# FCC Radio Test Report

## FCC ID: 2BSTS-MC400

**This report concerns: Original Grant**

| | | |
|---|---|---|
| **Project No.** | : | 2510C323 |
| **Equipment** | : | Projector |
| **Brand Name** | : | |
| **Model Name** | : | MC400, X1FR, MC400A, MC400PRO, X1F Pro, X1F Plus |
| **Applicant** | : | Global Aiptek Inc. |
| **Address** | : | 2911 N Cicero Ave., Chicago, IL, 60641, US |
| **Manufacturer** | : | Global Aiptek Inc. |
| **Address** | : | 2911 N Cicero Ave., Chicago, IL, 60641, US |
| **Factory1** | : | BO CHENG RUBBER PHILIPPINES INC. |
| **Address** | : | BLOCK 5 LOT 3 PHASE 3 LIMA TECHNOLOGY CENTER-SEZ SAN FERNANDO MALVAR BATANGAS, 4233 Philippines |
| **Factory2** | : | Chengdu Hotack Technology Co., Ltd. |
| **Address** | : | 501-502, Unit 3, Building 13, No. 666 Jinfenghuang Avenue, High-tech Industry Park, Jinniu District, Chengdu City, Si Chuan Province,China. |
| **Date of Receipt** | : | Nov. 03, 2025 |
| **Date of Test** | : | Nov. 04, 2025 ~ Jan. 08, 2026 |
| **Issued Date** | : | Jan. 12, 2026 |
| **Test Sample** | : | Engineering Sample No.: DG92025110336 for conducted, DG92025110333 for radiated 1GHz to 18GHz, DG92025110335 for worst case of radiated, DG92025110334 for others. |
| **Standard(s)** | : | FCC CFR Title 47, Part 15, Subpart C |

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. (Dongguan)

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**Declaration**

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL.

The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

**BTL**'s laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

**Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.
Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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## REVISION HISTORY

| Report No. | Version | Description | Issued Date | Note |
|---|---|---|---|---|
| BTL-FCCP-2-2510C323 | R00 | Original Report. | Dec. 25, 2025 | Invalid |
| BTL-FCCP-2-2510C323 | R01 | This report changes are as follow:<br>1. Revised the test date in page 43~44.<br>2. Added the test date in page 53~56.<br>It is a revision of the report BTL-FCCP-2-2510C323 R00. This is a newly released report. replacing the BTL-FCCP-2-2510C323 R00 report. | Jan. 12, 2026 | Valid |

## 1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standard:
ANSI C63.10-2020
The following reference test guidance is not within the scope of accreditation of A2LA:
KDB 558074 D01 15.247 Meas Guidance v05r02

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| FCC CFR Title 47, Part 15, Subpart C | | | | |
|---|---|---|---|---|
| **Standard(s) Section** | **Test Item** | **Test Result** | **Judgment** | **Remark** |
| 15.207 | AC Power Line Conducted Emissions | APPENDIX A | PASS | ------ |
| 15.247(d)<br>15.205(a)<br>15.209(a) | Radiated Emissions | APPENDIX B<br>APPENDIX C<br>APPENDIX D | PASS | ------ |
| 15.247(a)(2) | Bandwidth | APPENDIX E | PASS | ------ |
| 15.247(b)(3) | Maximum Output Power | APPENDIX F | PASS | ------ |
| 15.247(d) | Conducted Spurious Emission | APPENDIX G | PASS | ------ |
| 15.247(e) | Power Spectral Density | APPENDIX H | PASS | ------ |
| 15.203 | Antenna Requirement | ------ | PASS | **Note(2)** |

Note:
(1) “N/A” denotes test is not applicable to this device.
(2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of
**For Radiated 1GHz to 18GHz :**
Room 102 & 702, Building A3, No.9, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.
**For Others:**
No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.
BTL's Registration Number for FCC: 747969
BTL's Designation Number for FCC: CN1377

## 2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95.45% confidence level (based on a coverage factor (k=2))
The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

| Test Site | Method | Measurement Frequency Range | *U*,(dB) |
|---|---|---|---|
| DGDLC02 | CISPR | 150kHz ~ 30MHz | 2.66 |

B. Radiated emissions test:

| Test Site | Method | Measurement Frequency Range | *U*,(dB) |
|---|---|---|---|
| DGDLCB03 | CISPR | 9kHz ~ 30MHz | 2.26 |

| Test Site | Method | Measurement Frequency Range | Ant. H / V | *U*,(dB) |
|---|---|---|---|---|
| DGDLCB03 (3m) | CISPR | 30MHz ~ 200MHz | V | 4.40 |
| | | 30MHz ~ 200MHz | H | 3.62 |
| | | 200MHz ~ 1,000MHz | V | 4.58 |
| | | 200MHz ~ 1,000MHz | H | 3.98 |

| Test Site | Method | Measurement Frequency Range | *U*,(dB) |
|---|---|---|---|
| DGGDCB01 (3m) | CISPR | 1GHz ~ 18GHz | 3.98 |

| Test Site | Method | Measurement Frequency Range | *U*,(dB) |
|---|---|---|---|
| DGDLCB03 (1m) | CISPR | 18 ~ 26.5 GHz | 4.30 |

C. Other Measurement:

| Test Item | Uncertainty |
|---|---|
| Bandwidth | 0.75 % |
| Maximum Output Power | 1.3 dB |
| Conducted Spurious Emission | 2.1 dB |
| Conducted Bandedge Emission | 1.7 dB |
| Power Spectral Density | 1.8 dB |
| Temperature | 0.7 °C |
| Humidity | 1.7 % |

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

## 2.3 TEST ENVIRONMENT CONDITIONS

| Test Item | Temperature | Humidity | Test Voltage | Tested By |
|---|---|---|---|---|
| AC Power Line Conducted Emissions | 23°C | 53% | AC 120V/60Hz | Hayden Chen |
| Radiated Emissions -9 kHz to 30 MHz | 24°C | 53% | AC 120V/60Hz | Hayden Chen |
| Radiated Emissions -30 MHz to 1000 MHz | 25°C | 51% | AC 120V/60Hz | Torin Long |
| Radiated Emissions -Above 1000 MHz | 22°C | 45% | AC 120V/60Hz | Jensen Zhou |
| | 24°C | 53% | AC 120V/60Hz | Lafu Li |
| | 25°C | 51% | AC 120V/60Hz | Torin Long |
| | 27°C | 42% | AC 120V/60Hz | Lafu Li |
| Bandwidth | 23°C | 41% | AC 120V/60Hz | Steve Zhou |
| Maximum Output Power | 23°C | 41% | AC 120V/60Hz | Steve Zhou |
| Conducted Spurious Emission | 23°C | 41% | AC 120V/60Hz | Steve Zhou |
| Power Spectral Density | 23°C | 41% | AC 120V/60Hz | Steve Zhou |

# 3. GENERAL INFORMATION

## 3.1 GENERAL DESCRIPTION OF EUT

| | |
|---|---|
| Equipment | Projector |
| Brand Name | hp |
| Test Model | MC400 |
| Model Name | MC400, X1FR, MC400A, MC400PRO, X1F Pro, X1F Plus |
| Model Difference(s) | Model name and colors are different. |
| Hardware Version | LCD H726 68356A |
| Software Version | Android 14 |
| Power Source | DC Voltage supplied from AC adapter.<br>Model: TPN-LA35 |
| Power Rating | 20V⎓2.25A |
| Operation Frequency | 2402 MHz ~ 2480 MHz |
| Modulation Type | GFSK |
| Bit Rate of Transmitter | 1Mbps |
| Max. Output Power | 1Mbps: 9.00 dBm (0.0079 W) |

Note:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

2. Channel List:

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

3. Table for Filed Antenna:

| Ant. | Brand | P/N | Antenna Type | Connector | Gain (dBi) |
|---|---|---|---|---|---|
| 1 | LWC | WIFI/BT | FPC | N/A | 4.76 |

## 3.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

| Pretest Mode | Description |
|---|---|
| Mode 1 | TX Mode_1Mbps Channel 00/19/39 |
| Mode 2 | TX Mode_1Mbps Channel 39 |

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

| **AC power line conducted emissions test** | |
|---|---|
| Final Test Mode | Description |
| Mode 2 | TX Mode_1Mbps Channel 39 |

| **Radiated emissions test - Below 1GHz & Above 18 GHz** | |
|---|---|
| Final Test Mode | Description |
| Mode 2 | TX Mode_1Mbps Channel 39 |

| **Radiated emissions test - 1 GHz - 18 GHz** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | TX Mode_1Mbps Channel 00/19/39 |

| **Conducted test** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | TX Mode_1Mbps Channel 00/19/39 |

Note:

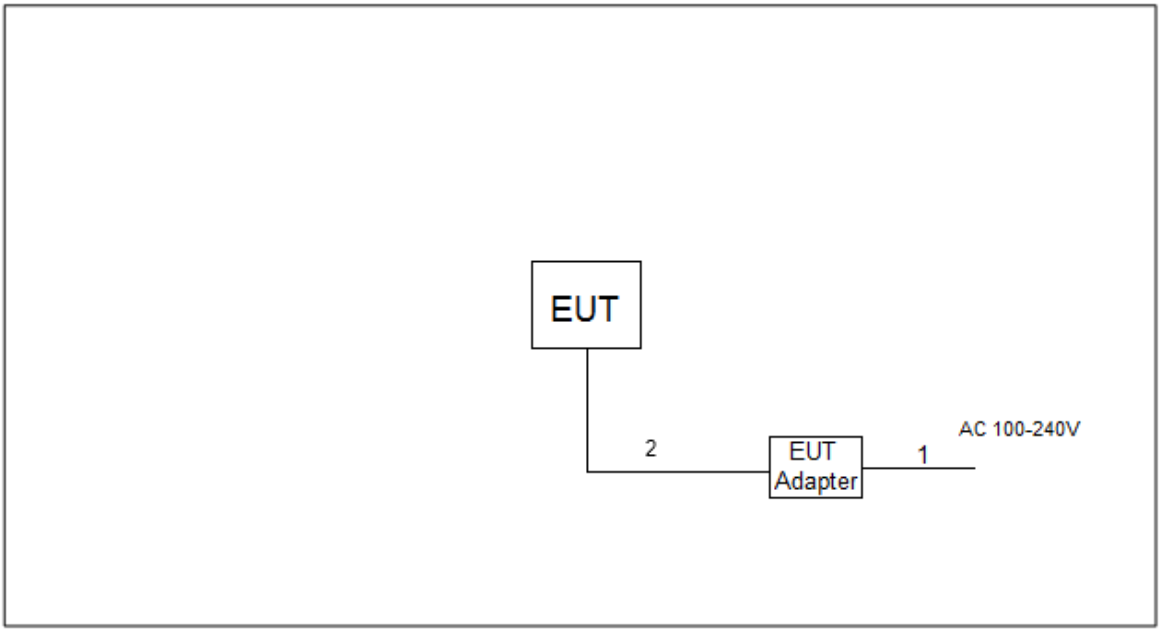
(1) For radiated emission above 1 GHz test, the spurious points of 1GHz~26.5GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.
(2) For AC power line conducted emissions and radiated emissions below 1 GHz test, the 1Mbps Channel 39 is found to be the worst case and recorded.
(3) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.
(4) For radiated emission 1GHz to 18GHz test, both Vertical and Horizontal are evaluated, only the worst polarization is recorded.

## 3.3 PARAMETERS OF TEST SOFTWARE

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

| Test Software Version | ADB | | |
|---|---|---|---|
| Frequency (MHz) | 2402 | 2440 | 2480 |
| 1Mbps | default | default | default |

## 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED




## 3.5 SUPPORT UNITS

| Item | Equipment | Brand | Model No. | Series No. |
|---|---|---|---|---|
| - | - | - | - | - |

| Item | Cable Type | Shielded Type | Ferrite Core | Length |
|---|---|---|---|---|
| 1 | AC Cable | NO | NO | 0.8m |
| 2 | DC Cable | NO | NO | 1.2m |

## 3.6 CUSTOMER INFORMATION DESCRIPTION

1) The antenna gain is provided by the manufacturer.
2) Except for AC power line conducted emissions and radiated emissions, the results of all test items include cable losses. All cable losses are provided by the testing laboratory.

# 4. AC POWER LINE CONDUCTED EMISSIONS

## 4.1 LIMIT

| Frequency of Emission (MHz) | Limit (dBμV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15 - 0.5 | 66 to 56* | 56 to 46* |
| 0.5 - 5.0 | 56 | 46 |
| 5.0 - 30.0 | 60 | 50 |

Note:

(1) The tighter limit applies at the band edges.
(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
Margin Level = Measurement Value - Limit Value

## 4.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

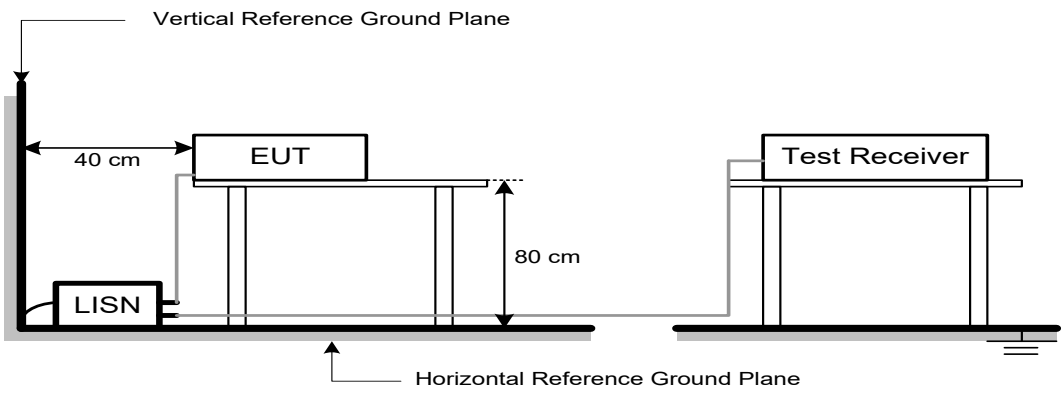
The following table is the setting of the receiver:

| Receiver Parameters | Setting |
|---|---|
| Start Frequency | 0.15 MHz |
| Stop Frequency | 30 MHz |
| IF Bandwidth | 9 kHz |

## 4.3 DEVIATION FROM TEST STANDARD

No deviation.

## 4.4 TEST SETUP




## 4.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

## 4.6 TEST RESULTS

Please refer to the APPENDIX A.

Remark:

(1) All readings are QP Mode value unless otherwise stated AVG in column of 『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform.In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.

(2) Measuring frequency range from 150 kHz to 30 MHz.

# 5. RADIATED EMISSIONS

## 5.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a) , then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (9 kHz-1000 MHz)

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009-0.490 | 2400/F(kHz) | 300 |
| 0.490-1.705 | 24000/F(kHz) | 30 |
| 1.705-30.0 | 30 | 30 |
| 30-88 | 100 | 3 |
| 88-216 | 150 | 3 |
| 216-960 | 200 | 3 |
| Above 960 | 500 | 3 |

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

| Frequency (MHz) | Band edge/ Harmonic at 3m (dBµV/m) | | Harmonic at 1m (dBµV/m) | |
|---|---|---|---|---|
| | Peak | Average | Peak | Average |
| Above 1000 | 74 | 54 | 83.5 (Note 5) | 63.5 (Note 5) |

Note:
(1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.
(2) The tighter limit applies at the band edges.
(3) Emission level (dBuV/m)=20log Emission level (uV/m).
(4) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value

(5)

$$FS_{\text{limit}} = FS_{\max} - 20\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

20log ($d_{limit}/d_{measure}$)=20log (3/1)=9.5 dB.
$FS_{limit}$: Harmonic at 3m Peak and Average limit.
$FS_{max}$: Harmonic at 1m Peak and Average Maximum value.
$d_{limit}$: Harmonic at 3m test distance.
$d_{measure}$: Harmonic Actual test distance.

