

Maximum Permissible Exposure

Equipment : 小米直立風冷無線充電座 50W
Brand Name : xiaomi
Model Name : MDY-12-EN
Applicant : 台灣小米通訊有限公司
台北市中正區新生南路 1 段 50 號 2 樓之 2
Manufacturer : Lanto Electronic Ltd.
No.399 baisheng Road, jinxi Town,
Kunshan City, Jiangsu, 215324, China
Standard : LP0002 Section 6.20.2 (2020-07-01)

The product was received on Dec. 28, 2021, and testing was started from Jan. 04, 2022 and completed on Jan. 04, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in LP0002 Section 6.20.2 (2020-07-01) 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: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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



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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: Amber Chiu

1 General Description

1.1 Information

There is a Bluetooth chip on PCB board which is disabled by software.

1.1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range	Operating Frequency	Modulation Type
WPC	112-148 kHz	136	FSK

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	BT COIL	077-091H-0391	Coil	N/A

1.1.3 Support Equipment

Support Equipment					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	Xiaomi	MDY-13-EG	-	-
2	10W Fixture	Lanto	A1	-	Provided by Customer
3	50W Fixture	Lanto	A3	-	Provided by Customer
4	10W Load	Lanto	A1	-	Provided by Customer
5	50W Load	Lanto	A3	-	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:

- LP0002 Section 6.20.2 (2020-07-01)

The following reference test guidance is not within the scope of accreditation of TAF:

- KDB680106 D01 RF Exposure Wireless Charging Apps v03r01

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 Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Alan Chien	20.1~26.9°C / 50~60%	04/Jan/2022
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	

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

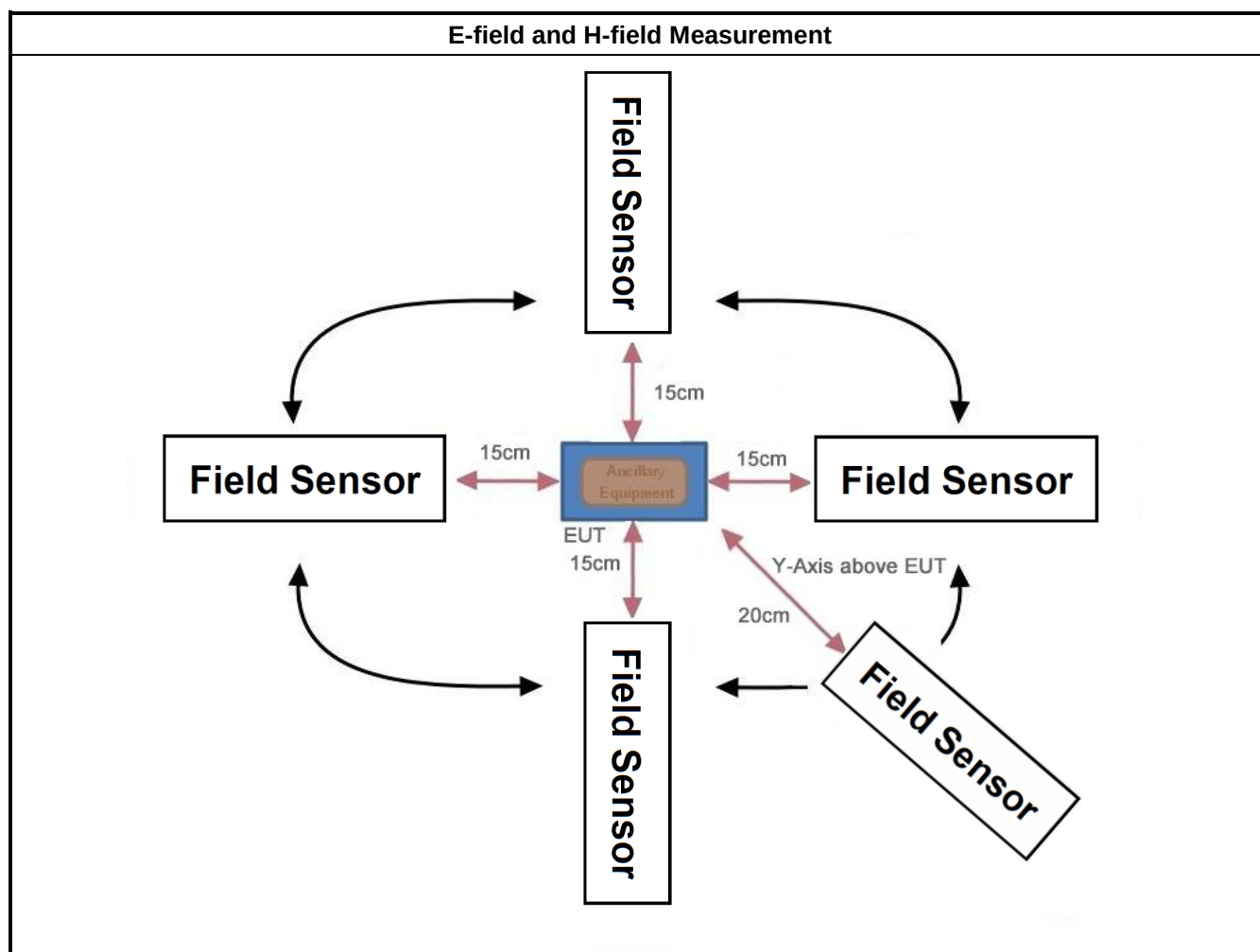
2.1.2 The Worst Condition

Ancillary Equipment	Evaluation Mode	Worst Condition
Fixture Load	WPC	Operating

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 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.

