

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                 |                                                                                    |                                                 |                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Prüfbericht-Nr.:</b><br><i>Test report no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>CN256888 001</b>                                                                                             | <b>Auftrags-Nr.:</b><br><i>Order no.:</i>                                          | <b>326130962</b>                                | <b>Seite 1 von 40</b><br><i>Page 1 of 40</i>                                          |
| <b>Kunden-Referenz-Nr.:</b><br><i>Client reference no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                          | /                                                                                                               | <b>Auftragsdatum:</b><br><i>Order date:</i>                                        | <b>2025-09-18</b>                               |                                                                                       |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Hannto Technology Co., Ltd.</b><br>Room 704, Building 1, No. 88, Shengrong Road, Pudong, Shanghai, China     |                                                                                    |                                                 |                                                                                       |
| <b>Prüfgegenstand:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                                                                          | Portable Photo Printer                                                                                          |                                                                                    |                                                 |                                                                                       |
| <b>Bezeichnung / Typ-Nr.:</b><br><i>Identification / Type no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                   | DMP130                                                                                                          |                                                                                    |                                                 |                                                                                       |
| <b>Auftrags-Inhalt:</b><br><i>Order content:</i>                                                                                                                                                                                                                                                                                                                                                                                                                     | Complete test                                                                                                   |                                                                                    |                                                 |                                                                                       |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                                                                  | FCC CFR47 Part 15, Subpart C Section 15.247<br>ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024 |                                                                                    |                                                 |                                                                                       |
| <b>Wareneingangsdatum:</b><br><i>Date of sample receipt:</i>                                                                                                                                                                                                                                                                                                                                                                                                         | 2025-09-22                                                                                                      |                                                                                    |                                                 |                                                                                       |
| <b>Prüfmuster-Nr.:</b><br><i>Test sample no.:</i>                                                                                                                                                                                                                                                                                                                                                                                                                    | A004097853-001                                                                                                  |                                                                                    |                                                 |                                                                                       |
| <b>Prüfzeitraum:</b><br><i>Testing period:</i>                                                                                                                                                                                                                                                                                                                                                                                                                       | 2025-10-16~2025-10-28                                                                                           |                                                                                    |                                                 |                                                                                       |
| <b>Ort der Prüfung:</b><br><i>Place of testing:</i>                                                                                                                                                                                                                                                                                                                                                                                                                  | TÜV Rheinland (Shanghai)<br>Co., Ltd.                                                                           |                                                                                    |                                                 |                                                                                       |
| <b>Prüflaboratorium:</b><br><i>Testing laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                                                               | TÜV Rheinland (Shanghai)<br>Co., Ltd.                                                                           |                                                                                    |                                                 |                                                                                       |
| <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>                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2025-11-19<br><small>Signed by: Tianlin Li</small>                                                              |                                                                                    | <b>Ausstellungsdatum:</b><br><i>Issue date:</i> | 2025-11-19<br><small>Signed by: Yanli Fan</small>                                     |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | Sachverständige(r)/Expert                                                                                       |                                                                                    | <b>Stellung / Position:</b>                     | Sachverständige(r)/Expert                                                             |
| <b>Sonstiges /</b><br><i>Other:</i>                                                                                                                                                                                                                                                                                                                                                                                                                                  | FCC ID: 2AZHDDMP130                                                                                             |                                                                                    |                                                 |                                                                                       |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br><i>Condition of the test item at delivery:</i>                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                 | Prüfmuster vollständig und unbeschädigt<br><i>Test item complete and undamaged</i> |                                                 |                                                                                       |
| <small>* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet<br/>* Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</small>                                                                                                                                                             |                                                                                                                 |                                                                                    |                                                 |                                                                                       |
| <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 above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i> |                                                                                                                 |                                                                                    |                                                 |                                                                                       |

Prüfbericht-Nr.: CN256888 001  
Test report no.:

Seite 2 von 40  
Page 2 of 40

**Anmerkungen**  
*Remarks*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</p> <p>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2 | <p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: <a href="http://go.tuv.com/digital-signature">go.tuv.com/digital-signature</a></p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: <a href="http://go.tuv.com/digital-signature">go.tuv.com/digital-signature</a></i></p> |
| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.</p> <p>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2023, 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. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2023, 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. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p>                                                                                                                                                                                                                                                                                       |

## TEST SUMMARY

### 5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

### 5.1.2 6dB & 99% BANDWIDTH

RESULT: Pass

### 5.1.3 OUTPUT POWER

RESULT: Pass

### 5.1.4 POWER SPECTRAL DENSITY

RESULT: Pass

### 5.1.5 CONDUCTED BAND EDGE AND OUT-OF BAND EMISSIONS

RESULT: Pass

### 5.2.1 CONDUCTED EMISSION

RESULT: Pass

### 5.3.1 RADIATED BAND-EDGE

RESULT: Pass

### 5.3.2 RADIATED SPURIOUS EMISSION

RESULT: Pass

## Contents

|            |                                                           |           |
|------------|-----------------------------------------------------------|-----------|
| <b>1.</b>  | <b>GENERAL REMARKS .....</b>                              | <b>5</b>  |
| <b>1.1</b> | <b>COMPLEMENTARY MATERIALS.....</b>                       | <b>5</b>  |
| <b>2.</b>  | <b>TEST SITES .....</b>                                   | <b>5</b>  |
| <b>2.1</b> | <b>TEST FACILITIES .....</b>                              | <b>5</b>  |
| <b>2.2</b> | <b>LIST OF TEST AND MEASUREMENT INSTRUMENTS.....</b>      | <b>6</b>  |
| <b>2.3</b> | <b>TRACEABILITY .....</b>                                 | <b>6</b>  |
| <b>2.4</b> | <b>CALIBRATION .....</b>                                  | <b>7</b>  |
| <b>2.5</b> | <b>MEASUREMENT UNCERTAINTY.....</b>                       | <b>7</b>  |
| <b>3.</b>  | <b>GENERAL PRODUCT INFORMATION.....</b>                   | <b>8</b>  |
| <b>3.1</b> | <b>PRODUCT FUNCTION AND INTENDED USE .....</b>            | <b>8</b>  |
| <b>3.2</b> | <b>RATINGS AND SYSTEM DETAILS.....</b>                    | <b>8</b>  |
| <b>3.3</b> | <b>INDEPENDENT OPERATION MODES.....</b>                   | <b>9</b>  |
| <b>3.4</b> | <b>NOISE GENERATING AND NOISE SUPPRESSING PARTS .....</b> | <b>9</b>  |
| <b>4.</b>  | <b>TEST SET-UP AND OPERATION MODES.....</b>               | <b>10</b> |
| <b>4.1</b> | <b>PRINCIPLE OF CONFIGURATION SELECTION .....</b>         | <b>10</b> |
| <b>4.2</b> | <b>TEST OPERATION AND TEST SOFTWARE.....</b>              | <b>10</b> |
| <b>4.3</b> | <b>SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT .....</b>  | <b>10</b> |
| <b>4.4</b> | <b>COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE.....</b>     | <b>10</b> |
| <b>5.</b>  | <b>TEST RESULTS .....</b>                                 | <b>12</b> |
| <b>5.1</b> | <b>CONDUCTED TESTING AT ANTENNA PORT .....</b>            | <b>12</b> |
| 5.1.1      | <i>Antenna Requirement .....</i>                          | <i>12</i> |
| 5.1.2      | <i>6dB &amp; 99% Bandwidth .....</i>                      | <i>13</i> |
| 5.1.3      | <i>Output Power .....</i>                                 | <i>20</i> |
| 5.1.4      | <i>Power Spectral Density.....</i>                        | <i>21</i> |
| 5.1.5      | <i>Conducted Band Edge and out-of Band Emissions.....</i> | <i>25</i> |
| <b>5.2</b> | <b>EMISSION IN THE FREQUENCY RANGE UP TO 30MHz.....</b>   | <b>28</b> |
| 5.2.1      | <i>Conducted Emission .....</i>                           | <i>28</i> |
| <b>5.3</b> | <b>EMISSION IN THE FREQUENCY RANGE ABOVE 30MHz .....</b>  | <b>30</b> |
| 5.3.1      | <i>Radiated Band-Edge.....</i>                            | <i>30</i> |
| 5.3.2      | <i>Radiated Spurious Emission.....</i>                    | <i>33</i> |
| <b>6.</b>  | <b>LIST OF TABLES .....</b>                               | <b>40</b> |
| <b>7.</b>  | <b>LIST OF FIGURES .....</b>                              | <b>40</b> |

# 1. General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

# 2. Test Sites

## 2.1 Test Facilities

TÜV Rheinland (Shanghai) Co., Ltd.  
No.14 building and north half of No.10 workshop building, No.525, Yuewang Lingang South Road, Pingqian (Taicang) Modern Industrial Park, Shaxi Town, Taicang City, Jiangsu Province, P.R. China

The used test equipment is in accordance with CISPR 16 for measurement of radio interference.

The Federal Communications Commission has reviewed the technical characteristics of the radiated and conducted emission facility, and has found these test facilities to be in compliance with the requirements of section 2.948 of the FCC rules. The description of the test facility is listed under FCC registration number 930979.

## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

| <b>Equip.</b> | <b>Description</b>           | <b>Model</b>            | <b>Manufacturer</b> | <b>Due Date</b><br>DD.MM.YYYY |
|---------------|------------------------------|-------------------------|---------------------|-------------------------------|
| EMC-C-195     | EMI test receiver            | ESR3                    | 102794              | 2026-08-02                    |
| EMC-C-366     | Thermohygrometer             | 608-H1                  | 2485149174          | 2026-07-11                    |
| EMC-S-028     | EMI measurement software     | EMC32-E+ (10.60.20)     | 100150              | N/A                           |
| EMC-C-190     | Artificial mains network     | ENV432                  | 101514              | 2026-09-02                    |
| EMC-S-036     | RF measurement software      | WMS32-WB<br>(11.40.00)  | 101516              | N/A                           |
| EMC-C-161     | Spectrum analyser            | FSV40                   | 101258              | 2026-07-11                    |
| EMC-C-196     | Wireless connectivity tester | CMW270                  | 102435              | 2027-08-09                    |
| EMC-C-302     | Signal generator             | SMB100B (6 GHz)         | 103832              | 2025-12-10                    |
| EMC-C-303     | Vector signal generator      | SMW200A                 | 110702              | 2025-12-10                    |
| EMC-C-304     | OSP                          | OSP-B157W8              | 100857              | 2025-12-10                    |
| EMC-C-317     | Thermohygrometer             | 608-H1                  | 2283796621          | 2026-06-10                    |
| EMC-S-032     | EMI measurement software     | EMC32-MEB<br>(10.60.20) | 100697              | N/A                           |
| EMC-C-018     | Double ridged horn antenna   | BBHA 9120 D             | 9120D-434           | 2026-03-24                    |
| EMC-C-066     | EMI test receiver            | ESCI                    | 100280              | 2026-09-28                    |
| EMC-C-068     | Broadband horn antenna       | BBHA 9170               | 9170-305            | 2028-06-18                    |
| EMC-C-121     | Thermohygrometer             | 608-H1                  | 1241320265          | 2026-06-05                    |
| EMC-C-155     | BiLog antenna                | CBL 6112D               | 40530               | 2026-09-24                    |
| EMC-C-175     | Preamplifier                 | EMC051845SE             | 980612              | 2026-07-11                    |
| EMC-C-176     | Preamplifier                 | EMC184045SE             | 980596              | 2026-07-11                    |
| EMC-C-001     | 3 m semi-anechoic chamber    | SAC3                    | FJ129002            | 2026-12-03                    |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

**Table 2: Measurement Uncertainty**

| Measurement Type                | Frequency      | Uncertainty |
|---------------------------------|----------------|-------------|
| Antenna Port Conducted Emission | < 1GHz         | ±0.39dB     |
|                                 | > 1GHz         | ±0.68dB     |
| Conducted Emission              | 150kHz - 30MHz | ±3.39dB     |
| Radiated Emission               | 9kHz - 30MHz   | ±2.93dB     |
|                                 | 30MHz - 1GHz   | ±5.34dB     |
|                                 | > 1GHz         | ±5.40dB     |

## 3. General Product Information

### 3.1 Product Function and Intended Use

The EUT (Equipment Under Test) is a Portable Photo Printer which contains Bluetooth LE and Classic function.  
This report is only evaluates Bluetooth LE function.

