**CFR 47 FCC PART 15 SUBPART C**

**TEST REPORT**

*For*

**Mini Wireless Charger**

**MODEL NUMBER: GC03A, GC03B, GC03C, GC03D, GC03E, GC03F, GC03G, GC03H, GC03I, GC03J, GC03K, GC03L, GC03M, GC03N, GC03P**

**REPORT NUMBER: E04A25100873F00101**

**ISSUE DATE: November 24, 2025**

**FCC ID: 2BSW7-GC03A**

*Prepared for*

**Innoartech (Shenzhen) Co., Ltd.**

**LOFT A 1008,upperhills,No. 5001,Huanggang Road, Huafu Street,Futian District, Shenzhen, China**

*Prepared by*

**Guangdong Global Testing Technology Co., Ltd.**

**Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People's Republic of China, 523808**

**This report is based on a single evaluation of the submitted sample(s) of the above mentioned Product, it does not imply an assessment of the production of the products.**
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Revision History

| Rev. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| V0 | November 24, 2025 | Initial Issue | |

## Summary of Test Results

| Test Item | Limit/Requirement | Result |
|---|---|---|
| Antenna Requirement | FCC Part 15.203 | Pass |
| AC Power Line Conducted Emission | FCC Part 15.207 | Pass |
| 20dB Bandwidth | FCC Part 15.215 | Pass |
| Radiated Emission | FCC Part 15.205/15.209 | Pass |

Note:
1. N/A: In this whole report not applicable.

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART C> when <Accuracy Method> decision rule is applied.

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# 1. ATTESTATION OF TEST RESULTS

**Applicant Information**

| | |
|---|---|
| Company Name: | Innoartech (Shenzhen) Co., Ltd. |
| Address: | LOFT A 1008,upperhills,No. 5001,Huanggang Road, Huafu Street,Futian District, Shenzhen, China |

**Manufacturer Information**

| | |
|---|---|
| Company Name: | Innoartech (Shenzhen) Co., Ltd. |
| Address: | LOFT A 1008,upperhills,No. 5001,Huanggang Road, Huafu Street,Futian District, Shenzhen, China |

**EUT Information**

| | |
|---|---|
| Product Description: | Mini Wireless Charger |
| Model: | GC03A |
| Series Model: | GC03B, GC03C, GC03D, GC03E, GC03F, GC03G, GC03H, GC03I, GC03J, GC03K, GC03L, GC03M, GC03N, GC03P |
| Brand: | lightide |
| Sample Received Date: | November 14, 2025 |
| Sample Status: | Normal |
| Sample ID: | A25100873 001 |
| Date of Tested: | November 14, 2025 to November 24, 2025 |

| APPLICABLE STANDARDS | |
|---|---|
| **STANDARD** | **TEST RESULTS** |
| **CFR 47 FCC PART 15 SUBPART C** | **Pass** |

Prepared By:

Win Huang

Project Engineer

Checked By:

Shawn Wen

Laboratory Leader

Approved By:

Shawn Wen

Laboratory Manager

## 2. TEST METHODOLOGY

All tests were performed in accordance with the standard CFR 47 FCC PART 15 SUBPART C

## 3. FACILITIES AND ACCREDITATION

| | |
|---|---|
| Accreditation Certificate | **A2LA (Certificate No.: 6947.01)**<br>Guangdong Global Testing Technology Co., Ltd.<br>has been assessed and proved to be in compliance with A2LA.<br>**FCC (FCC Designation No.: CN1343)**<br>Guangdong Global Testing Technology Co., Ltd.<br>has been recognized to perform compliance testing on equipment subject to Supplier's Declaration of Conformity (SDoC) and Certification rules<br>**ISED (Company No.: 30714)**<br>Guangdong Global Testing Technology Co., Ltd.<br>has been registered and fully described in a report filed with ISED. The Company Number is 30714 and the test lab Conformity Assessment Body Identifier (CABID) is CN0148. |

Note: All tests measurement facilities use to collect the measurement data are located at Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People’s Republic of China, 523808

# 4. CALIBRATION AND UNCERTAINTY

## 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommend dations and is traceable to recognized national standards.

## 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Test Items | k | Uncertainty |
|---|---|---|
| 20dB Emission Bandwidth | 2 | ±9.2 PPM |
| Temperature | 2 | ±0.5℃ |
| Humidity | 2 | ±3% |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. | | |

| Test Item | Measurement Frequency Range | K | U(dB) |
|---|---|---|---|
| Conducted emissions from the AC mains power ports (AMN) | 150 kHz ~ 30 MHz | 2 | 3.37 |
| Radiated emissions | 9 kHz ~ 30 MHz | 2 | 4.16 |
| Radiated emissions | 30 MHz ~ 1 GHz | 2 | 3.79 |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. | | | |

# 5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

| | |
|---|---|
| EUT Name | Mini Wireless Charger |
| Model | GC03A |
| Series Model | GC03B, GC03C, GC03D, GC03E, GC03F, GC03G, GC03H, GC03I, GC03J, GC03K, GC03L, GC03M, GC03N, GC03P |
| Model Difference | Note: Only the model name nomenclature is different. |
| Hardware Version | V01 |
| Software Version | V01 |
| Ratings | Input: 5V ⎓ 1A<br>Output: 160mA 0.8W |
| Power Supply | DC 5V |
| Operation Mode | Wireless Charging |
| Operating Frequency | 500-600KHz for Wireless Charging |
| Wireless Charging Power | Wireless Charging 0.8W |
| Modulation Technique | ASK |
| Antenna Type | Coil Antenna |

## 5.2. TEST MODE

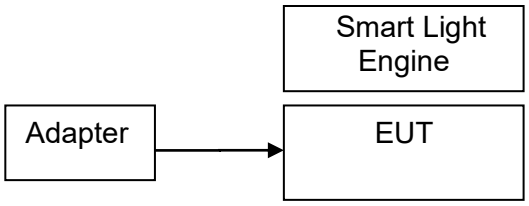
| Test Mode | Description |
|---|---|
| M01 | The EUT charges 0.8W load |

## 5.3. SUPPORT UNITS FOR SYSTEM TEST

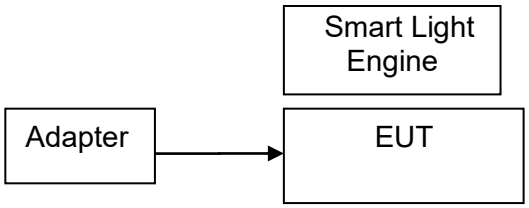
| No. | Equipment | Manufacturer | Model No. | Serial No. | Remark |
|---|---|---|---|---|---|
| 1 | Adapter | Xiaomi | 580245A087 | / | GTG Support |
| 2 | Smart Light Engine | Innoartech | LC-A03 | / | Innoartech |
| 3 | USB cable | / | / | / | GTG Support |

## 5.4. SETUP DIAGRAM

AC conducted emission:




Radiated Emission:



# 6. MEASURING EQUIPMENT AND SOFTWARE USED

| Test Equipment of Radiated emissions below 1GHz | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model No.** | **Serial No.** | **Last Cal.** | **Due Date** |
| 3m Semi-anechoic Chamber | ETS | 9m*6m*6m | Q2146 | 2025/08/23 | 2026/08/22 |
| EMI Test Receiver | Rohde & Schwarz | ESCI3 | 101409 | 2025/08/23 | 2026/08/22 |
| Spectrum Analyzer | KEYSIGHT | N9020A | MY51283932 | 2025/08/25 | 2026/08/24 |
| Spectrum Analyzer | Rohde & Schwarz | FSV40 | 101413 | 2025/08/25 | 2026/08/24 |
| Pre-Amplifier | HzEMC | HPA-9K0130 | HYPA21001 | 2025/08/23 | 2026/08/22 |
| Biconilog Antenna | Schwarzbeck | VULB 9168 | 01315 | 2025/09/20 | 2028/09/19 |
| Biconilog Antenna | ETS | 3142E | 00243646 | 2025/02/22 | 2028/02/21 |
| Loop Antenna | ETS | 6502 | 243668 | 2025/02/22 | 2028/02/21 |
| Test Software | Farad | EZ-EMC (Ver.FA-03A2 RE) | N/A | N/A | N/A |

| Test Equipment of Conducted emissions | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model No.** | **Serial No.** | **Last Cal.** | **Due Date** |
| Shielded Room | CHENG YU | 8m*5m*4m | N/A | 2025/08/23 | 2026/08/22 |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | 102647 | 2025/08/23 | 2026/08/22 |
| LISN/AMN | Rohde & Schwarz | ENV216 | 102843 | 2025/08/23 | 2026/08/22 |
| NNLK 8129 RC | Schwarzbeck | NNLK 8129 RC | 5046 | 2025/08/23 | 2026/08/22 |
| Test Software | Farad | EZ-EMC (Ver. EMC-con-3A1 1+) | N/A | N/A | N/A |

# 7. RADIATED TEST RESULTS

**LIMITS**

Please refer to CFR 47 FCC §15.205 and §15.209.

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

| Emissions radiated outside of the specified frequency bands above 30 MHz | | |
|---|---|---|
| Frequency Range (MHz) | Field Strength Limit (uV/m) at 3 m | Field Strength Limit (dBuV/m) at 3 m |
| | | Quasi-Peak |
| 30 - 88 | 100 | 40 |
| 88 - 216 | 150 | 43.5 |
| 216 - 960 | 200 | 46 |
| Above 960 | 500 | 54 |

| FCC Emissions radiated outside of the specified frequency bands below 30 MHz | | | |
|---|---|---|---|
| Frequency (MHz) | Field strength (microvolts/meter) | Measurement distance (meters) | Field Strength Limit (dBuV/m) at 3 m |
| | | | Quasi-Peak |
| 0.009-0.490 | 2400/F(kHz) | 300 | 128.5-93.8 |
| 0.490-1.705 | 24000/F(kHz) | 30 | 73.8-63.0 |
| 1.705-30.0 | 30 | 30 | 69.5 |

FCC Restricted bands of operation refer to FCC §15.205 (a):

| MHz | MHz | MHz | GHz |
|---|---|---|---|
| 0.090-0.110 | 16.42-16.423 | 399.9-410 | 4.5-5.15 |
| [1]0.495-0.505 | 16.69475-16.69525 | 608-614 | 5.35-5.46 |
| 2.1735-2.1905 | 16.80425-16.80475 | 960-1240 | 7.25-7.75 |
| 4.125-4.128 | 25.5-25.67 | 1300-1427 | 8.025-8.5 |
| 4.17725-4.17775 | 37.5-38.25 | 1435-1626.5 | 9.0-9.2 |
| 4.20725-4.20775 | 73-74.6 | 1645.5-1646.5 | 9.3-9.5 |
| 6.215-6.218 | 74.8-75.2 | 1660-1710 | 10.6-12.7 |
| 6.26775-6.26825 | 108-121.94 | 1718.8-1722.2 | 13.25-13.4 |
| 6.31175-6.31225 | 123-138 | 2200-2300 | 14.47-14.5 |
| 8.291-8.294 | 149.9-150.05 | 2310-2390 | 15.35-16.2 |
| 8.362-8.366 | 156.52475-156.52525 | 2483.5-2500 | 17.7-21.4 |
| 8.37625-8.38675 | 156.7-156.9 | 2690-2900 | 22.01-23.12 |
| 8.41425-8.41475 | 162.0125-167.17 | 3260-3267 | 23.6-24.0 |
| 12.29-12.293 | 167.72-173.2 | 3332-3339 | 31.2-31.8 |
| 12.51975-12.52025 | 240-285 | 3345.8-3358 | 36.43-36.5 |
| 12.57675-12.57725 | 322-335.4 | 3600-4400 | ([2]) |
| 13.36-13.41 | | | |

Note:[1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

**TEST PROCEDURE**

Below 30 MHz

The setting of the spectrum analyzer

| | |
|---|---|
| RBW | 200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz) |
| VBW | 200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz) |
| Sweep | Auto |

1. The testing follows the guidelines in ANSI C63.10-2020 clause 6.4.

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

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

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X KHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding 15.209(a) limit.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyzer

| | |
|---|---|
| RBW | 120 kHz |
| VBW | 300 kHz |
| Sweep | Auto |
| Detector | Peak/QP |
| Trace | Max hold |

1. The testing follows the guidelines in ANSI C63.10-2020 clause 6.5.

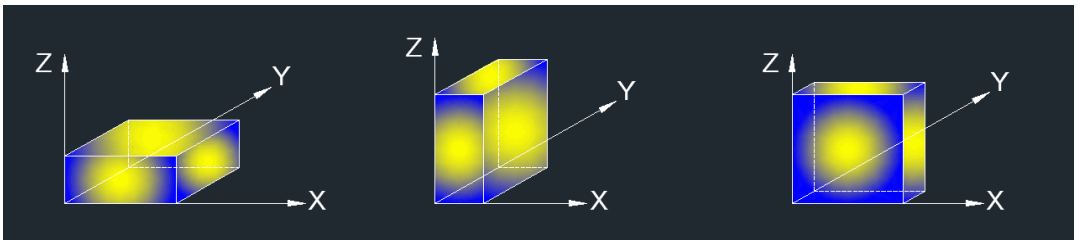
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