## 5.2 TEST PROCEDURE

a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
b. The measuring distance of 3 m or 1m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1 GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1 GHz)
i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

The following table is the setting of the receiver:

| Spectrum Parameters | Setting |
|---|---|
| Start ~ Stop Frequency | 9 kHz~150 kHz for RBW 200 Hz |
| Start ~ Stop Frequency | 0.15 MHz~30 MHz for RBW 9 kHz |
| Start ~ Stop Frequency | 30 MHz~1000 MHz for RBW 100 kHz |

| Spectrum Parameters | Setting |
|---|---|
| Start Frequency | 1000 MHz |
| Stop Frequency | 10th carrier harmonic |
| RBW / VBW<br>(Emission in restricted band) | 1 MHz / 3 MHz for PK value<br>1 MHz / 1/T Hz for AVG value |

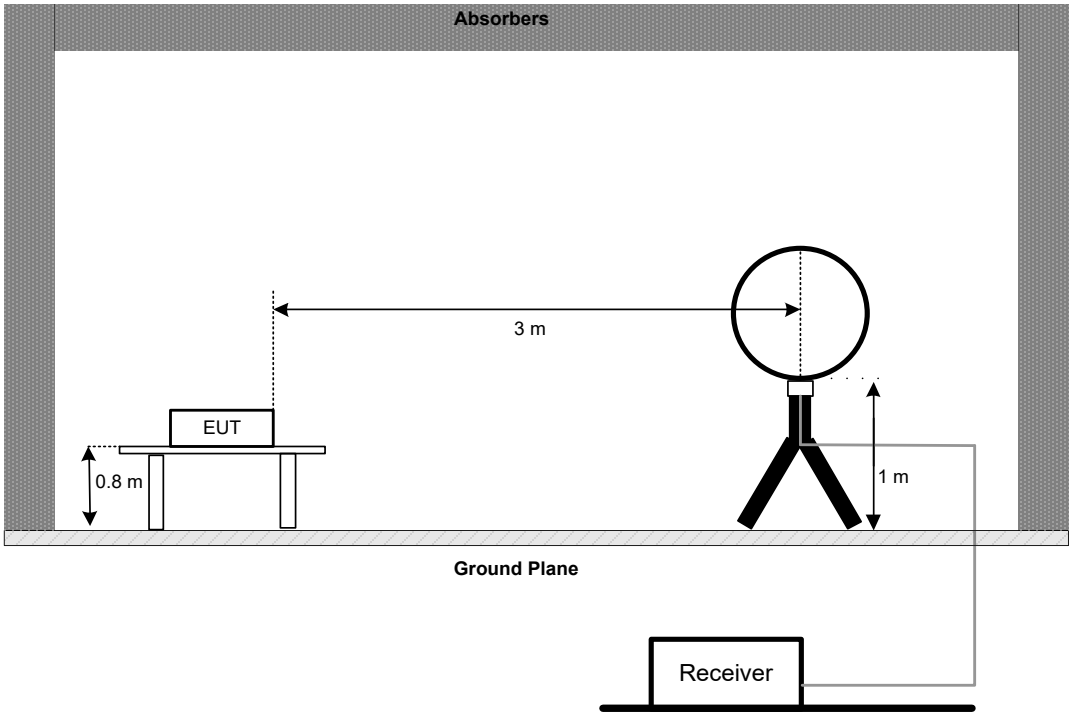
| Spectrum Parameters | Setting |
|---|---|
| Start ~ Stop Frequency | 9 kHz~90 kHz for PK/AVG detector |
| Start ~ Stop Frequency | 90 kHz~110 kHz for QP detector |
| Start ~ Stop Frequency | 110 kHz~490 kHz for PK/AVG detector |
| Start ~ Stop Frequency | 490 kHz~30 MHz for QP detector |
| Start ~ Stop Frequency | 30 MHz~1000 MHz for QP detector |
| Start ~ Stop Frequency | 1 GHz~26.5 GHz for PK/AVG detector |

## 5.3 DEVIATION FROM TEST STANDARD

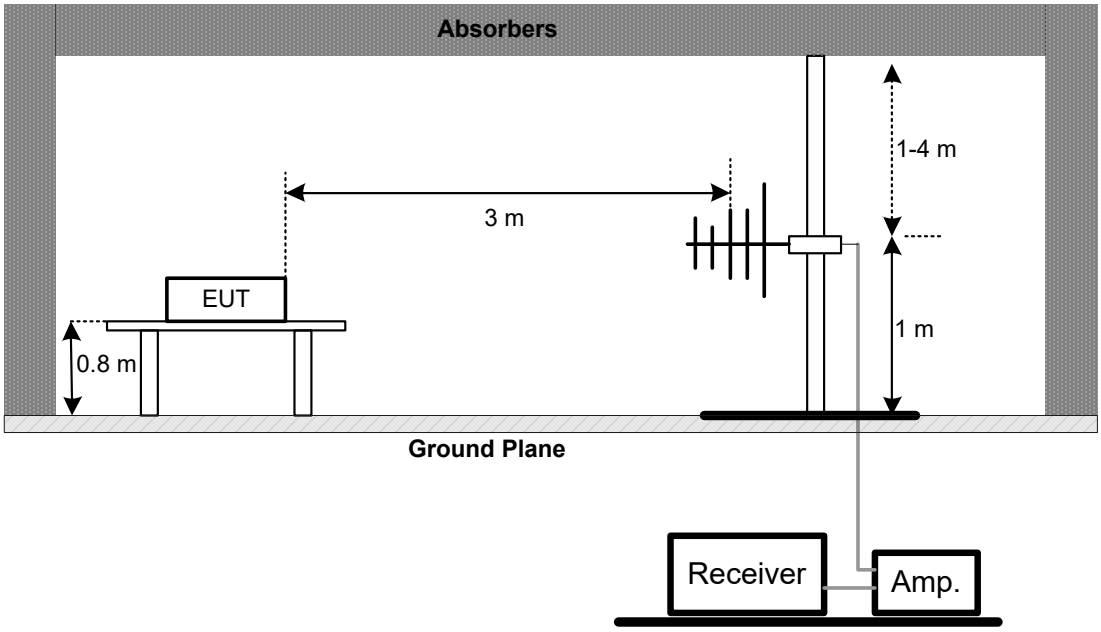
No deviation.

## 5.4 TEST SETUP

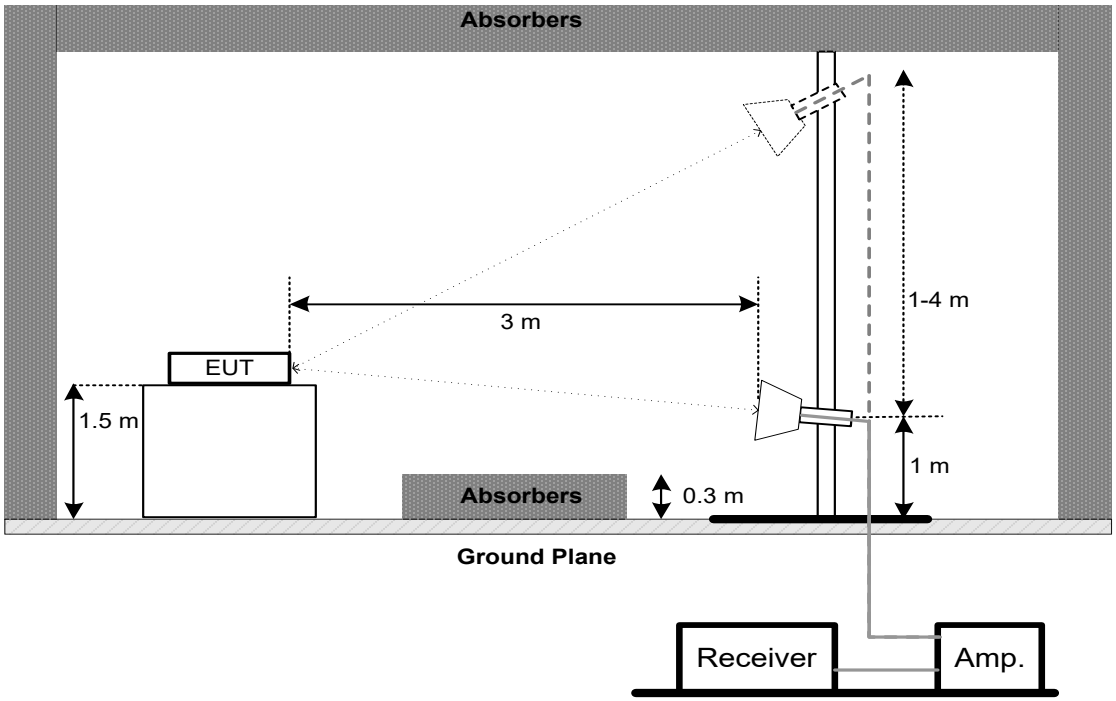
**9 kHz to 30 MHz**



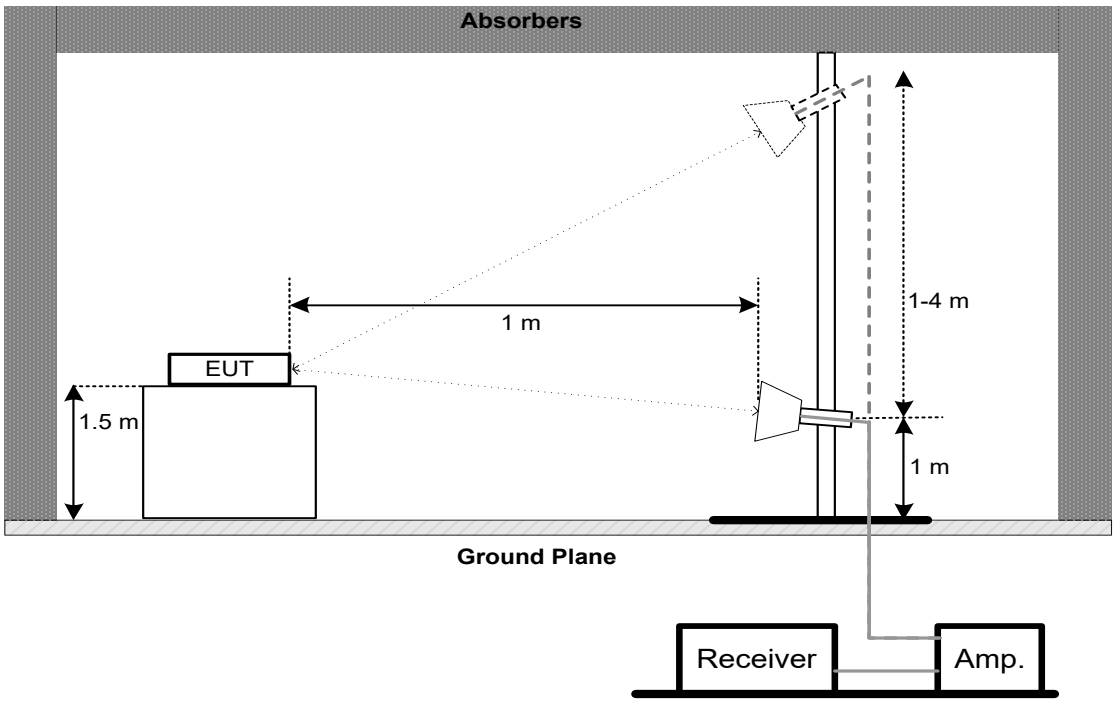

**30 MHz to 1 GHz**



**Above 1 GHz**
**Band edge & Harmonic(1 GHz to 18 GHz)**




**Harmonic(18 GHz to 26.5 GHz)**



## 5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

## 5.6 TEST RESULT - 9 kHz TO 30 MHz

Please refer to the APPENDIX B.

Remark:

(1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
(2) Limit line = specific limits (dBuV) + distance extrapolation factor.

## 5.7 TEST RESULT - 30 MHz TO 1000 MHz

Please refer to the APPENDIX C.

## 5.8 TEST RESULT - ABOVE 1000 MHz

Please refer to the APPENDIX D.

Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

# 6. BANDWIDTH

## 6.1 LIMIT

| Section | Test Item | Limit |
|---|---|---|
| FCC 15.247(a)(2) | 6 dB Bandwidth | >= 500 kHz |
| | 99% Emission Bandwidth | - |

## 6.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. The following table is the setting of the spectrum analyzer:

For 6 dB Bandwidth:

| Spectrum Parameters | Setting |
|---|---|
| Span | > Measurement Bandwidth |
| RBW | 100 kHz |
| VBW | 300 kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

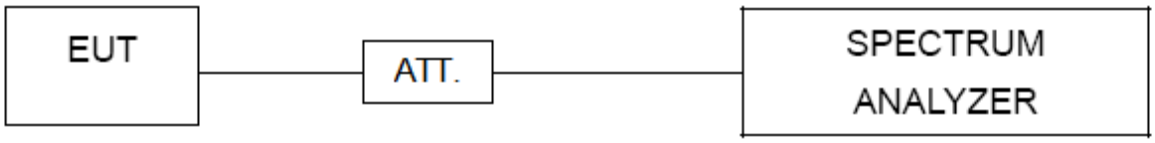
For 99% Emission Bandwidth:

| Spectrum Parameters | Setting |
|---|---|
| Span | Between 1.5 times and 5.0 times the OBW |
| RBW | 30 kHz |
| VBW | 100 kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

## 6.3 DEVIATION FROM STANDARD

No deviation.

## 6.4 TEST SETUP




## 6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

## 6.6 TEST RESULTS

Please refer to the APPENDIX E.

# 7. MAXIMUM OUTPUT POWER

## 7.1 LIMIT

| Section | Test Item | Limit |
|---|---|---|
| FCC 15.247(b)(3) | Maximum Output Power | 1.0000 watt or 30.00 dBm |

## 7.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

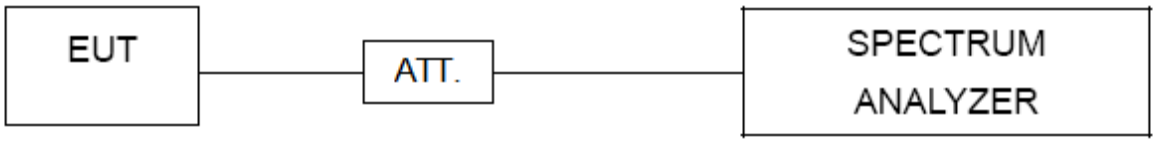
b. The following table is the setting of the spectrum analyzer:

| Spectrum Parameters | Setting |
|---|---|
| Span | ≥ 3×RBW |
| RBW | 3 MHz |
| VBW | 3 MHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

## 7.3 DEVIATION FROM STANDARD

No deviation.

## 7.4 TEST SETUP




## 7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

## 7.6 TEST RESULTS

Please refer to the APPENDIX F.

# 8. CONDUCTED SPURIOUS EMISSION

## 8.1 LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required.

## 8.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. The following table is the setting of the spectrum analyzer:

For Reference Level:

| Spectrum Parameters | Setting |
|---|---|
| Span | ≥ 1.5 times the bandwidth. |
| RBW | 100 kHz |
| VBW | 300 kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

For Emission Level - Band edge:

| Spectrum Parameters | Setting |
|---|---|
| Start Frequency | 2300 MHz |
| Stop Frequency | 2690 MHz |
| RBW | 100 kHz |
| VBW | 300 kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

For Emission Level - Harmonic:

| Spectrum Parameters | Setting |
|---|---|
| Start Frequency | 30 MHz |
| Stop Frequency | 26.5 GHz |
| RBW | 100 kHz |
| VBW | 300 kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

## 8.3 DEVIATION FROM STANDARD

No deviation.

## 8.4 TEST SETUP

## 8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

## 8.6 TEST RESULTS

Please refer to the APPENDIX G.

# 9. POWER SPECTRAL DENSITY

## 9.1 LIMIT

| Section | Test Item | Limit |
|---|---|---|
| FCC 15.247(e) | Power Spectral Density | 8 dBm<br>(in any 3 kHz) |

## 9.2 TEST PROCEDURE

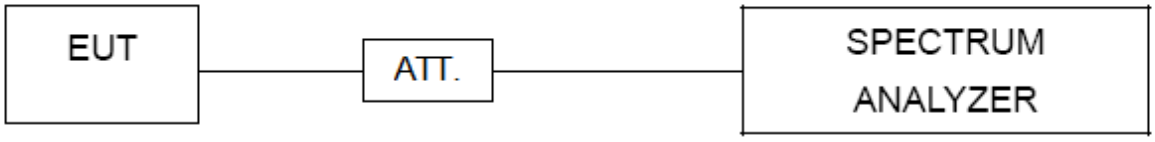
a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. The following table is the setting of the spectrum analyzer:

| Spectrum Parameters | Setting |
|---|---|
| Span | 1.5 times the DTS bandwidth |
| RBW | 3 kHz |
| VBW | 10 kHz |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | Auto |

## 9.3 DEVIATION FROM STANDARD

No deviation.