### 3.2 Ratings and System Details

**Table 3: Technical Specification of EUT**

| General Description of EUT                   |                             |
|----------------------------------------------|-----------------------------|
| Product Name:                                | Portable Photo Printer      |
| Model No.:                                   | DMP130                      |
| Operation Voltage:                           | DC 5V                       |
| Technical Specification of Bluetooth LE      |                             |
| Frequency Range:                             | 2402 – 2480MHz              |
| Modulation Type:                             | GFSK                        |
| Data Rate:                                   | 1Mb/s                       |
| Antenna Type:                                | PCB Antenna                 |
| Antenna Gain:                                | 0.51dBi                     |
| Technical Specification of Bluetooth Classic |                             |
| Frequency Range:                             | 2402 – 2480MHz              |
| Modulation Type:                             | GFSK, $\pi/4$ DQPSK, 8-DPSK |
| Antenna Type:                                | PCB Antenna                 |
| Antenna Gain:                                | 0.51 dBi                    |

**Table 4: Operation Channel List**

| RF Channel | Frequency [MHz] | RF Channel | Frequency [MHz] | RF Channel | Frequency [MHz] | RF Channel | Frequency [MHz] |
|------------|-----------------|------------|-----------------|------------|-----------------|------------|-----------------|
| <b>00</b>  | <b>2402</b>     | 10         | 2422            | 20         | 2442            | 30         | 2462            |
| 01         | 2404            | 11         | 2424            | 21         | 2444            | 31         | 2464            |
| 02         | 2406            | 12         | 2426            | 22         | 2446            | 32         | 2466            |
| 03         | 2408            | 13         | 2428            | 23         | 2448            | 33         | 2468            |
| 04         | 2410            | 14         | 2430            | 24         | 2450            | 34         | 2470            |
| 05         | 2412            | 15         | 2432            | 25         | 2452            | 35         | 2472            |
| 06         | 2414            | 16         | 2434            | 26         | 2454            | 36         | 2474            |
| 07         | 2416            | 17         | 2436            | 27         | 2456            | 37         | 2476            |
| 08         | 2418            | 18         | 2438            | 28         | 2458            | 38         | 2478            |
| 09         | 2420            | <b>19</b>  | <b>2440</b>     | 29         | 2460            | <b>39</b>  | <b>2480</b>     |

Test frequencies are lowest channel: 2402 MHz, middle channel: 2440 MHz and highest channel: 2480 MHz.

### 3.3 Independent Operation Modes

The basic operation modes are:

A. On, Bluetooth transmitting mode

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

## 4. Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024  
 Test Software used: BR BlueletSuite\_v6\_0.exe

**Table 5: Power parameter value**

| Channel Frequency<br>[MHz] | Power Parameter Value |
|----------------------------|-----------------------|
| 2402                       | 100A                  |
| 2440                       | 100A                  |
| 2480                       | 100A                  |

### 4.3 Special Accessories and Auxiliary Equipment

**Table 6: Special Accessories**

| Accessories                                       | Parameter         |
|---------------------------------------------------|-------------------|
| RF Cable between the antenna port and test system | Cable loss: 0.5dB |

Note: The RF cable used in the test was provided by

- ☐ Client  
☒ Test Lab

And the cable loss has been factored in the related test.

**Table 7: Auxiliary Equipment**

| Equipment | Brand  | Model Number | Serial number |
|-----------|--------|--------------|---------------|
| Laptop    | Lenovo | EMC-COMP-026 | PF-49VKS3     |
| Charger   | UGREEN | CD137        | /             |

**Prüfbericht - Nr.: CN256888 001**  
*Test Report No.***Seite 11 von 40**  
*Page 11 of 40*

## **4.4 Countermeasures to achieve EMC Compliance**

Null.

## 5. Test Results

### 5.1 Conducted Testing at Antenna Port

#### 5.1.1 Antenna Requirement

**RESULT:****Pass**

According to the manufacturer declared, the EUT has one PCB antenna, the directional gain of antenna is 0.51 dBi and the antenna is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

**Table 8: Antenna Requirement**

| FCC 15.203 – Antenna Requirement 1 |                                                                                             |
|------------------------------------|---------------------------------------------------------------------------------------------|
| Requirement:                       | No antenna other than that furnished by the responsible party shall be used with the device |
| Results:                           | Antenna type: PCB antenna                                                                   |
| Verdict:                           | Pass                                                                                        |

| FCC 15.204 – Antenna Requirement 2 |                                                                                                                                                                                                                              |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Requirement:                       | An intentional radiator may be operated only with the antenna with which it is authorized. If an antenna is marketed with the intentional radiator, it shall be of a type which is authorized with the intentional radiator. |
| Results:                           | Only one PCB antenna can be used                                                                                                                                                                                             |
| Verdict:                           | Pass                                                                                                                                                                                                                         |

**Prüfbericht - Nr.: CN256888 001**  
Test Report No.**Seite 13 von 40**  
Page 13 of 40**5.1.2 6dB & 99% Bandwidth****RESULT:****Pass**

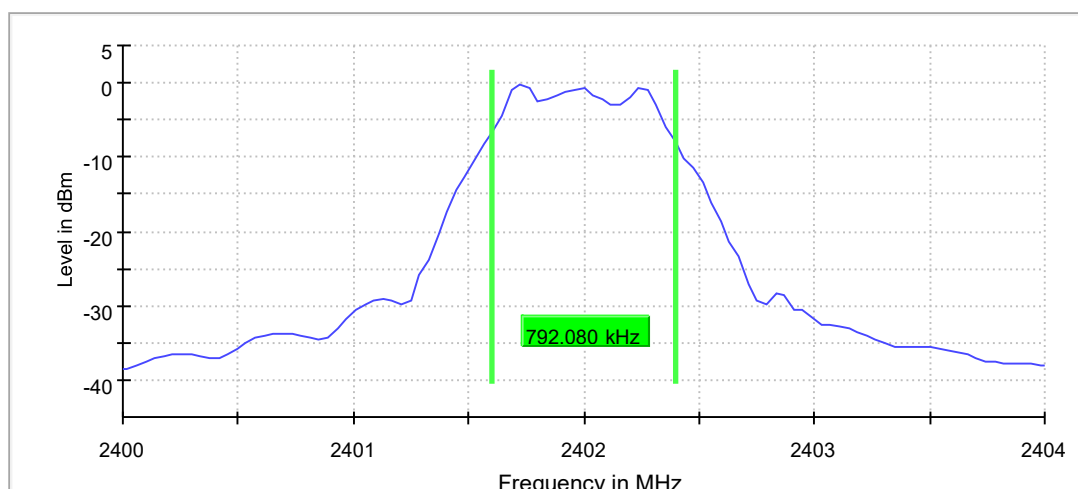
|                      |   |                                                                  |
|----------------------|---|------------------------------------------------------------------|
| Date of testing      | : | 2025-10-16                                                       |
| Ambient temperature  | : | 20.3°C                                                           |
| Relative humidity    | : | 51.2%                                                            |
| Atmospheric pressure | : | 101kPa                                                           |
| Test requirement     | : | FCC Part 15.247(a)(2)                                            |
| Test procedure       | : | ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024 |
| Test voltage         | : | DC 5V                                                            |
| Test modes applied   | : | A                                                                |

**6dB Bandwidth, 1Mbps, 2402MHz**

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2402.000000         | 0.792080        | 0.500000        | ---             | 2401.603960          | 2402.396040           |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2402.000000         | -0.2            | PASS   |

6 dB Bandwidth


**Measurement**

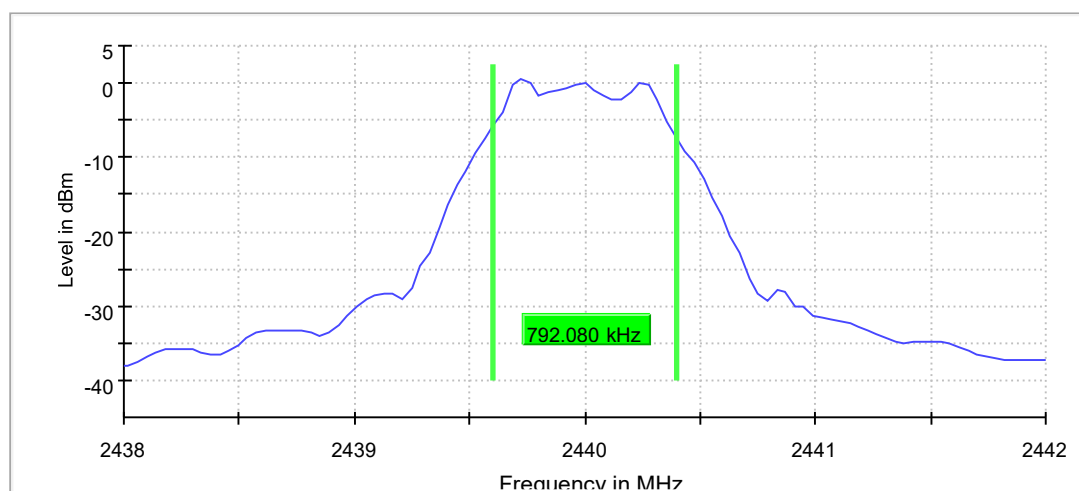
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.40000 GHz      | 2.40000 GHz   |
| Stop Frequency        | 2.40400 GHz      | 2.40400 GHz   |
| Span                  | 4.000 MHz        | 4.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 101              | ~ 80          |
| Sweeptime             | 18.938 µs        | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| SweepType             | FFT              | AUTO          |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.50 dB          | 0.50 dB       |
| Run                   | 7 / max. 150     | max. 150      |
| Stable                | 5 / 5            | 5             |
| Max Stable Difference | 0.31 dB          | 0.50 dB       |

**6dB Bandwidth, 1Mbps, 2440MHz**

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2440.000000         | 0.792080        | 0.500000        | ---             | 2439.603960          | 2440.396040           |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2440.000000         | 0.6             | PASS   |

6 dB Bandwidth


**Measurement**

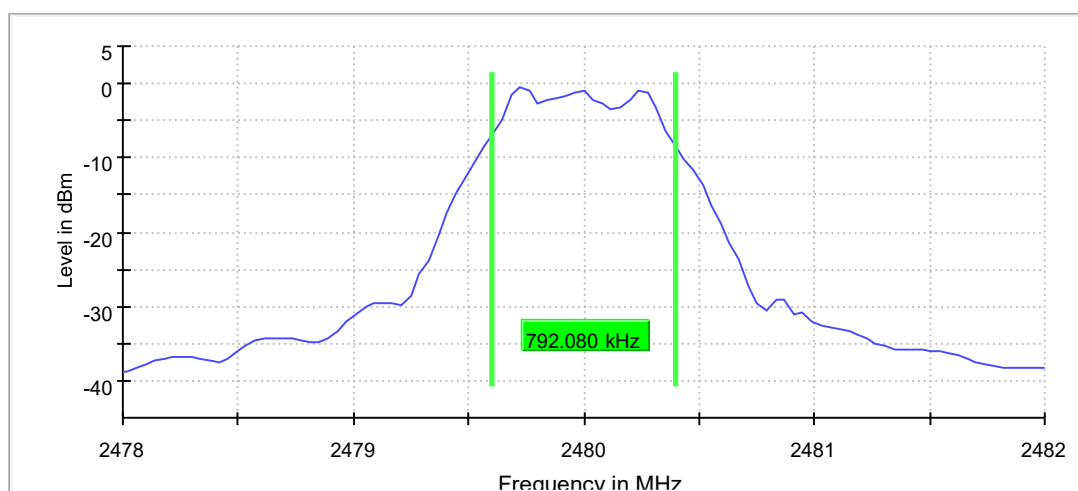
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.43800 GHz      | 2.43800 GHz   |
| Stop Frequency        | 2.44200 GHz      | 2.44200 GHz   |
| Span                  | 4.000 MHz        | 4.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 101              | ~ 80          |
| Sweeptime             | 18.938 µs        | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| SweepType             | FFT              | AUTO          |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.50 dB          | 0.50 dB       |
| Run                   | 11 / max. 150    | max. 150      |
| Stable                | 5 / 5            | 5             |
| Max Stable Difference | 0.01 dB          | 0.50 dB       |

**Prüfbericht - Nr.: CN256888 001**
*Test Report No.*
**Seite 16 von 40**
*Page 16 of 40*
**6dB Bandwidth, 1Mbps, 2480MHz**

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2480.000000         | 0.792080        | 0.500000        | ---             | 2479.603960          | 2480.396040           |

| DUT Frequency (MHz) | Max Level (dBm) | Result |
|---------------------|-----------------|--------|
| 2480.000000         | -0.6            | PASS   |

