Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

Exhibit 11: SAR Test Report of Portable Cellular Phone FCC ID: PY7A3880030 Model: T707T

Date of test: March 19 –March 29, 2009
Date of Report: April 1, 2009

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 IV, Global Type Approval

Test Responsible: Gerard Hayes
Technical Manager

Accreditation: This laboratory is accredited to ISO/IEC 17025-2005 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 PY7A3880030 model T707T 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)

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

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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 PY7A3880030 model T707T. 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	Monopole	
Location	Chin Cover	
Dimensions	Width	14.0 mm
	Length	46.0 mm

2.2 Device description

FCC ID Number / Device Model SEMC Type Number / IC Number	**PY7A3880030 / T707T AAD-3880030-BV / 4170B-A3880030**	
Hardware Revision # Software Revision # Battery Option(s)	**AP1 R1EA010 BST-39**	
Mode(s) of Operation Transmitting Frequency Range		**Serial number of Device Tested**
	GSM/GPRS/EDGE 824-849 MHz	BX900H71K4
	GSM/GPRS/EDGE 1850-1910 MHz	BX900H71K4
	UMTS/HSDPA Band IV (1712-1753 MHz)	BX900H71M1
Production Unit or Identical Prototype (47 CFR §2..908)	**Identical Prototype**	
Device Category	**Portable**	
RF Exposure Limits	**General Population / Uncontrolled**	

GSM		**850 MHz**	**1900 MHz**
Factory Target Maximum Output Power	**f_{low}**	33.0 dBm	31.0 dBm
	f_{mid}	33.0 dBm	31.0 dBm
	f_{high}	33.0 dBm	31.0 dBm
Calibration Frequency (f_{low}, f_{mid} , f_{high})		f_{low}, f_{mid} , f_{high}	f_{low}, f_{mid} , f_{high}
Duty Cycle		1/8	1/8

Device description (continued)

GPRS		**850 MHz**	**1900 MHz**
Factory Target Maximum Output Power	**f_{low}**	30.0 dBm	28.0 dBm
	f_{mid}	30.0 dBm	28.0 dBm
	f_{high}	30.0 dBm	28.0 dBm
Calibration Frequency (f_{low}, f_{mid} , f_{high})		f_{low}, f_{mid} , f_{high}	f_{low}, f_{mid} , f_{high}
Duty Cycle		1/4	1/4
EGPRS		**850 MHz**	**1900 MHz**
Factory Target Maximum Output Power	**f_{low}**	28 dBm	27 dBm
	f_{mid}	28 dBm	27 dBm
	f_{high}	28 dBm	27 dBm
Calibration Frequency (f_{low}, f_{mid} , f_{high})		f_{low}, f_{mid} , f_{high}	f_{low}, f_{mid} , f_{high}
Duty Cycle		1/4	1/4
		Band IV	
W-CDMA (Circuit Switched, UMTS Mode)	**f_{low}**	23.1 dBm	
Factory Target Maximum Output Power RMC 12.2, βc=8, βd=15	**f_{mid}**	23.1 dBm	
	f_{high}	23.1 dBm	
Calibration Frequency (f_{low}, f_{mid} , f_{high})		f_{low}, f_{mid} , f_{high}	
Duty Cycle		1/1	

3. Test Equipment Used

3.1 Dosimetric System

The Sony Ericsson SAR Laboratory utilizes Dosimetric Assessment Systems (Dasy4™) for adjacent to head and body-worn measurements manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. The overall RSS uncertainty of the measurement system is ±9.4 % (K=1) with an expanded uncertainty of ±18.8 % (K=2) for Dasy4™. The measurement uncertainty budget is given in Appendix 5 for the system. 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	Oct-31-2009
DASY3 DAE V1	417	Nov-07-2009
DASY3 DAE V1	432	May-13-2009
E-Field Probe ETDV6	1538	May-19-2009
E-Field Probe ETDV6	1539	Nov-17-2009
E-Field Probe ETDV6	1583	Nov-17-2009
Dipole Validation Kit, DV835V2	429	Nov-03-2009
Dipole Validation Kit, DV1800V2	217	Nov-04-2009
Dipole Validation Kit, DV1900V2	537	Nov-04-2009
S.A.M. Phantom used for 835MHz (Head)	1023	
S.A.M. Phantom used for 835MHz (Body)	1031	
S.A.M. Phantom used for 1900MHz (Head)	1054/1335	
S.A.M. Phantom used for 1900MHz (Body)	1020	

3.2 Additional Equipment

Description	Serial Number	Cal Due Date
Signal Generator HP8648C	3443U00433	February 01, 2010
Power Meter 437B	3125U16382	December 04, 2009
Power Meter 437B	3125U16190	May 05, 2009
Power Sensor - 8482H	MY41090241	June 14, 2009
Power Sensor - 8482H	3318A09268	July 02, 2009
Dielectric Probe Kit HP85070B	US33020256	Sept. 11, 2009
Digital Thermometer 61220-601 And Probe (61220-604)	350078	December 10, 2009
Digital Hygrometer/ Thermometer	230355187	March 03, 2010
HP RF Amplifier 8347A	3307A1069	May 07, 2009

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 ρ=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]. The ambient temperature of the laboratory was maintained within the desired the range and the liquid depth above the ear reference points was above 15.0 cm in 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	March 19, 2009	42.96	0.9202	21.6
		Recommended Limits	41.5	0.9	20-25
	Body	March 25, 2009	55.54	0.9373	21.3
		Recommended Limits	55.2	0.97	20-25
1800	Head	March 26, 2009	39.55	1.348	22.3
		March 26, 2009	39.38	1.369	22.1
		Recommended Limits	40	1.4	20-25
1900	Head	March 25, 2009	38.24	1.434	21.4
		March 28, 2009	38.26	1.462	22.5
		March 29, 2009	39.99	1.466	22.5
		Recommended Limits	40	1.4	20-25
	Body	March 19, 2009	52.23	1.531	21.5
		March 23, 2009	51.18	1.495	21.6
		Recommended Limits	53.3	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%	--	--

5. System Accuracy Verification

A system accuracy verification of the DASY4 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 numerical target SAR values indicated in the standerds. These tests were done at 835MHz/900MHz and/or 1800MHz/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). The ambient temperature of the laboratory was maintained within the desired the range and the liquid depth above the ear reference points was above 15.0 cm in all the cases.

It is seen in the following table that the system is operating within its specification, as the results are within acceptable tolerance of the reference values. The SAR distributions for each dipole measurement are shown in Appendix 1.

f			SAR (W/kg)		Dielectric Parameters		Tissue
(MHz)	Tissue Type	Date Measured	1g	10g	ε_r	σ (S/m)	Temp (°C)
835	Head	Mar-19-09	9.56	6.29	42.96	0.92	21.6
		Recommended Limits	**9.50**	**6.20**	**41.50**	**0.90**	**20-25**
	Body	Mar-25-09	10.12	6.73	55.54	0.94	21.3
		Recommended Limits	**9.90**	**6.46**	**55.20**	**0.97**	**20-25**
1800	Head	Mar-26-09	36.33	19.40	39.55	1.35	22.3
		Mar-26-09	35.61	19.12	39.38	1.37	22.1
		Recommended Limits	**38.1**	**19.8**	**40**	**1.4**	**20-25**
1900	Head	Mar-25-09	40.52	21.05	38.24	1.43	21.4
		Mar-28-09	41.88	21.78	38.26	1.46	22.5
		Mar-29-09	39.28	20.48	39.99	1.47	22.5
		Recommended Limits	**39.7**	**20.5**	**40**	**1.4**	**20-25**
	Body	Mar-19-09	40.30	21.05	52.23	1.53	21.5
		Mar-23-09	41.62	21.86	51.18	1.50	21.6
		Recommended Limits	**40.5**	**20.89**	**53.3**	**1.52**	**20-25**

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 0.00047 W/kg, which is below the recommended limit in [1].

6.0 Test Results

For all measurements, the test sample was operated using a base station simulator (CMU-200) that allows control of the transmitter using the signally software that is installed on the phone. 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 DASY4 SAR measurement system.

HSDPA Considerations

As per TCB/FCC guidance, the conducted power of the device was confirmed in two UMTS circuit switched modes (RMC and Voice) and four HSDPA modes. A CMU-200 was used to establish the call processing and modulation settings and an RF power meter was used for the measurements. For all HSDPA measurements, the following settings were applied:

H-SET3 QPSK, CQI feedback = 2msec, ΔACK = ΔNACK = ΔCQI = 8

The results (including relevant CMU modulation settings) are presented in the Table 6.0. As seen in the table, the conducted power measurements for the HSDPA modes were equal or below the circuit switched modes for each frequency/channel.

Table 6.0: Conducted Power Summary for UMTS - HSDPA Modes

					Band 4		
	βC	βD	ΔHS	max->	1712.4	1732.6	1752.6
CS - RMC	8	15	-		23.1	23.1	23.0
CS - voice	8	15	-		23.0	23.1	23.1
HSDPA - 1	2	15	8		23.0	23.1	23.0
HSDPA - 2	12	15	8		21.5	21.6	21.3
HSDPA - 3	15	8	8		21.5	21.6	21.2
HSDPA - 4	15	4	8		20.5	20.7	20.2

For head measurements, the units were measured in the following voice modes which correspond to the operating conditions with the highest conducted power:

GSM with a 1/8 duty cycle
UMTS (circuit switched) with RMC=12.2, βc=8, and βd=15

In all configurations, tests were conducted with Bluetooth functionality turned off.

For body measurements, the units were measured in the following data modes which correspond to the operating conditions with the highest conducted power:

E/GPRS (Multislot, Class 10) with a 1/4 duty cycle
UMTS (circuit switched) with RMC=12.2, βc=8, and βd=15

Simultaneous Transmitter (i.e. Bluetooth) Considerations

Since the measured SAR values are below 1.2 W/kg in all test cases and the conducted Bluetooth power is 2.82 mW, simultaneous SAR evaluation and stand-alone Bluetooth SAR evaluation are not required.

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 ambient temperature of the laboratory was maintained within the desired the range and the liquid depth above the ear reference points was above 15.0 cm in all the cases.

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

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

		Conducted Output Power (dBm)	Left Head (Cheek / Touch Position)						
f(MHz)	Channel/ frequency	GSM 1:8 Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
	128 / 824	**33**	**0.52**	**0.36**	**-0.02**	**0.52**	**0.36**		
	189 / 837	32.9	0.46	0.34	-0.17	0.46	0.34		
800 GSM	251 / 849	32.9	0.46	0.34	-0.09	0.46	0.34	21.8	21.6
	512 / 1850	30.8	0.38	0.23	-0.18	0.38	0.24		
	660/1880	**30.9**	**0.41**	**0.25**	**0.13**	**0.42**	**0.26**		
1900 GSM	810/1910	30.9	0.39	0.25	0.18	0.40	0.25	21.1	21.4
		Conducted Output Power (dBm)	Left Head (15° Tilt Position)						
f(MHz)	Channel/ frequency	GSM 1:8 Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
	128 / 824	33	0.22	0.17	0.03	0.22	0.17		
	189 / 837	**32.9**	**0.33**	**0.24**	**0.00**	**0.33**	**0.24**		
800 GSM	251 / 849	32.9	0.28	0.21	-0.03	0.28	0.21	21.8	21.6
	512 / 1850	**30.8**	**0.11**	**0.06**	**0.10**	**0.11**	**0.07**		
	660/1880	30.9	0.09	0.06	0.06	0.10	0.06		
1900 GSM	810/1910	30.9	0.08	0.05	0.10	0.08	0.05	21.1	21.4

Table 1: SAR measurement results for the portable cellular telephone FCC ID PY7A3880030 model T707T at maximum output power with Standard Battery BST-39. Measured against the left head in GSM mode.

f(MHz)	Channel/ frequency	Conducted Output Power (dBm) GSM 1:8 Duty Cycle	Right Head (Cheek / Touch Position) Measured (W/kg) 1g	10g	Drift (dB)	Extrapolated (W/kg) 1g	10g	Ambient Temp (°C)	Simulate Temp (°C)
	128 / 824	33	0.81	0.45	0.00	0.81	0.45		
	189 / 837	**32.9**	**0.90**	**0.50**	**-0.05**	**0.90**	**0.50**		
800 GSM	251 / 849	32.9	0.88	0.48	-0.03	0.88	0.48	21.8	21.6
	512 / 1850	**30.8**	**0.50**	**0.32**	**-0.05**	**0.51**	**0.32**		
	660/1880	30.9	0.49	0.30	0.01	0.50	0.31		
1900 GSM	810/1910	30.9	0.49	0.30	-0.06	0.50	0.30	21.1	21.4

f(MHz)	Channel/ frequency	Conducted Output Power (dBm) GSM 1:8 Duty Cycle	Right Head (15° Tilt Position) Measured (W/kg) 1g	10g	Drift (dB)	Extrapolated (W/kg) 1g	10g	Ambient Temp (°C)	Simulate Temp (°C)
	128 / 824	33	0.26	0.19	-0.06	0.26	0.19		
	189 / 837	**32.9**	**0.31**	**0.23**	**0.00**	**0.31**	**0.23**		
800 GSM	251 / 849	32.9	0.23	0.17	0.06	0.23	0.17	21.8	21.6
	512 / 1850	**30.8**	**0.12**	**0.07**	**-0.04**	**0.13**	**0.08**		
	660/1880	30.9	0.11	0.06	-0.07	0.11	0.06		
1900 GSM	810/1910	30.9	0.09	0.05	-0.04	0.10	0.05	21.1	21.4

Table 2: SAR measurement results for the portable cellular telephone FCC ID PY7A3880030 model T707T at maximum output power with Standard Battery BST-39. Measured against the right head in GSM mode.

f(MHz)	Channel/ frequency	Conducted Output Power (dBm)	UMTS Left Head Position (Cheek / Touch Position)						
		UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
Band IV	**1312/1712.4**	**23**	**0.768**	**0.475**	**-0.08**	**0.79**	**0.49**	22.3	22.1
	1413/1732.6	23	0.767	0.487	-0.10	0.78	0.50		
	1513/1752.6	23	0.673	0.416	0.02	0.69	0.43		
f(MHz)	Channel/ frequency	Conducted Output Power (dBm)	UMTS Left Head Position (15° Tilt Position)						
		UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
Band IV	**1312/1712.4**	**23**	**0.229**	**0.145**	**-0.01**	**0.23**	**0.15**	22.3	22.1
	1413/1732.6	23	0.208	0.132	0.00	0.21	0.14		
	1513/1752.6	23	0.192	0.121	0.01	0.20	0.12		

Table 3: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880030 model T707T at maximum output power with Standard Battery BST-39. Measured against the left head in UMTS mode.

f(MHz)	Channel/ frequency	Conducted Output Power (dBm)	UMTS Right Head Position (Cheek / Touch Position)						
		UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
Band IV	**1312/1712.4**	**23**	**0.56**	**0.38**	**-0.18**	**0.58**	**0.39**	22.3	22.1
	1413/1732.6	23	0.56	0.38	-0.15	0.57	0.39		
	1513/1752.6	23	0.55	0.37	-0.20	0.57	0.38		
f(MHz)	Channel/ frequency	Conducted Output Power (dBm)	UMTS Right Head Position (15° Tilt Position)						
		UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
Band IV	**1312/1712.4**	**23**	**0.20**	**0.13**	**0.11**	**0.20**	**0.13**	22.3	22.1
	1413/1732.6	23	0.20	0.13	0.13	0.20	0.13		
	1513/1752.6	23	0.18	0.11	0.14	0.19	0.12		

Table 4: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880030 model T707T at maximum output power with Standard Battery BST-39. Measured against the right head in UMTS mode.

6.2 Body-Worn Test Results

The SAR results shown in Tables 5 and 6 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.

A “flat” phantom was used for the body-worn tests. This “flat” phantom corresponds to the flat portion of the SAM phantom.

The ambient temperature of the laboratory was maintained within the desired the range and the liquid depth above the ear reference points was above 15.0 cm in all the cases.

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:

-15 mm spacer

A full data set output of the test conditions with the highest SAR values 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.

f(MHz)	Operating Condition	Channel/ frequency	Conducted Output Power (dBm)	Body Worn						
				15mm SPACER						
				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**	**30**	**0.43**	**0.30**	**-0.10**	**0.43**	**0.30**	21	21.3
		189 / 837	30	0.33	0.23	0.08	0.33	0.23		
		251 / 849	30	0.25	0.17	-0.02	0.25	0.17		
1900 GSM	2:8 Duty Cycle	512 / 1850	27.9	0.33	0.20	-0.02	0.33	0.20	21.7	21.5
		660/1880	28	0.30	0.18	-0.06	0.30	0.18		
		810/1910	**27.9**	**0.34**	**0.20**	**0.03**	**0.34**	**0.20**		
Front of phone facing body										
800 GSM	2:8 Duty Cycle	**128 / 824**	**30**	**0.12**	**0.09**	**0.08**	**0.12**	**0.09**	21	21.3
		189 / 837	30	0.10	0.08	0.00	0.10	0.08		
		251 / 849	30	0.08	0.06	0.01	0.08	0.06		
1900 GSM	2:8 Duty Cycle	**512 / 1850**	**27.9**	**0.18**	**0.11**	**0.01**	**0.18**	**0.11**	22.1	22.5
		660/1880	28	0.14	0.09	-0.05	0.14	0.09		
		810/1910	27.9	0.12	0.08	0.03	0.12	0.08		

Table 5: SAR measurement results for the portable cellular telephone FCC ID PY7A3880030 model T707T at maximum output power with Standard Battery BST-39. Measured with GSM/GPRS Mode.

f(MHz)	Channel/ frequency	Conducted Output Power (dBm)	UMTS Body Worn 15mm SPACER						
			Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
Back of phone facing body									
Band IV	1312/1712.4	23	0.60	0.40	-0.08	0.61	0.41	21.4	21.6
	1413/1732.6	**23**	**0.61**	**0.40**	**-0.02**	**0.62**	**0.41**		
	1513/1752.6	23	0.56	0.37	-0.08	0.58	0.38		
Front of phone facing body									
Band IV	1312/1712.4	23	0.16	0.11	0.02	0.16	0.11	21.4	21.6
	1413/1732.6	**23**	**0.18**	**0.12**	**-0.02**	**0.18**	**0.12**		
	1513/1752.6	23	0.16	0.11	0.07	0.16	0.11		

Table 6: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880030 model T707T at maximum output power with Standard Battery BST-39. Measured against the body with UMTS/HSDPA Modes.

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] IEC 62209-1, "Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz) ", First Edition 2005-02.

[3] IEEE, "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques," Std 1528-2003, June 2003.

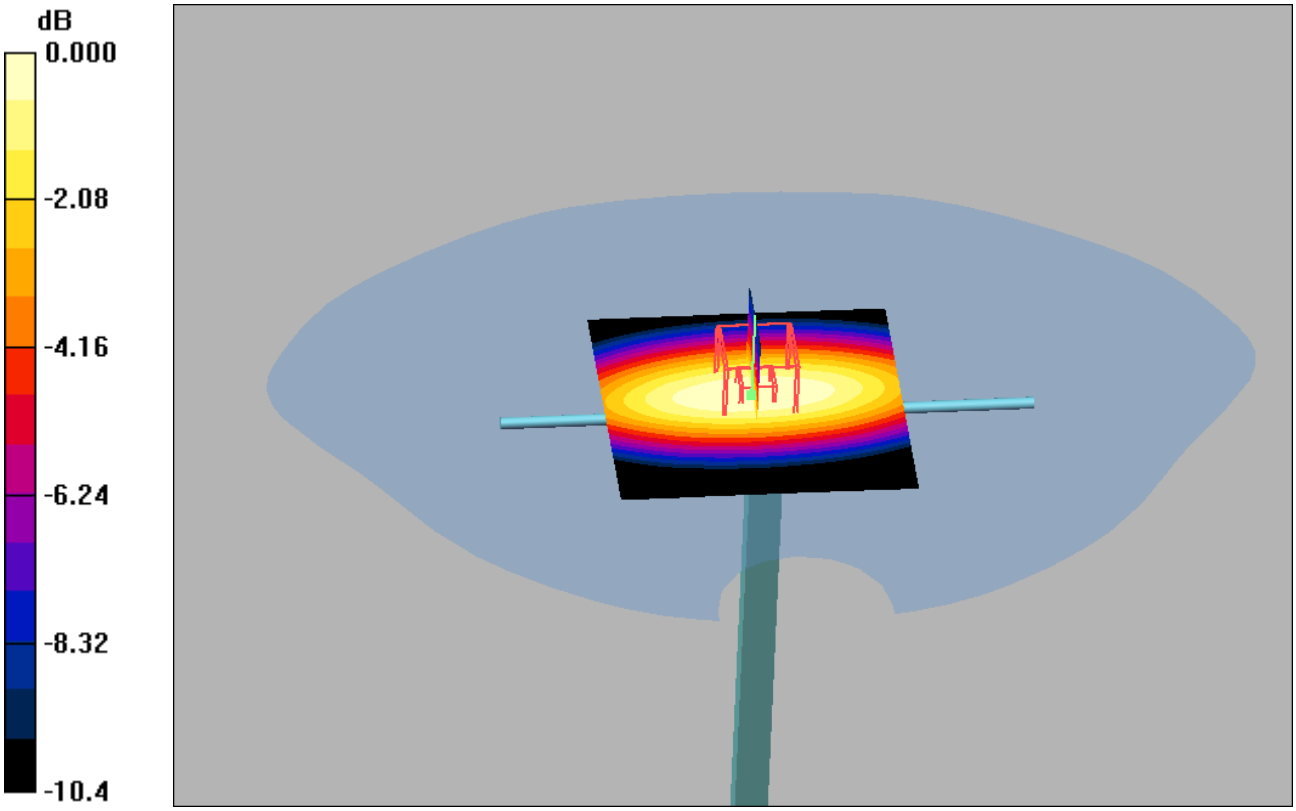
Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

