



CONFORMANCE TEST REPORT FOR HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS

Report No.: SRTC2012-H024-E0012

Product Name: GSM/GPRS Digital Mobile Phone

Product Model: ZTE-G R237m

Applicant: ZTE Corporation

Manufacturer: ZTE Corporation

Specification: FCC OET Bulletin 65 (Edition 97-01)

Supplement C (Edition 01-01)

47CFR 2.1093

FCC ID: Q78-GR237M

The State Radio_monitoring_center Testing Center (SRTC)

No.80 Beilishi Road Xicheng District Beijing, China

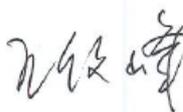
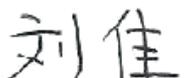
Tel: 86-10-68009202 Fax: 86-10-68009205

Executive summary

Test report no.:	SRTC2012-H024-E0012
Product Model:	ZTE-G R237m
Date of test:	2012.2.23
Date of report:	2012.2.24
Laboratory:	The State Radio_monitoring_center Testing Center (SRTC)
Test has been Carried out in accordance with:	<p>47CFR §2.1093</p> <p>Radiofrequency Radiation Exposure Evaluation: Portable Devices</p> <p>FCC OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01)</p> <p>Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields</p> <p>RSS-102</p> <p>Evaluation Procedure for Mobile and Portable Radio Transmitters with Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields</p> <p>IEEE 1528 - 2003</p> <p>IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Technique</p>
Documentation:	The documentation of the testing performed on the tested devices is archived for 5 years at SRTC

Result summary:

Mode	CH/f(MHz)	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
GPRS850	189/836.4	25.23	Towards ground	1.6	1.460	PASS

<p>This Test Report Is Issued by:</p> <p>Mr. Song Qizhu Director of the test lab</p> 	<p>Checked by:</p> <p>Mr. Wang Junfeng Deputy director of the test lab</p> 
<p>Tested by:</p> <p>Ms. Liu Jia Test engineer</p> 	<p>Issued date:</p> <p>2012.3.15</p>

Tables of Contents

1. General information	3
1.1 Notes of the test report	3
1.2 Information about the testing laboratory	3
1.3 Applicant’s details.....	3
1.4 Manufacturer’s details.....	3
1.5 Test details	4
1.6 Maximum Results	4
1.6.1 Head Configuration	4
1.6.2 Body Worn Configuration	4
2. DESCRIPTION OF THE DEVICE UNDER TEST	5
2.1 Description of the Antenna	5
2.2 Picture of the EUT	5
2.3 Test Positions for the Device under test.....	6
2.4 Picture to demonstrate the required liquid depth.....	7
3 TEST CONDITIONS.....	7
3.1 Temperature and Humidity	7
3.2 Test Signal, Frequencies and Output Power	7
4. DESCRIPTION OF THE TEST EQUIPMENT	7
4.1 Measurement System and Components	7
4.2 Phantoms	9
4.3 Tissue Simulants	9
4.3.1 Tissue Simulant Recipes	9
4.3.2 System Checking.....	10
4.3.3 Tissue Simulants used in the Measurements	11
5. DESCRIPTION OF THE TEST PROCEDURE	12
5.1 Device Holder	12
5.2 Test positions	12
5.2.1 Against Phantom Head	12
5.2.2 Body Worn Configuration	12
5.3 scan procedure.....	13
5.4 SAR Averaging Methods	13
6. MEASUREMENT UNCERTAINTY	14
7. Test Results	15
7.1 Test result.....	15
7.2 Conducted power	17
APPENDIX A: SYSTEM CHECKING SCANS	19
APPENDIX B: MEASUREMENT SCANS.....	21
APPENDIX C: RELEVANT PAGES FROM PROBE CALIBRATION REPORT(S).....	45
APPENDIX D: RELEVANT PAGES FROM DAE REPORT(S)	51
APPENDIX E: RELEVANT PAGES FROM DIPOLE VALIDATION KIT REPORT(S).....	58

1. General information

1.1 Notes of the test report

The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written permission of The State Radio_monitoring_center Testing Center (SRTC).

The test results relate only to individual items of the samples which have been tested.

1.2 Information about the testing laboratory

Company: The State Radio_monitoring_center Testing Center (SRTC)
Address: No.80 Beilishi Road, Xicheng District, Beijing China
City: Beijing
Country or Region: China
Contacted person: Wang Junfeng
Tel: +86 10 68009181 +86 10 68009202
Fax: +86 10 68009195 +86 10 68009205
Email: wangjf@srrc.org.cn / wangjunfeng@srtc.org.cn

1.3 Applicant's details

Company: ZTE Corporation
Address: ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park,
Nanshan District, 518057
City: Shenzhen
Country or Region: P.R.China
Grantee Code: Q78
Contacted person: Min Zhang
Tel: +86-021-68897541
Fax: +86-021-50801070
Email: zhang.min13@zte.com.cn

1.4 Manufacturer's details

Company: ZTE Corporation
Address: ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park,
Nanshan District, 518057
City: Shenzhen
Country or Region: P.R.China
Contacted person: Li Dezi
Tel: +86-021-68895196
Fax: +86-021-50801070
Email: li.dezi@zte.com.cn

1.5 Test details

Period of test	2012.2.23
Batteries used in testing	Li-Lon/Li3706T42P3h483757/ZTE CORPORATION
State of sample	production unit
Device class/ Multislot class DTM	B/12 N/A
H/W Version S/W Version	GMABc ESFC-CN-ZTE8-P109A23SV1.0.0
IMEI	860743001039001

1.6 Maximum Results

The maximum measured SAR values for Head configuration and Body Worn configuration are given in section 1.6.1 and 1.6.2 respectively. The device conforms to the requirements of the standard(s) when the maximum measured SAR value is less than or equal to the limit.

