



# FCC RF EXPOSURE REPORT

#### **CERTIFICATION TEST REPORT**

For

**EATON VOICE DIMMER** 

**MODEL NUMBER: WFAVD30** 

FCC ID: ZVAOH000024 IC: 9976A-OH000024

REPORT NUMBER: 4789620349.1-4

ISSUE DATE: September 22, 2020

#### Prepared for

TCL TECHNOLY ELECTRONICS (HUIZHOU) CO., LTD.
SECTION 37, ZHONGKAI HIGH-TECH DEVELOPMENT ZONE, HUIZHOU CITY,
GUANG DONG PROVINCE, P.R. CHINA

#### Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch

Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

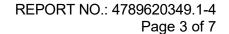
> Tel: +86 769 22038881 Fax: +86 769 33244054 Website: www.ul.com



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# **Revision History**

| Rev. | Issue Date | Revisions     | Revised By |
|------|------------|---------------|------------|
| V0   | 09/22/2020 | Initial Issue |            |





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# 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: TCL Technoly Electronics (Huizhou) Co., Ltd.

Address: Section 37, Zhongkai High-tech Development Zone, Huizhou City,

Guang Dong Province, P.R. China

**Manufacturer Information** 

Company Name: TCL Technoly Electronics (Huizhou) Co., Ltd.

Address: Section 37, Zhongkai High-tech Development Zone, Huizhou City,

Guang Dong Province, P.R. China

**EUT Information** 

Laboratory Manager

EUT Name: Eaton Voice Dimmer

Model: WFAVD30 Brand: EATON

Sample Received Date: August 27, 2020

Sample Status: Normal Sample ID: 3319105

Date of Tested: August 27, 2020 ~ September 21, 2020

| APPLICABLE STANDARDS |              |  |  |
|----------------------|--------------|--|--|
| STANDARD             | TEST RESULTS |  |  |
| FCC 47CFR§2.1091     | PASS         |  |  |

|                                 | 3                              |  |
|---------------------------------|--------------------------------|--|
| Prepared By:  Jacky Jany        | Checked By:                    |  |
| Jacky Jiang<br>Project Engineer | Shawn Wen<br>Laboratory Leader |  |
| Approved By:                    |                                |  |
| Stephen Guo                     |                                |  |



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#### 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091.

# 3. FACILITIES AND ACCREDITATION

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.



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# 4. REQUIREMENT

#### **LIMIT AND CALCULATION METHOD**

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with. Limits for General Population/Uncontrolled Exposure

#### RF EXPOSURE LIMIT

| Frequency<br>Range<br>(MHz) | E-field Strength<br>(E)<br>(V/m) | Magnetic Field<br>Strength (H)<br>(A/m) | Power Density<br>(S)<br>(mW/cm²) | Averaging Time<br> E ²,  H ² or S<br>(Minutes) |
|-----------------------------|----------------------------------|---|----------------------------------|--|
| 0.3 1.34                    | 614                              | 1.63                                    | (100)*                           | 30   |
| 1.34 30                     | 824/f                            | 2.19/f                                  | (180/f <sup>2</sup> )*           | 30   |
| 30 300                      | 27.5                             | 0.073                                   | 0.2                              | 30   |
| 300 1500                    |                                  |   | f/1500                           | 30   |
| 1500 100,000                |                                  |   | 1.0                              | 30   |

#### **CALCULATION METHOD**

 $S=PG/4\pi R^2$ 

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna



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# **CALCULATED RESULTS**

| The Worst case of BLE Mode |              |              |                    |                     |                |
|----------------------------|--------------|--------------|--------------------|---------------------|----------------|
| Frequency<br>Range         | Output Power | Output Power | Power Density      | Power Density Limit | Test<br>Result |
| MHz                        | dBm          | mW           | mW/cm <sup>2</sup> | mW/cm <sup>2</sup>  |                |
| 2402-2480                  | 6.0          | 3.981        | 0.00112            | 1.0                 | Complies       |

| The Worst case of WIFI Mode |              |              |                    |                     |                |
|-----------------------------|--------------|--------------|--------------------|---------------------|----------------|
| Frequency<br>Range          | Output Power | Output Power | Power Density      | Power Density Limit | Test<br>Result |
| MHz                         | dBm          | mW           | mW/cm <sup>2</sup> | mW/cm <sup>2</sup>  |                |
| 2412-2462                   | 17.0         | 50.119       | 0.0141             | 1.0                 | Complies       |

Note: 1. Antenna Gain=1.5 dBi (Numeric 1.41),  $\pi$ =3.141.

- 2. The Power comes from OD.
- 3. The minimum separation distance of the device is greater than 20 cm.
- 4. Calculated by WORST-CASE mode.
- 5. BLE and 2.4 G WiFi don't support simultaneous emission.

**END OF REPORT**