Appendix 1

SAR distribution comparison for the system accuracy verification

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

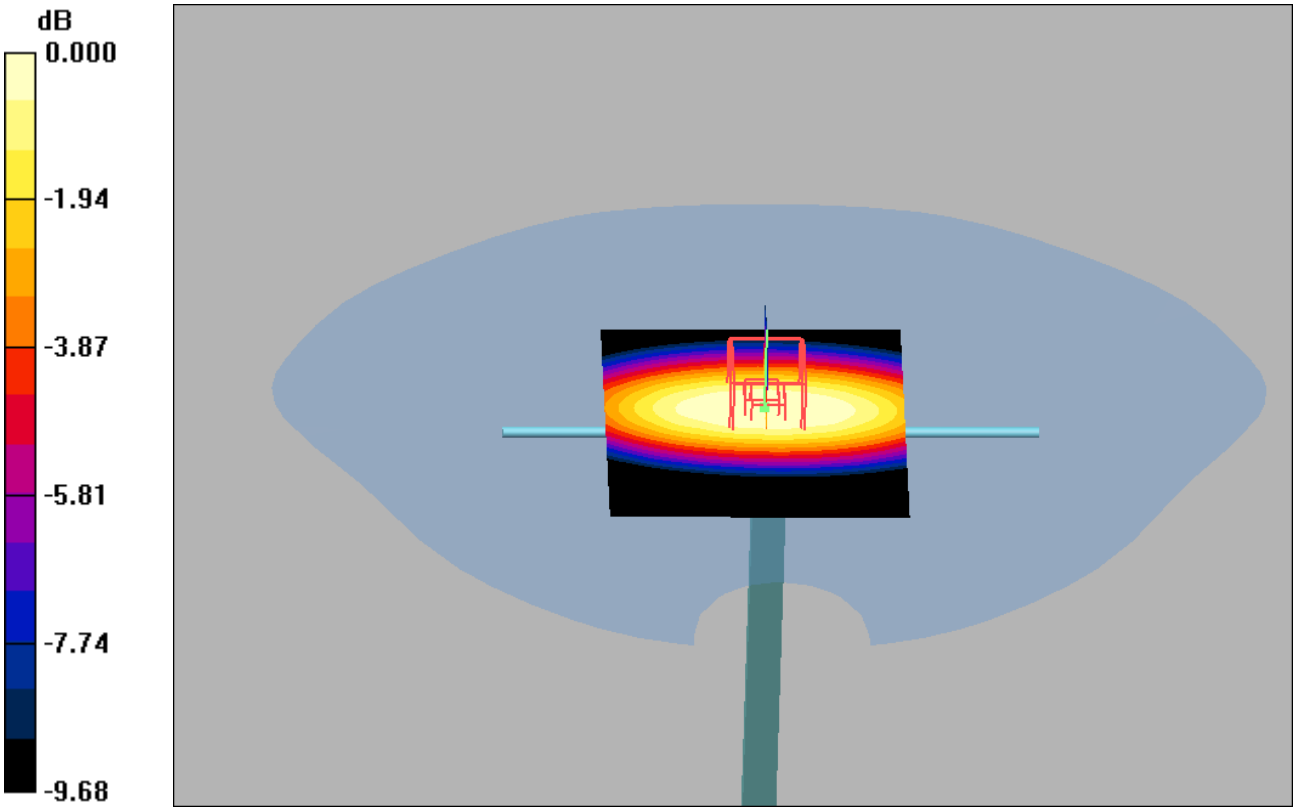
835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check .
Validation_835Head_429_1023_19Mar09_T01
File Name: Validation_835Head_429_1023_19Mar09_T01.da4
Phantom: SAM with CRP (Low Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1583ConvF(6.48, 6.48, 6.48)Duty Cycle: 1:1Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.92 mho/m; ε_r = 43; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.05 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.9 V/m; Power Drift = 0.042 dB
Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.975 mW/g; SAR(10 g) = 0.642 mW/g
Maximum value of SAR (measured) = 1.05 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.9 V/m; Power Drift = 0.042 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.949 mW/g; SAR(10 g) = 0.624 mW/g
Maximum value of SAR (measured) = 1.03 mW/g
Procedure Notes: Pin: before 100.3 mW / after 101 mW Humidity - 36.6 % Ambient Temp - 21.8 C Simulant Temp - 21.6 C



0 dB = 1.03mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_835Body_429_1031_25Mar09_T01
File Name: Validation_835Body_429_1031_25Mar09_T01.da4
Phantom: SAM with CRP (Low Band Body)Phantom section: Flat Section
Probe: ET3DV6 - SN1539ConvF(5.53, 5.53, 5.53)Duty Cycle: 1:1Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.937 mho/m; ε_r = 55.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.12 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 36.3 V/m; Power Drift = -0.078 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.677 mW/g
Maximum value of SAR (measured) = 1.10 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 36.3 V/m; Power Drift = -0.078 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.965 mW/g; SAR(10 g) = 0.644 mW/g
Maximum value of SAR (measured) = 1.04 mW/g
Procedure Notes: Pin: before 98 mW / after 98.2 mW Humidity - 41.7 % Ambient Temp - 21 C Simulant Temp - 21.3 C



0 dB = 1.04mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
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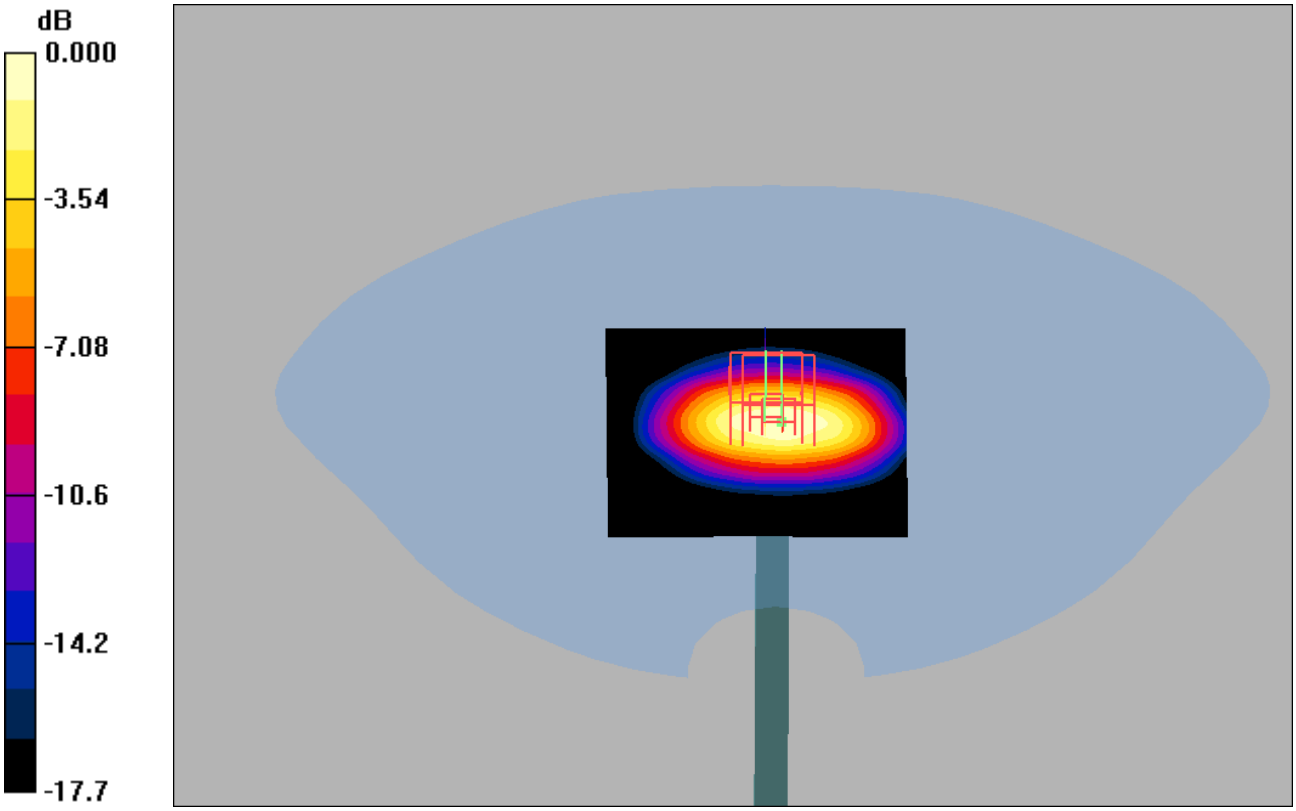
1800 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1800Head_238_1054_26Mar09_T01
File Name: Validation_1800Head_238_1054_26Mar09_T01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1538ConvF(5.46, 5.46, 5.46)Duty Cycle: 1:1Frequency: 1800 MHz
Medium parameters used: f = 1800 MHz; σ = 1.35 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.53 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.9 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 6.19 W/kg
SAR(1 g) = 3.57 mW/g; SAR(10 g) = 1.9 mW/g
Maximum value of SAR (measured) = 4.06 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.9 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 6.39 W/kg
SAR(1 g) = 3.75 mW/g; SAR(10 g) = 2.01 mW/g
Maximum value of SAR (measured) = 4.20 mW/g
Procedure Notes: Pin: before 99.5 mW / after 102 mW Humidity: 32.4 % Ambient Temp: 22.5 C Simulant Temp: 22.3 C

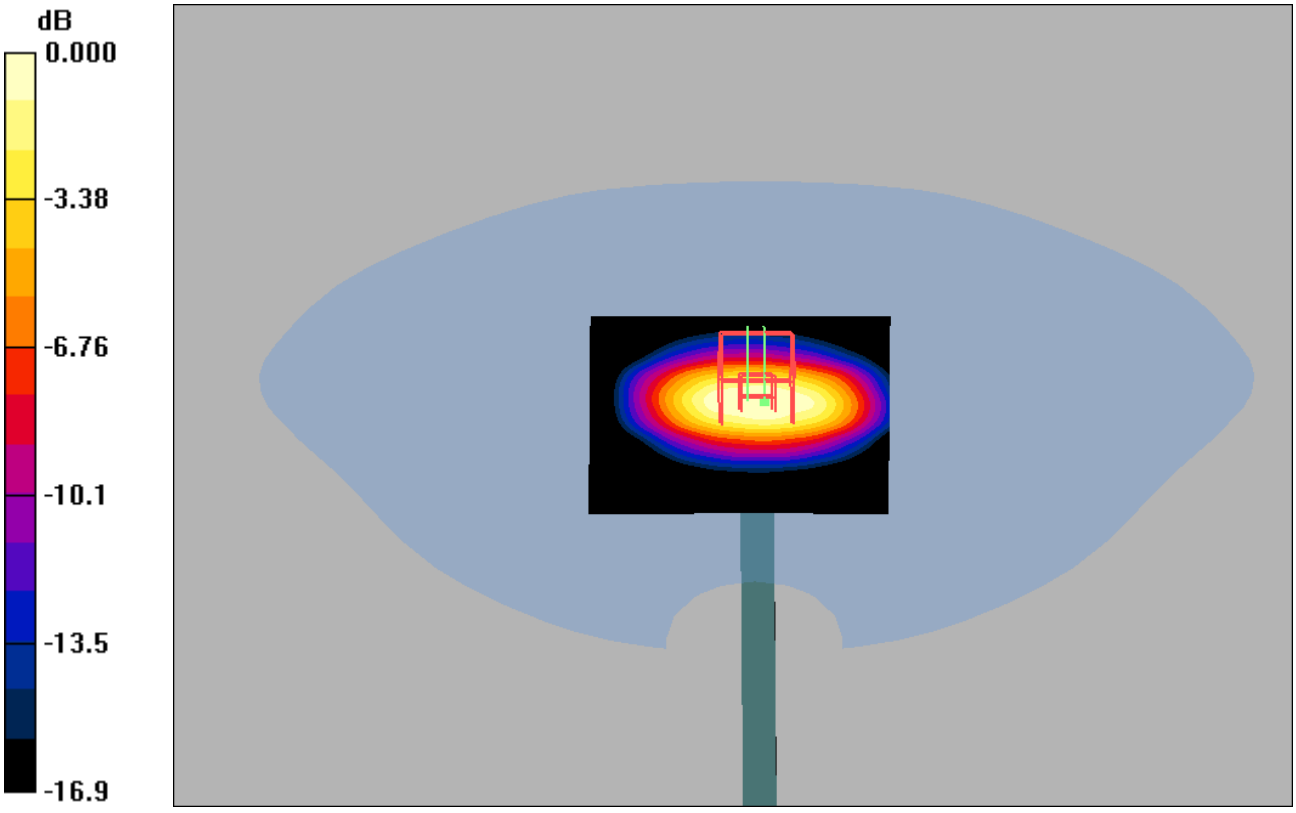


0 dB = 4.20mW/g

1800 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1800Head_217_1335_26Mar09_T01

File Name: Validation_1800Head_217_1335_26Mar09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1583ConvF(5.4, 5.4, 5.4)Duty Cycle: 1:1Frequency: 1800 MHz
Medium parameters used: f = 1800 MHz; σ = 1.37 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.60 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.5 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 6.22 W/kg
SAR(1 g) = 3.63 mW/g; SAR(10 g) = 1.95 mW/g
Maximum value of SAR (measured) = 4.08 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.5 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 6.03 W/kg
SAR(1 g) = 3.52 mW/g; SAR(10 g) = 1.89 mW/g
Maximum value of SAR (measured) = 3.93 mW/g
Procedure Notes: Pin: before 100.3 mW / after 100.5 mW Humidity: 34.6 % Ambient Temp: 22.3 C Simulant Temp: 22.1 C



0 dB = 3.93mW/g

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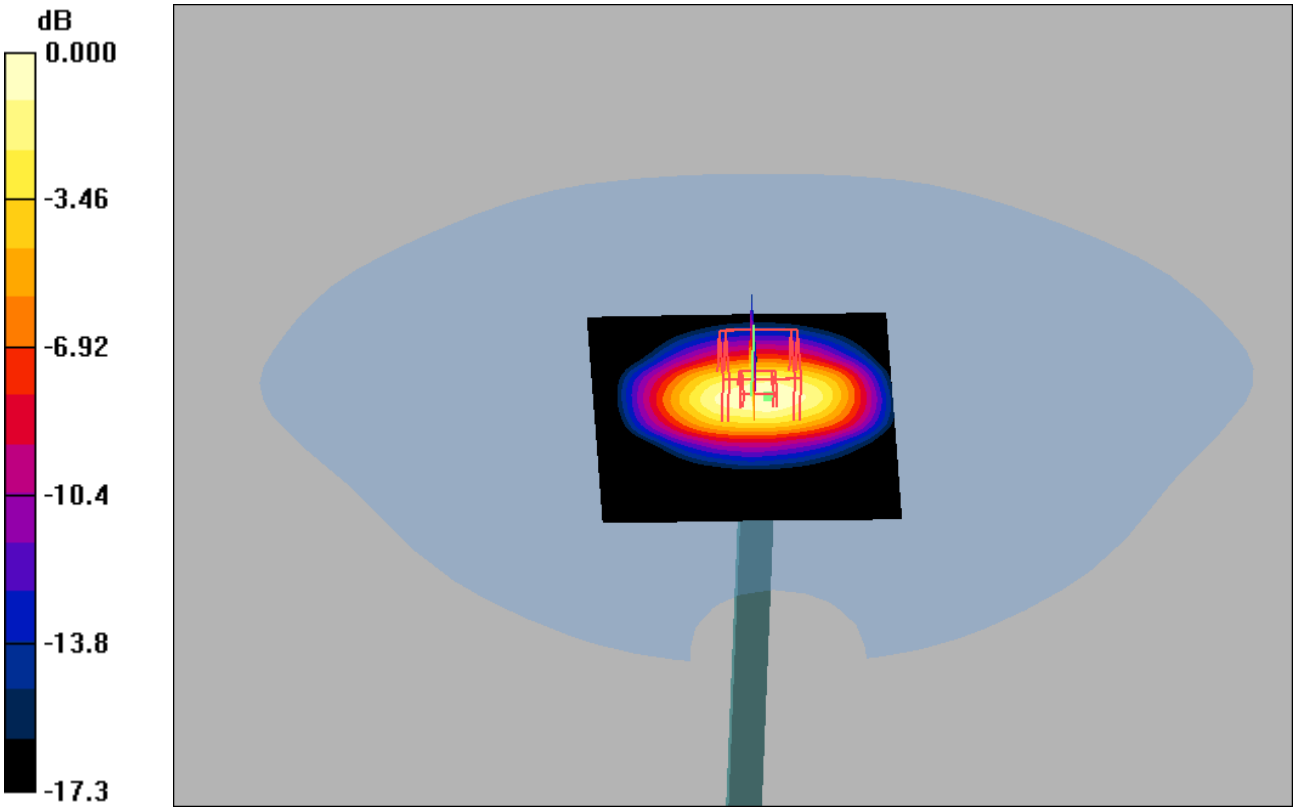
SEM/CV/PF/P Gerard Hayes	B	

1800 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1800Head_217_1054_28Mar09_T01
File Name: Validation_1800Head_217_1054_28Mar09_T01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1538ConvF(5.46, 5.46, 5.46)Duty Cycle: 1:1Frequency: 1800 MHz
Medium parameters used: f = 1800 MHz; σ = 1.35 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.19 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.2 V/m; Power Drift = 0.076 dB
Peak SAR (extrapolated) = 5.86 W/kg
SAR(1 g) = 3.39 mW/g; SAR(10 g) = 1.81 mW/g
Maximum value of SAR (measured) = 3.82 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.2 V/m; Power Drift = 0.076 dB
Peak SAR (extrapolated) = 6.23 W/kg
SAR(1 g) = 3.6 mW/g; SAR(10 g) = 1.92 mW/g
Maximum value of SAR (measured) = 4.08 mW/g
Procedure Notes: Pin: before 99.8 mW / after 100.1 mW Humidity: 39.3 % Ambient Temp: 22.1 C Simulant Temp: 22.5 C



0 dB = 4.08mW/g

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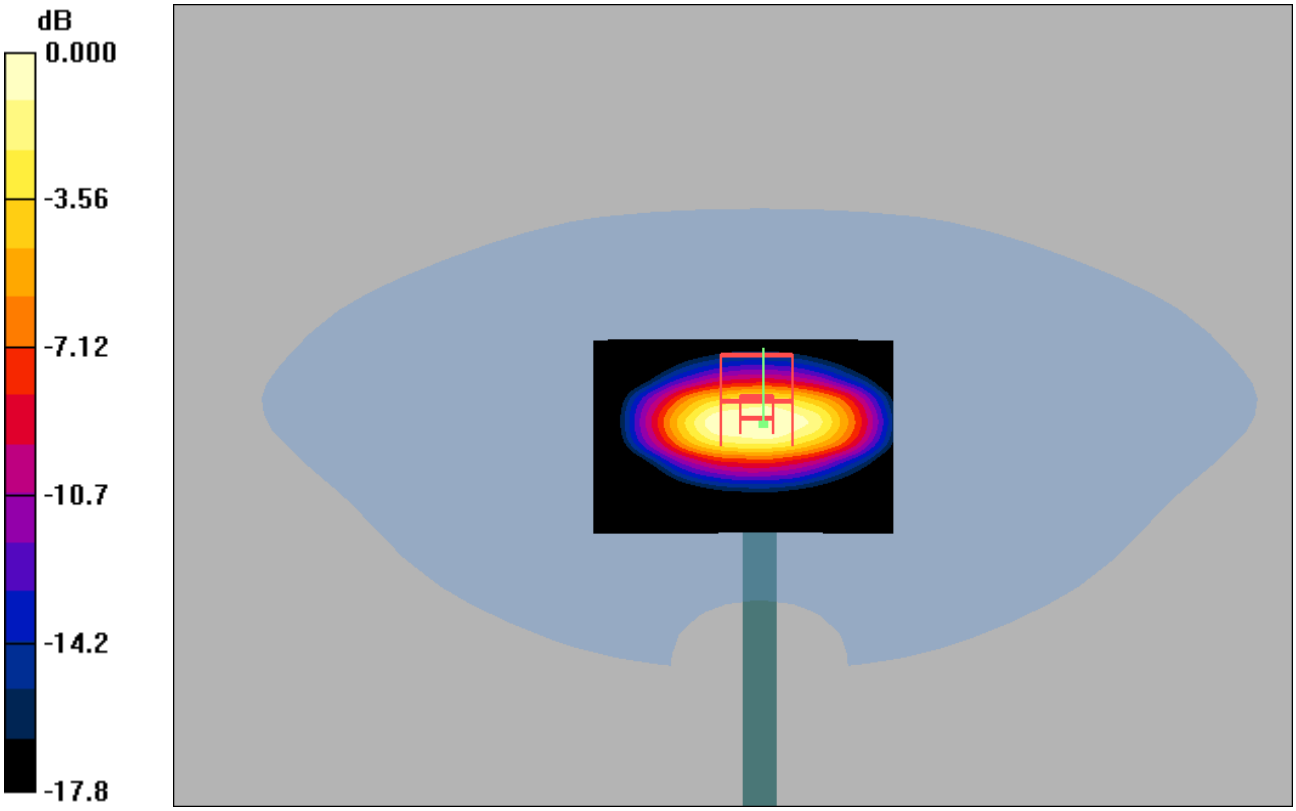
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

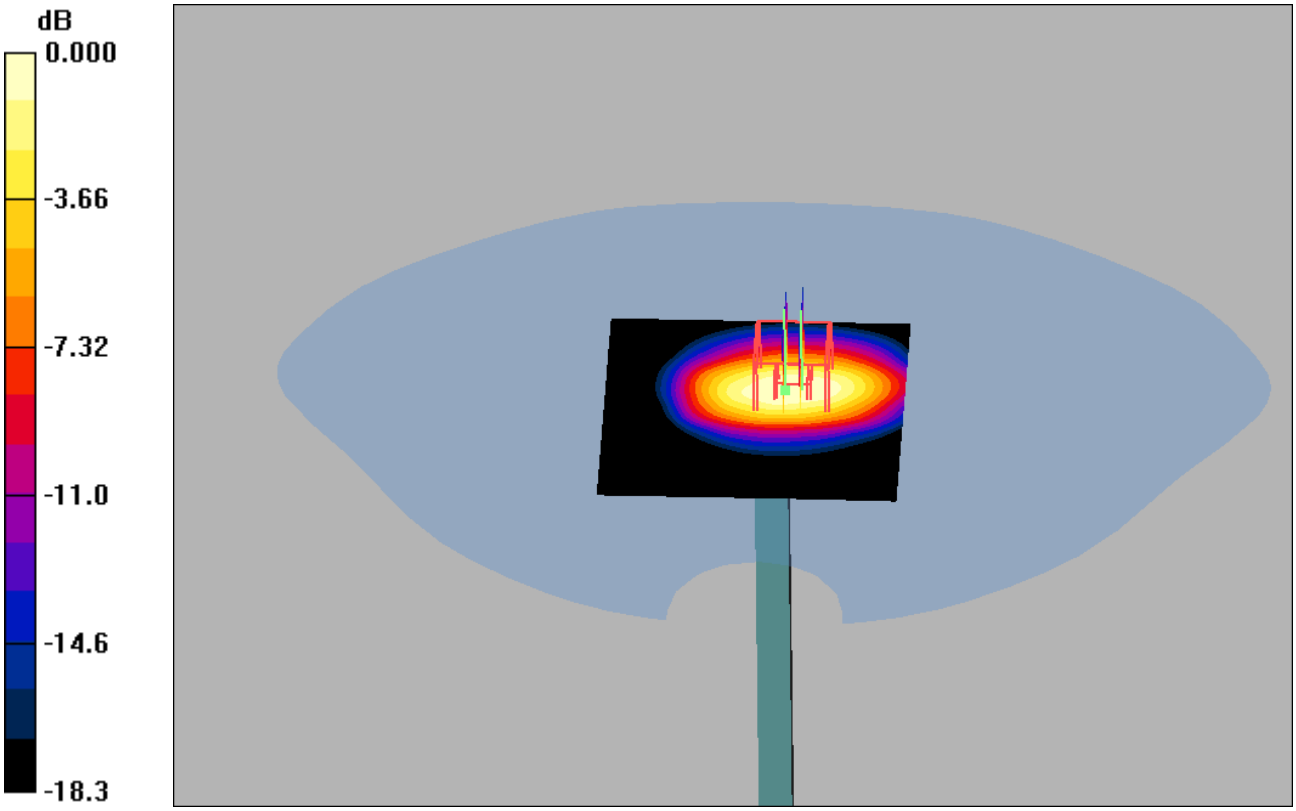
1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_537_1335_25Mar09_T01
File Name: Validation_1900Head_537_1335_25Mar09_T01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1583ConvF(5.12, 5.12, 5.12)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.32 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 59.4 V/m; Power Drift = 0.064 dB
Peak SAR (extrapolated) = 7.33 W/kg
SAR(1 g) = 4.1 mW/g; SAR(10 g) = 2.13 mW/g
Maximum value of SAR (measured) = 4.62 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 59.4 V/m; Power Drift = 0.064 dB
Peak SAR (extrapolated) = 7.30 W/kg
SAR(1 g) = 4.06 mW/g; SAR(10 g) = 2.11 mW/g
Maximum value of SAR (measured) = 4.55 mW/g
Procedure Notes: Pin: before 100.4 mW / after 101 mW Humidity: 42.6 % Ambient Temp: 21.1 C Simulant Temp: 21.4 C



