



## 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® Test Facility (BQTF)**  
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Annex to Test report no. : **2-4883-04-02/08**  
Type identification : **AAD-3052051-BV**  
Applicant : **Sony Ericsson Mobile Communications AB**  
Test standards : **FCC Part 15**  
**RSS 210 Issue 7**

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## 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:

**2008-01-25      Detlev Gillmann**

Date

Name

Signature



Technical responsibility for area of testing:

**2008-01-25      Stefan Bös**

Date

Name

Signature



## 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

<b>Name:</b>	Sony Ericsson Mobile Communications AB
<b>Street:</b>	Nya Vattentornet
<b>Town:</b>	22188 Lund
<b>Country:</b>	Sweden
<b>Telephone:</b>	+46-46-19-3000
<b>Fax:</b>	+46-46-19-3295
<b>Contact:</b>	Mr. Peter Lindeborg
<b>E-mail:</b>	peter.lindeborg@sonyericsson.com
<b>Telephone:</b>	+46-46-212-6180

## 1.4 Application details

**Date of receipt of order:** 2008-01-21

**Date of receipt of test item:** 2008-01-21

**Date of start test:** 2008-01-24

**Date of end test** 2008-01-25

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

## 2 Test standard/s:

<b>47 CFR Part 15</b>	<b>2007-09</b>	<b>Title 47 of the Code of Federal Regulations; Chapter I-Federal Communications Commission subchapter A - general, Part 15-Radio frequency devices</b>
<b>RSS - 210 Issue 7</b>	<b>2007-06</b>	<b>Spectrum Management and Telecommunications - Radio Standards Specification Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment</b>

### 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 - 60 with AAD-3052051-BV



#### 4 Summary of Measurement Results and list of all performed test cases

- 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 7, Section 6.6 , 7.4	Pass
6.2	Receiver spurious emission radiated (Idle mode) CFR Part SUBCLAUSE § 15.109 RSS 210, Issue 7, Section 7.3 Receiver Spurious Emissions (Radiated)	Pass

## 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

## 6 Annex A: FCC Part 15 Subpart B

### 6.1 Conducted Limits

#### Reference

FCC:	CFR Part 15.207, 15.107
IC:	RSS 210, Issue 7, Section 6.6 , 7.4

**Limits:** § 15.107 / 15.207

Frequency of Emission (MHz)	Conducted Limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 - 30	60	50

\* Decreases with the logarithm of the frequency

EUT: : AC/DC Charger CST – 60  
                   (with mobile AAD-3052051-BV)

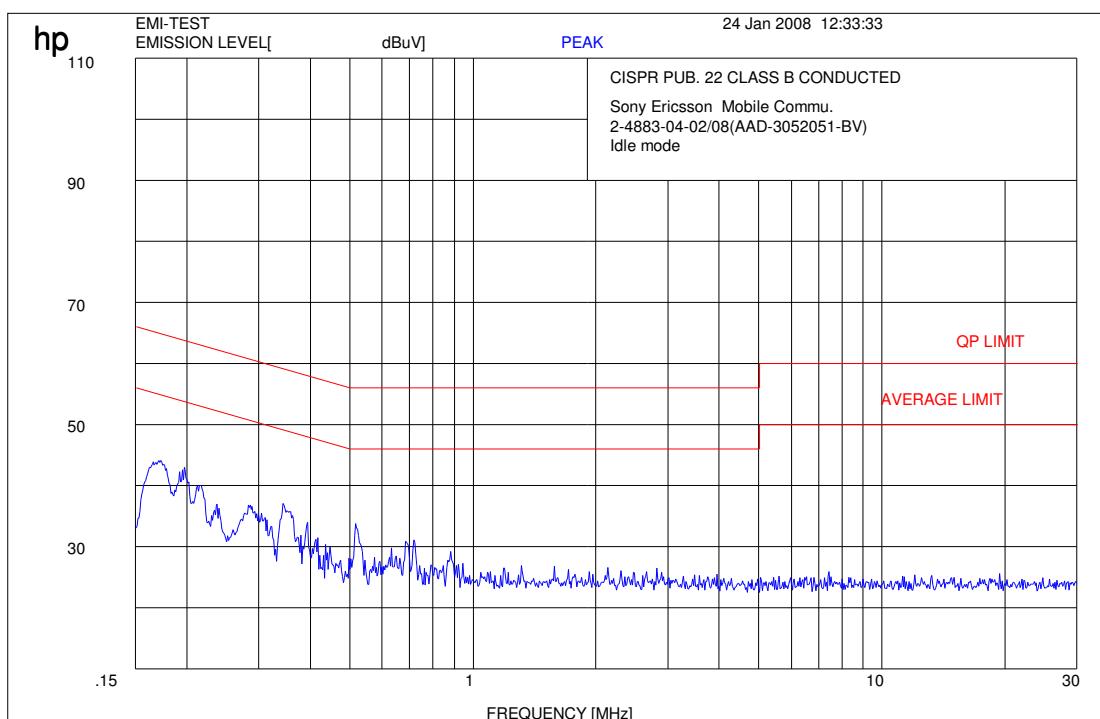
Power AC (measured) : 115 V / 60 Hz

Manufacturer: : Sony Ericsson Mobile Communications AB

Operating Condition : Idle mode

Test Site: : Room 006 (Shielded chamber)

