



## TEST REPORT

On Behalf of

**Shenzhen Growatt New Energy Co., Ltd.**

4-13/F. Building A, Sino-German(Europe) Industrial Park, Hangcheng Ave, Bao' an District,  
Shenzhen, China

**FCC ID:** 2AAJ9-INFINITY1300P  
**Model:** INFINITY 1300 PRO, INFINITY1200

June 4, 2024

**This Report Concerns:**

☒ Original Report

**Equipment Type:**

Portable Power Station

**Test Engineer:** LBi Li /

**Report Number:** QCT24ER-1354E-03

**Test Date:** March 1, 2024 ~ June 4, 2024

**Reviewed By:** Gordon Tan / *Gordon Tan*

**Approved By:** Kendy Wang / *Kendy Wang*

**Prepared By:** Shenzhen QC Testing Laboratory Co., Ltd.  
East of 1/F., Building E, Xinghong Science Park, No.111,  
Shuiku Road, Fenghuanggang, Xixiang Street, Bao'an  
District, Shenzhen, Guangdong, China  
**Tel:** 0755-23008269  
**Fax:** 0755-23726780







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## Report Number

## Description

**Issued Date**

QCT24ER-1354E-03

## Initial Issue

2024-6-4





## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment under Test (EUT)

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EUT Description      | Portable Power Station                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Model No.            | INFINITY 1300 PRO, INFINITY 1200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Tested Model         | INFINITY 1300 PRO, INFINITY 1200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sample(s) Status     | Engineer sample                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Operation Frequency: | 110.5kHz~205kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Modulation type:     | ASK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Antenna Type:        | Inductive loop coil Antenna                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Antenna gain*1:      | 0dBi (Max)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Power supply:        | <p>Model: INFINITY 1300 PRO<br/>Input: AC Input:100-120V~,50/60Hz, 15A, 1800W MAX<br/>Vehicle Input:12-24V ---,8A MAX<br/>Solar Input:12-60V ---,800W MAX<br/>Output:<br/>AC Output(X4):120V~,50/60Hz, 1800W MAX, TOTAL 1800W (PEAK:3600W)<br/>DC Output:<br/>USB-A Fast Charge(X4):5V ---,2.4A; 9V ---,2A; 12V ---,1.5A, 18W MAX, TOTAL 72W<br/>USB-C(X2):5V/9V/12V/15V/20V ---, 5A, 100W MAX, TOTAL 200W<br/>Car Cigarette Lighter: 13.2V ---, 10A MAX<br/>DC 5521 Port(X2):13.2V ---, 3A MAX, Car Cigarette Lighter and DC 5521 Port Total 10A Max<br/>Wireless Charging: 15W Max<br/>Battery Capacity: 1382.4Wh,51.2V, 27Ah</p> <p>Model: INFINITY 1200<br/>Input: AC Input:100-120V~,50/60Hz, 15A, 1800W MAX<br/>Vehicle Input:12-24V ---,8A MAX<br/>Solar Input:12-60V ---,600W MAX<br/>Output:<br/>AC Output(X2):120V~,50/60Hz, 1800W MAX, TOTAL 1800W (PEAK:3600W)<br/>DC Output:<br/>USB-A Fast Charge(X4):5V ---,2.4A; 9V ---,2A; 12V ---,1.5A, 18W MAX, TOTAL 72W<br/>USB-C(X2):5V/9V/12V/15V/20V ---, 5A, 100W MAX, TOTAL 200W<br/>Car Cigarette Lighter: 13.2V ---, 10A MAX<br/>DC 5521 Port(X2):13.2V ---, 3A MAX, Car Cigarette Lighter and DC 5521 Port Total 10A Max<br/>Wireless Charging: 15W MAX</p> |





|                   |                                                                                                           |
|-------------------|-----------------------------------------------------------------------------------------------------------|
|                   | Battery Capacity: 1280Wh,51.2V, 25Ah                                                                      |
| WPT Output Power: | 15W                                                                                                       |
| Trade Mark:       |                          |
| Applicant         | Shenzhen Growatt New Energy Co., Ltd.                                                                     |
| Address           | 4-13/F. Building A, Sino-German(Europe) Industrial Park, Hangcheng Ave, Bao' an District, Shenzhen, China |
| Manufacturer      | Shenzhen Growatt New Energy Co., Ltd.                                                                     |
| Address           | 4-13/F. Building A, Sino-German(Europe) Industrial Park, Hangcheng Ave, Bao' an District, Shenzhen, China |
| Sample No.        | Y24C1354E01WC (Model: INFINITY 1300 PRO) ,<br>Y24C1354E02WC (Model: INFINITY 1200)                        |

Note: \*1This information provided by Manufacturer, SZ QC Lab is not responsible for the accuracy of this information.





## 1.2 System Test Configuration

### 1.2.1 Support Equipment

| Manufacturer | Description           | Model | Serial Number |
|--------------|-----------------------|-------|---------------|
| EESON        | Wireless charger load | 2S    | /             |

### 1.2.2 Test mode

| Test Mode | Description                                           |
|-----------|-------------------------------------------------------|
| Mode 1    | Charging with 15 W wireless charging load (Full Load) |
| Mode 2    | Charging with 15 W wireless charging load (Half Load) |
| Mode 3    | Charging with 15 W wireless charging load (No Load)   |

Note: All the modes had been tested, but only the worst data was recorded in the report (Mode 1).





### 1.3 Test Facility

Test Firm : Shenzhen QC Testing Laboratory Co., Ltd.

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19. The testing quality system of our laboratory meets with ISO/IEC-17025 requirements. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

CNAS – Registration No.: L8464

The EMC Laboratory has been accredited by CNAS, and in compliance with ISO/IEC 17025:2017 General Requirements for testing Laboratories.

A2LA Certificate Number: 6759.01

The EMC Laboratory has been accredited by A2LA, and in compliance with ISO/IEC 17025:2017 General Requirements for testing Laboratories.

FCC Registration Number: 561109

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission.

IC Registration Number: 29628

CAB identifier: CN0141

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada.

### 1.4 Measurement Uncertainty

| Parameter                                          | Uncertainty                  |
|----------------------------------------------------|------------------------------|
| Occupied Channel Bandwidth                         | $\pm 1.42 \times 10^{-40}\%$ |
| RF output power, conducted                         | $\pm 1.06\text{dB}$          |
| Power Spectral Density, conducted                  | $\pm 1.06\text{dB}$          |
| Unwanted Emissions, conducted                      | $\pm 2.51\text{dB}$          |
| AC Power Line Conducted Emission                   | $\pm 1.80\text{dB}$          |
| Radiated Spurious Emission test (9kHz-30MHz)       | $\pm 2.66\text{dB}$          |
| Radiated Spurious Emission test (30MHz-1000MHz)    | $\pm 4.04\text{dB}$          |
| Radiated Spurious Emission test (1000MHz-18000MHz) | $\pm 4.70\text{ dB}$         |
| Radiated Spurious Emission test (18GHz-40GHz)      | $\pm 4.80\text{dB}$          |
| Temperature                                        | $\pm 0.8^{\circ}\text{C}$    |
| Humidity                                           | $\pm 3.2\%$                  |
| DC and low frequency voltages                      | $\pm 0.1\%$                  |
| Time                                               | $\pm 5\%$                    |
| Duty cycle                                         | $\pm 5\%$                    |

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$





## 2. Summary of Test Results

| Test Item                        | Section      | Result |
|----------------------------------|--------------|--------|
| Antenna requirement              | 15.203       | Pass   |
| AC Power Line Conducted Emission | 15.207       | Pass   |
| Spurious Emission                | 15.209(a)(f) | Pass   |
| 20dB Bandwidth                   | 15.215       | Pass   |

Note: 1. Pass: The EUT complies with the essential requirements in the standard.  
2. Test according to ANSI C63.10:2013  
3.. All indications of Pass/Fail in this report are opinions expressed by Shenzhen QC Testing Laboratory Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.





### 3. List of Test and Measurement Instruments

#### 3.1 Conducted Emission Test

| Item | Equipment                | Manufacturer    | Model No. | Serial No. | Last Cal.  | Cal.Due    |
|------|--------------------------|-----------------|-----------|------------|------------|------------|
| 1    | EMI Test Receiver        | R&S             | ESIB 7    | 2277573376 | 2024.03.14 | 2025.03.13 |
| 2    | EMI Test Receiver        | ROHDE & SCHWARZ | ESCI      | 101820     | 2023.08.21 | 2024.08.20 |
| 3    | Artificial Mains Network | SCHWARZBECK     | NSLK8126  | 8126200    | 2024.03.14 | 2025.03.13 |
| 4    | PULSE LIMITER            | R&S             | ESH3-Z2   | 100058     | 2024.03.14 | 2025.03.13 |

Conducted Emission Measurement Software: TS

#### 3.2 Radiated Emission Test

| Item | Equipment                              | Manufacturer     | Model No.            | Serial No.     | Last Cal.  | Cal.Due    |
|------|----------------------------------------|------------------|----------------------|----------------|------------|------------|
| 1.   | Spectrum Analyzer                      | ROHDE&SCHWARZ    | FSV 40               | 101458         | 2024.03.14 | 2025.03.13 |
| 2.   | Loop Antenna                           | EMCO             | 6502                 | 2133           | 2022.07.23 | 2024.07.22 |
| 3.   | Logarithmic compound broadband Antenna | SCKWARZBECK      | VULB9168             | VULB9168-1-588 | 2023.04.01 | 2025.03.31 |
| 4.   | EMI TEST RECEIVER                      | ROHDE & SCHWARZ  | ESIB 7               | 2277573376     | 2024.03.14 | 2025.03.13 |
| 5.   | EMI Test Receiver                      | R&S              | ESPI                 | 101131         | 2024.03.14 | 2025.03.13 |
| 6.   | Horn Antenna                           | SCHWARZBECK      | BBHA9120D            | 02069          | 2023.04.01 | 2025.03.31 |
| 7.   | Horn Antenna                           | COM-MW           | ZLB7-18-40 G -950    | 12221225       | 2023.01.12 | 2025.01.09 |
| 8.   | Amplifier                              | R&S              | BBV9721              | 9721-031       | 2024.03.14 | 2025.03.13 |
| 9.   | Amplifier                              | MITEQ            | TTA1800-30-H G       | 2063644        | 2024.03.30 | 2025.03.29 |
| 10.  | Pre-amplifier                          | COM-MW           | DLAN-18000 -40000-02 | 10229104       | 2024.03.14 | 2025.03.13 |
| 11.  | 966 Chamber                            | ZhongYu Electron | 9*6*6                | /              | 2022.07.25 | 2025.07.24 |

