

TEST REPORT

Reference No. : WTK21D01009511W002 V1
FCC ID : 2AYVL-3142801
Applicant : Dongguan Jiufeng Hardware and Plastics Co. Ltd.
Address : Da Sheng Road#6, Da Mao Ling Industrial Park, Dongping Village , Qishi Town, Dongguan, China
Manufacturer : Dongguan Guohong Lighting Art Products Co., LTD
Address : Building 3, No.3, Baisha Fuxiang Road, Humen Town, Dongguan City, Guangdong Province, China
Product : WIRELESS CHARGING BUNK SHELF
Model(s) : 3142801, 69680544
Standards : FCC CFR47 Part 1.1307
FCC CFR47 Part 1.1310
Date of Receipt sample : 2021-02-02
Date of Test : 2021-02-03 to 2021-03-02
Date of Issue : 2021-03-02
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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2 Contents

	Page
1 COVER PAGE.....	1
2 CONTENTS	2
3 REVISION HISTORY	3
4 GENERAL INFORMATION.....	4
4.1 GENERAL DESCRIPTION OF E.U.T.....	4
4.2 DETAILS OF ACCESSORIES	4
4.3 TEST MODE	5
4.4 TEST FACILITY.....	5
5 TEST SUMMARY	6
6 EQUIPMENT USED DURING TEST	7
6.1 EQUIPMENTS LIST	7
6.2 DESCRIPTION OF AUXILIARY EQUIPMENT	7
6.3 TEST EQUIPMENT CALIBRATION	7
7 RF EXPOSURE.....	8
7.1 TEST SETUP	8
7.2 EQUIPMENT APPROVAL CONSIDERATIONS (CLAUSE 5 B) OF KDB 680106 D01 v03.....	8
7.3 FCC RULES.....	9
7.4 EUT OPERATION.....	9
7.5 TEST RESULT	10
8 PHOTOGRAPHS OF TEST SETUP AND EUT.....	11

3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTK21D01009 511W002	2021-02-02	2021-02-03 to 2021-03-02	2021-03-02	original	-	Replaced
WTK21D01009 511W002 V1	2021-02-02	2021-02-03 to 2021-03-02	2021-03-24	Version 1	Update	Valid

4 General Information

4.1 General Description of E.U.T

Product: WIRELESS CHARGING BUNK SHELF
Model(s): 3142801, 69680544
Model Description: Only different for model names. Models 314280 was tested
Type of Modulation: ASK
Frequency Range: 110-205kHz
Antenna installation: Inductive loop coil Antenna
Antenna gain: 0dbi
Hardware Version: V1.1
Software Version: V1.1

4.2 Details of accessories

Ratings: Adapter Input: 100-240V, 50/60Hz 0.5A(Manufacturer:Dongguan Jingchong Electronic Technology Co.,Ltd)
Adapter Output:5V == 2.4A
Wireless Output: 5V/1A,5W

4.3 Test Mode

Test Mode	Descriptions
Standby mode	EUT alone powered by AC/DC adapter
Charging mode	loading of 5 W

Note: EUT was investigated with client device under normal charging condition as above then worst value was only report.

4.4 Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Testing Group Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files.

Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Testing Group Co., Ltd. EMC Laboratory 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. Registration number 523476, September 10, 2019.

5 Test Summary

Test Items	Test Requirement	Result
Electric Field Strength (E) (V/m)	FCC CFR 47 part1 § 1.1310	PASS
Magnetic Field Strength (H) (A/m)	KDB 680106 D01 v03	PASS

6 Equipment Used during Test

6.1 Equipments List

RF EXPOSURE						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Magnetic Field Meter	NARDA	ELT-400	M-0155/M-0170	2020-07-24	2021-07-23
2	Field strength probe	NARDA	EP-601	611WX70311	2021-01-13	2022-01-12

