

RF Exposure Evaluation Report

Product	Wireless Charger Module
Machine Type / Model No.	LPS-15WP B
FCC ID.	2APYS-LPS-15WPB

Applicant	Lanto Electronic Ltd
Address	No 399, Baisheng Road, Jinxi Town, Kunshan City, Jiangsu , China 215234

Date of Receipt	Nov. 19, 2020
Date of Declaration	Mar. 19, 2021
Report No.	20B0670R-E3032410101
Report Version	V1.0

The test results relate only to the samples tested.

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.

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.

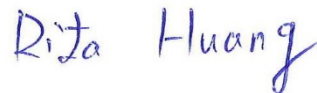
Issued Date: Mar. 19, 2021

Report No.: 20B0670R-E3032410101



Product	Wireless Charger Module	
Applicant	Lanto Electronic Ltd	
Address	No 399, Baisheng Road, Jinxi Town, Kunshan City, Jiangsu , China 215234	
Manufacturer	Lanto Electronic Ltd	
Machine Type / Model No.	LPS-15WP B	
FCC ID.	2APYS-LPS-15WPB	
EUT Rated Voltage	DC 12V	
EUT Test Voltage	AC 120 V / 60 Hz	
Trade Name	LUXSHAREICT	
Applicable Standard	KDB 447498 D01 v06	<input checked="" type="checkbox"/> For Field Strength Test
Test Result	Complied	

Documented By :



(Senior Adm. Specialist / Rita Huang)

Tested By :



(Senior Engineer / Ivan Chuang)

Approved By :



(Director / Vincent Lin)

Revision History

Report No.	Version	Description	Issued Date
20B0670R-E3032410101	V1.0	Initial issue of report.	Mar. 19, 2021

1. RF Exposure Evaluation

1.1. Test Equipment

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	EM Field Meter	Wavecontrol	SMP2	18SN0746	2018.04.23	2021.04.22

1.2. Test Facility

Ambient conditions in the laboratory:

Performed Item	Items	Required	Actual
Exposure Evaluation	Temperature (°C)	10~40 °C	19.8 °C
	Humidity (%RH)	10~90 %	68.2 %

USA : FCC Registration Number: TW0023

Canada : IC Registration Number: 25880

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd
Address : No.159, Sec. 2, Wenhua 1st Rd., Linkou Dist.,
New Taipei City 24457, Taiwan, R.O.C.
Phone number : 886-2-2602-7968
Fax number : 866-2-2602-3286
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 (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (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 ²)	6
30-300	61.4	0.163	1	6
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/F	2.19/F	*(180/F ²)	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 v03)

The temperature and related humidity: 18°C and 62% RH.

1.5. Test Result of RF Exposure Evaluation for WPT

Test Mode	Mode 1: Transmit - IdeaCentre AIO 5 24ALC6	
Items to be covered	Answer from applicant	
Power transfer frequency is less than 1 MHz.	Operation frequency range is 110~145kHz	
Output power from each primary coil is less than or equal to 15 watts.	15W (Max)	
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.	<p>*Electric Field Strength (V/m) @20cm = 1.21V/m (< 307 V/m) MPE Limit (614 V/m) *50% =307 V/m</p> <p>*Magnetic Field Strength (A/m) @20cm =0.04A/m (< 0.815 A/m) MPE Limit (1.63 A/m) *50%= 0.815 A/m</p>	

Test Mode	Mode 2: Transmit - IdeaCentre AIO 5 24IOB6	
Items to be covered	Answer from applicant	
Power transfer frequency is less than 1 MHz.	Operation frequency range is 110~145kHz	
Output power from each primary coil is less than or equal to 15 watts.	15W (Max)	
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.	<p>*Electric Field Strength (V/m) @20cm = 1.17V/m (< 307 V/m) MPE Limit (614 V/m) *50% =307 V/m</p> <p>*Magnetic Field Strength (A/m) @20cm =0.04A/m (< 0.815 A/m) MPE Limit (1.63 A/m) *50%= 0.815 A/m</p>	