1.6.1 Head Configuration

Mode	CH/f(MHz)	Power (dBm)	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
GSM850	251/848.8	32.43	Left cheek	1.6	0.769	PASS
GSM1900	661/1880.0	29.89	Left cheek	1.6	0.461	PASS

1.6.2 Body Worn Configuration

Mode	CH/f(MHz)	Power	Position	Sar Limit (1g avg) (mW/g)	Measured value (1g avg)(mW/g)	Result
GPRS 850	189/836.4	29.49	Towards ground	1.6	1.460	PASS
GPRS1900	661/1880.0	26.96	Towards ground	1.6	0.273	PASS

2. DESCRIPTION OF THE DEVICE UNDER TEST

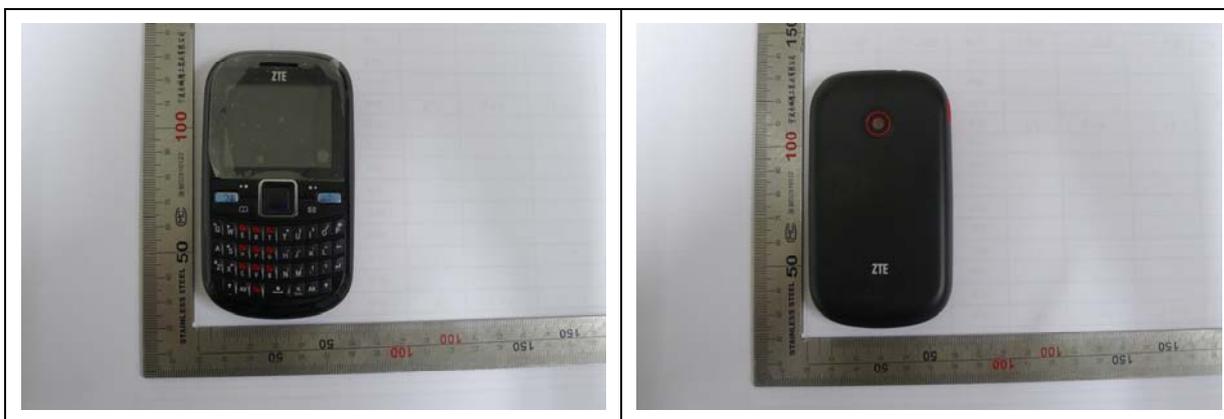
Device category	production unit
Exposure enviroment	General population/uncontrolled

Modes and Bands of operation	GSM 850	GSM 1900
Modulation Mode	GMSK	GMSK
Duty Cycle	1/8	1/8
Transmitter Frequency Range(MHz)	824-849	1850-1910

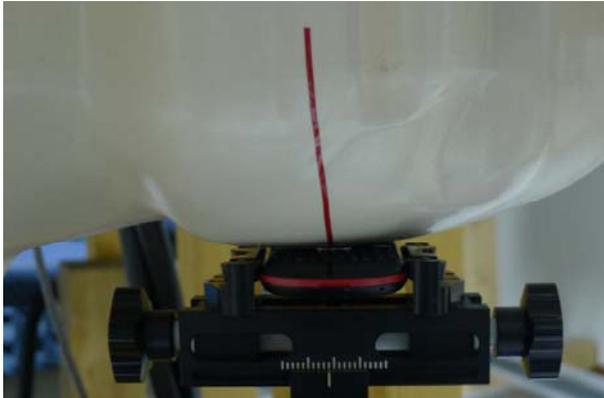
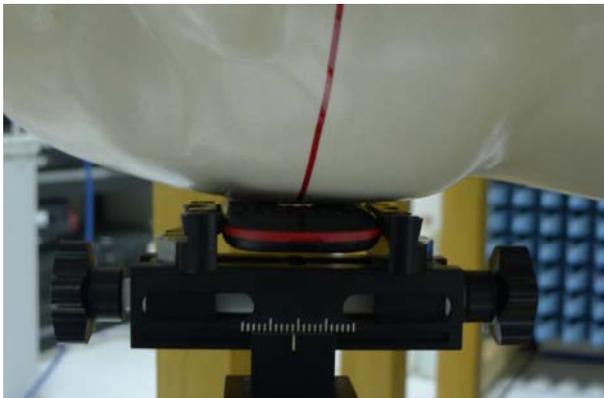
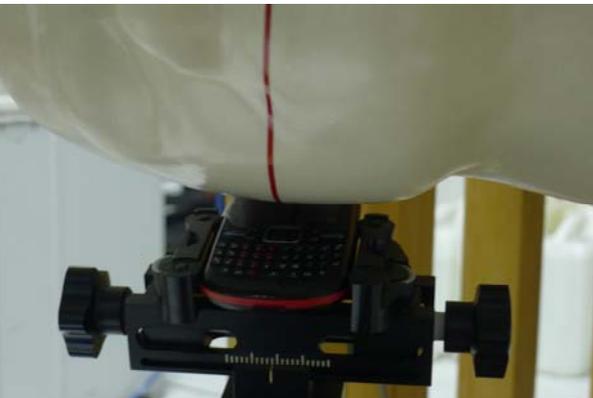
2.1 Description of the Antenna

The device has an internal antenna.

2.2 Picture of the EUT



2.3 Test Positions for the Device under test

	
<p>Cheek position, left side</p>	<p>Tilt position, left side</p>
	
<p>Cheek position, Right side</p>	<p>Tilt position, Right side</p>
	
<p>FLAT position (towards ground)</p>	<p>SPACER 15 mm</p>

2.4 Picture to demonstrate the required liquid depth

the liquid depth in the used SAM phantoms



Liquid depth for SAR Measurement

3 TEST CONDITIONS

3.1 Temperature and Humidity

Ambient temperature (° C)	21.0 to 23.0
Ambient humidity (RH %)	30 to 45

3.2 Test Signal, Frequencies and Output Power

The device was put into operation by using a call tester. Communication between the device and the call tester was established by air link.

The device output power was set to maximum power level for all tests; a fully charged battery was used for every test sequence.

In all operating bands the measurements were performed on lowest, middle and highest channels.

4. DESCRIPTION OF THE TEST EQUIPMENT

4.1 Measurement System and Components

The measurements were performed using an automated near-field scanning system, DASY4, manufactured by Schmid & Partner Engineering AG (SPEAG) in Switzerland. The SAR extrapolation algorithm used in all measurements was the 'advanced extrapolation' algorithm.

