Untertürkheimer Straße 6-10 . D-66117 Saarbrücken **RSC-Laboratory** 

Phone: +49 (0) 681-598-0 Fax:-9075





### **Accredited testing-laboratory**

DAR registration number: DAT-P-176/94-D1

Federal Motor Transport Authority (KBA) DAR registration number: KBA-P 00070-97

**Recognized by the Federal Communications Commission** Anechoic chamber registration no.: 90462 (FCC) Anechoic chamber registration no.: 3463A-1 (IC) **Certification ID: DE 0001 Accreditation ID: DE 0002** 

Accredited Bluetooth<sup>®</sup> Test Facility (BQTF)
The Bluetooth word mark and logos are owned by the Bluetooth SIG,

Inc. and any use of such marks by Cetecom ICT is under license

Annex to

Test report no. : 2-4576-04-02/07 Type identification: AAC-1052041-BV

Applicant : Sony Ericsson Mobile Communications AB

: PY7A1052041 FCC ID IC Reg. No. : 4170B-A1052041 Test standards : 47 CFR Part 15

**RSS - 210 Issue 6** 

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Annex to Test report no.: **2-4576-04-02/07** 

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Annex to Test report no.: **2-4576-04-02/07** 



1 General information

#### 1.1 Notes

The test results of this test report relate exclusively to the test item specified in 1.5. The CETECOM ICT Services GmbH does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM ICT Services GmbH.

Test laboratory manager:

2007-05-14 Detlev Gillmann

Date Name Signature

Technical responsibility for area of testing:

2007-05-14 Harro Ames

Date Name Signature

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#### 1.2 Testing laboratory

#### **CETECOM ICT Services GmbH**

Untertürkheimer Straße 6 - 10

66117 Saarbrücken

Germany

Phone: + 49 681 5 98 - 0
Fax: + 49 681 5 98 - 9075
e-mail: info@ICT.cetecom.de
Internet: http://www.cetecom-ict.de

State of accreditation: The test laboratory (area of testing) is accredited according to

**DIN EN ISO/IEC 17025** 

DAR registration number: DAT-P-176/94-D1

Accredited by: Federal Motor Transport Authority (KBA)

DAR registration number: KBA-P 00070-97

#### Testing location, if different from CETECOM ICT Services GmbH:

Name : Street : Town : Country : Phone : Fax :

#### 1.3 Details of applicant

Name: Sony Ericsson Mobile Communications AB

Street: Torshamnsgatan 27

Town: 164 94 Kista Country: Sweden

Telephone: +46 46 19 40 00 Fax: +46 8 404 3430

Contact: Kenth Skoglund

E-mail: kenth.skoglund@sonyericsson.com

Telephone: +46 8 508 77 056

#### 1.4 Application details

Date of receipt of order: 2007-03-14

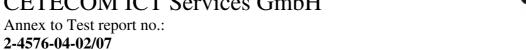
Date of receipt of test item: 2007-05-03

Date of start test: 2007-05-03

Date of end test 2007-05-14

Persons(s) who have been present during the test:

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#### 2 Test standard/s:

47 CFR Part 15 2006-08 Title 47 of the Code of Federal Regulations; Chapter I-

**Federal Communications Commission** 

subchapter A - general, Part 15-Radio frequency devices

RSS - 210 Issue 6 2005-09 Spectrum Management and Telecommunications - Radio

**Standards Specification** 

Low-power Licence-exempt Radiocommunication Devices (All

Frequency Bands): Category I Equipment

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Annex to Test report no.: **2-4576-04-02/07** 

#### 3 Technical tests

#### 3.1 Details of manufacturer

Name:	Sony Ericsson Mobile Communications AB
Street:	Nya Vattentornet
Town:	22188 Lund
Country:	Sweden

#### 3.2 Test item(s) and test configuration

No.: 1 Standard Charger CST-75 with AAC-1052041-BV

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Annex to Test report no.: **2-4576-04-02/07** 

4	Summary	of	Measurement	Results	and	list	of	all	perfor	med
	test cases									

$\boxtimes$	No deviations from the technical specifications were ascertained
	There were deviations from the technical specifications ascertained

Section in this Report	Test Name	Verdict
6.1	Conducted limits CFR Part 15.207, 15.107 RSS 210, Issue 6, Section 6.6, 7.4	Pass
6.2	Receiver spurious emission radiated (Idle mode) CFR Part SUBCLAUSE § 15.109 RSS 210, Issue 6, Section 7.3 Receiver Spurious Emissions (Radiated)	Pass

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Annex to Test report no.: **2-4576-04-02/07** 

#### 5 Measurements and results

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 9 kHz to 20 GHz in semi-anechoic chambers. The EUT is positioned on a non-conductive support with a height of 0.80 m above a conductive ground plane that covers the whole chamber.

