

				1(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

Exhibit 11: SAR Test Report of Portable Cellular Phone FCC ID: PY7A1031012 Model : T637

Date of test: December 3-30, 2003 **Date of Report:** December 31st, 2003

Laboratory: SAR Testing Laboratory Sony Ericsson Mobile Communications, Inc. 7001

Development Drive, P.O. Box 13969, Research Triangle Park, NC, 27709, USA

Rodney Dixon

Tested by: Technician III, Product Verification Group

Gerard Hayes

Consulting Engineer, Antenna/RF Development Group

... Gerard Hayes

Test Responsible: Consulting Engineer, Antenna/RF Development Group

Accreditation: This laboratory is accredited to ISO/IEC 17025-1999 to perform the following

electromagnetic exposure tests:

Specific Absorption Rate (SAR)

Dielectric parameters RF power measurement

On the following types of products:

Wireless communications devices. A2LA certificate #1650-01

Statement of Compliance:

Sony Ericsson Mobile Communications, Inc declares under its sole responsibility that portable cellular telephone FCC ID PY7A1031012 model T637 to which this declaration relates, is in conformity with the appropriate General Population/Uncontrolled RF exposure standards, recommendations and guidelines (FCC 47 CFR §2.1093). 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)

[©] Sony Ericsson Mobile Communications, Inc. 2003

This test report shall not be reproduced except in full, without written approval of the 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 Mobile Communications encourages all feedback, both positive and negative, on this test report.



FCC ID: **PY7A1031012**

				2(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

Table of Contents

1. Introduction	3
2. Description of the Device Under Test	3
2.1 Antenna description	3
2.2 Device description	3
3. Test Equipment Used	3
3.1 Dosimetric System	3
3.2 Additional Equipment	4
4. Electrical parameters of the tissue simulating liquid	4
5. System Accuracy Verification	5
6. Test Results	6
6.1 Head Adjacent Test Results	6
6.2 Body-Worn Test Results	9
References	12
Appendix 1: SAR distribution comparison for system accuracy verification	13
Appendix 2: SAR distribution plots for Phantom Head Adjacent Use	25
Appendix 3: SAR distribution plots for Body Worn Configuration	40
Appendix 4: Probe Calibration Certificate	65
Appendix 5: Measurement Uncertainty Budget	75
Appendix 6: Photographs of the device under test	79



				3(3.)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

1. Introduction

The Sony Ericsson SAR Laboratory has performed measurements of the maximum potential exposure to the user of portable cellular phone FCC ID PYA1031012 model T637. The Specific Absorption Rate (SAR) of this product was measured. The applicable RF safety guidelines and the SAR measurement specifications used for the test are described in [1].

2. Description of the Device Under Test

2.1 Antenna description

Type	Internal antenna		
Location	Inside the back cover, near the top		
Dimensions	Width	38 mm	
Difficusions	Length	22 mm	
Configuration	Patch antenna		

2.2 Device description

FCC ID Number / Device Model	PY7A1031012 / T637			
Serial number	CB500NTTHN	and CB500NTT7Y		
Mode(s) of Operation	GSM 800	GSM 1900		
Modulation Mode(s)	TDMA	TDMA		
Target Value for Maximum Output Power Setting	33 dBm 30 dBm			
Factory Tolerance Window in Power Setting	$\pm 1.0 \text{ dB}$ $\pm 1.0 \text{ dB}$			
Duty Cycle	1/8 1/8			
Transmitting Frequency Rang(s)	824-849 MHz 1850-1910 MHz			
Production Unit or Identical Prototype (47 CFR §2908)	Identical Prototype			
Device Category	Portable			
RF Exposure Limits	General Popula	tion / Uncontrolled		

3. Test Equipment Used

3.1 Dosimetric System

The Sony Ericsson SAR Laboratory utilizes a Dosimetric Assessment System (Dasy3TM v3.1d) manufactured by Schmid & Partner Engineering AG (SPEAGTM), of Zurich Switzerland. The overall RSS uncertainty of the measurement system is $\pm 10.61\%$ (K=1) with an expanded uncertainty of $\pm 21.22\%$ (K=2). The measurement uncertainty budget is given in Appendix 5. The list of calibrated equipment used for the measurements is shown in the following table.



FCC ID: **PY7A1031012**

				7(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

Description	Serial Number	Cal Due Date
DASY3 DAE V1	392	18-Jul-2004
DASY3 DAE V1	431	18-Jul-2004
DASY3 DAE V1	432	18-Jul-2004
E-Field Probe ETDV6	1538	29-Jul-2004
E-Field Probe ETDV6	1586	28-Aug-2004
Dipole Validation Kit, DV835V2	428	14-Jan-2004
S.A.M. Phantom used for 835MHz (Head)	1023	
S.A.M. Phantom used for 835MHz (Body)	1031	
Dipole Validation Kit, DV1900V2	536	14-Jan-2004
S.A.M. Phantom used for 1900MHz (Head)	1020	
S.A.M. Phantom used for 1900MHz (Body)	1030	

3.2 Additional Equipment

Description	Serial Number	Cal Due Date
Signal Generator HP8648C	3537A01598	09-Sep-2004
Power Meter 437B	3125U113481	16-May-2004
Power Meter 437B	3125U13729	14-Jan-2004
Power Sensor - 8482H	MY41090240	13-May-2004
Power Sensor - 8482H	MY41090239	13-May-2004
Network Analyzer HP8752C	3410A3105	17-Sep-2004
Dielectric Probe Kit HP85070B	US33020256	23-Oct-2004
Digital Thermometer 61220-601	350078	10-Nov-2004
Thermometer Probe 61220-604	99172351	10-Nov-2004
Digital Hygrometer/ Thermometer	21242911	10-Nov-2004
AR Power Amplifier 5S1G4	19290	05-Mar-2004

4. Electrical parameters of 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, along with the temperature of the simulated tissue are shown in the table below. A mass density of $\rho=1g/cm3$ was entered into the system in all the cases. It can be seen that the measured parameters are within tolerance of the recommended limits [1]. During the tests, the ambient temperature of the laboratory was in the range 22.5-23.9°C, the relative humidity was 20.5- 32.8 %, and the liquid depth above the ear reference points was more than 15.0 cm for all the cases. It is seen that the measured parameters are satisfactory for compliance testing.



5(87)

FCC ID: **PY7A1031012**

				3(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

			Dielectric Parameters		
f (MHz)	Tissue type	Limits / Measured	ε _r	σ (S/m)	Simulated Tissue Temp (°C)
		Measured, 03-Dec-03	42.0	0.90	23.0
	Head	Measured, 08-Dec-03	41.1	0.87	24.6
	Heau	Measured, 30-Dec-03	40.8	0.88	23.1
835		Recommended Limits	41.50	0.90	20-25
		Measured, 10-Dec-03	56.1	0.97	23.3
	Body	Measured, 11-Dec-03	56.7	0.96	22.5
	Bouy	Recommended Limits	55.20	0.97	20-25
		Measured, 05-Dec-03	38.7	1.42	22.0
	Head	Measured, 15-Dec-03	38.7	1.43	22.8
1900	Heau	Recommended Limits	40.00	1.40	20-25
1700		Measured, 11-Dec-03	51.34	1.53	22.7
	Body	Measured, 12-Dec-03	51.7	1.52	23.0
	Douy	Recommended Limits	53.30	1.52	20-25

The list of ingredients and the percent composition used for the simulated tissue are indicated in the table below.

	800MHz	800MHz	1800/1900MHz	1900MHz
Ingredient	Head	Body	Head	Body
Sugar	57.99%	56.00%		
DGBE			44.92%	30.82%
Water	39.72%	41.76%	54.90%	68.89%
Salt	1.18%	0.76%	0.18%	0.29%
HEC	0.92%	1.21%		
Bact.	0.19%	0.27%		

5. System Accuracy Verification

A system accuracy verification of the DASY3 was performed using the measurement equipment listed in Section 3.1. The daily system accuracy verification occurs within the flat section of the SAM phantom.

A SAR measurement was performed to see if the measured SAR was within $\pm 10\%$ from the target SAR indicated on the dipole certification sheet. These tests were done at 835 MHz and/or 1900MHz. These frequencies are within 100MHz of the mid-band frequency of the test device, according to [1]. The test was conducted on the same days as the measurement of the DUT. The results from the system accuracy verification are displayed in the table below (SAR values are normalized to 1W forward power delivered to the dipole). During the tests, the ambient temperature of the laboratory was in the range 22.7-23.6 °C, the relative humidity was in the range 20.5 – 31.7 % and the liquid depth above the ear reference points was above 150 mm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values. The SAR distributions are shown in Appendix 1.

Daily, prior to conducting tests, measurements were made with the RF sources powered off to determine the system noise level. The highest system noise was 0.0009 W/kg, which is below the recommended limit in [1].





				0(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes	SEM/CA/E-03:0154/REP			
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

f	Tissue		SAR (W/kg)		ectric neters	Tissue
(MHz)	Туре	Description	1g / 10g	ϵ_r	σ (S/m)	Temp (°C)
		Measured, 03-Dec-03	9.72/ 6.33	42.0	0.90	22.8
		Measured, 08-Dec-03	9.23 / 6.02	41.1	0.87	24.6
	Head	Measured, 30-Dec-03	9.06/5.91	40.8	0.88	22.7
835	835	Recommended Limits	9.50 / 6.20	41.50	0.90	20-25
		Measured, 10-Dec-03	8.99/5.92	56.1	0.97	23.3
	Body	Measured, 11-Dec-03	8.97/5.90	56.7	0.96	22.5
	·	Recommended Limits	9.90 / 6.46	55.20	0.97	20-25
		Measured, 05-Dec-03	40.48 /21.09	38.7	1.42	22.0
	Head	Measured, 15-Dec-03	40.20/20.89	38.7	1.43	22.8
1900		Recommended Limits	39.70 / 20.50	40.00	1.40	20-25
1300		Measured, 11-Dec-03	39.94 /21.02	51.34	1.53	22.7
	Body	Measured, 12-Dec-03	40.02/21.10	51.7	1.52	23.0
		Recommended Limits	40.50 / 20.89	53.30	1.52	20-25

6. Test Results

The test sample was operated in a test mode that allows control of the transmitter without the need to place actual phone calls. For the purposes of this test the unit is commanded to test mode and set to the proper channel, transmitter power level and transmit mode of operation. The phone was tested in the configurations stipulated in [1,2]. The phone was positioned into these configurations using the positioner supplied with the DASY 3.1d SAR measurement system.

The Cellular Phone FCC ID PY7A1031012 has the following battery option: Model #1-BKB 193 167 Battery This battery was used for SAR testing. The phone was placed in the SAR measurement system with a fully charged battery.

6.1 Head Adjacent Test Results

The SAR results shown in tables 1 through 4 are maximum SAR values averaged over 1 gram and 10 grams of phantom tissue. Also shown are the measured conducted output powers, the temperature of the test facility during the test, the temperature of the simulated tissue, the measured drift, and the extrapolated SAR. The extrapolated SAR corresponds to the measured SAR scaled to the maximum conducted output power.

The humidity and ambient temperature of the test facility were in the ranges 21.1-26.5% and 22.9-23.9°C, respectively. The SAR measurements were performed using the SAM phantoms listed in section 3.1.

The test conditions indicated as bold numbers in the following table are included in Appendix 2. All other test conditions measured lower SAR values than those included.



				1 (01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes	SEM/CA/E-03:0154/REP			
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

			Left Head		(Cheek / Touch Position)			
f (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)	
	128 / 824	33.80	1.12 / 0.676	-0.01	1.17 / 0.708	23.3	21.2	
800 GSM	189 / 837	33.20	1.05 / 0.634	-0.05	1.10 / 0.664	23.6	21.0	
	251 / 849	32.51	1.33 / 0.812	+0.01	1.39 / 0.850	22.9	21.7	
800 GSM BT on	251 / 849	32.51	1.33 / 0.811	-0.17	1.39 / 0.849	23.5	22.7	
	512 / 1850	30.70	0.605 / 0.370	-0.02	0.629 /0.385	23.5	21.3	
1900 GSM	660/1880	30.83	0.700 / 0.420	-0.08	0.728 /0.437	23.3	21.6	
	810/1910	30.72	0.673 / 0.395	+0.04	0.700 /0.411	23.1	21.1	

Table 1: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the left head in the Cheek/Touch Position.