Radiated Emission Measurement Software: EZ\_EMC





### 3.3 RF Conducted test

| Item                                        | Equipment                           | Manufacturer    | Model No.                | Serial No. | Last Cal.  | Cal.Due    |
|---------------------------------------------|-------------------------------------|-----------------|--------------------------|------------|------------|------------|
| 1.                                          | Wideband Radio Communication Tester | Rohde & Schwarz | CW500                    | 151583     | 2024.03.14 | 2025.03.13 |
| 2.                                          | Spectrum Analyzer                   | ROHDE&SCHWARZ   | FSV 40                   | 101458     | 2024.03.14 | 2025.03.13 |
| 3.                                          | Signal Generator                    | Agilent         | N5182A                   | MY50141563 | 2024.03.14 | 2025.03.13 |
| 4.                                          | RF Automatic Test System            | MW              | MW100-RFCB/<br>MW100-PSB | MW2007004  | 2024.03.14 | 2025.03.13 |
| RF Conducted Measurement Software: MTS 8310 |                                     |                 |                          |            |            |            |





## 4. Antenna requirement

**Standard requirement:** FCC Part15 C Section 15.203

15.203 requirement:

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, 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.

**EUT Antenna:** The Ant is Inductive loop coil Antenna, the best case gain of the antenna is 0dBi, reference to the Internal photo for details.



## 5. Conducted Emissions

### 5.1 Applicable Standard

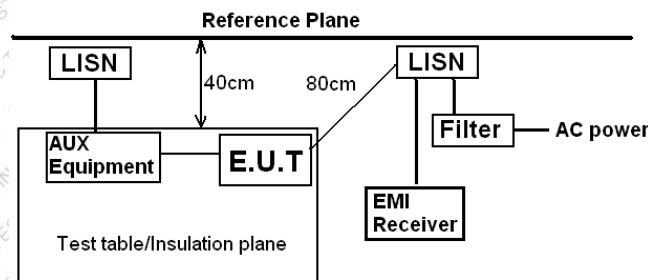
FCC Part15 C Section 15.207

### 5.2 Limit

| Frequency range (MHz) | Limit (dBμV) |           |
|-----------------------|--------------|-----------|
|                       | Quasi-peak   | Average   |
| 0.15-0.5              | 66 to 56*    | 56 to 46* |
| 0.5-5                 | 56           | 46        |
| 5-30                  | 60           | 50        |

Note \*: The level decreases linearly with the logarithm of the frequency.

### 5.3 Test setup



Remark:  
E.U.T: Equipment Under Test  
LISN: Line Impedance Stabilization Network  
Test table height=0.8m

### 5.4 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.  
RBW=9 kHz, VBW=30 kHz, Sweep time=auto

### 5.5 Test procedure

1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.
2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).
3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

### 5.6 Test Data

|              |          |              |      |
|--------------|----------|--------------|------|
| Temperature  | 22 °C    | Humidity     | 54%  |
| ATM Pressure | 101.1kPa | Antenna Gain | 0dBi |
| Test by      | LBi Li   | Test result  | PASS |

Test voltage: AC 120V/60Hz



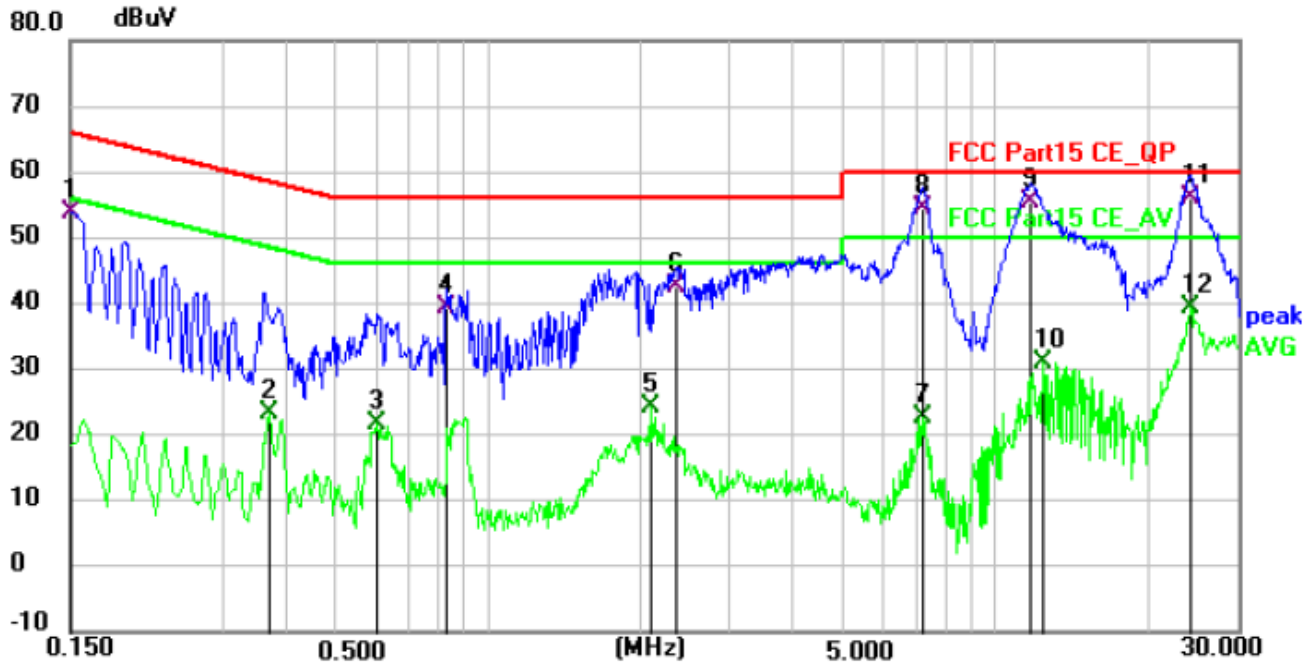


Measurement data:

Mode 1 Charging with 15 W wireless charging load (Full Load)

Note: All the modes had been tested, but only the worst data was recorded in the report (Mode 1).

Line: (Model: INFINITY 1300 PRO)

