



中认信通
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Bytech NY Inc.

Address: 2585 West 13th Street, Brooklyn NY 11223, New York, United States

FCC ID: 2AHN6-OPCP522

Product Name: 10W Mag Wireless Charger Light

Standard(s): 47 CFR Part 1.1310

47 CFR Part 2.1091

KDB 680106 D01 RF Exposure Wireless Charging
Apps v04

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: 2503R48042E-00

Date Of Issue: 2025/3/26

Reviewed By: Calvin Chen

Title: RF Engineer

Approved By: Sun Zhong

Title: Manager

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk “★”.

Each test item follows the test standard(s) without deviation.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2503R48042E-00	Original Report	2025/3/26

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General

EUT Name:	10W Mag Wireless Charger Light
EUT Model:	BY-OP-CP-522-AC
Operation Frequency:	110-205 kHz
Rated Input Voltage:	DC 9V from Type-C port
Maximum Wireless Output:	10 Watts
Sample Number:	2ZTZ-1
EUT Received Date:	2025/3/16
EUT Received Status:	Good

1.1.2 Antenna Information Detail▲

Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain (dBi)
Coil	Unknown	Unknown	Unknown
The Method of §15.203 Compliance: ☒ Antenna was permanently attached to the unit. ☐ Antenna use a unique type of connector to attach to the EUT. ☐ Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.			

1.1.3 Accessory Information

Accessory Description	Manufacturer	Model
/	/	/

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition

EUT Operation Mode:	The system was configured for testing in normal use Mode, which was provided by the manufacturer. Test Mode: Wireless Charging(10 Watts)
Equipment Modifications:	No
EUT Exercise Software:	No

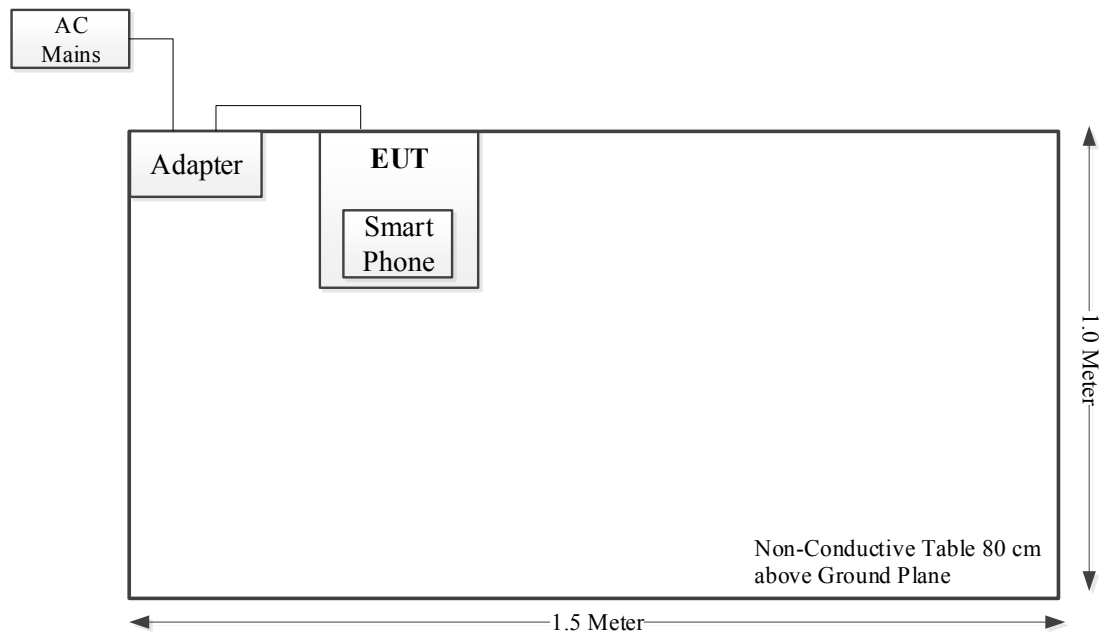
1.2.2 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
UGREEN	Adapter	CD161	40715
TECNO	Smart Phone	CM8	357161336192694

1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Power Cable	NO	NO	1.5	Adapter	EUT

1.2.4 Block Diagram of Test Setup



1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
E-Field	1.30 dB
H-Field	1.30 dB
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$

2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
FCC§1.1310 §2.1091	Maximum Permissible Exposure (MPE)	Compliant

3. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

3.1 Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
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
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

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

According with 680106 D01 Wireless Power Transfer v04 clause 3.2

Accordingly, for § 2.1091-Mobile devices, the MPE limits between 100 kHz to 300 kHz are to be considered the same as those at 300 kHz in Table 1 of § 1.1310, that is, 614 V/m and 1.63 A/m, for the electric field and magnetic field, respectively. For § 2.1093-Portable devices below 4 MHz and down to 100 kHz, the MPE limits in § 1.1310 (with the 300 kHz limit applicable all the way down to 100 kHz) can be used for the purpose of equipment authorization in lieu of SAR evaluations.

