# FCC EMI TEST REPORT

| | | |
|---|---|---|
| **FCC ID** | : | **PY7-26817E** |
| **Equipment** | : | **GSM/WCDMA/LTE Phone with BT, DTS/UNII a/b/g/n/ac, GPS and NFC** |
| **Brand Name** | : | **Sony** |
| **Applicant** | : | **Sony Mobile Communications Inc.<br>4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan** |
| **Manufacturer** | : | **Sony Mobile Communications Inc.<br>4-12-3 Higashi-Shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan** |
| **Standard** | : | **FCC 47 CFR FCC Part 15 Subpart B** |

**The product was received on Mar. 25, 2019 and testing was started from Jun. 07, 2019 and completed on Jun. 13, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.**

**The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.**

**The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.**

Jones Tsai

**Approved by: Jones Tsai**

***SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory***
*No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)*

# Table of Contents

**History of this test report** ..... **3**

**Summary of Test Result** ..... **4**

**1. General Description** ..... **5**

1.1. Product Feature of Equipment Under Test ..... 5
1.2. Modification of EUT ..... 5
1.3. Test Location ..... 6
1.4. Applicable Standards ..... 6

**2. Test Configuration of Equipment Under Test** ..... **7**

2.1. Test Mode ..... 7
2.2. Connection Diagram of Test System ..... 8
2.3. Support Unit used in test configuration and system ..... 9
2.4. EUT Operation Test Setup ..... 10

**3. Test Result** ..... **11**

3.1. Test of AC Conducted Emission Measurement ..... 11
3.2. Test of Radiated Emission Measurement ..... 13

**4. List of Measuring Equipment** ..... **15**

**5. Uncertainty of Evaluation** ..... **17**

**Appendix A. AC Conducted Emission Test Result**

**Appendix B. Radiated Emission Test Result**

# History of this test report

| Report No. | Version | Description | Issued Date |
|---|---|---|---|
| FC932517-01 | 01 | Initial issue of report | Jun. 26, 2019 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

# Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---|---|---|---|---|
| 3.1 | 15.107 | AC Conducted Emission | Pass | Under limit 10.28 dB at 0.152 MHz |
| 3.2 | 15.109 | Radiated Emission | Pass | Under limit 8.05 dB at 39.700 MHz |

| **Declaration of Conformity:** |
|---|
| The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. |
| **Comments and Explanations:** |
| The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification. |

**Reviewed by: Louis Wu**

**Report Producer: Wii Chang**

# 1. General Description

## 1.1. Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, DTS/UNII a/b/g/n/ac, NFC, and GNSS.

| Product Specification subjective to this standard | |
|---|---|
| **Antenna Type** | WWAN: Inverted-F / Loop Antenna<br>WLAN: Inverted-F Antenna<br>Bluetooth: Inverted-F Antenna<br>GPS/Glonass/Galileo/ BDS: Loop Antenna<br>NFC: Loop Antenna |

| EUT Information List | | | |
|---|---|---|---|
| HW Version | SW Version | S/N | Performed Test Item |
| A | 0.96 | BH9300ZHGP | Conducted Emission<br>Radiated Emission |

| Accessory List | |
|---|---|
| **AC Adapter** | Model Name : UCH20 |
| | S/N: 1116W37712313 |
| **Earphone** | Model Name.: STH40D |
| | S/N : N/A |
| **USB Cable** | Model Name.: UCB20 |
| | S/N : N/A |
| **Car Charger** | Model Name.: AN430 |
| | S/N : 1715A9140008F38 |

**Note:**

1. Above EUT list used are electrically identical per declared by manufacturer.
2. Above the accessories list are used to exercise the EUT during test, and the serial number of each type of accessories is listed in each section of this report. .
3. For other wireless features of this EUT, test report will be issued separately.

## 1.2. Modification of EUT

No modifications are made to the EUT during all test items.

## 1.3. Test Location

| | |
|---|---|
| **Test Site** | SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory |
| **Test Site Location** | No.52, Huaya 1st Rd., Guishan Dist.,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-3456<br>FAX: +886-3-328-4978 |
| **Test Site No.** | **Sporton Site No.** |
| | CO05-HY |

| | |
|---|---|
| **Test Site** | SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory |
| **Test Site Location** | No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist.,<br>Taoyuan City, Taiwan (R.O.C.)<br>TEL: +886-3-327-0868<br>FAX: +886-3-327-0855 |
| **Test Site No.** | **Sporton Site No.** |
| | 03CH10-HY |

FCC Designation No.: TW1093 and TW1098

## 1.4. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2014

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.

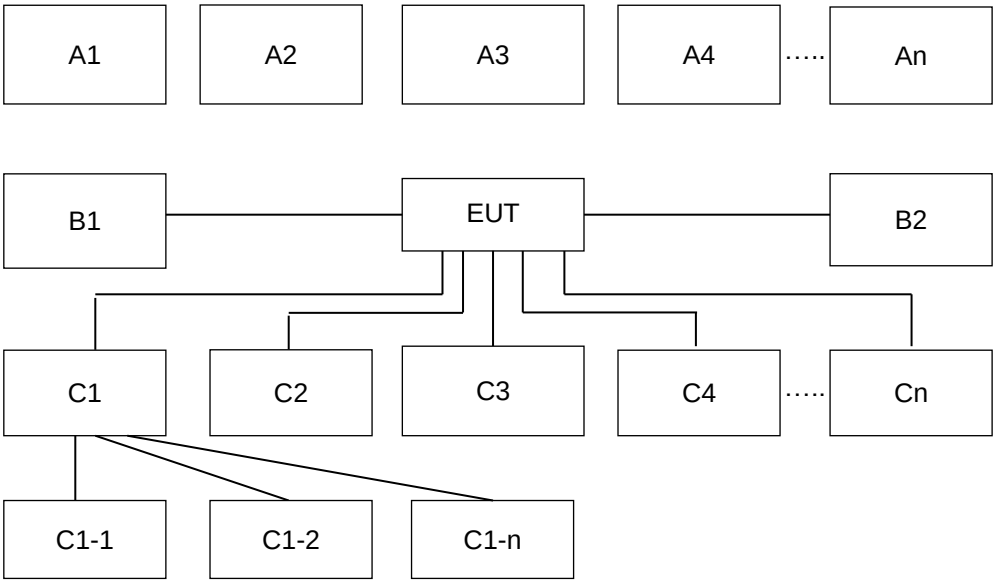
# 2. Test Configuration of Equipment Under Test

## 2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

| Test Items | Function Type |
|---|---|
| **AC Conducted Emission** | Mode 1: GSM850 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + MPEG4 + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 2: WCDMA Band V (Middle Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + MP3 + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 3: LTE Band 5 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 4: LTE Band 17 (Middle Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + Camera (Front) + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 5: LTE Band 5 (Low Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + Camera (Rear) + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 6: LTE Band 5 (High Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 7: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone |
| **Radiated Emissions** | Mode 1: GSM850 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + MPEG4 + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 2: WCDMA Band V (Middle Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + MP3 + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 3: LTE Band 5 (Middle Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + GPS Rx + USB Cable (Charging from Car Charger (12Vdc)) + Battery + Earphone<br>Mode 4: LTE Band 17 (Middle Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + Camera (Front) + USB Cable (Charging from Car Charger (24Vdc)) + Battery + Earphone<br>Mode 5: LTE Band 5 (Low Channel) Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + Camera (Rear) + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 6: LTE Band 5 (High Channel) Idle + Bluetooth Idle + WLAN (5GHz) Idle + NFC On + USB Cable (Charging from Adapter) + Battery + Earphone<br>Mode 7: Flight Mode + USB Cable (Data Link with Notebook) + Battery + Earphone |
| **Remark:**<br>**1.** Data Linking with Notebook means data application transferred mode between EUT and Notebook.<br>**2.** For radiation emission after pre-scanned the cellular band between 30MHz ~ 960MHz (GSM850/WCDMA Band V/LTE Band 5/17), only the worst case for cellular band test data of this mode was reported. | |

## 2.2. Connection Diagram of Test System




| Conduction Test Setup | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **No.** | **Wireless Station** | **Connection Type** | **Test Mode** | | | | | | |
| | | | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| A1 | BT Earphone | Bluetooth | X | X | X | X | X | X | |
| A2 | System Simulator | GSM/UMTS/CDMA/ WCDMA/LTE | X | X | X | X | X | X | |
| A3 | GPS Station | GPS | | | X | | | | |
| A4 | AP router | WiFi | X | X | X | X | X | X | |
| **No.** | **Power Source** | **Connection Type** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| B1 | AC : 120V/60Hz | AC Power Cable | X | X | X | X | X | X | |
| B2 | Power from system | AC Power Cable | | | | | | | X |
| **No.** | **Setup Peripherals** | **Connection Type** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| C1 | Notebook | USB Cable | | | | | | | X |
| C1-1 | Music Player | USB Cable to C1 | | | | | | | X |
| C1-2 | AP router | RJ-45 Cable to C1 | | | | | | | X |
| C2 | Earphone | Earphone jack | X | X | X | X | X | X | X |
| C3 | SD card | SD I/O interface without Cable | X | X | X | X | X | X | X |

| Radiation Test Setup | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Wireless Station | Connection Type | Test Mode | | | | | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| A1 | BT Earphone | Bluetooth | X | X | X | X | X | X | |
| A2 | System Simulator | GSM/UMTS/CDMA/ WCDMA/LTE | X | X | X | X | X | X | |
| A3 | GPS Station | GPS | | | X | | | | |
| A4 | AP router | WiFi | X | X | X | X | X | X | |
| **No.** | **Power Source** | **Connection Type** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| B1 | AC : 120V/60Hz | AC Power Cable | X | X | | | X | X | |
| B2 | DC : 12V | DC Power Cable | | | X | X | | | |
| B3 | Power from system | AC Power Cable | | | | | | | X |
| **No.** | **Setup Peripherals** | **Connection Type** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| C1 | Notebook | USB cable | | | | | | | X |
| C1-1 | Music Player | USB Cable to C1 | | | | | | | X |
| C1-2 | AP router | RJ-45 Cable to C1 | | | | | | | X |
| C2 | Earphone | Earphone jack | X | X | X | X | X | X | X |
| C3 | SD card | SD I/O interface without cable | X | X | X | X | X | X | X |
| C4 | Smart Phone | USB Cable | | | X | X | | | |

## 2.3. Support Unit used in test configuration and system

| Item | Equipment | Trade Name | Model Name | FCC ID | Data Cable | Power Cord |
|---|---|---|---|---|---|---|
| 1. | System Simulator | Anritsu | MT8820C | N/A | N/A | Unshielded, 1.8 m |
| 2. | System Simulator | Anritsu | 8820C | N/A | N/A | Unshielded, 1.8 m |
| 3. | GPS Station | Pendulum | GSG-54 | N/A | N/A | Unshielded, 1.8 m |
| 4. | Bluetooth Earphone | Sony | SBH82D | PY7-RD0010 | N/A | N/A |
| 5. | WLAN AP | ASUS | RT-AC66U | MSQ-RTAC66U | N/A | Unshielded, 1.8 m |
| 6. | Music Player | Apple | A1285 | FCC DoC | Shielded, 1.0 m | N/A |
| 7. | Notebook | DELL | Latitude E6320 | FCC DoC | N/A | AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m |
| 8. | Car Battery | GS | 65B24LS | FCC DoC | NA | NA |
| 9. | SD Card | SanDisk | MicroSD HC | FCC DoC | N/A | N/A |
| 10. | Smart Phone | Sony | NA | NA | NA | NA |

## 2.4. EUT Operation Test Setup

The EUT was in GSM and LTE idle mode during the testing. The EUT was synchronized with the BCCH, and had been continuous receiving mode by setting paging reorganization of the system simulator.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test:

1. Data application is transferred between Laptop and EUT via USB cable.
2. Execute “GPS Test” to make the EUT receive continuous signals from GPS station.
3. Execute “Music Player” to play MP3 files.
4. Execute “Video player” to play MPEG4 files.
5. Turn on camera to capture images.
6. Turn on NFC function
7. The data application (each file size is greater than 30Mbytes) is continuously transferred between the EUT and Notebook connected via USB cable, while Flight mode..

# 3. Test Result

## 3.1. Test of AC Conducted Emission Measurement

### 3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency of emission (MHz) | Conducted limit (dBuV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56* | 56 to 46* |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

*Decreases with the logarithm of the frequency.

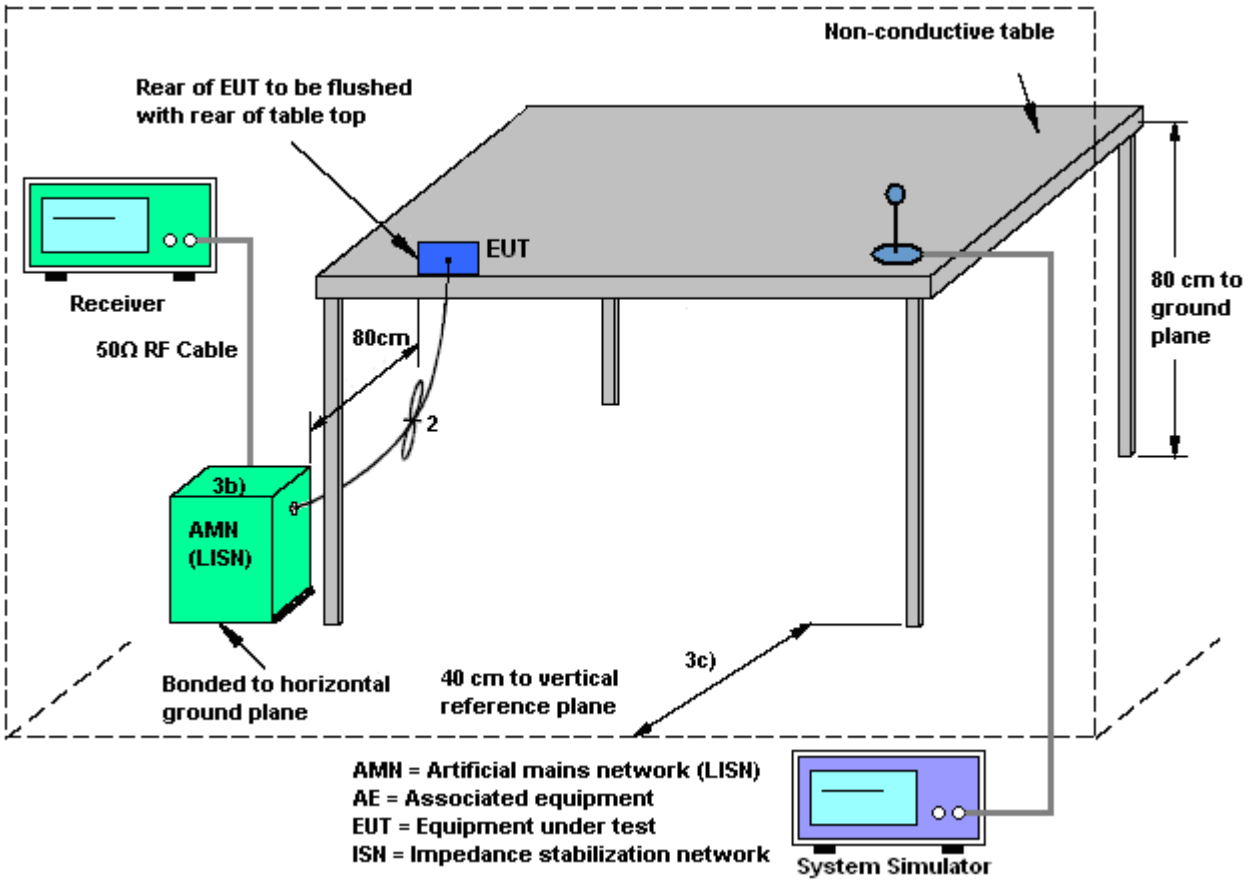
### 3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

### 3.1.3 Test Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

### 3.1.4 Test Setup




### 3.1.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

## 3.2. Test of Radiated Emission Measurement

### 3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 30 – 88 | 100 | 3 |
| 88 – 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

### 3.2.2. Measuring Instruments

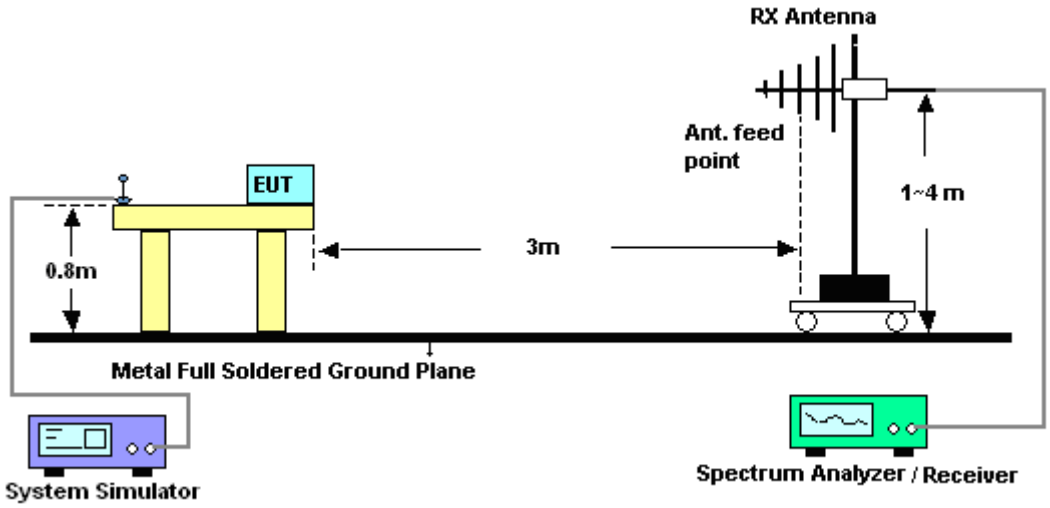
Refer a test equipment and calibration data table in this test report.