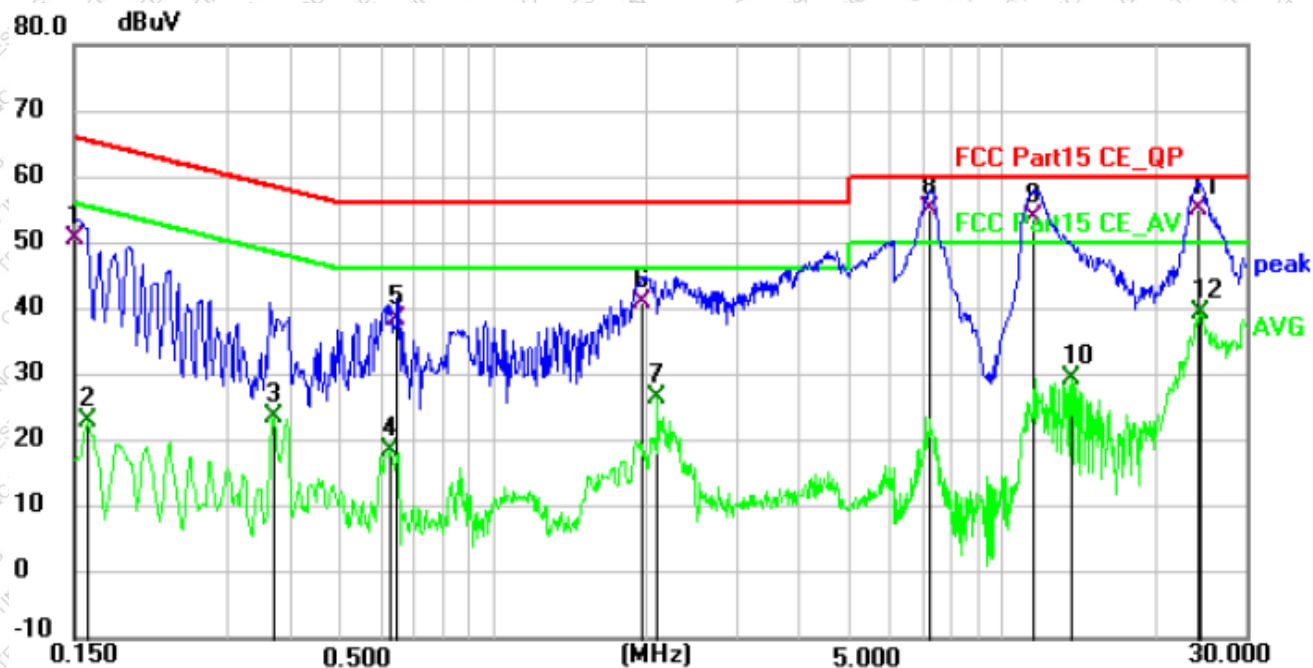


| No.  | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F |
|------|-----------------|----------------|-------------|--------------|--------------|-------------|----------|-----|
| 1    | 0.1500          | 43.84          | 10.04       | 53.88        | 66.00        | -12.12      | QP       | P   |
| 2    | 0.3704          | 13.01          | 10.19       | 23.20        | 48.49        | -25.29      | AVG      | P   |
| 3    | 0.6000          | 11.28          | 10.29       | 21.57        | 46.00        | -24.43      | AVG      | P   |
| 4    | 0.8340          | 29.30          | 10.16       | 39.46        | 56.00        | -16.54      | QP       | P   |
| 5    | 2.1074          | 13.92          | 10.23       | 24.15        | 46.00        | -21.85      | AVG      | P   |
| 6    | 2.3550          | 32.21          | 10.27       | 42.48        | 56.00        | -13.52      | QP       | P   |
| 7    | 7.1880          | 12.30          | 10.25       | 22.55        | 50.00        | -27.45      | AVG      | P   |
| 8    | 7.2195          | 44.35          | 10.25       | 54.60        | 60.00        | -5.40       | QP       | P   |
| 9    | 11.7510         | 44.88          | 10.39       | 55.27        | 60.00        | -4.73       | QP       | P   |
| 10   | 12.4170         | 20.71          | 10.41       | 31.12        | 50.00        | -18.88      | AVG      | P   |
| 11 * | 24.2743         | 45.39          | 10.55       | 55.94        | 60.00        | -4.06       | QP       | P   |
| 12   | 24.2743         | 28.95          | 10.55       | 39.50        | 50.00        | -10.50      | AVG      | P   |





Neutral: (Model: INFINITY 1300 PRO)

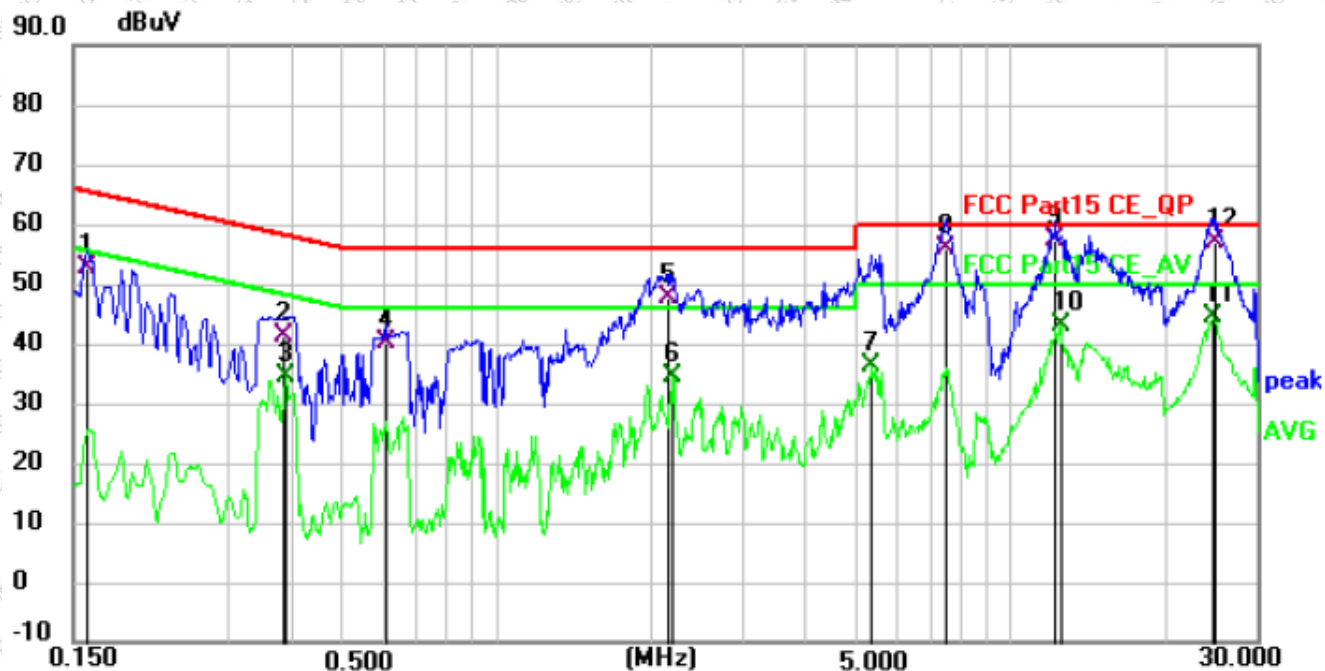


| No.  | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F |
|------|-----------------|----------------|-------------|--------------|--------------|-------------|----------|-----|
| 1    | 0.1500          | 40.71          | 10.02       | 50.73        | 66.00        | -15.27      | QP       | P   |
| 2    | 0.1590          | 12.98          | 10.07       | 23.05        | 55.52        | -32.47      | AVG      | P   |
| 3    | 0.3704          | 13.29          | 10.44       | 23.73        | 48.49        | -24.76      | AVG      | P   |
| 4    | 0.6238          | 8.18           | 10.28       | 18.46        | 46.00        | -27.54      | AVG      | P   |
| 5    | 0.6491          | 28.22          | 10.26       | 38.48        | 56.00        | -17.52      | QP       | P   |
| 6    | 1.9635          | 30.63          | 10.25       | 40.88        | 56.00        | -15.12      | QP       | P   |
| 7    | 2.1074          | 16.34          | 10.27       | 26.61        | 46.00        | -19.39      | AVG      | P   |
| 8    | 7.2150          | 44.96          | 10.18       | 55.14        | 60.00        | -4.86       | QP       | P   |
| 9    | 11.5350         | 43.52          | 10.42       | 53.94        | 60.00        | -6.06       | QP       | P   |
| 10   | 13.6455         | 18.93          | 10.49       | 29.42        | 50.00        | -20.58      | AVG      | P   |
| 11 * | 24.3690         | 44.69          | 10.56       | 55.25        | 60.00        | -4.75       | QP       | P   |
| 12   | 24.4634         | 28.90          | 10.56       | 39.46        | 50.00        | -10.54      | AVG      | P   |





Line: (Model: INFINITY 1200)

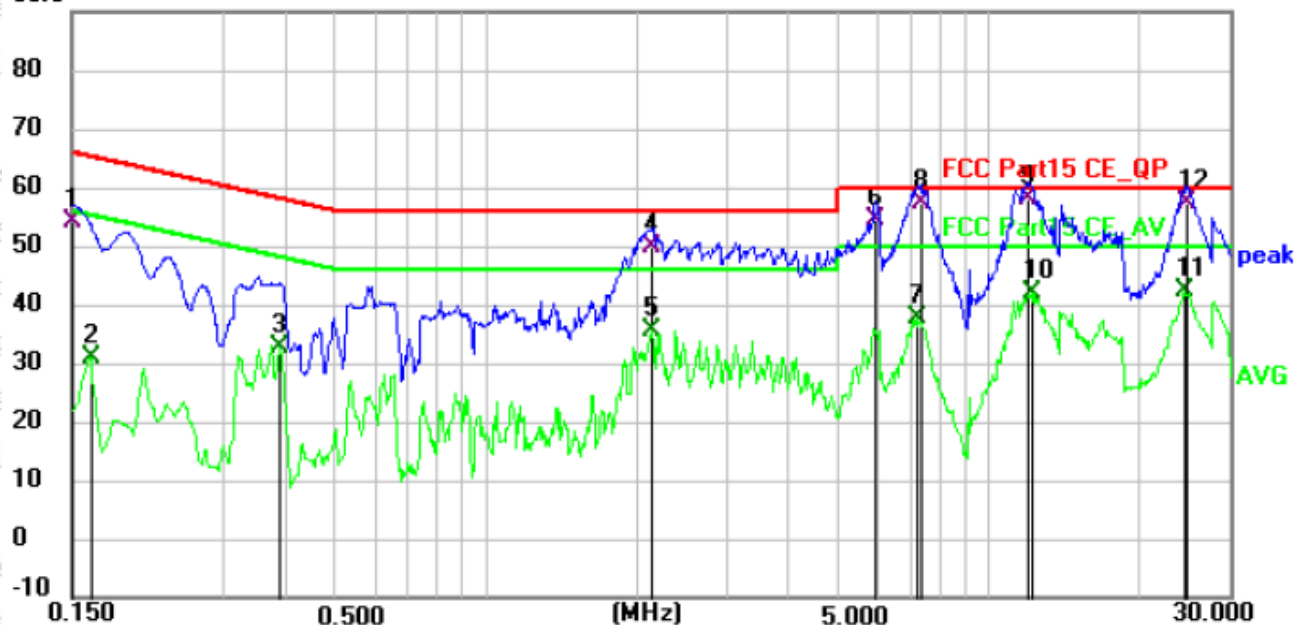


| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|-----|
| 1   | 0.1590          | 42.47          | 10.08       | 52.55        | 65.52        | -12.97      | QP       | P   |
| 2   | 0.3840          | 31.22          | 10.13       | 41.35        | 58.19        | -16.84      | QP       | P   |
| 3   | 0.3885          | 24.37          | 10.10       | 34.47        | 48.10        | -13.63      | AVG      | P   |
| 4   | 0.6090          | 30.06          | 10.29       | 40.35        | 56.00        | -15.65      | QP       | P   |
| 5   | 2.1614          | 37.47          | 10.24       | 47.71        | 56.00        | -8.29       | QP       | P   |
| 6   | 2.2020          | 24.22          | 10.25       | 34.47        | 46.00        | -11.53      | AVG      | P   |
| 7   | 5.3880          | 25.80          | 10.31       | 36.11        | 50.00        | -13.89      | AVG      | P   |
| 8   | 7.4580          | 45.48          | 10.25       | 55.73        | 60.00        | -4.27       | QP       | P   |
| 9 * | 12.2100         | 46.95          | 10.41       | 57.36        | 60.00        | -2.64       | QP       | P   |
| 10  | 12.4710         | 32.69          | 10.41       | 43.10        | 50.00        | -6.90       | AVG      | P   |
| 11  | 24.7470         | 33.80          | 10.55       | 44.35        | 50.00        | -5.65       | AVG      | P   |
| 12  | 24.9404         | 46.43          | 10.55       | 56.98        | 60.00        | -3.02       | QP       | P   |



