

# RF Exposure Evaluation Report

APPLICANT : Weifang GoerTek Electronics Co.,Ltd.  
EQUIPMENT : SRH-SA2  
BRAND NAME : SONY  
MODEL NAME : SRH-SA2  
FCC ID : SZGSRHSA2  
STANDARD : 47 CFR PART 2.1093  
FCC KDB 447498 D01 v06

The product evaluation date was started from Jul. 18, 2024 and completed on Jul. 18, 2024. We, Sporton International Inc. (Kunshan), would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1093 and FCC KDB 447498 D01 v06, and pass the limit. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.



Approved by: Si Zhang



**Sporton International Inc. (Kunshan)**

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People's Republic of China



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**Revision History**

| REPORT NO.  | VERSION | DESCRIPTION             | ISSUED DATE   |
|-------------|---------|-------------------------|---------------|
| FA420222-01 | Rev. 01 | Initial issue of report | Jul. 24, 2024 |
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## **1. Administration Data**

### **1.1. Testing Laboratory**

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

| Testing Laboratory |                                                                                                                                                |                     |                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------|
| Test Firm          | Sporton International Inc. (Kunshan)                                                                                                           |                     |                                |
| Test Site Location | No. 1098, Pengxi North Road, Kunshan Economic Development Zone<br>Jiangsu Province 215300 People's Republic of China<br>TEL : +86-512-57900158 |                     |                                |
| Test Site No.      | Sporton Site No.                                                                                                                               | FCC Designation No. | FCC Test Firm Registration No. |
|                    | SAR01-KS                                                                                                                                       | CN1257              | 314309                         |

| Applicant    |                                                                 |
|--------------|-----------------------------------------------------------------|
| Company Name | Weifang GoerTek Electronics Co.,Ltd.                            |
| Address      | Gaoxin 2 Road,Free Trade Zone,Weifang,Shandong,261205,P.R.China |

| Manufacturer |                                             |
|--------------|---------------------------------------------|
| Company Name | Sony Corporation                            |
| Address      | 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan |

## 2. Description of Equipment Under Test (EUT)

| Product Feature & Specification         |                                                            |
|-----------------------------------------|------------------------------------------------------------|
| EUT Type                                | SRH-SA2                                                    |
| Brand Name                              | SONY                                                       |
| Model Name                              | SRH-SA2                                                    |
| FCC ID                                  | SZGSRHSA2                                                  |
| Wireless Technology and Frequency Range | Bluetooth: 2402 MHz ~ 2480 MHz<br>nRF: 2402 MHz ~ 2480 MHz |
| Mode                                    | Bluetooth LE<br>nRF: GFSK                                  |
| Antenna Type                            | Bluetooth/ nRF : FPC Antenna                               |
| Antenna Gain                            | Bluetooth/ nRF: gain 2.0 dBi                               |
| HW Version                              | V03                                                        |
| SW Version                              | V29.0                                                      |
| EUT Stage                               | Identical Prototype                                        |

**Remark:**

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

**Comments and Explanations:**

1. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.
2. The maximum RF output tune up power, antenna gain also the safe distance used for evaluate RF exposure were declared by manufacturer.



### 3. Maximum RF Tune Up power among production units

#### <Bluetooth>

| Mode         | Maximum Average Power (dBm) |
|--------------|-----------------------------|
| Bluetooth LE | 5.0                         |

#### <nRF>

| Mode | Maximum Average Power (dBm) |
|------|-----------------------------|
| nRF  | 5.0                         |

### 4. RF Exposure Evaluation

| Mode         | Maximum Average Power (dBm) |
|--------------|-----------------------------|
| Bluetooth LE | 5.0                         |
| nRF          | 5.0                         |

#### Note:

- Per KDB 447498 D01v06 the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances*  $\leq 50$  mm are determined by:  
$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$
 for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR
  - f(GHz) is the RF channel transmit frequency in GHz
  - Power and distance are rounded to the nearest mW and mm before calculation
  - The result is rounded to one decimal place for comparison

| Bluetooth/ nRF Max Power (dBm) | Separation Distance (mm) | Frequency (GHz) | exclusion thresholds |
|--------------------------------|--------------------------|-----------------|----------------------|
| 5.0                            | < 5                      | 2.48            | 1.0                  |

- According to the EUT characteristic, nRF and Bluetooth cannot transmit simultaneously.

#### Conclusion:

Per KDB 447498 D01v06, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 1.0 which is  $\leq 7.5$  for 10-g extremity SAR, extremity SAR testing is not required, and complied with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (4.0 W/kg for extremity SAR) specified in FCC 47 CFR part 2 (2.1093).

-----THE END-----