

MPE REPORT

Bamboo charging station

Model No.: 8801,8802, 8805, 8807, 8810, 8811, 8812, 8813, 8814

FCC ID: 2BEQC-8801

Report No.:NCT24004291E-2

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Prepared for

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Prepared by

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TEST REPORT DESCRIPTION

Applicant : Dongguan Xunhomon Technology Co.,Ltd
Address : R502,Building 1,No.12 Jincheng street,Qingxi Town, Dongguan city, Guangdong province, China
Manufacturer : Dongguan Xunhomon Technology Co.,Ltd
Address : R502,Building 1,No.12 Jincheng street,Qingxi Town, Dongguan city, Guangdong province, China
EUT : Bamboo charging station
Model Name : 8801,8802, 8805, 8807, 8810, 8811, 8812, 8813, 8814
Trademark : Xunhomon

Measurement Procedure Used:

FCC Part 1(1.1310) and Part 2(2.1091)
KDB680106 D01 Wireless Power Transfer v04

The device described above is tested by Shenzhen NCT Testing Technology Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen NCT Testing Technology Co., Ltd. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen NCT Testing Technology Co., Ltd.

Test Engineer:



Keven Wu / Engineer

Technical Manager:



Henry Wang / Manager



1. SUMMARY OF TEST RESULT

EMISSION		
Description of Test Item	Standard & Limits	Results
MPE	FCC Part 1(1.1310) and Part 2(2.1091) KDB680106 D01 Wireless Power Transfer v04	Pass
Note: N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT	:	Bamboo charging station
Model Number	:	8801
Serial Number	:	8802, 8805, 8807, 8810, 8811, 8812, 8813, 8814
Mode difference	:	All the same except the model number.
Power Rating	:	DC Input: DC 9V/3A USB output:DC 5V/2A Wireless charging for Phone 1: 5W/7.5W/10W/15W(Max) Wireless charging for Phone 2: 5W/7.5W/10W/15W(Max) Wireless charging for earphone: 5W Wireless charging for watch: 3W Total Output: 27W Max
Operation Frequency for WPT	:	111-205 KHz for Phone 1 111-205 KHz for Phone 2 319.6KHz for watch 125KHz for earphone
Modulation	:	MSK
Antenna Type:	:	Coil Antenna
Date of Test	:	Jan. 22, 2024 to Feb. 02, 2024

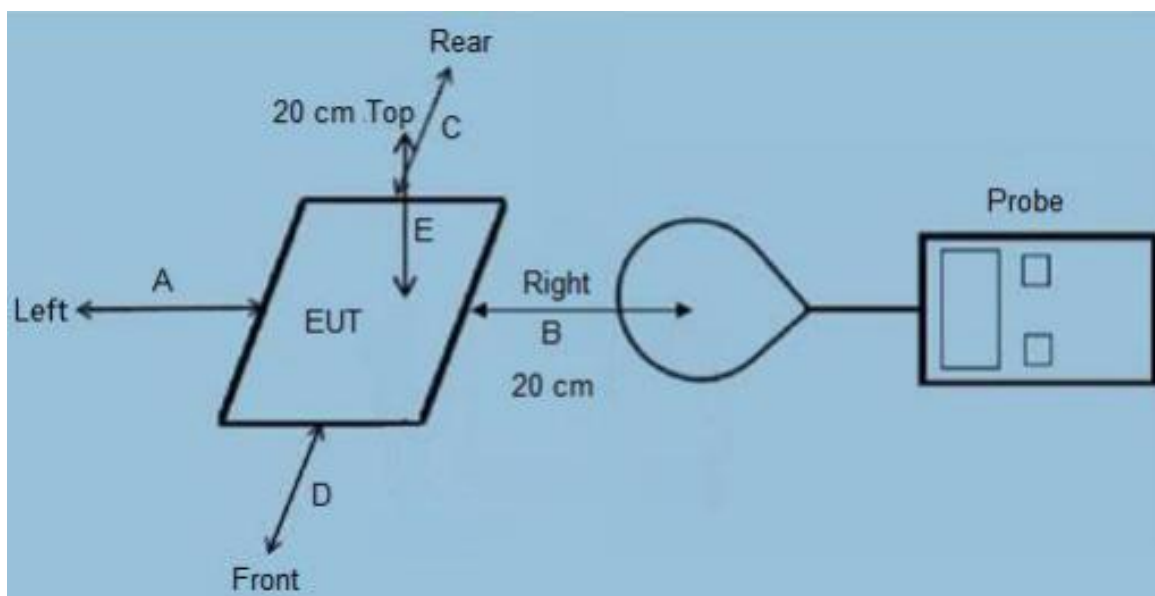
2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Bamboo charging station	Xunhomon	8801	N/A	EUT
E-2	Adapter	N/A	AS3603A-0903000US	N/A	Auxiliary
E-3	Phone 1	Apple	iPhone 12	N/A	Auxiliary
E-4	Phone 2	Apple	iPhone 12	N/A	Auxiliary
E-5	watch	Apple	iWatch S9	N/A	Auxiliary
E-6	Earphone	Apple	AirPods Pro3	N/A	Auxiliary