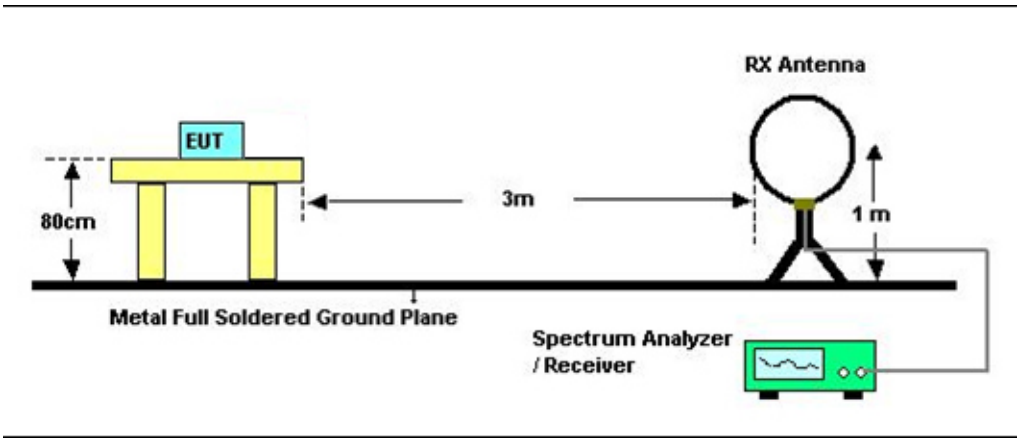
5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

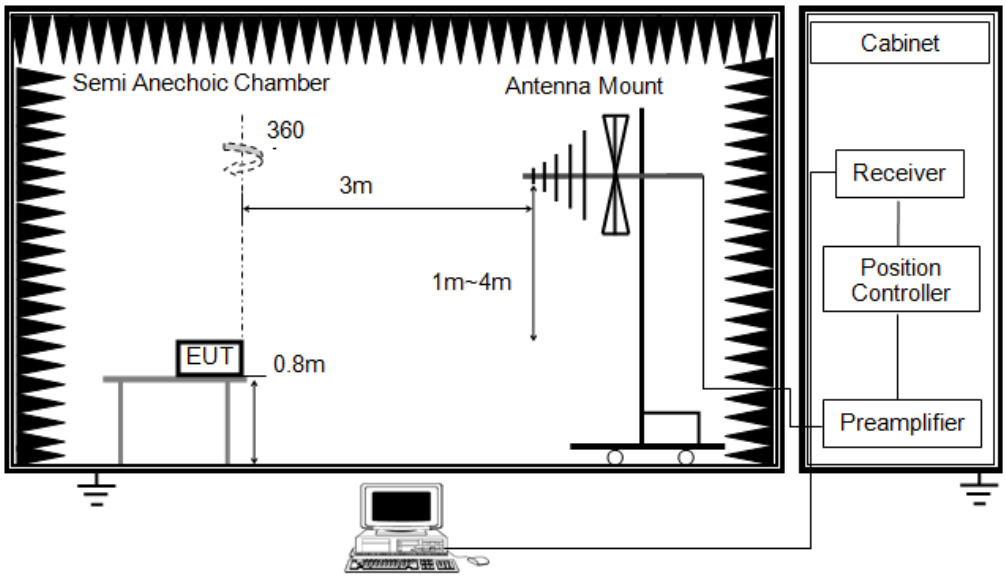
X axis, Y axis, Z axis positions:




Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

**TEST SETUP**



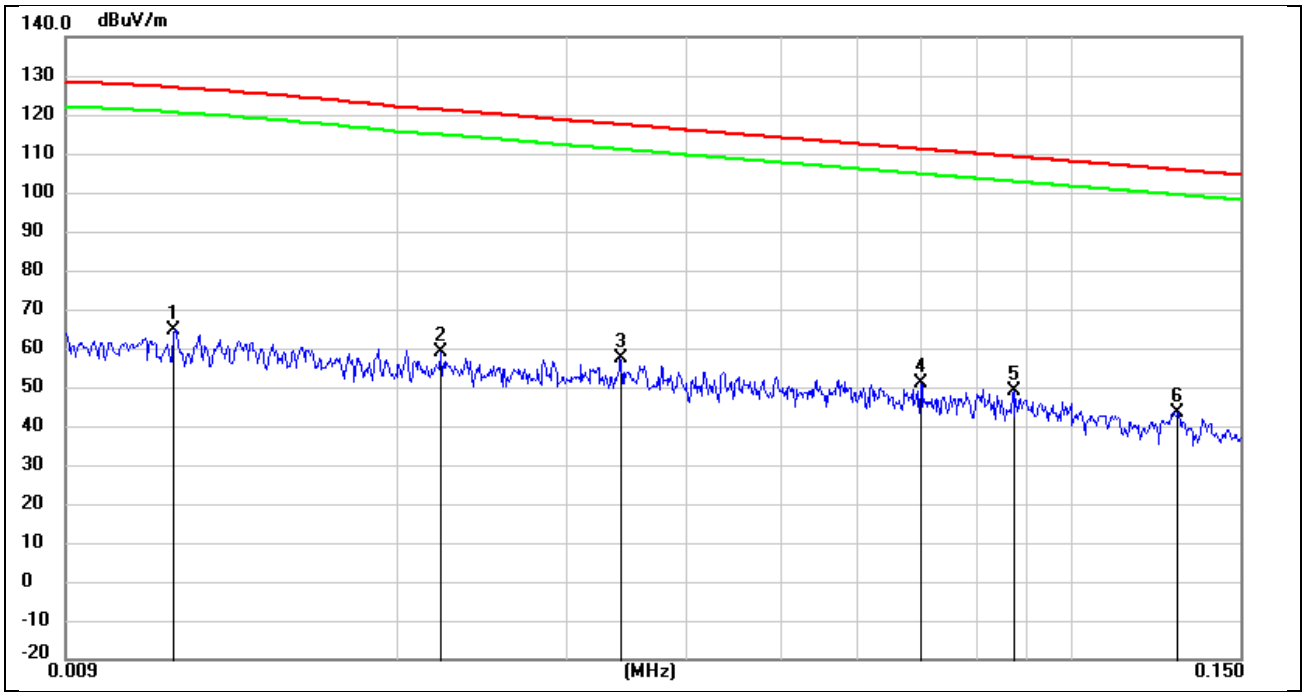



**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.7℃, 24.1℃ | Relative Humidity | 51%, 53% |
| Atmosphere Pressure | 101kPa, 101kPa | | |

