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REPORT

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Prepared (also subject responsible if other) SEM/CV/PF/P Gerard Hayes and Rodney Dixon		No. REP 2005 006 Z520i 02	
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Exhibit 11: SAR Test Report of Portable Cellular Phone FCC ID: PY7AC052011 Model : Z520i

Date of test: August 13 - August 16, 2005
Date of Report: August 18, 2005

Laboratory: SAR Testing Laboratory Sony Ericsson Mobile Communications, Inc. 7001
 Development Drive, P.O. Box 13969, Research Triangle Park, NC, 27709, USA

Tested by: Rodney Dixon
 Eng. Technician III, Product Verification Group

Test Responsible: Gerard Hayes *Gerard Hayes 18 August 2005*
 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 PY7AC052011 model Z520i 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)

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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.



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1. Introduction

The Sony Ericsson SAR Laboratory has performed measurements of the maximum potential exposure to the user of portable cellular phone FCC ID PY7AC052011 model Z520i. 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	PIFA- Type Antenna	
Location	External plastic loop, near the hinge	
Dimensions	Width	40 mm
	Length	30 mm
	Height	8mm

2.2 Device description

FCC ID Number / Device Model	PY7AC052011 / Z520i				
Serial number	BD3022UQJL		BD3022SBPV		
Mode(s) of Operation	GSM 800		GSM 1900		
Modulation Mode(s)	TDMA		TDMA		
Target Value and Factory Tolerance Window for Maximum Output Power Setting	f _{low}	32.2 dBm +0.4/-1.2 dB		f _{low}	30.0 dBm +0.5/-1.5 dB
	f _{mid}	31.7 dBm +0.4/-0.7 dB		f _{mid}	30.0 dBm +0.5/-1.5 dB
	f _{high}	31.7 dBm +0.3/-0.7 dB		f _{high}	30.0 dBm +0.5/-1.5 dB
GSM Mode: 1/8 Duty Cycle					
GPRS Mode: 2/8 Duty Cycle	f _{low}	32.2 dBm max.		f _{low}	Same as GSM 1:8
	f _{mid}	31.6 dBm max.		f _{mid}	Same as GSM 1:8
	f _{high}	31.2 dBm ± 0.3 dB		f _{high}	Same as GSM 1:8
Calibration Frequency (f _{low} , f _{mid} , f _{high})	f _{high}		f _{mid}		
Transmitting Frequency Rang(s)	824-849 MHz		1850-1910 MHz		
Production Unit or Identical Prototype (47 CFR §2..908)	Identical Prototype				
Device Category	Portable				
RF Exposure Limits	General Population / Uncontrolled				



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3. Test Equipment Used

3.1 Dosimetric System

The Sony Ericsson SAR Laboratory utilizes Dosimetric Assessment Systems (Dasy3™ v3.1d for body-worn measurements and Dasy4™ for adjacent to head measurements) manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. The overall RSS uncertainty of the measurement system is $\pm 10.77\%$ (K=1) with an expanded uncertainty of $\pm 21.55\%$ (K=2) for Dasy3™ v3.1d and $\pm 9.49\%$ (K=1) with an expanded uncertainty of $\pm 18.74\%$ (K=2) for Dasy4™. The measurement uncertainty budget is given in Appendix 5 for both systems. The list of calibrated equipment used for the measurements is shown in the following table.

Description	Serial Number	Cal Due Date
DASY3 DAE V1	345	12-Nov-2005
DASY3 DAE V1	417	11-Nov-2005
E-Field Probe ETDV6	1586	26-May-2006
E-Field Probe ETDV6	1587	26-May-2006
Dipole Validation Kit, DV835V2	438	24-May-2006
Dipole Validation Kit, DV900V2	035	24-May-2006
Dipole Validation Kit, DV1800V2	238	11-May-2006
Dipole Validation Kit, DV1900V2	536	19-May-2006
S.A.M. Phantom used for 835MHz (Head)	1251	
S.A.M. Phantom used for 835MHz (Body)	1031	
S.A.M. Phantom used for 900MHz (Head and Body)	1251	
S.A.M. Phantom used for 1800MHz (Head and Body)	1335	
S.A.M. Phantom used for 1900MHz (Head)	1335	
S.A.M. Phantom used for 1900MHz (Body)	1020	