0 dB = 4.55mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_537_1335_28Mar09_T01
File Name: Validation_1900Head_537_1335_28Mar09_T01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1583ConvF(5.12, 5.12, 5.12)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.46 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.20 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.9 V/m; Power Drift = 0.081 dB
Peak SAR (extrapolated) = 7.69 W/kg
SAR(1 g) = 4.28 mW/g; SAR(10 g) = 2.23 mW/g
Maximum value of SAR (measured) = 4.84 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.9 V/m; Power Drift = 0.081 dB
Peak SAR (extrapolated) = 7.53 W/kg
SAR(1 g) = 4.18 mW/g; SAR(10 g) = 2.17 mW/g
Maximum value of SAR (measured) = 4.72 mW/g
Procedure Notes: Pin: before 100.5 mW / after 101.5 mW Humidity: 41.1 % Ambient Temp: 22.7 C Simulant Temp: 22.5 C



0 dB = 4.72mW/g

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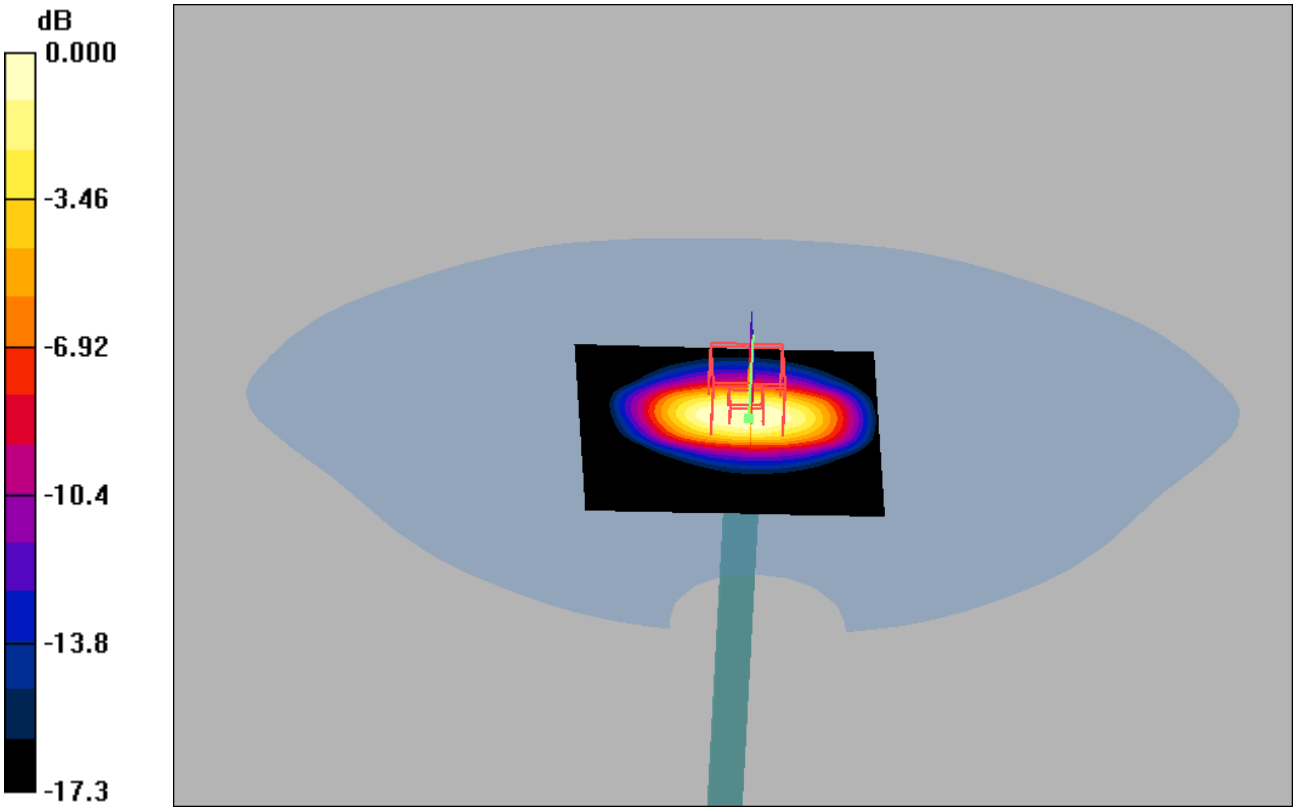
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

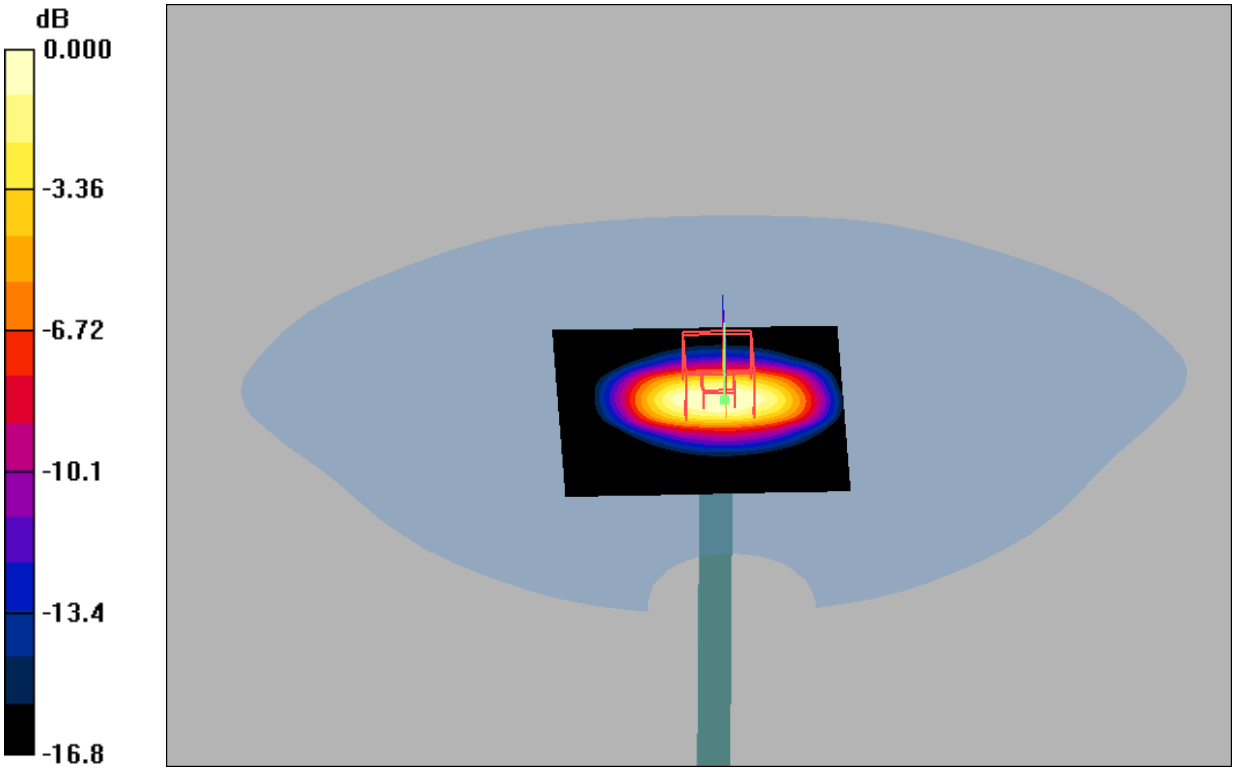
1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Body_537_1020_19Mar09_T01
File Name: Validation_1900Body_537_1020_19Mar09_T01.da4
Phantom: SAM with CRP (High Band Body)Phantom section: Flat Section
Probe: ET3DV6 - SN1539ConvF(4.21, 4.21, 4.21)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.53 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.11 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.8 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 7.32 W/kg
SAR(1 g) = 3.98 mW/g; SAR(10 g) = 2.08 mW/g
Maximum value of SAR (measured) = 4.47 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.8 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 7.50 W/kg
SAR(1 g) = 4.06 mW/g; SAR(10 g) = 2.12 mW/g
Maximum value of SAR (measured) = 4.41 mW/g
Procedure Notes: Pin: before 100.6 mW / after 98.9 mW Humidity - 39.4 % Ambient Temp - 21.7 C Simulant Temp - 21.5 C



0 dB = 4.41mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

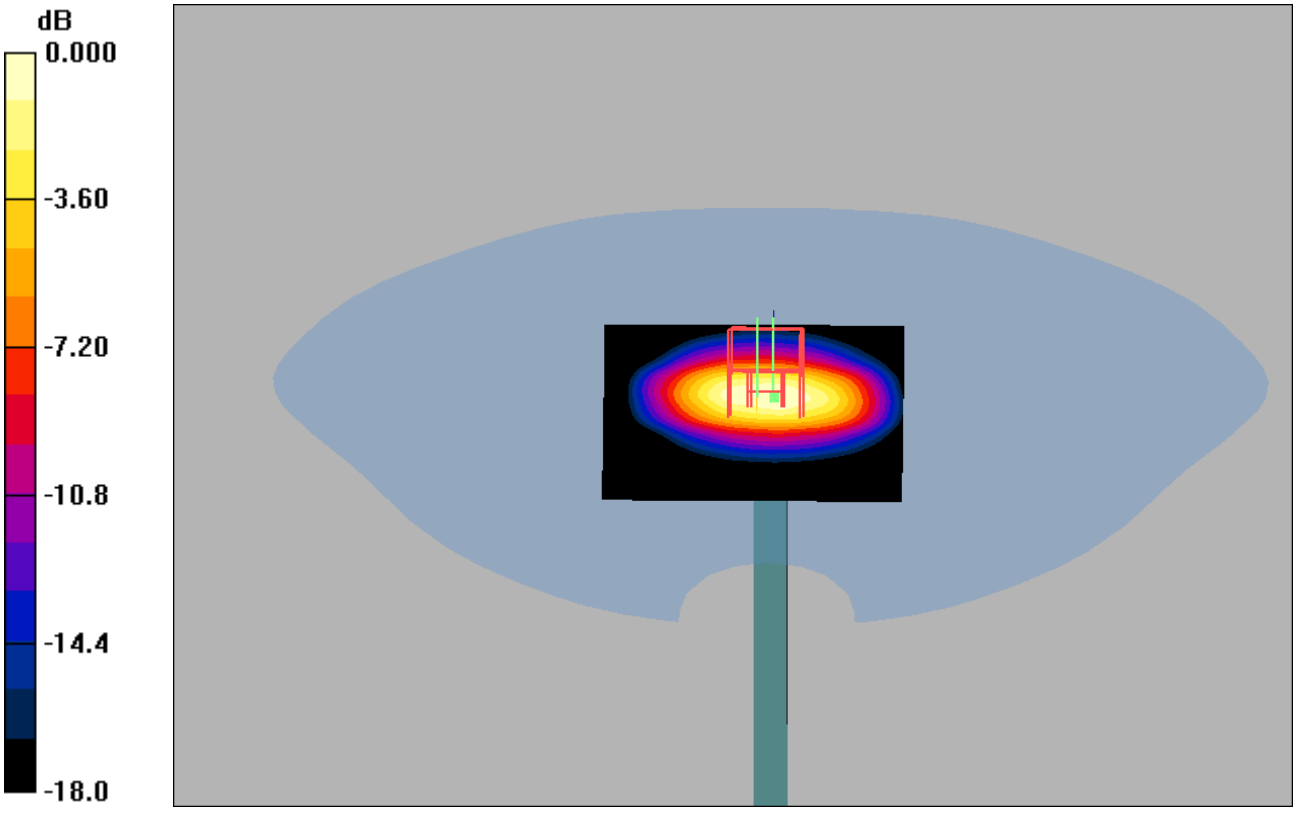
1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Body_537_1020_23Mar09_T01
File Name: Validation_1900Body_537_1020_23Mar09_T01.da4
Phantom: SAM with CRP (High Band Body)Phantom section: Flat Section
Probe: ET3DV6 - SN1539ConvF(4.21, 4.21, 4.21)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.49 mho/m; ε_r = 51.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.45 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 58.7 V/m; Power Drift = 0.008 dB
Peak SAR (extrapolated) = 7.54 W/kg
SAR(1 g) = 4.15 mW/g; SAR(10 g) = 2.18 mW/g
Maximum value of SAR (measured) = 4.63 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 58.7 V/m; Power Drift = 0.008 dB
Peak SAR (extrapolated) = 7.66 W/kg
SAR(1 g) = 4.19 mW/g; SAR(10 g) = 2.2 mW/g
Maximum value of SAR (measured) = 4.62 mW/g
Procedure Notes: Pin: before 100.1 mW / after 100.3 mW
Humidity - 41.4 % Ambient Temp - 21.4 C Simulant Temp - 21.6 C



0 dB = 4.62mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Body_537_1054_29Mar09_T01
File Name: Validation_1900Body_537_1054_29Mar09_T01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1538ConvF(5.18, 5.18, 5.18)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.47 mho/m; ε_r = 40; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Dipole at 10 mm/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.68 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.8 V/m; Power Drift = 0.039 dB
Peak SAR (extrapolated) = 6.84 W/kg
SAR(1 g) = 3.79 mW/g; SAR(10 g) = 1.97 mW/g
Maximum value of SAR (measured) = 4.30 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.8 V/m; Power Drift = 0.039 dB
Peak SAR (extrapolated) = 7.13 W/kg
SAR(1 g) = 3.98 mW/g; SAR(10 g) = 2.08 mW/g
Maximum value of SAR (measured) = 4.49 mW/g
Procedure Notes: Pin: before 100.3 mW / after 97.5 mW Humidity - 43.4 % Ambient Temp - 22.3 C Simulant Temp - 22.5 C



0 dB = 4.49mW/g

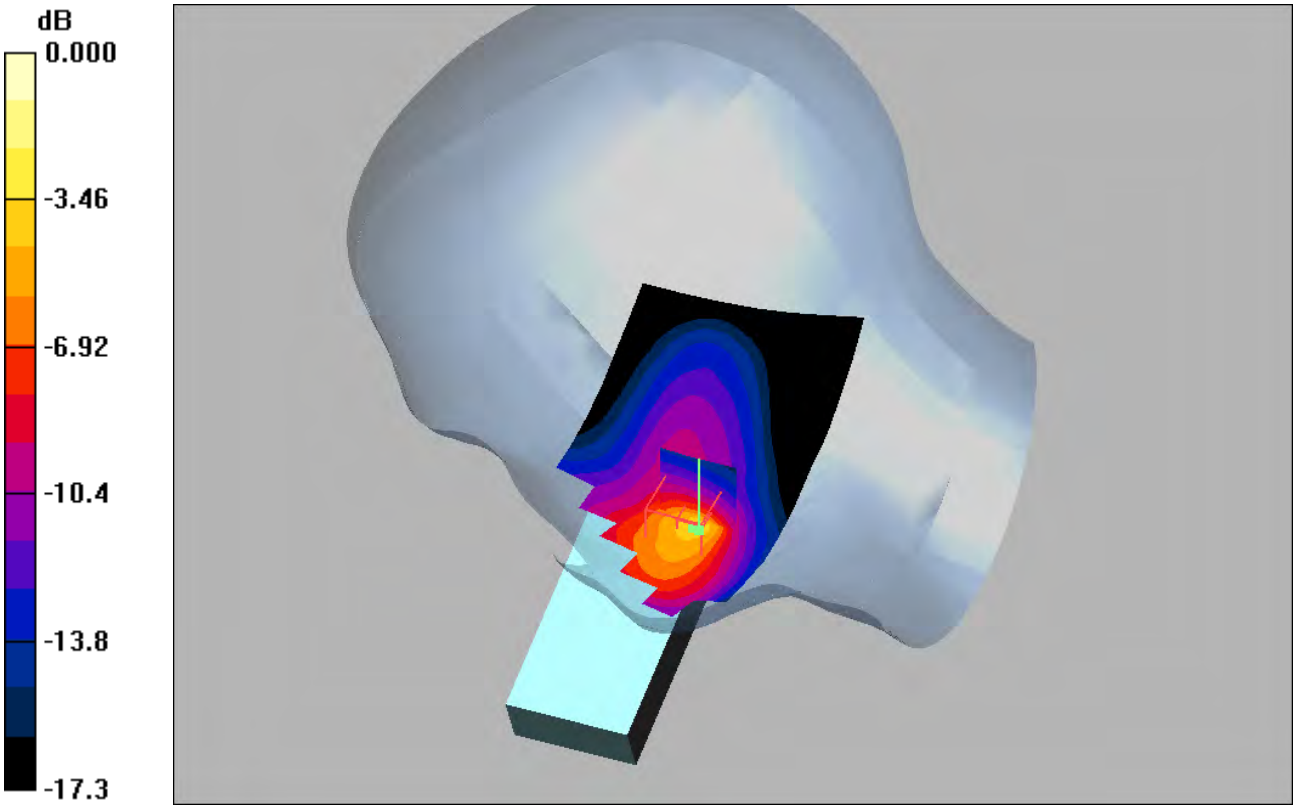
Appendix 2

SAR distribution plots for Phantom Head Adjacent Use

800 GSM Band: SAR Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Right Cheek Position.
Date/Time: 3/19/2009 8:28:18 AM
File Name: 19Mar09_T707t_GSM850_71K4_RCT01.da4
DUT: T707t
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1583ConvF(6.48, 6.48, 6.48)
Medium parameters used (interpolated): f = 836 MHz; σ = 0.922 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-39 Humidity - 36.6 % Ambient Temp - 21.8 C Simulant Temp - 21.6 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1583; ConvF(6.48, 6.48, 6.48); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1023
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

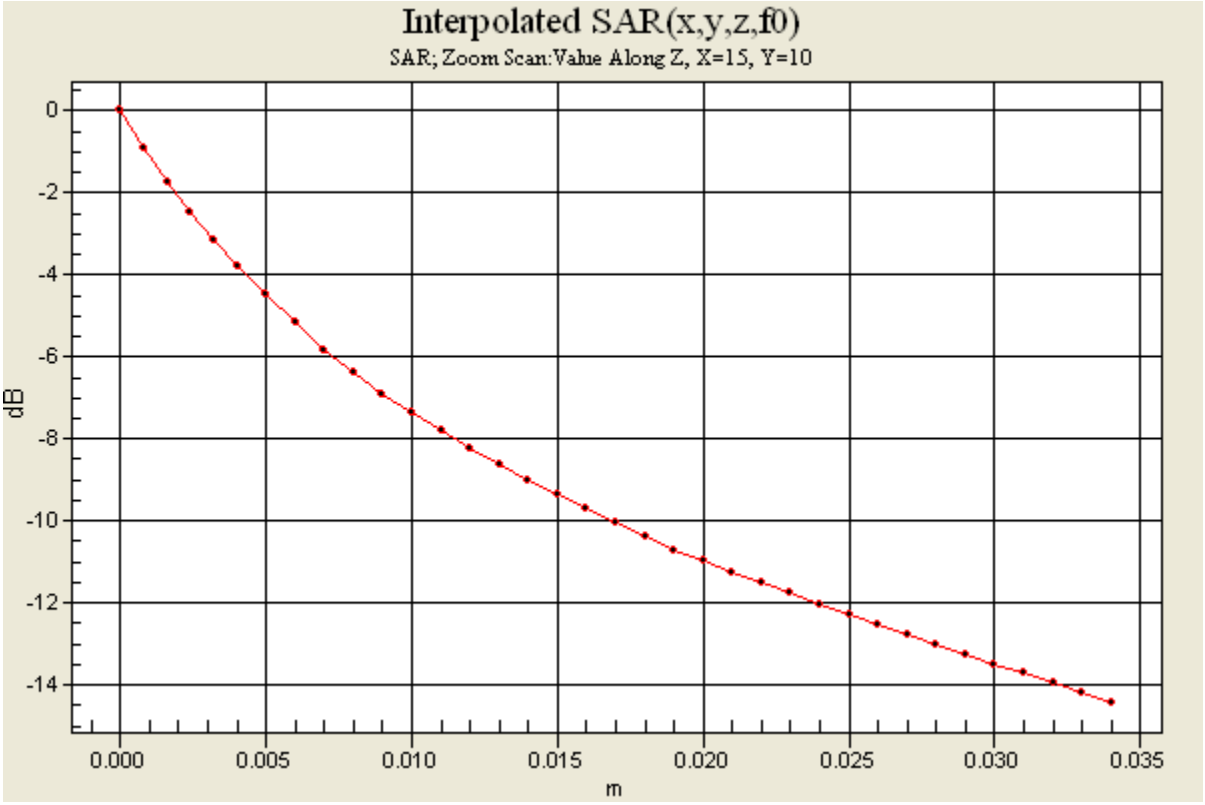
Middle channel cheek/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.987 mW/g
Middle channel cheek/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.74 V/m; Power Drift = -0.048 dB
Peak SAR (extrapolated) = 2.34 W/kg
SAR(1 g) = 0.903 mW/g; SAR(10 g) = 0.496 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.983 mW/g
Middle channel cheek/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.74 V/m; Power Drift = -0.048 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 2.34 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



