

IKEA of Sweden AB

MPE ASSESSMENT REPORT

Report Type:

FCC MPE assessment report

Model:

E2108 NORDMÄRKE

REPORT NUMBER:

210200358SHA-002

ISSUE DATE:

October 27, 2021

DOCUMENT CONTROL NUMBER:

TTRFFCCMPE-02_V1 © 2018 Intertek



Applicant : IKEA of Sweden AB
Box 702, 343 81 Älmhult, SWEDEN

Manufacturer : IKEA of Sweden AB
Box 702, 343 81 Älmhult, SWEDEN

FCC ID : **FHO-E2108**

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

FCC PART 1 SECTION 1.1310

PREPARED BY:

REVIEWED BY:

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Project Engineer
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Reviewer
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Revision History

Report No.	Version	Description	Issued Date
210200358SHA-002	Rev. 01	Initial issue of report	October 27, 2021

Measurement result summary

TEST ITEM	FCC REFERANCE	TEST RESULT	NOTE
RF Exposure	1.1310	Pass	-

Notes: 1: NA =Not Applicable

2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

3: Additions, Deviations and Exclusions from Standards: None.

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Wireless Charger
Type/Model:	E2108 NORDMÄRKE
Description of EUT:	EUT is a wireless charger, it has only one model.
Rating:	Input: DC 5V, 2A Wireless Output: 5W Rechargeable 18650 Li-ion Battery Pack: DC 3.7V 24Wh, 6500mAh
Category of EUT:	Class B
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	/
Hardware Version:	/
Sample Identification No.:	02070001-53-001
Sample received date:	July 27, 2021
Date of test:	August 02, 2021 ~ September 12, 2021

1.2 Technical Specification

Frequency Range:	112kHz – 148kHz
Modulation:	FSK
Antenna:	Coil antenna, 0dBi

1.3 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0051
	VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02

2 TEST SPECIFICATIONS

2.1 Standards or specification

FCC PART 1 SECTION 1.1310

KDB 680106 D01 RF Exposure Wireless Charging App v03

2.2 Mode of operation during the test

Within this test report, EUT was tested under its rating voltage and frequency (120V, 60Hz).
The 0%/50%/100% battery capacity was tested and the 100% battery capacity was worst case.

2.3 Test peripherals list

Item No.	Name	Band and Model	Description
1	Adapter	HW-059200CHQ	Input: 100-240V AC, 50/60Hz, 0.5A Output: 5V DC, 2A; 9V DC, 2A S/N: K68204JAX01148
2	Mobile phone	Apple iPhone12	S/N: FFYFP8EV0DYL

2.4 Record of climatic conditions

Test Item	Temperature (°C)	Relative Humidity (%)	Pressure (kPa)
RF Exposure	24	53	101

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2.5 Instrument list

Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	Exposure Level Tester	Narda	NBM-550	EC 6113	2021-12-25
<input checked="" type="checkbox"/>	E-Field sensor(100kHz-3GHz)	Narda	EF 0391	EC 6113	2021-12-25
<input checked="" type="checkbox"/>	H-Field sensor(300kHz-30MHz)	Narda	HF 3061	EC 6113	2021-12-25
<input checked="" type="checkbox"/>	Exposure Level Tester(1Hz-400kHz)	Narda	ELT-400	EC 2928	2022-09-11

2.6 Measurement uncertainty

Test Items	Expanded Uncertainty (k=2)
H-field	0.9 dB
E-field	1.1 dB

TEST REPORT

3 RF Exposure Assessment

Test result: Pass

3.1 Assessment Limit

Reference: 47 CFR §1.1310, KDB 680106

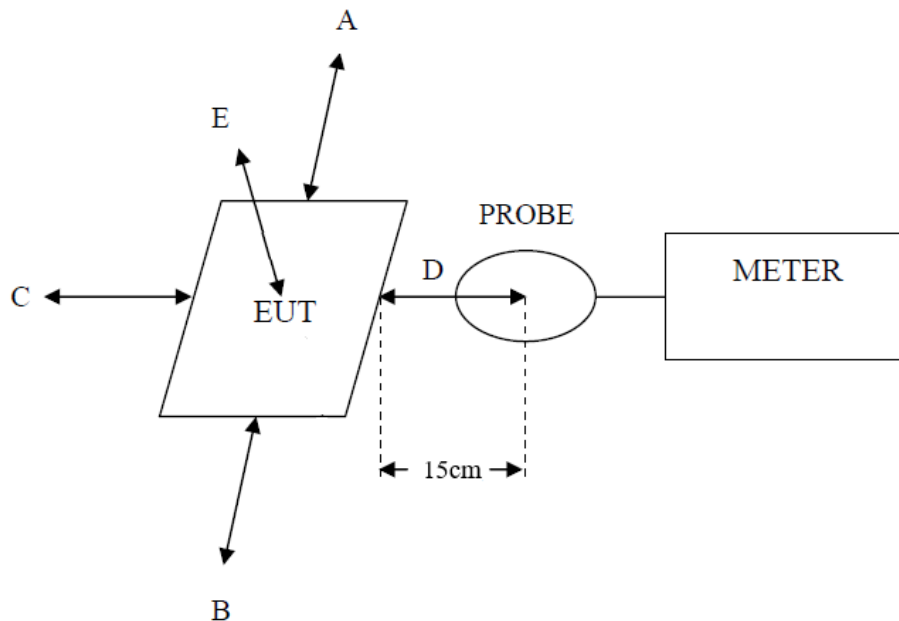
Limits for General Population/Uncontrolled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm ²]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	30
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 – 1 500	-	-	f/1500	30
1 500 – 100 000	-	-	1.0	30

Limits for Occupational/Controlled Exposure

Frequency range [MHz]	Electric field strength [V/m]	Magnetic field strength [A/m]	Power density [mW/cm ²]	Averaging time [minutes]
0.1 – 0.3	614	1.63	*100	6
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 – 1 500	-	-	f/300	6
1 500 – 100 000	-	-	5	6

3.2 Assessment Configuration



3.3 Assessment Results

Test result of Magnetic Field Strength:

Test Position	Test distance (cm)	Test result (A/m)	Limit (A/m)	Result (Pass/Fail)
A: Right	15	0.065	1.63 *0.5	Pass
B: Left	15	0.062	1.63 *0.5	Pass
C: Front	15	0.052	1.63 *0.5	Pass
D: Back	15	0.078	1.63 *0.5	Pass
E: Top	15	0.064	1.63 *0.5	Pass

Test result of Electric Field Strength:

Test Position	Test distance (cm)	Test result (V/m)	Limit (V/m)	Result (Pass/Fail)
A: Right	15	0.69	614 *0.5	Pass
B: Left	15	0.73	614 *0.5	Pass
C: Front	15	0.82	614 *0.5	Pass
D: Back	15	0.79	614 *0.5	Pass
E: Top	15	0.79	614 *0.5	Pass

***** END *****