6 dB Bandwidth


**Measurement**

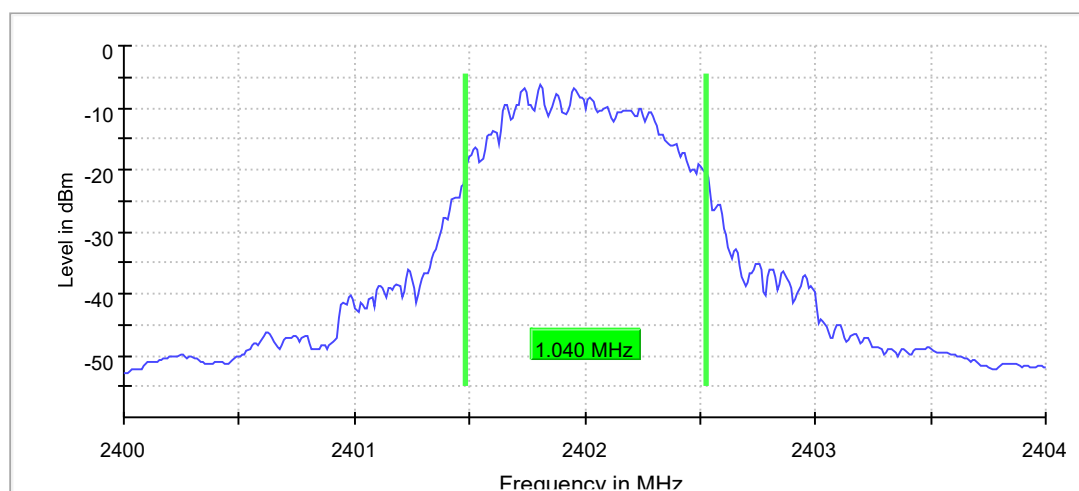
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.47800 GHz      | 2.47800 GHz   |
| Stop Frequency        | 2.48200 GHz      | 2.48200 GHz   |
| Span                  | 4.000 MHz        | 4.000 MHz     |
| RBW                   | 100.000 kHz      | ~ 100.000 kHz |
| VBW                   | 300.000 kHz      | ~ 300.000 kHz |
| SweepPoints           | 101              | ~ 80          |
| Sweeptime             | 18.938 $\mu$ s   | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| Sweeptype             | FFT              | AUTO          |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.50 dB          | 0.50 dB       |
| Run                   | 9 / max. 150     | max. 150      |
| Stable                | 5 / 5            | 5             |
| Max Stable Difference | 0.03 dB          | 0.50 dB       |

**99% Occupied Channel Bandwidth, 1Mbps, 2402MHz**

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2402.000000         | 1.040000        | ---             | ---             | 2401.485000          | 2402.525000           |

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2402.000000         | PASS   |

99 % Bandwidth


**Measurement**

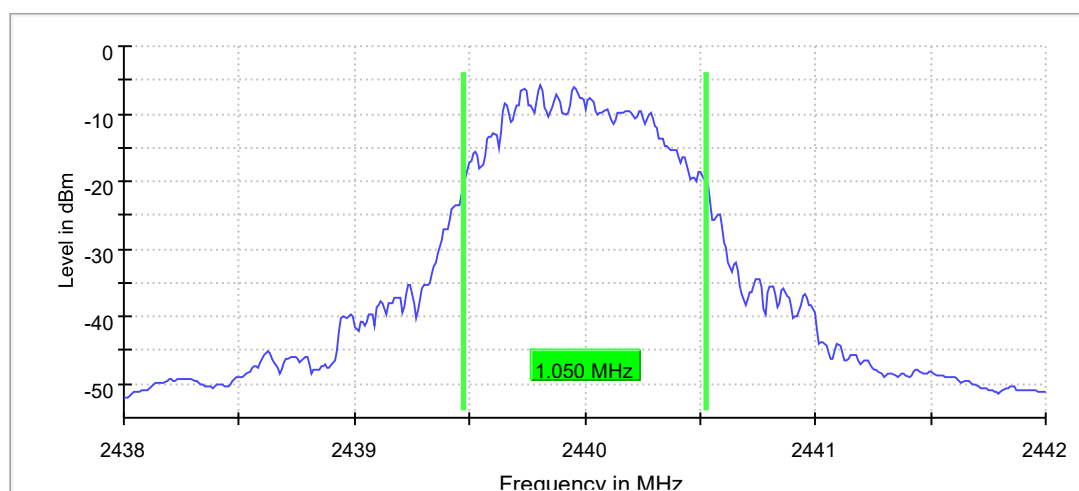
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.40000 GHz      | 2.40000 GHz   |
| Stop Frequency        | 2.40400 GHz      | 2.40400 GHz   |
| Span                  | 4.000 MHz        | 4.000 MHz     |
| RBW                   | 20.000 kHz       | >= 20.000 kHz |
| VBW                   | 100.000 kHz      | >= 60.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.824 µs        | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| SweepType             | FFT              | AUTO          |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.30 dB          | 0.30 dB       |
| Run                   | 5 / max. 150     | max. 150      |
| Stable                | 3 / 3            | 3             |
| Max Stable Difference | 0.16 dB          | 0.30 dB       |

**99% Occupied Channel Bandwidth, 1Mbps, 2440MHz**

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2440.000000         | 1.050000        | ---             | ---             | 2439.475000          | 2440.525000           |

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2440.000000         | PASS   |

99 % Bandwidth


**Measurement**

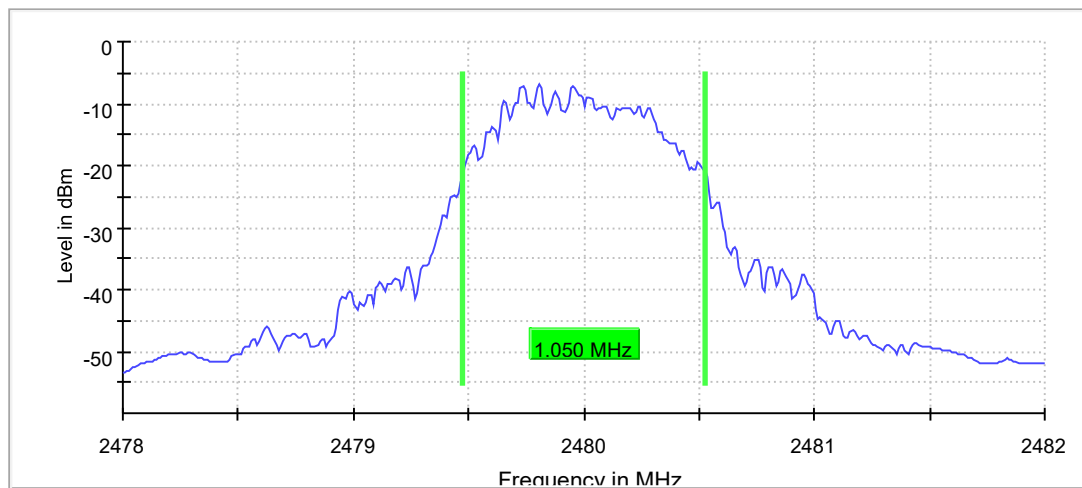
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.43800 GHz      | 2.43800 GHz   |
| Stop Frequency        | 2.44200 GHz      | 2.44200 GHz   |
| Span                  | 4.000 MHz        | 4.000 MHz     |
| RBW                   | 20.000 kHz       | >= 20.000 kHz |
| VBW                   | 100.000 kHz      | >= 60.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| SweepTime             | 94.824 µs        | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| Sweeptype             | FFT              | AUTO          |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.30 dB          | 0.30 dB       |
| Run                   | 8 / max. 150     | max. 150      |
| Stable                | 3 / 3            | 3             |
| Max Stable Difference | 0.10 dB          | 0.30 dB       |

**99% Occupied Channel Bandwidth, 1Mbps, 2480MHz**

| DUT Frequency (MHz) | Bandwidth (MHz) | Limit Min (MHz) | Limit Max (MHz) | Band Edge Left (MHz) | Band Edge Right (MHz) |
|---------------------|-----------------|-----------------|-----------------|----------------------|-----------------------|
| 2480.000000         | 1.050000        | ---             | ---             | 2479.475000          | 2480.525000           |

| DUT Frequency (MHz) | Result |
|---------------------|--------|
| 2480.000000         | PASS   |

99 % Bandwidth


**Measurement**

| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.47800 GHz      | 2.47800 GHz   |
| Stop Frequency        | 2.48200 GHz      | 2.48200 GHz   |
| Span                  | 4.000 MHz        | 4.000 MHz     |
| RBW                   | 20.000 kHz       | >= 20.000 kHz |
| VBW                   | 100.000 kHz      | >= 60.000 kHz |
| SweepPoints           | 400              | ~ 400         |
| Sweeptime             | 94.824 µs        | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| SweepType             | FFT              | AUTO          |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.30 dB          | 0.30 dB       |
| Run                   | 5 / max. 150     | max. 150      |
| Stable                | 3 / 3            | 3             |
| Max Stable Difference | 0.18 dB          | 0.30 dB       |

### 5.1.3 Output Power

**RESULT:**
**Pass**

Date of testing : 2025-10-16  
 Ambient temperature : 20.3°C  
 Relative humidity : 51.2%  
 Atmospheric pressure : 101kPa  
 Test requirement : FCC Part 15.247(b)(3)  
 Test procedure : ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024  
 Test voltage : DC 5V  
 Test modes applied : A

**Table 9: Peak Output Power**

| Data Rate | Frequency [MHz] | Peak Conducted Output Power [dBm] | Limit [dBm] | Maximum EIRP [dBm] | EIRP Limit [dBm] |
|-----------|-----------------|-----------------------------------|-------------|--------------------|------------------|
| 1Mbps     | 2402            | 0.5                               | 30          | 1.01               | 36               |
|           | 2440            | 1.0                               | 30          | <b>1.51</b>        | 36               |
|           | 2480            | 0.0                               | 30          | 0.51               | 36               |

**Note:**

1. The cable loss is taken into account in results.
2. EIRP=Conducted Output Power + Antenna Gain (0.51dBi), which is far below the 4 W (36dBm).

**Prüfbericht - Nr.: CN256888 001**  
Test Report No.**Seite 21 von 40**  
Page 21 of 40

### 5.1.4 Power Spectral Density

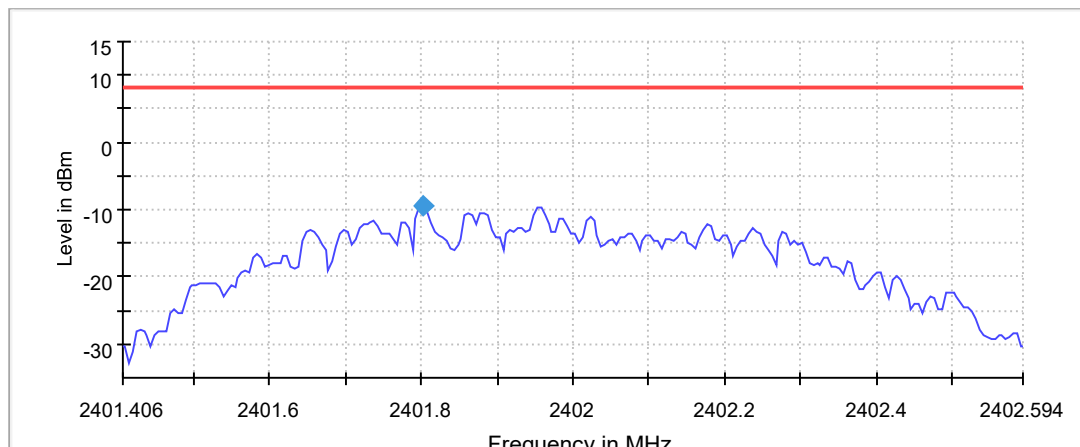
**RESULT:****Pass**

|                      |   |                                                                      |
|----------------------|---|----------------------------------------------------------------------|
| Date of testing      | : | 2025-10-16                                                           |
| Ambient temperature  | : | 20.3°C                                                               |
| Relative humidity    | : | 51.2%                                                                |
| Atmospheric pressure | : | 101kPa                                                               |
| Test requirement     | : | FCC Part 15.247(e)                                                   |
| Test procedure       | : | ANSI C63.10-2020+Cor. 1-2023+C63.10a-<br>2024+Errata to C63.10a-2024 |
| Test voltage         | : | DC 5V                                                                |
| Test modes applied   | : | A                                                                    |

**Prüfbericht - Nr.: CN256888 001**
*Test Report No.*
**Seite 22 von 40**
*Page 22 of 40*
**Power Spectral Density, 1Mbps, 2402MHz**

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2402.000000         | 2401.802812     | -9.490    | 8.0             | PASS   |

