

TEST REPORT

Reference No...... : WTD21D06058484W002
FCC ID : SYW-DIM-SMART
Applicant..... : Feit Electric Company
Address..... : 4901 Gregg Road, Pico Rivera, California, United States
Manufacturer : Jiangxi Innotech Technology Co., Ltd
Address..... : No.399, Rule Lake Avenue, Nanchang Airport Economic Zone,
NANCHANG Jiangxi
Product..... : Dimmer
Model(s) : DIM/SMART
Standards..... : FCC Part 1.1307
Date of Receipt sample : 2021-06-17
Date of Test : 2021-06-18 to 2021-06-28
Date of Issue..... : 2021-06-29
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:
Waltek Testing Group Co., Ltd.

Address: No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China
Tel: +86-769-2267 6998
Fax: +86-769-2267 6828

Compiled by:

Approved by:

Levi Xiao

Levi Xiao / Project Engineer



Daniel Liu

Daniel Liu / Designated Reviewer

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3. Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD21D06058484 W002	2021-06-17	2021-06-18 to 2021-06-28	2021-06-28	Original	-	Valid

4. General Information

4.1. General Description of E.U.T.

Product:	Dimmer
Model(s):	DIM/SMART
Wi-Fi Specification:	2.4G-802.11b/g/n HT20/n HT40
Bluetooth Version:	BLE 4.0
Hardware Version:	2.0
Software Version:	1.1.71

4.2. Details of E.U.T.

Operation Frequency:	WiFi: 802.11b/g/n HT20: 2412~2462MHz 802.11n HT40: 2422~2452MHz BLE:2402-2480MHz
Max. RF output power:	WiFi(2.4G): 17.23dBm BLE: 1.25dBm
Type of Modulation:	WiFi: CCK, OFDM BLE:GFSK
Antenna Gain:	1dbi
Ratings:	AC 120V, 50/60Hz

5. Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307	PASS

6. RF Exposure

Test Requirement: FCC Part 1.1307

Evaluation Method: FCC Part 2.1091 & KDB 447498 D01 General RF Exposure Guidance v06

6.1. 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 0.2 m normally can be maintained between the user and the device.

6.2. The procedures / limit

(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

6.3. MPE Calculation Method

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

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

P = output power 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, R=20cm,
as well as the gain of the used antenna, the RF power density can be obtained

Mode 1: alone transmission

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)
2.4G WIFI	1.00	1.259	17.23	52.84	0.013235	1
BLE	1.00	1.259	1.25	1.33	0.000334	1

6.4. Result: Compliance

No SAR measurement is required.

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