

# RF Exposure Evaluation Report

**Product** : Blue Ocean Dream Galaxy Projector  
**Trade mark** : N/A  
**Model/Type reference** : WH-E14  
**Serial Number** : N/A  
**Report Number** : EED32N81116902  
**FCC ID** : 2A2Y2-WH-E14  
**Date of Issue** : Dec. 28, 2021  
**Test Standards** : 47 CFR Part 1.1307  
47 CFR Part 2.1093  
KDB447498D01 General  
RF Exposure Guidance v06  
**Test result** : PASS

Prepared for:

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Prepared by:

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Dec. 28, 2021

Check No.: 4524291021



## 1 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | Dec. 28, 2021 | Original    |
|             |               |             |
|             |               |             |

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### 3 General Information

#### 3.1 Client Information

|                          |                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------|
| Applicant:               | Guangzhou Tuoke Commerce Trade Co Ltd.                                                  |
| Address of Applicant:    | Room 416, No.101, Wanggang Dexing Road, Jiahe Stress, Baiyun District, Guangzhou, China |
| Manufacturer:            | Guangzhou Tuoke Commerce Trade Co Ltd.                                                  |
| Address of Manufacturer: | Room 416, No.101, Wanggang Dexing Road, Jiahe Stress, Baiyun District, Guangzhou, China |

#### 3.2 General Description of EUT

|                                                                                                                                                                                              |                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Product Name:                                                                                                                                                                                | Blue Ocean Dream Galaxy Projector                                                                                  |
| Model No.:                                                                                                                                                                                   | WH-E14                                                                                                             |
| Trade Mark:                                                                                                                                                                                  | N/A                                                                                                                |
| Bluetooth Version:                                                                                                                                                                           | V5.0                                                                                                               |
| Operation Frequency:                                                                                                                                                                         | 2402MHz~2480MHz                                                                                                    |
| Modulation Technique:                                                                                                                                                                        | Frequency Hopping Spread Spectrum(FHSS)                                                                            |
| Modulation Type:                                                                                                                                                                             | GFSK, $\pi/4$ DQPSK                                                                                                |
| Number of Channel:                                                                                                                                                                           | 79                                                                                                                 |
| Hopping Channel Type:                                                                                                                                                                        | Adaptive Frequency Hopping systems                                                                                 |
| Product Type:                                                                                                                                                                                | <input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location |
| Antenna Type:                                                                                                                                                                                | PCB antenna                                                                                                        |
| Antenna Gain:                                                                                                                                                                                | 0.5dBi                                                                                                             |
| Power Supply:                                                                                                                                                                                | DC 5.0V                                                                                                            |
| Test Voltage:                                                                                                                                                                                | DC 5.0V                                                                                                            |
| Sample Received Date:                                                                                                                                                                        | Nov. 01, 2021                                                                                                      |
| Sample tested Date:                                                                                                                                                                          | Nov. 01, 2021 to Nov. 12, 2021                                                                                     |
| Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified. |                                                                                                                    |

### 3.3 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

### 3.4 Deviation from Standards

None.

### 3.5 Abnormalities from Standard Conditions

None.

### 3.6 Other Information Requested by the Customer

None.

## 4 SAR Evaluation

### 4.1 RF Exposure Compliance Requirement

#### 4.1.1 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.

##### 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:

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

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

#### 4.1.2 EUT RF Exposure

##### 1) For BT Classic

##### Measurement Data

| GFSK mode        |                            |                            |                       |       |
|------------------|----------------------------|----------------------------|-----------------------|-------|
| Test channel     | Peak Output Power<br>(dBm) | Tune up tolerance<br>(dBm) | Maximum tune-up Power |       |
|                  |                            |                            | (dBm)                 | (mW)  |
| Lowest(2402MHz)  | -3.35                      | -4.0±1                     | -3.0                  | 0.501 |
| Middle(2441MHz)  | -3.04                      | -4.0±1                     | -3.0                  | 0.501 |
| Highest(2480MHz) | -2.62                      | -3.5±1                     | -2.5                  | 0.562 |
| π/4DQPSK mode    |                            |                            |                       |       |
| Test channel     | Peak Output Power<br>(dBm) | Tune up tolerance<br>(dBm) | Maximum tune-up Power |       |
|                  |                            |                            | (dBm)                 | (mW)  |
| Lowest(2402MHz)  | -2.74                      | -3.5±1                     | -2.5                  | 0.562 |
| Middle(2441MHz)  | -2.51                      | -3.5±1                     | -2.5                  | 0.562 |
| Highest(2480MHz) | -1.98                      | -2.5±1                     | -1.5                  | 0.708 |

##### Worst case: π/4DQPSK mode

| Channel              | Maximum Peak<br>Conducted<br>Output Power<br>(dBm) | Tune up<br>tolerance<br>(dBm) | Maximum tune-<br>up Power |       | Calculated<br>value | Exclusion<br>threshold |
|----------------------|----------------------------------------------------|-------------------------------|---------------------------|-------|---------------------|------------------------|
|                      |                                                    |                               | (dBm)                     | (mW)  |                     |                        |
| Lowest<br>(2402MHz)  | -2.74                                              | -3.5±1                        | -2.5                      | 0.562 | 0.17                | 3.0                    |
| Middle<br>(2441MHz)  | -2.51                                              | -3.5±1                        | -2.5                      | 0.562 | 0.18                |                        |
| Highest<br>(2480MHz) | -1.98                                              | -2.5±1                        | -1.5                      | 0.708 | 0.22                |                        |

Conclusion: the calculated value ≤3.0, SAR is exempted.

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32N81116901.

## PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N81116901 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

\*\*\* End of Report \*\*\*