

Maximum Permissible Exposure

FCC ID : 2APYSG5SPY
Equipment : Wireless Device
Model Name : G5SPY
Applicant : Lanto Electronic Ltd
No.399 baisheng Road, jinxi Town, Kunshan City,
Jiangsu, 215324, China
Manufacturer : Lanto Electronic Ltd
No.399 baisheng Road, jinxi Town, Kunshan City,
Jiangsu, 215324, China
Standard : 47 CFR Part 2.1091

The product was received on May 06, 2021, and testing was started from May 22, 2021 and completed on Jun. 01, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 47 CFR Part 2.1091 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issued Date
FA150605NF	01	Initial issue of report	Jun. 11, 2021
FA150605NF	02	The Mode 1 Test Photos was updated This report is the latest version replacing for the report issued on Jun. 11, 2021	Jun. 25, 2021



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
2	-	Maximum Permissible Exposure	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

None

Reviewed by: Sam Tsai

Report Producer: Jenny Yang

1 General Description

1.1 Information

1.1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range	Operating Frequency	Modulation Type
WPC	112-148.5 kHz	141.3	FSK

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	-	-	coils	-

1.1.3 Accessories

Accessories				
USB Type-C Cable	Brand Name	luxshare	Model Name	LZ6UC025-CS-H
	Signal Line	1.5 meter, shielded cable, w/o ferrite core		

Reminder: Regarding to more detail and other information, please refer to user manual.

1.1.4 Support Equipment

Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	LOAD 5W	Lanto	A1	-	Note 1
2	LOAD 22.5W	Lanto	A2	-	Note 1
3	LOAD 30W	Lanto	A3	-	Note 1
4	AC adapter	Aohai	G9BR1	-	Note 1
5	AC adapter	HUAWEI	HW-200200CP1	-	Note 1

Note 1: Provided by Customer.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 2.1091
- ♦ KDB680106 D01 RF Exposure Wireless Charging Apps v03r01

Remark: The TAF code is not including all the FCC KDB listed without accreditation.

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Johnny Yu	20.1~26.9°C / 50~60%	22/May/2021~01/Jun/2021
Subcontractor : Sporton International Inc. Hsinchu Laboratory				
☐ Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)			
	TEL: 886-3-656-9065		FAX: 886-3-656-9085	
Test site Designation No. TW0006 with FCC.				

2 Human Exposure Assessment

2.1 Maximum Permissible Exposure

2.1.1 Limit of Maximum Permissible Exposure

(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 Time 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 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

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time 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 ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	F/1500	30
1500-100,000	-	-	1.0	30