Test Mode	Mode 3: Transmit - IdeaCentre AIO 5 27IOB6	
Items to be covered	Answer from applicant	
Power transfer frequency is less than 1 MHz.	Operation frequency range is 110~145kHz	
Output power from each primary coil is less than or equal to 15 watts.	15W (Max)	
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.	<p>*Electric Field Strength (V/m) @20cm = 1.23V/m (< 307 V/m) MPE Limit (614 V/m) *50% =307 V/m</p> <p>*Magnetic Field Strength (A/m) @20cm =0.05A/m (< 0.815 A/m) MPE Limit (1.63 A/m) *50%= 0.815 A/m</p>	

Product : Wireless Charger Module
 Test Item : RF Exposure Evaluation
 Test Site : ACB1
 Test Date : 2021/03/17
 Test Mode : Mode 1: Transmit - IdeaCentre AIO 5 24ALC6

DC 12V**E-Field Emissions**

Test Position	Frequency (MHz)	Measurement Level @15cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Side 1	0.12600	0.500	614.0	307.0	PASS
Side 2	0.12600	0.570	614.0	307.0	PASS
Side 3	0.12600	0.490	614.0	307.0	PASS
Side 4	0.12600	0.480	614.0	307.0	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Top	0.12600	1.210	614.0	307.0	PASS
Bottom	0.12600	0.480	614.0	307.0	PASS

H-Field Emissions

Test Position	Frequency (MHz)	Measurement Level @15cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Side 1	0.12600	0.020	1.63	0.815	PASS
Side 2	0.12600	0.040	1.63	0.815	PASS
Side 3	0.12600	0.030	1.63	0.815	PASS
Side 4	0.12600	0.030	1.63	0.815	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Top	0.12600	0.040	1.63	0.815	PASS
Bottom	0.12600	0.020	1.63	0.815	PASS

Product : Wireless Charger Module
 Test Item : RF Exposure Evaluation
 Test Site : ACB1
 Test Date : 2021/03/17
 Test Mode : Mode 2: Transmit - IdeaCentre AIO 5 24IOB6

DC 12V**E-Field Emissions**

Test Position	Frequency (MHz)	Measurement Level @15cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Side 1	0.12600	0.490	614.0	307.0	PASS
Side 2	0.12600	0.540	614.0	307.0	PASS
Side 3	0.12600	0.500	614.0	307.0	PASS
Side 4	0.12600	0.470	614.0	307.0	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Top	0.12600	1.170	614.0	307.0	PASS
Bottom	0.12600	0.460	614.0	307.0	PASS

H-Field Emissions

Test Position	Frequency (MHz)	Measurement Level @15cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Side 1	0.12600	0.020	1.63	0.815	PASS
Side 2	0.12600	0.030	1.63	0.815	PASS
Side 3	0.12600	0.020	1.63	0.815	PASS
Side 4	0.12600	0.040	1.63	0.815	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Top	0.12600	0.040	1.63	0.815	PASS
Bottom	0.12600	0.030	1.63	0.815	PASS

Product : Wireless Charger Module
 Test Item : RF Exposure Evaluation
 Test Site : ACB1
 Test Date : 2021/03/17
 Test Mode : Mode 3: Transmit - IdeaCentre AIO 5 27IOB6

DC 12V**E-Field Emissions**

Test Position	Frequency (MHz)	Measurement Level @15cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Side 1	0.12600	0.510	614.0	307.0	PASS
Side 2	0.12600	0.600	614.0	307.0	PASS
Side 3	0.12600	0.480	614.0	307.0	PASS
Side 4	0.12600	0.490	614.0	307.0	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (V/m)	Limit (V/m)	50% Limit (V/m)	Result
Top	0.12600	1.230	614.0	307.0	PASS
Bottom	0.12600	0.480	614.0	307.0	PASS