0 dB = 2.34mW/g

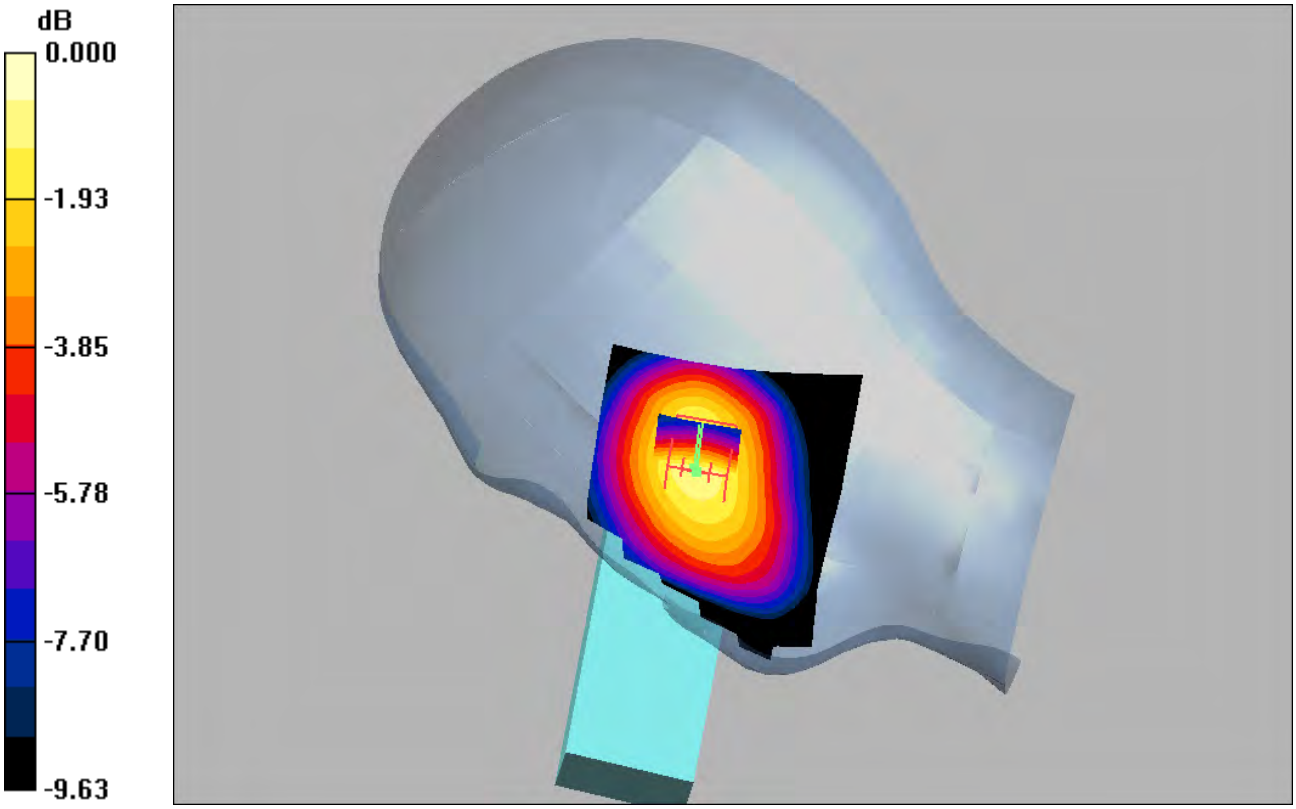
Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Right Tilt Position.
Date/Time: 3/19/2009 9:34:26 AM
File Name: 19Mar09_T707t_GSM850_71K4_RCT01.da4
DUT: T707t
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1583ConvF(6.48, 6.48, 6.48)
Medium parameters used (interpolated): f = 836 MHz; σ = 0.922 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-39 Humidity - 36.6 % Ambient Temp - 21.8 C Simulant Temp - 21.6 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1583; ConvF(6.48, 6.48, 6.48); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1023
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

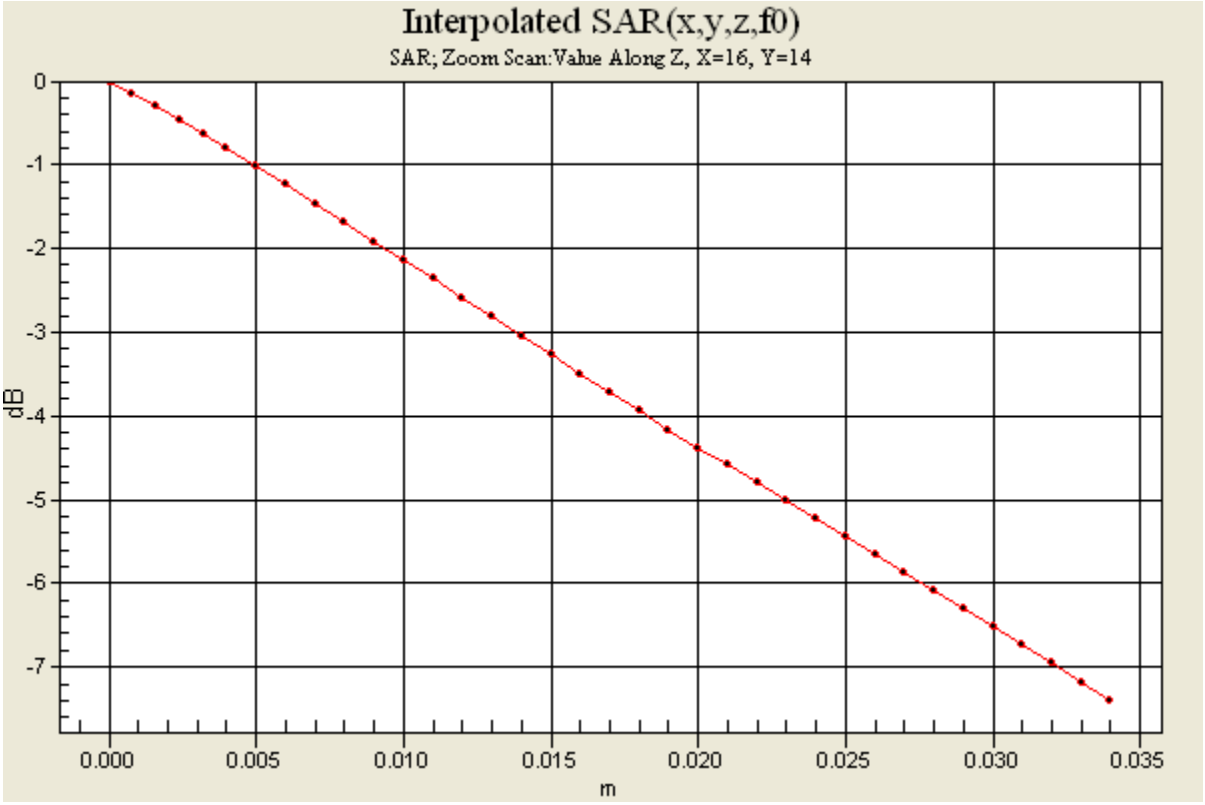
Middle channel tilt/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.323 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = 0.004 dB
Peak SAR (extrapolated) = 0.394 W/kg
SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.227 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.327 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = 0.004 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.394 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	



0 dB = 0.394mW/g

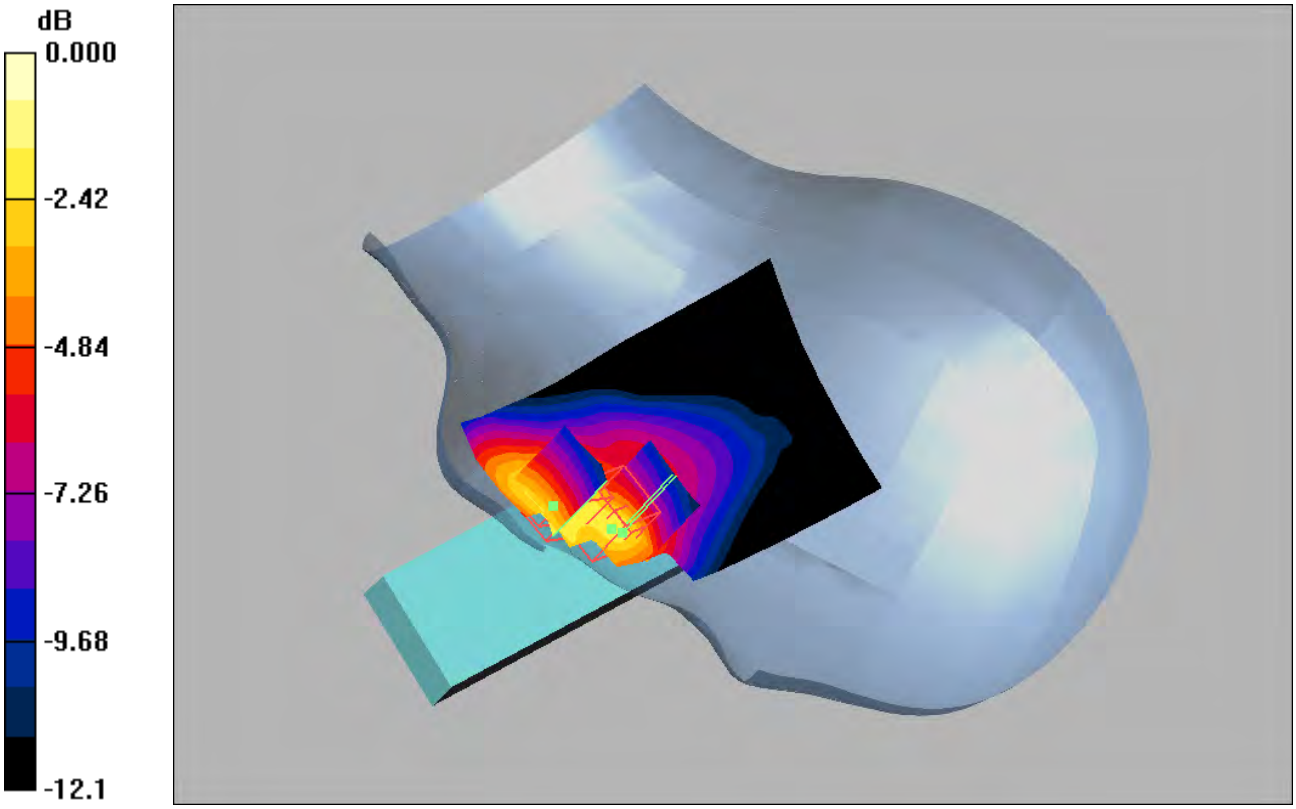
Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	



800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Left Cheek Position.
Date/Time: 3/19/2009 3:00:17 PM
File Name: 19Mar09_T707t_GSM850_71K4_LCT01.da4
DUT: T707t
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1583ConvF(6.48, 6.48, 6.48)
Medium parameters used (interpolated): f = 824 MHz; σ = 0.911 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-39 Humidity - 36.6 % Ambient Temp - 21.8 C Simulant Temp - 21.6 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1583; ConvF(6.48, 6.48, 6.48); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1023
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

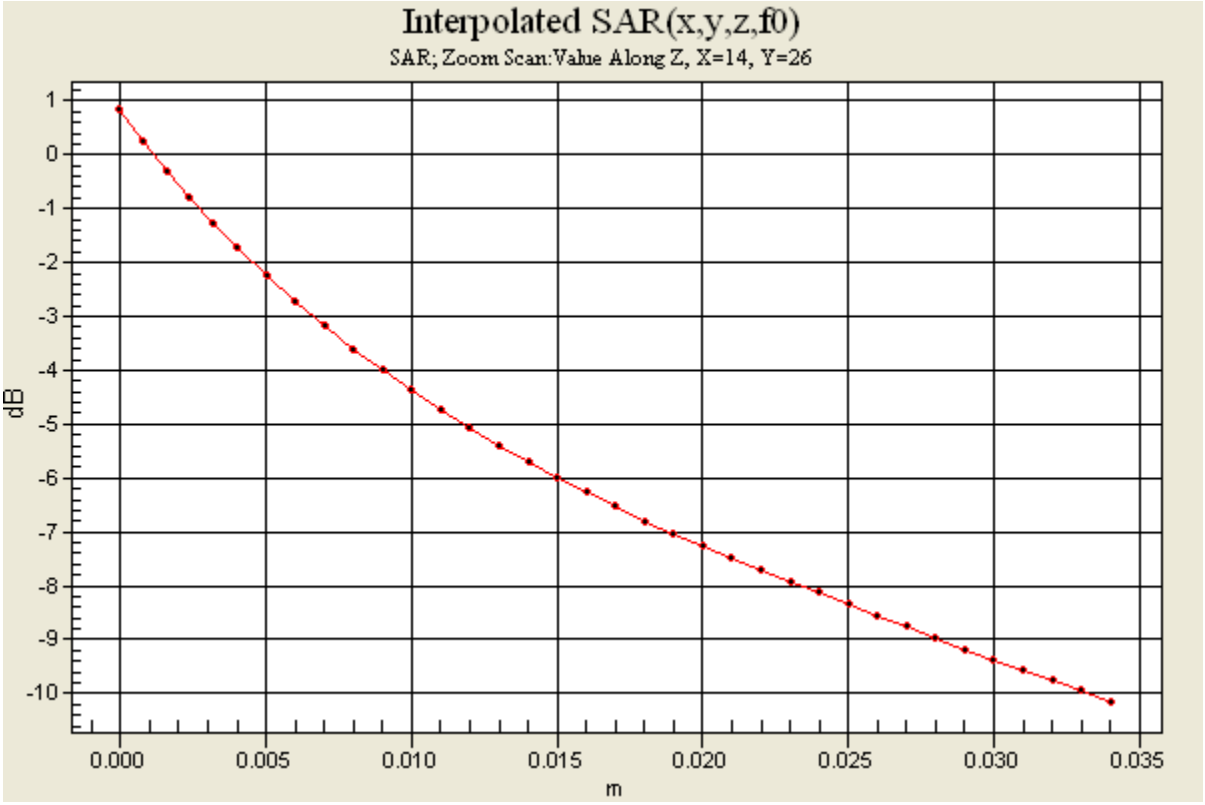
Low channel cheek/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.545 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.13 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 0.978 W/kg
SAR(1 g) = 0.515 mW/g; SAR(10 g) = 0.357 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.558 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 1:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.13 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 0.810 W/kg
SAR(1 g) = 0.512 mW/g; SAR(10 g) = 0.367 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.564 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.13 V/m; Power Drift = -0.022 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.978 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



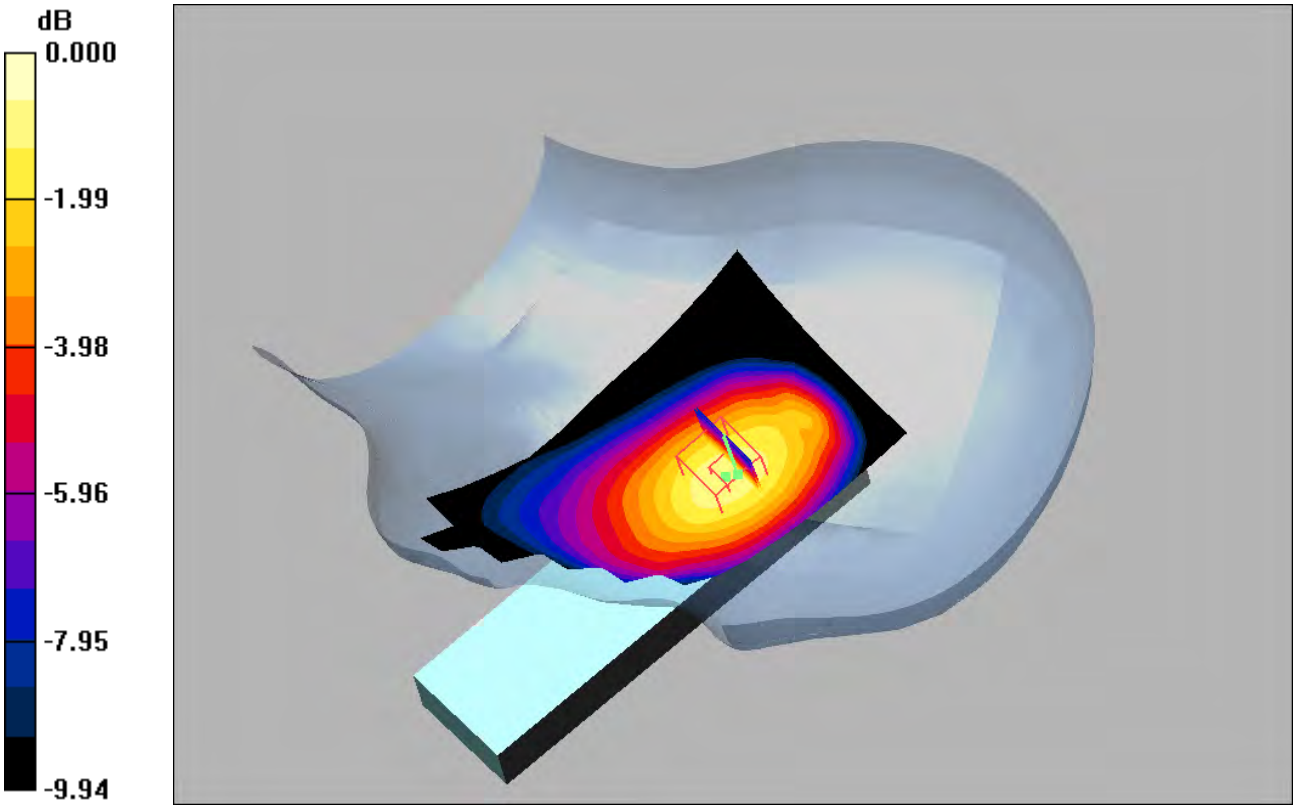
0 dB = 0.810mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	



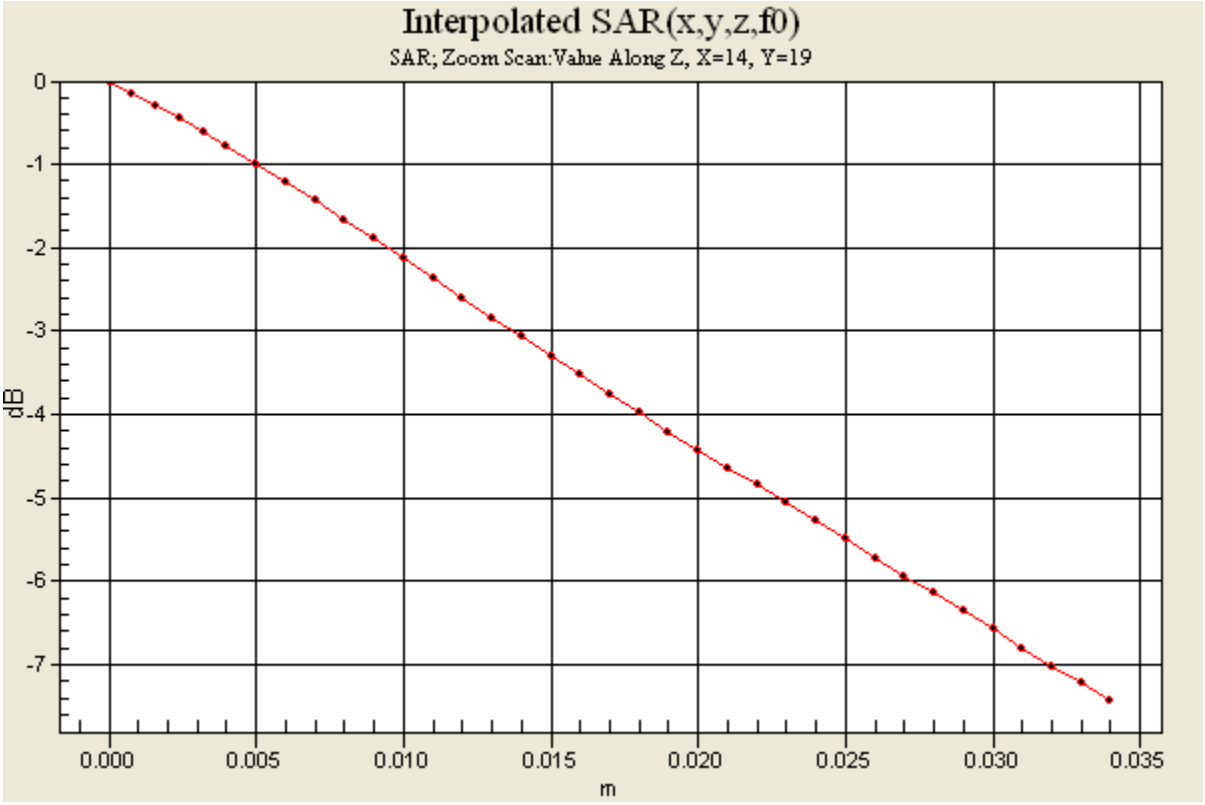
800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Left Tilt Position.
Date/Time: 3/19/2009 12:33:55 PM
File Name: 19Mar09_T707t_GSM850_71K4_LCT01.da4
DUT: T707t
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1583ConvF(6.48, 6.48, 6.48)
Medium parameters used (interpolated): f = 836 MHz; σ = 0.922 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-39 Humidity - 36.6 % Ambient Temp - 21.8 C Simulant Temp - 21.6 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1583; ConvF(6.48, 6.48, 6.48); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1023
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Middle channel tilt/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.347 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.7 V/m; Power Drift = 0.003 dB
Peak SAR (extrapolated) = 0.419 W/kg
SAR(1 g) = 0.331 mW/g; SAR(10 g) = 0.244 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.349 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.7 V/m; Power Drift = 0.003 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.419 mW/g



0 dB = 0.419mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



1900 GSM Band: Distribution and Extrapolation of Maximum SAR

Model: T707T with Standard Battery: BST-39, Right Cheek Position.