## 9.4 TEST SETUP




## 9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

## 9.6 TEST RESULTS

Please refer to the APPENDIX H.

## 10. MEASUREMENT INSTRUMENTS LIST

| AC Power Line Conducted Emissions (Test Date: Nov. 10, 2025) | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | EMI TEST RECEIVER | R&S | ESCI | 100382 | Dec. 06, 2025 |
| 2 | TWO-LINE V-NETWORK | R&S | ENV216 | 101447 | Dec. 06, 2025 |
| 3 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |
| 4 | Cable | N/A | SFT205-NMNM-9M-001 | 9M | Jul. 08, 2026 |
| 5 | 643 Shield Room | ETS | 6*4*3 | N/A | N/A |

| Radiated Emissions - 9 kHz to 30 MHz (Test Date: Nov. 11, 2025) | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Active Loop Antenna | Schwarzbeck | FMZB 1513-60 | 00025 | Mar. 01, 2026 |
| 2 | Receiver | Agilent | N9038A | MY52130039 | Jan. 10, 2026 |
| 3 | Cable | RegalWay | LMR400-NMNM-6m | N/A | Apr. 26, 2026 |
| 4 | Cable | RegalWay | LMR400-NMRANM-3.5m | N/A | Apr. 26, 2026 |
| 5 | 966 Chamber room | CM | 9*6*6 | N/A | May 09, 2026 |

| Radiated Emissions - 30 MHz to 1 GHz (Test Date: Nov. 11, 2025) | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Trilog-Broadband Antenna | Schwarzbeck | VULB 9168 | 01462 | Dec. 14, 2025 |
| 2 | Attenuator | EMC INSTRUMENT | EMCI-N-6-06 | AT-06009 | Dec. 14, 2025 |
| 3 | Preamplifier | EMC INSTRUMENT | EMC001330 | 980998 | May 17, 2026 |
| 4 | Cable | RegalWay | LMR400-NMNM-12.5m | N/A | Jun. 04, 2026 |
| 5 | Cable | RegalWay | LMR400-NMNM-3m | N/A | Jun. 04, 2026 |
| 6 | Cable | RegalWay | LMR400-NMNM-0.5m | N/A | Jun. 04, 2026 |
| 7 | Receiver | Agilent | N9038A | MY52130039 | Jan. 10, 2026 |
| 8 | Positioning Controller | MF | MF-7802 | N/A | N/A |
| 9 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |
| 10 | 966 Chamber room | CM | 9*6*6 | N/A | May 15, 2026 |

| Radiated Emissions - 1 GHz - 18 GHz (Test Date: Nov. 11, 2025 ~ Nov. 27, 2025, Jan. 08, 2026) | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Positioning Controller | MF | MF-7802 | N/A | N/A |
| 2 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |
| 3 | MXA Signal Analyzer | KEYSIGHT | N9020B | MY63430227 | Jul. 25, 2026 |
| 4 | Cable | EMC INSTRUMENT | EMC104-SM-SM-10000 | N/A | Oct. 20, 2026 |
| 5 | Cable | EMC INSTRUMENT | EMC104-SM-SM-3000 | N/A | Oct. 20, 2026 |
| 6 | Cable | RegalWay | RWLP50-4.0A-SMSM-1M | N/A | Oct. 20, 2026 |
| 7 | 966 Chamber room | Tai He | 9*6*6（NSA&VSWR） | N/A | May 18, 2026 |
| 8 | Double Ridged Broadband Horn Antenna | RF SPIN | DRH18-E | 210106A18E | Jul. 15, 2026 |
| 9 | Preamplifier | EMC INSTRUMENT | EMC118A45SE | 981001 | May 28, 2026 |
| 10 | Attenuator | Talent Microwave | TA10A2-S-18 | N/A | N/A |
| 11 | Filter | COM-MW | ZHPF6-M3000-18000-174 | N/A | Oct. 17, 2026 |

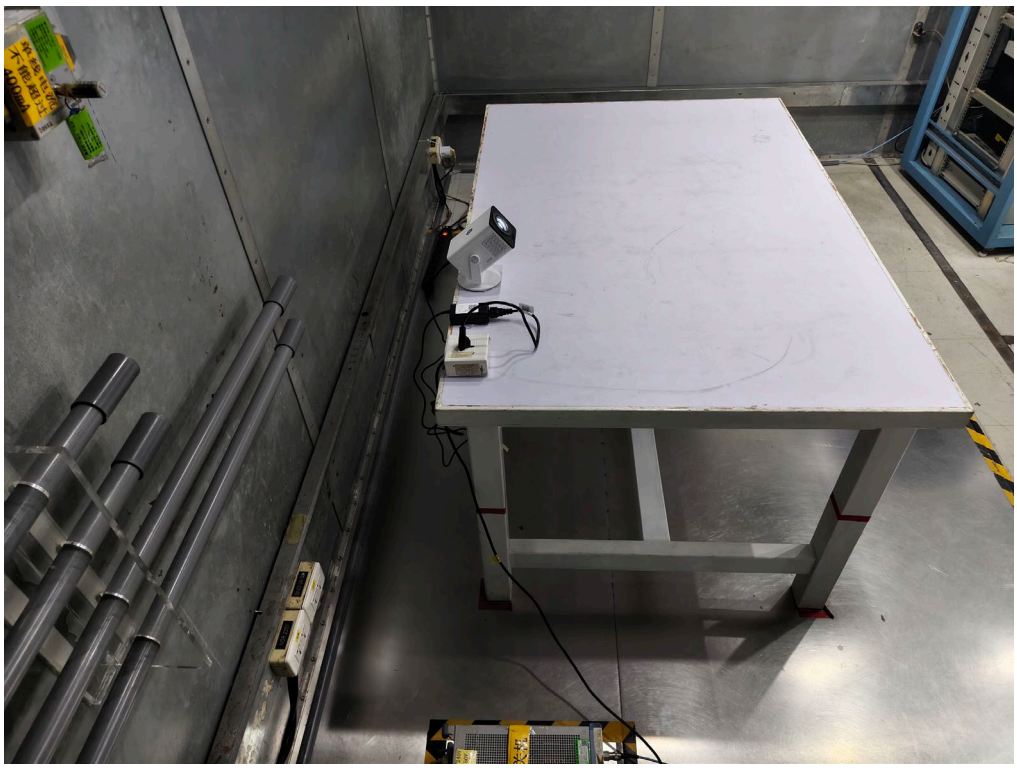
| Radiated Emissions - Above 18 GHz (Test Date: Nov. 11, 2025) | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Cable | Tonscend | HF160-KMKM-0.5M | N/A | Oct. 21, 2026 |
| 2 | Cable | Tonscend | HF160-KMKM-5M | N/A | Oct. 21, 2026 |
| 3 | Pre-Amplifier | EMC INSTRUMENT | EMC184045SE | 980409 | Dec. 06, 2025 |
| 4 | DRG Horn Antenna | ETS | 3116C | 218942 | Feb. 28, 2026 |
| 5 | Positioning Controller | MF | MF-7802 | N/A | N/A |
| 6 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |
| 7 | MXA Signal Analyzer | KEYSIGHT | N9020B | MY63380204 | Jul. 25, 2026 |

| Bandwidth & Maximum Output Power & Power Spectral Density & Conducted Spurious Emission (Test Date: Dec. 12, 2025) | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP40 | 100185 | May 17, 2026 |
| 2 | CTA | BTL | CTA | N/A | N/A |
| 3 | Isolation attenuator | Z-Link | ASMA-16-18-2W | N/A | N/A |

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

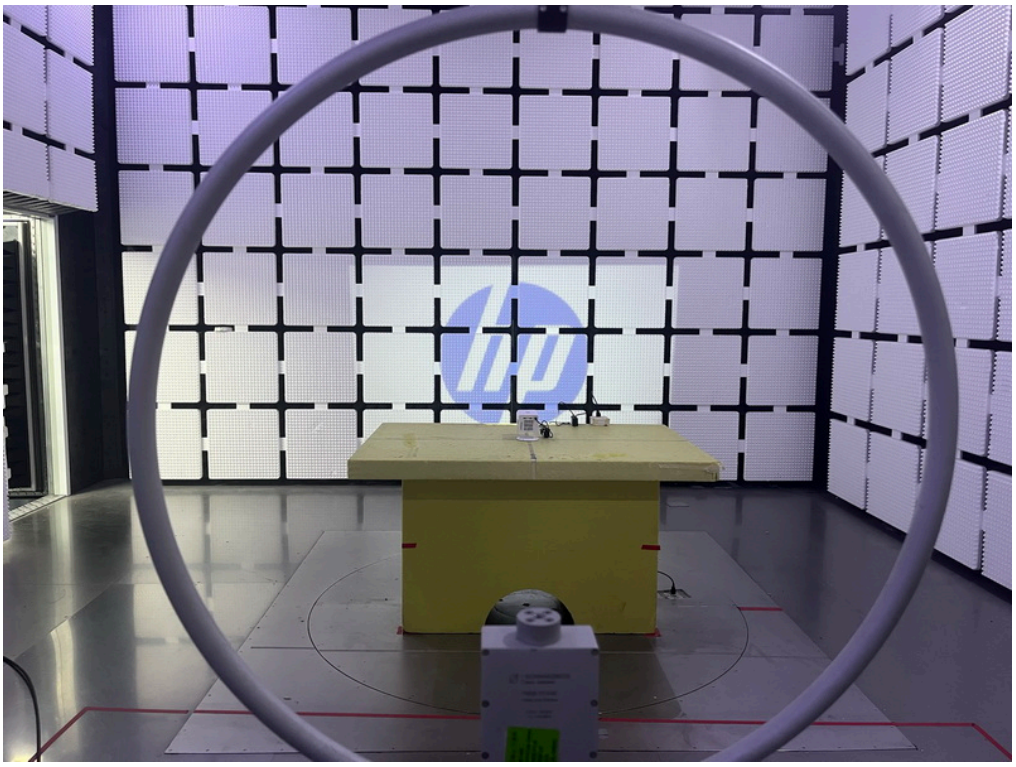
## 11. EUT TEST PHOTO

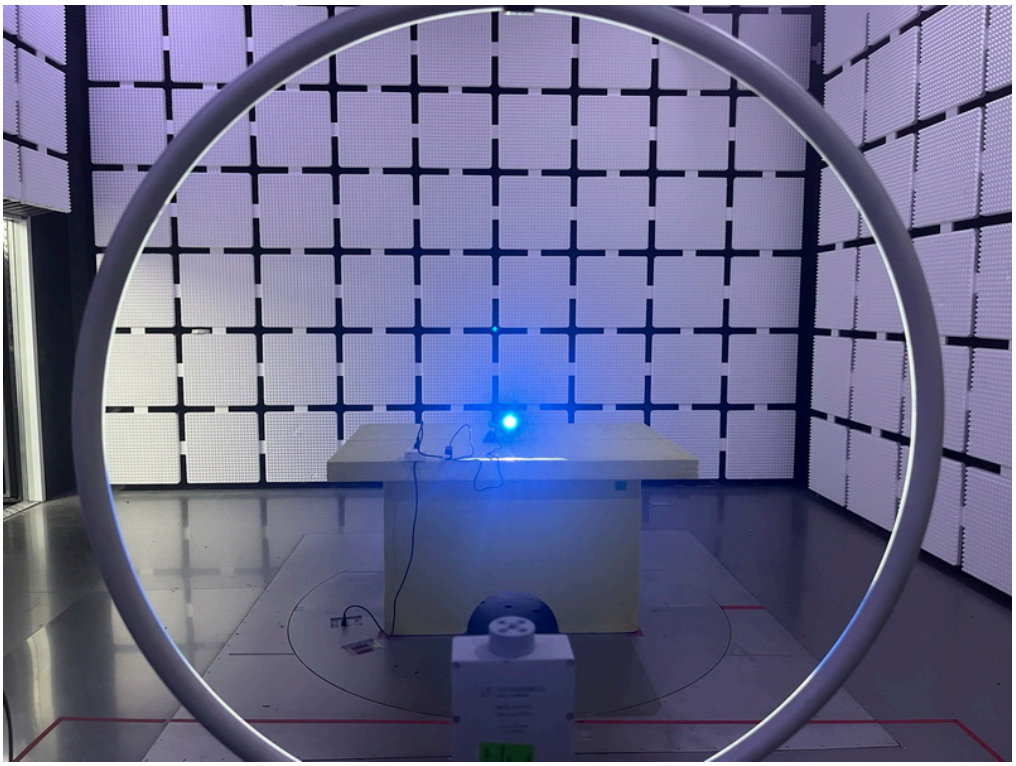
**AC Power Line Conducted Emissions Test Photos**



