

FCC RF Exposure

Applicant : PEAG, LLC dba JLab Audio
Address : 5927 LANDAU CT, Carlsbad, CA 92008, United States
Product Name : Charging base
Brand Mark :  JLAB®
Model : Epic Lux Lab Edition-Charging base
FCC ID : 2AHYV-ELUXCD
Report Number : BLA-EMC-202502-A2302
Date of Receipt : Feb. 12, 2025
Date of Test : Feb. 17, 2025 to Mar. 21, 2025
Test Standard : KDB 680106 D01 RF Exposure Wireless Charging App v03r01
Test Result : Pass

Compiled by: *Hugh*

Review by: *Sueela*

Approved by: *Blue Zheng*

Issued Date: Mar. 21, 2025

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Table of Contents

1	General information	4
1.1	General information	4
1.2	General description of EUT	4
2	Test equipment	5
3	RF Exposure Compliance Requirement	6
3.1	Measuring Standard	6
3.2	Limits	6
3.3	Test Procedure	9
3.4	Test Result	10
	Appendix A: photographs of test setup	11

Revise Record

Version No.	Date	Description
01	Mar. 21, 2025	Original

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1 General information

1.1 General information

Applicant	PEAG, LLC dba JLab Audio
Address	5927 LANDAU CT, Carlsbad, CA 92008, United States
Manufacturer	GuangDong Simpreal Intelligent Technology Co., Ltd
Address	Room 2408, JiaHong ZhenXing DaSha, DongGuan Avenue #13, DongCheng District, DongGuan City, GuangDong Province, P.R. China
Factory	GuangDong Simpreal Intelligent Technology Co., Ltd
Address	Room 2408, JiaHong ZhenXing DaSha, DongGuan Avenue #13, DongCheng District, DongGuan City, GuangDong Province, P.R. China

1.2 General description of EUT

Product name	Charging base
Model no.	Epic Lux Lab Edition-Charging base
Series model	N/A
Engineer test sample no	BLA-EMC-202502-A23- Base
Operation Frequency	110.5KHz-205KHz
Modulation type	ASK
Antenna Type	Inductive loop coil Antenna
Antenna Gain:	0dBi(Provided by customer)
Power supply or adapter information	DC5V
Hardware Version	V1.2
Software Version	V1.0.36

Note: for a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2 Test equipment

Test Equipment	Manufacturer	Model No.	SN.	Cal. Date	Due. date
Electric and Magnetic Field Analyzer	Narda	EHP-200A	180ZX11016	2024.04.24	2025.04.23

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3 RF Exposure Compliance Requirement

3.1 Measuring Standard

KDB 680106 D01 RF Exposure Wireless Charging App v03r01

3.1.1 Requirements for Wireless charging device

According to the item 5 of KDB 680106 D01 RF Exposure Wireless Charging App v03:

- 1) Power transfer frequency is less than 1MHz.

Yes

- 2) Output power from each primary coil is less than or equal to 15 watts.

Yes, Output: 5W Max

- 3) The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.

No

- 4) Client device is placed directly in contact with the transmitter.

Yes

- 5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

Yes

- 6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Yes

3.2 Limits

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)

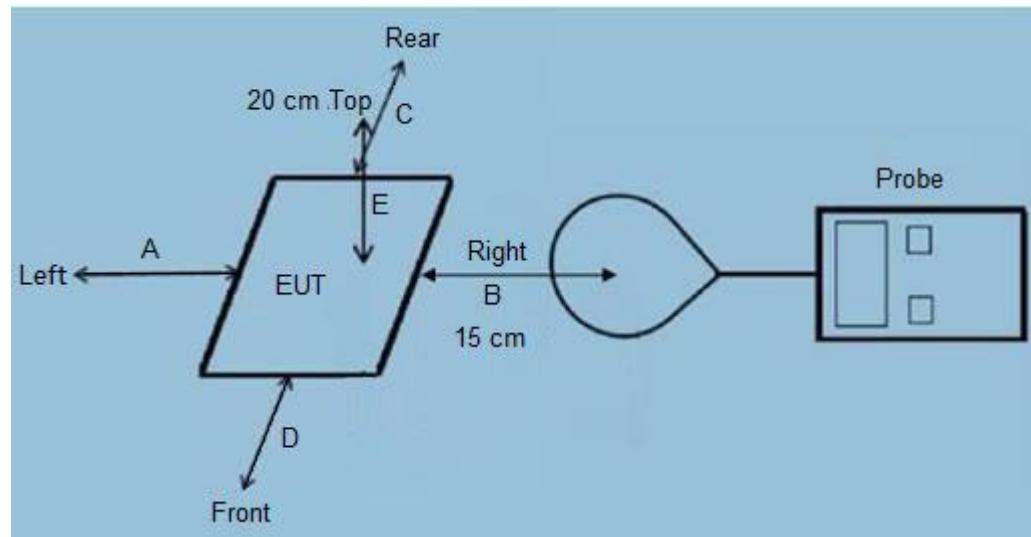
Limits for Maximum Permissible Exposure (MPE)

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
*=Plane-wave equivalent power density
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

3.2.1 Test Setup

A:



3.3 Test Procedure

- 1) The RF exposure test was performed in an echoic chamber;
- 2) The measurement probe was placed at test distance(15 cm from edges, 20 cm from top) Which is between the edge of the charger and the geometric center of probe, for test setup A;
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A,B, C,D, E) were completed;

Remark: The EUT's test position A, B,C, D and E is valid for the E and H field measurements.

3.4 Test Result

Test Result for Test setup A

Connect AC power in mode:

E-Filed Strength at (15 cm from edges A,B,C,D,15cm and 20 cm from top E) surrounding the EUT (V/m)

Charging Load Worse case	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position E 20cm	Limits (V/m)
<5%	0.55	0.57	0.64	0.46	0.18	0.26	614
50%	0.10	0.21	0.33	0.57	0.61	0.89	614
>90 %	0.31	0.54	0.26	0.17	0.09	0.28	614

H-Filed Strength at (15 cm from edges A,B,C,D, 15cm and 20 cm from top E) surrounding the EUT (A/m)

Charging Load Worse case	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position E 20cm	Limits (A/m)
<5%	0.0132	0.0145	0.0554	0.0332	0.0454	0.0431	1.63
50%	0.0445	0.0657	0.0109	0.0119	0.0547	0.0887	1.63
>90 %	0.0349	0.0458	0.0641	0.0170	0.0118	0.0766	1.63

Appendix A: photographs of test setup

Test setup of A side



Test setup of B side



Test setup of C side



Test setup of D side



Test setup of E side



----END OF REPORT----

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