

TEST REPORT

Product Name : Moving light
Model Number : Beam 12
FCC ID : 2A6YB-BEAM12

Prepared for : GUANGZHOU HAYA LIGHTING EQUIPMENT CO.,LTD.
Address : 8th of Guanglong Road,Zhongluotan Town,Baiyun
District,Guangzhou City China

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Date(s) of Tests : May 27, 2023 to July 12, 2023
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1. TEST RESULT CERTIFICATION

Applicant : GUANGZHOU HAYA LIGHTING EQUIPMENT CO.,LTD.
Address : 8th of Guanglong Road,Zhongluotan Town,Baiyun District,Guangzhou City
China
Manufacturer : GUANGZHOU HAYA LIGHTING EQUIPMENT CO.,LTD.
Address : 8th of Guanglong Road,Zhongluotan Town,Baiyun District,Guangzhou City
China
Factory : GUANGZHOU HAYA LIGHTING EQUIPMENT CO.,LTD.
Address : 8th of Guanglong Road,Zhongluotan Town,Baiyun District,Guangzhou City
China
EUT : Moving light
Model Name : Beam 12
Trademark : 

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 1.1310: §1.1307(b)	PASS

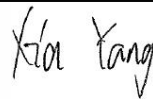
The above equipment was tested by EMTEK(DONGGUAN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules FCC 1.1310: §1.1307(b).

The test results of this report relate only to the tested sample identified in this report

Date of Test :

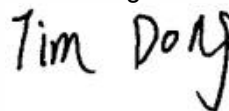
May 27, 2023 to July 12, 2023

Prepared by :



Xia Yang /Editor

Reviewer :



Tim Dong/ Supervisor

Approve & Authorized Signer :



Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2304130131E00502R	July 12, 2023	Original Report



2. EUT Specification

Characteristics	Description
Product:	Moving light
Model Number:	Beam 12
Sample:	1#
Device Type:	SRD
Data Rate:	1 Mbps
Modulation:	GFSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	79 channels
Transmit Power Max:	9.27 dBm(0.008453W)
Antenna Gain:	ANT1: -1.31dBi ANT2: 2.95dBi
Power supply:	AC 100-240V~50/60Hz
Evaluation applied:	☒ MPE Evaluation ☐ SAR Evaluation

3. Test Requirement:

RF EXPOSURE EVALUATION

According to KDB 447498: 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)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	--	--	F/300	6
1500-100000	--	--	5	6
(B) Limits for General Population/Uncontrol Exposures				
300-1500	--	--	F/1500	6
1500-100000	--	--	1	30

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

Where

P_d = Power density in mW/cm²

P_{out} =output power to antenna in mW

G = Numeric gain of the antenna relative to isotropic antenna

π =3.1416

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

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

4. Measurement Result

ANT1 gain: -1.31dBi
 ANT2 gain: 2.95dBi
 Directional gain: 4.09dBi

ANT	Frequency (MHz)	Output Power (dBm)	E.I.R.P (dBm)	Target Power W/tolerance (dBm)	Max tune up power tolerance (dBm)	Max tune up power tolerance (mW)	Power Density at R=20cm (mW/cm2)	Limit (mW/cm2)	Verdict
ANT1	2402	8.30	6.99	8±1	9	7.94	0.001169	1	PASS
ANT2	2402	9.27	12.22	12±1	13	19.95	0.007829	1	PASS
TOTAL	2402	11.82	13.36	13±1	14	25.12	0.012812	1	PASS
ANT1	2441	6.80	5.49	6±1	7	5.01	0.000737	1	PASS
ANT2	2441	7.75	10.70	10±1	11	12.59	0.004940	1	PASS
TOTAL	2441	10.31	11.84	11±1	12	15.85	0.008084	1	PASS
ANT1	2480	9.65	8.34	9±1	10	10.00	0.001471	1	PASS
ANT2	2480	10.60	13.55	13±1	14	25.12	0.009857	1	PASS
TOTAL	2480	13.16	14.69	14±1	15	31.62	0.016129	1	PASS

*** End of Report ***