Neutral: (Model: INFINITY 1200)

90.0 dBuV



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB) | Level (dBuV) | Limit (dBuV) | Margin (dB) | Detector | P/F |
|-----|-----------------|----------------|-------------|--------------|--------------|-------------|----------|-----|
| 1   | 0.1500          | 43.97          | 10.02       | 53.99        | 66.00        | -12.01      | QP       | P   |
| 2   | 0.1635          | 20.77          | 10.10       | 30.87        | 55.28        | -24.41      | AVG      | P   |
| 3   | 0.3885          | 22.31          | 10.43       | 32.74        | 48.10        | -15.36      | AVG      | P   |
| 4   | 2.1300          | 39.68          | 10.27       | 49.95        | 56.00        | -6.05       | QP       | P   |
| 5   | 2.1300          | 25.40          | 10.27       | 35.67        | 46.00        | -10.33      | AVG      | P   |
| 6   | 5.9504          | 44.34          | 10.29       | 54.63        | 60.00        | -5.37       | QP       | P   |
| 7   | 7.1790          | 27.41          | 10.17       | 37.58        | 50.00        | -12.42      | AVG      | P   |
| 8   | 7.3185          | 47.30          | 10.19       | 57.49        | 60.00        | -2.51       | QP       | P   |
| 9 * | 11.9670         | 47.53          | 10.43       | 57.96        | 60.00        | -2.04       | QP       | P   |
| 10  | 12.2100         | 31.59          | 10.44       | 42.03        | 50.00        | -7.97       | AVG      | P   |
| 11  | 24.5040         | 31.72          | 10.56       | 42.28        | 50.00        | -7.72       | AVG      | P   |
| 12  | 24.6975         | 46.74          | 10.55       | 57.29        | 60.00        | -2.71       | QP       | P   |

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.



## 6. Spurious Emission

### 6.1 Applicable Standard

FCC Part15 C Section 15.209

### 6.2 Limit

#### Limits for frequency below 30MHz

| Frequency   | Limit (uV/m) | Measurement Distance(m) | Remark           |
|-------------|--------------|-------------------------|------------------|
| 0.009-0.490 | 2400/F(kHz)  | 300                     | Quasi-peak Value |
| 0.490-1.705 | 24000/F(kHz) | 30                      | Quasi-peak Value |
| 1.705-30    | 30           | 30                      | Quasi-peak Value |

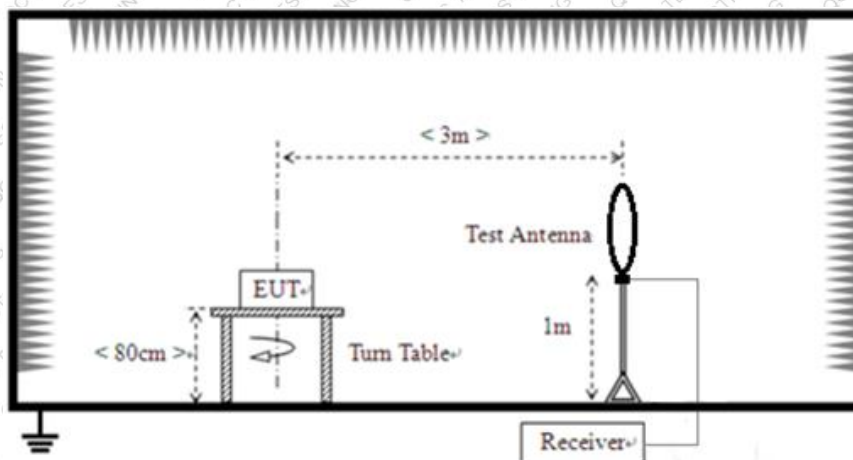
#### Limits for frequency Above 30MHz

| Frequency     | Limit (dBuV/m @3m) | Remark           |
|---------------|--------------------|------------------|
| 30MHz-88MHz   | 40.00              | Quasi-peak Value |
| 88MHz-216MHz  | 43.50              | Quasi-peak Value |
| 216MHz-960MHz | 46.00              | Quasi-peak Value |
| 960MHz-1GHz   | 54.00              | Quasi-peak Value |
| Above 1GHz    | 54.00              | Average Value    |
|               | 74.00              | Peak Value       |

Remark: The emission limits shown in the above table 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.

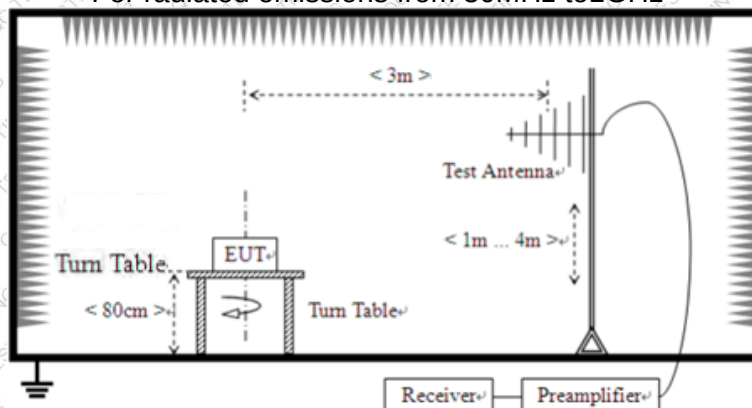
### 6.3 Test setup

For radiated emissions from Below 30MHz

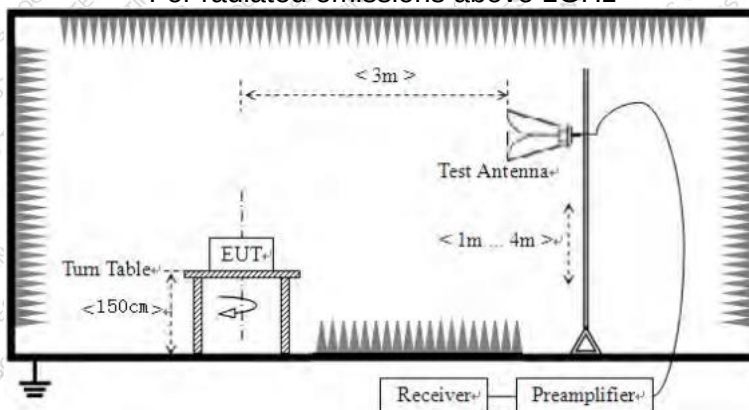




For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



## 6.4 EMI Test Receiver Setup

| Frequency   | Detector   | RBW    | VBW    | Remark           |
|-------------|------------|--------|--------|------------------|
| 9kHz- 30MHz | Quasi-peak | 10kHz  | 30kHz  | Quasi-peak Value |
| 30MHz-1GHz  | Quasi-peak | 120kHz | 300kHz | Quasi-peak Value |
| Above 1GHz  | Peak       | 1MHz   | 3MHz   | Peak Value       |
|             | AV         | 1MHz   | 10Hz   | Average Value    |

Remark: For the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission test in these three bands are based on measurements employing an average detector.

## 6.5 Test procedure

- The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.





- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

## 6.1 Test Data

|              |          |              |      |
|--------------|----------|--------------|------|
| Temperature  | 25 °C    | Humidity     | 56%  |
| ATM Pressure | 101.1kPa | Antenna Gain | 0dBi |
| Test by      | LBi Li   | Test result  | PASS |

Test voltage: AC 120V/60Hz

Mode 1 Charging with 15 W wireless charging load (Full Load)

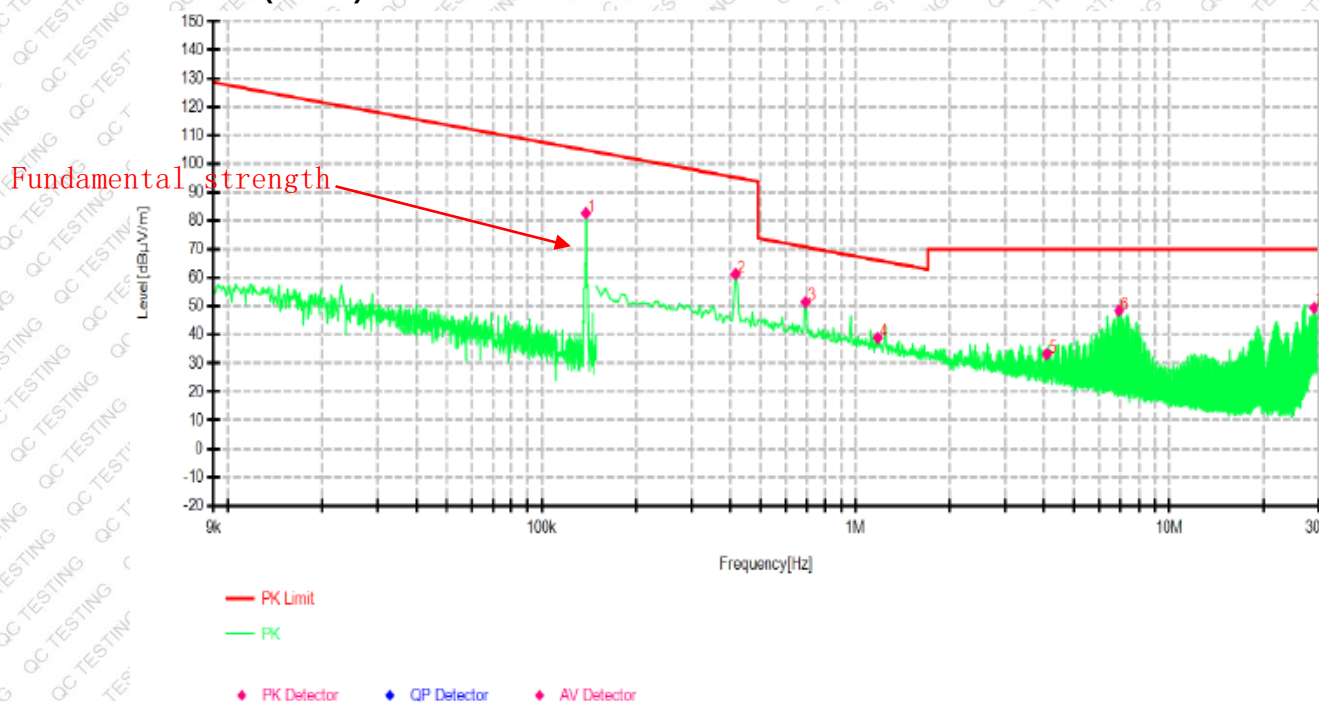
Note: All the modes had been tested, but only the worst data was recorded in the report (Mode 1).

