Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Exhibit 11: SAR Test Report of Portable Cellular Phone FCC ID: PY7A3880044 Model: X2A

Date of test: September 21 – October 07, 2009
Date of Report: February 16, 2019

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: Gary Thomas
Technical Manager

Accreditation: This laboratory is accredited to ISO/IEC 17025-2003 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 PY7A3880044 model X2A 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/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

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Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
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SEM/CCMVPCP Gary Thomas	D	

1. Introduction

The Sony Ericsson SAR Laboratory has performed measurements of the maximum potential exposure to the user of portable cellular phone FCC ID PY7A3880044 model X2A. 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

All information in this section was supplied by the Sony Ericsson engineer responsible for the RF design of the DUT.

2.1 Device Description

Device Model	**AAD-3880044-BV**
Market Name	**X2**
GPRS Multislot Class	**10**
EDGE Class	**10**
GPRS Capability Class	**B**
BT Class and Conducted Power	**Class 1, 12.0 dBm**
Production Unit or Identical Prototype Note 1	**Identical Prototype**
Hardware Version	**AP1**
Software Version	**R1AA033**
Device Category	**Portable**
RF Exposure Environment	**General Population / Uncontrolled**

Note 1: Per 47 47 CFR §2.908

Serial Number (of EUT used for each test)	**CB511DWALC**			**CB511DWAKC**		
Mode	GSM 800			GSM 1900		
Crest Factor	8.3			8.3		
Multiple Access Scheme	TDMA			TDMA		
Channel No.	128	189	251	512	660	810
Measured Power Level [dBm] Note 1	**33.4**	**33.4**	**33.4**	**29.5**	**29.4**	**29.3**
Product Maximum Power Level [dBm] Note 2	**35.5**			**29.5**		
Transmitting Frequency Range [MHz]	824.2 – 848.8			1850.2 – 1909.8		

Serial Number (of EUT used for each test)	**CB511DWAKC**			**CB511DWAKC**			**CB511DWALC**		
Mode	UMTS 1			UMTS 2			UMTS 5		
Crest Factor	1			1			1		
Multiple Access Scheme	WCDMA			WCDMA			WCDMA		
Channel No.	9613	9750	9887	9263	9400	9537	4133	4175	4232
Measured Power Level [dBm] Note 1	**24.3**	**24.4**	**24.4**	**23.4**	**23.4**	**23.3**	**24.0**	**24.0**	**24.0**
Product Maximum Power Level [dBm] Note 2	**24.5**			**23.4**			**24.0**		
Transmitting Frequency Range [MHz]	1922.4 – 1977.6			1852.4 – 1907.6			826.4 – 846.6		

WLAN Output Power					
Serial Number of EUT		CB511DWAL3			
Mode	Max Output Power Range (set by design) [dBm] Note 2	Measured Power [dBm] Note 2			
		Ch 1	Ch 6	Ch 11	Ch 13
801.11b 1Mbit/sec	15 +/-3	**17.0**	**17.1**	**17.8**	**17.9**
801.11b 2Mbit/sec		**17.0**	**17.1**	**17.8**	**17.9**
801.11b 5.5Mbit/sec		**17.0**	**17.1**	**17.8**	**17.9**
801.11b 11Mbit/sec		**17.0**	**17.1**	**17.8**	**17.9**
801.11g 6Mbit/sec	15 +/-3	**17.5**	**17.6**	**18.0**	**17.9**
801.11g 9Mbit/sec		**17.5**	**17.6**	**18.0**	**17.9**
801.11g 12Mbit/sec		**17.5**	**17.6**	**18.0**	**17.9**
801.11g 18Mbit/sec		**17.5**	**17.6**	**18.0**	**17.9**
801.11g 24Mbit/sec		**17.5**	**17.6**	**18.0**	**17.9**
801.11g 36Mbit/sec		**17.5**	**17.6**	**18.0**	**17.9**
801.11g 48Mbit/sec		**17.5**	**17.6**	**18.0**	**17.9**
801.11g 54Mbit/sec		**17.5**	**17.6**	**18.0**	**17.9**

Note 2: All power level data was supplied by the Sony Ericsson engineer responsible for the RF design of the DUT.

2.2 Antenna Description

Antenna	Type	Dimensions		Location	Distance from Main Antenna (mm)
		Width (mm)	Length (mm)		
Main	PIFA	11.0	49.0	Bottom	N.A.
WLAN	PIFA	6.4	9.6	Top Left	77.2
BT	PIFA	6.4	9.6	Top Left	77.2

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 ±9.7 % (K=1) with an expanded uncertainty of ±19.5 % (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	415	Oct-31-2009
E-Field Probe ETDV6	1539	Nov-17-2009
E-Field Probe ETDV6	1584	Nov-17-2009
E-Field Probe ETDV6	1587	May-25-2010
Dipole Validation Kit, DV835V2	438	May-25-2010
Dipole Validation Kit, DV1900V2	536	May-26-2010
Dipole Validation Kit, DV2440V2	702	May-20-2010
S.A.M. Phantom used for 835MHz (Head)	1023	
S.A.M. Phantom used for 835MHz (Body)	1031	
S.A.M. Phantom used for 900MHz (Head and Body)	1023	
S.A.M. Phantom used for 1800MHz (Head and Body)	1054/1335	
S.A.M. Phantom used for 1900MHz (Head)	1054/1335	
S.A.M. Phantom used for 1900MHz (Body)	1020	
S.A.M. Phantom used for 2450MHz (Head and Body)	1251	

3.2 Additional Equipment

Description	Serial Number	Cal Due Date
Signal Generator HP8648C	3443U00433	February 01, 2010
Signal Generator HP8648C	3443U00311	April 09, 2010
Signal Generator HP8648C	3537A01598	August 10, 2011
Power Meter 437B	3125U16382	December 04, 2009
Power Meter 437B	3125U16190	May 07, 2010
Power Meter 437B	3125U113481	April 02, 2010
Power Meter 437B	3125U12026	May 07, 2010
Power Meter 437B	3110A05257	April 02, 2010
Power Meter 437B	3125U13729	January 05, 2010
Power Sensor - 8482H	MY41090241	June 4, 2010
Power Sensor - 8482H	3318A07097	June 04, 2010
Power Sensor - 8482H	MY41090240	February 13, 2010
Power Sensor - 8482H	2704A06235	December 03, 2009
Power Sensor - 8482H	MY41090239	February 13, 2010
Power Sensor - 8482H	3318A09268	August 07, 2010
Dielectric Probe Kit HP85070B	US33020390	April 7, 2010
Dickson Thermometer TC200	909709	May 4, 2010
Dickson Humidity FH325	9099180	May 07, 2010
Network Analyzer 8752A	3310A01528	December 5, 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	September 21, 2009	40.98	0.8933	23.4
		September 22, 2009	41.94	0.9087	23.5
		Recommended Limits	41.5	0.9	20-25
	Body	September 30, 2009	54.9	0.9722	23.7
		October 1, 2009	55.47	0.9739	23.7
		Recommended Limits	55.2	0.97	20-25
1900	Head	September 21, 2009	38.09	1.467	23.4
		September 22, 2009	38.65	1.464	23.5
		September 25, 2009	38.46	1.445	23.7
		Recommended Limits	40	1.4	20-25
	Body	October 2, 2009	51.33	1.487	23.6
		October 5, 2009	50.74	1.534	23.5
		Recommended Limits	53.3	1.52	20-25
2450	Head	October 5, 2009	39.39	1.907	23.5
		October 7, 2009	39.15	1.914	23.6
		Recommended Limits	39.2	1.95	20-25
	Body	October 2, 2009	51.93	2.096	23.6
		Recommended Limits	52.7	1.95	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 and 2450MHz. 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	Sep-21-09	9.66	6.31	40.98	0.89	23.4
		Sep-22-09	9.78	6.30	41.94	0.91	23.5
		Sep-25-09	9.85	6.44	41.31	0.91	23.7
		Sep-28-09	9.70	6.34	41.33	0.90	23.7
		Recommended Limits	**9.50**	**6.20**	**41.50**	**0.90**	**20-25**
	Body	Sep-30-09	9.93	6.53	54.9	0.97	23.7
		Oct-01-09	9.87	6.51	55.47	0.97	23.7
		Recommended Limits	**9.90**	**6.46**	**55.20**	**0.97**	**20-25**
1900	Head	Sep-21-09	38.67	20.23	38.09	1.47	23.4
		Sep-22-09	37.81	19.73	38.65	1.46	23.5
		Sep-25-09	38.44	20.12	38.46	1.45	23.7
		Sep-28-09	38.75	20.12	38.68	1.46	23.7
		Sep-29-09	39.22	20.41	38.57	1.46	23.7
		Sep-30-09	39.06	20.28	38.16	1.46	23.7
		Oct-01-09	36.94	19.25	38.7	1.44	23.7
		Recommended Limits	**39.7**	**20.5**	**40**	**1.4**	**20-25**
	Body	Oct-02-09	41.02	21.46	51.33	1.49	23.6
		Oct-05-09	41.87	21.88	50.74	1.53	23.5
		Recommended Limits	**40.5**	**20.89**	**53.3**	**1.52**	**20-25**
2450	Head	Oct-05-09	52.78	23.63	39.39	1.91	23.5
		Oct-07-09	56.40	25.15	39.15	1.91	23.6
		Recommended Limits	**52.4**	**24**	**39.8**	**1.95**	**20-25**
	Body	Oct-02-09	56.88	25.46	51.93	2.10	23.6
		Recommended Limits	**54.5**	**25.2**	**52.7**	**1.95**	**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 0.00124 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 signaling 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), four HSDPA modes, and five HSUPA modes. All conducted data was supplied by the Sony Ericsson engineer responsible for the RF design of the DUT. A CMU-200 was used to establish the call processing and modulation settings. All measurements were referenced back to an RF power meter. 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 and HSUPA modes were equal or below the circuit switched modes for each frequency/channel.

Table 6.0: Conducted Power Summary for UMTS – HSDPA and HSUPA Modes

a) **HSDPA Settings and Conducted Power and HSUPA Conducted Power (dBm)**

s/n WAKC				1852,4 (Band2)	1880 (Band2)	1907,6 (Band2)
				Band 2		
	βC	βD	ΔHS			
CS - RMC	8	15	-	23.4	23.4	23.3
CS - voice	8	15	-	23.4	23.4	23.3
HSDPA - 1	2	15	8	23.2	23.2	23.2
HSDPA - 2	12	15	8	23.0	23.1	23.1
HSDPA - 3	15	8	8	22.7	22.8	22.7
HSDPA - 4	15	4	8	22.7	22.7	22.7
HSUPA - Sub-test 1				22.7	22.7	22.3
HSUPA - Sub-test 2				21.7	21.7	21.5
HSUPA - Sub-test 3				22.1	21.8	21.7
HSUPA - Sub-test 4				21.8	21.8	21.6
HSUPA - Sub-test 5				22.6	22.8	23.2

NOTE: In the table above, none of the HSDPA/HSUPA settings leads to conducted power values exceeding the conducted power in RMC mode by more than 0.25 dB. Therefore no additional SAR measurements are required for those test modes.

s/n WALC

				826,4 (Band5)	836,6 (Band5)	846.6 (Band5)
				Band 5		
	βC	βD	ΔHS			
CS - RMC	8	15	-	24.0	24.0	24.0
CS - voice	8	15	-	24.0	24.0	24.0
HSDPA - 1	2	15	8	23.9	23.9	23.8
HSDPA - 2	12	15	8	23.8	23.8	23.8
HSDPA - 3	15	8	8	23.4	23.4	23.3
HSDPA - 4	15	4	8	23.3	23.3	23.3
HSUPA - Sub-test 1				23.3	23.2	22.8
HSUPA - Sub-test 2				21.7	21.5	21.9
HSUPA - Sub-test 3				22.3	22.6	22.3
HSUPA - Sub-test 4				22.5	22.3	22.0
HSUPA - Sub-test 5				23.3	23.1	22.8

NOTE: In the table above, none of the HSDPA/HSUPA settings leads to conducted power values exceeding the conducted power in RMC mode by more than 0.25 dB. Therefore no additional SAR measurements are required for those test modes.

b) HSUPA Settings

Sub-test	$ß_c$	$ß_d$	ßd (SF)	$ß_c$ / $ß_d$	$ß_{hs}$	$ß_{ec}$	$ß_{ed}$
1	11/15 (3)	15/15 (3)	64	11/15	22/15	209/225	1039/225
2	6/15	15/15	64	6/15	12/15	12/15	94/75
3	15/15	9/15	64	15/9	30/15	30/15	1:47/15 2:47/15
4	2/15	15/15	64	2/15	4/15	2/15	56/75
5	15/15 (4)	15/15 (4)	64	15/15 (4)	30/15	24/15	134/15

Sub-test	$ß_{ec\ (SF)}$	$ß_{ed\ (code)}$	CM (dB)	MPR (dB)	AG Index	E-TFCI
1	4	1	1.0	0.0	20	75
2	4	1	3.0	2.0	12	67
3	4	2	2.0	1.0	15	92
4	4	1	3.0	2.0	17	71
5	4	1	1.0	0.0	21	81

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. WLAN, Bluetooth) Considerations

This Bluetooth/WLAN antenna is located at a minimum of 77.2 mm from the cellular antenna. The maximum reported WLAN/Bluetooth conducted power is 18.0 dBm.

The following table summarizes the stand-alone maximum SAR values for the cellular and WLAN operating conditions:

Operating Configuration	**Maximum Cellular SAR** (W/kg, 1-gram average)	**Maximum WLAN SAR** (W/kg, 1-gram average)	**Sum(Cellular + WLAN)** (W/kg, 1-gram average)
Head Adjacent			
Right Open	0.37	0.38	**0.75**
Right Closed	0.94	0.13	**1.07**
Lefft Open	1.03	0.22	**1.25**
Left Closed	0.67	0.16	**0.83**
Body-worn	1.06	0.04	**1.10**

Since the sum of two stand-alone SAR values are below 1.6 W/kg in all test configurations, additional simultaneous transmission considerations (including the processing of volumetric scans) are not required.

For reference, the measured stand-alone SAR values are presented in the following tables:

Head Adjacent, Cellular: Tables 1-8
Head Adjacent, WLAN: Tables 9
Body-worn, Cellular: Tables 10-11
Body-worn, WLAN: Tables 12

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. All conducted data was supplied by the Sony Ericsson engineer responsible for the RF design of the DUT.

The ambient temperature of the laboratory was maintained within the desired 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.

f(MHz)	Channel/ frequency	Conducted Output Power (dBm) / GSM 1:8 Duty Cycle	Left Head (Cheek / Touch Position) Measured (W/kg) 1g	10g	Drift (dB)	Extrapolated (W/kg) 1g	10g	Ambient Temp (°C)	Simulate Temp (°C)
	128 / 824	33.4	0.31	0.22	0.01	0.32	0.23		
	189 / 837	33.4	0.43	0.31	0.02	0.43	0.32		
800 GSM	251 / 849	33.4	0.58	0.42	0.02	0.60	0.43	23.8	23.4
	512 / 1850	29.5	0.23	0.15	0.02	0.23	0.15		
	660/1880	29.4	0.25	0.16	-0.16	0.25	0.16		
1900 GSM	810/1910	29.3	0.32	0.20	-0.09	0.32	0.20	23.8	23.4
f(MHz)	Channel/ frequency	Conducted Output Power (dBm) / GSM 1:8 Duty Cycle	Left Head (15° Tilt Position) Measured (W/kg) 1g	10g	Drift (dB)	Extrapolated (W/kg) 1g	10g	Ambient Temp (°C)	Simulate Temp (°C)
	128 / 824	33.4	0.15	0.09	0.08	0.15	0.09		
	189 / 837	33.4	0.19	0.14	0.00	0.20	0.15		
800 GSM	251 / 849	33.4	0.23	0.17	0.01	0.23	0.17	23.8	23.4
	512 / 1850	29.5	0.18	0.11	0.05	0.18	0.11		
	660/1880	29.4	0.20	0.12	-0.03	0.20	0.12		
1900 GSM	810/1910	29.3	0.27	0.16	0.02	0.27	0.16	23.8	23.4

Table 1: SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured closed against the left head in GSM mode.

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

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	33.4	0.31	0.22	0.01	0.32	0.23		
	189 / 837	33.4	0.45	0.31	-0.01	0.46	0.32		
800 GSM	251 / 849	33.4	0.58	0.41	0.00	0.59	0.41	23.8	23.4
	512 / 1850	29.5	0.32	0.19	-0.10	0.32	0.19		
	660/1880	29.4	0.37	0.21	-0.14	0.37	0.21		
1900 GSM	810/1910	29.3	0.49	0.27	-0.09	0.49	0.27	23.8	23.4

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	33.4	0.18	0.13	0.04	0.18	0.14		
	189 / 837	33.4	0.23	0.17	0.05	0.24	0.17		
800 GSM	251 / 849	33.4	0.28	0.21	0.03	0.29	0.21	23.8	23.4
	512 / 1850	29.5	0.17	0.11	0.00	0.17	0.11		
	660/1880	29.4	0.20	0.12	0.03	0.20	0.12		
1900 GSM	810/1910	29.3	0.28	0.17	0.06	0.28	0.17	23.8	23.4

Table 2: SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured closed against the right head in GSM mode.

		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	33.4	0.50	0.34	0.12	0.51	0.35		
	189 / 837	33.4	0.64	0.43	0.06	0.65	0.44		
800 GSM	251 / 849	33.4	1.01	0.67	0.06	1.03	0.69	23.6	23.5
	512 / 1850	29.5	0.17	0.09	0.02	0.17	0.09		
	660/1880	29.4	0.17	0.10	-0.01	0.17	0.10		
1900 GSM	810/1910	29.3	0.27	0.15	0.01	0.27	0.15	23.6	23.5
		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	33.4	0.14	0.11	0.08	0.14	0.11		
	189 / 837	33.4	0.14	0.11	0.02	0.15	0.11		
800 GSM	251 / 849	33.4	0.14	0.11	-0.02	0.14	0.11	23.6	23.5
	512 / 1850	29.5	0.04	0.03	0.02	0.04	0.03		
	660/1880	29.4	0.05	0.03	-0.01	0.05	0.03		
1900 GSM	810/1910	29.3	0.09	0.06	0.00	0.09	0.06	23.6	23.5

Table 3: SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured open against the left head in GSM mode.

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

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	33.4	0.15	0.12	0.08	0.16	0.12		
	189 / 837	33.4	0.19	0.15	0.09	0.19	0.15		
800 GSM	251 / 849	33.4	0.30	0.23	0.04	0.31	0.24	23.6	23.5
	512 / 1850	29.5	0.09	0.06	-0.19	0.09	0.06		
	660/1880	29.4	0.12	0.08	-0.12	0.12	0.08		
1900 GSM	810/1910	29.3	0.20	0.13	-0.08	0.20	0.13	23.6	23.5

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	33.4	0.15	0.11	-0.02	0.15	0.11		
	189 / 837	33.4	0.18	0.14	0.04	0.18	0.14		
800 GSM	251 / 849	33.4	0.20	0.16	-0.02	0.21	0.16	23.6	23.5
	512 / 1850	29.5	0.05	0.03	-0.01	0.05	0.03		
	660/1880	29.4	0.06	0.04	-0.09	0.06	0.04		
1900 GSM	810/1910	29.3	0.10	0.06	-0.01	0.10	0.06	23.6	23.5

Table 4: SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured open 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)
	4133/826.6	24	0.393	0.285	0.04	0.39	0.29		
	4175/835	24	0.473	0.342	0.01	0.47	0.34		
Band V	4232/846.4	24	0.458	0.326	-0.02	0.46	0.33	23.7	23.7
	9263/1852.6	23.4	0.669	0.421	-0.15	0.67	0.42		
	9400/1880	23.4	0.643	0.407	-0.19	0.64	0.41		
Band II	9537/1907.4	23.3	0.641	0.401	0.03	0.64	0.40	23.7	23.7
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)
	4133/826.6	24	0.222	0.126	0.01	0.22	0.13		
	4175/835	24	0.247	0.138	0.01	0.25	0.14		
Band V	4232/846.4	24	0.186	0.101	0.01	0.19	0.10	23.7	23.7
	9263/1852.6	23.4	0.494	0.294	-0.20	0.49	0.29		
	9400/1880	23.4	0.483	0.285	-0.01	0.48	0.29		
Band II	9537/1907.4	23.3	0.542	0.316	-0.01	0.54	0.32	23.7	23.7

Table 5: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured closed against the left head in UMTS mode.

		Conducted Output Power (dBm)	UMTS Right Head Position (Cheek / Touch Position)						
f(MHz)	Channel/ frequency	UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
	4133/826.6	24	0.37	0.26	-0.01	0.37	0.26		
	4175/835	24	0.44	0.31	0.03	0.44	0.31		
Band V	4232/846.4	24	0.41	0.29	-0.12	0.41	0.29	23.7	23.7
	9263/1852.6	23.4	0.94	0.55	-0.07	0.94	0.55		
	9400/1880	23.4	0.88	0.50	0.03	0.88	0.50		
Band II	9537/1907.4	23.3	0.91	0.51	-0.05	0.91	0.51	23.7	23.7
		Conducted Output Power (dBm)	UMTS Right Head Position (15° Tilt Position)						
f(MHz)	Channel/ frequency	UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
	4133/826.6	24	0.23	0.12	0.02	0.23	0.12		
	4175/835	24	0.24	0.14	0.04	0.24	0.14		
Band V	4232/846.4	24	0.19	0.11	-0.04	0.19	0.11	23.7	23.7
	9263/1852.6	23.4	0.46	0.29	-0.17	0.46	0.29		
	9400/1880	23.4	0.48	0.29	-0.07	0.48	0.29		
Band II	9537/1907.4	23.3	0.53	0.32	-0.05	0.53	0.32	23.7	23.7

Table 6: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured closed against the right head in UMTS mode.

		Conducted Output Power (dBm)	UMTS Left Head Position (Cheek / Touch Position)						
f(MHz)	Channel/ frequency	UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
	4133/826.6	24	0.752	0.513	0.05	0.75	0.51		
	4175/835	24	0.877	0.593	0.04	0.88	0.59		
Band V	4232/846.4	24	0.895	0.599	0.01	0.90	0.60	23.9	23..7
	9263/1852.6	23.4	0.391	0.222	-0.06	0.39	0.22		
	9400/1880	23.4	0.391	0.22	-0.09	0.39	0.22		
Band II	9537/1907.4	23.3	0.395	0.222	-0.11	0.40	0.22	23.9	23..7
		Conducted Output Power (dBm)	UMTS Left Head Position (15° Tilt Position)						
f(MHz)	Channel/ frequency	UMTS Duty Cycle	Measured (W/kg) 1g / 10g		Drift (dB)	Extrapolated (W/kg) 1g / 10g		Ambient Temp (°C)	Simulate Temp (°C)
	4133/826.6	24	0.193	0.152	-0.05	0.19	0.15		
	4175/835	24	0.191	0.15	-0.03	0.19	0.15		
Band V	4232/846.4	24	0.156	0.119	-0.03	0.16	0.12	23.9	23..7
	9263/1852.6	23.4	0.119	0.0736	-0.05	0.12	0.07		
	9400/1880	23.4	0.133	0.0817	-0.08	0.13	0.08		
Band II	9537/1907.4	23.3	0.166	0.101	-0.03	0.17	0.10	23.9	23..7

Table 7: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured open 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)
	4133/826.6	24	0.28	0.22	0.04	0.28	0.22		
	4175/835	24	0.31	0.24	0.00	0.31	0.24		
Band V	4232/846.4	24	0.29	0.22	0.02	0.29	0.22	23.9	23..7
	9263/1852.6	23.4	0.28	0.19	-0.19	0.28	0.19		
	9400/1880	23.4	0.31	0.21	-0.12	0.31	0.21		
Band II	9537/1907.4	23.3	0.37	0.24	-0.05	0.37	0.24	23.9	23..7
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)
	4133/826.6	24	0.19	0.15	-0.08	0.19	0.15		
	4175/835	24	0.22	0.17	-0.03	0.22	0.17		
Band V	4232/846.4	24	0.16	0.12	0.02	0.16	0.12	23.9	23..7
	9263/1852.6	23.4	0.12	0.08	-0.12	0.12	0.08		
	9400/1880	23.4	0.14	0.09	-0.06	0.14	0.09		
Band II	9537/1907.4	23.3	0.16	0.10	0.00	0.16	0.10	23.9	23..7

Table 8: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured open against the right head in UMTS mode.

Prepared (also subject responsible if other)	No.	
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f(MHz)	Conducted Output Power	Channel/ frequency	WLAN Left Head Position (Cheek / Touch Position) Measured (W/kg) 1g	10g	Drift (dB)	Ambient Temp (°C)	Simulate Temp (°C)
Open	17.5	1/2412	0.13	0.06	-0.13		
	17.6	6/2437	0.12	0.06	0.05		
	18.0	11/2462	0.12	0.06	-0.03		
	17.9	13/2472	0.16	0.08	0.03	23.7	23.6
Closed	17.5	1/2412	0.11	0.06	-0.09		
	17.6	6/2437	0.10	0.05	0.04		
	18.0	11/2462	0.16	0.08	0.09		
	17.9	13/2472	0.11	0.06	-0.03	23.8	23.5

f(MHz)	Conducted Output Power	Channel/ frequency	WLAN Left Head Position (15° Tilt Position) Measured (W/kg) 1g	10g	Drift (dB)	Ambient Temp (°C)	Simulate Temp (°C)
Open	17.5	1/2412	0.16	0.08	0.00		
	17.6	6/2437	0.16	0.08	0.01	23.7	23.6
	18.0	11/2462	0.15	0.07	0.05		
	17.9	13/2472	0.22	0.10	-0.04		
Closed	17.5	1/2412	0.13	0.06	0.01		
	17.6	6/2437	0.12	0.06	-0.01	23.8	23.5
	18.0	11/2462	0.16	0.08	0.03		
	17.9	13/2472	0.15	0.07	0.03		

f(MHz)	Conducted Output Power	Channel/ frequency	WLAN Right Head Position (Cheek / Touch Position) Measured (W/kg) 1g	10g	Drift (dB)	Ambient Temp (°C)	Simulate Temp (°C)
Open	17.5	1/2412	0.38	0.17	-0.04		
	17.6	6/2437	0.25	0.11	0.01	24	24
	18.0	11/2462	0.22	0.10	-0.06		
	17.9	13/2472	0.31	0.14	0.00		
Closed	17.5	1/2412	0.13	0.06	-0.07		
	17.6	6/2437	0.11	0.05	-0.03	24	24
	18.0	11/2462	0.11	0.05	-0.05		
	17.9	13/2472	0.12	0.06	-0.03		

f(MHz)	Conducted Output Power	Channel/ frequency	WLAN Right Head Position (15° Tilt Position) Measured (W/kg) 1g / 10g		Drift (dB)	Ambient Temp (°C)	Simulate Temp (°C)
Open	17.5	1/2412	0.34	0.15	-0.04	24	24
	17.6	6/2437	0.21	0.10	0.01		
	18.0	11/2462	0.16	0.08	-0.05		
	17.9	13/2472	0.27	0.13	-0.06		
Closed	17.5	1/2412	0.13	0.06	0.01	24	24
	17.6	6/2437	0.12	0.06	-0.01		
	18.0	11/2462	0.16	0.08	0.03		
	17.9	13/2472	0.15	0.07	0.03		

Table 9: WLAN SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured open and closed against the head in WLAN 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. All conducted data was supplied by the Sony Ericsson engineer responsible for the RF design of the DUT. Conducted powers shown in these tables are peak power per slot.

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 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	30.3	0.89	0.61	-0.03	0.93	0.63	23.7	23.7
		189 / 837	30.3	0.97	0.66	-0.02	1.02	0.69		
		251 / 849	30.2	0.93	0.62	0.05	0.97	0.65		
	1:8 Duty Cycle	251 / 849	33.4	1.04	0.70	0.03	1.06	0.72	23.7	23.7
1900 GSM	2:8 Duty Cycle	512 / 1850	27	0.23	0.14	0.05	0.26	0.16	23.8	23.5
		660/1880	26.9	0.27	0.16	-0.08	0.31	0.18		
		810/1910	26.8	0.34	0.20	-0.05	0.38	0.23		
	1:8 Duty Cycle	810/1910	29.3	0.32	0.19	-0.15	0.32	0.19	23.8	23.5
Front of phone facing body										
800 GSM	2:8 Duty Cycle	128 / 824	30.3	0.41	0.30	0.05	0.43	0.31	23.7	23.7
		189 / 837	30.3	0.48	0.34	0.06	0.50	0.36		
		251 / 849	30.2	0.43	0.32	0.04	0.45	0.33		
1900 GSM	2:8 Duty Cycle	512 / 1850	27	0.12	0.08	-0.07	0.14	0.09	23.8	23.6
		660/1880	26.9	0.16	0.10	-0.04	0.18	0.11		
		810/1910	26.8	0.26	0.16	0.01	0.29	0.18		

Table 10: SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured with GSM/GPRS Mode.

f(MHz)	Channel/ frequency	Conducted Output Power (dBm)	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 V	4133/826.6	24	0.73	0.50	0.03	0.73	0.50	23.8	23.7
	4175/835	24	0.85	0.58	0.06	0.85	0.58		
	4232/846.4	24	0.83	0.56	-0.04	0.83	0.56		
Band II	9263/1852.6	23.4	0.61	0.37	-0.14	0.61	0.37	23.7	23.6
	9400/1880	23.4	0.64	0.39	0.18	0.64	0.39		
	9537/1907.4	23.3	0.63	0.37	-0.14	0.63	0.37		
Front of phone facing body									
Band V	4133/826.6	24	0.35	0.25	0.07	0.35	0.25	23.8	23.7
	4175/835	24	0.40	0.29	0.08	0.40	0.29		
	4232/846.4	24	0.38	0.27	0.02	0.38	0.27		
Band II	9263/1852.6	23.4	0.33	0.20	-0.09	0.33	0.20	23.7	23.6
	9400/1880	23.4	0.37	0.22	0.08	0.37	0.22		
	9537/1907.4	23.3	0.43	0.27	0.03	0.43	0.27		

Table 11: UMTS SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured against the body with UMTS/HSDPA Modes.

f(MHz)	Conducted Output Power	Channel/ frequency	WLAN Body Worn 15mm SPACER				
			Measured (W/kg) 1g / 10g		Drift (dB)	Ambient Temp (°C)	Simulate Temp (°C)
Back of phone facing body							
WLAN	17.5	1/2412	0.03	0.02	-0.17	23.7	23.6
	17.6	6/2437	0.03	0.01	0.07		
	18.0	11/2462	0.03	0.02	0.00		
	17.9	13/2472	0.03	0.02	0.02		
Front of phone facing body							
WLAN	17.5	1/2412	0.04	0.02	0.08	23.7	23.6
	17.6	6/2437	0.03	0.02	0.00		
	18.0	11/2462	0.03	0.02	0.18		
	17.9	13/2472	0.03	0.02	0.11		

Table 12: WLAN SAR measurement results for the portable cellular telephone FCC ID PY7A3880044 model X2A at maximum output power with Standard Battery BST-41. Measured against the body with WLAN Modes.

Prepared (also subject responsible if other)		No.	
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Approved	Checked		
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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] 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.

[4] FCC KDB248227, "SAR measurement procedure for 802.11 a/b/g Transmitters", May 2007

[5] FCC KDB648474, "SAR Evaluation Consideration for HANDSETS with Multiple Transmitters and Antenna", April 2008.

[6] 3GPP TS 34.121 Universal Mobile Telecommunications System (UMTS); Terminal Conformance Specification, Radio Transmission and Reception (FDD).

[7] FCC KDB941225 SAR Test Procedures, 3G Devices, 2.5G, GPS/GPRS/Edge, 2.1093
(SAR Measurement Procedures for 3G Devices, WCDMA/HSUPA)

[8] PBA KDB Input Tracking number #703553 regarding function of HSUPA MPR (Maximum Power Reduction) of the Qualcomm RF Chipset.

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Appendix 1

SAR distribution comparison for the system accuracy verification

Prepared (also subject responsible if other)	No.	
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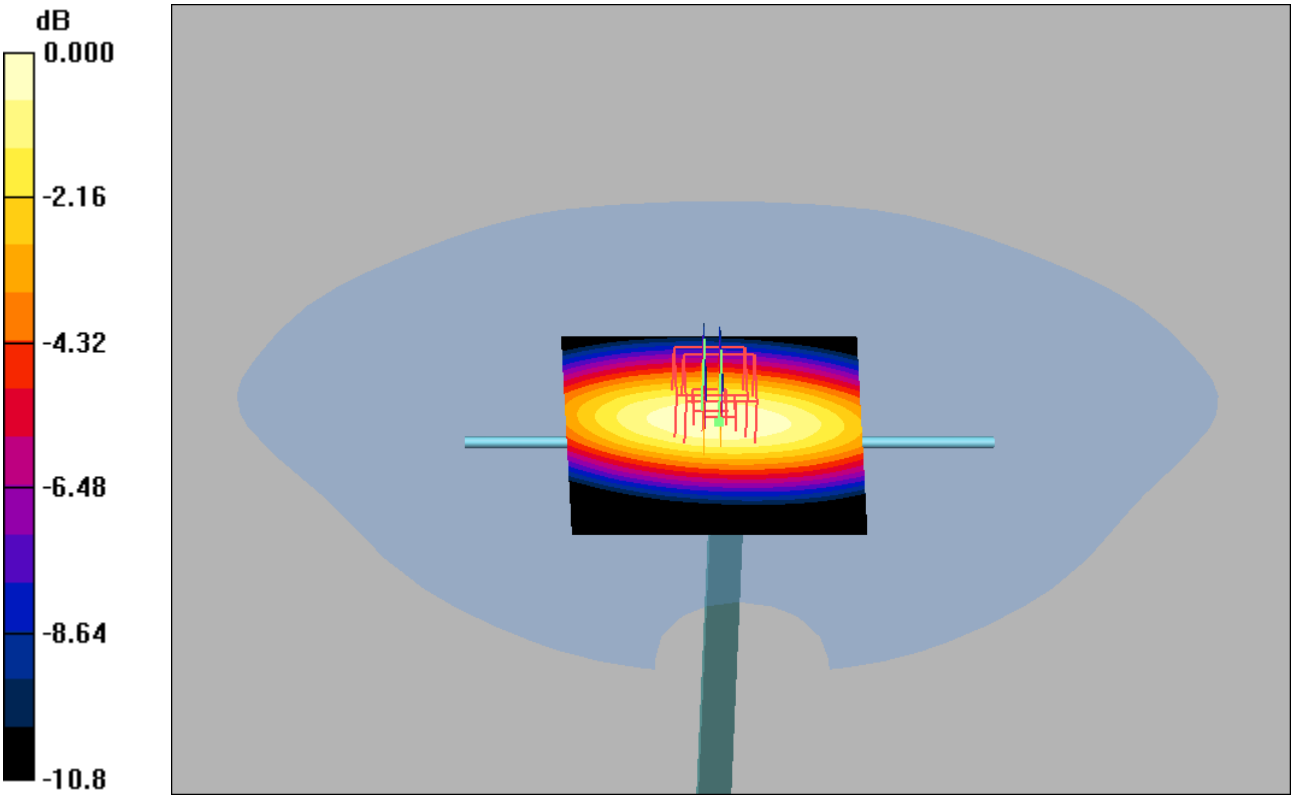
835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_835Head_438_1023_21Sept09_T01

File Name: Validation_835Head_438_1023_21Sept09_T01.da4

Phantom: SAM with CRP (Low Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)Duty Cycle: 1:1Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.893 mho/m; ε_r = 41; 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) = 1.04 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.4 V/m; Power Drift = 0.045 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 0.975 mW/g; SAR(10 g) = 0.636 mW/g
Maximum value of SAR (measured) = 1.06 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.4 V/m; Power Drift = 0.045 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 0.974 mW/g; SAR(10 g) = 0.637 mW/g
Maximum value of SAR (measured) = 1.05 mW/g



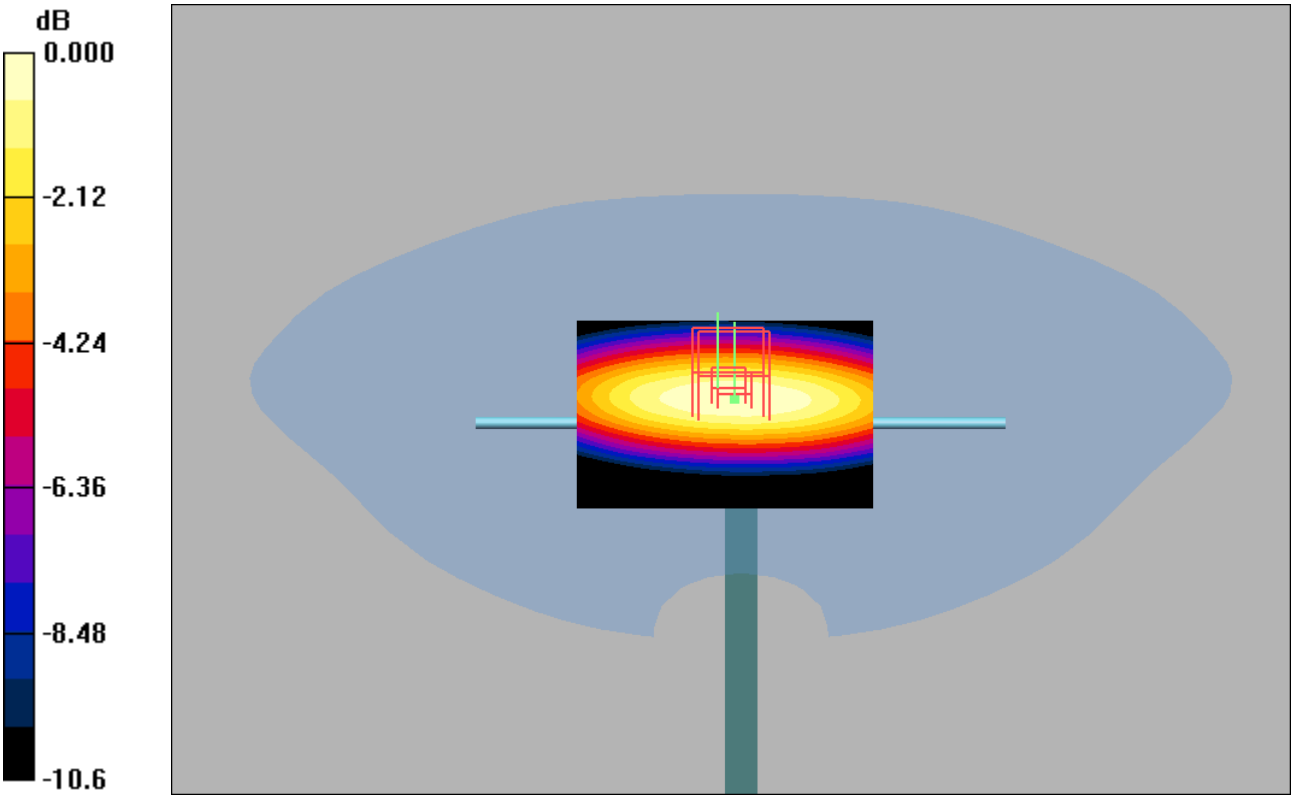
0 dB = 1.05mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_835Head_438_1023_22Sept09_T01

File Name: Validation_835Head_438_1023_22Sept09_T01.da4

Phantom: SAM with CRP (Low Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)Duty Cycle: 1:1Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.909 mho/m; ε_r = 41.9; 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) = 1.03 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.5 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 1.40 W/kg
SAR(1 g) = 0.956 mW/g; SAR(10 g) = 0.626 mW/g
Maximum value of SAR (measured) = 1.03 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.5 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.960 mW/g; SAR(10 g) = 0.629 mW/g
Maximum value of SAR (measured) = 1.02 mW/g



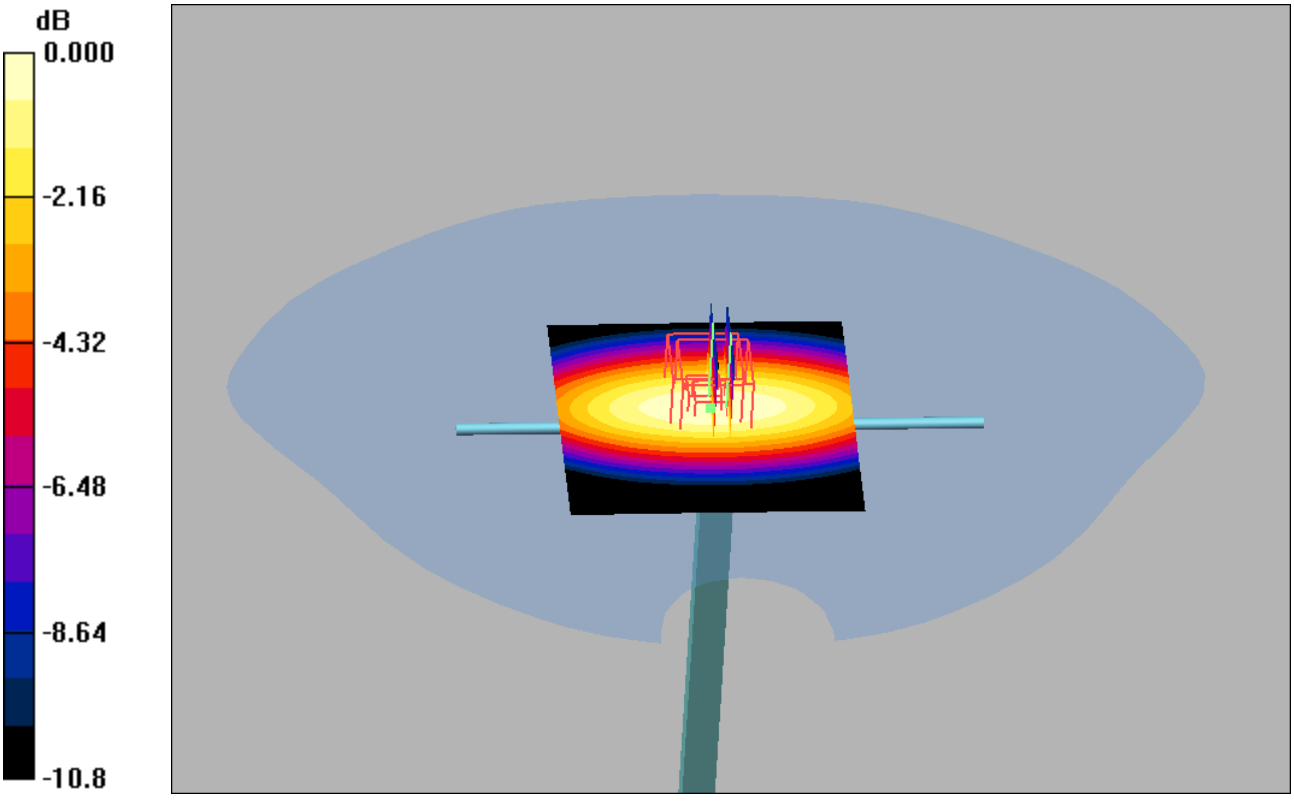
0 dB = 1.02mW/g

Prepared (also subject responsible if other)		No.	
SEM/CCMVAR Rodney Dixon		REP 2009 006 X2A 02	
Approved	Checked		
SEM/CCMVPCP Gary Thomas		D	

835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_835Head_438_1023_25Sept09_T01

File Name: Validation_835Head_438_1023_25Sept09_T01.da4

Phantom: SAM with CRP (Low Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)Duty Cycle: 1:1Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.912 mho/m; ε_r = 41.3; 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) = 1.06 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.3 V/m; Power Drift = 0.031 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 0.986 mW/g; SAR(10 g) = 0.645 mW/g
Maximum value of SAR (measured) = 1.06 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.3 V/m; Power Drift = 0.031 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 0.985 mW/g; SAR(10 g) = 0.644 mW/g



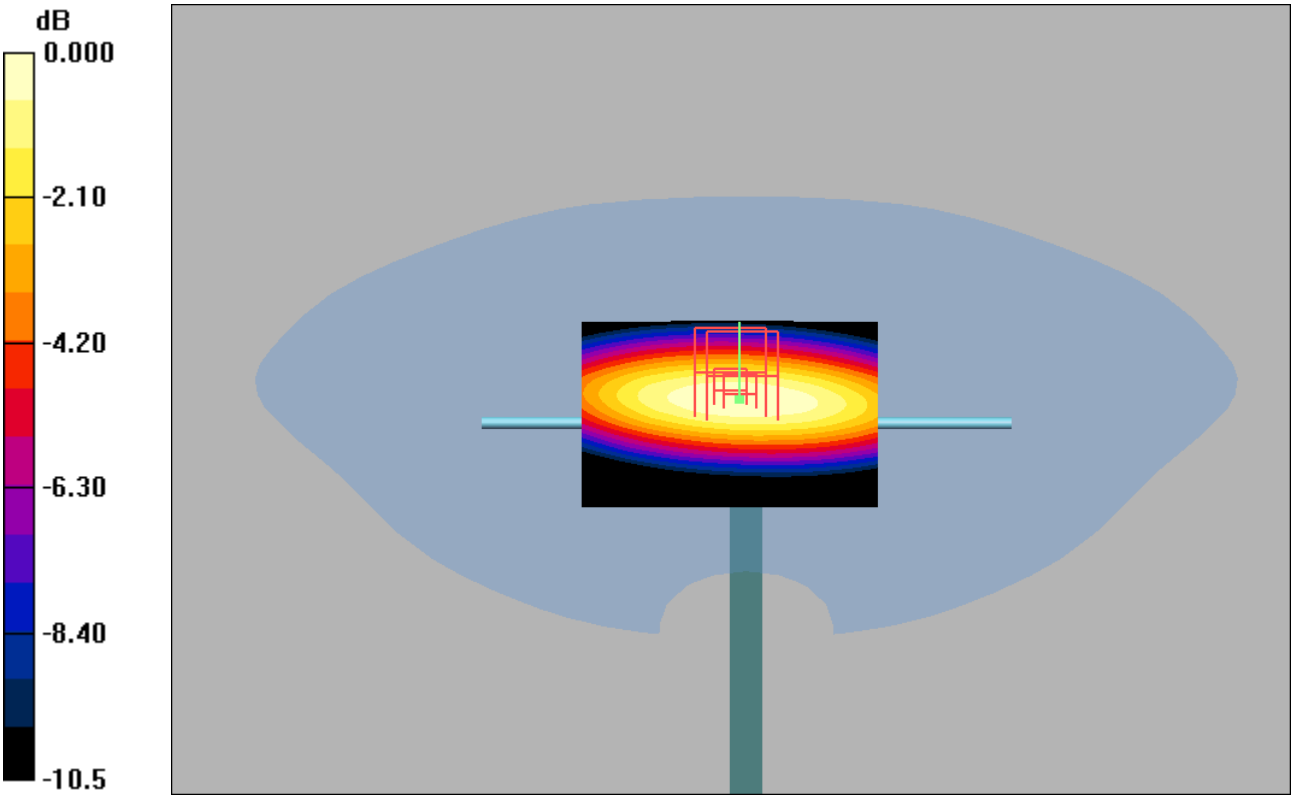
0 dB = 1.06mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_835Head_438_1023_28Sept09_T01

File Name: Validation_835Head_438_1023_28Sept09_T01.da4

Phantom: SAM with CRP (Low Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)Duty Cycle: 1:1Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.899 mho/m; ε_r = 41.3; 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) = 1.04 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.1 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.969 mW/g; SAR(10 g) = 0.632 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 = 35.1 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.966 mW/g; SAR(10 g) = 0.633 mW/g
Maximum value of SAR (measured) = 1.03 mW/g



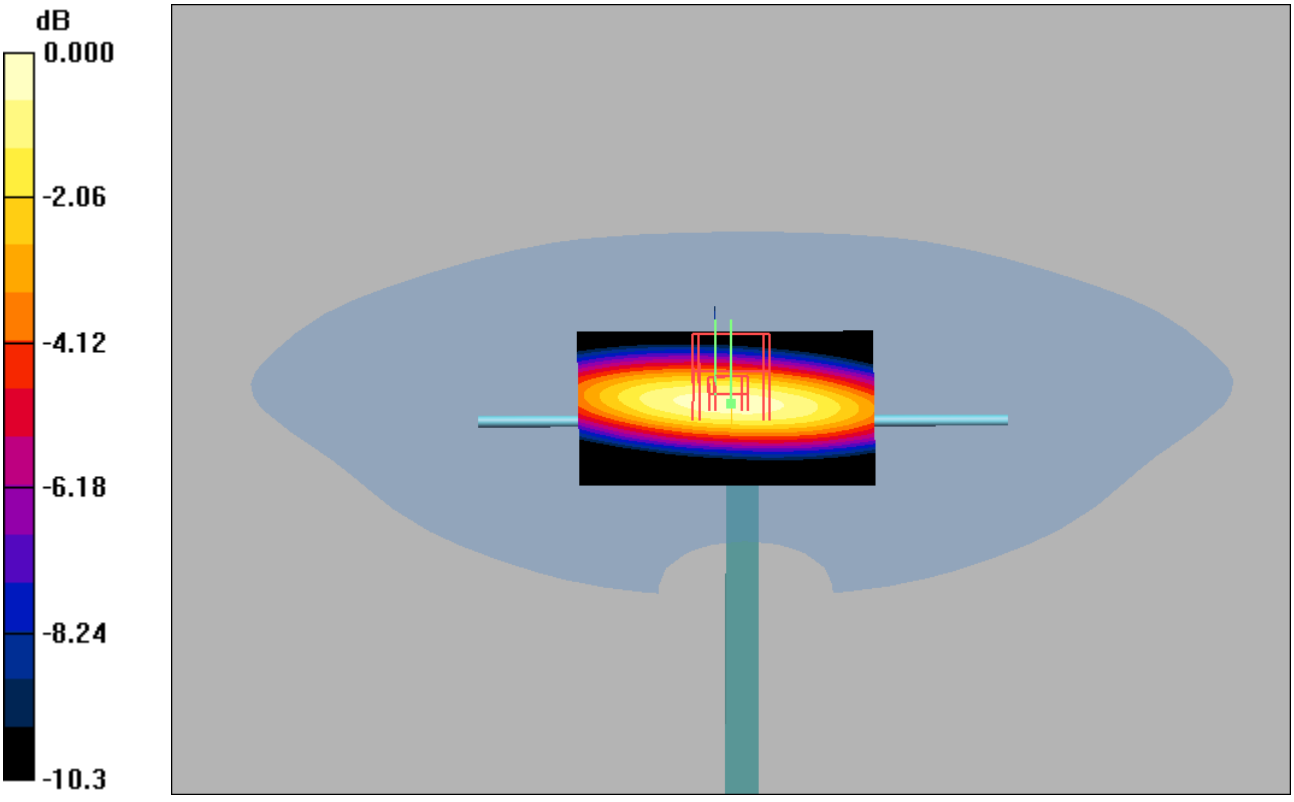
0 dB = 1.03mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_835Body_438_1031_30Sept09_T01

File Name: Validation_835Body_438_1031_30Sept09_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 = 0.977 mho/m; ε_r = 54.9; 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) = 1.04 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.7 V/m; Power Drift = -0.138 dB
Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.980 mW/g; SAR(10 g) = 0.644 mW/g
Maximum value of SAR (measured) = 1.06 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.7 V/m; Power Drift = -0.138 dB
Peak SAR (extrapolated) = 1.44 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.664 mW/g
Maximum value of SAR (measured) = 1.10 mW/g



