



Report No.: PTC22021805804E-FC03

# FCC TEST REPORT

## FCC ID: 2A43H-PL014-PL013

|                                                                                         |   |                                     |
|-----------------------------------------------------------------------------------------|---|-------------------------------------|
| Product                                                                                 | : | Space Light Bars                    |
| Model Name                                                                              | : | Smart Light PL014,Smart Light PL013 |
| Brand                                                                                   | : | N/A                                 |
| Report No.                                                                              | : | PTC22021805804E-FC03                |
| <b>Prepared for</b>                                                                     |   |                                     |
| TOLEZ LTD                                                                               |   |                                     |
| Building 308, Hesheng cultural and creative park, Longhua District, Shenzhen, Guangdong |   |                                     |
| <b>Prepared by</b>                                                                      |   |                                     |
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## TEST RESULT CERTIFICATION

Applicant's name : TOLEZ LTD

Address : Building 308, Hesheng cultural and creative park, Longhua District, Shenzhen, Guangdong

Manufacture's name : TOLEZ LTD

Address : Building 308, Hesheng cultural and creative park, Longhua District, Shenzhen, Guangdong

Product name : Space Light Bars

Model name : Smart Light PL014, Smart Light PL013

Test procedure : KDB 447498 D01 General RF Exposure Guidance v06

Test Date : Mar. 02, 2022 to Mar. 09, 2022

Date of Issue : Mar. 09, 2022

Test Result : Pass

This device described above has been tested by PTS, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read 'Abel Yu'.

Abel Yu / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read 'Wu Weimin'.

Wu Weimin / Manager



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## 2 Test Summary

| Test Items                                                        | Test Requirement | Result |
|-------------------------------------------------------------------|------------------|--------|
| Maximum Permissible Exposure<br>(Exposure of Humans to RF Fields) | 1.1307(b)(1)     | PASS   |
| Remark:                                                           |                  |        |
| N/A: Not Applicable                                               |                  |        |



### 3 General Information

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

|                      |   |                                                                                                         |
|----------------------|---|---------------------------------------------------------------------------------------------------------|
| Product Name         | : | Space Light Bars                                                                                        |
| Model Name           | : | Smart Light PL014                                                                                       |
| Additional model     | : | Smart Light PL013                                                                                       |
| Specification        | : | 802.11b/g/n HT20<br>BT 4.2 BLE                                                                          |
| Operation Frequency  | : | 2412-2462MHz for 802.11b/g; n(HT20)<br>2402-2480MHz for BT                                              |
| Number of Channel    | : | 11 channels for 802.11b/g; n(HT20)<br>40 channels for BT                                                |
| Type of Modulation   | : | DSSS with DBPSK/DQPSK/CCK for 802.11b;<br>OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;<br>GFSK For BT |
| Antenna installation | : | PCB antenna                                                                                             |
| Antenna Gain         | : | 2.5 dBi                                                                                                 |
| Power supply         | : | Adapter model:JYH36-2401500-BA<br>Input : AC100-240V 50/60HZ 1.2A, Output:DC 24V 1.5A                   |
| Hardware Version     | : | N/A                                                                                                     |
| Software Version     | : | N/A                                                                                                     |



## 4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

### 4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

### 4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

| Frequency Range | Electric Field | Magnetic Field | Power Density (S) | Averaging Time |
|-----------------|----------------|----------------|-------------------|----------------|
| 0.3-3.0         | 614            | 1.63           | (100)*            | 6              |
| 3.0-30          | 1842 / f       | 4.89 / f       | (900 / f)*        | 6              |
| 30-300          | 61.4           | 0.163          | 1.0               | 6              |
| 300-1500        |                |                | F/300             | 6              |
| 1500-100,000    |                |                | 5                 | 6              |

(B) Limits for General Population / Uncontrolled Exposure

| Frequency Range | Electric Field | Magnetic Field | Power Density (S) | Averaging Time |
|-----------------|----------------|----------------|-------------------|----------------|
| 0.3-1.34        | 614            | 1.63           | (100)*            | 30             |
| 1.34-30         | 824/f          | 2.19/f         | (180/f)*          | 30             |
| 30-300          | 27.5           | 0.073          | 0.2               | 30             |
| 300-1500        |                |                | F/1500            | 30             |
| 1500-100,000    |                |                | 1.0               | 30             |

Note: f = frequency in MHz ; \*Plane-wave equivalent power density



#### 4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

#### 4.4 Test Result

| Item | Antenna Gain (numeric) | Max. Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (mW/cm <sup>2</sup> ) | Limit of Power Density (mW/cm <sup>2</sup> ) | Result |
|------|------------------------|------------------------------|------------------------|-------------------------------------|----------------------------------------------|--------|
| WIFI | 1.78                   | 16.616                       | 45.878                 | 0.0162                              | 1                                            | Pass   |
| BLE  | 1.78                   | -1.349                       | 0.733                  | 0.00026                             | 1                                            | Pass   |

\*\*\*\*\*THE END REPORT\*\*\*\*\*