

## TEST REPORT

|                                           |                                                                                                      |                  |
|-------------------------------------------|------------------------------------------------------------------------------------------------------|------------------|
| <b>Report Number.....:</b>                | 91216-23-72-23-PP001                                                                                 |                  |
| <b>Date of issue .....</b>                | 2023-11-20                                                                                           |                  |
| <b>Prepared by (+signature) .....</b>     | Pale                                                                                                 | <i>Pale Cai</i>  |
| <b>Reviewer (+signature) .....</b>        | Duke                                                                                                 | <i>Duke Chen</i> |
| <b>Approved by (+signature) .....</b>     | Jason                                                                                                | <i>Jason gao</i> |
| <b>Testing Laboratory name .....</b>      | SLG-CPC Testlaboratory Co., Ltd.                                                                     |                  |
| <b>Address .....</b>                      | No. 11, Wu Song Road, Dongcheng District, Dongguan, Guangdong Province, China 523117                 |                  |
| <b>Applicant's name .....</b>             | JiangXi Kingtron Technology Co., Ltd.                                                                |                  |
| <b>Address .....</b>                      | Luoxin Tech. Industrial Park, 2nd District, Quannan Industrial Park, Ganzhou, Jiangxi, China, 341800 |                  |
| <b>Manufacturer's name .....</b>          | JiangXi Kingtron Technology Co., Ltd.                                                                |                  |
| <b>Address .....</b>                      | Luoxin Tech. Industrial Park, 2nd District, Quannan Industrial Park, Ganzhou, Jiangxi, China, 341800 |                  |
| <b>Factory's name .....</b>               | JiangXi Kingtron Technology Co., Ltd.                                                                |                  |
| <b>Address .....</b>                      | Luoxin Tech. Industrial Park, 2nd District, Quannan Industrial Park, Ganzhou, Jiangxi, China, 341800 |                  |
| <b>Standard(s) .....</b>                  | FCC Rules and Regulations Part 15 Subpart C, Section 209                                             |                  |
| <b>Test item description .....</b>        | 4-in-1 Wireless Charger                                                                              |                  |
| <b>Trade Mark .....</b>                   | /                                                                                                    |                  |
| <b>Model/Type reference .....</b>         | W406B                                                                                                |                  |
| <b>FCC ID .....</b>                       | 2BBEH-W406                                                                                           |                  |
| <b>Date of receipt of test item .....</b> | 2023-11-09                                                                                           |                  |
| <b>Date (s) of performance of test:</b>   | 2023-11-10 to 2023-11-17                                                                             |                  |
| <b>Summary of Test Results .....</b>      | <b>Pass</b>                                                                                          |                  |

The Summary of Test Results based on a technical opinion belongs to the standard(s).

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**Modified Information**

| Report No.           | Revision Data | Summary          |
|----------------------|---------------|------------------|
| 91216-23-72-23-PP001 | 2023-11-20    | Original Version |
|                      |               |                  |

## 1. SUMMARY OF TEST RESULTS

| EMISSION                                         |                                                            |         |
|--------------------------------------------------|------------------------------------------------------------|---------|
| Description of Test Item                         | Standard & Limits                                          | Results |
| Conducted Emission                               | FCC Part 15, Subpart C- Section 15.207<br>ANSI C63.10-2013 | Pass    |
| Radiated Emission                                | FCC Part 15, Subpart C- Section 15.209<br>ANSI C63.10-2013 | Pass    |
| 20dB Bandwidth                                   | FCC Part 15, Subpart C- Section 15.215<br>ANSI C63.10-2013 | Pass    |
| Note: N/A is an abbreviation for Not Applicable. |                                                            |         |

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

|                         |                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name            | 4-in-1 Wireless Charger                                                                                                                                        |
| Trade Name              | /                                                                                                                                                              |
| Model Name              | W406B                                                                                                                                                          |
| Series Model            | /                                                                                                                                                              |
| Output                  | Wireless Output 1: 5W/7.5W/10W for Phone<br>Wireless Output 2: 5W/7.5W/10W for Phone<br>Wireless Output 3: 5W for AirPods<br>Wireless Output 4: 2.5W for Watch |
| Operation frequency     | 110-205kHz for Phone and AirPods<br>326kHz for Watch                                                                                                           |
| Modulation Type         | FSK                                                                                                                                                            |
| Antenna Type            | Inductive Loop Antenna with 0dBi                                                                                                                               |
| Power Supply            | Input: DC 5V 3A or 9V 3A                                                                                                                                       |
| Hardware version number | W406B-V03                                                                                                                                                      |
| Software version number | 0xE7D17576                                                                                                                                                     |
| Connecting I/O Port(s)  | Please refer to the User's Manual                                                                                                                              |

## 2.2. Independent Operation Modes

| Mode:                                                                                                                                                                                                                                                         | TEST MODE DESCRIPTION                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 10W for Phone + Wireless Output 2: 10W for Phone + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch   |
| 2                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 7.5W for Phone + Wireless Output 2: 10W for Phone + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch  |
| 3                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 5W for Phone + Wireless Output 2: 10W for Phone + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch    |
| 4                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 7.5W for Phone + Wireless Output 2: 7.5W for Phone + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch |
| 5                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 7.5W for Phone + Wireless Output 2: 5W for Phone + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch   |
| 6                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 5W for Phone + Wireless Output 2: 5W for Phone + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch     |
| 7                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 10W for Phone + Wireless Output 2: 10W for Phone + Wireless Output 3: 5W for AirPods                                       |
| 8                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 10W for Phone + Wireless Output 2: 10W for Phone + Wireless Output 4: 2.5W for Watch                                       |
| 9                                                                                                                                                                                                                                                             | EUT + Wireless Output 1: 10W for Phone + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch                                      |
| 10                                                                                                                                                                                                                                                            | EUT + Wireless Output 1: 10W for Phone + Wireless Output 2: 10W for Phone                                                                           |
| 11                                                                                                                                                                                                                                                            | EUT + Wireless Output 1: 10W for Phone + Wireless Output 3: 5W for AirPods                                                                          |
| 12                                                                                                                                                                                                                                                            | EUT + Wireless Output 1: 10W for Phone + Wireless Output 4: 2.5W for Watch                                                                          |
| 13                                                                                                                                                                                                                                                            | EUT + Wireless Output 3: 5W for AirPods + Wireless Output 4: 2.5W for Watch                                                                         |
| 14                                                                                                                                                                                                                                                            | EUT + Wireless Output 1: 10W for Phone                                                                                                              |
| 15                                                                                                                                                                                                                                                            | EUT + Wireless Output 2: 10W for Phone                                                                                                              |
| 16                                                                                                                                                                                                                                                            | EUT + Wireless Output 3: 5W for AirPods                                                                                                             |
| 17                                                                                                                                                                                                                                                            | EUT + Wireless Output 4: 2.5W for Watch                                                                                                             |
| Note:<br>1. All test modes were pre - tested, but we only recorded the worst case in this report. The worst case is Mode 1<br>2. All voltage inputs have been tested, with only the worst voltage recorded.<br>3. Product folding has been evaluated for use. |                                                                                                                                                     |

## 2.3. Description of Test Facility

### Site Description

EMC Lab. : Accredited by ISED, October 04 2021  
 CAB identifier: CN0126  
 Company Number: 27767  
  
