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BA/SEMC/ CVVBAU Rob Carr

Approved

BA/SEMC/ CVVBAU Jon Kenny

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Company Internal
REPORT

No.

CVDVBA11:352

Date

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Test Report issued by Accredited SAR Laboratory

for

FCC ID: PY7A1880033 (CK13i)

to

**FCC OET BULLETIN 65 SUPPLEMENT C 01-01
IEEE STD 1528:2003
IC RSS-102 ISSUE 4****Date of test:** 2011-06-08 to 2011-07-15**Laboratory:** Sony Ericsson SAR Test Laboratory
Sony Ericsson Mobile Communications AB
Maplewood, Chineham Business Park
Basingstoke, RG24 8YB,
England**Testing Engineer:** Robert Carr
Robert.Carr@sonyericsson.com
+44 2087625958

ROBERT CARR

Testing Approval: Jon Kenny
Jon.kenny@sonyericsson.com
+44 2087625957

Jon Kenny

Statement of Compliance

Sony Ericsson Mobile Communications AB declares under its sole responsibility that the product

Sony Ericsson Type AAB-1880033-BV; FCC ID PY7A1880033; IC 4170B-A1880033

to which this declaration relates, is in conformity with the appropriate RF exposure standards recommendations and guidelines. It also declares that the product was tested in accordance with the appropriate measurement standards, guidelines and recommended practices. Any deviations from these standards, guidelines and recommended practices are noted below:

(None)

This laboratory is accredited to ISO/IEC 17025 (SWEDAC accreditation no. 1847).



Laboratories are accredited by the Swedish Board for Accreditation and Conformity Assessment (SWEDAC) under the terms of Swedish legislation. The accredited laboratory activities meet the requirements in SS-EN ISO/IEC 17025 (2005). This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

The results and statements contained herein relate only to the items tested. The names of individuals involved may be mentioned only in connection with the statements or results from this report.

Sony Ericsson encourages all feedback, both positive and negative, on this report.

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1 Introduction

In this test report, compliance of the Sony Ericsson FCC ID: PY7A1880033 (CK13i) portable telephone with RF safety guidelines is demonstrated. The applicable RF safety guidelines and the SAR measurement specifications used for the test are described in the SAR Measurement Specifications of Wireless Handsets [1].

2 Customer details

Company Name:	Sony Ericsson Mob Int TW
Address:	9F, 35, Lane11, Kuang Fu N. Rd. Taipei Taiwan
Contact Name:	Ken Lee

3 Device Under Test

3.1 Antenna Description

Type	Internal antenna	
Location	Bottom of phone	
Main and WLAN antennas distance	58.9 mm	
Dimensions	Max length	53 mm
	Max width	21.54 mm
Configuration	PIFA/IFA	

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3.2 Device Description

Device model	AAB-1880033-BV					
Market name	CK13i					
Serial number (EUT #)	WUJ0298766 (#20352) WUJ0298792 (#20581) - WLAN					
Mode	GSM 850 (#20352)			GSM 1900 (#20352)		
Crest factor	8.3			8.3		
Multiple access scheme	TDMA			TDMA		
Channel No.	128	190	251	512	661	885
Measured Power Level [dBm]¹	33.3	33.3	33.3	30.3	30.3	30.3
Product Maximum power Level [dBm]¹	33.3	33.3	33.3	30.3	30.3	30.3
Data mode	GPRS			GPRS		
Crest factor	4.15 (2TX)			4.15 (2TX)		
Measured Power Level [dBm]¹	33.3	33.3	33.3	30.3	30.3	30.3
Product Maximum power Level [dBm]¹	33.3	33.3	33.3	30.3	30.3	30.3
Data mode	EDGE			EDGE		
Crest factor	4.15 (2TX)			4.15 (2TX)		
Measured Power Level [dBm]¹	33.3	33.3	33.3	30.3	30.3	30.3
Product Maximum power Level [dBm]¹	33.3	33.3	33.3	30.3	30.3	30.3
Transmitting frequency range [MHz]	824.0 - 849.0			1850.0 - 1910.0		

GPRS Multislot class	10
EDGE class	10
GPRS Capability class	B
BT class and conducted power	Class 1 3.2 mW
Prototype or production unit	Preproduction
Hardware Version	AP2.1
Software version	P5AB194 P5AB215 (WLAN #20581)
Device category	Portable
RF exposure environment	General population / uncontrolled

