


TEST REPORT

Reference No...... : WTD21D07074074W002 V1
FCC ID : 2AQA6-H6002A
Applicant..... : Shenzhen Intellirocks Tech. Co., Ltd
Address..... : No. 2901-2904, 3002, Block C, Section 1, Chuangzhi Yuncheng Building, Liuxian Avenue, Xili Community, Xili Street, Nanshan District, Xili Street, Nanshan District, Shenzhen, Guangdong, China
Manufacturer : NanChang Innotech Homesmart Co., Ltd
Address..... : 1st to 5th floor, 2-1#, Nanchang Small and Medium-sized Enterprises Entrepreneurship Incubation Base (Phase II), Guowei Industrial Park, No. 669 Huangtang E Rd, Linkong Economic Zone, Nanchang, Jiangxi, China
Product..... : Smart LED Bulb
Model(s) : H6002
Brand Name..... : 
Standards..... : FCC Part 2.1091
Date of Receipt sample : 2021-07-26
Date of Test : 2021-07-26 to 2021-07-29
Date of Issue..... : 2021-08-10
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.

Prepared By:

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3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD21D07074074 W002	2021-07-26	2021-07-26 to 2021-07-29	2021-07-29	Original	-	Replaced
WTD21D07074074 W002 V1	2021-07-26	2021-07-26 to 2021-07-29	2021-08-10	Version	Updated	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	Smart LED Bulb
Model(s):	H6002
Model Description:	N/A
Wi-Fi Specification:	2.4G-802.11b/g/n HT20
Bluetooth Version:	5.0
Hardware Version:	V1.0
Software Version:	1.00.10

4.2 Details of E.U.T.

Operation Frequency:	Wi-Fi: 802.11b/g/n HT20: 2412~2462MHz BLE:2402-2480MHz
Max. RF output power:	Wi-Fi: 17.94dBm BLE: 4.34dBm
Type of Modulation:	Wi-Fi: CCK, OFDM BLE: GFSK
Antenna installation:	Wi-Fi/BLE: internal permanent antenna
Antenna Gain:	Wi-Fi/BLE: 1.5dBi
Ratings:	120V~ 0.11A, 60Hz, 9W

4.3 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
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	47 C.F.R § 2.1091	PASS

6 RF Exposure

Test Requirement: FCC Part 2.1091

Test Mode: TX

6.1 Procedures and Requirements

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 levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

FCC Part 1.1310:

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	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

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ;

*Plane-wave equivalent power density

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

From the peak EUT RF output power, the minimum mobile separation distance, d=20cm, as well as the gain of the used antenna, the RF power density can be obtained

6.2 Test Result

FCC Part 2.1091:

Distance of 20cm normally can be maintained between the user and the device.

Mode	Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)
BLE	1.50	1.413	4.34	2.72	0.000763	1.0
2.4G WIFI	1.50	1.413	17.94	62.23	0.017487	1.0

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