 Accredited by A2LA, October 04 2021  
 The Certificate Registration Number is 6325.01  
  
 Accredited by FCC  
 Designation Number: CN1287  
 Test Firm Registration Number: 394054  
  
 Name of Firm : SLG-CPC Testlaboratory Co., Ltd.  
 Site Location : No. 11, Wu Song Road, Dongcheng District, Dongguan,  
 Guangdong Province, China 523117

## Description of Support Device

| No. | Equipment        | Trade name | Model           | S/N | Power Cord |
|-----|------------------|------------|-----------------|-----|------------|
| 1   | First Cellphone  | Apple      | IPhone12pro max |     |            |
| 2   | Second Cellphone | Apple      | IPhone12pro max |     |            |
| 3   | Wall Charger     | /          | PW0087          |     |            |
| 4   | Watch            | Apple      | S8              |     |            |
| 5   | Earbuds          | Apple      | A2190           |     |            |

## 2.4. Measurement Uncertainty

| Test Item                      | Uncertainty             |
|--------------------------------|-------------------------|
| Occupied Channel Bandwidth     | : $\pm 2.3\%$           |
| Conducted Emission Uncertainty | : 3.08dB                |
|                                |                         |
| Radiated Emission Uncertainty  | :                       |
| (3m Chamber)                   | 3.46dB (0.009MHz~30MHz) |
|                                | 3.60dB (30MHz~1GHz)     |
|                                | 4.48dB (1~6GHz)         |

### 3. MEASURING DEVICE AND TEST EQUIPMENT

#### 3.1. MEASUREMENT EQUIPMENT USED

| Equipment                           | Manufacturer    | Model        | S/N              | Last Cal.  | DUE Cal. |
|-------------------------------------|-----------------|--------------|------------------|------------|----------|
| <b>RF Connected Test</b>            |                 |              |                  |            |          |
| Vector Signal Generator             | Rohde & Schwarz | SMBV100B(6G) | 101166           | 2023/06/04 | 1 year   |
| Analog Signal Generator             | Rohde & Schwarz | SMB100A(40G) | 181333           | 2023/08/04 | 1 year   |
| Signal Analyzer                     | Rohde & Schwarz | FSV40        | 101527           | 2023/03/29 | 1 year   |
| Power Analyzer                      | Rohde & Schwarz | OSP-B157W8   | N/A              | 2023/06/02 | 1 year   |
| Wideband Radio Communication Tester | R&S             | CMW270       | 101985           | 2023/06/16 | 1 year   |
| Wideband Radio Communication Tester | Rohde & Schwarz | CMW500       | 166898           | 2023/06/16 | 1 year   |
| Temperature&Humidity test chamber   | ESPEC           | VC 4018      | /                | 2023/03/29 | 1 year   |
| <b>Radiated Emission Test</b>       |                 |              |                  |            |          |
| EMI Test Receiver                   | KEYSIGHT        | N9010A       | MY56070465       | 2022/12/07 | 1 year   |
| EMI Test Receiver                   | Rohde & Schwarz | FSV40        | 101511           | 2023/03/29 | 1 year   |
| Bilog Antenna                       | Schwarzbeck     | VULB 9163    | 01335            | 2023/04/21 | 3 year   |
| Broadband Antenna                   | Schwarzbeck     | 9162         | 139              | 2022/03/22 | 3 year   |
| Power Amplifier                     | EMEC            | EM330        | 060676           | 2022/12/07 | 3 year   |
| Cable                               | Tuyue           | F4309        | L-400-NmNm-12000 | 2022/12/07 | 1 year   |
| Horn Antenna                        | Schwarzbeck     | BBHA9120D    | 1779             | 2022/04/21 | 3 year   |
| Horn Antenna                        | Schwarzbeck     | BBHA9170     | 00954            | 2022/09/13 | 3 year   |
| Power Amplifier                     | Rohde & Schwarz | SCU-18F      | 180118           | 2022/04/21 | 3 year   |
| Power Amplifier                     | Rohde & Schwarz | SCU40A       | 100499           | 2023/06/21 | 3 year   |
| Active Loop Antenna                 | ETS LINDGREN    | 6512         | 41623            | 2022/04/23 | 3 year   |
| Test Software                       | Farad           | EZ-EMC       | Ver.CPC-3A1      | /          | /        |
| <b>Conducted Emission Test</b>      |                 |              |                  |            |          |
| LISN                                | Schwarzbeck     | NSLK 8127    | 8127-892         | 2023/03/21 | 1 year   |
| LISN                                | Schwarzbeck     | NSLK 8127    | 8127-437         | 2023/07/07 | 1 year   |
| EMI Test Receiver                   | R&S             | ESR3         | 102124           | 2022/12/07 | 1 year   |
| Triple loop                         | R&S             | HM020        | 834206/006       | 2022/12/07 | 2 year   |
| Pulse Limiter                       | R&S             | ESH3-Z2      | 357.8810.52      | 2022/12/07 | 1 year   |
| Test Software                       | Farad           | EZ-EMC       | Ver.CPC-3A1      | /          | /        |



## 4. 20DB BANDWIDTH

### 4.1. Test Procedure

Set to the maximum power setting and enable the EUT transmit continuously  
 Set RBW = 300Hz.  
 Set the video bandwidth (VBW) =1kHz.  
 Set Span= 7kHz  
 Set Detector = Peak.  
 Set Trace mode = max hold.  
 Set Sweep = auto couple.  
 Measure and record the results in the test report.