			Right head		(Cheek / Touch Position)			
f (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)	
	128 / 824	33.80	1.01 / 0.606	+0.13	1.06 / 0.635	23.5	21.1	
800 GSM	189 / 837	33.20	1.02 /0.617	-0.03	1.07 / 0.646	23.1	21.1	
	251 / 849	32.51	1.35 / 0.813	+0.08	1.41 / 0.851	23.3	22.8	
800 GSM BT on	251 / 849	32.51	1.34 / 0.811	-0.04	1.40 / 0.849	23.9	22.7	
	512 / 1850	30.70	0.771 / 0.436	+0.08	0.802 /0.453	23.3	22.1	
1900 GSM	660/1880	30.83	0.814 / 0.462	-0.08	0.846 /0.480	23.2	21.3	
	810/1910	30.72	0.735 / 0.424	-0.07	0.764 /0.441	23.3	21.6	

Table 2: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the right head in the Cheek/Touch Position.

			Left Head (15° Tilt Position)					
F (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)	
	128 / 824	33.80	0.357 / 0.225	-0.07	0.370 / 0.235	23.6	22.0	
800 GSM	189 / 837	33.20	0.357 / 0.224	0.00	0.370 / 0.235	23.2	22.2	
	251 / 849	32.51	0.562 / 0.357	-0.01	0.590 / 0.374	23.6	22.5	
1000 001	512 / 1850	30.70	0.790 / 0.450	-0.03	0.822 / 0.468	23.3	21.6	
1900 GSM	660/1880	30.83	0.785 / 0.446	+0.02	0.816 / 0.464	23.3	21.2	
	810/1910	30.72	0.772 / 0.439	+0.01	0.803 / 0.457	23.3	21.3	
1900 GSM BT on	512 / 1850	30.70	0.781 / 0.445	-0.02	0.812 / 0.463	23.3	21.2	



Sony Ericsson		REPORT		8(87)
Prepared (also subject responsible if other) SEM/CV/PF/P Gerard Hayes		No. SEM/CA/E-03:0154	/REP	
Approved SEM/CV/PF/P Gerard Hayes	Checked			X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

Table 3: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the left head in the 15° Tilt Position.

			Right Head (15° Tilt Position)					
F (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)	
	128 / 824	33.80	0.424 / 0.257	-0.18	0.440 / 0.269	23.3	23.5	
800 GSM	189 / 837	33.20	0.378 / 0.232	-0.10	0.400 / 0.243	23.6	23.3	
	251 / 849	32.51	0.588 / 0.367	+0.08	0.620 / 0.384	23.6	22.6	
4000 6614	512 / 1850	30.70	0.830 / 0.457	-0.05	0.863 / 0.475	23.5	22.6	
1900 GSM	660/1880	30.83	0.885 / 0.488	0.00	0.920 / 0.507	23.5	21.1	
	810/1910	30.72	0.877 / 0.485	-0.06	0.912 / 0.504	23.3	22.1	
1900 GSM BT on	660 / 1880	30.70	0.871 / 0.479	-0.13	0.906 / 0.498	23.3	22.8	

Table 4: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the right head in the 15° Tilt Position.



9(87)

				0(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes	SEM/CA/E-03:0154/REP			
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

6.2 Body-Worn Test Results

The SAR results shown in table 5-10 are the maximum SAR values averaged over 1gram and 10 grams of phantom tissue. Also shown are the measured conducted output powers, the temperature of the test facility during the test, the temperature of the simulated tissue after the test, the measured drift and the extrapolated SAR. The extrapolated SAR corresponds to the measured SAR scaled to the maximum conducted output power. The humidity and ambient temperature of the test facility were in the ranges 22.3-32.8% and 22.5-23.9°C, respectively.

A "flat" phantom was used for the body-worn tests. This "flat" phantom corresponds to the flat portion of the SAM phantom. The tissue stimulant depth above the ear canal was verified to be above 150mm in all the measurements. The same device holder described in section 6 was used for positioning the phone. The cellular phone was tested with a headset connected to the device for all body-worn SAR measurements.

The following body-worn accessories were tested for this phone:

- -Carry case model ICT-14
- -Carry case model ICT-25
- -20 mm spacer

A full data set output of the three test conditions with the highest SAR values from the Dasy™ measurement system is included as Appendix 3. The test conditions included are indicated as bold numbers in the following table. All other test conditions measured lower SAR values than those included.

			Body Worn PHF: HPB-20 Carry Accessory: ICT-14 (Back of phone facing body)					
f (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)	
	128 / 824	33.80	0.557 / 0.391	-0.09	0.583 / 0.409	23.7	22.5	
800 GSM	189 / 837	33.20	0.456 / 0.322	-0.14	0.477 / 0.337	23.7	21.6	
	251 / 849	32.51	0.433 / 0.319	-0.01	0.476 / 0.334	23.5	21.4	
800 GSM BT on	128 / 824	33.80	0.477 / 0.328	-0.08	0.499 / 0.343	23.8	21.8	
	512 / 1850	30.70	0.768 / 0.442	-0.08	0.799 / 0.460	22.6	22.6	
1900 GSM	660/1880	30.83	0.698 / 0.402	-0.03	0.726 / 0.418	23.7	21.6	
	810/1910	30.72	0.637 / 0.367	-0.09	0.662 / 0.382	23.8	21.6	
1900 GSM BT on	512 / 1850	30.70	0.618 / 0.358	-0.04	0.643 / 0.372	23.6	22.0	

Table 5: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the body with carry accessory ICT-14. Back of the phone facing the flat phantom.



10(87)

FCC ID: **PY7A1031012**

				10(07)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes	SEM/CA/E-03:0154/REP			
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

			Body Worn PHF: HPB-20 Carry Accessory: ICT-14 (Front of phone facing body)					
f (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)	
	128 / 824	33.80	0.267 / 0.181	-0.06	0.280 / 0.190	23.8	21.9	
800 GSM	189 / 837	33.20	0.220 / 0.148	-0.03	0.230 / 0.155	23.6	21.5	
	251 / 849	32.51	0.298/ 0.201	-0.05	0.312 / 0.210	23.6	21.7	
	512 / 1850	30.70	0.151 / 0.0964	-0.09	0.157 / 0.100	22.5	22.7	
1900 GSM	660/1880	30.83	0.161 / 0.102	-0.11	0.167 / 0.107	23.6	21.6	
	810/1910	30.72	0.141 / 0.0890	-0.07	0.147 / 0.0930	23.9	21.5	

Table 6: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the body with carry accessory ICT-14. Front of the phone facing the flat phantom.

			Body Worn PHF: HPB-20 Carry Accessory: ICT-25 (Back of phone facing body)							
f (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)			
	128 / 824	33.80	0.640 / 0.447	-0.04	0.670 / 0.468	23.8	21.9			
800 GSM	189 / 837	33.20	0.507 / 0.356	-0.04	0.531 / 0.373	23.8	22.0			
	251 / 849	32.51	0.605 / 0.427	-0.14	0.634 / 0.447	23.6	21.6			
800 GSM BT on	128 / 824	33.80	0.585 / 0.408	-0.08	0.613 / 0.427	23.8	21.8			
	512 / 1850	30.70	0.811 / 0.464	-0.01	0.843 / 0.483	22.6	22.6			
1900 GSM	660/1880	30.83	0.996 / 0.559	-0.01	1.04 / 0.581	23.9	21.5			
	810/1910	30.72	0.736 / 0.412	-0.03	0.765 / 0.428	23.7	21.7			
1900 GSM BT on	660/1880	30.83	0.872 / 0.493	-0.06	0.907 / 0.513	23.6	22.0			

Table 7: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the body with carry accessory ICT-25. Back of the phone facing the flat phantom.



11(87)

FCC ID: **PY7A1031012**

				11(07)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

			Body Worn PHF: HPB-20 Carry Accessory: ICT-25 (Front of phone facing body)						
f (MHz)	Channel/	Conducted Output Power	Measured (W/kg)		Extrapolated (W/kg)	Ambient	Simulate		
	frequency	(dBm)	1g / 10g	Drift (dB)	1g / 10g	Temp (°C)	Temp (°C)		
			0.272 /		0.285 /				
	128 / 824	33.80	0.179	-0.03	0.187	23.7	21.6		
800 GSM			0.319 /		0.334 /				
	189 / 837	33.20	0.214	+0.02	0.224	23.6	21.9		
			0.316/		0.331 /				
	251 / 849	32.51	0.209	+0.13	0.219	23.5	21.6		
			0.162 /		0.168 /				
	512 / 1850	30.70	0.103	-0.02	0.107	22.8	22.7		
1900 GSM			0.150 /		0.156 /				
	660/1880	30.83	0.0944	-0.03	0.0980	23.9	21.5		
			0.122 /		0.127 /				
	810/1910	30.72	0.0757	-0.06	0.0790	23.9	21.5		

Table 8: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the body with carry accessory ICT-25. Front of the phone facing the flat phantom.

			Body Worn PHF: HPB-20 Carry Accessory: 20 mm spacer (Back of phone facing body					
f (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolate d (W/kg) 1g / 10g	Ambient Temp	Simulate Temp (°C)	
	128 / 824	33.80	0.434 / 0.305	-0.13	0.454 / 0.319	22.5	22.7	
800 GSM	189 / 837	33.20	0.404 / 0.281	-0.01	0.423 / 0.294	22.6	22.7	
	251 / 849	32.51	0.408 / 0.284	-0.10	0.427 / 0.297	23.9	21.5	
800 GSM BT on	128 / 824	33.80	0.393 / 0.272	-0.09	0.412 / 0.285	23.8	21.8	
	512 / 1850	30.70	0.480 / 0.289	-0.07	0.499 / 0.301	23.3	22.8	
1900 GSM	660/1880	30.83	0.522 / 0.312	-0.08	0.543 / 0.324	23.2	22.5	
	810/1910	30.72	0.502 / 0.297	-0.09	0.522 / 0.309	23.5	22.1	
1900 GSM BT on	660/1880	30.83	0.551 / 0.326	-0.03	0.573 / 0.339	23.7	22.2	

Table 9: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the body with a 20 mm spacer. Back of the phone facing the flat phantom.

APPLICANT: Sony Ericsson Mobile Communications Inc.

REPORT



12(87)

FCC ID: **PY7A1031012**

				12(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

			Body Worn PHF: HPB-20 Carry Accessory: 20 mm spacer (Front of phone facing body)						
f (MHz)	Channel/ frequency	Conducted Output Power (dBm)	Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)		
	128 / 824	33.80	0.103 / 0.0684	-0.16	0.108 / 0.072	22.6	22.5		
800 GSM	189 / 837	33.20	0.101 / 0.0684	-0.10	0.106 / 0.072	22.5	22.5		
	251 / 849	32.51	0.163 / 0.111	-0.04	0.171 / 0.116	22.7	22.5		
	512 / 1850	30.70	0.129 / 0.0813	+0.04	0.134 / 0.0850	23.2	23.1		
1900 GSM	660/1880	30.83	0.145 / 0.0913	+0.11	0.151 / 0.0950	23.4	22.4		
	810/1910	30.72	0.135 / 0.0849	-0.07	0.140 / 0.0880	23.6	22.0		

Table 10: SAR measurement results for the portable cellular telephone FCC ID PY7A1031012 model T637 at maximum output power. Measured against the body with a 20 mm spacer. Front of the phone facing the flat phantom.

References

- [1] FCC, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields: Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions," Supplement C (Edition 01-01) to OET Bulletin 65 (Edition 97-01).
- [2] 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 1528-200X, Draft 6.5 August 20, 2001.

APPLICANT: Sony Ericsson Mobile Communications Inc.