¹ These values are supplied by the customer

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WLAN Output Power				
Mode	Max Output Power ¹ (dBm)	EUT (#20581) Measured Ave Power (dBm) ¹		
		Ch 1	Ch 6	Ch11
802.11b 1Mbit/sec	14.5	14.6	14.5	14.5
802.11b 2Mbit/sec		14.5	14.5	14.5
802.11b 5.5Mbit/sec		14.5	14.5	14.6
802.11b 11Mbit/sec		14.5	14.5	14.5
802.11g 6Mbit/sec	14.5	14.5	14.5	14.6
802.11g 9Mbit/sec		14.5	14.5	14.5
802.11g 12Mbit/sec		14.5	14.5	14.5
802.11g 18Mbit/sec		14.5	14.4	14.5
802.11g 24Mbit/sec		14.5	14.5	14.5
802.11g 36Mbit/sec		14.5	14.5	14.5
802.11g 48Mbit/sec		14.5	14.5	14.5
802.11g 54Mbit/sec		14.5	14.6	14.5

Mode	EUT (#20581) Measured Peak Power (dBm) ¹		
	Ch 1	Ch 6	Ch 11
802.11b 1Mbit/sec	17.8	17.8	17.9
802.11b 2Mbit/sec	17.7	17.7	17.7
802.11b 5.5Mbit/sec	17.7	17.7	17.8
802.11b 11Mbit/sec	17.7	17.9	17.9
802.11g 6Mbit/sec	22.9	22.8	22.6
802.11g 9Mbit/sec	22.8	22.8	22.1
802.11g 12Mbit/sec	22.7	22.9	22.9
802.11g 18Mbit/sec	23.1	23.1	22.9
802.11g 24Mbit/sec	23.1	22.9	22.9
802.11g 36Mbit/sec	22.4	23.1	22.9
802.11g 48Mbit/sec	22.9	23.1	22.6
802.11g 54Mbit/sec	22.7	22.5	22.1

¹ These values are supplied by the customer



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4 Test equipment

4.1 Dosimetric system

SAR measurements were made using the DASY4 professional system (software version 4.7, Build 55) with SAM twin phantom, manufactured by Schmid & Partner Engineering AG (SPEAG). The list of calibrated equipment is given below.

SAR System 1

Description	Inventory Number	Due Date
Signal generator HP SMY02	3.110	2012-05
Directional coupler HP778D	15.233	None
Power meter R&S NRVD	FB000511	2012-05
Power sensor R&S NRV-Z5	FB000512	2012-05
Power sensor R&S NRV-Z5	FB000513	2012-05
Network analyzer Agilent 8719D	2.022	2012-05
Dielectric probe kit HP8507C	14.046	Self Cal
R&S CMU200	FB000540	2012-05
DASY4 DAE3	448	2011-11
E-field probe ET3DV6	1610	2011-11

SAR System 2

Description	Inventory Number	Due Date
Signal generator HP E4433B	1.045	2012-05
Directional coupler HP778D	FB000506	None
Power meter R&S NRVD	4.073	2012-05
Power sensor R&S NRV-Z5	4.074	2012-05
Power sensor R&S NRV-Z5	4.076	2012-05
R&S CMU200	FB000539	2015-05
DASY4 DAE3	415	2011-11
E-field probe ET3DV6	1539	2011-11
DASY4 DAE3	417	2011-11
E-field probe ET3DV6	1584	2011-11

Dipoles

Description	Serial Number	Due Date
Dipole Validation Kit, D835V2	438	2012-05
Dipole Validation Kit, D1900V2	539	2012-10
Dipole Validation Kit, D2450V2	721	2012-10

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5 Electrical parameters on the tissue simulating liquid

Prior to conducting SAR measurements, the relative permittivity, ϵ_r , and the conductivity σ , of the tissue simulating liquids were measured with the dielectric probe kit. These values are shown in the table below. The mass density, ρ , entered into the DASY4 software is also given. Recommended limits for permittivity ϵ_r , conductivity σ and mass density ρ are also shown.