Peak Power Spectral Density



— Limit   
 — Sum Level   
 ◆ PSD

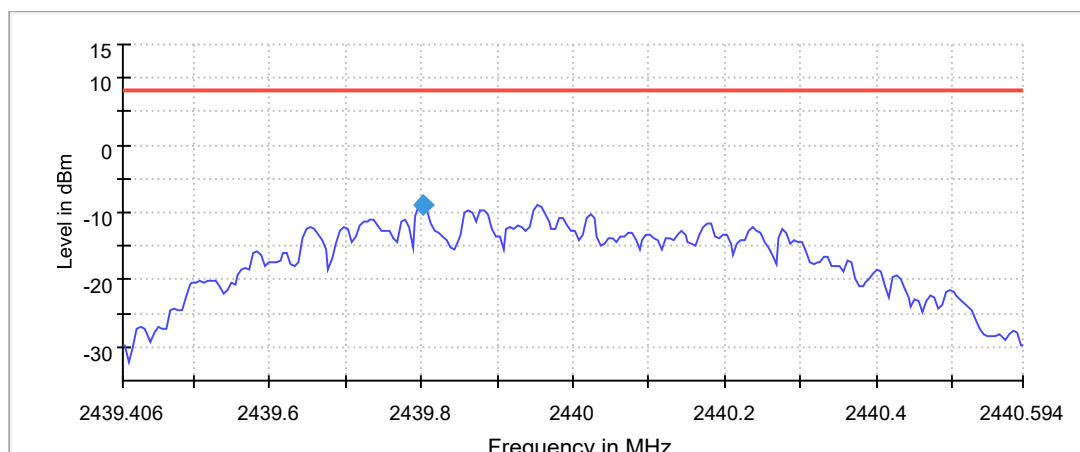
**Measurement**

| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.40141 GHz      | 2.40141 GHz   |
| Stop Frequency        | 2.40259 GHz      | 2.40259 GHz   |
| Span                  | 1.188 MHz        | 1.188 MHz     |
| RBW                   | 10.000 kHz       | <= 10.000 kHz |
| VBW                   | 30.000 kHz       | >= 30.000 kHz |
| SweepPoints           | 238              | ~ 238         |
| SweepTime             | 1.190 ms         | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| SweepType             | Sweep            | Sweep         |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.50 dB          | 0.50 dB       |
| Run                   | 4 / max. 150     | max. 150      |
| Stable                | 2 / 2            | 2             |
| Max Stable Difference | 0.23 dB          | 0.50 dB       |

**Prüfbericht - Nr.: CN256888 001**
*Test Report No.*
**Seite 23 von 40**
*Page 23 of 40*
**Power Spectral Density, 1Mbps, 2440MHz**

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2440.000000         | 2439.802812     | -8.776    | 8.0             | PASS   |

Peak Power Spectral Density



— Limit    — Sum Level    ◆ PSD

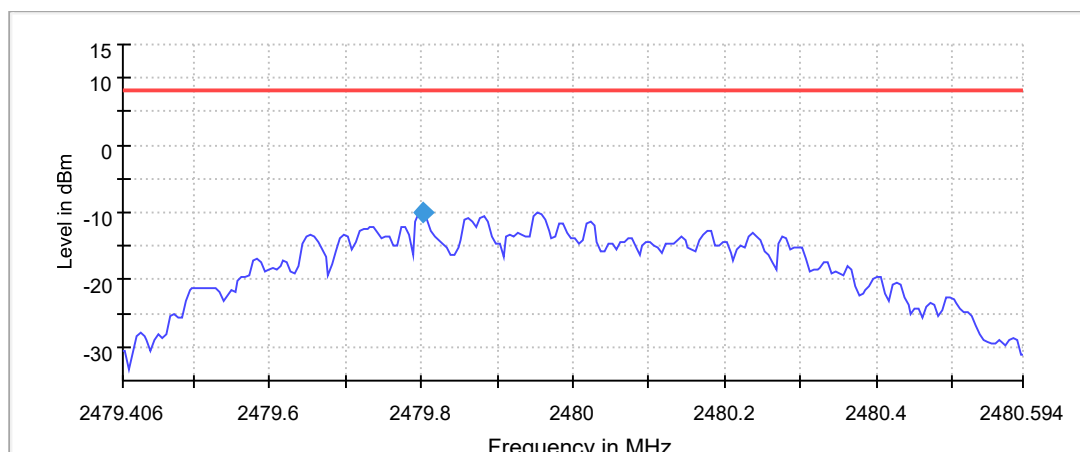
**Measurement**

| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.43941 GHz      | 2.43941 GHz   |
| Stop Frequency        | 2.44059 GHz      | 2.44059 GHz   |
| Span                  | 1.188 MHz        | 1.188 MHz     |
| RBW                   | 10.000 kHz       | <= 10.000 kHz |
| VBW                   | 30.000 kHz       | >= 30.000 kHz |
| SweepPoints           | 238              | ~ 238         |
| Sweeptime             | 1.190 ms         | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| SweepType             | Sweep            | Sweep         |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.50 dB          | 0.50 dB       |
| Run                   | 3 / max. 150     | max. 150      |
| Stable                | 2 / 2            | 2             |
| Max Stable Difference | 0.31 dB          | 0.50 dB       |

**Prüfbericht - Nr.: CN256888 001**
*Test Report No.*
**Seite 24 von 40**
*Page 24 of 40*
**Power Spectral Density, 1Mbps, 2480MHz**

| DUT Frequency (MHz) | Frequency (MHz) | PSD (dBm) | Limit Max (dBm) | Result |
|---------------------|-----------------|-----------|-----------------|--------|
| 2480.000000         | 2479.802812     | -9.881    | 8.0             | PASS   |

Peak Power Spectral Density


**Measurement**

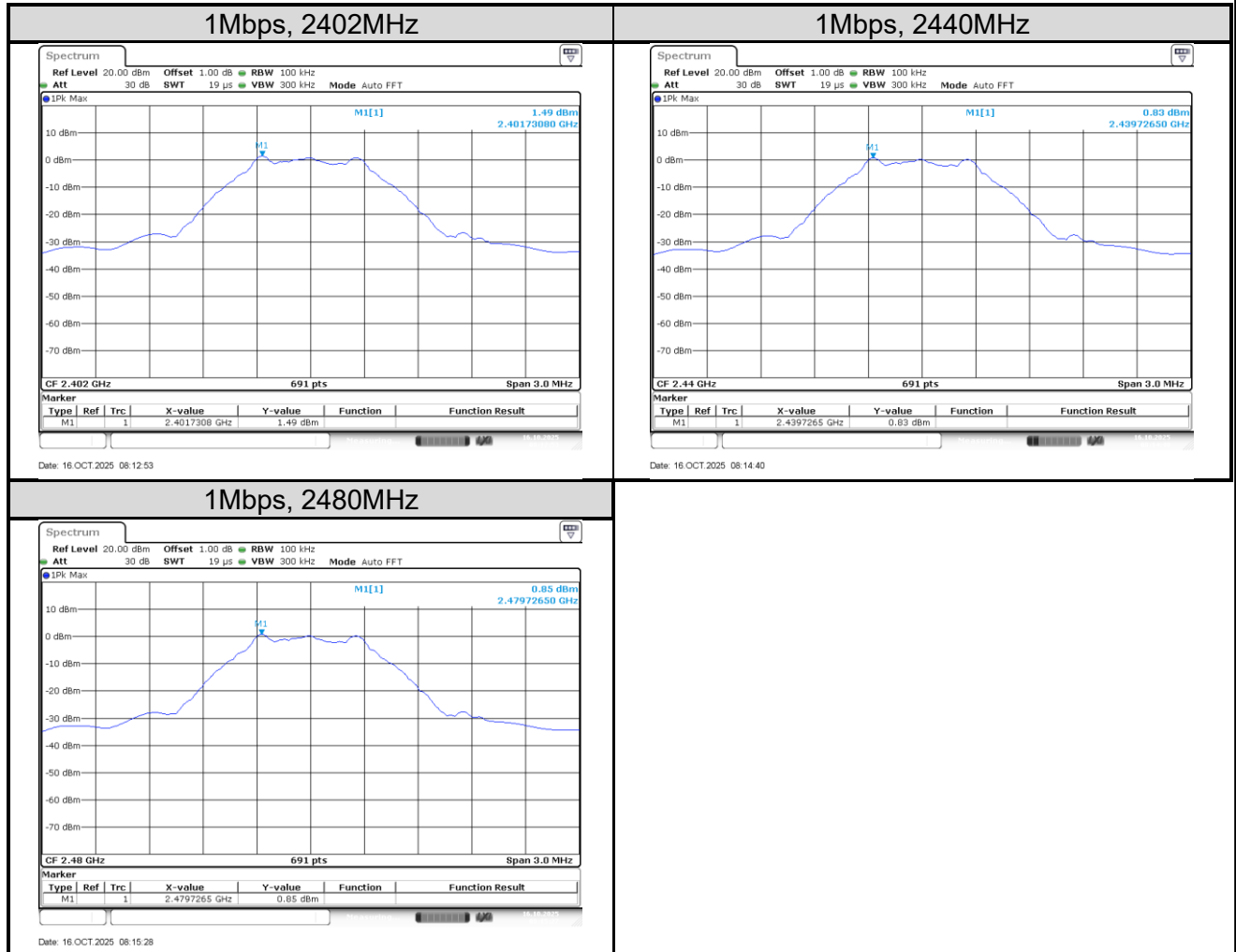
| Setting               | Instrument Value | Target Value  |
|-----------------------|------------------|---------------|
| Start Frequency       | 2.47941 GHz      | 2.47941 GHz   |
| Stop Frequency        | 2.48059 GHz      | 2.48059 GHz   |
| Span                  | 1.188 MHz        | 1.188 MHz     |
| RBW                   | 10.000 kHz       | <= 10.000 kHz |
| VBW                   | 30.000 kHz       | >= 30.000 kHz |
| SweepPoints           | 238              | ~ 238         |
| Sweeptime             | 1.190 ms         | AUTO          |
| Reference Level       | -10.000 dBm      | -10.000 dBm   |
| Attenuation           | 10.000 dB        | AUTO          |
| Detector              | MaxPeak          | MaxPeak       |
| SweepCount            | 100              | 100           |
| Filter                | 3 dB             | 3 dB          |
| Trace Mode            | Max Hold         | Max Hold      |
| SweepType             | Sweep            | Sweep         |
| Preamp                | off              | off           |
| Stablemode            | Trace            | Trace         |
| Stablevalue           | 0.50 dB          | 0.50 dB       |
| Run                   | 3 / max. 150     | max. 150      |
| Stable                | 2 / 2            | 2             |
| Max Stable Difference | 0.27 dB          | 0.50 dB       |