The following table lists calibration dates of SPEAG components:

Test Equipment	Serial Number	Calibration interval	Calibration expiry
DAE4	720	1 year	2013.2.7
Dosimetric E-field Probe ES3DV3	3128	1 year	2013.2.3
Dipole Validation Kit, D900V2	171	1 year	2012.06.11
Dipole Validation Kit, D1800V2	2d084	1 year	2012.06.11
DASY4 software Version	4.7	N/A	N/A

Additional test equipment used in testing:

Test Equipment	Model	Serial Number	Calibration interval	Calibration expiry
Signal Generator	E4428C	MY45280865	1year	2012.08.20
Amplifier	5S1G4	0323472	N/A	N/A
Power meter	E4417A	MY45101004	1year	2012.08.19
Power Sensor	E9300B	MY41496001	1year	2012.08.19
Power Sensor	E9300B	MY41496003	1year	2012.08.19
Call Tester	8960	GB43194054	1year	2012.08.20
Network Analyzer	8714ET	US40372083	1year	2012.08.20
Dielectric Probe Kit	85070D	US33030365	N/A	N/A

Isotropic E-field Probe Type ES3DV3

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	Calibration certificate in Appendix C
Frequency	10 MHz to 4 GHz; Linearity: ± 0.2 dB (30 MHz to 4 GHz)
Optical Surface Detection	± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm
Dynamic Range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Application	General dosimetry up to 4 GHz Dosimetry in strong gradient fields Compliance tests of mobile phones

4.2 Phantoms

The phantom used for all tests i.e. for both system checks and device testing, was the twinheaded "SAM Phantom", manufactured by SPEAG. The phantom conforms to the requirements of IEEE 1528 - 2003.

System checking was performed using the flat section, whilst Head SAR tests used the left and right head profile sections. Body SAR testing also used the flat section between the head profiles.

The SPEAG device holder (see Section 5.1) was used to position the device in all tests whilst a tripod was used to position the validation dipoles against the flat section of phantom.

4.3 Tissue Simulants

Recommended values for the dielectric parameters of the tissue simulants are given in IEEE 1528 - 2003 and FCC Supplement C to OET Bulletin 65. All tests were carried out using simulants whose dielectric parameters were within $\pm 5\%$ of the recommended values. All tests were carried out within 24 hours of measuring the dielectric parameters.

The depth of the tissue simulant was 15.0 ± 0.5 cm measured from the ear reference point during system checking and device measurements.

4.3.1 Tissue Simulant Recipes

The following recipe(s) were used for Head and Body tissue stimulant(s):

800MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Water	40.29	50.75
Sugar	57.90	48.21
Nacl	1.38	0.94
Cellulose	0.24	0
Preventol	0.18	0.10

1900MHz band

Ingredient	Head (% by weight)	Body (% by weight)
Water	44.45	70.17
DGBE	55.24	29.44
Nacl	0.31	0.39

4.3.2 System Checking

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system checking results (dielectric parameters and SAR values) are given in the table below. Test Date is 2012.2.23

System checking, head tissue simulant

		SAR _{1g} [w/kg]	ϵ_r	σ [S/m]	Temperature	
					Ambient[°C]	Liquid[°C]
900MHz	Target Value	10.8	41.5±2.1	0.97±0.05	15-30	-
	Measured Value	10.6	42.1	0.98	22.5	22.3

All SAR values are normalized to 1W forward power

		SAR _{1g} [w/kg]	ϵ_r	σ [S/m]	Temperature	
					Ambient[°C]	Liquid[°C]
1800MHz	Target Value	38.1	40±1.9	1.40±0.07	15-30	-
	Measured Value	38.8	40.5	1.38	22.5	22.2

All SAR values are normalized to 1W forward power

4.3.3 Tissue Simulants used in the Measurements

For the measurement of the following parameters the HP 85070D dielectric probe kit is used, representing the open-ended coaxial probe measurement procedure. Tested date is 2012.2.23

Head		ϵ_r	σ [S/m]	Temperature	
				Ambient [°C]	Liquid [°C]
900MHz	Recommended Value	41.5±2.1	0.97±0.05	15-30	-
	Measured Value	42.1	0.98	22.5	22.3
1800MHz	Recommended Value	40±1.9	1.40±0.07	15-30	-
	Measured Value	40.5	1.38	22.5	22.2

Body		ϵ_r	σ [S/m]	Temperature	
				Ambient [°C]	Liquid [°C]
900MHz	Recommended Value	55.0±2.8	1.05±0.05	15-30	-
	Measured Value	55.4	1.01	22.6	22.4
1800MHz	Recommended Value	53.3±2.7	1.52±0.08	15-30	-
	Measured Value	54.8	1.49	22.6	22.3

5. DESCRIPTION OF THE TEST PROCEDURE

5.1 Device Holder

The device was placed in the device holder (illustrated below) that is supplied by SPEAG as an integral part of the Dasy system.



Device holder supplied by SPEAG

5.2 Test positions

5.2.1 Against Phantom Head

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 - 2003 "IEEE

Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

5.2.2 Body Worn Configuration

The device was placed in the SPEAG holder below the flat section of the phantom. The distance between the device and the phantom was kept at the separation distance using a separate flat spacer that was removed before the start of the measurements. The device was oriented with its antenna facing the phantom since this orientation gives higher results.

5.3 scan procedure

First, area scans were used for determination of the field distribution. Next, a zoom scan, a minimum of 7 x 7x7 points covering a volume of at least 30x30x30mm, was performed around the highest E-field value to determine the averaged SAR value. Drift was determined by measuring the same point at the start of the area scan and again at the end of the zoom scan.

5.4 SAR Averaging Methods

The maximum SAR value was averaged over a cube of tissue using interpolation and extrapolation.

The interpolation, extrapolation and maximum search routines within Dasy4 are all based on the modified Quadratic Shepard's method (Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988, pp. 139-148).

The interpolation scheme combines a least-square fitted function method with a weighted average method. A trivariate 3-D / bivariate 2-D quadratic function is computed for each measurement point and fitted to neighbouring points by a least-square method. For the zoom scan, inverse distance weighting is incorporated to fit distant points more accurately. The interpolating function is finally calculated as a weighted average of the quadratics.

In the zoom scan, the interpolation function is used to extrapolate the Peak SAR from the deepest measurement points to the inner surface of the phantom.

6. MEASUREMENT UNCERTAINTY

DASY4 Uncertainty Budget								
Error description	Uncertainty value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std.Unc (1g).	Std.Unc. (10g)	(v_i) V_{eff}
Measurement system								
Probe calibration	±5.9%	N	1	1	1	±5.9%	±5.9%	∞
Axial isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary effects	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System detection limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF ambient noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF ambient reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe positioner	±0.4%	R	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
Probe positioning	±2.9%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Max.SAR Eval.	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid conductivity(target)	±5.0%	R	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
Liquid conductivity(meas.)	±2.5%	N	1	0.64	0.43	±1.6%	±1.1%	∞
Liquid conductivity(target)	±5.0%	R	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
Liquid onductivity(means.)	±2.5%	N	1	0.6	0.49	±1.5%	±1.2%	∞
Combined std. Uncertainty						±10.9%	±10.7%	387
Expanded STD Uncertainty						±21.9%	±21.4%	

