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# RF Exposure Evaluation

## FCC ID:2A49V-QE01B

**Measuring Standard**

FCC Part 1(1.1310) and Part 2(2.1091)

KDB 680106 D01 RF Exposure Wireless Charging Base App v03

**Test Configuration**

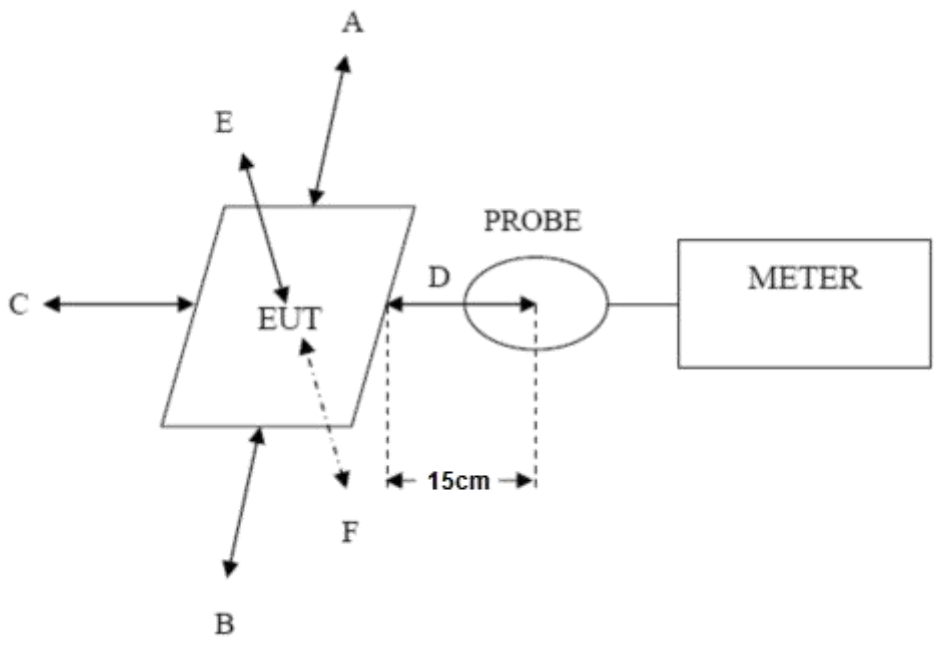
The test distance of Position E on the front side is 20cm, the test distance of Position A,B,C,D is 15cm using the equipment list above for determining compliance with the MPE requirements of FCC Part 1.1310.

The RF power density was measured at Under maximum load test.

The test distance of Position E on the front side is 20cm, the test distance of Position A,B,C,D is 15cm, the field probes were positioned at the location where there is maximum field strength. The maximum E-field and H-field is reported below.

This device uses a wireless charging circuit for power transfer operating at the frequency of 110.1KHz -205kHz. Thus, the 300kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).

**TEST Setup**



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## TEST Limits

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm$^2$) | Averaging time (minutes) |
|---|---|---|---|---|
| (A) Limits for Occupational/Controlled Exposure | | | | |
| 0.3-3.0 | 614 | 1.63 | *100 | 6 |
| 3.0-30 | 1842/f | 4.89/f | *900/f$^2$ | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1,500 | | | f/300 | 6 |
| 1,500-100,000 | | | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 0.3-1.34 | 614 | 1.63 | *100 | 30 |
| 1.34-30 | 824/f | 2.19/f | *180/f$^2$ | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1,500 | | | f/1500 | 30 |
| 1,500-100,000 | | | 1.0 | 30 |

f = frequency in MHz * = Plane-wave equivalent power density

## Measuring Device and Test Equipment

| Description | Manufacturer | Model | S/N | Cal. Until |
|---|---|---|---|---|
| Probe FHP(1Hz-400KHz) | Narda Safety Test Solutions GmbH | EHP-50F | J-0015 | Nov 11, 2022 |
| Adapter | N/A | N/A | N/A | N/A |
| PHONE 1 | HUAWEI | P40 | N/A | N/A |

## TEST MODE

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| MODE | TEST MODE DESCRIPTION |
|---|---|
| 1 | Wireless charging mode(Full load) |
| 2 | Wireless charging mode(Half load) |
| 3 | Wireless charging mode(Null load) |
| Note:<br>1. The Mode 1 was the worst case and only the data of the worst case record in this report. | |

**TEST RESULT**

☒ **Passed** ☐ **Not Applicable**

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| | | | |
|---|---|---|---|
| EUT | PORTABLE POWER STATION | Model Name. : | QE01B(US) |
| Pressure: | 1010hPa | Test Date: | 2022-8-26 |
| Test Voltage: | Output:10W(Max) | Test Mode: | Mode 1 (worse case) |

| E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EUT Side** | **Frequency Range (KHz)** | **Probe A (V/m)** | **Probe B (V/m)** | **Probe C (V/m)** | **Probe D (V/m)** | **Probe E (V/m)** | **Limits (V/m)** | **50% Limit (V/m)** |
| Full load | 110~205 | 0.68 | 0.69 | 0.66 | 0.65 | 0.75 | 614 | 307 |
| Half load | 110~205 | 0.65 | 0.66 | 0.63 | 0.63 | 0.73 | | |
| Null load | 110~205 | 0.62 | 0.64 | 0.60 | 0.61 | 0.71 | | |

| H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EUT Side** | **Frequency Range (KHz)** | **Probe A** (A/m) | **Probe B** (A/m) | **Probe C** (A/m) | **Probe D** (A/m) | **Probe E** (A/m) | **Limits (A/m)** | **50% Limit (A/m)** |
| Full load | 110~205 | 0.43 | 0.44 | 0.42 | 0.43 | 0.54 | 1.63 | 0.815 |
| Half load | 110~205 | 0.40 | 0.41 | 0.40 | 0.41 | 0.52 | | |
| Null load | 110~205 | 0.39 | 0.40 | 0.38 | 0.40 | 0.50 | | |

Remark: The device meets the mobile RF exposure limit at a 15cm separation distance as specified in §2.1091 of the FCC Rules.

