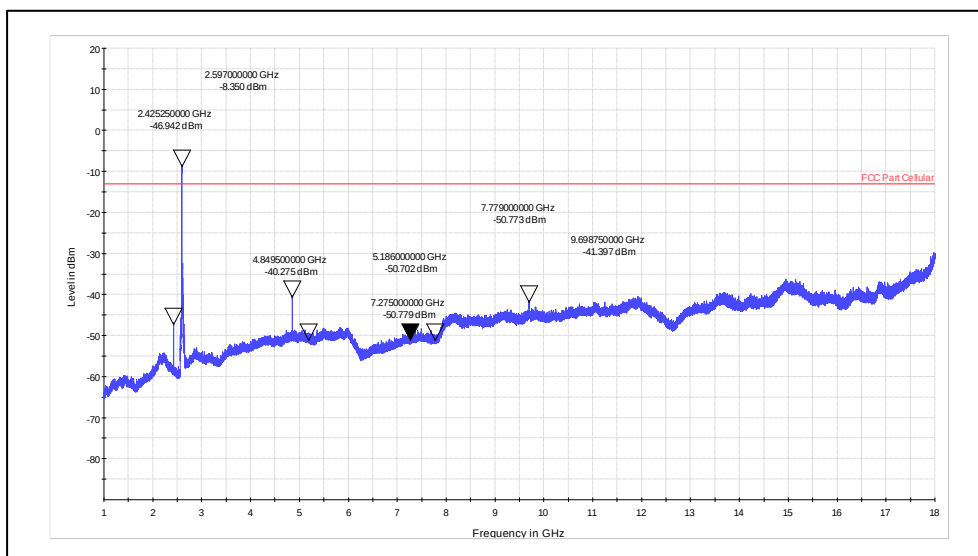
| Channel Frequency (MHz) | Antenna Polarization | Measured Frequency (MHz) | Measured Spurious Emission (dBm) | Limit (dBm) | Margin (dB) |
|-------------------------|----------------------|--------------------------|----------------------------------|-------------|-------------|
| 2593.00                 | Vertical             | 5186.00                  | -50.71                           | -13.00      | -37.71      |
|                         |                      | 7779.00                  | -50.84                           | -13.00      | -37.84      |
| 2425.00                 |                      | 4850.00                  | -38.89                           | -13.00      | -25.89      |
|                         | Horizontal           | 7275.00                  | -50.35                           | -13.00      | -37.35      |
| 2593.00                 |                      | 5186.00                  | -50.70                           | -13.00      | -37.70      |
|                         |                      | 7779.00                  | -50.77                           | -13.00      | -37.77      |
| 2425.00                 |                      | 4850.00                  | -40.27                           | -13.00      | -27.27      |
|                         |                      | 7275.00                  | -50.77                           | -13.00      | -37.77      |

### Test Plots:



Channel Frequency: 2593MHz & 2425MHz

Polarization: Vertical



Channel Frequency: 2593MHz & 2425MHz

Polarization: Horizontal

**Prüfbericht - Nr.:**  
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## 8 AC Power Line Conducted Emission

**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

### Limits of section 15.207

| Frequency of emission<br>(MHz) | Conducted limit<br>(dBµV) |                   |
|--------------------------------|---------------------------|-------------------|
|                                | Quasi-peak<br>(dBµV)      | Average<br>(dBµV) |
| 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 mains Relative Humidity = 64%

