# **RF** Exposure Evaluation Report

Product Name	Wireless Charger Module
Model No.	LPS-15WP K
FCC ID.	2APYS-LPS15WPK

Applicant	Lanto Electronic Ltd
Address	No.399 baisheng Road, jinxi Town Kunshan, Jiangsu, China 215234

Date of Receipt	Dec. 10, 2021
Date of Declaration	Jan. 26, 2022
Report No.	21C0383R-RFUSMPEV02-A
Report Version	V1.0

The test results relate only to the samples tested.

This report must not be used to claim product endorsement by TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.



Issued Date: Jan. 26, 2022 Report No.: 21C0383R-RFUSMPEV02-A



Product Name	Wireless Charger Module				
Applicant	Lanto Electronic Ltd				
Address	No.399 baisheng Road,jinxi Town Kunshan, Jiangsu, China 215234				
Manufacturer	Lanto Electronic Ltd				
Model No.	LPS-15WP K				
FCC ID.	2APYS-LPS15WPK				
EUT Rated Voltage	DC20 V, 1A				
EUT Test Voltage	AC 120 V / 60 Hz				
Trade Name	LUXSHAREICT				
Applicable Standard	KDB 447498 D01 v06 X For Field Strength Test				
Test Result	Complied				

Documented By :

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Ida Tung

( Project Specialist / Ida Tung )

Tested By

alan Chen

(Senior Engineer / Alan Chen)

Approved By

Jung Tim

( Manager / Tim Sung )



## **Revision History**

Report No.	Version	Description	Issued Date
21C0383R-RFUSMPEV02-A V1.0		Initial issue of report.	2022-01-26

## **1. RF Exposure Evaluation**

## 1.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Specification	Last Cal.
Х	EM Field Meter	Wavecontrol	SMP2 / 18SN0746	1 Hz - 60 GHz	Apr., 2021
Х	Isotropic EM Field Probe	Wavecontrol	WP400-3 / 18WP120014	1 Hz - 400 KHz	Apr., 2021
Х	Isotropic EM Field Probe	Wavecontrol	WP400 / 18WP100392	1 Hz - 400 KHz	Apr., 2021
Х	Isotropic EM Field Probe	Wavecontrol	WPF8 / 18WP040835	100 KHz - 8 GHz	Apr., 2021

## **1.2.** Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
	Temperature (°C)	10~40 °C	25.5°C
Radiated Emission	Humidity (%RH)	10~90 %	55.1%

USA : FCC R	legi	istration Number: TW0033		
Canada : IC Reg	gist	ration Number: 26930		
Site Description	:	Accredited by TAF		
		Accredited Number: 3023		
Test Laboratory	:	DEKRA Testing and Certification Co., Ltd		
Address :		No. 5-22, Ruishukeng Linkou District, New Taipei City,		
		24451, Taiwan		
Performed Location :		No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City		
		333411, Taiwan, R.O.C.		
Phone number	:	+886-3-275-7255		
Fax number	:	+866-3-327-8031		
Email address	:	info.tw@dekra.com		
Website	:	http://www.dekra.com.tw		

#### 1.3. Limits

According to FCC 1.1310: 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	Electric Field	Magnetic Field	Power Density	Average Time				
(MHz)	Strength (V/m)	Strength (A/m) (mW/cm <sup>2</sup> )		(Minutes)				
(A) Limits for Occupational/ Control Exposures								
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	6				
300-1500	300-1500		F/300	6				
1500-100,000			5	6				
	(B) Limits for Gene	ral Population/ Unco	ontrolled Exposures					
0.3-1.34	614	1.63	*(100)	30				
1.34-30	824/F	2.19/F	*(180/F <sup>2</sup> )	30				
300-1500	27.5	0.073	0.2	30				
300-1500			F/1500	30				
1500-100,000			1	30				

Note:

1. RF Exposure evaluation should be conducted assuming a separation distance of 10 cm

2. The EUT is including four models for different marketing requirement.

#### **1.4.** Test Procedure

The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils per the FCC 's request. (reference KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01)

## **1.5.** Test Result of RF Exposure Evaluation for WPT

Items to be covered	Answer from applicant
Power transfer frequency is less than 1 MHz.	Operation frequency range is 123kHz.
Output power from each primary coil is less than or equal to 15 watts.	Output Power equal to 15W.
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 to detect and allow coupling only between individual pairs of coils.	Yes, allow coupling only between individual pairs of coils.
Client device is placed directly in contact with the transmitter.	Yes, meet the requirements.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes, meet the requirements.
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.	*Electric Field Strength (V/m) @20cm = 0.50V/m (< 307 V/m) MPE Limit (614 V/m) *50% =307 V/m *Magnetic Field Strength (A/m) @15cm
	=0.04 A/m (< 0.815 A/m ) MPE Limit (1.63 A/m) *50%= 0.815 A/m



Product	:	Wireless Charger Module
Test Item	:	<b>RF</b> Exposure Evaluation
Test Site	:	ACB1 Chamber
Test Date	:	2021/12/29

#### **E-Field Emissions**

Test Position	Frequency (MHz)	Measurement Level @15cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Side 1	0.12800	0.440	614.0	307.0	PASS
Side 2	0.12800	0.450	614.0	307.0	PASS
Side 3	0.12800	0.460	614.0	307.0	PASS
Side 4	0.12800	0.470	614.0	307.0	PASS
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Test	Frequency	Measurement	Limit	50% Limit	Result
Position	(MHz)	Level @20cm	(V/m)	(V/m)	
		( <b>V</b> /m)			
Тор	0.12800	0.500	614.0	307.0	PASS
Bottom	0.12800	0.480	614.0	307.0	PASS

#### **H-Field Emissions**

Test	Frequency	Measurement	Limit	50% Limit	Result
Position	(MHz)	Level @15cm	(A/m)	(A/m)	
		(A/m)			
Side 1	0.12800	0.020	1.63	0.815	PASS
Side 2	0.12800	0.040	1.63	0.815	PASS
Side 3	0.12800	0.030	1.63	0.815	PASS
Side 4	0.12800	0.020	1.63	0.815	PASS
Test	Frequency	Measurement	Limit	50% Limit	Result
Position	(MHz)	Level @20cm	( <b>V</b> / <b>m</b> )	( <b>V</b> / <b>m</b> )	
		(V/m)			
Тор	0.12800	0.020	1.63	0.815	PASS
Bottom	0.12800	0.010	1.63	0.815	PASS