f [MHz]	Tissue type	Measured / Recommended	Dielectric Parameters		Density
			ϵ_r	σ [S/m]	ρ [g/cm ³]
835	Head	Measured, 2011-06-10	40.42	0.87	1.00
		Recommended	41.50	0.90	1.00
835	Body	Measured, 2011-06-13	52.87	0.97	1.00
		Recommended	55.20	0.97	1.00
1900	Head	Measured, 2011-06-08	38.78	1.45	1.00
		Recommended	40.00	1.40	1.00
1900	Body	Measured, 2011-06-14	51.79	1.53	1.00
		Recommended	53.30	1.52	1.00
2450	Head	Measured, 2011-06-22	37.39	1.85	1.00
		Recommended	39.20	1.80	1.00
2450	Body	Measured, 2011-06-21	50.19	2.01	1.00
		Recommended	52.70	1.95	1.00

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5.1 Dielectrics for Frequencies Tested

Band	Ch	Frequency (MHz)	Parameters	
GSM 850 Head	128	824.2	ϵ_r	40.6
			σ	0.86
	190	836.6	ϵ_r	40.4
			σ	0.87
	251	848.8	ϵ_r	40.3
			σ	0.881
GSM 850 Body	128	824.2	ϵ_r	53.0
			σ	0.96
	190	836.6	ϵ_r	52.8
			σ	0.972
	251	848.8	ϵ_r	52.7
			σ	0.984
GSM 1900 Head	512	1850.2	ϵ_r	39.0
			σ	1.41
	661	1880.0	ϵ_r	38.9
			σ	1.44
	810	1909.8	ϵ_r	38.8
			σ	1.47
GSM 1900 Body	512	1850.2	ϵ_r	52.0
			σ	1.48
	661	1880.0	ϵ_r	51.9
			σ	1.51
	810	1909.8	ϵ_r	51.8
			σ	1.54
WLAN Head	1	2412.0	ϵ_r	37.6
			σ	1.81
	6	2437.0	ϵ_r	37.4
			σ	1.84
	11	2462.0	ϵ_r	37.3
			σ	1.85
WLAN Body	1	2412.0	ϵ_r	50.4
			σ	1.96
	6	2437.0	ϵ_r	50.2
			σ	1.99
	11	2462.0	ϵ_r	50.1
			σ	2.03

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6 System accuracy verification

A system accuracy verification of the DASY4 was performed using the dipole validation kit listed in section 4.1. The system verification test was conducted on the same day as the measurement of the DUT. The ambient humidity and temperature of test facility were kept between the range 30-70% and 20.0-25.0 °C respectively. RF noise had been measured in liquid when all RF equipment in lab was switched off. Measured value was 0.0002 mW/g in 1g mass.

f ₀ [MHz]	Tissue type	Measured / Reference	SAR [W/kg] 1g	Dielectric Parameters		Density	Liquid T[°C]
				ε _r	σ [S/m]	ρ [g/cm ³]	
835	Head	Measured, 2011-06-10	10.04	40.42	0.87	1.00	21.5
		Reference	9.61	41.50	0.90	1.00	22.0
835	Body	Measured, 2011-06-13	10.24	52.87	0.97	1.00	23.5
		Reference	9.80	55.20	0.97	1.00	22.0
1900	Head	Measured, 2011-06-08	36.32	38.78	1.45	1.00	21.6
		Reference	39.10	40.00	1.40	1.00	22.0
1900	Body	Measured, 2011-06-14	36.80	51.79	1.53	1.00	23.5
		Reference	39.70	53.30	1.52	1.00	22.0
2450	Head	Measured, 2011-07-15	51.60	37.39	1.85	1.00	24.5
		Reference	53.00	39.20	1.80	1.00	22.0
2450	Body	Measured, 2011-07-14	56.00	50.19	2.01	1.00	22.6
		Reference	51.50	52.70	1.95	1.00	22.0

7 SAR measurement uncertainty

SAR measurement uncertainty evaluation for Sony Ericsson PY7A1880033 (CK13i) phone According to IEEE 1528