Table 6.1 – Measurement uncertainty evaluation

7. Test Results

7.1 Test result

The measured Head SAR values for the test device are tabulated below:

Mode: GSM 850

f_L (MHz)=824.2MHz f_M (MHz)=836.4 MHz f_H (MHz)= 848.8MHz

SAR Values (Head, 850MHz Band)

Limit of SAR (W/kg)	1 g Average
	1.6
Test Case	Measurement Result (mW/g)
	1 g Average
Left hand, Touch cheek, f_H	0.769
Left hand, Touch cheek, f_M	0.712
Left hand, Touch cheek, f_L	0.605
Left hand, Tilt 15 Degree, f_M	0.447
Right hand, Touch cheek, f_M	0.710
Right hand, Tilt 15 Degree, f_M	0.380

Mode:GSM850

f_L (MHz)=824.2MHz f_M (MHz)=836.4 MHz f_H (MHz)= 848.8MHz

SAR Values (Body, 850MHz Band)

Limit of SAR (W/kg)	1g Average
	1.6
Test Case	Measurement Result (mW/g)
	1g Average
Towards ground with a headset f_M	0.504
Towards phantom with a headset f_M	0.243
Towards ground/GPRS, 15mm spacer f_H	1.430
Towards ground/GPRS, 15mm spacer f_M	1.460
Towards ground/GPRS, 15mm spacer f_L	1.250
Towards phantom/GPRS, 15mm spacer f_H	1.000
Towards phantom/GPRS, 15mm spacer f_M	0.861
Towards phantom/GPRS, 15mm spacer f_L	0.669

Mode: GSM1900

f_L (MHz)=1850.2MHz f_M (MHz)=1880.0MHz f_H (MHz)=1909.8MHz

SAR Values (Head, 1900MHz Band)

Limit of SAR (W/kg)	1 g Average
	1.6
Test Case	Measurement Result (mW/g)
	1 g Average
Left hand, Touch cheek , f_H	---
Left hand, Touch cheek, f_M	0.461
Left hand, Touch cheek , f_L	---
Left hand, Tilt 15 Degree, f_M	0.109
Right hand, Touch cheek , f_H	---
Right hand, Touch cheek, f_M	0.385
Right hand, Touch cheek f_L	---
Right hand, Tilt 15 Degree, f_M	0.129

Mode:GSM1900

f_L (MHz)=1850.2MHz f_M (MHz)=1880.0MHz f_H (MHz)=1909.8MHz

SAR Values (Body, 1900MHz Band)

Limit of SAR (W/kg)	1g Average
	1.6
Test Case	Measurement Result (mW/g)
	1g Average
Towards ground with a headset f_M	0.231
Towards phantom with a headset f_M	0.154
Towards ground/GPRS, 15mm spacer f_M	0.273
Towards phantom/GPRS, 15mm spacer f_M	0.213

7.2 Conducted power

Mode	GSM850(Head) Duty cycle: 1:8(12.5%)			GSM1900(Head) Duty cycle: 1:8(12.5%)		
	Channel	128	189	251	512	661
Frequency(MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
Measured Power(dBm)	32.19	32.35	32.43	29.83	29.89	29.73

GPRS Measured Power

Mode	GPRS850			GPRS1900		
	Channel	128	189	251	512	661
Frequency(MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
4Downlink1uplink Power(dBm)	32.12	32.28	32.36	29.77	29.82	29.66
3Downlink2uplink Power(dBm)	30.42	30.58	30.68	27.98	28.02	27.87
2Downlink3uplink Power(dBm)	29.33	29.49	29.61	26.91	26.96	26.80
1Downlink4uplink Power(dBm)	27.42	27.66	27.75	25.09	25.15	24.98

GPRS/EDGE Averaged Power

Mode	GPRS850			GPRS1900		
Channel	128	189	251	512	661	810
Frequency(MHz)	824.2	836.4	848.8	1850.2	1880.0	1909.8
4Downlink1uplink Power(dBm)	23.08	23.25	23.33	20.74	20.79	20.63
3Downlink2uplink Power(dBm)	24.40	24.56	24.66	21.96	22.00	21.85
2Downlink3uplink Power(dBm)	25.07	25.23	25.35	22.65	22.70	22.54
1Downlink4uplink Power(dBm)	24.41	24.65	24.74	22.08	22.14	21.97

Division Factors(for Measured Power and Averaged Power):

To average the power, the division factor is as follows:

1TX-slot (4Downlink1uplink)= 1 transmit time slot out of 8 time slots=>
conducted power divided by (8/1) => -9.03dB

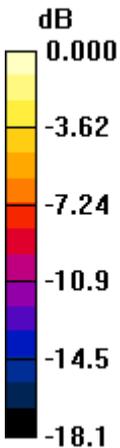
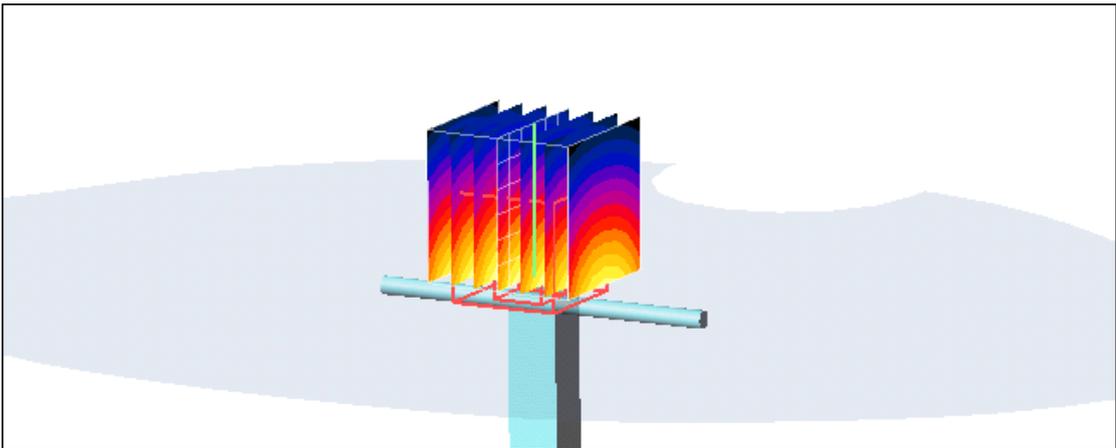
2TX-slots(3Downlink2uplink) = 2 transmit time slots out of 8 time slots=>
conducted power divided by (8/2) => -6.02dB

3TX-slots (2Downlink3uplink)= 3 transmit time slots out of 8 time slots=>
conducted power divided by (8/3) => -4.26dB

4TX-slots (1Downlink4uplink)= 4 transmit time slots out of 8 time slots=>
conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 3Txslots(2Downlink3uplink) for GPRS.