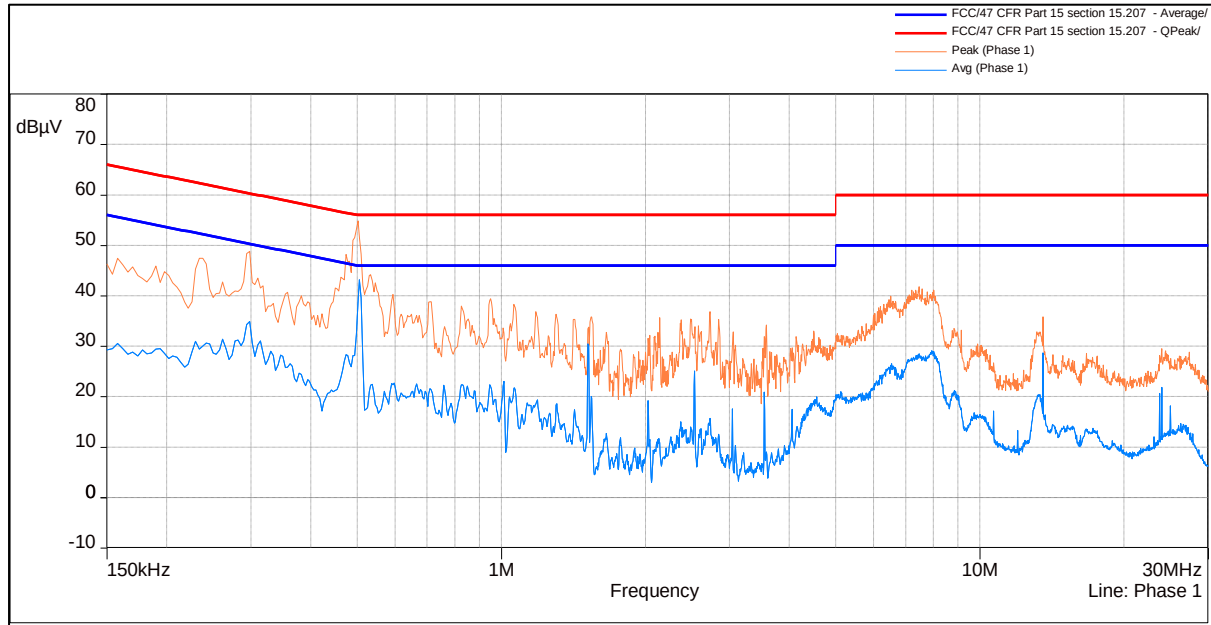
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## Test Result:

### 110VAC-60Hz-Line



### Quasi Peak:

| Frequency (MHz) | Level (dBμV) | Limit (dBμV) | Margin (dB) | Comments |
|-----------------|--------------|--------------|-------------|----------|
| 0.50425         | 44.93        | 56           | -11.07      | Pass     |
| 0.29665         | 45.4         | 60.3         | -14.9       | Pass     |
| 0.94415         | 36.19        | 56           | -19.81      | Pass     |
| 0.2345          | 40.73        | 62.31        | -21.58      | Pass     |
| 1.52025         | 33.54        | 56           | -22.46      | Pass     |
| 7.91375         | 35.9         | 60           | -24.1       | Pass     |
| 1.2966          | 31.83        | 56           | -24.17      | Pass     |
| 13.5616         | 33.98        | 60           | -26.02      | Pass     |
| 2.5349          | 29.44        | 56           | -26.56      | Pass     |