3.2 Additional Equipment

Description	Serial Number	Cal Due Date
Signal Generator HP8648C	3537A01598	August 30, 2006
Power Meter 437B	3125U16382	December 8, 2005
Power Meter 437B	3125U13729	January 6, 2006
Power Sensor - 8482H	MY41090240	April 29, 2006
Power Sensor - 8482H	MY41090239	April 29, 2006
Dielectric Probe Kit HP85070B	US33020390	July 4, 2006
Digital Thermometer 61220-601 And Probe (61220-604)	350078	November 5, 2005
Digital Hygrometer/ Thermometer	21242911	November 3, 2005
HP RF Amplifier 8347A	3307A1069	May 4, 2006



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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 $\rho=1\text{g/cm}^3$ 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 22.2-24.1°C, the relative humidity was 45.4%- 53.9 %, 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.

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters		
			ϵ_r	σ (S/m)	Simulated Tissue Temp (°C)
835	Head	Measured, 13-Aug-05	40.9	.889	23.2
		Recommended Limits	41.50	0.90	20-25
	Body	Measured, 14-Aug-05	53.99	.985	22.8
		Recommended Limits	55.20	0.97	20-25
1900	Head	Measured, 15-Aug-05	38.47	1.454	22.2
		Recommended Limits	40.00	1.40	20-25
	Body	Measured, 16-Aug-05	51.48	1.536	22
		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.

Ingredient	800/900 MHz Head 900MHz Body	800MHz Body	1800/1900 MHz Head 1800MHz Body	1900MHz 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%	--	--



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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 +/- 10% from the target SAR indicated on the dipole certification sheet. These tests were done at 835MHz and 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 22.2-23.6 °C, the relative humidity was in the range 45.4 – 52.1 % and the liquid depth above the ear reference points was above 15.0 cm 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 0.00018 W/kg, which is below the recommended limit in [1].

f (MHz)	Tissue Type	Description	SAR (W/kg) 1g / 10g		Dielectric Parameters		Tissue Temp (°C)
					ϵ_r	s (S/m)	
835	Head	Measured, 13-Aug-05	8.78	5.73	40.9	.889	23.2
		Recommended Limits	9.50	6.20	41.50	0.90	20-25
	Body	Measured, 14-Aug-05	9.23	5.95	53.99	.985	22.8
		Recommended Limits	9.90	6.46	55.20	0.97	20-25
1900	Head	Measured, 15-Aug-05	39.05	20.37	38.47	1.454	22.2
		Recommended Limits	39.70	20.50	40.00	1.40	20-25
	Body	Measured, 16-Aug-05	43.68	22.47	51.48	1.536	22.0
		Recommended Limits	40.50	20.89	53.30	1.52	20-25



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6. Test Results

For head measurements (with a 1/8 GSM duty cycle), the sample was operated using test software that allows the control of the transmitter. For body measurements (2/8 EGPRS duty cycle), the test sample was operated using a base station simulator that allows control of the transmitter using the signally software that installed on the phone call. For the purposes of these tests, the unit is commanded to 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 PY7AC052011 has the following battery option:
BKB 193 203 (BST-37) Standard Lithium Polymer Battery

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 and 2 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 46.2 – 53.9 % and 22.2 -24.1°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.

Summary of Maximum Extrapolated SAR Results : Head Adjacent			
Frequency	Extrapolated SAR (W/kg)		Test Configuration
	1 g	10 g	
800 GSM	1.49	0.962	Right head, cheek/touch position, 849 MHz BST-37 battery
1900 GSM	0.365	0.181	Right head, cheek/touch position, 1910 MHz BST-37 battery