### 3.2.3. Test Procedures

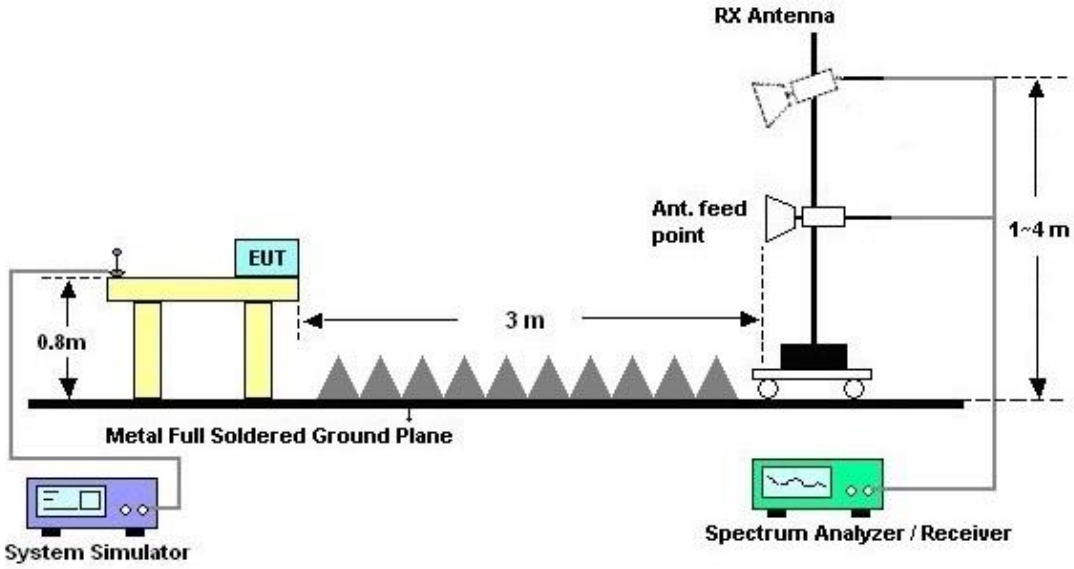
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, 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.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dBμV/m) = 20 log Emission level (μV/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

## 3.2.4. Test Setup of Radiated Emission

**For radiated emissions from 30MHz to 1GHz**




**For radiated emissions above 1GHz**




## 3.2.5. Test Result of Radiated Emission

Please refer to Appendix B.

# 4. List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| AC Power Source | ChainTek | APC-1000W | N/A | N/A | N/A | Jun. 12, 2019~ Jun. 13, 2019 | N/A | Conduction (CO05-HY) |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | 102388 | 9KHz~3.6GHz | Nov. 12, 2018 | Jun. 12, 2019~ Jun. 13, 2019 | Nov. 11, 2019 | Conduction (CO05-HY) |
| Hygrometer | Testo | 608-H1 | 34913912 | N/A | Mar. 19, 2019 | Jun. 12, 2019~ Jun. 13, 2019 | Mar. 18, 2020 | Conduction (CO05-HY) |
| LISN | Rohde & Schwarz | ENV216 | 100080 | 9kHz~30MHz | Nov. 14, 2018 | Jun. 12, 2019~ Jun. 13, 2019 | Nov. 13, 2019 | Conduction (CO05-HY) |
| LISN | Rohde & Schwarz | ENV216 | 100081 | 9kHz~30MHz | Nov. 09, 2018 | Jun. 12, 2019~ Jun. 13, 2019 | Nov. 08, 2019 | Conduction (CO05-HY) |
| Software | Rohde & Schwarz | EMC32 V10.30 | N/A | N/A | N/A | Jun. 12, 2019~ Jun. 13, 2019 | N/A | Conduction (CO05-HY) |
| LF Cable | HUBER + SUHNER | RG-214/U | LF01 | N/A | Dec. 31, 2018 | Jun. 12, 2019~ Jun. 13, 2019 | Dec. 30, 2019 | Conduction (CO05-HY) |
| Pulse Limiter | Rohde & Schwarz | ESH3-Z2 | 100851 | N/A | Dec. 31, 2018 | Jun. 12, 2019~ Jun. 13, 2019 | Dec. 30, 2019 | Conduction (CO05-HY) |
| Amplifier | SONOMA | 310N | 187311 | 9kHz~1GHz | Oct. 23, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Oct. 22, 2019 | Radiation (03CH10-HY) |
| Bilog Antenna | TESEQ | CBL 6111D&00800 N1D01N-06 | 35413&02 | 30MHz~1GHz | Feb. 12, 2019 | Jun. 07, 2019~ Jun. 10, 2019 | Feb. 11, 2020 | Radiation (03CH10-HY) |
| Horn Antenna | SCHWARZBECK | BBHA 9120 D | 9120D-1325 | 1GHz ~ 18GHz | Oct. 02, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Oct. 01, 2019 | Radiation (03CH10-HY) |
| Preamplifier | Jet-Power | JAP00101800-30-10P | 160118550004 | 1GHz~18GHz | Apr. 16, 2019 | Jun. 07, 2019~ Jun. 10, 2019 | Apr. 15, 2020 | Radiation (03CH10-HY) |
| Spectrum Analyzer | Keysight | N9010A | MY54200485 | 10Hz ~ 44GHz | Nov. 02, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Nov. 01, 2019 | Radiation (03CH10-HY) |
| Controller | EMEC | EM 1000 | N/A | Control Turn table & Ant Mast | N/A | Jun. 07, 2019~ Jun. 10, 2019 | N/A | Radiation (03CH10-HY) |
| Antenna Mast | EMEC | AM-BS-4500-B | N/A | 1~4m | N/A | Jun. 07, 2019~ Jun. 10, 2019 | N/A | Radiation (03CH10-HY) |
| Turn Table | EMEC | TT 2200 | N/A | 0~360 Degree | N/A | Jun. 07, 2019~ Jun. 10, 2019 | N/A | Radiation (03CH10-HY) |
| Software | Audix | E3 6.2009-8-24 | RK-001042 | N/A | N/A | Jun. 07, 2019~ Jun. 10, 2019 | N/A | Radiation (03CH10-HY) |
| EMI Test Receiver | Keysight | N9038A(MXE) | MY54130085 | 20Hz ~ 8.4GHz | Jan. 19, 2019 | Jun. 07, 2019~ Jun. 10, 2019 | Jan. 20, 2020 | Radiation (03CH10-HY) |

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|---|---|---|---|---|---|---|---|---|
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 / 102 | MY11692/ 4PE, MY11693/ 4PE, MY2855/2 | 30M-1G | Nov. 08, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Nov. 07, 2019 | Radiation (03CH10-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 / 102 | MY11692/ 4PE, MY11693/ 4PE, MY2855/2 | 1G-18G | Nov. 08, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Nov. 07, 2019 | Radiation (03CH10-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 505134/2 | 30M~40GHz | Oct. 16, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Oct. 15, 2019 | Radiation (03CH10-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 800740/2 | 30M~40GHz | Oct. 16, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Oct. 15, 2019 | Radiation (03CH10-HY) |
| SHF-EHF Horn Antenna | SCHWARZBECK | BBHA 9170 | BBHA9170584 | 18GHz- 40GHz | Dec. 05, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Dec. 04, 2019 | Radiation (03CH10-HY) |
| Preamplifier | EMEC | EM18G40G | 060715 | 18GHz ~ 40GHz | Dec. 06, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Dec. 05, 2019 | Radiation (03CH10-HY) |
| Filter | Microwave | H1G013G1 | SN477215 | 1.0G High Pass | Nov. 02, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Nov. 01, 2019 | Radiation (03CH10-HY) |
| Filter | Wainwright | WLKS1200-8SS | SN3 | 1.2G Low Pass | Nov. 02, 2018 | Jun. 07, 2019~ Jun. 10, 2019 | Nov. 01, 2019 | Radiation (03CH10-HY) |

# 5. Uncertainty of Evaluation

**Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)**

| | |
|---|---|
| Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y)) | **2.20** |

**Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)**

| | |
|---|---|
| Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y)) | **5.60** |

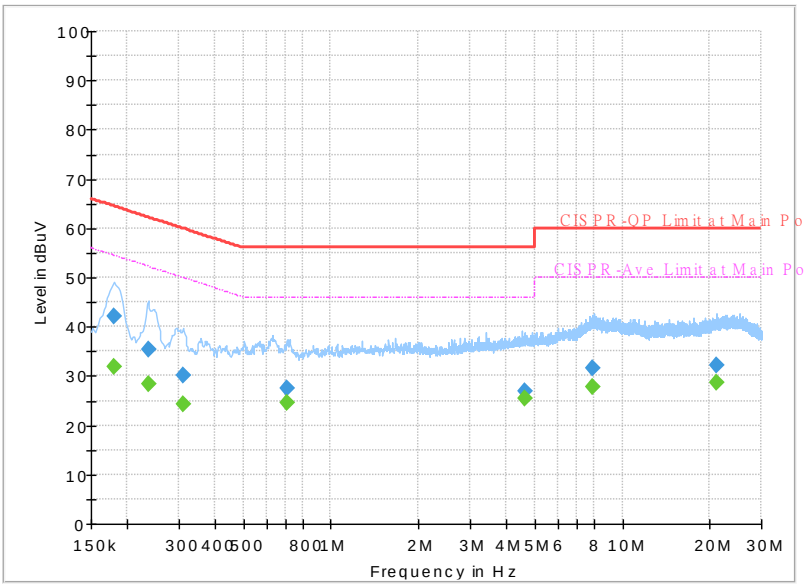
**Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)**

| | |
|---|---|
| Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y)) | **5.20** |

# Appendix A. AC Conducted Emission Test Results

| | | | |
|---|---|---|---|
| **Test Mode :** | Mode 1 | **Temperature :** | 24~26℃ |
| **Test Engineer :** | Jimmy Chang | **Relative Humidity :** | 53~55% |
| **Test Voltage :** | 120Vac / 60Hz | **Phase :** | Line |
| **Remark :** | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

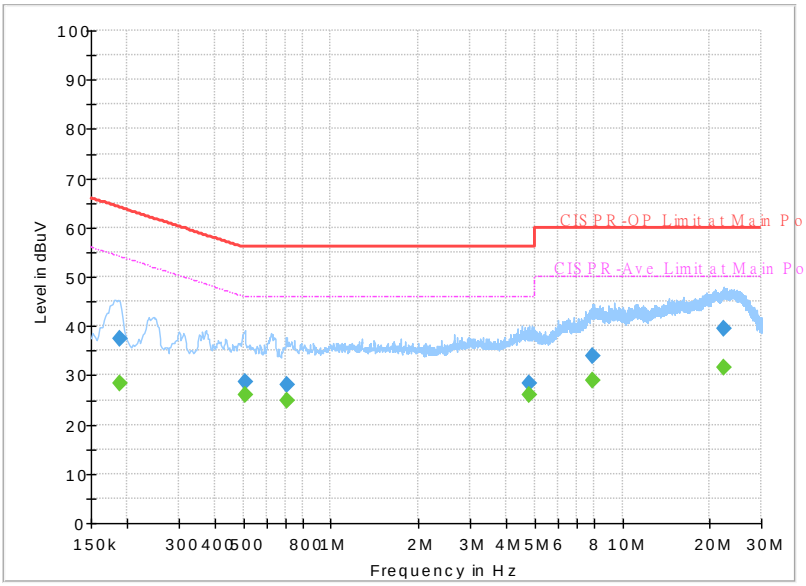



**Final Result**

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.179250 | --- | 31.98 | 54.52 | 22.54 | L1 | OFF | 19.5 |
| 0.179250 | 42.21 | --- | 64.52 | 22.31 | L1 | OFF | 19.5 |
| 0.235500 | --- | 28.43 | 52.25 | 23.82 | L1 | OFF | 19.5 |
| 0.235500 | 35.51 | --- | 62.25 | 26.74 | L1 | OFF | 19.5 |
| 0.312000 | --- | 24.38 | 49.92 | 25.54 | L1 | OFF | 19.5 |
| 0.312000 | 30.01 | --- | 59.92 | 29.91 | L1 | OFF | 19.5 |
| 0.710250 | --- | 24.44 | 46.00 | 21.56 | L1 | OFF | 19.6 |
| 0.710250 | 27.48 | --- | 56.00 | 28.52 | L1 | OFF | 19.6 |
| 4.605000 | --- | 25.44 | 46.00 | 20.56 | L1 | OFF | 19.7 |
| 4.605000 | 26.88 | --- | 56.00 | 29.12 | L1 | OFF | 19.7 |
| 7.921500 | --- | 27.63 | 50.00 | 22.37 | L1 | OFF | 19.8 |
| 7.921500 | 31.46 | --- | 60.00 | 28.54 | L1 | OFF | 19.8 |
| 21.090750 | --- | 28.74 | 50.00 | 21.26 | L1 | OFF | 20.3 |
| 21.090750 | 32.23 | --- | 60.00 | 27.77 | L1 | OFF | 20.3 |

