Page 1 of 12 Report No.: AIT22111601W2

# **FCC TEST REPORT**

Client Information:

Applicant: QUEST USA CORP

Applicant add.: 495 Flatbush Ave, Brooklyn, NY 11225, USA

Manufacturer: TELEPHONE EST(HK)CO.,LTD

Manufacturer add.: Room 706, 7F, FuLi Tianhe commercial building, Linhe East Road and

Tianhe District, Guangzhou, China

**Product Information:** 

Product Name: Wireless charger

Model No.: IJ10010-BL,IJ10011-BL,IJ10012-BL

Brand Name: IJOY

FCC ID: 2AJQ7GEODE

Applicable standards: FCC Rules and Regulations part 2.1091

KDB680106 D01v03

Prepared By:

## Dongguan Yaxu (AiT) Technology Limited

No.22, Jingianling 3rd Street, Jitigang, Huangjiang, Dongguan,

Guangdong, China

Tel.: +86-769-8202 0499 Fax.: +86-769-8202 0495

Date of Receipt: Nov. 16, 2022 Date of Test: Nov. 16~ Dec. 14, 2022

Date of Issue: Dec. 15, 2022 Test Result: Pass

This device described above has been tested by Dongguan Yaxu (AiT) Technology Limited and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Note: This report shall not be reproduced except in full, without the written approval of Dongguan Yaxu (AiT) Technology Limited, this document may be altered or revised by Dongguan Yaxu (AiT) Technology Limited, personal only, and shall be noted in the revision of the document. This test report must not be used by the client to claim product endorsement.

Reviewed by: 1/2/2007 roved by:

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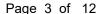
Seal-Chen



# Contents

Report No.: AIT22111601W2

TEST FACILITY	3
1.1 Deviation from standard	3
1.2 Abnormalities from standard conditions	3
1.3 Test Location	3
1.4 Environmental conditions	3
2 GENERAL INFORMATION	4
A Boodwal Bookstotter	
2.1 Product Description	4
2.2 Description of the test mode	5
2.3 Special Accessories	
2.5 Statement of the measurement uncertainty	
2.6 Equipments Used during the Test	
2.0 Equipments Osed during the rest	
3 TEST CONDITIONS AND RESULTS	7
3.1 LIMITS	
3.2 TEST SETUP	7
3.3 TEST PROCEDURE	8
3.4 TEST RESULT	
3.5 Conclusion	9
TEST SETUD DUOTOS OF THE EUT	1.0





1 Test Facility

# The test facility is recognized, certified or accredited by the following organizations: .CNAS- Registration No: L6177

Dongguan Yaxu (AiT) technology Limited is accredited to ISO/IEC 17025:2017 general Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the competence of testing and calibration laboratories) on Aug.04, 2020

## FCC-Registration No.: 703111 Designation Number: CN1313

Dongguan Yaxu (AiT) technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

## IC —Registration No.: 6819A CAB identifier: CN0122

The 3m Semi-anechoic chamber of Dongguan Yaxu (AiT) technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6819A

#### A2LA-Lab Cert. No.: 6317.01

Dongguan Yaxu (AiT) technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

#### 1.1 Deviation from standard

None

## 1.2 Abnormalities from standard conditions

None

# 1.3 Test Location

## Dongguan Yaxu (AiT) Technology Limited

Address: No.22, Jinqianling 3rd Street, Jitigang, Huangjiang, Dongguan, Guangdong, China

Tel.: +86-769-8202 0499 Fax.: +86-769-8202 0495

#### 1.4 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar



Page 4 of 12 Report No.: AIT22111601W2

# 2 General Information

# 2.1 Product Description

EUT Name:	Wireless charger
Model No:	IJ10010-BL
Serial Model:	IJ10011-BL,IJ10012-BL
Test sample(s) ID:	22111601
Sample(s) Status:	Engineer sample
Serial No.:	N/A
Operation frequency:	113kHz-205kHz
Modulation Technology:	FSK
Antenna Type:	loop coil Antenna
Antenna gain:	0dBi
Hardware version.:	N/A
Software version.:	N/A
Power supply:	Input:5V2A/9V2A Output:10W(Max)
Battery:	N/A
Note:	For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

Page 5 of 12 Report No.: AIT22111601W2

# 2.2 Description of the test mode

Equipment under test was operated during the measurement under the following conditions: ☐ Charging and communication mode

