# TEST REPORT

| | | |
|---|---|---|
| **Report Number.....:** | 90029-23-72-23-PP001 | |
| **Date of issue .....:** | 2023-01-05 | |
| **Tested by (+signature) .....:** | Duke | Duke chen |
| **Approved by (+signature).....:** | Jason | Jason gao |
| **Testing Laboratory name.....:** | SLG-CPC Testlaboratory Co., Ltd. | |
| **Address .....:** | No. 11, Wu Song Road, Dongcheng District, Dongguan, Guangdong Province, China 523117 | |
| **Applicant's name.....:** | ShenzhenShi Weizhichuang Technology Co., Ltd | |
| **Address .....:** | Room 508, 5/F, Keerda Building, No. 2, Zhonghao 1 Road, Xiangjiaotang Community, Bantian Street, Longgang District, ShenzhenShi | |
| **Manufacturer's name .....:** | ShenzhenShi Weizhichuang Technology Co., Ltd | |
| **Address .....:** | Room 508, 5/F, Keerda Building, No. 2, Zhonghao 1 Road, Xiangjiaotang Community, Bantian Street, Longgang District, ShenzhenShi | |
| **Factory's name .....:** | ShenzhenShi Weizhichuang Technology Co., Ltd | |
| **Address .....:** | Room 508, 5/F, Keerda Building, No. 2, Zhonghao 1 Road, Xiangjiaotang Community, Bantian Street, Longgang District, ShenzhenShi | |
| **Standard(s).....:** | FCC Rules and Regulations Part 15 Subpart C, Section 209 | |
| **Test item description.....:** | Wireless Charging | |
| **Trade Mark.....:** | N/A | |
| **Model/Type reference.....:** | CW340 | |
| **FCC ID.....:** | 2A8QNWZC-CW340 | |
| **Date of receipt of test item .....:** | 2022-11-20 | |
| **Date (s) of performance of test:** | 2022-11-21 to 2022-11-27 | |
| **Summary of Test Results.....:** | **Pass** | |
| The Summary of Test Results based on a technical opinion belongs to the standard(s). | | |
| **General disclaimer:**<br>This report shall not be reproduced except in full, without the written approval of SLG-CPC Testlaboratory Co., Ltd. The test results in the report only apply to the tested sample. | | |



*Address:No.11,WuSongRoad,*
*DongchengDistrict,Dongguan,*
*GuangdongProvince,China523117*
*Tel: 86-769-22607797*
*Fax: 86-769-22607907*
*http://www.cpcteam.com*

# TABLE OF CONTENT

## Modified Information

| Report No. | Revision Data | Summary |
|---|---|---|
| 90029-23-72-23-PP001 | 2023-01-05 | 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 | Wireless Charging |
| Trade Name | N/A |
| Model Name | CW340 |
| Series Model | / |
| Output | Wireless Output 1 UP TO: 2.5W for Watch<br>Wireless Output 2 UP TO: 15W for Cellphone<br>Wireless Output 3 UP TO: 3W for Earbuds |
| Operation frequency | 115-205kHz for Cellphone and Earbuds<br>325-328kHz for Watch |
| Modulation Type | MSK |
| Antenna Type | Inductive Loop Antenna with 0dBi |
| Power Supply | Input: DC 9V 2A |
| Hardware version number | V1.0 |
| Software version number | V1.0 |
| Connecting I/O Port(s) | Please refer to the User's Manual |

## 2.2. Independent Operation Modes

| Mode: | TEST MODE DESCRIPPTION |
|---|---|
| 1 | EUT + Wireless Output UP TO : 15W for Cellphone + Wireless Output UP TO: 2.5W for Watch + Wireless Output UP TO: 3W for Earbuds |
| 2 | EUT + Wireless Output UP TO : 15W for Cellphone + Wireless Output UP TO: 2.5W for Watch |
| 3 | EUT + Wireless Output UP TO : 15W for Cellphone + Wireless Output UP TO: 3W for Earbuds |
| 4 | EUT + Wireless Output UP TO: 2.5W for Watch + Wireless Output UP TO: 3W for Earbuds |
| 5 | EUT + Wireless Output UP TO : 15W for Cellphone |
| 6 | EUT + Wireless Output UP TO: 2.5W for Watch |
| 7 | EUT + Wireless Output UP TO: 3W for Earbuds |
| Note:<br>1. Product folding has been evaluated for use.<br>2. All test modes were pre - tested, but we only recorded the worst case in this report.The worst case is Mode 1 | |

## 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

## 2.4. Description of Support Device

| No. | Equipment | Trade name | Model | S/N | Power Cord |
|---|---|---|---|---|---|
| 1. | Cellphone | iPhone | IPhone12 | | |
| 2 | Adapter | HUAWEI | HW-200675CD1 | | |
| 3 | Watch | iPhone | S8 | | |
| 4 | Earbuds | AirPods Pro | A2190 | | |