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

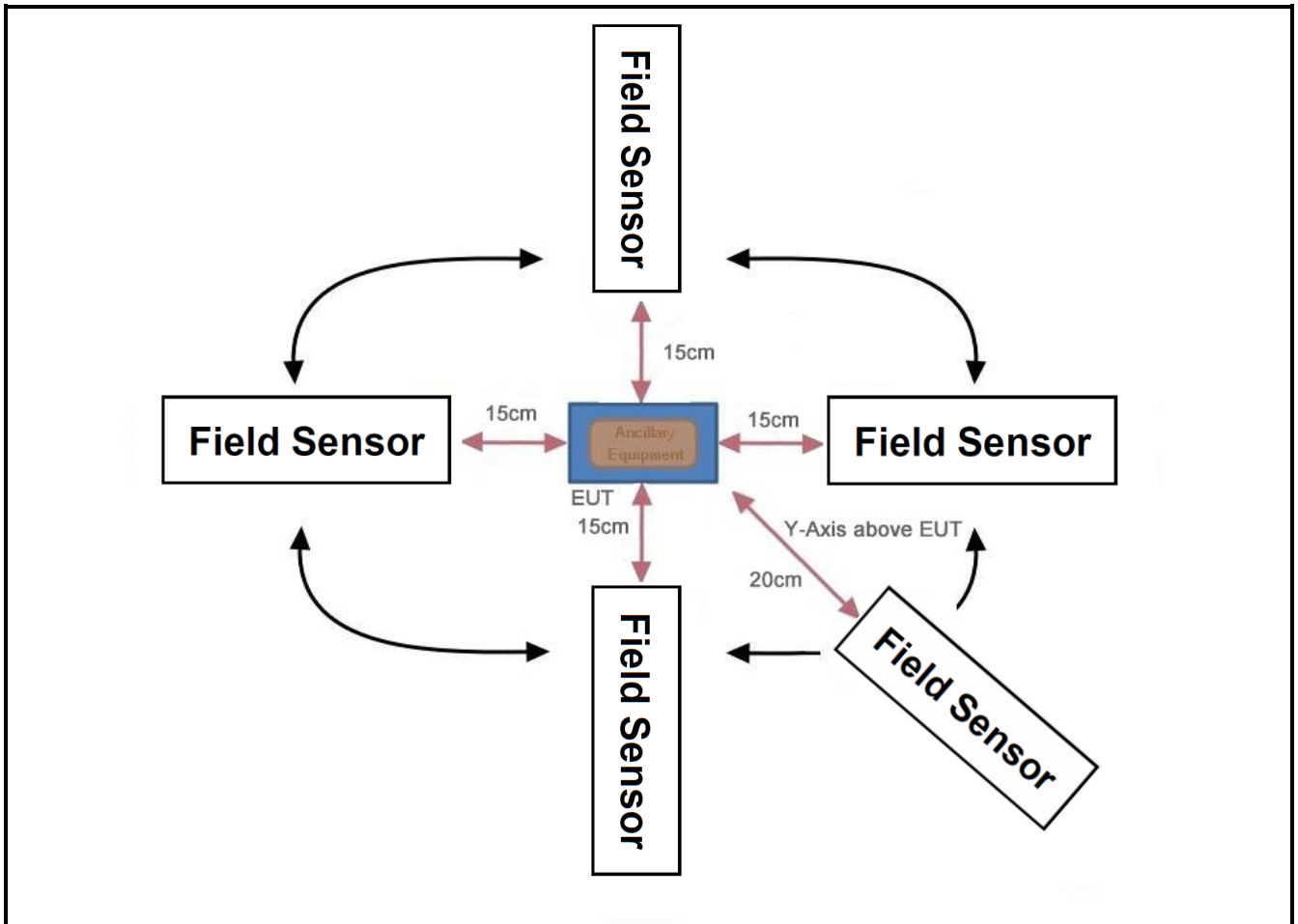
2.1.2 The Worst Condition

Mode	Ancillary Equipment	Evaluation Mode	Worse Condition	Remark
1	The Load 5W on coil 2	WPC	Operating	With 30W Adapter
2	The Load 30W on coil 1	WPC	Operating	With 65W Adapter
3	The Load 22.5W on coil 1	WPC	Operating	With 30W Adapter

2.1.3 Test Method

Test Method	
☒	Performed aggregate both leakage E-field and H-field at surrounding the device from all simultaneous transmitting coils.
☒	During testing, the EUT was placed on a non-conductive table top and the ancillary equipment (e.g., mobile phone) was placed on the EUT for charging. Maximum E-field and H-field measurements were tested 15/20 cm from each side of the EUT. Along the side of the EUT to center of E-field probe and H-field probe were positioned at the location to search maximum field strength.
☒	E-field transfer to H-field
-	$E\text{-field} = Z_0 \times H\text{-field}$ $H\text{-field} = E\text{-field} \div Z_0$ Where Z_0 = Free Space Impedance = 377Ω

2.1.4 Test Setup



Note 1 : find worst position for each axis.

Note 2 : This shall be measured as the distance from the edge of the device to the center of the measurement probe.

2.1.5 Result of Maximum Permissible Exposure

<Mode 1>

Maximum Permissible Exposure				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
Operating	15cm	Left	0.4656	0.3623
	15cm	Right	0.2313	0.1386
	15cm	Top	0.3875	0.1695
	15cm	Bottom	0.4469	0.7862
	20cm	Y-axis above EUT	0.2875	0.2299
Limit			614.00	1.63
Margin Limit (%)			0.08%	48.23%

<Mode 2>

Maximum Permissible Exposure				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
Operating	15cm	Left	1.4219	0.0791
	15cm	Right	2.4844	0.4254
	15cm	Top	1.8125	0.0919
	15cm	Bottom	2.1094	0.4869
	20cm	Y-axis above EUT	0.3750	0.5524
Limit			614.00	1.63
Margin Limit (%)			0.40%	33.89%

<Mode 3>

Maximum Permissible Exposure				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
Operating	15cm	Left	1.5938	0.1519
	15cm	Right	1.3750	0.2475
	15cm	Top	1.2188	0.0684
	15cm	Bottom	2.4375	0.8344
	20cm	Y-axis above EUT	2.4063	0.3628
Limit			614.00	1.63
Margin Limit (%)			0.40%	51.19%

3 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer/ Brand Name	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Electric and Magnetic field Probe - Analyzer	Narda S.T.S. / PMM	EHP 200AC	180ZX00640	3kHz~30MHz	09/Nov/2020	08/Nov/2021

—————THE END—————