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

# 2.3 Special Accessories

Follow auxiliary equipment(s) test with EUT that provided by the manufacturer or laboratory is listed as follow:

Description	Manufacturer	Model	Technical Parameters	Certificate	Provided by
Mobile phone	Apple	A1863	1	CE/FCC	laboratory



#### 2.4 **Measurement results**

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# 2.5 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Shenzhen Global Test Service Co.,Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Test Item	Frequency Range	Measurement Uncertainty	Notes	
Radiated Emission	0.009MHz-30MHz	3.10dB	(1)	
Radiated Emission	30MHz-1GHz	3.75dB	(1)	
Radiated Emission	1GHz-18GHz	3.88dB	(1)	
Radiated Emission	18GHz-40GHz	3.88dB	(1)	
AC Power Line Conducted 0.15MHz ~ 30MHz 1.20dB (1)				
Note (1): The measurement un	certainty is for coverage factor	of k=2 and a level of confidence	e of 95%.	

# 2.6 Equipments Used during the Test

Test Equipment	Manufacturer	Model No.	SN.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
Electric and Magnetic Field Analyzer	Narda	EHP-200A	180ZX10505	2022.06.28	2024.06.27



# **TEST CONDITIONS AND RESULTS**

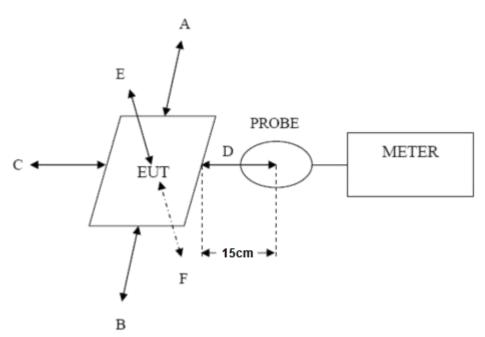
#### 3.1 LIMITS

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).

# 3.2 TEST SETUP



Note: Position A: Front of EUT; Position B: Left of EUT; Position C: back of EUT; Position D: Right of EUT; Position E: Top of EUT(20 cm measure distance);



# 3.3 TEST PROCEDURE

The EUT was placed on a non-conductive table top and the ancillary equipment (e.g.mobile phone) was placed on the EUT for charging.

Maximum E-field and H-field measurements were tested 15cm from each side of the EUT. For top side the measure distance is 20cm.

Along the side of the EUT to center of E-field probe and H-field probe were positioned at the location to search maximum field strength.

# 3.4 TEST RESULT

EUT	Wireless charger	Model Name. :	IJ10010-B
Pressure:	1010hPa	Test Date:	2021-07-08
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)
Full load	110.1~205	0.89	0.88	0.86	0.88	3.02	
Half load	110.1~205	0.83	0.83	0.84	0.83	2.90	614
Null load	110.1~205	0.76	0.73	0.75	0.73	2.89	

H-Field Str	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)
Full load	110.1~205	0.43	0.43	0.45	0.46	0.78	
Half load	110.1~205	0.41	0.40	0.42	0.42	0.65	1.63
Null load	110.1~205	0.42	0.42	0.43	0.41	0.62	

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.



Page 9 of 12 Report No.: AIT22111601W2

Equipment Approval Considerations
The EUT does comply with KDB 680106 D01 as follow table.

Requirements of KDB 680106 D01	Yes / No	Description
Power transfer frequency is less than 1 MHz	Yes	The device operate in the frequency range 110.1KHz~205KHz
Output power from each primary coil is less than 15 watts	Yes	The maximum output power for each primary coil is 15W.
The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes	The transfer system includes only one primary coils.
Client device is placed directly in contact with the transmitter.	Yes	Client device is placed directly in contact with the transmitter.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes	Conform Mixed mobile exposure conditions
The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	Yes	The EUT H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

# 3.5 Conclusion

A minimum safety distance of 0 cm to the antenna is required when the device is charging a smart phone for portable exposure and 20 cm to the antenna for mobile exposure. The detected emissions are below the limitations according FCC KDB 680106.



# 4 Test Setup Photos of the EUT



Test Position A-15cm from the edge of EUT to the geometric center of the probe









Test Position C-15cm from the edge of EUT to the geometric center of the probe











Test Position E-20cm from the edge of EUT to the geometric center of the probe

\*\* End of report \*\*