The receiving antennas are conforming to specifications ANSI C63.2-1996 clause 15 and ANSI C63.4-2003 clause 4.1.5. These antennas can be moved over the height range between 1.0 m and 4.0 m in order to search for maximum field strength emitted from EUT. The measurement distances between EUT and receiving antennas are indicated in the test set-ups for the various frequency ranges. For each measurement, the EUT is rotated in all three axes until the maximum field strength is received.

The wanted and unwanted emissions are received by spectrum analysers where the detector modes and resolution bandwidths over various frequency ranges are set according to requirement ANSI C63.4-2003 clause 4.2. Antennas are conforming to ANSI C63.2-1996 item 15.

9 kHz – 150 kHz ,Quasi Peak measurement, 200 Hz Bandwidth, passive loop antenna. 150 kHz - 30 MHz: Quasi Peak measurement, 9 kHz Bandwidth, passive loop antenna. 30 MHz - 200 MHz: Quasi Peak measurement, 120 KHz Bandwidth, biconical antenna 200MHz - 1GHz: Quasi Peak measurement, 120 KHz Bandwidth, log periodic antenna >1GHz: Average, RBW 1MHz, VBW 10 Hz, wave guide horn

All measurement settings are according to FCC 15.109 and 15.107

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### 6 Annex A: FCC Part 15 Subpart B

#### 6.1 Conducted Limits

#### Reference

FCC: CFR Part 15.207, 15.107 IC: RSS 210, Issue 6, Section 6.6, 7.4

**Limits:** § 15.107 / 15.207

Frequency of Emission (MHz)	Conducted Limit (dBµV)			
	Quasi-peak	Average		
0.15 - 0.5	66 to 56 *	56 to 46 *		
0.5 - 5	56	46		
5 - 30	60	50		

<sup>\*</sup> Decreases with the logarithm of the frequency

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Annex to Test report no.:

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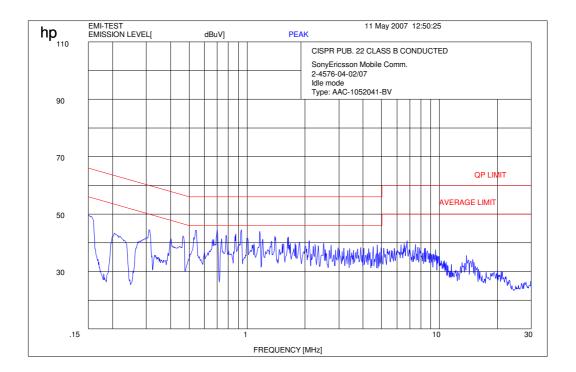
EUT: : AC/DC Standard charger

(with mobile AAC-1052041-BV)

Power AC (measured) : 115 V / 60 Hz Manufacturer: : SonyEricsson Operating Condition : Idle mode

Test Site: : Room 006 (Shielded chamber)

Operator: : Gillmann



Upper Limit LINE CISPPR 22 QP Lower Limit LINE CISPPR 22 AV

Setting: 150 kHz - 30 MHz: Quasi Peak measurement, 9kHz Bandwidth,

L1 and N – system (max. Hold)

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Annex to Test report no.: **2-4576-04-02/07** 

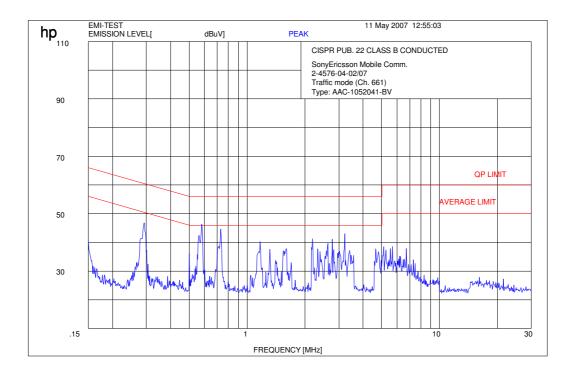
EUT: : AC/DC Standard charger

(with mobile AAC-1052041-BV)