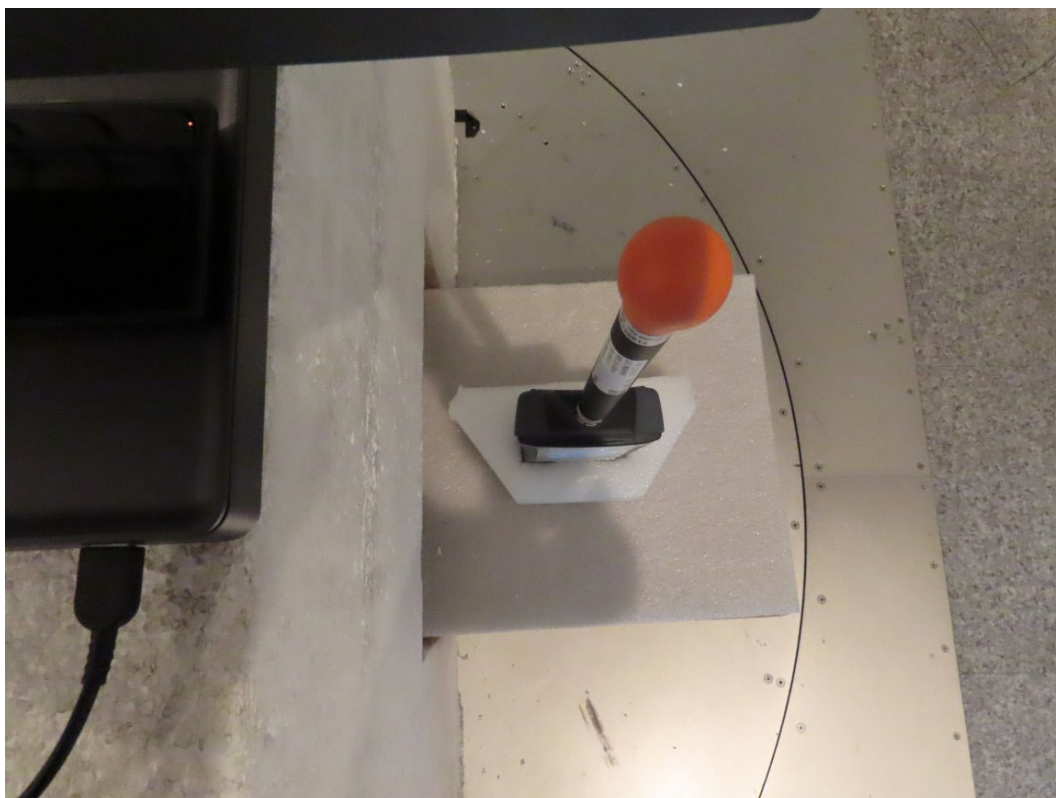
H-Field Emissions

Test Position	Frequency (MHz)	Measurement Level @15cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Side 1	0.12600	0.030	1.63	0.815	PASS
Side 2	0.12600	0.040	1.63	0.815	PASS
Side 3	0.12600	0.020	1.63	0.815	PASS
Side 4	0.12600	0.040	1.63	0.815	PASS

Test Position	Frequency (MHz)	Measurement Level @20cm (A/m)	Limit (A/m)	50% Limit (A/m)	Result
Top	0.12600	0.050	1.63	0.815	PASS
Bottom	0.12600	0.020	1.63	0.815	PASS

