

#### FCC IC RF EXPOSURE REPORT

**FOR** 

**Element Outlet** 

**MODEL NUMBER: E1C-NB6** 

FCC ID: 2AGN8-E1CNB6 IC: 20888-E1CNB6

REPORT NUMBER: 4788140260-7

**ISSUE DATE: Dec. 10, 2017** 

## Prepared for

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Prepared by

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DATE: Dec. 10, 2017

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## 1. ATTESTATION OF TEST RESULTS

**Applicant Information** 

Company Name: Sengled Co., Ltd.

Address: Room 201/15, Building 1, No.498, Guoshoujing Road, Pilot Free

Trade Zone, Shanghai City, P.R. China

**Manufacturer Information** 

Company Name: Sengled Co., Ltd.

Address: Room 201/15, Building 1, No.498, Guoshoujing Road, Pilot Free

Trade Zone, Shanghai City, P.R. China

**EUT Description** 

Product Name Element Outlet

Brand Name N/A

Model Name E1C-NB6 Test Model Number 1271817-004

Date Tested Oct. 31, 2017 ~ Dec. 09, 2017

**APPLICABLE STANDARDS** 

STANDARD

FCC Guidelines for Human Exposure IEEE Complies

C95.1

Sephen Suo

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**TEST RESULTS** 

DATE: Dec. 10, 2017

By:

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

#### 3. FACILITIES AND ACCREDITATION

| Test Location                | UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.  |
|------------------------------|--|
| Address                      | Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China  |
| Accreditation<br>Certificate | UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. The Certificate Registration Number is 4102.01. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The Designation Number is CN1187. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320. |

Note: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites.

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#### 4. REQUIREMENT

#### **LIMIT**

Limits for General Population/Uncontrolled Exposure

| Limits for General Population/Uncontrolled Exposure |   |   |   |   |  |  |  |  |  |
|---|---|---|---|---|--|--|--|--|--|
| Frequency Range<br>(MHz)                            | Electric Field<br>Strength (E)<br>(V/m) | Magnetic Field<br>Strength (H)<br>(A/m) | Power<br>Density (S)<br>(mW/cm <sup>2</sup> ) | 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/f2)*                                     | 30  |  |  |  |  |  |
| 30-300  | 27.5                                    | 0.073                                   | 0.2   | 30  |  |  |  |  |  |
| 300-1500  | -                                       |   | f/150   | 30  |  |  |  |  |  |
| 1500-100,000  |   |   | 1.0   | 30  |  |  |  |  |  |

Note 1: f = frequency in MHz, \* means Plane-wave equivalent power density

Note 2: 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 cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm<sup>2</sup> is available for this EUT.

### **MPE CALCULATION METHOD**

 $S = PG/(4\pi R^{2})$ 

where: 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

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

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## **CALCULATED RESULTS**

Radio Frequency Radiation Exposure Evaluation

| Zigbee (Worst case) |                            |      |              |           |               |          |                |  |  |
|---------------------|----------------------------|------|--------------|-----------|---------------|----------|----------------|--|--|
| Frequency           | Output Power to<br>Antenna |      | Antenna Gain |           | Power Density | Limit    | Test<br>Result |  |  |
| (MHz)               | (dBm)                      | (mW) | (dBi)        | (Numeric) | (mW/cm2)      | (mW/cm2) |                |  |  |
| 2405                | 7                          | 5.01 | -0.4         | 0.91      | 0.00091       | 1        | Complies       |  |  |

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Note: the calculated distance is 20cm.

## **END OF REPORT**