FCC TEST REPORT

FCC ID: 2A9C6-10

Product	:	RGBIC LED Light
Model Name	:	FH-LT-1
Serial model	:	FH-LT-2,36008883,F-01-02,CP080022x01, FH-LT-3,FH-LT-4,FH-LT-6,FH-LT-7,FH-LT-8
Brand	:	N/A
Report No.	:	PTC25022003501E-FC02

Prepared for

Dongguan Coolgy Lighting Technology Co.,Ltd

No.117, Longtian Road, Shuibei Industrial Area, Shipai town, Dongguan City, Guangdong Province

Prepared by

Precise Testing & Certification Co., Ltd.

Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China.

TEST RESULT CERTIFICATION

Applicant's name	:	Dongguan Coolgy Lighting Technology Co.,Ltd
Address	:	No.117, Longtian Road, Shuibei Industrial Area, Shipai town, Dongguan City, Guangdong Province
Manufacture's name	:	Dongguan Coolgy Lighting Technology Co.,Ltd
Address	:	No.117, Longtian Road, Shuibei Industrial Area, Shipai town, Dongguan City, Guangdong Province
Product name	:	RGBIC LED Light
Model name	:	FH-LT-1
Serial model	:	FH-LT-2,36008883,F-01-02,CP080022x01, FH-LT-3,FH-LT-4,FH-LT-6,FH-LT-7,FH-LT-8
Test procedure	:	FCC CFR47 Part 1.1307(b)(1)
Test Date	:	Feb. 21, 2025 to Mar. 03, 2025
Date of Issue	:	Mar. 03, 2025
Test Result	:	PASS

This device described above has been tested by PTC, 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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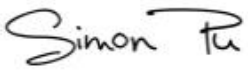
Test Engineer:

Jack zhou / Engineer

Technical Manager:



Simon Pu / Manager

Contents

Page

2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	15.247 (i)	PASS
Remark:		
N/A: Not Applicable		

3 General Information

3.1 General Description of E.U.T.

Product Name	:	RGBIC LED Light
Model Name	:	FH-LT-1
Serial model	:	FH-LT-2,36008883,F-01-02,CP080022x01, FH-LT-3,FH-LT-4,FH-LT-6,FH-LT-7,FH-LT-8
Differences Description	:	the only difference is appearance color.
Operating frequency	:	2402-2480MHz
Number of Channels	:	40 channel For DTS
Type of Modulation	:	GFSK, For DTS
Antenna installation	:	PCB Antenna
Antenna Gain	:	-2.44 dBi
Power supply	:	DC5V
Hardware Version	:	N/A
Software Version	:	N/A

4 RF Exposure

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

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

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

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

Test Mode	Test Frequency(MHz)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm2)	Limit of Power Density (mW/cm2)	Result
BLE_1M	2480	1.00	4.19	4.19±1	2.624218543	0.000297660	1	Pass

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