**Radiated Emissions Test Photos**

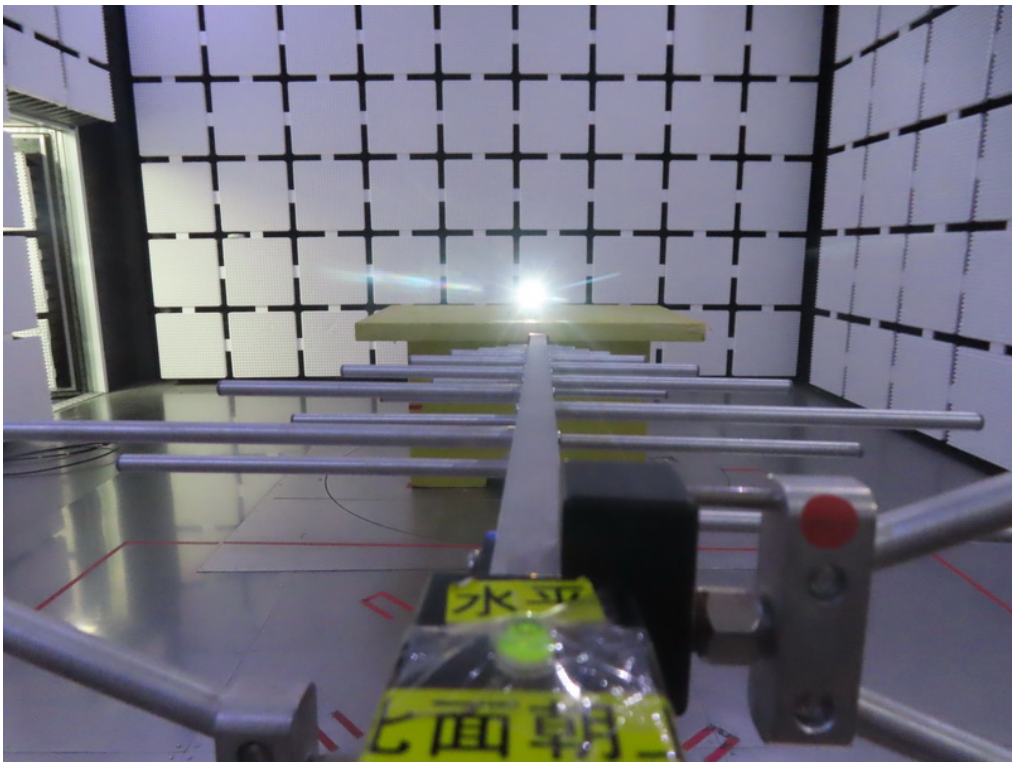
**9 kHz to 30 MHz**

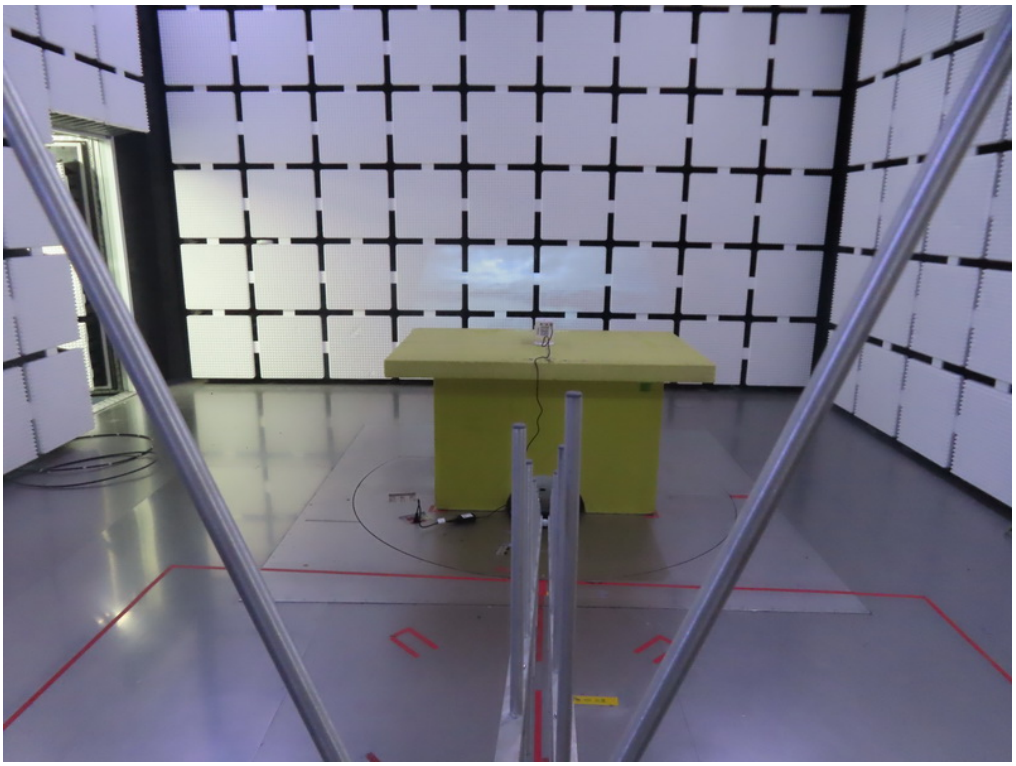




**Radiated Emissions Test Photos**

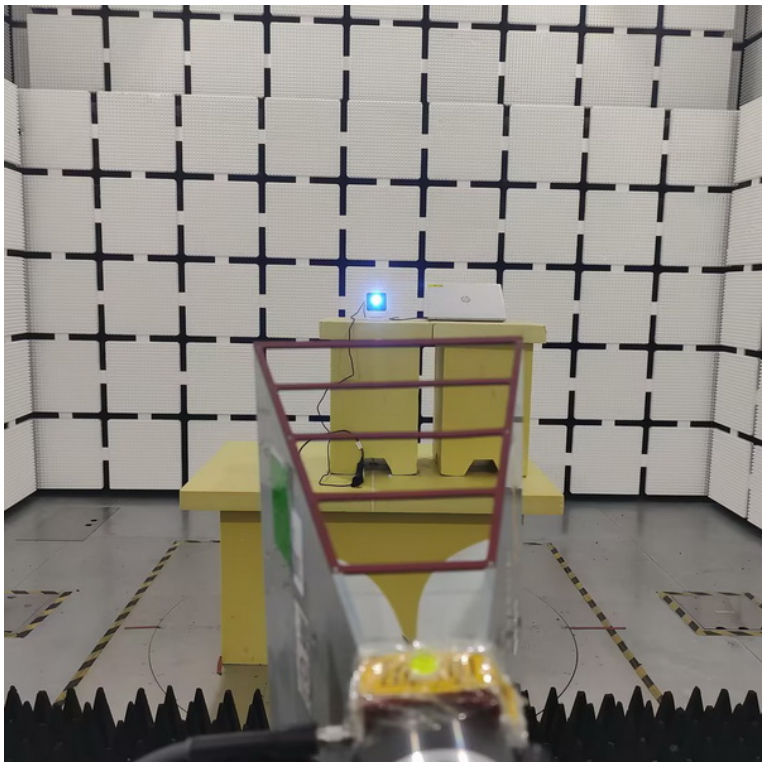
**30 MHz to 1000 MHz**

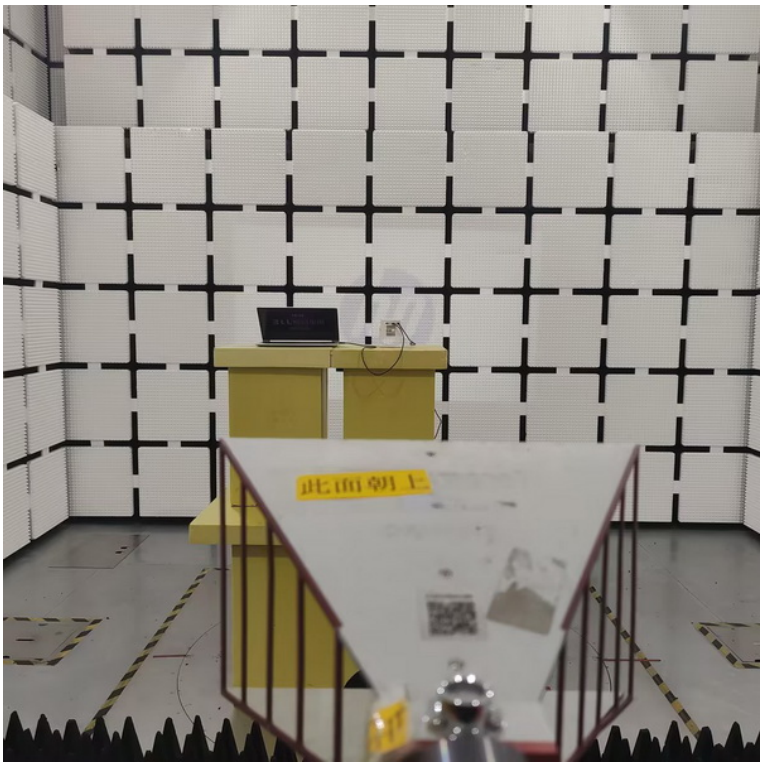


**Radiated Emissions Test Photos**

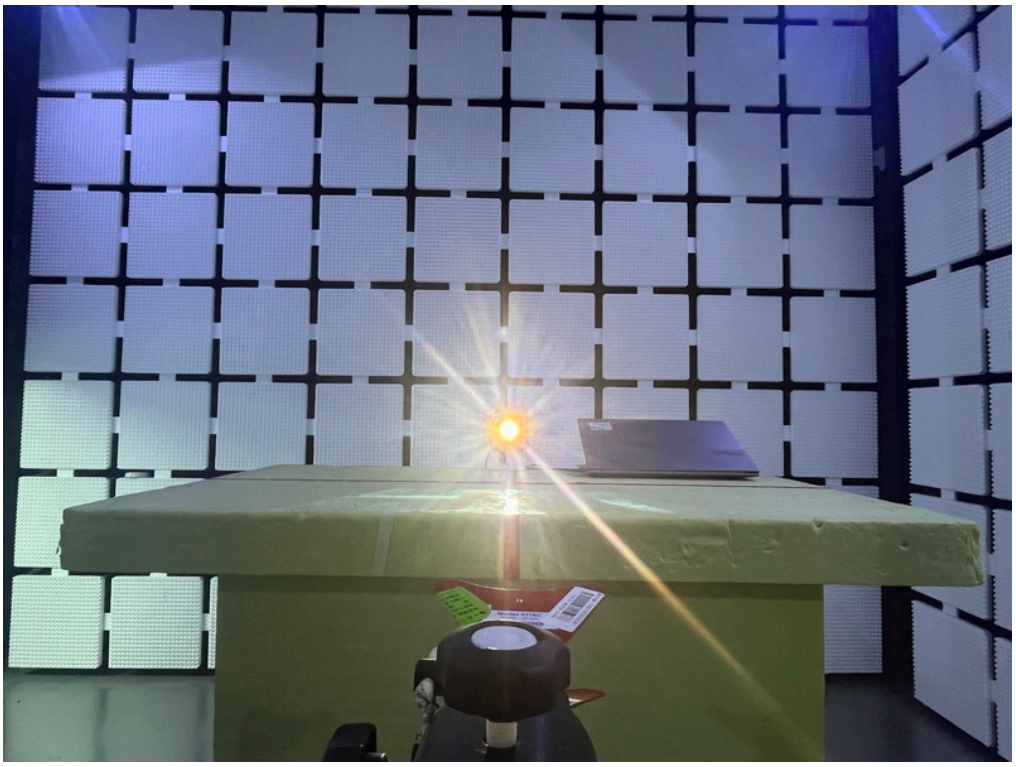
**Band edge & Harmonic(1 GHz to 18 GHz)**