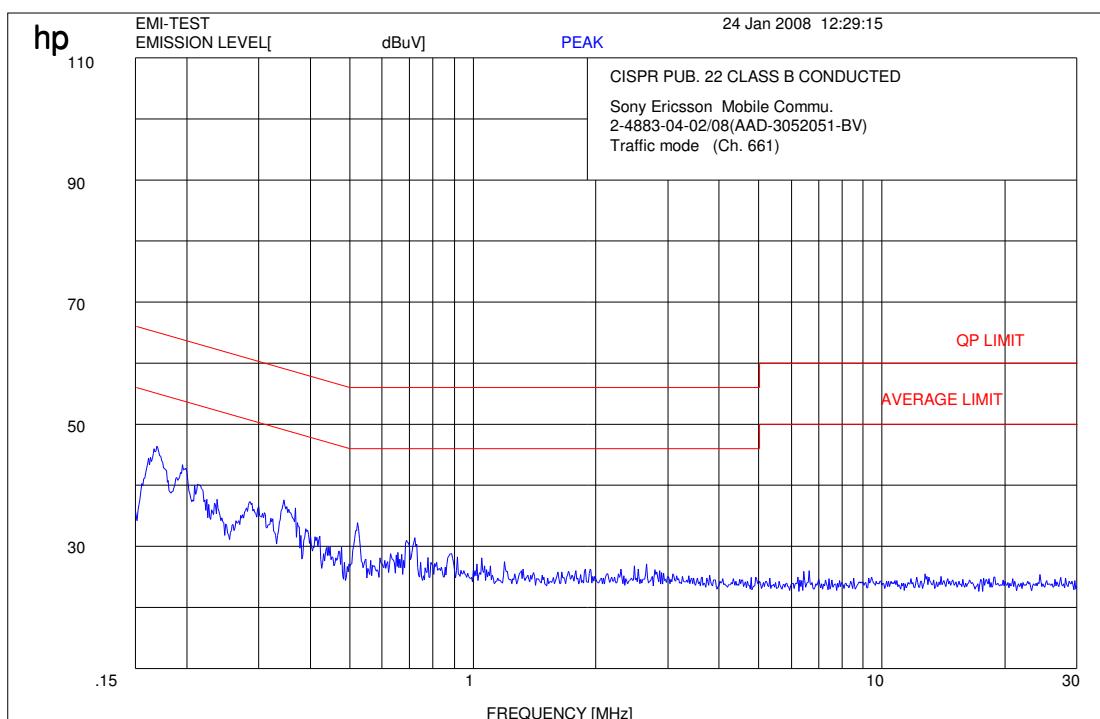
Operator: : Gillmann



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)

EUT: : AC/DC Charger CST – 60  
 (with mobile AAD-3052051-BV)  
 Power AC (measured) : 115 V / 60 Hz  
 Manufacturer: : Sony Ericsson Mobile Communications AB  
 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)

## 6.2 Receiver spurious emission radiated (Idle mode)

### Reference

FCC:	CFR Part SUBCLAUSE § 15.109	
IC:	RSS 210, Issue 7, Section 7.3 Receiver Spurious Emissions (Radiated)	

SPURIOUS EMISSIONS LEVEL ( $\mu\text{V/m}$ )								
Idle Mode			MHz			MHz		
1900 MHz			MHz			MHz		
F [MHz]	Detector	Level [ $\mu\text{V/m}$ ]	F [MHz]	Detector	Level [ $\mu\text{V/m}$ ]	F [MHz]	Detector	Level [ $\mu\text{V/m}$ ]
No critical peaks								
Measurement uncertainty			$\pm 3 \text{ dB}$					

f &lt; 1 GHz : RBW/VBW: 100 kHz

f ≥ 1GHz : RBW/VBW: 1 MHz

### Limits

### SUBCLAUSE § 15.109

Frequency (MHz)	Field strength ( $\mu\text{V/m}$ )	Measurement distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
above 960	500	3

