



## SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR230600172803

Page: 1 of 7

# RF EXPOSURE EVALUATION REPORT

**Application No.:** SZCR2306001728AT  
**Applicant:** Edgenectar Inc.  
**Address of Applicant:** 111 N, Market St. #300, San Jose, California 95113 United States  
**Manufacturer:** Edgenectar Inc.  
**Address of Manufacturer:** 111 N, Market St. #300, San Jose, California 95113 United States  
**Equipment Under Test (EUT):**  
**EUT Name:** Outdoor CAT-B intergrated  
**Model No.:** Odge5000i  
**FCC ID:** 2A9Z95GEMFOB01  
**Standard(s) :** FCC Rules 47 CFR §2.1091  
KDB 447498 D04 interim General RF Exposure Guidance v01  
**Date of Receipt:** 2023-11-20  
**Date of Evaluation:** 2023-11-20 to 2023-12-22  
**Date of Issue:** 2024-01-04

|                           |              |
|---------------------------|--------------|
| <b>Evaluation Result:</b> | <b>Pass*</b> |
|---------------------------|--------------|

\* In the configuration evaluated, the EUT complied with the standards specified above.

Keny Xu

Keny Xu  
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch EMC Laboratory

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| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 01              |         | 2024-01-04 |          | Original |
|                 |         |            |          |          |
|                 |         |            |          |          |

|                          |  |                              |  |  |
|--------------------------|--|------------------------------|--|--|
| Authorized for issue by: |  |                              |  |  |
|                          |  | Calvin Weng                  |  |  |
|                          |  | Calvin Weng/Project Engineer |  |  |
|                          |  | Eric Fu                      |  |  |
|                          |  | Eric Fu/Reviewer             |  |  |



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## 3 General Information

### 3.1 General Description of E.U.T.

|               |                                                  |
|---------------|--------------------------------------------------|
| Product Type: | <input type="checkbox"/> Portable device         |
|               | <input type="checkbox"/> Mobile device           |
|               | <input checked="" type="checkbox"/> Fixed device |

### 3.2 Details of E.U.T.

|                                                     |                    |
|-----------------------------------------------------|--------------------|
| Power supply:                                       | DC48V              |
| EUT Type:                                           | CBSD               |
| Category of EUT:                                    | Category B         |
| Operation Frequency Band:                           | N48 (3550-3700MHz) |
| Test Mode:                                          | TM1.1, TM3.1a      |
| Modulation Type:                                    | QPSK, 16QAM        |
| Bandwidth:                                          | 100MHz             |
| Transmission (TX) and Receiving (RX) Antenna Ports: | 4*4                |
| MIMO supported                                      | 4*4 UL<br>4*4 DL   |
| Antenna Type:                                       | External Antenna   |
| Antenna Gain:                                       | 14dBi              |

Note:

(1)The antenna gain value is provided by the customer. The test lab will not be responsible for wrong test result due to incorrect information about antenna gain values.

### 3.3 Separation Distance

|                                                                                                                                                                                                                                                                                                               |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Minimum test separation distance:                                                                                                                                                                                                                                                                             | 200cm |
| Remark: This minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander. |       |

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### 3.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

### 3.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### • A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

#### • VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

#### • FCC –Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

#### • Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

### 3.6 Deviation from Standards

None

### 3.7 Abnormalities from Standard Conditions

None



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## 4 FCC Radiofrequency radiation exposure limits

According to §1.1310, the limit for general population/uncontrolled exposures

| Frequency range<br>(MHz)                            | Electric field strength<br>(V/m) | Magnetic field strength<br>(A/m) | Power density<br>(mW/cm <sup>2</sup> ) | Averaging time<br>(minutes) |
|-----------------------------------------------------|----------------------------------|----------------------------------|----------------------------------------|-----------------------------|
| Limits for General Population/Uncontrolled Exposure |                                  |                                  |                                        |                             |
| 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                          |

## 5 Measurement and Calculation

### 5.1 Maximum transmit power

The Power Data is based on the RF Test Report SZCR230600172802 and Tune up procedure.

Antenna Gain: 14dBi

MPE Calculation

According to the formula  $S = P / 4\pi R^2$ , we can calculate S which is MPE.

Note:

- 1) P (mW)
- 2) R = distance to the center of radiation of antenna (in centimeter)
- 3) MPE limit = 1mW/cm<sup>2</sup>

| Test Mode | Frequency Band (MHz) | Max Conducted power (dBm) | Max E.I.R.P (dBm) | Operation Distance R(cm) | Power Density (mW/cm <sup>2</sup> ) | Limit of Power Density S(mW/cm <sup>2</sup> ) | Result |
|-----------|----------------------|---------------------------|-------------------|--------------------------|-------------------------------------|-----------------------------------------------|--------|
| N48       | 3550-3700            | 42                        | 56                | 200                      | 0.7920                              | 1.00                                          | Pass   |

--End of the Report--