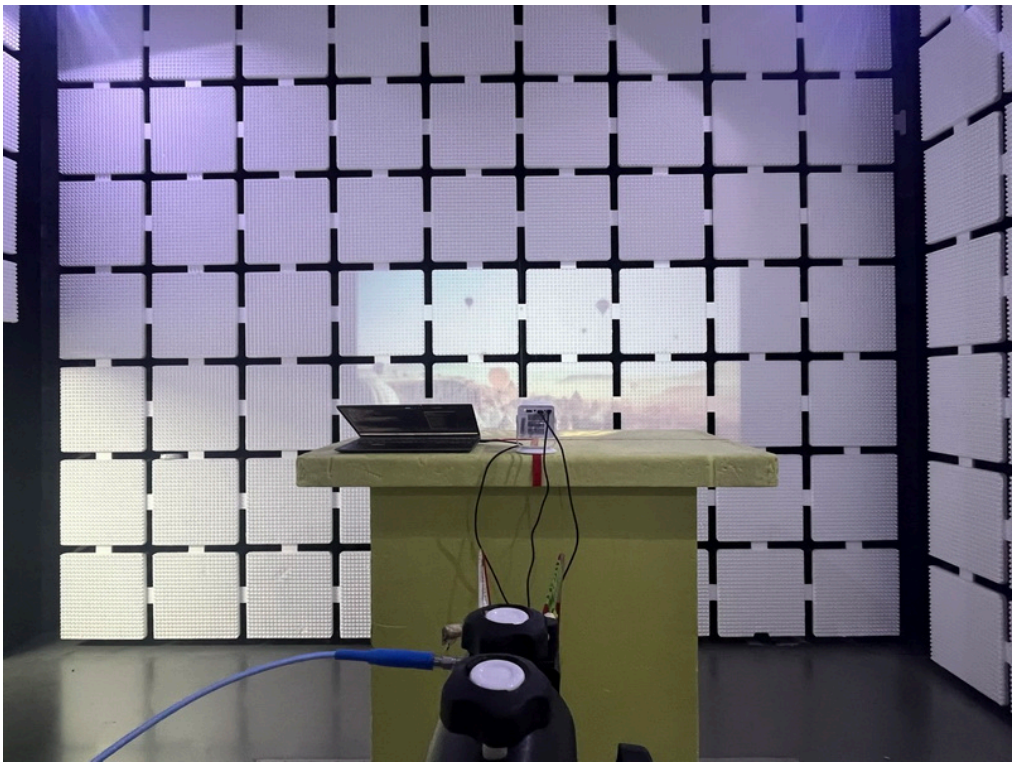




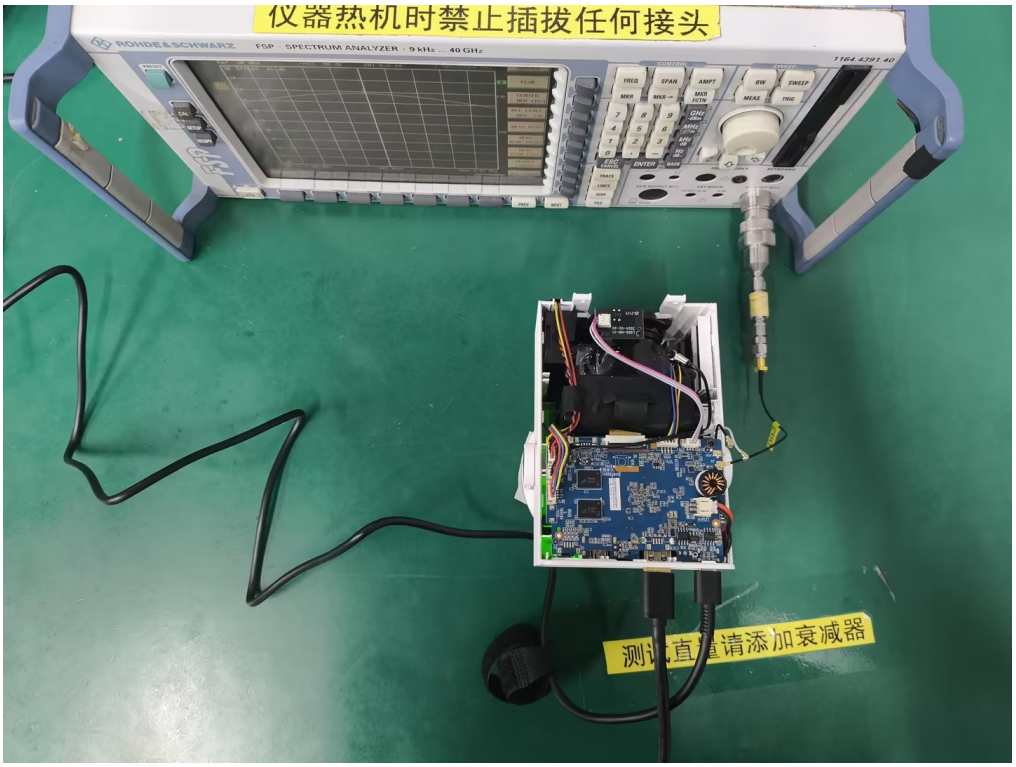
**Radiated Emissions Test Photos**

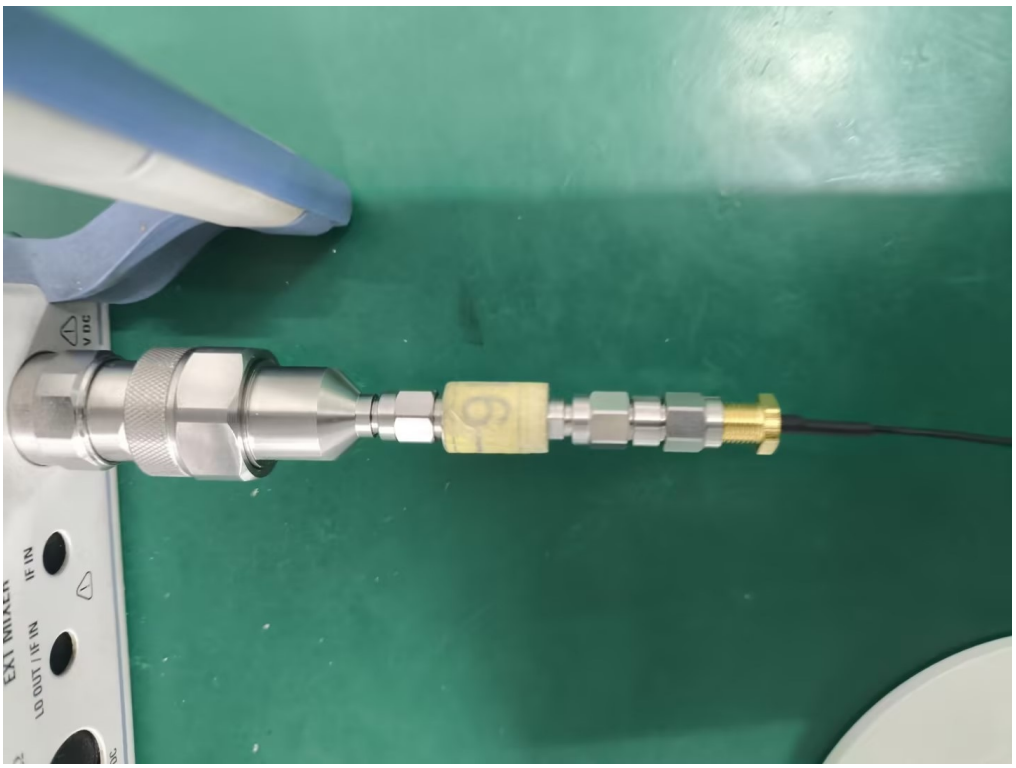
**Harmonic(18 GHz to 26.5 GHz)**





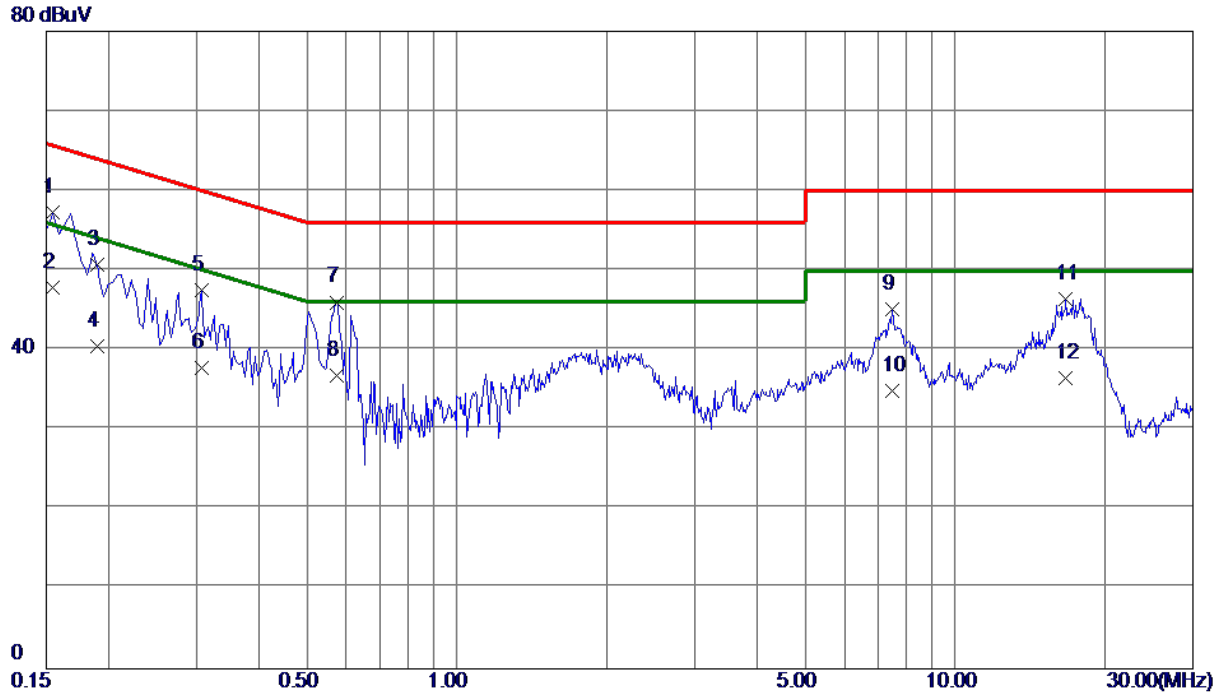
**Conducted Test Photos**



# APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

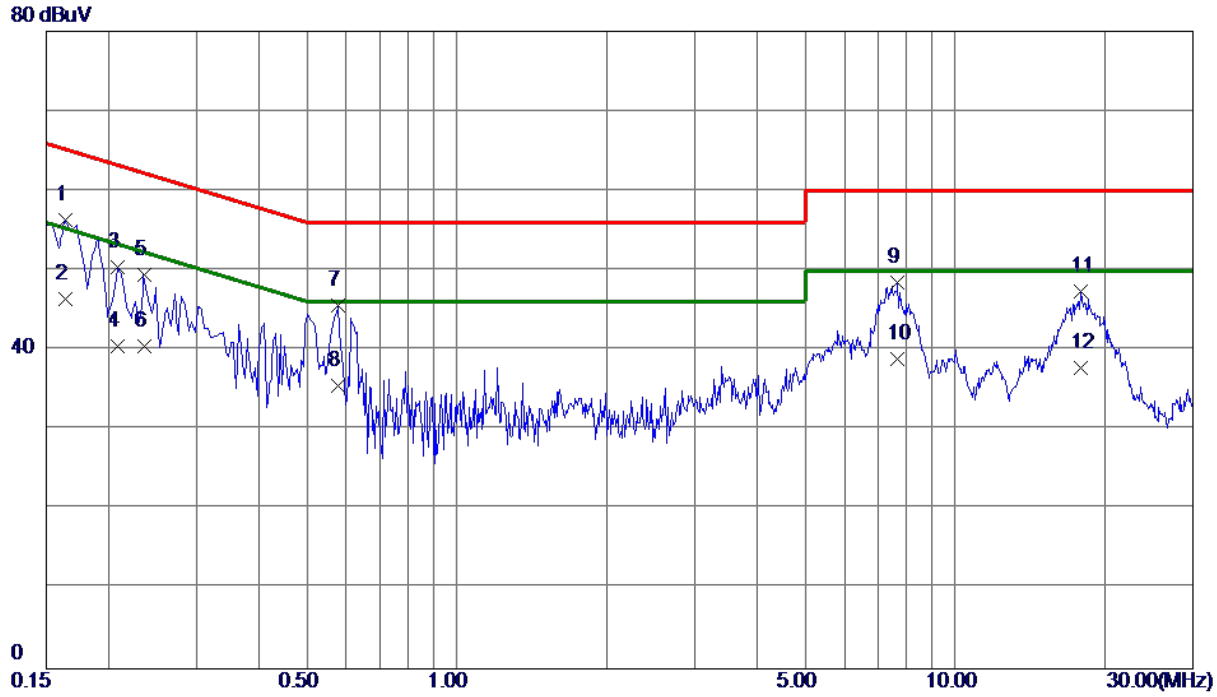
| Test Mode | TX Mode Channel 39_1Mbps | Phase | Line |
|---|---|---|---|




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | 0.1545 | 47.43 | 9.90 | 57.33 | 65.75 | -8.42 | QP | |
| 2 * | 0.1545 | 37.91 | 9.90 | 47.81 | 55.75 | -7.94 | AVG | |
| 3 | 0.1894 | 40.75 | 9.91 | 50.66 | 64.06 | -13.40 | QP | |
| 4 | 0.1894 | 30.50 | 9.91 | 40.41 | 54.06 | -13.65 | AVG | |
| 5 | 0.3075 | 37.66 | 9.93 | 47.59 | 60.04 | -12.45 | QP | |
| 6 | 0.3075 | 27.90 | 9.93 | 37.83 | 50.04 | -12.21 | AVG | |
| 7 | 0.5730 | 36.03 | 9.97 | 46.00 | 56.00 | -10.00 | QP | |
| 8 | 0.5730 | 26.81 | 9.97 | 36.78 | 46.00 | -9.22 | AVG | |
| 9 | 7.4985 | 33.94 | 11.23 | 45.17 | 60.00 | -14.83 | QP | |
| 10 | 7.4985 | 23.60 | 11.23 | 34.83 | 50.00 | -15.17 | AVG | |
| 11 | 16.6695 | 32.35 | 14.12 | 46.47 | 60.00 | -13.53 | QP | |
| 12 | 16.6695 | 22.39 | 14.12 | 36.51 | 50.00 | -13.49 | AVG | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | TX Mode Channel 39_1Mbps | Phase | Neutral |
|---|---|---|---|

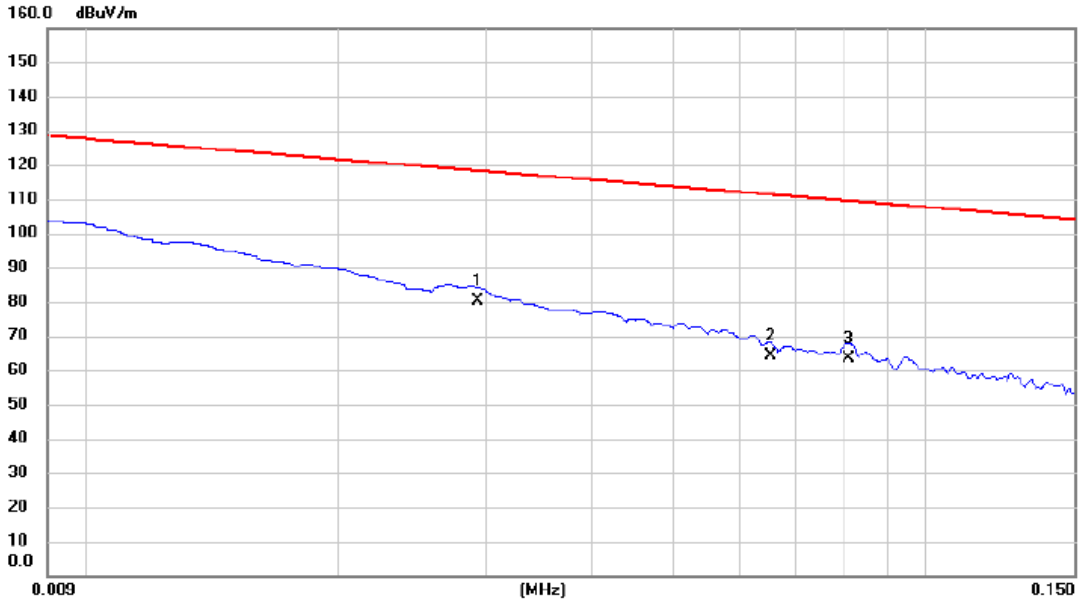



| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 * | 0.1635 | 46.42 | 9.97 | 56.39 | 65.28 | -8.89 | QP | |
| 2 | 0.1635 | 36.40 | 9.97 | 46.37 | 55.28 | -8.91 | AVG | |
| 3 | 0.2085 | 40.39 | 9.97 | 50.36 | 63.26 | -12.90 | QP | |
| 4 | 0.2085 | 30.50 | 9.97 | 40.47 | 53.26 | -12.79 | AVG | |
| 5 | 0.2355 | 39.42 | 9.98 | 49.40 | 62.25 | -12.85 | QP | |
| 6 | 0.2355 | 30.50 | 9.98 | 40.48 | 52.25 | -11.77 | AVG | |
| 7 | 0.5775 | 35.51 | 10.03 | 45.54 | 56.00 | -10.46 | QP | |
| 8 | 0.5775 | 25.50 | 10.03 | 35.53 | 46.00 | -10.47 | AVG | |
| 9 | 7.6515 | 37.20 | 11.27 | 48.47 | 60.00 | -11.53 | QP | |
| 10 | 7.6515 | 27.60 | 11.27 | 38.87 | 50.00 | -11.13 | AVG | |
| 11 | 17.9205 | 32.90 | 14.39 | 47.29 | 60.00 | -12.71 | QP | |
| 12 | 17.9205 | 23.40 | 14.39 | 37.79 | 50.00 | -12.21 | AVG | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

# APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

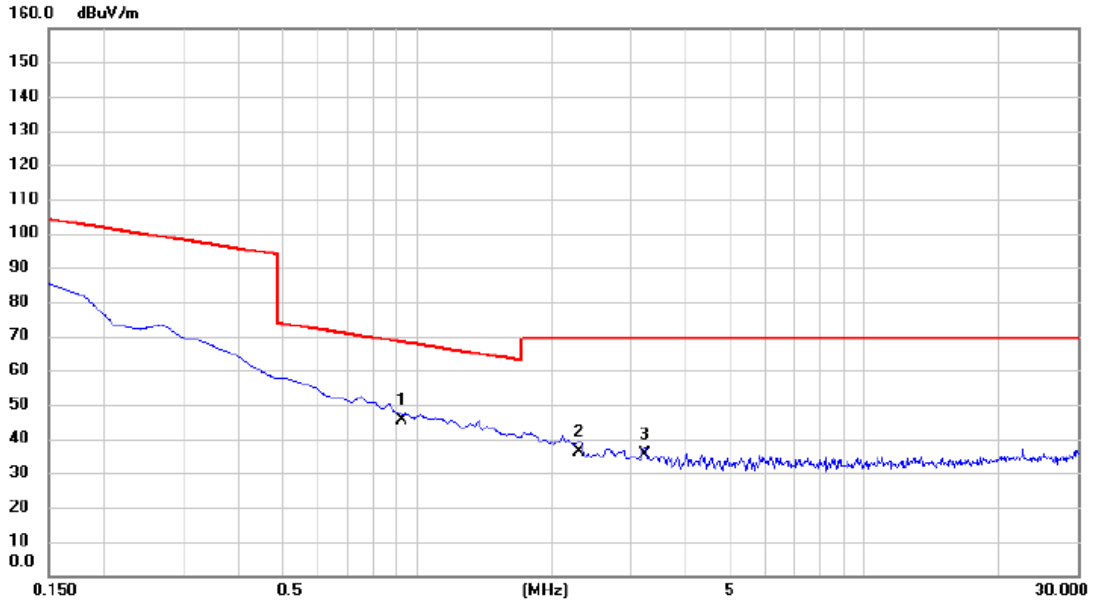
| Test Mode | TX Mode Channel 39_1Mbps | Polarization | Ant 0° |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 0.029 | 60.20 | 20.15 | 80.35 | 118.27 | -37.92 | AVG | |
| 2 | | 0.065 | 44.13 | 20.14 | 64.27 | 111.31 | -47.04 | AVG | |
| 3 | | 0.081 | 43.25 | 20.14 | 63.39 | 109.44 | -46.05 | AVG | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

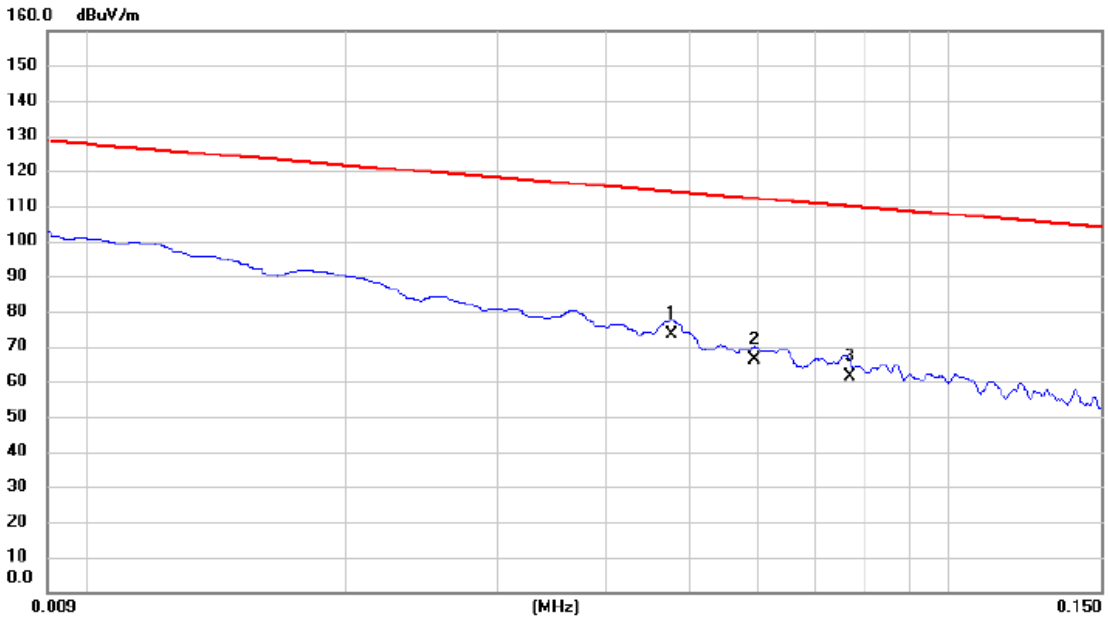
| Test Mode | TX Mode Channel 39_1Mbps | Polarization | Ant 0° |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 0.928 | 25.61 | 19.99 | 45.60 | 68.25 | -22.65 | QP | |
| 2 | | 2.299 | 16.20 | 20.02 | 36.22 | 69.54 | -33.32 | QP | |
| 3 | | 3.224 | 15.23 | 20.08 | 35.31 | 69.54 | -34.23 | QP | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

