

FCC TEST REPORT

Report No.....: AB25110056FW02

FCC ID.....: **2BSW7-LC-A01**

Applicant.....: Innoartech (Shenzhen) Co., Ltd.

Address.....: LOFT A 1008, upperhills, No. 5001, Huanggang Road, Huafu Street, Futian District, Shenzhen, Guangdong

Manufacturer.....: Innoartech (Shenzhen) Co., Ltd.

Address.....: LOFT A 1008, upperhills, No. 5001, Huanggang Road, Huafu Street, Futian District, Shenzhen, Guangdong

Product Name.....: Intelligent Light Engine

Trade Mark.....: Lightide

Test Model.....: LC-A01

Additional Model(s).....: LC

Standard.....: FCC Part 2 (Section 2.1091)
KDB 447498 D01
IEEE C95.1

Date of Receipt.....: 2025.11.18

Date of Issue.....: 2025.12.23

Test Result.....: Pass

Compiled by:
(Printed Name + Signature)

Huaijie Li

Huaijie Li

Supervised by:
(Printed Name + Signature)

David Huang

David Huang

Approved by:
(Printed Name + Signature)

Jay Liu

Jay Liu

Testing Laboratory Name.....: Aibo Standard Technology (Shenzhen) Co., Ltd.

Address.....: 101, Building B, Tuori New Energy Industrial Park, High-tech Park, Tianliao Community, Yutang Street, Guangming District, Shenzhen City, Guangdong Province, China

This test report may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by Aibo. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver. Any objections must be raised to Aibo within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit. The test report merely correspond to the test sample.

FCC TEST REPORT

EUT.....	: Intelligent Light Engine
Test Model.....	: LC-A01
Applicant.....	: Innoartech (Shenzhen) Co., Ltd.
Address.....	: LOFT A 1008, upperhills, No. 5001, Huanggang Road, Huafu Street, Futian District, Shenzhen, Guangdong
Manufacturer.....	: Innoartech (Shenzhen) Co., Ltd.
Address.....	: LOFT A 1008, upperhills, No. 5001, Huanggang Road, Huafu Street, Futian District, Shenzhen, Guangdong

Test Result	Positive
--------------------	-----------------

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

REPORT VERSION

Version No.	Issue Date	Description
01	2025.12.23	Initial Issue

TABLE OF CONTENTS

1. GENERAL INFORMATION	5
1.1. GENERAL DESCRIPTION OF EUT	5
1.2. DESCRIPTION OF TEST FACILITY	6
2. RF EXPOSURE EVALUATION	7
2.1 LIMIT	7
2.2 EVALUATION RESULT	8

1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

Product Name:	Intelligent Light Engine
Trade Mark:	Lightide
Test Model:	LC-A01
Additional Model(s):	LC
Model Difference:	All models are the same circuit and RF module, except the model name
Hardware Version:	V1.0
Software Version:	V1.0
Power Supply:	Battery 3.7V
EUT Supports Function: (Provided by the customer)	2.4GHz ISM Bands:
Test Sample(s) Number:	AB25110056-01 (Engineer Sample) AB25110056-02 (Normal Sample)
Radio Specification Subject to this Report	
Bluetooth Version:	Bluetooth LE
Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Channel Spacing:	2MHz
Channel Number(s):	40
Antenna Type:	Integral Antenna
Antenna Gain:	0.89dBi

1.2. DESCRIPTION OF TEST FACILITY

Test Lab: Aibo Standard Technology (Shenzhen) Co., Ltd.

Address: 101, Building B, Tuori New Energy Industrial Park, High-tech Park, Tianliao Community, Yutang Street, Guangming District, Shenzhen City, Guangdong Province, China

Tel.: +86 755 85250797

E-mail: aibo@aibonorm.com

Website: www.aibonorm.com

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Certificate No.: 7514.01

Aibo Standard Technology (Shenzhen) Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC Accredited Lab.

Designation Number: CN1411

Test Firm Registration Number: 567066

ISED Wireless Device Testing Laboratories

Company Number: 33924

CAB identifier: CN0185

2. RF EXPOSURE EVALUATION

2.1 Limit

The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	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				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	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

Friis transmission formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm², P_{out} = output power to antenna in mW;

G = gain of antenna in linear scale, $\pi = 3.1416$;

R = distance between observation point and center of the radiator in cm

P_d is the limit of MPE, 1 mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

2.2 Evaluation Result

Mode	Power (dBm)	Antenna Gain	Max EIRP(dBm)	Max EIRP(mW)	Power Density at R=20cm (mW/cm ²)	Limit (mW/cm ²)	Result
BLE 1M	-0.73	0.89	0.160	1.038	0.000206	1.0	PASS

So a SAR test is not required

*****THE END*****