According to 680106 D01 Wireless Power Transfer v04 clause 5.2

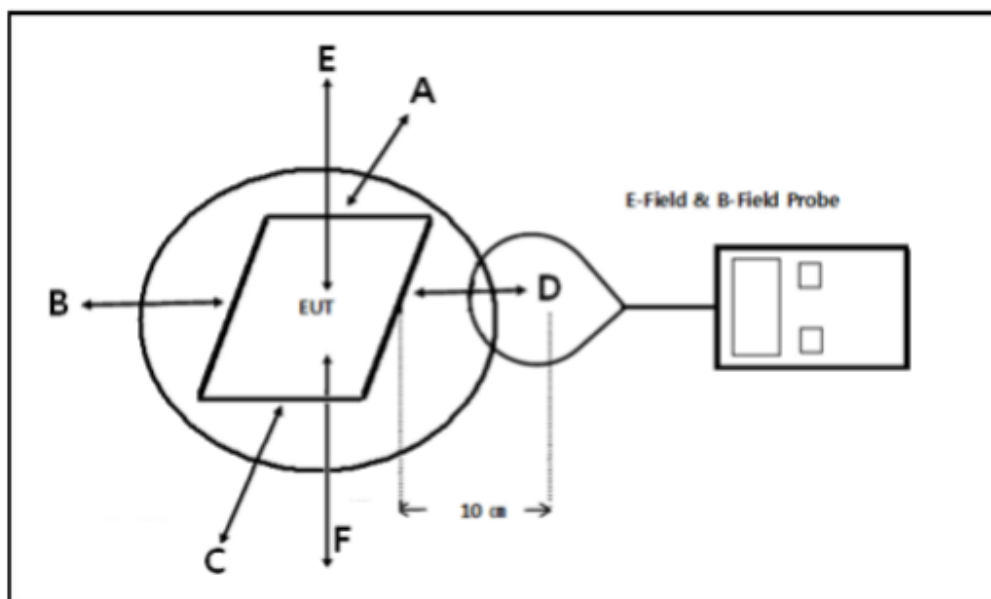
There might be situations where the WPT RF emissions are limited enough that even operations in a “crowded” environment, where many similar WPT devices are present, do not pose significant EMC and RF exposure concerns. In this scenario, and for devices operating within a one-meter distance from the receiver, as defined above, a manufacturer will not have to submit an “Equipment Compliance Review” KDB, and receive FCC concurrence before proceeding with equipment authorization. This exception to the requirement of submitting the ECR to obtain FCC concurrence only applies when all the following criteria (1) through (6) are met:

- (1) The power transfer frequency is below 1 MHz.
- (2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.
- (3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)
- (4) Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).

(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a $1/d$ (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.

(6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.

3.2 Block Diagram of Test Setup



3.3 Test Procedures

- 1) Perform H-field and E-field measurements for each all sides of the EUT at 20cm, along all the principal axes defined with respect to the orientation of the transmitting element(e.g., coil or antenna).
- 2) The highest emission level was recorded and compared with limit.
- 3) The EUT was measured according to 680106 D01 Wireless Power Transfer v04

3.4 Test Data:

Sample Number:	2ZTZ-1	Test Date:	2025/3/26
Test Site:	RF	Test Mode:	Wireless Charging
Tester:	David Huang	Test Result:	pass

Environmental Conditions:

Temperature: (°C)	25.3	Relative Humidity: (%)	50	ATM Pressure: (kPa)	101.5
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Narda	Electric and Magnetic Field Probe-Analyzer	EHP-200AC	180ZX10204	2023/09/01	2026/08/31

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:**H-Field Strength:**

Frequency Range (kHz)	Position A (A/m)	Position B (A/m)	Position C (A/m)	Position D (A/m)	Position E (A/m)	Position F (A/m)	50% Limit (A/m)	Limit (A/m)
116	0.0382	0.0397	0.0485	0.0394	0.037	0.0208	0.815	1.63

E-Field Strength:

Frequency Range (kHz)	Position A (V/m)	Position B (V/m)	Position C (V/m)	Position D (V/m)	Position E (V/m)	Position F (V/m)	50% Limit (V/m)	Limit (V/m)
116	0.9015	0.3991	0.6261	0.6258	0.734	1.0044	307	614

Considerations of compliance 680106 D01 Wireless Power Transfer v04 clause 5.2:

(1) Power transfer frequency is less than 1 MHz

Yes, the operation frequency is 110-205 kHz.

(2) The output power from each transmitting element (e.g., coil) is less than or equal to 15 watts.

Yes, the maximum output power of primary coil is 10 Watts.

(3) A client device providing the maximum permitted load is placed in physical contact with the transmitter (i.e., the surfaces of the transmitter and client device enclosures need to be in physical contact)

Yes, client device is placed directly in contact with the transmitter

(4) Only § 2.1091-Mobile exposure conditions apply (i.e., this provision does not cover § 2.1093-Portable exposure conditions).

Yes, mobile exposure conditions.

(5) The E-field and H-field strengths, at and beyond 20 cm surrounding the device surface, are demonstrated to be less than 50% of the applicable MPE limit, per KDB 447498, Table 1. These measurements shall be taken along the principal axes of the device, with one axis oriented along the direction of the estimated maximum field strength, and for three points per axis or until a 1/d (inverse distance from the emitter structure) field strength decay is observed. Symmetry considerations may be used for test reduction purposes. The device shall be operated in documented worst-case compliance scenarios (i.e., the ones that lead to the maximum field components), and while all the radiating structures (e.g., coils or antennas) that by design can simultaneously transmit are energized at their nominal maximum power.

Yes, the test result for H-field and E-field strength are less than 50% of the MPE limit.

(6) For systems with more than one radiating structure, the conditions specified in (5) must be met when the system is fully loaded (i.e., clients absorbing maximum power available), and with all the radiating structures operating at maximum power at the same time, as per design conditions. If the design allows one or more radiating structures to be powered at a higher level while other radiating structures are not powered, then those cases must be tested as well. For instance, a device may use three RF coils powered at 5 W, or one coil powered at 15 W: in this case, both scenarios shall be tested.

Yes, the device only with one WPT coil.

4. EUT PHOTOGRAPHS

Please refer to the attachment 2501R48041E-RF EUT EXTERNAL PHOTOGRAPHS and 2501R48041E-RF EUT INTERNAL PHOTOGRAPHS

5. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2503R48042E-00-TSP TEST SETUP PHOTOGRAPHS.

******* END OF REPORT *******