### Average:

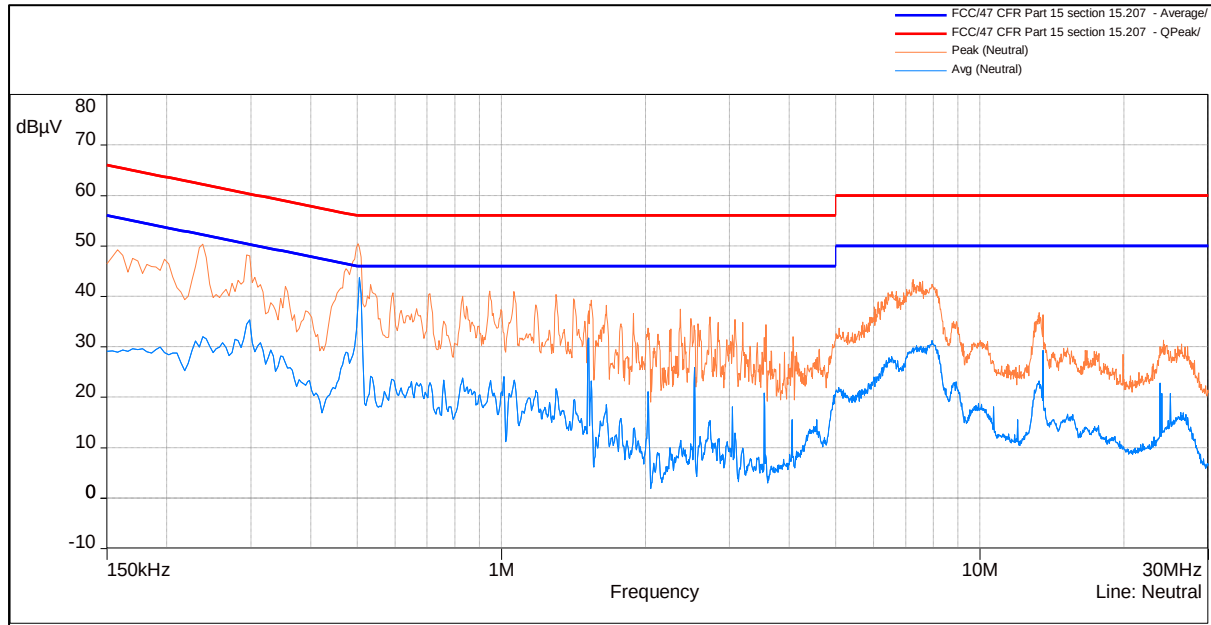
| Frequency (MHz) | Level (dBμV) | Limit (dBμV) | Margin (dB) | Comments |
|-----------------|--------------|--------------|-------------|----------|
| 0.50425         | 41.63        | 46           | -4.37       | Pass     |
| 1.52025         | 32.17        | 46           | -13.83      | Pass     |
| 0.29665         | 34.77        | 50.3         | -15.53      | Pass     |
| 2.5349          | 25.6         | 46           | -20.4       | Pass     |
| 13.5616         | 27.57        | 50           | -22.43      | Pass     |
| 7.91375         | 27.36        | 50           | -22.64      | Pass     |
| 0.94415         | 21.87        | 46           | -24.13      | Pass     |
| 0.2345          | 27.61        | 52.31        | -24.7       | Pass     |
| 1.2966          | 17.39        | 46           | -28.61      | Pass     |

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**110VAC-60Hz-Neutral:**



**Quasipeak:**

| Frequency (MHz) | Level (dBμV) | Limit (dBμV) | Margin (dB) | Comments |
|-----------------|--------------|--------------|-------------|----------|
| 0.50285         | 44.4         | 56           | -11.6       | Pass     |
| 0.29845         | 43.56        | 60.3         | -16.74      | Pass     |
| 0.2371          | 42.89        | 62.17        | -19.28      | Pass     |
| 1.06335         | 36.61        | 56           | -19.39      | Pass     |
| 1.53685         | 35.4         | 56           | -20.6       | Pass     |
| 7.95285         | 37.33        | 60           | -22.67      | Pass     |
| 13.55885        | 34.15        | 60           | -25.85      | Pass     |
| 2.53355         | 28.57        | 56           | -27.43      | Pass     |

**Average:**

| Frequency (MHz) | Level (dBμV) | Limit (dBμV) | Margin (dB) | Comments |
|-----------------|--------------|--------------|-------------|----------|
| 0.50285         | 39.16        | 46           | -6.84       | Pass     |
| 0.29845         | 33.45        | 50.3         | -16.84      | Pass     |
| 2.53355         | 25.86        | 46           | -20.14      | Pass     |
| 7.95285         | 28.93        | 50           | -21.07      | Pass     |
| 0.2371          | 30.51        | 52.17        | -21.66      | Pass     |
| 13.55885        | 28.29        | 50           | -21.71      | Pass     |
| 1.06335         | 22.37        | 46           | -23.63      | Pass     |
| 1.53685         | 21.66        | 46           | -24.34      | Pass     |

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