Power AC (measured) : 115 V / 60 Hz Manufacturer: : SonyEricsson

Operating Condition : Traffic mode (Ch. 661)
Test Site: : Room 006 (Shielded chamber)

Operator: : Gillmann



Upper Limit LINE CISPPR 22 QP Lower Limit LINE CISPPR 22 AV

Setting: 150 kHz - 30 MHz: Quasi Peak measurement, 9kHz Bandwidth,

L1 and N – system (max. Hold)

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Annex to Test report no.:

2-4576-04-02/07

EUT: : AC/DC Standard charger

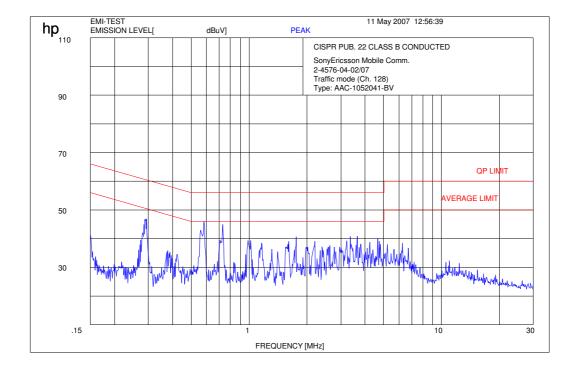
(with mobile AAC-1052041-BV)

Power AC (measured) : 115 V / 60 Hz Manufacturer: : SonyEricsson

Operating Condition : Traffic mode (Ch 128)

Test Site: : Room 006 (Shielded chamber)

Operator: : Gillmann



Upper Limit LINE CISPPR 22 QP Lower Limit LINE CISPPR 22 AV

Setting: 150 kHz - 30 MHz: Quasi Peak measurement, 9kHz Bandwidth,

L1 and N – system (max. Hold)

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Annex to Test report no.: **2-4576-04-02/07** 

#### 6.2 Receiver spurious emission radiated (Idle mode)

#### Reference

FCC: CFR Part SUBCLAUSE § 15.109

IC: RSS 210, Issue 6, Section 7.3 Receiver Spurious Emissions (Radiated)

	SPURIOUS EMISSIONS LEVEL (μV/m)								
	MHz			MHz			MHz		
F [MHz]	Detector	Level [μV/m]	F [MHz]	Detector	Level [µV/m]	F [MHz]	Detector	Level [µV/m]	
Measuremen	nt uncertainty		±3 dB						

f < 1 GHz : RBW/VBW: 100 kHz  $f \ge 1 \text{ GHz} : RBW/VBW: 1 \text{ MHz}$ 

#### Limits

#### **SUBCLAUSE § 15.109**

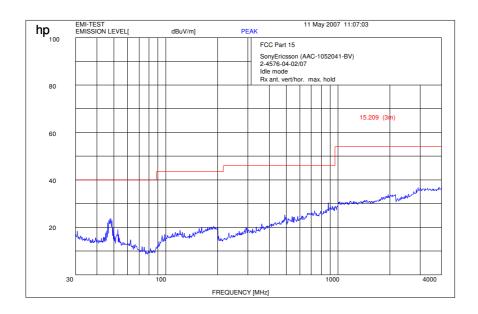
Frequency (MHz)	Field strength (μV/m)	Measurement distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

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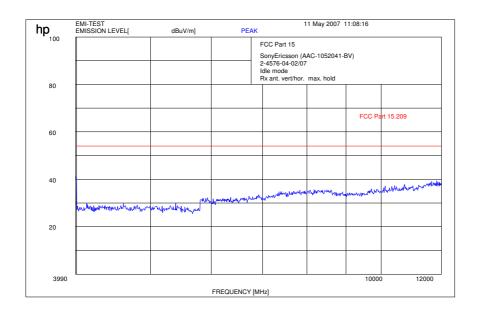


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#### IDLE MODE (30 MHz - 4 GHz)