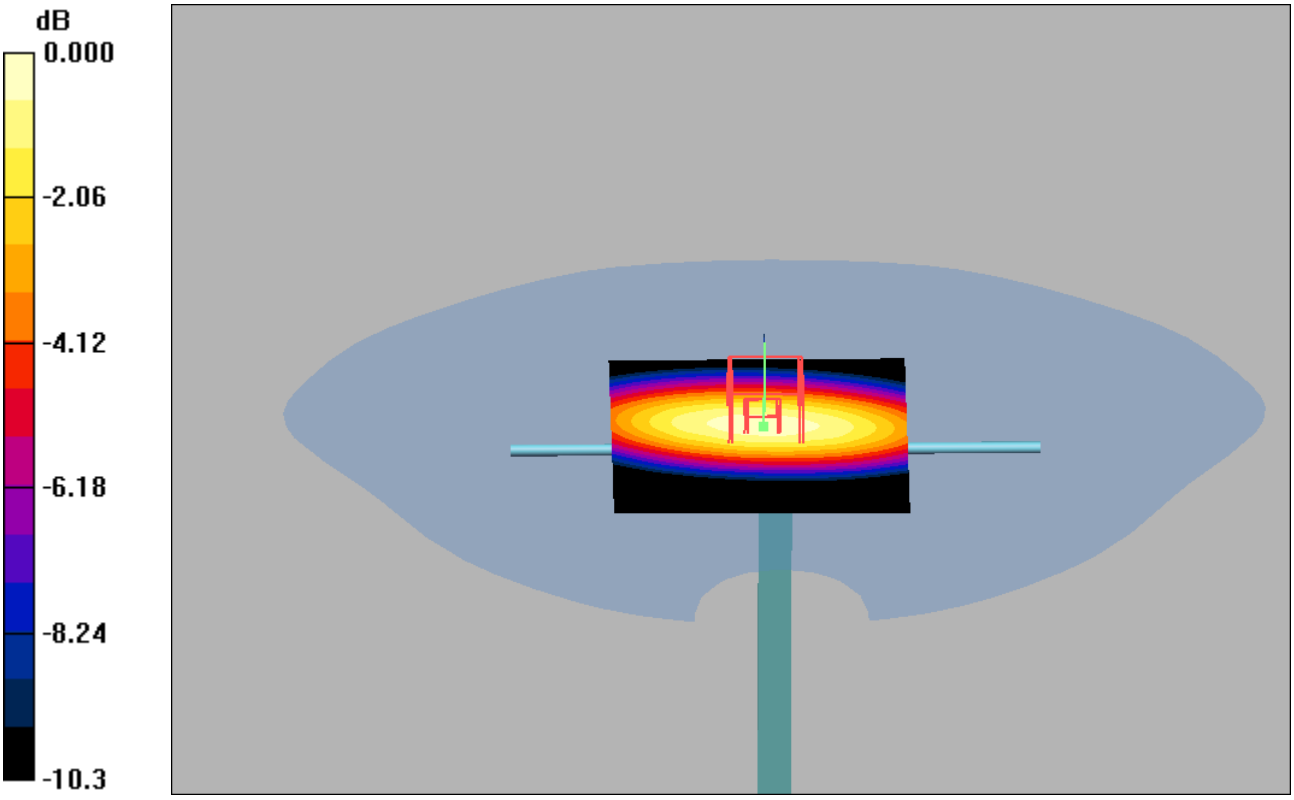
0 dB = 1.10mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

835 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_835Body_438_1031_01Oct09_T01

File Name: Validation_835Body_438_1031_01Oct09_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 = 0.974 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) = 1.03 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.0 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.971 mW/g; SAR(10 g) = 0.640 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 = 34.0 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.661 mW/g
Maximum value of SAR (measured) = 1.09 mW/g



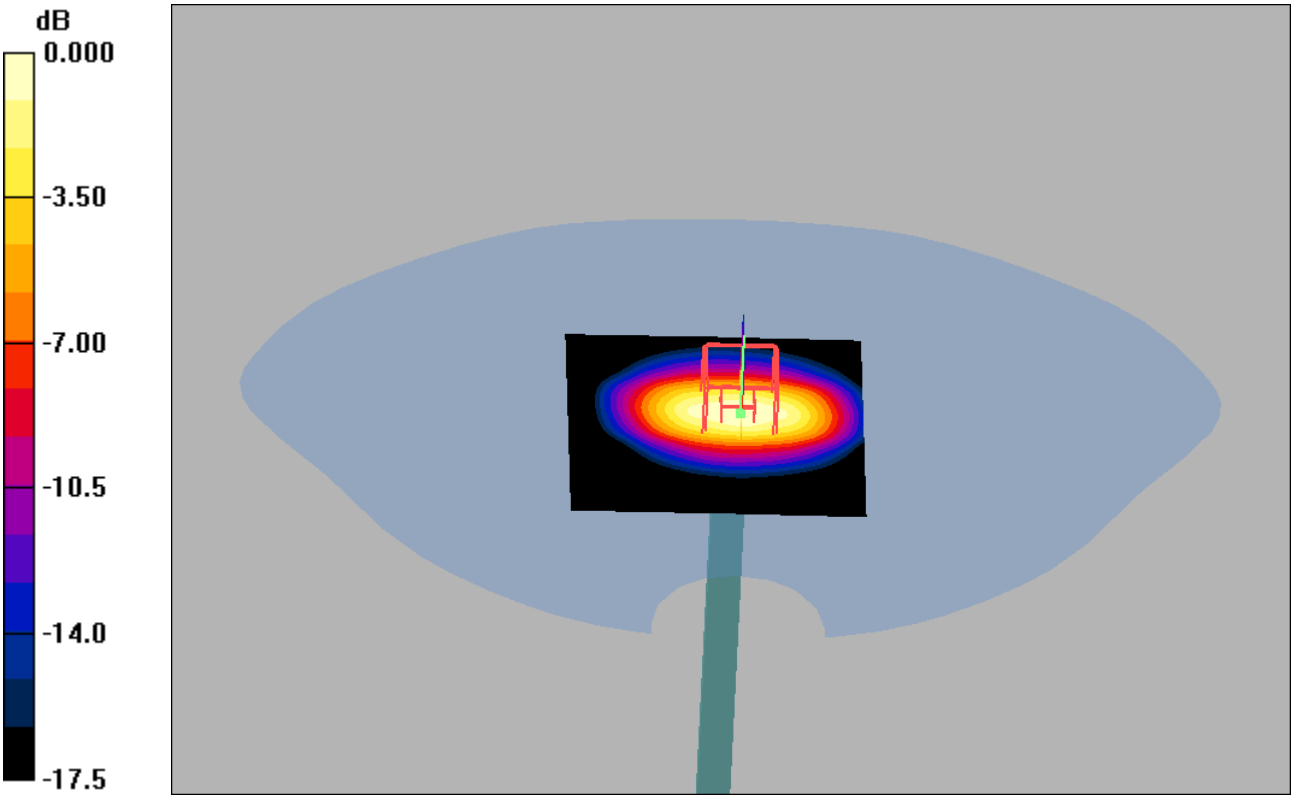
0 dB = 1.09mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		D
SEM/CCMVPCP Gary Thomas		

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_536_1054_21Sept09_T01

File Name: Validation_1900Head_536_1054_21Sept09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.47 mho/m; ε_r = 38.1; 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) = 4.77 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.0 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 6.93 W/kg
SAR(1 g) = 3.8 mW/g; SAR(10 g) = 1.98 mW/g
Maximum value of SAR (measured) = 4.31 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.0 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 7.25 W/kg
SAR(1 g) = 3.98 mW/g; SAR(10 g) = 2.09 mW/g
Maximum value of SAR (measured) = 4.46 mW/g



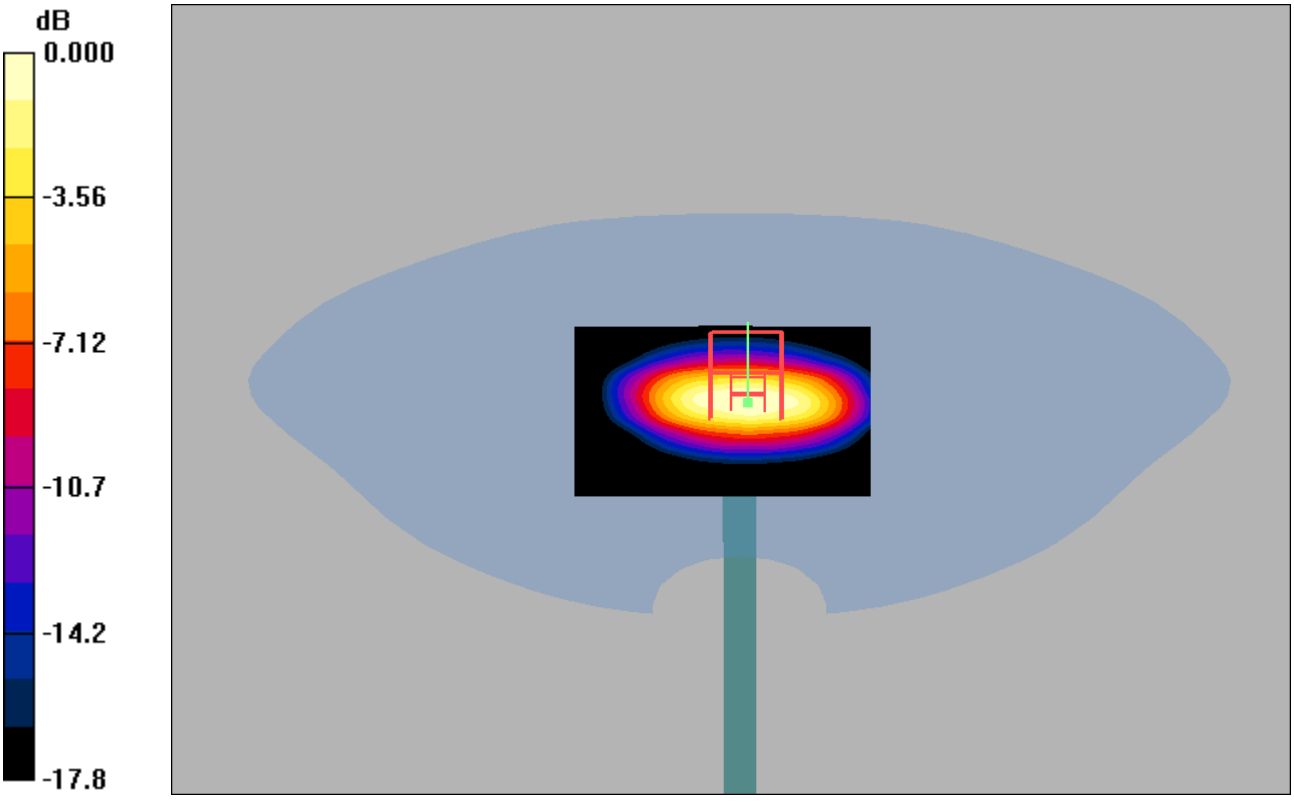
0 dB = 4.46mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_536_1054_22Sept09_T01

File Name: Validation_1900Head_536_1054_22Sept09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.46 mho/m; ε_r = 38.6; 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) = 4.70 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 = 0.055 dB
Peak SAR (extrapolated) = 6.83 W/kg
SAR(1 g) = 3.75 mW/g; SAR(10 g) = 1.95 mW/g
Maximum value of SAR (measured) = 4.20 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 = 0.055 dB
Peak SAR (extrapolated) = 6.93 W/kg
SAR(1 g) = 3.82 mW/g; SAR(10 g) = 2 mW/g
Maximum value of SAR (measured) = 4.21 mW/g



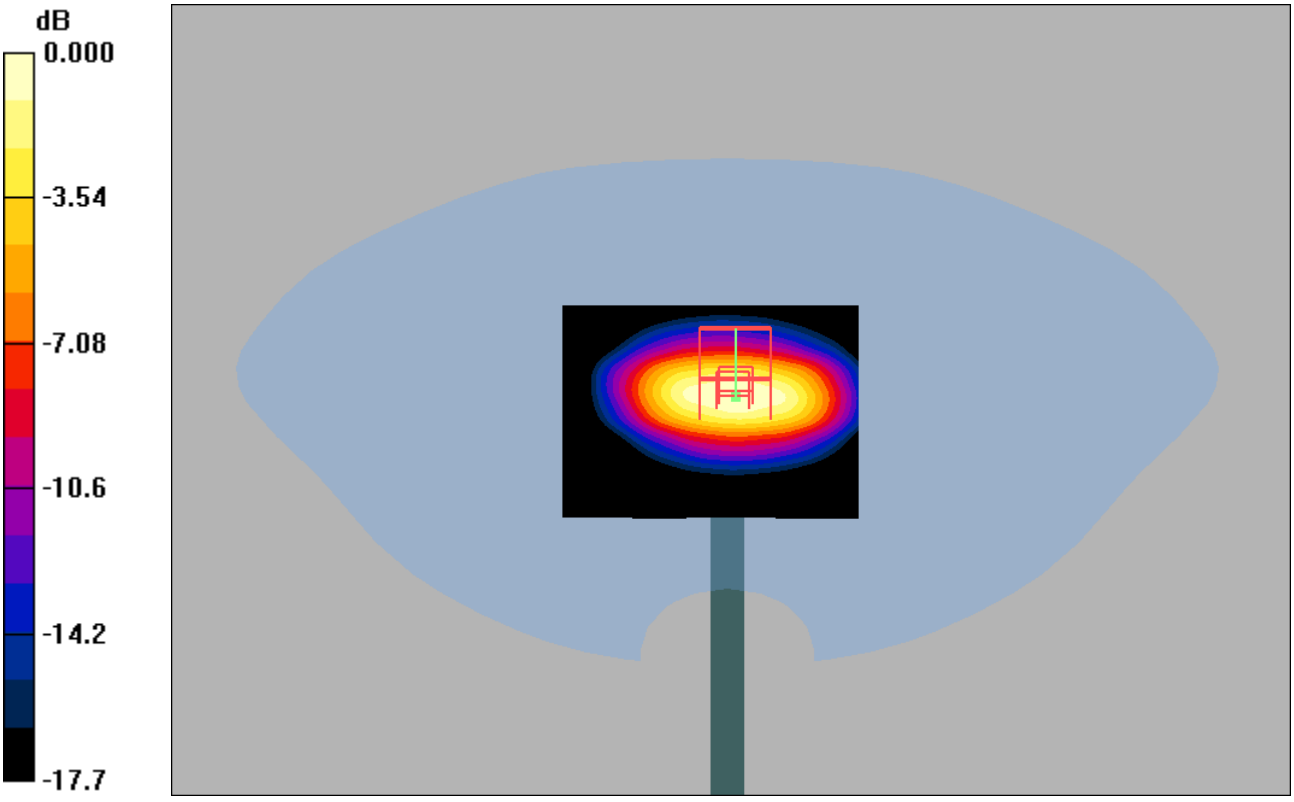
0 dB = 4.21mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_536_1054_25Sept09_T01

File Name: Validation_1900Head_536_1054_25Sept09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.45 mho/m; ε_r = 38.5; 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) = 4.77 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.5 V/m; Power Drift = 0.003 dB
Peak SAR (extrapolated) = 6.90 W/kg
SAR(1 g) = 3.78 mW/g; SAR(10 g) = 1.97 mW/g
Maximum value of SAR (measured) = 4.28 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.5 V/m; Power Drift = 0.003 dB
Peak SAR (extrapolated) = 7.11 W/kg
SAR(1 g) = 3.92 mW/g; SAR(10 g) = 2.06 mW/g
Maximum value of SAR (measured) = 4.35 mW/g



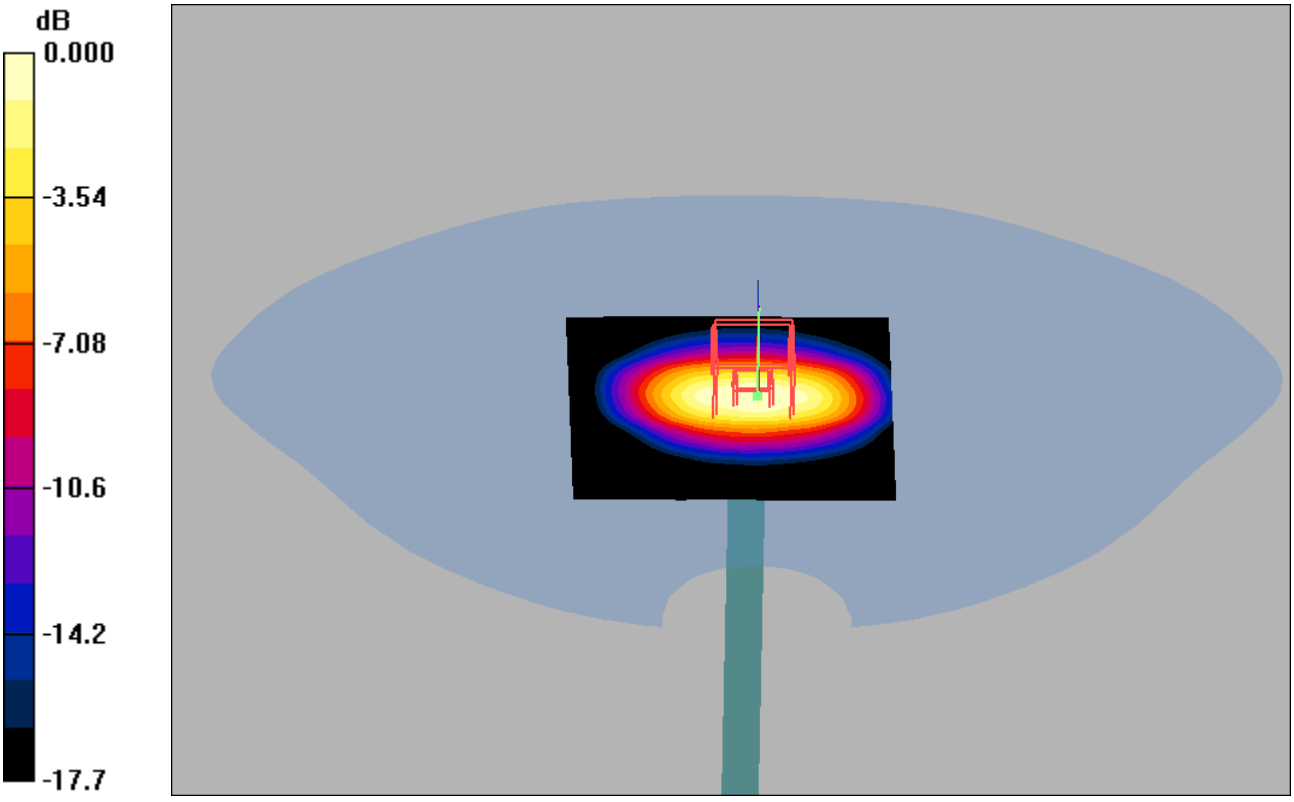
0 dB = 4.35mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_536_1054_28Sept09_T01

File Name: Validation_1900Head_536_1054_28Sept09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.46 mho/m; ε_r = 38.7; 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) = 4.91 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 = 0.013 dB
Peak SAR (extrapolated) = 7.23 W/kg
SAR(1 g) = 3.92 mW/g; SAR(10 g) = 2.03 mW/g
Maximum value of SAR (measured) = 4.41 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 = 0.013 dB
Peak SAR (extrapolated) = 7.22 W/kg
SAR(1 g) = 3.92 mW/g; SAR(10 g) = 2.04 mW/g
Maximum value of SAR (measured) = 4.42 mW/g



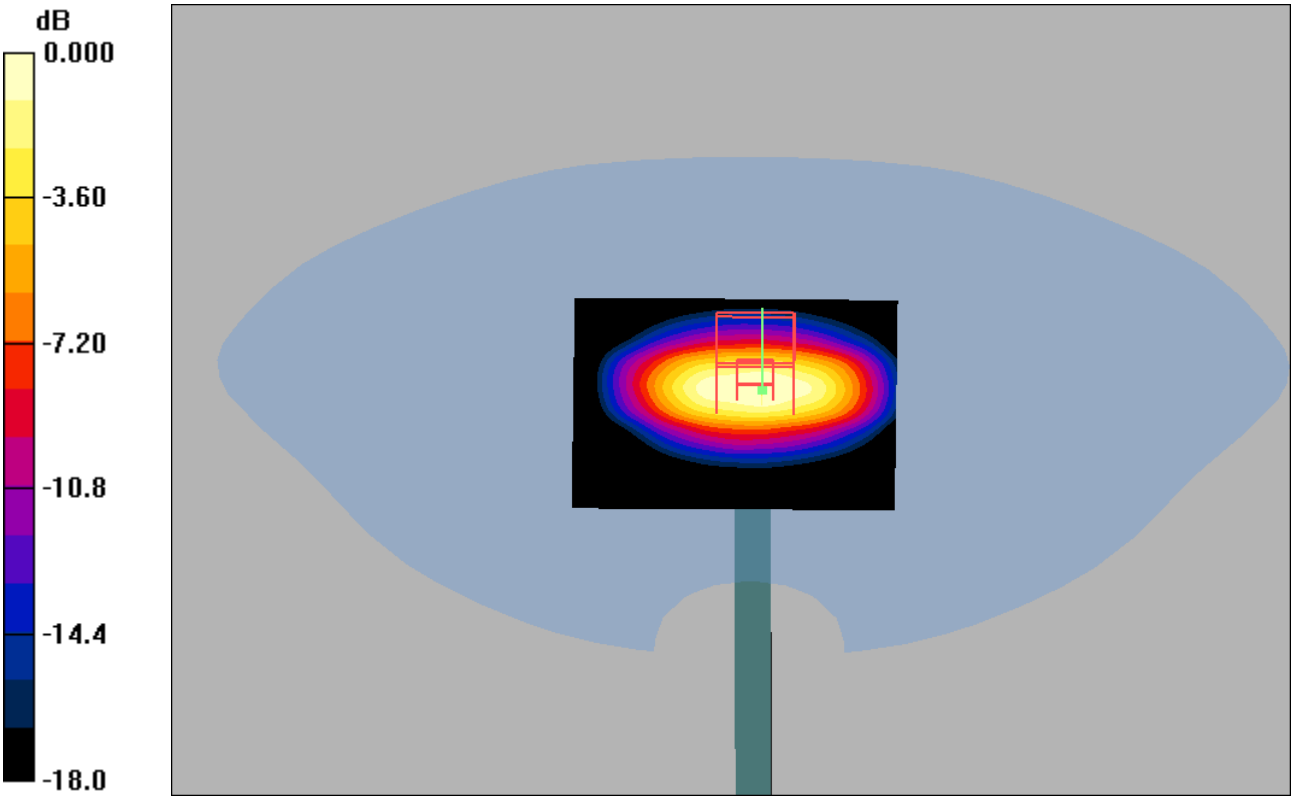
0 dB = 4.42mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_536_1054_29Sept09_T01

File Name: Validation_1900Head_536_1054_29Sept09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.46 mho/m; ε_r = 38.6; 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) = 4.90 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.4 V/m; Power Drift = -0.007 dB
Peak SAR (extrapolated) = 7.14 W/kg
SAR(1 g) = 3.91 mW/g; SAR(10 g) = 2.03 mW/g
Maximum value of SAR (measured) = 4.39 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.4 V/m; Power Drift = -0.007 dB
Peak SAR (extrapolated) = 7.19 W/kg
SAR(1 g) = 3.93 mW/g; SAR(10 g) = 2.05 mW/g
Maximum value of SAR (measured) = 4.36 mW/g



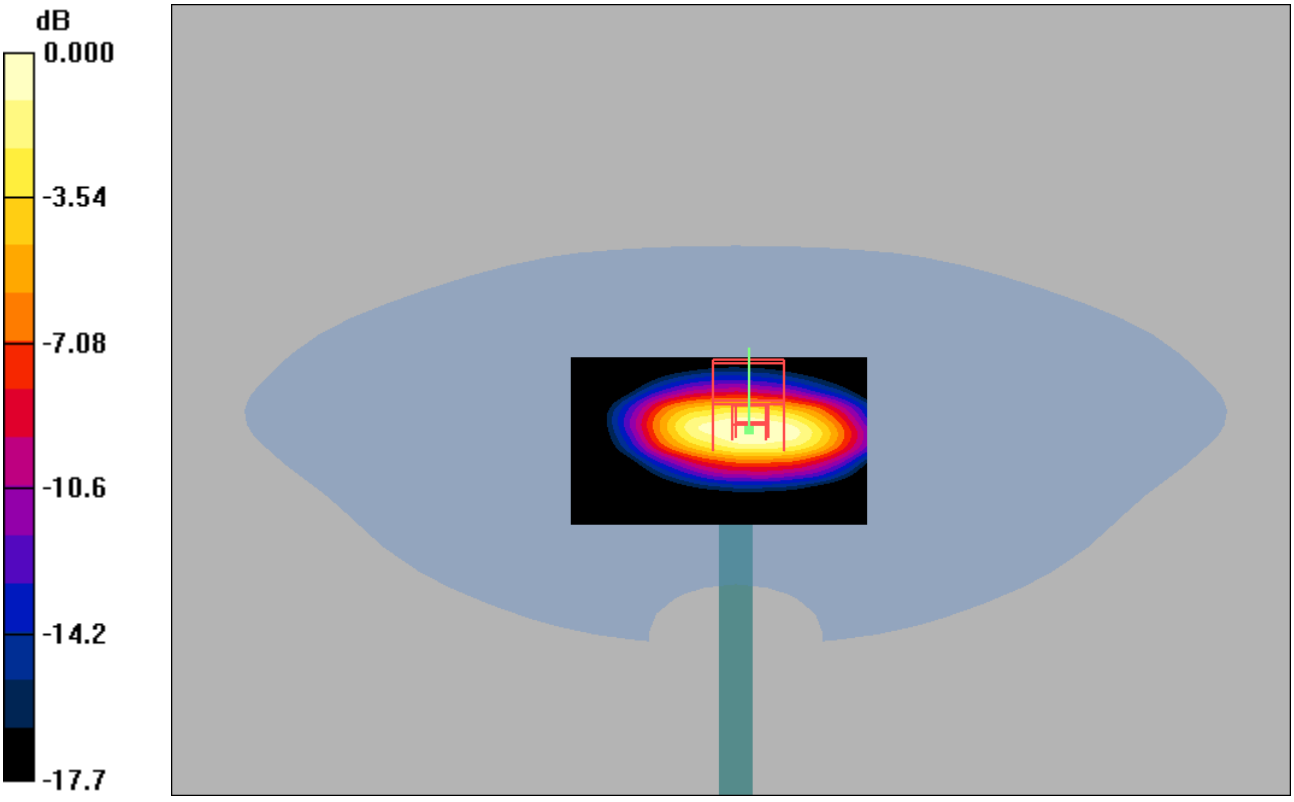
0 dB = 4.36mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_536_1054_30Sept09_T01

File Name: Validation_1900Head_536_1054_30Sept09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.46 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) = 4.88 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.6 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 7.10 W/kg
SAR(1 g) = 3.88 mW/g; SAR(10 g) = 2.01 mW/g
Maximum value of SAR (measured) = 4.36 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.6 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 7.19 W/kg
SAR(1 g) = 3.94 mW/g; SAR(10 g) = 2.05 mW/g
Maximum value of SAR (measured) = 4.42 mW/g



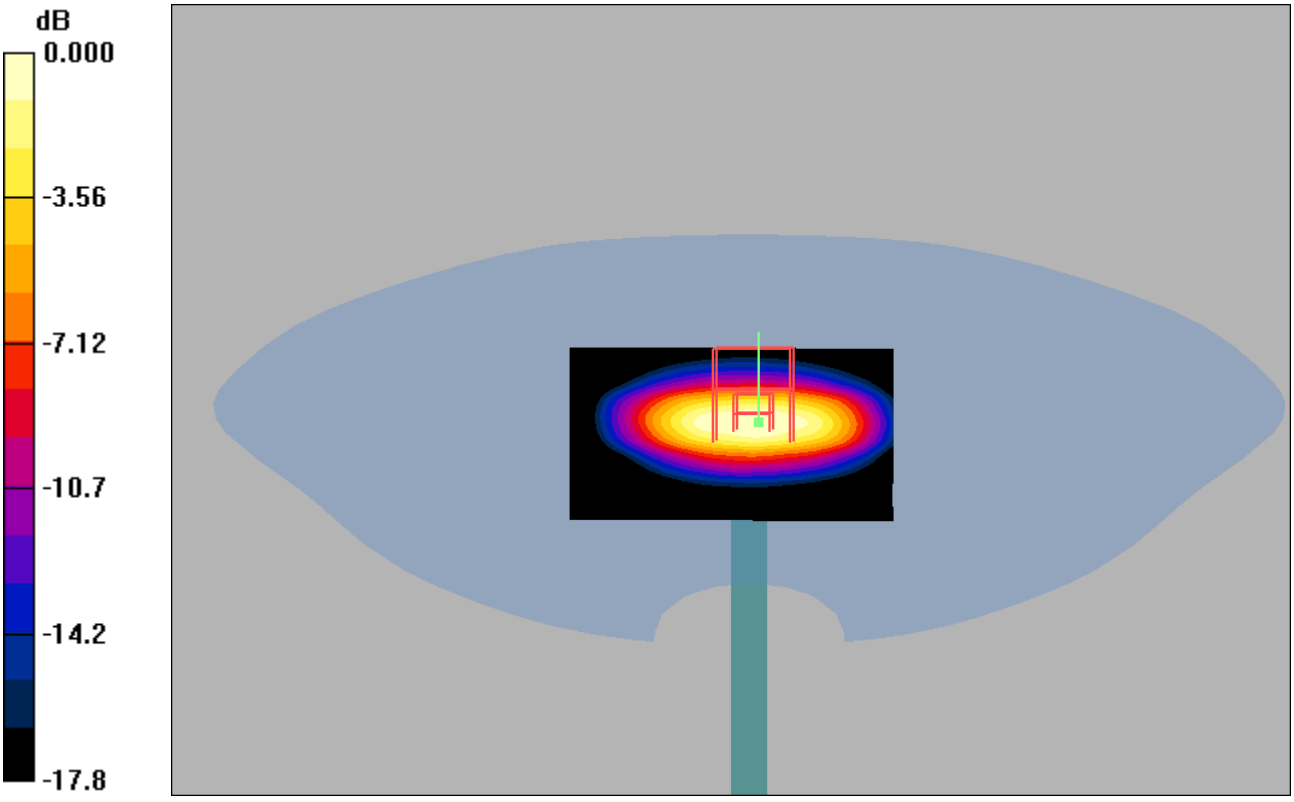
0 dB = 4.42mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Head_536_1054_01Oct09_T01

File Name: Validation_1900Head_536_1054_01Oct09_T01.da4

Phantom: SAM with CRP (High Band Head)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)Duty Cycle: 1:1Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.44 mho/m; ε_r = 38.7; 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) = 4.66 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.3 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 6.73 W/kg
SAR(1 g) = 3.69 mW/g; SAR(10 g) = 1.92 mW/g
Maximum value of SAR (measured) = 4.13 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.3 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 6.72 W/kg
SAR(1 g) = 3.68 mW/g; SAR(10 g) = 1.92 mW/g
Maximum value of SAR (measured) = 4.12 mW/g



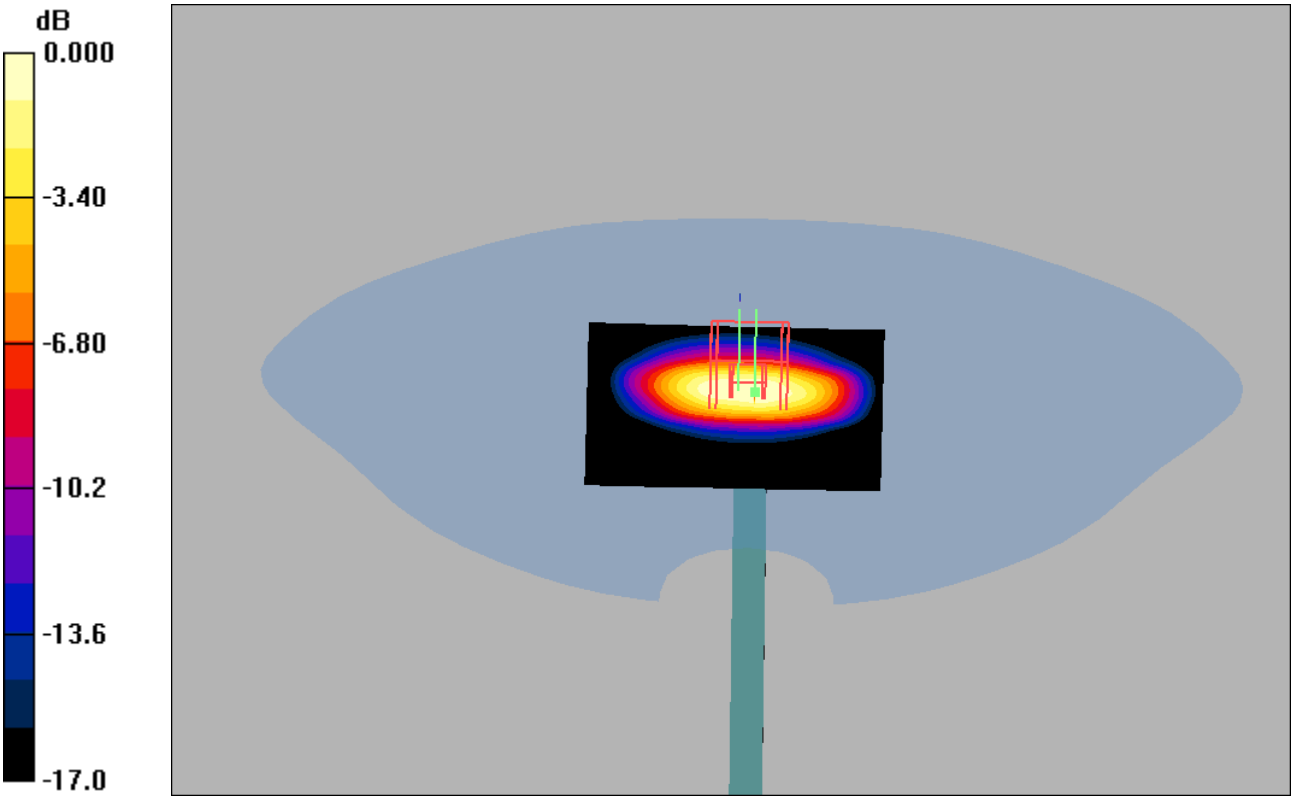
0 dB = 4.12mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Body_536_1020_02Oct09_T01

File Name: Validation_1900Body_536_1020_02Oct09_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 = 51.3; 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) = 5.11 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.5 V/m; Power Drift = -0.001 dB
Peak SAR (extrapolated) = 7.62 W/kg
SAR(1 g) = 4.11 mW/g; SAR(10 g) = 2.15 mW/g
Maximum value of SAR (measured) = 4.57 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.5 V/m; Power Drift = -0.001 dB
Peak SAR (extrapolated) = 7.55 W/kg
SAR(1 g) = 4.09 mW/g; SAR(10 g) = 2.14 mW/g
Maximum value of SAR (measured) = 4.56 mW/g



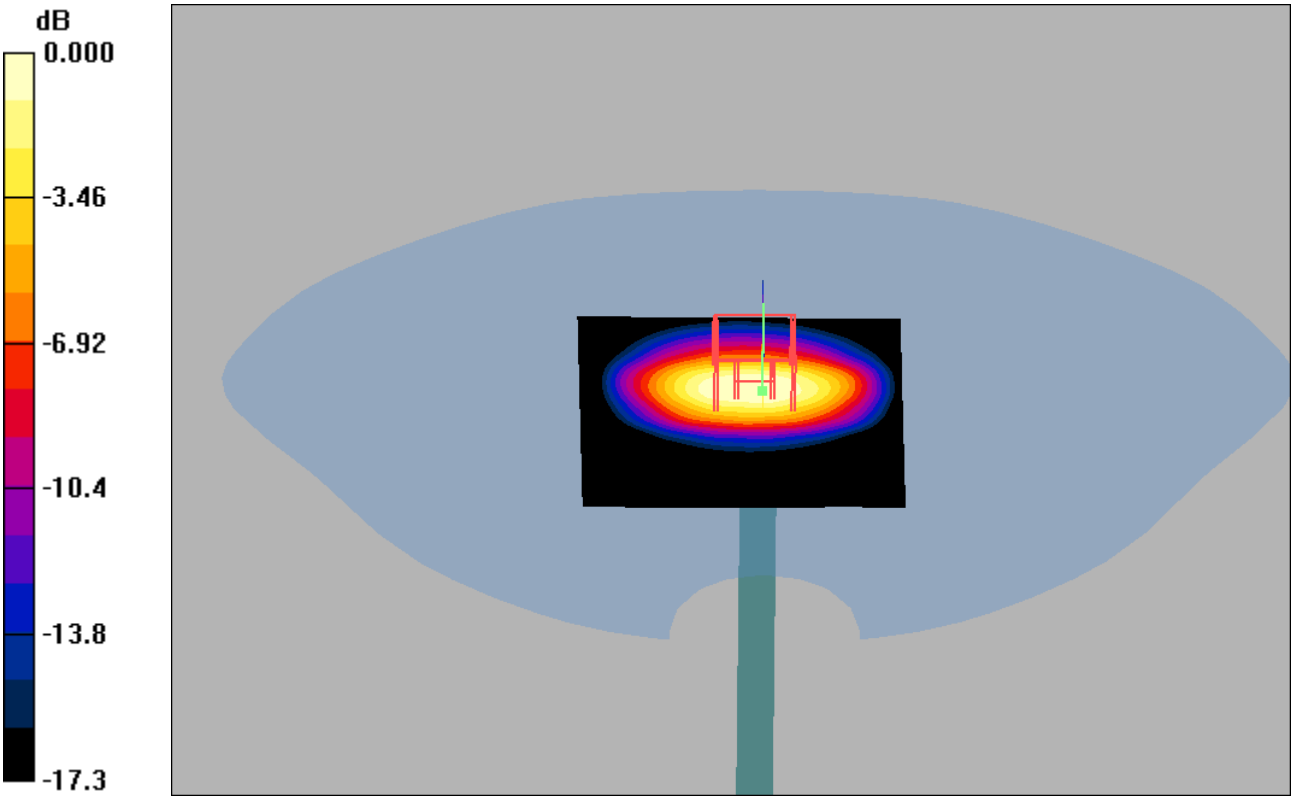
0 dB = 4.56mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_1900Body_536_1020_05Oct09_T01

File Name: Validation_1900Body_536_1020_05Oct09_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 = 50.7; 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) = 5.09 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.7 V/m; Power Drift = 0.021 dB
Peak SAR (extrapolated) = 7.90 W/kg
SAR(1 g) = 4.24 mW/g; SAR(10 g) = 2.21 mW/g
Maximum value of SAR (measured) = 4.71 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.7 V/m; Power Drift = 0.021 dB
Peak SAR (extrapolated) = 7.68 W/kg
SAR(1 g) = 4.16 mW/g; SAR(10 g) = 2.18 mW/g
Maximum value of SAR (measured) = 4.59 mW/g



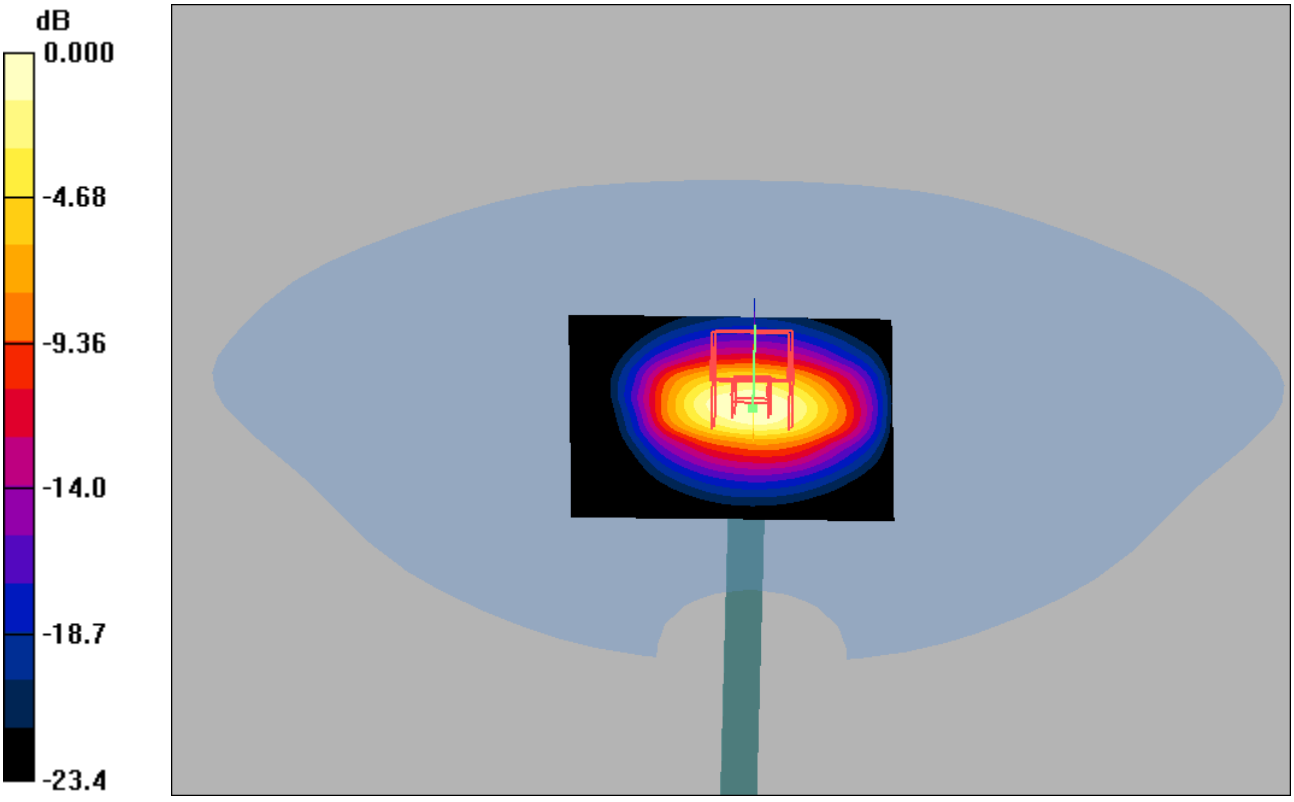
0 dB = 4.59mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

2450 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_2450Head_702_1251_05Oct09_T01

File Name: Validation_2450Head_702_1251_05Oct09_T01.da4

Phantom: SAM with CRP (WLAN right phantom)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)Duty Cycle: 1:1Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 1.91 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) = 6.69 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.9 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 12.7 W/kg
SAR(1 g) = 5.2 mW/g; SAR(10 g) = 2.33 mW/g
Maximum value of SAR (measured) = 5.72 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.9 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 13.1 W/kg
SAR(1 g) = 5.32 mW/g; SAR(10 g) = 2.38 mW/g
Maximum value of SAR (measured) = 5.73 mW/g



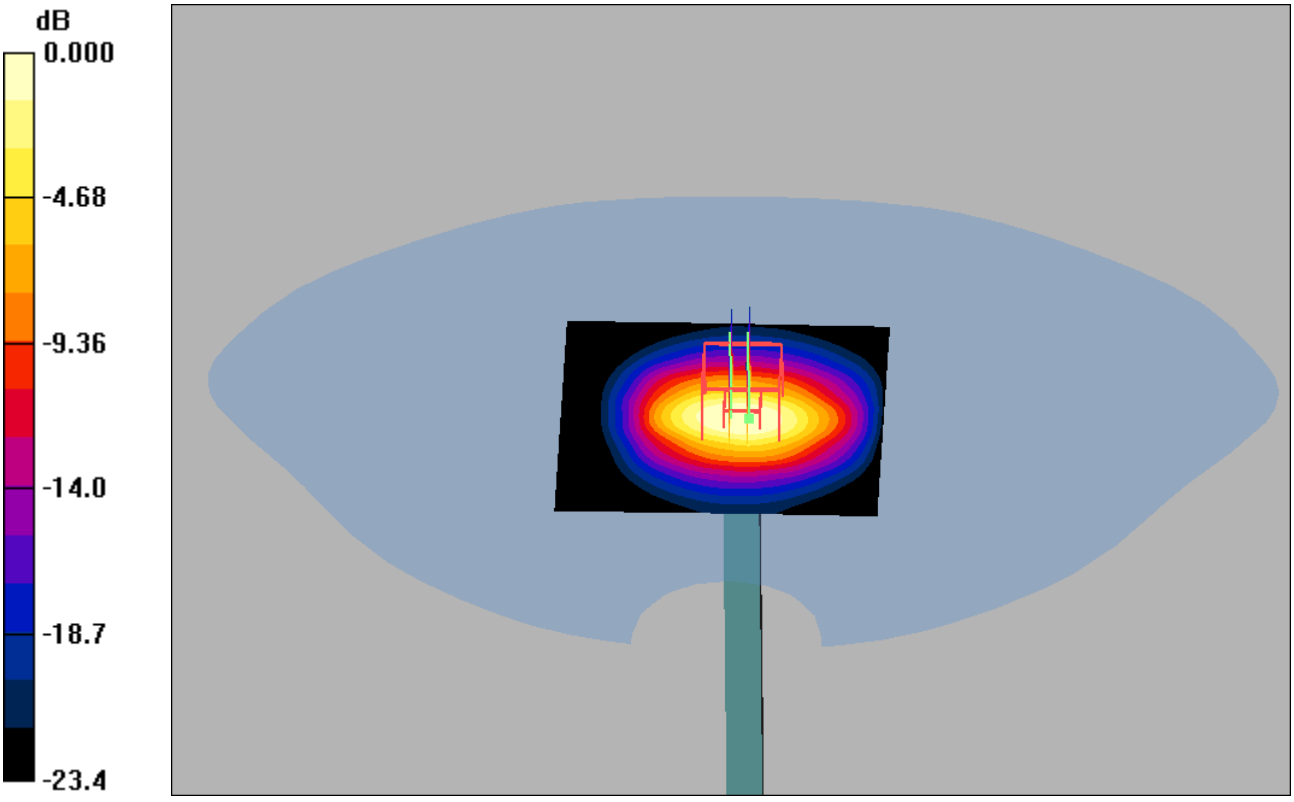
0 dB = 5.73mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

2450 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_2450Head_702_1251_07Oct09_T01

File Name: Validation_2450Head_702_1251_07Oct09_T01.da4

Phantom: SAM with CRP (WLAN right phantom)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)Duty Cycle: 1:1Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 1.91 mho/m; ε_r = 39.2; 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) = 6.81 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.5 V/m; Power Drift = 0.074 dB
Peak SAR (extrapolated) = 13.6 W/kg
SAR(1 g) = 5.51 mW/g; SAR(10 g) = 2.45 mW/g
Maximum value of SAR (measured) = 5.97 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.5 V/m; Power Drift = 0.074 dB
Peak SAR (extrapolated) = 13.8 W/kg
SAR(1 g) = 5.59 mW/g; SAR(10 g) = 2.5 mW/g
Maximum value of SAR (measured) = 6.00 mW/g



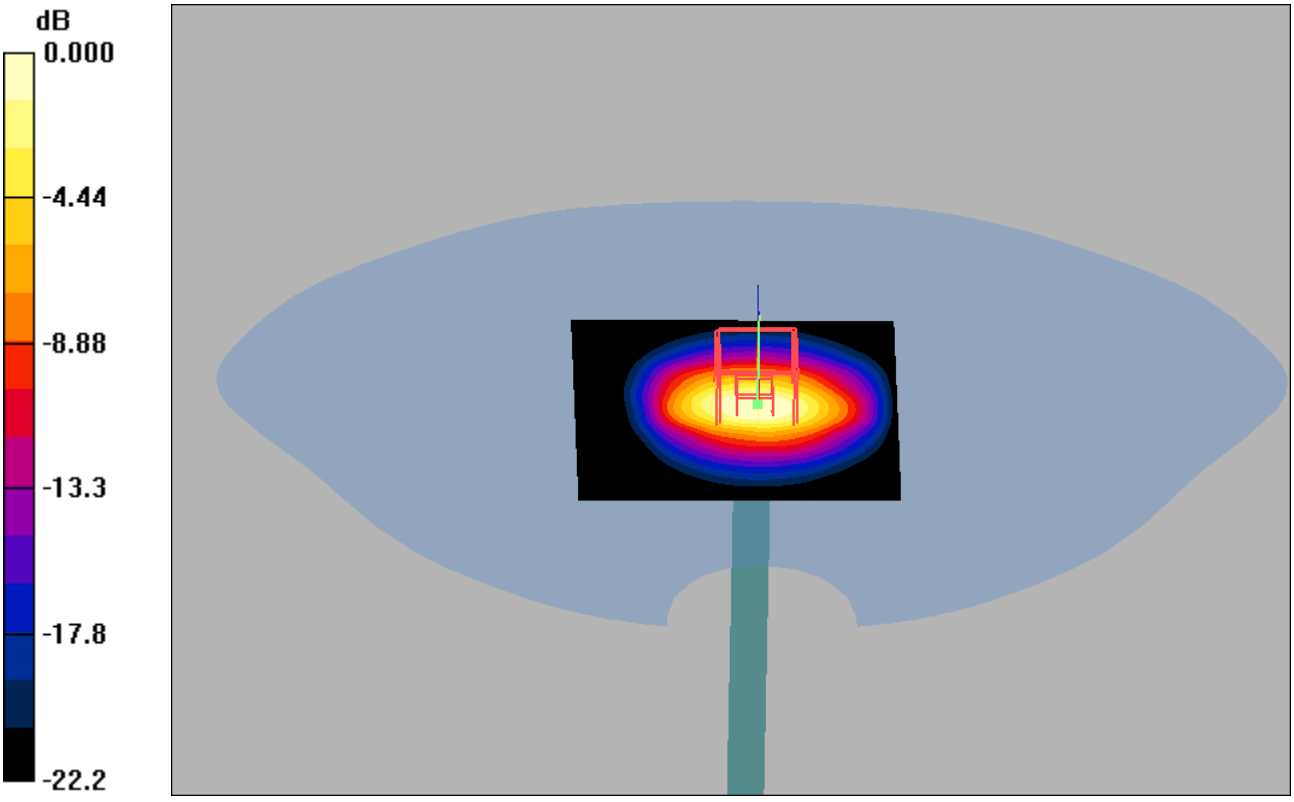
0 dB = 6.00mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

2450 MHz SAR Distribution of Validation Dipole Antenna
System Performance Check.
Validation_2450Body_702_1251_02Oct09_T01

File Name: Validation_2450Body_702_1251_02Oct09_T01.da4

Phantom: SAM with CRP (WLAN right phantom)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(3.9, 3.9, 3.9)Duty Cycle: 1:1Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 2.11 mho/m; ε_r = 51.9; 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) = 6.97 mW/g
Dipole at 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.4 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 14.0 W/kg
SAR(1 g) = 5.65 mW/g; SAR(10 g) = 2.52 mW/g
Maximum value of SAR (measured) = 6.21 mW/g
Dipole at 10 mm/Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.4 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 14.2 W/kg
SAR(1 g) = 5.72 mW/g; SAR(10 g) = 2.57 mW/g
Maximum value of SAR (measured) = 6.30 mW/g



0 dB = 6.30mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Appendix 2

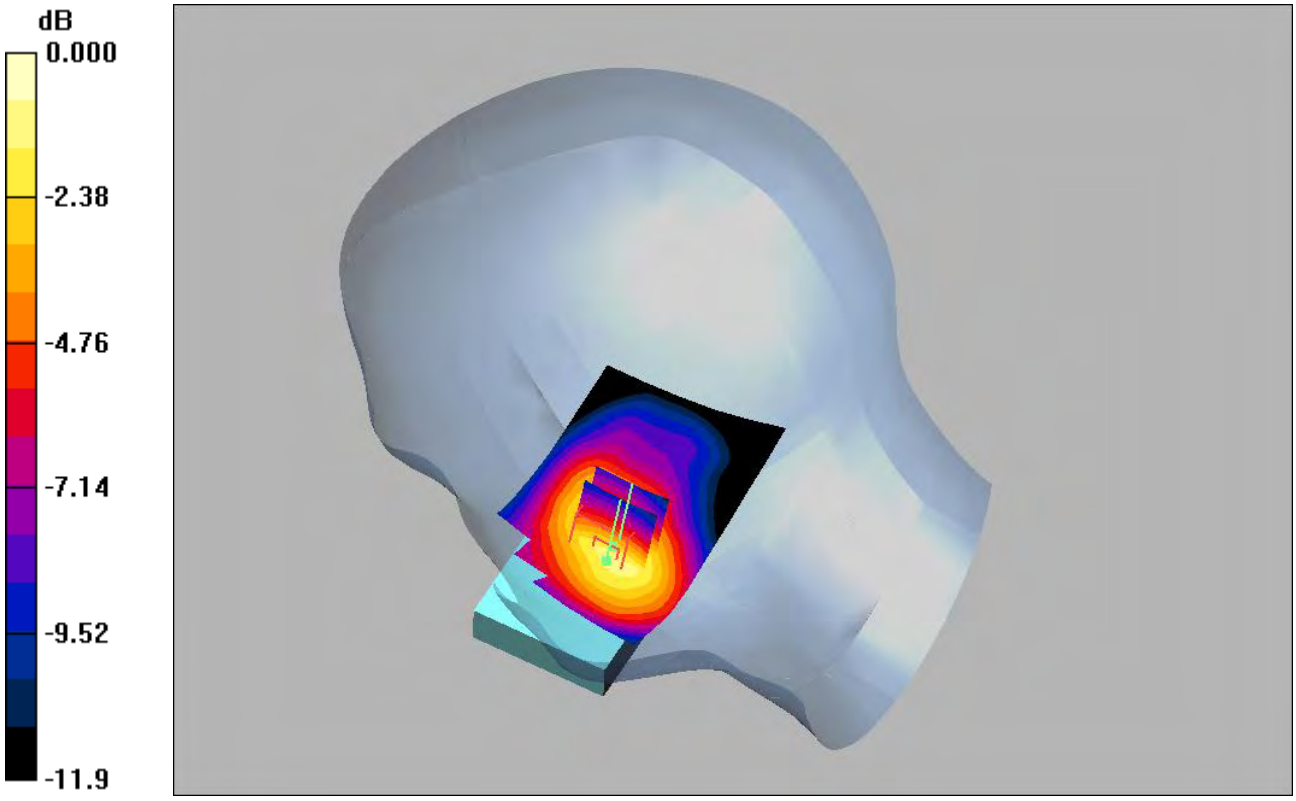
SAR distribution plots for Phantom Head Adjacent Use