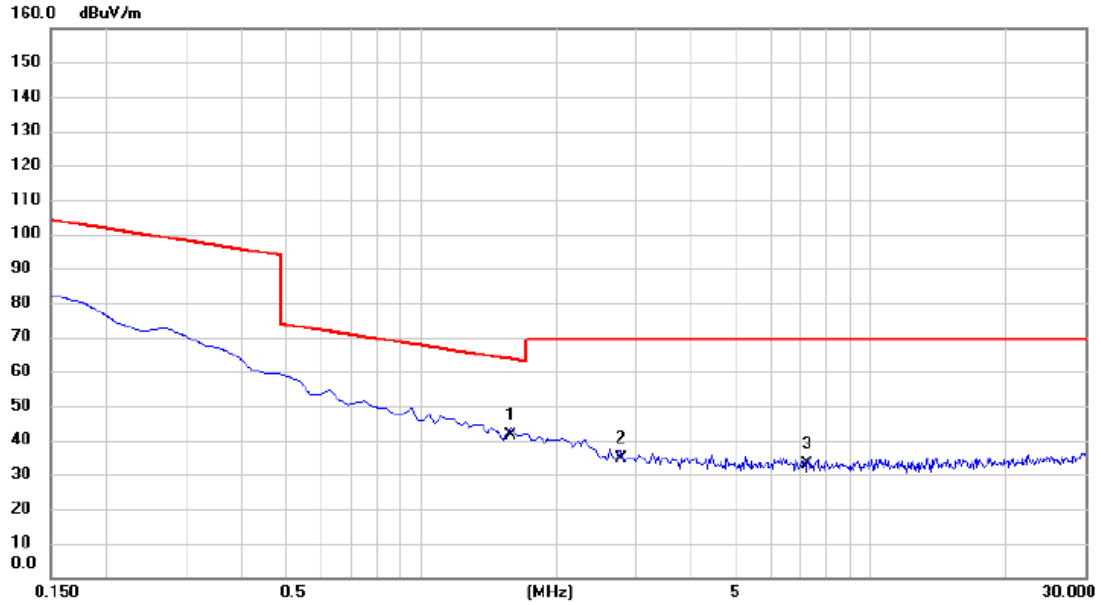
| Test Mode | TX Mode Channel 39_1Mbps | Polarization | Ant 90° |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 0.048 | 53.20 | 20.14 | 73.34 | 114.05 | -40.71 | AVG | |
| 2 | | 0.059 | 46.23 | 20.14 | 66.37 | 112.11 | -45.74 | AVG | |
| 3 | | 0.077 | 41.26 | 20.14 | 61.40 | 109.90 | -48.50 | AVG | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | TX Mode Channel 39_1Mbps | Polarization | Ant 90° |
|---|---|---|---|

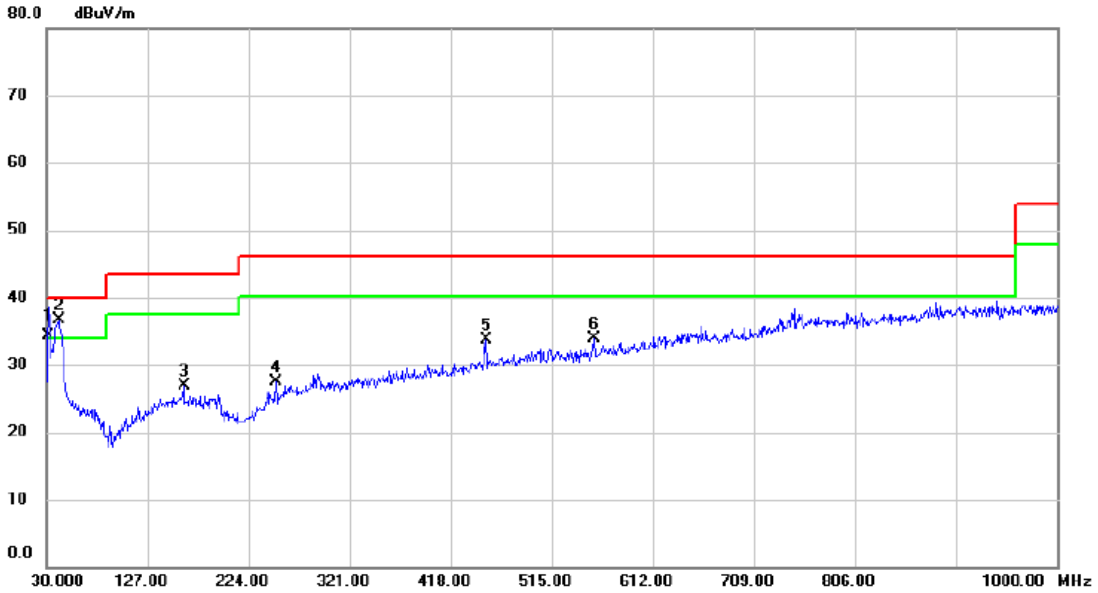



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 1.583 | 21.32 | 20.01 | 41.33 | 63.62 | -22.29 | QP | |
| 2 | | 2.777 | 14.58 | 20.06 | 34.64 | 69.54 | -34.90 | QP | |
| 3 | | 7.224 | 12.69 | 20.30 | 32.99 | 69.54 | -36.55 | QP | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

# APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

| Test Mode | TX Mode Channel 39_1Mbps | Polarization | Vertical |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | ! | 31.940 | 46.91 | -12.65 | 34.26 | 40.00 | -5.74 | QP | |
| 2 | * | 41.640 | 48.14 | -11.42 | 36.72 | 40.00 | -3.28 | peak | |
| 3 | | 161.920 | 37.55 | -10.55 | 27.00 | 43.52 | -16.52 | peak | |
| 4 | | 250.190 | 38.83 | -11.37 | 27.46 | 46.02 | -18.56 | peak | |
| 5 | | 451.950 | 39.69 | -5.95 | 33.74 | 46.02 | -12.28 | peak | |
| 6 | | 555.740 | 38.09 | -4.26 | 33.83 | 46.02 | -12.19 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

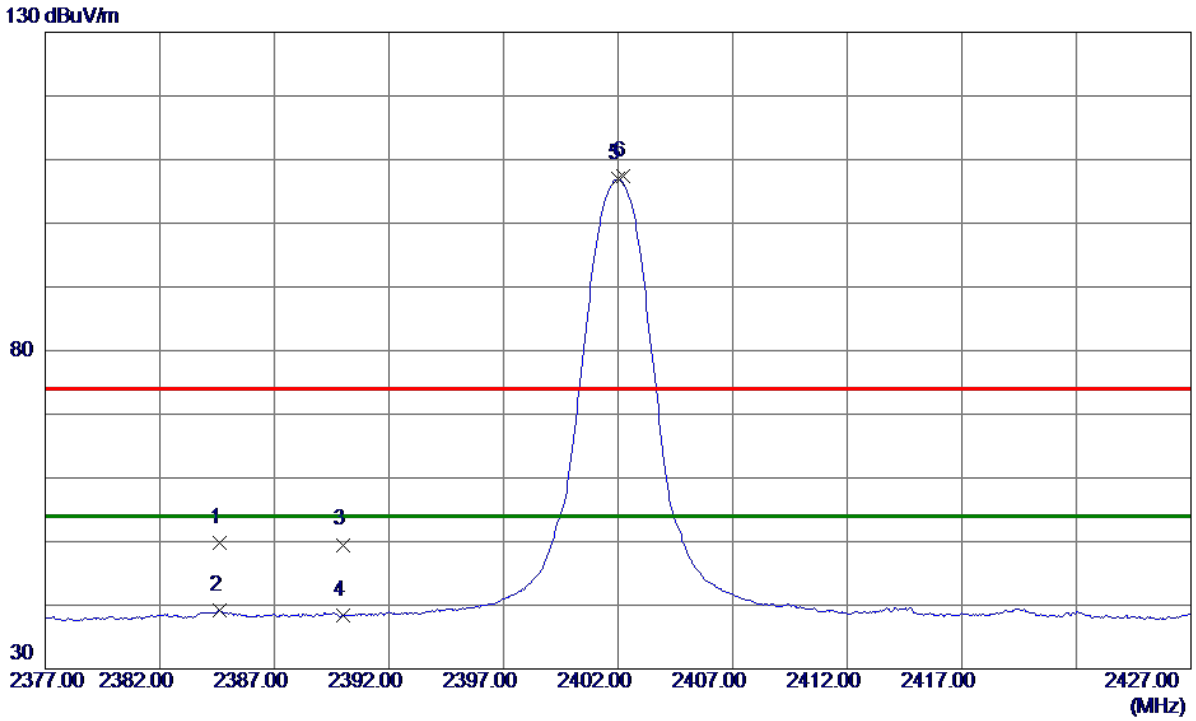
| Test Mode | TX Mode Channel 39_1Mbps | Polarization | Horizontal |
|---|---|---|---|

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 31.940 | 50.46 | -12.65 | 37.81 | 40.00 | -2.19 | peak | |
| 2 | | 39.700 | 45.09 | -11.61 | 33.48 | 40.00 | -6.52 | peak | |
| 3 | | 114.390 | 41.68 | -13.59 | 28.09 | 43.52 | -15.43 | peak | |
| 4 | | 189.080 | 39.07 | -12.61 | 26.46 | 43.52 | -17.06 | peak | |
| 5 | | 270.560 | 43.27 | -10.67 | 32.60 | 46.02 | -13.42 | peak | |
| 6 | | 285.110 | 41.73 | -9.96 | 31.77 | 46.02 | -14.25 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

# APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

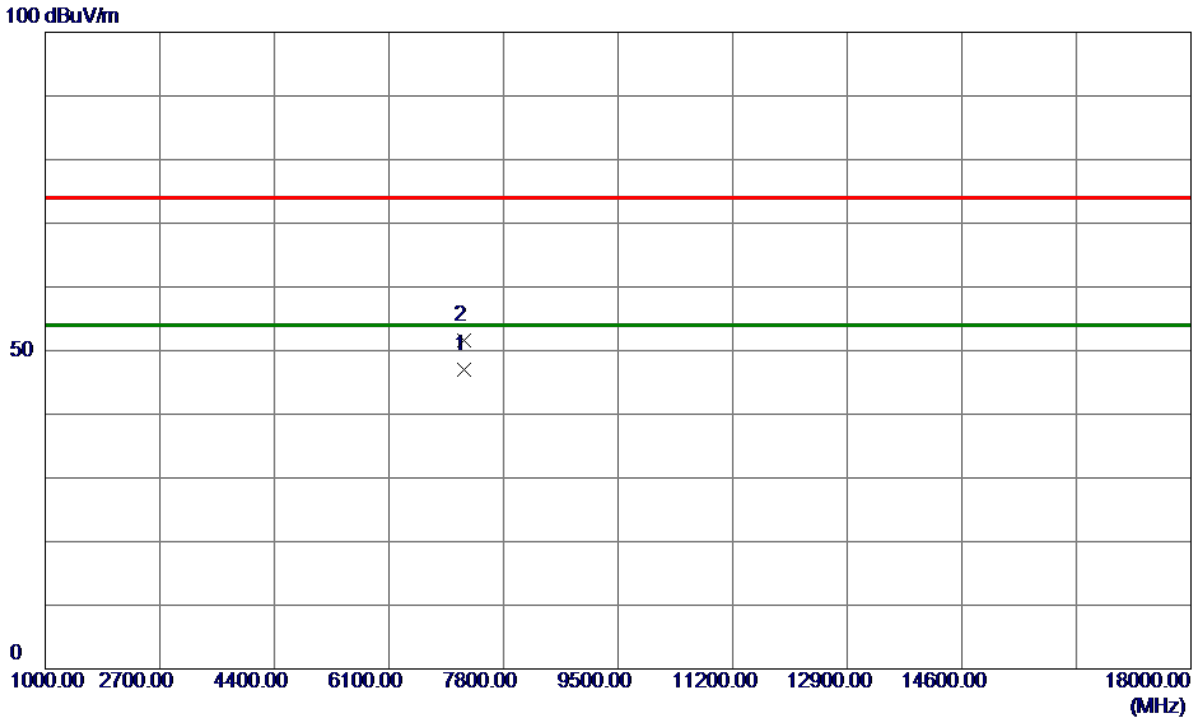
| Test Mode | TX 2402 MHz_CH00_1Mbps | Polarization | Vertical |
|---|---|---|---|




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2384.6000 | 41.32 | 8.41 | 49.73 | 74.00 | -24.27 | Peak | |
| 2 | 2384.6000 | 30.77 | 8.41 | 39.18 | 54.00 | -14.82 | AVG | |
| 3 | 2390.0000 | 41.06 | 8.44 | 49.50 | 74.00 | -24.50 | Peak | |
| 4 | 2390.0000 | 29.99 | 8.44 | 38.43 | 54.00 | -15.57 | AVG | |
| 5 * | 2402.0000 | 98.41 | 8.49 | 106.90 | 54.00 | 52.90 | AVG | No Limit |
| 6 | 2402.2000 | 98.87 | 8.49 | 107.36 | 74.00 | 33.36 | Peak | No Limit |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

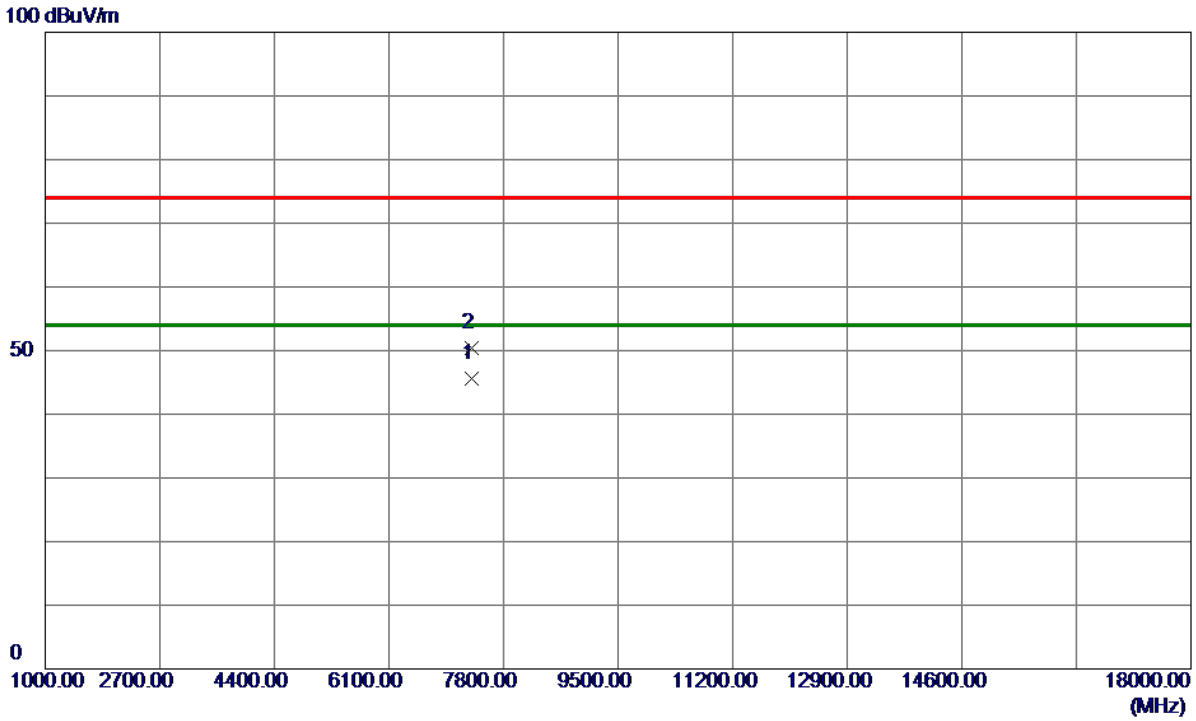
| Test Mode | TX 2402 MHz_CH00_1Mbps | Polarization | Horizontal |
|---|---|---|---|




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 7205.8500 | 38.42 | 8.62 | 47.04 | 54.00 | -6.96 | AVG | |
| 2 | 7205.4000 | 42.91 | 8.62 | 51.53 | 74.00 | -22.47 | Peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