Uncertainty Component	Uncert. 1g (%)	Uncert. 10g (%)	Prob. Dist.	Div.	1g mass	
					Ci	Calc (%)
Measurement System						
Probe Calibration*	±5.9	±5.9	N	1	1	±5.9
Axial Isotropy*	±4.7	±4.7	R	√3	0.71	±1.9
Hemispherical Isotropy*	±9.6	±9.6	R	√3	0.71	±3.9
Boundary effect*	±1.0	±1.0	R	√3	1	±0.6
Linearity*	±4.7	±4.7	R	√3	1	±2.7
System Detection limits*	±1.0	±1.0	R	√3	1	±0.6
Readout electronics*	±0.3	±0.3	N	1	1	±0.3
Response time*	±0.8	±0.8	R	√3	1	±0.5
Integration time*	±2.6	±2.6	R	√3	1	±1.5
RF Ambient Conditions (noise)*	±0.1	±0.0	R	√3	1	±0.1
RF Ambient Conditions (Reflections)*	±3.0	±3.0	R	√3	1	±1.7
Probe positioner mech. Tolerance*	±0.4	±0.4	R	√3	1	±0.2
Probe positioning with respect to phantom*	±2.9	±2.9	R	√3	1	±1.7
Extrap, interpolation and integration*	±1.0	±1.0	R	√3	1	±0.6
Measurement System Uncertainty						±8.4
Test Sample Related						
Test sample positioning	±3.7	±1.7	N	1	1	±3.7
Device holder uncertainty	±5.3	±4.7	N	1	1	±5.3
Power drift*	±5.0	±5.0	R	√3	1	±2.9
Test Sample Related Uncertainty						±7.1
Phantom and Tissue Parameters						
Phantom uncertainty*	±4.0	±4.0	R	√3	1	±2.3
Liquid conductivity (target)*	±5.0	±5.0	R	√3	0.64	±1.8
Liquid conductivity (measured)	±2.8	±2.8	N	1	0.64	±1.8
Liquid Permittivity (target)*	±5.0	±5.0	R	√3	0.60	±1.7
Liquid Permittivity (measured)	±3.3	±3.3	N	1	0.60	±2.0
Phantom and Tissue Parameters Uncertainty						±4.3
Combined standard uncertainty (%)						±11.8
Expanded standard uncertainty (%) (k=2)						±23.6

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8.1 Test results

The ambient humidity and temperature of test facility were kept between the range 30-70% and 20.0-25.0 °C respectively. A base station simulator was used to control the device during the SAR measurement. The DUT was supplied with a fully charged battery for each measurement.

For head measurement, the DUT was tested on the right-hand side and the left-hand side of the phantom, in two phone positions, cheek (touch) and tilt (cheek + 15°). The DUT was tested at the lowest, middle and highest frequencies in the transmission band. The measured 1-gram averaged SAR values of the DUT towards the head are provided in Table 1.

For body measurement the DUT was tested with the back (antenna) and front (display) towards the phantom flat section with 15 mm distance in speech mode and data mode. For all modes, the device was tested at the lowest, middle and highest frequencies in the transmission band. For portable hands free (PHF) usage the Sony Ericsson head set MH-610 was connected to the DUT. The measured 1-gram averaged SAR values of the DUT towards the body are provided in Table 2.

Band	Channel	Measured output power ¹ [dBm]	Position	Liquid T [°C]	Measured SAR [W/kg]	
					Left-hand 1g mass	Right-hand 1g mass
GSM 850	128	33.3	Cheek	21.5	0.41	0.41
			Tilt	21.5	-	-
	190	33.3	Cheek	21.5	0.54	0.53
			Tilt	21.5	0.32	0.30
	251	33.3	Cheek	21.5	0.70	0.66
			Tilt	21.5	-	-
GSM 1900	512	30.3	Cheek	21.6	1.11	0.78
			Tilt	21.6	-	-
	661	30.3	Cheek	21.6	1.24	0.81
			Tilt	21.6	0.43	0.45
	810	30.3	Cheek	21.6	1.36	0.94
			Tilt	21.6	-	-
WLAN 802.11b 1 Mbps	1	14.6	Cheek	24.5	-	0.14
			Tilt	24.5	0.13	-
	6	14.5	Cheek	24.5	0.11	0.13
			Tilt	24.5	0.12	0.12
	11	14.5	Cheek	24.5	-	0.12
			Tilt	24.5	0.11	-

Table 1: SAR measurement result for Sony Ericsson PY7A1880033 telephone at highest possible output power. Measured towards the head.

¹ Measured output values were provided by the customer.