Closed Position

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

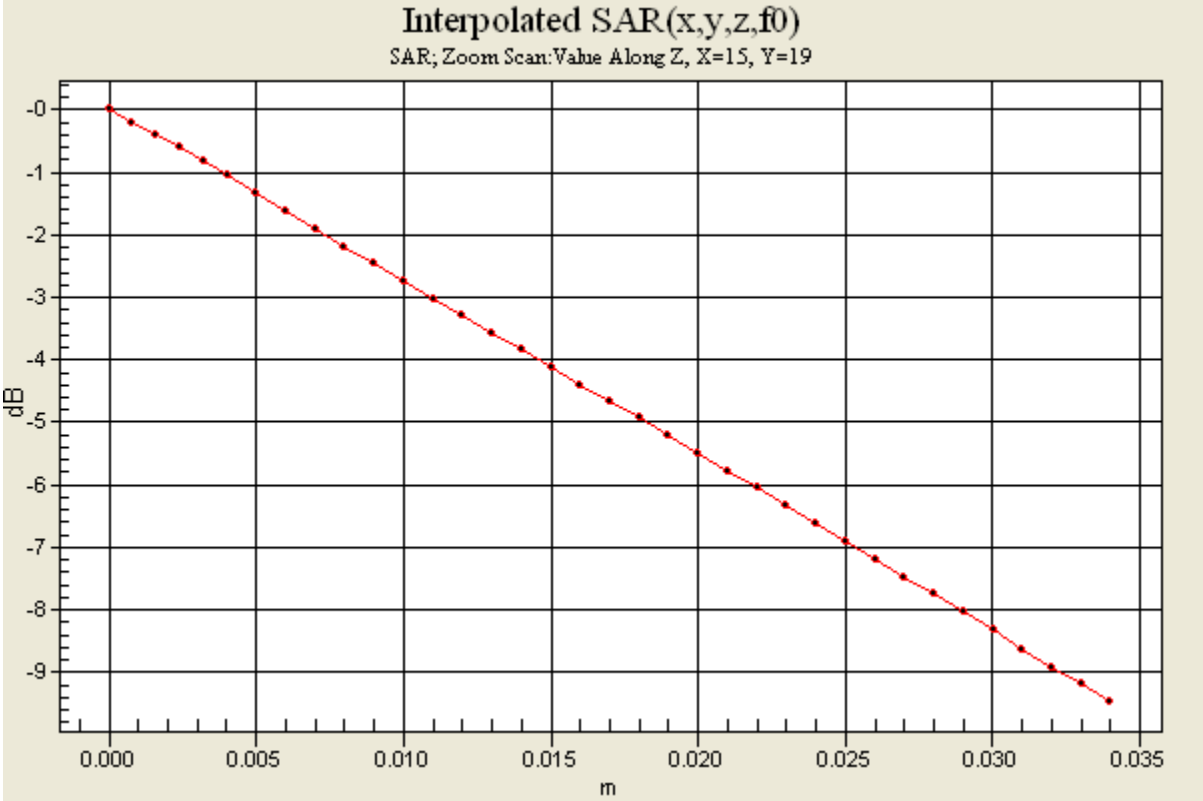
800 GSM Band: SAR Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/21/2009 12:38:26 PM
File Name: 21Sept09_X2A_GSM850_WALC_RCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 849 MHz; σ = 0.909 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes:
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- 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
High channel cheek/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.614 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 0.784 W/kg
SAR(1 g) = 0.579 mW/g; SAR(10 g) = 0.405 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.620 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.004 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.784 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.784mW/g

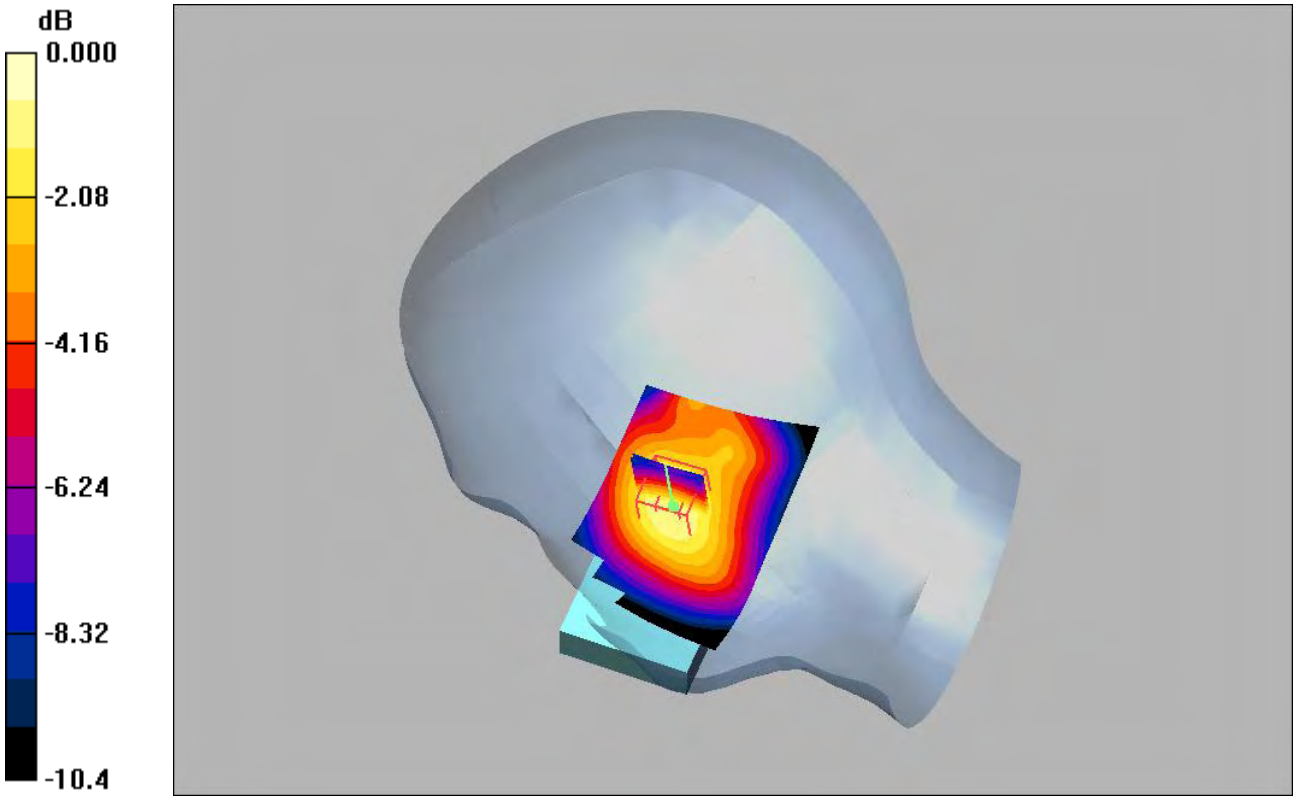
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

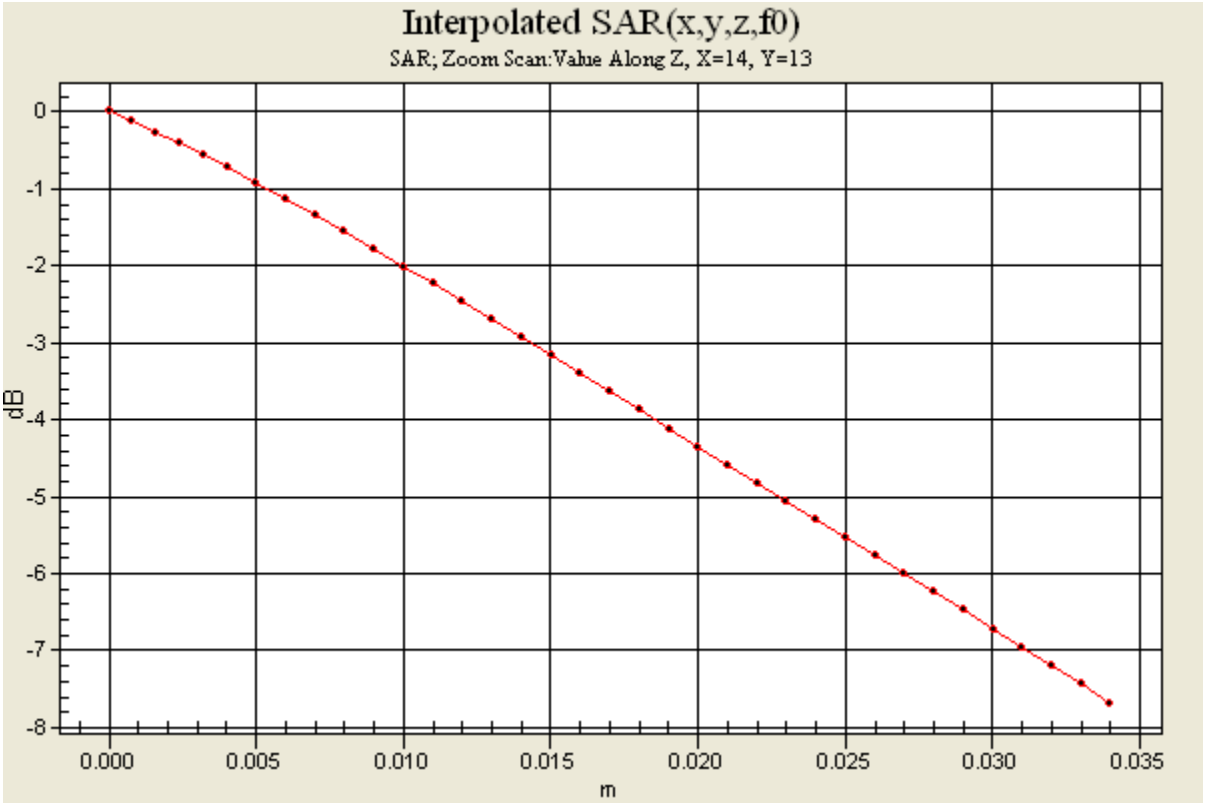
800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/21/2009 1:38:06 PM
File Name: 21Sept09_X2A_GSM850_WALC_RCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 849 MHz; σ = 0.909 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes:
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- 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
High channel tilt/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.300 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.352 W/kg
SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.205 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.301 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = 0.033 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.352 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.352mW/g

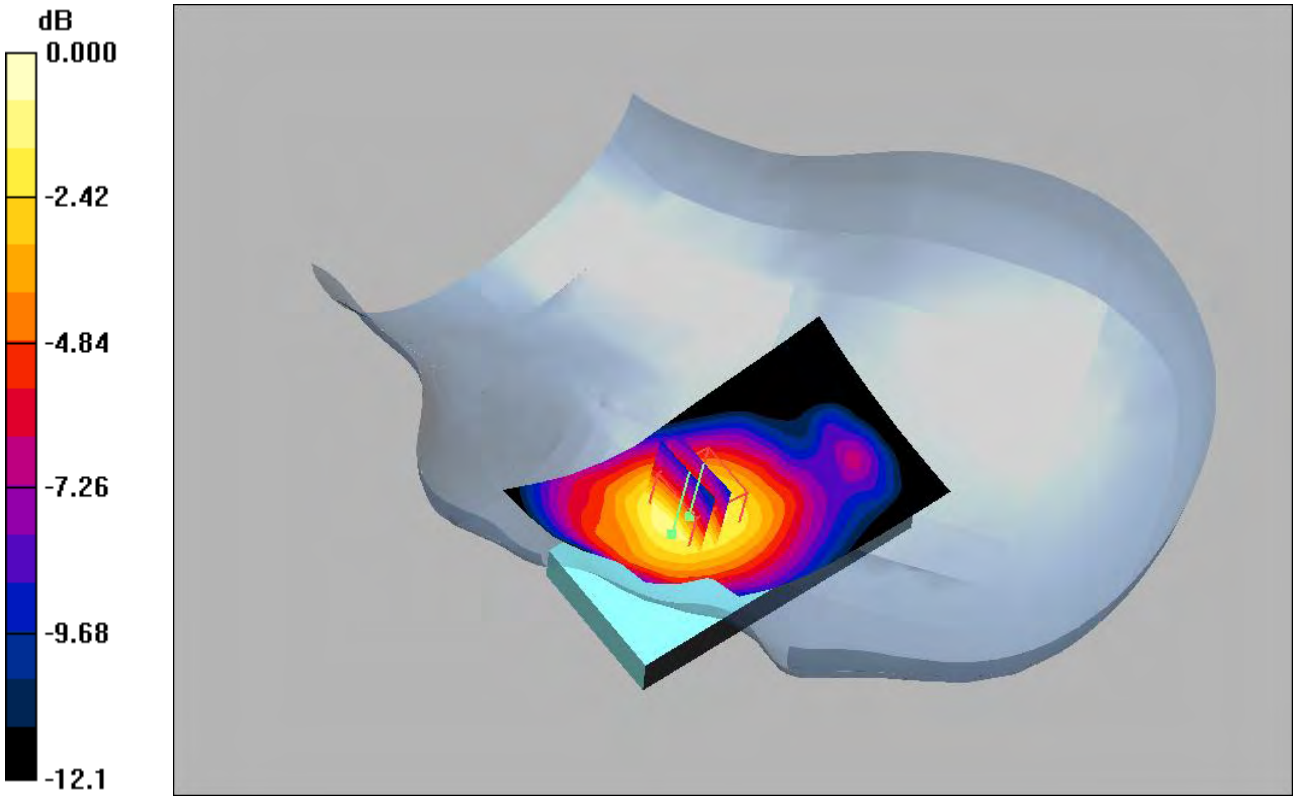
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

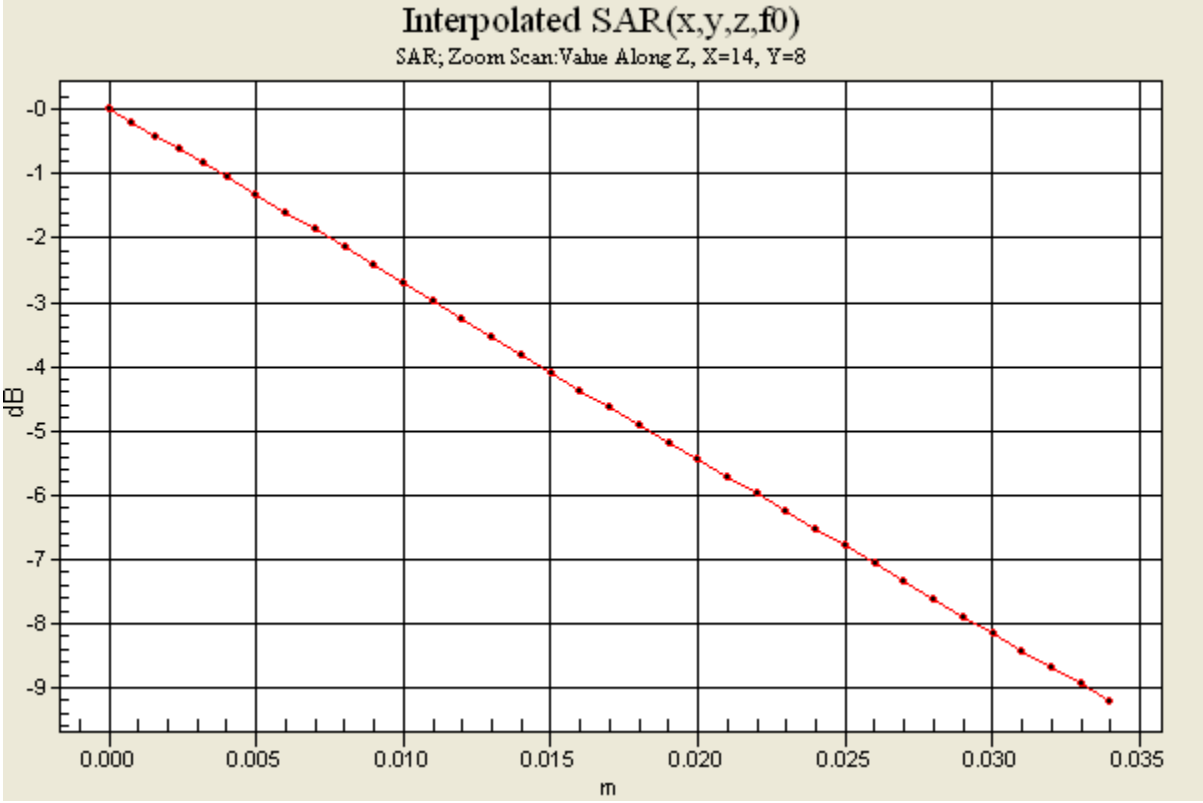
800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/21/2009 9:43:59 AM
File Name: 21Sept09_X2A_GSM850_WALC_LCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 849 MHz; σ = 0.909 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-41 Humidity - 43.4 % Ambient Temp - 23.6 C Simulant Temp - 23.5 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- 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
High channel cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.619 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 0.758 W/kg
SAR(1 g) = 0.583 mW/g; SAR(10 g) = 0.418 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.619 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = 0.019 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.758 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.758mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

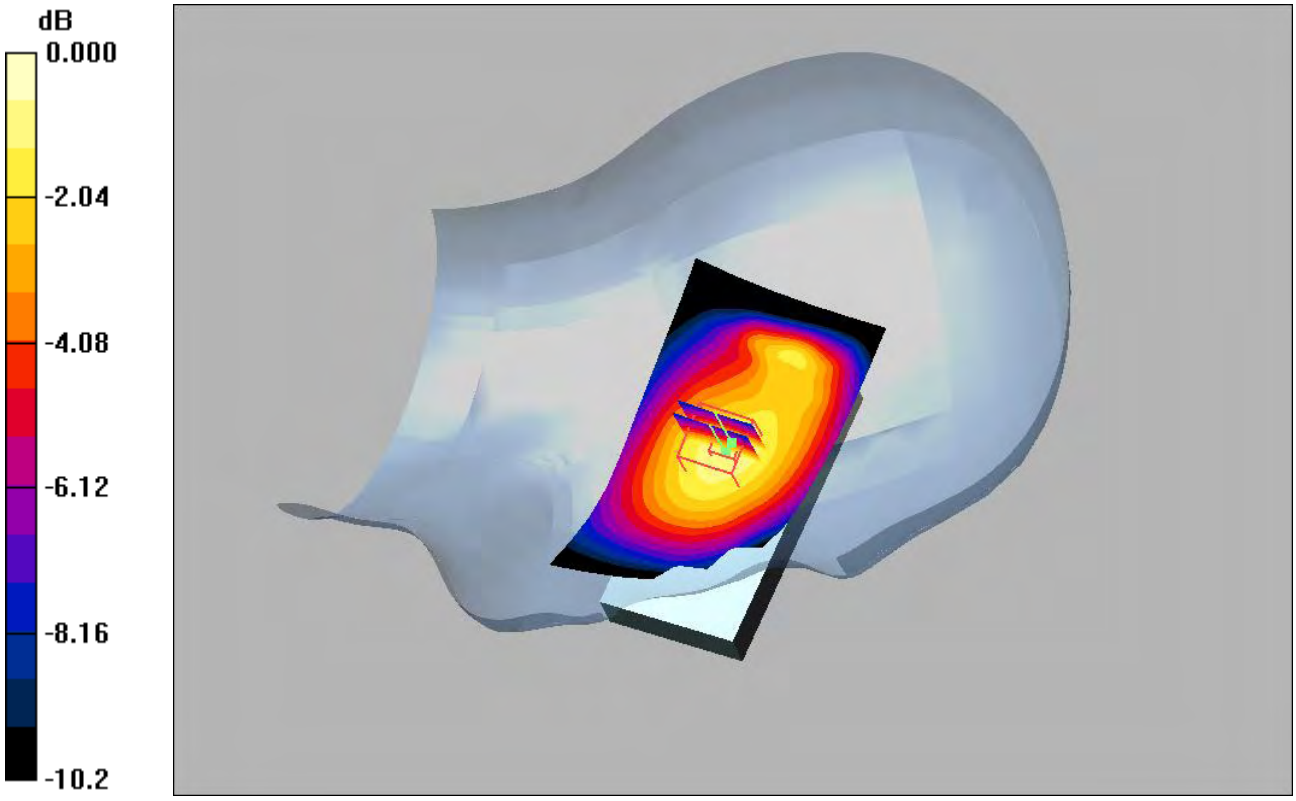


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/21/2009 11:06:36 AM
File Name: 21Sept09_X2A_GSM850_WALC_LCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 849 MHz; σ = 0.909 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-41 Humidity - 43.4 % Ambient Temp - 23.6 C Simulant Temp - 23.5 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- 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

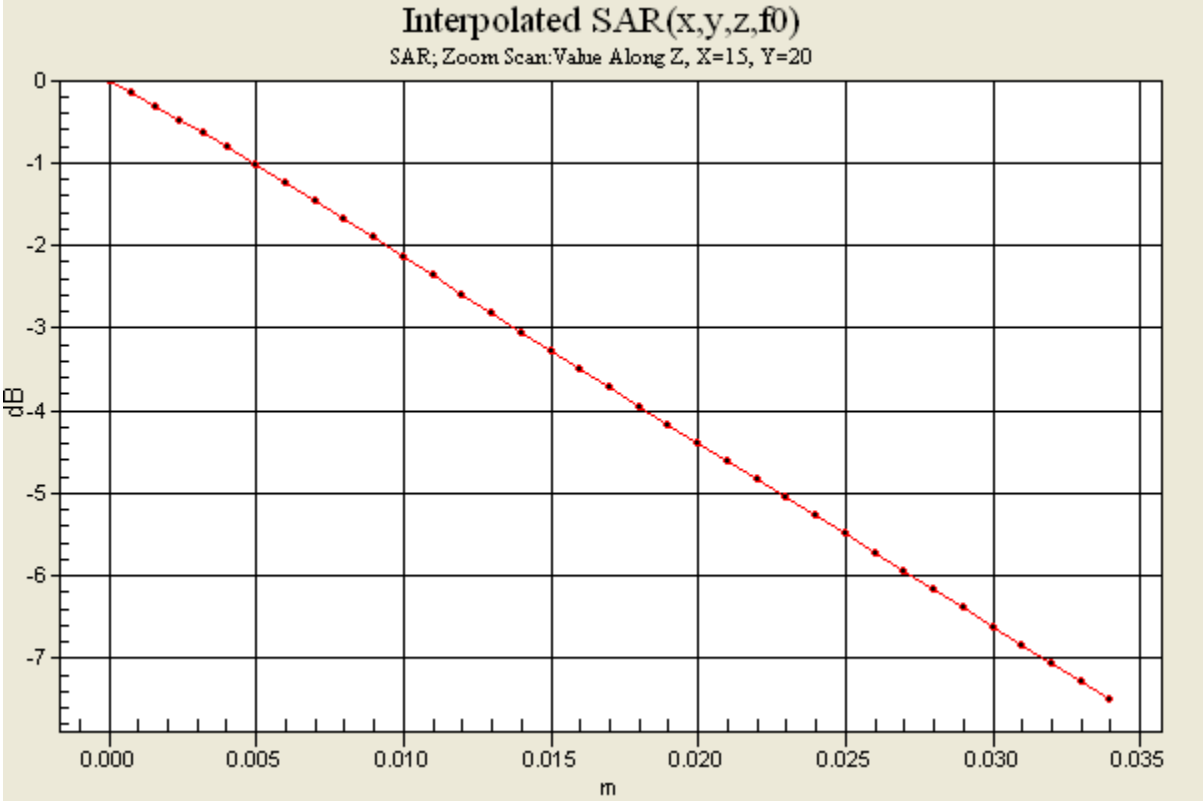
High channel tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.235 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.9 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.284 W/kg
SAR(1 g) = 0.225 mW/g; SAR(10 g) = 0.166 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.238 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.9 V/m; Power Drift = 0.007 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.284 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



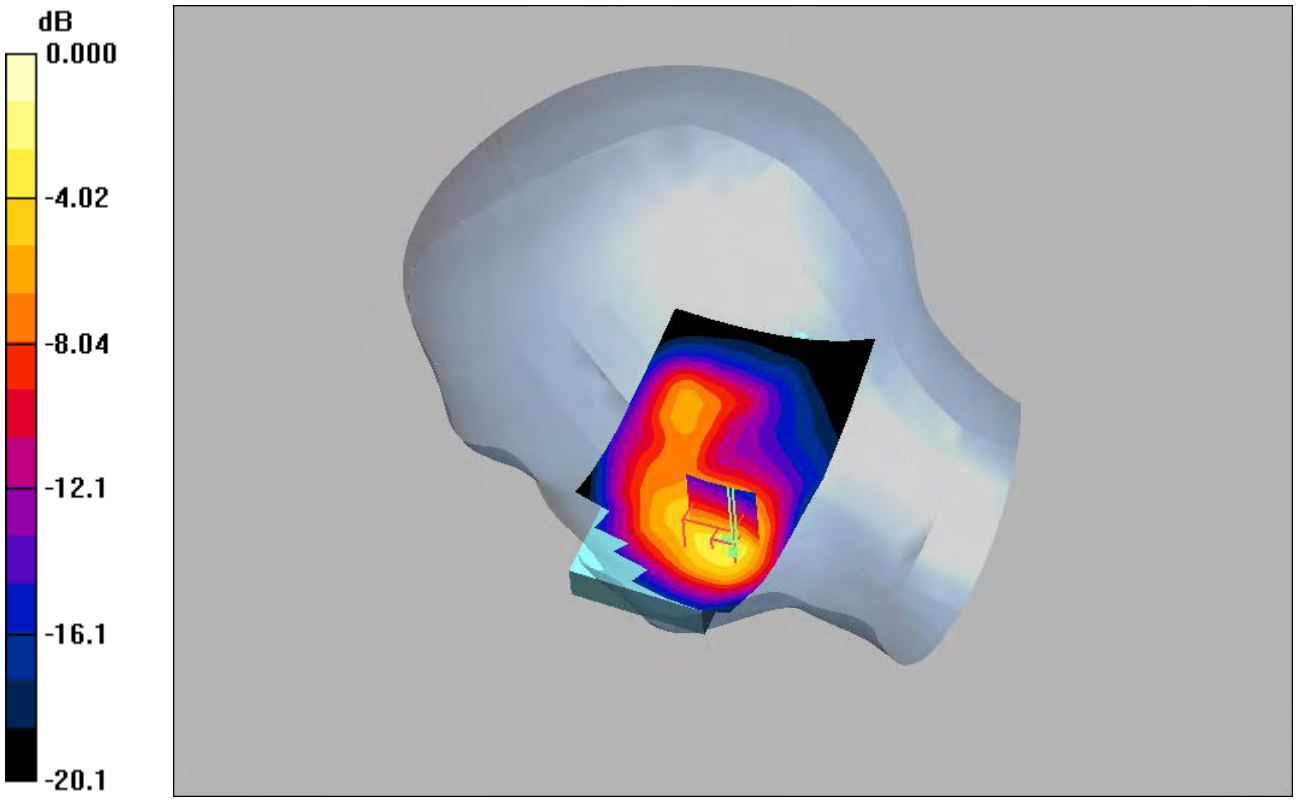
0 dB = 0.284mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



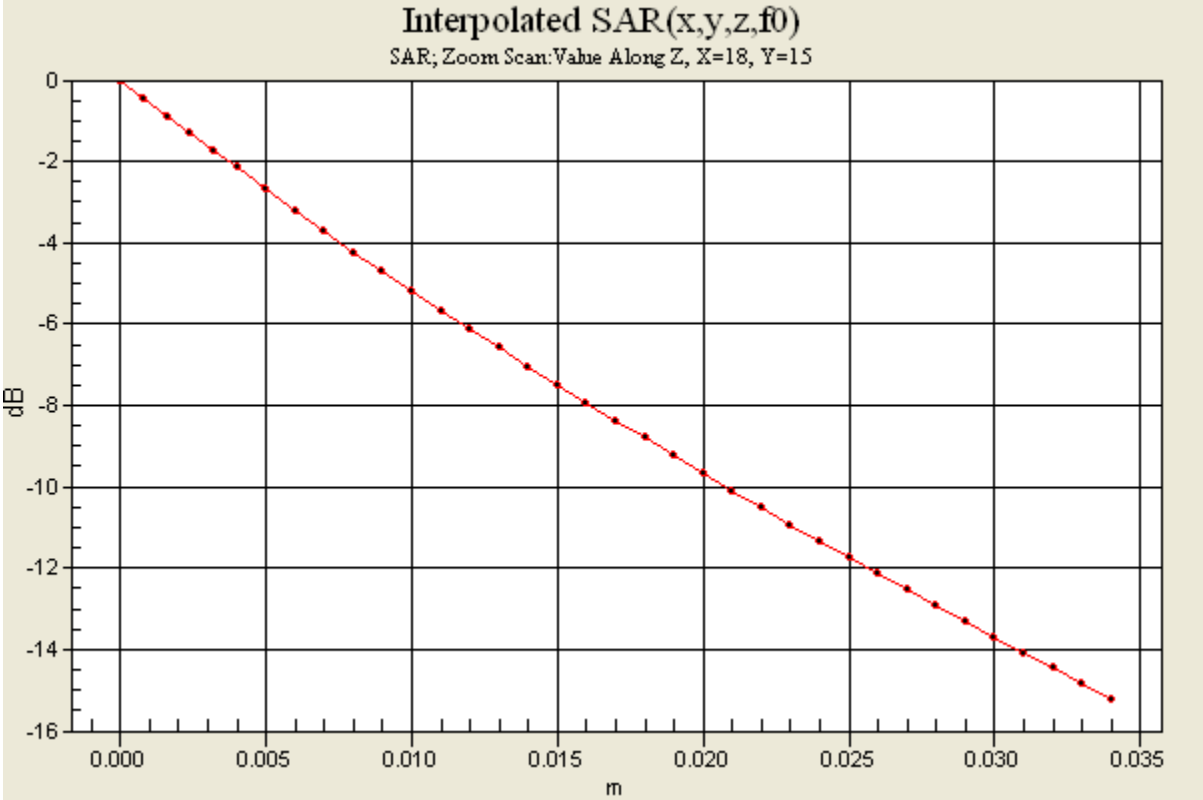
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/21/2009 12:49:51 PM
File Name: 21Sept09_X2A_GSM1900_WAKC_RCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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
High channel cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.479 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.56 V/m; Power Drift = -0.091 dB
Peak SAR (extrapolated) = 0.904 W/kg
SAR(1 g) = 0.485 mW/g; SAR(10 g) = 0.271 mW/g
Maximum value of SAR (measured) = 0.528 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.56 V/m; Power Drift = -0.091 dB
Maximum value of SAR (interpolated) = 0.904 mW/g



0 dB = 0.904mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



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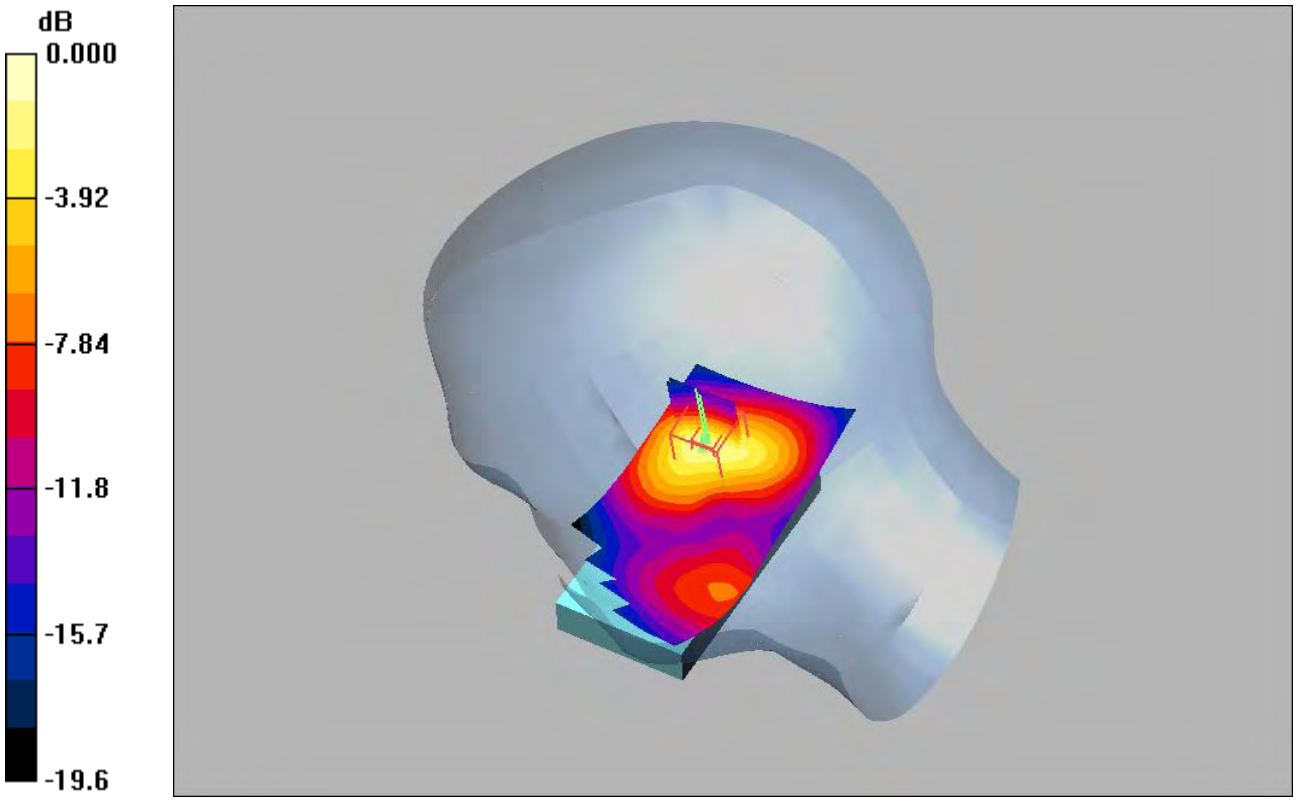
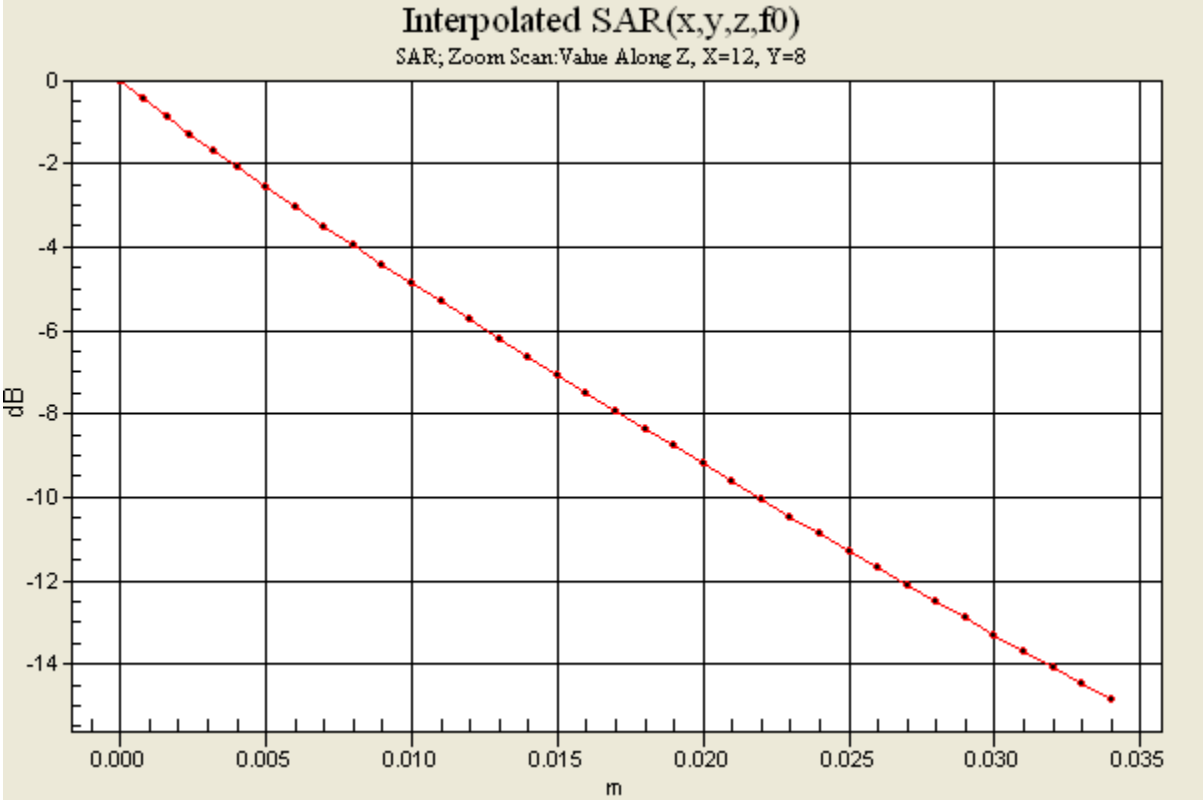
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/21/2009 1:58:25 PM
File Name: 21Sept09_X2A_GSM1900_WAKC_RCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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
High channel tilt/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.329 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = 0.059 dB
Peak SAR (extrapolated) = 0.451 W/kg
SAR(1 g) = 0.275 mW/g; SAR(10 g) = 0.165 mW/g
Maximum value of SAR (measured) = 0.297 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = 0.059 dB
Maximum value of SAR (interpolated) = 0.451 mW/g



0 dB = 0.451mW/g

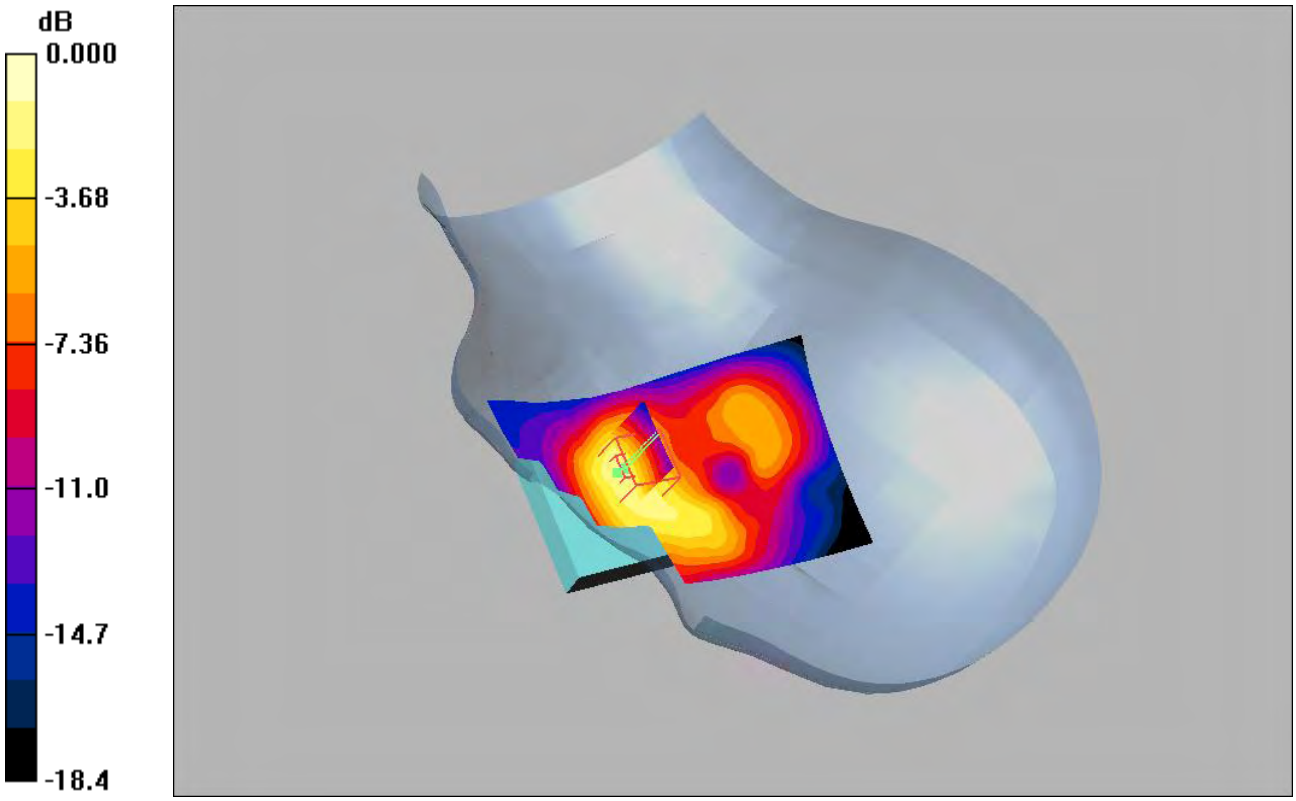
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/21/2009 9:53:18 AM
File Name: 21Sept09_X2A_GSM1900_WAKC_LCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

High channel cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.360 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.08 V/m; Power Drift = -0.093 dB
Peak SAR (extrapolated) = 0.453 W/kg
SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.199 mW/g
Maximum value of SAR (measured) = 0.348 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.08 V/m; Power Drift = -0.093 dB
Maximum value of SAR (interpolated) = 0.453 mW/g



0 dB = 0.453mW/g

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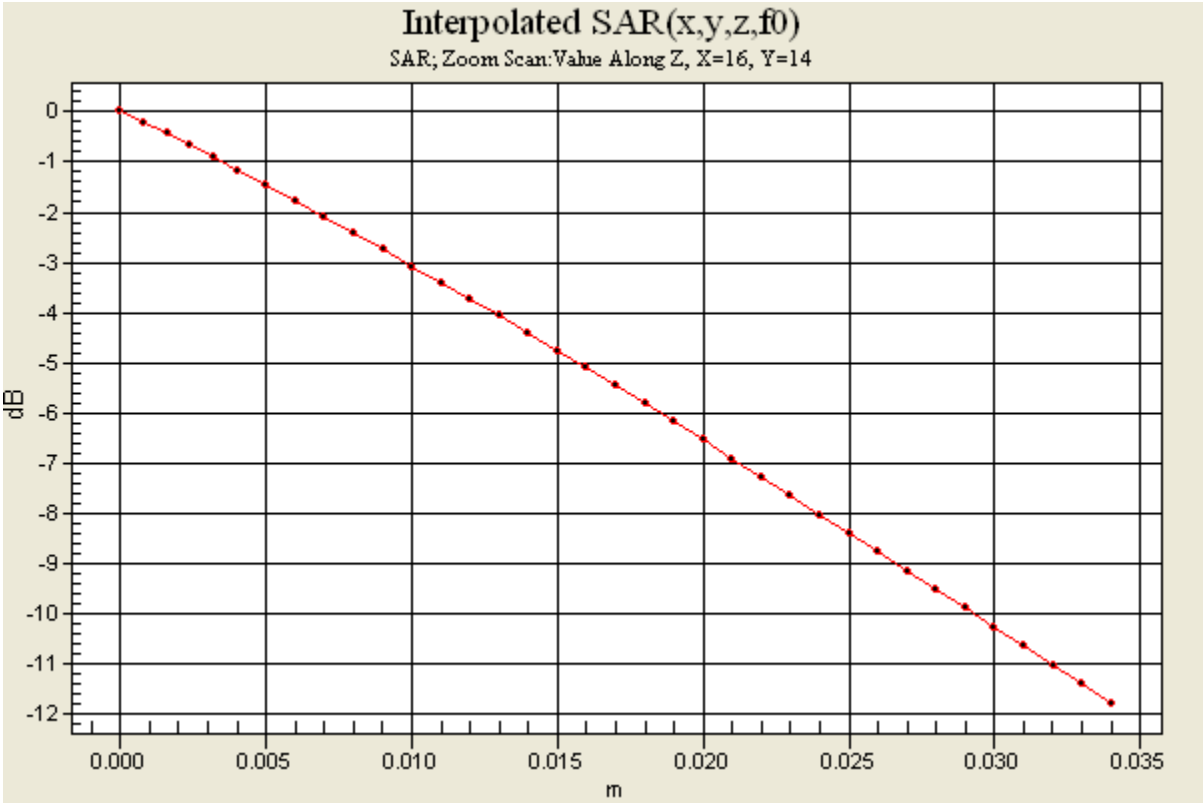
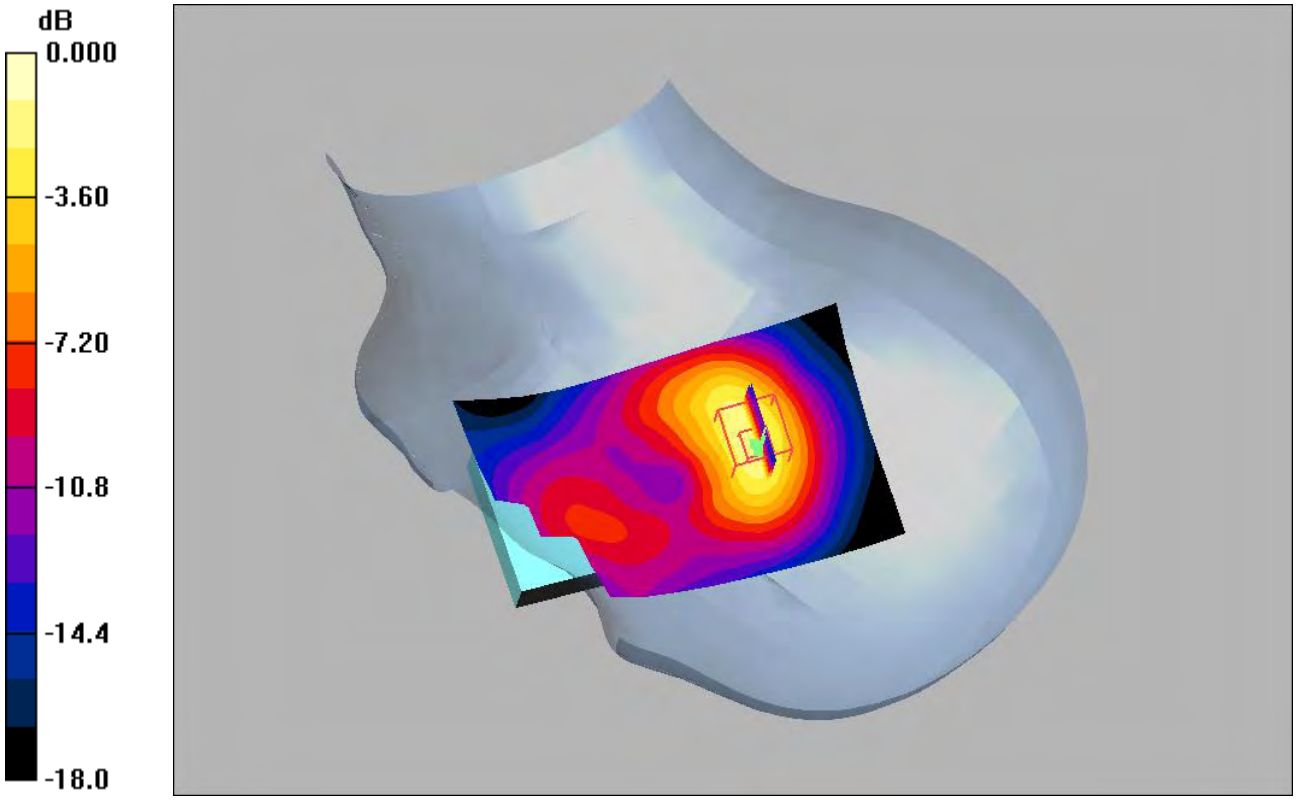
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/21/2009 11:07:55 AM
File Name: 21Sept09_X2A_GSM1900_WAKC_LCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

High channel tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.308 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.9 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 0.413 W/kg
SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.160 mW/g
Maximum value of SAR (measured) = 0.302 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.9 V/m; Power Drift = 0.023 dB
Maximum value of SAR (interpolated) = 0.413 mW/g



0 dB = 0.413mW/g

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SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
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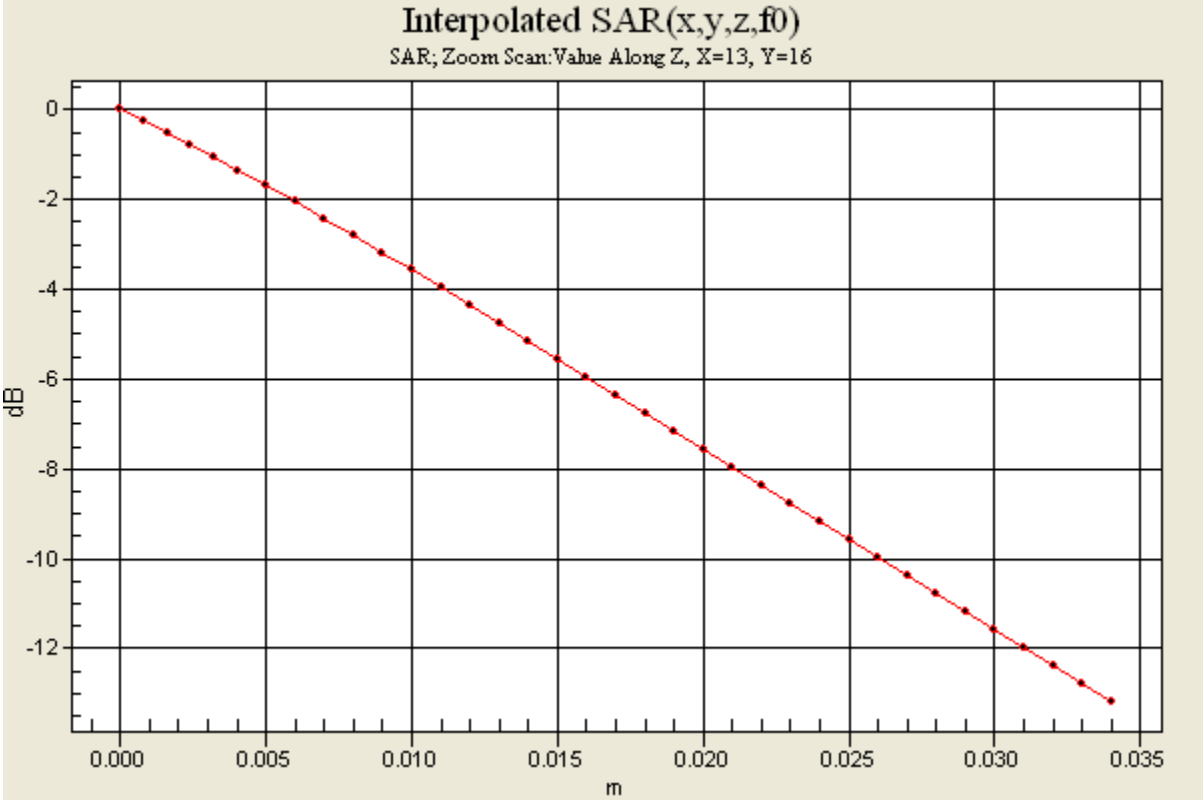
SEM/CCMVPCP Gary Thomas	D	