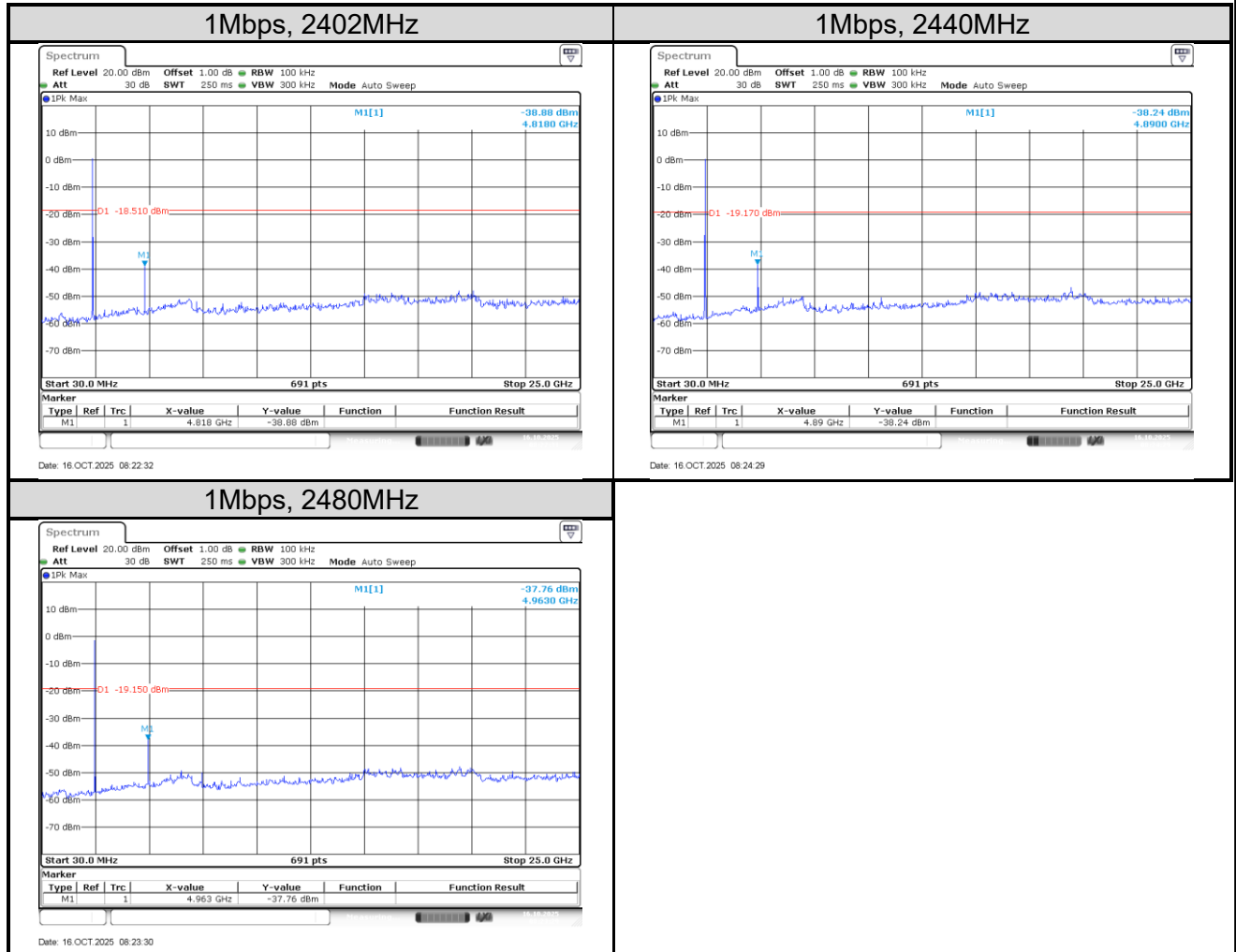
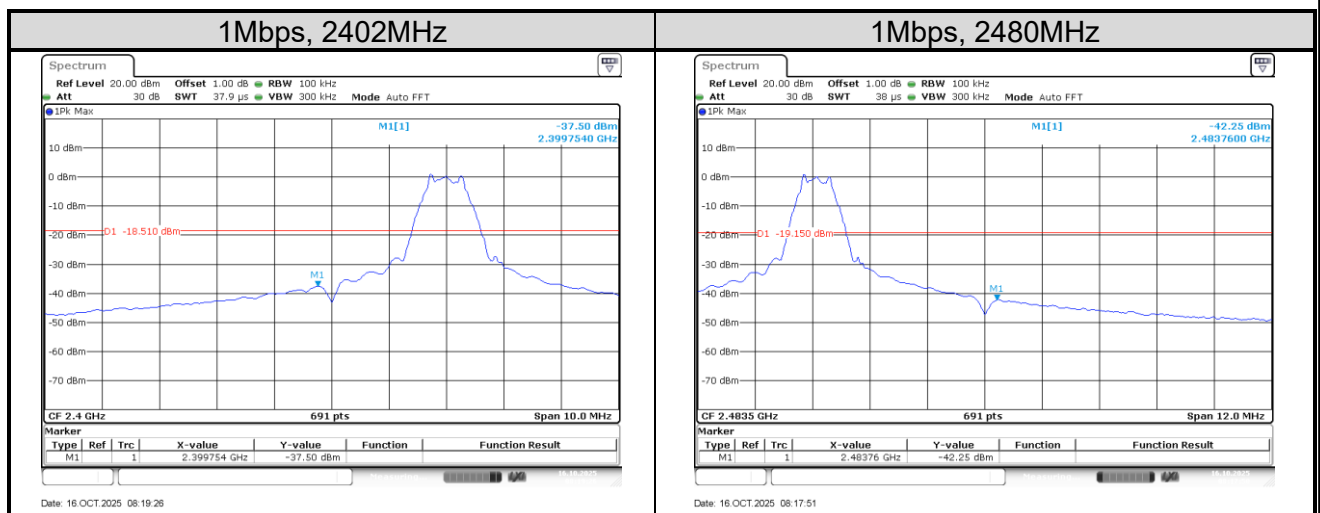
**Prüfbericht - Nr.: CN256888 001**  
Test Report No.**Seite 25 von 40**  
Page 25 of 40

### 5.1.5 Conducted Band Edge and out-of Band Emissions

**RESULT:****Pass**

|                      |   |                                                                      |
|----------------------|---|----------------------------------------------------------------------|
| Date of testing      | : | 2025-10-16                                                           |
| Ambient temperature  | : | 20.3°C                                                               |
| Relative humidity    | : | 51.2%                                                                |
| Atmospheric pressure | : | 101kPa                                                               |
| Test requirement     | : | FCC Part 15.247(d)                                                   |
| Test procedure       | : | ANSI C63.10-2020+Cor. 1-2023+C63.10a-<br>2024+Errata to C63.10a-2024 |
| Test voltage         | : | DC 5V                                                                |
| Test modes applied   | : | A                                                                    |

**Figure 1: Reference level**


**Figure 2: Conducted Spurious Emission**

**Figure 3: Conducted Band Edge**


## 5.2 Emission in the Frequency Range up to 30MHz

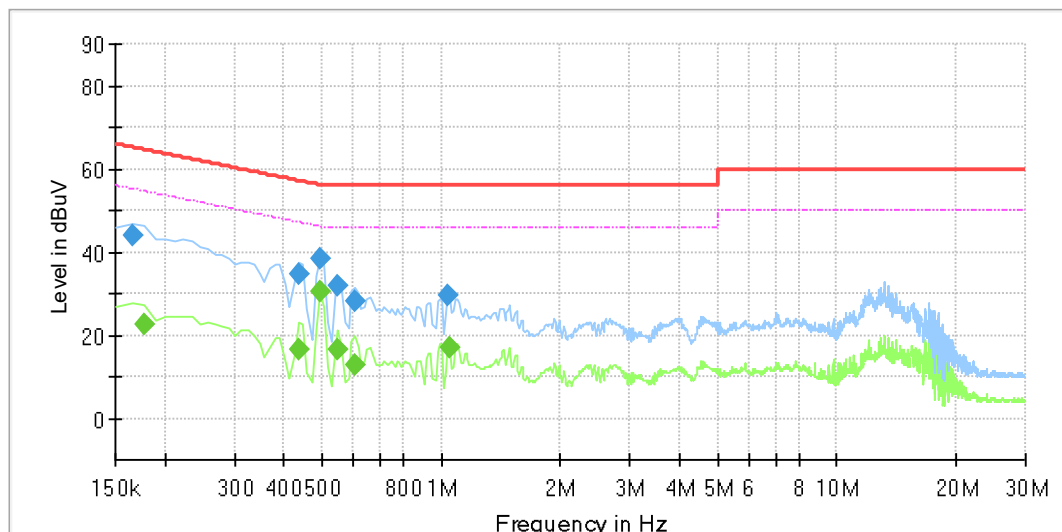
### 5.2.1 Conducted Emission

**RESULT:**

## Pass

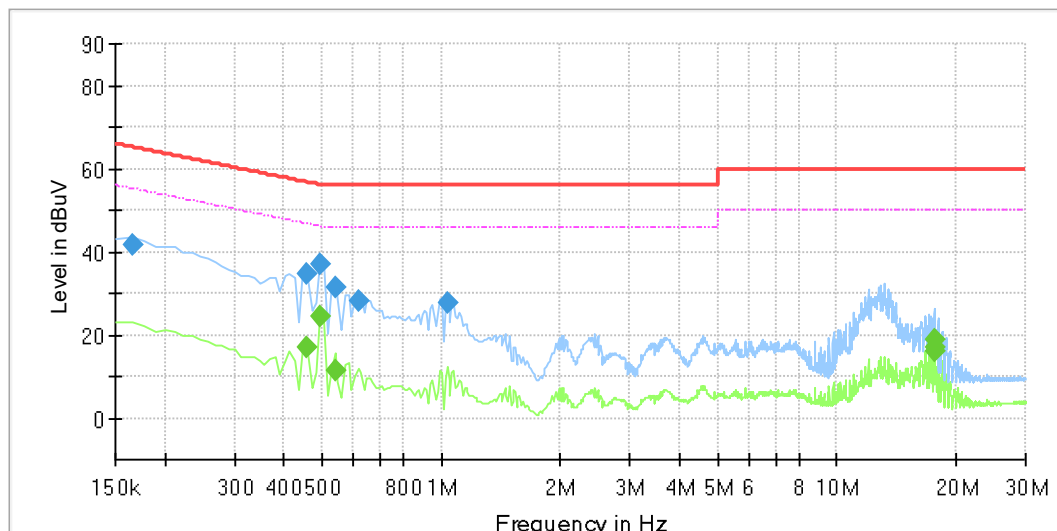
|                      |   |                                                                                          |
|----------------------|---|------------------------------------------------------------------------------------------|
| Date of testing      | : | 2025-10-29                                                                               |
| Ambient temperature  | : | 22.9°C                                                                                   |
| Relative humidity    | : | 53.2%                                                                                    |
| Atmospheric pressure | : | 101kPa                                                                                   |
| Test requirement     | : | FCC Part 15.207 (a)                                                                      |
| Test procedure       | : | KDB 558074 D01v05r02<br>ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024 |
| Test voltage         | : | AC120V, 60Hz                                                                             |
| Test modes applied   | : | A                                                                                        |

**Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L.**



## Final Result

| Frequency<br>(MHz) | QuasiPeak<br>(dBuV) | CAverage<br>(dBuV) | Limit<br>(dBuV) | Margin<br>(dB) | Line | Corr.<br>(dB) |
|--------------------|---------------------|--------------------|-----------------|----------------|------|---------------|
| 0.166875           | 43.97               | ---                | 65.12           | 21.15          | L1   | 10.3          |
| 0.178125           | ---                 | 22.43              | 54.57           | 32.15          | L1   | 10.3          |
| 0.436875           | ---                 | 16.28              | 47.12           | 30.84          | L1   | 10.3          |
| 0.436875           | 34.65               | ---                | 57.12           | 22.47          | L1   | 10.3          |
| 0.493125           | ---                 | 30.49              | 46.12           | 15.63          | L1   | 10.3          |
| 0.493125           | 38.25               | ---                | 56.12           | 17.87          | L1   | 10.3          |
| 0.549375           | 31.91               | ---                | 56.00           | 24.09          | L1   | 10.3          |
| 0.549375           | ---                 | 16.54              | 46.00           | 29.46          | L1   | 10.3          |
| 0.605625           | 28.03               | ---                | 56.00           | 27.97          | L1   | 10.3          |
| 0.605625           | ---                 | 12.57              | 46.00           | 33.43          | L1   | 10.3          |
| 1.033125           | 29.37               | ---                | 56.00           | 26.63          | L1   | 10.4          |
| 1.044375           | ---                 | 16.95              | 46.00           | 29.05          | L1   | 10.4          |

**Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N.**


## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|------|------------|
| 0.166875        | 41.55            | ---             | 65.12        | 23.57       | N    | 10.4       |
| 0.459375        | ---              | 16.83           | 46.70        | 29.87       | N    | 10.3       |
| 0.459375        | 34.64            | ---             | 56.70        | 22.06       | N    | 10.3       |
| 0.493125        | ---              | 24.42           | 46.12        | 21.69       | N    | 10.3       |
| 0.493125        | 37.11            | ---             | 56.12        | 19.00       | N    | 10.3       |
| 0.538125        | ---              | 11.40           | 46.00        | 34.60       | N    | 10.4       |
| 0.538125        | 31.51            | ---             | 56.00        | 24.49       | N    | 10.4       |
| 0.616875        | 28.35            | ---             | 56.00        | 27.65       | N    | 10.4       |
| 1.033125        | 27.68            | ---             | 56.00        | 28.32       | N    | 10.4       |
| 17.593125       | ---              | 18.68           | 50.00        | 31.32       | N    | 11.3       |
| 17.626875       | ---              | 16.96           | 50.00        | 33.04       | N    | 11.3       |
| 17.671875       | ---              | 16.10           | 50.00        | 33.90       | N    | 11.3       |