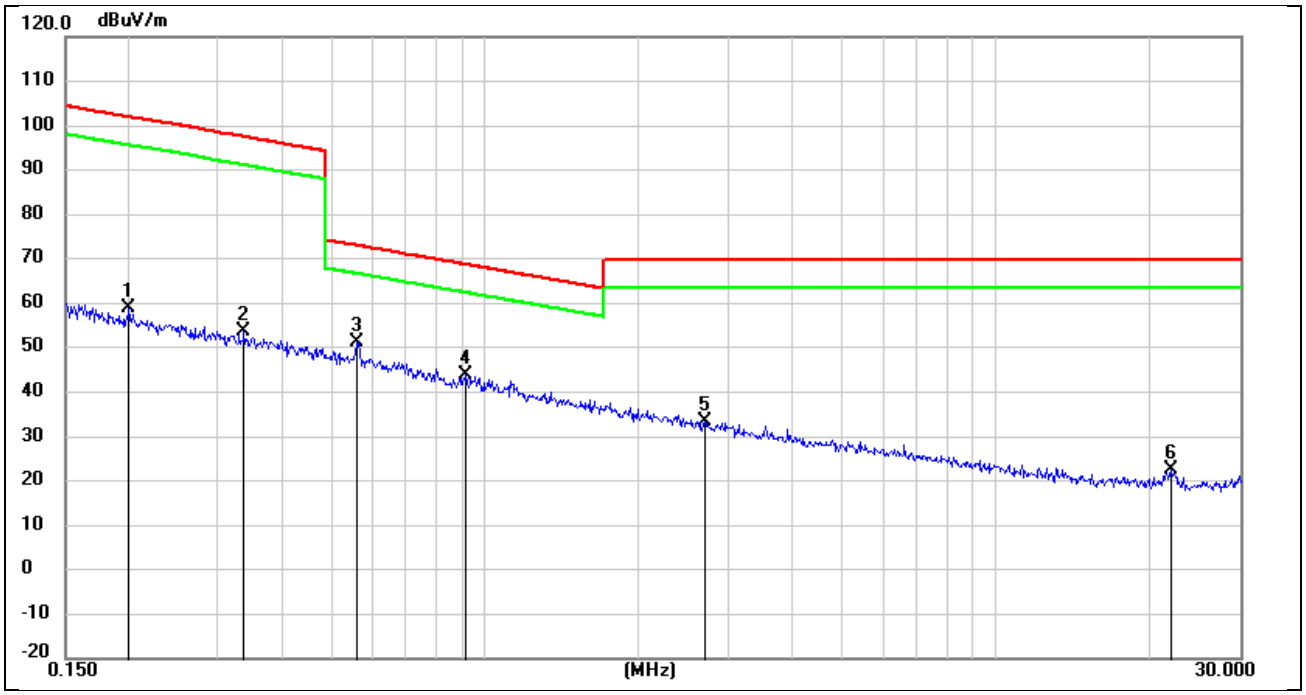
**TEST RESULTS**

## 7.1. RADIATED SPURIOUS EMISSION



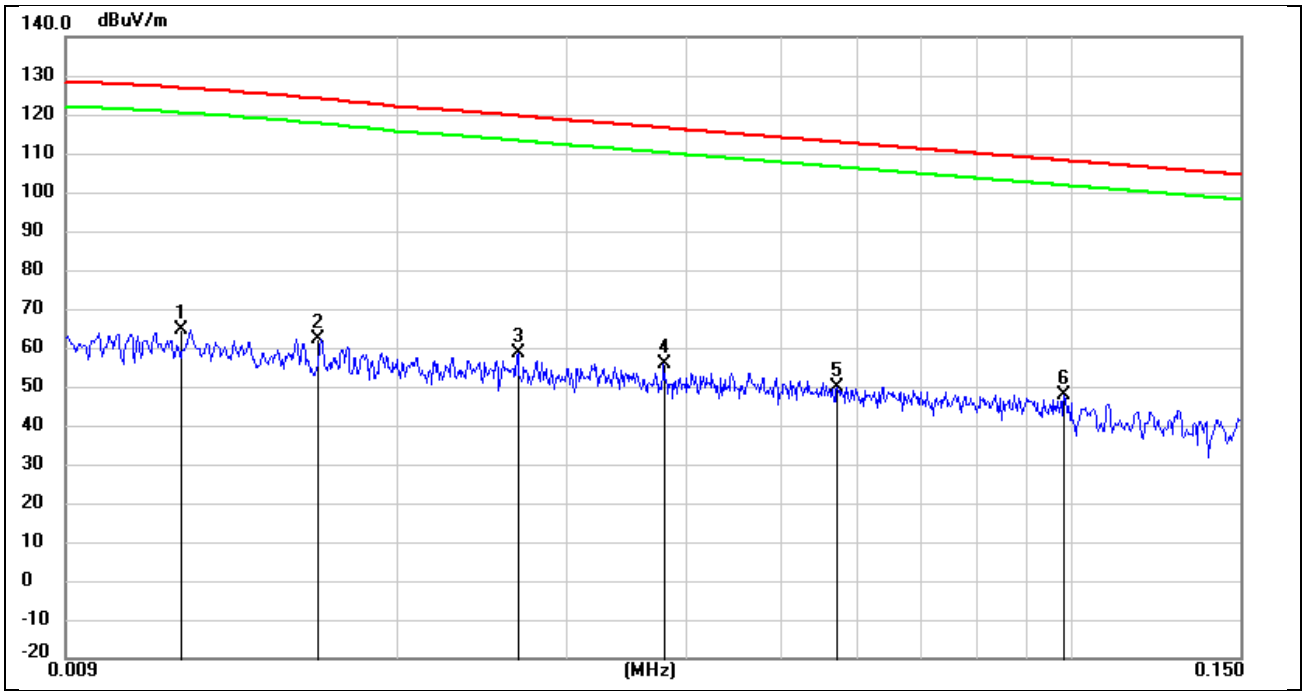

| Phase: coplanar | Mode: M01 |
|---|---|

| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Measure-ment (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.0117 | 46.81 | 17.81 | 64.62 | 126.58 | -61.96 | peak | |
| 2 | 0.0221 | 44.87 | 13.97 | 58.84 | 120.84 | -62.00 | peak | |
| 3 * | 0.0341 | 44.43 | 12.90 | 57.33 | 117.03 | -59.70 | peak | |
| 4 | 0.0700 | 39.76 | 11.07 | 50.83 | 110.70 | -59.87 | peak | |
| 5 | 0.0874 | 38.11 | 10.88 | 48.99 | 108.79 | -59.80 | peak | |
| 6 | 0.1292 | 32.80 | 10.72 | 43.52 | 105.39 | -61.87 | peak | |