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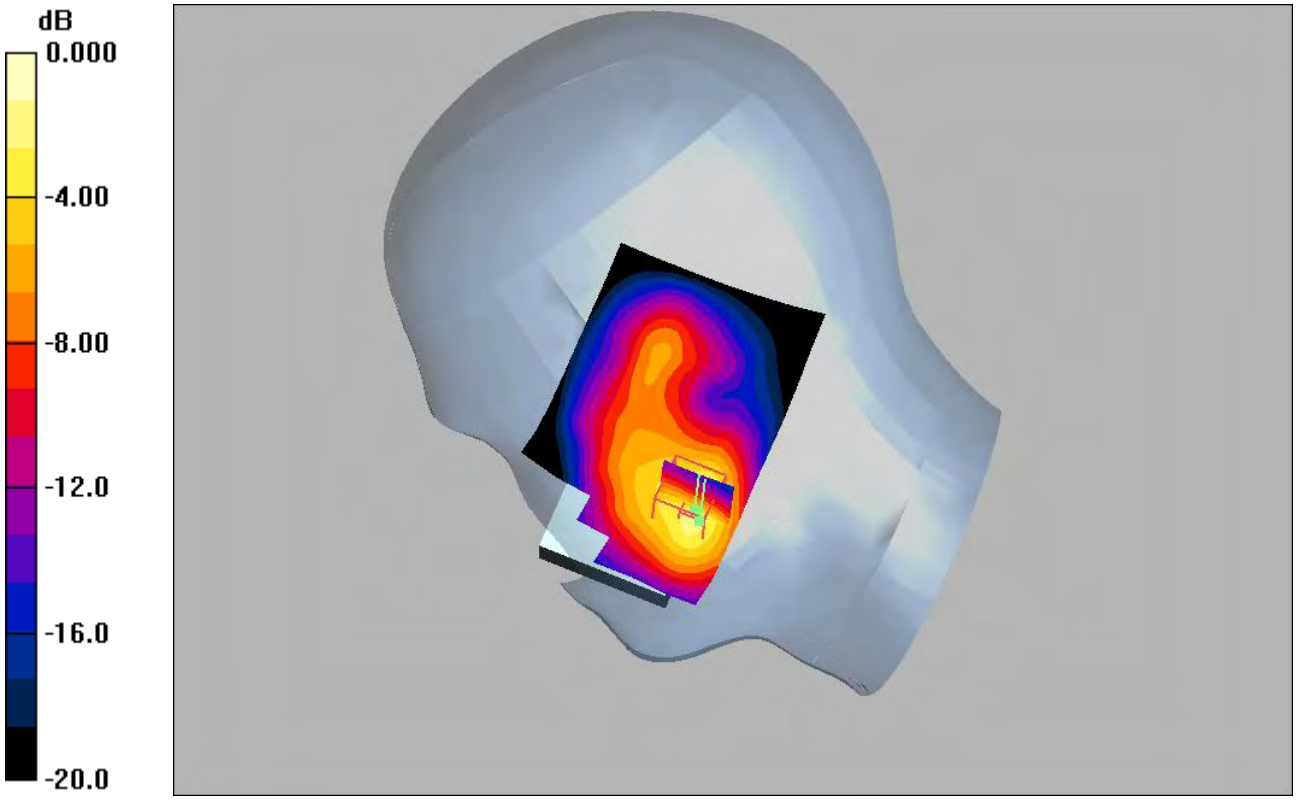
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/25/2009 12:14:34 PM
File Name: 25Sept09_X2A_B2WCDMA_WAKC_RCT01.da4
DUT: X2A
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1852.6 MHz; σ = 1.4 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

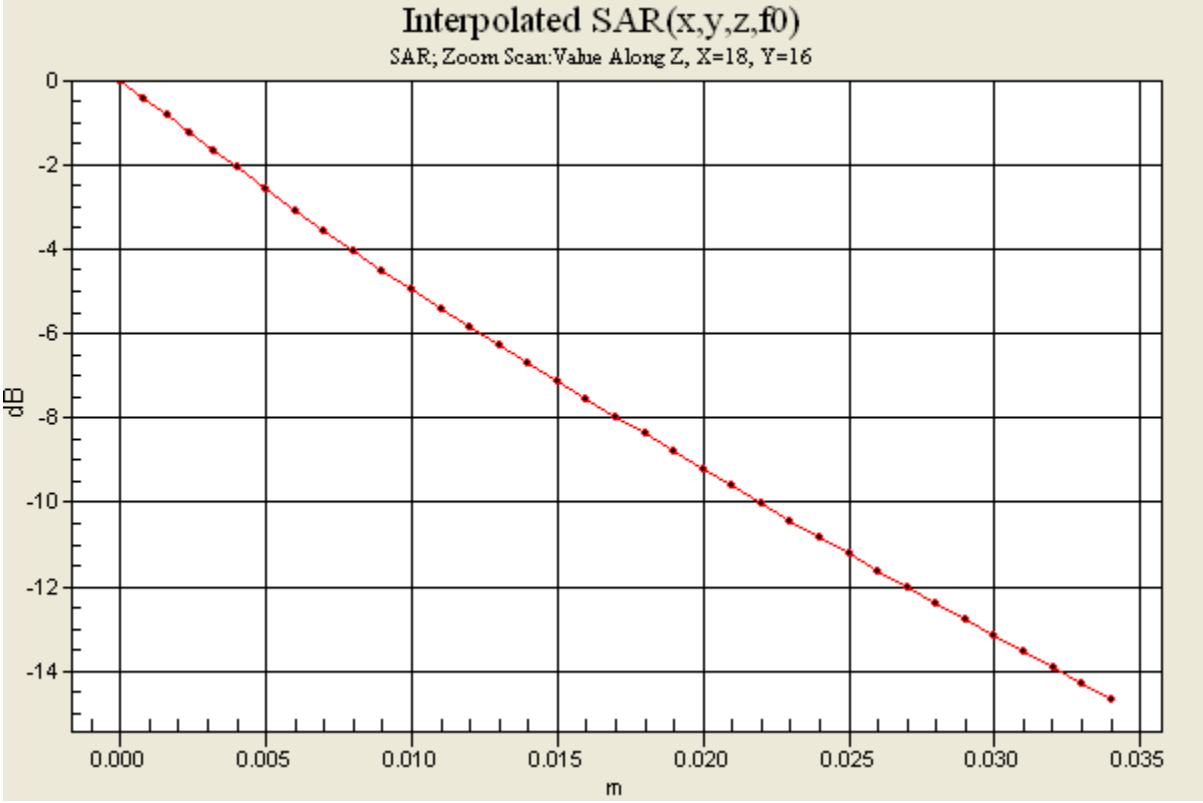
Low channel cheek/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.13 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.075 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.939 mW/g; SAR(10 g) = 0.547 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.03 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.075 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.69 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 1.69mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

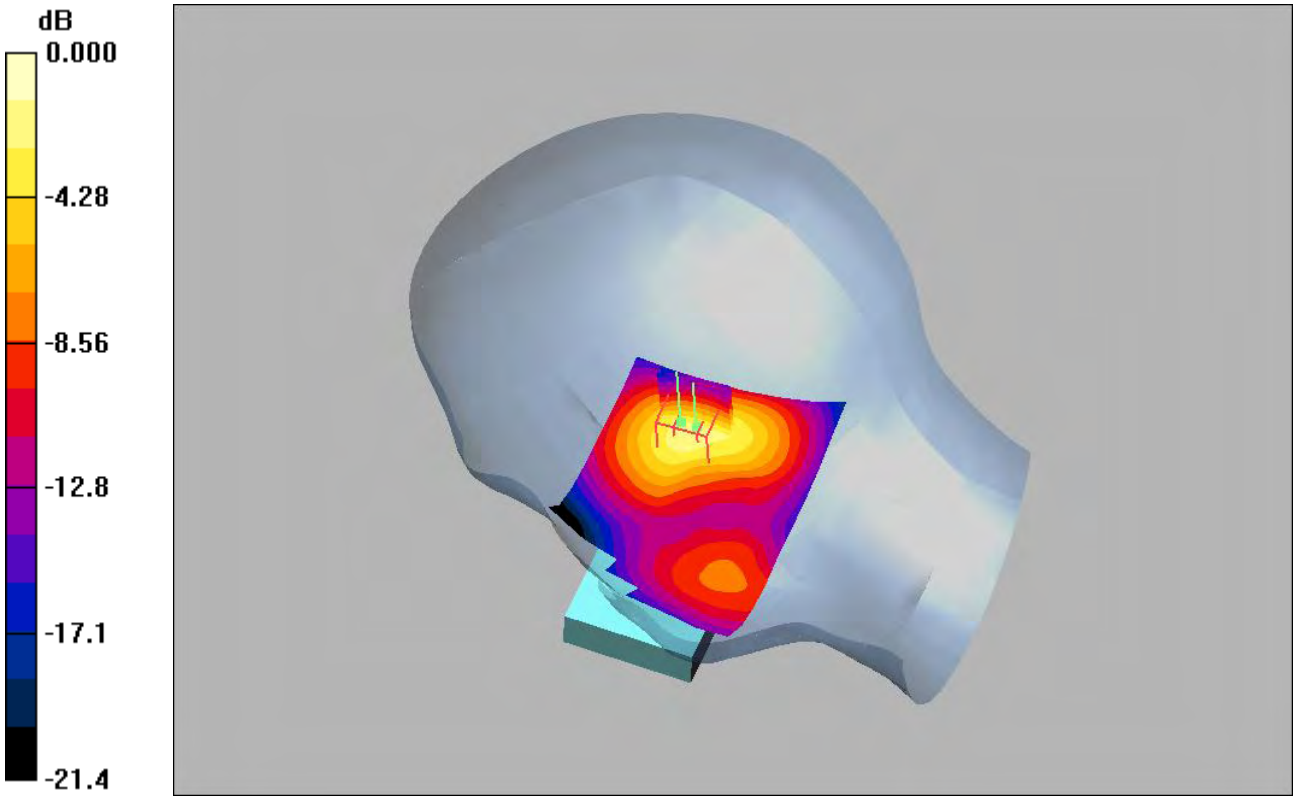


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/25/2009 2:01:22 PM
File Name: 25Sept09_X2A_B2WCDMA_WAKC_RCT01.da4
DUT: X2A
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1907.4 MHz; σ = 1.46 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

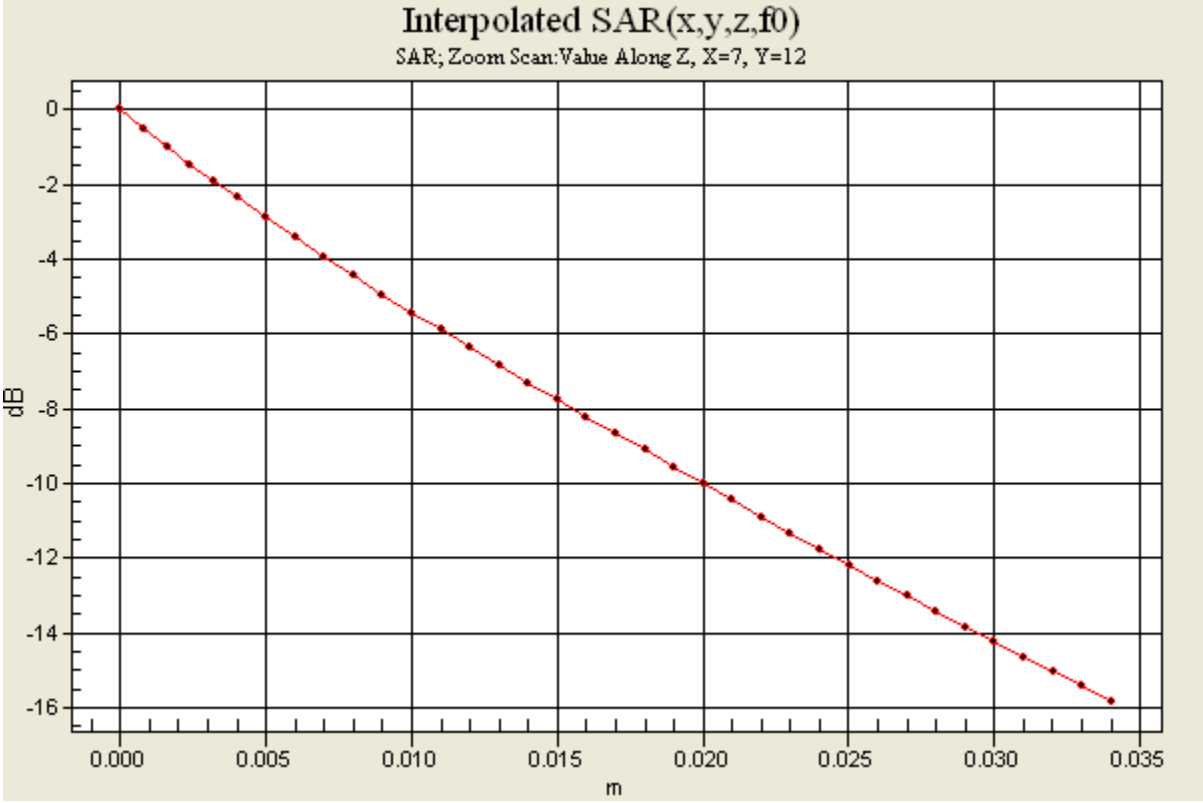
High channel tilt/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.632 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.7 V/m; Power Drift = -0.050 dB
Peak SAR (extrapolated) = 0.885 W/kg
SAR(1 g) = 0.533 mW/g; SAR(10 g) = 0.319 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.583 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.7 V/m; Power Drift = -0.050 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.885 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.885mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

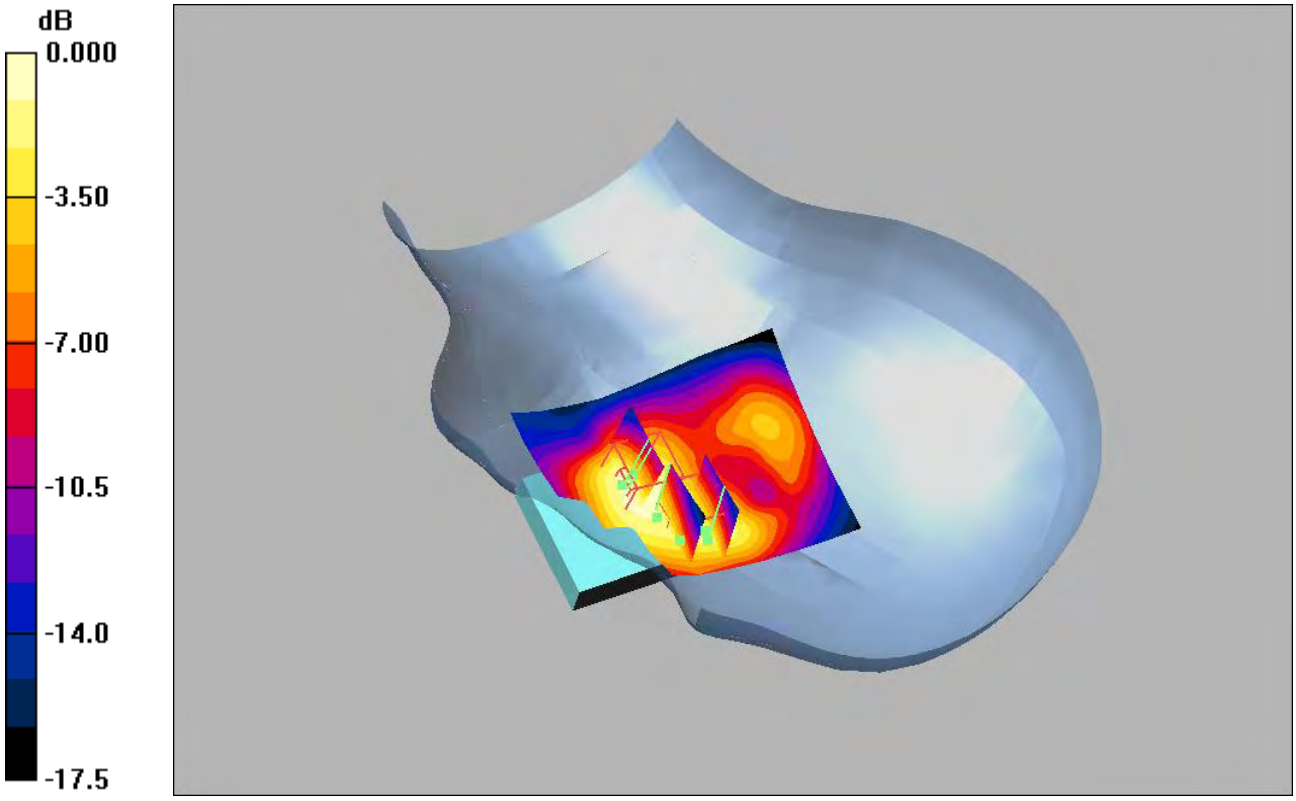


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/25/2009 10:02:08 AM
File Name: 25Sept09_X2A_B2WCDMA_WAKC_LCT01.da4
DUT: X2A
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1852.6 MHz; σ = 1.4 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

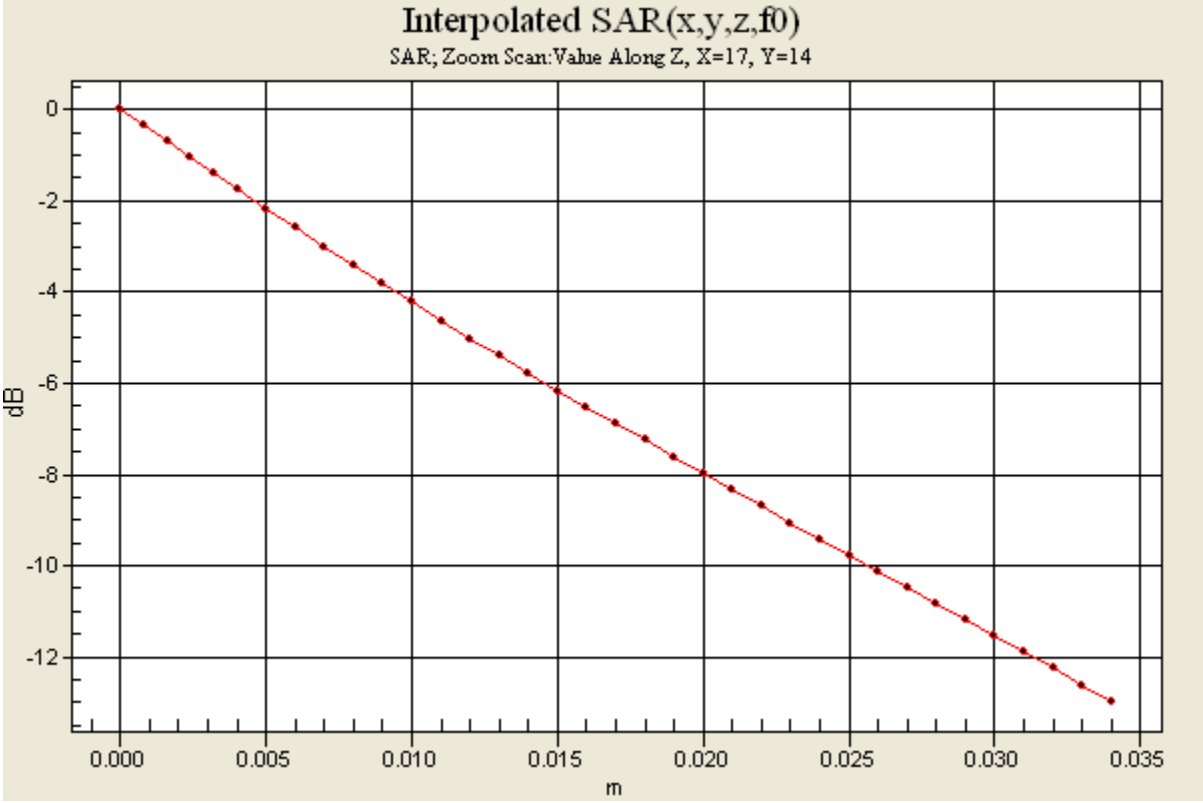
Low channel cheek/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.745 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.153 dB
Peak SAR (extrapolated) = 0.937 W/kg
SAR(1 g) = 0.669 mW/g; SAR(10 g) = 0.421 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.713 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.153 dB
Peak SAR (extrapolated) = 0.768 W/kg
SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.321 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.599 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.153 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.937 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.153 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.768 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.768mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

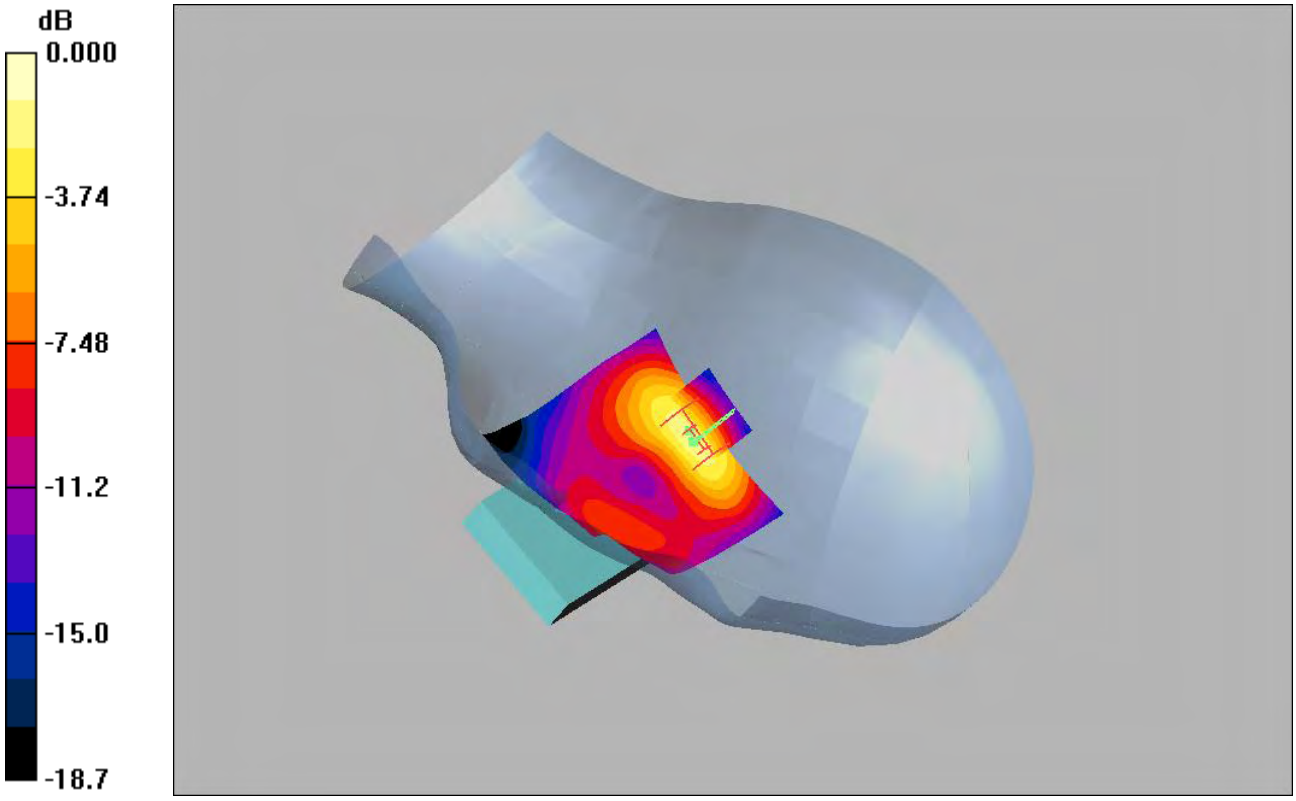


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/25/2009 11:51:21 AM
File Name: 25Sept09_X2A_B2WCDMA_WAKC_LCT01.da4
DUT: X2A
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1907.4 MHz; σ = 1.46 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

High channel tilt/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.568 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.3 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 0.823 W/kg
SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.316 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.599 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.3 V/m; Power Drift = -0.009 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.823 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.823mW/g

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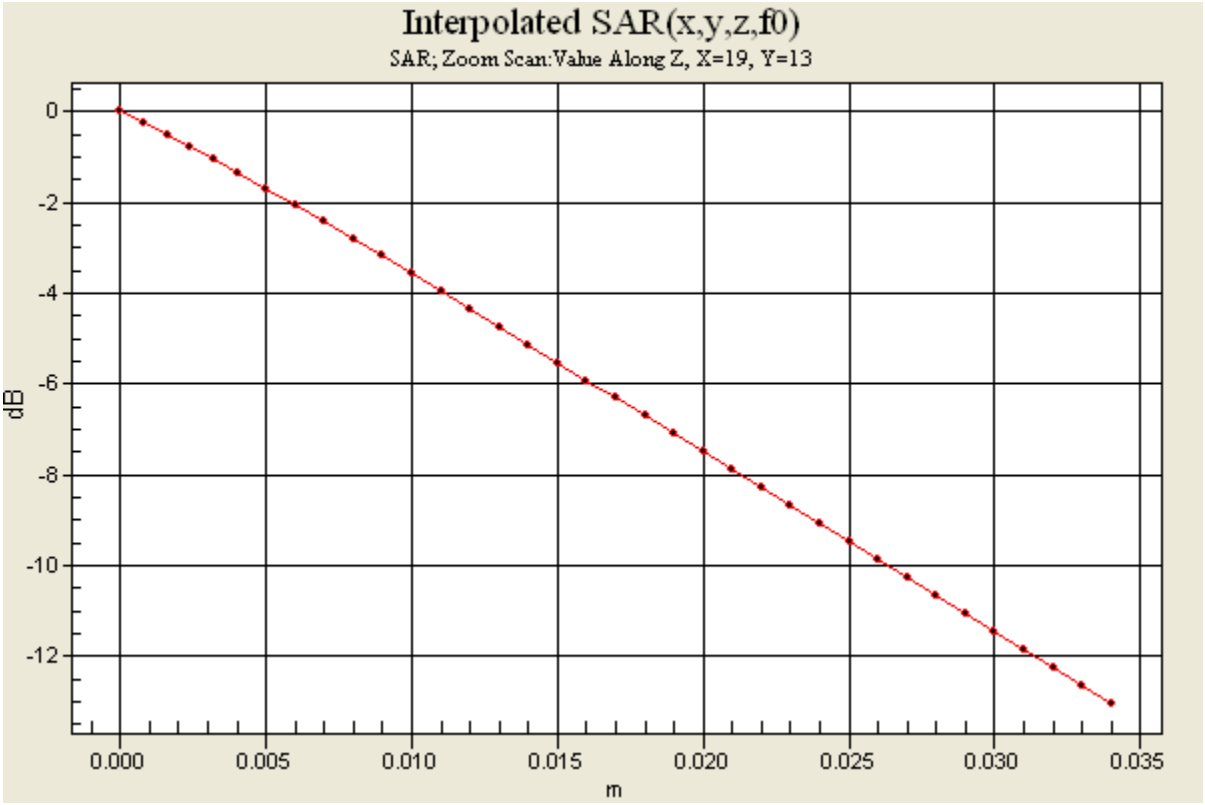
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



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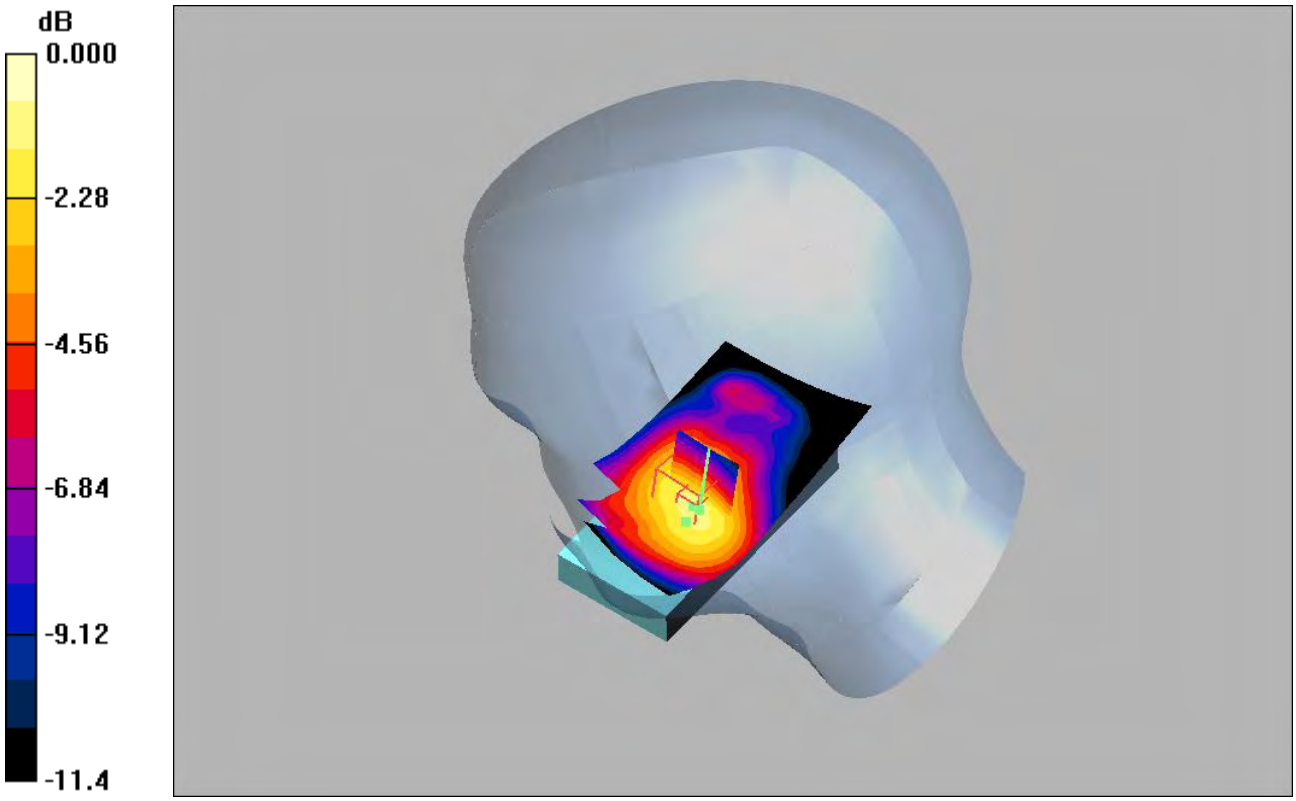
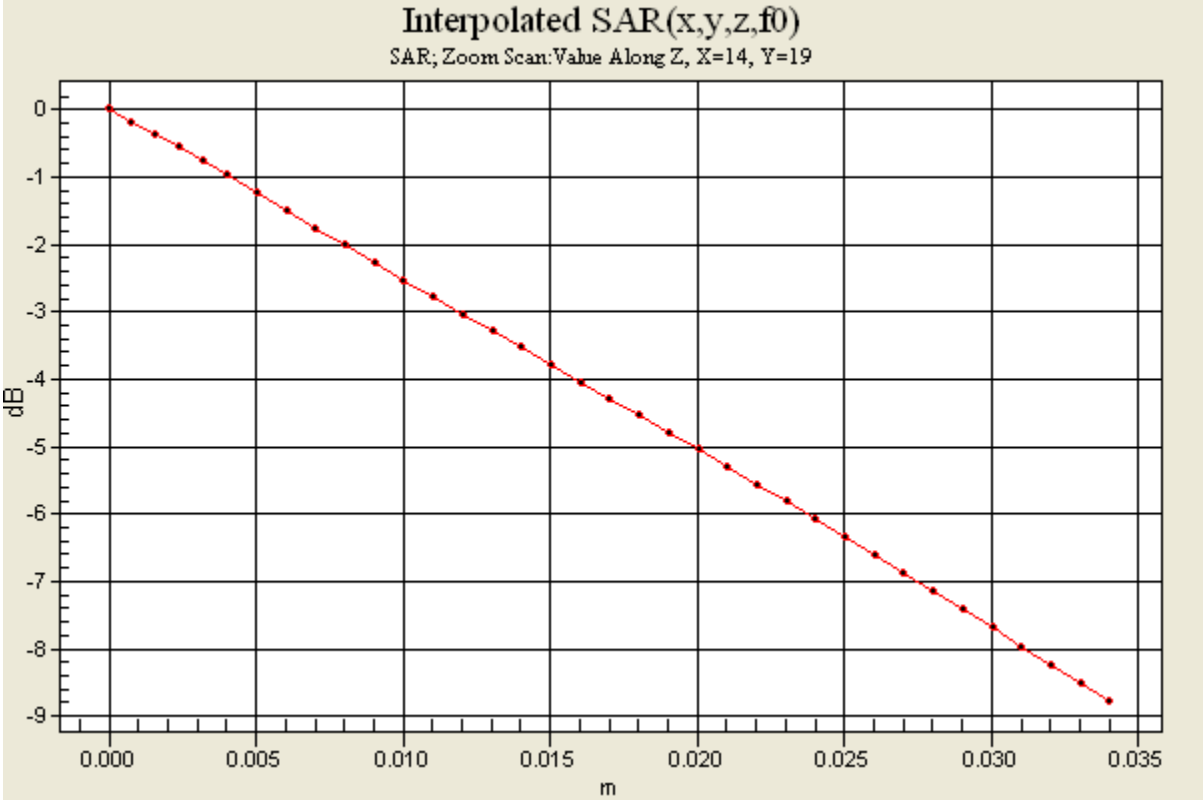
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/25/2009 11:56:05 AM
File Name: 25Sept09_X2A_B5WCDMA_WALC_RCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used: f = 835 MHz; σ = 0.912 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186
Middle channel cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.449 mW/g
Middle channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.034 dB
Peak SAR (extrapolated) = 0.586 W/kg
SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.310 mW/g
Maximum value of SAR (measured) = 0.470 mW/g
Middle channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.034 dB
Maximum value of SAR (interpolated) = 0.586 mW/g



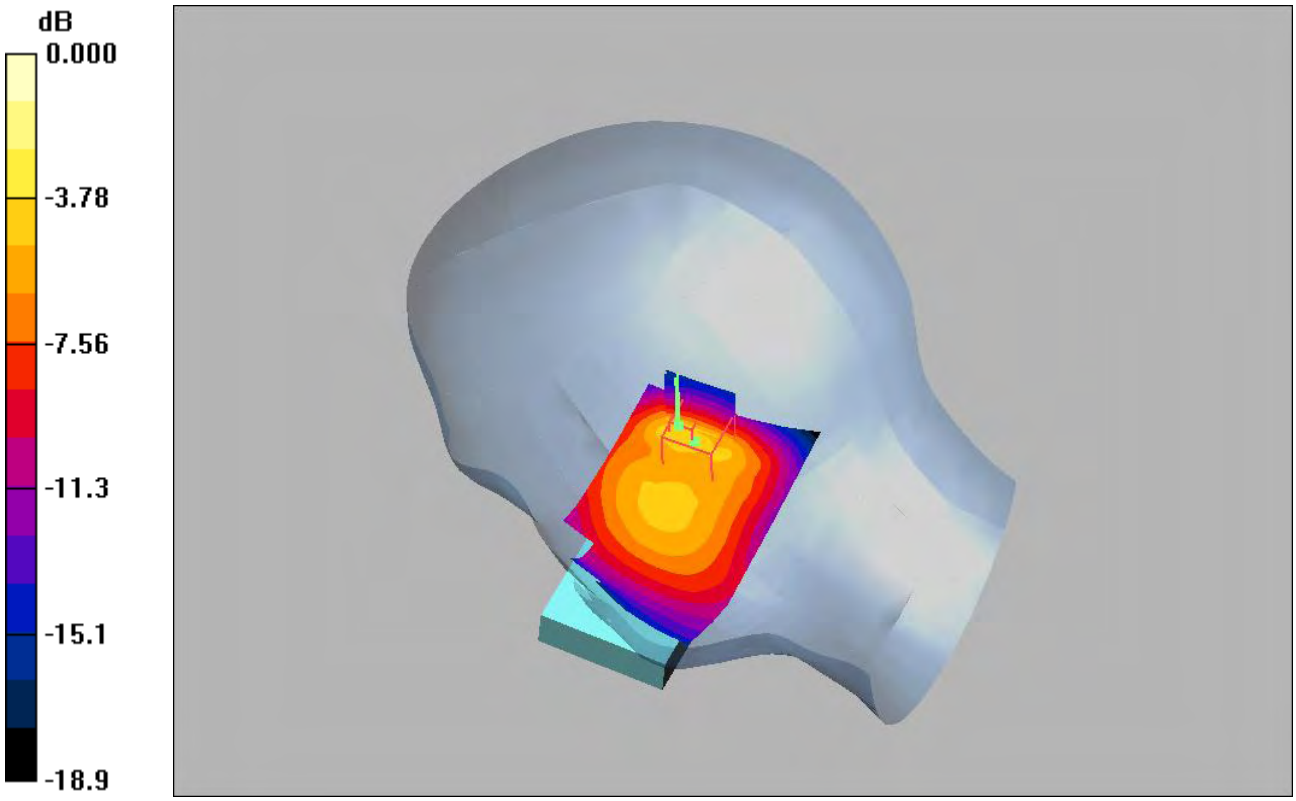
0 dB = 0.586mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



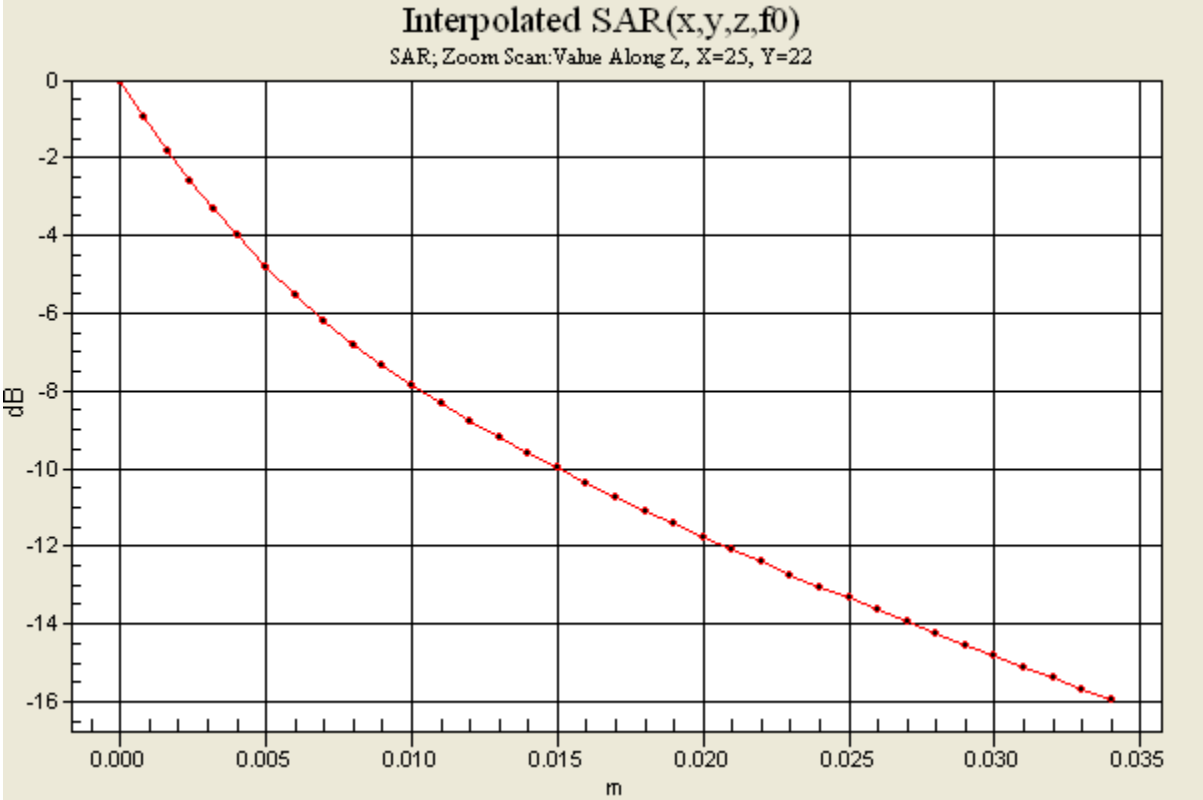
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/25/2009 12:58:20 PM
File Name: 25Sept09_X2A_B5WCDMA_WALC_RCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used: f = 835 MHz; σ = 0.912 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186
Middle channel tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.266 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.4 V/m; Power Drift = 0.043 dB
Peak SAR (extrapolated) = 0.677 W/kg
SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.139 mW/g
Maximum value of SAR (measured) = 0.278 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.4 V/m; Power Drift = 0.043 dB
Maximum value of SAR (interpolated) = 0.677 mW/g



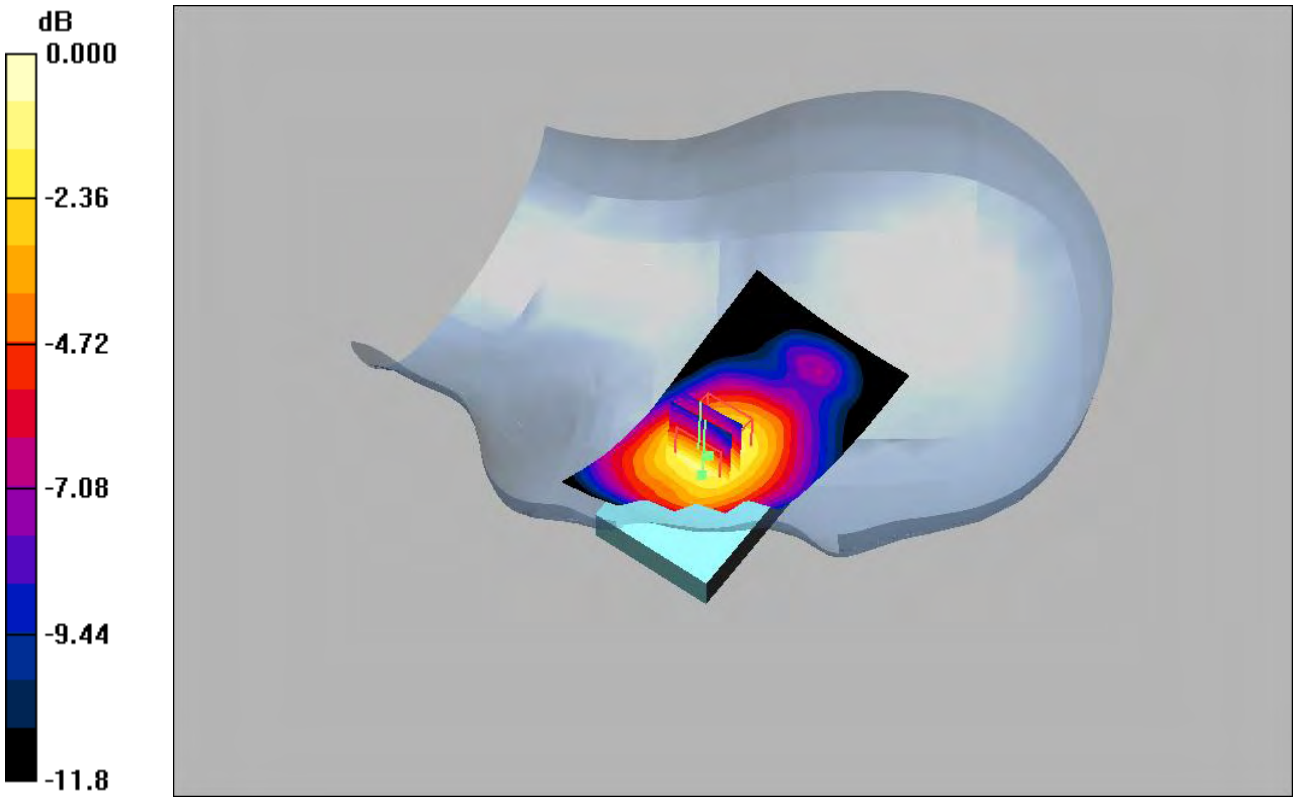
0 dB = 0.677mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



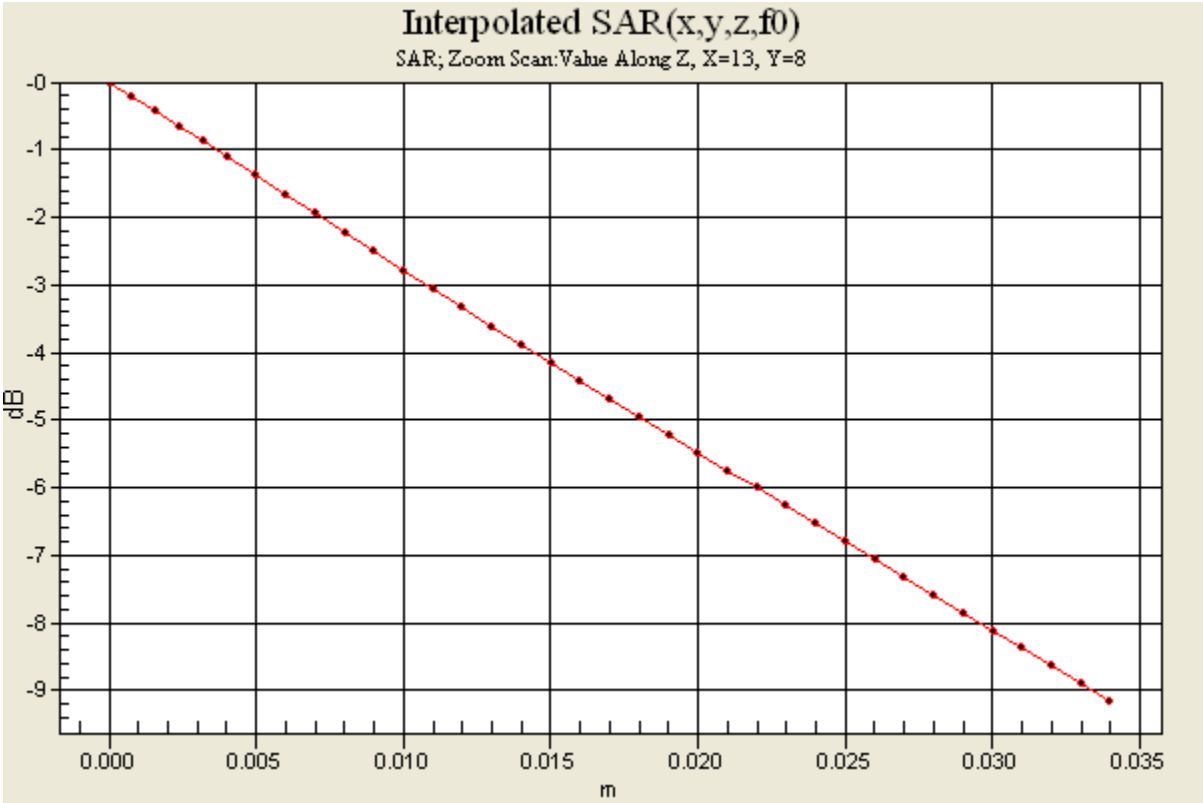
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/25/2009 9:03:10 AM
File Name: 25Sept09_X2A_B5WCDMA_WALC_LCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used: f = 835 MHz; σ = 0.912 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186
Middle channel cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.508 mW/g
Middle channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 0.600 W/kg
SAR(1 g) = 0.473 mW/g; SAR(10 g) = 0.342 mW/g
Maximum value of SAR (measured) = 0.497 mW/g
Middle channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = 0.010 dB
Maximum value of SAR (interpolated) = 0.600 mW/g



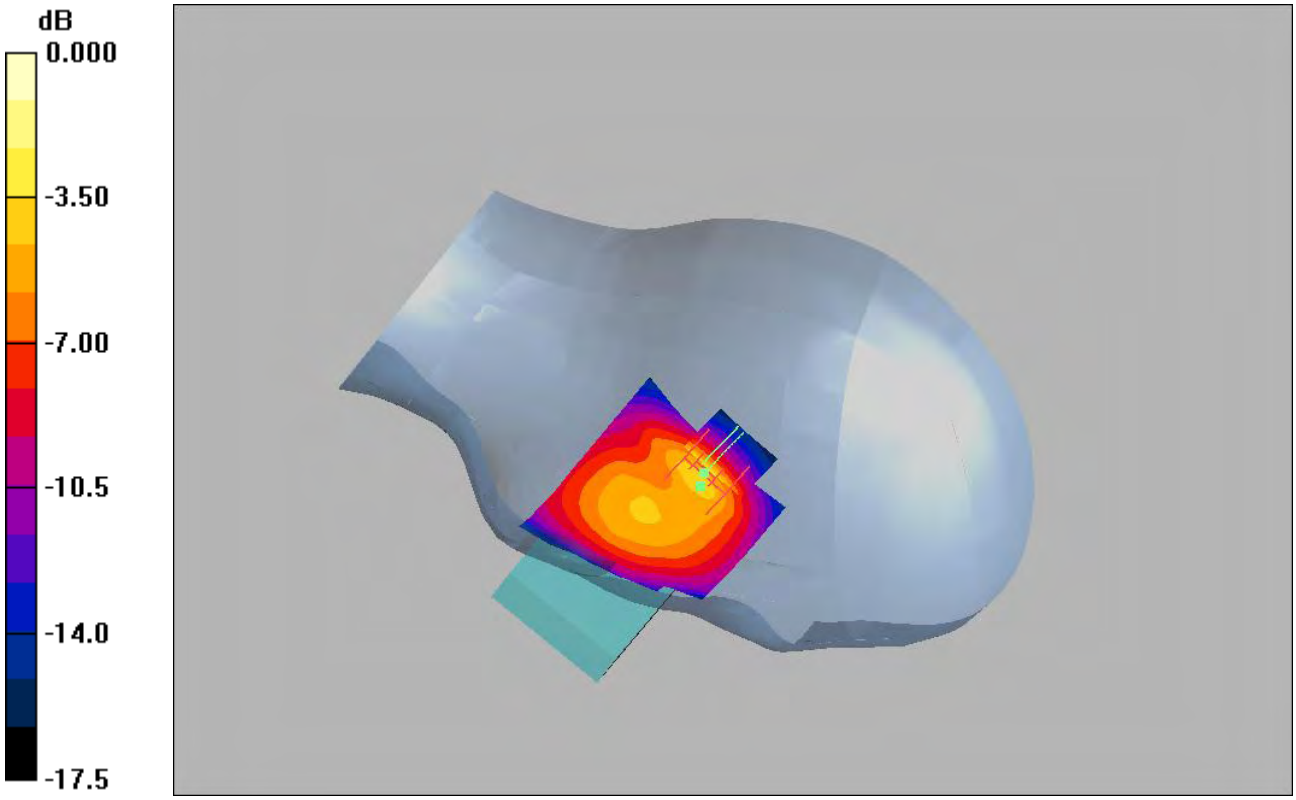
0 dB = 0.600mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