1.6. EUT Test Setup Photographs

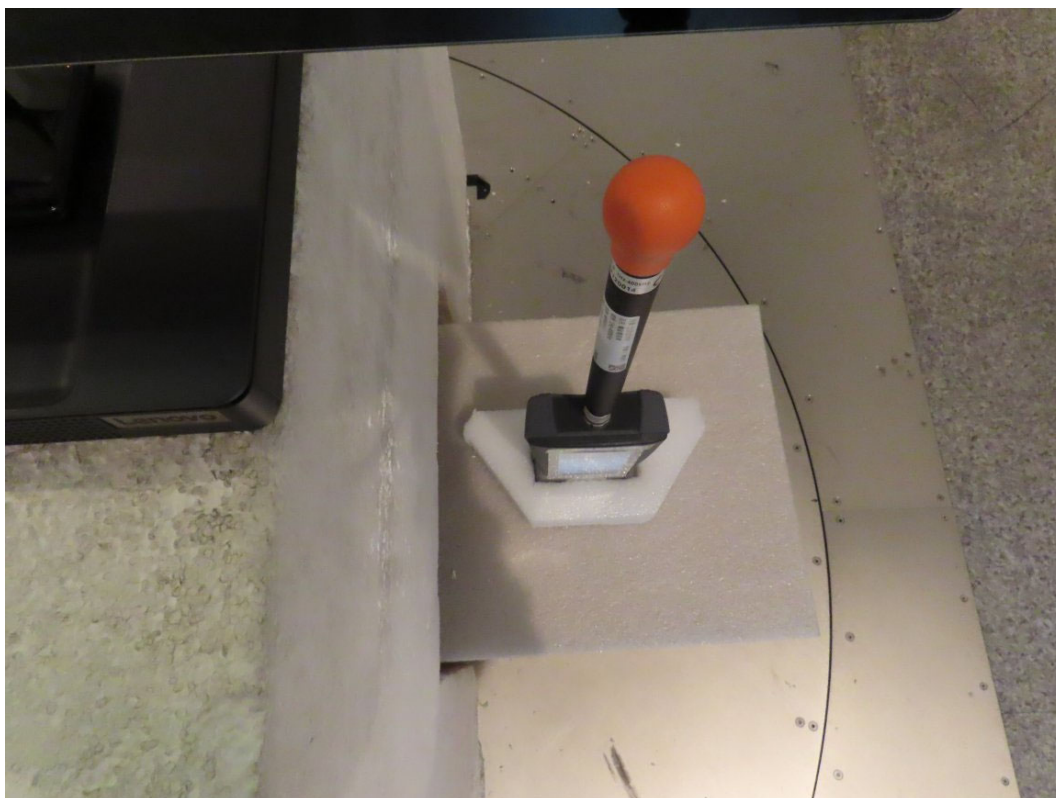
Side 1



Side 2



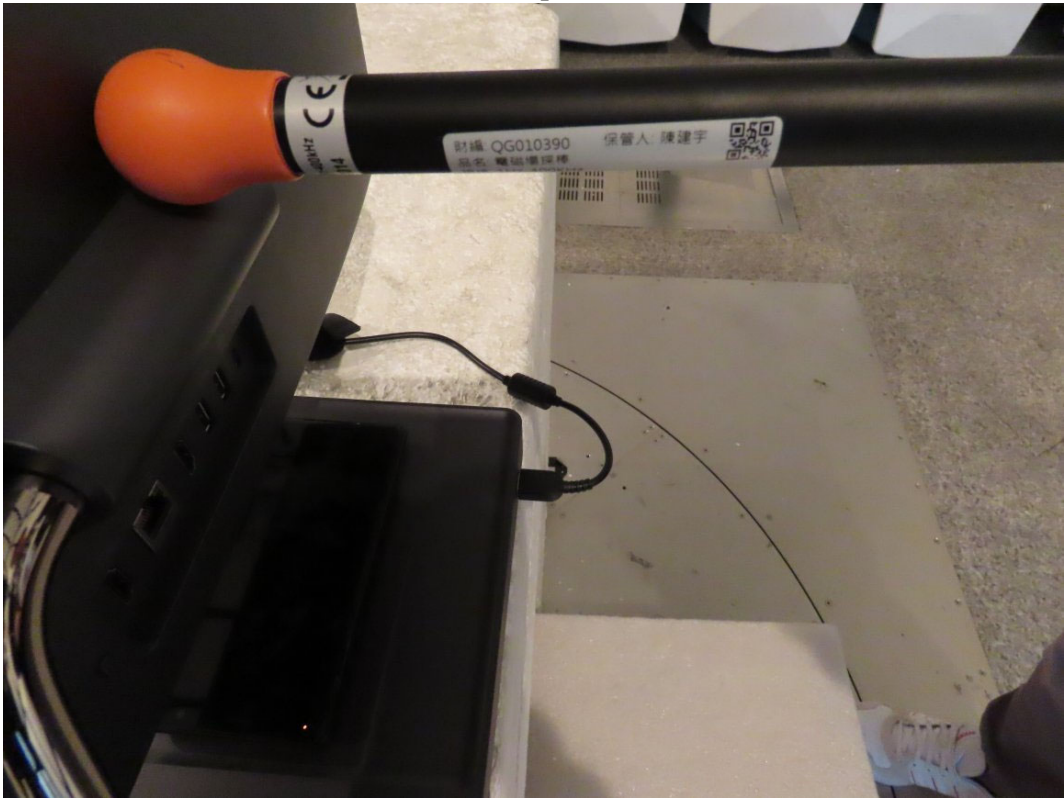
Side 3



Side 4



Top



Bottom

