

Maximum Permissible Exposure

FCC ID : 2BGXJ-UWRH301
Equipment : Smart Station
Brand Name : UniWhale
Model Name : UW-RH-301
Applicant : SIRIUXENSE INC
16192 Coastal Hwy Lewes, DE 19958 United States
Manufacturer : SIRIUXENSE INC
16192 Coastal Hwy Lewes, DE 19958 United States
Standard : 47 CFR Part 2.1091

The product was received on Feb. 23, 2024, and testing was started from Mar. 07, 2024 and completed on Mar. 07, 2024. 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: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Testing Applied Standards	6
1.3 Testing Location Information	6
2 HUMAN EXPOSURE ASSESSMENT	7
2.1 Maximum Permissible Exposure	7
3 TEST EQUIPMENT AND CALIBRATION DATA.....	10
4 MEASUREMENT UNCERTAINTY	11
APPENDIX A. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	



History of this test report

Report No.	Version	Description	Issued Date
FA260824-02NF	01	Initial issue of report	Jun. 26, 2024



Summary of Test Result

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

Note : From Sporton Project No.:FA260824-01NF.

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: Barry Hsaio

Report Producer: Debby Hung

1 General Description

1.1 Information

1.1.1 EUT General Information

RF General Information			
Evaluation Mode	Frequency Range	Operating Frequency	Modulation Type
WPC	110-205 kHz	146.5kHz	ASK

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	TDK	WT303012-12F2-ID	Wireless charging antenna coils	N/A

1.1.3 Accessories

Accessories				
USB Cable	Brand Name	UniWhale	Model Name	UW-UC-301
	Signal Line	1.9 meter, non-shielded cable, w/o ferrite core		
Smart Baby Tag	Brand Name	UniWhale	Model Name	UW-RB-301

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	Adapter	ASUS	Mcdslo AD33531	-	-

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

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

- ♦ KDB 680106 D01 Wireless Power Transfer v04

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	TH07-HY	Yuna Lin	23.1~23.6°C / 52~55%	07/Mar/2024

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

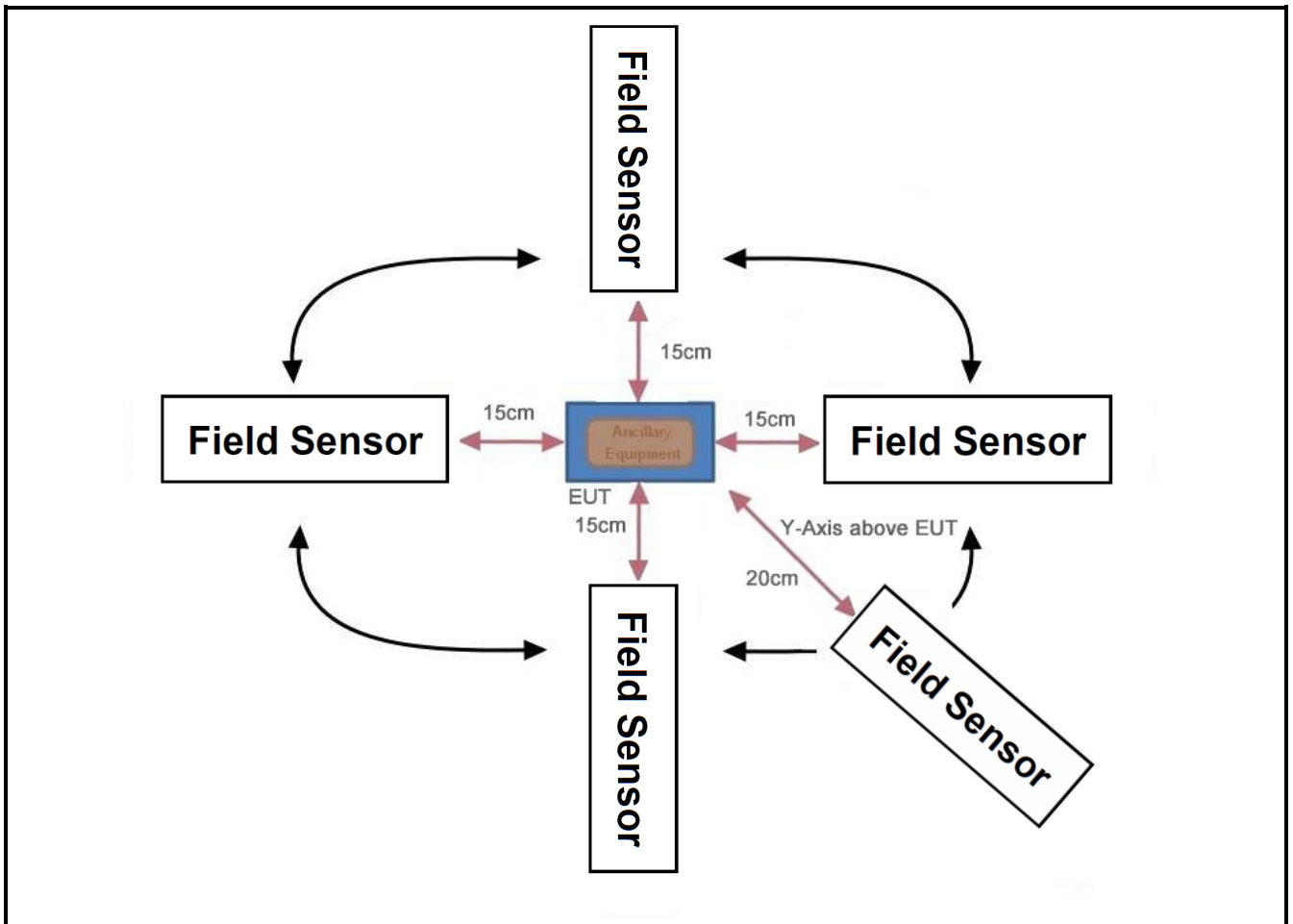
2.1.2 The Worst Condition

Ancillary Equipment	Evaluation Mode	Worst Condition
Smart Baby Tag	WPC	Low power

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				
Charging Condition	Separation	Probe from EUT Side	E-field (V/m)	H-field (A/m)
Low power	15cm	Left	0.4271	0.0189
	15cm	Right	0.4271	0.0188
	15cm	Top	0.4248	0.0189
	15cm	Bottom	0.4271	0.0195
	20cm	Z-axis above EUT	0.4271	0.0190
Limit			614	1.63
Result			Pass	Pass

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	17/Jan/2024	16/Jan/2025
Probe – test tool	Narda S.T.S. / PMM	EHP200-TS	Rel 1.94 28/08/2020	NA	NA	NA

4 Measurement Uncertainty

Test Items	Uncertainty	Remark
Maximum Permissible Exposure	1.5 (V/m)	Confidence levels of 95%