Date/Time: 3/25/2009 10:29:33 AM

File Name: 25Mar09_T707t_GSM1900_71M1_RCT01.da4

DUT: T707t

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

Probe: ET3DV6 - SN1583ConvF(5.12, 5.12, 5.12)

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.4 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3

Measurement Standard: DASY4 (High Precision Assessment)

Program Notes: Battery - BST-39 Humidity: 42.6 % Ambient Temp: 21.1 C Simulant Temp: 21.4 C

DASY4 Configuration:

- Probe: ET3DV6 - SN1583; ConvF(5.12, 5.12, 5.12); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1335
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Low channel cheek/Area Scan (51x101x1):

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.559 mW/g

Low channel cheek/Zoom Scan (7x7x7)/Cube 0:

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

Reference Value = 3.46 V/m; Power Drift = -0.055 dB

Peak SAR (extrapolated) = 0.819 W/kg

SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.317 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.547 mW/g

Low channel cheek/Zoom Scan (31x31x36)/Cube 0:

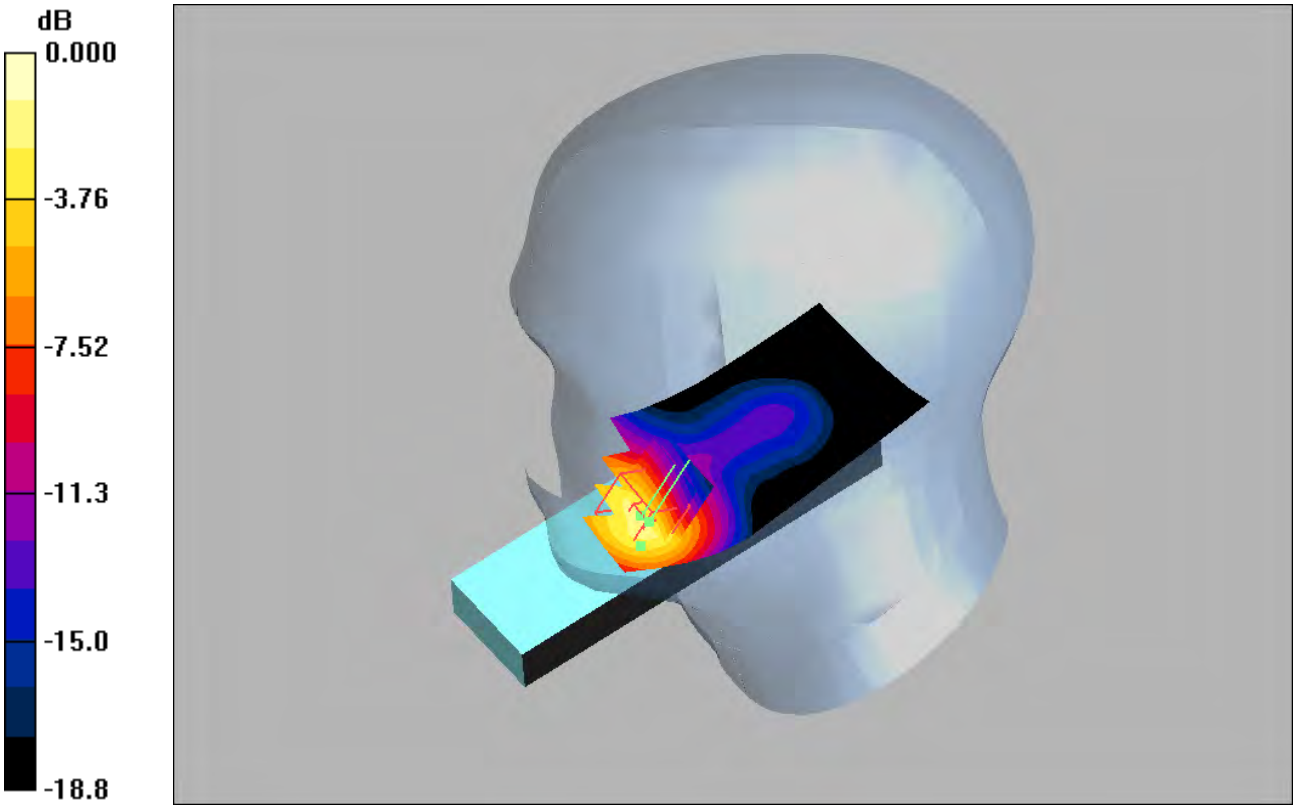
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.46 V/m; Power Drift = -0.055 dB

Info: Interpolated medium parameters used for SAR evaluation.

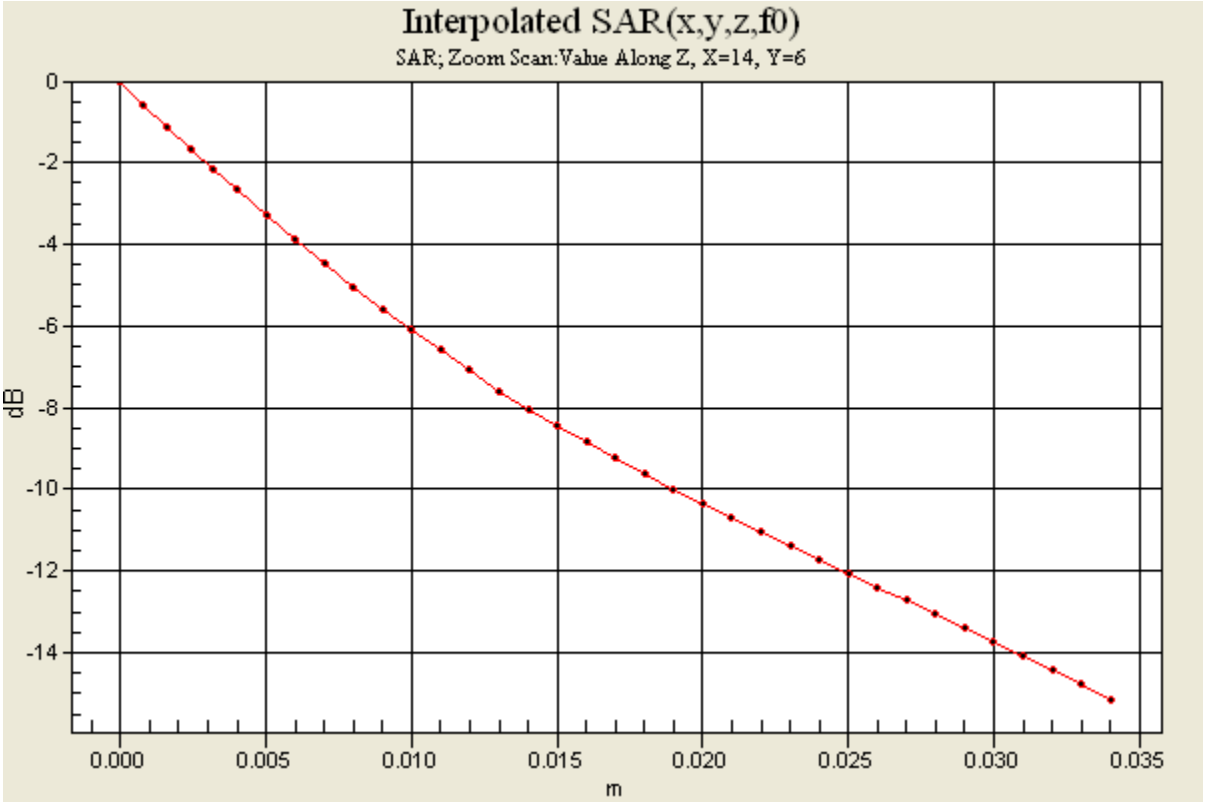
Maximum value of SAR (interpolated) = 0.819 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



0 dB = 0.819mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	



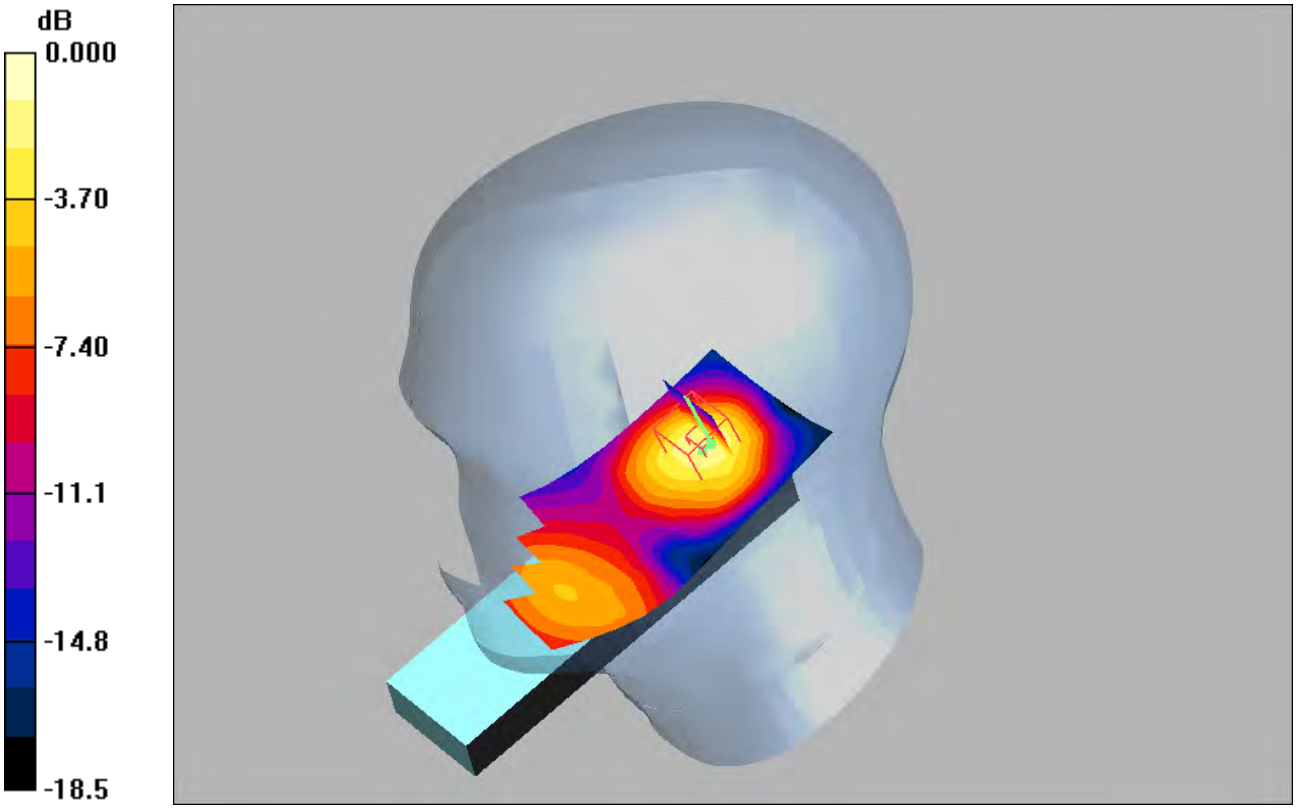
1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Right Tilt Position.
Date/Time: 3/25/2009 11:50:26 AM
File Name: 25Mar09_T707t_GSM1900_71M1_RCT01.da4
DUT: T707t
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1583ConvF(5.12, 5.12, 5.12)
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.4 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery - BST-39 Humidity: 42.6 % Ambient Temp: 21.1 C Simulant Temp: 21.4 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1583; ConvF(5.12, 5.12, 5.12); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1335
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Low channel tilt/Area Scan (51x101x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.149 mW/g

Low channel tilt/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.80 V/m; Power Drift = -0.039 dB
Peak SAR (extrapolated) = 0.192 W/kg
SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.074 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.138 mW/g

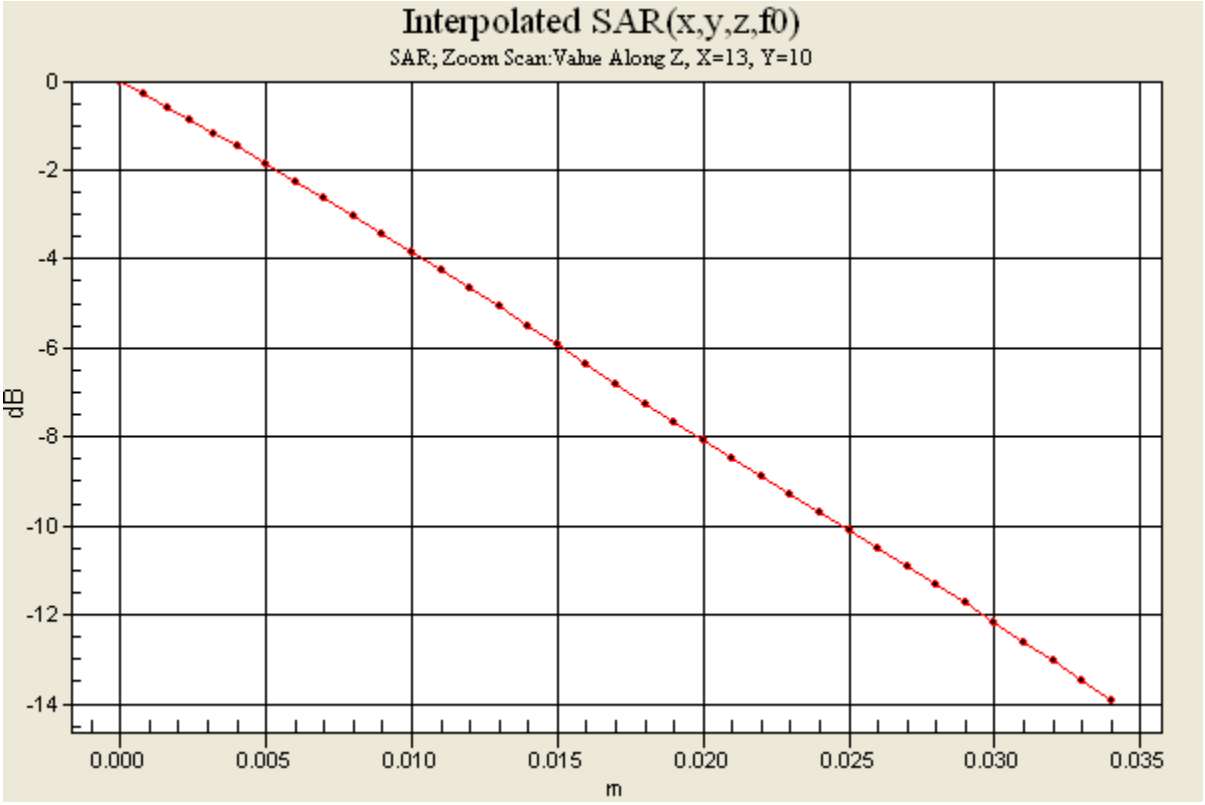
Low channel tilt/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.80 V/m; Power Drift = -0.039 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.192 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



0 dB = 0.192mW/g

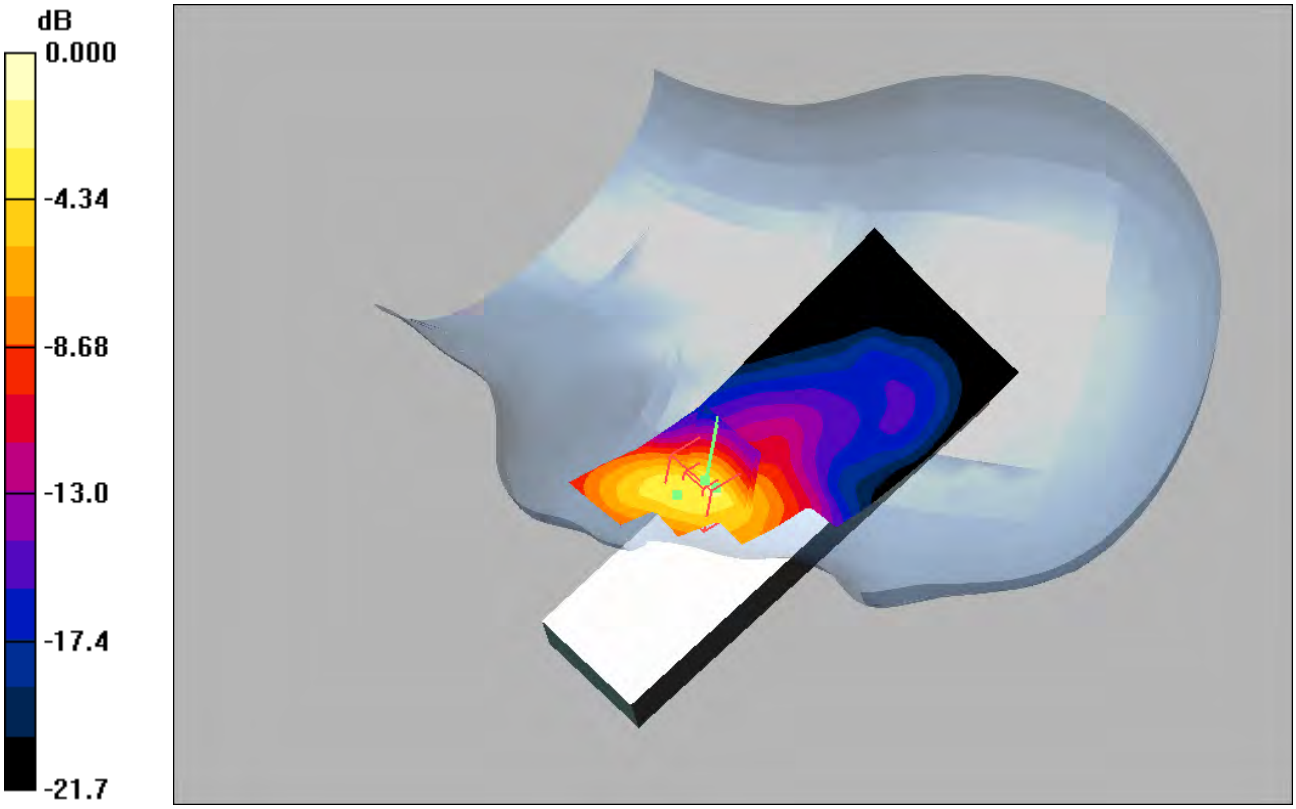
Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Left Cheek Position.
Date/Time: 3/25/2009 8:23:40 AM
File Name: 25Mar09_T707t_GSM1900_71M1_LCT01.da4
DUT: T707t
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1583ConvF(5.12, 5.12, 5.12)
Medium parameters used: f = 1880 MHz; σ = 1.42 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery - BST-39 Humidity: 42.6 % Ambient Temp: 21.1 C Simulant Temp: 21.4 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1583; ConvF(5.12, 5.12, 5.12); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1335
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

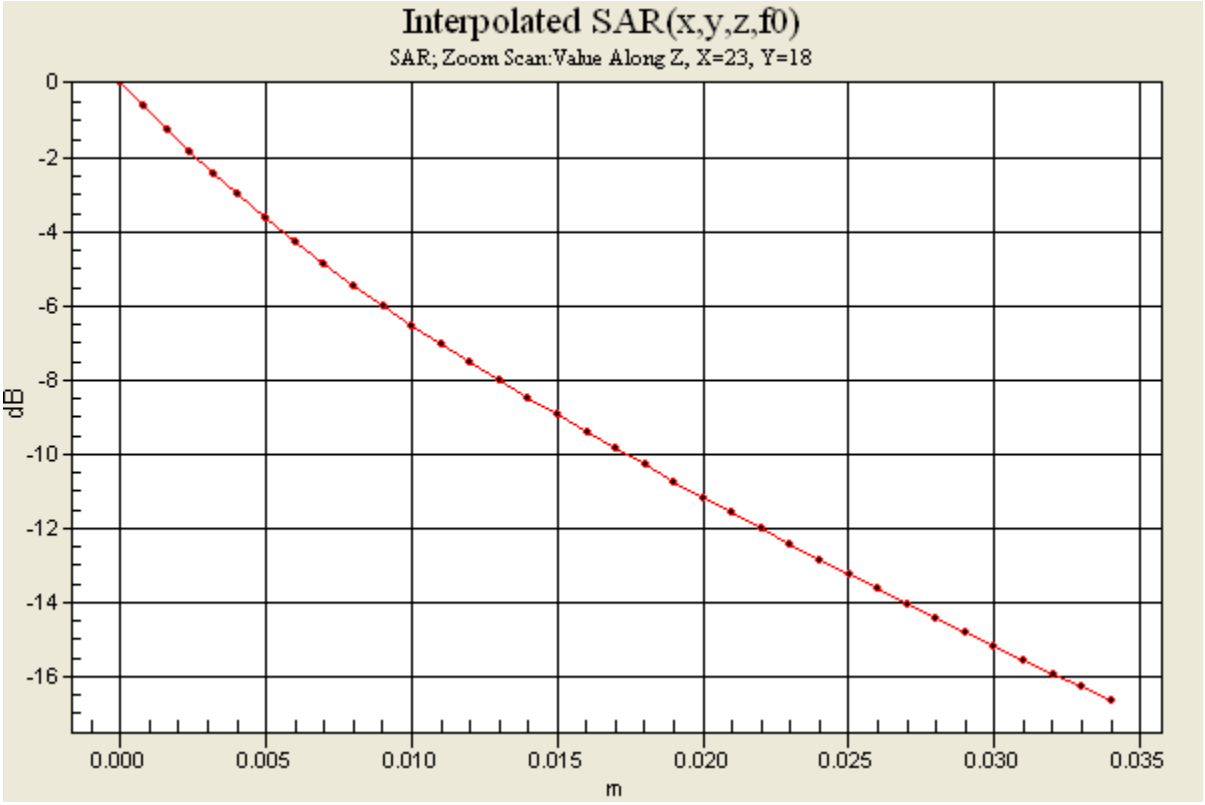
Middle channel cheek/Area Scan (51x101x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.469 mW/g
Middle channel cheek/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.18 V/m; Power Drift = 0.130 dB
Peak SAR (extrapolated) = 0.844 W/kg
SAR(1 g) = 0.414 mW/g; SAR(10 g) = 0.253 mW/g
Maximum value of SAR (measured) = 0.446 mW/g
Middle channel cheek/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.18 V/m; Power Drift = 0.130 dB
Maximum value of SAR (interpolated) = 0.844 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	