REPORT

FCC ID: **PY7A1031012**

Sony Ericsson		REPORT			13(87)
Prepared (also subject responsible if other) SEM/CV/PF/P Gerard Hayes		No. SEM/CA/E-03:	1 :0154	/REP	
Approved SEM/CV/PF/P Gerard Hayes	Checked				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

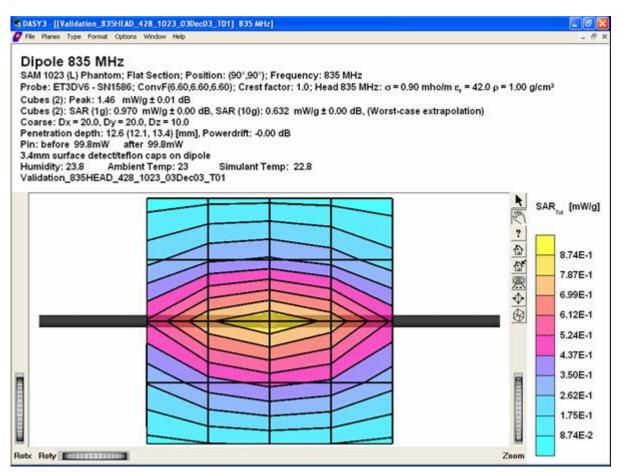
Appendix 1

SAR distribution comparison for the system accuracy verification



14(87)

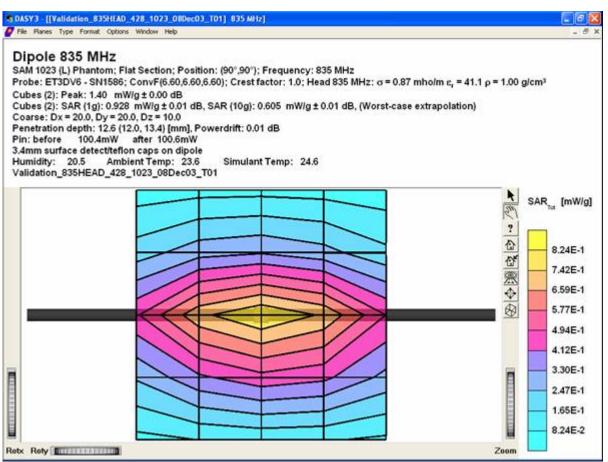
SEM/CV/PF/P Gerard Hayes		No. SEM/CA/E-03:0	154/REP	(0.)
SEM/CV/PF/P Gerard Hayes	Checked			X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



835 MHz SAR distribution of validation dipole antenna from system performance check on December 3, 2003 (Using head tissue).



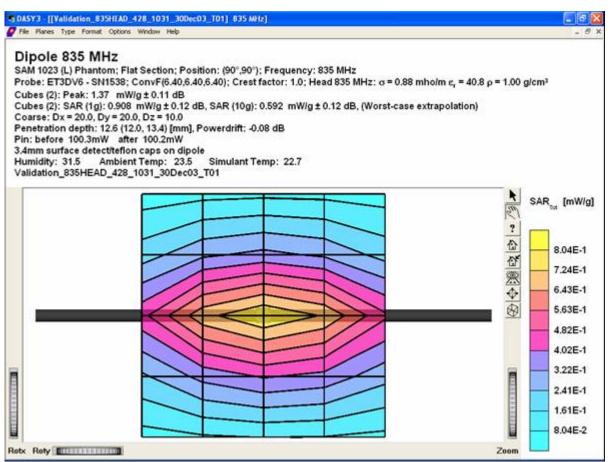
				10(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



835 MHz SAR distribution of validation dipole antenna from system performance check on December 8, 2003 (Using head tissue).



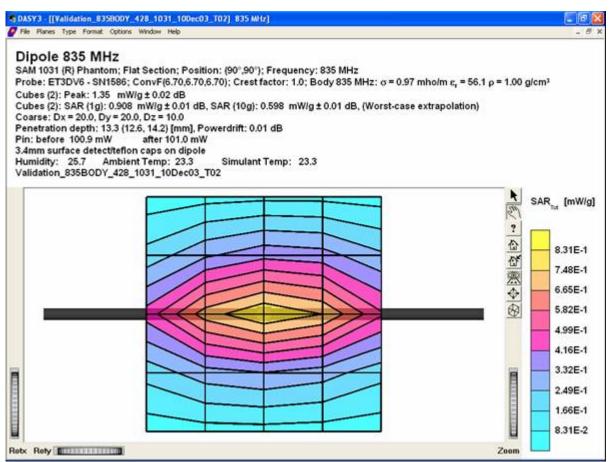
				10(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



835 MHz SAR distribution of validation dipole antenna from system performance check on December 30, 2003 (Using head tissue).



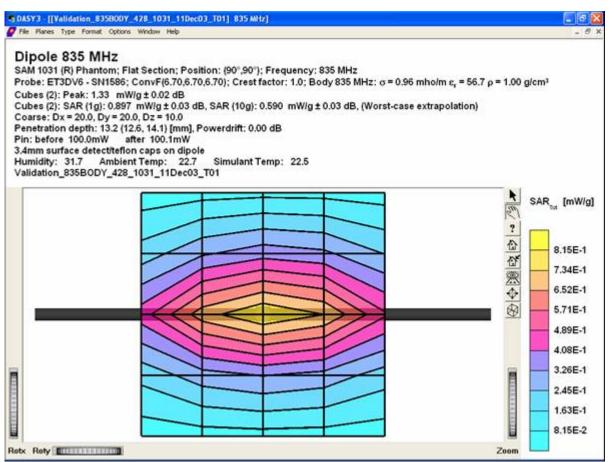
				17(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



835 MHz SAR distribution of validation dipole antenna from system performance check on December 10, 2003 (Using muscle/body tissue).



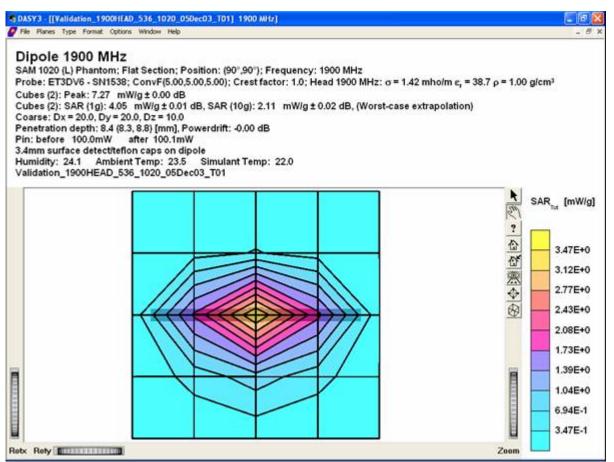
				: (3:)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



835 MHz SAR distribution of validation dipole antenna from system performance check on December 11, 2003 (Using muscle/body tissue).



				.5(3.)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



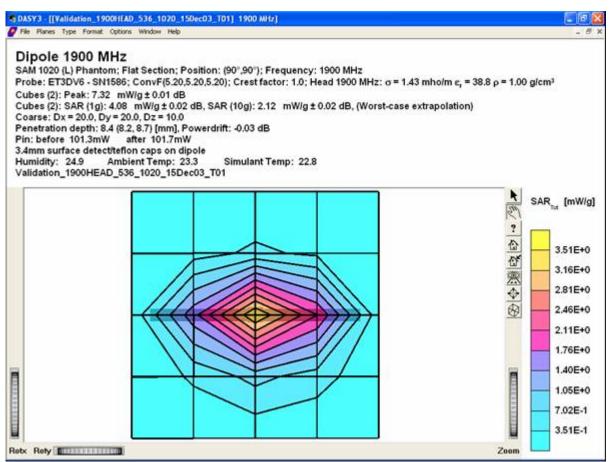
1900 MHz SAR distribution of validation dipole antenna from system performance check on December 5, 2003 (Using head tissue).

т

FCC ID: **PY7A1031012**



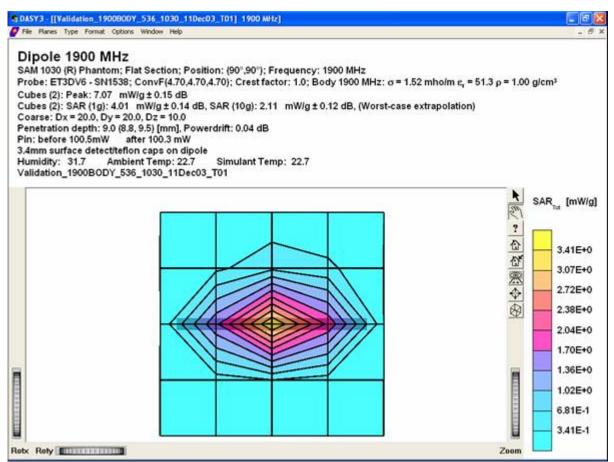
				20(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



1900 MHz SAR distribution of validation dipole antenna from system performance check on December 15, 2003 (Using head tissue).



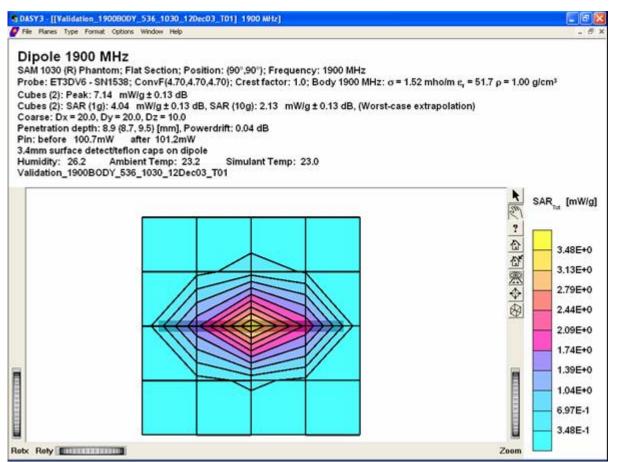
				21(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



1900 MHz SAR distribution of validation dipole antenna from system performance check on December 11, 2003 (Using muscle/body tissue).



				22(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



1900 MHz SAR distribution of validation dipole antenna from system performance check on December 12, 2003 (Using muscle/body tissue).

APPLICANT: Sony Ericsson Mobile Communications Inc.

REPORT



23(87)

FCC ID: **PY7A1031012**

				23(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

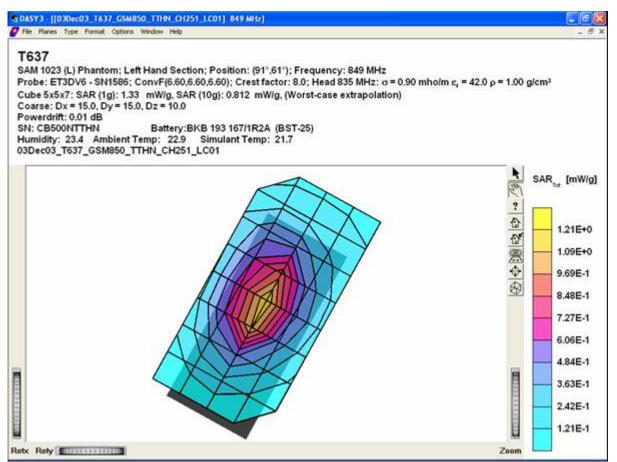
Appendix 2

SAR distribution plots for Phantom Head Adjacent Use



FCC ID: **PY7A1031012**

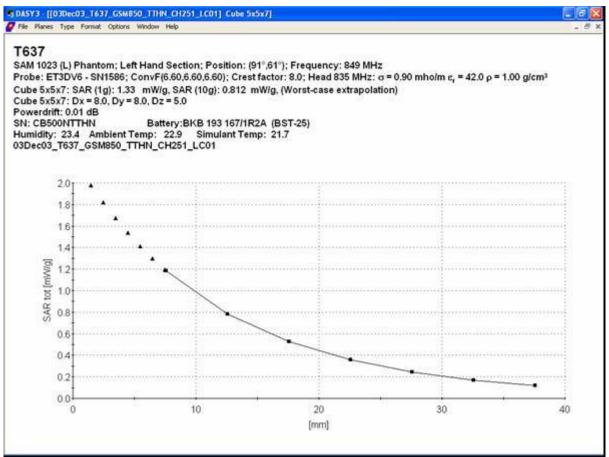
				21(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 800 GSM band. Measured against the left hand side of the head in the "Cheek/Touch" position.



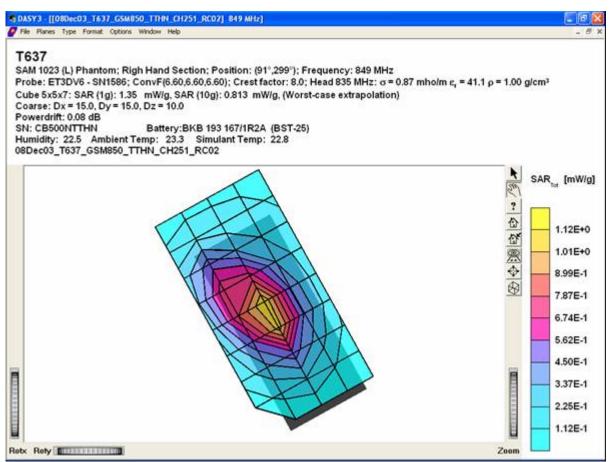
				=0(0.)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the left hand side of the head in the "Cheek/Touch" position.



