

# TEST REPORT

**Product Name** : Bluetooth Beanie Light  
**Brand Mark** : N/A  
**Model No.** : EXS-001  
**Extension model** : EXS-002, EXS-003, EXS-004, EXS-005,  
EXS-006  
**FCC ID** : 2A4RV-BX9RH  
**Report Number** : BLA-EMC-202202-A2403  
**Date of Sample Receipt** : 2022/2/23  
**Date of Test** : 2022/3/3 to 2022/3/3  
**Date of Issue** : 2022/3/3  
**Test Standard** : 47 CFR Part 1.1307, Part 2.1093, KDB  
447498  
**Test Result** : Pass

Prepared for:

**Shenzhen Bingrenhui Trade Co., LTD**  
**513, No. 20, Area 1, Yangtai Villa, Dalang Street, Longhua District,**  
**Shenzhen**

Prepared by:

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Date:

2022/3/3



## REPORT REVISE RECORD

| Version No. | Date     | Description |
|-------------|----------|-------------|
| 00          | 2022/3/3 | Original    |

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## 1 TEST SUMMARY

| Test item   | Test Requirement                            | Test Method        | Class/Severity     | Result |
|-------------|---------------------------------------------|--------------------|--------------------|--------|
| RF Exposure | 47 CFR Part 1.1307, Part 2.1093, KDB 447498 | CFR 47 Part 2.1093 | CFR 47 Part 2.1093 | PASS   |

## 2 GENERAL INFORMATION

|                       |                                                                               |
|-----------------------|-------------------------------------------------------------------------------|
| <b>Applicant</b>      | Shenzhen Bingrenhui Trade Co., LTD                                            |
| <b>Address</b>        | 513, No. 20, Area 1, Yangtai Villa, Dalang Street, Longhua District, Shenzhen |
| <b>Manufacturer</b>   | Shenzhen Bingrenhui Trade Co., LTD                                            |
| <b>Address</b>        | 513, No. 20, Area 1, Yangtai Villa, Dalang Street, Longhua District, Shenzhen |
| <b>Factory</b>        | Shenzhen Bingrenhui Trade Co., LTD                                            |
| <b>Address</b>        | 513, No. 20, Area 1, Yangtai Villa, Dalang Street, Longhua District, Shenzhen |
| <b>Product Name</b>   | Bluetooth Beanie Light                                                        |
| <b>Test Model No.</b> | EXS-001                                                                       |

## 3 GENERAL DESCRIPTION OF E.U.T.

|                             |                                     |
|-----------------------------|-------------------------------------|
| <b>Hardware Version</b>     | N/A                                 |
| <b>Software Version</b>     | N/A                                 |
| <b>Operation Frequency:</b> | 2402MHz-2480MHz                     |
| <b>Modulation Type:</b>     | GFSK, pi/4DQPSK, 8DPSK              |
| <b>Channel Spacing:</b>     | 1MHz                                |
| <b>Number of Channels:</b>  | 79                                  |
| <b>Antenna Type:</b>        | PCB Antenna                         |
| <b>Antenna Gain:</b>        | 0.68dBi (Provided by the applicant) |

#### 4 LABORATORY LOCATION

All tests were performed at:  
BlueAsia of Technical Services(Shenzhen) Co., Ltd.  
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No tests were sub-contracted.

## 5 RF EXPOSURE COMPLIANCE REQUIREMENT

### 5.1 STANDARD REQUIREMENT

According to KDB447498D01 General RF Exposure Guidance v06

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

### 5.2 LIMITS

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:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot \sqrt{f(\text{GHz})} \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion

### 5.3 EUT RF EXPOSURE

| Operational Mode: 8-DPSK                                |                                           |                        |                       |      |                  |                     |
|---------------------------------------------------------|-------------------------------------------|------------------------|-----------------------|------|------------------|---------------------|
| Channel                                                 | Maximum Peak Conducted Output Power (dBm) | Tune up tolerance (dB) | Maximum tune-up Power |      | Calculated value | Exclusion threshold |
|                                                         |                                           |                        | (dBm)                 | (mW) |                  |                     |
| 2402 MHz                                                | 1.035                                     | ±1                     | 2.035                 | 1.60 | 0.50             | 3.0                 |
| 2441 MHz                                                | -0.663                                    | ±1                     | 0.337                 | 1.08 | 0.34             |                     |
| 2480 MHz                                                | -1.776                                    | ±1                     | -0.776                | 0.84 | 0.26             |                     |
| Conclusion: the calculated value ≤3.0. SAR is exempted. |                                           |                        |                       |      |                  |                     |

**----END OF REPORT----**

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