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f (MHz)	Channel/ frequency	Conducted Output Power (dBm) GSM 1:8 Duty Cycle	FCC ID PYAF031011 with Standard Battery BST-37							
			Left Head (Cheek / Touch Position)							
			Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambi ent Temp (°C)	Simulate Temp (°C)	
800 GSM	128 / 824	32.6	0.618	0.400	0.06	0.618	0.400	22.2	23.2	
	189 / 837	32.1	0.868	0.563	-0.03	0.868	0.563	22.2	23.2	
	251 / 849	32	1.41	0.908	-0.08	1.41	0.908	22.2	23.2	
1900 GSM	512 / 1850	30.4	0.155	0.081	0.01	0.159	0.083	23.3	22.2	
	660/1880	30.4	0.166	0.088	0.06	0.170	0.090	23.3	22.2	
	810/1910	30.4	0.218	0.116	-0.05	0.223	0.119	23.3	22.2	
f (MHz)	Channel/ frequency	Conducted Output Power (dBm) GSM 1:8 Duty Cycle	FCC ID PYAF031011 with Standard Battery BST-37							
			Left Head (15° Tilt Position)							
			Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambi ent Temp (°C)	Simulate Temp (°C)	
800 GSM	128 / 824	32.6	0.165	0.123	-0.01	0.165	0.123	22.5	23.3	
	189 / 837	32.1	0.241	0.179	-0.10	0.241	0.179	22.5	23.3	
	251 / 849	32	0.372	0.275	-0.07	0.372	0.275	22.5	23.3	
1900 GSM	512 / 1850	30.4	0.054	0.033	-0.03	0.055	0.034	24.1	21.6	
	660/1880	30.4	0.058	0.036	-0.04	0.059	0.037	24.1	21.6	
	810/1910	30.4	0.071	0.044	-0.13	0.073	0.045	24.1	21.6	

Table 1: SAR measurement results for the portable cellular telephone FCC ID PY7AC052011 model Z520i at maximum output power with Standard Battery BST-37. Measured against the left head.



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f (MHz)	Channel/ frequency	Conducted Output Power (dBm) GSM 1:8 Duty Cycle	FCC ID PYAF031011 with Standard Battery BST-37							
			Right Head (Cheek / Touch Position)							
			Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambi ent Temp (°C)	Simulate Temp (°C)	
800 GSM	128 / 824	32.6	0.661	0.431	0.08	0.661	0.431	23.0	23.9	
	189 / 837	32.1	0.927	0.603	0.05	0.927	0.603	23.0	23.9	
	251 / 849	32	1.49	0.962	-0.08	1.49	0.962	23.0	23.9	
Bluetooth On	251 / 849	32	1.41	0.917	-0.09	1.41	0.917	22.9	23.4	
1900 GSM	512 / 1850	30.4	0.262	0.133	-0.02	0.268	0.136	22.4	21.8	
	660/1880	30.4	0.284	0.144	0.04	0.291	0.147	22.4	21.8	
	810/1910	30.4	0.357	0.177	-0.02	0.365	0.181	22.4	21.8	
Bluetooth On	810/1910	30.4	0.350	0.174	-0.04	0.358	0.178	23.3	21.9	
f (MHz)	Channel/ frequency	Conducted Output Power (dBm) GSM 1:8 Duty Cycle	FCC ID PYAF031011 with Standard Battery BST-37							
			Right Head (15° Tilt Position)							
			Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambi ent Temp (°C)	Simulate Temp (°C)	
800 GSM	128 / 824	32.6	0.16	0.119	0.00	0.160	0.119	23.1	23.9	
	189 / 837	32.1	0.239	0.178	0.04	0.239	0.178	23.1	23.9	
	251 / 849	32	0.362	0.268	-0.06	0.362	0.268	23.1	23.9	
1900 GSM	512 / 1850	30.4	0.061	0.038	-0.03	0.062	0.039	23.2	22.2	
	660/1880	30.4	0.069	0.043	0.04	0.071	0.044	23.2	22.2	
	810/1910	30.4	0.075	0.047	0.02	0.077	0.048	23.2	22.2	

Table 2: SAR measurement results for the portable cellular telephone FCC ID PY7AC052011 model Z520i at maximum output power with Standard Battery BST-37. Measured against the right head.