Note: (1)The support equipment was authorized by Declaration of Confirmation.
(2)For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.3. Test Setup



2.4. Description of Test Facility

Site Description

EMC Lab. : Accredited by CNAS, 2022-09-27
The certificate is valid until 2028.01.07
The Laboratory has been assessed and proved to be in compliance with
CNAS-CL01:2006 (identical to ISO/IEC 17025:2017)
The Certificate Registration Number is L8251

Designation Number: CN1347
Test Firm Registration Number: 894804
Accredited by A2LA, June 14, 2023
The Certificate Registration Number is 6837.01

Accredited by Industry Canada, November 09, 2018
The Conformity Assessment Body Identifier is CN0150
Company Number: 30806

Name of Firm : Shenzhen NCT Testing Technology Co., Ltd.
Site Location : A101&2F B2, Fuqiao 6th Area, Xintian Community, Fuhai Street, Baoan
District, Shenzhen, People's Republic of China

2.5. Measurement Uncertainty

Parameter	Uncertainty
Electric Field Emissions	$\pm 0.08\text{V/m}$
Magnetic Field Emissions	$\pm 0.02\text{A/m}$
uT	± 0.01

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. For MPE Measurement

Used	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
<input checked="" type="checkbox"/>	Exposure Level Tester(1Hz-400KHz)	Narda	EHP-200A	180ZX00634	2023.06.21	2024.06.20

4. RF EXPOSURE

4.1. Measuring Standard

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

4.2. Requirments

Three different categories of transmitters are defined by the FCC in OET Bulletin 65. These categories are fixed installation, mobile, and portable and are defined as follows:

- o Fixed Installations: fixed location means that the device, including its antenna, is physically secured at a permanent location and is not able to be easily moved to another location. Additionally, distance to humans from the antenna is maintained to at least 2 meters.
- o Mobile Devices: a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to be generally used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structures and the body of the user or nearby persons. Transmitters designed to be used by consumers or workers that can be easily re-located, such as a wireless modem operating in a laptop computer, are considered mobile devices if they meet the 20 centimeter separation requirement. The FCC rules for evaluating mobile devices for RF compliance are found in 47 CFR §2.1091.
- o Portable Devices: a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user. Portable device requirements are found in Section 2.1093 of the FCC's Rules (47 CFR§2.1093). The FCC also categorizes the use of the device as based upon the user's awareness and ability to exercise control over his or her exposure. The two categories defined are Occupational/ Controlled Exposure and General Population/Uncontrolled Exposure. These two categories are defined as follows:
 - Occupational/Controlled Exposure: In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means. Awareness of the potential for RF exposure in a workplace or similar environment can be provided through specific training as part of a RF safety program. If appropriate, warning signs and labels can also be used to establish such awareness by providing prominent information on the risk of potential exposure and instructions on methods to minimize such exposure risks.
 - General Population/Uncontrolled Exposure: The general population / uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices.

4.3. Test configuration

1. The field strength of both E-field and H-field was measured at 20cm (the 20 cm measured from the center of the probe(s) to the edge of the device) using the equipment list above for determining compliance with the MPE requirements of FCC Part 1.1310.
2. The RF power density was measured at 3 different charge conditions: min load, mid load, max load.
3. Maximum E-field and H-field measurements were made 20cm from each side of the EUT. Along the side of the EUT and still 20cm away from the edge of the EUT, the field probes were positioned at the location where there is maximum field strength. The maximum E-field and H-field is reported below.
4. This device uses operating at the frequency of 111-319.6kHz. Thus, the 300kHz limits were used: E-field Limit = 614 (V/m); H-field limit = 1.63 (A/m).
5. The EUT were measured according to the dictates of KDB680106 D01 Wireless Power Transfer v04

4.4. Limits

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

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

Test Mode:

Mode	Description	Remark
1	Adapter + EUT + Phone 1 + Phone 2 + watch +Earphone t	Full Load/Half Load/No Load
2	Adapter + EUT + Phone 1 + Phone 2 + watch +USB output	Full Load/Half Load/No Load
3	Adapter + EUT + Phone 1 + Phone 2 + Earphone +USB output	Full Load/Half Load/No Load
4	Adapter + EUT + Phone 1 + watch +Earphone +USB output	Full Load/Half Load/No Load
5	Adapter + EUT + Phone 2 + watch +Earphone +USB output	Full Load/Half Load/No Load
6	Adapter + EUT + Phone 1	Full Load/Half Load/No Load
7	Adapter + EUT + Phone 2	Full Load/Half Load/No Load
8	Adapter + EUT + watch	Full Load/Half Load/No Load
9	Adapter + EUT + Earphone	Full Load/Half Load/No Load
10	Adapter + EUT + USB output	Full Load/Half Load/No Load
11	Adapter + EUT + Phone 1 + Phone 2	Full Load/Half Load/No Load
12	Adapter + EUT + Phone 1 + watch	Full Load/Half Load/No Load
13	Adapter + EUT + Phone 1 + Earphone	Full Load/Half Load/No Load
14	Adapter + EUT + Phone 1 + USB output	Full Load/Half Load/No Load
15	Adapter + EUT + Phone 2 + watch	Full Load/Half Load/No Load
16	Adapter + EUT + Phone 2 + Earphone	Full Load/Half Load/No Load
17	Adapter + EUT + Phone 2 + USB output	Full Load/Half Load/No Load
18	Adapter + EUT + watch +Earphone	Full Load/Half Load/No Load
19	Adapter + EUT + watch +USB output	Full Load/Half Load/No Load
20	Adapter + EUT + Earphone +USB output	Full Load/Half Load/No Load
21	Adapter + EUT + Phone 1 + Phone 2 + watch	Full Load/Half Load/No Load
22	Adapter + EUT + Phone 1 + Phone 2 + Earphone	Full Load/Half Load/No Load
23	Adapter + EUT + Phone 1 + Phone 2 + USB output	Full Load/Half Load/No Load
24	Adapter + EUT + Phone 1 + watch +Earphone	Full Load/Half Load/No Load
25	Adapter + EUT + Phone 1 + watch +USB output	Full Load/Half Load/No Load
26	Adapter + EUT + Phone 1 + Earphone +USB output	Full Load/Half Load/No Load
27	Adapter + EUT + Phone 2 + watch +Earphone	Full Load/Half Load/No Load
28	Adapter + EUT + Phone 2 + watch +USB output	Full Load/Half Load/No Load
29	Adapter + EUT + Phone 2 + Earphone +USB output	Full Load/Half Load/No Load
30	Adapter + EUT + watch + Earphone +USB output	Full Load/Half Load/No Load
31	Adapter + EUT + Phone 1 + Phone 2 + watch +Earphone +USB output	Full Load/Half Load/No Load
Remark: All the modes have tested and recorded the worst Mode (Mode 1: Full Load) in the report		

4.5. Measuring Results

Test Mode: Mode 1 Full Load

Electric Field Emissions		
Test Position	Measure Value (V/m)	Limit(V/m)
Top	2.657	614
Left	2.826	614
Right	2.734	614
Rear	2.985	614
Front	2.952	614
Magnetic Field Emissions		
Test Position	Measure Value (A/m)	Limit(A/m)
Top	0.0353	1.63
Left	0.0402	1.63
Right	0.0459	1.63
Rear	0.0645	1.63
Front	0.0611	1.63

Test Mode: Mode 1 Half Load

Electric Field Emissions		
Test Position	Measure Value (V/m)	Limit(V/m)
Top	1.623	614
Left	1.822	614
Right	1.712	614
Rear	1.978	614
Front	1.963	614
Magnetic Field Emissions		
Test Position	Measure Value (A/m)	Limit(A/m)
Top	0.0342	1.63
Left	0.0466	1.63
Right	0.0409	1.63
Rear	0.0557	1.63
Front	0.0523	1.63

Test Mode: Mode 1 No Load

Electric Field Emissions		
Test Position	Measure Value (V/m)	Limit(V/m)
Top	0.226	614
Left	0.337	614
Right	0.316	614
Rear	0.482	614
Front	0.431	614
Magnetic Field Emissions		
Test Position	Measure Value (A/m)	Limit(A/m)
Top	0.0095	1.63
Left	0.0137	1.63
Right	0.0129	1.63
Rear	0.0265	1.63
Front	0.0248	1.63

5. PHOTOGRAPHS OF TEST SETUP