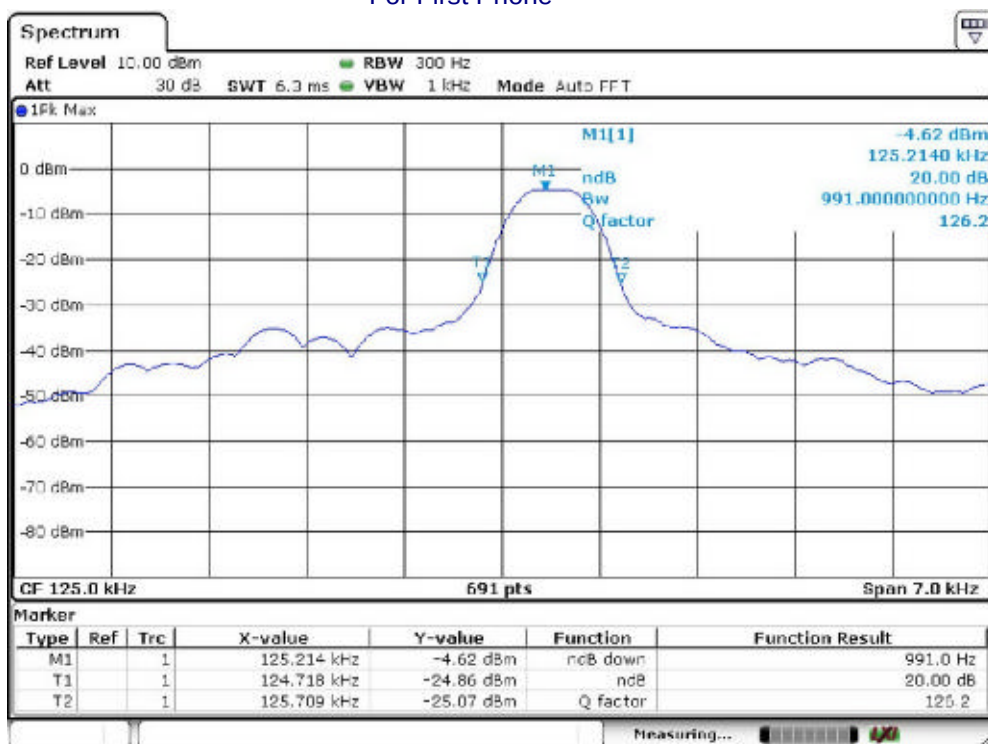
### 4.2. Test Results

Temperature: 24℃  
 Humidity: 53 %

Test Date: 2023-11-08  
 Test By: Pale

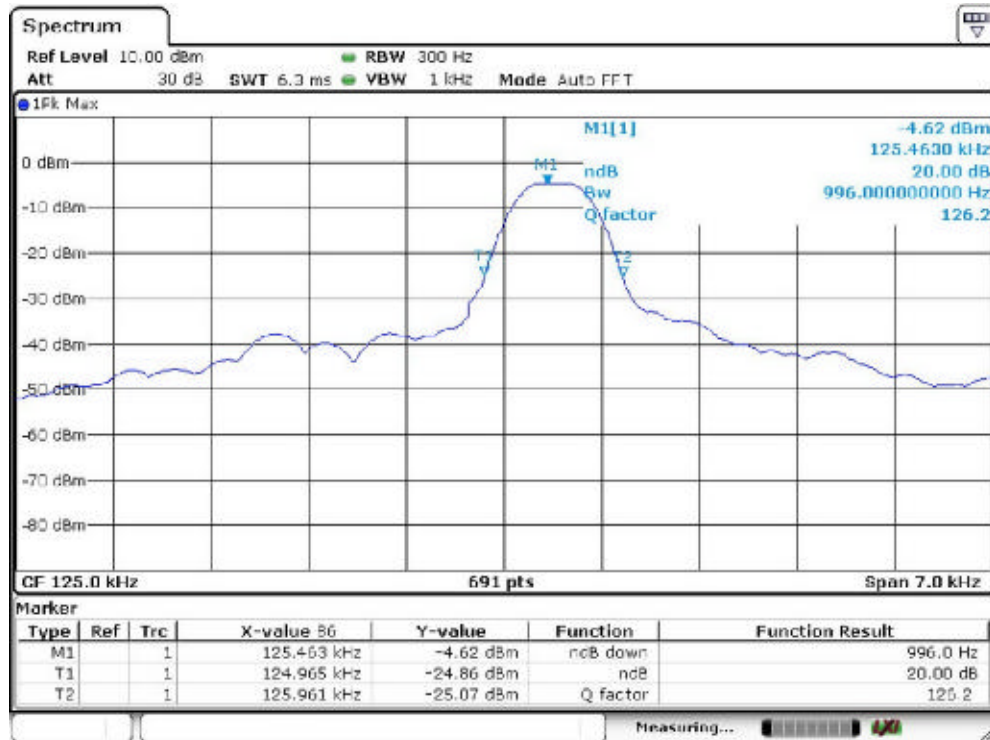
Frequency 110-205kHz 20dB Band=991Hz

For First Phone



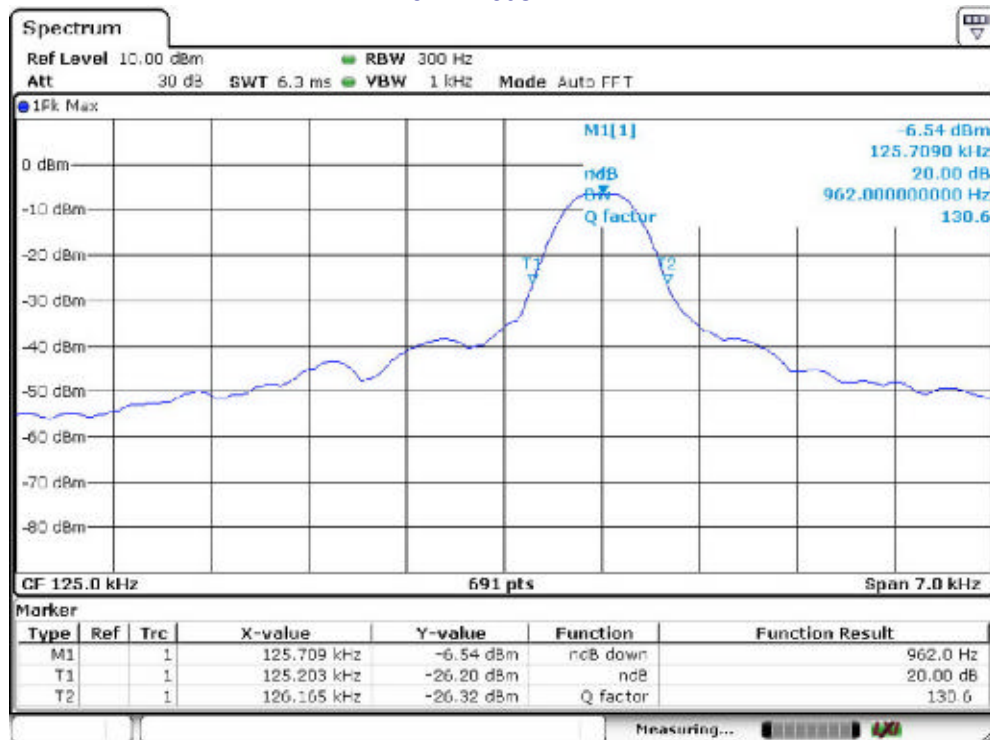
Frequency 110-205kHz 20dB Band=996Hz

For Second Phone



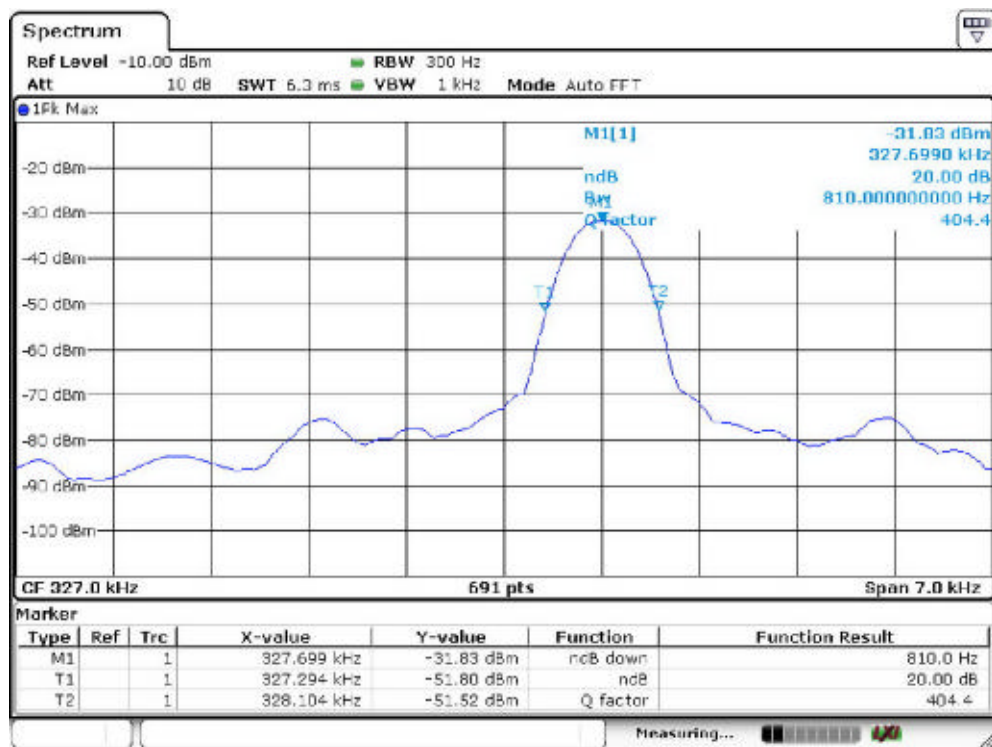
Frequency 110-205kHz 20dB Band=962Hz

For AirPods



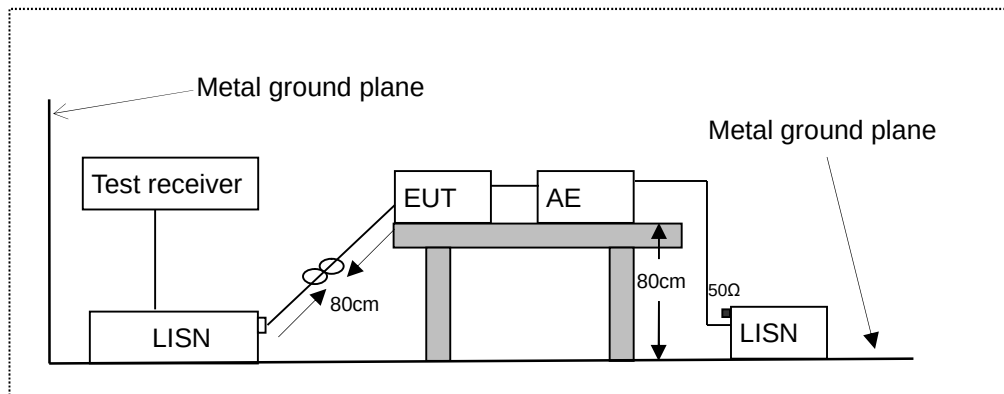
Frequency 326kHz 20dB Band=810Hz

For Watch



## 5. POWER LINE CONDUCTED EMISSION MEASUREMENT

### 5.1. Block Diagram of Test Setup



LISN: Line Impedance Stabilization Network

AE: Associated equipment

EUT: Equipment under test

### 5.2. Limits

FCC Part 15.207

| Frequency<br>(MHz) | Limit (dB $\mu$ V) |               |
|--------------------|--------------------|---------------|
|                    | Quasi-peak Level   | Average Level |
| 0.15 ~ 0.50        | 66.0 ~ 56.0 *      | 56.0 ~ 46.0 * |
| 0.50 ~ 5.00        | 56.0               | 46.0          |
| 5.00 ~ 30.00       | 60.0               | 50.0          |

NOTE1-The lower limit shall apply at the transition frequencies.  
 NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

