# **TEST REPORT**

**Reference No.** : WTS20X08055638W-2

FCC ID ...... 2AMRO-CHWRIO107GL

Applicant .....: iOttie Inc

Address .....: 20 West 37th Street 6th FL New York, New York 10018, United States

Product Name .....: iON wireless Duo

Test Model. ....: CHWRIO107GL

**Standards** .....: KDB 680106 D01 V03

Date of Receipt sample .... : Aug.14, 2020

Date of Test.....: Aug.14, 2020 to Sept.02, 2020

Date of Issue .....: Sept.02, 2020

Test Result.....: Pass

#### Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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# **Report version**

Version No.	Date of issue	Description
Rev.00	Sept.02, 2020	Original
/	/	

## 1. GENERAL INFORMATION

## 1.1 Product Description for Equipment Under Test (EUT)

**Client Information** 

Applicant: iOttie Inc

Address of applicant: 20 West 37th Street 6th FL New York, New York

10018, United States

Manufacturer: NuVolta Technologies (Hefei) Co., Ltd

Address of manufacturer: Room 605/606, No. 2800, Building F-1, Innovation

Industrial Park Phase 2, Innovation Avenue,

High-tech Zone, Hefei

Factory#1: Shenzhen Hengtaiying Technology CO.,Ltd Address of factory: 2F,11 Block,Kaetat Industrial Park,liaokeng

Village, Shiyan Street, Bao'an District, Shenzhen,

Guangdong, China.

General Description of EUT		
Product Name:	iON wireless Duo	
Trade Name:	/	
Model No.:	CHWRIO107GL	
Adding Model(s):	/	

Technical Characteristics of EUT		
Frequency Range:	110~148kHz	
Antenna Type:	Coil Antenna	
Rated Voltage:	Stand: DC5V/DC9V/DC12V	
Rated Voltage:	Pad: DC5V	
Rated Current:	Stand: 1A/1.1A/1.25A	
Rated Current.	Pad: 1A	
Reted Dower:	Stand: 5W/10W/15W	
Rated Power:	Pad: 5W	

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# 1.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal Date	<b>Due Date</b>
MPE Measuring	Narda	ELT-400	M-0155/M-0170	2020-07-15	2021-07-14
Instrument	Natua	EL1-400	WI-0133/WI-0170	2020-07-13	2021-07-14
Broadband Field	Nanda	NDM 520	D 1600	2020 06 21	2021 06 20
Meter	Narda	NBM-520	D-1699	2020-06-21	2021-06-20

# 2. RF Exposure Test Report

## 2.1 Standard Applicable

According to § 1.1310 system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

TABLE 1-LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

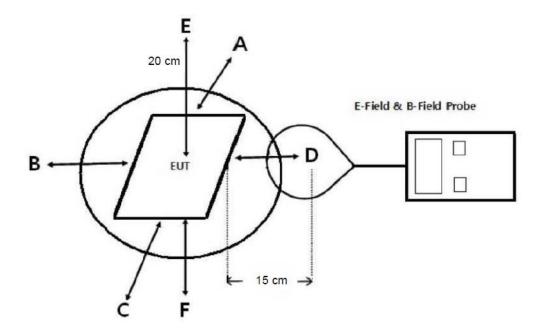
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
	(A) Limits for O	ccupational/Controlled Exp	osure	
0.3-3.0	614	1.63	*100	6
3.0-30	1842/1	4.89/1	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
	(B) Limits for Gener	ral Population/Uncontrolled	Exposure	
0.3-1.34	614	1.63	*100	30
1.34-30	824/1	2.19/1	*180/f <sup>2</sup>	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

## 2.2 Test Conditions

Test Mode	Description	Remark
TM1	Wineless Changing	Input DC19V/1.8A; Output: Pad
TM1	Wireless Charging	DC5V/1A And Stand DC5V1A
TM2	Input DC19V/1.8A; Output	
TM2	Wireless Charging	DC5V/1A And Stand DC9V1.1A
TM2	Window Chamin	Input DC19V/1.8A; Output: Pad
TM3	Wireless Charging	DC5V/1A And Stand DC12V1.25A
Measurement Distance:	15 cm	

#### 2.3 Test Procedure



- a. The measurement probe was placed at test distance(15 cm for A,B,C,D,F and 20 cm for E) which is between the edge of the charger and the geometric center of probe.
- b. The highest emission level was recorded at the measurement points(A, B, C, D, E, F).
- c. The EUT was measured according to the distance of KDB 680106 D01 V03.

#### 2.4 Test Result

The EUT dose comply with item 5.2 of KDB 680106 D01V03

- 1. Power transfer frequency is less that 1 MHz Yes, the device operate in the frequency range from  $110\sim148\,\mathrm{kHz}$ .
- 2. 2. Output power from each primary coil is less than or equal to 15 watts Yes, the maximum output power of the primary coil is equal to 15W.
- 3. 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 client device includes only single primary coils.
- 4. Client device is inserted in or placed directly in contact with the transmitter Yes, Client device is placed directly in contact with the transmitter.
- 5. Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

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Yes, It is mobile exposure conditions only.

6. 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 field strength levels are less than 50% of the MPE limit, refer to test TM1, TM2 list, and the coils can't transmitted simultaneous.

Test Mode: TM1

	Electric Field Emis	sions	
Test Position	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Тор	27	614	307
Bottom	28	614	307
Side 1	30	614	307
Side 2	26	614	307
Side 3	26	614	307
Side 4	29	614	307
	15 (1 TILLT )		
	Magnetic Field Emis		T
Test Position	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m)
Тор	0.27	1.63	0.815
Bottom	0.23	1.63	0.815
Side 1	0.23	1.63	0.815
Side 2	0.24	1.63	0.815

Test Mode: TM2

Side 4

<b>Electric Field Emissions</b>			
<b>Test Position</b>	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Тор	32	614	307
Bottom	35	614	307
Side 1	34	614	307
Side 2	35	614	307
Side 3	35	614	307
Side 4	36	614	307

0.815

1.63

0.24

	Magnetic Field Emissions			
Test Position	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m)	
Top	0.31	1.63	0.815	
Bottom	0.35	1.63	0.815	
Side 1	0.34	1.63	0.815	
Side 2	0.35	1.63	0.815	

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Side 3	0.33	1.63	0.815
Side 4	0.32	1.63	0.815

Test Mode: TM3

	Electric Field Emis	sions	
Test Position	Measure Value (V/m)	Limit(V/m)	50% Limit (V/m)
Тор	38	614	307
Bottom	39	614	307
Side 1	37	614	307
Side 2	37	614	307
Side 3	38	614	307
Side 4	38	614	307
	Magnetic Field Emi	ssions	
Test Position	Measure Value (A/m)	Limit(A/m)	50% Limit (A/m
Тор	0.41	1.63	0.815
Bottom	0.39	1.63	0.815
Side 1	0.38	1.63	0.815
Side 1 Side 2	0.38 0.42	1.63 1.63	0.815 0.815

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