0 dB = 0.844mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

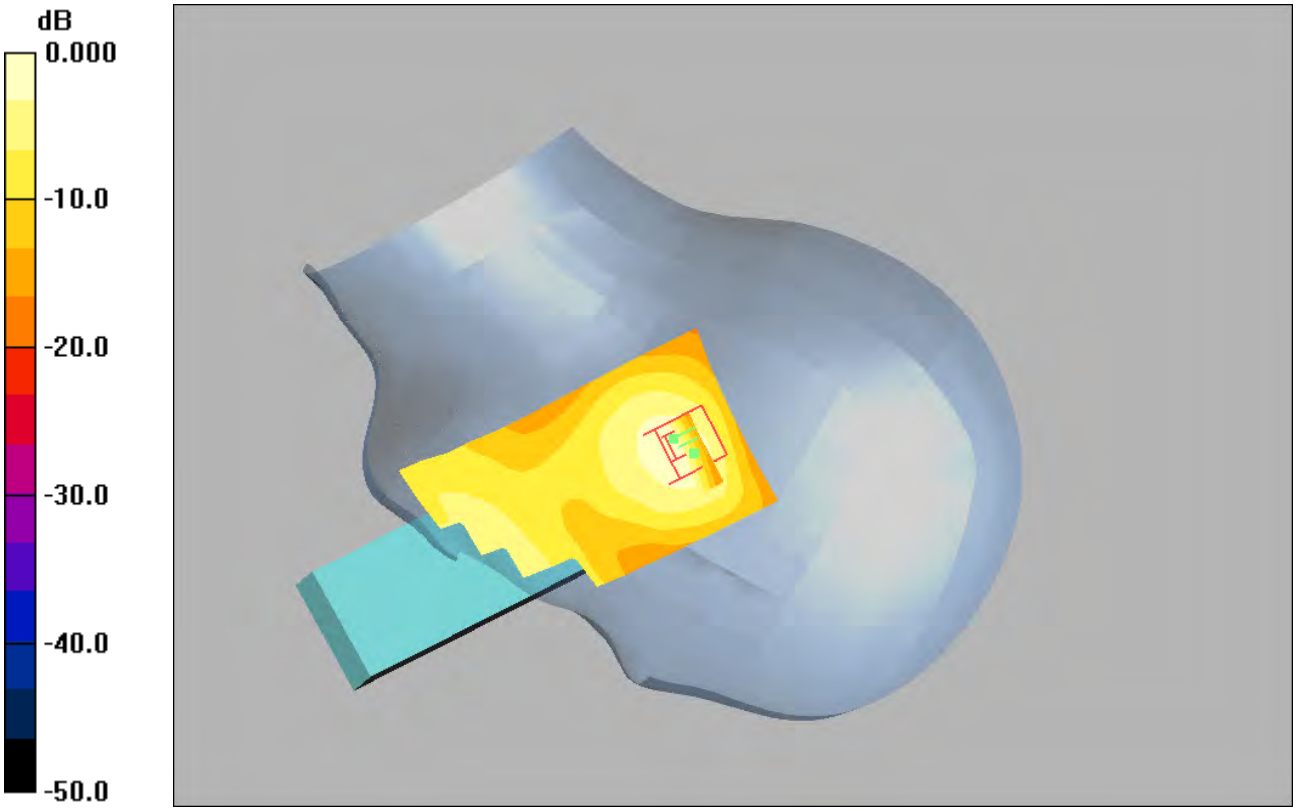


Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Left Tilt Position.
Date/Time: 3/25/2009 9:22:12 AM
File Name: 25Mar09_T707t_GSM1900_71M1_LCT01.da4
DUT: T707t
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1583ConvF(5.12, 5.12, 5.12)
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.4 mho/m; ε_r = 38.6; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery - BST-39 Humidity: 42.6 % Ambient Temp: 21.1 C Simulant Temp: 21.4 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1583; ConvF(5.12, 5.12, 5.12); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (High Band Head); Type: SAM; Serial: TP: 1335
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

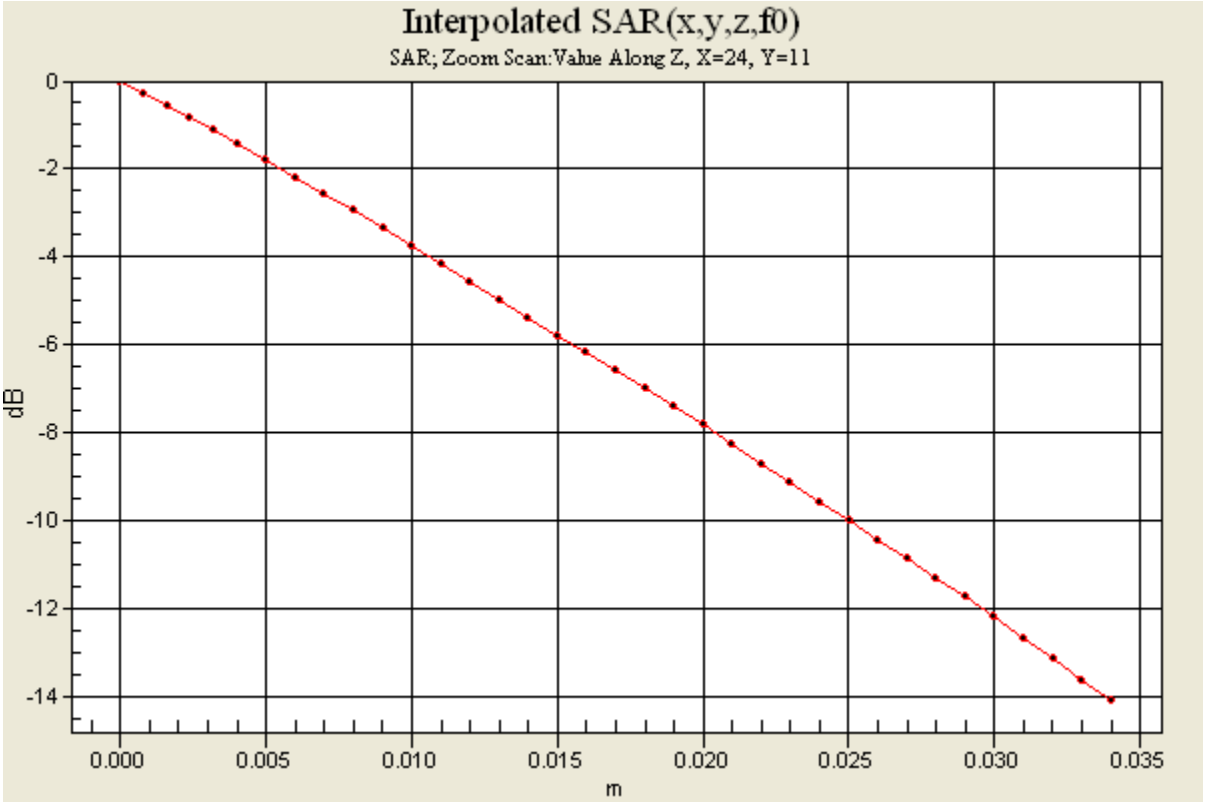
Low channel tilt/Area Scan (51x101x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.133 mW/g
Low channel tilt/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.27 V/m; Power Drift = 0.097 dB
Peak SAR (extrapolated) = 0.166 W/kg
SAR(1 g) = 0.109 mW/g; SAR(10 g) = 0.064 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.119 mW/g
Low channel tilt/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.27 V/m; Power Drift = 0.097 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.166 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	



0 dB = 0.166mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



Band IV WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Right Cheek Position.
26Mar09_T707t_B4WCDMA_71M1_RCT01

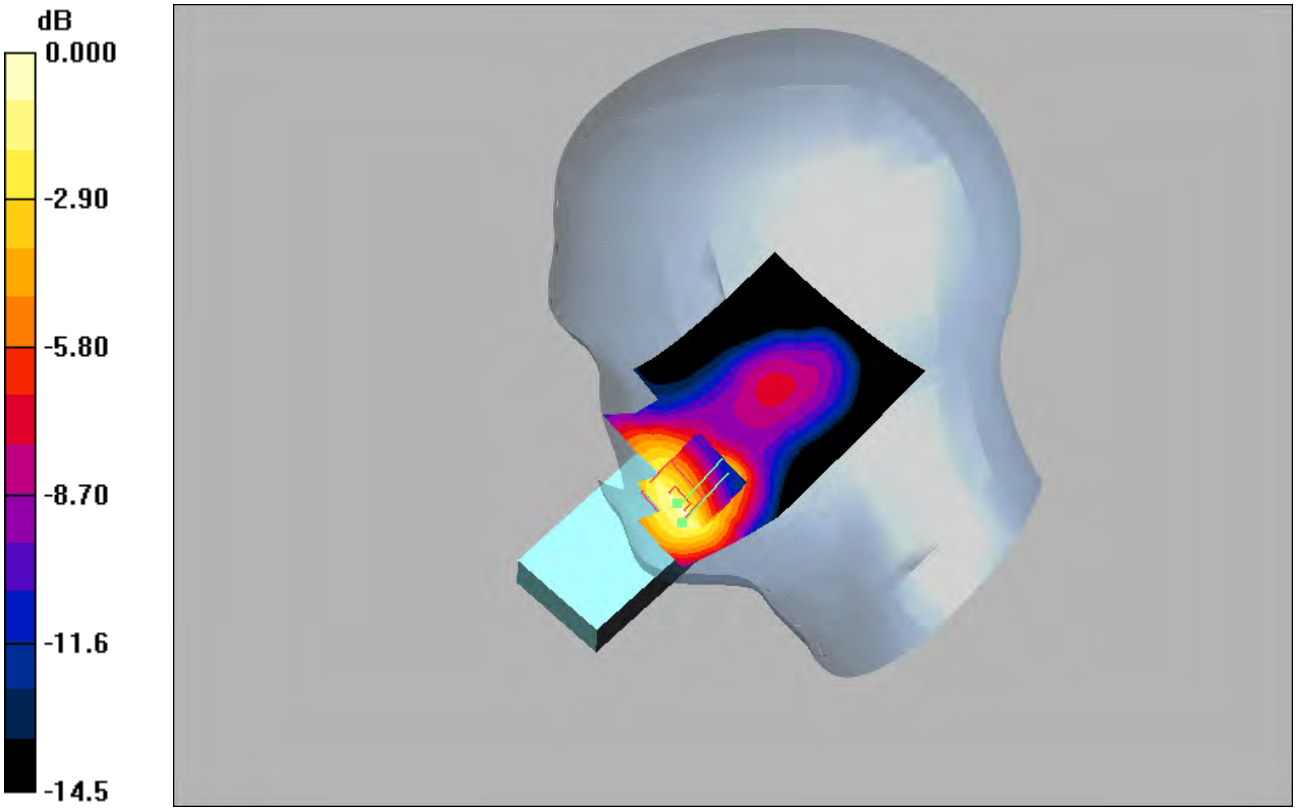
File Name: 26Mar09_T707t_B4WCDMA_71M1_RCT01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1583ConvF(5.4, 5.4, 5.4)Duty Cycle: 1:1Frequency: 1712.4 MHz
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.26 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)

Low channel cheek/Area Scan (61x101x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.637 mW/g

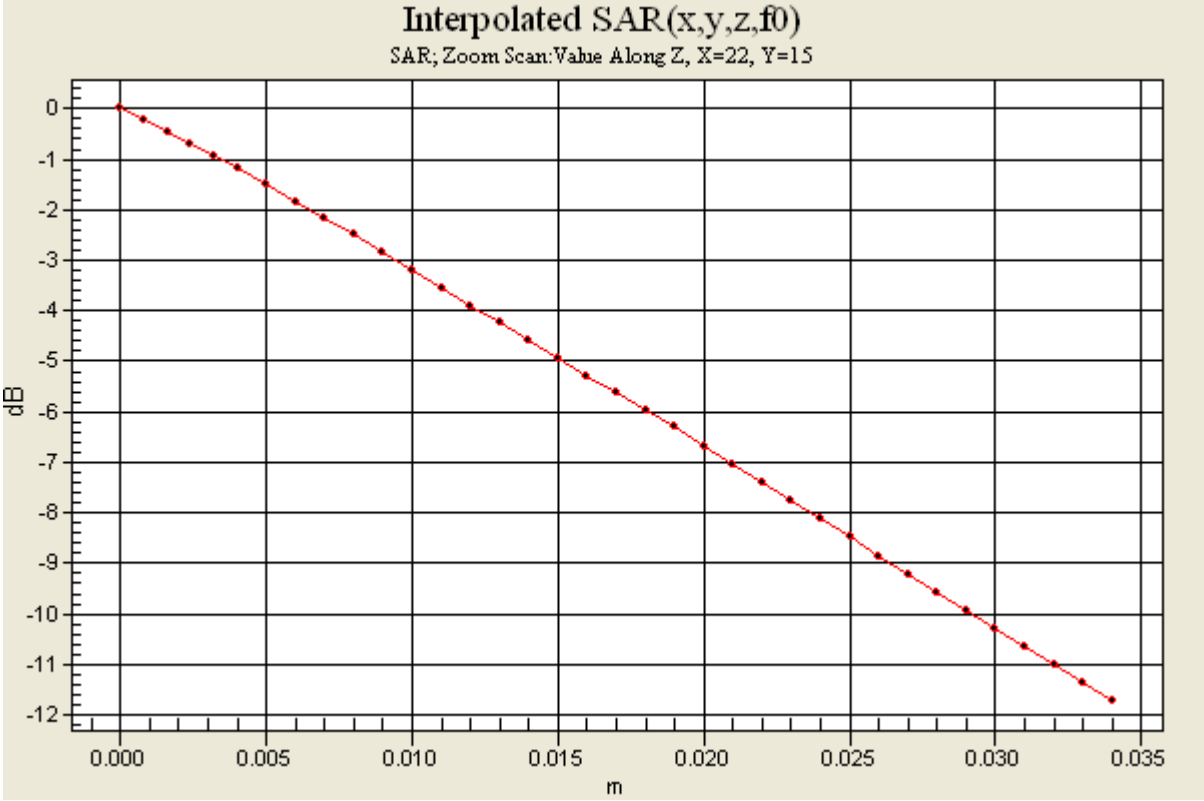
Low channel cheek/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.33 V/m; Power Drift = -0.179 dB
Peak SAR (extrapolated) = 0.759 W/kg
SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.380 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.611 mW/g

Low channel cheek/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.33 V/m; Power Drift = -0.179 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.759 mW/g

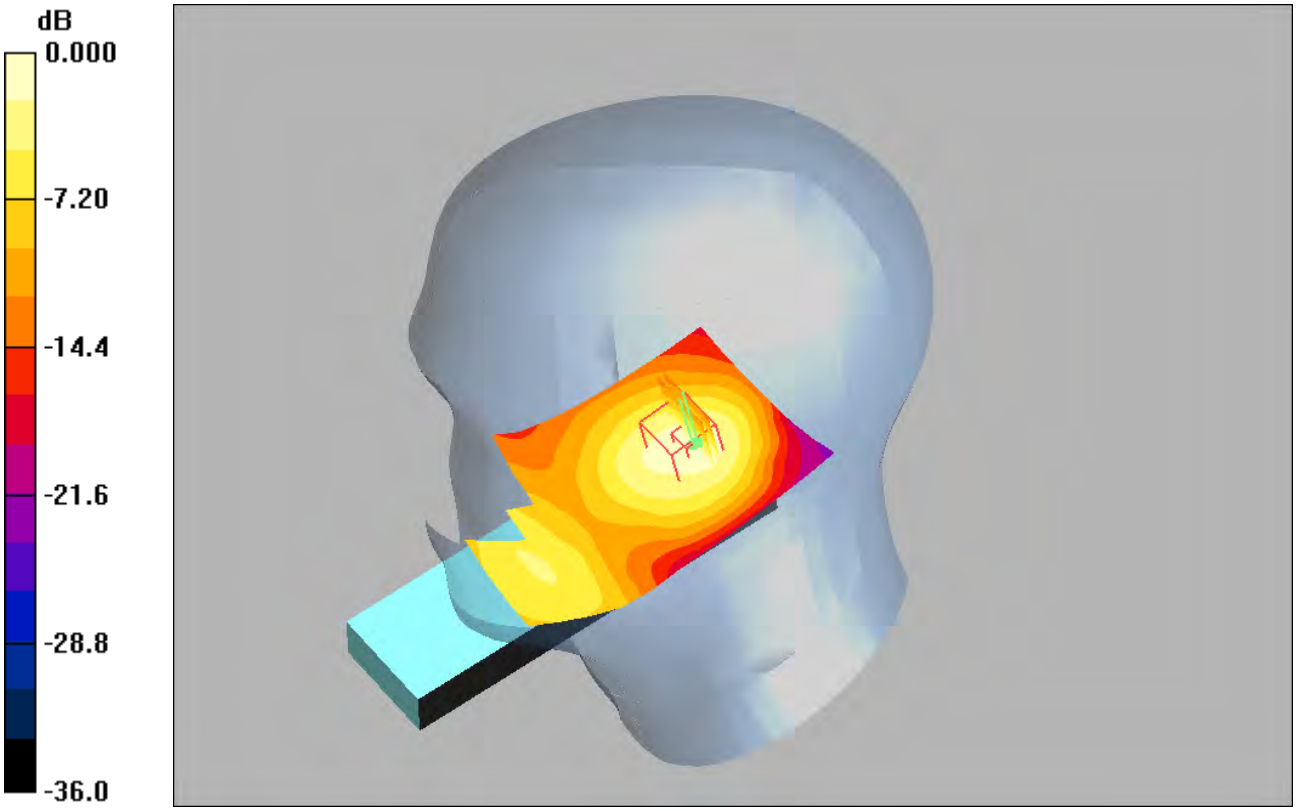


0 dB = 0.759mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

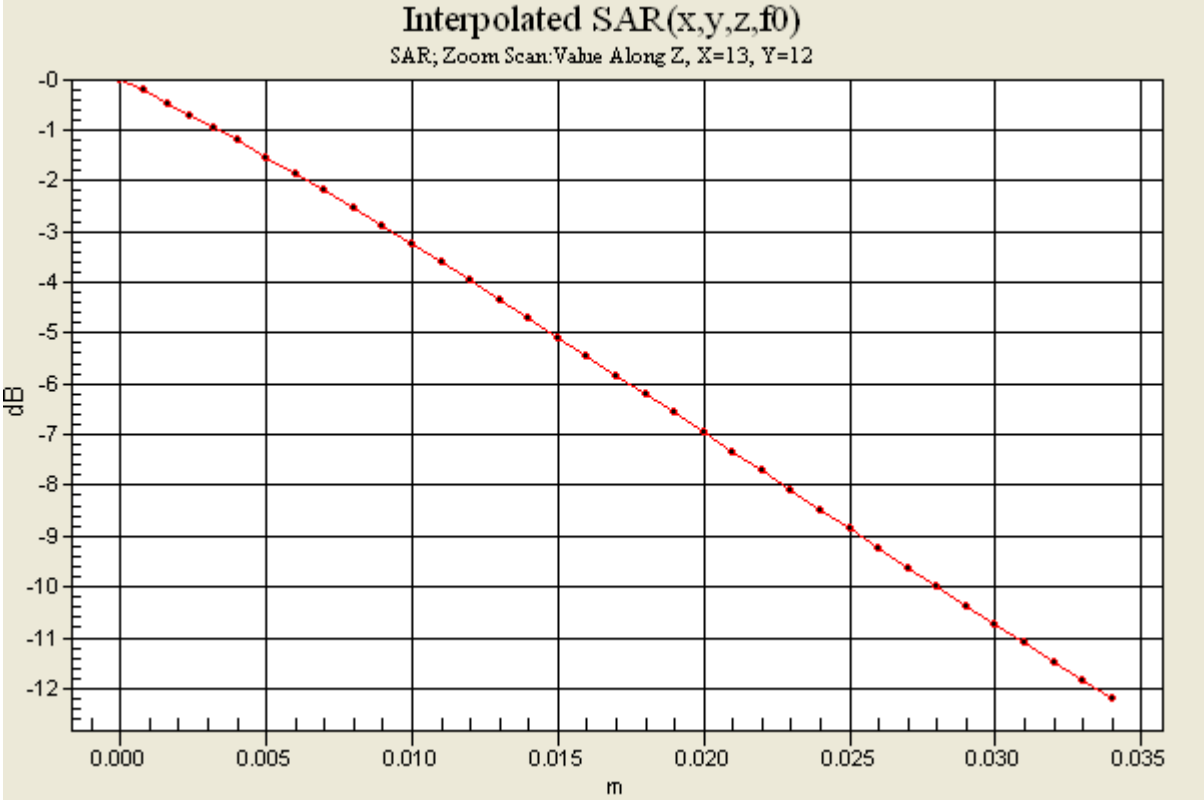


Band IV WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Right Tilt Position.
26Mar09_T707t_B4WCDMA_71M1_RCT01
File Name: 26Mar09_T707t_B4WCDMA_71M1_RCT01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1583ConvF(5.4, 5.4, 5.4)Duty Cycle: 1:1Frequency: 1732.6 MHz
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.29 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Middle channel tilt/Area Scan (61x101x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.236 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.6 V/m; Power Drift = 0.127 dB
Peak SAR (extrapolated) = 0.285 W/kg
SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.128 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.218 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.6 V/m; Power Drift = 0.127 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.285 mW/g