### 5.3. Test Procedure

The EUT was placed on a desk 0.8 m height from the metal ground plane and 0.4 m from the conducting wall of the shielding room and it was kept at least 0.8 m from any other grounded conducting surface. The size of the table will nominally be 1.5 m x1.0 m.

The rear of the arrangement shall be flush with the back of the supporting tabletop unless that would not be possible or typical of normal use.

All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units.

Connect EUT to the power mains through a line impedance stabilization network (LISN). Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

All the support units are connecting to the other LISN.

The LISN provides 50 ohm coupling impedance for the measuring instrument.

Both sides of AC line were checked for maximum conducted interference.

The frequency range from 150 kHz to 30 MHz was sweep.

Set the test-receiver system to quasi peak detect function and average detect function, and to measure the conducted emissions values.

Test results were obtained from the following equation:

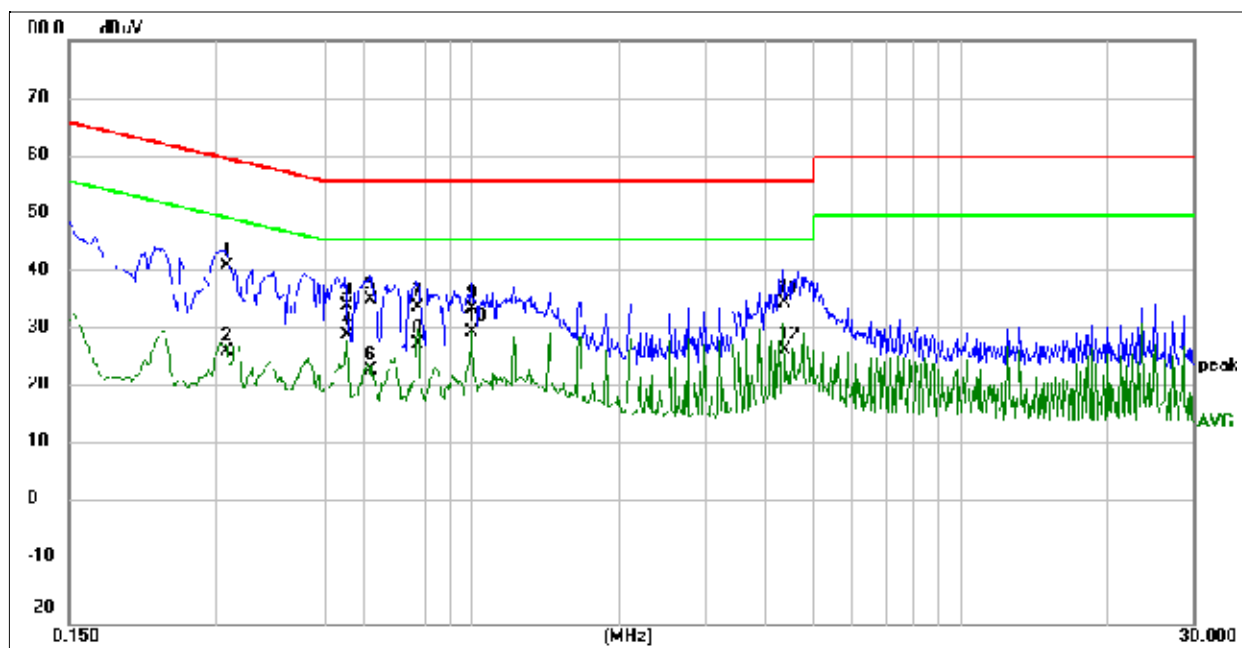
Emission Level (dB $\mu$ V) = LISN Factor (dB) + Cable Loss (dB) + Reading (dB $\mu$ V)

Margin (dB) = Emission Level (dB $\mu$ V) - Limit (dB $\mu$ V)