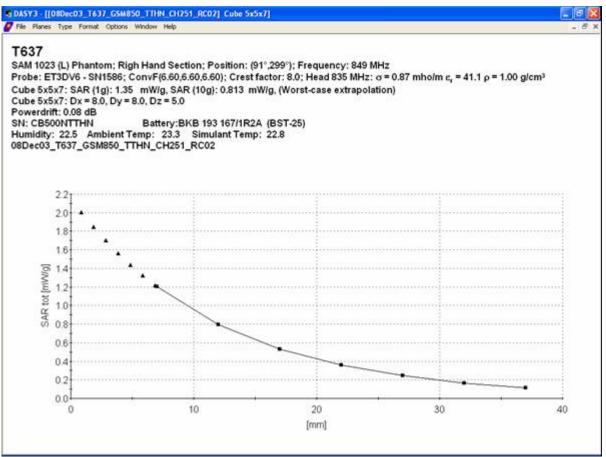
				20(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 800 GSM band. Measured against the right hand side of the head in the "Cheek/Touch" position.



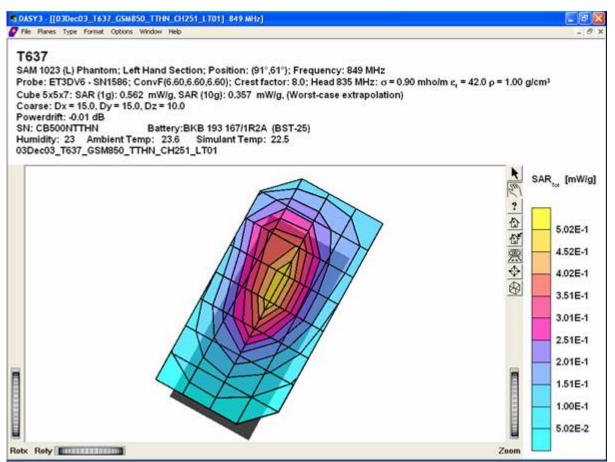
				21(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the right hand side of the head in the "Cheek/Touch" position.



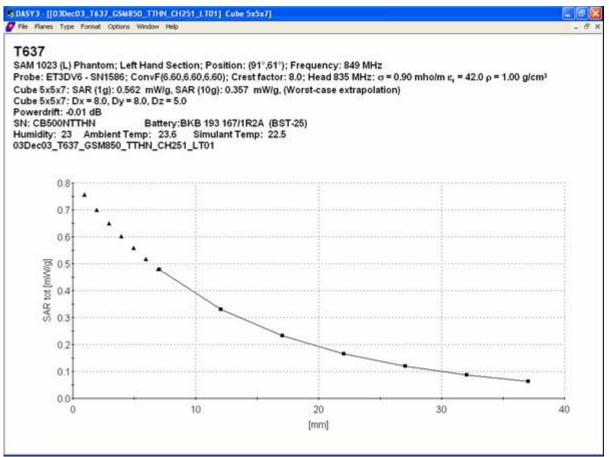
				20(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 800 GSM band. Measured against the left hand side of the head in the "Tilt" position.



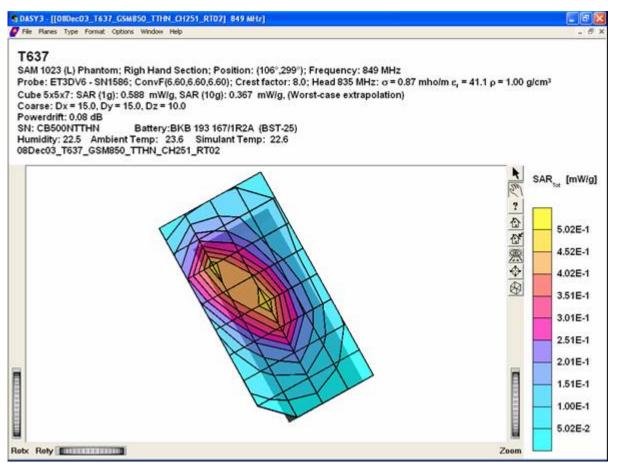
				=5(3.)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the left hand side of the head in the "Tilt" position.



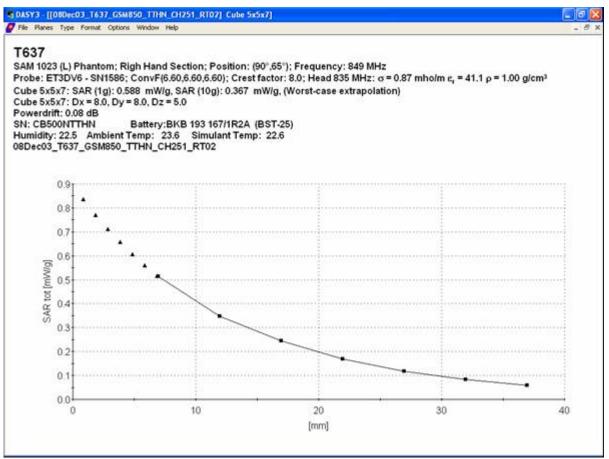
				33(3.)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 800 GSM band. Measured against the right hand side of the head in the "Tilt" position.



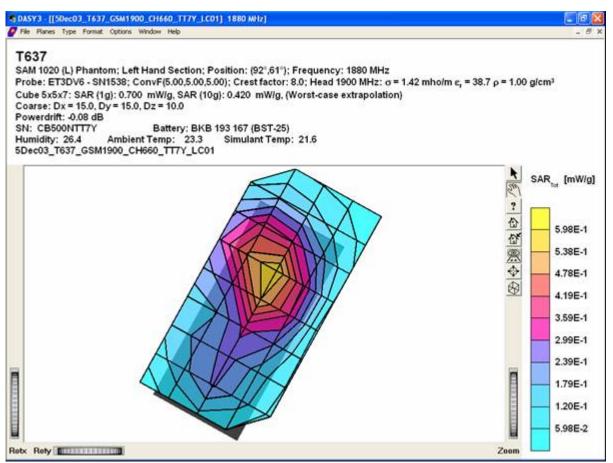
				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 800 GSM band, while phone is against the right hand side of the head in the "Tilt" position.



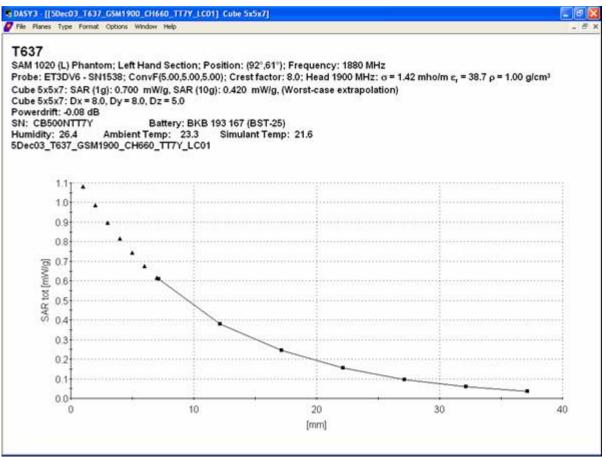
				0 <u>2</u> (01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 1900 GSM band. Measured against the left hand side of the head in the "Cheek/Touch" position.



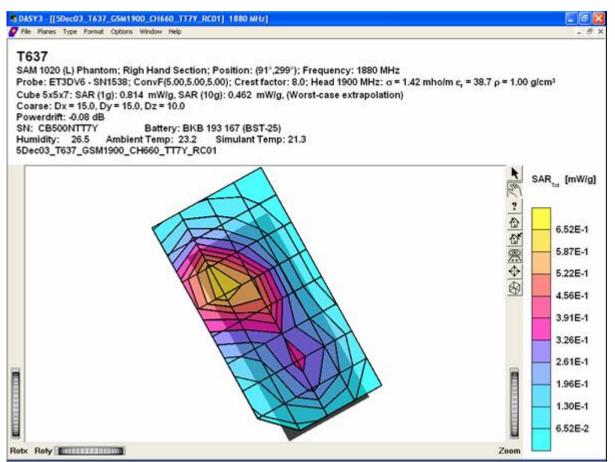
				38(8:)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the left hand side of the head in the "Cheek/Touch" position.



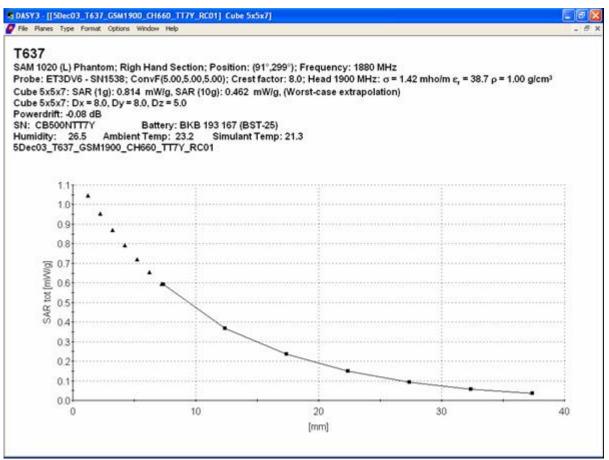
				0 1 (01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 1900 GSM band. Measured against the right hand side of the head in the "Cheek/Touch" position.



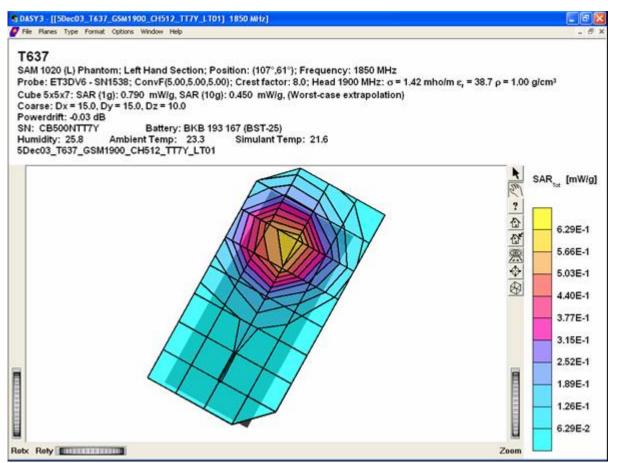
				38(3.)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the right hand side of the head in the "Cheek/Touch" position.



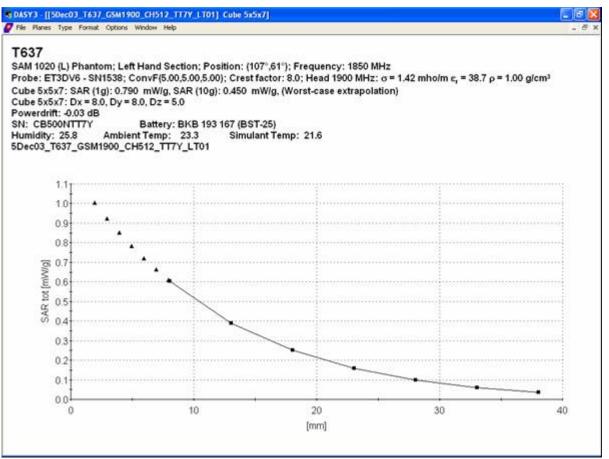
				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 1900 GSM band. Measured against the left hand side of the head in the "Tilt" position.



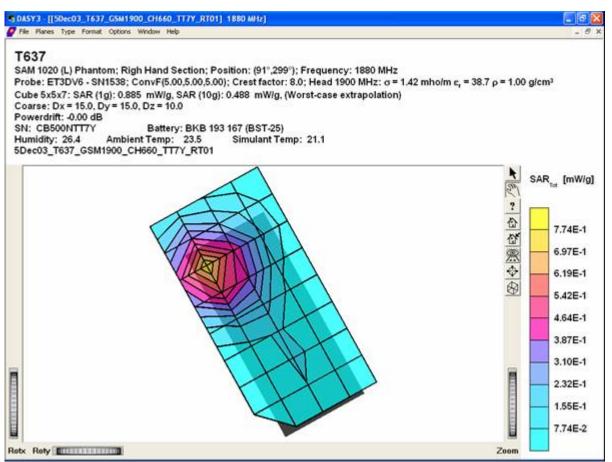
				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the left hand side of the head in the "Tilt" position.



