

# **MPE TEST REPORT**

**Applicant** LEXON

FCC ID 2ARD3-LA128

**Product** POWERSOUND

**Brand** LEXON

Model LA128

**Report No.** R2103A0169-M1

**Issue Date** March 5, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in FCC Part 1 Subpart I / FCC Part 2 Subpart J. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Approved by: Guangchang Fan

Guangchang Fan

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## **Table of Contents**

1	Test	Laboratory	3
	1.1	Notes of the Test Report	3
	1.2	Test facility	3
	1.3	Testing Location	
	1.4	Laboratory Environment	4
2	Stat	ement of Compliance	5
3	Des	cription of Equipment under Test	6
4	Test	Specification, Methods and Procedures	7
5	Equ	ipment Under Test	8
	5.1	Description of EUT	8
	5.2	Worst-Case Configuration	8
	5.3	KDB 680106 D01 v03 Section 5.b) Equipment Approval Considerations	8
	5.4	Description of Test Setup	9
6	Test	and Measurement Equipment	10
7	Max	imum Permissible RF Exposure	11
	7.1	FCC Limits and Summary	11
	7.2	Maximum Permissible Exposure Test Results	12
Α	NNEX.	A: The EUT Appearance	13
Α	NNFX	B: Test Setup Photos	14



**Test Laboratory** 

**Notes of the Test Report** 

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(shanghai) co., Ltd. The results documented in this report apply only to the tested sample, under the

conditions and modes of operation as described herein .Measurement Uncertainties were not taken

into account and are published for informational purposes only. This report is written to support

regulatory compliance of the applicable standards stated above.

**Test facility** 1.2

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission

list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory

Accreditation to perform measurement.

**Testing Location** 

Company:

TA Technology (Shanghai) Co., Ltd.

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Test Report Report Report No.: R2103A0169-M1

## 1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C		
Relative humidity	Min. = 30%, Max. = 70%		
Ground system resistance	< 0.5 Ω		
Ambient noise is checked and found very low and in compliance with requirement of standard			
Reflection of surrounding objects is minimize	ed and in compliance with requirement of standards.		



Test Report Report No.: R2103A0169-M1

## 2 Statement of Compliance

The Maximum Permissible Exposure (MPE) found during testing for the EUT is as follows:

Table 1: Maximum Permissible Exposure

FCC Limit		Maximum Permissible Exposure		FCC Percentage		
Magnetic Field	Electric Field	Magnetic Field RMS	Electric Field RMS	Magnetic Field Percentage	Electric Field Percentage	
(A/m)	(V/m)	(A/m)	(V/m)	(%)	(%)	
1.63	614	0.0687	0.6459	4.21%	0.0011	
Date of Testing:		March 1, 2021~March 4, 2021				
Date of Sample Receiving:	March 1, 2021					
Test Result	Complies					

Note: 1. Above result is the worst case of all test mode and test positions.

- 2. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.
- 3. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.



est Report Report No.: R2103A0169-M1

## 3 Description of Equipment under Test

#### **Client Information**

Applicant	LEXON
Applicant address	125 avenue des Champs Elysées 75008 Paris France
Manufacturer	LEXON
Manufacturer address	125 avenue des Champs Elysées 75008 Paris France

### **General Technologies**

Model	LA128
SN	1#
Hardware Version	V22
Software Version	V2.1



Test Report Report No.: R2103A0169-M1

## 4 Test Specification, Methods and Procedures

All calculations were made in accordance with FCC OET Bulletin 65 Edition 97-01 and IC Safety Code 6.

FCC Part 1 Subpart I FCC Part 2 Subpart J KDB 680106 D01



## **Equipment Under Test**

### **Description of EUT**

The EUT is a wireless charging device which has a single inductive charging coil. The charging frequency is between 110 kHz to 205 kHz, and the maximum power consumption is 5W.

### **5.2 Worst-Case Configuration**

Configuration	Mode	Description		
1	1 Standby Base station in stand-by, idle n			
2 Operating		Communication before charging, adjustment charging mode / position		

Note: EUT was tested as standby and operation modes.