#### 5.4. Measuring Results

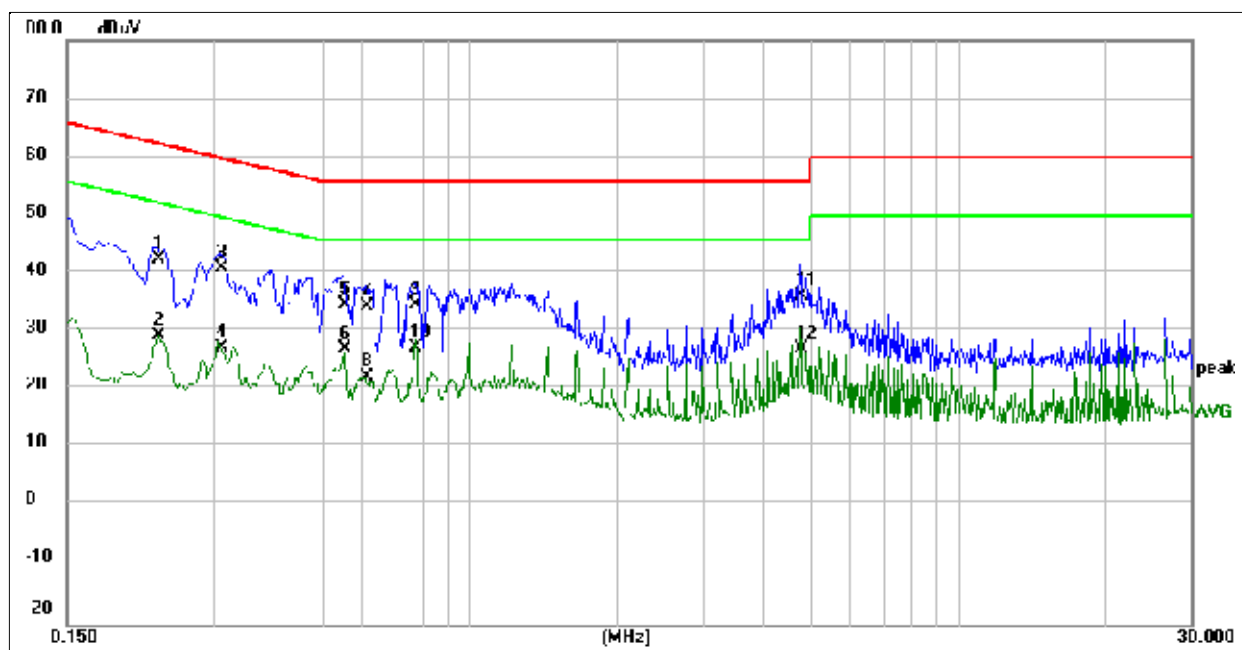
**PASS.**

|                  |                            |
|------------------|----------------------------|
| Model No.:       | W406B                      |
| Phase:           | L1                         |
| Test Power :     | AC 120V/60Hz               |
| Standard:        | FCC Part15C Conduction(QP) |
| Operating Mode : | Mode 1                     |
| Temperature:     | 24℃                        |
| Humidity:        | 53 %                       |



| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|-----|-----------------|----------------------|-----------------------|-------------------------|----------------|-------------|----------|---------|
| 1   | 0.3140          | 19.48                | 21.88                 | 41.36                   | 59.86          | -18.50      | QP       |         |
| 2   | 0.3140          | 4.92                 | 21.88                 | 26.80                   | 49.86          | -23.06      | AVG      |         |
| 3   | 0.5540          | 12.87                | 21.89                 | 34.76                   | 56.00          | -21.24      | QP       |         |
| 4   | 0.5540          | 7.80                 | 21.89                 | 29.69                   | 46.00          | -16.31      | AVG      |         |
| 5   | 0.6180          | 13.66                | 21.89                 | 35.55                   | 56.00          | -20.45      | QP       |         |
| 6   | 0.6180          | 1.69                 | 21.89                 | 23.58                   | 46.00          | -22.42      | AVG      |         |
| 7   | 0.7740          | 12.58                | 21.88                 | 34.46                   | 56.00          | -21.54      | QP       |         |
| 8   | 0.7740          | 6.26                 | 21.88                 | 28.14                   | 46.00          | -17.86      | AVG      |         |
| 9   | 1.0020          | 12.39                | 21.88                 | 34.27                   | 56.00          | -21.73      | QP       |         |
| 10  | 1.0020          | 8.14                 | 21.88                 | 30.02                   | 46.00          | -15.98      | AVG      |         |
| 11  | 4.3380          | 15.08                | 19.97                 | 35.05                   | 56.00          | -20.95      | QP       |         |
| 12  | 4.3380          | 7.09                 | 19.97                 | 27.06                   | 46.00          | -18.94      | AVG      |         |

|                  |                            |
|------------------|----------------------------|
| Model No.:       | W406B                      |
| Phase:           | N                          |
| Test Power :     | AC 120V/60Hz               |
| Standard:        | FCC Part15C Conduction(QP) |
| Operating Mode : | Mode 1                     |
| Temperature:     | 24℃                        |
| Humidity:        | 53 %                       |



| No. | Frequency (MHz) | Reading Level (dBμV) | Correct Factor (dB/m) | Emission Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Detector | Comment |
|-----|-----------------|----------------------|-----------------------|-------------------------|----------------|-------------|----------|---------|
| 1   | 0.2300          | 20.72                | 21.93                 | 42.65                   | 62.45          | -19.80      | QP       |         |
| 2   | 0.2300          | 7.71                 | 21.93                 | 29.64                   | 52.45          | -22.81      | AVG      |         |
| 3   | 0.3100          | 19.35                | 21.88                 | 41.23                   | 59.97          | -18.74      | QP       |         |
| 4   | 0.3100          | 5.79                 | 21.88                 | 27.67                   | 49.97          | -22.30      | AVG      |         |
| 5   | 0.5540          | 13.12                | 21.89                 | 35.01                   | 56.00          | -20.99      | QP       |         |
| 6   | 0.5540          | 5.50                 | 21.89                 | 27.39                   | 46.00          | -18.61      | AVG      |         |
| 7   | 0.6140          | 12.74                | 21.89                 | 34.63                   | 56.00          | -21.37      | QP       |         |
| 8   | 0.6140          | 0.60                 | 21.89                 | 22.49                   | 46.00          | -23.51      | AVG      |         |
| 9   | 0.7740          | 13.02                | 21.88                 | 34.90                   | 56.00          | -21.10      | QP       |         |
| 10  | 0.7740          | 5.83                 | 21.88                 | 27.71                   | 46.00          | -18.29      | AVG      |         |
| 11  | 4.7700          | 16.37                | 19.98                 | 36.35                   | 56.00          | -19.65      | QP       |         |
| 12  | 4.7700          | 7.47                 | 19.98                 | 27.45                   | 46.00          | -18.55      | AVG      |         |