Measurement data:

Note: Limit dBuV/m @3m = Limit dBuV/m @300m+ 80

Limit dBuV/m @3m = Limit dBuV/m @30m + 40

9 kHz~30 MHz (X Axis) (Model: INFINITY 1300 PRO)

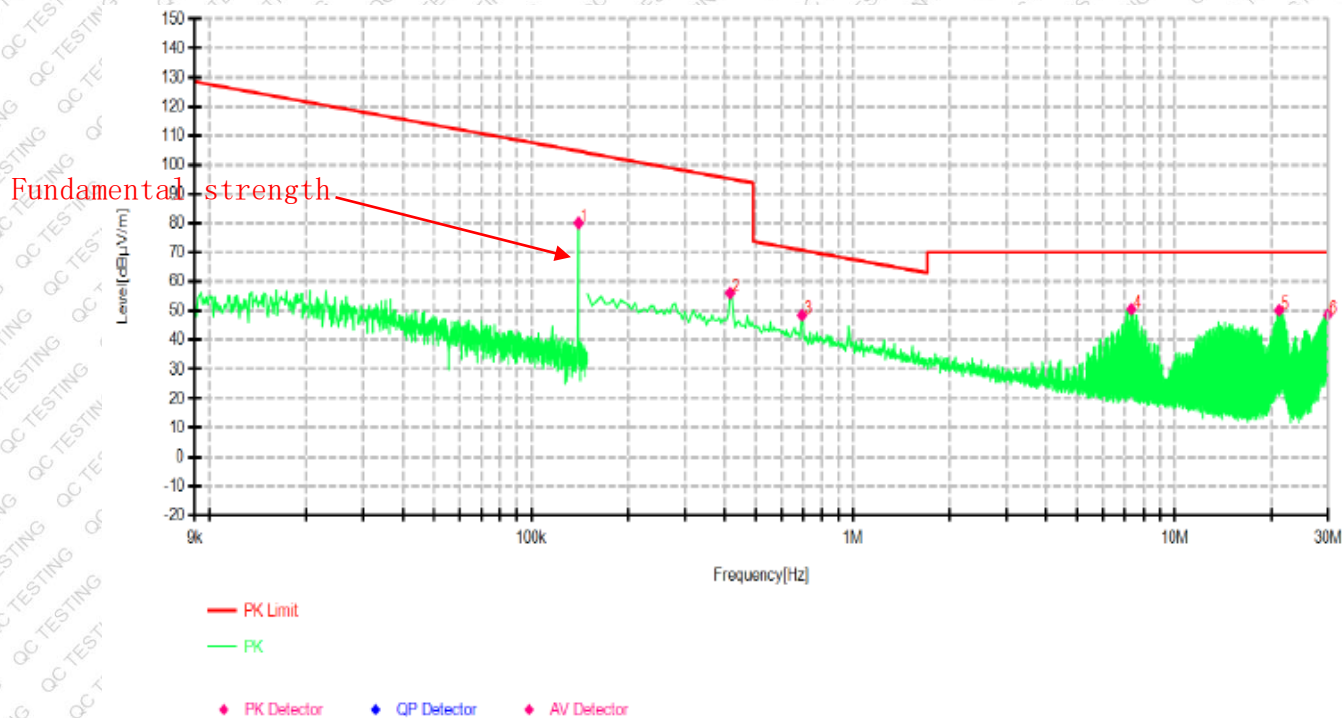


| Final Data List |                |                |             |                |             |          |            |         |
|-----------------|----------------|----------------|-------------|----------------|-------------|----------|------------|---------|
| NO.             | Frequency [Hz] | Level [dBuV/m] | Factor [dB] | Limit [dBuV/m] | Margin [dB] | Detector | Instrument | Verdict |
| 1               | 138.4k         | 82.64          | 10.42       | 104.78         | 22.14       | AVG      | X          | PASS    |
| 2               | 415k           | 61.30          | 10.59       | 95.24          | 33.94       | AVG      | X          | PASS    |
| 3               | 695k           | 51.47          | 10.63       | 70.76          | 19.29       | QP       | X          | PASS    |
| 4               | 1.18M          | 38.95          | 10.62       | 66.17          | 27.22       | QP       | X          | PASS    |
| 5               | 4.085M         | 33.23          | 11.02       | 70.00          | 36.77       | QP       | X          | PASS    |
| 6               | 6.925M         | 48.35          | 10.89       | 70.00          | 21.65       | QP       | X          | PASS    |
| 7               | 28.955M        | 49.36          | 8.71        | 70.00          | 20.64       | QP       | X          | PASS    |





9 kHz~30 MHz (Y Axis) (Model: INFINITY 1300 PRO)



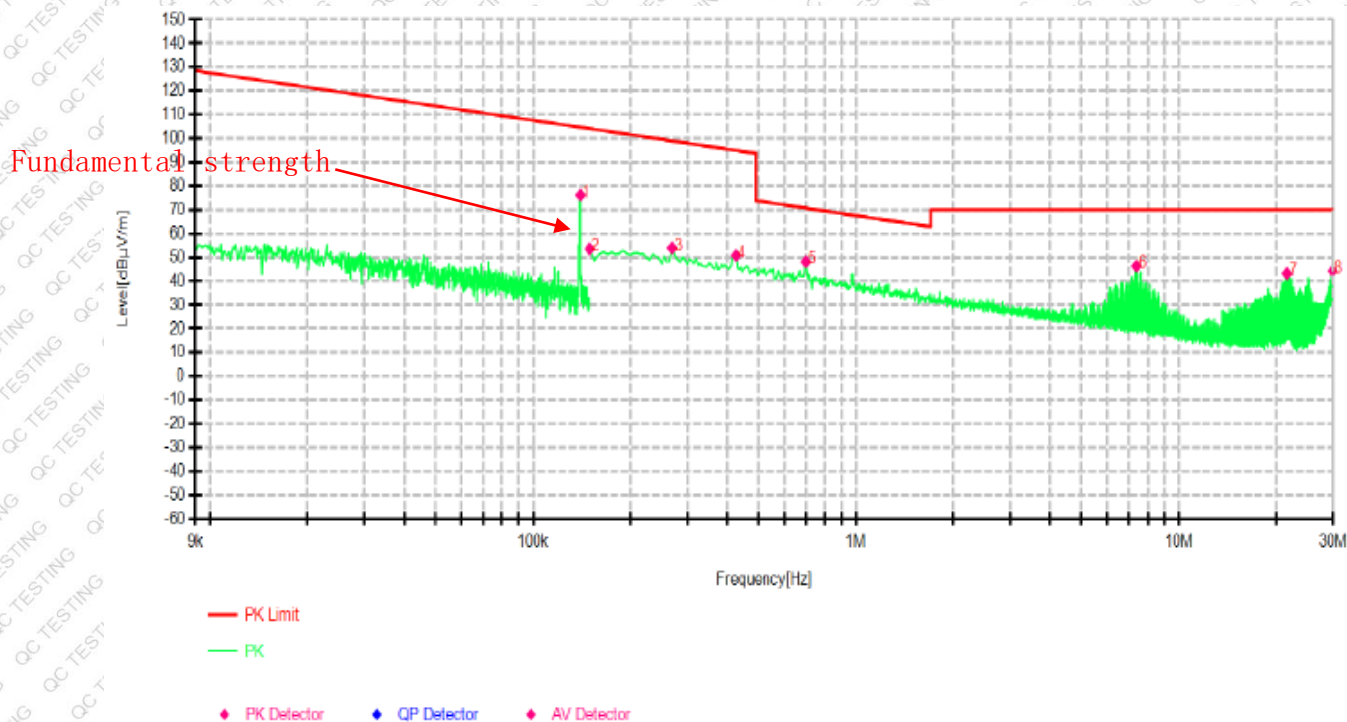
Final Data List

| NO. | Frequency [Hz] | Level [dBμV/m] | Factor [dB] | Limit [dBμV/m] | Margin [dB] | Detector | Instrument | Verdict |
|-----|----------------|----------------|-------------|----------------|-------------|----------|------------|---------|
| 1   | 140.3k         | 80.05          | 10.42       | 104.66         | 24.61       | AVG      | Y          | PASS    |
| 2   | 415k           | 56.01          | 10.59       | 95.24          | 39.23       | AVG      | Y          | PASS    |
| 3   | 695k           | 48.50          | 10.63       | 70.76          | 22.26       | PK       | Y          | PASS    |
| 4   | 7.345M         | 50.56          | 10.88       | 70.00          | 19.44       | QP       | Y          | PASS    |
| 5   | 21.16M         | 50.18          | 9.45        | 70.00          | 19.82       | QP       | Y          | PASS    |
| 6   | 29.92M         | 48.60          | 8.53        | 70.00          | 21.40       | QP       | Y          | PASS    |