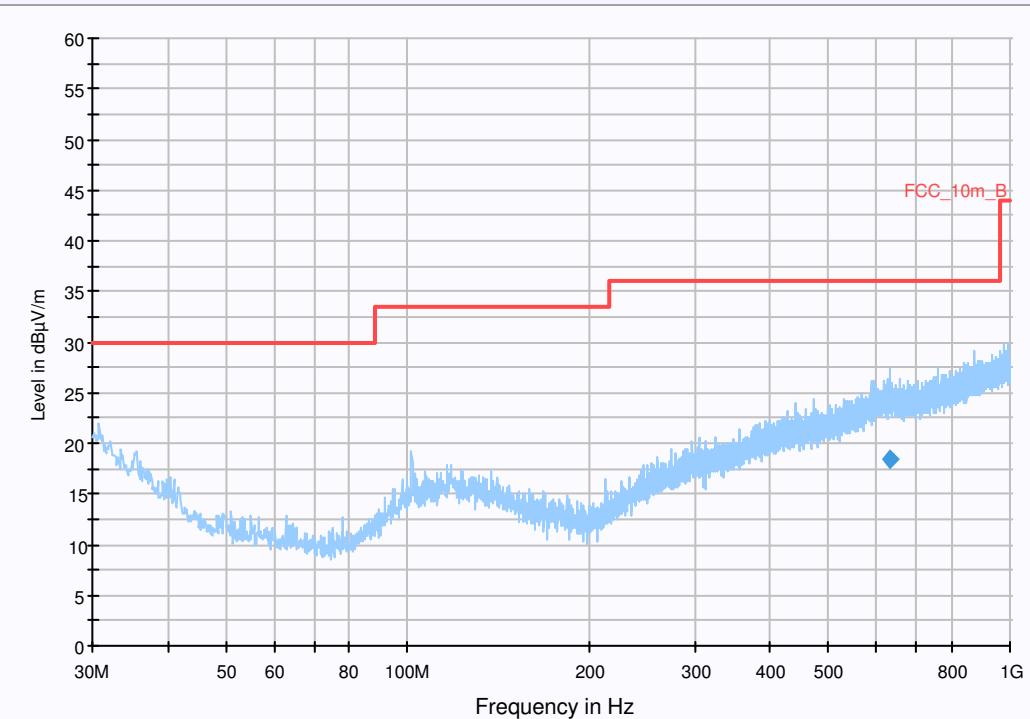
**CETECOM ICT Services GmbH****Information**

EUT: AAD-3052051-BV + CAA-0002002-BV  
 Serial Number: BX9005S8RT + 8907W1740946  
 Test Description: FCC part 15 class B @ 10 m  
 Operating Conditions: BT testmode (channel 39)  
 Operator Name: Folz  
 Comment: Powered with AC 115V/ 60 Hz

**Scan Setup: STAN\_Fin [EMI radiated]**

Hardware Setup: EMI radiated\Electric Field (NOS)  
 Level Unit: dB $\mu$ V/m

Subrange	Detectors	IF Bandwidth	Meas. Time	Receiver
30MHz - 1GHz	QuasiPeak	120kHz	15s	Receiver

**FCC\_10m\_FCCLIMIT(B)****Final Measurement Detector 1**

Frequency (MHz)	QuasiPeak (dB $\mu$ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V/m)	Comment
631.586900	18.5	15000.000	120.000	322.0	H	84.0	21.6	17.5	36.0	

## Hardware Setup: EMI radiated\Electric Field (NOS) - [EMI radiated]

## Subrange 1

Frequency Range: 30MHz - 2GHz

Receiver: Receiver [ESCI 3]

@ GPIB0 (ADR 20), SN 100083/003, FW 3.32, CAL 07.01.2009

Signal Path: without Notch

FW 1.0

Antenna: Chase Broadband BiLog Antenna CBL 6112

SN 2110, FW A, CAL 07.01.2009

Correction Table (vertical): Chase Broadband BiLog Antenna CBL 6112

Correction Table (horizontal): Chase Broadband BiLog Antenna CBL 6112

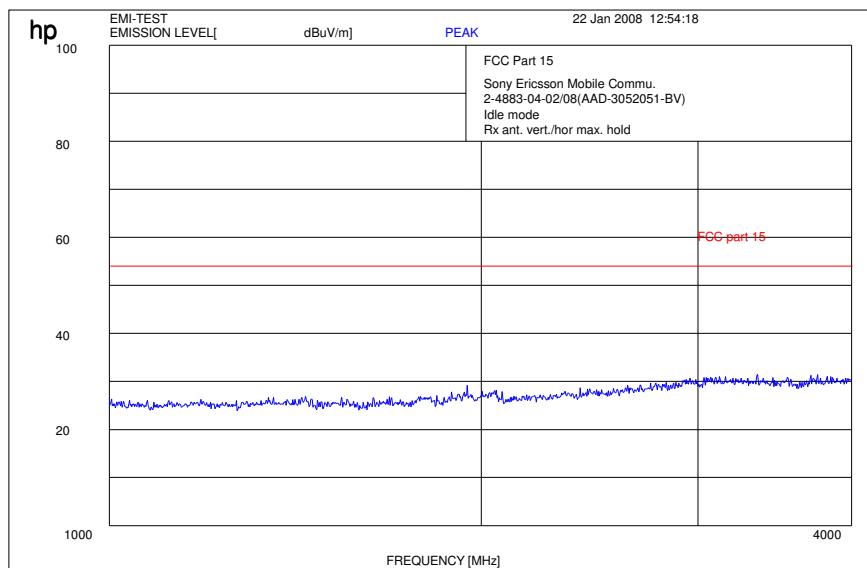
Correction Table: Cabel with switch (1007)