| Test Mode : | Mode 1 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

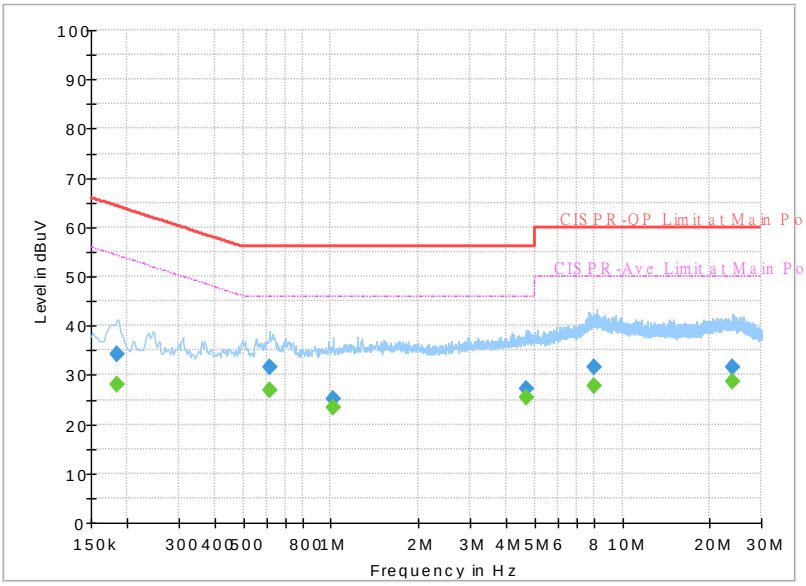



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.188250 | --- | 28.47 | 54.11 | 25.64 | N | OFF | 19.5 |
| 0.188250 | 37.52 | --- | 64.11 | 26.59 | N | OFF | 19.5 |
| 0.505500 | --- | 25.92 | 46.00 | 20.08 | N | OFF | 19.5 |
| 0.505500 | 28.59 | --- | 56.00 | 27.41 | N | OFF | 19.5 |
| 0.705750 | --- | 24.91 | 46.00 | 21.09 | N | OFF | 19.6 |
| 0.705750 | 28.03 | --- | 56.00 | 27.97 | N | OFF | 19.6 |
| 4.805250 | --- | 26.04 | 46.00 | 19.96 | N | OFF | 19.7 |
| 4.805250 | 28.38 | --- | 56.00 | 27.62 | N | OFF | 19.7 |
| 7.867500 | --- | 28.89 | 50.00 | 21.11 | N | OFF | 19.8 |
| 7.867500 | 34.04 | --- | 60.00 | 25.96 | N | OFF | 19.8 |
| 22.310250 | --- | 31.55 | 50.00 | 18.45 | N | OFF | 20.4 |
| 22.310250 | 39.58 | --- | 60.00 | 20.42 | N | OFF | 20.4 |

| Test Mode : | Mode 2 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

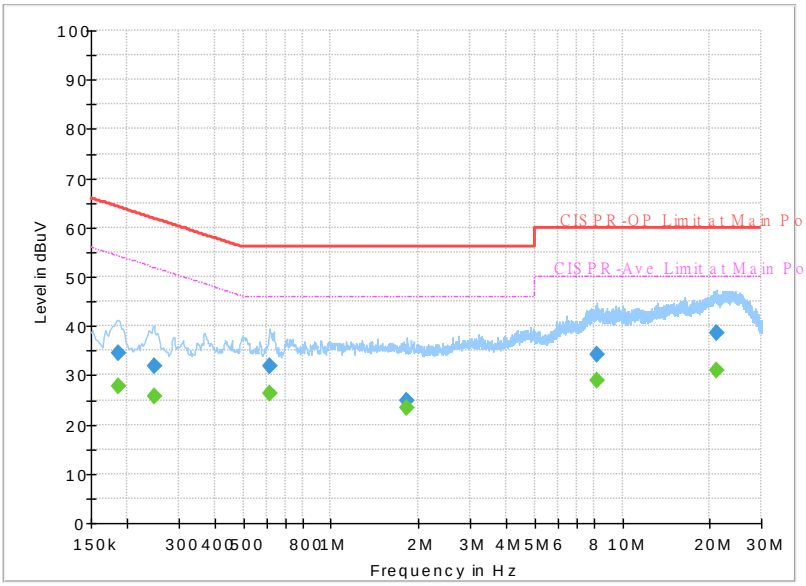



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.183750 | --- | 27.93 | 54.31 | 26.38 | L1 | OFF | 19.5 |
| 0.183750 | 34.07 | --- | 64.31 | 30.24 | L1 | OFF | 19.5 |
| 0.615750 | --- | 26.85 | 46.00 | 19.15 | L1 | OFF | 19.6 |
| 0.615750 | 31.67 | --- | 56.00 | 24.33 | L1 | OFF | 19.6 |
| 1.018500 | --- | 23.53 | 46.00 | 22.47 | L1 | OFF | 19.6 |
| 1.018500 | 25.16 | --- | 56.00 | 30.84 | L1 | OFF | 19.6 |
| 4.656750 | --- | 25.48 | 46.00 | 20.52 | L1 | OFF | 19.7 |
| 4.656750 | 27.06 | --- | 56.00 | 28.94 | L1 | OFF | 19.7 |
| 8.031750 | --- | 27.64 | 50.00 | 22.36 | L1 | OFF | 19.8 |
| 8.031750 | 31.51 | --- | 60.00 | 28.49 | L1 | OFF | 19.8 |
| 23.768250 | --- | 28.73 | 50.00 | 21.27 | L1 | OFF | 20.3 |
| 23.768250 | 31.71 | --- | 60.00 | 28.29 | L1 | OFF | 20.3 |

| Test Mode : | Mode 2 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

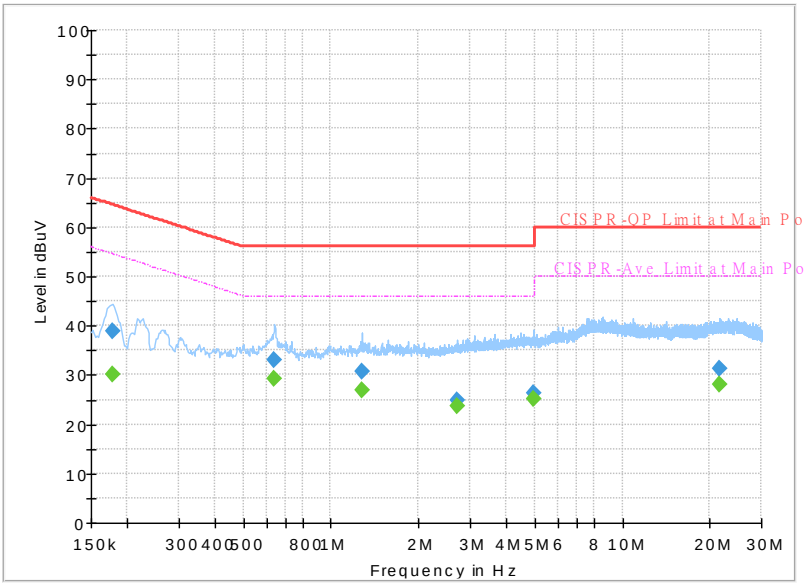



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.186000 | --- | 27.72 | 54.21 | 26.49 | N | OFF | 19.5 |
| 0.186000 | 34.62 | --- | 64.21 | 29.59 | N | OFF | 19.5 |
| 0.246750 | --- | 25.66 | 51.87 | 26.21 | N | OFF | 19.5 |
| 0.246750 | 31.78 | --- | 61.87 | 30.09 | N | OFF | 19.5 |
| 0.615750 | --- | 26.46 | 46.00 | 19.54 | N | OFF | 19.6 |
| 0.615750 | 32.01 | --- | 56.00 | 23.99 | N | OFF | 19.6 |
| 1.828500 | --- | 23.51 | 46.00 | 22.49 | N | OFF | 19.6 |
| 1.828500 | 24.94 | --- | 56.00 | 31.06 | N | OFF | 19.6 |
| 8.193750 | --- | 29.05 | 50.00 | 20.95 | N | OFF | 19.8 |
| 8.193750 | 34.13 | --- | 60.00 | 25.87 | N | OFF | 19.8 |
| 21.003000 | --- | 30.97 | 50.00 | 19.03 | N | OFF | 20.4 |
| 21.003000 | 38.72 | --- | 60.00 | 21.28 | N | OFF | 20.4 |

| Test Mode : | Mode 3 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

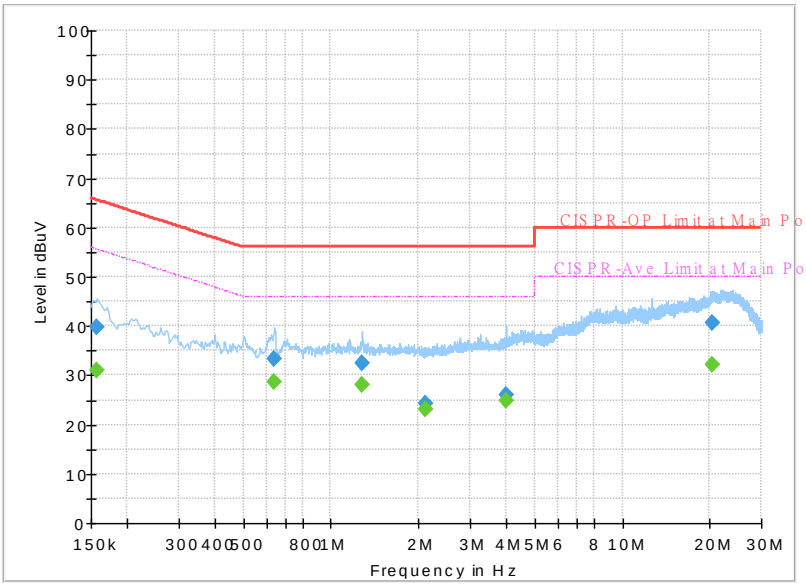



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.177000 | --- | 30.04 | 54.63 | 24.59 | L1 | OFF | 19.5 |
| 0.177000 | 38.76 | --- | 64.63 | 25.87 | L1 | OFF | 19.5 |
| 0.640500 | --- | 29.18 | 46.00 | 16.82 | L1 | OFF | 19.6 |
| 0.640500 | 32.91 | --- | 56.00 | 23.09 | L1 | OFF | 19.6 |
| 1.279500 | --- | 26.92 | 46.00 | 19.08 | L1 | OFF | 19.6 |
| 1.279500 | 30.74 | --- | 56.00 | 25.26 | L1 | OFF | 19.6 |
| 2.706000 | --- | 23.76 | 46.00 | 22.24 | L1 | OFF | 19.6 |
| 2.706000 | 24.91 | --- | 56.00 | 31.09 | L1 | OFF | 19.6 |
| 4.938000 | --- | 25.15 | 46.00 | 20.85 | L1 | OFF | 19.7 |
| 4.938000 | 26.45 | --- | 56.00 | 29.55 | L1 | OFF | 19.7 |
| 21.527250 | --- | 28.15 | 50.00 | 21.85 | L1 | OFF | 20.3 |
| 21.527250 | 31.30 | --- | 60.00 | 28.70 | L1 | OFF | 20.3 |

| Test Mode : | Mode 3 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

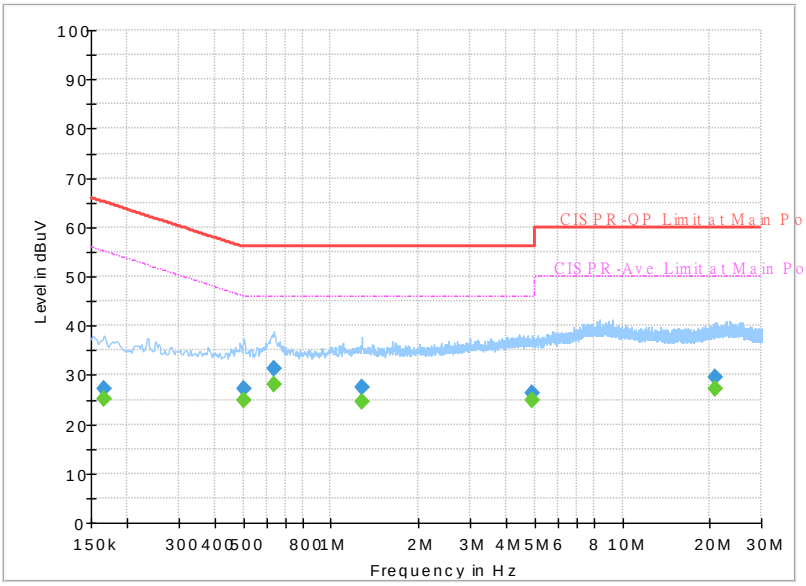



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.156750 | --- | 30.86 | 55.63 | 24.77 | N | OFF | 19.5 |
| 0.156750 | 39.75 | --- | 65.63 | 25.88 | N | OFF | 19.5 |
| 0.640500 | --- | 28.74 | 46.00 | 17.26 | N | OFF | 19.6 |
| 0.640500 | 33.25 | --- | 56.00 | 22.75 | N | OFF | 19.6 |
| 1.279500 | --- | 28.13 | 46.00 | 17.87 | N | OFF | 19.6 |
| 1.279500 | 32.53 | --- | 56.00 | 23.47 | N | OFF | 19.6 |
| 2.100750 | --- | 23.13 | 46.00 | 22.87 | N | OFF | 19.4 |
| 2.100750 | 24.27 | --- | 56.00 | 31.73 | N | OFF | 19.4 |
| 3.988500 | --- | 24.74 | 46.00 | 21.26 | N | OFF | 19.7 |
| 3.988500 | 26.09 | --- | 56.00 | 29.91 | N | OFF | 19.7 |
| 20.352750 | --- | 32.03 | 50.00 | 17.97 | N | OFF | 20.3 |
| 20.352750 | 40.55 | --- | 60.00 | 19.45 | N | OFF | 20.3 |

| Test Mode : | Mode 4 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

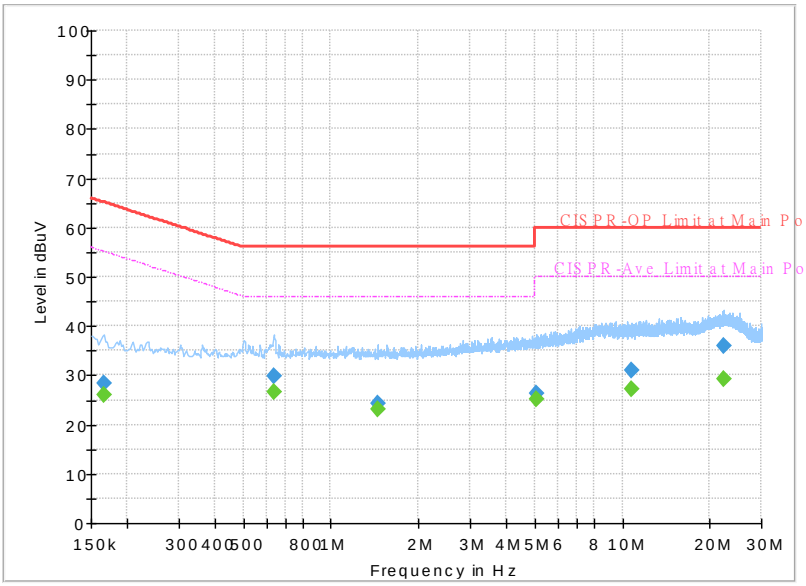



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.165750 | --- | 25.24 | 55.17 | 29.93 | L1 | OFF | 19.5 |
| 0.165750 | 27.15 | --- | 65.17 | 38.02 | L1 | OFF | 19.5 |
| 0.503250 | --- | 24.87 | 46.00 | 21.13 | L1 | OFF | 19.5 |
| 0.503250 | 27.27 | --- | 56.00 | 28.73 | L1 | OFF | 19.5 |
| 0.638250 | --- | 28.04 | 46.00 | 17.96 | L1 | OFF | 19.6 |
| 0.638250 | 31.23 | --- | 56.00 | 24.77 | L1 | OFF | 19.6 |
| 1.277250 | --- | 24.69 | 46.00 | 21.31 | L1 | OFF | 19.6 |
| 1.277250 | 27.51 | --- | 56.00 | 28.49 | L1 | OFF | 19.6 |
| 4.913250 | --- | 24.98 | 46.00 | 21.02 | L1 | OFF | 19.7 |
| 4.913250 | 26.25 | --- | 56.00 | 29.75 | L1 | OFF | 19.7 |
| 20.825250 | --- | 27.11 | 50.00 | 22.89 | L1 | OFF | 20.3 |
| 20.825250 | 29.57 | --- | 60.00 | 30.43 | L1 | OFF | 20.3 |