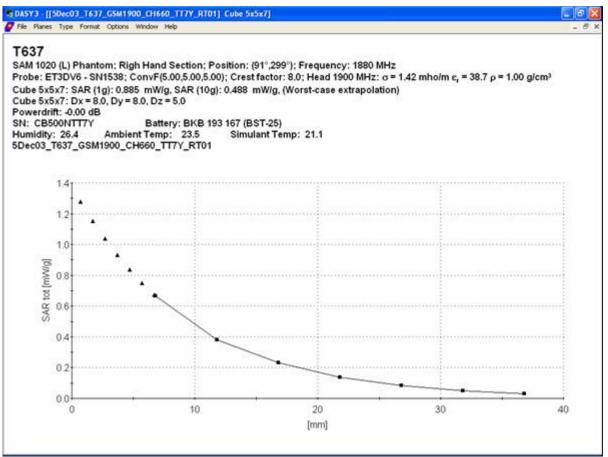
				30(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 1900 GSM band. Measured against the right hand side of the head in the "Tilt" position.



				38(8:)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for Maximum SAR in 1900 GSM band, while phone is against the right hand side of the head in the "Tilt" position.

APPLICANT: Sony Ericsson Mobile Communications Inc.



FCC ID: **PY7A1031012**

Sony Ericsson	REPORT	40(87)
Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Gerard Hayes	SEM/CA/E-03:0154/REP	
Approved Checked		
SEM/CV/PF/P Gerard Hayes	A X:\SAR Chamber\FCC reports\T637 Reports\FCCT637.doc	\Final

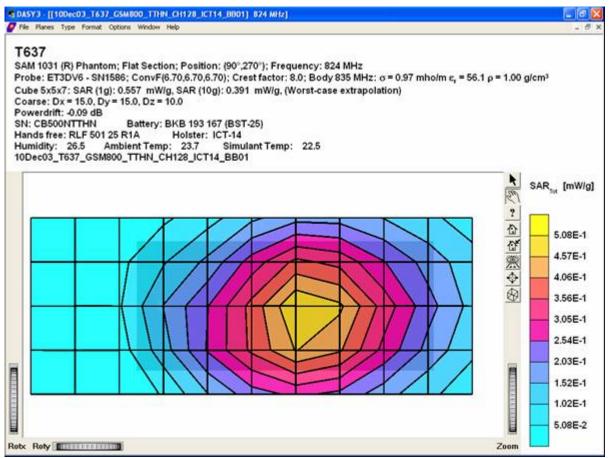
Appendix 3

SAR distribution plots for Body Worn Configuration



41(87)

				+1(0 <i>1</i>)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

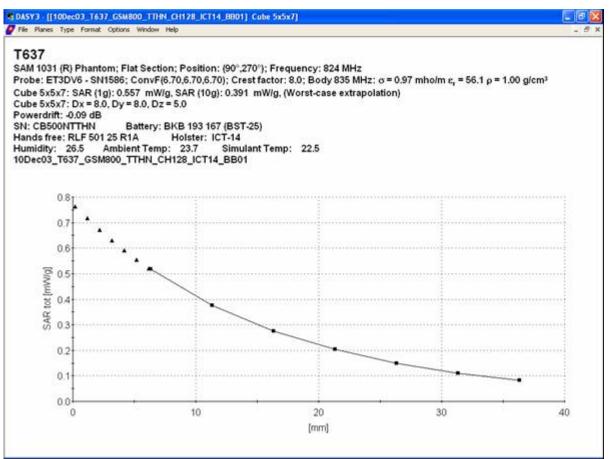


Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



42(87)

				12(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

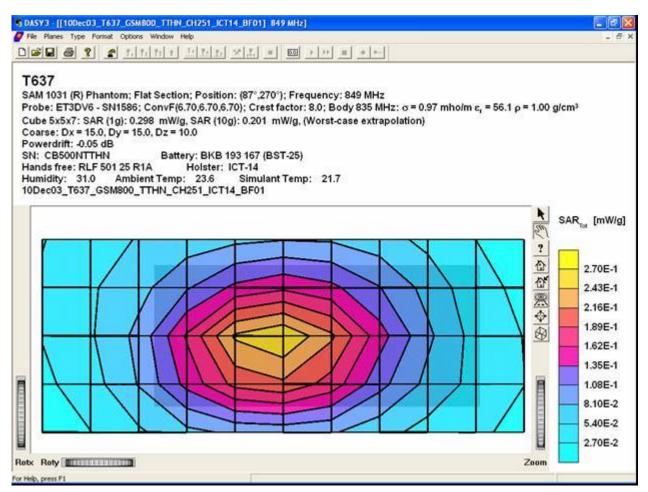


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while phone is against the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



43(87)

				10(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

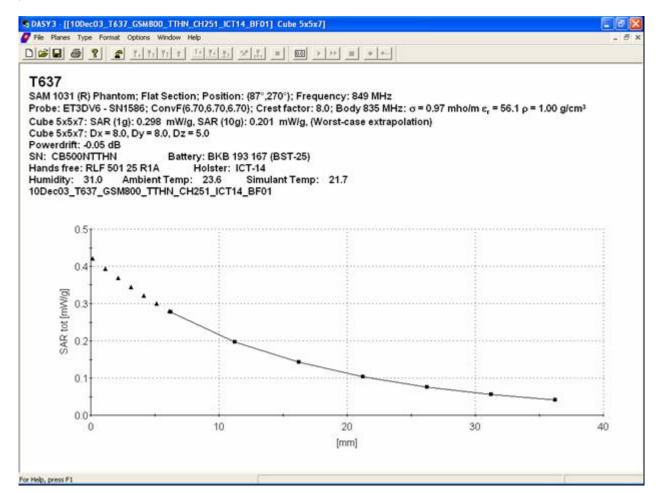


Distribution of maximum SAR in 800 GSM band. Measured with front of device facing the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



44(87)

				++ (01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

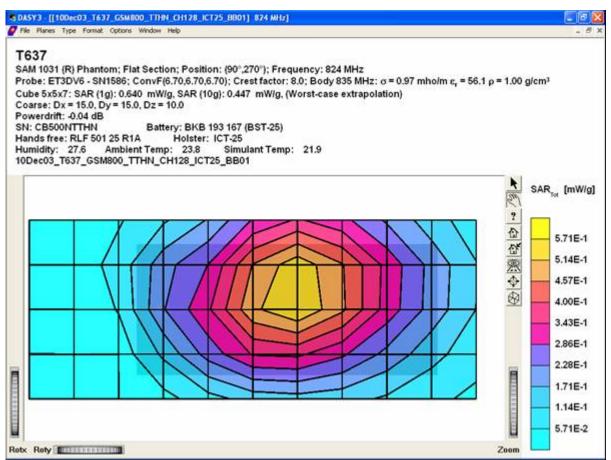


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while front of the phone is against the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



45(87)

				19(91)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

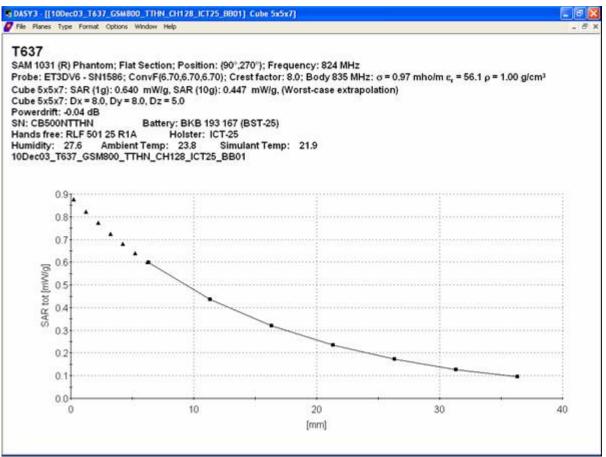


Distribution of maximum SAR in 800 GSM band. Measured with front of device facing the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



46(87)

				10(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

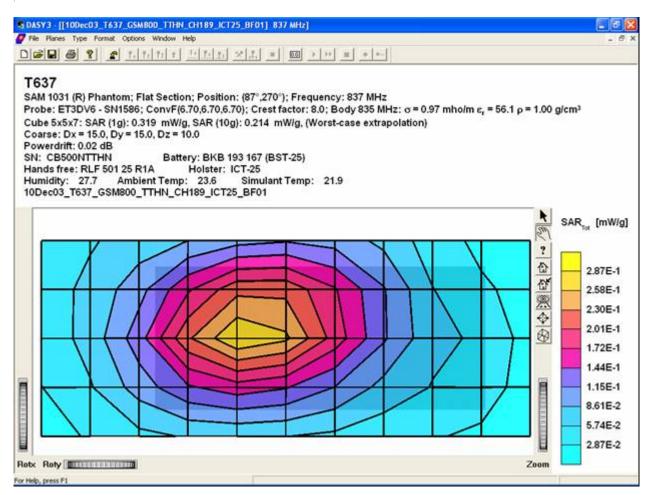


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while back of the phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



47(87)

				11 (01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

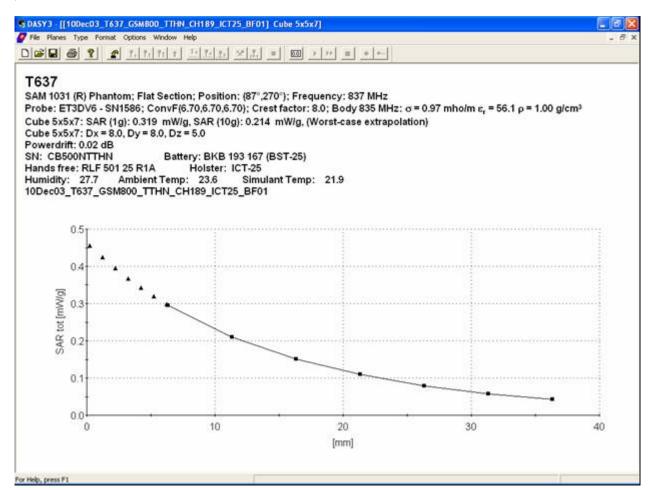


Distribution of maximum SAR in 800 GSM band. Measured with front of device facing the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



48(87)

				TO(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

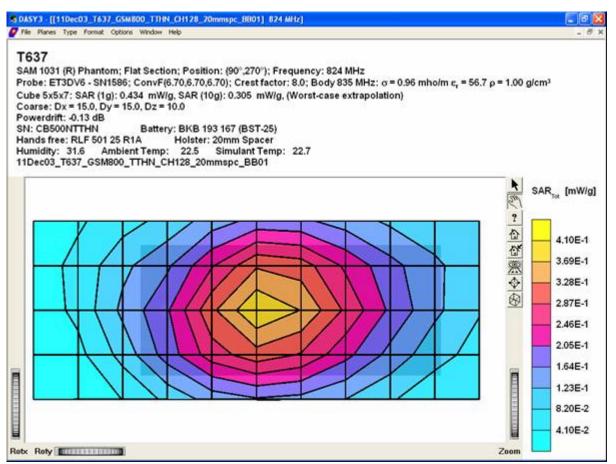


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while front of the phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



49(87)

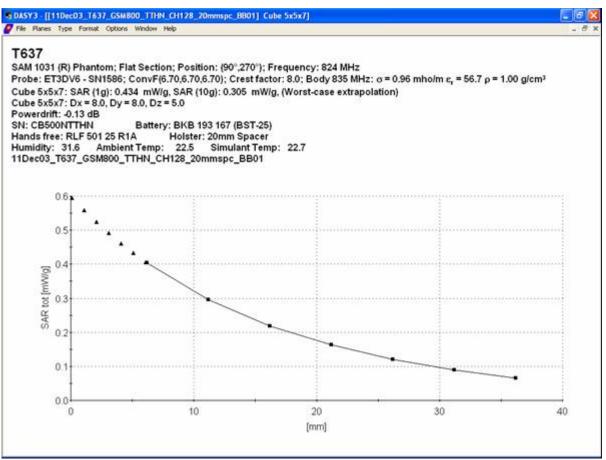
				10(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using a 20 mm spacer and hands free accessory RLF 501 25/04 (HPE-14).



				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while back of the phone is against the body using a 20 mm spacer and hands free accessory RLF 501 25/04 (HPE-14).

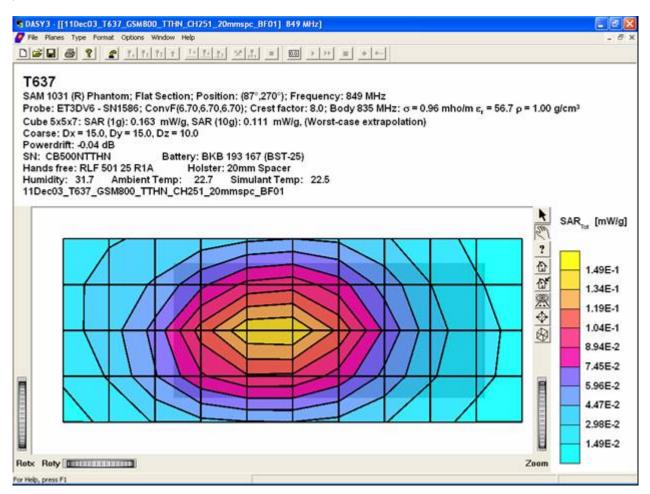
REPORT



51(87)

FCC ID: **PY7A1031012**

				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Distribution of maximum SAR in 800 GSM band. Measured with front of device facing the body using a 20 mm spacer and hands free accessory (RLF 501 25/04 (HPE-14).