### 5.3 KDB 680106 D01 v03 Section 5.b) Equipment Approval Considerations

Requirement	Device
(1) Power transfer frequency is less than 1 MHz	Yes. Operating Frequency is between 110kHz to 205 kHz.
(2) Output power from each primary coil is less than or equal to 15 watts.	Yes. Maximum power is 5 Watts.
(3) The transfer system includes only single primary and secondary coils. This includes charging systems that	
may have multiple primary coils and clients that are able	Yes.
to detect and allow coupling only between individual	
pairs of coils.	
(4) Client device is placed directly in contact with the	Yes.
transmitter.	100.
(5) Mobile exposure conditions only (portable exposure	Yes.
conditions are not covered by this exclusion).	1 <del>6</del> 5.
(6) The aggregate H-field strengths at 15 cm	
surrounding the device and 20 cm above the top surface	Yes. The aggregate field are 0.0011% of the
from all simultaneous transmitting coils are	FCC H field limit.
demonstrated to be less than 50% of the MPE limit.	

TA Technology (Shanghai) Co., Ltd. TA-MB-01-014S Page 8 of 14



Test Report Report No.: R2103A0169-M1

### 5.4 Description of Test Setup

### **Support Equipment**

Support Equipment & Peripherals List							
Description Manufacturer Model Serial Number							
Notebook PC	DELL	Inspiron 5480	7FRD2P2				
Auxiliary equipment Apple iPhone11pro Max FK1CQ4UPN705							

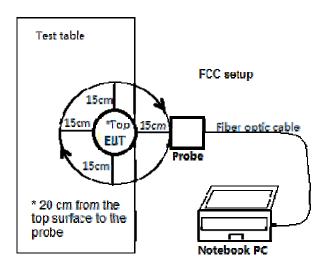
#### **Test Setup**

The following two configurations are tested;

Configuration	Mode	Descriptions
1	Standby	Base station in stand-by, idle mode
	Operating	Communication before charging,
	(<10% Power Charging)	adjustment charging mode / position
2	Operating	Communication before charging,
2	(~50% Power Charging)	adjustment charging mode / position
	Operating	Communication before charging,
	(>90% Power Charging)	adjustment charging mode / position

#### **Measurement Setup**

FCC: The measurement was taken using a probe placed 15 cm surrounding the device and 20 cm above the top surface of the EUT. Measurements were taken the top and all sides of the EUT per KDB680106 D01 v03.





## 6 Test and Measurement Equipment

The following test and measurement equipment was used for the tests documented in this report;

Description	Manufacturer	Model	Software	Serial Number	Cal Date	Cal Due
Electric and Magnetic Field Probe	Narda	EHP-200A	Rel. 1.92	170WX91001	12-31-2020	12-30-2021



### Maximum Permissible RF Exposure

#### **FCC Limits and Summary**

§ 1.1310 The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
(A) Lim	its for Occupational	I/Controlled Exposu	res	
0.3–3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) Limits	for General Populati	ion/Uncontrolled Exp	oosure	
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)—Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)	
30–300 300–1500	27.5	0.073	0.2 f/1500	30 30	
1500–100,000			1.0	30	

f = frequency in MHz

\* = Plane-wave equivalent power density
Note 1 to Table 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

Note 2 to Table 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.



### 7.2 Maximum Permissible Exposure Test Results

#### **E-Field and H-Fiend Measurements**

Note: RMS measurements were performed.

Configuration	Test Mode	Measuring Distance (cm)	Location	Maximum Permissible Exposure	
				Magnetic Field RMS	Electric Field RMS
				(A/m)	(V/m)
1	Standby	20	Back	0.0528	0.3928
		20	Front	0.0539	0.4031
		15	Left	0.0499	0.4115
		15	Right	0.0498	0.4069
		15	Тор	0.0524	0.4005
		15	Bottom	0.0493	0.3981
2	Operating (Power <10% Charging) Adjustment charging mode / position for worst case	20	Back	0.0561	0.5290
		20	Front	0.0535	0.6459
		15	Left	0.0533	0.4248
		15	Right	0.0496	0.4158
		15	Тор	0.0488	0.3990
		15	Bottom	0.0543	0.4066
	Operating (Power	20	Back	0.0622	0.5185
	40% - 50%	20	Front	0.0601	0.5887
	Charging)	15	Left	0.0687	0.4559
	Adjustment charging	15	Right	0.0654	0.4344
	mode / position for	15	Тор	0.0640	0.3943
	worst case	15	Bottom	0.0621	0.3939
	Operating (Power >90% Charging) Adjustment charging mode / position for worst case	20	Back	0.0481	0.5595
		20	Front	0.0577	0.5876
		15	Left	0.0662	0.4112
		15	Right	0.0532	0.4512
		15	Тор	0.0501	0.4066
		15	Bottom	0.0569	0.4357



## **ANNEX A: The EUT Appearance**

The EUT Appearance are submitted separately.



## **ANNEX B: Test Setup Photos**

The Test Setup Photos are submitted separately.

\*\*\*\*\*END OF REPORT \*\*\*\*\*