9 kHz~30 MHz (Z Axis) (Model: INFINITY 1300 PRO)



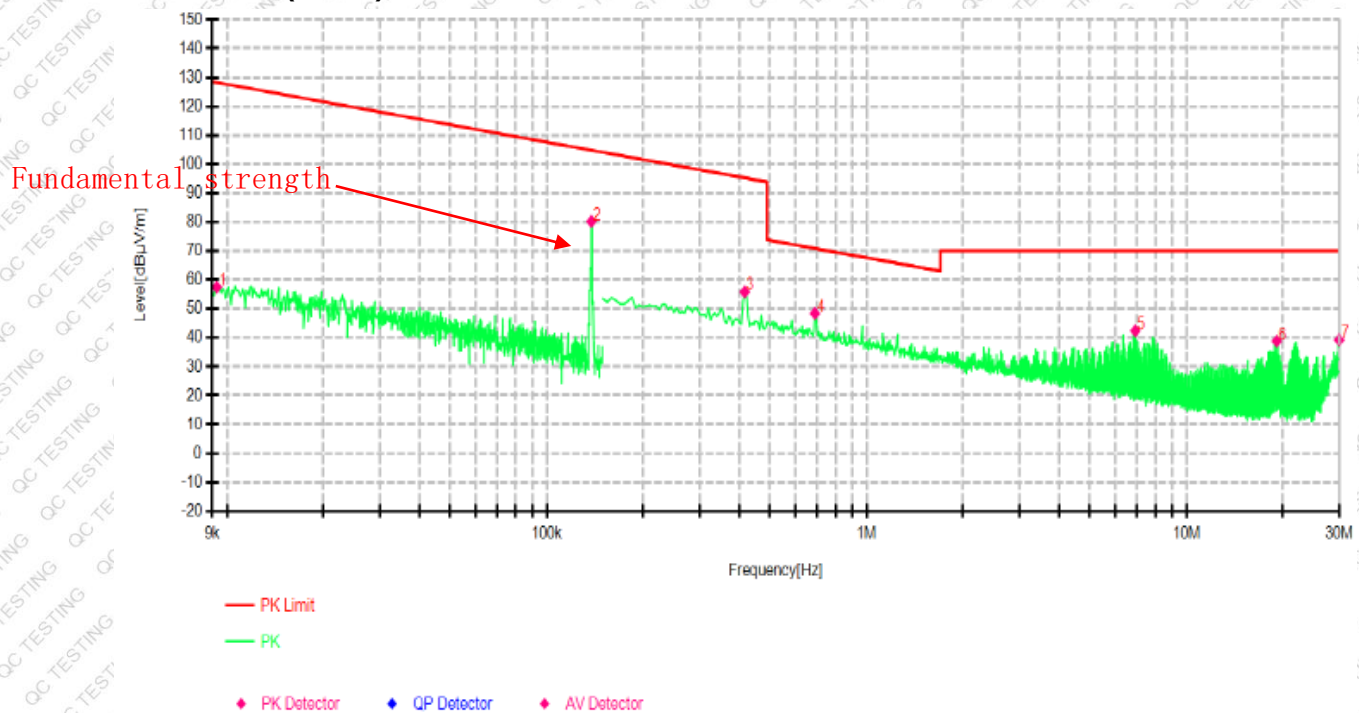
Final Data List

| NO. | Frequency [Hz] | Level [dBμV/m] | Factor [dB] | Limit [dBμV/m] | Margin [dB] | Detector | Instrument | Verdict |
|-----|----------------|----------------|-------------|----------------|-------------|----------|------------|---------|
| 1   | 140.2k         | 76.12          | 10.42       | 104.67         | 28.55       | AVG      | Z          | PASS    |
| 2   | 150k           | 53.53          | 10.38       | 104.08         | 50.55       | AVG      | Z          | PASS    |
| 3   | 270k           | 53.92          | 10.48       | 98.98          | 45.06       | AVG      | Z          | PASS    |
| 4   | 425k           | 50.74          | 10.60       | 95.04          | 44.30       | AVG      | Z          | PASS    |
| 5   | 700k           | 48.09          | 10.63       | 70.70          | 22.61       | QP       | Z          | PASS    |
| 6   | 7.39M          | 46.25          | 10.87       | 70.00          | 23.75       | QP       | Z          | PASS    |
| 7   | 21.62M         | 43.16          | 9.38        | 70.00          | 26.84       | QP       | Z          | PASS    |
| 8   | 29.91M         | 44.18          | 8.53        | 70.00          | 25.82       | QP       | Z          | PASS    |





9 kHz~30 MHz (X Axis) (Model: INFINITY 1200)



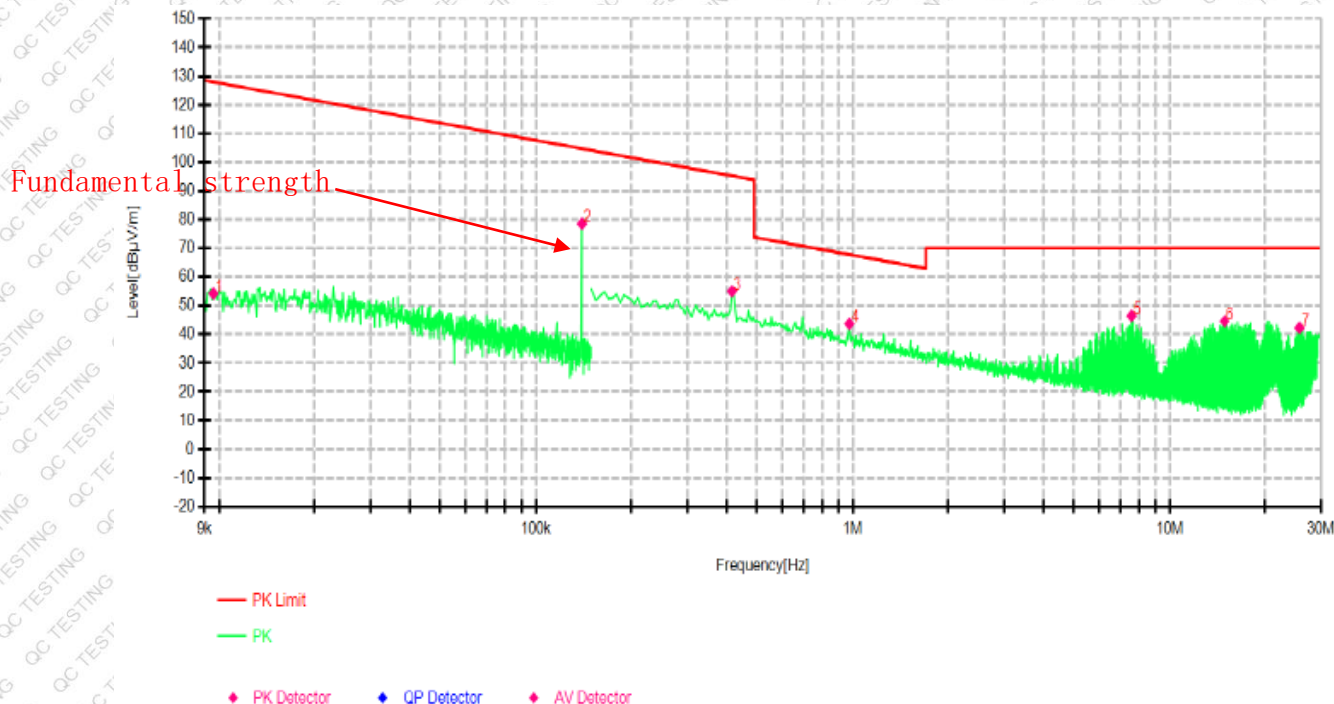
Final Data List

| NO. | Frequency [Hz] | Level [dBμV/m] | Factor [dB] | Limit [dBμV/m] | Margin [dB] | Detector | Instrument | Verdict |
|-----|----------------|----------------|-------------|----------------|-------------|----------|------------|---------|
| 1   | 9.3k           | 57.44          | 16.45       | 128.23         | 70.79       | AVG      | X          | PASS    |
| 2   | 138.4k         | 80.14          | 10.42       | 104.78         | 24.64       | AVG      | X          | PASS    |
| 3   | 415k           | 55.80          | 10.59       | 95.24          | 39.44       | AVG      | X          | PASS    |
| 4   | 690k           | 48.39          | 10.63       | 70.83          | 22.44       | QP       | X          | PASS    |
| 5   | 6.925M         | 42.35          | 10.89       | 70.00          | 27.65       | QP       | X          | PASS    |
| 6   | 19.185M        | 38.74          | 9.64        | 70.00          | 31.26       | QP       | X          | PASS    |
| 7   | 30M            | 39.19          | 8.51        | 70.00          | 70.00       | QP       | X          | PASS    |





9 kHz~30 MHz (Y Axis) (Model: INFINITY 1200)