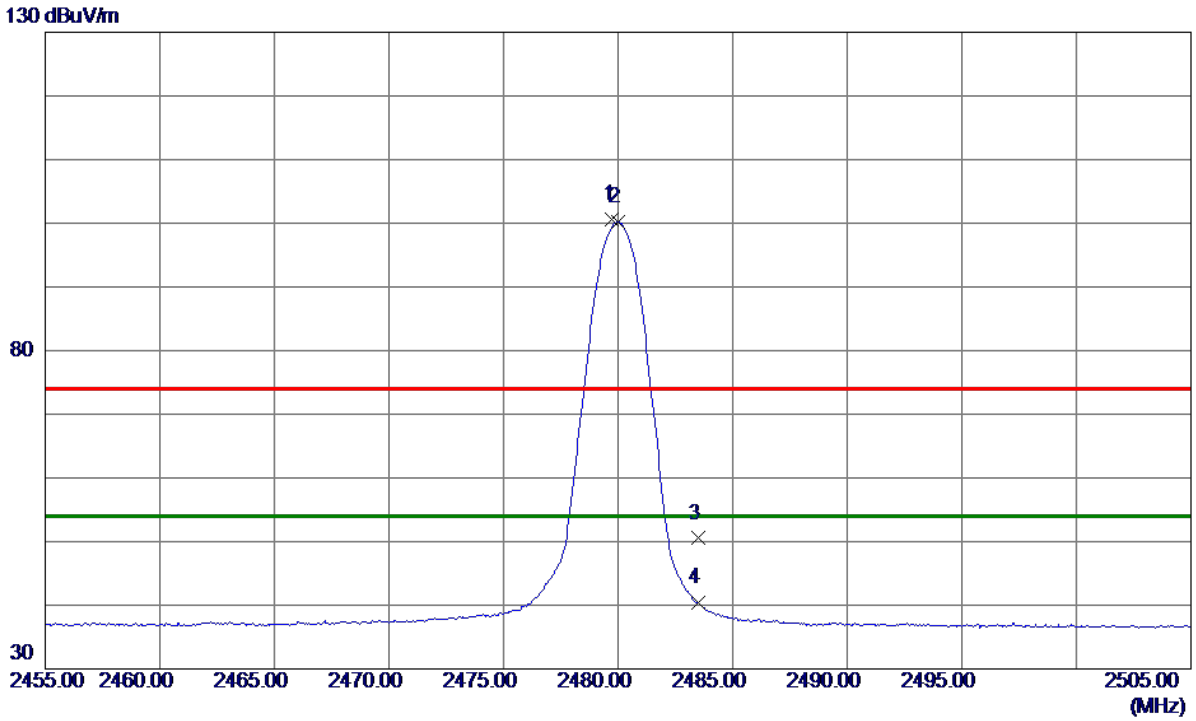
| Test Mode | TX 2440 MHz_CH19_1Mbps | Polarization | Horizontal |
|---|---|---|---|




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 7319.8500 | 36.90 | 8.68 | 45.58 | 54.00 | -8.42 | AVG | |
| 2 | 7319.4500 | 41.81 | 8.68 | 50.49 | 74.00 | -23.51 | Peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

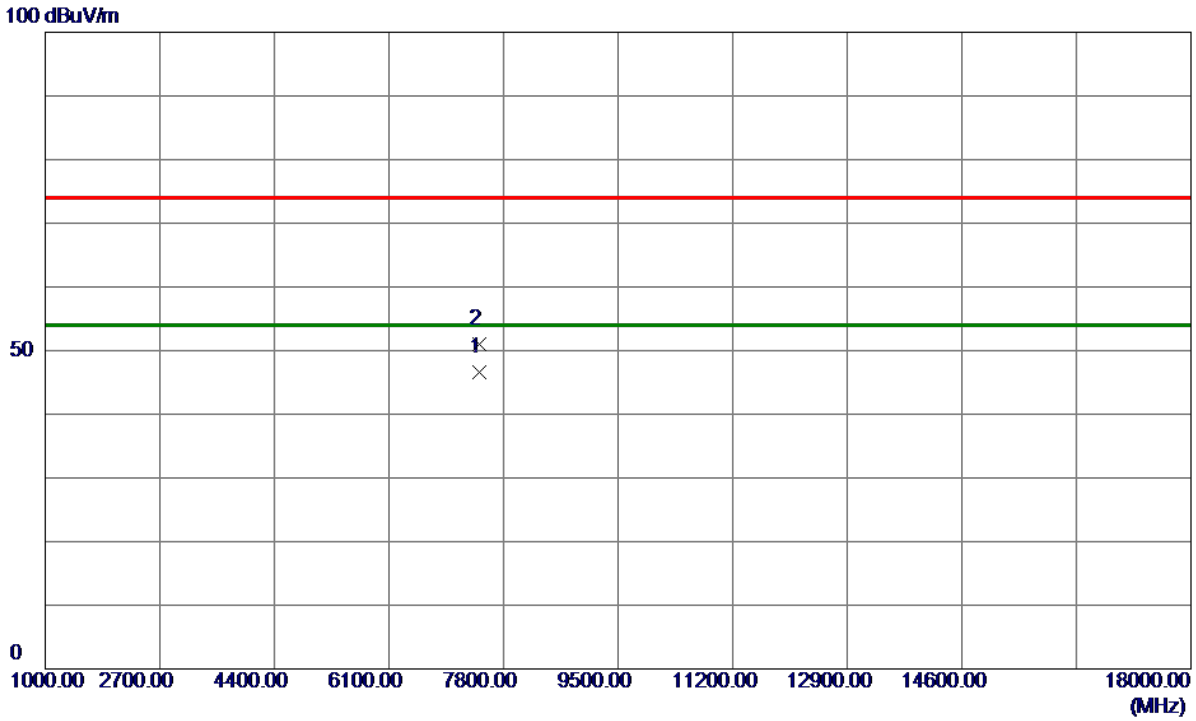
| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Vertical |
|---|---|---|---|




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2479.7500 | 91.78 | 8.85 | 100.63 | 74.00 | 26.63 | Peak | No Limit |
| 2 * | 2480.0000 | 91.29 | 8.85 | 100.14 | 54.00 | 46.14 | AVG | No Limit |
| 3 | 2483.5000 | 41.63 | 8.87 | 50.50 | 74.00 | -23.50 | Peak | |
| 4 | 2483.5000 | 31.44 | 8.87 | 40.31 | 54.00 | -13.69 | AVG | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

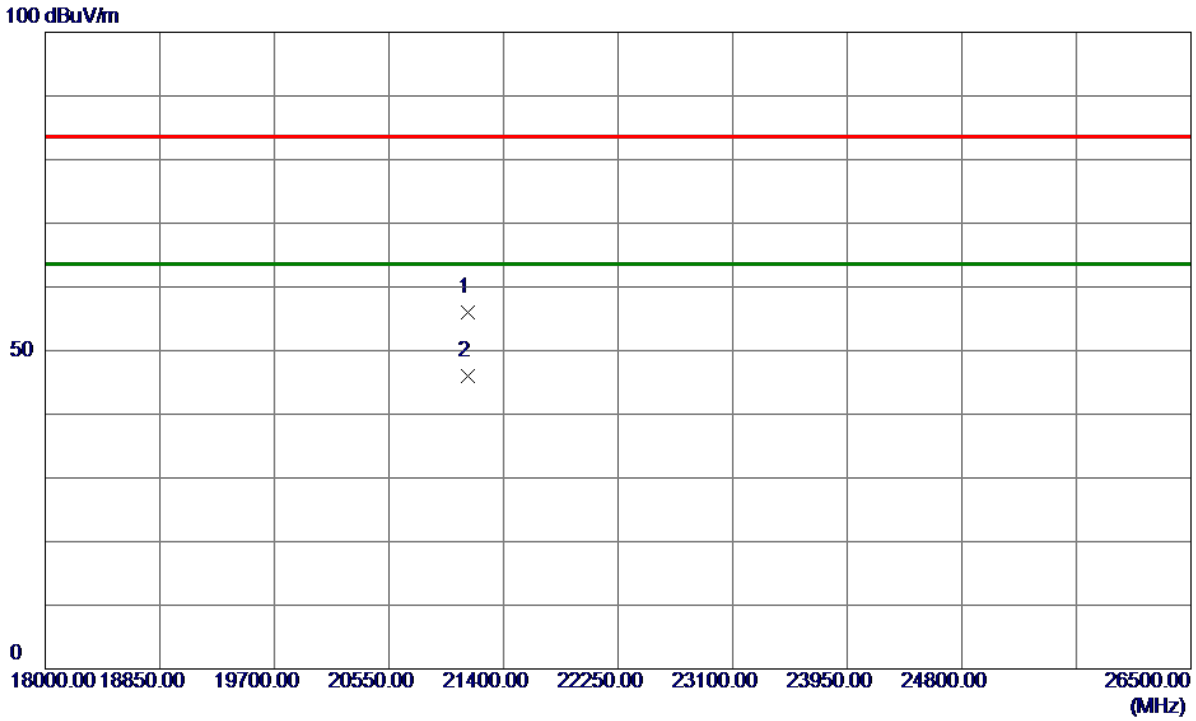
| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Horizontal |
|---|---|---|---|




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 7439.9000 | 37.91 | 8.74 | 46.65 | 54.00 | -7.35 | AVG | |
| 2 | 7440.2000 | 42.31 | 8.74 | 51.05 | 74.00 | -22.95 | Peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

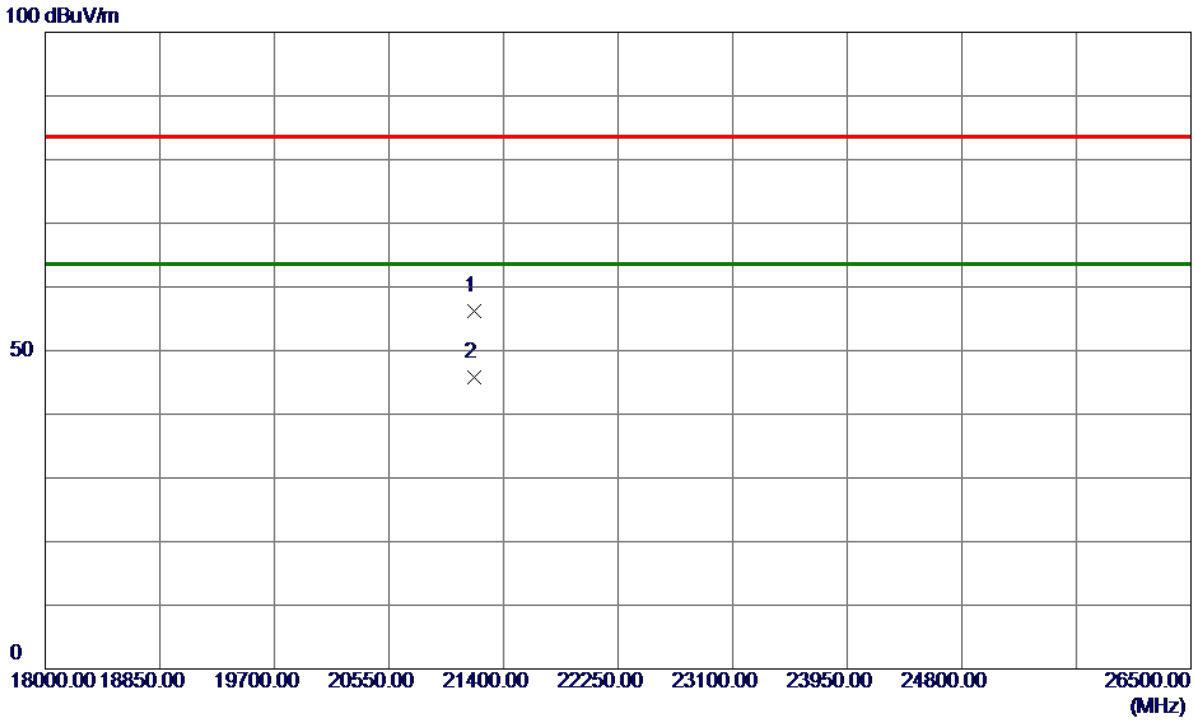
| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Vertical |
|---|---|---|---|




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 21136.5000 | 50.30 | 5.76 | 56.06 | 83.50 | -27.44 | Peak | |
| 2 * | 21136.5000 | 40.16 | 5.76 | 45.92 | 63.50 | -17.58 | AVG | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Horizontal |
|---|---|---|---|

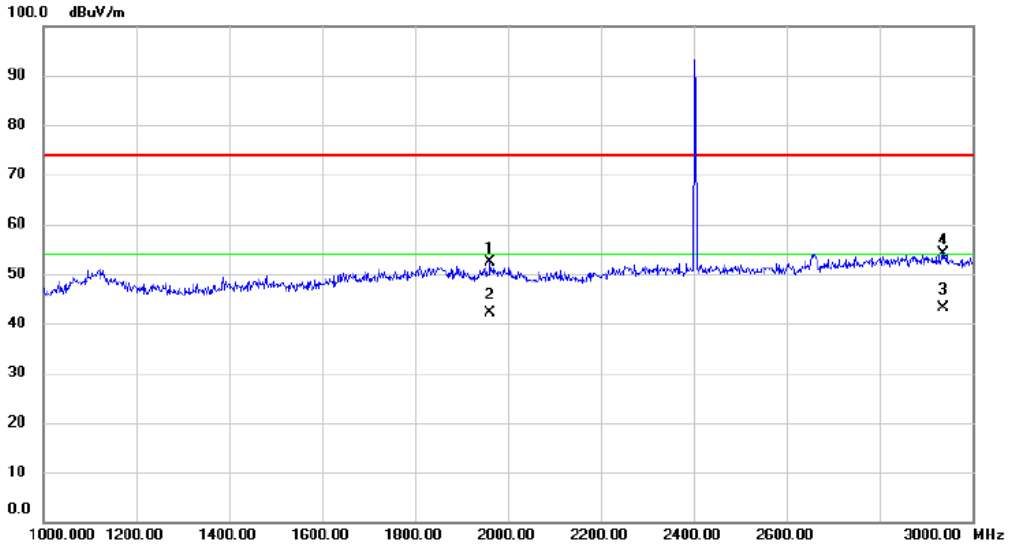



| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 21179.0000 | 50.46 | 5.67 | 56.13 | 83.50 | -27.37 | Peak | |
| 2 * | 21179.0000 | 40.12 | 5.67 | 45.79 | 63.50 | -17.71 | AVG | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

**Worst Case:**

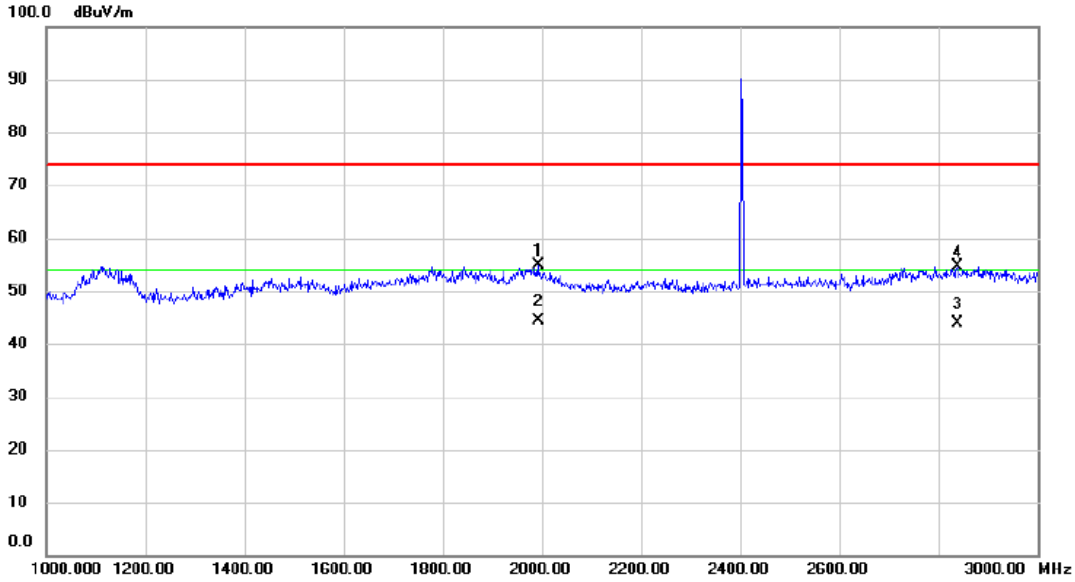
| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Vertical |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 1962.000 | 44.20 | 8.09 | 52.29 | 74.00 | -21.71 | peak | |
| 2 | | 1962.000 | 34.13 | 8.09 | 42.22 | 54.00 | -11.78 | AVG | |
| 3 | * | 2936.000 | 32.10 | 11.05 | 43.15 | 54.00 | -10.85 | AVG | |
| 4 | | 2936.000 | 42.99 | 11.05 | 54.04 | 74.00 | -19.96 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