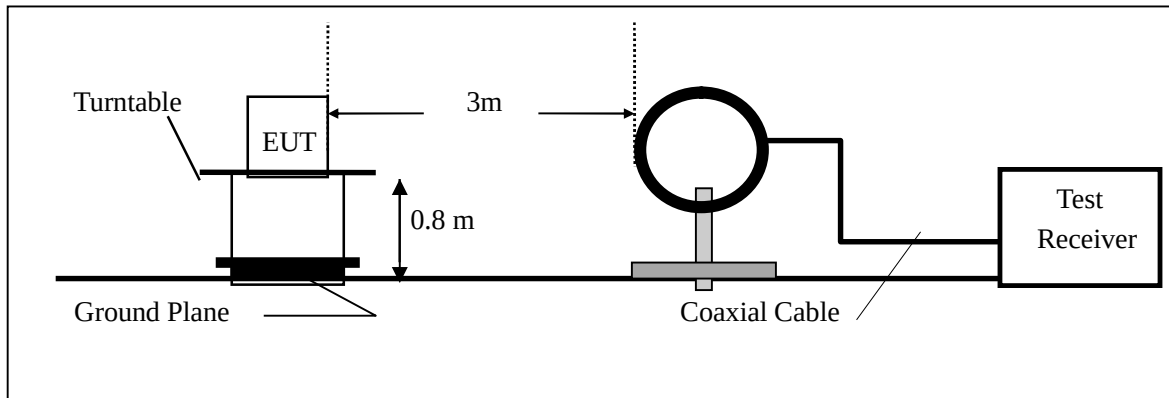
## 6. RADIATED EMISSION TEST

### 6.1. Measurement Procedure

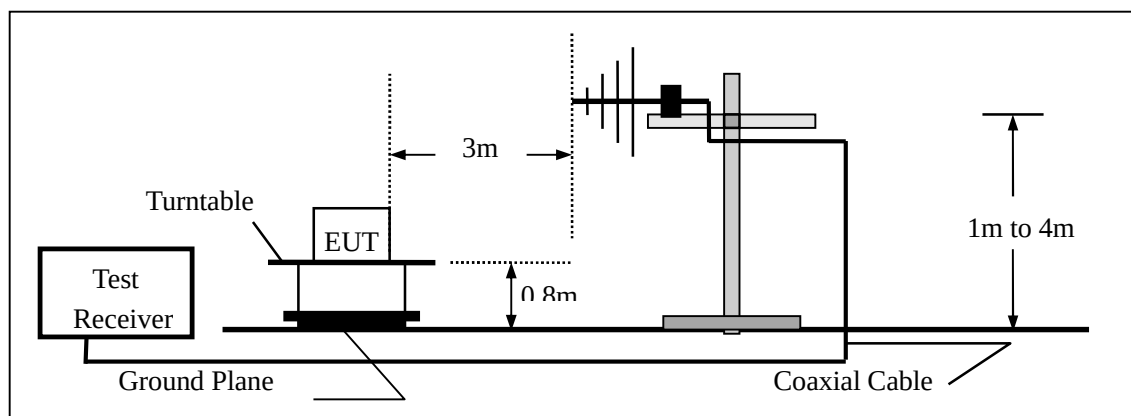
1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured were complete.
5. Use the following receiver/spectrum analyzer settings:  
 Span = wide enough to fully capture the emission being measured  
 RBW=200Hz for 9KHz to 150KHz,  
 RBW=9kHz for 150KHz to 30MHz,  
 RBW=120KHz for 30MHz to 1GHz  
 VBW  $\geq 3 \times$  RBW  
 Sweep = auto  
 Detector function = QP  
 Trace = max hold

### 6.2. Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz





### 6.3. Radiated Emission Limit

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

| FCC Part 15.209    |                              |      |                                                                    |                         |
|--------------------|------------------------------|------|--------------------------------------------------------------------|-------------------------|
| Frequency<br>(MHz) | Field Strength<br>Limitation |      | Field Strength Limitation Frequency tion at 3m<br>Measurement Dist |                         |
|                    | (uV/m)                       | Dist | (uV/m)                                                             | (dBuV/m)                |
| 0.009 – 0.490      | 2400 / F(KHz)                | 300m | 10000 * 2400/F(KHz)                                                | 20log 2400/F(KHz) + 80  |
| 0.490 – 1.705      | 24000 / F(KHz)               | 30m  | 100 * 24000/F(KHz)                                                 | 20log 24000/F(KHz) + 40 |
| 1.705 – 30.00      | 30                           | 30m  | 100* 30                                                            | 20log 30 + 40           |
| 30.0 – 88.0        | 100                          | 3m   | 100                                                                | 20log 100               |
| 88.0 – 216.0       | 150                          | 3m   | 150                                                                | 20log 150               |
| 216.0 – 960.0      | 200                          | 3m   | 200                                                                | 20log 200               |
| Above 960.0        | 500                          | 3m   | 500                                                                | 20log 500               |

#### 15.205 Restricted bands of operation

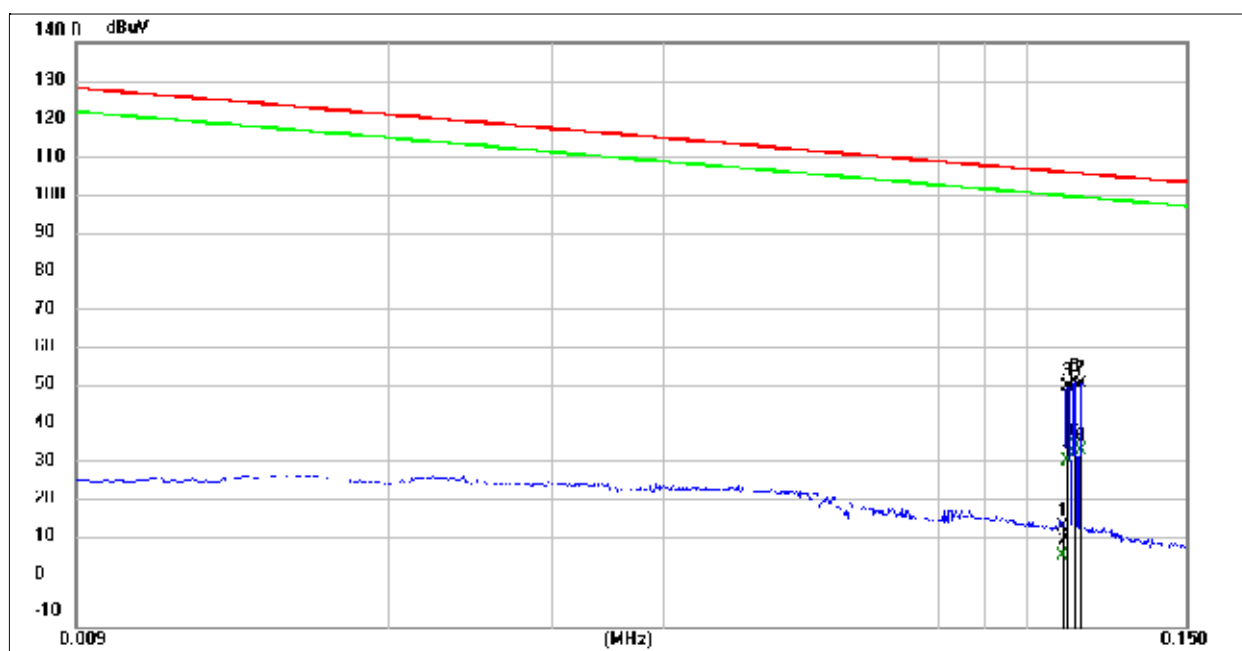
| MHz                 | MHz                   | MHz             | GHz              |
|---------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110       | 16.42 - 16.423        | 399.9 - 410     | 4.5 - 5.15       |
| 0.495 - 0.505       | 16.69475 - 16.69525  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

- Remark:
1. Emission level in dBuV/m=20 log (uV/m)
  2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
  3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of § 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