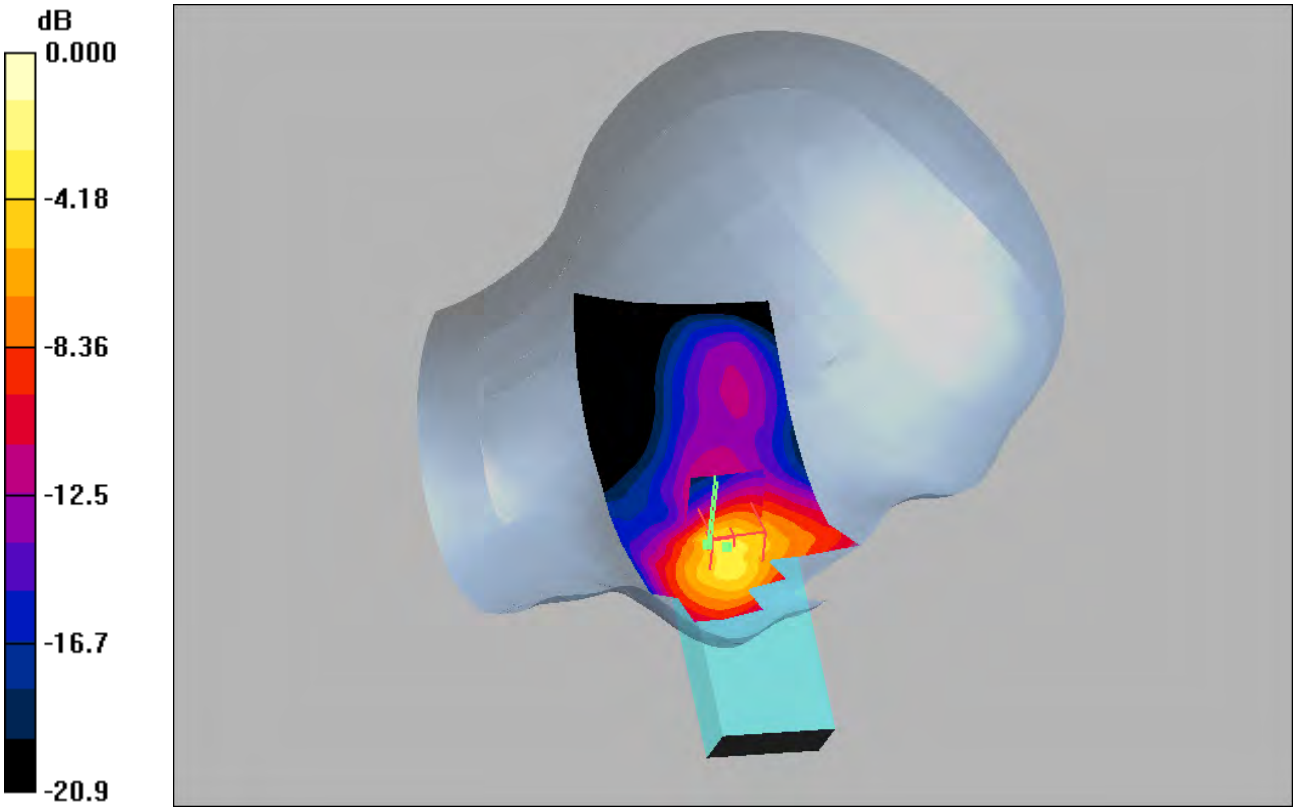


0 dB = 0.285mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

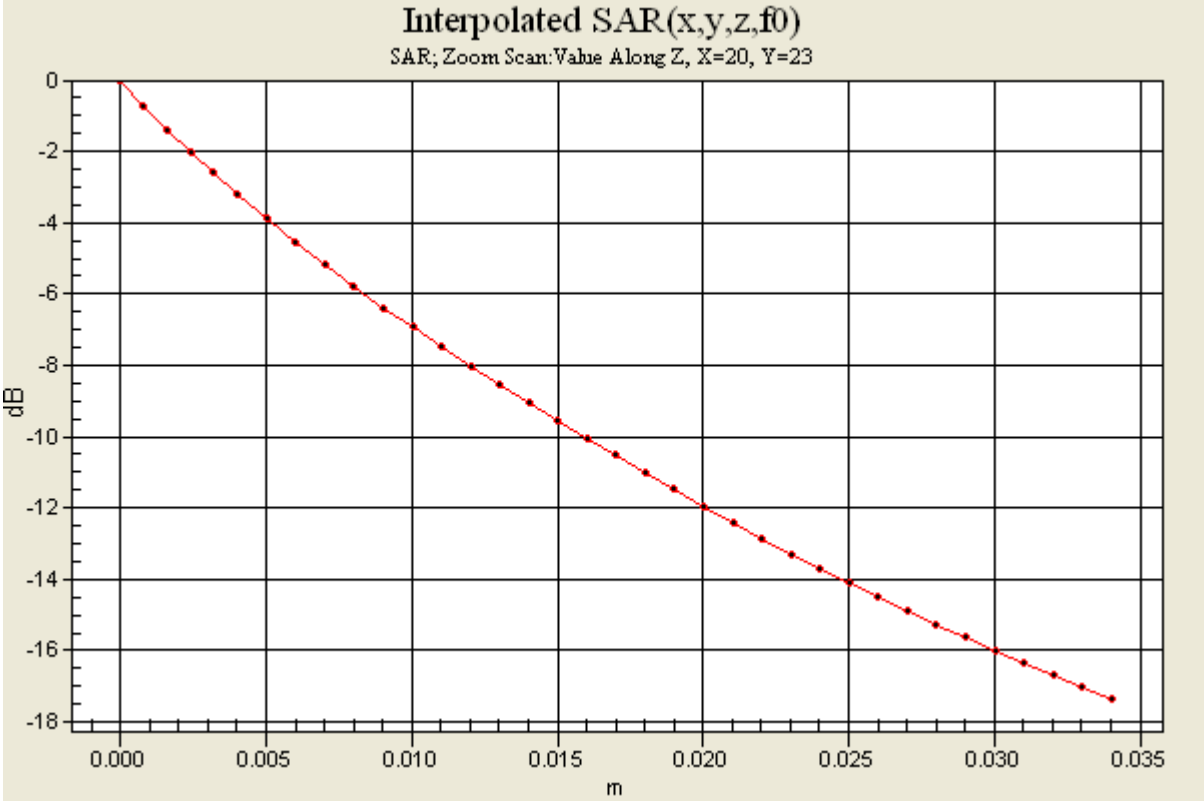


Band IV WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Left Cheek Position.
26Mar09_T707t_B4WCDMA_71M1_LCT01
File Name: 26Mar09_T707t_B4WCDMA_71M1_LCT01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1583ConvF(5.4, 5.4, 5.4)Duty Cycle: 1:1Frequency: 1712.4 MHz
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.26 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Low channel cheek/Area Scan (61x101x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.899 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.92 V/m; Power Drift = -0.082 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 0.768 mW/g; SAR(10 g) = 0.475 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.830 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.92 V/m; Power Drift = -0.082 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.73 mW/g
Procedure Notes:

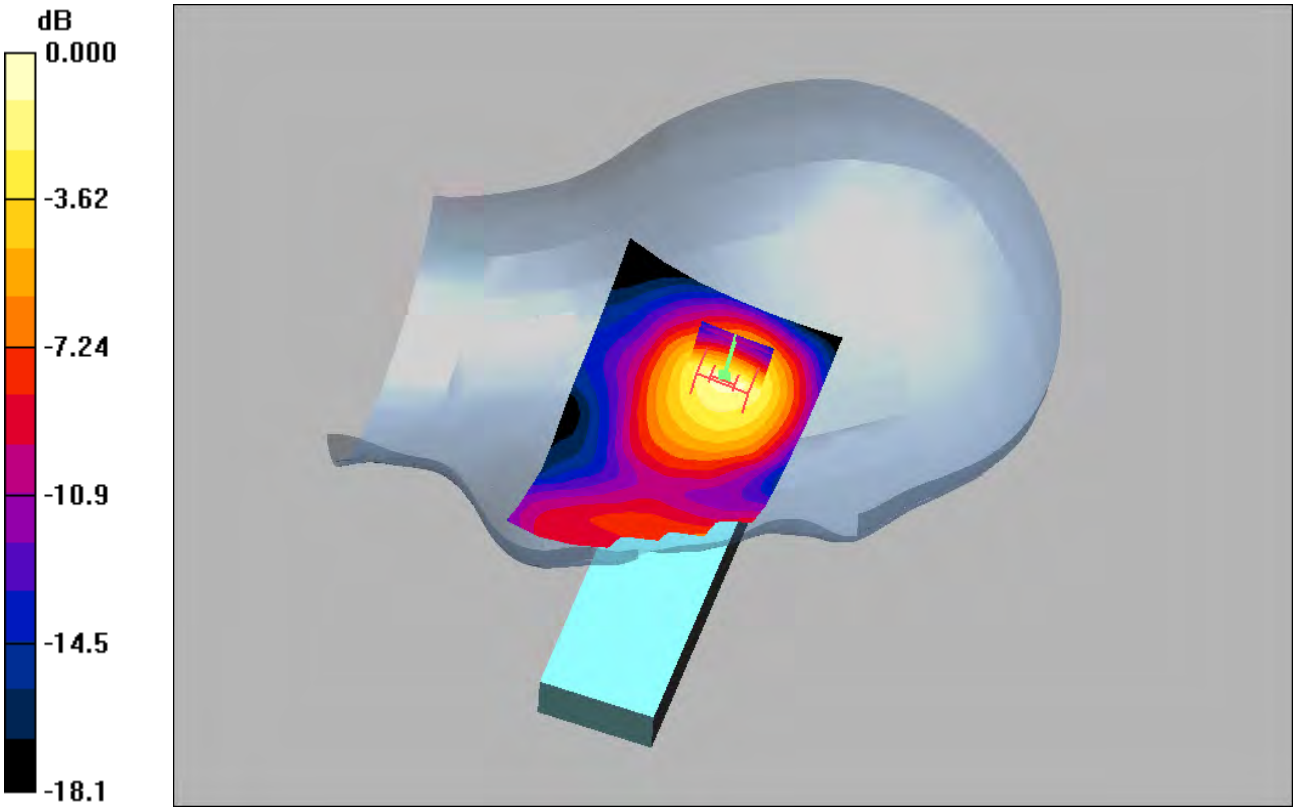


Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

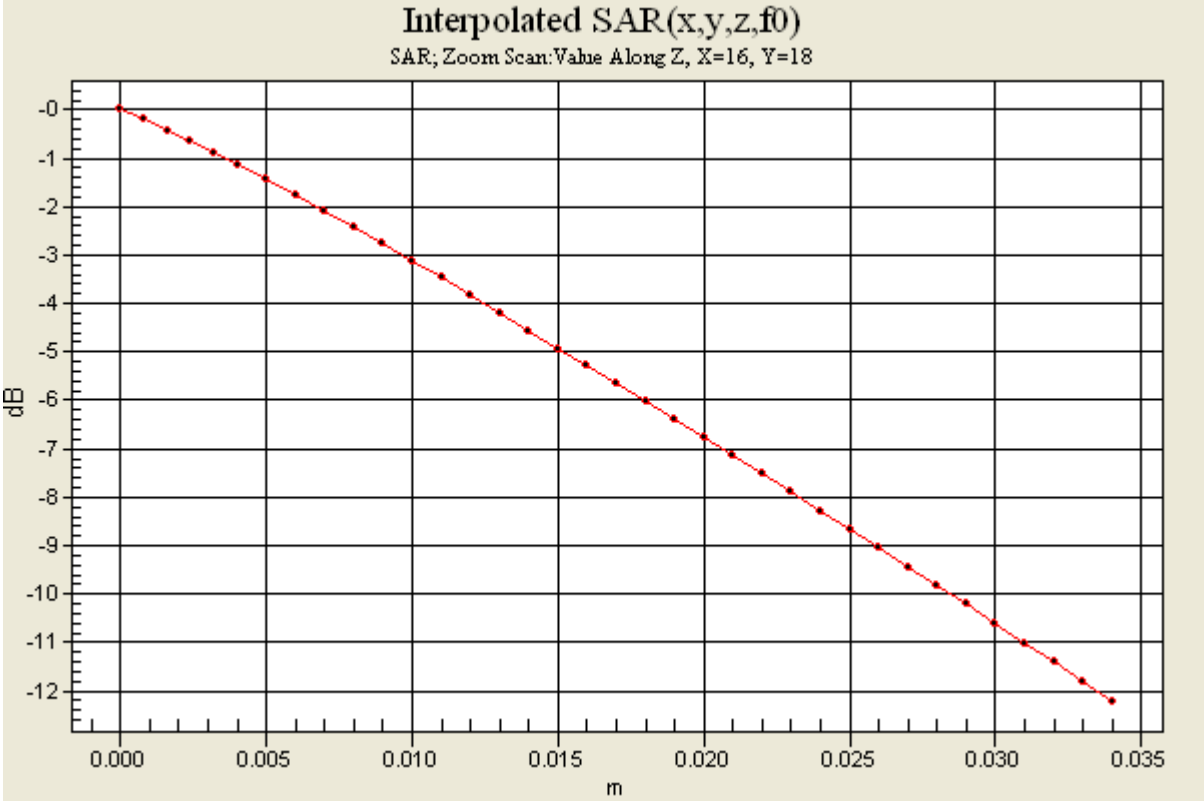
0 dB = 1.73mW/g



Band IV WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: T707T with Standard Battery: BST-39, Left Tilt Position.
26Mar09_T707t_B4WCDMA_71M1_LCT01
File Name: 26Mar09_T707t_B4WCDMA_71M1_LCT01.da4
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1583ConvF(5.4, 5.4, 5.4)Duty Cycle: 1:1Frequency: 1712.4 MHz
Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.26 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Low channel tilt/Area Scan (61x101x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.279 mW/g
Low channel tilt/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 0.321 W/kg
SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.145 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.250 mW/g
Low channel tilt/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = -0.012 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.321 mW/g
Procedure Notes:



0 dB = 0.321mW/g


Interpolated SAR(x,y,z,f0)
SAR; Zoom Scan:Value Along Z, X=16, Y=18
dB
-0
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

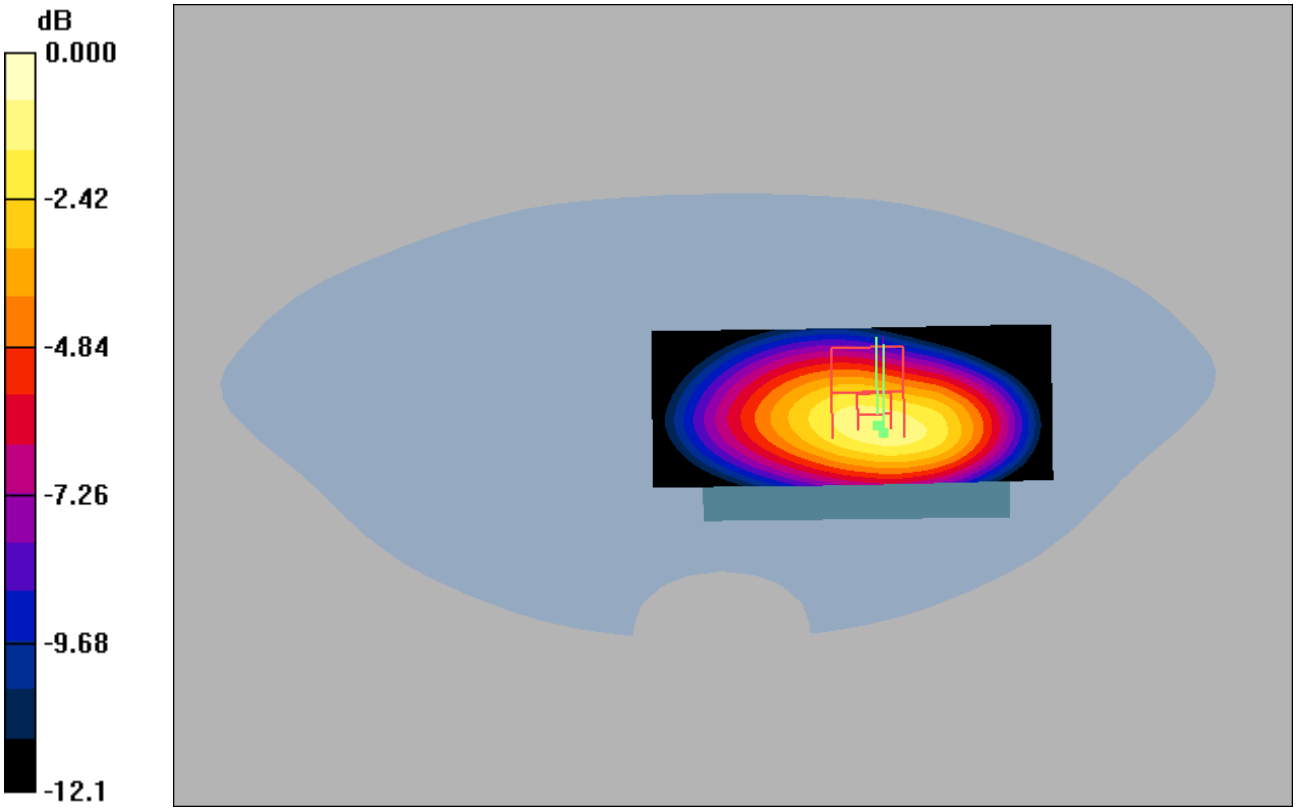
Appendix 3

SAR distribution plots for Body Worn Configuration

Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-39)
Date/Time: 3/25/2009 8:23:34 AM
File Name: 25Mar09_T707t_GSM835_71K4_15mm_BBF01.da4
DUT: T707t body
Phantom: SAM with CRP (Low Band Body)Phantom section: Flat Section
Probe: ET3DV6 - SN1539ConvF(5.53, 5.53, 5.53)
Medium parameters used (interpolated): f = 824 MHz; σ = 0.924 mho/m; ε_r = 55.6; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery - BST39 Humidity - 41.7 % Ambient Temp - 21.0 C Simulant Temp - 21.3 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(5.53, 5.53, 5.53); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn432; Calibrated: 5/13/2008
- Phantom: SAM with CRP (Low Band Body); Type: SAM; Serial: TP: 1031
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

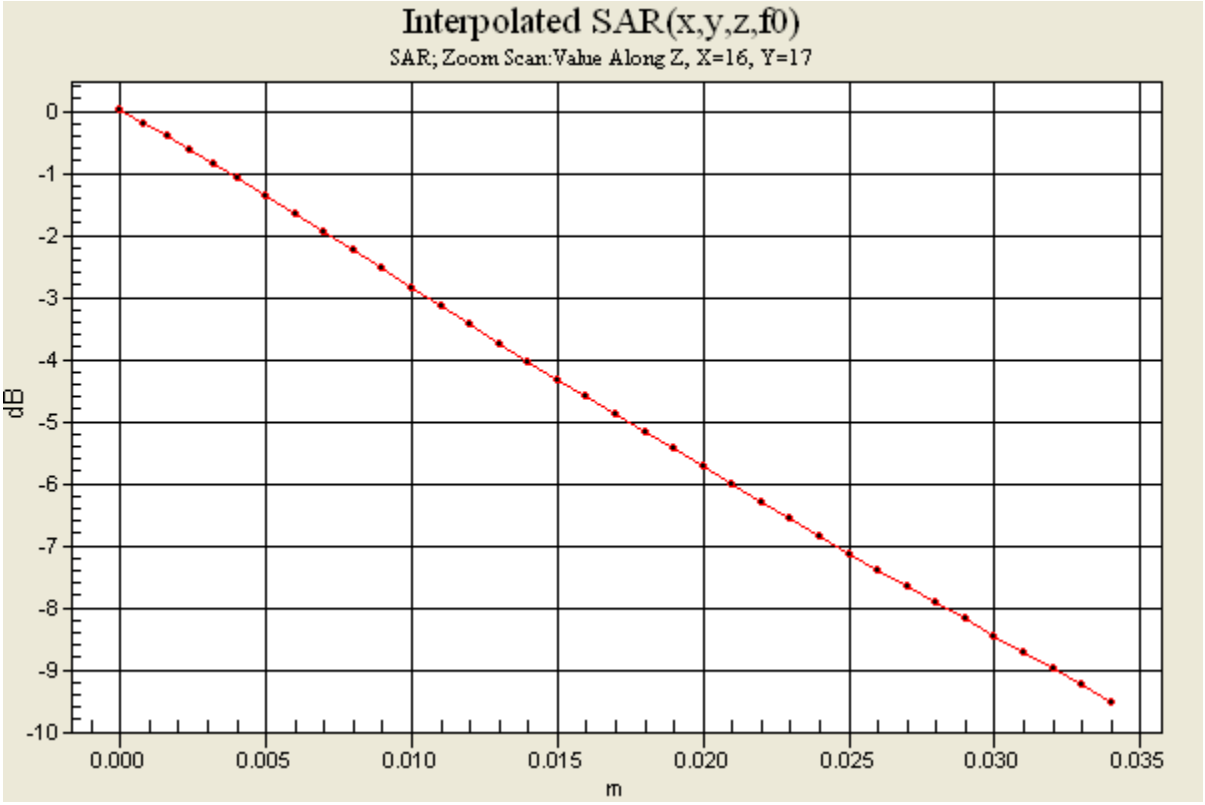
Low channel back/Area Scan (51x81x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.467 mW/g
Low channel back/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.098 dB
Peak SAR (extrapolated) = 0.594 W/kg
SAR(1 g) = 0.434 mW/g; SAR(10 g) = 0.300 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.463 mW/g
Low channel back/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.098 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.594 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



0 dB = 0.594mW/g

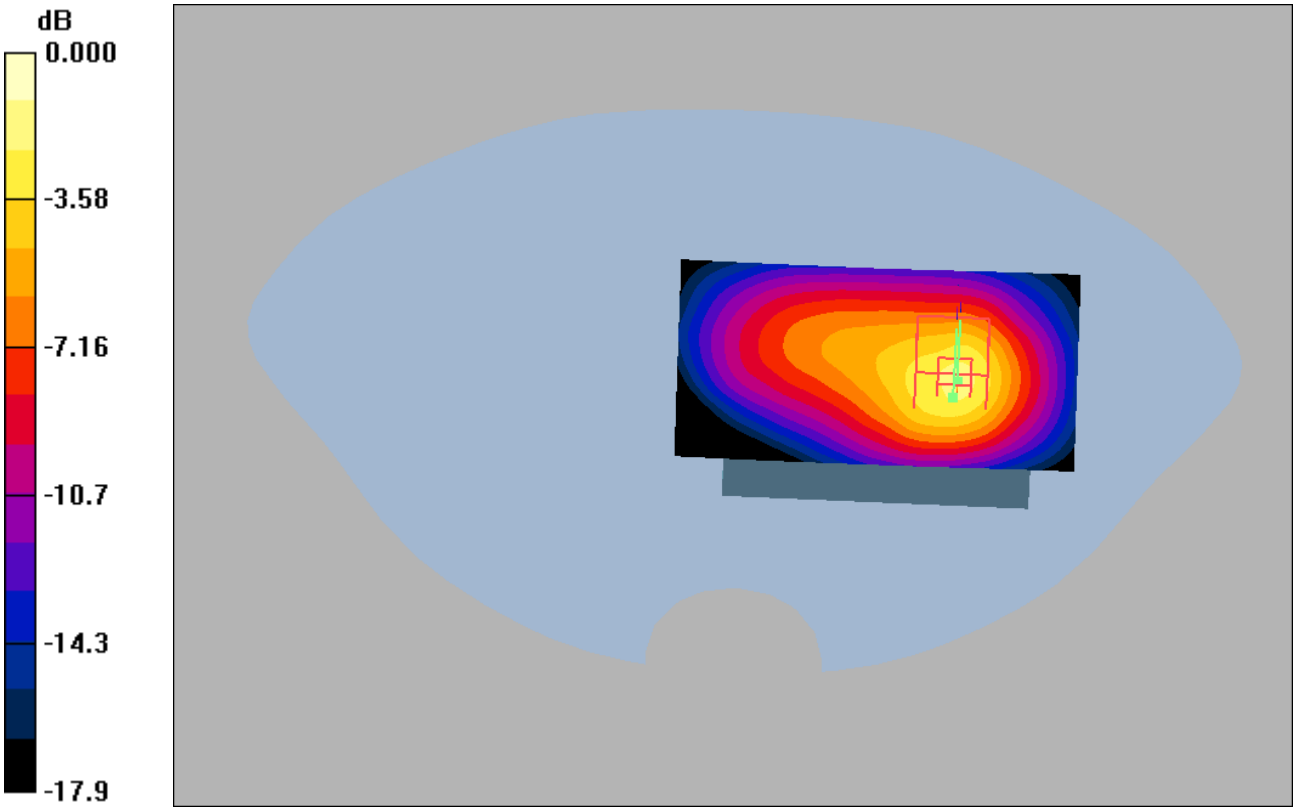
Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-39)
Date/Time: 3/19/2009 11:13:27 AM
File Name: 19Mar09_T707t_GSM1900_71M3_15mm_BBF01.da4
DUT: T707t body
Phantom: SAM with CRP (High Band Body)Phantom section: Flat Section
Probe: ET3DV6 - SN1539ConvF(4.21, 4.21, 4.21)
Medium parameters used: f = 1910 MHz; σ = 1.54 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery - BST38 Humidity - 42.1 % Ambient Temp - 22.1 C Simulant Temp - 21.7 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.21, 4.21, 4.21); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn432; Calibrated: 5/13/2008
- Phantom: SAM with CRP (High Band Body); Type: SAM; Serial: TP: 1020
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