APPENDIX A: SYSTEM CHECKING SCANS

SYSTEM CHECKING SCANS	900MHz
<p>DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:171 Medium parameters used (interpolated): $f = 900 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 42.1$; $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section</p> <p>DASY4 Configuration:</p> <ul style="list-style-type: none"> - Probe: ES3DV3 - SN3128; ConvF(7.375, 7.783, 7.540); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn725; Calibrated: 10/18/2011 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186 <p>$d=15\text{mm}$, $\text{Pin}=250\text{mW}$/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$ Reference Value = 54.9V/m; Power Drift = 0.034 dB Peak SAR (extrapolated) = 4.11 W/kg SAR(1 g) = 2.65mW/g; SAR(10 g) = 1.63 mW/g Maximum value of SAR (measured) = 3.0 mW/g</p> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;"> <p>dB</p>  <p>0.000 -3.62 -7.24 -10.9 -14.5 -18.1</p> </div> <div>  </div> </div> <p style="margin-top: 20px;">0 dB = 3.0 mW/g</p>	

SYSTEM CHECKING SCANS

1800 MHz

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d084

Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3128; ConvF(5.767, 6.013, 5.888); Calibrated: 2/3/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn725; Calibrated: 10/18/2011
- Phantom: SAM 1559; Type: SAM; Serial: 1559
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

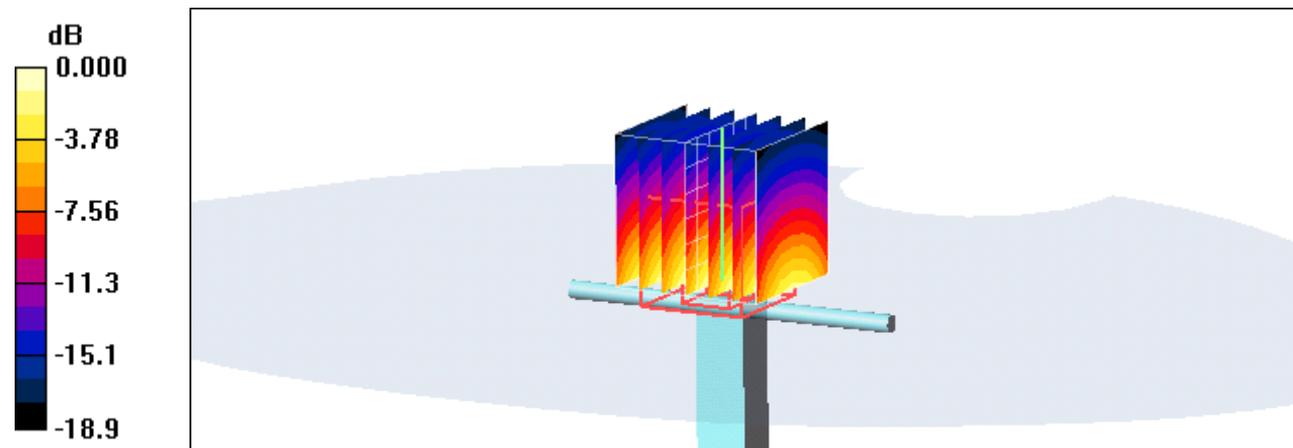
d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.4 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 9.7 mW/g; SAR(10 g) = 5.07 mW/g