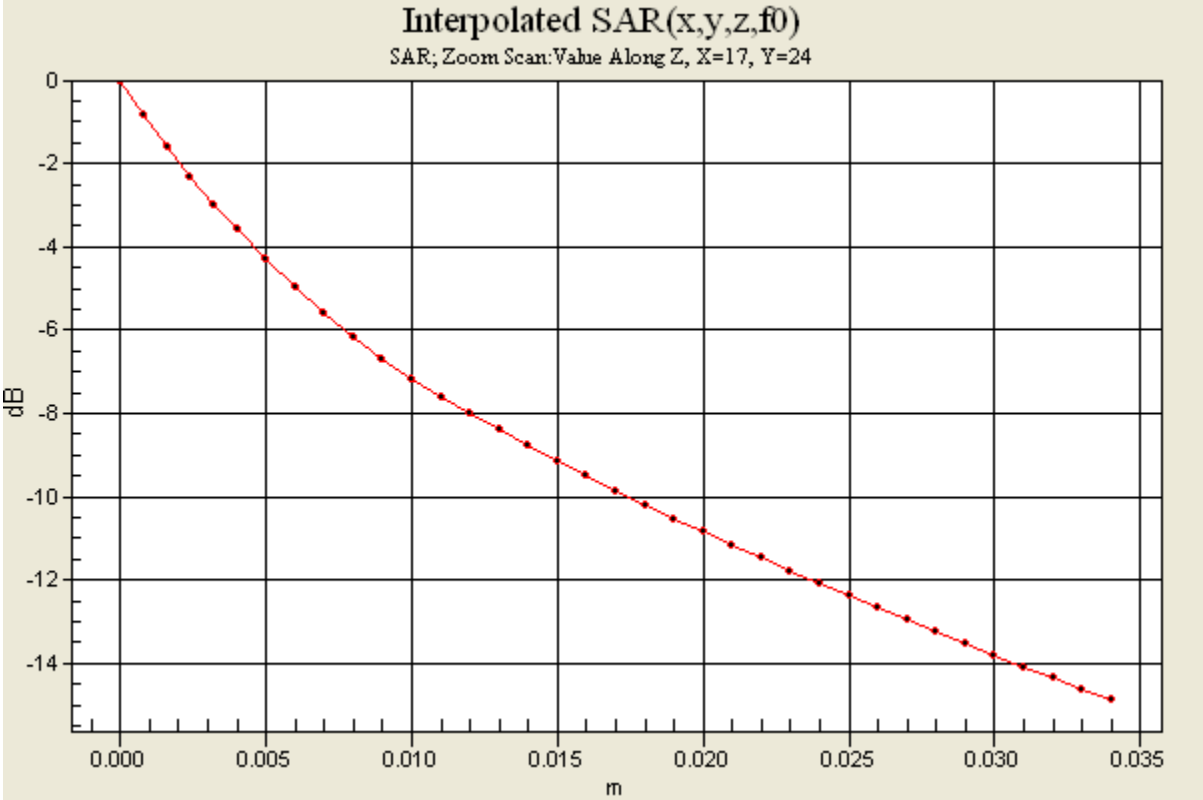
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/25/2009 10:52:20 AM
File Name: 25Sept09_X2A_B5WCDMA_WALC_LCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used: f = 835 MHz; σ = 0.912 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186
Middle channel tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.266 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.641 W/kg
SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.138 mW/g
Maximum value of SAR (measured) = 0.269 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.007 dB
Maximum value of SAR (interpolated) = 0.641 mW/g



0 dB = 0.641mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

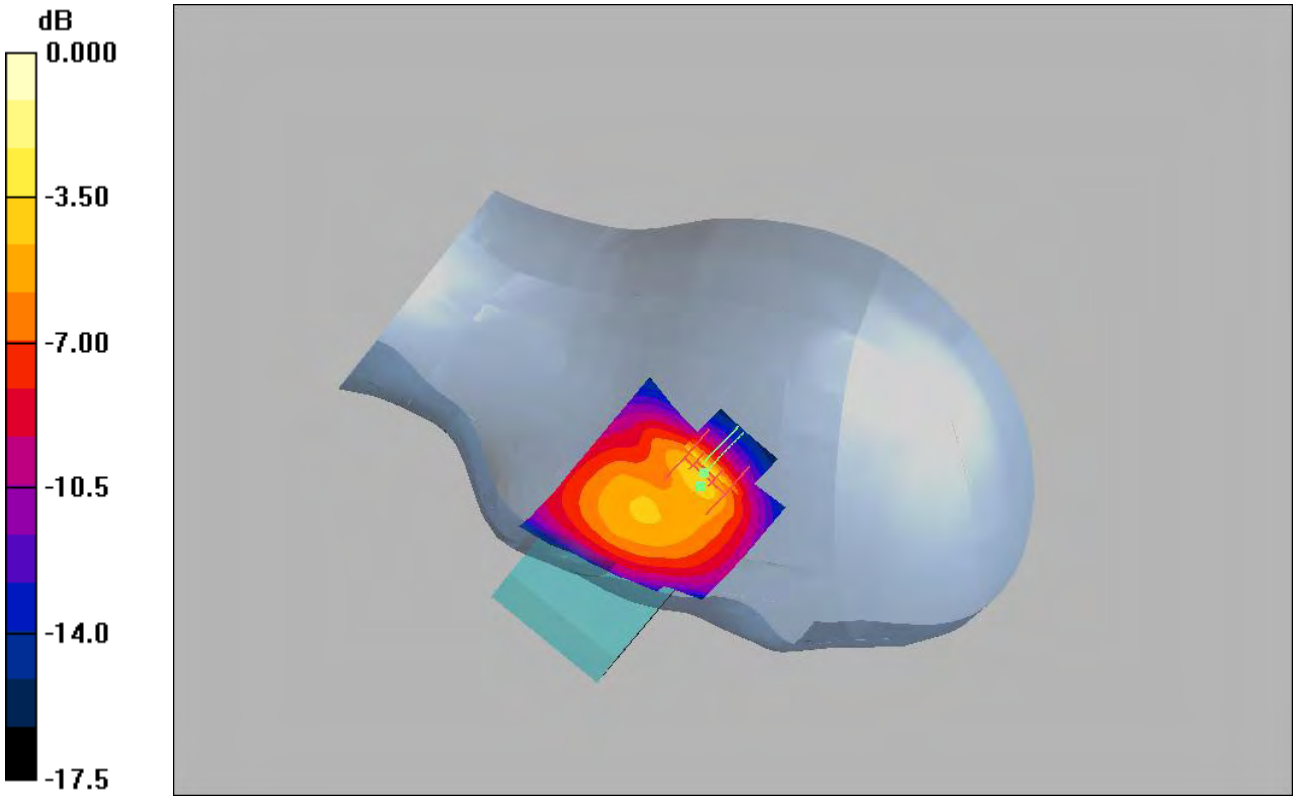
Appendix 2a

SAR distribution plots for Phantom Head Adjacent Use

Open Position

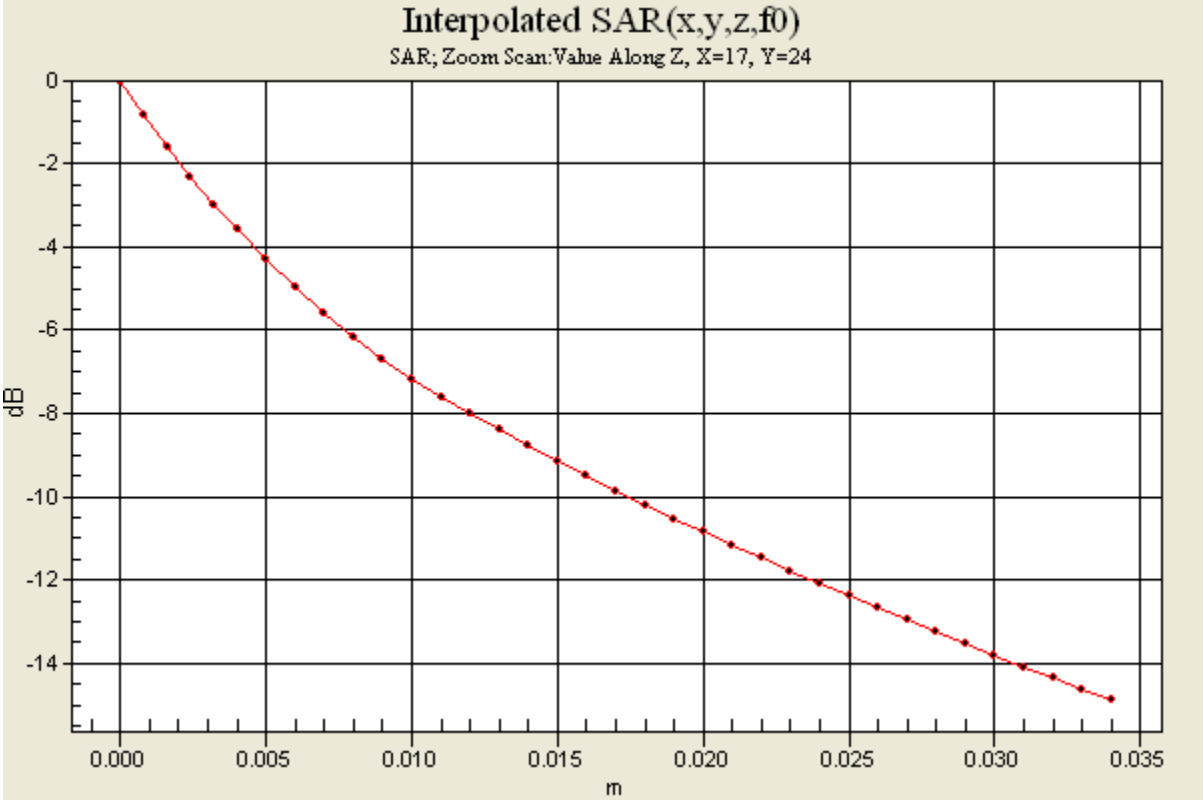
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

800 GSM Band: SAR Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/25/2009 10:52:20 AM
File Name: 25Sept09_X2A_B5WCDMA_WALC_LCT01.da4
DUT: X2A
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used: f = 835 MHz; σ = 0.912 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186
Middle channel tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.266 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.641 W/kg
SAR(1 g) = 0.247 mW/g; SAR(10 g) = 0.138 mW/g
Maximum value of SAR (measured) = 0.269 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.007 dB
Maximum value of SAR (interpolated) = 0.641 mW/g



0 dB = 0.641mW/g

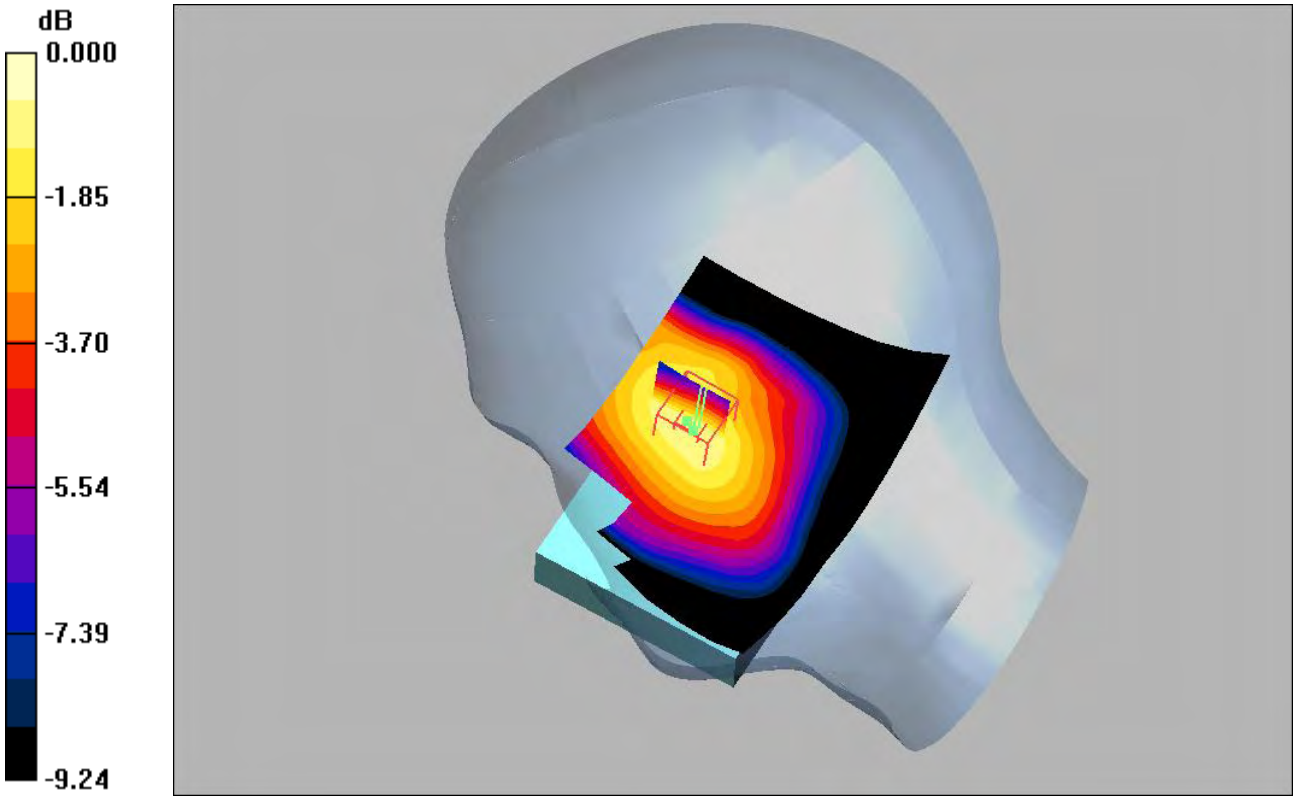
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

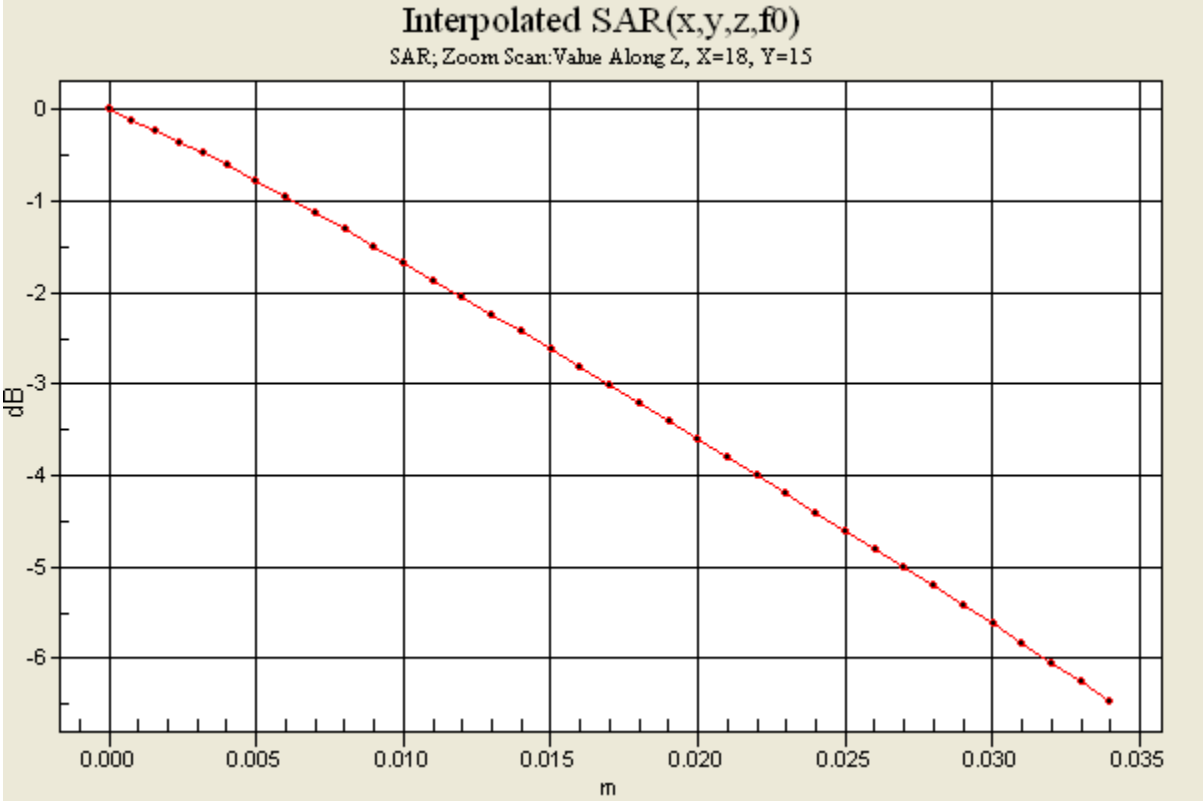
800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/22/2009 9:44:36 AM
File Name: 22Sept09_X2A_GSM850_WALC_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 849 MHz; σ = 0.922 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes:
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- 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
High channel tilt/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.210 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.87 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.156 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.213 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.87 V/m; Power Drift = -0.023 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.245 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.245mW/g

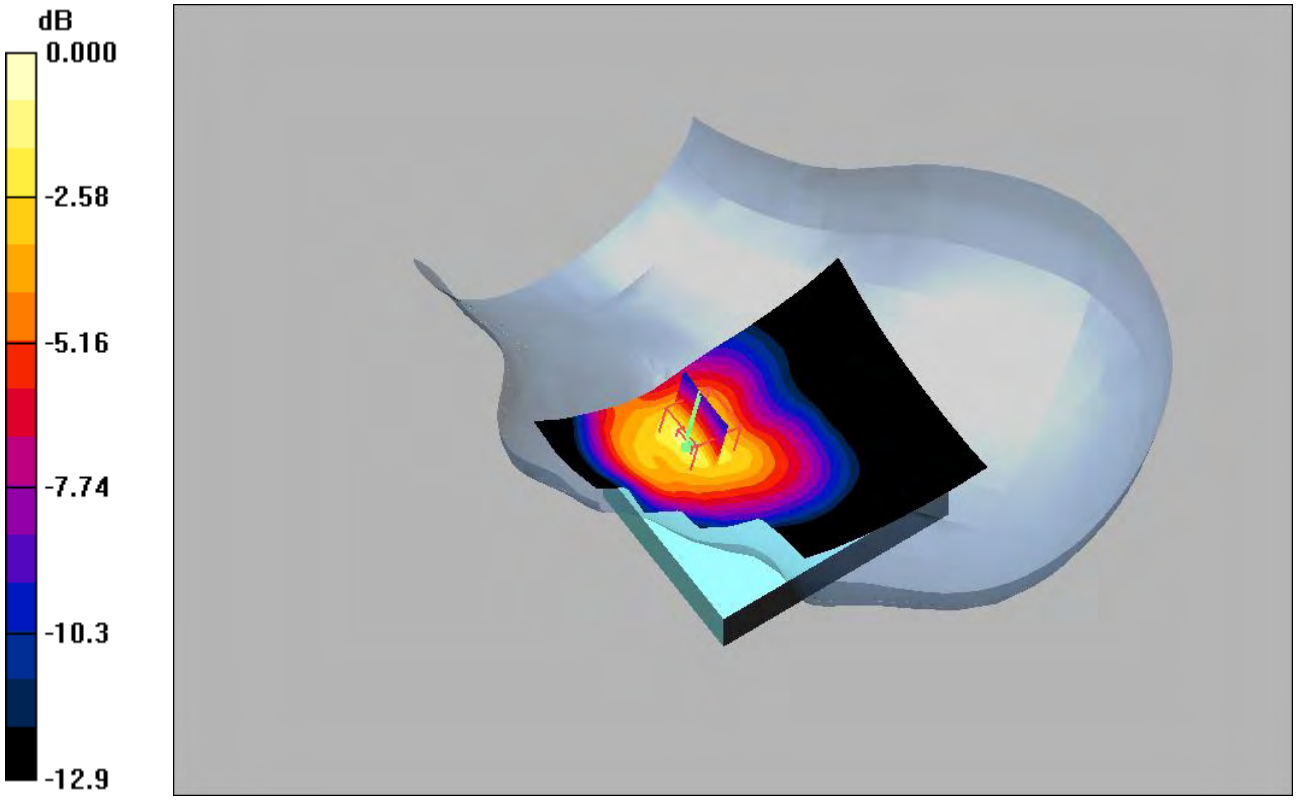
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

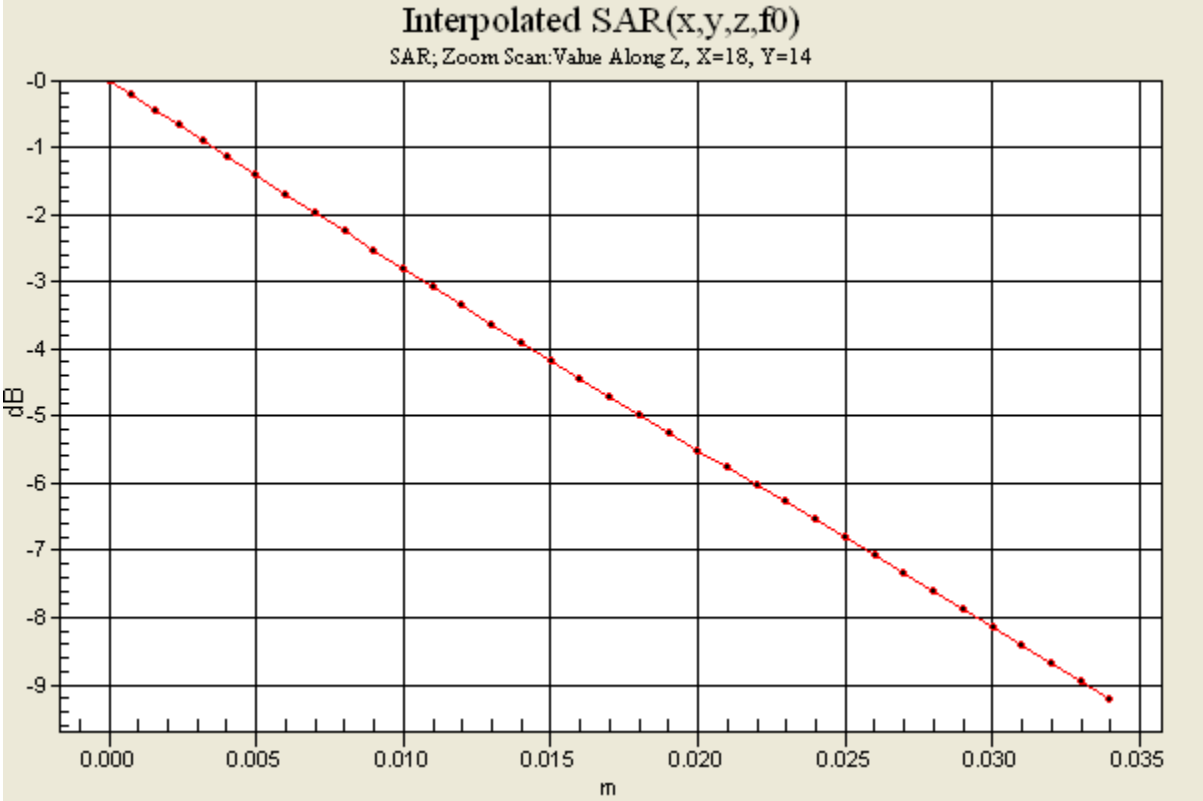
800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/22/2009 11:36:40 AM
File Name: 22Sept09_X2A_GSM850_WALC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 849 MHz; σ = 0.922 mho/m; ε_r = 41.8; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-41 Humidity - 43.4 % Ambient Temp - 23.6 C Simulant Temp - 23.5 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- 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
High channel cheek/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.10 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.74 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.674 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.09 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.74 V/m; Power Drift = 0.058 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.42 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 1.42mW/g

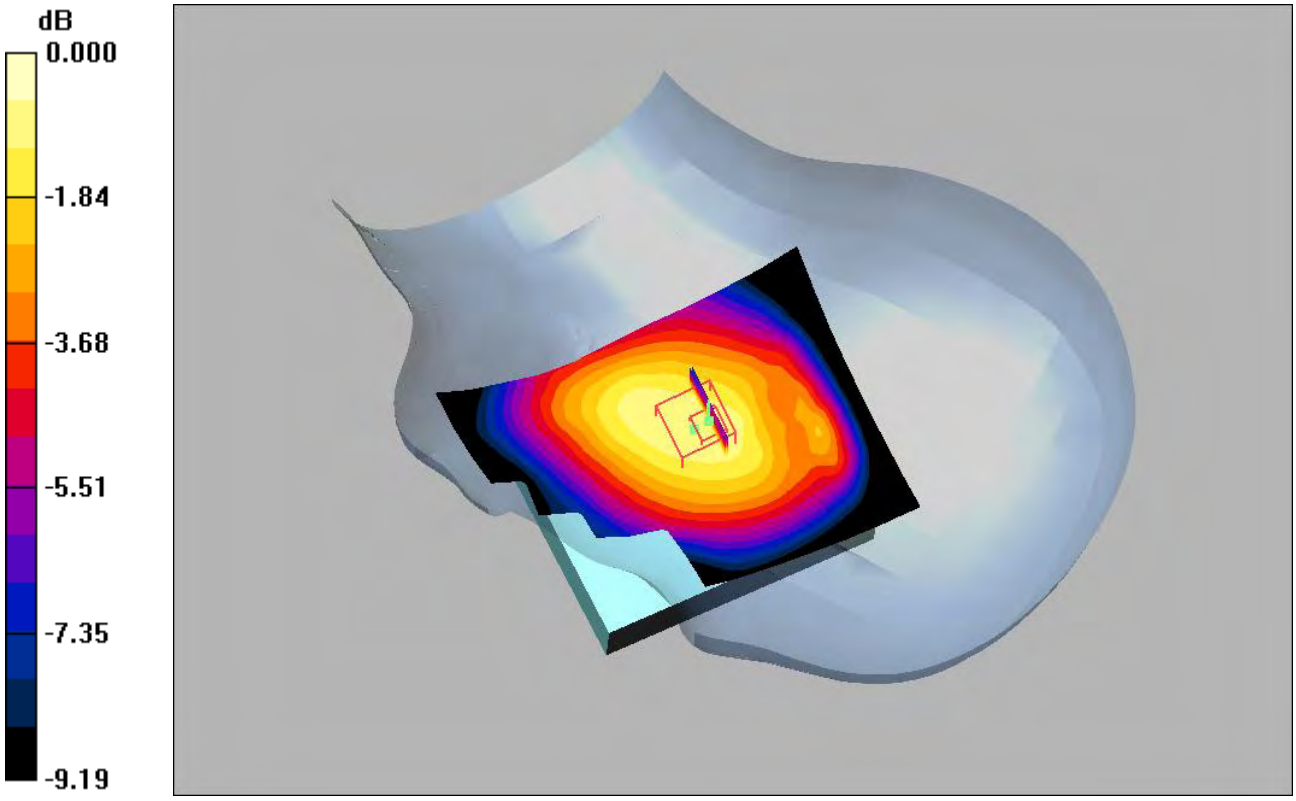
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

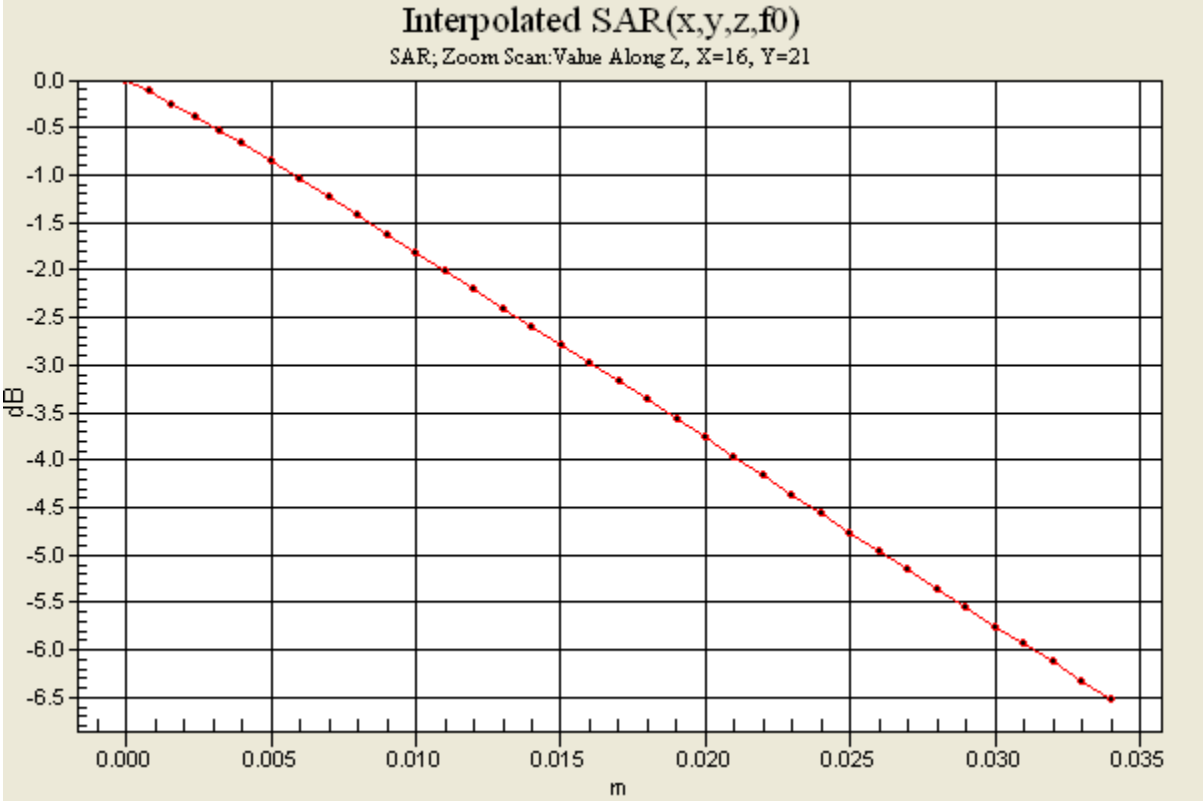
800 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/22/2009 12:24:40 PM
File Name: 22Sept09_X2A_GSM850_WALC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 836 MHz; σ = 0.91 mho/m; ε_r = 41.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
Program Notes: Battery BST-41 Humidity - 43.4 % Ambient Temp - 23.6 C Simulant Temp - 23.5 C
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- 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 (71x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.147 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.03 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 0.174 W/kg
SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.112 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.150 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.03 V/m; Power Drift = 0.022 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.174 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.174mW/g

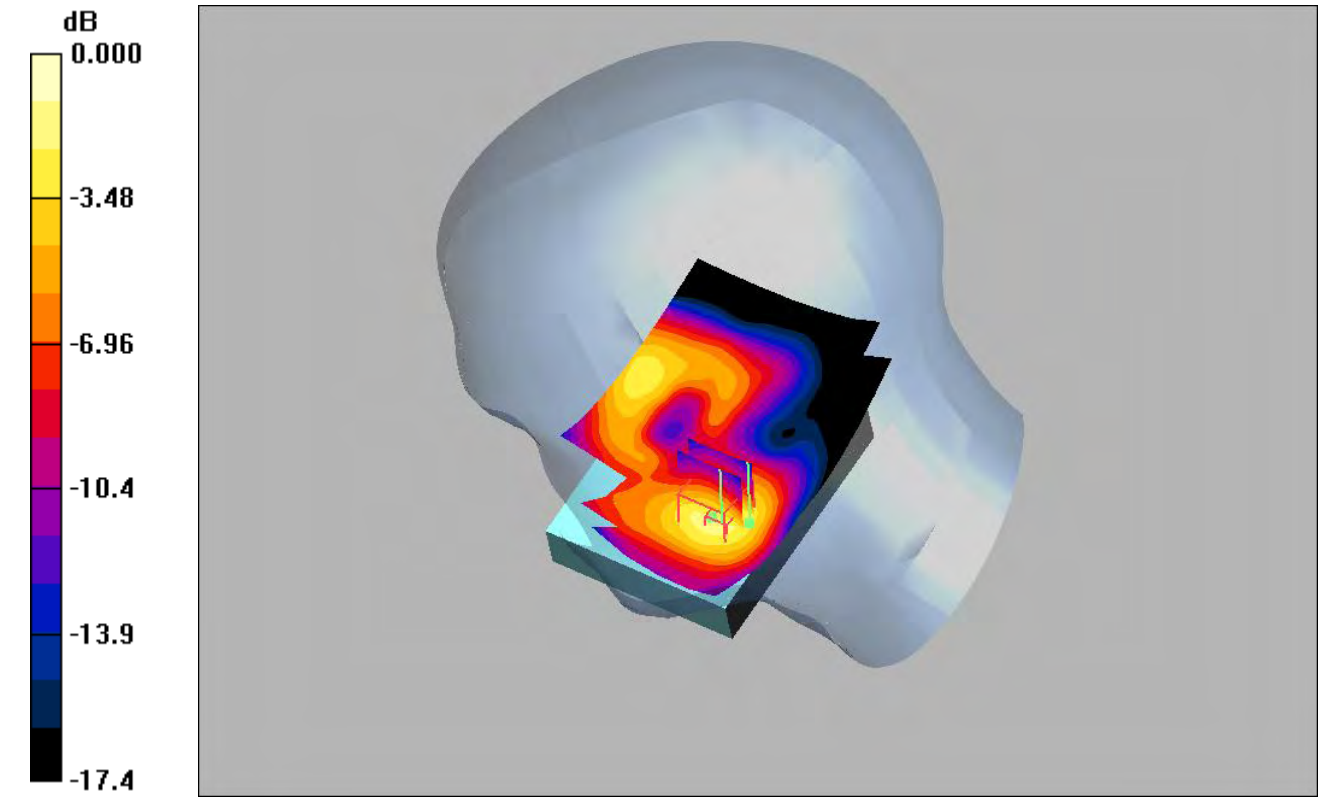
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

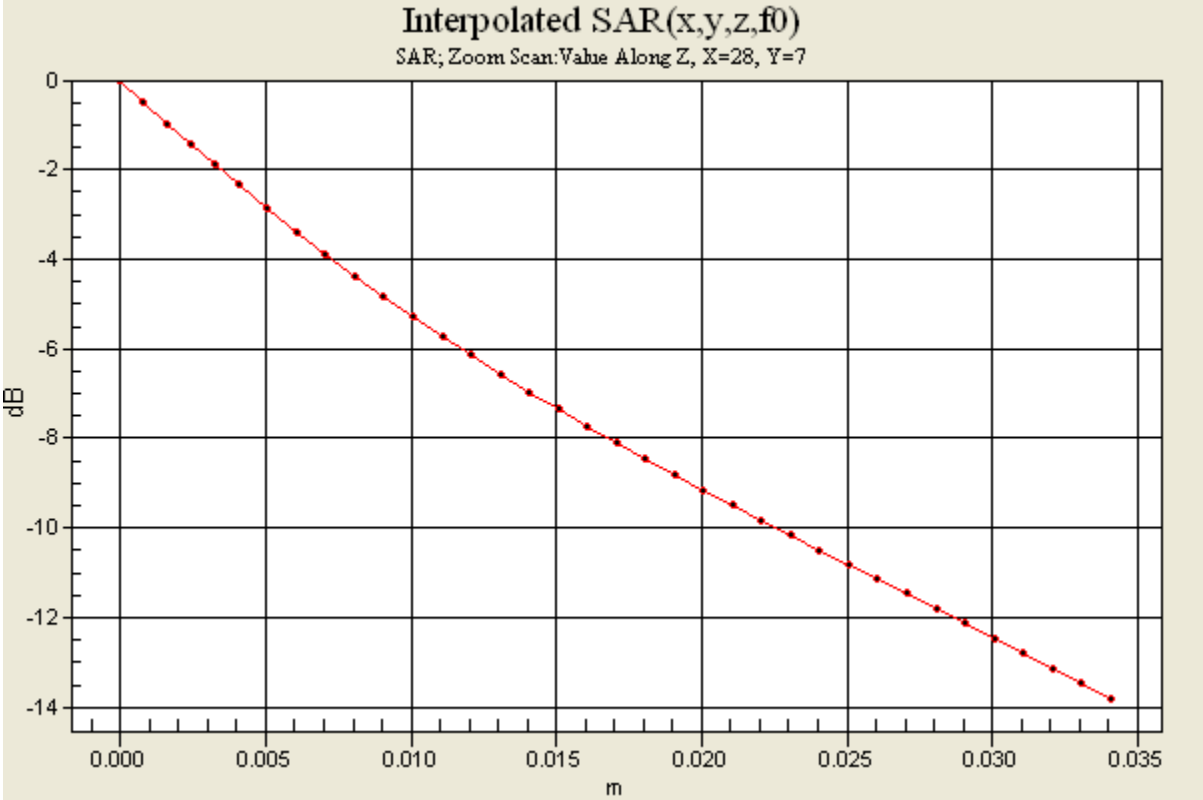
1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/22/2009 8:37:41 AM
File Name: 22Sept09_X2A_GSM1900_WAKC_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

High channel cheek/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.232 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.43 V/m; Power Drift = -0.081 dB
Peak SAR (extrapolated) = 0.335 W/kg
SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.133 mW/g
Maximum value of SAR (measured) = 0.218 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.43 V/m; Power Drift = -0.081 dB
Maximum value of SAR (interpolated) = 0.335 mW/g



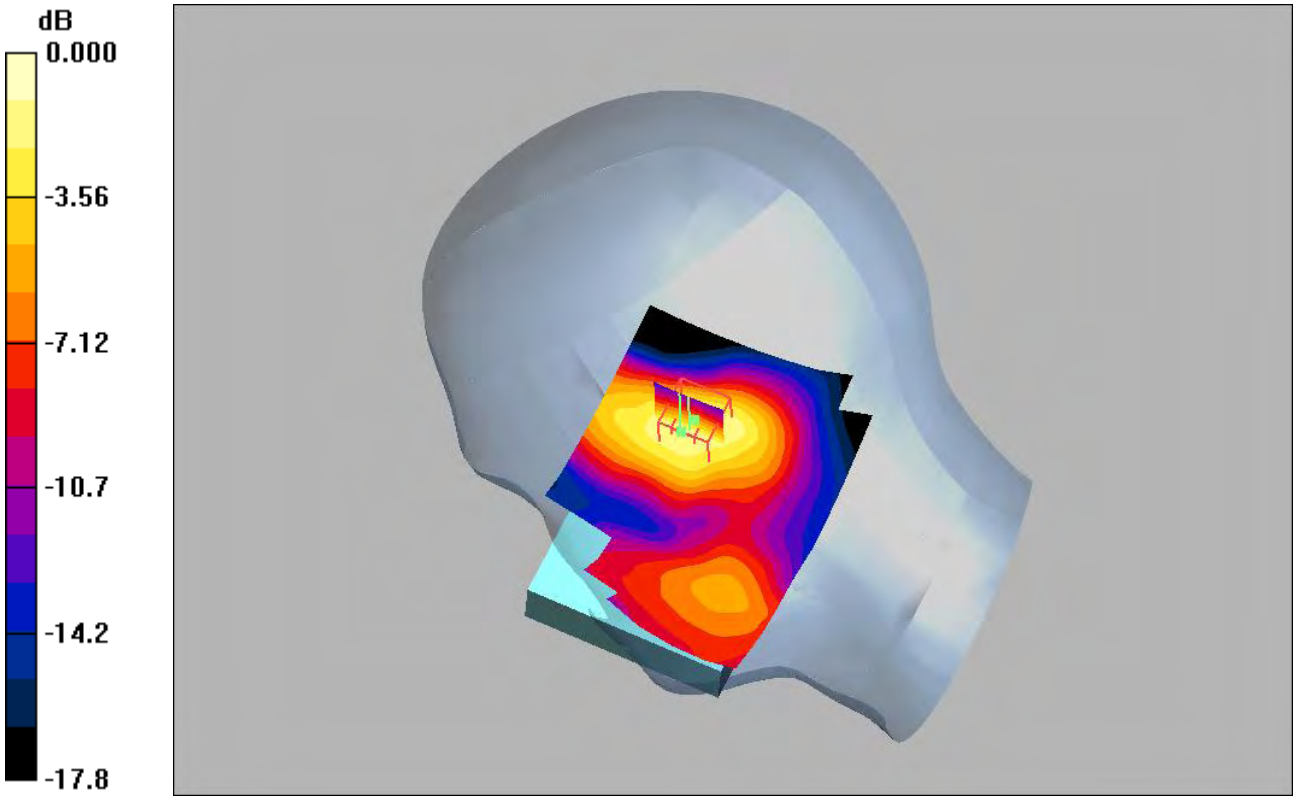
0 dB = 0.335mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



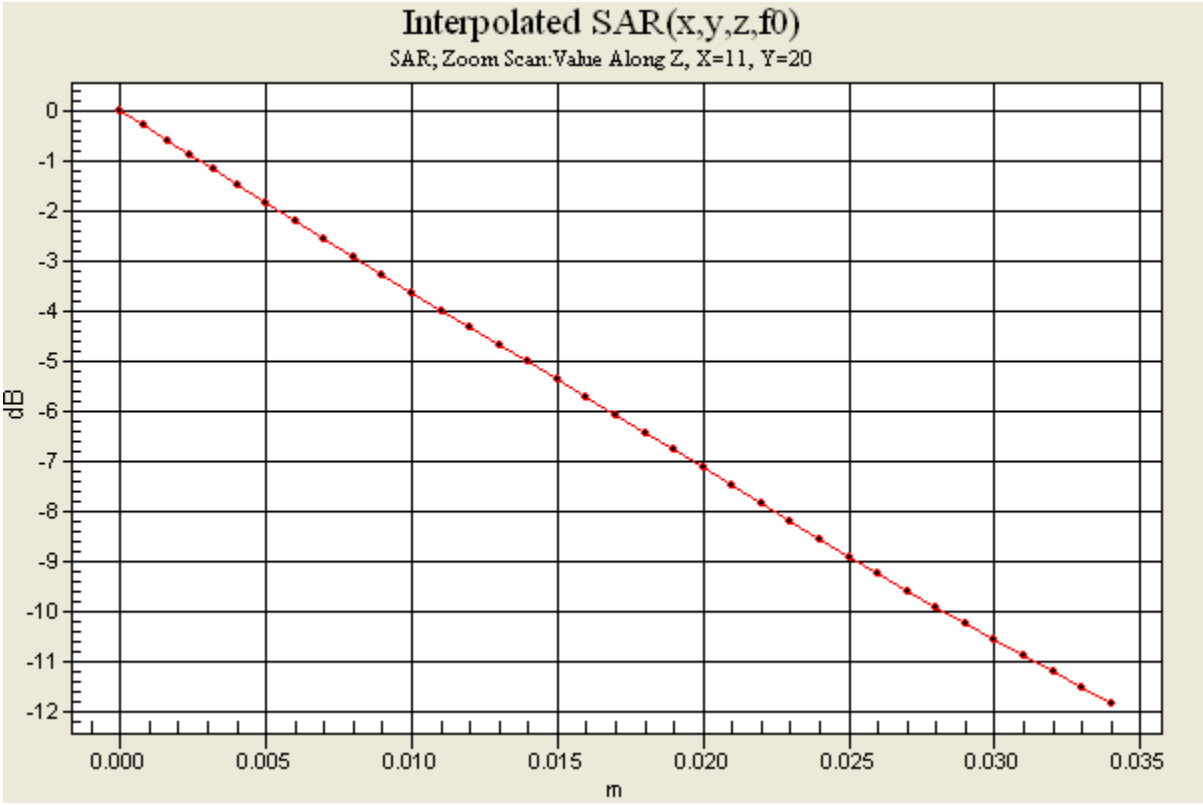
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/22/2009 9:51:51 AM
File Name: 22Sept09_X2A_GSM1900_WAKC_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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
High channel tilt/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.119 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.85 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 0.142 W/kg
SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.060 mW/g
Maximum value of SAR (measured) = 0.103 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.85 V/m; Power Drift = -0.009 dB
Maximum value of SAR (interpolated) = 0.142 mW/g



0 dB = 0.142mW/g

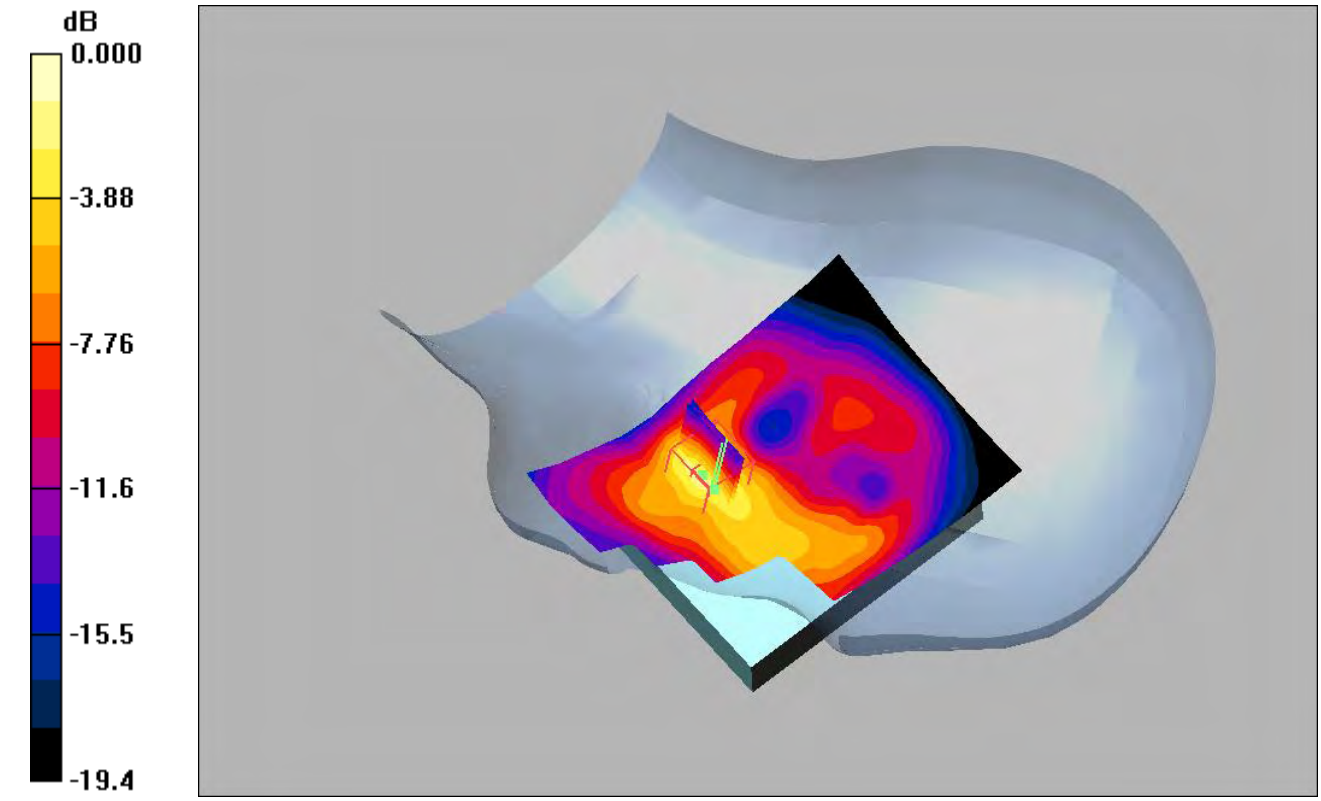
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/22/2009 11:46:26 AM
File Name: 22Sept09_X2A_GSM1900_WAKC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

High channel cheek/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.293 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.88 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.442 W/kg
SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.150 mW/g
Maximum value of SAR (measured) = 0.307 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.88 V/m; Power Drift = 0.007 dB
Maximum value of SAR (interpolated) = 0.442 mW/g



0 dB = 0.442mW/g

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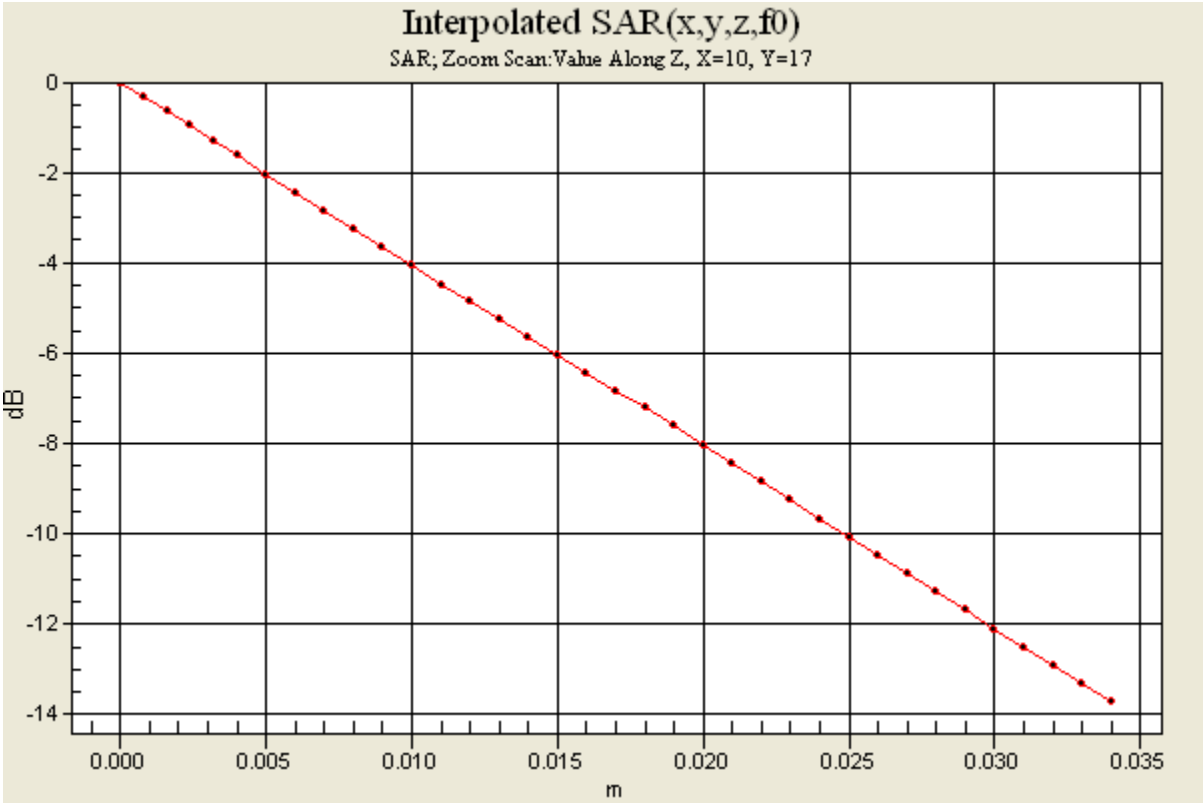
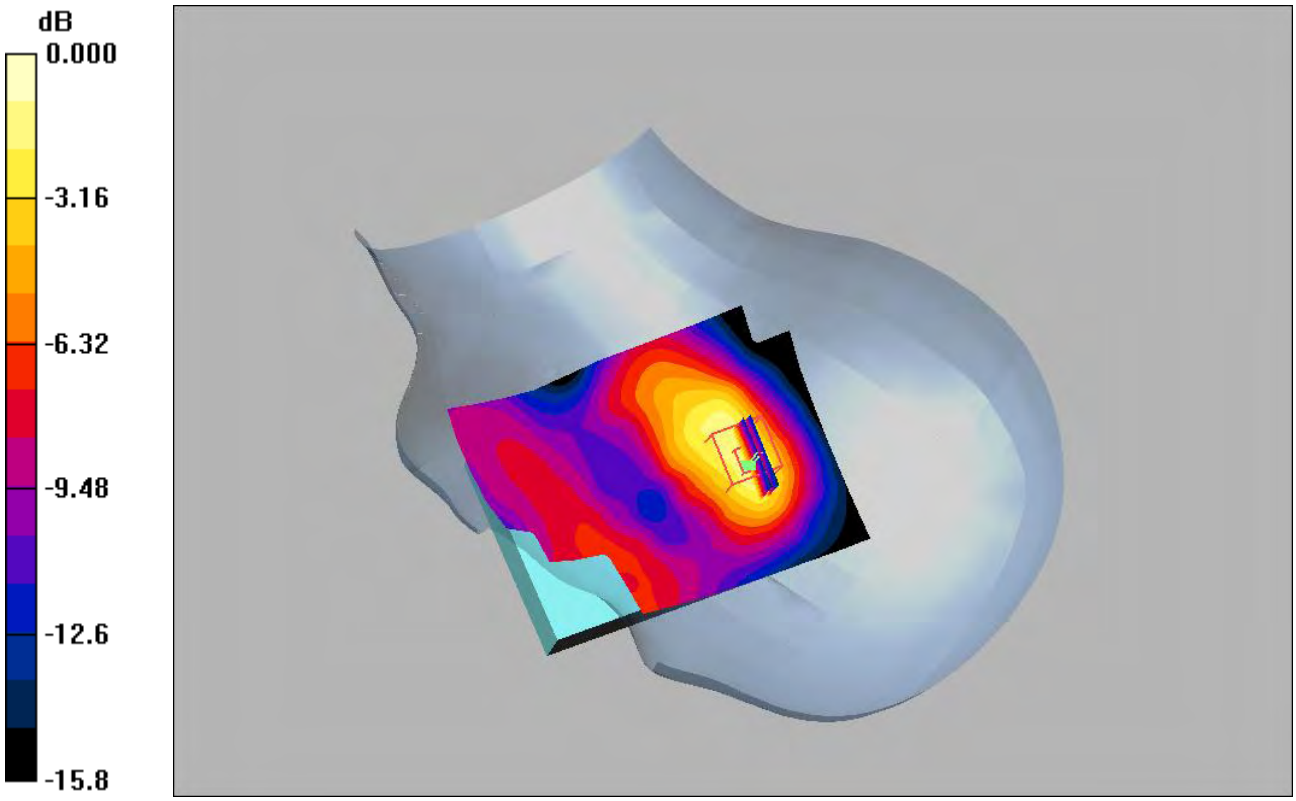
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