## 5.3 Emission in the Frequency Range above 30MHz

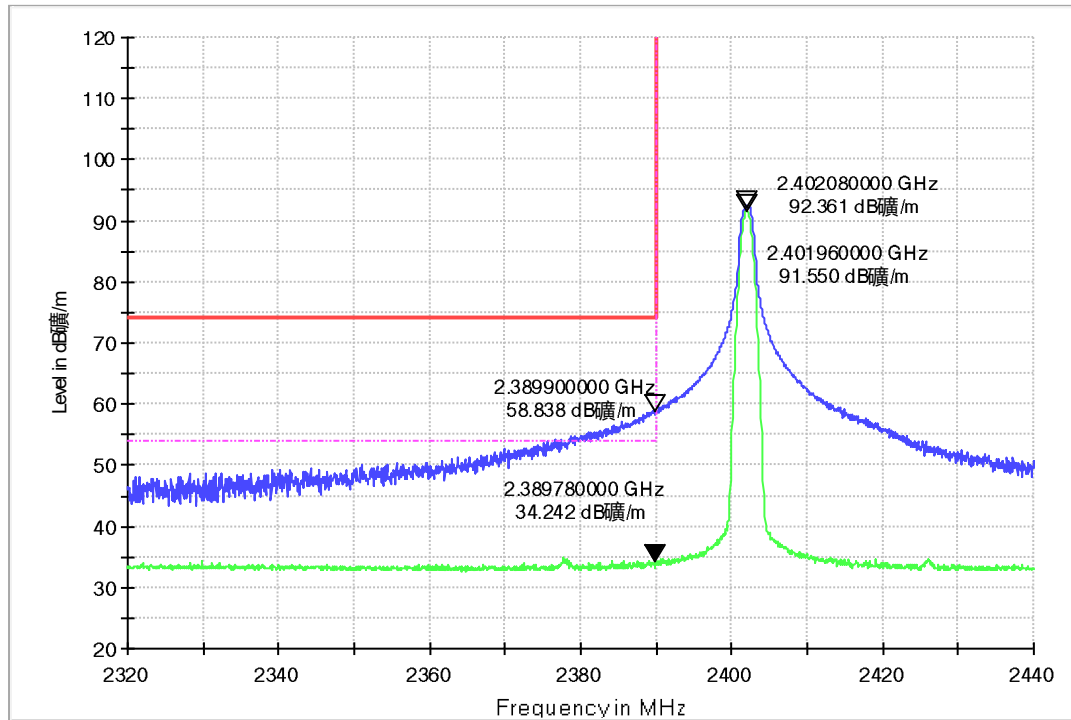
### 5.3.1 Radiated Band-Edge

**RESULT:****Pass**

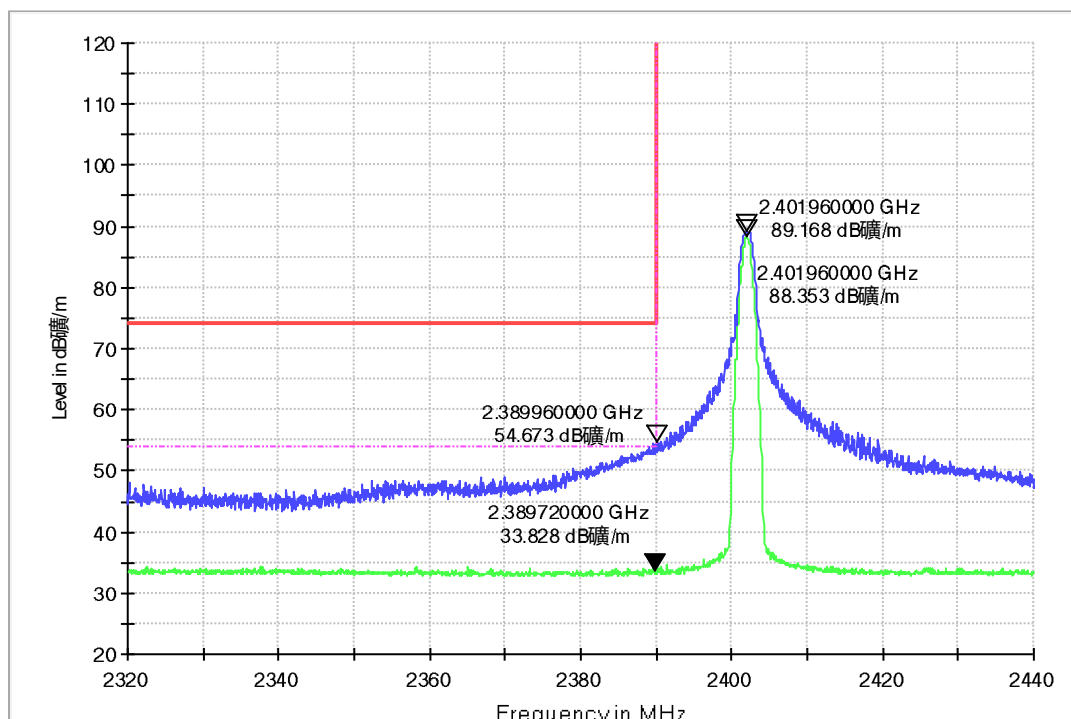
|                      |                                                                        |
|----------------------|------------------------------------------------------------------------|
| Date of testing      | : 2025-10-29                                                           |
| Ambient temperature  | : 22.9°C                                                               |
| Relative humidity    | : 53.2%                                                                |
| Atmospheric pressure | : 101kPa                                                               |
| Test requirement     | : FCC Part 15.247(d)<br>FCC Part 15.205(a)<br>FCC Part 15.209(a)       |
| Test procedure       | : ANSI C63.10-2020+Cor. 1-2023+C63.10a-<br>2024+Errata to C63.10a-2024 |
| Test voltage         | : DC 5V                                                                |
| Test modes applied   | : A                                                                    |