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6.2 Body-Worn Test Results

The SAR results shown in Table 3 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 45.4 – 51.5 % and 22.3-23.6°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 15.0 cm 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 (HBP-20) connected to the device for all body-worn SAR measurements.

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

-20 mm spacer

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

Summary of Maximum Extrapolated SAR Results: Body-worn			
Frequency	Extrapolated SAR (W/kg)		Test Configuration
	1 g	10 g	
800 GSM	1.10	0.754	20MM SPACER Carry Accessory, back of phone facing body, 849 MHz, 2:8 Duty Cycle, BST-37 battery
1900 GSM	0.376	0.234	20MM SPACER Carry Accessory, back of phone facing body, 1850MHz, 2:8 Duty Cycle BST-37 battery



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f (MHz)	Operating Condition	Channel/frequency	Conducted Output Power (dBm)	FCC ID PYAF031011 with Standard Battery BST-37						
				Body Worn Carry Accessory: 20MM SPACER						
				Back of phone facing body						
				Measured (W/kg) 1g / 10g	Drift (dB)	Extrapolated (W/kg) 1g / 10g	Ambient Temp (°C)	Simulate Temp (°C)		
Back of phone facing body										
800 GSM	2:8 Duty Cycle	128 / 824	32.2	0.605	0.416	0.04	0.605	0.416	22.7	22.4
		189 / 837	31.6	0.733	0.502	-0.03	0.733	0.502	22.7	22.4
		251 / 849	31.5	1.10	0.754	-0.02	1.10	0.754	22.7	22.4
	Bluetooth On	251 / 849	31.5	1.10	0.750	-0.02	1.10	0.750	22.6	22.5
	1:8 Duty Cycle	251 / 849	31.5	0.577	0.402	-0.05	0.577	0.402	22.6	22.5
1900 GSM	2:8 Duty Cycle	512 / 1850	30.4	0.367	0.229	-0.04	0.376	0.234	22.9	22.3
		660/1880	30.4	0.314	0.194	0.01	0.321	0.199	22.9	22.3
		810/1910	30.4	0.320	0.198	-0.01	0.327	0.203	22.9	22.3
	Bluetooth On	512 / 1710	30.4	0.348	0.213	-0.01	0.356	0.218	22.9	22.3
	1:8 Duty Cycle	512 / 1710	30.4	0.154	0.095	0.01	0.158	0.098	22.9	22.3
Front of phone facing body										
800 GSM	2:8 Duty Cycle	128 / 824	32.2	0.196	0.139	0.00	0.196	0.139	23.6	22.8
		189 / 837	31.6	0.246	0.175	0.01	0.246	0.175	23.6	22.8
		251 / 849	31.5	0.374	0.266	-0.01	0.374	0.266	23.6	22.8
1900 GSM	2:8 Duty Cycle	512 / 1850	30.4	0.357	0.220	-0.01	0.365	0.225	22.9	22.3
		660/1880	30.4	0.270	0.166	-0.01	0.276	0.170	22.9	22.3
		810/1910	30.4	0.263	0.162	-0.07	0.269	0.166	22.9	22.3

Table 3: SAR measurement results for the portable cellular telephone FCC ID PY7AC052011 model Z520i at maximum output power with Standard Battery BST-37. Measured against the body with carry accessory 20MM Spacer.

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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.

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Appendix 1**SAR distribution comparison for the system accuracy verification**



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**835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check on August 13, 2005 (Using head tissue).
Validation_835Head_438_1251_13Aug05_T01**

File Name: [Validation_835Head_438_1251_13Aug05_T01.da4](#)

Phantom: SAM with CRP (Low Band Head) Phantom section: Flat Section

Probe: ET3DV6 - SN1586ConvF(6.58, 6.58, 6.58) Duty Cycle: 1:1 Frequency: 835 MHz

Medium parameters used: $f = 835$ MHz; $s = 0.889$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Measurement Standard: DASY4 (High Precision Assessment)

Dipole at 10 mm/Area Scan (61x61x1):

Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.934 mW/g

Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 33.4 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.875 mW/g; SAR(10 g) = 0.571 mW/g

Maximum value of SAR (measured) = 0.948 mW/g

Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:

Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 33.4 V/m; Power Drift = 0.00 dB

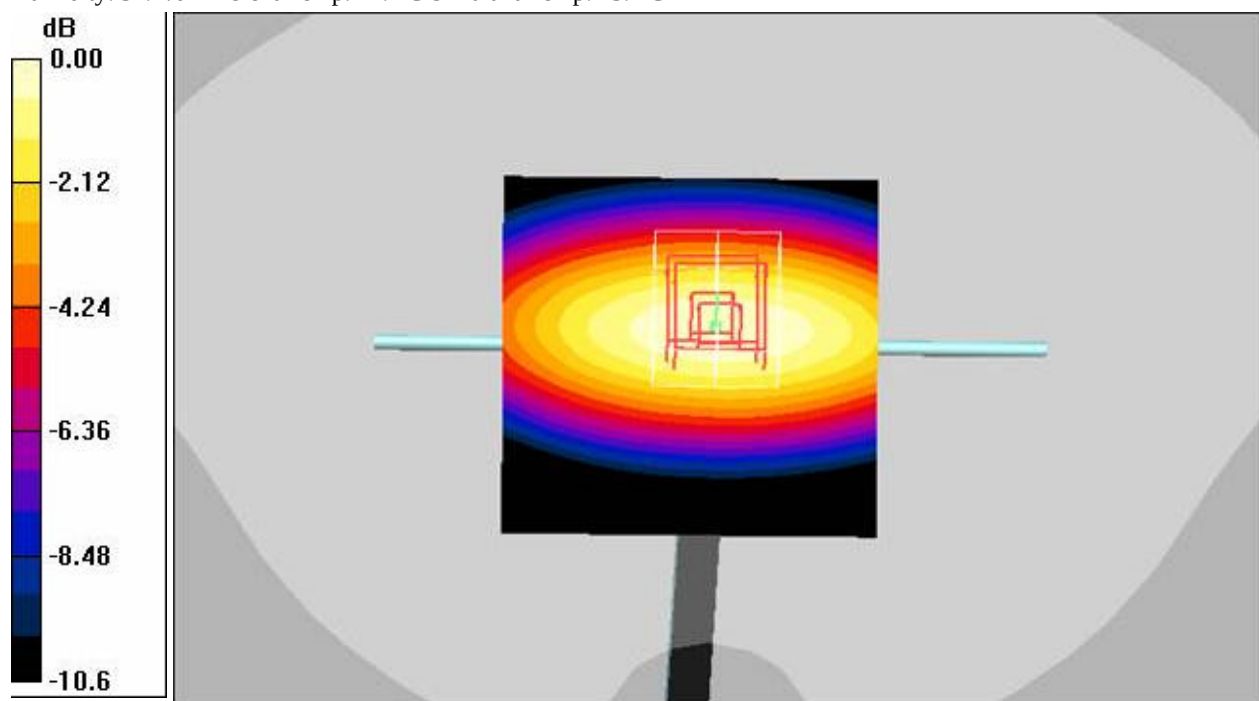
Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.881 mW/g; SAR(10 g) = 0.576 mW/g