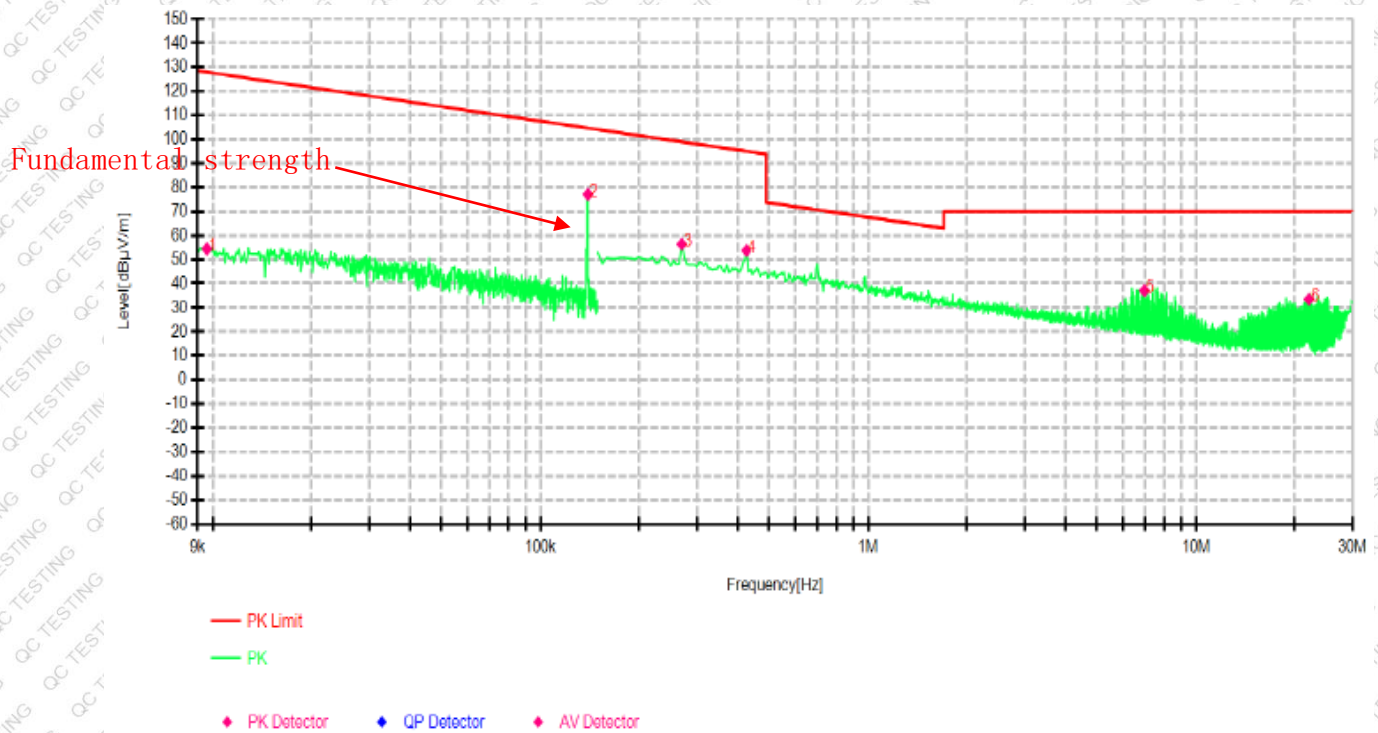


Final Data List

| NO. | Frequency [Hz] | Level [dBμV/m] | Factor [dB] | Limit [dBμV/m] | Margin [dB] | Detector | Instrument | Verdict |
|-----|----------------|----------------|-------------|----------------|-------------|----------|------------|---------|
| 1   | 9.6k           | 54.22          | 16.39       | 127.96         | 73.74       | AVG      | Y          | PASS    |
| 2   | 140.3k         | 78.55          | 10.42       | 104.66         | 26.11       | AVG      | Y          | PASS    |
| 3   | 415k           | 55.01          | 10.59       | 95.24          | 40.23       | AV       | Y          | PASS    |
| 4   | 975k           | 43.66          | 10.58       | 67.82          | 24.16       | QP       | Y          | PASS    |
| 5   | 7.585M         | 46.43          | 10.87       | 70.00          | 23.57       | QP       | Y          | PASS    |
| 6   | 14.89M         | 44.56          | 9.85        | 70.00          | 25.44       | QP       | Y          | PASS    |
| 7   | 25.69M         | 42.24          | 8.89        | 70.00          | 27.76       | QP       | Y          | PASS    |



9 kHz~30 MHz (Z Axis) (Model: INFINITY 1200)



Final Data List

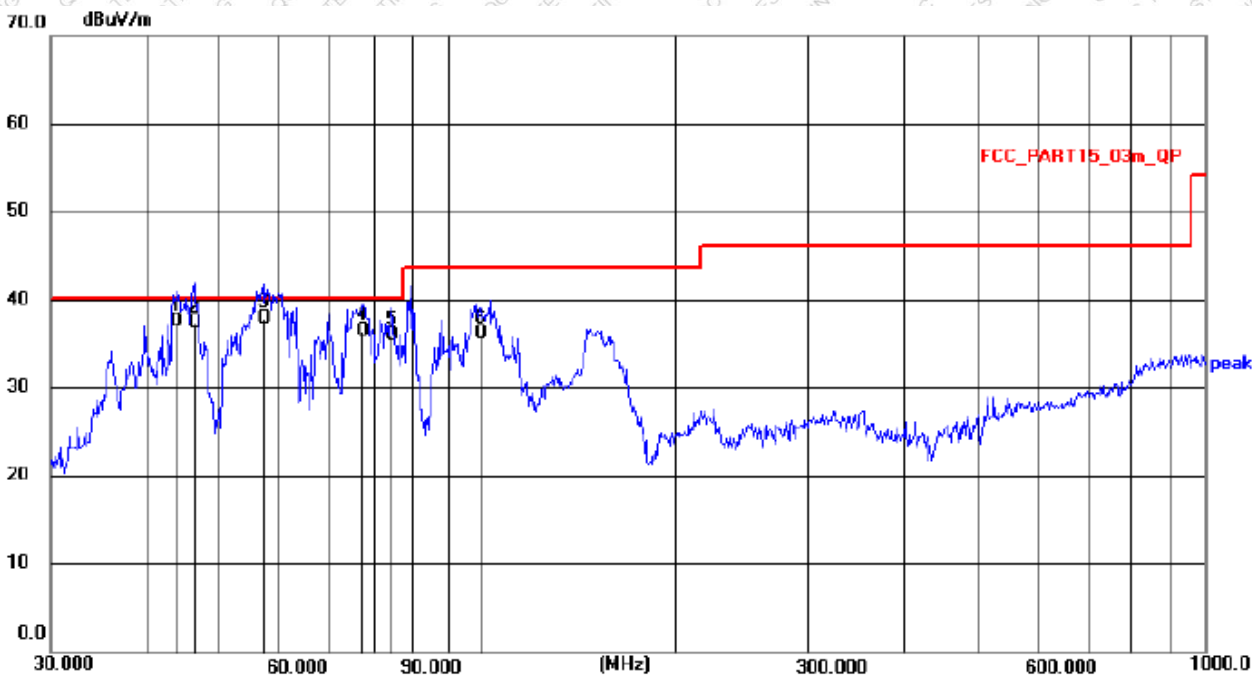
| NO. | Frequency [Hz] | Level [dBμV/m] | Factor [dB] | Limit [dBμV/m] | Margin [dB] | Detector | Instrument | Verdict |
|-----|----------------|----------------|-------------|----------------|-------------|----------|------------|---------|
| 1   | 9.6k           | 54.45          | 16.39       | 127.96         | 73.51       | AVG      | Z          | PASS    |
| 2   | 140.2k         | 77.12          | 10.42       | 104.67         | 27.55       | AVG      | Z          | PASS    |
| 3   | 270k           | 56.42          | 10.48       | 98.98          | 42.56       | AVG      | Z          | PASS    |
| 4   | 425k           | 53.74          | 10.60       | 95.04          | 41.30       | AVG      | Z          | PASS    |
| 5   | 6.97M          | 37.12          | 10.89       | 70.00          | 32.88       | QP       | Z          | PASS    |
| 6   | 22.145M        | 33.46          | 9.30        | 70.00          | 36.54       | QP       | Z          | PASS    |





30MHz~1GHz

Horizontal (Model: INFINITY 1300 PRO)



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 43.9658         | 23.00          | 14.53         | 37.53          | 40.00          | 2.47        | QP       |
| 2   | 46.3402         | 22.87          | 14.50         | 37.37          | 40.00          | 2.63        | QP       |
| 3 * | 57.1914         | 23.98          | 13.83         | 37.81          | 40.00          | 2.19        | QP       |
| 4   | 77.3210         | 26.10          | 10.42         | 36.52          | 40.00          | 3.48        | QP       |
| 5   | 84.4054         | 26.08          | 9.96          | 36.04          | 40.00          | 3.96        | QP       |
| 6   | 110.9569        | 23.84          | 12.29         | 36.13          | 43.50          | 7.37        | QP       |



Vertical (Model: INFINITY 1300 PRO)