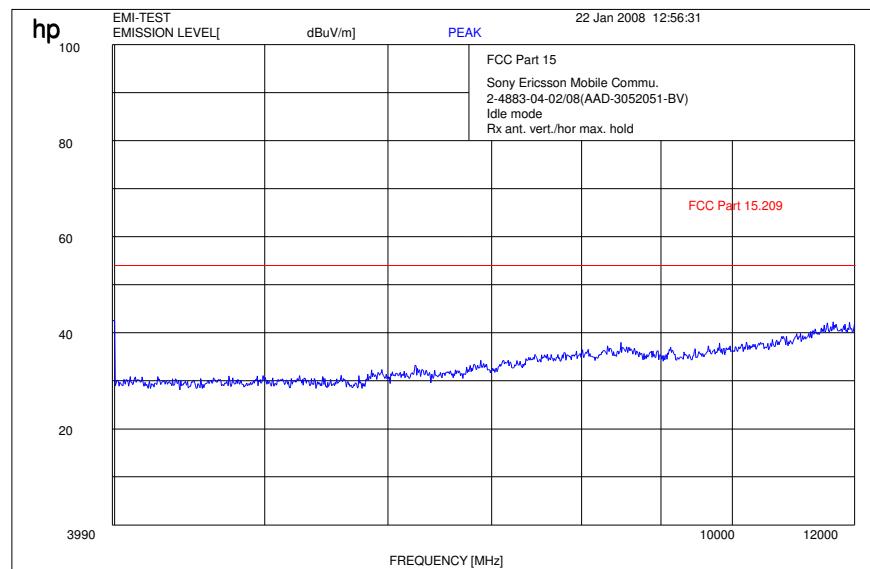
Antenna Tower: Tower [EMCO 2090 Antenna Tower]

@ GPIB0 (ADR 8), FW REV 3.12

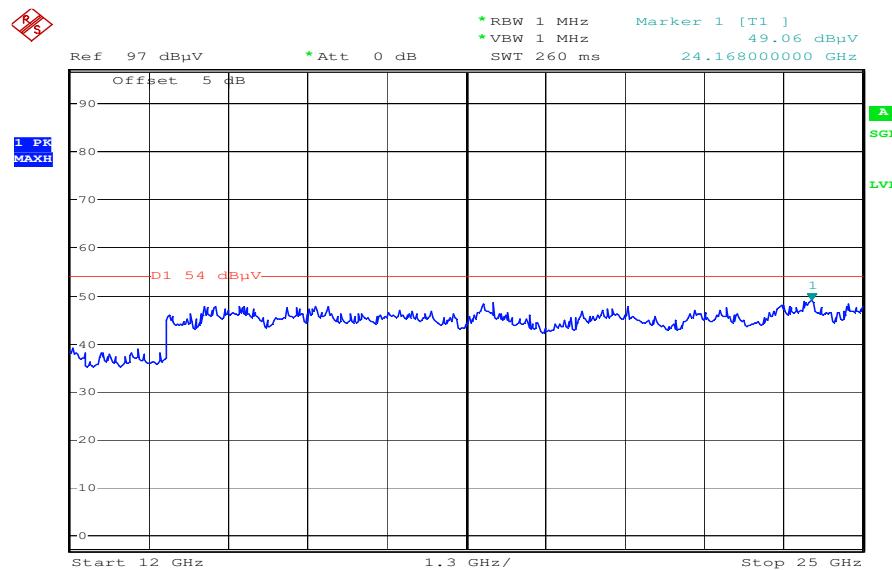
Turntable: Turntable [EMCO Turntable]

@ GPIB0 (ADR 9)

**Idle Mode (1 MHz - 4 GHz)** $f \geq 1\text{GHz} : \text{RBW / VBW } 1\text{ MHz}$

**Idle Mode (4 GHz – 12.0 GHz)**

f ≥ 1GHz : RBW / VBW 1 MHz

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

Date: 23.JAN.2008 11:21:55

## 7 Photographs of the Test Set-up

**Photos No.: 01**



**Photos No.: 02**



**Photos No.: 03**