Maximum value of SAR (measured) = 0.943 mW/g

Procedure Notes: Pin: before 100.1mW / after 100mW

Humidity: 52.1% Ambient Temp: 22.2 C Simulant Temp: 23.2 C

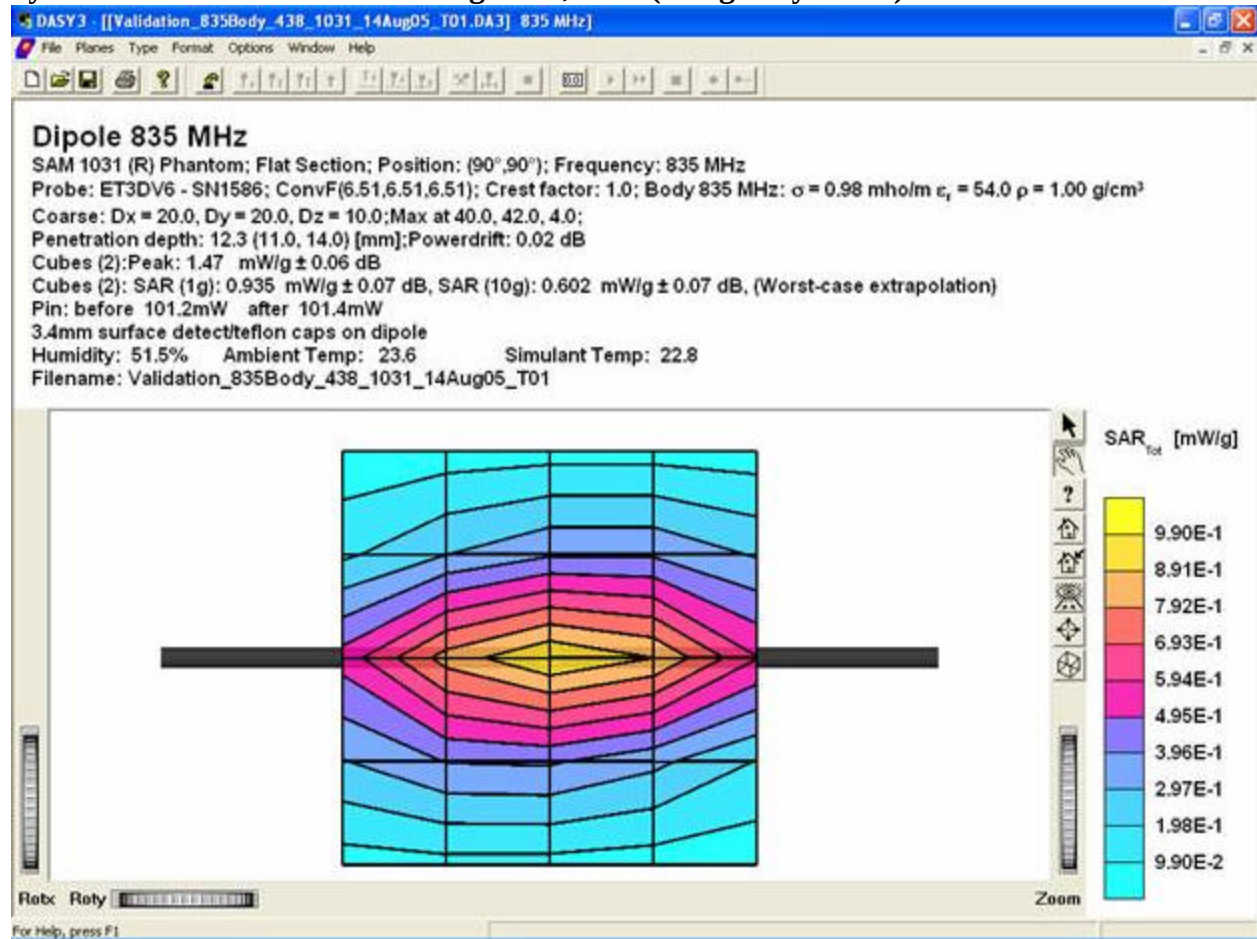


0 dB = 0.943mW/g



Prepared (also subject responsible if other) SEM/CV/PF/P Gerard Hayes and Rodney Dixon	No. REP 2005 006 Z520i 02	
Approved SEM/CV/PF/P Gerard Hayes	Checked	A X:\SAR Chamber\FCC reports\Z520i\Final Reports\FCCZ520i.doc

835 MHz SAR Distribution of Validation Dipole Antenna

System Performance Check on August 14, 2005 (Using body tissue).