## 2.5. Measurement Uncertainty

| Test Item | | Uncertainty |
|---|---|---|
| Occupied Channel Bandwidth | : | ±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. |
|---|---|---|---|---|---|
| **RF Connected Test** | | | | | |
| Vector Signal Generater | Rohde & Schwarz | SMBV100B(6G) | 101166 | 2022/06/29 | 1 year |
| Analog Signal Generator | Rohde & Schwarz | SMB100A(40G) | 181333 | 2022/06/29 | 1 year |
| Signal Analyzer | Rohde & Schwarz | FSV40 | 101527 | 2022/04/19 | 1 year |
| Power Analyzer | Rohde & Schwarz | OSP-B157W8 | N/A | 2022/06/29 | 1 year |
| Wideband Radio Communication Tester | R&S | CMW270 | 101985 | 2022/07/05 | 1 year |
| Wideband Radio Communication Tester | Rohde & Schwarz | CMW500 | 166898 | 2022/07/14 | 1 year |
| Temperature&Humidity test chamber | ESPEC | VC 4018 | / | 2022/03/23 | 1 year |
| **Radiated Emission Test** | | | | | |
| EMI Test Receiver | KEYSIGHT | N9010A | MY56070465 | 2022/12/07 | 1 year |
| EMI Test Receiver | Rohde & Schwarz | FSV40 | 101511 | 2022/04/19 | 1 year |
| Bilog Antenna | Schwarzbeck | VULB 9163 | 01335 | 2020/04/28 | 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 |
| Active Loop Antenna | ETS LINDGREN | 6512 | 41623 | 2022/04/23 | 3 year |
| Test Software | Farad | EZ-EMC | Ver.CPC-3A1 | / | / |
| **Conducted Emission Test** | | | | | |
| LISN | Schwarzbeck | NSLK 8127 | 8127-892 | 2022/03/19 | 1 year |
| LISN | Schwarzbeck | NSLK 8127 | 8127-437 | 2022/08/26 | 1 year |
| EMI Test Receiver | R&S | ESR3 | 102124 | 2022/12/07 | 1 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

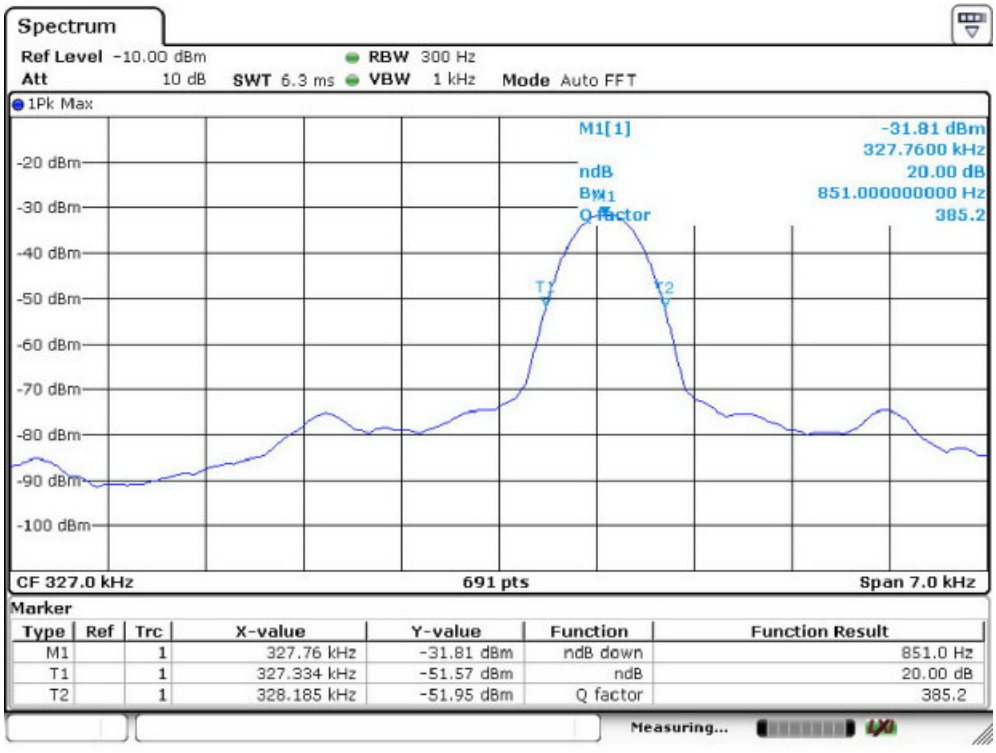
## 4.1. Test Procedure

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.

