BioLite Inc.

TEST REPORT

SCOPE OF WORK
EMC TESTING–BGB0101

REPORT NUMBER
220329091GZU-002

ISSUE DATE	**[REVISED DATE]**
19-August-2022	[----------]

PAGES
10

DOCUMENT CONTROL NUMBER
© 2017 INTERTEK

Room 02, & 101/E201/E301/
E401/E501/E601/E701/E801 of
Room 01 1-8/F., No. 7-2. Caipin
Road, Science City, GETDD,
Guangzhou, Guangdong, China
Telephone: +86 20 8213 9688
Facsimile: +86 20 3205 7538
www.intertek.com.cn

TEST REPORT

Applicant Name & Address	:	BioLite Inc. 65 Jay Street 3rd Floor, Brooklyn, NY 11201 United States
Manufacturing Site	:	Dongguan DBK Energy Technology Co., Ltd No. 252, Zhangmutou Section, Dongshen Rd., Zhangmutou Town, DONGGUAN CITY, Guangdong Province China
Intertek Report No:		220329091GZU-002
FCC ID:		2A3GZBGB

Test standards

47 CFR PART 1, Subpart I, Section 1.1310
KDB 680106 D01 RF Exposure Wireless Charging App v03r01

Sample Description

Product	:	BaseCharge 1500
Model No.	:	BGB0101
Electrical Rating	:	See page 5
Serial No.	:	Not Labeled
Date Received	:	29 March 2022
Date Test Conducted	:	18 July 2022-25 July 2022

Prepared and Checked By

Elena Lei

Engineer

Approved By:

Dean Liu

Project Engineer

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT

CONTENT

TEST REPORT

1.0 TEST RESULT SUMMARY

Classification of EUT: Class B

Test Item	Standard	Result
EMF	47 CFR PART 1, Subpart I, Section 1.1310	PASS

Remark:
When determining the test results, measurement uncertainty of tests has been considered.

TEST REPORT

2.0 General Description

2.1 Product Description

Operating Frequency	120-203KHz
Type of Modulation:	ASK
Antenna Type	Inductive loop coil antenna
Power Supply:	Battery Capacity: 1520.64Wh (21.6V, 70.4Ah) Output: AC (3X) :110V~60Hz, Rated power 1200W each port, 2400W Surge, Total 1200W Pure Sine Wave USB-C PD (1X): 5VDC 3A, 9VDC 3A, 12VDC 3A, 15VDC 3A, 20VDC 5A, 100W Max USB-A (2X): 5VDC 3A, each port, Total 30W Max USB-C (2X): 5VDC 3A, each port, Total 30W Max Wireless Charging: 10W Car Port&DC5521 (2X): 12VDC 10A each port, Total 120W Max Total DC+AC Output 1200W Max Input: Solar DC: 12-30V, 400W Max USB-C PD (1X): 5VDC 3A, 9VDC 3A, 12VDC 3A, 15VDC 3A, 20VDC 5A, 100W Max,Total DC+USB-C PD Input 500W Max Operating Temp: 0-40℃
Power cord:	wires unscreened cable

2.2 Test Facility

Room102/104, No 203, KeZhu Road, Science City, GETDD Guangzhou, China

A2LA Certificate Number 0078.10
Intertek Testing Services Shenzhen Ltd. Guangzhou Branch is accredited by A2LA and Listed in FCC website. FCC accredited test labs may perform both Certification testing under Parts 15 and 18 and Declaration of Conformity testing.

2.3 EUT Exercising Software

N/A

2.4 Special Accessories

N/A

TEST REPORT

2.5 Equipment Modification

Any modifications installed previous to testing by BioLite Inc. will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Guangzhou Branch.

TEST REPORT

2.6 Support Equipment List and Description

This product was tested with corresponding support equipment as below:
Support Equipment:

Description	Manufacturer	Model No.	SN/Version	Supplied by
Adapter	DBK	YHY-19004740	100-240~, 50/60Hz, 2.0A	Client
Adapter	DBK	HW-200325CP0	100-240~, 50/60Hz, 5V/9V/12V/15V/20V	Client
cement resistor*6	-	5/2/0.5/1/10 Ω, 50W	-	Intertek
light bulb*3		100-240~, 50/60Hz,	--	Intertek
Slide rheostat*2		100-240~, 50/60Hz,	--	Intertek
WPT client	--	5W,7.5W,10W	110-205K	Customer
Voltage regulating controller	--	--	5V/9V/12V/15V/20V	Client

Cable

Description	Model No.	Connector type	Cable length/type	Supplied by
Antenna cable	RF-01	SMA	0.2 m(shielded)	Intertek
1st light bulb	C-01	AC	1.1 m(unshielded)	Intertek
2nd light bulb	C-02	AC	1.3 m(unshielded)	Intertek
3rd light bulb	C-03	AC	1.3 m(unshielded)	Intertek
1st cement resistor cord	C-04	USB	0.6 m(unshielded)	Intertek
2nd cement resistor cord	C-05	USB	0.6 m(unshielded)	Intertek
3rd cement resistor cord	C-06	TYPE-C	0.6 m(unshielded)	Intertek
4thcement resistor cord	C-07	TYPE-C	1.3 m(unshielded)	Intertek
5thcement resistor cord	C-07	TYPE-C	1.3 m(unshielded)	Intertek
6th cement resistor cord	C-08	DC	0.3 m(unshielded)	Intertek
1st Slide rheostat	C-09	DC	0.4 m(unshielded)	Intertek
2nd Slide rheostat	C-09	DC	1.2 m(unshielded)	Intertek

TEST REPORT

Remark: WPT client was one of typical client devices, it's selected such that the EUT was fully exercised at maximum power from its transmitter. It will not be sold together.

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above evaluated respectively

Pretest mode	Description	
Standby Mode	kept transmitting continuously	
Charging Mode	CH: Low	WPT client is charging at 1% battery power, 50% and 99% battery power respectively, keep transmitting continuously
	CH: Middle	
	CH: High	

TEST REPORT

3.0 EMF TEST

3.1 Standard Requirement

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 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 0.1m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
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
1500-100000	--	--	5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S)(mW/cm^2)	Averaging Times $\|E\|^2$, $\|H\|^2$ or S (minutes)
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
1500-100000	--	--	1.0	30

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

TEST REPORT

3.2 Test Data

Input Voltage: 120V/60Hz
Ambient Condition: 24℃, 50%RH

Test distance: 15 cm surrounding the device, and 20 cm away from the surface from the coil.

H-Filed Strength:

Test Position	**Probe Measure Result (A/m)**			**50% Limit (A/m)**	**Limit (A/m)**
	WPT client in 1% battery power	WPT client in 50% battery power	WPT client in 99% battery power		
Side 1	0.035	0.041	0.044	0.815	1.63
Side 2	0.045	0.034	0.036	0.815	1.63
Side 3	0.038	0.042	0.052	0.815	1.63
Side 4	0.033	0.044	0.053	0.815	1.63
Top	0.044	0.052	0.059	0.815	1.63

4.0 Test Equipment List

Equip. No.	**Equipment**	**Model**	**Manufacturer**	**Cal. date**	**Due date**
EM007-03	Exposure Level Tester	ELT-400	NARDA	2022/2/28	2023/2/28

**********End of the test report**********