Maximum value of SAR (measured) = 10.9 mW/g

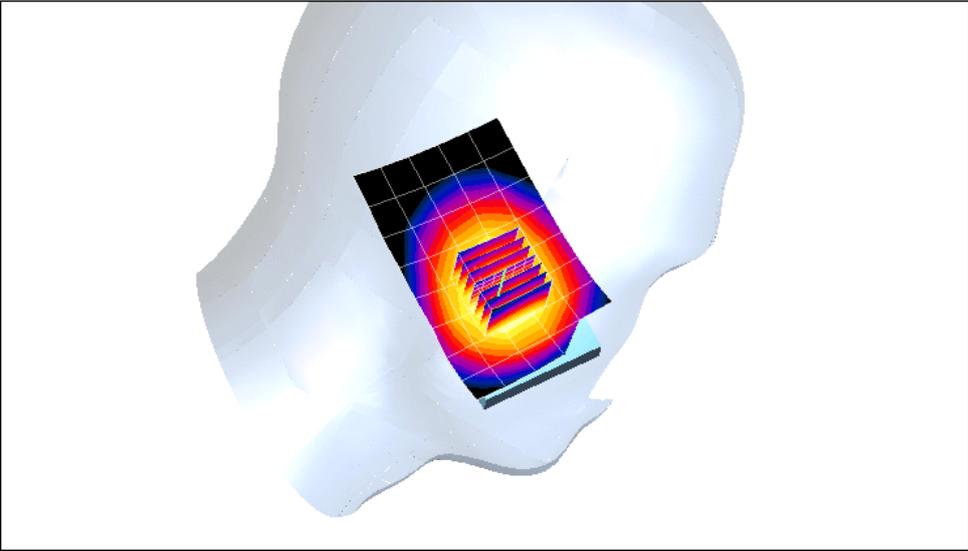


0 dB = 10.9 mW/g

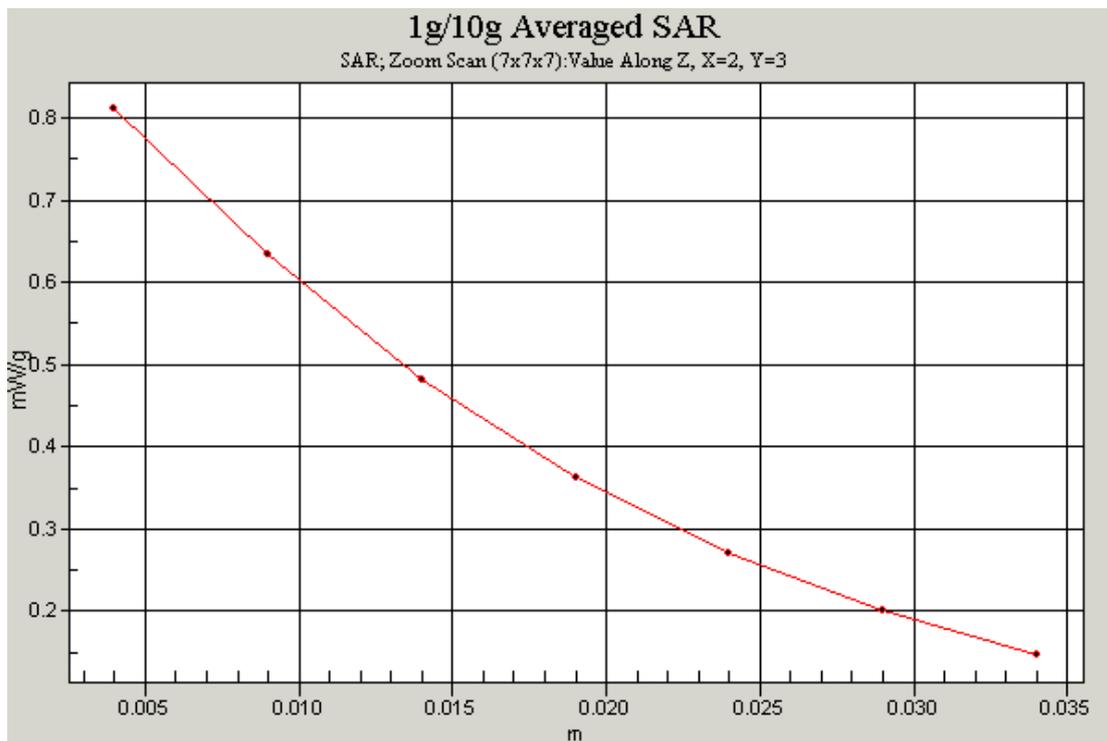
APPENDIX B: MEASUREMENT SCANS

GSM (850MHz/head)

Left Side	Cheek	824.2 MHz
<p>Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.892$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³ Phantom section: Left Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.375, 7.783, 7.54); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Touch position - Low/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.628 mW/g</p> <p>Touch position - Low/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 12.0 V/m; Power Drift = -0.121 dB Peak SAR (extrapolated) = 0.784 W/kg SAR(1 g) = 0.605 mW/g; SAR(10 g) = 0.438 mW/g Maximum value of SAR (measured) = 0.640 mW/g</p> <div data-bbox="306 1464 1283 1944"> </div> <p style="text-align: center;">0 dB = 0.640mW/g</p>		

Left Side	Cheek	836.4 MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³ Phantom section: Left Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.375, 7.783, 7.54); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Touch position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.729 mW/g</p> <p>Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 13.0 V/m; Power Drift = -0.103 dB Peak SAR (extrapolated) = 0.925 W/kg SAR(1 g) = 0.712 mW/g; SAR(10 g) = 0.516 mW/g Maximum value of SAR (measured) = 0.756 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000</p> <p>-2.10</p> <p>-4.20</p> <p>-6.30</p> <p>-8.40</p> <p>-10.5</p> </div>  </div> <p style="text-align: center;">0 dB = 0.756mW/g</p>		

Left Side	Cheek	848.8 MHz
<p>Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.907$ mho/m; $\epsilon_r = 40.8$; $\rho = 1000$ kg/m³ Phantom section: Left Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.375, 7.783, 7.54); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Touch position - High/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.803 mW/g</p> <p>Touch position - High/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 13.7 V/m; Power Drift = -0.197 dB Peak SAR (extrapolated) = 0.980 W/kg SAR(1 g) = 0.769 mW/g; SAR(10 g) = 0.559 mW/g Maximum value of SAR (measured) = 0.811 mW/g</p> <div data-bbox="215 1272 1374 1848"> </div>		



Z-Scan at power reference point (850 MHz CH251)

Left Side	Tilt	836.4 MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³ Phantom section: Left Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.375, 7.783, 7.54); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Tilt position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.461 mW/g</p> <p>Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 15.8 V/m; Power Drift = -0.173 dB Peak SAR (extrapolated) = 0.574 W/kg SAR(1 g) = 0.447 mW/g; SAR(10 g) = 0.327 mW/g Maximum value of SAR (measured) = 0.473 mW/g</p> <div data-bbox="220 1272 1372 1848"> <p>dB 0.000 -1.79 -3.59 -5.38 -7.18 -8.97</p> </div> <p>0 dB = 0.473mW/g</p>		

Right Side	Cheek	836.4 MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³ Phantom section: Right Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.375, 7.783, 7.54); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Touch position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.739 mW/g</p> <p>Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 11.3 V/m; Power Drift = -0.115 dB Peak SAR (extrapolated) = 0.893 W/kg SAR(1 g) = 0.710 mW/g; SAR(10 g) = 0.520 mW/g Maximum value of SAR (measured) = 0.759 mW/g</p> <div data-bbox="225 1301 1362 1861"> </div>		

Right Side	Tilt	836.4MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³ Phantom section: Right Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.375, 7.783, 7.54); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Tilt position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.403 mW/g</p> <p>Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 13.9 V/m; Power Drift = -0.087 dB Peak SAR (extrapolated) = 0.486 W/kg SAR(1 g) = 0.380 mW/g; SAR(10 g) = 0.277 mW/g Maximum value of SAR (measured) = 0.402 mW/g</p> <div data-bbox="212 1317 1377 1892"> </div> <p>0 dB = 0.402mW/g</p>		

GSM with headset (850MHz/Flat)

FLAT	Towards ground	836.4 MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used: $f = 836.41 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 55.9$; $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards ground - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.524 mW/g</p> <p>Towards ground - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 16.3 V/m; Power Drift = -0.046 dB Peak SAR (extrapolated) = 0.649 W/kg SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.368 mW/g Maximum value of SAR (measured) = 0.532 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000 -2.06 -4.12 -6.18 -8.24 -10.3</p> </div> <div style="flex-grow: 1;"> </div> </div> <p style="text-align: center;">0 dB = 0.532mW/g</p>		

FLAT	Towards phantom	836.4 MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used: $f = 836.41 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 55.9$; $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section</p>		
<p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p>		
<p>Towards phantom- Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.249 mW/g</p>		
<p>Towards phantom- Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 9.84 V/m; Power Drift = 0.068 dB Peak SAR (extrapolated) = 0.318 W/kg SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.177 mW/g Maximum value of SAR (measured) = 0.258 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000 -1.88 -3.75 -5.63 -7.50 -9.38</p> </div> <div style="flex-grow: 1;"> </div> </div> <p style="text-align: center;">0 dB = 0.258mW/g</p>		

GPRS (850MHz/Flat)