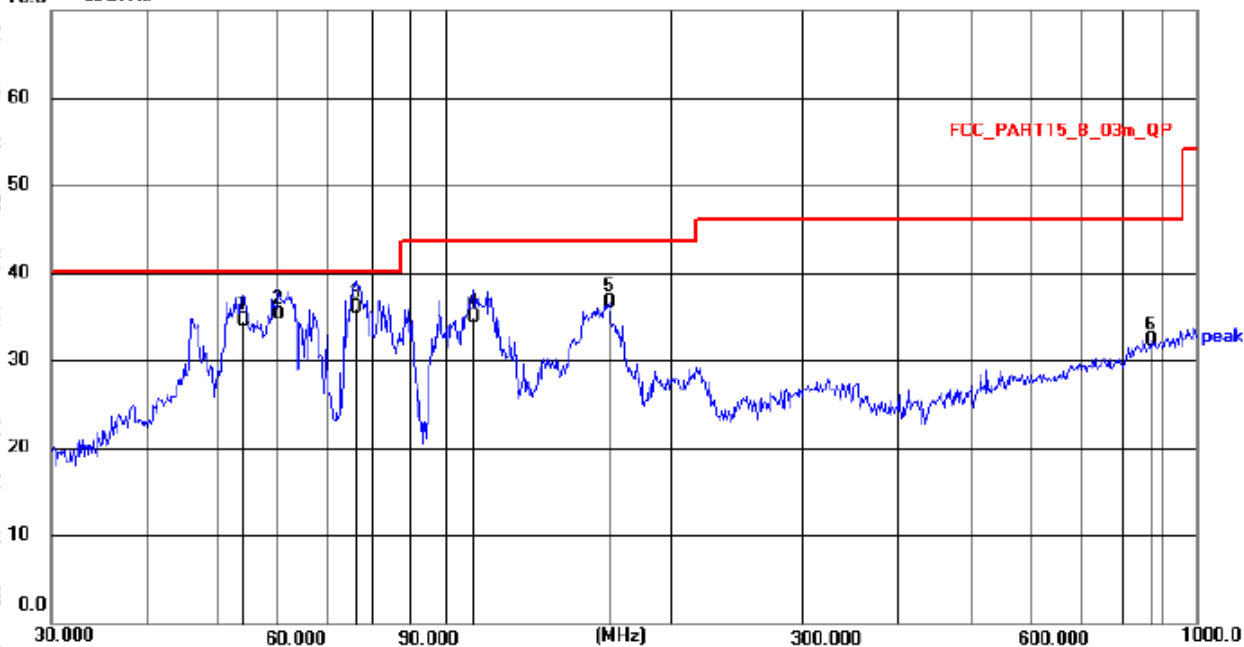
| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 30.0000         | 24.25          | 12.44         | 36.69          | 40.00          | 3.31        | QP       |
| 2 * | 49.1865         | 22.76          | 14.45         | 37.21          | 40.00          | 2.79        | QP       |
| 3   | 63.7588         | 23.65          | 12.94         | 36.59          | 40.00          | 3.41        | QP       |
| 4   | 99.5279         | 26.27          | 11.24         | 37.51          | 43.50          | 5.99        | QP       |
| 5   | 134.0877        | 26.35          | 13.96         | 40.31          | 43.50          | 3.19        | QP       |
| 6   | 255.6228        | 22.97          | 13.22         | 36.19          | 46.00          | 9.81        | QP       |





Horizontal (Model: INFINITY 1200)

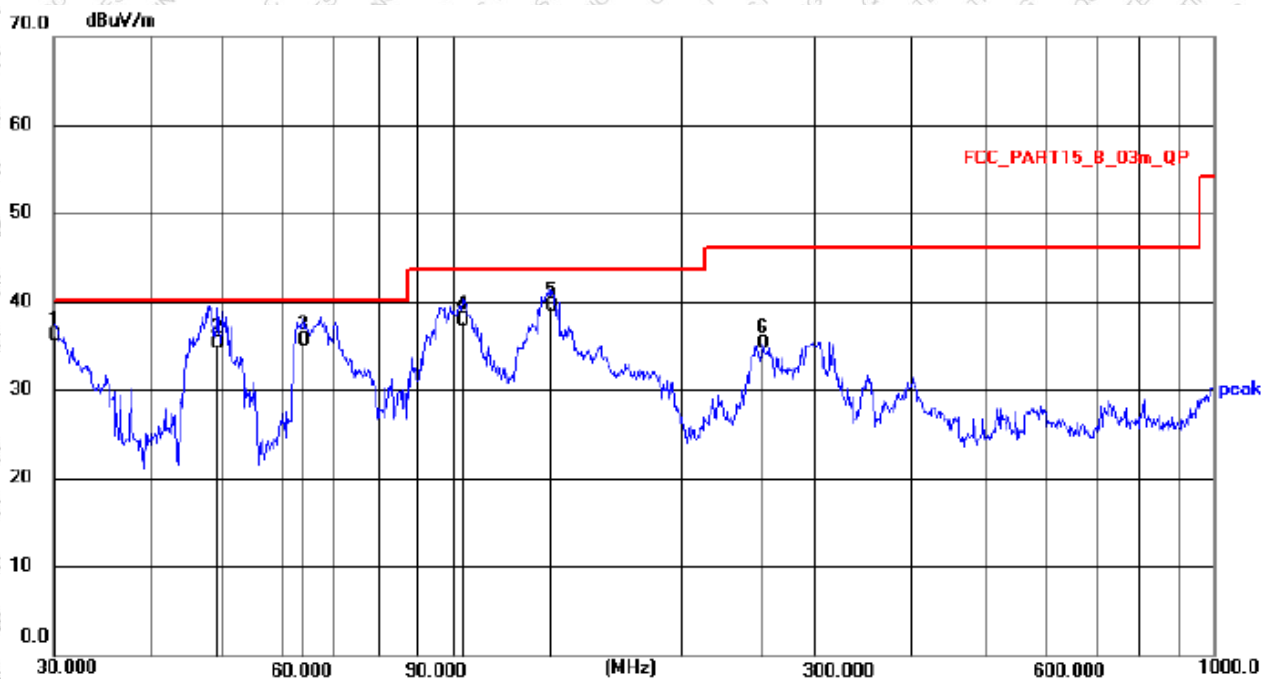
70.0 dBuV/m



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1   | 53.8817         | 20.50          | 14.11         | 34.61          | 40.00          | 5.39        | QP       |
| 2   | 60.0690         | 21.74          | 13.58         | 35.32          | 40.00          | 4.68        | QP       |
| 3 * | 76.2442         | 25.41          | 10.63         | 36.04          | 40.00          | 3.96        | QP       |
| 4   | 109.4116        | 22.85          | 12.15         | 35.00          | 43.50          | 8.50        | QP       |
| 5   | 165.4866        | 22.90          | 13.79         | 36.69          | 43.50          | 6.81        | QP       |
| 6   | 869.1300        | 6.59           | 25.71         | 32.30          | 46.00          | 13.70       | QP       |



Vertical (Model: INFINITY 1200)



| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector |
|-----|-----------------|----------------|---------------|----------------|----------------|-------------|----------|
| 1 * | 30.0000         | 23.75          | 12.44         | 36.19          | 40.00          | 3.81        | QP       |
| 2   | 49.1865         | 20.76          | 14.45         | 35.21          | 40.00          | 4.79        | QP       |
| 3   | 63.7588         | 22.65          | 12.94         | 35.59          | 40.00          | 4.41        | QP       |
| 4   | 103.0800        | 26.24          | 11.58         | 37.82          | 43.50          | 5.68        | QP       |
| 5   | 135.0318        | 25.44          | 14.01         | 39.45          | 43.50          | 4.05        | QP       |
| 6   | 255.6228        | 21.97          | 13.22         | 35.19          | 46.00          | 10.81       | QP       |

Remarks:

1. Level = Reading + Factor



## 7. 20dB Occupy Bandwidth

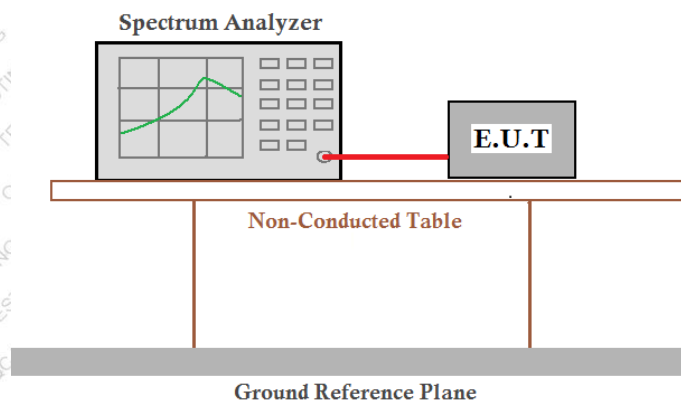
### 7.1 Applicable Standard

FCC Part15 C Section 15.215

## 7.2 Limit

N/A

### 7.3 Test setup

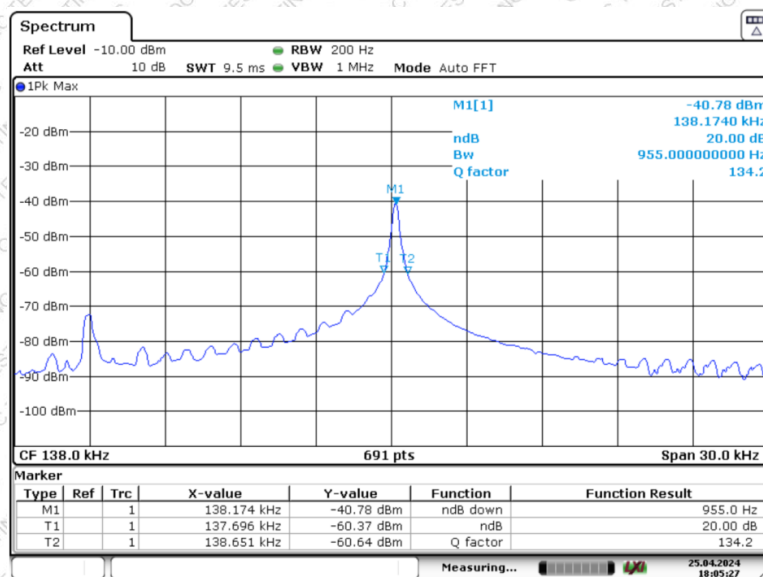


## 7.4 Test Method

ANSI C63.10:2013

## 7.5 Test Data

|              |          |              |      |
|--------------|----------|--------------|------|
| Temperature  | 22 ℃     | Humidity     | 54%  |
| ATM Pressure | 101.1kPa | Antenna Gain | 0dBi |
| Test by      | LBi Li   | Test result  | PASS |



Date: 25.APR.2024 18:05:27

138.174kHz: 20dB BW=995Hz

----- THE END OF TEST REPORT -----