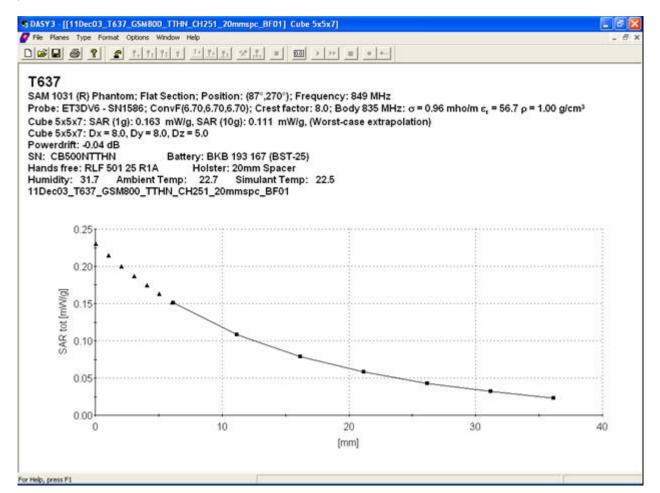
REPORT



52(87)

FCC ID: **PY7A1031012**

				32(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	54/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

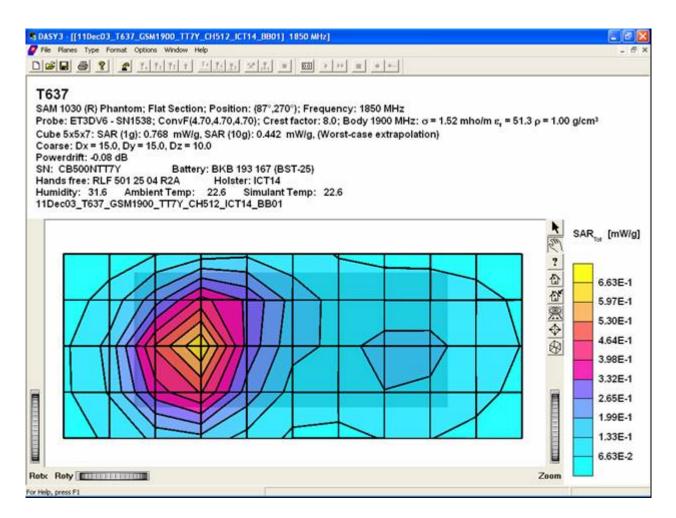


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 800 GSM band, while phone is against the body using a 20 mm spacer and hands free accessory (RLF 501 25/04 (HPE-14).



53(87)

				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

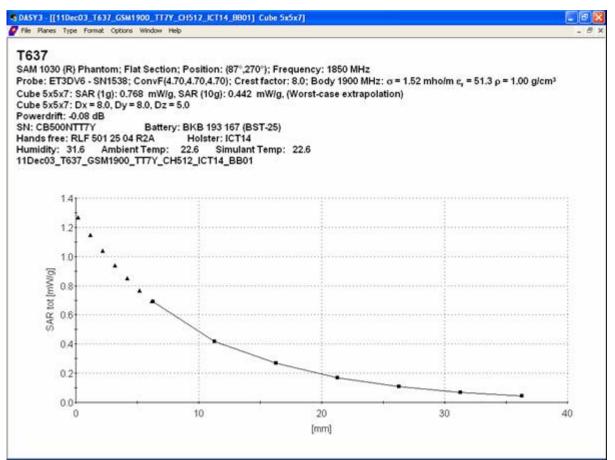


Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



54(87)

				0 1(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	I54/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

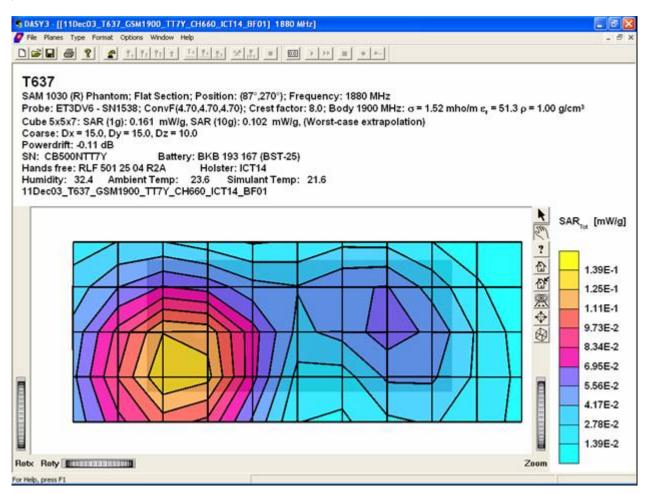


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while back of the phone is against the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



55(87)

				33(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

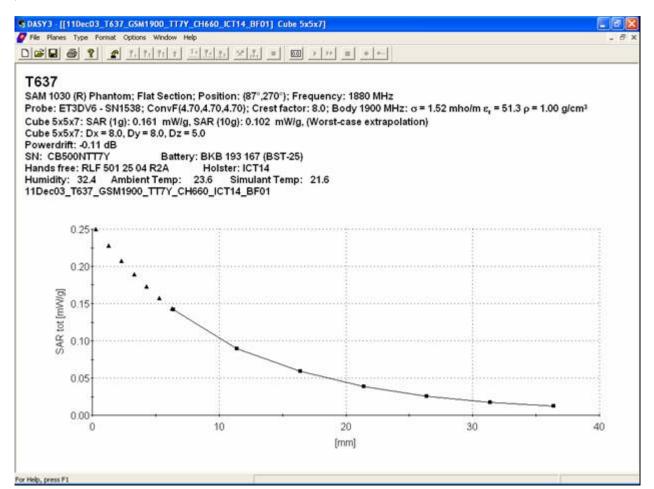


Distribution of maximum SAR in 1900 GSM band. Measured with front of device facing the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



56(87)

				30(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

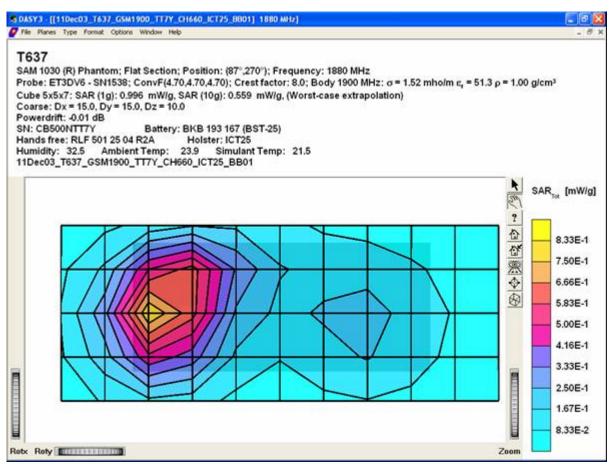


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while front of the phone is against the body using carry accessory ICT-14 and hands free accessory RLF 501 25/04 (HPE-14).



57(87)

				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

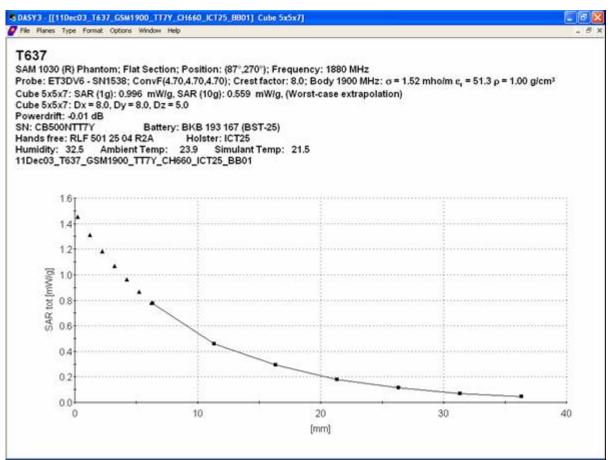


Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



58(87)

				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

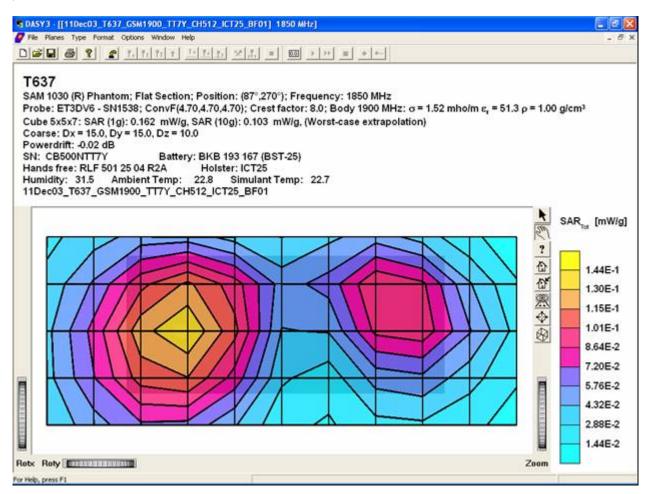


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while back of the phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



59(87)

				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

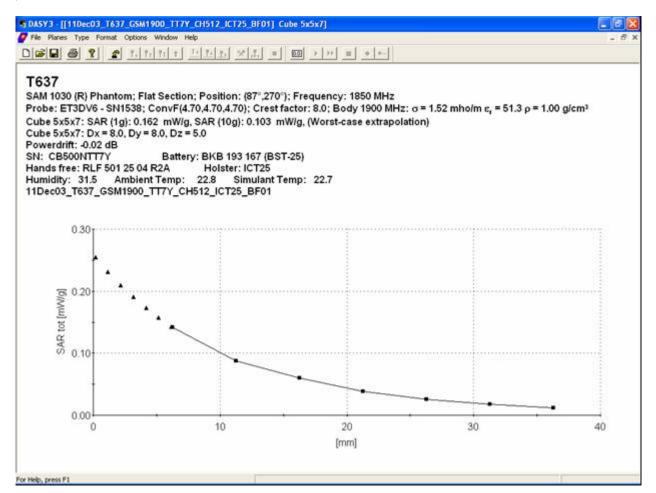


Distribution of maximum SAR in 1900 GSM band. Measured with front of device facing the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



60(87)

				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

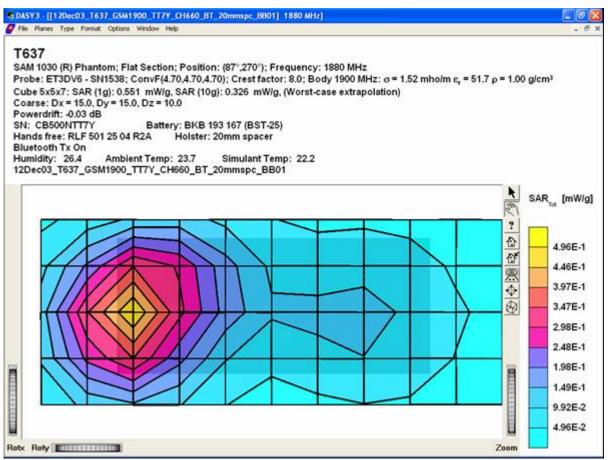


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while front of the phone is against the body using carry accessory ICE-25 and hands free accessory RLF 501 25/04 (HPE-14).



61(87)

				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

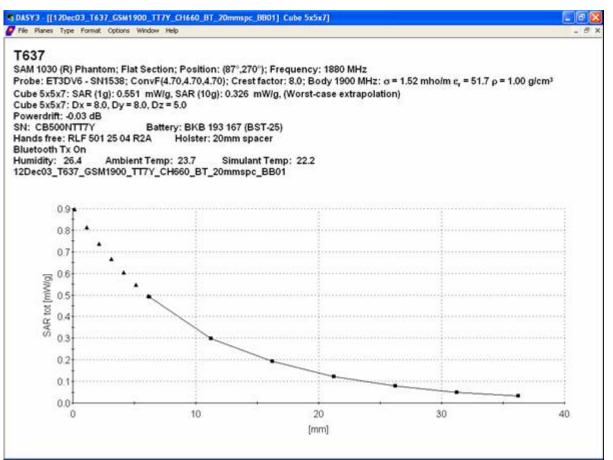


Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using a 20mm spacer and hands free accessory RLF 501 25/04 (HPE-14).