**Figure 6: Radiated Band-Edge, 1Mbps, 2402MHz, H**

XXY-2310~2410 BE 1-18GHz HL050 FSV40 Pre-10-YUNFANG

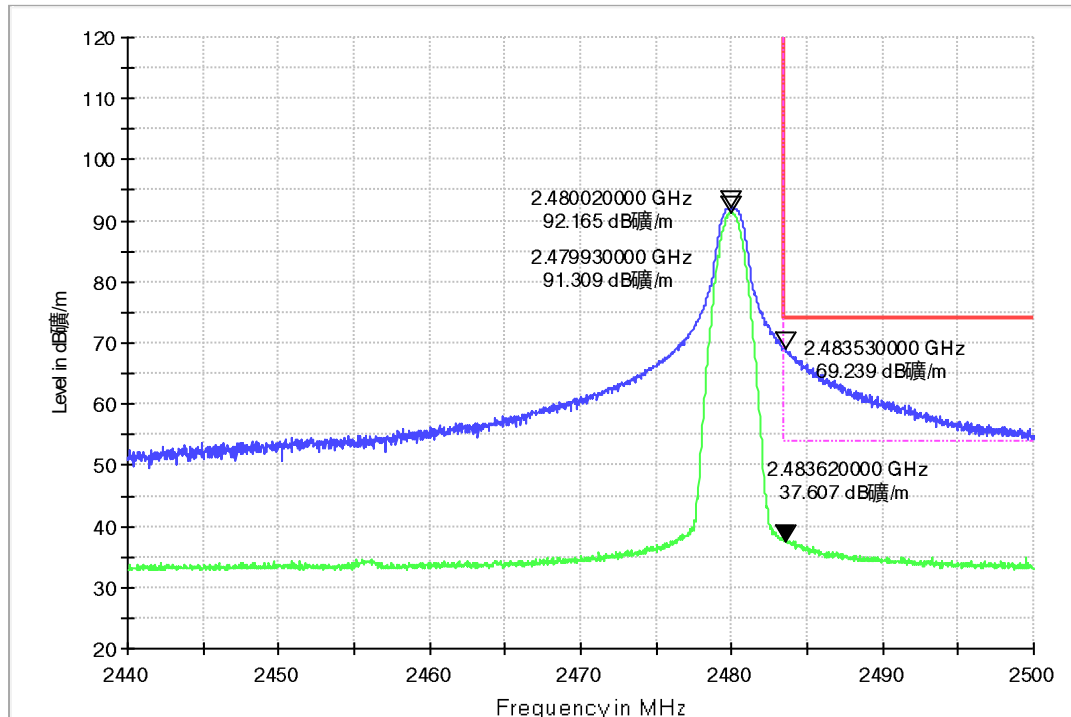

**Figure 7: Radiated Band-Edge, 1Mbps, 2402MHz, V**

XXY-2310~2410 BE 1-18GHz HL050 FSV40 Pre-10-YUNFANG

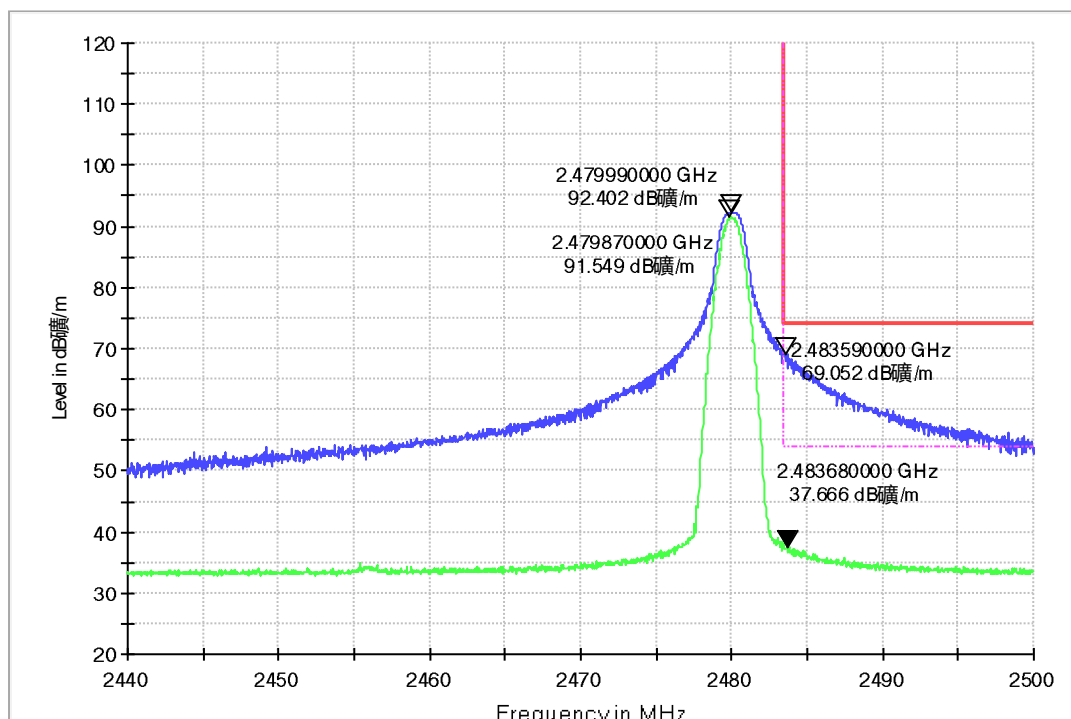


**Figure 8: Radiated Band-Edge, 1Mbps, 2480MHz, H**

XXY-2470° 2500 BE 1-18GHz HL050 FSV40 Pre-10-YUNFANG


**Figure 9: Radiated Band-Edge, 1Mbps, 2480MHz, V**

XXY-2470° 2500 BE 1-18GHz HL050 FSV40 Pre-10-YUNFANG



**Prüfbericht - Nr.: CN256888 001**  
Test Report No.**Seite 33 von 40**  
Page 33 of 40

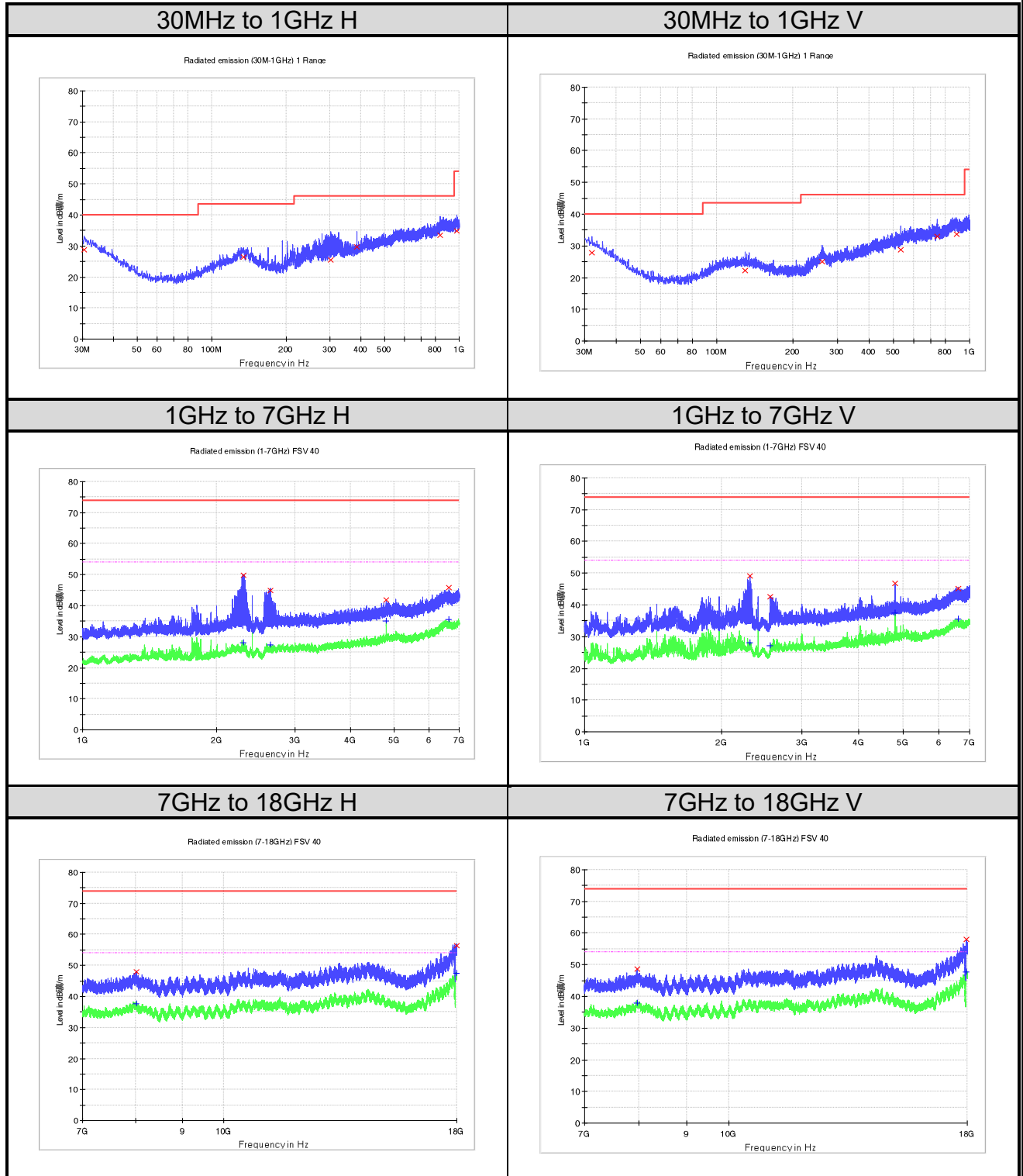
### 5.3.2 Radiated Spurious Emission

**RESULT:****Pass**

|                      |   |                                                                      |
|----------------------|---|----------------------------------------------------------------------|
| Date of testing      | : | 2025-10-29                                                           |
| Ambient temperature  | : | 22.9°C                                                               |
| Relative humidity    | : | 53.2%                                                                |
| Atmospheric pressure | : | 101kPa                                                               |
| Test requirement     | : | FCC Part 15.247(d)<br>FCC Part 15.209(a)                             |
| Test procedure       | : | ANSI C63.10-2020+Cor. 1-2023+C63.10a-<br>2024+Errata to C63.10a-2024 |
| Test voltage         | : | DC 5V                                                                |
| Test modes applied   | : | A                                                                    |

**Note:**

For the frequency range from 18GHz to 25GHz, no emission was found.

**Figure 10: Radiated Spurious Emission, 1Mbps, 2402MHz**


**Limit and Margin**
**QP**

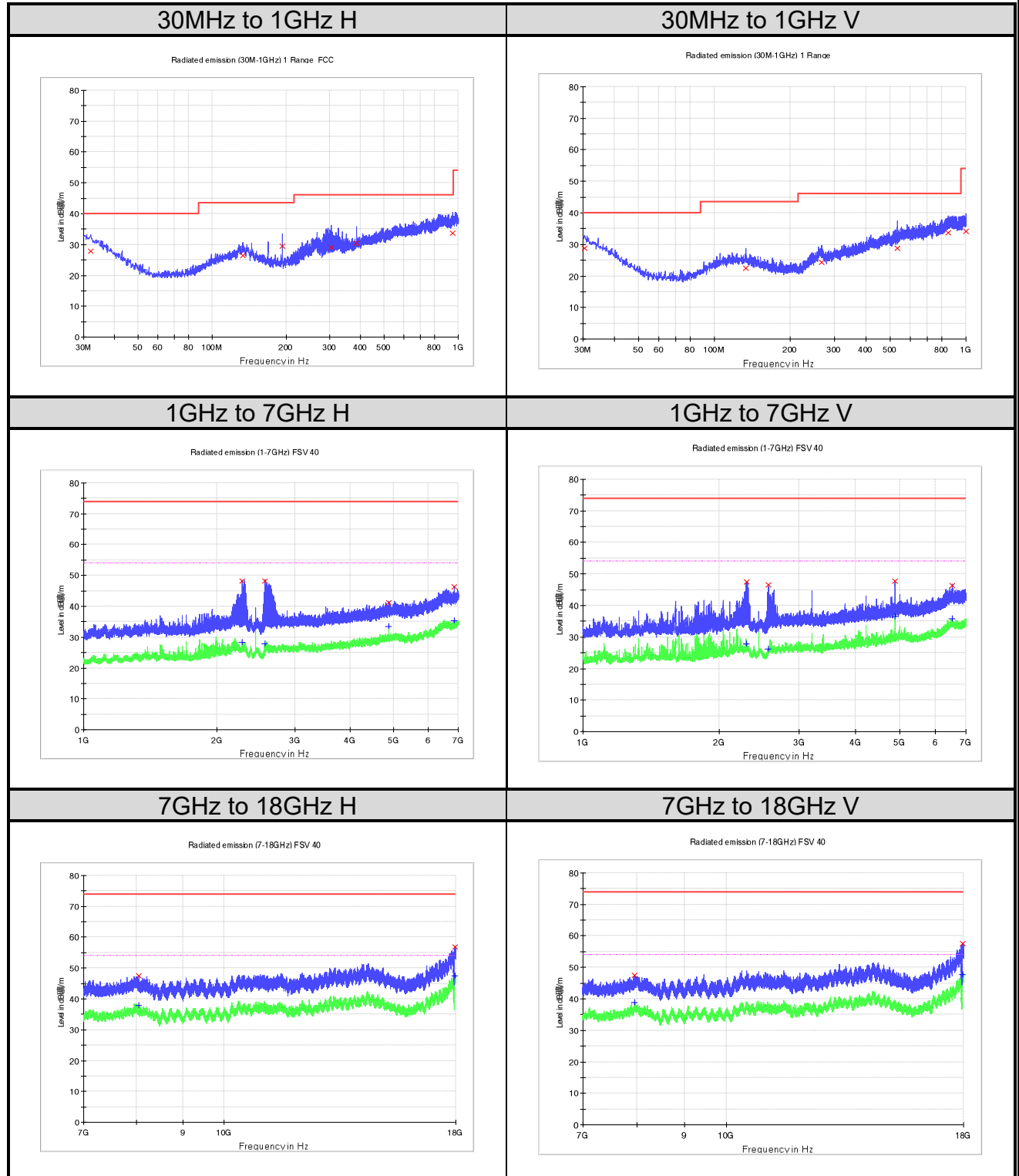
| Frequency (MHz) | QuasiPeak (dBμV/m) | Pol | Corr. (dB/m) | Margin - QPK (dB) | Limit - QPK (dBμV/m) |
|-----------------|--------------------|-----|--------------|-------------------|----------------------|
| 30.363750       | 28.8               | H   | 25.2         | 11.2              | 40.0                 |
| 133.790000      | 26.5               | H   | 18.4         | 17.0              | 43.5                 |
| 302.812500      | 25.5               | H   | 20.8         | 20.5              | 46.0                 |
| 385.262500      | 29.7               | H   | 22.5         | 16.3              | 46.0                 |
| 837.767500      | 33.4               | H   | 28.8         | 12.6              | 46.0                 |
| 976.113750      | 34.8               | H   | 30.2         | 19.2              | 54.0                 |
| 32.061250       | 27.8               | V   | 24.2         | 12.2              | 40.0                 |
| 129.546250      | 22.2               | V   | 18.6         | 21.4              | 43.5                 |
| 261.102500      | 25.0               | V   | 21.6         | 21.0              | 46.0                 |
| 532.460000      | 28.8               | V   | 25.0         | 17.2              | 46.0                 |
| 743.920000      | 33.0               | V   | 29.1         | 13.0              | 46.0                 |
| 891.238750      | 33.6               | V   | 28.7         | 12.4              | 46.0                 |

**PK**

| Frequency (MHz) | MaxPeak (dBμV/m) | Pol | Corr. (dB/m) | Margin - PK+ (dB) | Limit - PK+ (dBμV/m) |
|-----------------|------------------|-----|--------------|-------------------|----------------------|
| 2294.909091     | 49.8             | H   | -15.7        | 24.2              | 74.0                 |
| 2635.545455     | 45.0             | H   | -15.6        | 29.0              | 74.0                 |
| 4804.272727     | 41.8             | H   | -11.2        | 32.2              | 74.0                 |
| 6647.636364     | 46.0             | H   | -7.5         | 28.1              | 74.0                 |
| 8023.000000     | 48.1             | H   | -3.4         | 25.9              | 74.0                 |
| 17992.093750    | 56.4             | H   | 12.0         | 17.6              | 74.0                 |
| 2302.000000     | 49.1             | V   | -15.7        | 24.9              | 74.0                 |
| 2560.272727     | 42.6             | V   | -15.9        | 31.4              | 74.0                 |
| 4804.000000     | 46.8             | V   | -11.2        | 27.2              | 74.0                 |
| 6612.181818     | 45.2             | V   | -7.4         | 28.8              | 74.0                 |
| 7965.593750     | 48.6             | V   | -3.4         | 25.4              | 74.0                 |
| 17961.843750    | 58.1             | V   | 11.5         | 15.9              | 74.0                 |

**AV**

| Frequency (MHz) | Average (dBμV/m) | Pol | Corr. (dB/m) | Margin - AVG (dB) | Limit - AVG (dBμV/m) |
|-----------------|------------------|-----|--------------|-------------------|----------------------|
| 2294.909091     | 28.0             | H   | -15.7        | 26.0              | 54.0                 |
| 2635.545455     | 27.4             | H   | -15.6        | 26.6              | 54.0                 |
| 4804.272727     | 35.2             | H   | -11.2        | 18.8              | 54.0                 |
| 6647.636364     | 35.6             | H   | -7.5         | 18.4              | 54.0                 |
| 8023.000000     | 37.6             | H   | -3.4         | 16.4              | 54.0                 |
| 17992.093750    | 47.5             | H   | 12.0         | 6.5               | 54.0                 |
| 2302.000000     | 28.1             | V   | -15.7        | 25.9              | 54.0                 |
| 2560.272727     | 27.1             | V   | -15.9        | 26.9              | 54.0                 |
| 4804.000000     | 37.5             | V   | -11.2        | 16.5              | 54.0                 |
| 6612.181818     | 35.6             | V   | -7.4         | 18.4              | 54.0                 |
| 7965.593750     | 37.8             | V   | -3.4         | 16.2              | 54.0                 |
| 17961.843750    | 47.8             | V   | 11.5         | 6.2               | 54.0                 |