Note:Only the Mode1 worst case modes is recorded in the report.

KSIGN(Guangdong) Testing Co, Ltd.

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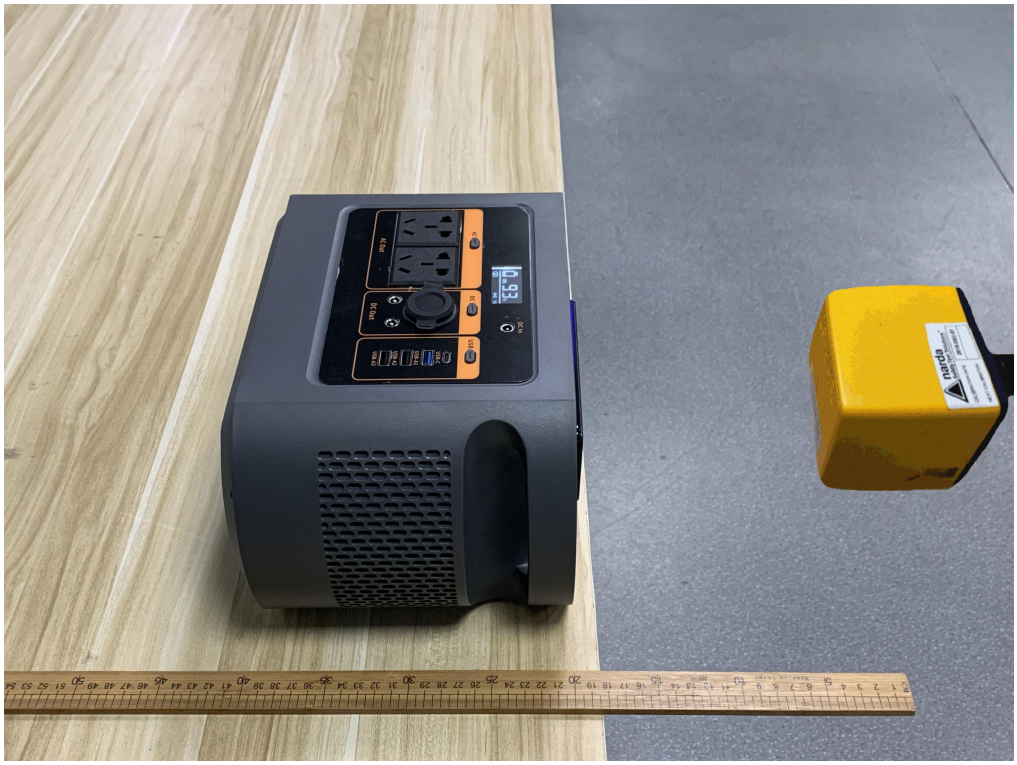
## PHOTOGRAPHS OF TEST SETUP

Position E



Position A

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Position B

Position C

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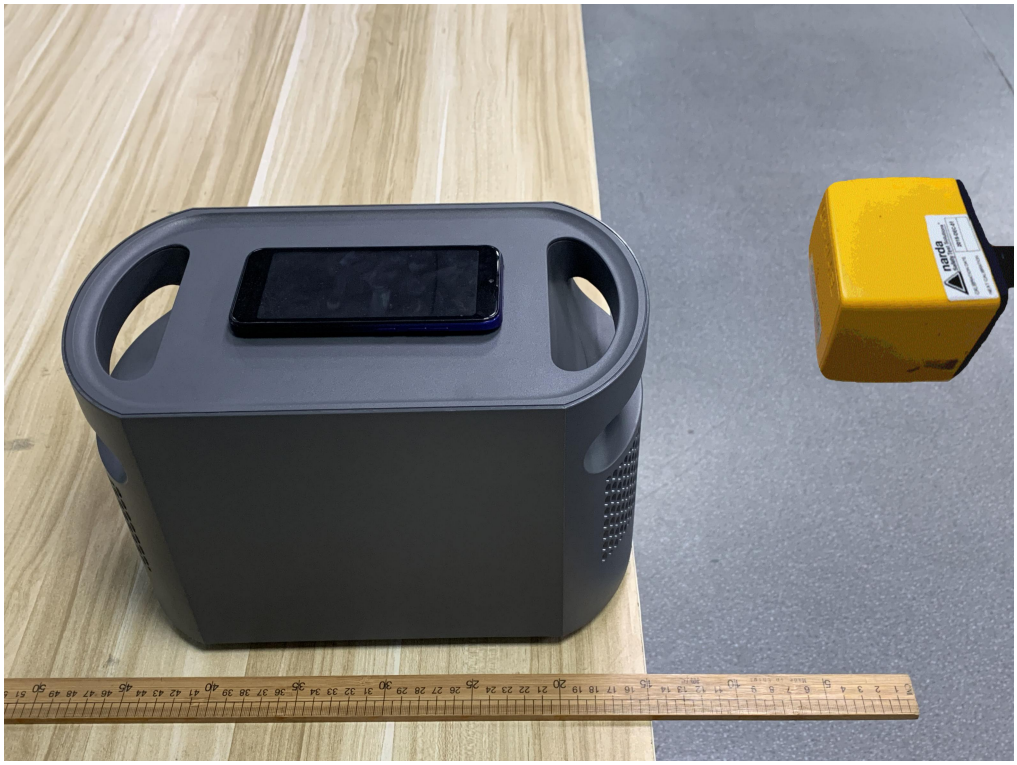
Position D



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