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

Maximum Permissible Exposure - 10W				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
Operating	15cm	Left	1.8727	0.0678
	15cm	Right	1.5914	0.0280
	15cm	Top	1.8263	0.1475
	15cm	Bottom	1.4562	0.1063
	20cm	Y-axis above EUT	0.8281	0.0299
Limit			614.00	1.63
Margin Limit (%)			0.31%	9.05%

Maximum Permissible Exposure - 50W				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
Operating	15cm	Left	5.7501	0.2291
	15cm	Right	2.4336	0.2053
	15cm	Top	8.6675	0.5560
	15cm	Bottom	1.9627	0.4984
	20cm	Y-axis above EUT	5.7074	0.2576
Limit			614.00	1.63
Margin Limit (%)			1.41%	34.11%

3 Test Equipment and Calibration Data

Instrument for Conducted Test

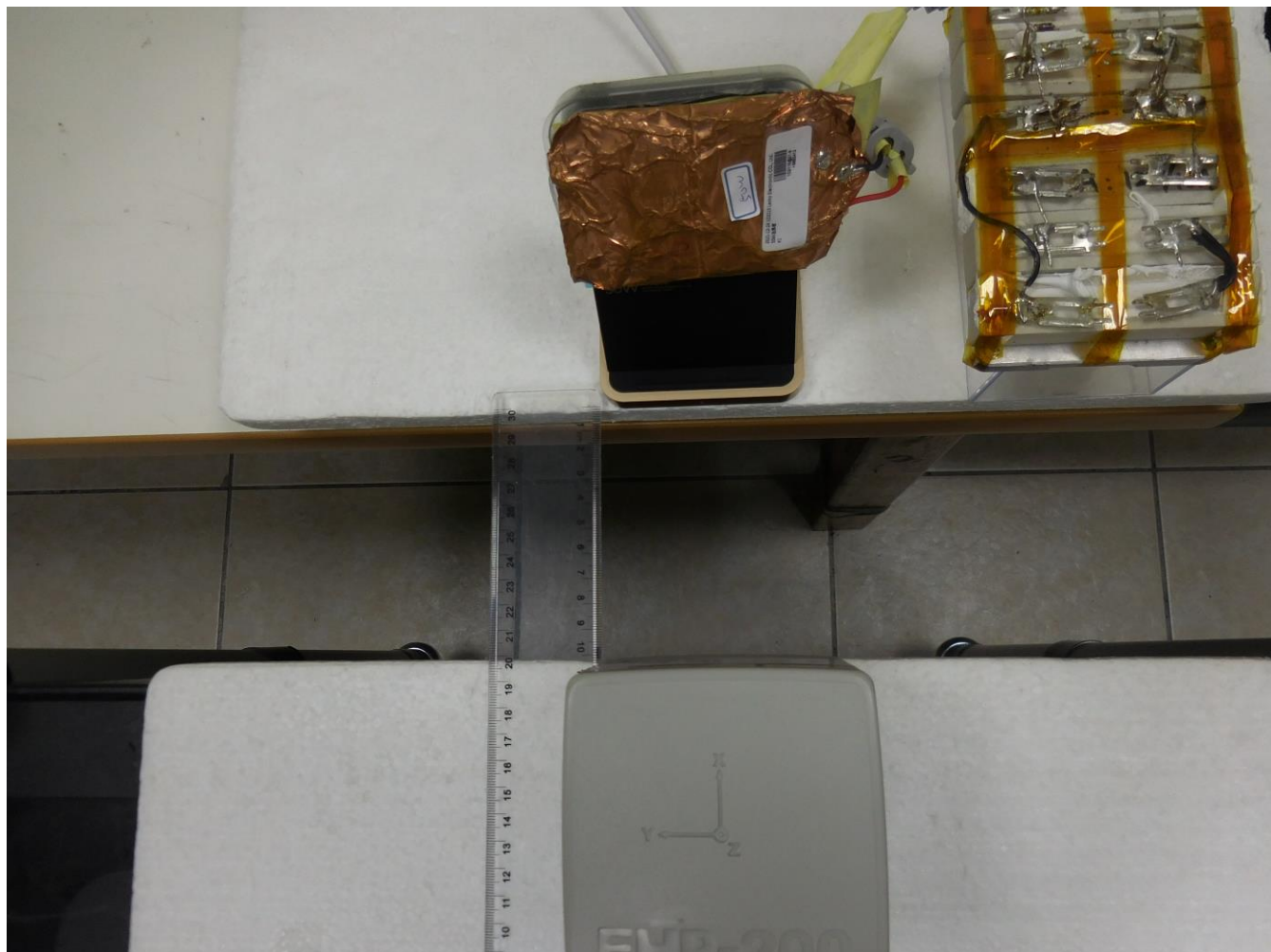
Instrument	Manufacturer/ Brand Name	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Electric and Magnetic field Probe - Analyzer	Narda S.T.S. / PMM	EHP 200AC	170WX80309	3kHz~30MHz	26/Oct/2021	25/Oct/2022
Probe – test tool	Narda S.T.S. / PMM	EHP200-TS	Rel 1.94 28/08/2020	NA	NA	NA

Appendix A. Test Photos

10W



50W



THE END