



SAR TEST REPORT

No. I14Z45359-SEM01

For

Sony Mobile Communications AB

Wireless charger product

Type number: AC-0010

Model name: WCH10

With

Hardware Version: AP2.2

Software Version: /

FCC ID: PY7-AC0010

IC ID: 4170B-AC0010

Issued Date: 2014-04-28



Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

Test Laboratory:

TMC Beijing, Telecommunication Metrology Center of MIIT

No. 52, Huayuan Bei Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2079, Fax:+86(0)10-62304633 Email:welcomed@emcite.com. www.emcite.com

Revision Version

Report Number	Revision	Date	Memo
I14Z45359-SEM01	0	2014/04/23	Initial creation of test report
I14Z45359-SEM01	1	2014/04/28	Add the testing results for front/Rear position and the statement of operational mode for handset in section 6.4 on page 9

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1 Test Laboratory

1.1 Testing Location

Company Name:	TMC Beijing, Telecommunication Metrology Center of MIIT
Address:	No 52, Huayuan beilu, Haidian District, Beijing,P.R.China
Postal Code:	100191
Telephone:	00861062304633
Fax:	00861062304793

1.2 Testing Environment

Temperature:	Min. = 15 °C, Max. = 30 °C
Relative humidity:	Min. = 30%, Max. = 70%
Ground system resistance:	< 0.5 Ω
Ambient noise & Reflection:	< 0.012 W/kg

1.3 Project Data

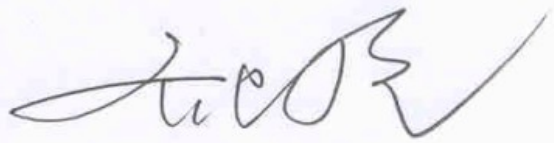
Project Leader:	Qi Dianyuan
Test Engineer:	Lin Xiaojun
Testing Start Date:	April 22, 2014
Testing End Date:	April 22, 2014

1.4 Signature



Lin Xiaojun

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)



Xiao Li

Deputy Director of the laboratory

(Approved this test report)

2 Client Information

2.1 Applicant Information

Company Name:	Sony Mobile Communications (China) Co. Ltd
Address /Post:	Sony Mobile R&D Center, No. 16, Guangshun South Street, Chaoyang District
City:	Beijing
Postal Code:	100102
Country:	China
Contact Person:	Ma, Gang
Telephone:	+86-10-58656312
Fax:	+86-10-58659049

2.2 Manufacturer Information

Company Name:	Sony Mobile Communications AB
Address /Post:	Mobilvägen, 22188 Lund, Sweden
City:	Lund
Postal Code:	22188
Country:	Sweden
Contact Person:	Nilsson, Mikael
Telephone:	+46 703 227503
Fax:	+46 706 127385

3 Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1 About EUT

Description:	Wireless Charger
Type number:	AC-0010
Model name:	WCH10

3.2 Internal Identification of EUT used during the test

EUT ID*	SN	HW	SW Version
EUT1	1349AAA60000E5E	AP2.2	/

*EUT ID: is used to identify the test sample in the lab internally.

3.3 Internal Identification of AE used during the test

AE ID*	Description	Model	SN	Manufacturer
AE1	AC/DC adapter	AC-0020-EU	/	SONY
AE2	Mobile phone	Nokia 920	/	Nokia

*AE ID: is used to identify the test sample in the lab internally.