62(87)

				0=(0:)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

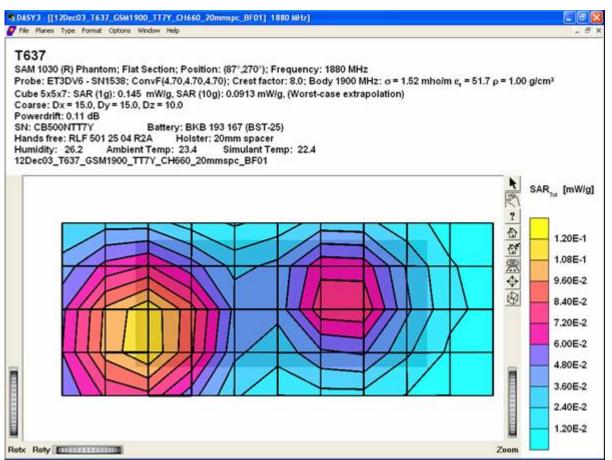


SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while back of the phone is against the body using a 20 mm spacer and hands free accessory RLF 501 25/04 (HPE-14).



63(87)

				00(01)
Prepared (also subject responsible if other)		No.		·
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

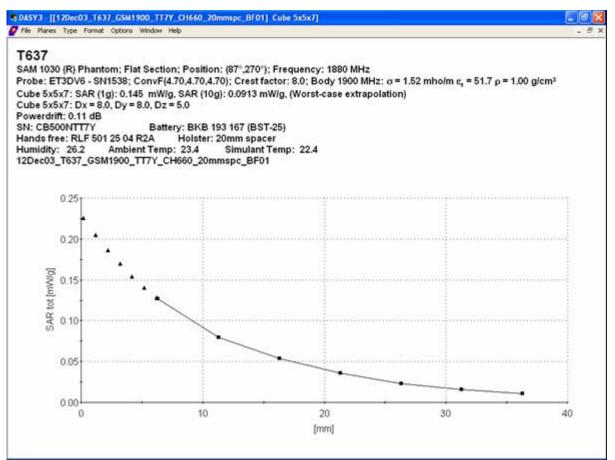


Distribution of maximum SAR in 1900 GSM band. Measured with front of device facing the body using a 20mm spacer and hands free accessory RLF 501 25/04 (HPE-14).



64(87)

				9:(0:)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



SAR Extrapolation to the phantom inner surface. Measured for maximum SAR in 1900 GSM band, while front of the phone is against the body using a 20 mm spacer and hands free accessory RLF 501 25/04 (HPE-14).

APPLICANT: Sony Ericsson Mobile Communications Inc.

REPORT



65(87)

FCC ID: **PY7A1031012**

				03(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

Appendix 4

Probe Calibration Certificate



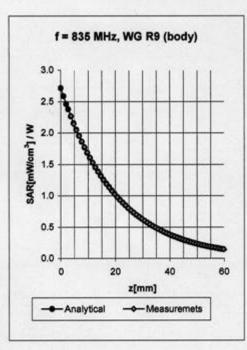
66(87)

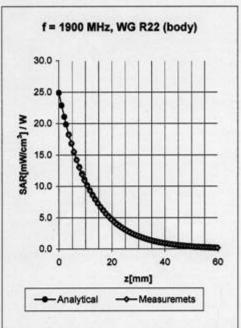
	00(07)
Prepared (also subject responsible if other)	No.
SEM/CV/PF/P Gerard Hayes	SEM/CA/E-03:0154/REP
Approved Checked	
SEM/CV/PF/P Gerard Hayes	A X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

ET3DV6 SN:1538

July 29, 2003

Conversion Factor Assessment





Body 835 MHz

ε, = 55.2 ± 5%

 σ = 0.97 ± 5% mho/m

Valid for f=750-950 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X

6.3 ± 9.5% (k=2)

Boundary effect:

ConvF Y

6.3 ± 9.5% (k=2)

Alpha

ConvF Z

6.3 ± 9.5% (k=2)

Depth

Body

1900 MHz

E. = 53.3 ± 5%

 $\sigma = 1.52 \pm 5\% \text{ mho/m}$

Valid for f=1800-2000 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X

4.7 ± 9.5% (k=2)

Boundary effect:

ConvF Y

4.7 ± 9.5% (k=2)

Alpha

0.69

ConvF Z

4.7 ± 9.5% (k=2)

Depth

2.41

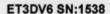
0.50

2.30



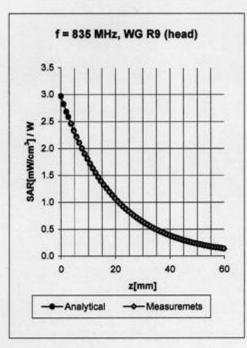
67(87)

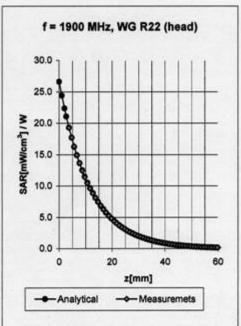
				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154	1/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



July 29, 2003

Conversion Factor Assessment





lead	835 MHz

 $\epsilon_r = 41.5 \pm 5\%$

 $\sigma = 0.90 \pm 5\% \text{ mho/m}$

Valid for f=750-950 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X	6.4 ± 9.5% (k=2)
ConvF Y	6.4 ± 9.5% (k=2)
ConvF Z	6.4 ± 9.5% (k=2)

Boundary	effect:	
Alpha		0.49

epth	2.23

Head	1900 MHZ	ε _τ = 40.0 ± 5%	0 = 1.40 I 5% mno/m
Valid for f=1	800-2000 MHz with Head 1	lissue Simulating Liquid ac	cording to EN 50361, P1528-200X

ConvF X	5.0 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	5.0 ± 9.5% (k=2)	Alpha	0.59
ConvF Z	5.0 ± 9.5% (k=2)	Depth	2.42

ORT



68(87)

				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc
-				•

ET3DV6 SN:1538

July 29, 2003

FCC ID: **PY7A1031012**

DASY - Parameters of Probe: ET3DV6 SN:1538

Diode Compression

NormX	1.30 µV/(V/m) ²	DCP X	97	mV
NormY	1.17 µV/(V/m) ²	DCP Y	97	mV
NormZ	1.36 µV/(V/m) ²	DCP Z	97	mV

Sensitivity in Tissue Simulating Liquid

Head	835 MHz	$\epsilon_{r} = 41.5 \pm 5\%$	$\sigma = 0.90 \pm 5\% \text{ mho/m}$
Valid for f=750-950	MHz with Head Tis	sue Simulating Liquid acco	ording to EN 50361, P1528-200X
Convi	EX 6.4	± 9.5% (k=2)	Boundary effect:

ConvF X	6.4 ± 9.5% (K=2)	Boundary effect:	
ConvF Y	6.4 ± 9.5% (k=2)	Alpha	0.49
ConvF Z	6.4 ± 9.5% (k=2)	Depth	2.23

Head	1900 MHz	$\varepsilon_r = 40.0 \pm 5\%$	σ = 1.40 ± 5% mho/m
Valid for f=1	800-2000 MHz with Head Ti	ssue Simulating Liquid ac	cording to EN 50361, P1528-200X

ConvF X	5.0 ± 9.5% (k=2)	Boundary effect:	
ConvF Y	5.0 ± 9.5% (k=2)	Alpha	0.59
ConvF Z	5.0 ± 9.5% (k=2)	Depth	2.42

Boundary Effect

Head 835 MHz Typical SAR gradient: 5 % per mn	ad	835 MHz	Typical SAR gradient: 5 % per	mm
---	----	---------	-------------------------------	----

Probe Tip to Boundary		1 mm	2 mm
SAR _{be} [%]	Without Correction Algorithm	10.7	5.8
SAR _{be} [%]	With Correction Algorithm	0.3	0.6

Head 1900 MHz Typical SAR gradient: 10 % per mm

Probe Tip to Boundary	1 mm	2 mm
SAR _{be} [%] Without Correction Algorithm	14.5	9.4
SAR _{be} [%] With Correction Algorithm	0.2	0.1

Sensor Offset

Probe Tip to Sensor Center	2.7	mm
Optical Surface Detection	1.8 ± 0.2	mm

APPLICANT: Sony Ericsson Mobile Communications Inc.
REPORT



69(87)

FCC ID: **PY7A1031012**

				03(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



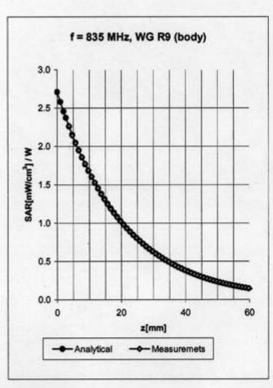
70(87)

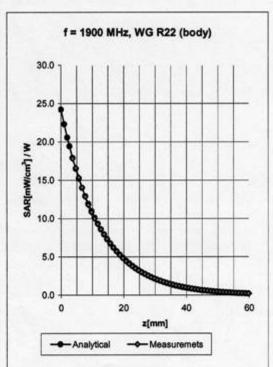
				10(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



August 28, 2003

Conversion Factor Assessment





Body

835 MHz

&= 55.2 ± 5%

σ= 0.97 ± 5% mho/m

Valid for f=750-950 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X

6.7 ± 9.5% (k=2)

Boundary effect:

ConvF Y

6.7 ± 9.5% (k=2)

Alpha

0.35

ConvF Z

6.7 ± 9.5% (k=2)

Depth

2.61

Body

1900 MHz

e, = 53.3 ± 5%

σ= 1.52 ± 5% mho/m

Valid for f=1800-2000 MHz with Body Tissue Simulating Liquid according to OET 65 Suppl. C

ConvF X

4.8 ± 9.5% (k=2)

Boundary effect:

ConvF Y

4.8 ± 9.5% (k=2)

Alpha

0.59

ConvF Z

4.8 ± 9.5% (k=2)

Depth

2.62

APPLICANT: Sony Ericsson Mobile Communications Inc.
REPORT



71(87)

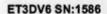
FCC ID: **PY7A1031012**

				11(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	54/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



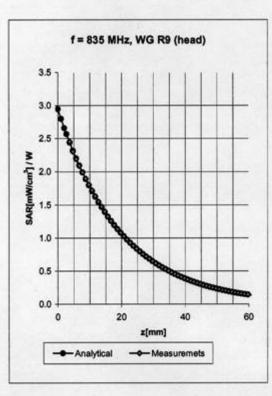
72(87)

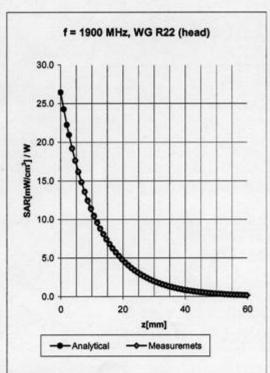
				12(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0154/REP		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



August 28, 2003

Conversion Factor Assessment





Head

835 MHz

&= 41.5 ± 5%

σ= 0.90 ± 5% mho/m

Valid for f=750-950 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X

6.6 ± 9.5% (k=2)

Boundary effect:

ConvF Y

6.6 ± 9.5% (k=2)

Alpha

0.30

ConvF Z

6.6 ± 9.5% (k=2)

Depth

3.06

Head

1900 MHz

ε, = 40.0 ± 5%

 $\sigma = 1.40 \pm 5\% \text{ mho/m}$

Valid for f=1800-2000 MHz with Head Tissue Simulating Liquid according to EN 50361, P1528-200X

ConvF X

5.2 ± 9.5% (k=2)

Boundary effect:

ConvF Y

5.2 ± 9.5% (k=2)

Alpha

0.49

ConvF Z

5.2 ± 9.5% (k=2)

Depth

2.62

APPLICANT: Sony Ericsson Mobile Communications Inc.
REPORT

Sony Ericsson

73(87)

FCC ID: **PY7A1031012**

				13(01)		
Prepared (also subject responsible if other)		No.				
SEMINOVITINI Goldina Hayee		SEM/CA/E-03:0154/REP				
Approved	Checked					
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc		



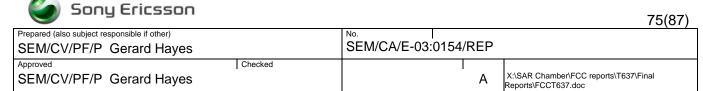
Prepared (also subject responsible if other) SEM/CV/PF/P Gerard Hayes	ard Hayes SEM/CA/E-03:0154/REP			
SEM/CV/PF/P Gerard Hayes	Checked			X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc
		1		