#### Idle Mode (4 GHz – 12.0 GHz)



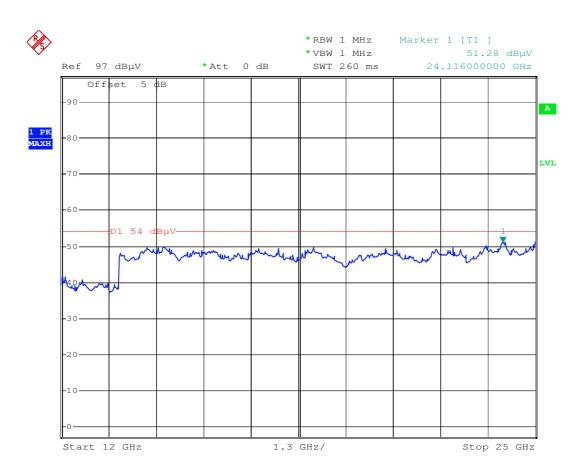
f < 1 GHz: RBW/VBW: 100 kHz  $f \ge 1 \text{GHz}: RBW / VBW 1 \text{ MHz}$ 

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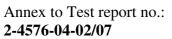
Annex to Test report no.: **2-4576-04-02/07** 

#### Idle Mode (12 GHz - 25 GHz)



Date: 12.MAY.2007 11:11:25

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### 7 Photographs of the Test Set-up

### **Photo 1: Radiated Test Set-up**

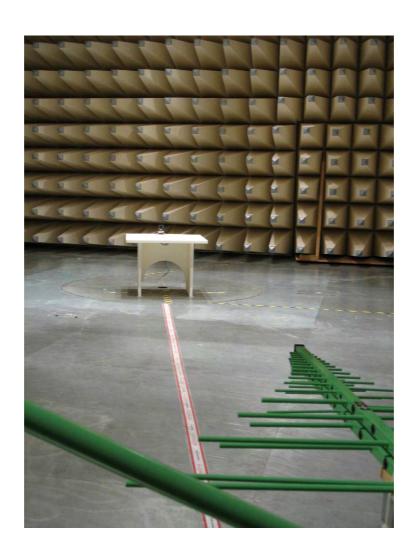


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Annex to Test report no.: **2-4576-04-02/07** 

**Photo 2: Radiated Test Set-up** 



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# Photo 3: Conducted Test Set-up



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### 8 Photographs of the EUT

Photo documentation

Photo 1:



Photo 2:



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Photo 3:



Photo 4:



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Photo 5:



Photo 6:



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Annex to Test report no.: 2-4576-04-02/07



Photo 7:



Photo 8:



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Photo 9:



Photo 10:



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Annex to Test report no.: **2-4576-04-02/07** 



Photo 11:



Photo 12:



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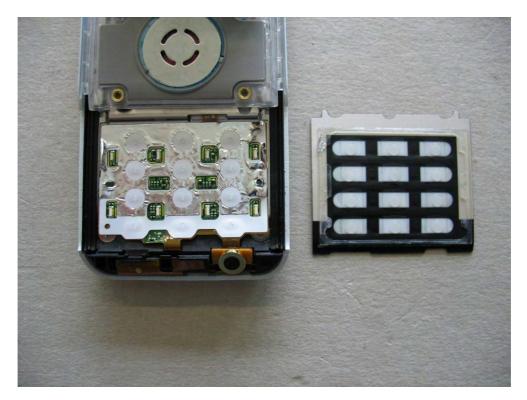
Annex to Test report no.: **2-4576-04-02/07** 



Photo 13:



Photo 14:



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Photo 15:



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Photo 16:

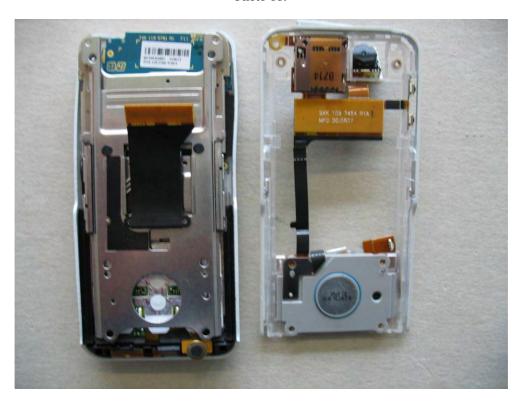


Photo 17:



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Photo 18:



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