1900 GSM Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/22/2009 12:57:15 PM
File Name: 22Sept09_X2A_GSM1900_WAKC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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
High channel tilt/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.112 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.61 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 0.147 W/kg
SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.057 mW/g
Maximum value of SAR (measured) = 0.100 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.61 V/m; Power Drift = -0.002 dB
Maximum value of SAR (interpolated) = 0.147 mW/g



0 dB = 0.147mW/g

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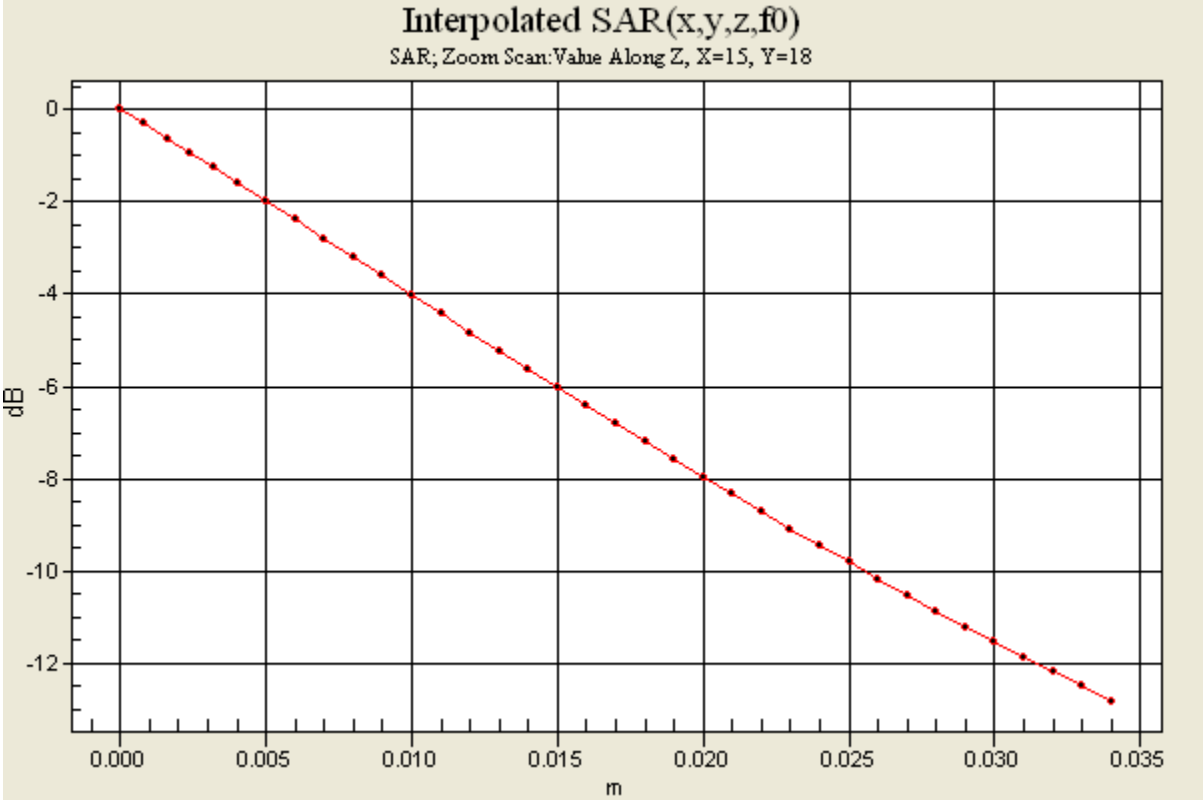
SEM/CCMVAR Rodney Dixon		REP 2009 006 X2A 02	
Approved	Checked		
SEM/CCMVPCP Gary Thomas		D	



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SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/28/2009 12:04:38 PM
File Name: 28Sept09_X2A_B2WCDMA_WAKC_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1907.4 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

High channel cheek/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.423 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.83 V/m; Power Drift = -0.052 dB
Peak SAR (extrapolated) = 0.510 W/kg
SAR(1 g) = 0.369 mW/g; SAR(10 g) = 0.243 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.396 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.83 V/m; Power Drift = -0.052 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.510 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
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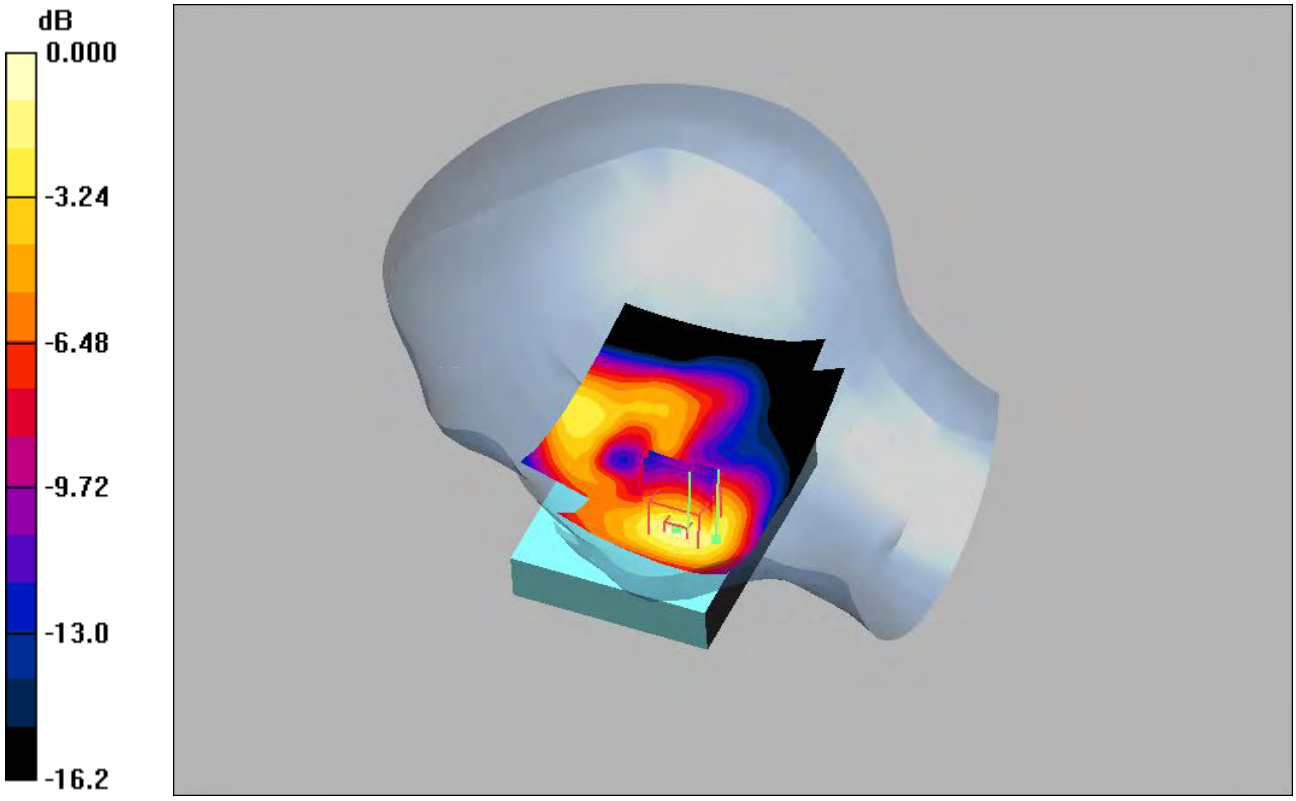
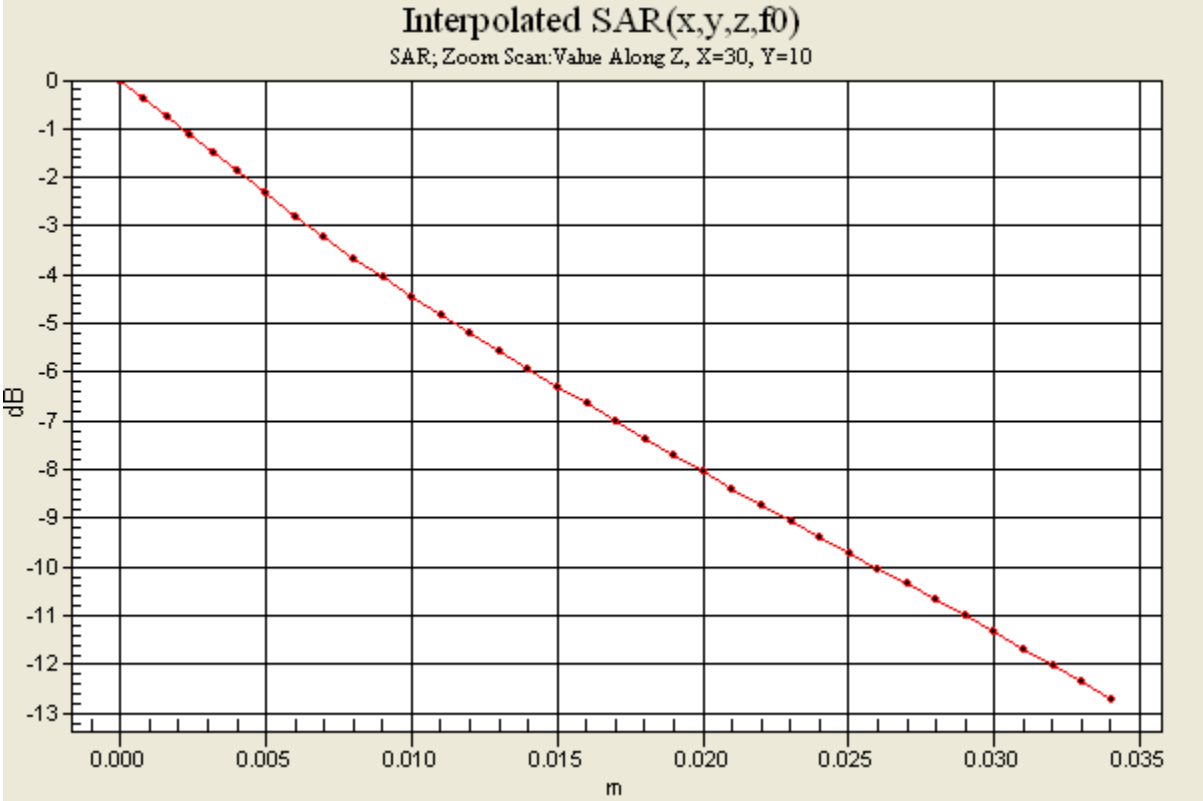
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.510mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

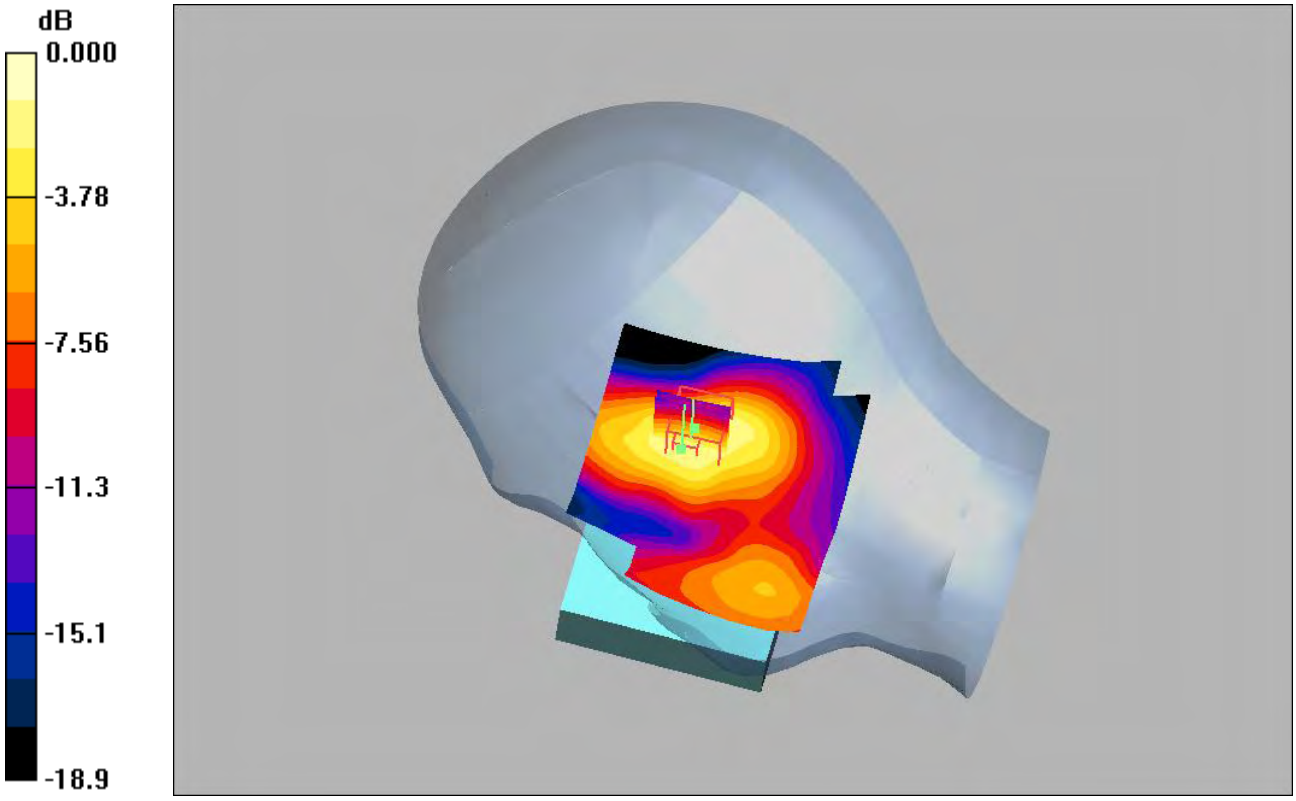


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/28/2009 1:14:50 PM
File Name: 28Sept09_X2A_B2WCDMA_WAKC_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1907.4 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

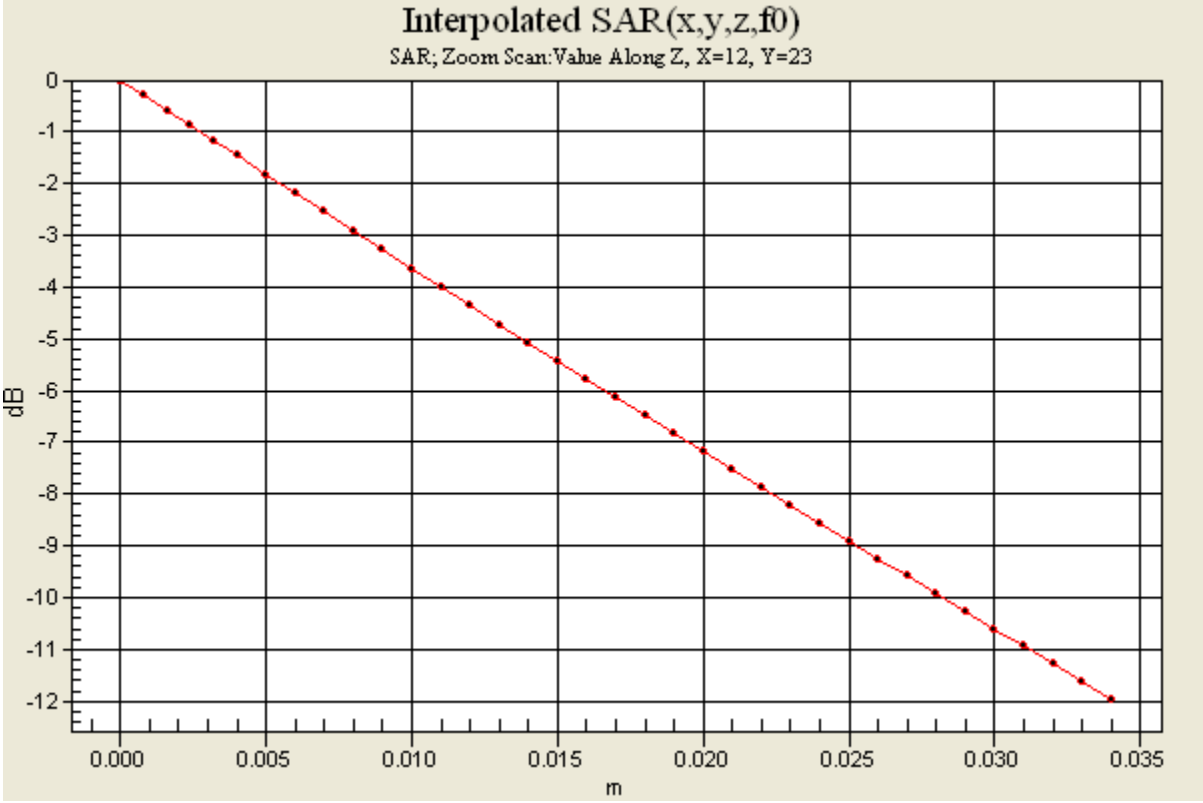
High channel tilt/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.196 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = 0.005 dB
Peak SAR (extrapolated) = 0.246 W/kg
SAR(1 g) = 0.162 mW/g; SAR(10 g) = 0.102 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.175 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = 0.005 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.246 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



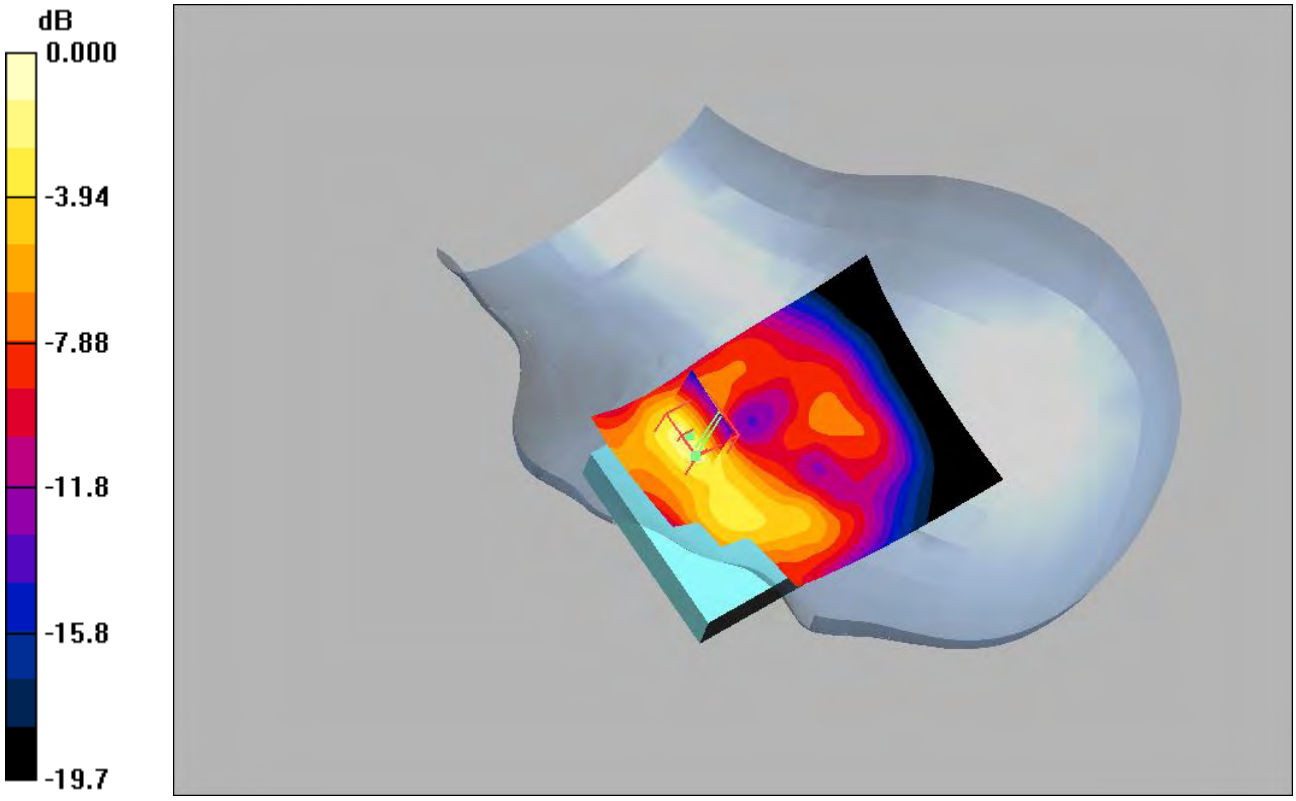
0 dB = 0.246mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



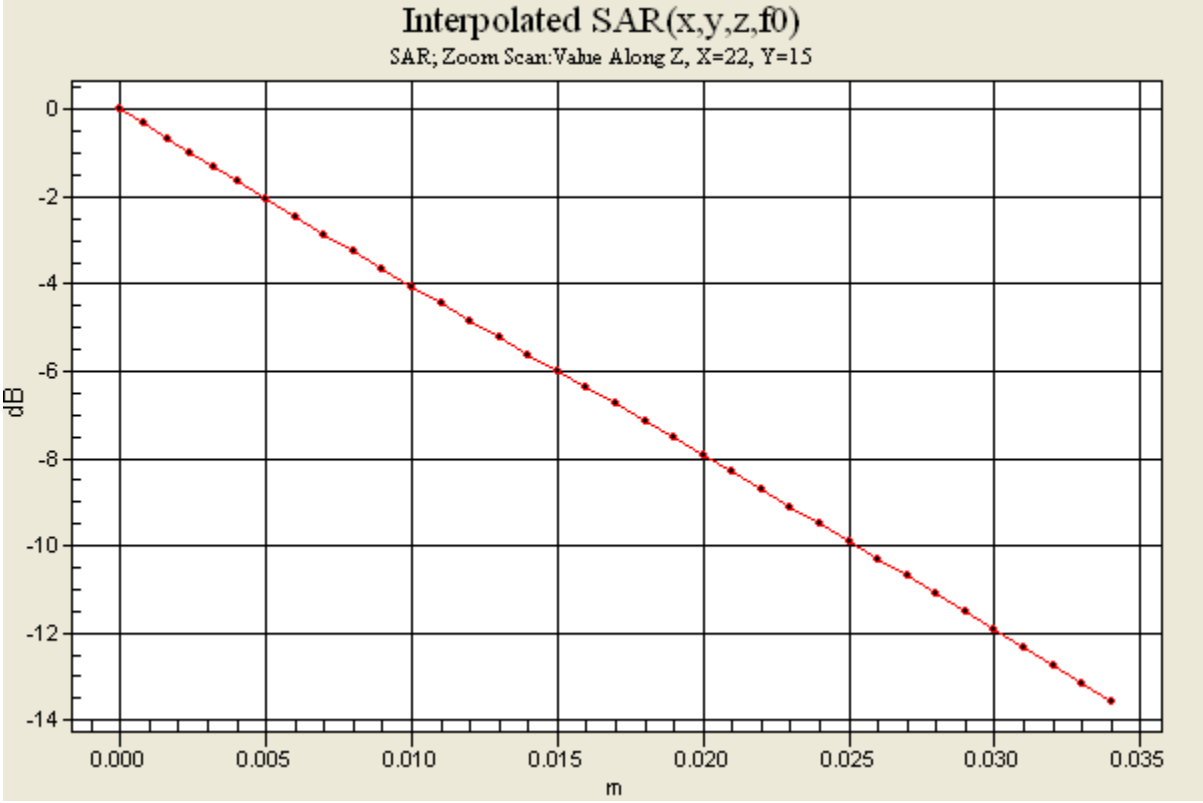
Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/28/2009 9:26:33 AM
File Name: 28Sept09_X2A_B2WCDMA_WAKC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1907.4 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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
High channel cheek/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.430 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.18 V/m; Power Drift = -0.112 dB
Peak SAR (extrapolated) = 0.644 W/kg
SAR(1 g) = 0.395 mW/g; SAR(10 g) = 0.222 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.439 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.18 V/m; Power Drift = -0.112 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.644 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.644mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

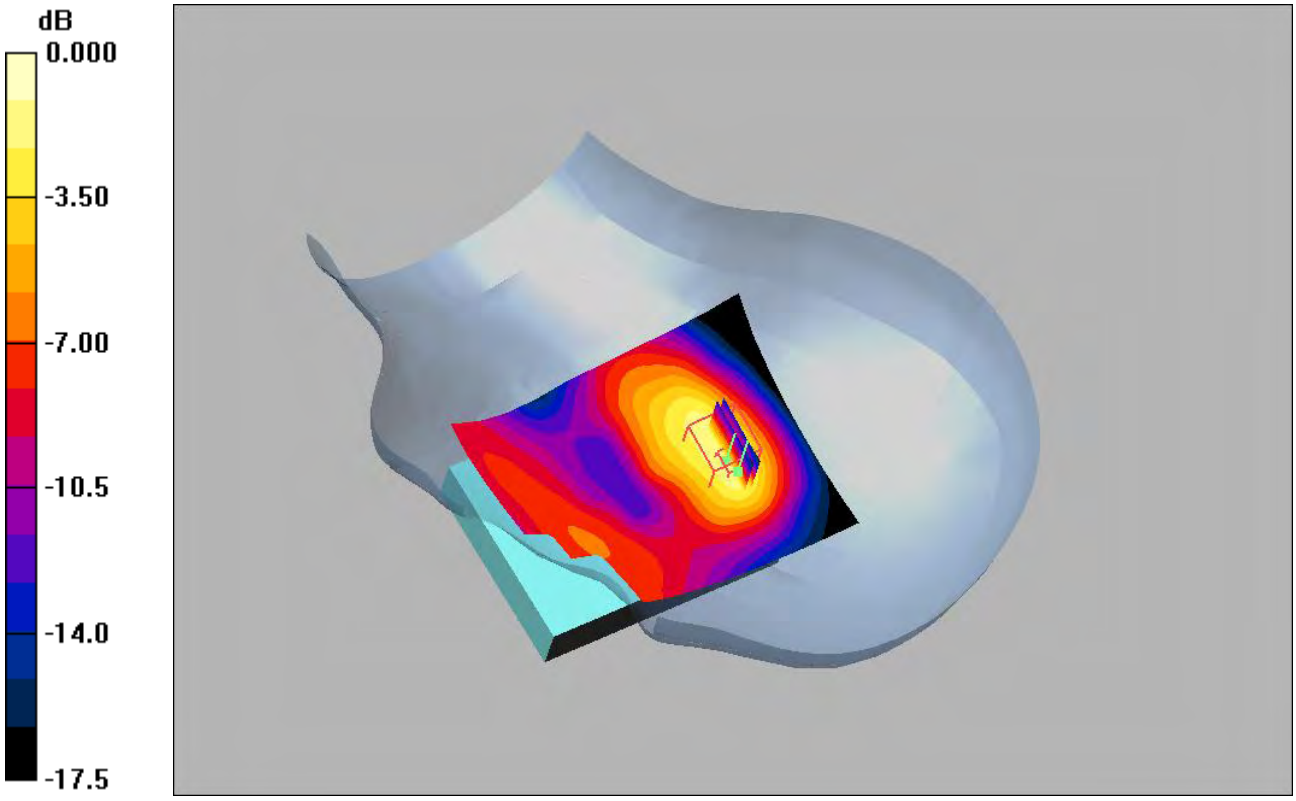


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band II WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/28/2009 10:42:07 AM
File Name: 28Sept09_X2A_B2WCDMA_WAKC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (High Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(5.1, 5.1, 5.1)
Medium parameters used (interpolated): f = 1907.4 MHz; σ = 1.47 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(5.1, 5.1, 5.1); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- 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

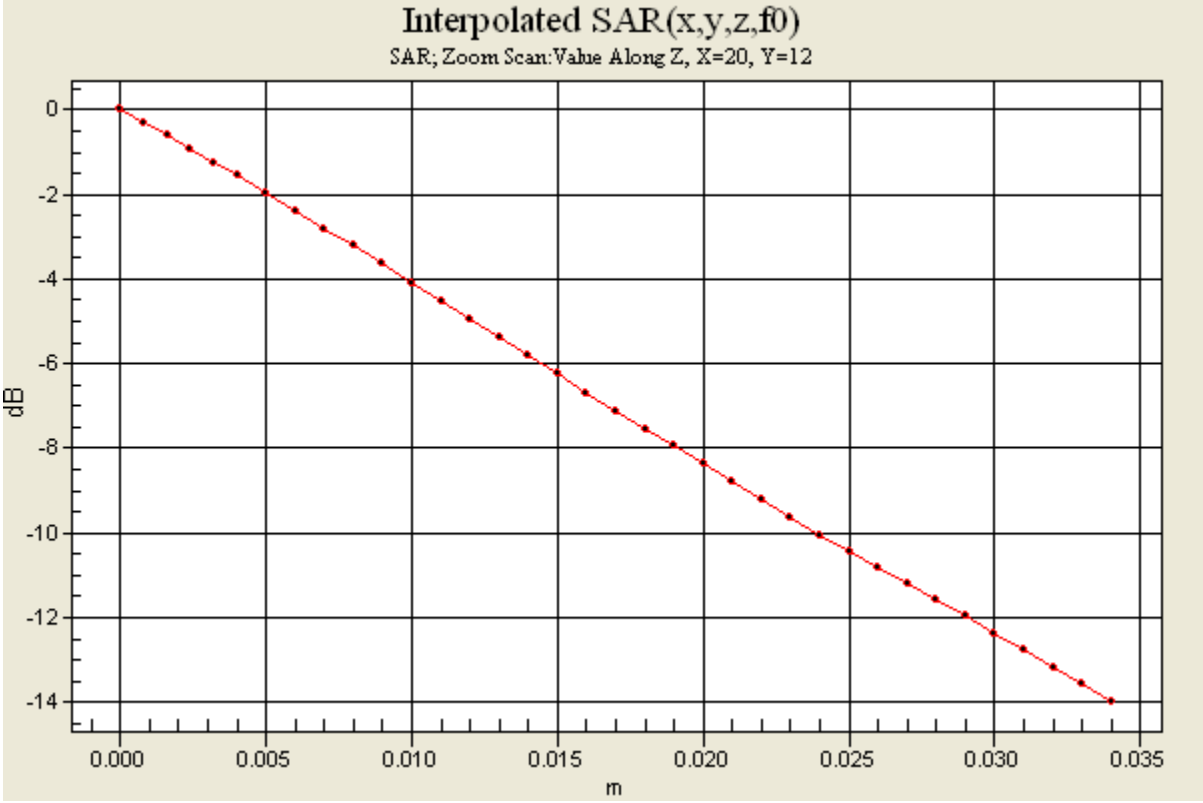
High channel tilt/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.204 mW/g
High channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 0.263 W/kg
SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.101 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.179 mW/g
High channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = -0.028 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.263 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.263mW/g

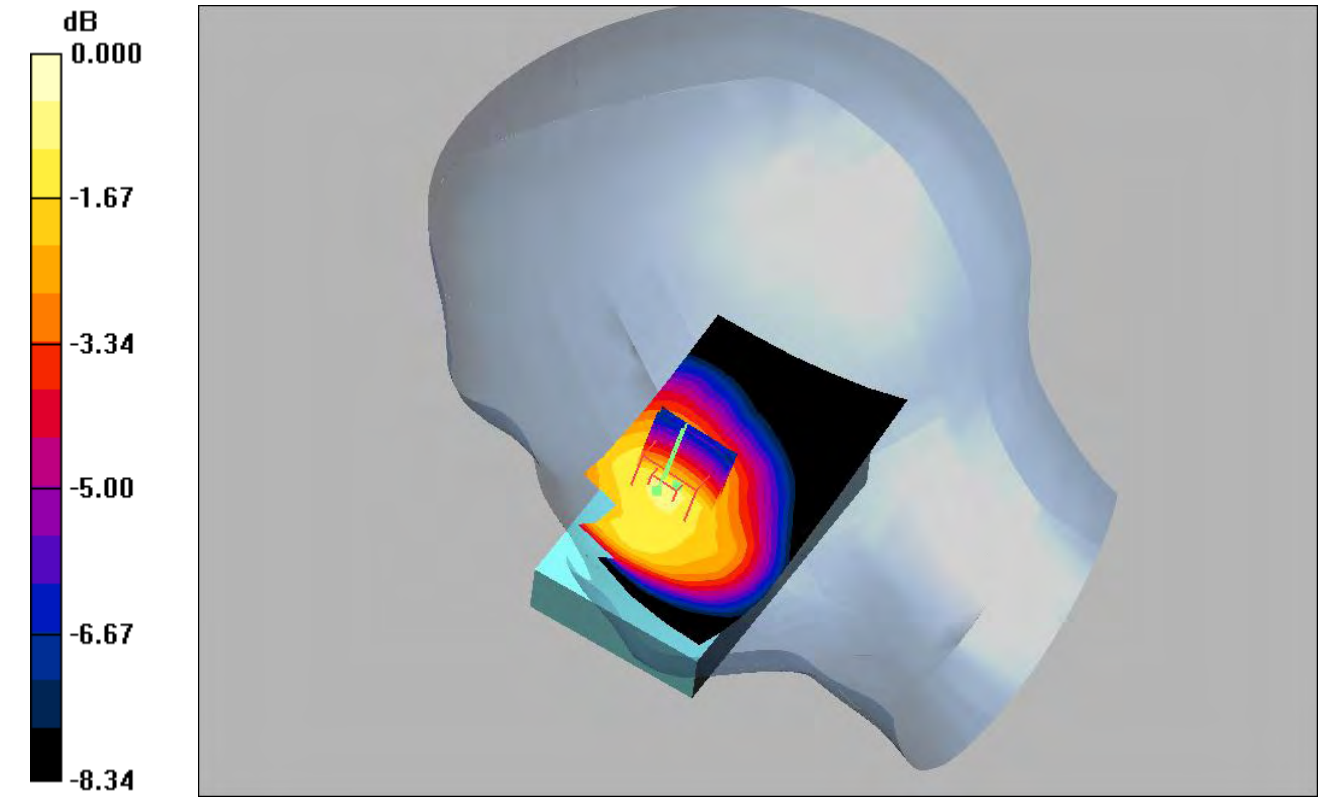
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

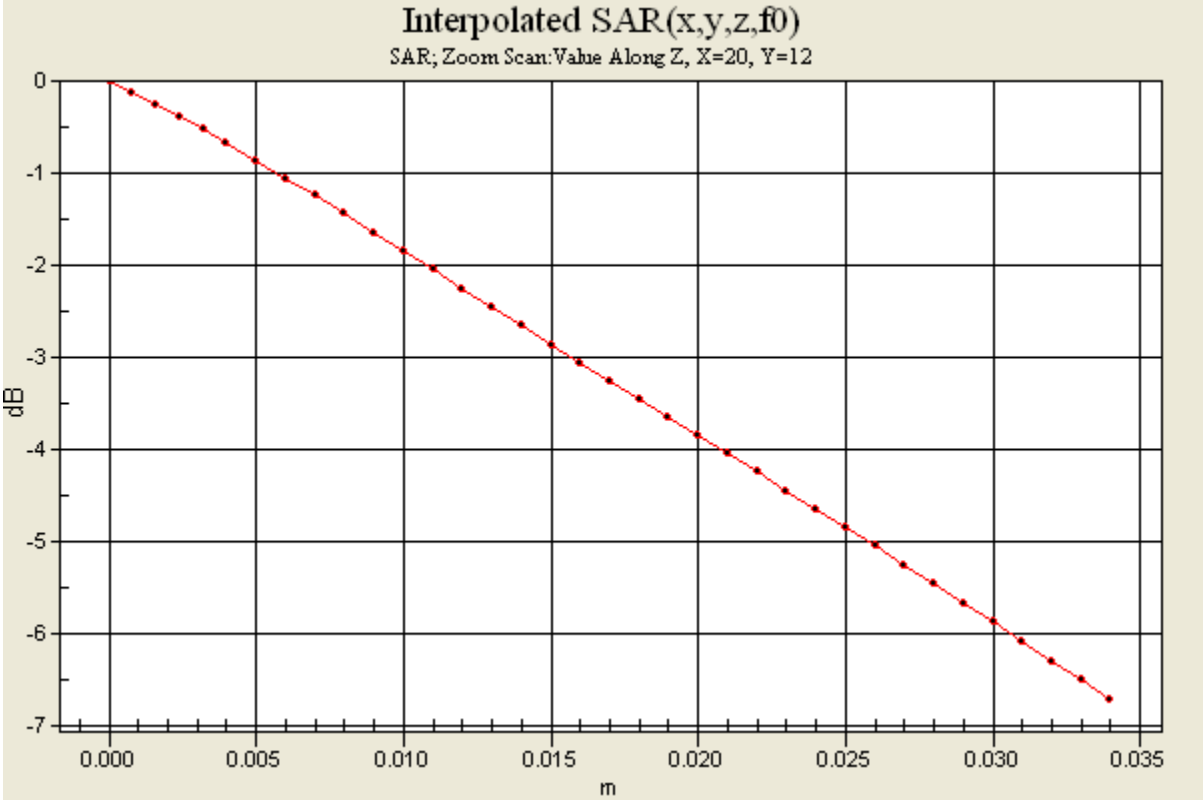
Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Cheek Position.
Date/Time: 9/28/2009 11:07:38 AM
File Name: 28Sept09_X2A_B5WCDMA_WALC_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used: f = 835 MHz; σ = 0.899 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Middle channel cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.320 mW/g
Middle channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.48 V/m; Power Drift = -0.001 dB
Peak SAR (extrapolated) = 0.388 W/kg
SAR(1 g) = 0.313 mW/g; SAR(10 g) = 0.237 mW/g
Maximum value of SAR (measured) = 0.330 mW/g
Middle channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.48 V/m; Power Drift = -0.001 dB
Maximum value of SAR (interpolated) = 0.388 mW/g



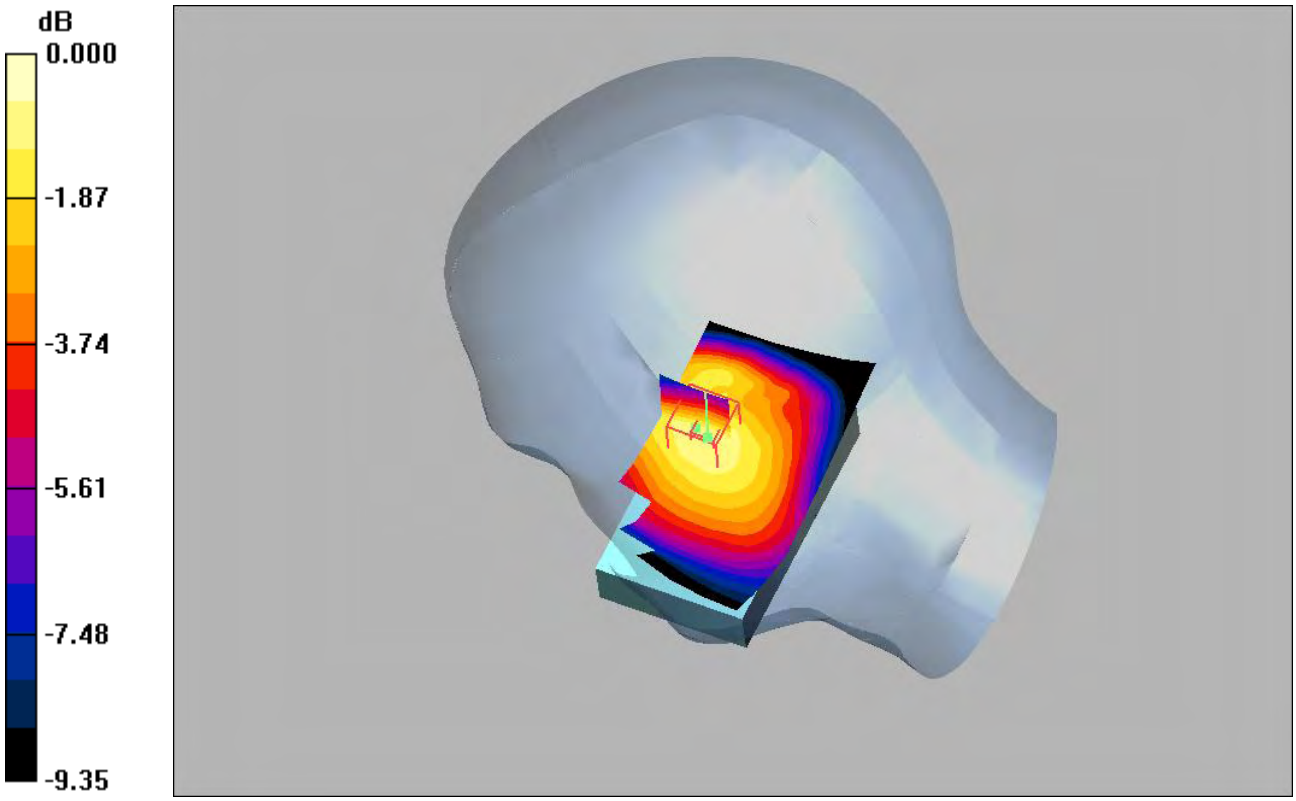
0 dB = 0.388mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

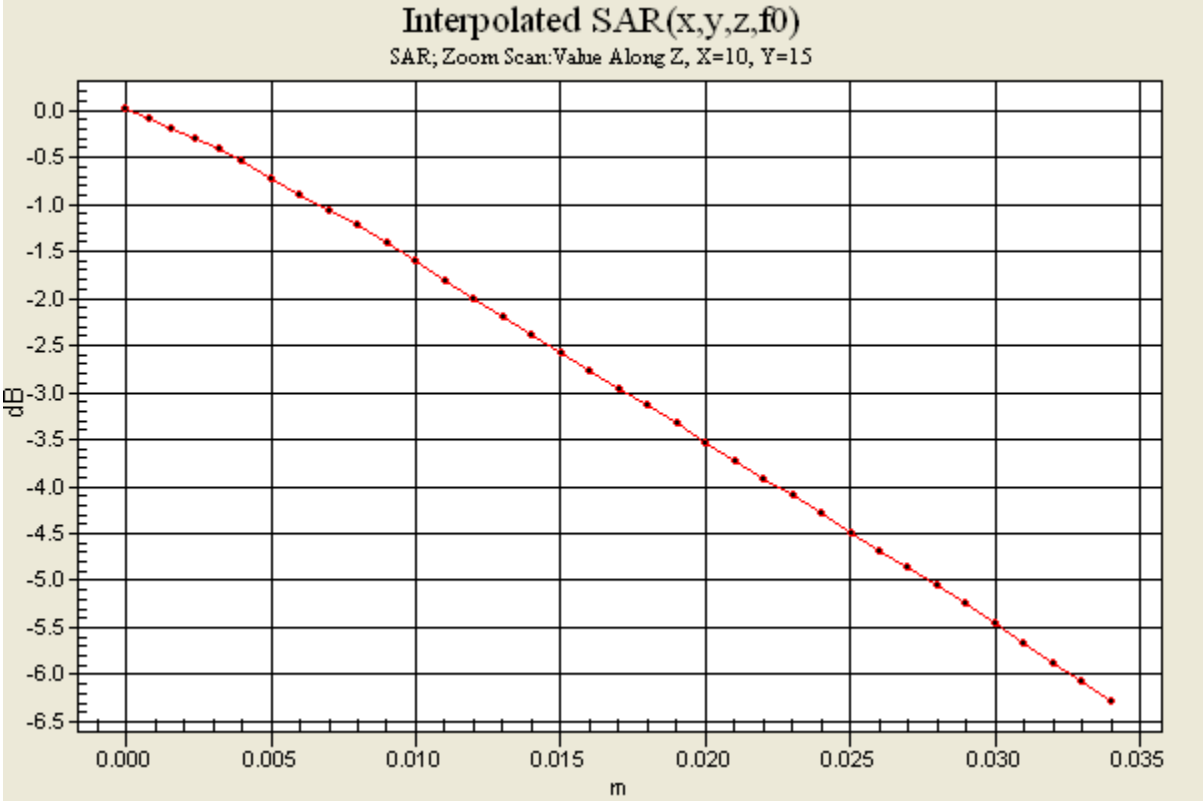


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 9/28/2009 12:09:00 PM
File Name: 28Sept09_X2A_B5WCDMA_WALC_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (Low Band Head)Phantom section: Right Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used: f = 835 MHz; σ = 0.899 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186
Middle channel tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.220 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 0.261 W/kg
SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.165 mW/g
Maximum value of SAR (measured) = 0.230 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = -0.030 dB
Maximum value of SAR (interpolated) = 0.261 mW/g



0 dB = 0.261mW/g

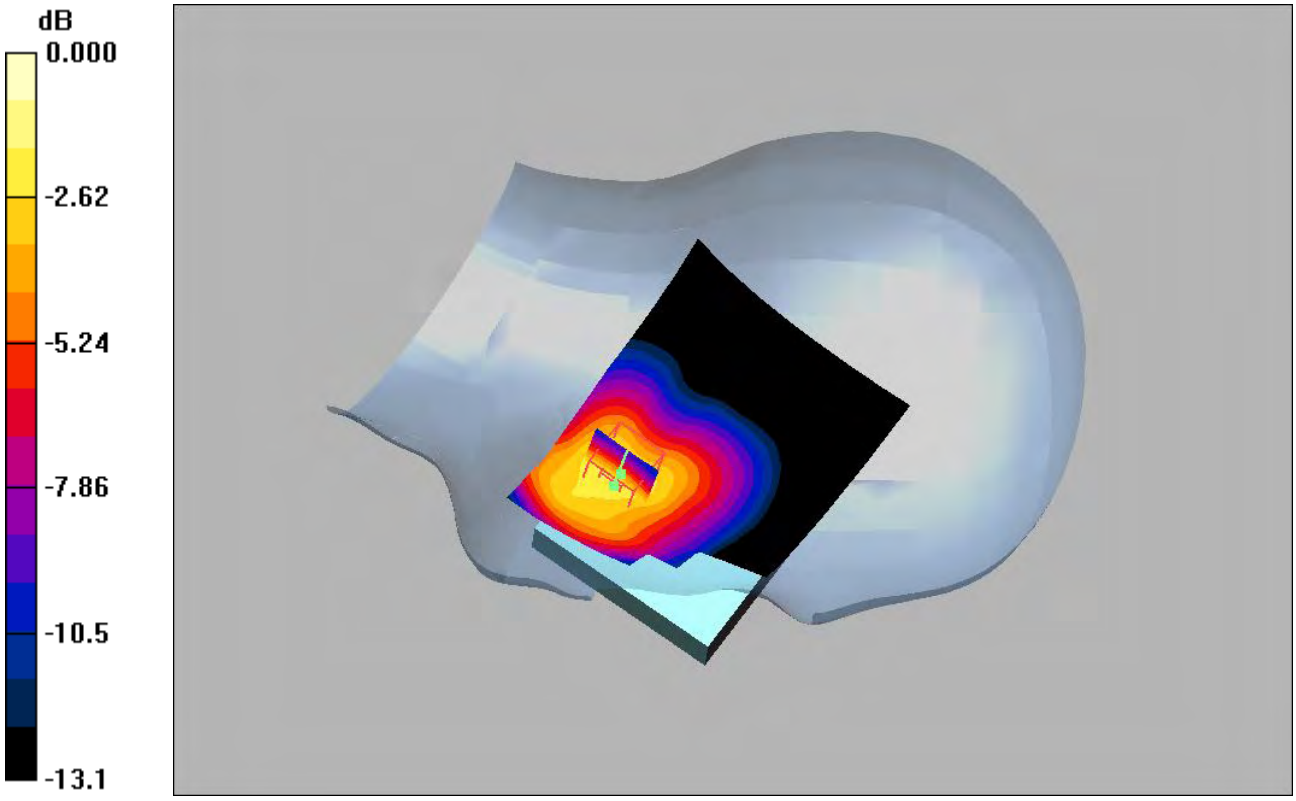

Interpolated SAR(x,y,z,f0)
SAR; Zoom Scan:Value Along Z, X=10, Y=15
dB
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
-3.5
-4.0
-4.5
-5.0
-5.5
-6.0
-6.5
0.000
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Cheek Position.
Date/Time: 9/28/2009 9:07:58 AM
File Name: 28Sept09_X2A_B5WCDMA_WALC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 846.4 MHz; σ = 0.902 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

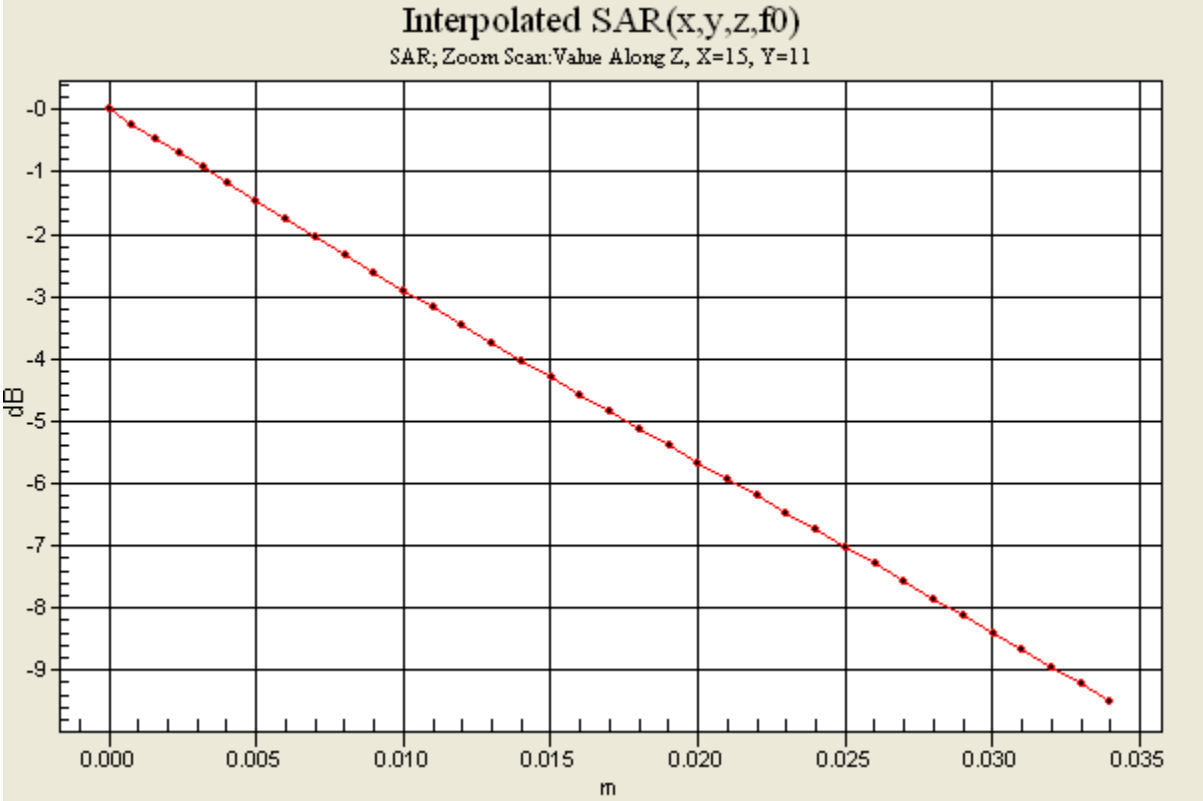
High channel cheek/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.923 mW/g
High channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.32 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 0.895 mW/g; SAR(10 g) = 0.599 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.950 mW/g
High channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.32 V/m; Power Drift = 0.013 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.26 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 1.26mW/g

