Human Exposure Report

FCC ID: RNE02047TX

This report concerns: Original Grant

Project No.	:	2208C150
Equipment	:	WIRELESS CHARGING W. STATION
Brand Name	:	ACURITE
Test Model	:	02047
Series Model	:	02047M, 02047DI, 02047C
Applicant	:	Chaney Instrument Co.
Address	:	Unit No. 1, 9/F., Clifford Centre, No. 782 Cheung Sha Wan Road,Kowloon,Hong Kong.
Factory	:	Chaney Instrument Co.
Address	:	Unit No. 1, 9/F., Clifford Centre, No. 782 Cheung Sha Wan Road,Kowloon,Hong Kong.
Date of Receipt	:	Aug. 22, 2022
Date of Test	:	Aug. 23, 2022 ~ Sep. 02, 2022
Issued Date	:	Sep. 16, 2022
Report Version	:	R00
Test Sample	:	Engineering Sample No.: DG2022081949
Standard(s)	:	47 CFR PART 1, Subpart I, Section 1.1310 KDB680106 D01 RF Exposure Wireless Charging Apps v03r01

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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Approved by : Chay Cai

TESTING CERT #5123.02

BTL Inc.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2208C150	R00	Original Report.	Sep. 16, 2022	Valid

1. GENERAL INFORMATION

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town Dongguan City, Guangdong 523792 People's Republic of China.
BTL's Registration Number for FCC: 357015
BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))
The BTL measurement uncertainty as below table:

Test Items	U
Magnetic Field strength (ESM-100, 5 Hz - 400 kHz)	6.220%
Electrical Field strength (ESM-100, 5 Hz - 400 kHz)	8.030%

2. APPLICABLE STANDARD

2.1 LIMITS

For 47 CFR PART 1, Subpart I, Section 1.1310:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density ($m/W/cm^2$)	Averaging time (minutes)
(A) Limits for Occupational / Controlled Exposures				
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
300-1500	/	/	f/300	6
1500-100000	/	/	5	6
(B) Limits for General Population / Uncontrolled Exposures				
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
1500-100000	/	/	1.0	30

F=frequency in MHz

*=Plane-wave equivalent power density

RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules.

The emissions should be within the limits at 300kHz in Table 1 of 1.1310 (use the 300kHz limits for 150kHz: 614V/m, 1.63A/m).

For KDB680106 D01:
For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

3. MEASUREMENT INSTRUMENTS LIST

Human Exposure					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	3D H/E Fieldmeter	maschek Elektronik	ESM-100	971965	Sep. 18, 2023

Remark:
(1) All calibration period of equipment list is three year.

4. TEST RESULTS

Electric Field Emissions

Test Position(20cm)	Probe Measure Results (V/m)	Limit (V/m)
	intermediate charge	
Top	9.4	614

Test Position(15cm)	Probe Measure Results (V/m)	Limit (V/m)
	intermediate charge	
Top	13.5	614
Front Side	1.2	614
Back Side	4.4	614
Left Side	2.4	614
Right Side	1.3	614
Bottom	1.2	614

Note: The maximum Probe Measure Results of this EUT is 13.5 V/m, less than 307 V/m(614 *50%).

Magnetic Field Emissions

Test Position(20cm)	Probe Measure Results (A/m)	Limit (A/m)
	intermediate charge	
Top	0.044	1.63

Test Position(15cm)	Probe Measure Results (A/m)	Limit (A/m)
	intermediate charge	
Top	0.068	1.63
Front Side	0.0368	1.63
Back Side	0.0224	1.63
Left Side	0.0152	1.63
Right Side	0.0184	1.63
Bottom	0.028	1.63

Note: The maximum Probe Measure Results of this EUT is 0.068 A/m, less than 0.815 V/m(1.63*50%).

Remark:

(1) The EUT has the maximum average output power when the support unit is in low power and being charged by EUT.

(2) The transfer system includes only single primary. The transfer system desinged by Wireless Power Consortium (WPC). The main purpose is Provide convenient and universal wireless charging for mobile phones and other portable electronic devices. Under the Qi standard, the transmission and reception use flat inductors to transmit energy by inductive coupling.

5. TEST PHOTOS

Front Side
(15 cm)

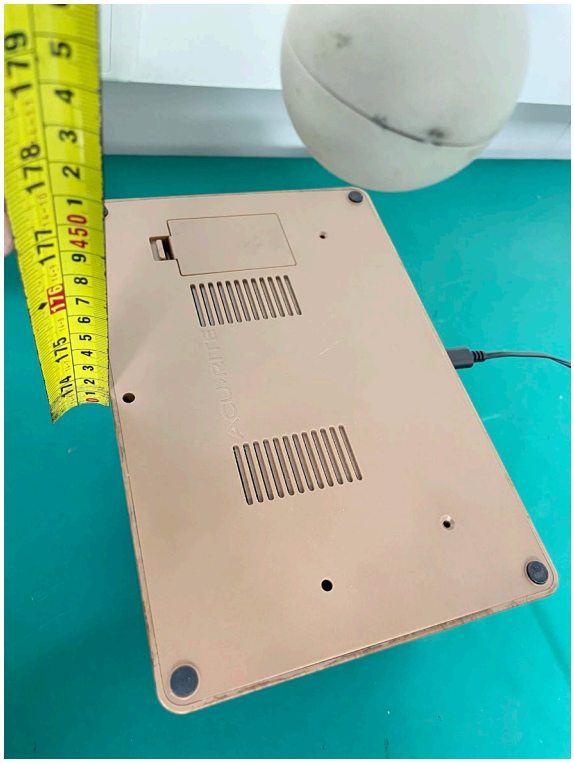
Back Side
(15 cm)

Left Side
(15 cm)

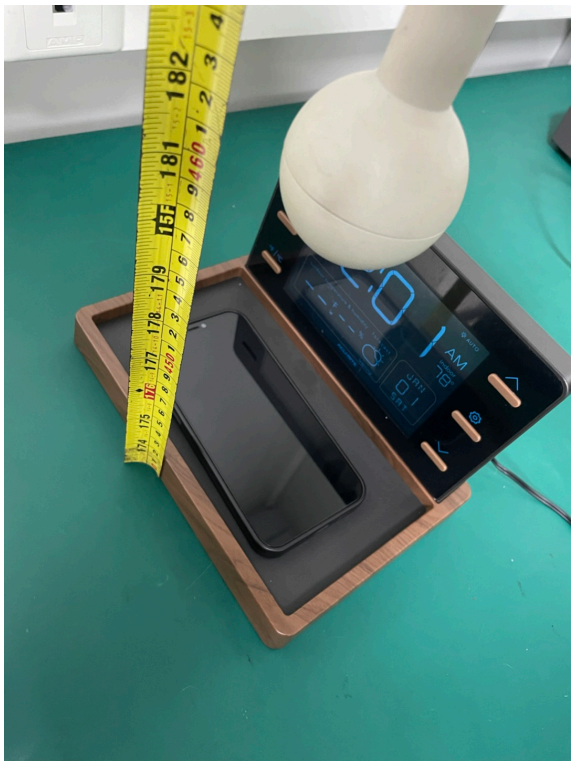
Right Side
(15 cm)

Top
(15 cm)

Bottom
(15 cm)



Top
(20 cm)



End of Test Report