| Test Mode : | Mode 4 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

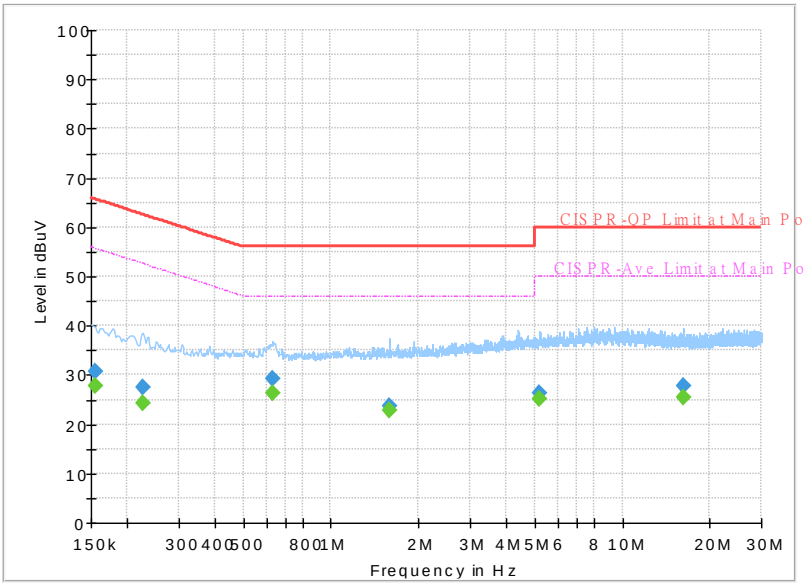



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.165750 | --- | 25.95 | 55.17 | 29.22 | N | OFF | 19.5 |
| 0.165750 | 28.33 | --- | 65.17 | 36.84 | N | OFF | 19.5 |
| 0.638250 | --- | 26.47 | 46.00 | 19.53 | N | OFF | 19.6 |
| 0.638250 | 29.96 | --- | 56.00 | 26.04 | N | OFF | 19.6 |
| 1.443750 | --- | 23.02 | 46.00 | 22.98 | N | OFF | 19.6 |
| 1.443750 | 24.13 | --- | 56.00 | 31.87 | N | OFF | 19.6 |
| 5.048250 | --- | 25.05 | 50.00 | 24.95 | N | OFF | 19.7 |
| 5.048250 | 26.43 | --- | 60.00 | 33.57 | N | OFF | 19.7 |
| 10.799250 | --- | 27.25 | 50.00 | 22.75 | N | OFF | 20.0 |
| 10.799250 | 31.03 | --- | 60.00 | 28.97 | N | OFF | 20.0 |
| 22.222500 | --- | 29.23 | 50.00 | 20.77 | N | OFF | 20.4 |
| 22.222500 | 36.09 | --- | 60.00 | 23.91 | N | OFF | 20.4 |

| Test Mode : | Mode 5 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

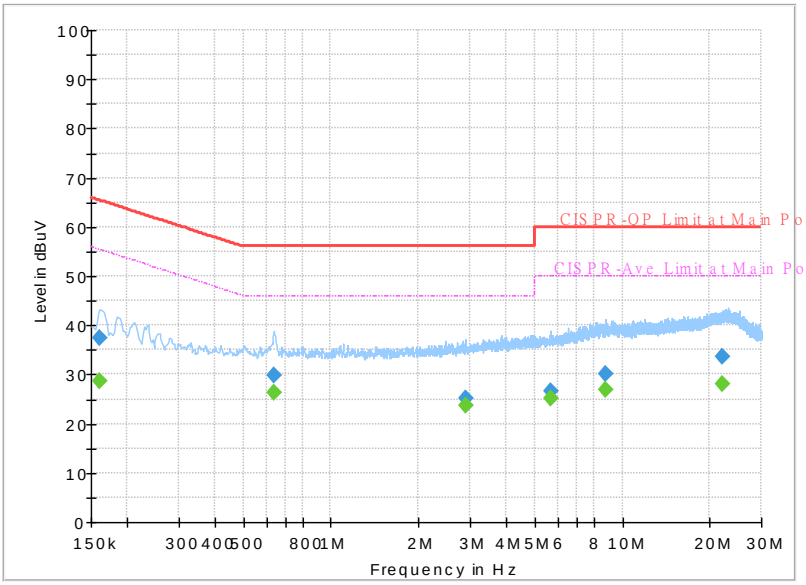



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.154500 | --- | 27.89 | 55.75 | 27.86 | L1 | OFF | 19.5 |
| 0.154500 | 30.78 | --- | 65.75 | 34.97 | L1 | OFF | 19.5 |
| 0.226500 | --- | 24.30 | 52.58 | 28.28 | L1 | OFF | 19.5 |
| 0.226500 | 27.60 | --- | 62.58 | 34.98 | L1 | OFF | 19.5 |
| 0.631500 | --- | 26.22 | 46.00 | 19.78 | L1 | OFF | 19.6 |
| 0.631500 | 29.25 | --- | 56.00 | 26.75 | L1 | OFF | 19.6 |
| 1.585500 | --- | 22.81 | 46.00 | 23.19 | L1 | OFF | 19.6 |
| 1.585500 | 23.76 | --- | 56.00 | 32.24 | L1 | OFF | 19.6 |
| 5.181000 | --- | 25.11 | 50.00 | 24.89 | L1 | OFF | 19.7 |
| 5.181000 | 26.33 | --- | 60.00 | 33.67 | L1 | OFF | 19.7 |
| 16.165500 | --- | 25.54 | 50.00 | 24.46 | L1 | OFF | 20.1 |
| 16.165500 | 27.69 | --- | 60.00 | 32.31 | L1 | OFF | 20.1 |

| Test Mode : | Mode 5 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

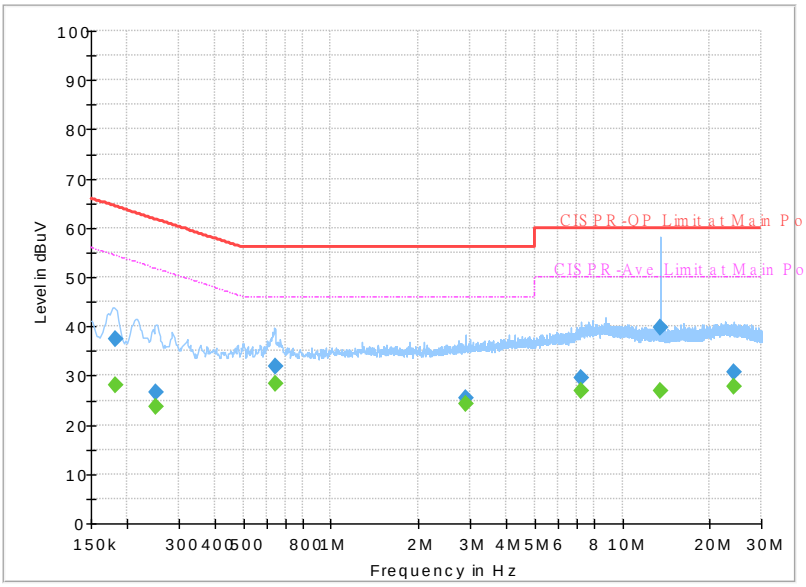



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.161250 | --- | 28.74 | 55.40 | 26.66 | N | OFF | 19.5 |
| 0.161250 | 37.32 | --- | 65.40 | 28.08 | N | OFF | 19.5 |
| 0.636000 | --- | 26.29 | 46.00 | 19.71 | N | OFF | 19.6 |
| 0.636000 | 29.78 | --- | 56.00 | 26.22 | N | OFF | 19.6 |
| 2.888250 | --- | 23.78 | 46.00 | 22.22 | N | OFF | 19.6 |
| 2.888250 | 25.07 | --- | 56.00 | 30.93 | N | OFF | 19.6 |
| 5.676000 | --- | 25.20 | 50.00 | 24.80 | N | OFF | 19.7 |
| 5.676000 | 26.57 | --- | 60.00 | 33.43 | N | OFF | 19.7 |
| 8.772000 | --- | 26.90 | 50.00 | 23.10 | N | OFF | 19.9 |
| 8.772000 | 30.01 | --- | 60.00 | 29.99 | N | OFF | 19.9 |
| 21.972750 | --- | 27.97 | 50.00 | 22.03 | N | OFF | 20.4 |
| 21.972750 | 33.73 | --- | 60.00 | 26.27 | N | OFF | 20.4 |

| Test Mode : | Mode 6 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

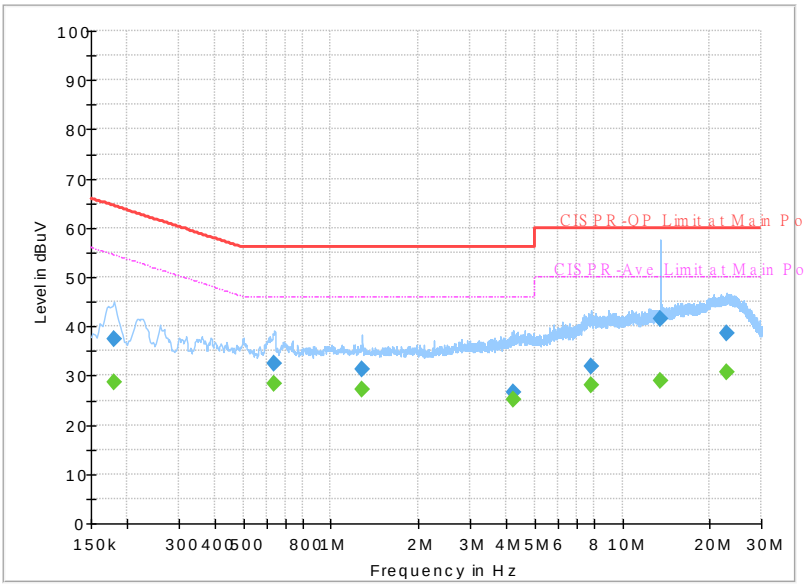



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.181500 | --- | 28.05 | 54.42 | 26.37 | L1 | OFF | 19.5 |
| 0.181500 | 37.51 | --- | 64.42 | 26.91 | L1 | OFF | 19.5 |
| 0.251250 | --- | 23.80 | 51.72 | 27.92 | L1 | OFF | 19.5 |
| 0.251250 | 26.62 | --- | 61.72 | 35.10 | L1 | OFF | 19.5 |
| 0.642750 | --- | 28.43 | 46.00 | 17.57 | L1 | OFF | 19.6 |
| 0.642750 | 31.77 | --- | 56.00 | 24.23 | L1 | OFF | 19.6 |
| 2.901750 | --- | 24.13 | 46.00 | 21.87 | L1 | OFF | 19.6 |
| 2.901750 | 25.47 | --- | 56.00 | 30.53 | L1 | OFF | 19.6 |
| 7.255500 | --- | 26.82 | 50.00 | 23.18 | L1 | OFF | 19.8 |
| 7.255500 | 29.50 | --- | 60.00 | 30.50 | L1 | OFF | 19.8 |
| 13.560000 | --- | 26.86 | 50.00 | 23.14 | L1 | OFF | 20.0 |
| 13.560000 | 39.69 | --- | 60.00 | 20.31 | L1 | OFF | 20.0 |
| 24.074250 | --- | 27.89 | 50.00 | 22.11 | L1 | OFF | 20.3 |
| 24.074250 | 30.75 | --- | 60.00 | 29.25 | L1 | OFF | 20.3 |

| Test Mode : | Mode 6 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

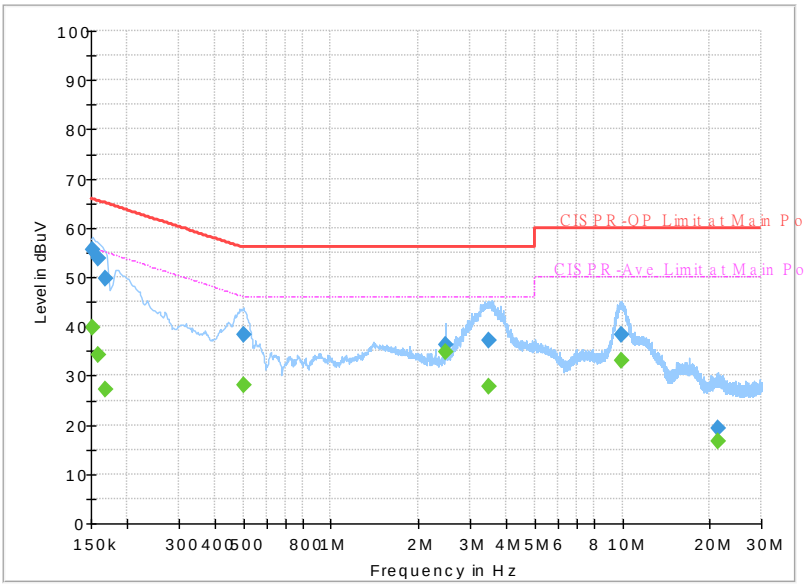



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.179250 | --- | 28.76 | 54.52 | 25.76 | N | OFF | 19.5 |
| 0.179250 | 37.50 | --- | 64.52 | 27.02 | N | OFF | 19.5 |
| 0.640500 | --- | 28.23 | 46.00 | 17.77 | N | OFF | 19.6 |
| 0.640500 | 32.51 | --- | 56.00 | 23.49 | N | OFF | 19.6 |
| 1.279500 | --- | 27.13 | 46.00 | 18.87 | N | OFF | 19.6 |
| 1.279500 | 31.25 | --- | 56.00 | 24.75 | N | OFF | 19.6 |
| 4.236000 | --- | 25.12 | 46.00 | 20.88 | N | OFF | 19.7 |
| 4.236000 | 26.66 | --- | 56.00 | 29.34 | N | OFF | 19.7 |
| 7.849500 | --- | 27.97 | 50.00 | 22.03 | N | OFF | 19.8 |
| 7.849500 | 31.81 | --- | 60.00 | 28.19 | N | OFF | 19.8 |
| 13.560000 | --- | 28.86 | 50.00 | 21.14 | N | OFF | 20.1 |
| 13.560000 | 41.62 | --- | 60.00 | 18.38 | N | OFF | 20.1 |
| 22.751250 | --- | 30.68 | 50.00 | 19.32 | N | OFF | 20.4 |
| 22.751250 | 38.45 | --- | 60.00 | 21.55 | N | OFF | 20.4 |

| Test Mode : | Mode 7 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

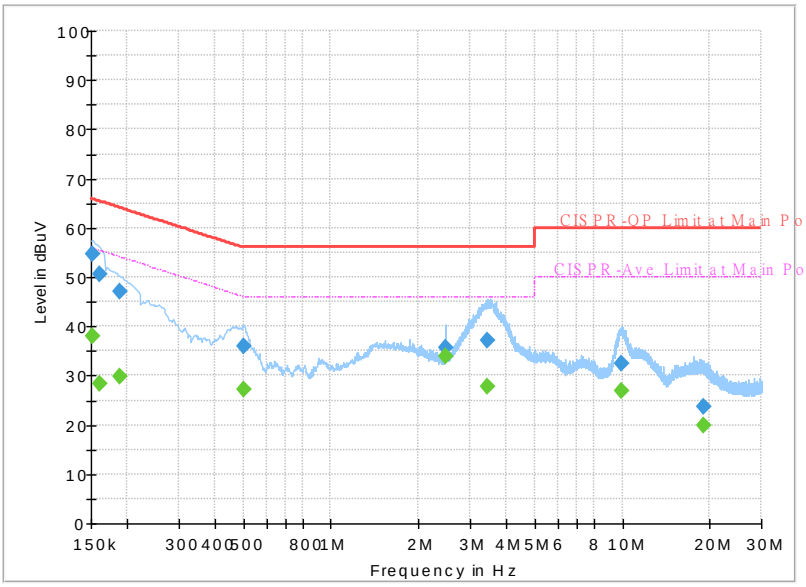



## Final Result

| Frequency | QuasiPeak | CAverage | Limit | Margin | Line | Filter | Corr. |
|---|---|---|---|---|---|---|---|
| 0.152250 | --- | 39.66 | 55.88 | 16.22 | L1 | OFF | 19.5 |
| 0.152250 | 55.60 | --- | 65.88 | 10.28 | L1 | OFF | 19.5 |
| 0.159000 | --- | 34.20 | 55.52 | 21.32 | L1 | OFF | 19.5 |
| 0.159000 | 53.67 | --- | 65.52 | 11.85 | L1 | OFF | 19.5 |
| 0.168000 | --- | 27.09 | 55.06 | 27.97 | L1 | OFF | 19.5 |
| 0.168000 | 49.80 | --- | 65.06 | 15.26 | L1 | OFF | 19.5 |
| 0.501000 | --- | 28.03 | 46.00 | 17.97 | L1 | OFF | 19.5 |
| 0.501000 | 38.36 | --- | 56.00 | 17.64 | L1 | OFF | 19.5 |
| 2.476500 | --- | 34.92 | 46.00 | 11.08 | L1 | OFF | 19.5 |
| 2.476500 | 36.28 | --- | 56.00 | 19.72 | L1 | OFF | 19.5 |
| 3.484500 | --- | 27.76 | 46.00 | 18.24 | L1 | OFF | 19.6 |
| 3.484500 | 37.13 | --- | 56.00 | 18.87 | L1 | OFF | 19.6 |
| 9.897000 | --- | 32.99 | 50.00 | 17.01 | L1 | OFF | 19.7 |
| 9.897000 | 38.37 | --- | 60.00 | 21.63 | L1 | OFF | 19.7 |
| 21.196500 | --- | 16.56 | 50.00 | 33.44 | L1 | OFF | 19.8 |
| 21.196500 | 19.37 | --- | 60.00 | 40.63 | L1 | OFF | 19.8 |

| Test Mode : | Mode 7 | Temperature : | 24~26℃ |
|---|---|---|---|
| Test Engineer : | Jimmy Chang | Relative Humidity : | 53~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Remark : | All emissions not reported here are more than 10 dB below the prescribed limit. | | |

