



## FCC RF EXPOSURE REPORT

*For*

**Eaton Voice Dimmer**

**MODEL NUMBER: WFAVD30**

**FCC ID: ZVAOH000027**

**REPORT NUMBER: 4790246663-3**

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*Prepared by*

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Revision History

| Rev. | Issue Date | Revisions     | Revised By |
|------|------------|---------------|------------|
| V0   | 01/18/2022 | Initial Issue |            |

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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Tonly Technology Co., Ltd.  
Address: Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong, China

### Manufacturer Information

Company Name: Tonly Technology Co., Ltd.  
Address: Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong, China

### EUT Information

EUT Name: Eaton Voice Dimmer  
Model: WFAVD30  
Brand: /  
Sample Received Date: December 30, 2021  
Sample Status: Normal  
Sample ID: 4540551  
Date of Tested: December 30, 2021 ~ January 15, 2022

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

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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

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accreditation Certificate | <p><b>A2LA (Certificate No.: 4102.01)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p><b>ISED (Company No.: 21320)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p><b>VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)</b><br/>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.</p> <p>Facility Name:<br/>Chamber D, the VCCI registration No. is G-20019 and R-20004<br/>Shielding Room B, the VCCI registration No. is C-20012 and T-20011</p> |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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.

## 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 Range (MHz) | E-field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (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

**CALCULATED RESULTS**

| BLE Mode  |              |              |                    |                     |             |
|-----------|--------------|--------------|--------------------|---------------------|-------------|
| Frequency | Output Power | Output Power | Power Density      | Power Density Limit | Test Result |
| MHz       | dBm          | mW           | mW/cm <sup>2</sup> | mW/cm <sup>2</sup>  | --          |
| 2402~2480 | 7            | 3.98         | 0.00157            | 1.0                 | Complies    |

| WIFI Mode |              |              |                    |                     |             |
|-----------|--------------|--------------|--------------------|---------------------|-------------|
| Frequency | Output Power | Output Power | Power Density      | Power Density Limit | Test Result |
| MHz       | dBm          | mW           | mW/cm <sup>2</sup> | mW/cm <sup>2</sup>  | --          |
| 2412~2462 | 18           | 63.10        | 0.02493            | 1.0                 | Complies    |

Note: 1. Antenna Gain=2.98 dBi (Numeric 1.98),  $\pi=3.141$ .  
2. The Power comes from Operation Description.  
3. The minimum separation distance of the device is greater than 20 cm.  
4. Calculate by WORST-CASE mode.

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**END OF REPORT**