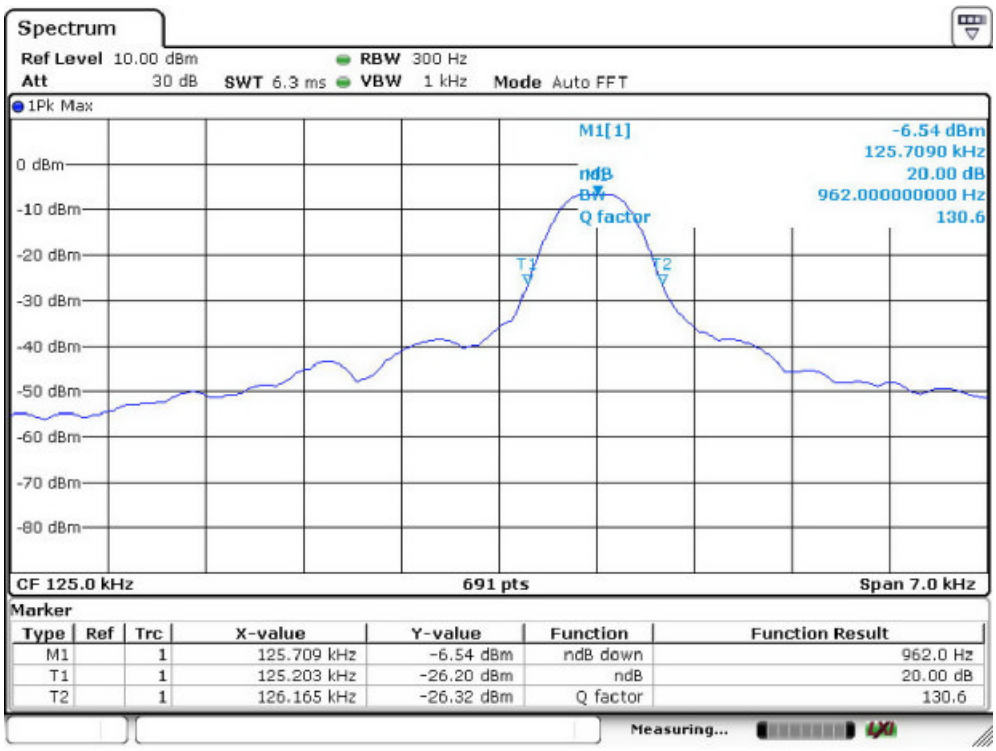
## 4.2. Test Results

| | | | |
|---|---|---|---|
| Temperature: | 24℃ | Test Date: | 2022-11-26 |
| Humidity: | 53 % | Test By: | Ken |

Frequency 325-327kHz 20dB Band=851Hz

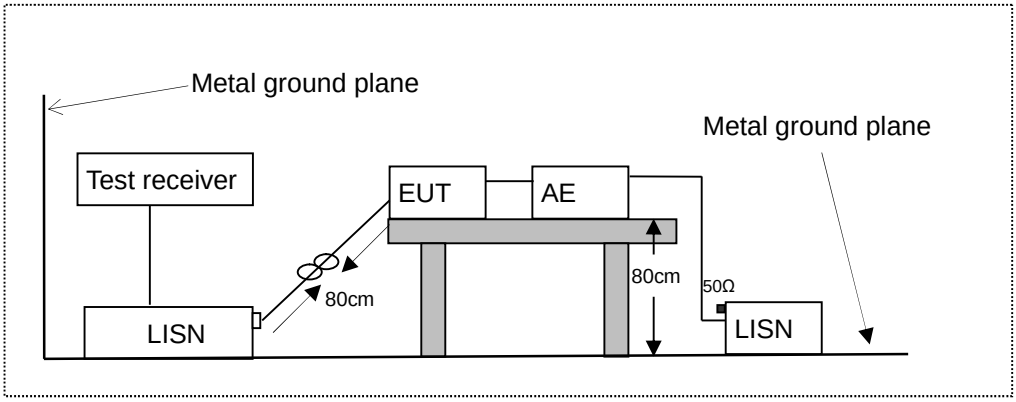


Frequency 115-205kHz 20dB Band=962Hz



# 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 (MHz) | | | Limit (dBμV) | |
|---|---|---|---|---|
| | | | 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.<br>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.

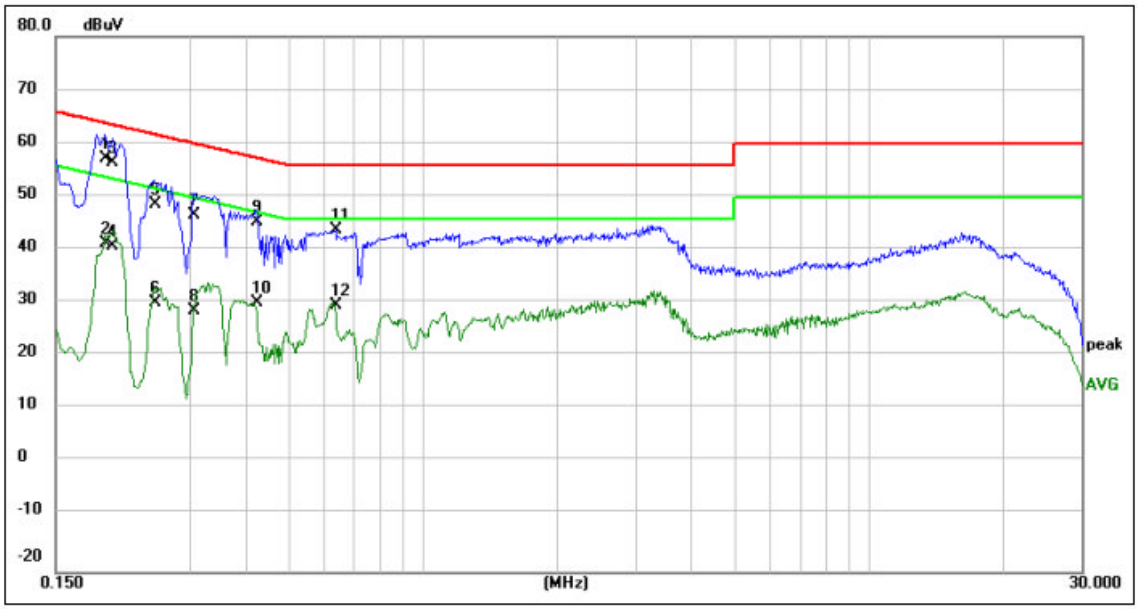
The frequency range from 150 kHz to 30 MHz was sweep.