Full Spectrum

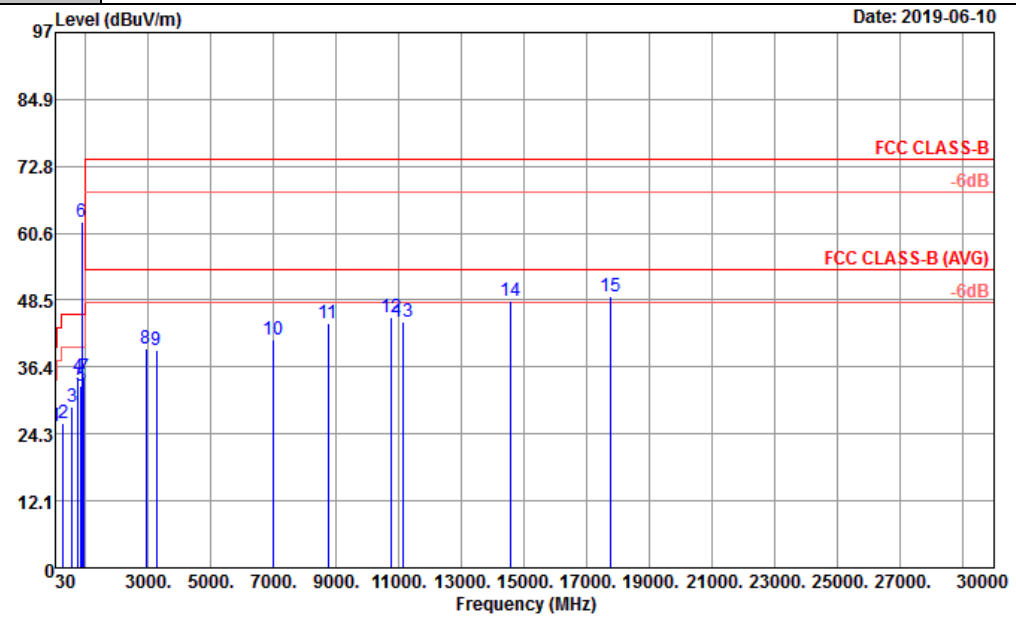



## Final Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.152250 | --- | 38.09 | 55.88 | 17.79 | N | OFF | 19.5 |
| 0.152250 | 54.81 | --- | 65.88 | 11.07 | N | OFF | 19.5 |
| 0.161250 | --- | 28.35 | 55.40 | 27.05 | N | OFF | 19.5 |
| 0.161250 | 50.72 | --- | 65.40 | 14.68 | N | OFF | 19.5 |
| 0.188250 | --- | 29.96 | 54.11 | 24.15 | N | OFF | 19.5 |
| 0.188250 | 47.15 | --- | 64.11 | 16.96 | N | OFF | 19.5 |
| 0.503250 | --- | 27.30 | 46.00 | 18.70 | N | OFF | 19.5 |
| 0.503250 | 35.96 | --- | 56.00 | 20.04 | N | OFF | 19.5 |
| 2.476500 | --- | 33.99 | 46.00 | 12.01 | N | OFF | 19.5 |
| 2.476500 | 35.69 | --- | 56.00 | 20.31 | N | OFF | 19.5 |
| 3.462000 | --- | 27.64 | 46.00 | 18.36 | N | OFF | 19.6 |
| 3.462000 | 37.28 | --- | 56.00 | 18.72 | N | OFF | 19.6 |
| 9.978000 | --- | 26.83 | 50.00 | 23.17 | N | OFF | 19.7 |
| 9.978000 | 32.33 | --- | 60.00 | 27.67 | N | OFF | 19.7 |
| 18.971250 | --- | 19.87 | 50.00 | 30.13 | N | OFF | 19.9 |
| 18.971250 | 23.81 | --- | 60.00 | 36.19 | N | OFF | 19.9 |

# Appendix B. Radiated Emission Test Result

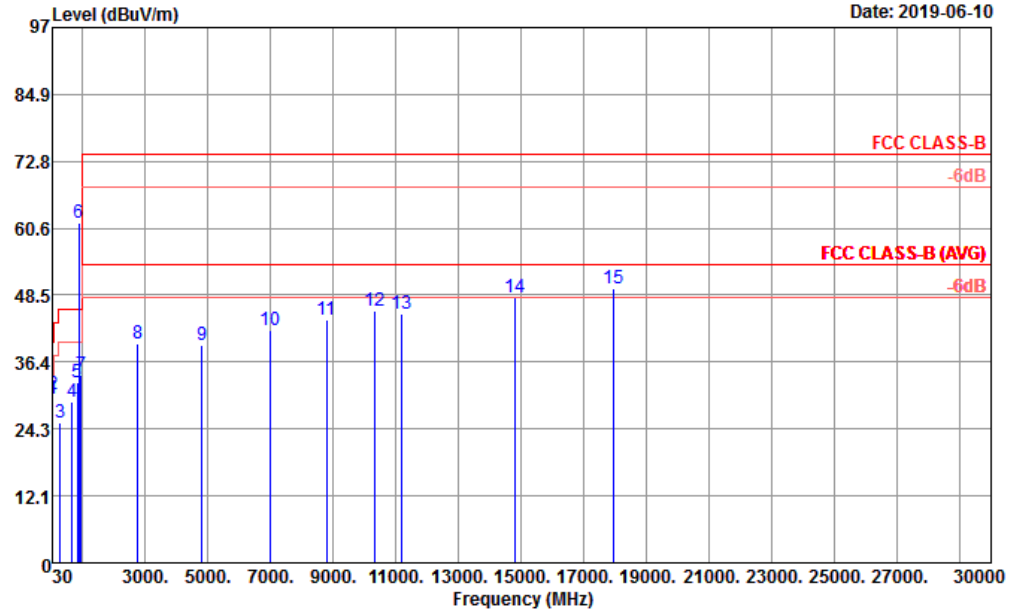
| Mode : | Mode 1 | Temperature : | 21~24°C |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Horizontal |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.97 | 25.68 | -14.32 | 40.00 | 33.20 | 24.81 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 282.20 | 26.22 | -19.78 | 46.00 | 38.06 | 18.89 | 1.88 | 32.61 | --- | --- | Peak |
| 3 | | 560.59 | 29.08 | -16.92 | 46.00 | 32.79 | 26.30 | 2.68 | 32.69 | --- | --- | Peak |
| 4 | | 745.86 | 34.49 | -11.51 | 46.00 | 35.59 | 28.22 | 3.16 | 32.48 | --- | --- | Peak |
| 5 | | 853.53 | 33.10 | -12.90 | 46.00 | 32.51 | 29.30 | 3.37 | 32.08 | --- | --- | Peak |
| 6 | * | 881.66 | 62.66 | | | 62.10 | 29.07 | 3.41 | 31.92 | --- | --- | Peak |
| 7 | | 954.41 | 34.53 | -11.47 | 46.00 | 31.12 | 31.18 | 3.52 | 31.29 | 100 | 0 | Peak |
| 8 | | 2934.00 | 39.84 | -34.16 | 74.00 | 65.84 | 28.27 | 7.62 | 61.89 | --- | --- | Peak |
| 9 | | 3256.00 | 39.48 | -34.52 | 74.00 | 65.21 | 28.36 | 7.96 | 62.05 | --- | --- | Peak |
| 10 | | 6994.00 | 41.28 | -32.72 | 74.00 | 59.11 | 35.38 | 10.38 | 63.59 | --- | --- | Peak |
| 11 | | 8742.00 | 44.29 | -29.71 | 74.00 | 59.42 | 37.57 | 11.69 | 64.39 | --- | --- | Peak |
| 12 | | 10756.00 | 45.51 | -28.49 | 74.00 | 56.85 | 39.72 | 13.03 | 64.09 | --- | --- | Peak |
| 13 | | 11140.00 | 44.65 | -29.35 | 74.00 | 55.63 | 39.52 | 13.33 | 63.83 | --- | --- | Peak |
| 14 | | 14550.00 | 48.38 | -25.62 | 74.00 | 55.36 | 41.25 | 15.05 | 63.28 | --- | --- | Peak |
| 15 | | 17766.00 | 49.10 | -24.90 | 74.00 | 51.22 | 43.09 | 17.18 | 62.39 | 100 | 0 | Peak |

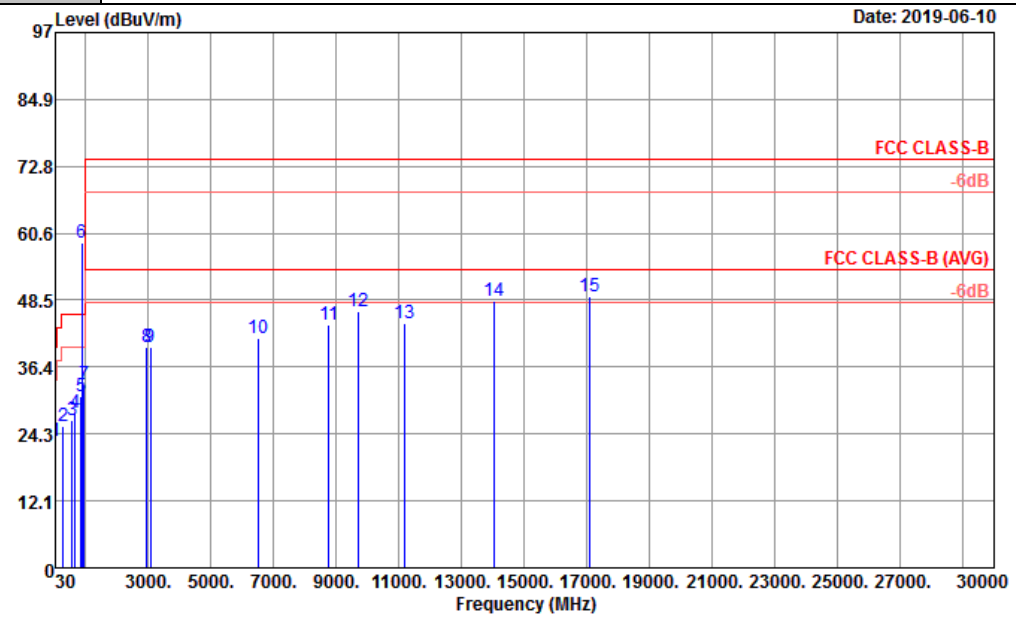
| Mode : | Mode 1 | Temperature : | 21~24°C |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Vertical |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 29.67 | -10.33 | 40.00 | 36.70 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 39.70 | 30.40 | -9.60 | 40.00 | 42.81 | 19.81 | 0.55 | 32.77 | 100 | 0 | Peak |
| 3 | | 282.20 | 25.33 | -20.67 | 46.00 | 37.17 | 18.89 | 1.88 | 32.61 | --- | --- | Peak |
| 4 | | 667.29 | 29.23 | -16.77 | 46.00 | 32.35 | 26.50 | 3.00 | 32.62 | --- | --- | Peak |
| 5 | | 838.01 | 32.63 | -13.37 | 46.00 | 32.57 | 28.88 | 3.34 | 32.16 | --- | --- | Peak |
| 6 | * | 881.66 | 61.48 | | | 60.92 | 29.07 | 3.41 | 31.92 | --- | --- | Peak |
| 7 | | 949.56 | 34.03 | -11.97 | 46.00 | 30.89 | 30.96 | 3.51 | 31.33 | --- | --- | Peak |
| 8 | | 2756.00 | 39.77 | -34.23 | 74.00 | 66.51 | 27.81 | 7.30 | 61.85 | --- | --- | Peak |
| 9 | | 4796.00 | 39.51 | -34.49 | 74.00 | 62.20 | 31.11 | 8.50 | 62.30 | --- | --- | Peak |
| 10 | | 6982.00 | 42.20 | -31.80 | 74.00 | 60.06 | 35.33 | 10.39 | 63.58 | --- | --- | Peak |
| 11 | | 8792.00 | 43.97 | -30.03 | 74.00 | 58.96 | 37.68 | 11.78 | 64.45 | --- | --- | Peak |
| 12 | | 10302.00 | 45.65 | -28.35 | 74.00 | 58.31 | 39.21 | 12.69 | 64.56 | --- | --- | Peak |
| 13 | | 11190.00 | 45.16 | -28.84 | 74.00 | 56.21 | 39.42 | 13.37 | 63.84 | --- | --- | Peak |
| 14 | | 14796.00 | 48.07 | -25.93 | 74.00 | 54.96 | 41.11 | 15.18 | 63.18 | --- | --- | Peak |
| 15 | | 17958.00 | 49.64 | -24.36 | 74.00 | 47.94 | 46.69 | 17.33 | 62.32 | 100 | 0 | Peak |

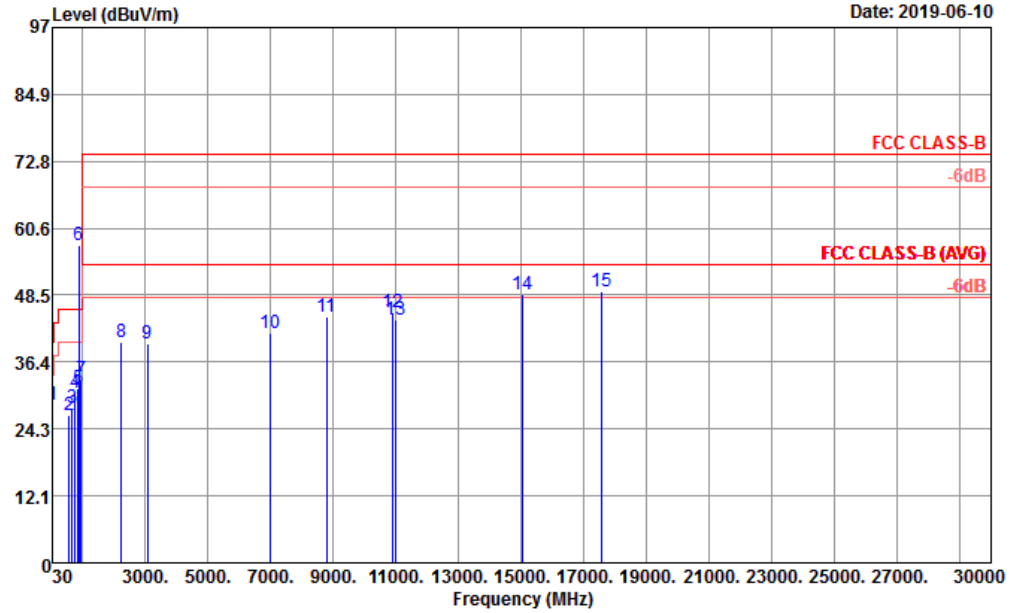
| Mode : | Mode 2 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Horizontal |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 22.87 | -17.13 | 40.00 | 29.90 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 282.20 | 25.69 | -20.31 | 46.00 | 37.53 | 18.89 | 1.88 | 32.61 | --- | --- | Peak |
| 3 | | 558.65 | 26.77 | -19.23 | 46.00 | 30.59 | 26.19 | 2.68 | 32.69 | --- | --- | Peak |
| 4 | | 668.26 | 28.19 | -17.81 | 46.00 | 31.31 | 26.50 | 3.00 | 32.62 | --- | --- | Peak |
| 5 | | 843.83 | 31.16 | -14.84 | 46.00 | 30.79 | 29.15 | 3.35 | 32.13 | --- | --- | Peak |
| 6 | * | 881.66 | 59.03 | | | 58.47 | 29.07 | 3.41 | 31.92 | --- | --- | Peak |
| 7 | | 958.29 | 33.32 | -12.68 | 46.00 | 29.77 | 31.27 | 3.53 | 31.25 | 100 | 0 | Peak |
| 8 | | 2948.00 | 40.07 | -33.93 | 74.00 | 66.01 | 28.30 | 7.65 | 61.89 | --- | --- | Peak |
| 9 | | 3056.00 | 40.05 | -33.95 | 74.00 | 65.66 | 28.52 | 7.80 | 61.93 | --- | --- | Peak |
| 10 | | 6504.00 | 41.49 | -32.51 | 74.00 | 60.18 | 34.21 | 10.10 | 63.00 | --- | --- | Peak |
| 11 | | 8766.00 | 44.12 | -29.88 | 74.00 | 59.18 | 37.63 | 11.73 | 64.42 | --- | --- | Peak |
| 12 | | 9686.00 | 46.36 | -27.64 | 74.00 | 60.37 | 38.60 | 12.13 | 64.74 | --- | --- | Peak |
| 13 | | 11192.00 | 44.29 | -29.71 | 74.00 | 55.34 | 39.42 | 13.37 | 63.84 | --- | --- | Peak |
| 14 | | 14034.00 | 48.39 | -25.61 | 74.00 | 55.98 | 40.84 | 14.78 | 63.21 | --- | --- | Peak |
| 15 | | 17106.00 | 49.18 | -24.82 | 74.00 | 55.67 | 39.81 | 16.67 | 62.97 | 100 | 0 | Peak |