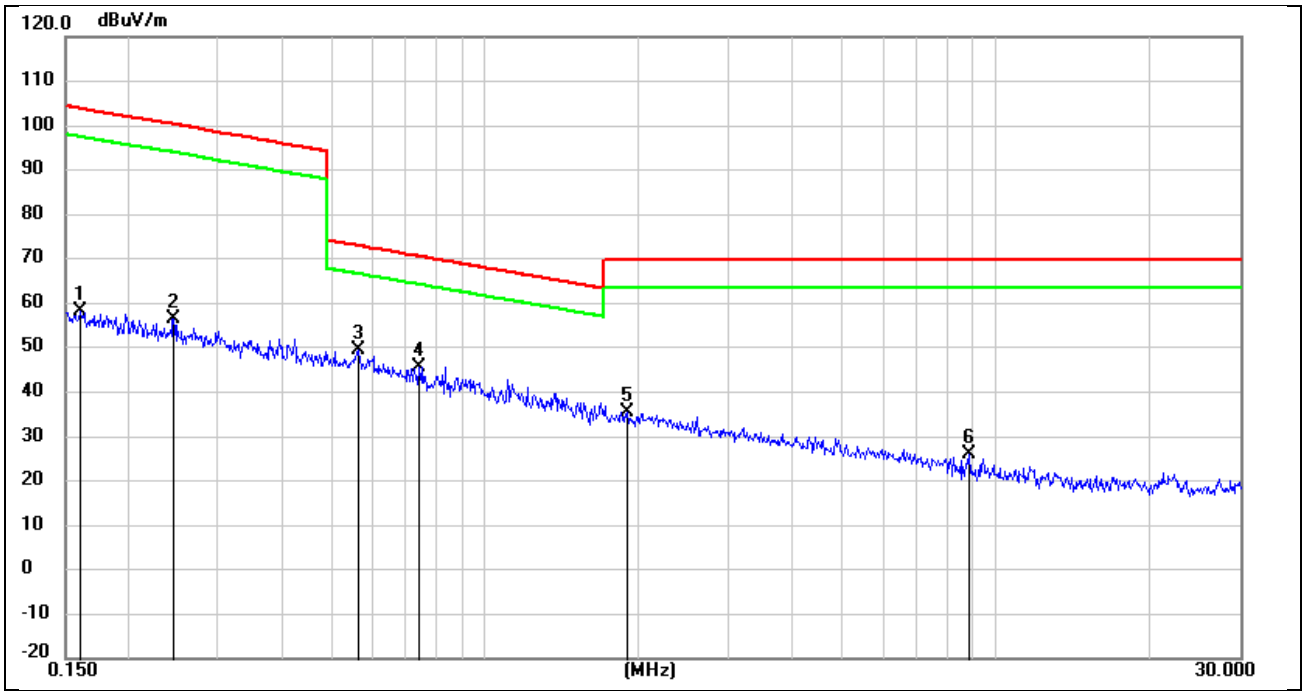

| Phase: coplanar | Mode: M01 |
|---|---|

| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Measure-ment (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1997 | 48.27 | 10.64 | 58.91 | 101.59 | -42.68 | peak | |
| 2 | 0.3356 | 43.02 | 10.57 | 53.59 | 97.17 | -43.58 | peak | |
| 3 * | 0.5581 | 40.87 | 10.52 | 51.39 | 72.71 | -21.32 | peak | |
| 4 | 0.9136 | 33.24 | 10.54 | 43.78 | 68.39 | -24.61 | peak | |
| 5 | 2.6925 | 22.79 | 10.69 | 33.48 | 69.54 | -36.06 | peak | |
| 6 | 21.9463 | 12.84 | 9.80 | 22.64 | 69.54 | -46.90 | peak | |




| Phase: coaxial | Mode: M01 |
|---|---|

| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Measure-ment (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.0120 | 47.11 | 17.68 | 64.79 | 126.40 | -61.61 | peak | |
| 2 | 0.0165 | 46.63 | 15.70 | 62.33 | 123.69 | -61.36 | peak | |
| 3 | 0.0267 | 44.85 | 13.56 | 58.41 | 119.22 | -60.81 | peak | |
| 4 | 0.0378 | 43.31 | 12.57 | 55.88 | 116.11 | -60.23 | peak | |
| 5 | 0.0571 | 38.56 | 11.33 | 49.89 | 112.50 | -62.61 | peak | |
| 6 * | 0.0984 | 37.17 | 10.79 | 47.96 | 107.75 | -59.79 | peak | |




| Phase: coaxial | Mode: M01 |
|---|---|

| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Measure-ment (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1598 | 47.71 | 10.67 | 58.38 | 103.53 | -45.15 | peak | |
| 2 | 0.2442 | 45.80 | 10.60 | 56.40 | 100.02 | -43.62 | peak | |
| 3 * | 0.5611 | 38.82 | 10.52 | 49.34 | 72.66 | -23.32 | peak | |
| 4 | 0.7391 | 35.18 | 10.53 | 45.71 | 70.25 | -24.54 | peak | |
| 5 | 1.8880 | 24.89 | 10.62 | 35.51 | 69.54 | -34.03 | peak | |
| 6 | 8.8223 | 15.03 | 10.91 | 25.94 | 69.54 | -43.60 | peak | |

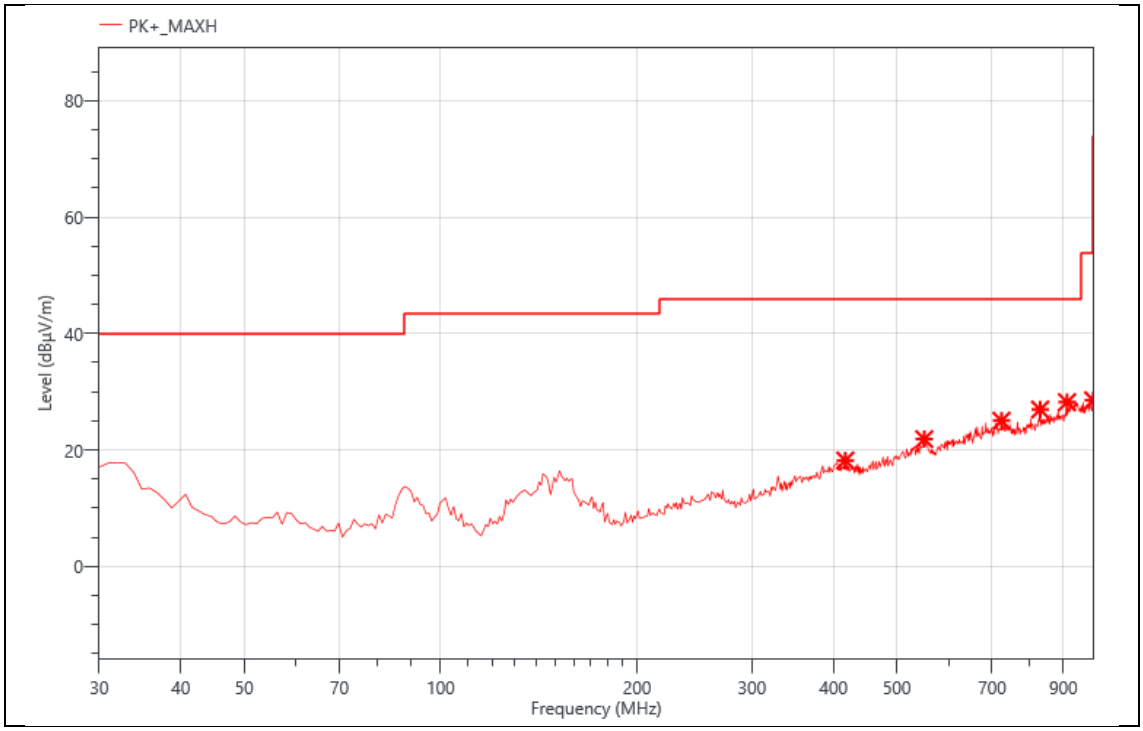
Note:

1.Measurement = Reading Level + Correct Factor.

2.Margin= Measurement - Limit.

3. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

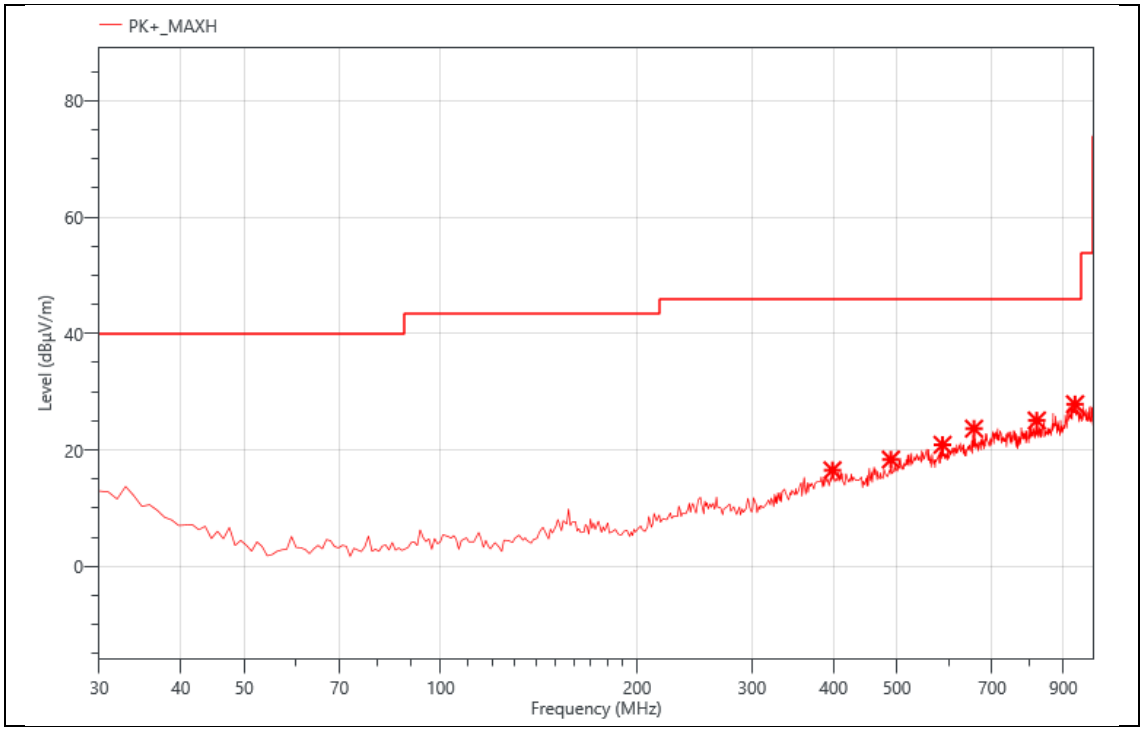
| | |
|---|---|
| Mode: | M01 |
| Power: | DC 5V |
| TE: | Berny |
| Date | 2025/11/14 |
| T/A/P | 24.1℃/53%/101Kpa |




## Critical_Freqs

| No. | Freq. (MHz) | Reading (dBµV) | Corr. (dB) | Meas. (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Det. | Pol. |
|---|---|---|---|---|---|---|---|---|
| 1 | 417.030 | 31.74 | -13.54 | 18.20 | 46.00 | 27.80 | PK+ | V |
| 2 | 550.890 | 31.41 | -9.54 | 21.87 | 46.00 | 24.13 | PK+ | V |
| 3 | 723.550 | 31.56 | -6.53 | 25.03 | 46.00 | 20.97 | PK+ | V |
| 4 | 829.280 | 32.29 | -5.34 | 26.95 | 46.00 | 19.05 | PK+ | V |
| 5 | 911.730 | 31.73 | -3.51 | 28.22 | 46.00 | 17.78 | PK+ | V |
| 6 | 1000.000 | 30.78 | -2.23 | 28.55 | 53.90 | 25.35 | PK+ | V |

| | |
|---|---|
| Mode: | M01 |
| Power: | DC 5V |
| TE: | Berny |
| Date | 2025/11/14 |
| T/A/P | 24.1℃/53%/101Kpa |




## Critical_Freqs

| No. | Freq. (MHz) | Reading (dBµV) | Corr. (dB) | Meas. (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Det. | Pol. |
|---|---|---|---|---|---|---|---|---|
| 1 | 398.600 | 30.17 | -13.65 | 16.52 | 46.00 | 29.48 | PK+ | H |
| 2 | 489.780 | 30.67 | -12.31 | 18.36 | 46.00 | 27.64 | PK+ | H |
| 3 | 587.750 | 30.68 | -9.78 | 20.90 | 46.00 | 25.10 | PK+ | H |
| 4 | 656.620 | 31.53 | -7.86 | 23.67 | 46.00 | 22.33 | PK+ | H |
| 5 | 819.580 | 30.54 | -5.47 | 25.07 | 46.00 | 20.93 | PK+ | H |
| 6 | 937.920 | 29.99 | -2.13 | 27.86 | 46.00 | 18.14 | PK+ | H |

Note:

1.Measurement = Reading Level + Correct Factor.
2.Margin=Limit- Measurement.
3. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
4. Peak: Peak detector.
5. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

# 8. AC POWER LINE CONDUCTED EMISSION

**LIMITS**

Please refer to CFR 47 FCC §15.207 (a)

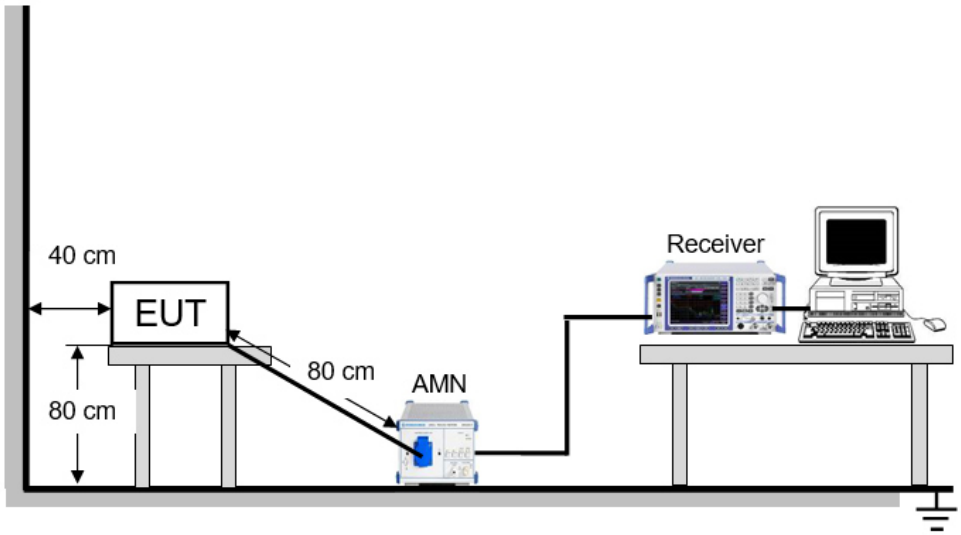
| FREQUENCY (MHz) | Quasi-peak | Average |
|---|---|---|
| 0.15 -0.5 | 66 - 56 * | 56 - 46 * |
| 0.50 -5.0 | 56.00 | 46.00 |
| 5.0 -30.0 | 60.00 | 50.00 |

**TEST PROCEDURE**

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2020.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