## 6.4.Measurement Result

9kHz-150kHz:

|                  |                       |
|------------------|-----------------------|
| Model No.:       | W406B                 |
| Phase:           | Vertical              |
| Test Power :     | AC 120V/60Hz          |
| Standard:        | FCC Part15.209 9k-30M |
| Operating Mode : | Mode 1                |
| Temperature:     | 24℃                   |
| Humidity:        | 51%                   |



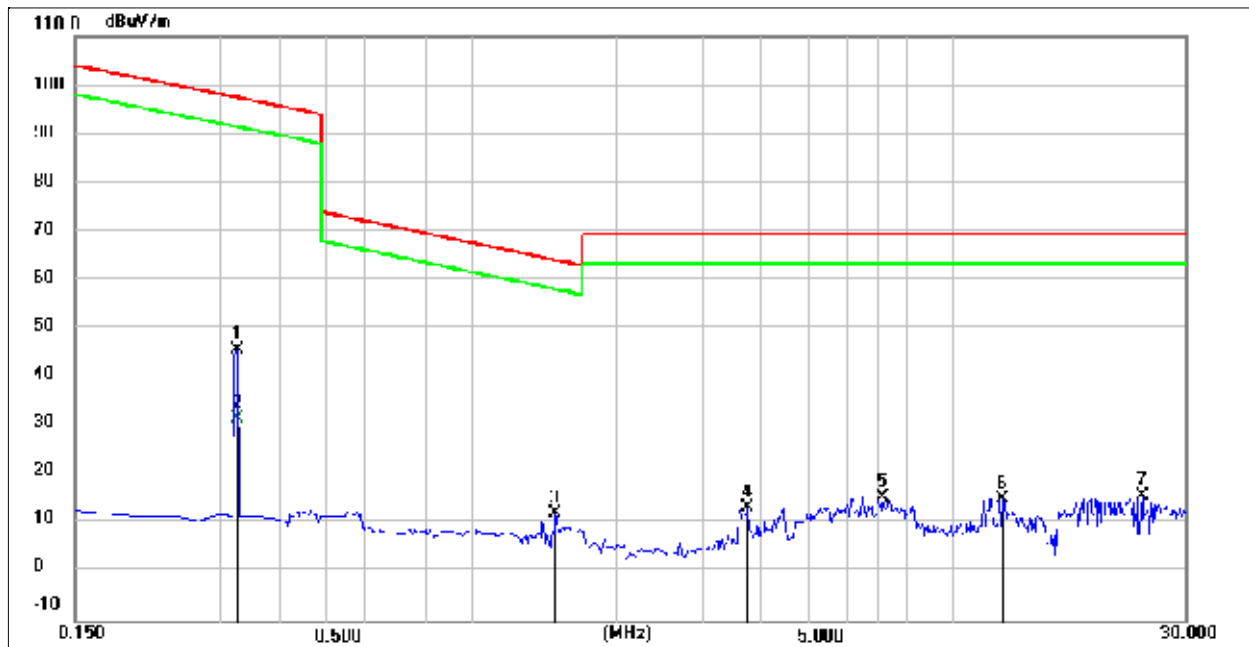
| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |  |  |  |
|-----|-----------------|----------------------|-----------------------|-------------------------|----------------|-------------|--------|--|--|--|
| 1   | 0.111000        | 74.70                | -22.76                | 51.94                   | 106.69         | -54.75      | peak   |  |  |  |
| 2   | 0.111000        | 55.67                | -22.76                | 32.91                   | 106.69         | -73.78      | AVG    |  |  |  |
| 3   | 0.113000        | 75.74                | -22.75                | 52.99                   | 106.54         | -53.55      | peak   |  |  |  |
| 4   | 0.113000        | 59.42                | -22.75                | 36.67                   | 106.54         | -69.87      | AVG    |  |  |  |
| 5   | 0.115000        | 75.45                | -22.75                | 52.70                   | 106.39         | -53.69      | peak   |  |  |  |
| 6   | 0.115000        | 58.20                | -22.75                | 35.45                   | 106.39         | -70.94      | AVG    |  |  |  |

### Restricted band edge

| Frequency (Khz) | Reading Level (dBuV/m) | Factor (dB/m) | Emission level (dBuv/m) | Limit (dBuV/m) | Detector Type | Result |
|-----------------|------------------------|---------------|-------------------------|----------------|---------------|--------|
| 0.110000        | 38.77                  | -22.76        | 16.01                   | 106.77         | PK            | PASS   |
| 0.110000        | 31.21                  | -22.76        | 8.45                    | 106.77         | AV            | PASS   |

150kHz-30MHz:

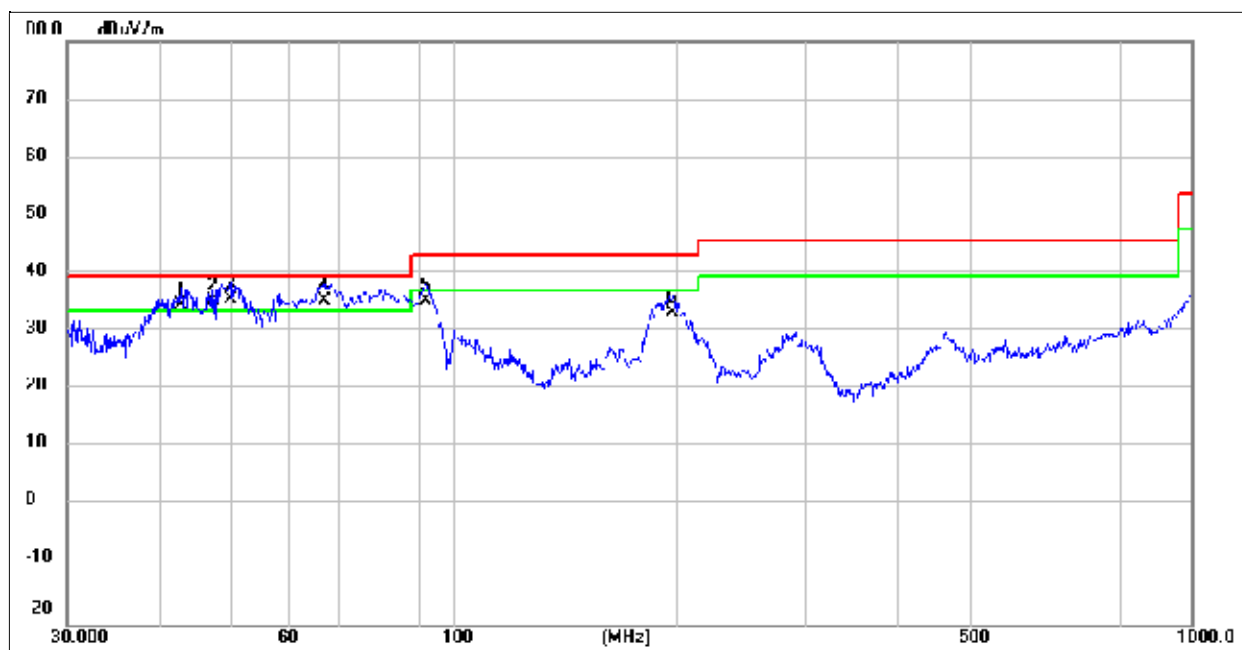
|                  |                       |
|------------------|-----------------------|
| Model No.:       | W406B                 |
| Phase:           | Vertical              |
| Test Power :     | AC 120V/60Hz          |
| Standard:        | FCC Part15.209 9k-30M |
| Operating Mode : | Mode 1                |
| Temperature:     | 24℃                   |
| Humidity:        | 51%                   |



| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |  |  |  |
|-----|-----------------|----------------------|-----------------------|-------------------------|----------------|-------------|--------|--|--|--|
| 1   | 0.325100        | 68.39                | -22.68                | 45.71                   | 97.50          | -51.79      | peak   |  |  |  |
| 2   | 0.325100        | 54.51                | -22.68                | 31.83                   | 97.50          | -65.67      | AVG    |  |  |  |
| 3   | 1.493200        | 35.10                | -22.70                | 12.40                   | 64.17          | -51.77      | peak   |  |  |  |
| 4   | 3.732000        | 35.85                | -22.38                | 13.47                   | 69.50          | -56.03      | peak   |  |  |  |
| 5   | 7.105000        | 37.17                | -21.67                | 15.50                   | 69.50          | -54.00      | peak   |  |  |  |
| 6   | 12.537300       | 36.09                | -20.68                | 15.41                   | 69.50          | -54.09      | peak   |  |  |  |
| 7   | 24.507600       | 35.42                | -19.54                | 15.88                   | 69.50          | -53.62      | peak   |  |  |  |

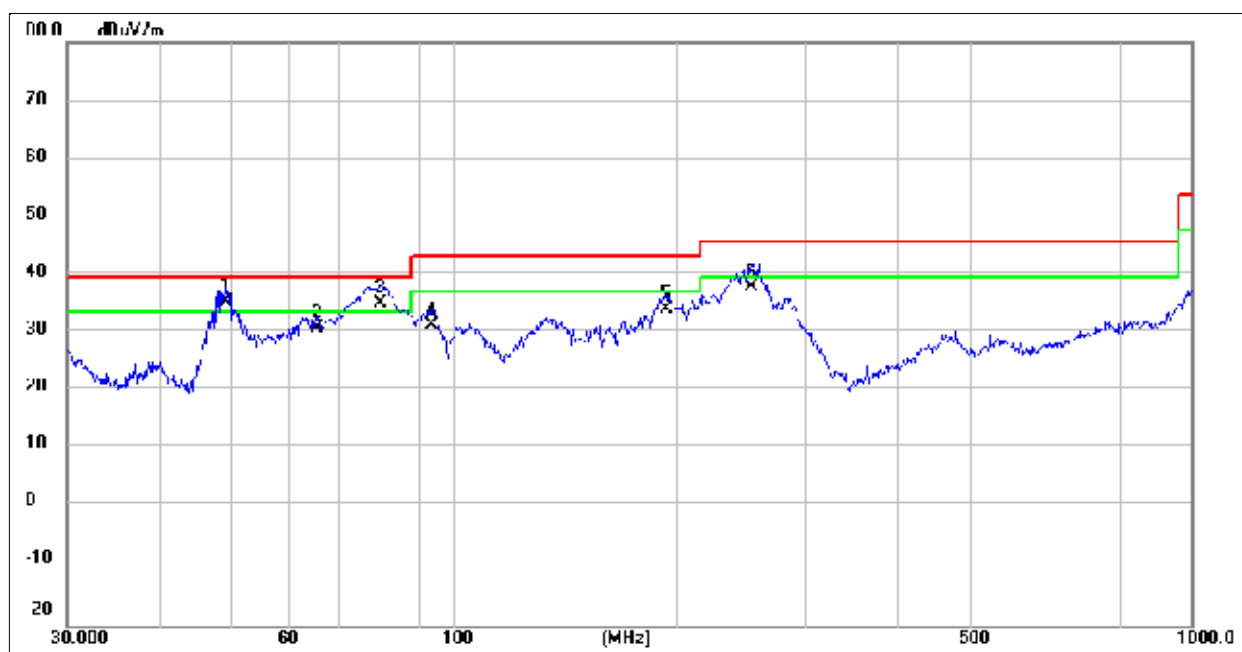
## 30MHz-1GHz:

|                  |                           |
|------------------|---------------------------|
| Model No.:       | W406B                     |
| Phase:           | Vertical                  |
| Test Power :     | AC 120V/60Hz              |
| Standard:        | FCC Part15C Radiation(QP) |
| Operating Mode : | Mode 1                    |
| Temperature:     | 22℃                       |
| Humidity:        | 53%                       |



| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |  |  |  |
|-----|-----------------|----------------------|-----------------------|-------------------------|----------------|-------------|--------|--|--|--|
| 1   | 42.7495         | 37.94                | -3.09                 | 34.85                   | 40.00          | -5.15       | QP     |  |  |  |
| 2   | 47.3255         | 40.50                | -4.84                 | 35.66                   | 40.00          | -4.34       | QP     |  |  |  |
| 3   | 49.8814         | 41.79                | -5.78                 | 36.01                   | 40.00          | -3.99       | QP     |  |  |  |
| 4   | 66.9669         | 45.88                | -10.31                | 35.57                   | 40.00          | -4.43       | QP     |  |  |  |
| 5   | 91.8162         | 43.71                | -8.13                 | 35.58                   | 43.50          | -7.92       | QP     |  |  |  |
| 6   | 198.5879        | 40.75                | -7.07                 | 33.68                   | 43.50          | -9.82       | QP     |  |  |  |

|                  |                           |
|------------------|---------------------------|
| Model No.:       | W406B                     |
| Phase:           | Horizontal                |
| Test Power :     | AC 120V/60Hz              |
| Standard:        | FCC Part15C Radiation(QP) |
| Operating Mode : | Mode 1                    |
| Temperature:     | 22℃                       |
| Humidity:        | 53%                       |



| No. | Frequency (MHz) | Reading Level (dBuV) | Correct Factor (dB/m) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |  |  |  |
|-----|-----------------|----------------------|-----------------------|-------------------------|----------------|-------------|--------|--|--|--|
| 1   | 49.1865         | 41.23                | -5.53                 | 35.70                   | 40.00          | -4.30       | QP     |  |  |  |
| 2   | 65.3431         | 41.26                | -10.18                | 31.08                   | 40.00          | -8.92       | QP     |  |  |  |
| 3   | 79.8002         | 46.21                | -10.87                | 35.34                   | 40.00          | -4.66       | QP     |  |  |  |
| 4   | 93.4402         | 39.09                | -7.47                 | 31.62                   | 43.50          | -11.88      | QP     |  |  |  |
| 5   | 194.4534        | 41.46                | -7.06                 | 34.40                   | 43.50          | -9.10       | QP     |  |  |  |
| 6   | 253.8366        | 41.27                | -3.00                 | 38.27                   | 46.00          | -7.73       | QP     |  |  |  |

## 7. ANTENNA APPLICATION

### 7.1. Antenna Requirement

| Standard            | Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FCC CRF Part 15.203 | An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded. |

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

### 7.2. Result

PASS.

The EUT has 4 antennas: an Inductive Loop Antenna, antenna has a gain of 0 dBi;

Note: ☒ Antenna use a permanently attached antenna which is not replaceable.  
☐ Not using a standard antenna jack or electrical connector for antenna replacement  
☐ The antenna has to be professionally installed (please provide method of installation)

which in accordance to section 15.203, please refer to the internal photos.

-----The end-----