

Nantong Tenchown Intelligent Technology Co., Ltd MPE ASSESSMENT REPORT

Report Type: FCC MPE assessment report

Model: TC-C-W, TC-C-W(02)

REPORT NUMBER: 240500464SHA-002

ISSUE DATE: August 13, 2024

DOCUMENT CONTROL NUMBER: TTRFFCCMPE-02_V1 © 2018 Intertek



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|--------------|---|---|
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| | | Report no.: 240500464SHA-002 |
| Applicant | : | Nantong Tenchown Intelligent Technology Co., Ltd |
| | | No.18 Xisu Road, High-tech District, Hai'an Country, NANTONG CITY Jiangsu 226600 |
| Manufacturer | : | Nantong Tenchown Intelligent Technology Co., Ltd |
| | | No.18 Xisu Road, High-tech District, Hai'an Country, NANTONG CITY Jiangsu 226600 |
| FCC ID | : | 2A57E-TC-C-W2 |

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

FCC PART 1 SECTION 1.1310

PREPARED BY:

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REVIEWED BY:

Reviewer Wakeyou Wang

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Revision History

| Report No. | Version | Description | Issued Date |
|------------------|---------|-------------------------|-----------------|
| 240500464SHA-002 | Rev. 01 | Initial issue of report | August 13, 2024 |
| | | | |
| | | | |



Measurement result summary

| TEST ITEM | FCC REFERANCE | TEST RESULT | NOTE |
|-------------|---------------|-------------|------|
| RF Exposure | 1.1310 | Pass | - |

Notes: 1: NA =Not Applicable

2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

3: Additions, Deviations and Exclusions from Standards: None.

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1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

| Product name: | Wireless charging |
|-----------------------|--|
| Type/Model: | TC-C-W, TC-C-W(02) |
| | EUT is a wireless charger, all models are the same except USB port, |
| | secondary circuit for USB drive and model name. after evaluation, we |
| Description of EUT: | choose TC-C-W for all tests. |
| | Input: 125VAC, 60Hz, 0.8A. |
| | DC output (single use only): 29VDC, 2A |
| | Wireless output: 15W MAX |
| Rating: | USB A+USB C output: 5VDC, 2A total (for model TC-C-W only) |
| Category of EUT: | Class B |
| EUT type: | Table top 🔲 Floor standing |
| Software Version: | / |
| Hardware Version: | / |
| Sample received date: | July 24, 2024 |
| Date of test: | July 27, 2024~ August 9, 2024 |

1.2 Technical Specification

| Frequency Range: | 111kHz – 205kHz |
|------------------|--------------------|
| Modulation: | ASK |
| Antenna: | Coil antenna, OdBi |

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1.3 Description of Test Facility

| Name: | Intertek Testing Services (Shanghai FTZ) Co., Ltd. |
|------------|--|
| Address: | Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China |
| Telephone: | 86 21 61278200 |
| Telefax: | 86 21 54262353 |

| The test facility is recognized, | CNAS Accreditation Lab Registration No. CNAS L21189 |
|--------------------------------------|---|
| certified, or accredited by these | FCC Accredited Lab Designation Number: CN0175 |
| organizations: | IC Registration Lab CAB identifier.: CN0014 |
| | VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252 |
| | A2LA Accreditation Lab Certificate Number: 3309.02 |

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2 TEST SPECIFICATIONS

2.1 Standards or specification

FCC PART 1 SECTION 1.1310 KDB 680106 D01 Wireless Power Transfer v04

2.2 Mode of operation during the test

Within this test report, EUT was tested under its rating voltage and frequency (120V, 60Hz). The 0%/50%/100% battery capacity was tested and the 100% battery capacity was worst case.

2.3 Test peripherals list

| Item No. | Name | Band and Model | Description |
|----------|--------------|----------------|-------------------|
| 1 | Mobile phone | Apple iPhone12 | S/N: FFYFP8EV0DYL |
| | | | |

2.4 Record of climatic conditions

| Test Item | Temperature | Relative Humidity | Pressure |
|-------------|-------------|-------------------|----------|
| | (°C) | (%) | (kPa) |
| RF Exposure | 24 | 53 | 101 |



2.5 Instrument list

| Used | Equipment | Manufacturer | Туре | Internal no. | Due date |
|-------------|--------------------------|--------------|---------|--------------|------------|
| \boxtimes | Emf meter | Narda | elt-400 | EC2928 | 2025-07-15 |
| \boxtimes | Broadband field meter | Narda | Nbm-550 | EC 6113 | 2025-04-07 |
| \boxtimes | Probe ef 0391 | Narda | Ef 0391 | EC 6113-1 | 2025-04-07 |
| \square | Probe hf 0361 | Narda | Hf3061 | EC 6113-2 | 2025-04-07 |
| | EMF meter | Narda | ehp-50f | EC 6527 | 2024-09-17 |

2.6 Measurement uncertainty

| Test Items | Expanded Uncertainty (k=2) | |
|------------|-------------------------------|--|
| H-field | 0.9 dB | |
| E-field | 1.1 dB | |

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3 RF Exposure Assessment

Test result: Pass

3.1 Assessment Limit

Reference: 47 CFR §1.1310, KDB 680106

Limits for General Population/Uncontrolled Exposure

| Frequency range | Electric field strength | Magnetic field strength | Power density | Averaging time |
|-----------------|----------------------------|----------------------------|-----------------------|----------------|
| [MHz] | [V/m] | [A/m] | [mW/cm ²] | [minutes] |
| 0.1 – 0.3 | 614 | 1.63 | *100 | 30 |
| 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 |

Limits for Occupational/Controlled Exposure

| Frequency range [MHz] | Electric field strength [V/m] | Magnetic field strength [A/m] | Power density [mW/cm ²] | Averaging time [minutes] |
|--------------------------|-------------------------------------|-------------------------------------|--|-----------------------------|
| 0.1 - 0.3 | 614 | 1.63 | *100 | 6 |
| 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 |

3.2 Assessment Configuration



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3.3 Assessment Results

Test result of Magnetic Field Strength:

| Test Position | Test distance | Test result | Limit | Result |
|---------------|---------------|-------------|-----------|-------------|
| | (cm) | (A/m) | (A/m) | (Pass/Fail) |
| A: Right | 20 | 0.124 | 1.63 *0.5 | Pass |
| B: Left | 20 | 0.135 | 1.63 *0.5 | Pass |
| C: Front | 20 | 0.206 | 1.63 *0.5 | Pass |
| D: Back | 20 | 0.427 | 1.63 *0.5 | Pass |
| Е: Тор | 20 | 0.516 | 1.63 *0.5 | Pass |

Test result of Electric Field Strength:

| Test Position | Test distance | Test result | Limit | Result |
|---------------|---------------|-------------|----------|-------------|
| | (cm) | (V/m) | (V/m) | (Pass/Fail) |
| A: Right | 20 | 1.02 | 614 *0.5 | Pass |
| B: Left | 20 | 1.35 | 614 *0.5 | Pass |
| C: Front | 20 | 2.24 | 614 *0.5 | Pass |
| D: Back | 20 | 2.54 | 614 *0.5 | Pass |
| Е: Тор | 20 | 4.20 | 614 *0.5 | Pass |