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 (dBμV) = LISN Factor (dB) + Cable Loss (dB) + Reading (dBμV)
Margin (dB) = Emission Level (dBμV) - Limit (dBμV)

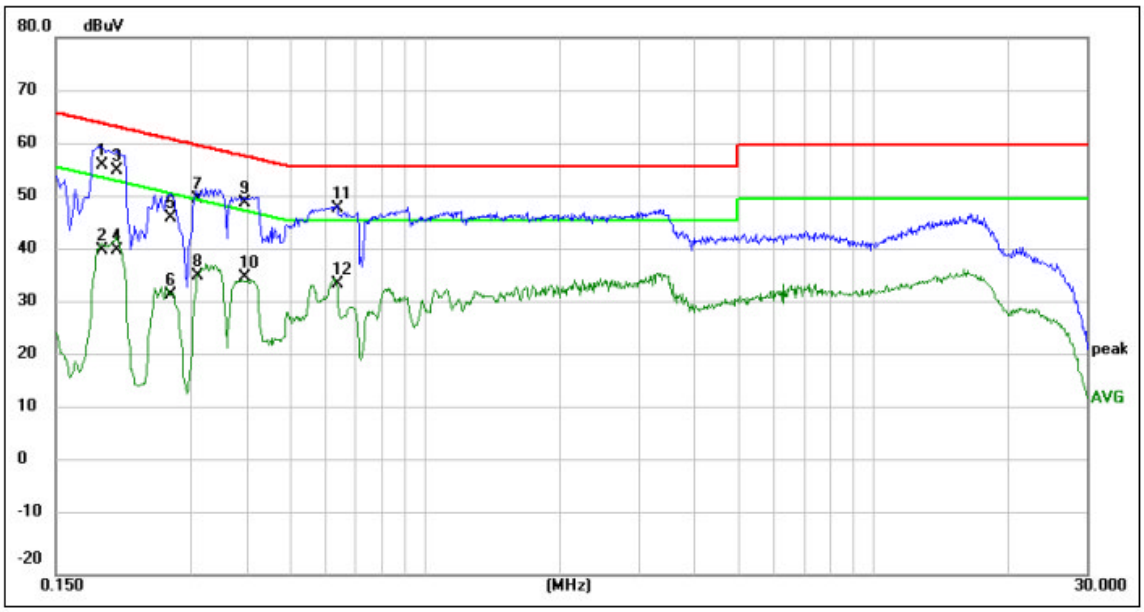
## 5.4. Measuring Results

**PASS.**




| | | | |
|---|---|---|---|
| **Site:** | | **Phase:L1** | **Temperature(C):24.5(C)** |
| **Limit:** | **FCC Part 15C Conduction(QP)** | | **Humidity(%):60%** |
| **M/N.:** | **CW340** | **Power Rating:** | **AC 120V/60 Hz** |
| **Mode:** | **Wireless Charge** | **Test Engineer:** | **Ken** |
| **Note:** | | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Factor (dB) | Measure-ment(dBuV) | Limit (dBuV) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 * | 0.1940 | 47.29 | 9.94 | 57.23 | 63.86 | -6.63 | QP | |
| 2 | 0.1940 | 31.39 | 9.94 | 41.33 | 53.86 | -12.53 | AVG | |
| 3 | 0.2014 | 46.66 | 9.95 | 56.61 | 63.55 | -6.94 | QP | |
| 4 | 0.2014 | 31.05 | 9.95 | 41.00 | 53.55 | -12.55 | AVG | |
| 5 | 0.2500 | 38.71 | 9.93 | 48.64 | 61.76 | -13.12 | QP | |
| 6 | 0.2500 | 20.42 | 9.93 | 30.35 | 51.76 | -21.41 | AVG | |
| 7 | 0.3060 | 36.74 | 9.92 | 46.66 | 60.08 | -13.42 | QP | |
| 8 | 0.3060 | 18.90 | 9.92 | 28.82 | 50.08 | -21.26 | AVG | |
| 9 | 0.4220 | 35.45 | 9.89 | 45.34 | 57.41 | -12.07 | QP | |
| 10 | 0.4220 | 20.50 | 9.89 | 30.39 | 47.41 | -17.02 | AVG | |
| 11 | 0.6380 | 34.00 | 9.92 | 43.92 | 56.00 | -12.08 | QP | |
| 12 | 0.6380 | 19.86 | 9.92 | 29.78 | 46.00 | -16.22 | AVG | |