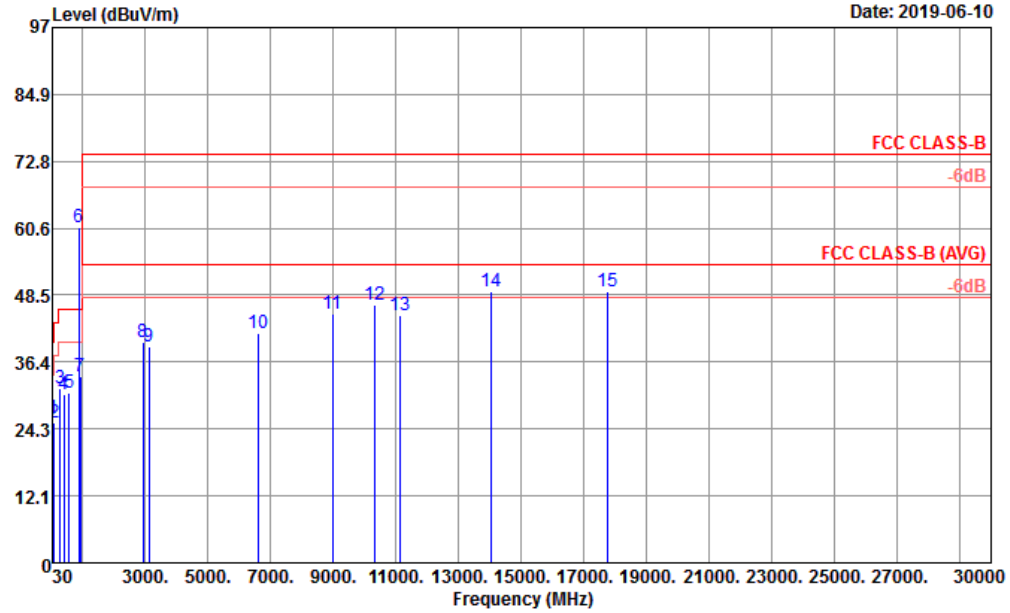
| Mode : | Mode 2 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Vertical |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 39.70 | 28.73 | -11.27 | 40.00 | 41.14 | 19.81 | 0.55 | 32.77 | 100 | 0 | Peak |
| 2 | | 561.56 | 26.78 | -19.22 | 46.00 | 30.49 | 26.30 | 2.68 | 32.69 | --- | --- | Peak |
| 3 | | 659.53 | 28.17 | -17.83 | 46.00 | 31.31 | 26.50 | 2.99 | 32.63 | --- | --- | Peak |
| 4 | | 759.44 | 30.77 | -15.23 | 46.00 | 31.74 | 28.30 | 3.18 | 32.45 | --- | --- | Peak |
| 5 | | 859.35 | 31.52 | -14.48 | 46.00 | 30.97 | 29.21 | 3.38 | 32.04 | --- | --- | Peak |
| 6 | * | 881.66 | 57.45 | | | 56.89 | 29.07 | 3.41 | 31.92 | --- | --- | Peak |
| 7 | | 958.29 | 33.16 | -12.84 | 46.00 | 29.61 | 31.27 | 3.53 | 31.25 | --- | --- | Peak |
| 8 | | 2230.00 | 39.94 | -34.06 | 74.00 | 67.31 | 27.84 | 6.54 | 61.75 | --- | --- | Peak |
| 9 | | 3078.00 | 39.66 | -34.34 | 74.00 | 65.18 | 28.61 | 7.82 | 61.95 | --- | --- | Peak |
| 10 | | 6994.00 | 41.48 | -32.52 | 74.00 | 59.31 | 35.38 | 10.38 | 63.59 | --- | --- | Peak |
| 11 | | 8794.00 | 44.65 | -29.35 | 74.00 | 59.63 | 37.69 | 11.78 | 64.45 | --- | --- | Peak |
| 12 | | 10884.00 | 45.49 | -28.51 | 74.00 | 56.32 | 39.98 | 13.13 | 63.94 | --- | --- | Peak |
| 13 | | 11000.00 | 44.03 | -29.97 | 74.00 | 54.51 | 40.10 | 13.22 | 63.80 | --- | --- | Peak |
| 14 | | 15042.00 | 48.58 | -25.42 | 74.00 | 55.93 | 40.43 | 15.31 | 63.09 | --- | --- | Peak |
| 15 | | 17550.00 | 49.25 | -24.75 | 74.00 | 53.17 | 41.55 | 17.01 | 62.48 | 100 | 0 | Peak |

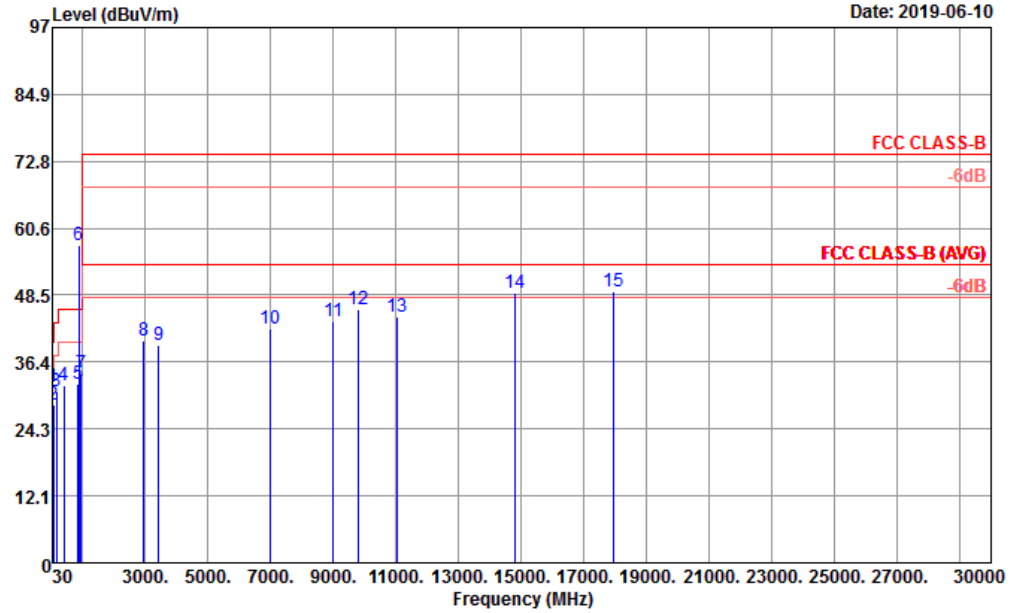
| Mode : | Mode 3 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Horizontal |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 26.18 | -13.82 | 40.00 | 33.21 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 87.23 | 25.36 | -14.64 | 40.00 | 42.63 | 14.42 | 1.00 | 32.69 | --- | --- | Peak |
| 3 | | 282.20 | 31.53 | -14.47 | 46.00 | 43.37 | 18.89 | 1.88 | 32.61 | --- | --- | Peak |
| 4 | | 393.75 | 30.56 | -15.44 | 46.00 | 39.30 | 21.65 | 2.23 | 32.62 | --- | --- | Peak |
| 5 | | 560.59 | 30.68 | -15.32 | 46.00 | 34.39 | 26.30 | 2.68 | 32.69 | --- | --- | Peak |
| 6 | * | 879.72 | 60.74 | | | 60.15 | 29.11 | 3.41 | 31.93 | --- | --- | Peak |
| 7 | | 930.16 | 33.80 | -12.20 | 46.00 | 32.13 | 29.71 | 3.48 | 31.52 | 100 | 0 | Peak |
| 8 | | 2916.00 | 39.88 | -34.12 | 74.00 | 65.95 | 28.23 | 7.58 | 61.88 | --- | --- | Peak |
| 9 | | 3118.00 | 39.07 | -34.93 | 74.00 | 64.49 | 28.70 | 7.85 | 61.97 | --- | --- | Peak |
| 10 | | 6590.00 | 41.74 | -32.26 | 74.00 | 60.23 | 34.38 | 10.24 | 63.11 | --- | --- | Peak |
| 11 | | 8982.00 | 45.14 | -28.86 | 74.00 | 60.62 | 37.36 | 11.84 | 64.68 | --- | --- | Peak |
| 12 | | 10308.00 | 46.80 | -27.20 | 74.00 | 59.43 | 39.23 | 12.69 | 64.55 | --- | --- | Peak |
| 13 | | 11132.00 | 44.82 | -29.18 | 74.00 | 55.79 | 39.54 | 13.32 | 63.83 | --- | --- | Peak |
| 14 | | 14034.00 | 49.06 | -24.94 | 74.00 | 56.65 | 40.84 | 14.78 | 63.21 | --- | --- | Peak |
| 15 | | 17766.00 | 49.07 | -24.93 | 74.00 | 51.19 | 43.09 | 17.18 | 62.39 | 100 | 0 | Peak |

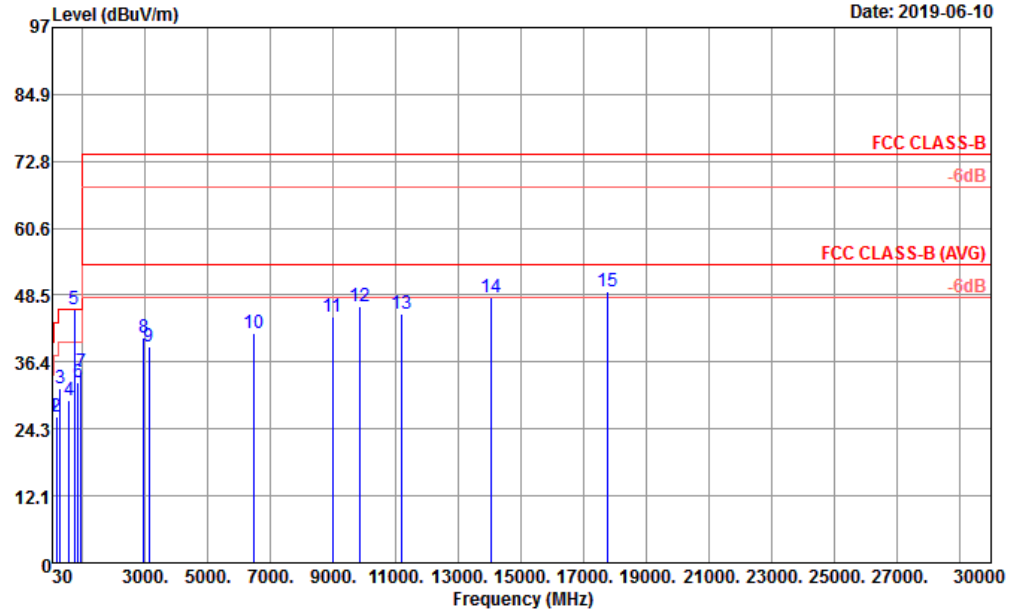
| Mode : | Mode 3 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Vertical |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 39.70 | 31.95 | -8.05 | 40.00 | 44.36 | 19.81 | 0.55 | 32.77 | 100 | 0 | Peak |
| 2 | | 62.98 | 28.57 | -11.43 | 40.00 | 48.62 | 11.90 | 0.78 | 32.73 | --- | --- | Peak |
| 3 | | 156.10 | 30.94 | -12.56 | 43.50 | 44.75 | 17.50 | 1.32 | 32.63 | --- | --- | Peak |
| 4 | | 397.63 | 32.06 | -13.94 | 46.00 | 40.67 | 21.75 | 2.26 | 32.62 | --- | --- | Peak |
| 5 | | 840.92 | 32.50 | -13.50 | 46.00 | 32.25 | 29.04 | 3.35 | 32.14 | --- | --- | Peak |
| 6 | * | 883.60 | 57.46 | | | 56.93 | 29.03 | 3.41 | 31.91 | --- | --- | Peak |
| 7 | | 953.44 | 34.20 | -11.80 | 46.00 | 30.84 | 31.14 | 3.52 | 31.30 | --- | --- | Peak |
| 8 | | 2950.00 | 40.33 | -33.67 | 74.00 | 66.27 | 28.30 | 7.65 | 61.89 | --- | --- | Peak |
| 9 | | 3426.00 | 39.47 | -34.53 | 74.00 | 65.38 | 28.15 | 8.10 | 62.16 | --- | --- | Peak |
| 10 | | 6982.00 | 42.39 | -31.61 | 74.00 | 60.25 | 35.33 | 10.39 | 63.58 | --- | --- | Peak |
| 11 | | 8992.00 | 43.85 | -30.15 | 74.00 | 59.31 | 37.38 | 11.85 | 64.69 | --- | --- | Peak |
| 12 | | 9806.00 | 45.94 | -28.06 | 74.00 | 59.68 | 38.84 | 12.18 | 64.76 | --- | --- | Peak |
| 13 | | 11036.00 | 44.57 | -29.43 | 74.00 | 55.21 | 39.92 | 13.25 | 63.81 | --- | --- | Peak |
| 14 | | 14796.00 | 48.81 | -25.19 | 74.00 | 55.70 | 41.11 | 15.18 | 63.18 | --- | --- | Peak |
| 15 | | 17958.00 | 49.27 | -24.73 | 74.00 | 47.57 | 46.69 | 17.33 | 62.32 | 100 | 0 | Peak |