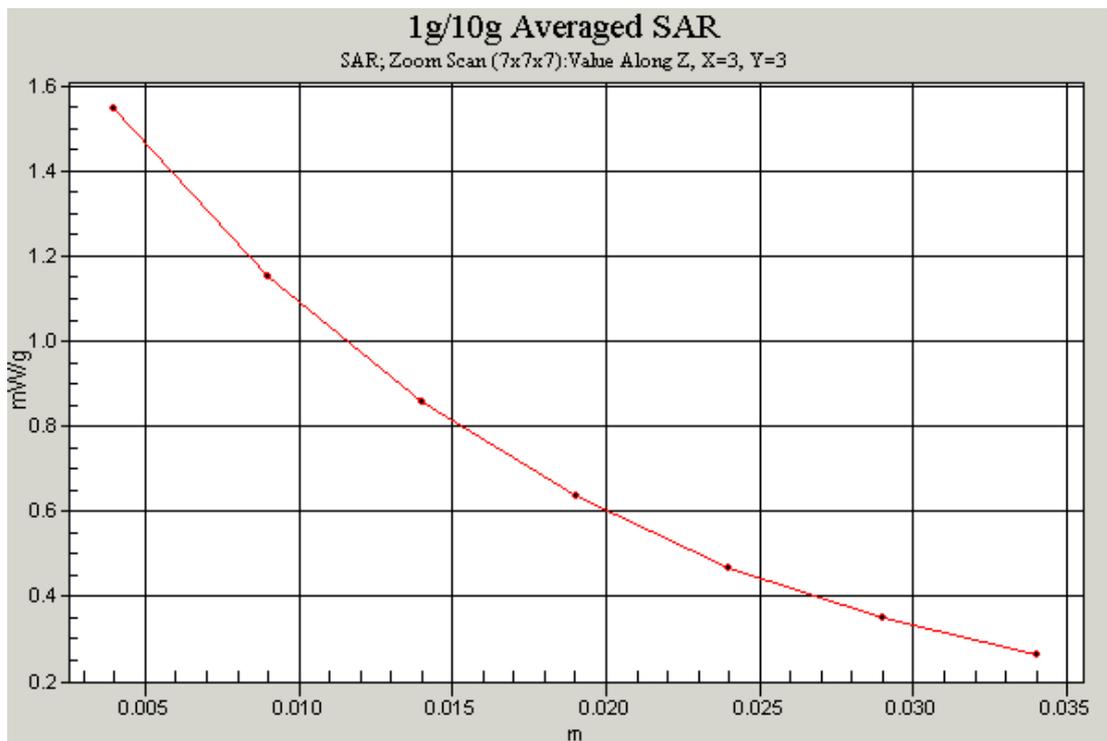
FLAT	Towards phantom	824.2 MHz
<p>Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 56$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards phantom - Low GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.681 mW/g</p> <p>Towards phantom - Low GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 20.8 V/m; Power Drift = -0.027 dB Peak SAR (extrapolated) = 0.889 W/kg SAR(1 g) = 0.669 mW/g; SAR(10 g) = 0.482 mW/g Maximum value of SAR (measured) = 0.709 mW/g</p> <div data-bbox="215 1339 1372 1915"> </div> <p>0 dB = 0.709mW/g</p>		

FLAT	Towards phantom	836.4 MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used: $f = 836.41$ MHz; $\sigma = 0.96$ mho/m; $\epsilon_r = 55.9$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards phantom- Middle GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.880 mW/g</p> <p>Towards phantom- Middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 23.7 V/m; Power Drift = 0.007 dB Peak SAR (extrapolated) = 1.13 W/kg SAR(1 g) = 0.861 mW/g; SAR(10 g) = 0.620 mW/g Maximum value of SAR (measured) = 0.908 mW/g</p> <div data-bbox="220 1339 1369 1908"> </div> <p>0 dB = 0.908mW/g</p>		

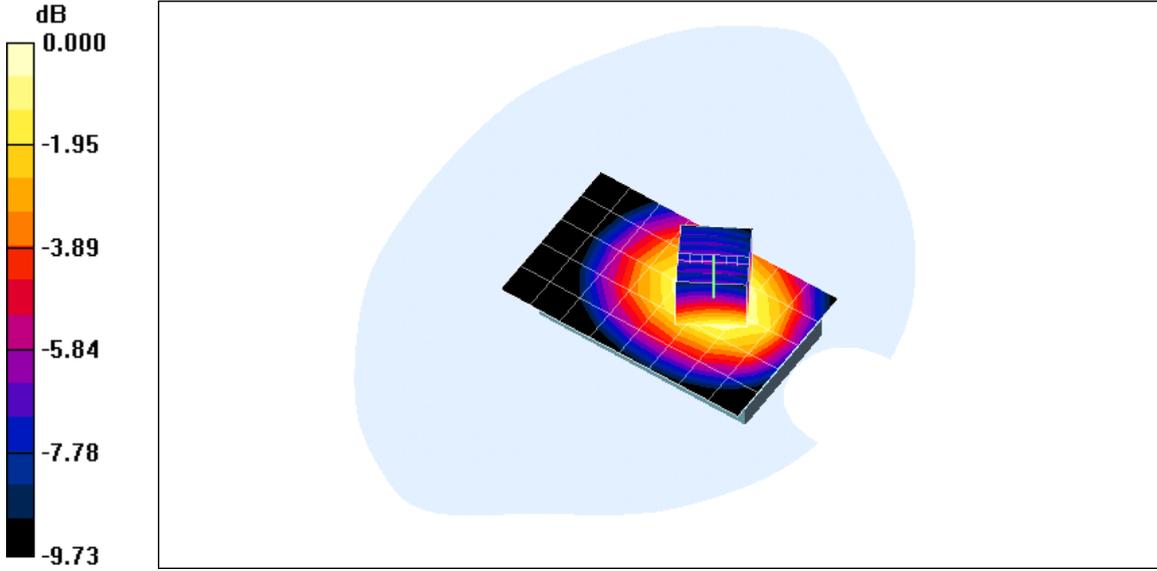
FLAT	Towards phantom	848.8 MHz
<p>Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.969$ mho/m; $\epsilon_r = 55.8$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards phantom - High GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.06 mW/g</p> <p>Towards phantom - High GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 25.9 V/m; Power Drift = -0.167 dB Peak SAR (extrapolated) = 1.31 W/kg SAR(1 g) = 1 mW/g; SAR(10 g) = 0.718 mW/g Maximum value of SAR (measured) = 1.05 mW/g</p> <div data-bbox="215 1339 1375 1908"> </div> <p>0 dB = 1.05mW/g</p>		