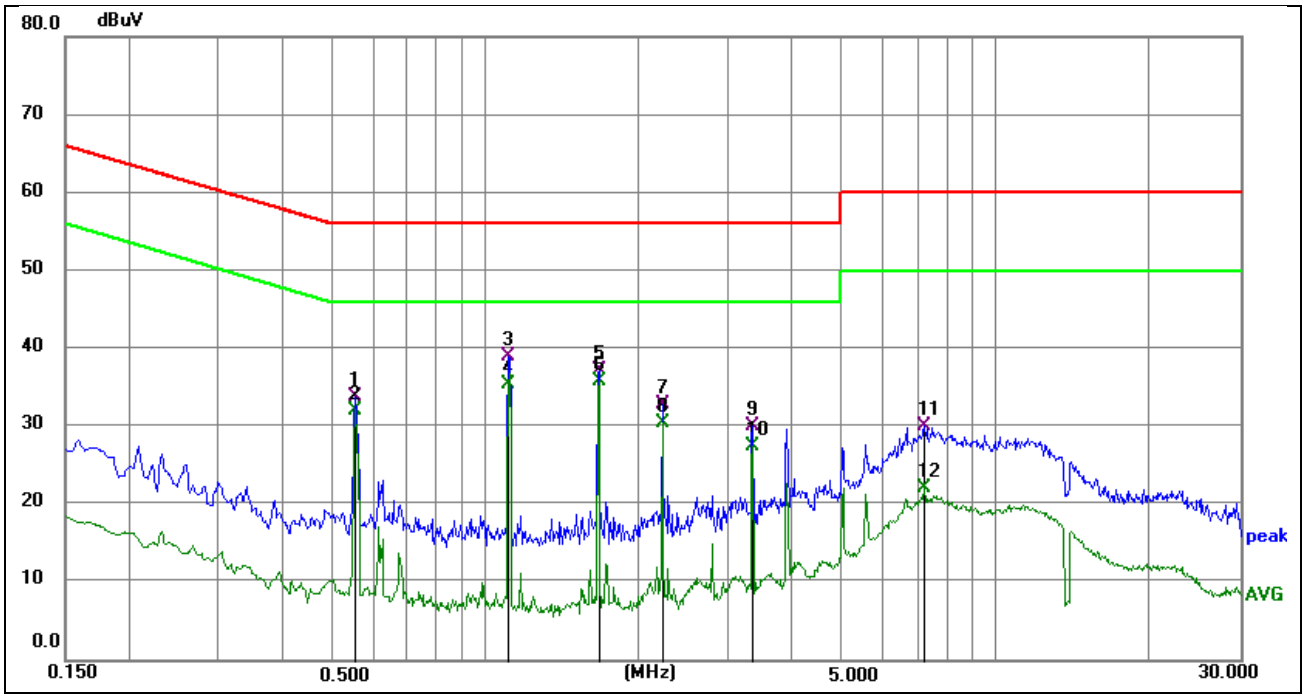
**TEST SETUP**




**TEST ENVIRONMENT**

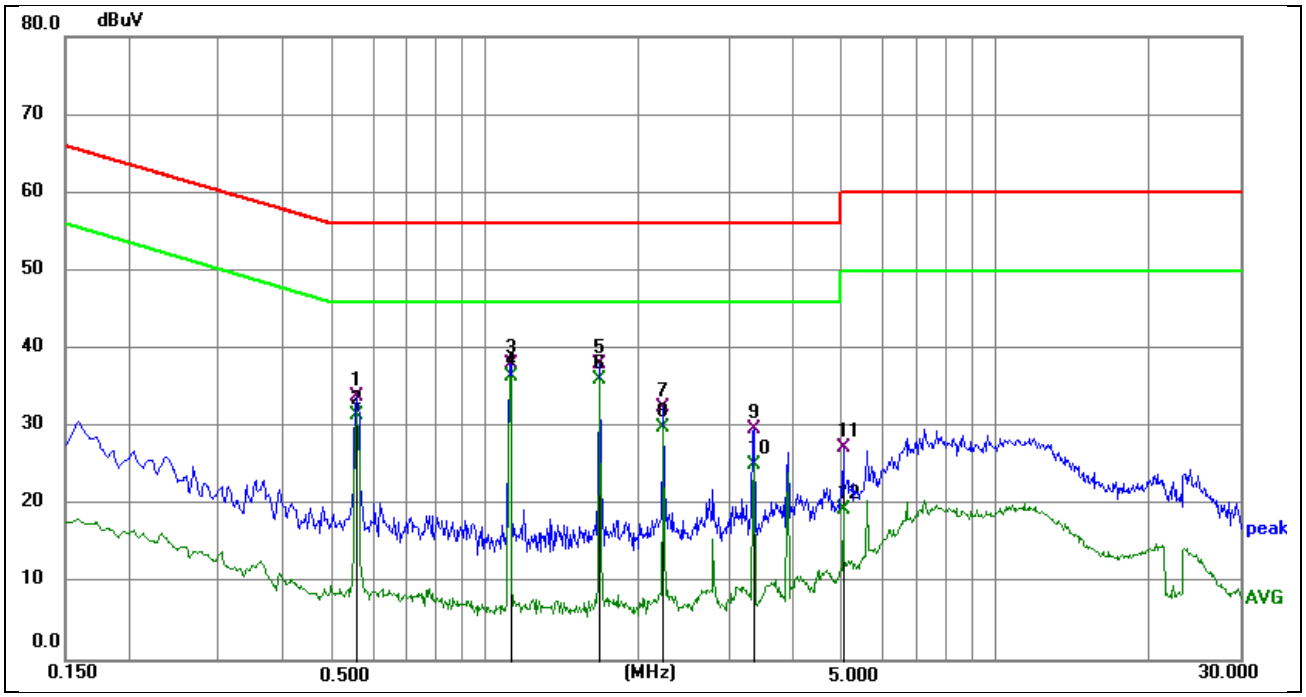
| | | | |
|---|---|---|---|
| Temperature | 23.4℃ | Relative Humidity | 54% |
| Atmosphere Pressure | 101kPa | | |

**TEST RESULTS**




| Phase: L1 | Mode: M01 |
|---|---|

| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.5550 | 24.16 | 9.61 | 33.77 | 56.00 | -22.23 | QP |
| 2 | 0.5550 | 22.39 | 9.61 | 32.00 | 46.00 | -14.00 | AVG |
| 3 | 1.1085 | 29.47 | 9.53 | 39.00 | 56.00 | -17.00 | QP |
| 4 | 1.1085 | 25.98 | 9.53 | 35.51 | 46.00 | -10.49 | AVG |
| 5 | 1.6665 | 27.70 | 9.60 | 37.30 | 56.00 | -18.70 | QP |
| 6 | 1.6665 | 26.23 | 9.60 | 35.83 | 46.00 | -10.17 | AVG |
| 7 | 2.2200 | 23.25 | 9.64 | 32.89 | 56.00 | -23.11 | QP |
| 8 | 2.2200 | 20.78 | 9.64 | 30.42 | 46.00 | -15.58 | AVG |
| 9 | 3.3360 | 20.34 | 9.67 | 30.01 | 56.00 | -25.99 | QP |
| 10 | 3.3360 | 17.75 | 9.67 | 27.42 | 46.00 | -18.58 | AVG |
| 11 | 7.2420 | 20.40 | 9.65 | 30.05 | 60.00 | -29.95 | QP |
| 12 | 7.2420 | 12.41 | 9.65 | 22.06 | 50.00 | -27.94 | AVG |