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1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check on August 15, 2005 (Using head tissue).
Validation 1900Head 536 1335 15Aug05 T01

File Name: [Validation 1900Head 536 1335 15Aug05 T01.da4](#)

Phantom: SAM with CRP (High Band Head) Phantom section: Flat Section

Probe: ET3DV6 - SN1587ConvF(5.05, 5.05, 5.05) Duty Cycle: 1:1 Frequency: 1900 MHz

Medium parameters used: $f = 1900$ MHz; $s = 1.45$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

Measurement Standard: DASY4 (High Precision Assessment)

Dipole at 10 mm/Area Scan (61x61x1):

Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 5.01 mW/g

Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 56.2 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 7.02 W/kg

SAR(1 g) = 3.97 mW/g; SAR(10 g) = 2.07 mW/g

Maximum value of SAR (measured) = 4.51 mW/g

Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:

Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 56.2 V/m; Power Drift = -0.01 dB

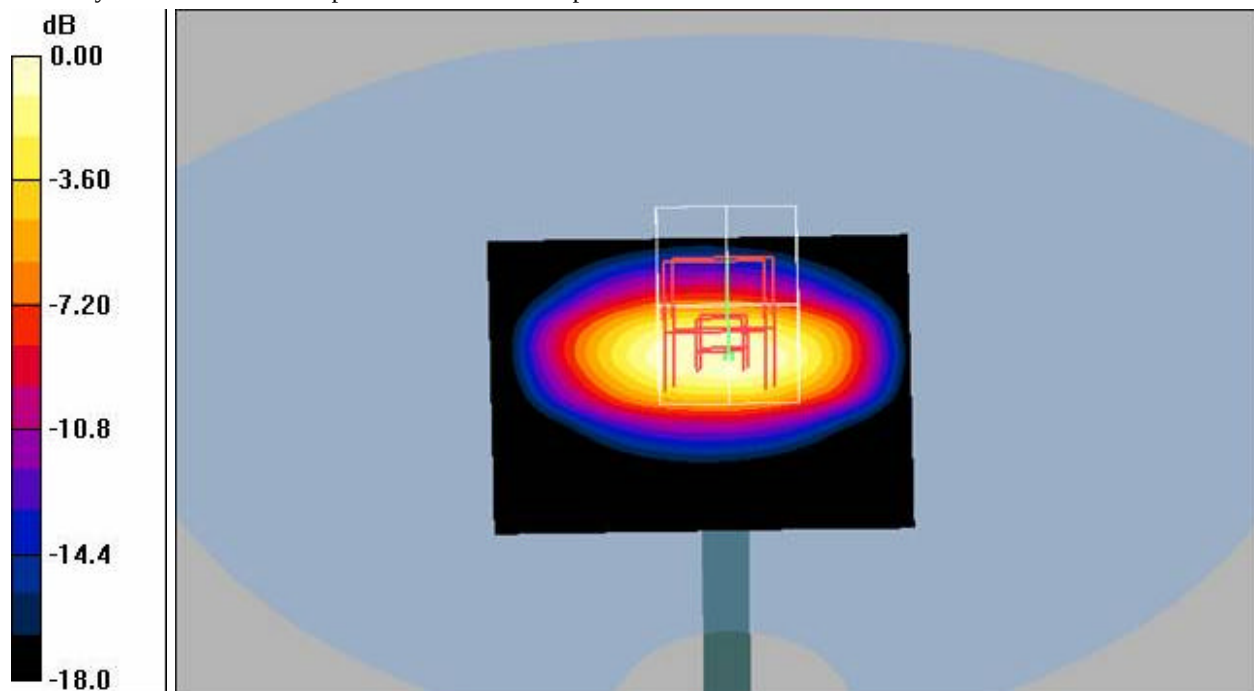
Peak SAR (extrapolated) = 6.94 W/kg

SAR(1 g) = 3.93 mW/g; SAR(10 g) = 2.05 mW/g

Maximum value of SAR (measured) = 4.43 mW/g

Procedure Notes: Pin: before 101.4 mW / after 100.9 mW

Humidity: 48.8% Ambient Temp: 23.3 C Simulant Temp: 22.2 C



0 dB = 4.43mW/g



Prepared (also subject responsible if other) SEM/CV/PF/P Gerard Hayes and Rodney Dixon	No. REP 2005 006 Z520i 02	
Approved SEM/CV/PF/P Gerard Hayes	Checked	A X:\SAR Chamber\FCC reports\Z520i\Final Reports\FCCZ520i.doc

**1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check on August 14, 2005 (Using body tissue).**