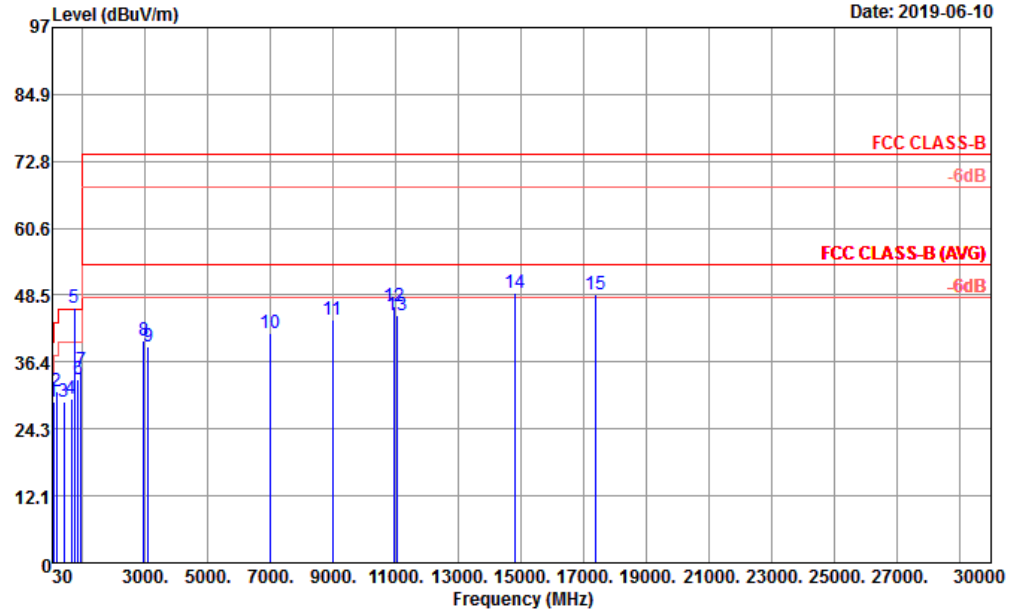
| Mode : | Mode 4 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Horizontal |
| Remark : | #5 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 26.36 | -13.64 | 40.00 | 33.39 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 159.01 | 26.58 | -16.92 | 43.50 | 41.27 | 16.60 | 1.33 | 32.62 | --- | --- | Peak |
| 3 | | 282.20 | 31.61 | -14.39 | 46.00 | 43.45 | 18.89 | 1.88 | 32.61 | --- | --- | Peak |
| 4 | | 573.20 | 29.34 | -16.66 | 46.00 | 33.29 | 26.04 | 2.71 | 32.70 | --- | --- | Peak |
| 5 | * | 739.07 | 46.01 | | | 47.30 | 28.06 | 3.14 | 32.49 | --- | --- | Peak |
| 6 | | 847.71 | 32.70 | -13.30 | 46.00 | 32.20 | 29.25 | 3.36 | 32.11 | --- | --- | Peak |
| 7 | | 952.47 | 34.47 | -11.53 | 46.00 | 31.16 | 31.10 | 3.52 | 31.31 | 100 | 0 | Peak |
| 8 | | 2938.00 | 40.73 | -33.27 | 74.00 | 66.71 | 28.28 | 7.63 | 61.89 | --- | --- | Peak |
| 9 | | 3106.00 | 39.27 | -34.73 | 74.00 | 64.69 | 28.70 | 7.84 | 61.96 | --- | --- | Peak |
| 10 | | 6442.00 | 41.64 | -32.36 | 74.00 | 60.76 | 33.87 | 10.00 | 62.99 | --- | --- | Peak |
| 11 | | 8986.00 | 44.54 | -29.46 | 74.00 | 60.00 | 37.37 | 11.85 | 64.68 | --- | --- | Peak |
| 12 | | 9844.00 | 46.52 | -27.48 | 74.00 | 60.00 | 39.06 | 12.23 | 64.77 | --- | --- | Peak |
| 13 | | 11160.00 | 45.13 | -28.87 | 74.00 | 56.14 | 39.48 | 13.34 | 63.83 | --- | --- | Peak |
| 14 | | 14034.00 | 48.15 | -25.85 | 74.00 | 55.74 | 40.84 | 14.78 | 63.21 | --- | --- | Peak |
| 15 | | 17766.00 | 49.10 | -24.90 | 74.00 | 51.22 | 43.09 | 17.18 | 62.39 | 100 | 0 | Peak |

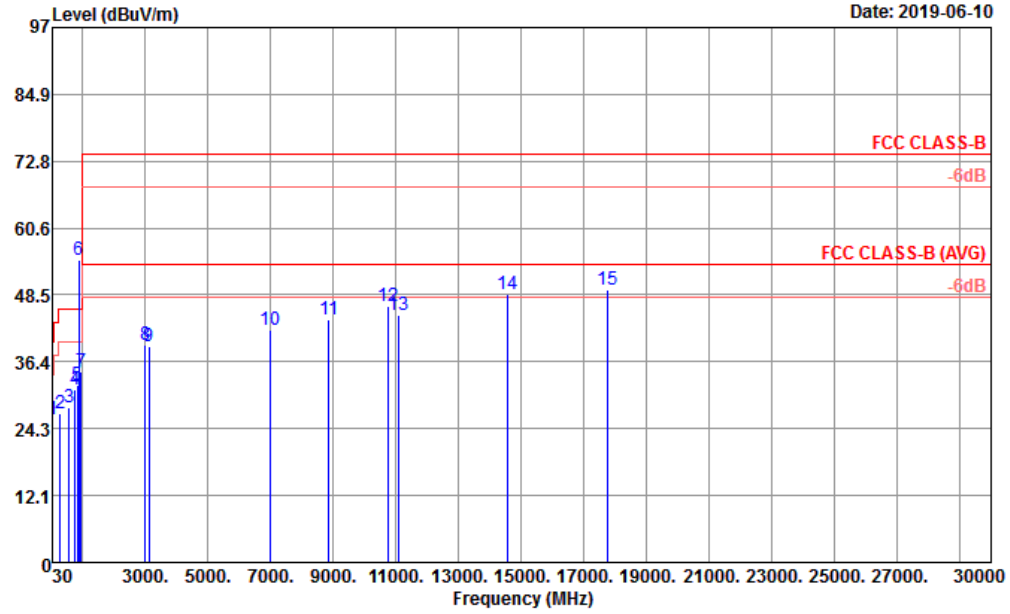
| Mode : | Mode 4 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Vertical |
| Remark : | #5 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 64.92 | 29.05 | -10.95 | 40.00 | 48.95 | 12.01 | 0.82 | 32.73 | 100 | 0 | Peak |
| 2 | | 171.62 | 30.95 | -12.55 | 43.50 | 46.61 | 15.54 | 1.41 | 32.61 | --- | --- | Peak |
| 3 | | 398.60 | 29.18 | -16.82 | 46.00 | 37.77 | 21.77 | 2.26 | 32.62 | --- | --- | Peak |
| 4 | | 632.37 | 29.63 | -16.37 | 46.00 | 32.85 | 26.55 | 2.90 | 32.67 | --- | --- | Peak |
| 5 | * | 741.01 | 46.22 | | | 47.45 | 28.12 | 3.14 | 32.49 | --- | --- | Peak |
| 6 | | 860.32 | 33.15 | -12.85 | 46.00 | 32.61 | 29.20 | 3.38 | 32.04 | --- | --- | Peak |
| 7 | | 941.80 | 34.86 | -11.14 | 46.00 | 32.36 | 30.41 | 3.50 | 31.41 | --- | --- | Peak |
| 8 | | 2950.00 | 40.30 | -33.70 | 74.00 | 66.24 | 28.30 | 7.65 | 61.89 | --- | --- | Peak |
| 9 | | 3088.00 | 39.15 | -34.85 | 74.00 | 64.62 | 28.65 | 7.83 | 61.95 | --- | --- | Peak |
| 10 | | 6988.00 | 41.55 | -32.45 | 74.00 | 59.40 | 35.35 | 10.39 | 63.59 | --- | --- | Peak |
| 11 | | 8978.00 | 44.03 | -29.97 | 74.00 | 59.50 | 37.36 | 11.84 | 64.67 | --- | --- | Peak |
| 12 | | 10960.00 | 46.54 | -27.46 | 74.00 | 57.14 | 40.06 | 13.19 | 63.85 | --- | --- | Peak |
| 13 | | 11018.00 | 44.74 | -29.26 | 74.00 | 55.30 | 40.01 | 13.23 | 63.80 | --- | --- | Peak |
| 14 | | 14796.00 | 48.81 | -25.19 | 74.00 | 55.70 | 41.11 | 15.18 | 63.18 | 100 | 0 | Peak |
| 15 | | 17358.00 | 48.63 | -25.37 | 74.00 | 53.88 | 40.56 | 16.86 | 62.67 | --- | --- | Peak |

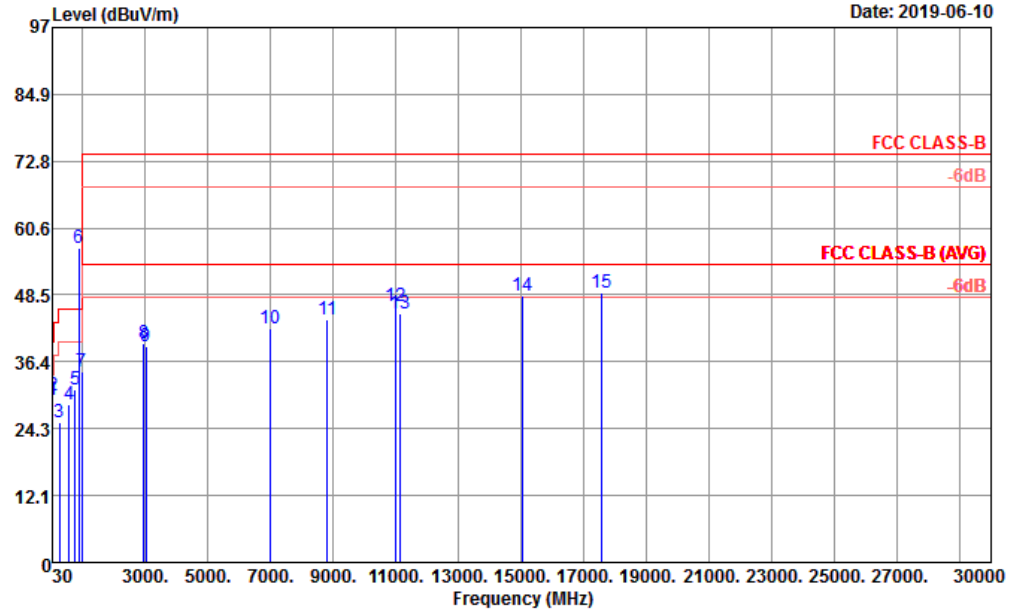
| Mode : | Mode 5 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Horizontal |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 25.88 | -14.12 | 40.00 | 32.91 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 282.20 | 27.01 | -18.99 | 46.00 | 38.85 | 18.89 | 1.88 | 32.61 | --- | --- | Peak |
| 3 | | 577.08 | 28.20 | -17.80 | 46.00 | 32.23 | 25.96 | 2.71 | 32.70 | --- | --- | Peak |
| 4 | | 759.44 | 31.27 | -14.73 | 46.00 | 32.24 | 28.30 | 3.18 | 32.45 | --- | --- | Peak |
| 5 | | 829.28 | 32.11 | -13.89 | 46.00 | 32.54 | 28.46 | 3.32 | 32.21 | --- | --- | Peak |
| 6 | * | 873.90 | 54.82 | | | 54.18 | 29.20 | 3.40 | 31.96 | --- | --- | Peak |
| 7 | | 958.29 | 34.64 | -11.36 | 46.00 | 31.09 | 31.27 | 3.53 | 31.25 | 100 | 0 | Peak |
| 8 | | 2986.00 | 39.58 | -34.42 | 74.00 | 65.38 | 28.37 | 7.73 | 61.90 | --- | --- | Peak |
| 9 | | 3108.00 | 39.27 | -34.73 | 74.00 | 64.69 | 28.70 | 7.84 | 61.96 | --- | --- | Peak |
| 10 | | 6994.00 | 42.04 | -31.96 | 74.00 | 59.87 | 35.38 | 10.38 | 63.59 | --- | --- | Peak |
| 11 | | 8856.00 | 43.98 | -30.02 | 74.00 | 59.02 | 37.68 | 11.81 | 64.53 | --- | --- | Peak |
| 12 | | 10732.00 | 46.50 | -27.50 | 74.00 | 57.97 | 39.63 | 13.02 | 64.12 | --- | --- | Peak |
| 13 | | 11080.00 | 44.76 | -29.24 | 74.00 | 55.60 | 39.70 | 13.28 | 63.82 | --- | --- | Peak |
| 14 | | 14550.00 | 48.54 | -25.46 | 74.00 | 55.52 | 41.25 | 15.05 | 63.28 | --- | --- | Peak |
| 15 | | 17766.00 | 49.39 | -24.61 | 74.00 | 51.51 | 43.09 | 17.18 | 62.39 | 100 | 0 | Peak |

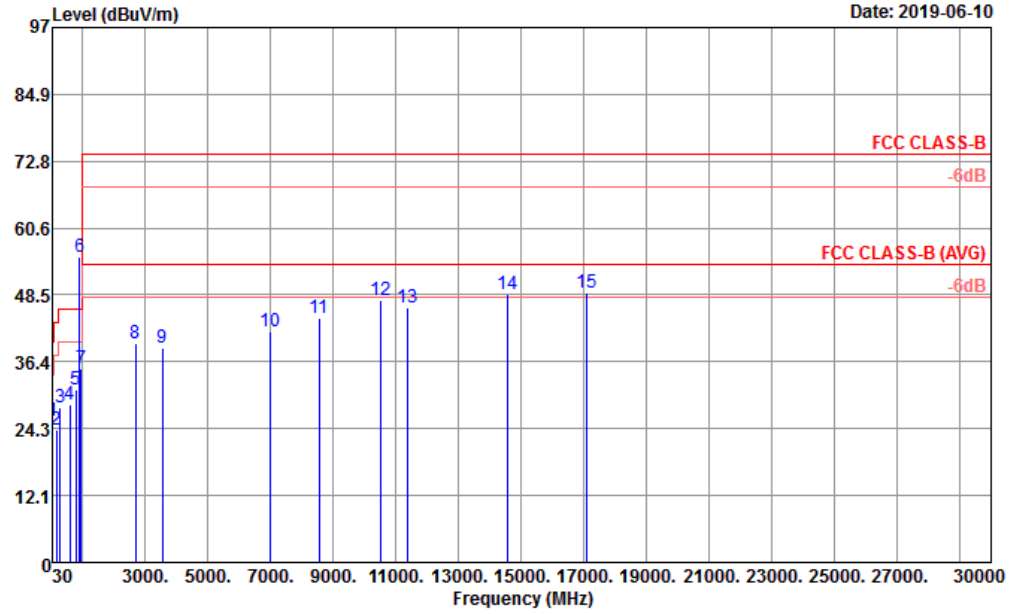
| Mode : | Mode 5 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Vertical |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 29.46 | -10.54 | 40.00 | 36.49 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 39.70 | 30.29 | -9.71 | 40.00 | 42.70 | 19.81 | 0.55 | 32.77 | 100 | 0 | Peak |
| 3 | | 259.89 | 25.50 | -20.50 | 46.00 | 36.32 | 19.98 | 1.80 | 32.60 | --- | --- | Peak |
| 4 | | 572.23 | 28.77 | -17.23 | 46.00 | 32.71 | 26.06 | 2.70 | 32.70 | --- | --- | Peak |
| 5 | | 751.68 | 31.22 | -14.78 | 46.00 | 32.22 | 28.30 | 3.17 | 32.47 | --- | --- | Peak |
| 6 | * | 873.90 | 56.95 | | | 56.31 | 29.20 | 3.40 | 31.96 | --- | --- | Peak |
| 7 | | 959.26 | 34.57 | -11.43 | 46.00 | 30.99 | 31.29 | 3.53 | 31.24 | --- | --- | Peak |
| 8 | | 2938.00 | 39.62 | -34.38 | 74.00 | 65.60 | 28.28 | 7.63 | 61.89 | --- | --- | Peak |
| 9 | | 3014.00 | 39.16 | -34.84 | 74.00 | 64.87 | 28.43 | 7.77 | 61.91 | --- | --- | Peak |
| 10 | | 6994.00 | 42.32 | -31.68 | 74.00 | 60.15 | 35.38 | 10.38 | 63.59 | --- | --- | Peak |
| 11 | | 8802.00 | 44.06 | -29.94 | 74.00 | 59.03 | 37.70 | 11.79 | 64.46 | --- | --- | Peak |
| 12 | | 10972.00 | 46.46 | -27.54 | 74.00 | 57.02 | 40.07 | 13.20 | 63.83 | --- | --- | Peak |
| 13 | | 11152.00 | 45.07 | -28.93 | 74.00 | 56.06 | 39.50 | 13.34 | 63.83 | --- | --- | Peak |
| 14 | | 15042.00 | 48.34 | -25.66 | 74.00 | 55.69 | 40.43 | 15.31 | 63.09 | --- | --- | Peak |
| 15 | | 17550.00 | 48.97 | -25.03 | 74.00 | 52.89 | 41.55 | 17.01 | 62.48 | 100 | 0 | Peak |