**Figure 11: Radiated Spurious Emission, 1Mbps, 2440MHz**


**Limit and Margin**
**QP**

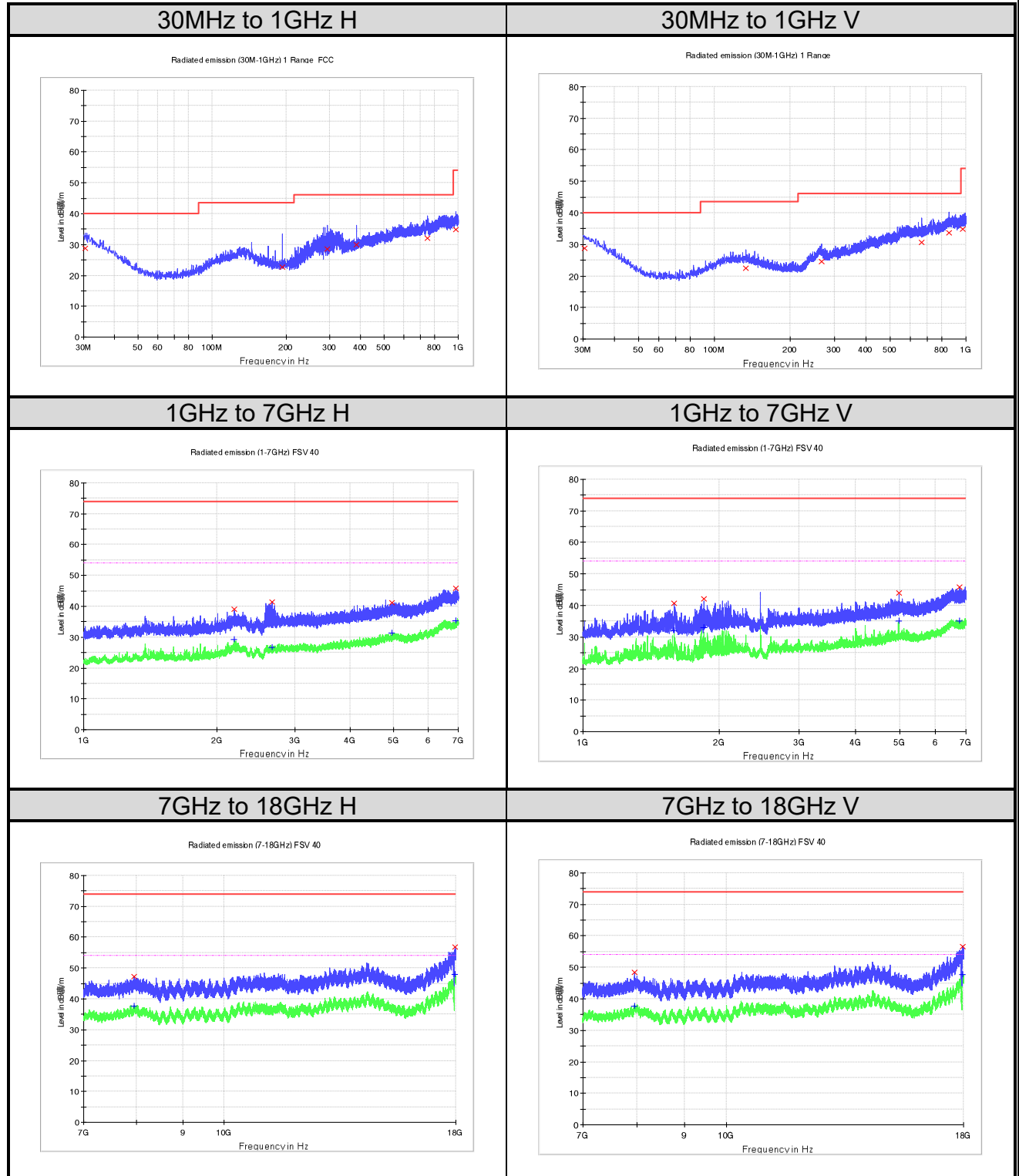
| Frequency (MHz) | QuasiPeak (dBµV/m) | Pol | Corr. (dB/m) | Margin - QPK (dB) | Limit - QPK (dBµV/m) |
|-----------------|--------------------|-----|--------------|-------------------|----------------------|
| 32.061250       | 27.7               | H   | 24.2         | 12.3              | 40.0                 |
| 133.668750      | 26.4               | H   | 18.4         | 17.1              | 43.5                 |
| 192.475000      | 29.6               | H   | 15.8         | 13.9              | 43.5                 |
| 304.025000      | 29.1               | H   | 20.6         | 16.9              | 46.0                 |
| 385.383750      | 30.3               | H   | 22.5         | 15.7              | 46.0                 |
| 948.226250      | 33.7               | H   | 29.2         | 12.3              | 46.0                 |
| 30.363750       | 28.8               | V   | 25.2         | 11.2              | 40.0                 |
| 132.941250      | 22.3               | V   | 18.4         | 21.2              | 43.5                 |
| 266.195000      | 24.4               | V   | 21.1         | 21.6              | 46.0                 |
| 532.217500      | 28.8               | V   | 25.0         | 17.2              | 46.0                 |
| 851.590000      | 33.6               | V   | 28.9         | 12.4              | 46.0                 |
| 997.332500      | 34.1               | V   | 29.7         | 19.9              | 54.0                 |

**PK**

| Frequency (MHz) | MaxPeak (dBµV/m) | Pol | Corr. (dB/m) | Margin - PK+ (dB) | Limit - PK+ (dBµV/m) |
|-----------------|------------------|-----|--------------|-------------------|----------------------|
| 2281.272727     | 48.3             | H   | -15.7        | 25.7              | 74.0                 |
| 2564.090909     | 48.3             | H   | -15.9        | 25.7              | 74.0                 |
| 4879.818182     | 41.1             | H   | -11.1        | 32.9              | 74.0                 |
| 6853.000000     | 46.3             | H   | -7.5         | 27.7              | 74.0                 |
| 8051.187500     | 47.6             | H   | -3.5         | 26.4              | 74.0                 |
| 17965.968750    | 56.9             | H   | 11.5         | 17.1              | 74.0                 |
| 2297.636364     | 47.4             | V   | -15.7        | 26.6              | 74.0                 |
| 2570.363636     | 46.5             | V   | -15.9        | 27.5              | 74.0                 |
| 4880.363636     | 47.8             | V   | -11.1        | 26.2              | 74.0                 |
| 6522.727273     | 46.4             | V   | -7.3         | 27.6              | 74.0                 |
| 7959.406250     | 47.5             | V   | -3.5         | 26.5              | 74.0                 |
| 17971.125000    | 57.5             | V   | 11.6         | 16.5              | 74.0                 |

**AV**

| Frequency (MHz) | Average (dBµV/m) | Pol | Corr. (dB/m) | Margin - AVG (dB) | Limit - AVG (dBµV/m) |
|-----------------|------------------|-----|--------------|-------------------|----------------------|
| 2281.272727     | 28.4             | H   | -15.7        | 25.6              | 54.0                 |
| 2564.090909     | 27.8             | H   | -15.9        | 26.3              | 54.0                 |
| 4879.818182     | 33.5             | H   | -11.1        | 20.6              | 54.0                 |
| 6853.000000     | 35.3             | H   | -7.5         | 18.8              | 54.0                 |
| 8051.187500     | 37.8             | H   | -3.5         | 16.2              | 54.0                 |
| 17965.968750    | 47.5             | H   | 11.5         | 6.5               | 54.0                 |
| 2297.636364     | 27.7             | V   | -15.7        | 26.3              | 54.0                 |
| 2570.363636     | 26.1             | V   | -15.9        | 27.9              | 54.0                 |
| 4880.363636     | 36.6             | V   | -11.1        | 17.4              | 54.0                 |
| 6522.727273     | 35.7             | V   | -7.3         | 18.3              | 54.0                 |
| 7959.406250     | 38.9             | V   | -3.5         | 15.1              | 54.0                 |
| 17971.125000    | 47.8             | V   | 11.6         | 6.2               | 54.0                 |

**Figure 12: Radiated Spurious Emission, 1Mbps, 2480MHz**


**Limit and Margin**
**QP**

| Frequency (MHz) | QuasiPeak (dBμV/m) | Pol | Corr. (dB/m) | Margin - QPK (dB) | Limit - QPK (dBμV/m) |
|-----------------|--------------------|-----|--------------|-------------------|----------------------|
| 30.363750       | 28.7               | H   | 25.2         | 11.3              | 40.0                 |
| 192.838750      | 22.7               | H   | 15.8         | 20.8              | 43.5                 |
| 293.476250      | 28.6               | H   | 20.3         | 17.4              | 46.0                 |
| 385.020000      | 30.0               | H   | 22.5         | 16.0              | 46.0                 |
| 751.437500      | 32.1               | H   | 28.3         | 13.9              | 46.0                 |
| 975.022500      | 34.9               | H   | 30.3         | 19.2              | 54.0                 |
| 30.363750       | 28.8               | V   | 25.2         | 11.2              | 40.0                 |
| 133.183750      | 22.4               | V   | 18.4         | 21.1              | 43.5                 |
| 265.831250      | 24.5               | V   | 21.1         | 21.5              | 46.0                 |
| 664.501250      | 30.6               | V   | 26.6         | 15.4              | 46.0                 |
| 856.197500      | 33.8               | V   | 28.9         | 12.2              | 46.0                 |
| 974.416250      | 34.9               | V   | 30.3         | 19.1              | 54.0                 |

**PK**

| Frequency (MHz) | MaxPeak (dBμV/m) | Pol | Corr. (dB/m) | Margin - PK+ (dB) | Limit - PK+ (dBμV/m) |
|-----------------|------------------|-----|--------------|-------------------|----------------------|
| 2183.090909     | 39.0             | H   | -15.9        | 35.0              | 74.0                 |
| 2659.545455     | 41.5             | H   | -15.5        | 32.5              | 74.0                 |
| 4960.000000     | 41.3             | H   | -11.0        | 32.7              | 74.0                 |
| 6903.181818     | 45.8             | H   | -7.2         | 28.2              | 74.0                 |
| 7959.750000     | 47.3             | H   | -3.5         | 26.7              | 74.0                 |
| 17979.031250    | 56.8             | H   | 11.8         | 17.2              | 74.0                 |
| 1586.363636     | 40.8             | V   | -18.9        | 33.2              | 74.0                 |
| 1850.636364     | 42.0             | V   | -18.5        | 32.0              | 74.0                 |
| 4985.636364     | 43.9             | V   | -10.9        | 30.1              | 74.0                 |
| 6765.727273     | 45.8             | V   | -7.7         | 28.2              | 74.0                 |
| 7961.812500     | 48.5             | V   | -3.4         | 25.5              | 74.0                 |
| 17959.781250    | 56.6             | V   | 11.4         | 17.4              | 74.0                 |

**AV**

| Frequency (MHz) | Average (dBμV/m) | Pol | Corr. (dB/m) | Margin - AVG (dB) | Limit - AVG (dBμV/m) |
|-----------------|------------------|-----|--------------|-------------------|----------------------|
| 2183.090909     | 29.2             | H   | -15.9        | 24.8              | 54.0                 |
| 2659.545455     | 26.7             | H   | -15.5        | 27.3              | 54.0                 |
| 4960.000000     | 31.4             | H   | -11.0        | 22.6              | 54.0                 |
| 6903.181818     | 35.2             | H   | -7.2         | 18.8              | 54.0                 |
| 7959.750000     | 37.7             | H   | -3.5         | 6.7               | 54.0                 |
| 17979.031250    | 47.9             | H   | 11.8         | -2.9              | 54.0                 |
| 1586.363636     | 32.0             | V   | -18.9        | 22.0              | 54.0                 |
| 1850.636364     | 33.0             | V   | -18.5        | 21.0              | 54.0                 |
| 4985.636364     | 35.1             | V   | -10.9        | 18.9              | 54.0                 |
| 6765.727273     | 35.0             | V   | -7.7         | 19.0              | 54.0                 |
| 7961.812500     | 37.7             | V   | -3.4         | 16.3              | 54.0                 |
| 17959.781250    | 47.6             | V   | 11.4         | 6.4               | 54.0                 |

## 6. List of Tables

|                                                       |    |
|-------------------------------------------------------|----|
| Table 1: List of Test and Measurement Equipment ..... | 6  |
| Table 2: Measurement Uncertainty .....                | 7  |
| Table 3: Technical Specification of EUT .....         | 8  |
| Table 4: Operation Channel List.....                  | 9  |
| Table 5: Power parameter value .....                  | 10 |
| Table 6: Special Accessories .....                    | 10 |
| Table 7: Auxiliary Equipment.....                     | 10 |
| Table 8: Antenna Requirement .....                    | 12 |
| Table 9: Peak Output Power .....                      | 20 |

## 7. List of Figures

|                                                                            |    |
|----------------------------------------------------------------------------|----|
| Figure 1: Reference level .....                                            | 26 |
| Figure 2: Conducted Spurious Emission .....                                | 27 |
| Figure 3: Conducted Band Edge .....                                        | 27 |
| Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L.....  | 28 |
| Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N. .... | 29 |
| Figure 8: Radiated Band-Edge, 1Mbps, 2402MHz, H.....                       | 31 |
| Figure 9: Radiated Band-Edge, 1Mbps, 2402MHz, V .....                      | 31 |
| Figure 10: Radiated Band-Edge, 1Mbps, 2480MHz, H.....                      | 32 |
| Figure 11: Radiated Band-Edge, 1Mbps, 2480MHz, V .....                     | 32 |
| Figure 16: Radiated Spurious Emission, 1Mbps, 2402MHz.....                 | 34 |
| Figure 17: Radiated Spurious Emission, 1Mbps, 2440MHz.....                 | 36 |
| Figure 18: Radiated Spurious Emission, 1Mbps, 2480MHz.....                 | 38 |