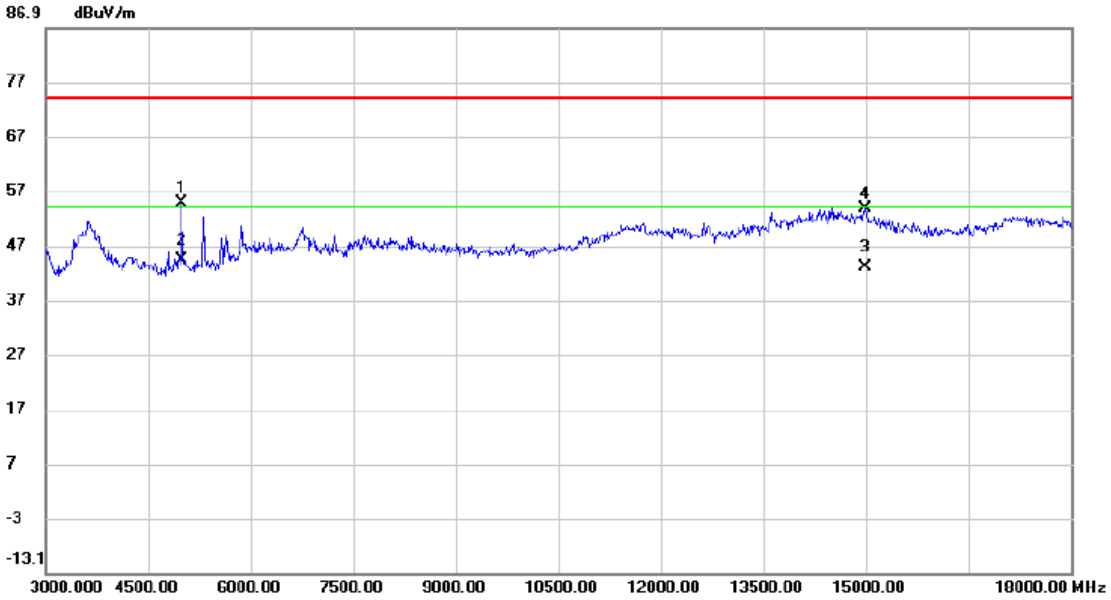
| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Horizontal |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 1992.000 | 46.73 | 8.20 | 54.93 | 74.00 | -19.07 | peak | |
| 2 | * | 1992.000 | 36.13 | 8.20 | 44.33 | 54.00 | -9.67 | AVG | |
| 3 | | 2838.000 | 33.01 | 10.75 | 43.76 | 54.00 | -10.24 | AVG | |
| 4 | | 2838.000 | 43.88 | 10.75 | 54.63 | 74.00 | -19.37 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

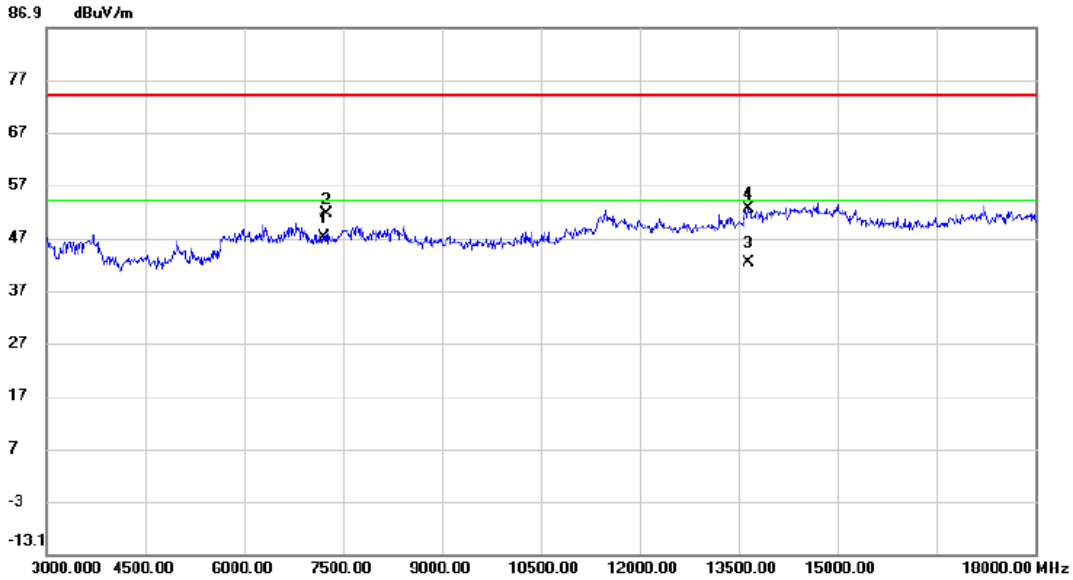
| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Vertical |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4995.000 | 48.90 | 5.81 | 54.71 | 74.00 | -19.29 | peak | |
| 2 | * | 4995.000 | 38.42 | 5.81 | 44.23 | 54.00 | -9.77 | AVG | |
| 3 | | 14985.000 | 30.13 | 12.94 | 43.07 | 54.00 | -10.93 | AVG | |
| 4 | | 14985.000 | 40.78 | 12.94 | 53.72 | 74.00 | -20.28 | peak | |

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

| Test Mode | TX 2480 MHz_CH39_1Mbps | Polarization | Horizontal |
|---|---|---|---|




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 7205.850 | 38.42 | 8.64 | 47.06 | 54.00 | -6.94 | AVG | |
| 2 | | 7250.400 | 42.91 | 8.70 | 51.61 | 74.00 | -22.39 | peak | |
| 3 | | 13650.000 | 29.56 | 12.68 | 42.24 | 54.00 | -11.76 | AVG | |
| 4 | | 13650.000 | 39.75 | 12.68 | 52.43 | 74.00 | -21.57 | peak | |

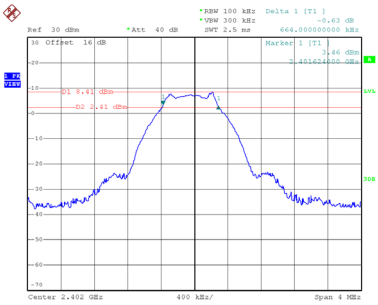
REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

# APPENDIX E - BANDWIDTH

| Test Mode | TX Mode_1Mbps |
|---|---|

| Channel | Frequency (MHz) | 6 dB Bandwidth (MHz) | 99 % Occupied Bandwidth (MHz) | 6 dB Bandwidth Min. Limit (MHz) | Test Result |
|---|---|---|---|---|---|
| 00 | 2402 | 0.664 | 1.024 | 0.5 | Pass |
| 19 | 2440 | 0.672 | 1.032 | 0.5 | Pass |
| 39 | 2480 | 0.656 | 1.040 | 0.5 | Pass |

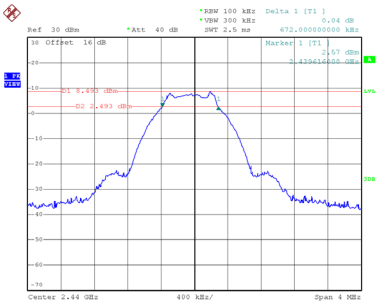
**CH00**



Date: 12.DEC.2025 15:53:13

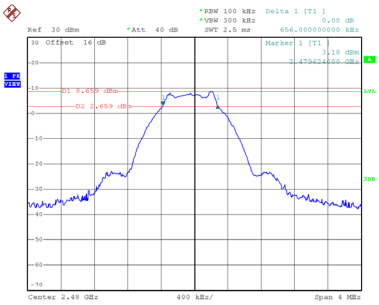
**CH19**

6 dB Bandwidth

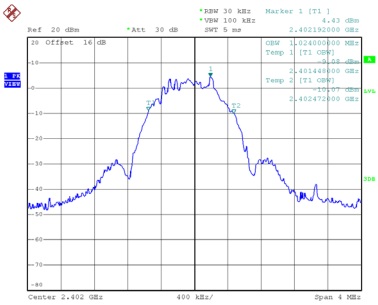


Date: 12.DEC.2025 15:55:18

**CH39**

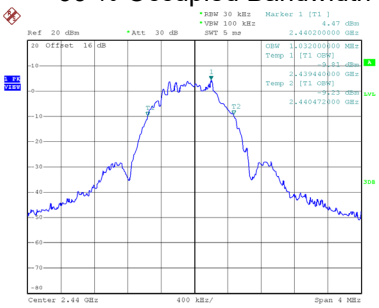


Date: 12.DEC.2025 15:57:16

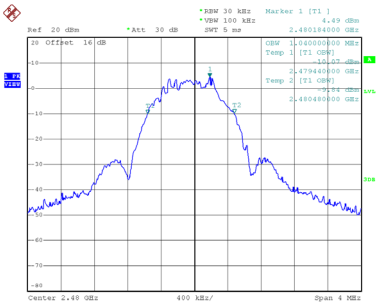


Date: 12.DEC.2025 15:53:26

99 % Occupied Bandwidth



Date: 12.DEC.2025 15:55:31



Date: 12.DEC.2025 15:57:29

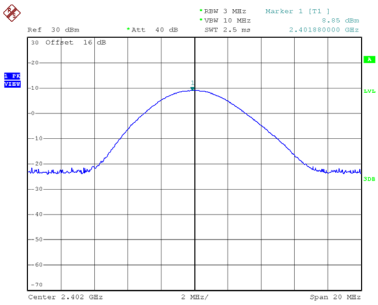
# APPENDIX F - MAXIMUM OUTPUT POWER

| Test Mode | TX Mode_1Mbps |
|---|---|

| Frequency (MHz) | Output Power (dBm) | Output Power (W) | Max. Limit (dBm) | Max. Limit (W) | Test Result |
|---|---|---|---|---|---|
| 2402 | 8.85 | 0.0077 | 30.00 | 1.0000 | Pass |
| 2440 | 8.97 | 0.0079 | 30.00 | 1.0000 | Pass |
| 2480 | 9.00 | 0.0079 | 30.00 | 1.0000 | Pass |

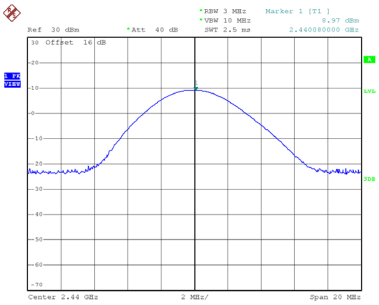
Note: Output power = Measure result + Cable loss

**CH00**



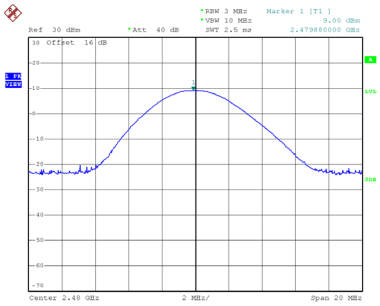

Date: 12.DEC.2025 15:53:00

**CH19**




Date: 12.DEC.2025 15:55:05

**CH39**

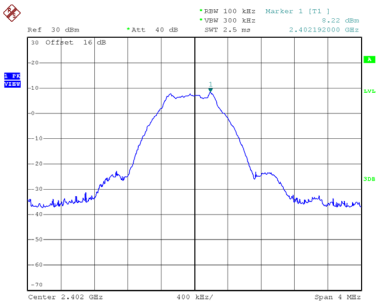



Date: 12.DEC.2025 15:57:03

# APPENDIX G - CONDUCTED SPURIOUS EMISSION

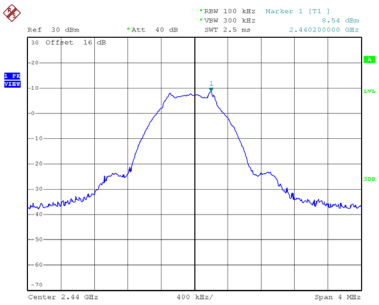
| Test Mode | TX Mode_1Mbps |
|---|---|

### Reference Level-CH00



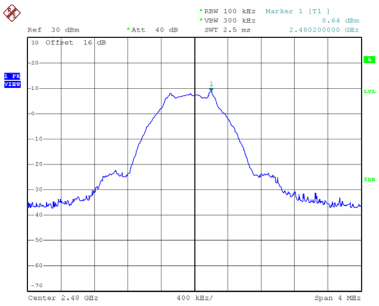

Date: 12.DEC.2025 15:53:51

### Reference Level-CH19



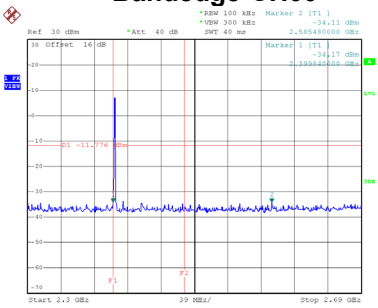

Date: 12.DEC.2025 15:55:55

### Reference Level-CH39



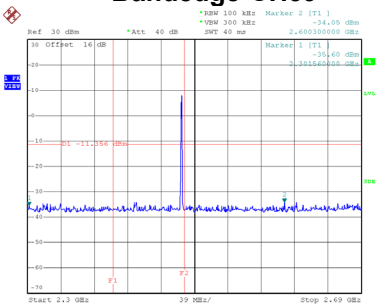

Date: 12.DEC.2025 15:57:54

### Bandedge-CH00



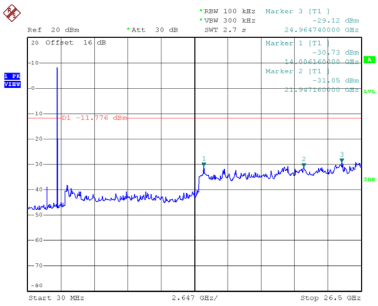

Date: 12.DEC.2025 15:54:04

### Bandedge-CH39



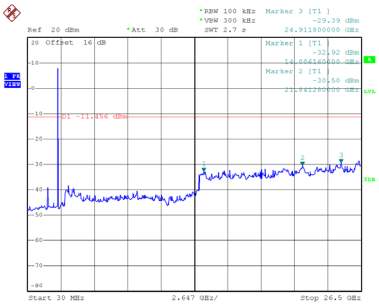

Date: 12.DEC.2025 15:58:07

### Harmonic-CH00



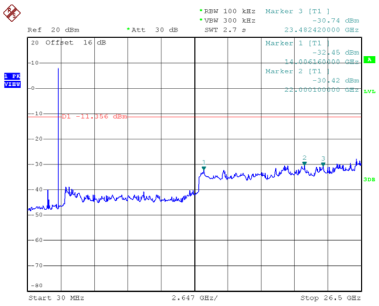

Date: 12.DEC.2025 15:54:18

### Harmonic-CH19




Date: 12.DEC.2025 15:56:22

### Harmonic-CH39



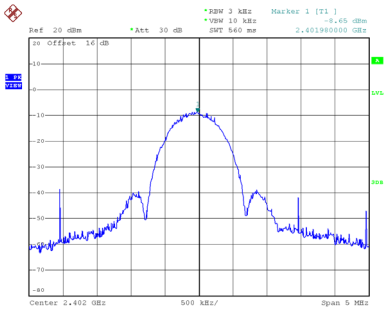

Date: 12.DEC.2025 15:58:21

# APPENDIX H - POWER SPECTRAL DENSITY

| Test Mode | TX Mode_1Mbps |
|---|---|

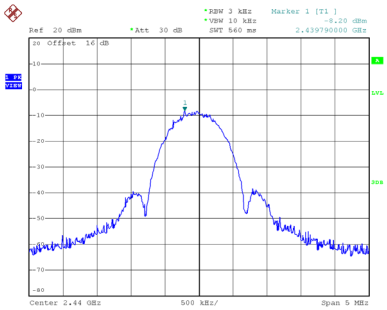
| Channel | Frequency (MHz) | Power Spectral Density (dBm/3 kHz) | Max. Limit (dBm/3 kHz) | Test Result |
|---|---|---|---|---|
| 00 | 2402 | -8.65 | 8.00 | Pass |
| 19 | 2440 | -8.20 | 8.00 | Pass |
| 39 | 2480 | -7.70 | 8.00 | Pass |

**CH00**




Date: 12.DEC.2025 15:53:38

**CH19**

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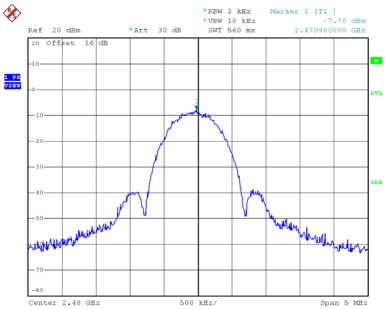
**CH39**




Date: 12.DEC.2025 15:57:42

**End of Test Report**