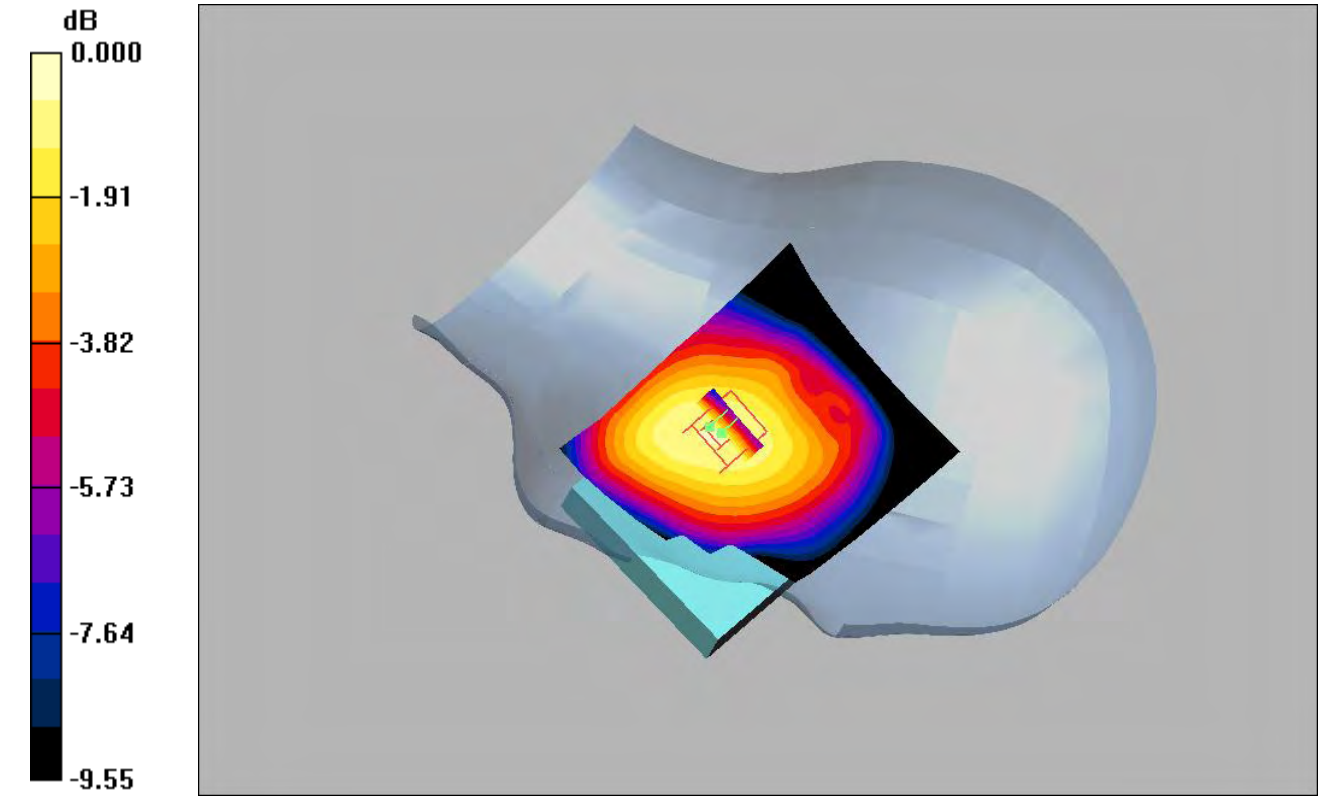
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Band V WCDMA Band: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 9/28/2009 9:32:13 AM
File Name: 28Sept09_X2A_B5WCDMA_WALC_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (Low Band Head)Phantom section: Left Section
Probe: ET3DV6 - SN1587ConvF(6.39, 6.39, 6.39)
Medium parameters used (interpolated): f = 826.6 MHz; σ = 0.891 mho/m; ε_r = 41.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1587; ConvF(6.39, 6.39, 6.39); Calibrated: 5/25/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn345; Calibrated: 10/31/2008
- Phantom: SAM with CRP (Low Band Head); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Low channel tilt/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.203 mW/g
Low channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 0.230 W/kg
SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.152 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.201 mW/g
Low channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.051 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.230 mW/g



0 dB = 0.230mW/g

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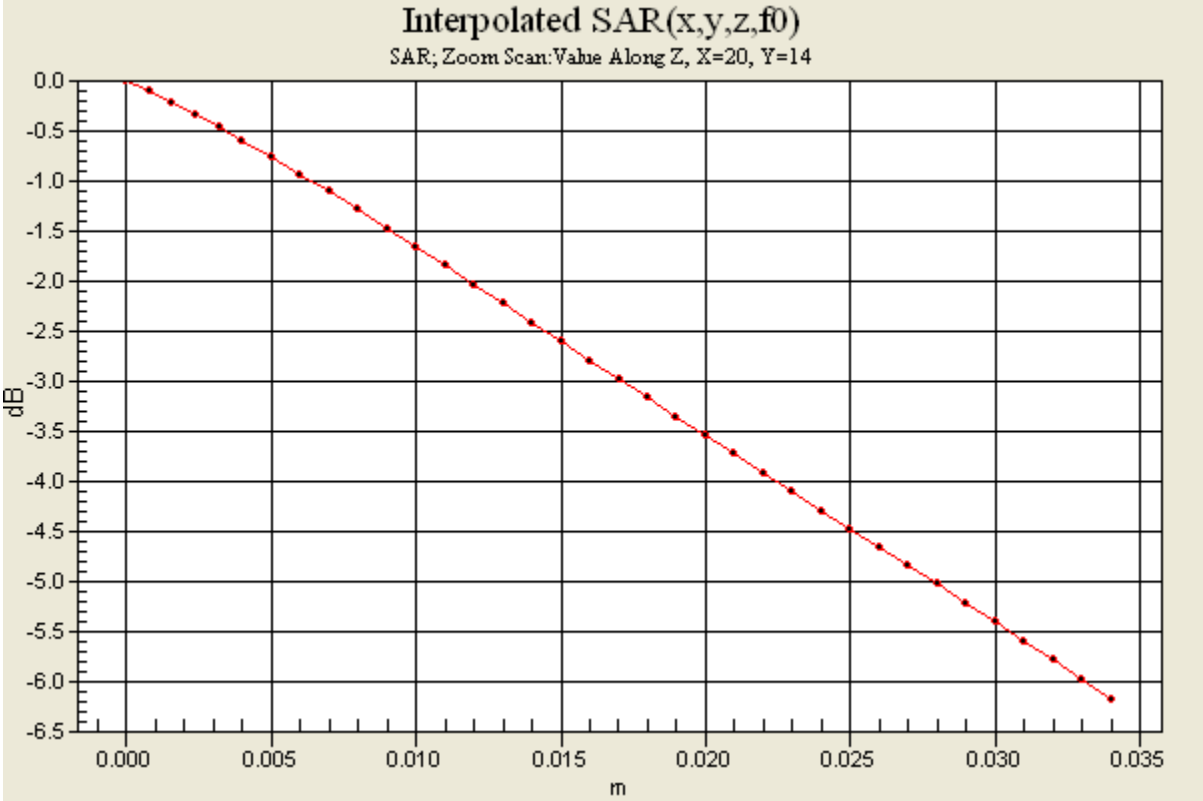
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



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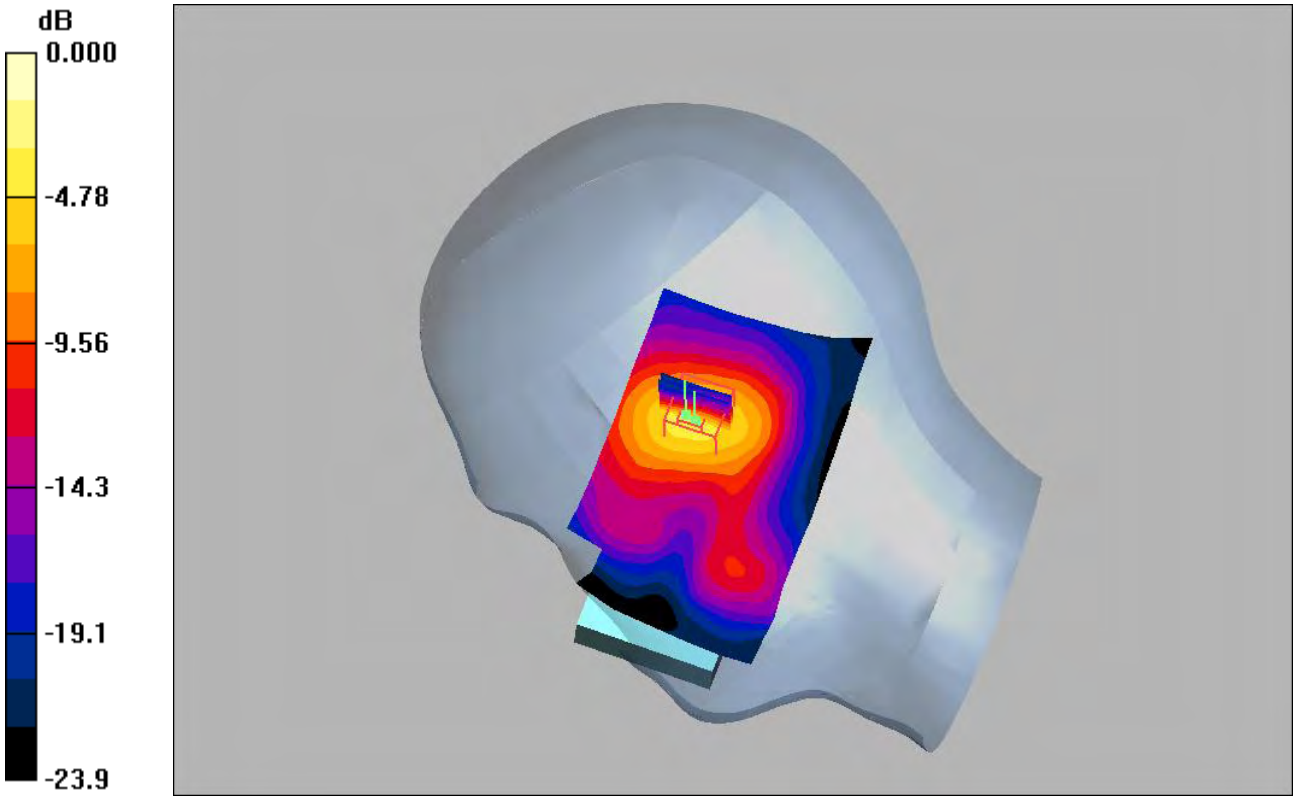
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Check Position.
Date/Time: 10/6/2009 7:12:02 AM
File Name: 05Oct09_X2A_WLAN2450_WA3L_RCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.9 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

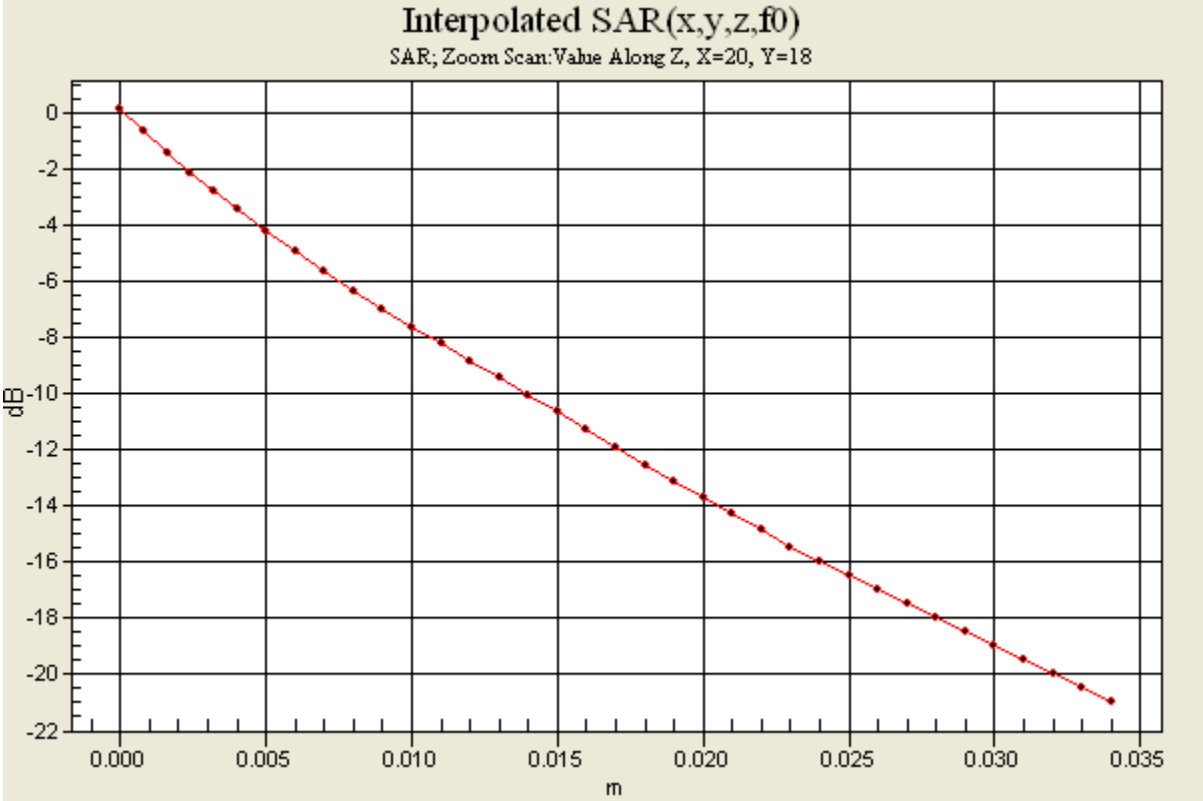
Low channel cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.151 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.08 V/m; Power Drift = -0.074 dB
Peak SAR (extrapolated) = 0.313 W/kg
SAR(1 g) = 0.132 mW/g; SAR(10 g) = 0.065 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.146 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.08 V/m; Power Drift = -0.074 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.313 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.313mW/g

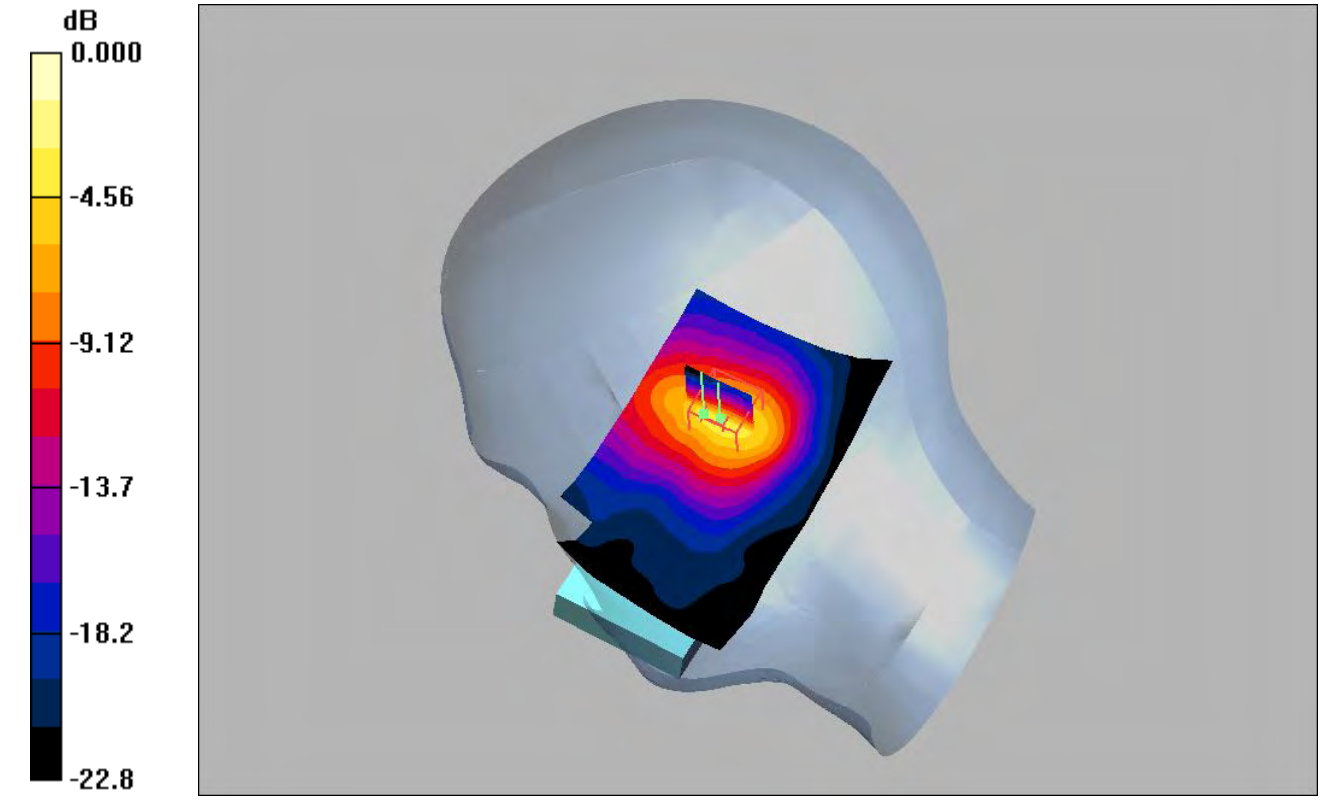
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

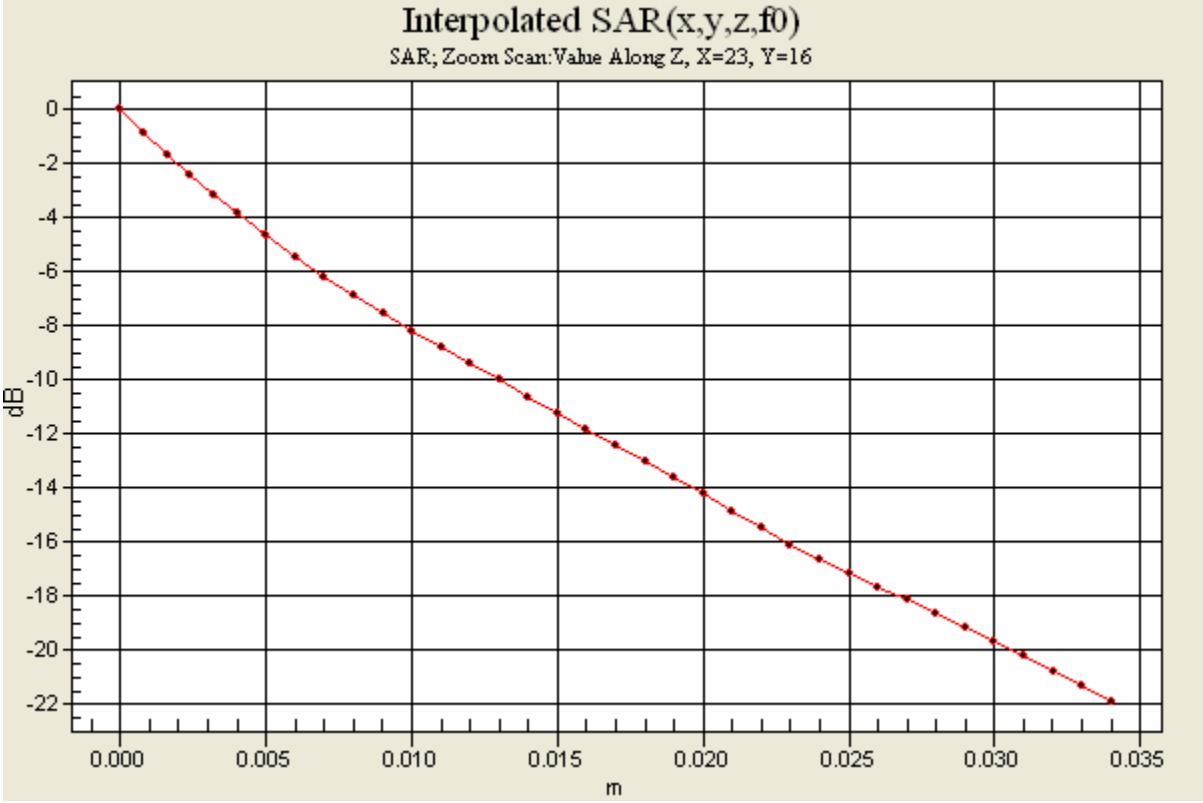
WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt Position.
Date/Time: 10/6/2009 7:34:30 AM
File Name: 05Oct09_X2A_WLAN2450_WA3L_RCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.9 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

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) = 0.146 mW/g
Low channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.36 V/m; Power Drift = 0.046 dB
Peak SAR (extrapolated) = 0.312 W/kg
SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.064 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.140 mW/g
Low channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.36 V/m; Power Drift = 0.046 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.312 mW/g



0 dB = 0.312mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

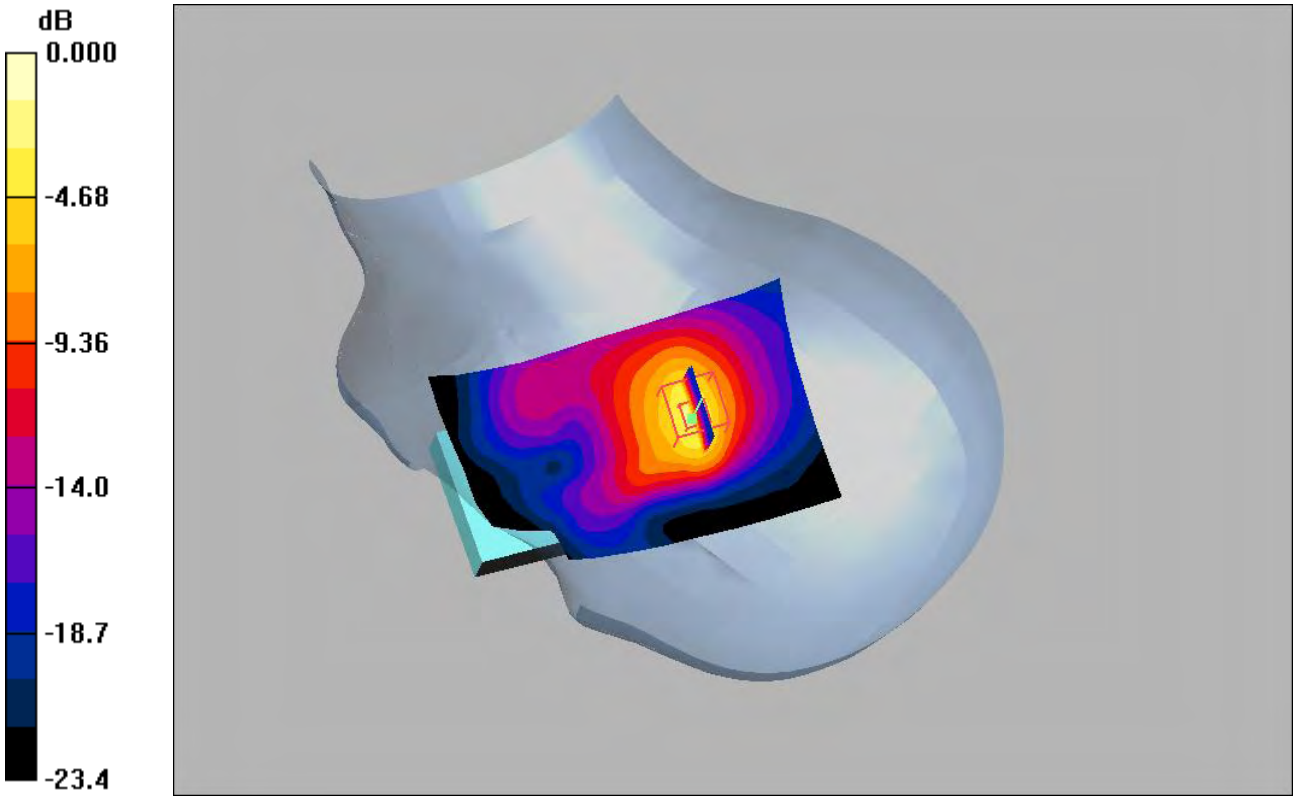


Prepared (also subject responsible if other)		No.	
SEM/CCMVAR Rodney Dixon		REP 2009 006 X2A 02	
Approved	Checked		
SEM/CCMVPCP Gary Thomas		D	

WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Check Position.
Date/Time: 10/5/2009 10:48:27 AM
File Name: 05Oct09_X2A_WLAN2450_WA3L_LCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.91 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

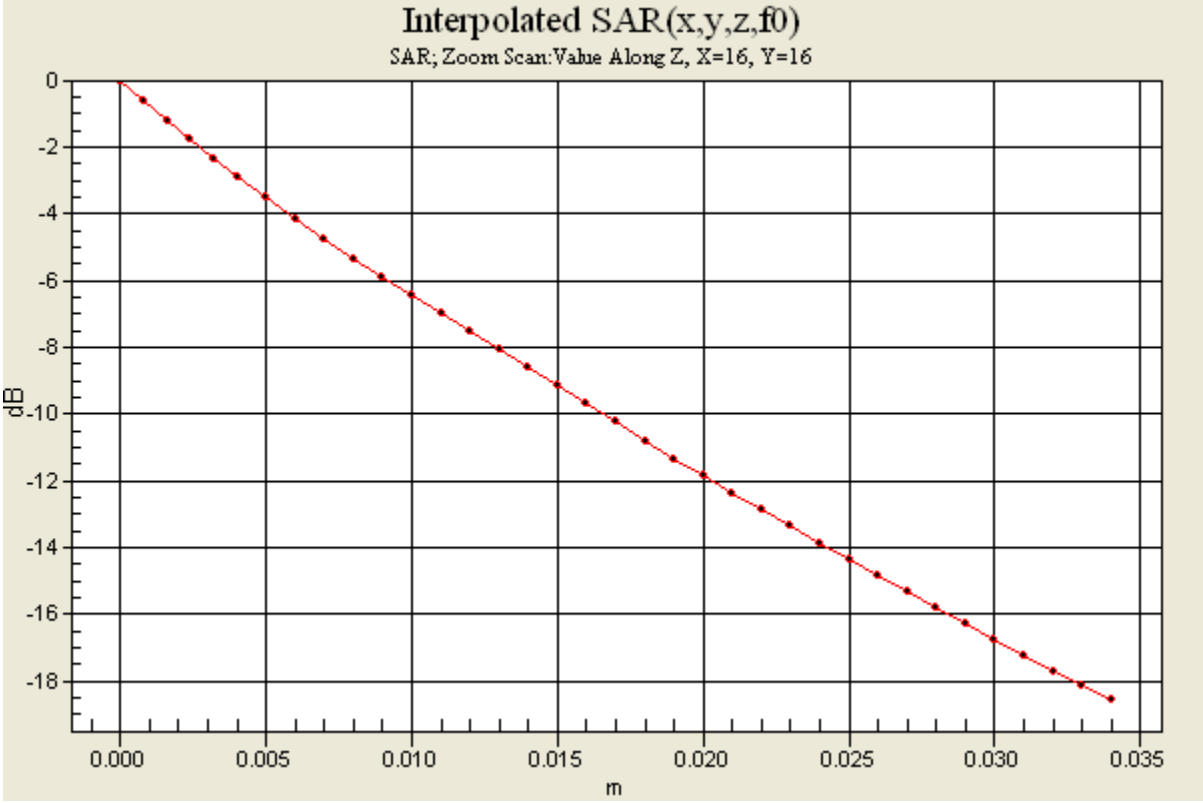
High FCC channel cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.185 mW/g
High FCC channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.40 V/m; Power Drift = 0.090 dB
Peak SAR (extrapolated) = 0.341 W/kg
SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.077 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.175 mW/g
High FCC channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.40 V/m; Power Drift = 0.090 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.341 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.341mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

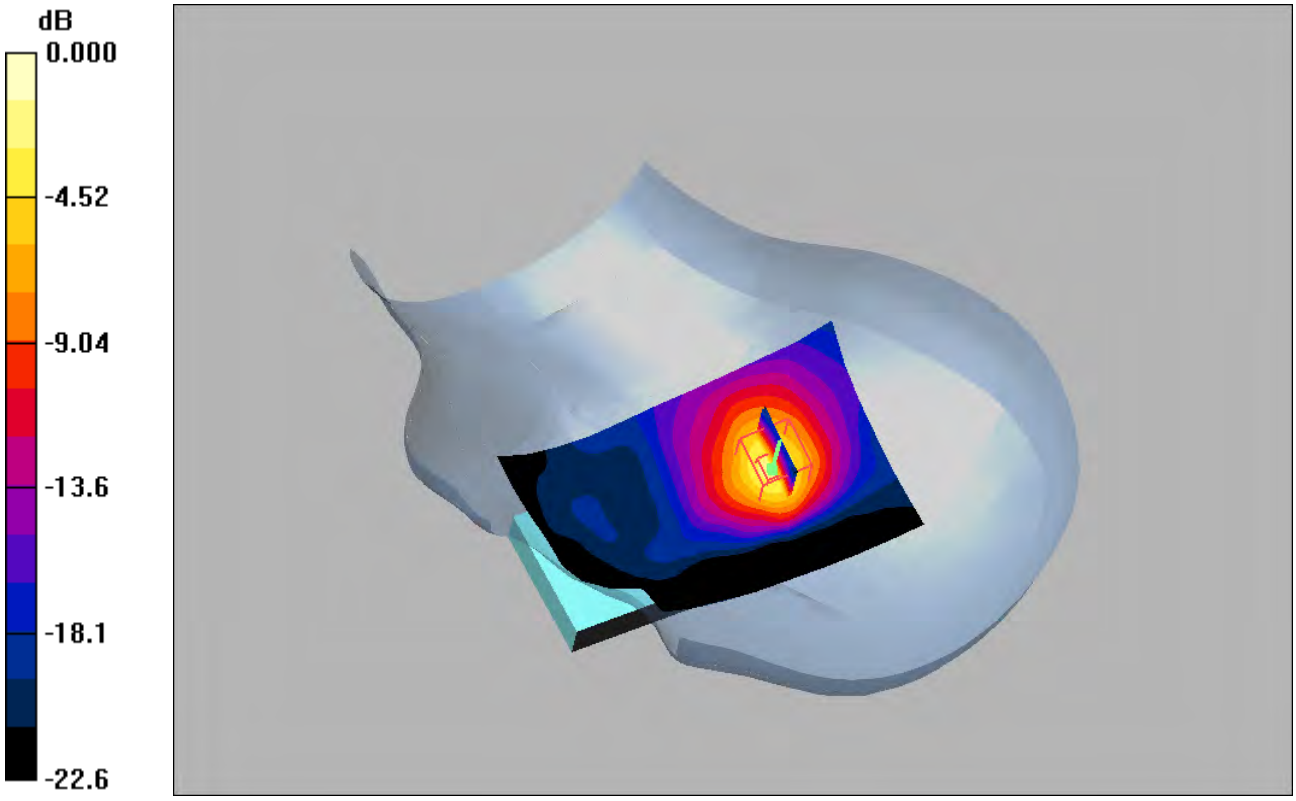


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt Position.
Date/Time: 10/5/2009 8:57:58 AM
File Name: 05Oct09_X2A_WLAN2450_WA3L_LCT01.da4
DUT: X2A Closed
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.9 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

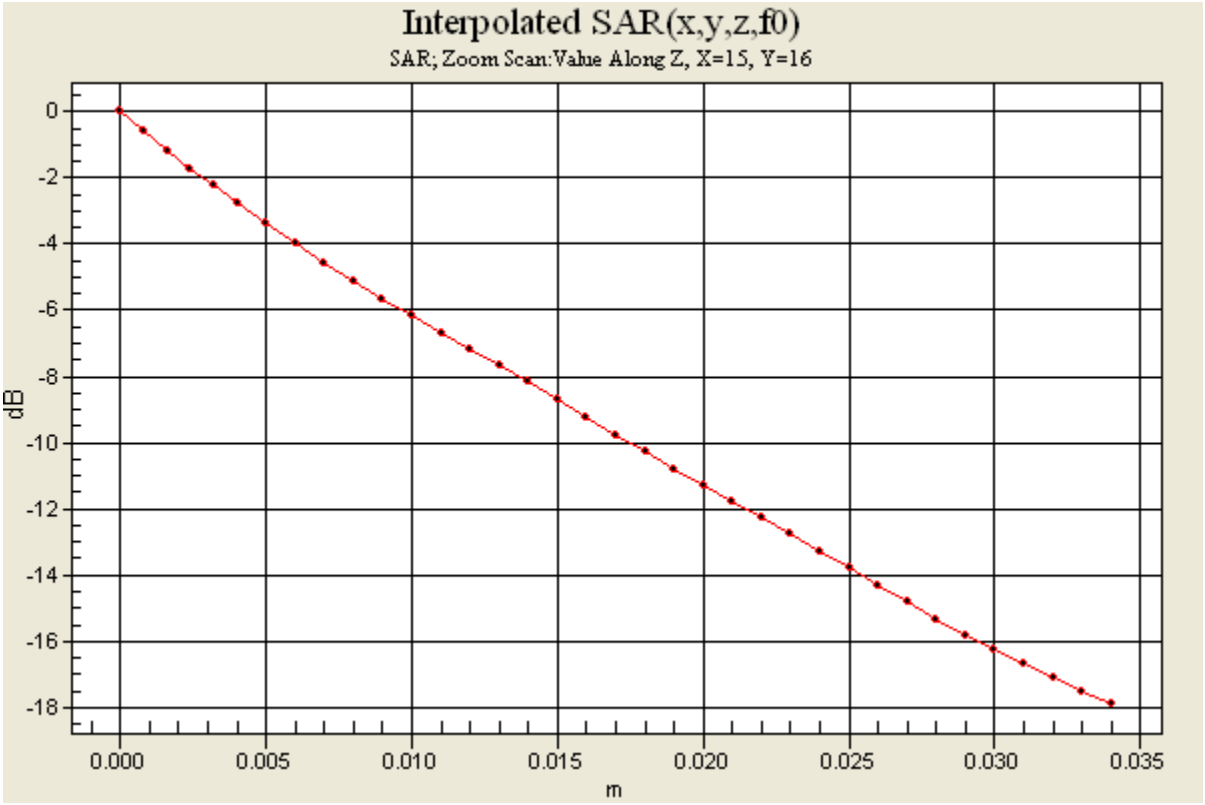
Low channel tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.159 mW/g
Low channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.53 V/m; Power Drift = 0.006 dB
Peak SAR (extrapolated) = 0.269 W/kg
SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.063 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.143 mW/g
Low channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.53 V/m; Power Drift = 0.006 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.269 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.269mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

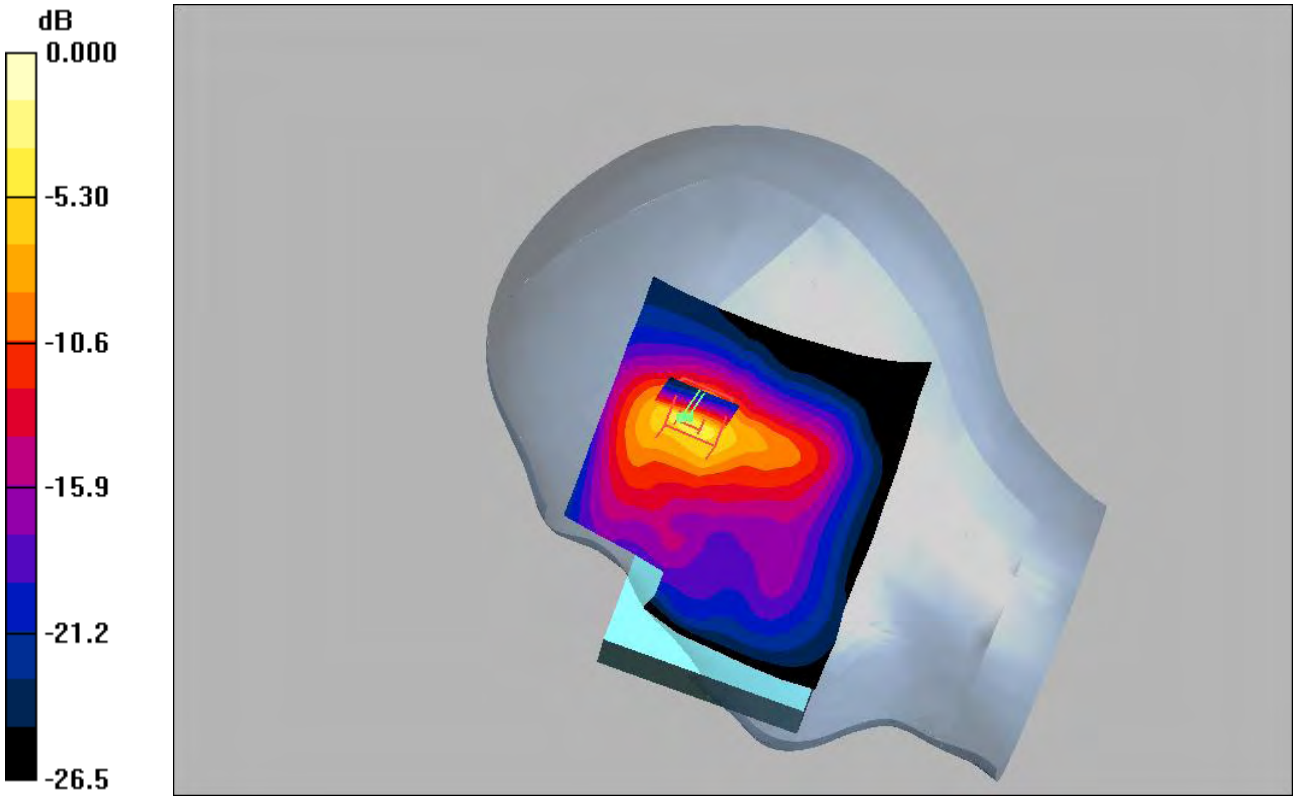


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Check open Position.
Date/Time: 10/7/2009 1:08:59 PM
File Name: 07Oct09_X2A_WLAN2450_WA3L_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.85 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

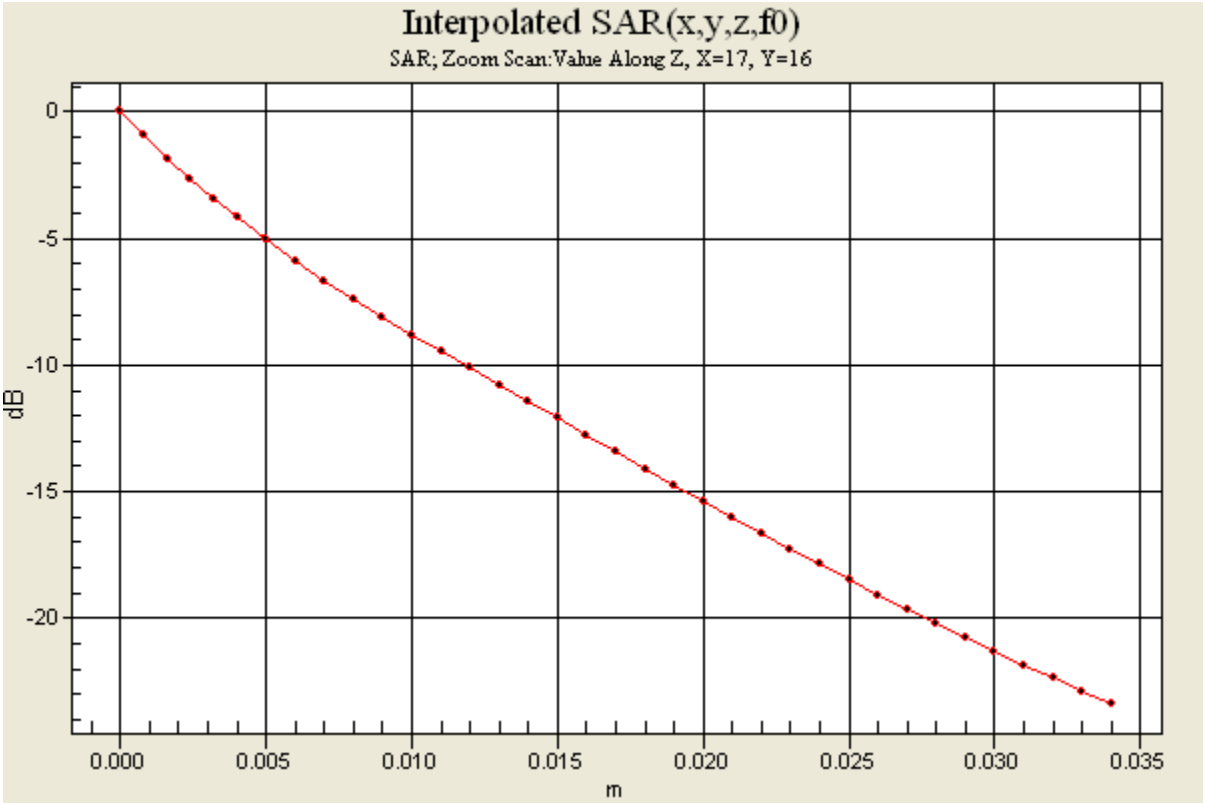
Low channel cheek/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.438 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.89 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.381 mW/g; SAR(10 g) = 0.168 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.424 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.89 V/m; Power Drift = -0.036 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.07 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 1.07mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

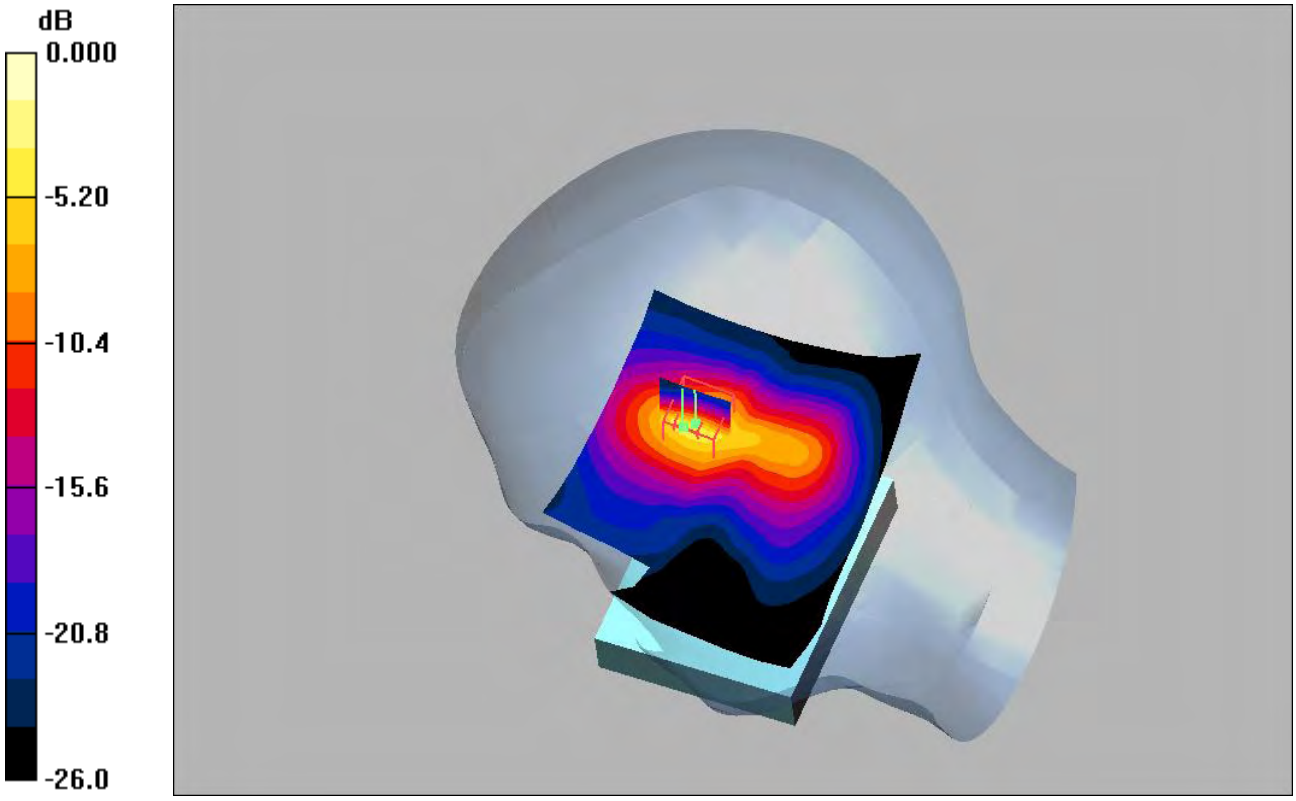


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Right Tilt open Position.
Date/Time: 10/7/2009 1:33:01 PM
File Name: 07Oct09_X2A_WLAN2450_WA3L_open_RCT01.da4
DUT: X2A open
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Right Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.85 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

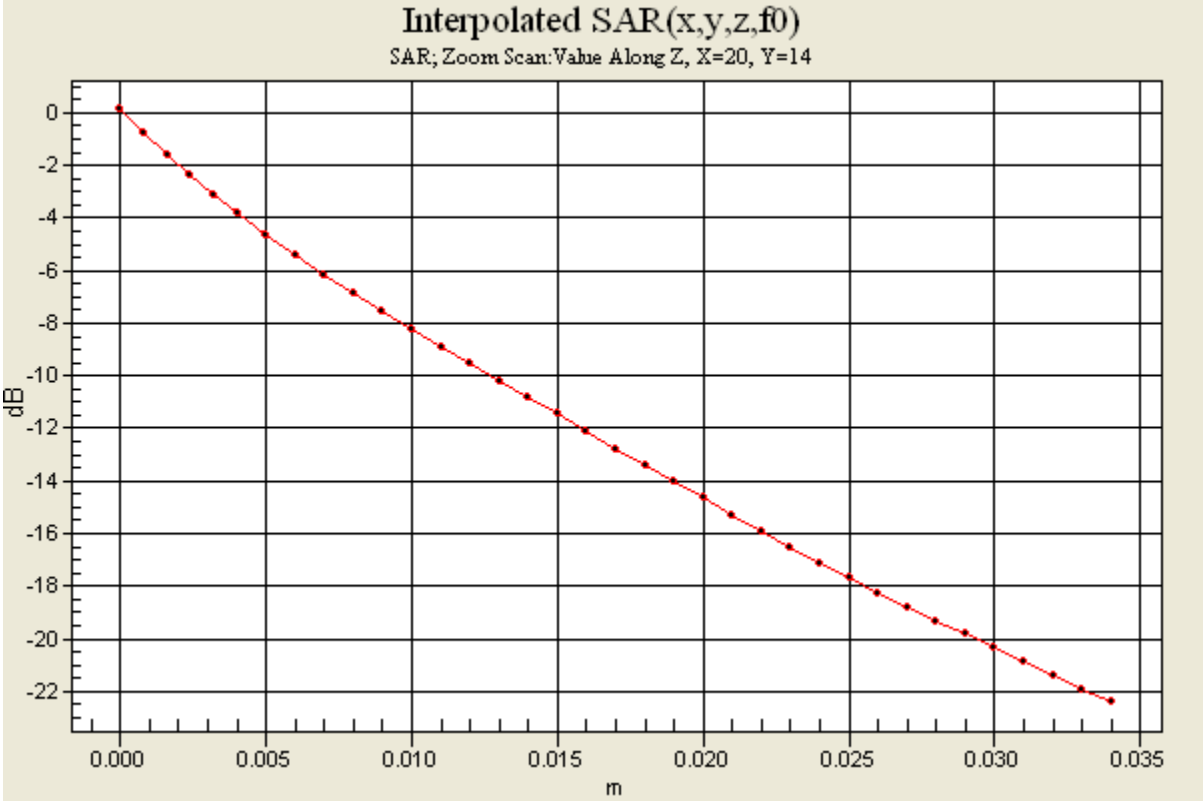
Low channel tilt/Area Scan (81x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.408 mW/g
Low channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.60 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 0.918 W/kg
SAR(1 g) = 0.344 mW/g; SAR(10 g) = 0.153 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.377 mW/g
Low channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.60 V/m; Power Drift = -0.036 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.918 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.918mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

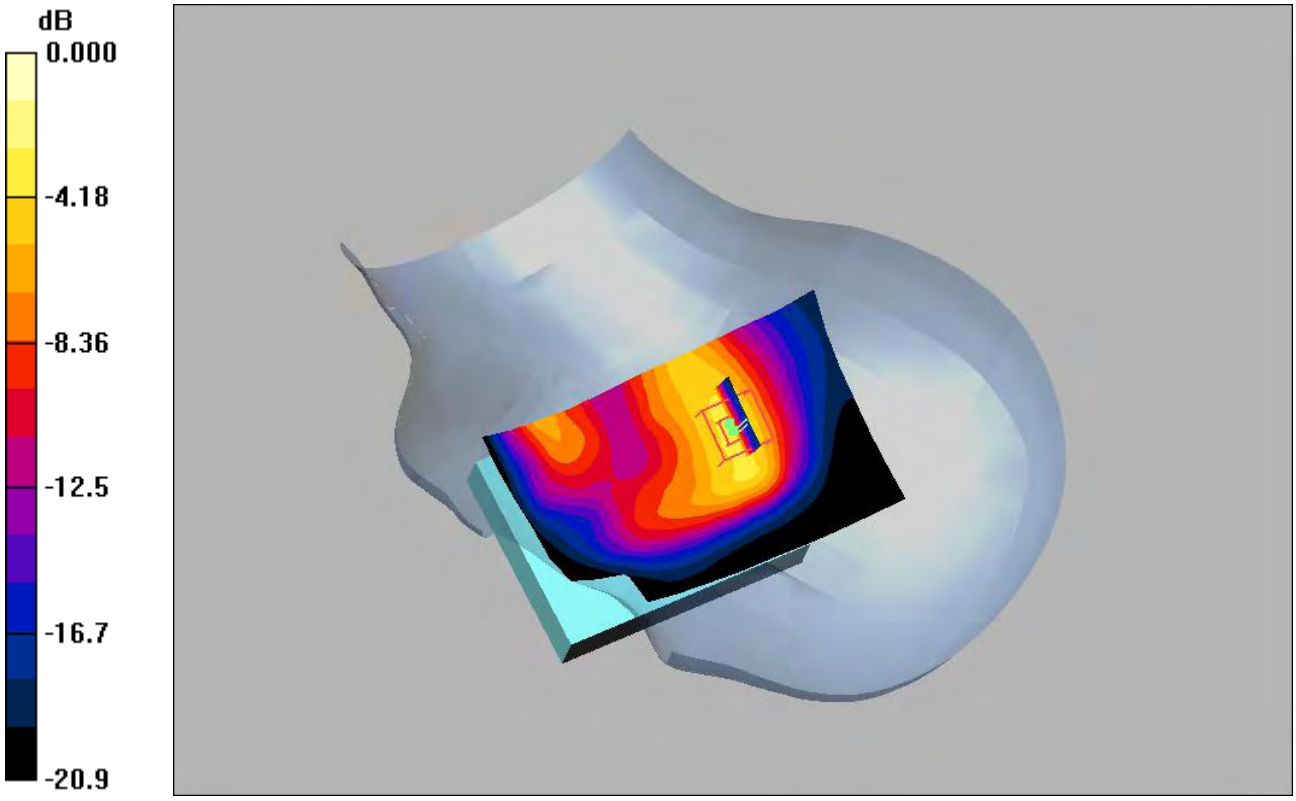


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Check open Position.
Date/Time: 10/7/2009 7:44:28 AM
File Name: 07Oct09_X2A_WLAN2450_WA3L_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2412 MHz; σ = 1.85 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

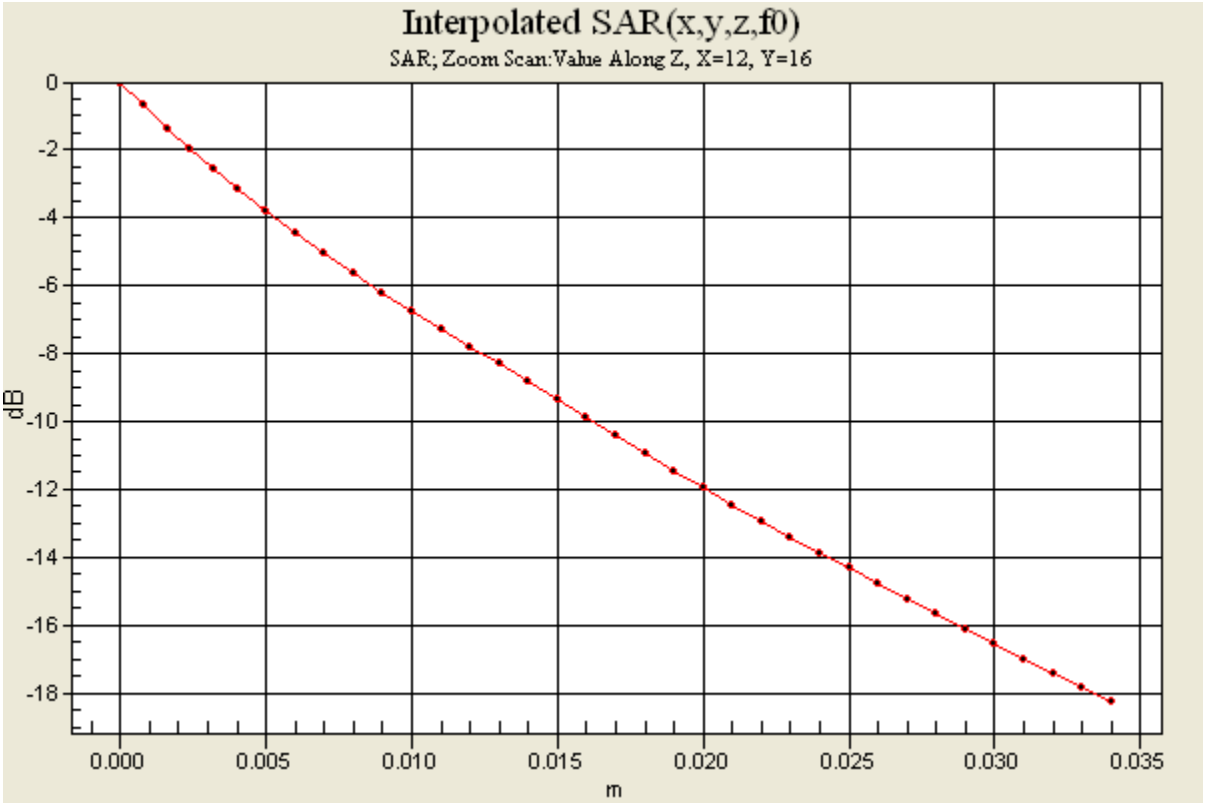
Low channel cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.137 mW/g
Low channel cheek/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.66 V/m; Power Drift = -0.134 dB
Peak SAR (extrapolated) = 0.279 W/kg
SAR(1 g) = 0.125 mW/g; SAR(10 g) = 0.064 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.134 mW/g
Low channel cheek/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.66 V/m; Power Drift = -0.134 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.279 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.279mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