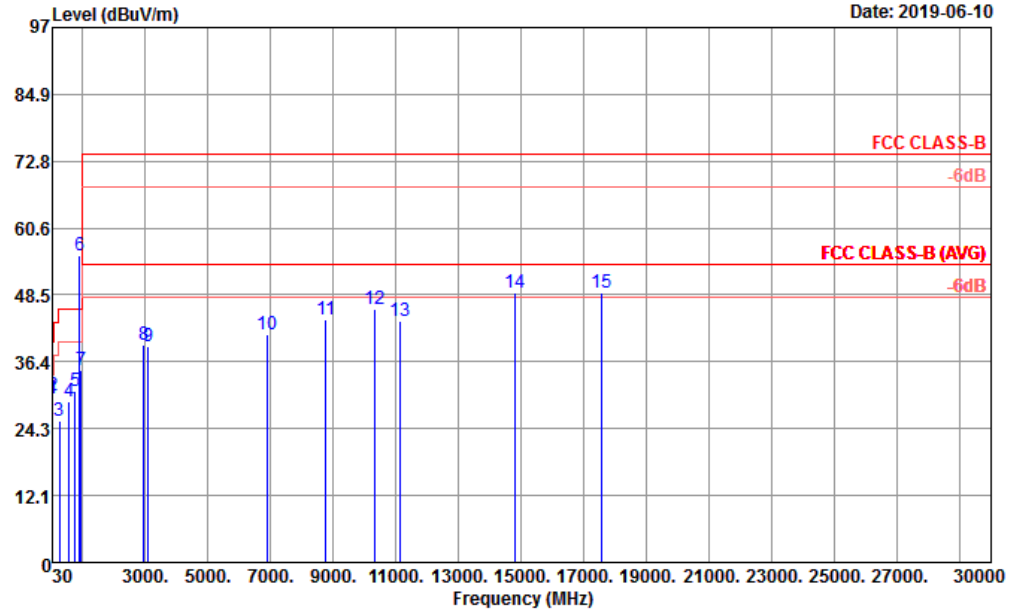
| Mode : | Mode 6 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Horizontal |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 25.73 | -14.27 | 40.00 | 32.76 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 156.10 | 23.99 | -19.51 | 43.50 | 37.80 | 17.50 | 1.32 | 32.63 | --- | --- | Peak |
| 3 | | 282.20 | 28.01 | -17.99 | 46.00 | 39.85 | 18.89 | 1.88 | 32.61 | --- | --- | Peak |
| 4 | | 594.54 | 28.55 | -17.45 | 46.00 | 32.81 | 25.71 | 2.75 | 32.72 | --- | --- | Peak |
| 5 | | 773.99 | 31.21 | -14.79 | 46.00 | 32.05 | 28.38 | 3.20 | 32.42 | --- | --- | Peak |
| 6 | * | 889.42 | 55.41 | | | 54.96 | 28.91 | 3.42 | 31.88 | --- | --- | Peak |
| 7 | | 957.32 | 35.10 | -10.90 | 46.00 | 31.58 | 31.25 | 3.53 | 31.26 | 100 | 0 | Peak |
| 8 | | 2678.00 | 39.80 | -34.20 | 74.00 | 66.84 | 27.56 | 7.24 | 61.84 | --- | --- | Peak |
| 9 | | 3536.00 | 39.03 | -34.97 | 74.00 | 64.41 | 28.72 | 8.11 | 62.21 | --- | --- | Peak |
| 10 | | 6984.00 | 41.75 | -32.25 | 74.00 | 59.60 | 35.34 | 10.39 | 63.58 | --- | --- | Peak |
| 11 | | 8554.00 | 44.30 | -29.70 | 74.00 | 59.98 | 37.01 | 11.47 | 64.16 | --- | --- | Peak |
| 12 | | 10512.00 | 47.61 | -26.39 | 74.00 | 59.64 | 39.51 | 12.85 | 64.39 | --- | --- | Peak |
| 13 | | 11378.00 | 46.20 | -27.80 | 74.00 | 57.09 | 39.48 | 13.51 | 63.88 | --- | --- | Peak |
| 14 | | 14550.00 | 48.51 | -25.49 | 74.00 | 55.49 | 41.25 | 15.05 | 63.28 | --- | --- | Peak |
| 15 | | 17106.00 | 49.02 | -24.98 | 74.00 | 55.51 | 39.81 | 16.67 | 62.97 | 100 | 0 | Peak |

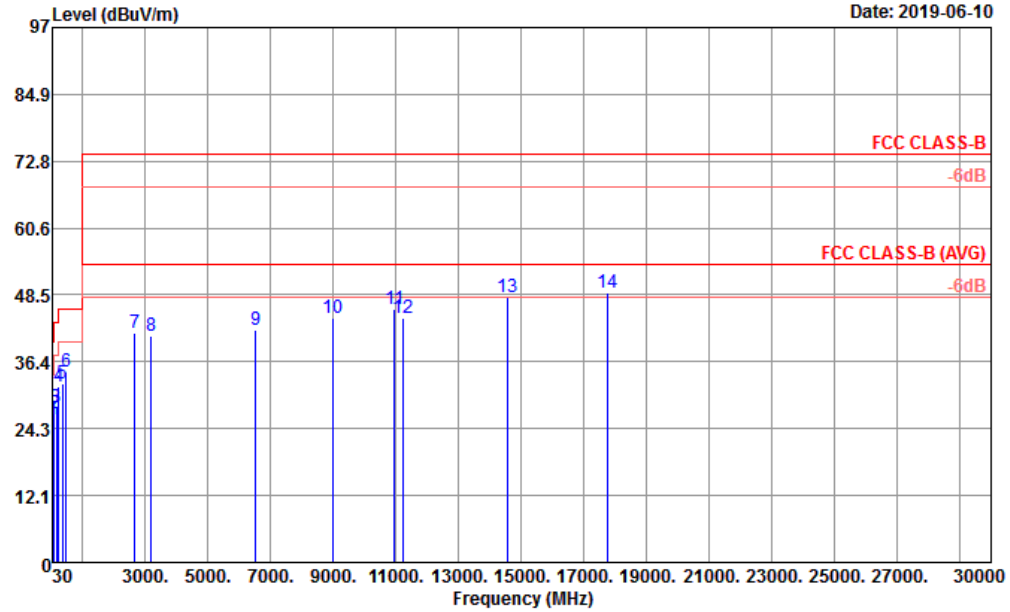
| Mode : | Mode 6 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Vertical |
| Remark : | #6 is system simulator signal which can be ignored. | | |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 VERTICAL

| | | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | | 30.00 | 29.75 | -10.25 | 40.00 | 36.78 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | | 39.70 | 30.32 | -9.68 | 40.00 | 42.73 | 19.81 | 0.55 | 32.77 | 100 | 0 | Peak |
| 3 | | 257.95 | 25.75 | -20.25 | 46.00 | 36.89 | 19.67 | 1.79 | 32.60 | --- | --- | Peak |
| 4 | | 575.14 | 29.07 | -16.93 | 46.00 | 33.06 | 26.00 | 2.71 | 32.70 | --- | --- | Peak |
| 5 | | 755.56 | 31.02 | -14.98 | 46.00 | 32.00 | 28.30 | 3.18 | 32.46 | --- | --- | Peak |
| 6 | * | 889.42 | 55.61 | | | 55.16 | 28.91 | 3.42 | 31.88 | --- | --- | Peak |
| 7 | | 958.29 | 34.92 | -11.08 | 46.00 | 31.37 | 31.27 | 3.53 | 31.25 | --- | --- | Peak |
| 8 | | 2940.00 | 39.49 | -34.51 | 74.00 | 65.47 | 28.28 | 7.63 | 61.89 | --- | --- | Peak |
| 9 | | 3086.00 | 39.27 | -34.73 | 74.00 | 64.76 | 28.64 | 7.82 | 61.95 | --- | --- | Peak |
| 10 | | 6882.00 | 41.41 | -32.59 | 74.00 | 59.57 | 34.86 | 10.44 | 63.46 | --- | --- | Peak |
| 11 | | 8760.00 | 44.10 | -29.90 | 74.00 | 59.17 | 37.62 | 11.72 | 64.41 | --- | --- | Peak |
| 12 | | 10336.00 | 45.94 | -28.06 | 74.00 | 58.41 | 39.34 | 12.72 | 64.53 | --- | --- | Peak |
| 13 | | 11152.00 | 43.73 | -30.27 | 74.00 | 54.72 | 39.50 | 13.34 | 63.83 | --- | --- | Peak |
| 14 | | 14796.00 | 48.81 | -25.19 | 74.00 | 55.70 | 41.11 | 15.18 | 63.18 | --- | --- | Peak |
| 15 | | 17550.00 | 48.83 | -25.17 | 74.00 | 52.75 | 41.55 | 17.01 | 62.48 | 100 | 0 | Peak |

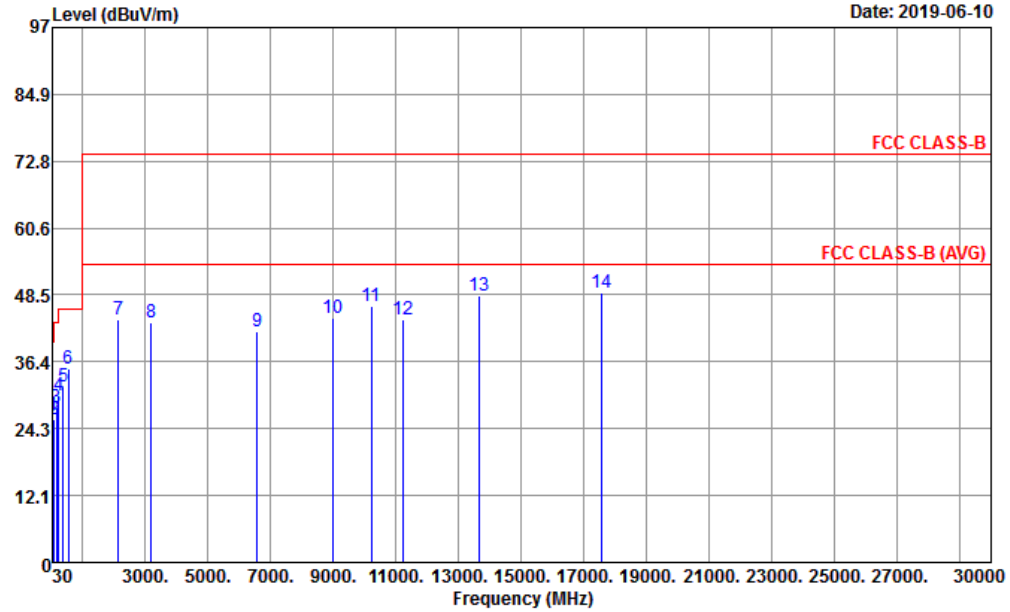
| Mode : | Mode 7 | Temperature : | 21~24°C |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Horizontal |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN_9170_406_0584 HORIZONTAL

| | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | 30.00 | 25.99 | -14.01 | 40.00 | 33.02 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | 88.20 | 26.99 | -16.51 | 43.50 | 44.13 | 14.54 | 1.01 | 32.69 | --- | --- | Peak |
| 3 | 164.83 | 28.07 | -15.43 | 43.50 | 43.31 | 16.02 | 1.36 | 32.62 | --- | --- | Peak |
| 4 | 240.49 | 31.76 | -14.24 | 46.00 | 45.29 | 17.36 | 1.71 | 32.60 | --- | --- | Peak |
| 5 | 362.71 | 32.40 | -13.60 | 46.00 | 42.26 | 20.70 | 2.06 | 32.62 | --- | --- | Peak |
| 6 | 463.59 | 34.70 | -11.30 | 46.00 | 41.62 | 23.27 | 2.44 | 32.63 | 100 | 0 | Peak |
| 7 | 2660.00 | 41.73 | -32.27 | 74.00 | 68.82 | 27.52 | 7.22 | 61.83 | --- | --- | Peak |
| 8 | 3196.00 | 41.01 | -32.99 | 74.00 | 66.51 | 28.61 | 7.91 | 62.02 | --- | --- | Peak |
| 9 | 6526.00 | 42.23 | -31.77 | 74.00 | 60.87 | 34.25 | 10.14 | 63.03 | --- | --- | Peak |
| 10 | 8986.00 | 44.31 | -29.69 | 74.00 | 59.77 | 37.37 | 11.85 | 64.68 | --- | --- | Peak |
| 11 | 10948.00 | 45.84 | -28.16 | 74.00 | 56.47 | 40.05 | 13.18 | 63.86 | --- | --- | Peak |
| 12 | 11216.00 | 44.43 | -29.57 | 74.00 | 55.48 | 39.40 | 13.39 | 63.84 | --- | --- | Peak |
| 13 | 14550.00 | 48.14 | -25.86 | 74.00 | 55.12 | 41.25 | 15.05 | 63.28 | --- | --- | Peak |
| 14 | 17766.00 | 48.99 | -25.01 | 74.00 | 51.11 | 43.09 | 17.18 | 62.39 | 100 | 0 | Peak |

| Mode : | Mode 7 | Temperature : | 21~24℃ |
|---|---|---|---|
| Test Engineer : | Yu Wang | Relative Humidity : | 57~63% |
| Test Distance : | 3m | Polarization : | Vertical |




Site : 03CH10-HY
Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL

| | Freq | Level | Over Limit | Limit Line | Read Level | Antenna Factor | Cable Loss | Preamp Factor | A/Pos | T/Pos | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | 30.00 | 26.63 | -13.37 | 40.00 | 33.66 | 25.30 | 0.45 | 32.78 | --- | --- | Peak |
| 2 | 88.20 | 25.86 | -17.64 | 43.50 | 43.00 | 14.54 | 1.01 | 32.69 | --- | --- | Peak |
| 3 | 162.89 | 28.02 | -15.48 | 43.50 | 43.08 | 16.21 | 1.35 | 32.62 | --- | --- | Peak |
| 4 | 241.46 | 30.37 | -15.63 | 46.00 | 43.78 | 17.48 | 1.71 | 32.60 | --- | --- | Peak |
| 5 | 375.32 | 31.81 | -14.19 | 46.00 | 41.39 | 20.91 | 2.13 | 32.62 | --- | --- | Peak |
| 6 | 533.43 | 35.12 | -10.88 | 46.00 | 41.18 | 24.00 | 2.61 | 32.67 | 100 | 0 | Peak |
| 7 | 2130.00 | 44.17 | -29.83 | 74.00 | 72.42 | 27.16 | 6.32 | 61.73 | --- | --- | Peak |
| 8 | 3190.00 | 43.43 | -30.57 | 74.00 | 68.92 | 28.62 | 7.90 | 62.01 | --- | --- | Peak |
| 9 | 6576.00 | 41.86 | -32.14 | 74.00 | 60.38 | 34.35 | 10.22 | 63.09 | --- | --- | Peak |
| 10 | 8972.00 | 44.44 | -29.56 | 74.00 | 59.93 | 37.34 | 11.84 | 64.67 | --- | --- | Peak |
| 11 | 10220.00 | 46.47 | -27.53 | 74.00 | 59.50 | 38.96 | 12.63 | 64.62 | --- | --- | Peak |
| 12 | 11226.00 | 44.12 | -29.88 | 74.00 | 55.18 | 39.40 | 13.39 | 63.85 | --- | --- | Peak |
| 13 | 13680.00 | 48.42 | -25.58 | 74.00 | 56.79 | 40.46 | 14.50 | 63.33 | --- | --- | Peak |
| 14 | 17550.00 | 48.97 | -25.03 | 74.00 | 52.89 | 41.55 | 17.01 | 62.48 | 100 | 0 | Peak |

———THE END———