4 TEST METHODOLOGY

Measurement Procedure Used:

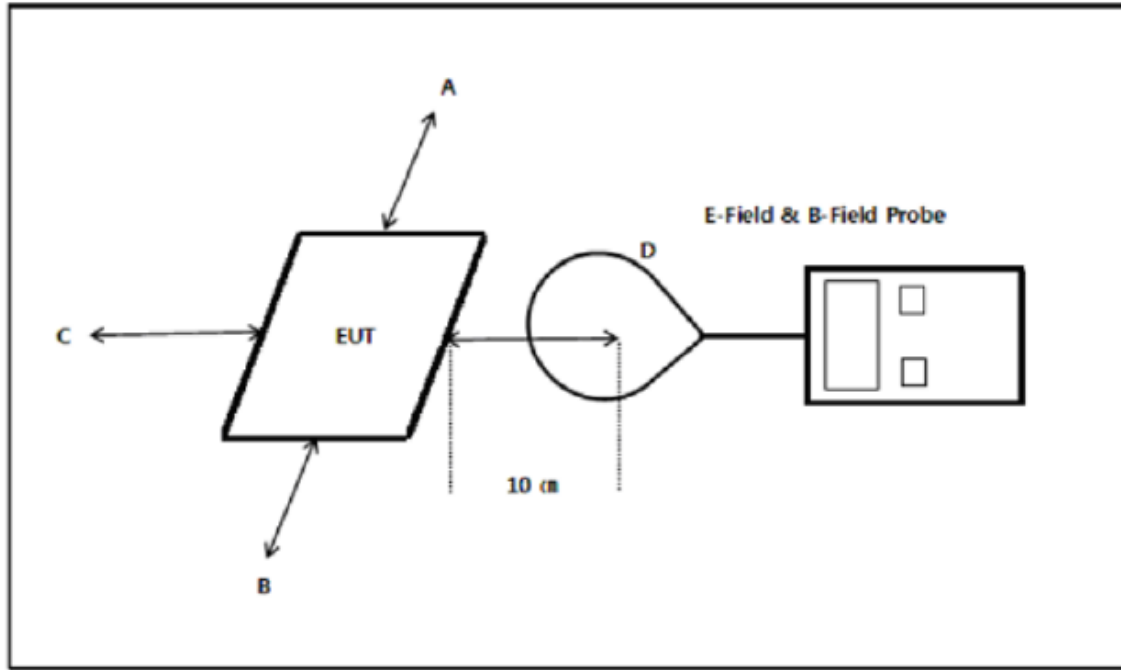
FCC CFR 47 part1, 1.1307(c) and (d), 1.1310

5 LIST OF TEST AND MEASUREMENT INSTRUMENTS

Equipment	Manufacturer	Model	Serial no.	Calibrated date	Calibrated until
E-Field Probe	NARDA	2244/90.72	K-0011/AR0123	2014.4.1	2015.3.31
H-Field Probe	NARDA	2300/90.10	J-0014/J0011	2014.3.26	2015.3.25

6 TEST RESULT

6.1 Test Setup



Note: -The RF exposure test is performed in the shield room.

-The test distance is between the edge of the charge and the geometric center of probe.

-The Nokia 920 with specific receiver being charged by the transmitter during the field measurements.

6.2 Test Position

For test position photo, please refer to «Test_setup_photos_Rev02.pdf»

6.3 Environmental evaluation and exposure limit according to FCC CFR 47 part1, 1.1307(c) and (d), 1.1310

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(c) and (d).

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (Mw/cm)	Average Time (minutes)
(A) Limits for Occupational / Control Exposures				
0.3-3.0	614	1.63	*(100)	6
(B) Limits for general Population / Uncontrol Exposures				

0.3-1.34	614	1.63	*(100)	30
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*=Plane wave equivalent power density

6.4 E and H field strength

Test Mode for Wireless Charger: Normal Operation (Charging mode)

Test Mode for Handset: Airport Mode

6.4.1. E-Filed Strength at 10 cm from the edges surrounding the EUT

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	Limits (V/m)
0.11~0.12	1.15	0.95	1.08	0.89	1.12	0.72	614.0

6.4.2. H-Filed Strength at 10 cm from the edges surrounding the EUT

Frequency Range (MHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Test Position F	Limits (A/m)
0.11~0.12	0.189	0.190	0.187	0.196	0.201	0.188	1.63