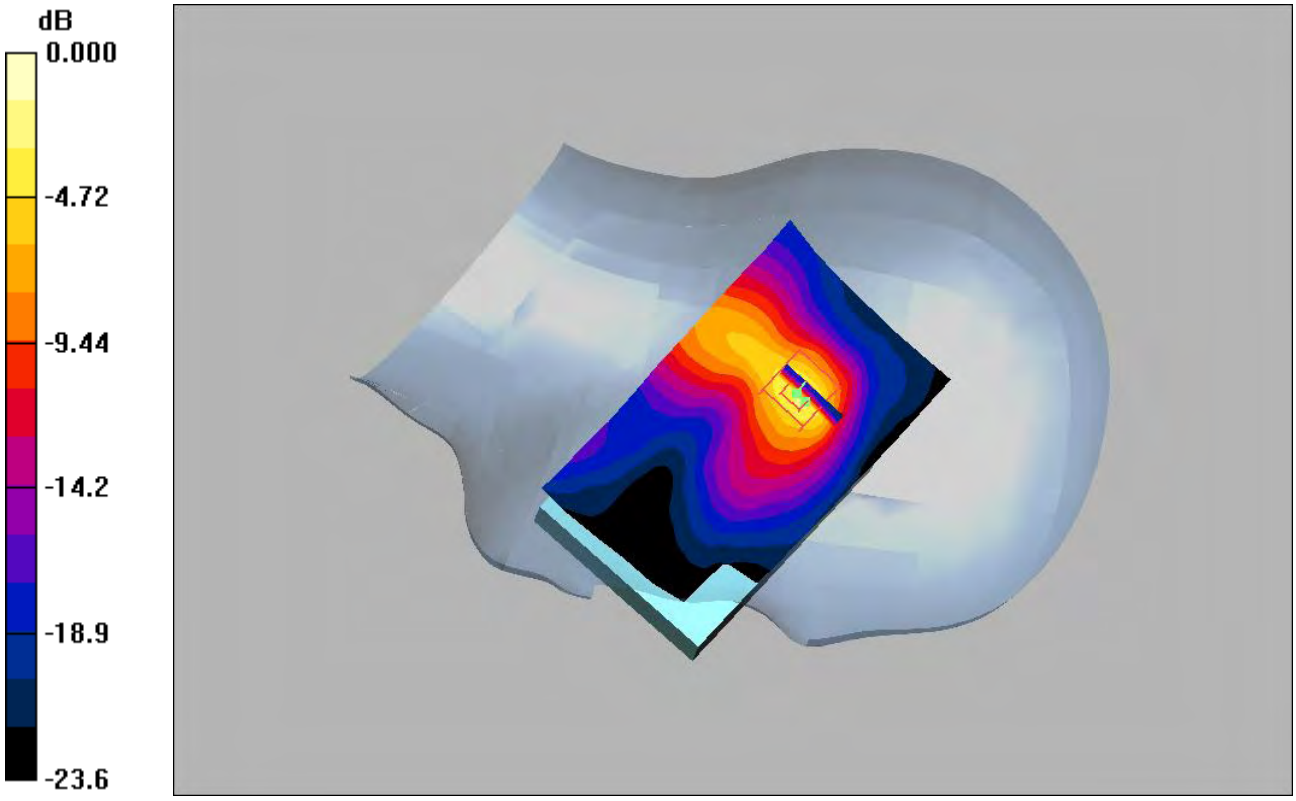


Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

WLAN: Distribution and Extrapolation of Maximum SAR
Model: X2A with Standard Battery: BST-41, Left Tilt open Position.
Date/Time: 10/7/2009 8:41:28 AM
File Name: 07Oct09_X2A_WLAN2450_WA3L_open_LCT01.da4
DUT: X2A open
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Left Section
Probe: ET3DV6 - SN1584ConvF(4.51, 4.51, 4.51)
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.89 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(4.51, 4.51, 4.51); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

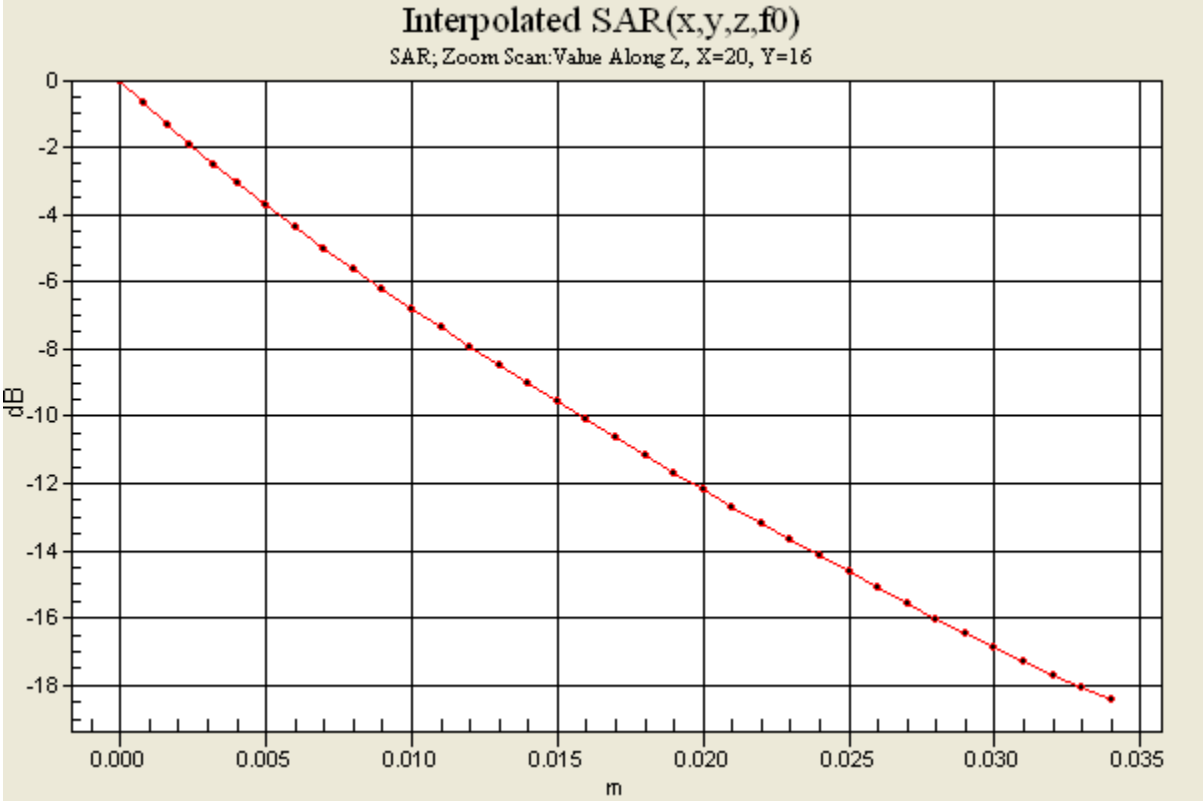
Middle channel tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.183 mW/g
Middle channel tilt/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.75 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 0.353 W/kg
SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.075 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.175 mW/g
Middle channel tilt/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.75 V/m; Power Drift = 0.013 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.353 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.353mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



Prepared (also subject responsible if other)		No.	
SEM/CCMVAR Rodney Dixon		REP 2009 006 X2A 02	
Approved	Checked		
SEM/CCMVPCP Gary Thomas		D	

Appendix 3

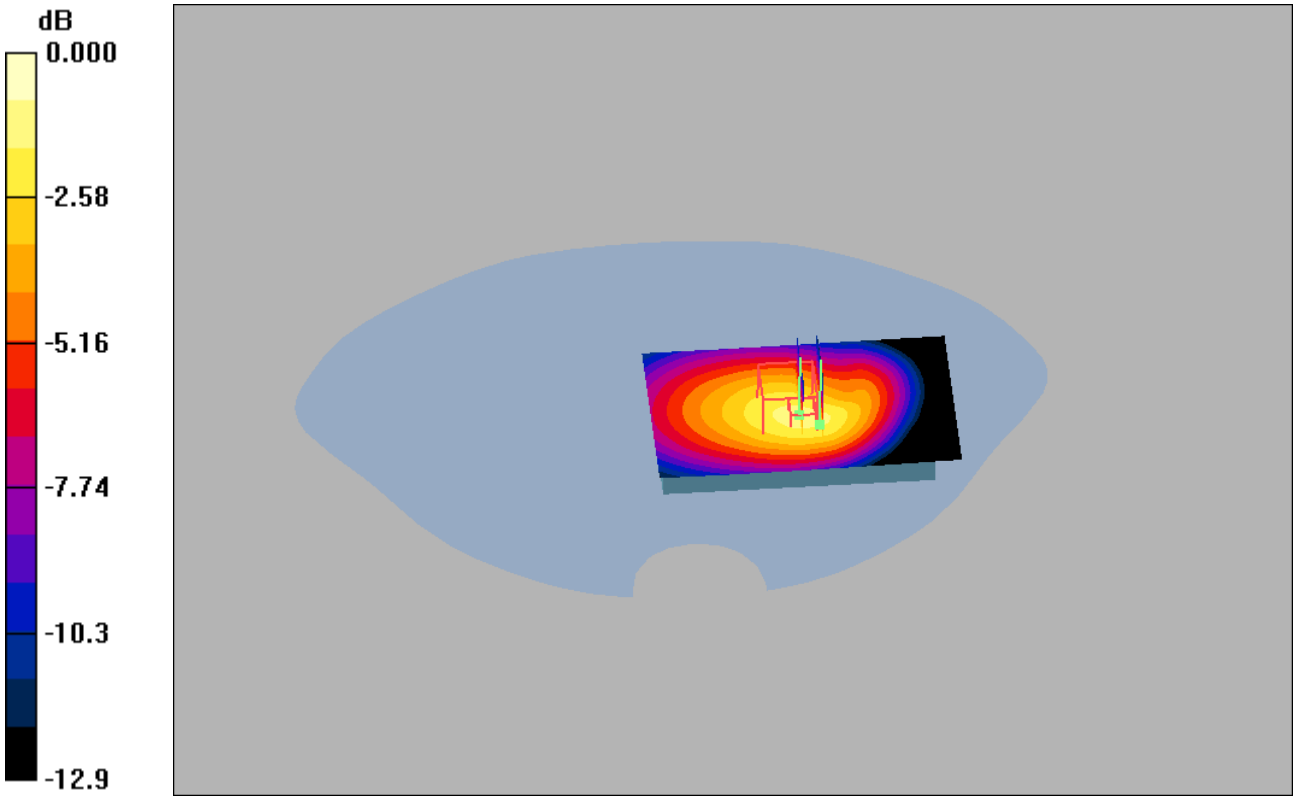
SAR distribution plots for Body Worn Configuration

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Distribution of maximum SAR in 800 GSM band. Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-41)
Date/Time: 9/30/2009 9:01:43 AM
File Name: 30Sept09_X2A_GSM835_WALC_15mm_BBF01.da4
DUT: X2A 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 = 836 MHz; σ = 0.978 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(5.53, 5.53, 5.53); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn415; Calibrated: 10/31/2008
- 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

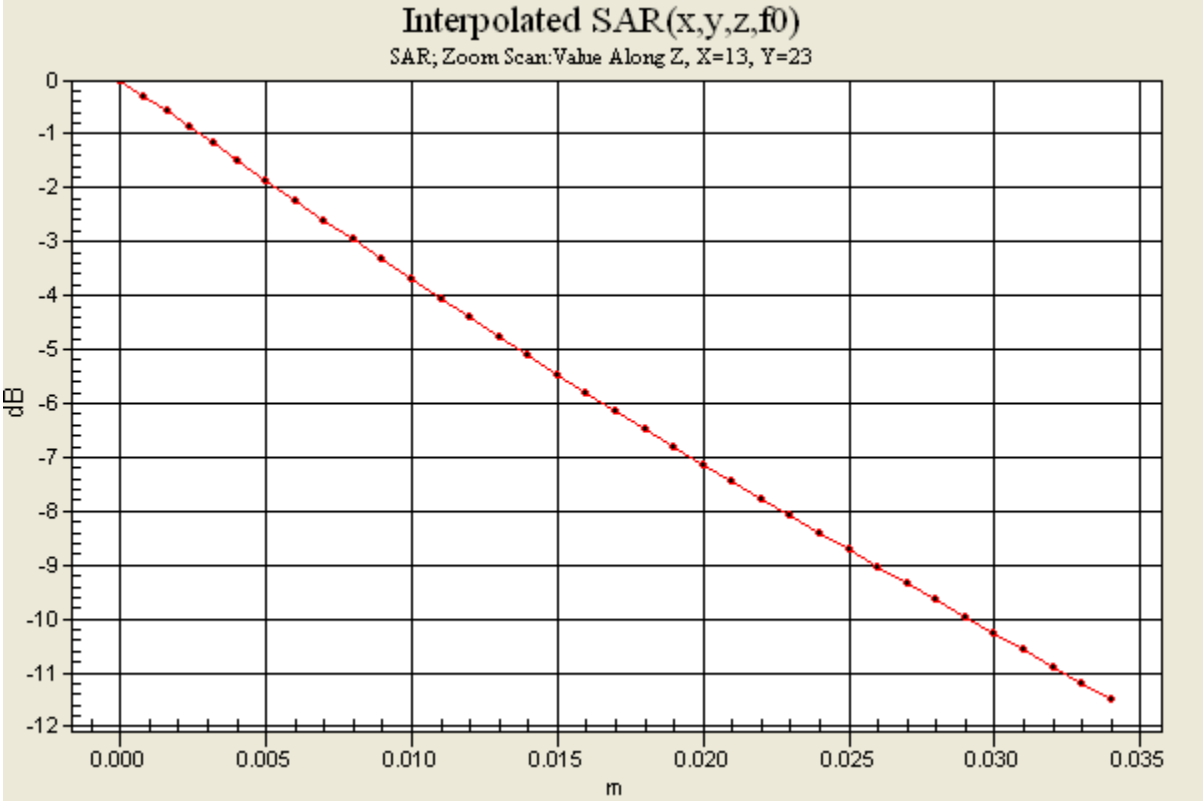
Middle channel back/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.05 mW/g
Middle channel back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.4 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.974 mW/g; SAR(10 g) = 0.660 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.05 mW/g
Middle channel back/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.4 V/m; Power Drift = -0.016 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 1.43 mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



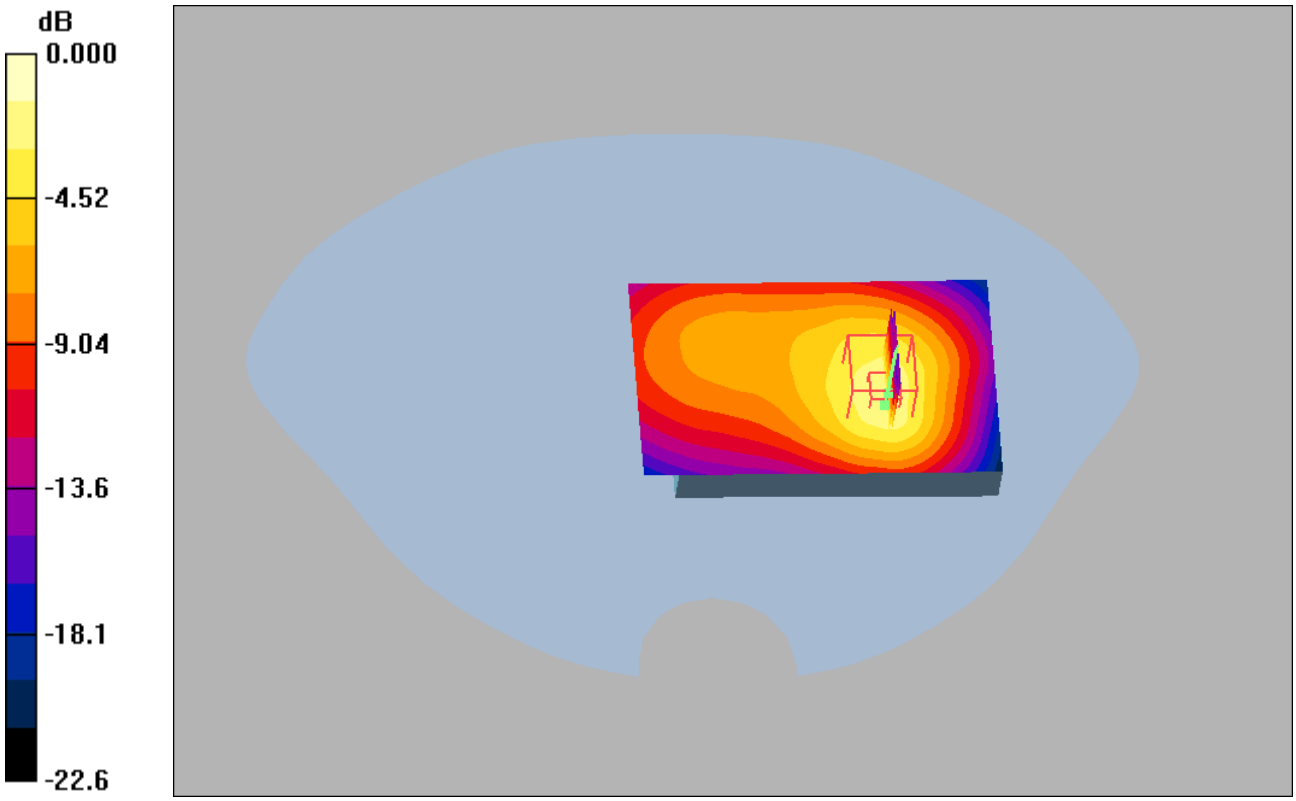
0 dB = 1.43mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



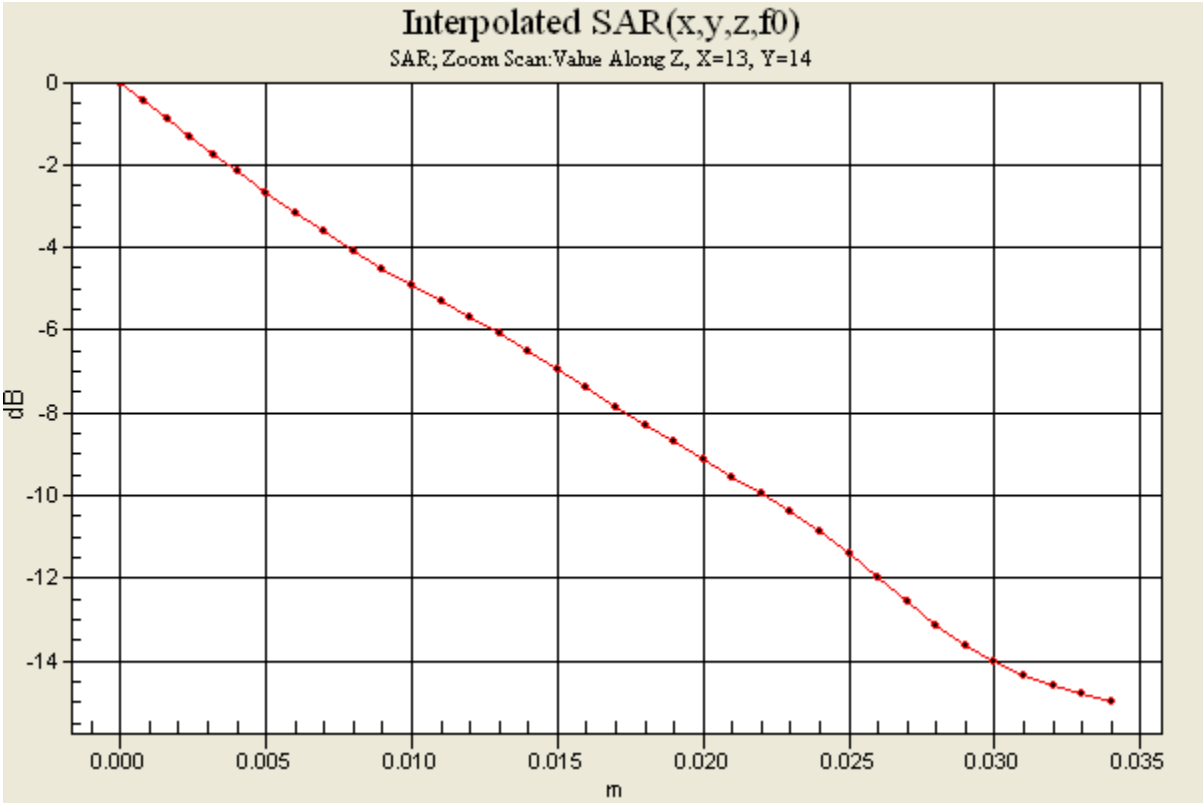
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		D
SEM/CCMVPCP Gary Thomas		

Distribution of maximum SAR in 1900 GSM band. Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-41)
Date/Time: 10/5/2009 10:44:37 AM
File Name: 05Oct09_X2A_GSM1900_WAKC_15mm_BBF01.da4
DUT: X2A 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 = 1.55 mho/m; ε_r = 50.6; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.21, 4.21, 4.21); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn415; Calibrated: 10/31/2008
- 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) = 0.379 mW/g
High channel back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.88 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 0.604 W/kg
SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.202 mW/g
Maximum value of SAR (measured) = 0.366 mW/g
High channel back/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.88 V/m; Power Drift = -0.054 dB
Maximum value of SAR (interpolated) = 0.604 mW/g



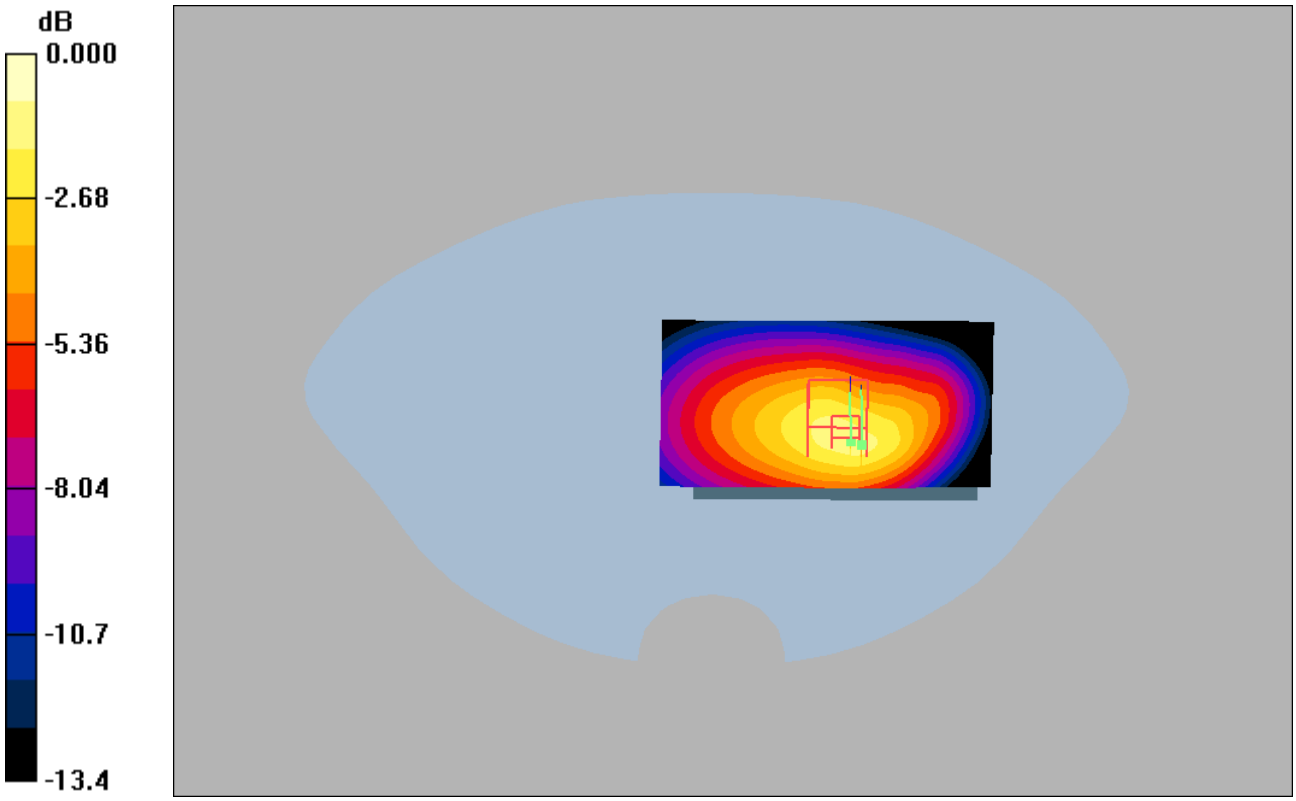
0 dB = 0.604mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



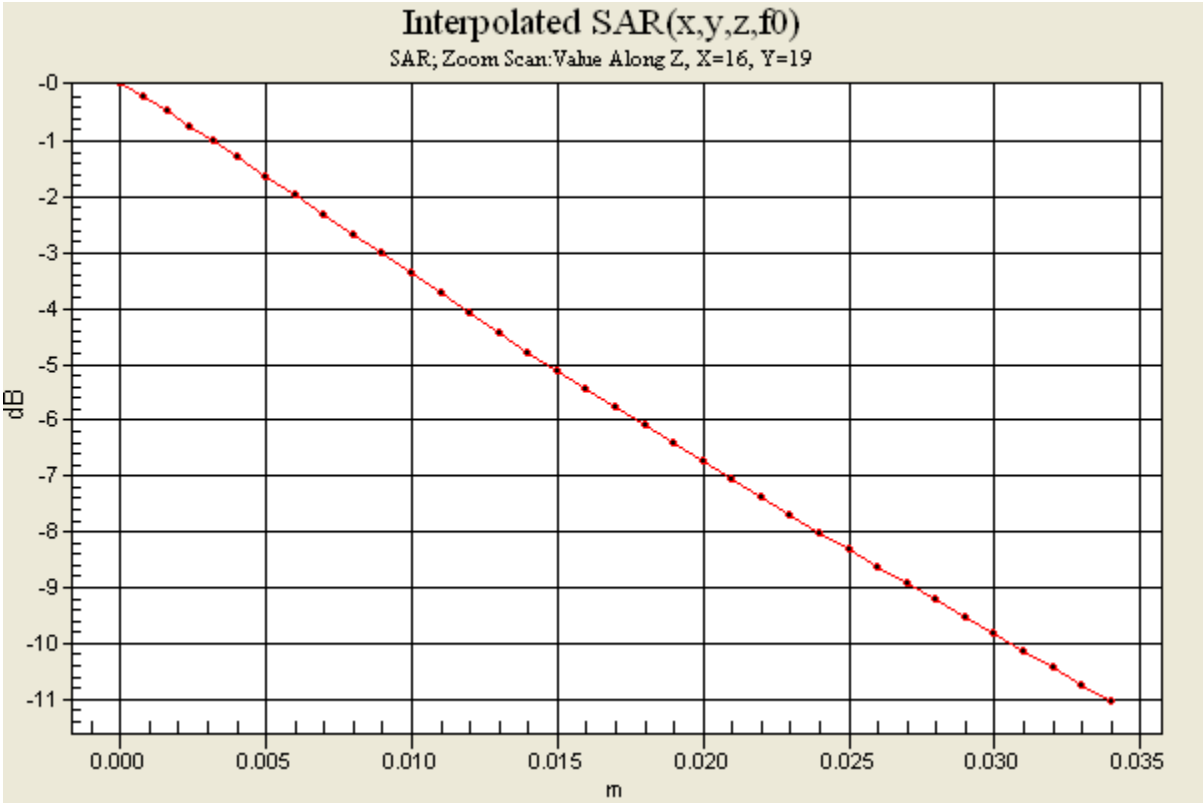
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Distribution of maximum SAR in UMTS Band V (850MHz). Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-41)
Date/Time: 10/1/2009 9:38:15 AM
File Name: 01Oct09_X2A_B5WCDMA_WALC_15mm_BBF01.da4
DUT: Aino body
Phantom: SAM with CRP (Low Band Body)Phantom section: Flat Section
Probe: ET3DV6 - SN1539ConvF(5.53, 5.53, 5.53)
Medium parameters used: f = 835 MHz; σ = 0.974 mho/m; ε_r = 55.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(5.53, 5.53, 5.53); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn415; Calibrated: 10/31/2008
- 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
Middle channel back/Area Scan (51x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.904 mW/g
Middle channel back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.4 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.851 mW/g; SAR(10 g) = 0.576 mW/g
Maximum value of SAR (measured) = 0.921 mW/g
Middle channel back/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.4 V/m; Power Drift = 0.058 dB
Maximum value of SAR (interpolated) = 1.23 mW/g



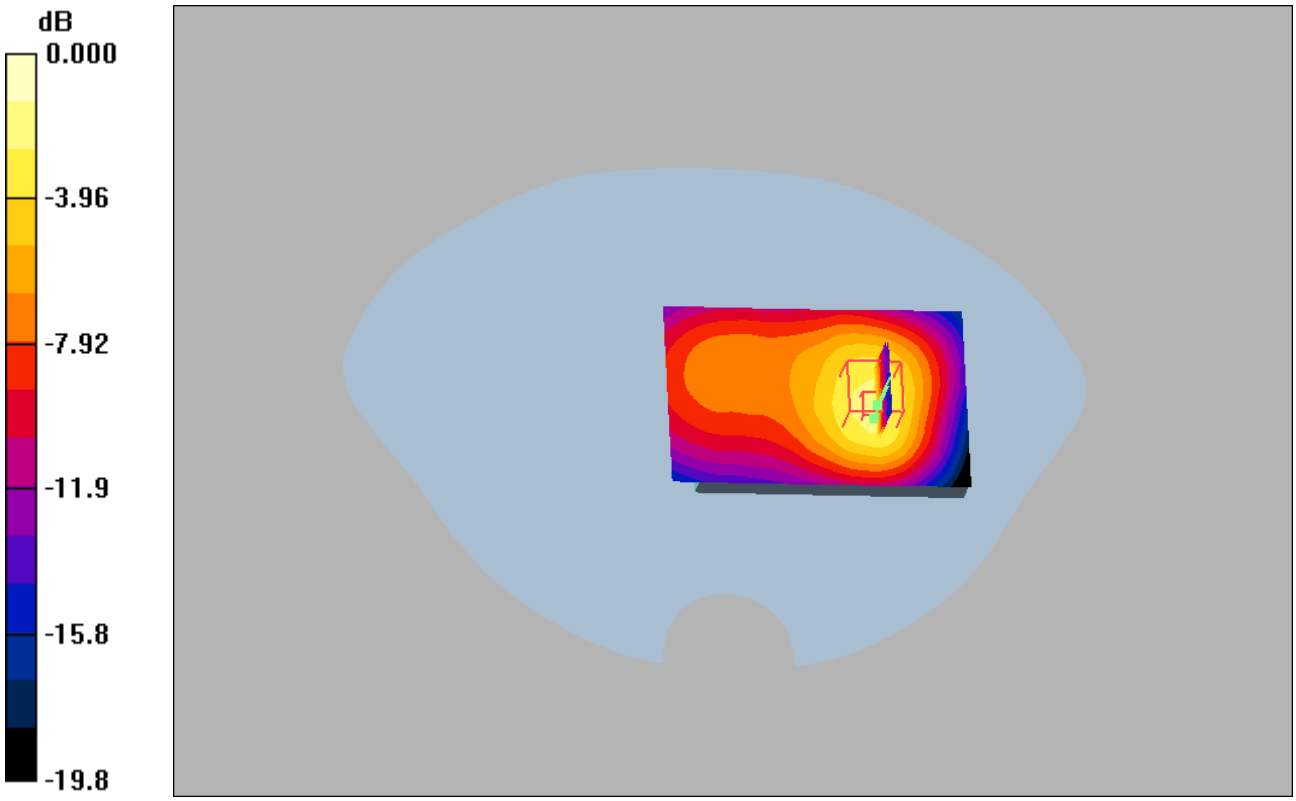
0 dB = 1.23mW/g

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	



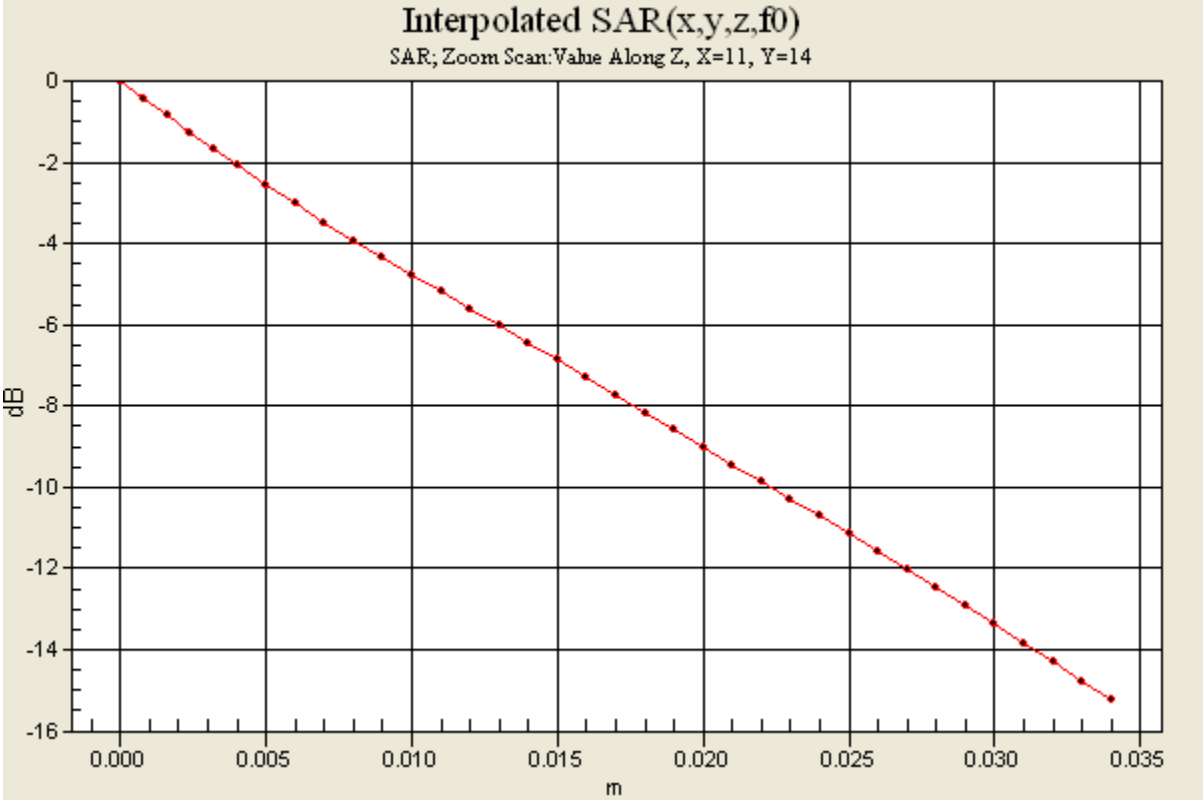
Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Distribution of maximum SAR in UMTS Band II (1900 MHz). Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-41)
Date/Time: 10/2/2009 9:54:15 AM
File Name: 02Oct09_X2A_B2WCDMA_WAKC_15mm_BBF01.da4
DUT: X2A 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 = 1880 MHz; σ = 1.48 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1539; ConvF(4.21, 4.21, 4.21); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn415; Calibrated: 10/31/2008
- 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
Maximum value of SAR (interpolated) = 0.731 mW/g
Middle channel back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = 0.181 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.643 mW/g; SAR(10 g) = 0.386 mW/g
Maximum value of SAR (measured) = 0.685 mW/g
Middle channel back/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = 0.181 dB
Maximum value of SAR (interpolated) = 1.12 mW/g



0 dB = 1.12mW/g

Prepared (also subject responsible if other)		No.	
SEM/CCMVAR Rodney Dixon		REP 2009 006 X2A 02	
Approved	Checked		
SEM/CCMVPCP Gary Thomas		D	



Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

Distribution of maximum SAR in WLAN. Measured with back of device facing the body using a 15mm spacer. (Standard Battery, BST-41)

Date/Time: 10/2/2009 10:11:58 AM
File Name: 03Oct09_X2A_WLAN2450_WA3L_15mm_BBF01.da4
DUT: X2A body
Phantom: SAM with CRP (WLAN right phantom)Phantom section: Flat Section
Probe: ET3DV6 - SN1584ConvF(3.9, 3.9, 3.9)
Medium parameters used (interpolated): f = 2412 MHz; σ = 2.05 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Measurement Standard: DASY4 (High Precision Assessment)
DASY4 Configuration:
- Probe: ET3DV6 - SN1584; ConvF(3.9, 3.9, 3.9); Calibrated: 11/17/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn417; Calibrated: 11/7/2008
- Phantom: SAM with CRP (WLAN right phantom); Type: SAM; Serial: 1251
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Low channel front/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.045 mW/g
Low channel front/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.74 V/m; Power Drift = 0.080 dB
Peak SAR (extrapolated) = 0.093 W/kg
SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.024 mW/g
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.043 mW/g
Low channel front/Zoom Scan (31x31x36)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.74 V/m; Power Drift = 0.080 dB
Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (interpolated) = 0.093 mW/g

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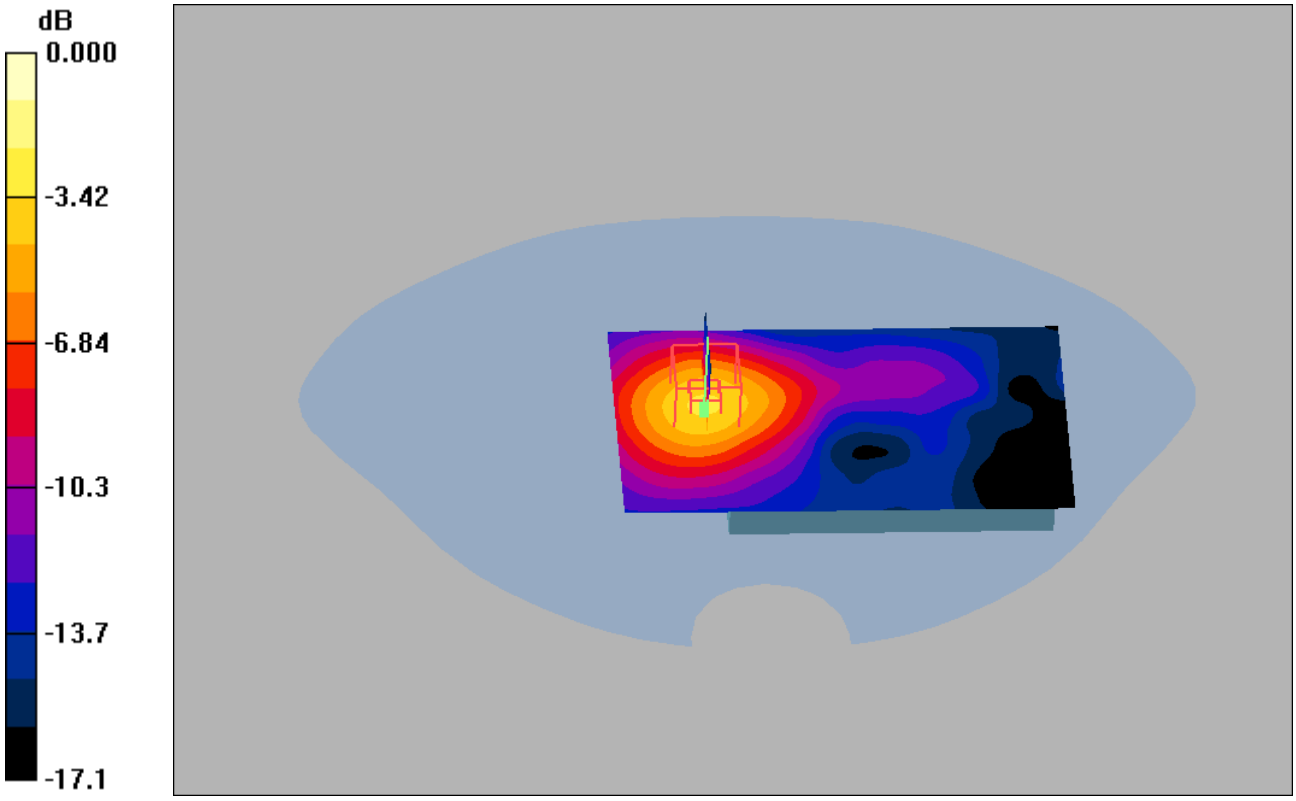
SEM/CCMVPCP Gary Thomas	D	



0 dB = 0.093mW/g

Prepared (also subject responsible if other)		No.	
SEM/CCMVAR Rodney Dixon		REP 2009 006 X2A 02	
Approved	Checked		
SEM/CCMVPCP Gary Thomas		D	

Appendix 4

Probe Calibration Certificates

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

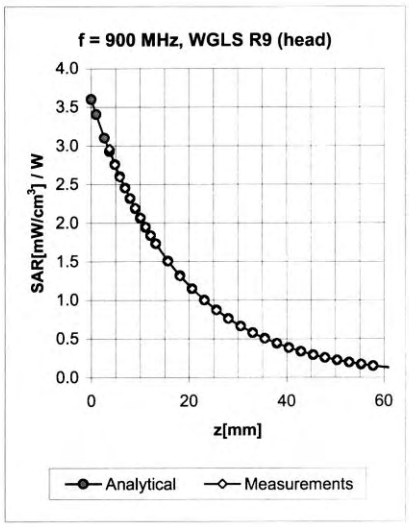
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

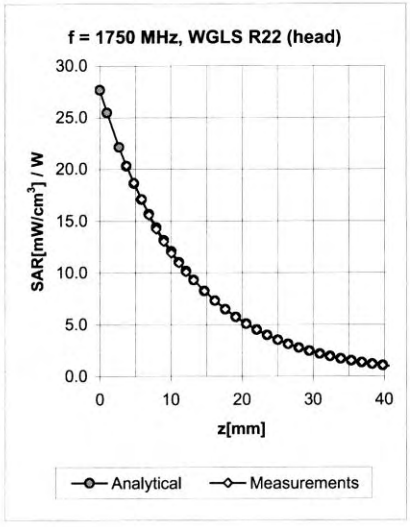
[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

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:1584 **November 17, 2008**

DASY - Parameters of Probe: ET3DV6 SN:1584

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

NormX	**1.89** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**93** mV
NormY	**1.81** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**94** mV
NormZ	**1.90** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**94** 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	9.9	5.9
SAR_{be} [%]	With Correction Algorithm	0.8	0.6

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	10.7	6.6
SAR_{be} [%]	With Correction Algorithm	0.8	0.5

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm

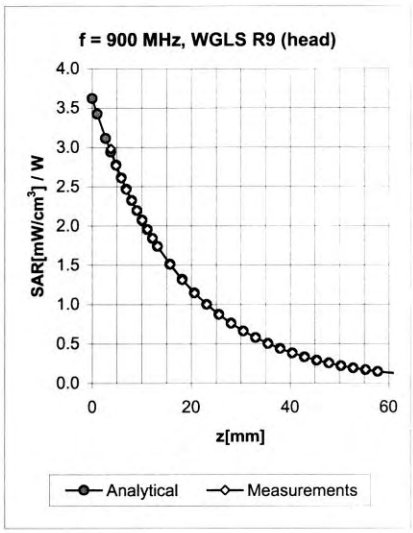
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

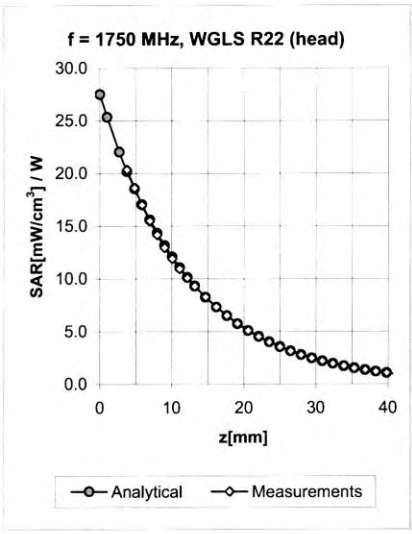
[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

ET3DV6 SN:1584 **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%	0.19	4.09	6.34 ± 11.0% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.23	3.46	6.18 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.89	1.84	5.36 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.99	1.66	5.10 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.99	1.27	4.51 ± 11.0% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.23	3.72	6.14 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.30	2.92	6.03 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.99	1.88	4.78 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.99	1.77	4.46 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.99	1.35	3.90 ± 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:1587 **May 25, 2009**

DASY - Parameters of Probe: ET3DV6 SN:1587

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

NormX	**2.20** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**91** mV
NormY	**1.94** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**92** mV
NormZ	**1.84** ± 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	11.3	7.4
SAR_{be} [%]	With Correction Algorithm	0.9	0.7

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	12.5	8.6
SAR_{be} [%]	With Correction Algorithm	0.7	0.3

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm

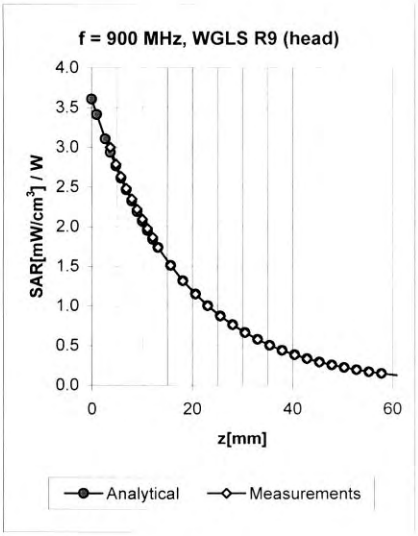
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

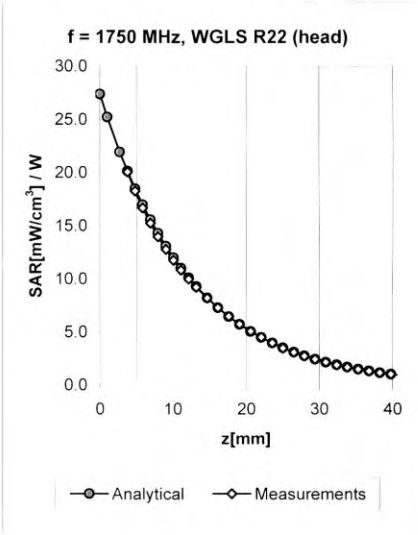
[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

ET3DV6 SN:1587 **May 25, 2009**

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%	0.44	2.15	6.39 ± 11.0% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.22	3.75	6.16 ± 11.0% (k=2)
1750	± 50 / ± 100	Head	40.1 ± 5%	1.37 ± 5%	0.50	2.60	5.49 ± 11.0% (k=2)
1900	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.45	2.95	5.23 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.50	2.30	4.58 ± 11.0% (k=2)
835	± 50 / ± 100	Body	55.2 ± 5%	0.97 ± 5%	0.34	2.60	6.27 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.34	2.69	6.11 ± 11.0% (k=2)
1750	± 50 / ± 100	Body	53.4 ± 5%	1.49 ± 5%	0.60	2.60	4.90 ± 11.0% (k=2)
1900	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.83	2.48	4.58 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.35	2.00	3.99 ± 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.**

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		
SEM/CCMVPCP Gary Thomas	D	

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	E.3.2	3.7	R	1.73	0.6	0.49	1.28	1.05	∞

from target values (5)									
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	2.7	N	1	1	1	2.7	2.7	4
Device Holder Uncertainty	E.4.1	1.1	R	1.73	1	1	0.7	0.7	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				**9.7**	**9.4**	
Expanded Uncertainty (95% CONFIDENCE LEVEL)			K=2				**19.5**	**18.8**	

Prepared (also subject responsible if other)	No.	
SEM/CCMVAR Rodney Dixon	REP 2009 006 X2A 02	
Approved / Checked		D
SEM/CCMVPCP Gary Thomas		

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**	

Prepared (also subject responsible if other)		No.	
SEM/CCMVAR Rodney Dixon		REP 2009 006 X2A 02	
Approved	Checked		
SEM/CCMVPCP Gary Thomas		D	

Appendix 6

Photographs of the Device under Test

Closed:

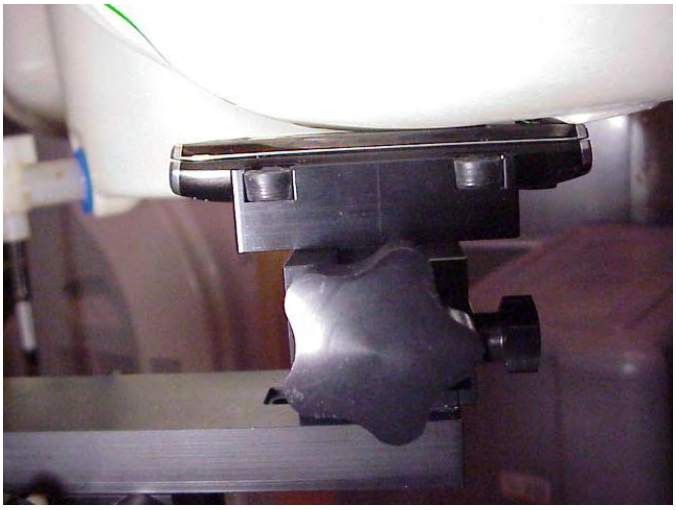
Open:

Side:

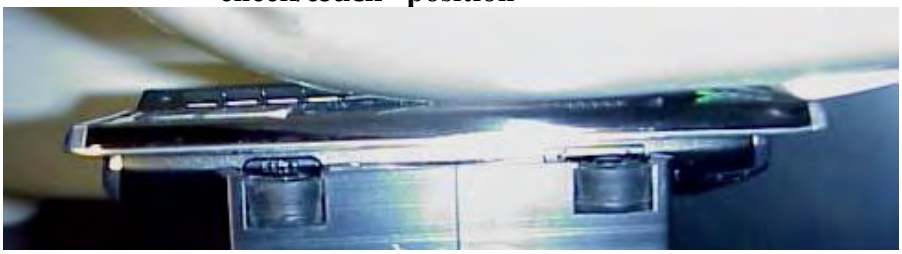
15mm Back:

15mm Front:

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



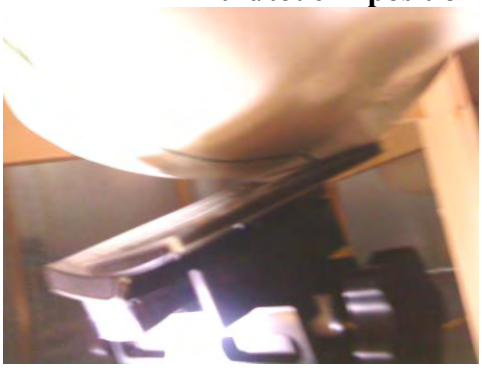
"cheek/touch" position



"cheek/touch" open position

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

"tilt/touch" position



"tilt/touch" open position