| | | | |
|---|---|---|---|
| **Site:** | | **Phase:N** | **Temperature(C):24.5(C)** |
| **Limit:** | **FCC Part 15C Conduction(QP)** | | **Humidity(%):60%** |
| **M/N.:** | **CW340** | **Power Rating:** | **AC 120V/60 Hz** |
| **Mode:** | **Wireless Charge** | **Test Engineer:** | **Ken** |
| **Note:** | | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Factor (dB) | Measure-ment(dBuV) | Limit (dBuV) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1900 | 46.38 | 9.94 | 56.32 | 64.04 | -7.72 | QP | |
| 2 | 0.1900 | 30.41 | 9.94 | 40.35 | 54.04 | -13.69 | AVG | |
| 3 | 0.2051 | 45.20 | 9.95 | 55.15 | 63.40 | -8.25 | QP | |
| 4 | 0.2051 | 30.36 | 9.95 | 40.31 | 53.40 | -13.09 | AVG | |
| 5 | 0.2700 | 36.51 | 9.93 | 46.44 | 61.12 | -14.68 | QP | |
| 6 | 0.2700 | 22.22 | 9.93 | 32.15 | 51.12 | -18.97 | AVG | |
| 7 | 0.3100 | 39.94 | 9.92 | 49.86 | 59.97 | -10.11 | QP | |
| 8 | 0.3100 | 25.67 | 9.92 | 35.59 | 49.97 | -14.38 | AVG | |
| 9 | 0.3940 | 39.37 | 9.89 | 49.26 | 57.98 | -8.72 | QP | |
| 10 | 0.3940 | 25.51 | 9.89 | 35.40 | 47.98 | -12.58 | AVG | |
| 11 * | 0.6380 | 38.38 | 9.92 | 48.30 | 56.00 | -7.70 | QP | |
| 12 | 0.6380 | 24.14 | 9.92 | 34.06 | 46.00 | -11.94 | AVG | |

# 6. RADIATED EMISSION TEST

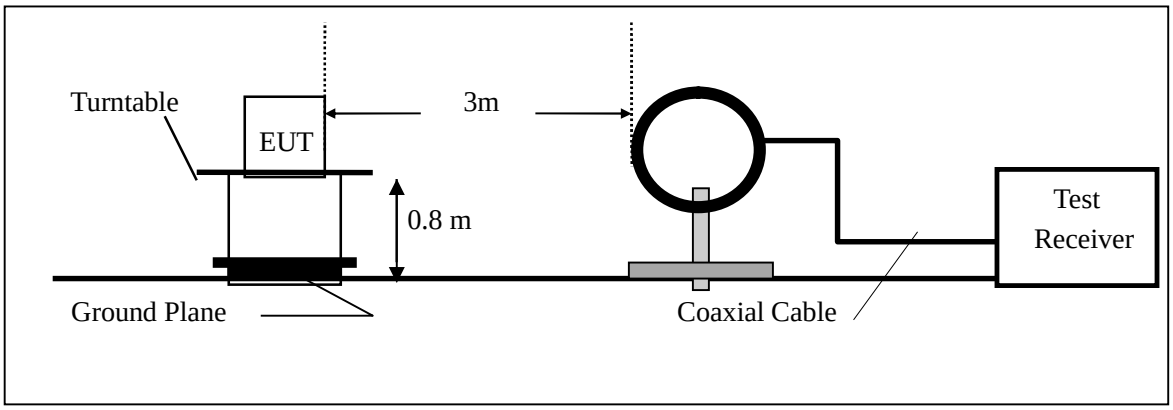
## 6.1. Measurement Procedure

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:

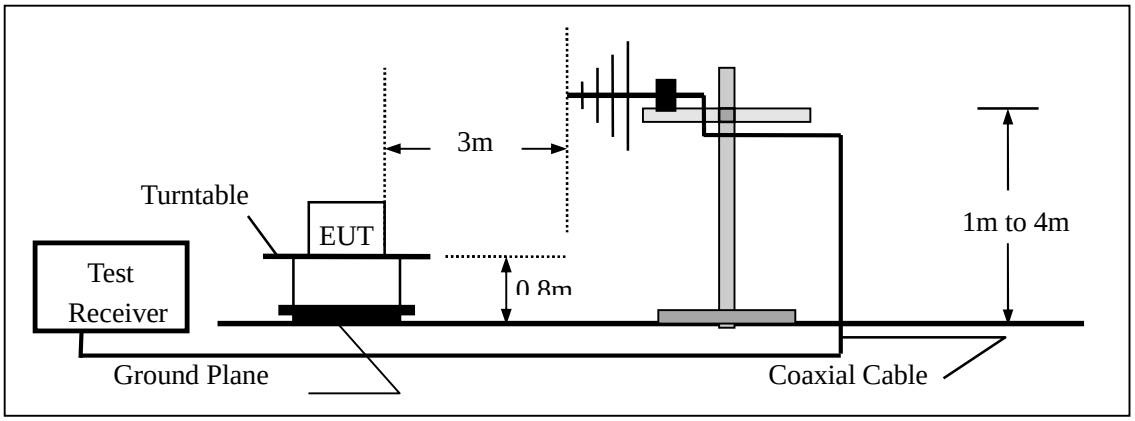
Span = wide enough to fully capture the emission being measured
RBW=200Hz for 9KHz to 150KHz,
RBW=9kHz for 150KHz to 30MHz,
RBW=120KHz for 30MHz to 1GHz
VBW ≥ 3*RBW
Sweep = auto
Detector function = QP
Trace = max hold

## 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 (MHz) | Field Strength Limitation | | Field Strength Limitation Frequency tion at 3m 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 |

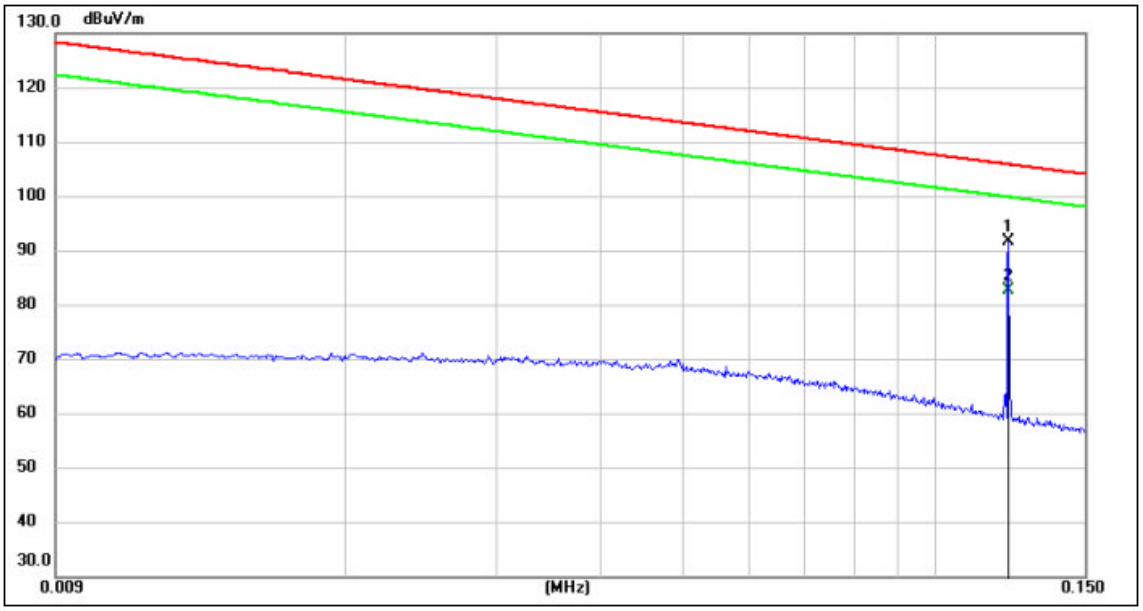
### 15.205 Restricted bands of operation

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

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 ξ 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

## 6.4. Measurement Result

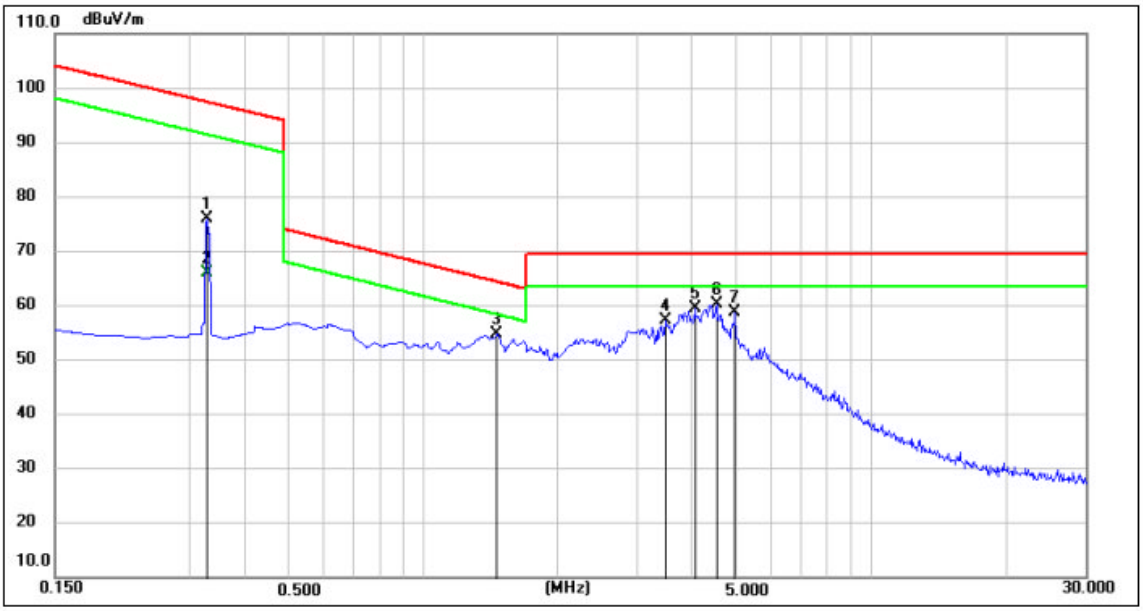
9kHz-150kHz:




| | | | |
|---|---|---|---|
| **Site:** | | **Antenna:Vertical** | **Temperature(C): 23.4(C)** |
| **Limit:** | **FCC Part15.209 9k-30M** | | **Humidity(%): 47%RH** |
| **M/N.:** | **CW340** | **Power Rating:** | **AC 120 V/60 Hz** |
| **Mode:** | **Wireless Charge** | **Test Engineer:** | **Ken** |
| **Note:** | | | |

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 0.121800 | 77.74 | 13.97 | 91.71 | 105.89 | -14.18 | peak |
| 2 | 0.121800 | 68.68 | 13.97 | 82.65 | 105.89 | -23.24 | AVG |

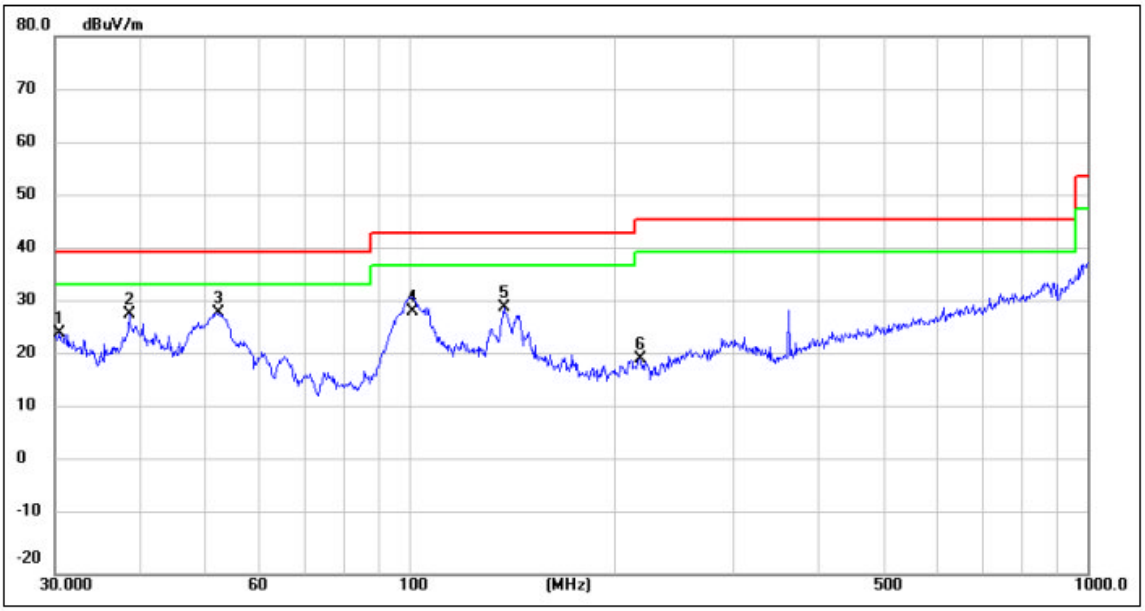
150kHz-30MHz:




| | | | |
|---|---|---|---|
| **Site:** | | **Antenna:Vertical** | **Temperature(C): 23.4(C)** |
| **Limit:** | **FCC Part15.209 9k-30M** | | **Humidity(%): 47%RH** |
| **M/N.:** | **CW340** | **Power Rating:** | **AC 120 V/60 Hz** |
| **Mode:** | **Wireless Charge** | **Test Engineer:** | **Ken** |
| **Note:** | | | |

