TEST REPORT

Report No.: SHATBL2511019W03

Applicant	:	Fanlight Corporation, Inc.
Product Name	:	Wireless Control Device
Brand Name	:	SyncMesh
Model Name	:	SYNC-101-ANT
FCC ID	:	**2BT4K-3602**
Test Standard	:	FCC 47 CFR Part 2.1091
Date of Test	:	2025.11.24~2026.03.04

Report Prepared by : Emily

(Emily)

Report Approved by : Guozheng Li

(Guozheng Li)

Authorized Signatory : Terry Yang

(Terry Yang)

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TABLE OF CONTENTS

TEST REPORT 1
TABLE OF CONTENTS 2
REVISION HISTORY 3
DECLARATION OF REPORT 4
1. GENERAL DESCRIPTION 5
1.1. Applicant 5
1.2. Manufacturer 5
1.3. General Information of EUT 6
1.4. Modification of EUT 6
1.5. Laboratory Information 6
2. FCC 47CFR §2.1091 Requirement 7
2.1. Test Standards 7
2.2. Limit 7
2.3. MPE Calculation Method 7
2.4. Antenna Information 8
2.5. Manufacturing Tolerance 8
2.6. Test Result 8

REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	2026.03.04	Initial Release	Guozheng Li

DECLARATION OF REPORT

1. The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR Part 2.1091. And it is applicable only to the tested sample identified in the report.

2. This report shall not be reproduced except in full, without the written approval of ATBL, this document only be altered or revised by ATBL, personal only, and shall be noted in the revision of the document.

3. The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.

4. The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.

1. GENERAL DESCRIPTION

1.1. Applicant

Name : Fanlight Corporation, Inc.

Address : 2000 S Grove Ave Building B, Ontario, California, United States

1.2. Manufacturer

Name : Fanlight Corporation, Inc.

Address : 2000 S Grove Ave Building B, Ontario, California, United States

1.3. General Information of EUT

General Information	
Equipment Name	Wireless Control Device
Brand Name	SyncMesh
Model Name	SYNC-101-ANT
Series Model	N/A
Model Difference	N/A
Sample No.	202511180014003
Power Input	DC 12V from Adapter
Adapter	Manufacturer: Pross Electric (China) Co., Ltd. Model: GLCG-150C-F-260BHG Input: 120-277Vac Output1: 180-260Vdc 500-750mA 150W Max. Output2: 12VDC 200mA Max.
Battery	N/A
Hardware Version	CNBR-B REV01
Software Version	v1.0.0
Operating Temperature Range	-30 ~ +70℃
Connecting I/O Port(s)	Refer to the remark below.

Remark:

The above information of EUT was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4. Modification of EUT

No modifications are made to the EUT during all test items.

1.5. Laboratory Information

Company Name	:	Shanghai ATBL Technology Co., Ltd.
Address	:	5-6/F., Unit 1, No 8, Free Trade One Life Science No. 160, Basheng Road, Pudong New District, Shanghai, China
Telephone	:	+86(0)21-51298625
FCC-Registration Number	:	485917
Designation Number	:	CN1306
A2LA Number	:	6184.01
CNAS Number	:	CNAS L14531
ISED Designation Number	:	27371
CAB identifier	:	CN0116

2. FCC 47CFR §2.1091 Requirement

2.1. Test Standards

According to §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

KDB447498 D01: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

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2.2. Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	6
3.0 – 30	1842/f	4.89/f	(900/f²)*	6
30 – 300	61.4	0.163	1.0	6
300 – 1500	/	/	f/300	6
1500 – 100,000	/	/	5	6

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 30	824/f	2.19/f	(180/f²)*	30
30 – 300	27.5	0.073	0.2	30
300 – 1500	/	/	f/1500	30
1500 – 100,000	/	/	1.0	30

F=frequency in MHz

*=Plane-wave equivalent power density

2.3. MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S=PG/4\pi R^2$

Where: S=power density

P=power input to antenna
G=power gain of the antenna in the direction of interest relative to an isotropic radiator
R=distance to the center of radiation of the antenna

2.4. Antenna Information

EUT can only use antennas certificated as follows provided by manufacturer;

Transmitter Circuit	Operating Band	Peak Gain (dBi)	Antenna Type
Chain 0	NFC	3.00	coil Antenna
Chain 1	2.4G WIFI	3.71	Rod antenna

2.5. Manufacturing Tolerance

Function	Target (dBm)	Tolerance ± (dB)
NFC	61.44dBuV/m(-33.76dBm)	1.00
802.11g_2412MHz	7.52	1.00

Note1:The target power has included the maximum transmission power and tolerance values.
Note2:WIFI Output power (EIRP) including turn-up tolerance.

2.6. Test Result

As declared by the Applicant, the EUT is a wireless device used in a Mobile application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, r =20cm, as well as the gain of the used antenna is refer to section 4, the RF power density can be obtained.

Modulation Type	Output power (Target)		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm^2)	MPE Limits (mW/cm^2)
	dBm	mW				
SISO Transmit						
NFC	-32.76	0.00053	3.00	1.995	0.00000021	0.9789
802.11g_2412MHz	8.52	7.11214	3.71	2.350	0.00332622	1.0000

Simultaneous Transmitting:

NFC+2.4GHz=0.00000021+0.00332622=0.00332643＜1

Note:

1. If nothing else, the report will only record the worst power.
2. The Maximum power is less than the limit, complies with the exemption requirements.
3. Output power (AVG) including tune-up tolerance;
4. The calculated distance is 20 cm.

※※※※※END OF THE REPORT※※※※※