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Band	Channel	Measured output power ² [dBm]	Position	Body Distance (mm)	Liquid T [°C]	Measured SAR [W/kg] 1g mass
GSM 850	128	33.3	Speech	15mm	23.5	0.68
			GPRS 2TX	15mm	23.5	0.73
	190	33.3	Speech	15mm	23.5	0.89
			GPRS 2TX	15mm	23.5	0.97
			EDGE 2TX	15mm	23.5	0.95
	251	33.3	Speech	15mm	23.5	1.12
			Speech PHF	15mm	23.5	0.71
			Front GPRS 2TX	15mm	23.5	0.64
			GPRS 2TX	15mm	23.5	1.19
GSM 1900	512	30.3	Speech	15mm	23.5	0.54
			EDGE 2TX	15mm	23.5	0.98
	661	30.3	Speech	15mm	23.5	0.56
			EDGE 2TX	15mm	23.5	1.04
			Front EDGE 2TX	15mm	23.5	0.65
			GPRS 2TX	15mm	23.5	1.02
	810	30.3	Speech	15mm	23.5	0.60
			Speech PHF	15mm	23.5	0.48
			EDGE 2TX	15mm	23.5	1.02
WLAN 802.11b 1 Mbps	1	14.6	Back	15mm	22.6	0.05
	6	14.5	Back	15mm	22.6	0.05
	13	14.5	Back	15mm	22.6	0.05

Table 2: SAR measurement result for Sony Ericsson PY7A1880033 telephone at highest possible output power. Measured towards the body.

8.2 Simultaneous Transmitters

The EUT supports simultaneous transmission using WLAN and an active cell band. According to the requirements of KDB 648474 the highest cell band must be combined with the corresponding WLAN value. If the resulting SAR value is greater than the limit of 1.6 w/kg the Peak Location Separation Ratio must be calculated. If the peak location separation ratio is <0.3 volume scans must be performed.

The combined simultaneous transmission values for FCC ID: PY7A1880033 (CK13i) can be found in Table 3.

Band	Highest Cell Band SAR (W/Kg)	Corresponding WLAN SAR (W/Kg)	Combined SAR (W/Kg)
GSM 850 Head	0.70	0.13	0.83
GSM1900 Head	1.36	0.13	1.49
GSM 850 Body	1.19	0.05	1.24
GSM 1900 Body	1.04	0.05	1.09

Table 3. Simultaneous transmission combined SAR results for Sony Ericsson PY7A188033 telephone.

The combined results for all bands are below the limit of 1.6 W/Kg. Therefore peak location separation ratio and volume scan measurements are not required.

² The measured output power values were provided by the customer.

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9 References

- [1] R.Plicanic. "SAR Measurement Specification of Wireless Handsets". Sony Ericsson SAR Test Laboratory internal document GUG/N 03:141
- [2] FCC. "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields: Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radio Frequency Emissions." Supplement C (Edition 01-01) to OET Bulletin 65 (Edition 97- 01).
- [3] IEEE. "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques." Std 1528-2003. June. 2003.
- [4] IEC 62209-1. "Procedure to measure the Specific Absorption Rate (SAR) for hand-held mobile wireless devices in the frequency range of 300 MHz to 3 GHz". February 2005.
- [5] FCC KDB648474. "SAR Evaluation Consideration for HANDSETS with Multiple Transmitters and Antenna", April 2008.
- [6] FCC KDB248227. "SAR Measurement procedure for 802.11a/b/g Transmitters", May 2007.

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Appendix

9.1 Photographs of the device under test



Front



Back



Sides



Back side with battery

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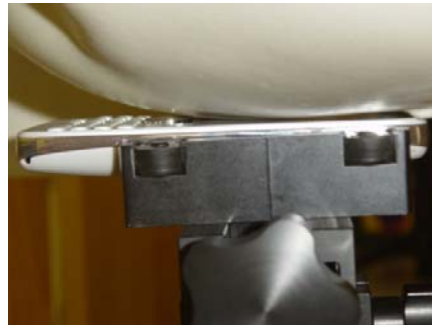
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9.2 Device position at SAM Twin Phantom



DUT position towards the head: Cheek (touch) position



DUT position towards the head: Tilt (touch + 15°) position



DUT position towards the body

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REPORT**

Prepared (also subject responsible if other)

BA/SEMC/CVVBAU Rob Carr

Approved

BA/SEMC/CVVBAU Jon Kenny

Checked

JK

No.

CVDVBA11:352

Date

110711

Rev

A

Reference

File**9.3 Attachments**

- System validation
- Measurement plots for head and body position
- Probe calibration
- Dipole calibration