| Phase: N | Mode: M01 |
|---|---|

| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.5595 | 24.20 | 9.58 | 33.78 | 56.00 | -22.22 | QP |
| 2 | 0.5595 | 21.86 | 9.58 | 31.44 | 46.00 | -14.56 | AVG |
| 3 | 1.1174 | 28.48 | 9.60 | 38.08 | 56.00 | -17.92 | QP |
| 4 | 1.1174 | 26.88 | 9.60 | 36.48 | 46.00 | -9.52 | AVG |
| 5 | 1.6755 | 28.32 | 9.63 | 37.95 | 56.00 | -18.05 | QP |
| 6 | 1.6755 | 26.34 | 9.63 | 35.97 | 46.00 | -10.03 | AVG |
| 7 | 2.2290 | 22.74 | 9.64 | 32.38 | 56.00 | -23.62 | QP |
| 8 | 2.2290 | 20.19 | 9.64 | 29.83 | 46.00 | -16.17 | AVG |
| 9 | 3.3495 | 20.09 | 9.66 | 29.75 | 56.00 | -26.25 | QP |
| 10 | 3.3495 | 15.55 | 9.66 | 25.21 | 46.00 | -20.79 | AVG |
| 11 | 5.0190 | 17.72 | 9.67 | 27.39 | 60.00 | -32.61 | QP |
| 12 | 5.0190 | 9.67 | 9.67 | 19.34 | 50.00 | -30.66 | AVG |

Note: 1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

# 9. 20DB BANDWIDTH

**LIMITS**

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. In the case of intentional radiators operating under the provisions of subpart E, the emission bandwidth may span across multiple contiguous frequency bands identified in that subpart. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

**TEST PROCEDURE**

a.) The EUT operates at maximum output power according to the user manual.

b.) If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

c.) If the EUT is a floor standing device, it is placed on the ground.

d.) Auxiliary equipment and cables were positioned to simulate normal operation conditions.

f.) The EUT is connected to DC Power Source or an adapter.

e.) The measurement distance is 3 meter.

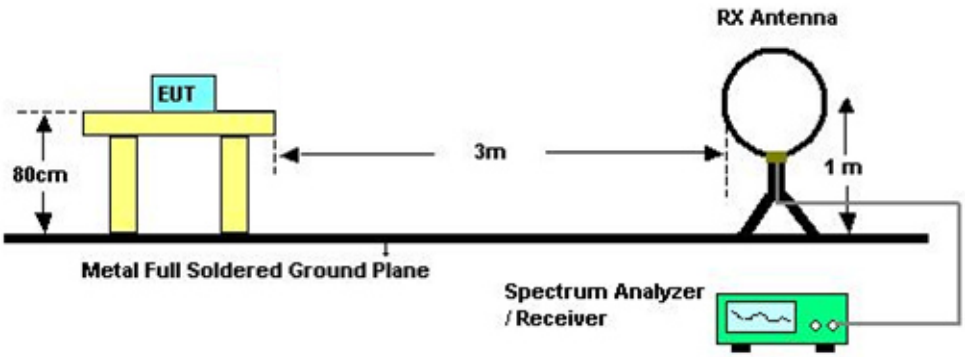
f.) The EUT was set into operation.

g.) Adjust the test instrument for the following setting.

| | |
|---|---|
| RBW | 1kHz |
| VBW | 3*RBW |
| Detector | Peak |
| Sweep time | Auto |
| Trace Mode | Max hold |

h.) Allow trace to fully stabilize.

**TEST SETUP**




**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.8℃ | Relative Humidity | 53% |
| Atmosphere Pressure | 101kPa | | |

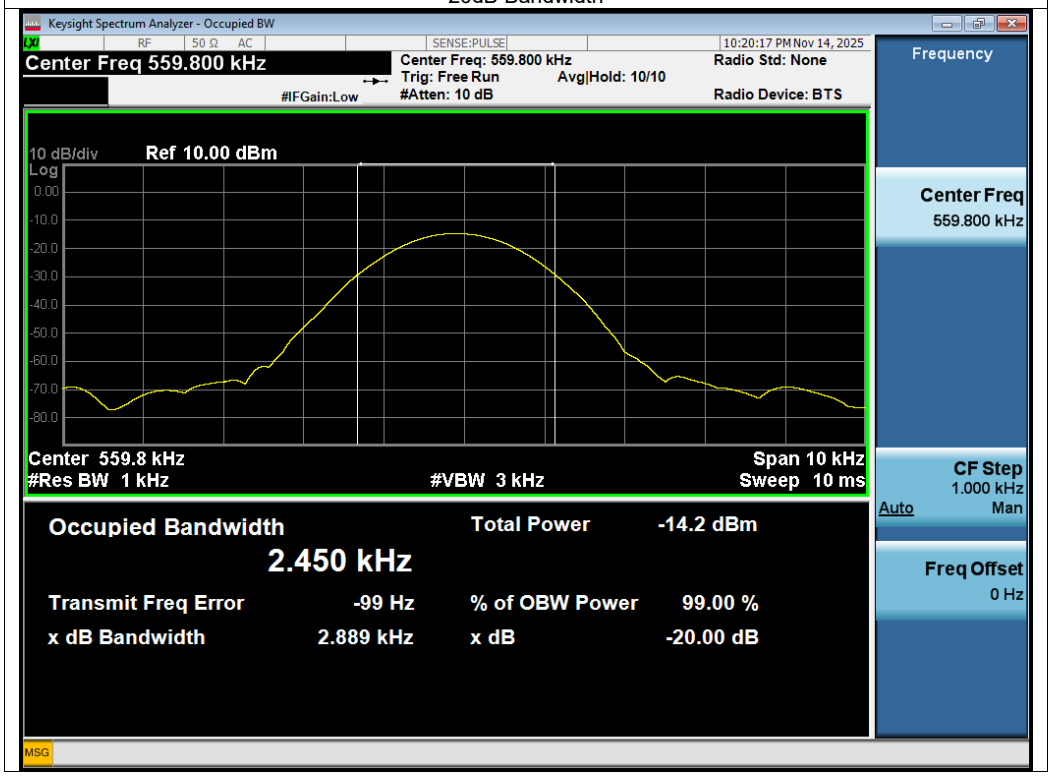
**TEST RESULTS**

For Watch

| Frequency (kHz) | 20dB Bandwidth (kHz) | Result |
|---|---|---|
| 559.8 | 2.889 | Pass |

For Watch

| Test Graphs |
| --- |
| 20dB Bandwidth |



# 10. ANTENNA REQUIREMENT

**REQUIREMENT**

Please refer to FCC §15.203
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

**DESCRIPTION**

Pass.

**END OF REPORT**