ET3DV6	SN:1586					Augu	ust 28, 2003
DASY	- Param	eters	of Probe: ET	3DV6 SN:	1586		
Sensiti	vity in Free	Space		Diode C	ompressi	on	
	NormX	1	1.88 µV/(V/m) ²		DCP X	96	mV
	NormY	1	1.82 μV/(V/m) ²		DCPY	96	mV
	NormZ	1	1.83 µV/(V/m) ²		DCP Z	96	mV
Sensitiv	vity in Tissue	e Simula	iting Liquid				
Head	83	5 MHz	e,= 41.5 ±	: 5% o	0.90 ± 59	6 mho/m	
Valid for fe	-750-950 MHz w	ith Head Tis	sue Simulating Liquid acco	ording to EN 50361	, P1 528-200	(
	ConvF X		6.6 ± 9.5% (k=2)		Boundary e	effect:	
	ConvF Y		6.6 ± 9.5% (k=2)		Alpha	0.30	
	ConvF Z		6.6 ± 9.5% (k=2)		Depth	3.06	
Head	190	0 MHz	ε _τ = 40.0 ±	± 5% σ	1.40 ± 59	6 mho/m	
Valid for fe	=1800-2000 MHz	with Head	Tissue Simulating Liquid a	ccording to EN 503	61, P1528-20	oox	
	ConvF X		5.2 ± 9.5% (k=2)		Boundary e	effect:	
	ConvF Y		5.2 ± 9.5% (k=2)		Alpha	0.49	
	ConvF Z		5.2 ± 9.5% (k=2)		Depth	2.62	
Bound	ary Effect						
Head	83	55 MHz	Typical SAR gradie	ent: 5 % per mm			4
	Probe Tip to	Boundary			1 mm	2 mm	
	SAR _{be} [%]	Without	Correction Algorithm		10.3	6.0	
	SAR _{be} [%]	With Cor	rection Algorithm		0.5	0.7	
Head	190	00 MHz	Typical SAR gradi	ent: 10 % per mm			
	Probe Tip to	Boundary			1 mm	2 mm	
	SAR ₆₀ [%]		Correction Algorithm		13.3	9.1	
	SAR _{be} [%]	With Cor	rection Algorithm		0.2	0.2	
Sensor	Offset						
	Probe Tip to	Sensor Cer	nter	2.7		mm	
	Optical Surfa	ce Detection	on	1.8 ± 0.2		mm	

APPLICANT: Sony Ericsson Mobile Communications Inc.

REPORT

FCC ID: **PY7A1031012**



Appendix 5

Measurement Uncertainty Budget

EPORT

Sony Ericsson

76(87)

FCC ID: **PY7A1031012**

				70(07)
Prepared (also subject responsible if other)		No.		
delinio (n. 17). Gordia Hayoo		SEM/CA/E-03:01		
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

1. Table 1. Uncertainty Budget for System Performance Check (Dipole & flat phantom)

а	b	С	d	e = f(d,k)	f	g	h = c x f/e	i= cxg/e	k
Uncertainty Component	Sec.	Tol. (± %)	Prob. Dist.	Div.	c _i (1-g)	c _i (10-g)	1-g <i>u</i> ; (±%)	10-g <i>u_i</i> (±%)	Vi
Measurement System									
Probe Calibration (<i>k</i> =1)	E2.1	4.8	N	1	1	1	4.8	4.8	∞
Axial Isotropy	E.2.2	4.7	R	1.73	0.707	0.707	1.9	1.9	8
Hemispherical Isotropy	E.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	×
Boundary Effect	E.2.3	8.3	R	1.73	1	1	4.8	4.8	∞
Linearity	E.2.4	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6	1.0	N	1	1	1	1.0	1.0	∞
Response Time	E.2.7	0.0	R	1.73	1	1	0.0	0.0	∞
Integration Time	E.2.8	0.0	R	1.73	1	1	0.0	0.0	∞
RF Ambient Conditions	E.6.1	3.0	R	1.73	1	1	1.7	1.7	8
Probe Positioner Mechanical Tolerance(corresponds to the mechanical constrains of the robot)	E.6.2	0.4	R	1.73	1	1	0.2	0.2	~
Probe Positioning with respect to Phantom Shell	E.6.3	2.9	R	1.73	1	1	1.7	1.7	× ×
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E.5	3.9	R	1.73	1	1	2.3	2.3	8
Dipole									
Dipole Axis to Liquid Distance	8, E.4.2	1.0	R	1.73	1	1	0.6	0.6	8
Input Power and SAR Drift Measurement	8, 6.6.2	5.0	R	1.73	1	1	2.9	2.9	8
Phantom and Tissue Parameters									
Phantom Uncertainty - shell thickness tolerance	E.3.1	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity - deviation from target values (5)	E.3.2	4.3	R	1.73	0.64	0.43	1.59	1.07	∞
Liquid Conductivity - measurement uncertainty (6)	E.3.3	6.20	R	1.73	0.64	0.43	2.29	1.54	×
Liquid Permittivity - deviation from target values (5)	E.3.2	3.7	R	1.73	0.6	0.49	1.28	1.05	×
Liquid Permittivity - measurement uncertainty (6)	E.3.3	6.08	R	1.73	0.6	0.49	2.11	1.72	× ×
Combined Standard Uncertainty			RSS				10.61	10.31	
Expanded Uncertainty							21.22	20.62	

Sony Ericsson

EPORT

77(87)

FCC ID: **PY7A1031012**

					11(01)
Prepared (also subject responsible if other)		No.			
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	:0154/R	REP	
Approved	Checked				
SEM/CV/PF/P Gerard Hayes					X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc
-					

(95% CONFIDENCE LEVEL)					
(00% 00:11 122:102 22:122)					į l

2. Table 2. Uncertainty Budget for the Device Under Test

а	b	С	d	e = f(d,k)	f	g	h= cxf/e	i = c x g / e	k
Uncertainty Component	Sec.	Tol. (± %)	Prob. Dist.	Div.	c _i (1-g)	c _i (10-g)	1-g u; (±%)	10-g u _i (±%)	V _i
Measurement System									
Probe Calibration (k=1)	E2.1	4.8	N	1	1	1	4.8	4.8	×
Axial Isotropy	E.2.2	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Hemispherical Isotropy	E.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Boundary Effect	E.2.3	8.3	R	1.73	1	1	4.8	4.8	∞
Linearity	E.2.4	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5	1.0	R	1.73	1	1	0.6	0.6	×
Readout Electronics	E.2.6	1.0	N	1	1	1	1.0	1.0	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	1.4	R	1.73	1	1	0.8	0.8	∞
RF Ambient Conditions	E.6.1	3.0	R	1.73	1	1	1.7	1.7	oc
Probe Positioner Mechanical Tolerance(corresponds to the mechanical constrains of the robot)	E.6.2	0.4	R	1.73	1	1	0.2	0.2	∞
Probe Positioning with respect to Phantom Shell	E.6.3	2.9	R	1.73	1	1	1.7	1.7	∞
Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	E.5	3.9	R	1.73	1	1	2.3	2.3	×
Test sample Related									
Test Sample Positioning	E.4.2	1.8	N	1	1	1	1.8	1.8	4
Device Holder Uncertainty	E.4.1	1.6	R	1.73	1	1	0.9	0.9	4
Output Power Variation - SAR drift measurement (4)	6.6.2	5.0	R	1.73	1	1	2.9	2.9	8
Phantom and Tissue Parameters									
Phantom Uncertainty (shape and thickness tolerances)	E.3.1	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity - deviation from target values (5)	E.3.2	4.3	R	1.73	0.64	0.43	1.6	1.1	×
Liquid Conductivity - measurement uncertainty (6)	E.3.3	6.20	R	1.73	0.64	0.43	2.3	1.5	œ
Liquid Permittivity - deviation from target values (5)	E.3.2	3.7	R	1.73	0.6	0.49	1.3	1.0	∞
Liquid Permittivity - measurement uncertainty (6)	E.3.3	6.08	R	1.73	0.6	0.49	2.1	1.7	00

C. FCC ID: PY7A1031012

ORT



78(87)

				. 5(3.)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

Combined Standard Uncertainty		RSS		10.83	10.54	
Expanded Uncertainty		14.0		21.67	21.08	
(95% CONFIDENCE LEVEL)		K=2		21.07	21.08	

Table 4a. Values for ϵ '

Uncertainty Component	Toleranc e	Probability Distribution	Divisor	C i	Standard Uncertainty (±%)	v _i or
	(±%)					V _{eff}
Repeatability (n repeats)	0.97	N	1	1	0.97	4
Network analyzer uncertainty	8.38	R	1.73	1	4.83	∞
sources						
Dielectric Error Sources	5.93	R	1.73	1	3.42	∞
Combined standard					6.08	
uncertainty						

Table 4b. Values for $\boldsymbol{\sigma}$

Uncertainty Component	Toleranc e (±%)	Probability Distribution	Divisor	C i	Standard Uncertainty (±%)	V _i or V _{eff}
Repeatability (n repeats)	1.85	N	1	1	1.85	4
Network analyzer uncertainty sources	8.38	R	1.73	1	4.83	∞
Dielectric Error Sources	5.93	R	1.73	1	3.42	∞
Combined standard uncertainty					6.20	

APPLICANT: Sony Ericsson Mobile Communications Inc.

REPORT



79(87)

FCC ID: **PY7A1031012**

				13(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/REP	
Approved	hecked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc

Appendix 6

Photographs of the device under test



Prepared (also subject responsible if other) SEM/CV/PF/P Gerard Hayes		No. SEM/CA/E-03:01	154/REP	33(0.)
SEM/CV/PF/P Gerard Hayes	Checked			X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Front view of device



Back view of device



				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	54/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Side views of device



				02(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	54/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc







Front, back, and side views of carry accessory model ICT-14.



				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:01	I54/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc







Front, back, and side views of carry accessory model ICT-25.

APPLICANT: Sony Ericsson Mobile Communications Inc.
REPORT

PORT



84(87)

FCC ID: **PY7A1031012**

				01(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:015	4/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Position of device against head phantom using the "cheek" position

APPLICANT: Sony Ericsson Mobile Communications Inc.
REPORT



85(87)

FCC ID: **PY7A1031012**

					05(07)
Prepared (also subject responsible if other)		No.			
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:	0154/R	EP	
Approved	Checked				
SEM/CV/PF/P Gerard Hayes					X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Position of device against head phantom using the "tilt" position

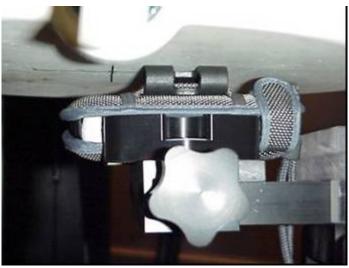
REPORT



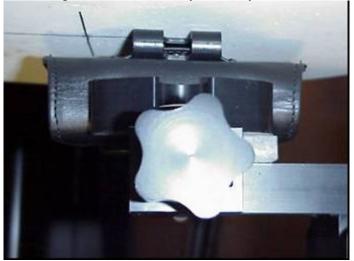
86(87)

FCC ID: **PY7A1031012**

				00(01)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0	0154/REP	
Approved	Checked			
SEM/CV/PF/P Gerard Hayes				X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Position of device against flat phantom using carry accessory ICT-14 with hands free accessory RLF 501 25/04 (HPE-14).



Position of device against flat phantom using carry accessory ICT-25 with hands free accessory RLF 501 25/04 (HPE-14).

APPLICANT: Sony Ericsson Mobile Communications Inc.

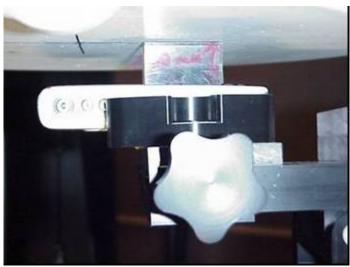
REPORT



87(87)

FCC ID: **PY7A1031012**

				07(07)
Prepared (also subject responsible if other)		No.		
SEM/CV/PF/P Gerard Hayes		SEM/CA/E-03:0)154/REP	
Approved Che	necked			
SEM/CV/PF/P Gerard Hayes			Α	X:\SAR Chamber\FCC reports\T637\Final Reports\FCCT637.doc



Position of device against flat phantom using 20mm spacer with hands free accessory RLF 501 25/04 (HPE-14).