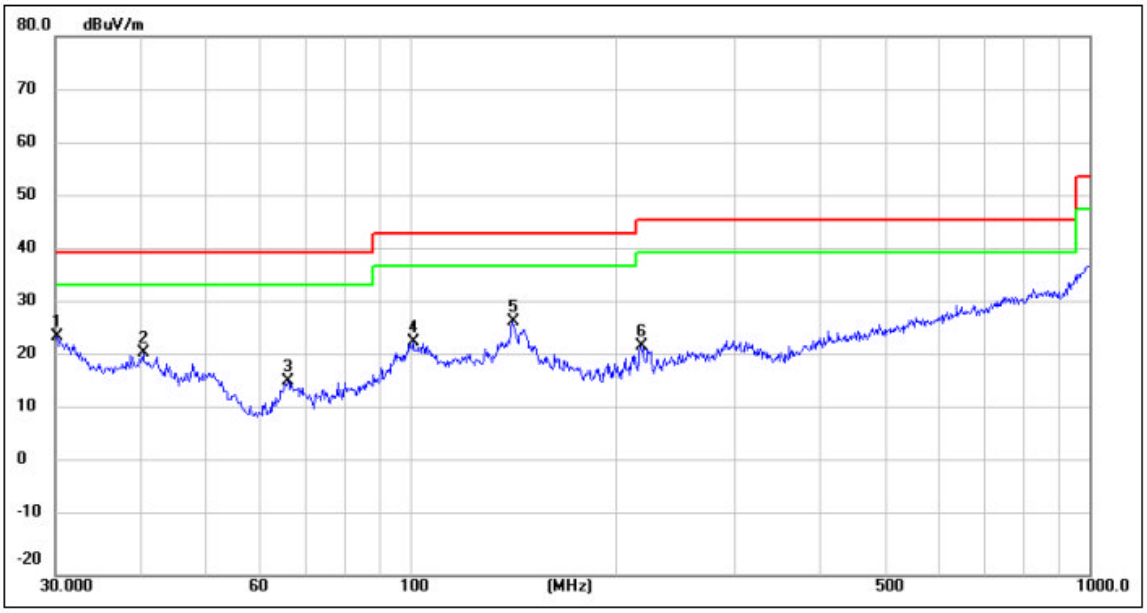
| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 0.327100 | 68.83 | 7.05 | 75.88 | 97.45 | -21.57 | peak |
| 2 | 0.327100 | 58.97 | 7.05 | 66.02 | 97.45 | -31.43 | AVG |
| 3 | 1.463300 | 61.19 | -6.33 | 54.86 | 64.35 | -9.49 | peak |
| 4 | 3.463200 | 70.20 | -12.97 | 57.23 | 69.50 | -12.27 | peak |
| 5 | 4.030400 | 73.76 | -14.38 | 59.38 | 69.50 | -10.12 | peak |
| 6 | 4.508000 | 75.29 | -15.11 | 60.18 | 69.50 | -9.32 | peak |
| 7 | 4.955700 | 74.55 | -15.80 | 58.75 | 69.50 | -10.75 | peak |

## 30MHz-1GHz:




| | | | |
|---|---|---|---|
| **Site:** | | **Antenna::Vertical** | **Temperature(C):24.5(C)** |
| **Limit:** | **FCC Class 15C 3M Radiation(QP)** | | **Humidity(%):55%** |
| **M/N.:** | **CW340** | **Power Rating:** | **AC 120V/60 Hz** |
| **Mode:** | **Wireless Charge** | **Test Engineer:** | **Ken** |
| **Note:** | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.5306 | 25.01 | -0.19 | 24.82 | 40.00 | -15.18 | peak | | | |
| 2 | 38.6160 | 33.34 | -5.03 | 28.31 | 40.00 | -11.69 | peak | | | |
| 3 * | 52.3912 | 39.75 | -11.01 | 28.74 | 40.00 | -11.26 | peak | | | |
| 4 | 101.2885 | 33.46 | -4.71 | 28.75 | 43.50 | -14.75 | QP | | | |
| 5 | 137.9028 | 32.23 | -2.72 | 29.51 | 43.50 | -13.99 | peak | | | |
| 6 | 218.3085 | 26.65 | -6.64 | 20.01 | 46.00 | -25.99 | peak | | | |




| | | | |
|---|---|---|---|
| **Site:** | | **Antenna::Horizontal** | **Temperature(C):24.5(C)** |
| **Limit:** | **FCC Class 15C 3M Radiation(QP)** | | **Humidity(%):55%** |
| **M/N.:** | **CW340** | **Power Rating:** | **AC 120V/60 Hz** |
| **Mode:** | **Wireless Charge** | **Test Engineer:** | **Ken** |
| **Note:** | | | |

| No. | Frequency (MHz) | Reading (dBuV) | Factor (dB/m) | Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Det. | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 * | 30.2111 | 24.13 | 0.14 | 24.27 | 40.00 | -15.73 | peak | | | |
| 2 | 40.4172 | 26.53 | -5.20 | 21.33 | 40.00 | -18.67 | peak | | | |
| 3 | 66.0342 | 29.44 | -13.42 | 16.02 | 40.00 | -23.98 | peak | | | |
| 4 | 100.9339 | 27.94 | -4.72 | 23.22 | 43.50 | -20.28 | peak | | | |
| 5 | 141.3298 | 29.89 | -2.69 | 27.20 | 43.50 | -16.30 | peak | | | |
| 6 | 218.3085 | 29.12 | -6.64 | 22.48 | 46.00 | -23.52 | peak | | | |

# 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 1 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----------