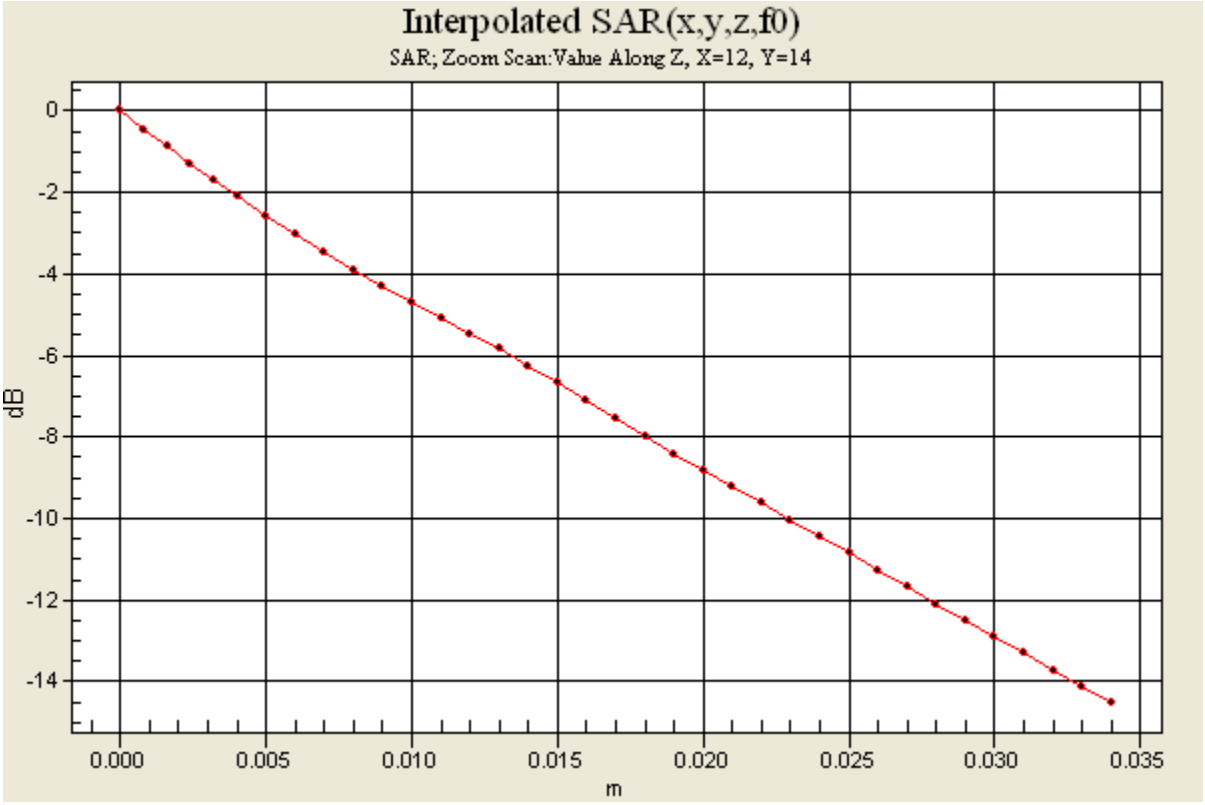
High channel back/Area Scan (51x81x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.392 mW/g
High channel back/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.22 V/m; Power Drift = 0.031 dB
Peak SAR (extrapolated) = 0.602 W/kg
SAR(1 g) = 0.343 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.373 mW/g
High channel back/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.22 V/m; Power Drift = 0.031 dB
Maximum value of SAR (interpolated) = 0.602 mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



0 dB = 0.602mW/g

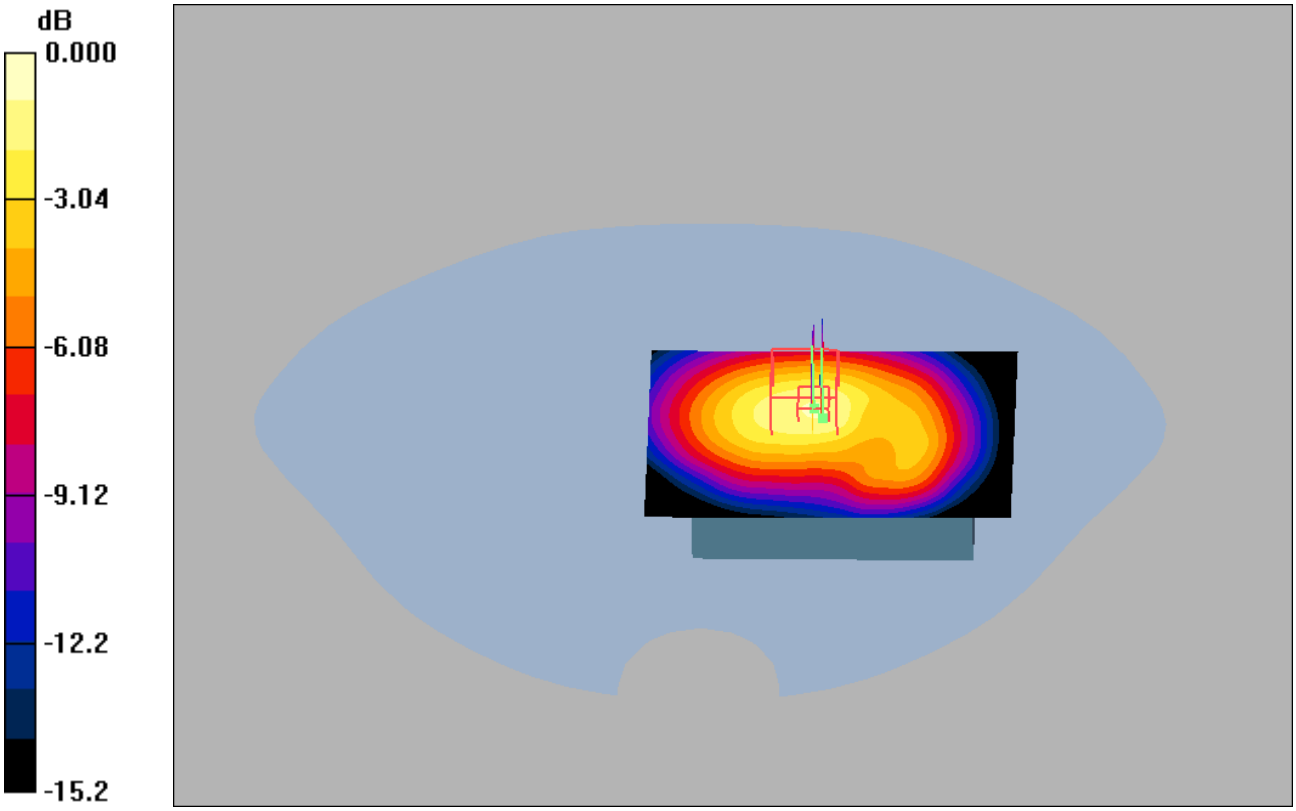
Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	



Distribution of maximum SAR in UMTS Band IV. Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-39)
Date/Time: 3/23/2009 9:02:23 AM
File Name: 23Mar09_T707t_B4WCDMA_71M1_15mm_BBF01.da4
DUT: T707t body
Phantom: SAM with CRP (High Band Body)Phantom section: Flat Section
Probe: ET3DV6 - SN1539ConvF(4.56, 4.56, 4.56)
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.32 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery - BST39 Humidity - 41.4 % Ambient Temp - 21.4 C Simulant Temp - 21.6 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.56, 4.56, 4.56); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn432; Calibrated: 5/13/2008
- Phantom: SAM with CRP (High Band Body); Type: SAM; Serial: TP: 1020
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

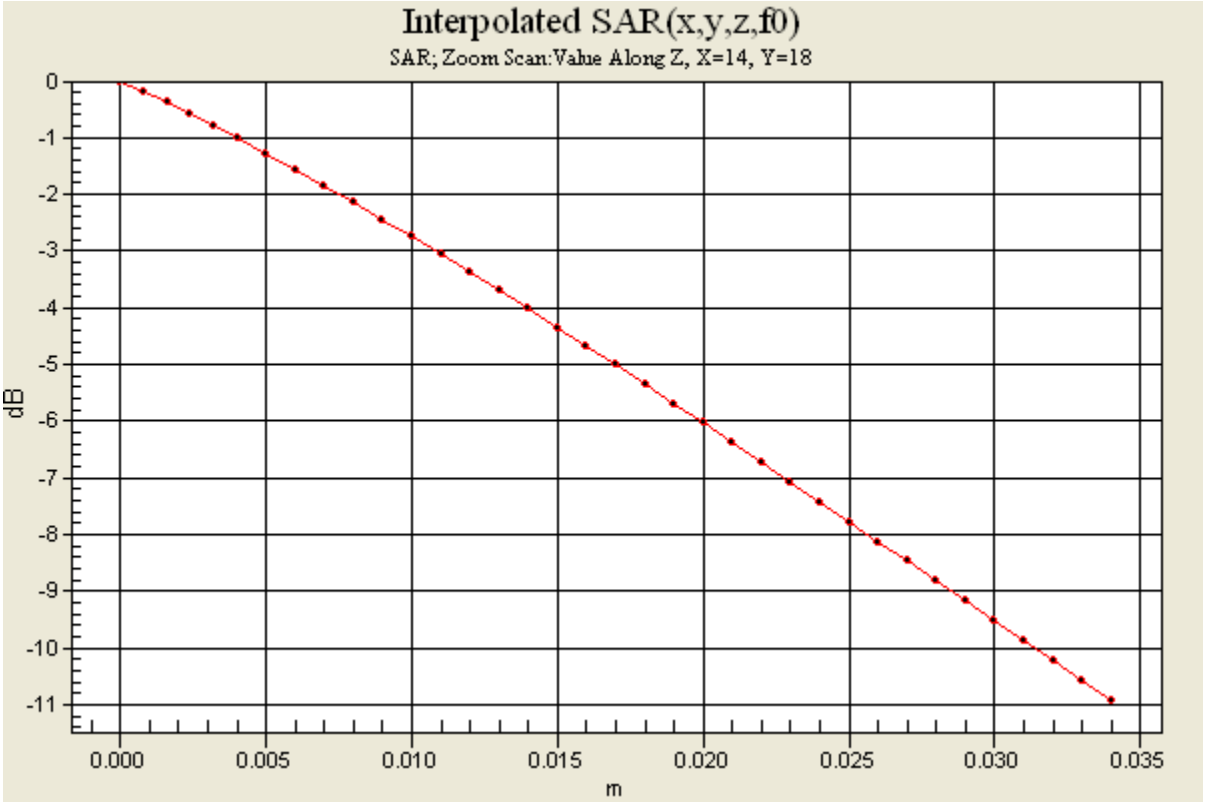
Middle channel back/Area Scan (51x81x1):
Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.671 mW/g
Middle channel back/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 0.824 W/kg
SAR(1 g) = 0.607 mW/g; SAR(10 g) = 0.402 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.654 mW/g
Middle channel back/Zoom Scan (31x31x36)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.018 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.824 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	



0 dB = 0.824mW/g

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

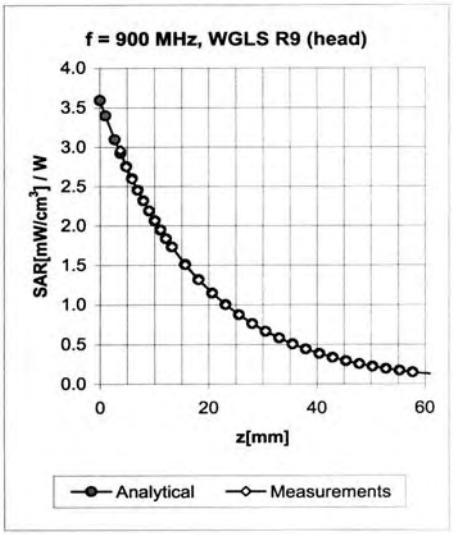


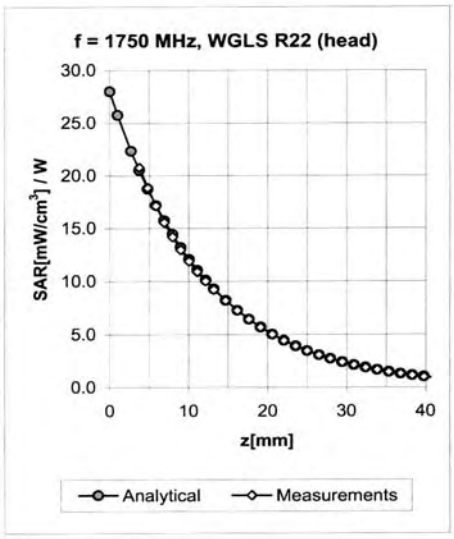
Appendix 4

Probe Calibration Certificates

ET3DV6 SN:1538 **May 19, 2008**

Conversion Factor Assessment





f [MHz]	Validity [MHz][c]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.23	3.69	6.22 ± 11.0% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.28	3.22	6.08 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.55	2.50	5.46 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.53	2.50	5.18 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.50	2.40	4.68 ± 11.0% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.32	3.06	6.07 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.41	2.70	5.93 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.56	2.50	4.82 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.50	2.50	4.58 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.48	2.40	4.15 ± 11.0% (k=2)

[c] **The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.**

ET3DV6 SN:1538 **May 19, 2008**

DASY - Parameters of Probe: ET3DV6 SN:1538

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.28** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**90** mV
NormY	**1.22** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**83** mV
NormZ	**1.41** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**90** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	10.8	6.4
SAR_{be} [%]	With Correction Algorithm	0.6	0.2

TSL **1750 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	11.1	6.5
SAR_{be} [%]	With Correction Algorithm	0.8	0.5

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm

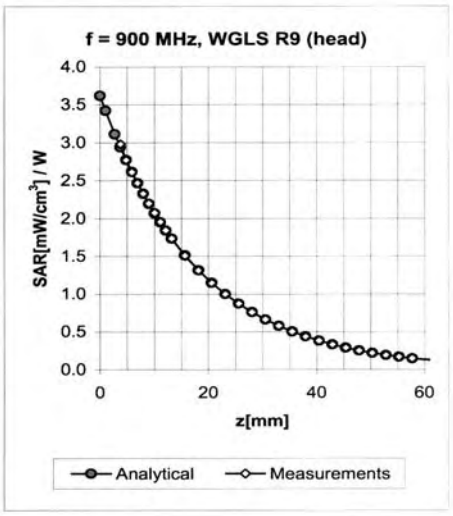
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

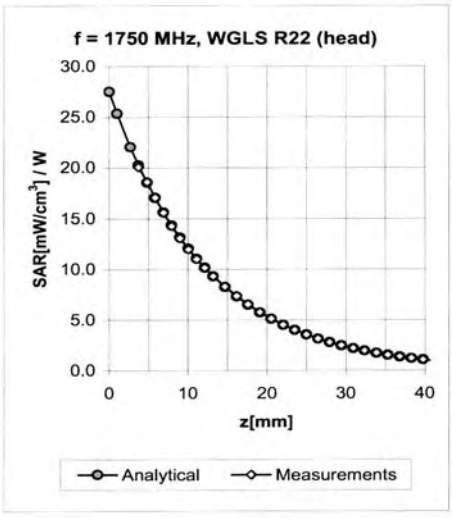
[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

ET3DV6 SN:1583 **November 17, 2008**

Conversion Factor Assessment





f [MHz]	Validity [MHz][c]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.20	3.91	6.48 ± 11.0% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.23	3.41	6.31 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.81	1.92	5.40 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.99	1.72	5.12 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.99	1.23	4.58 ± 11.0% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.27	3.20	6.33 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.34	2.72	6.19 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.99	1.89	4.90 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.99	1.78	4.58 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.99	1.43	4.00 ± 11.0% (k=2)

[c] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

ET3DV6 SN:1583 **November 17, 2008**

DASY - Parameters of Probe: ET3DV6 SN:1583

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.84** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**92** mV
NormY	**2.03** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**93** mV
NormZ	**1.96** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**92** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	9.8	6.0
SAR_{be} [%]	With Correction Algorithm	0.8	0.5

TSL **1750 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	11.2	7.5
SAR_{be} [%]	With Correction Algorithm	0.9	0.4

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm

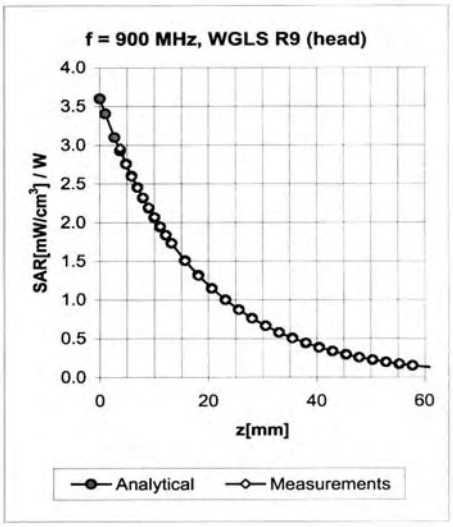
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

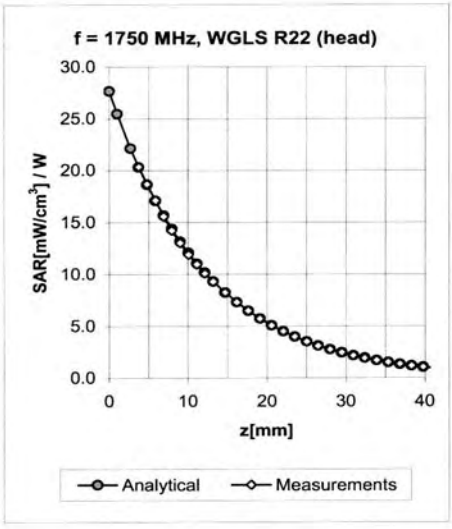
[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

ET3DV6 SN:1539 **November 17, 2008**

Conversion Factor Assessment





f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
835	± 50 / ± 100	Head	41.5 ± 5%	0.90 ± 5%	0.29	3.10	5.71 ± 11.0% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.30	3.22	5.57 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.99	1.73	4.90 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.99	1.72	4.65 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.99	1.42	4.27 ± 11.0% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.33	3.02	5.53 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.32	3.42	5.34 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.99	1.99	4.56 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.99	1.73	4.21 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.99	1.46	3.76 ± 11.0% (k=2)

[C] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

ET3DV6 SN:1539 **November 17, 2008**

DASY - Parameters of Probe: ET3DV6 SN:1539

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.33** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**84** mV
NormY	**1.30** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**84** mV
NormZ	**1.40** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**89** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	11.6	7.1
SAR_{be} [%]	With Correction Algorithm	0.8	0.5

TSL **1750 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	10.5	6.0
SAR_{be} [%]	With Correction Algorithm	0.9	0.4

Sensor Offset

Probe Tip to Sensor Center **2.7** mm

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

Prepared (also subject responsible if other)	No.	
SEM/CV/PF/P Rodney Dixon	REP 2009 003 T707t 02	
Approved / Checked		
SEM/CV/PF/P Gerard Hayes	B	

Appendix 5

Measurement Uncertainty Budget

Table 1. Uncertainty Budget for System Performance Check (Dipole & flat phantom) DASY4 System

a	*b*	*c*	*d*	*e = f(d,k)*	*f*	*g*	*h = c x f / 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_i (±%)**	**10-g u_i (±%)**	**v_i**
Measurement System									
Probe Calibration (*k*=1)	E2.1	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Axial Isotropy	E.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Hemispherical Isotropy	E.2.2	1.0	R	1.73	1	1	0.6	0.6	∞
Boundary Effect	E.2.3	4.7	R	1.73	1	1	2.7	2.7	∞
Linearity	E.2.4	1.0	R	1.73	1	1	0.6	0.6	∞
System Detection Limits	E.2.5	1.0	N	1	1	1	1.0	1.0	∞
Readout Electronics	E.2.6	0.8	R	1.73	1	1	0.5	0.5	∞
Response Time	E.2.7	2.6	R	1.73	1	1	1.5	1.5	∞
Integration Time	E.2.8	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
RF Ambient Conditions	E.6.1	3.0	R	1.73	1	1	1.7	1.7	∞
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	1.0	R	1.73	1	1	0.6	0.6	∞
Dipole									
Dipole Axis to Liquid Distance	8, E.4.2	1.0	R	1.73	1	1	0.6	0.6	∞
Input Power and SAR Drift Measurement	8, 6.6.2	5.0	R	1.73	1	1	2.9	2.9	∞
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				9.37	9.03	
Expanded Uncertainty (95% C.L.)							18.74	18.05	

Table 2: Uncertainty Budget for the Device Under Test with DASY4 System

a	*b*	*c*	*d*	*e = f(d,k)*	*f*	*g*	*h = c x f / 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_i (±%)**	**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	1.0	R	1.73	1	1	0.6	0.6	∞
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	2.6	R	1.73	1	1	1.5	1.5	∞
RF Ambient Conditions	E.6.1	3.0	R	1.73	1	1	1.7	1.7	∞
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	1.0	R	1.73	1	1	0.6	0.6	∞
Test sample Related									
Test Sample Positioning	E.4.2	1.1	N	1	1	1	1.1	1.1	4
Device Holder Uncertainty	E.4.1	0.9	R	1.73	1	1	0.5	0.5	4
Output Power Variation - SAR drift measurement (4)	6.6.2	5.0	R	1.73	1	1	2.9	2.9	∞
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	∞
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	∞
Combined Standard Uncertainty			RSS				**9.4**	**9.1**	
Expanded Uncertainty (95% CONFIDENCE LEVEL)			K=2				**18.8**	**18.1**	

Table 3a. Values for ε'

Uncertainty Component	Tolerance (±%)	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 sources	8.38	R	1.73	1	4.83	∞
Dielectric Error Sources	5.93	R	1.73	1	3.42	∞
Combined standard uncertainty					**6.08**	

Table 3b. Values for σ

Uncertainty Component	Tolerance (±%)	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**	

Appendix 6

Photographs of the Device Under Test

Prepared (also subject responsible if other)		No.	
SEM/CV/PF/P Rodney Dixon		REP 2009 003 T707t 02	
Approved	Checked		
SEM/CV/PF/P Gerard Hayes		B	

Front:

Back:

Side:

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

"cheek/touch" position

"tilt" position

Position with device against flat phantom using a 15mm spacer with hands free accessory.

Back of device against flat phantom.

Front of device against flat phantom

Hands Free