



# **FCC TEST REPORT** FCC ID: 2A43H-PL016

Product	:	Light Bar				
Model Name	:	Smart Light PL016				
Brand	:	N/A				
Report No.	:	PTC22021805802E-FC02				
Prepared for						
TOLEZ LTD						
Building 308, Hesheng cultural and creative park, Longhua District, Shenzhen, Guangdong						
Prepared by						

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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 : Light Bar

Model name : Smart Light PL016

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.

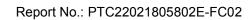
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Test Engineer:

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# 2 Test Summary

Test Items	Test Requirement	Result		
Maximum Permissible Exposure (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	:	Light Bar			
Model Name	:	Smart Light PL016			
Additional model	:	N/A			
Bluetooth Version	:	BT 4.2 BLE			
Operating frequency	:	2402-2480MHz			
Numbers of Channel	:	40 channels			
Type of Modulation	:	GFSK			
Antenna Type	:	PCB Antenna			
Antenna Gain	:	2.5 dBi			
Power supply :		Adapter model : JYH7Z-1200100-AA Input : AC100-240V 50/60HZ 0.5A, Output:DC 24V 1.0A			
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	21.0	0.070	F/1500	30
300-1300			171300	30
1500-100,000			1.0	30

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



## 4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$$
Power Density: Pd (W/m²) =  $\frac{E^2}{377}$ 

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

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

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/cm2)	Limit of Power Density (mW/cm2)	Result
BLE	1.78	2.306	1.7	0.000602	1	Pass

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