6.2 Description of Auxiliary Equipment

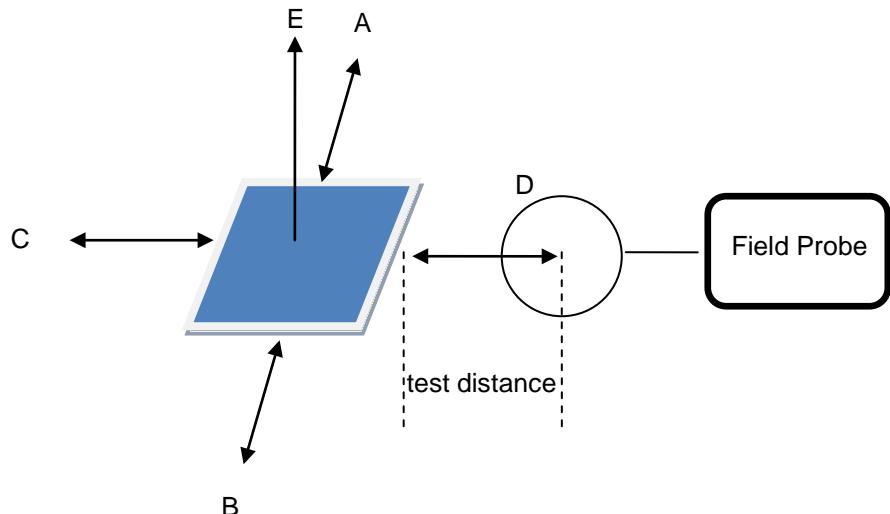
Equipment	Manufacturer	Model No.	Series No.
Simulated load	/	/	/

6.3 Test Equipment Calibration

All the test equipments used are valid and calibrated by CEPREI Certification Body that address is No.110 Dongguan Zhuang RD. Guangzhou, P.R. China.

7 RF Exposure

7.1 Test Setup



The RF exposure test was performed in anechoic chamber.

The probe was placed at test distance which is between the edge of the charger and the geometric centre of probe.

The EUT was put in different directions (Left(26cm), Right(12cm), Front(14cm), Rear(12cm), Top and Bottom(20cm) to obtain the maximum reading.

The EUT was measured according to the dictates of KDB 680106 D01 RF Exposure Wireless Charging App v03.

7.2 Equipment approval considerations (clause 5 b) of KDB 680106 D01 v03

Remark: The device meets the RF exposure limit at separation distance as specified in §1.1310 of the FCC Rules and meeting all of the following requirements as follows.

- (1) Power transfer frequency is less than 1 MHz.
- (2) Output power from each primary coil is less than or equal to 15 watts.
- (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.
- (4) Client device is placed directly in contact with the transmitter.
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
- (6) The aggregate H-field strengths at 12 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.

7.3 FCC Rules

§1.1310: The criteria listed in the following table 1 shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of FCC part 2.1093 of this chapter.

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 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
1500–100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)—Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
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

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

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).

7.4 EUT Operation

Operating Environment :

Temperature: 23.5 °C

Humidity: 51.1 % RH

Atmospheric Pressure: 101.2kPa

EUT Operation : loading of 5 W

Only the worst case transmitting mode were record in the report.

7.5 Test Result

Maximum RF exposure reading and percentage

Electric Field Limit			Magnetic Field Limit		
FCC	Maximum RMS (V/m)	Percentage (%)	FCC	Maximum RMS (A/m)	Percentage (%)
614	2.365	0.385	1.63	0.233	14.35

E-Filed Strength (V/m) of charging mode: loading of 5 W

Frequency Range MHz	Test Position					Maximum (V/m)
	A	B	C	D	E	
0.127	2.365	1.303	0.543	2.364	1.253	2.365

H-Filed Strength (A/m) of charging mode: loading of 5 W

Frequency Range MHz	Test Position					Maximum (A/m)
	A	B	C	D	E	
0.127	0.233	0.164	0.031	0.231	0.125	0.233

8 Photographs of test setup and EUT.

Note: Please refer to appendix: Appendix-3142801-Photos.

=====End of Report=====