FLAT	Towards ground	824.2 MHz
<p>Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 56$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards ground - Low GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.32 mW/g</p> <p>Towards ground - Low GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 28.1 V/m; Power Drift = 0.002 dB Peak SAR (extrapolated) = 1.65 W/kg SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.895 mW/g</p> <div data-bbox="207 1254 1372 1859"> </div> <p>0 dB = 1.32mW/g</p>		

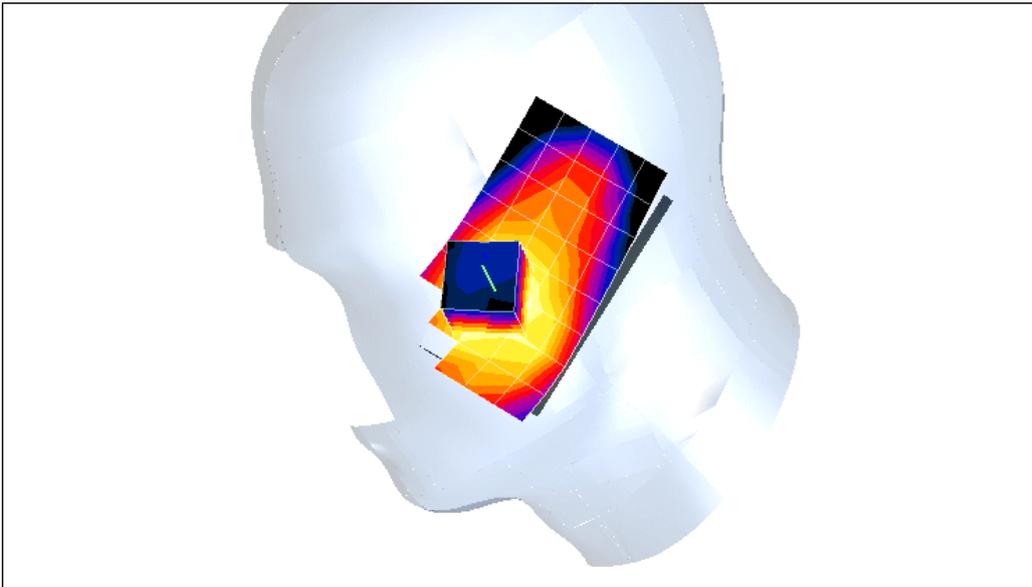
FLAT	Towards ground	836.4 MHz
<p>Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3 Medium parameters used: $f = 836.41 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 55.9$; $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards ground - Middle GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.56 mW/g</p> <p>Towards ground - Middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 30.7 V/m; Power Drift = -0.121 dB Peak SAR (extrapolated) = 1.95 W/kg SAR(1 g) = 1.46 mW/g; SAR(10 g) = 1.03 mW/g Maximum value of SAR (measured) = 1.54 mW/g</p> <div data-bbox="220 1301 1369 1865"> </div> <p>0 dB = 1.54mW/g</p>		

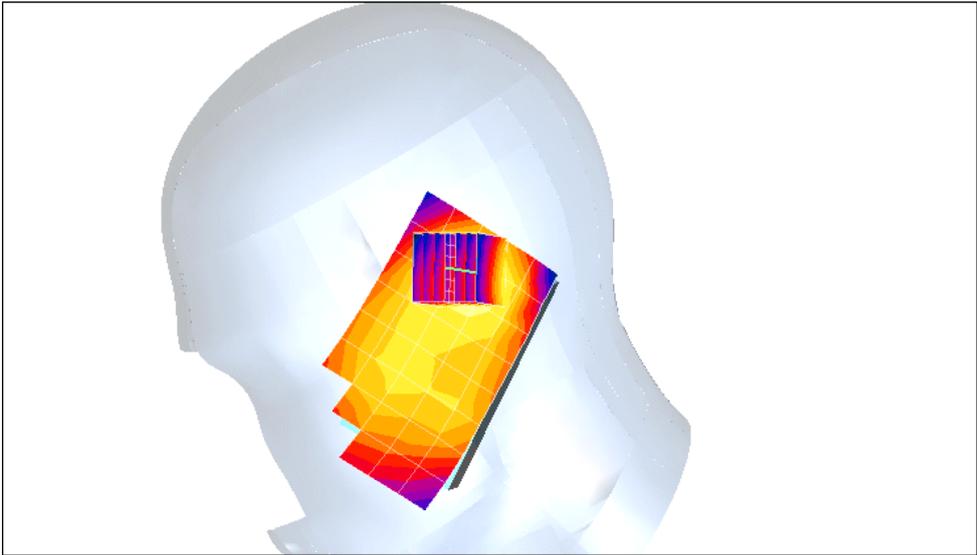


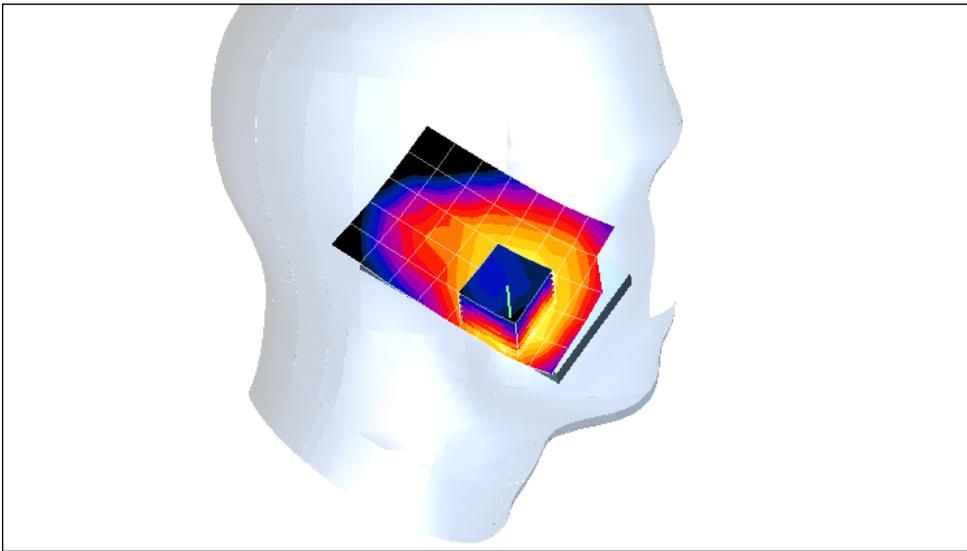
Z-Scan at power reference point (850 MHz CH251)

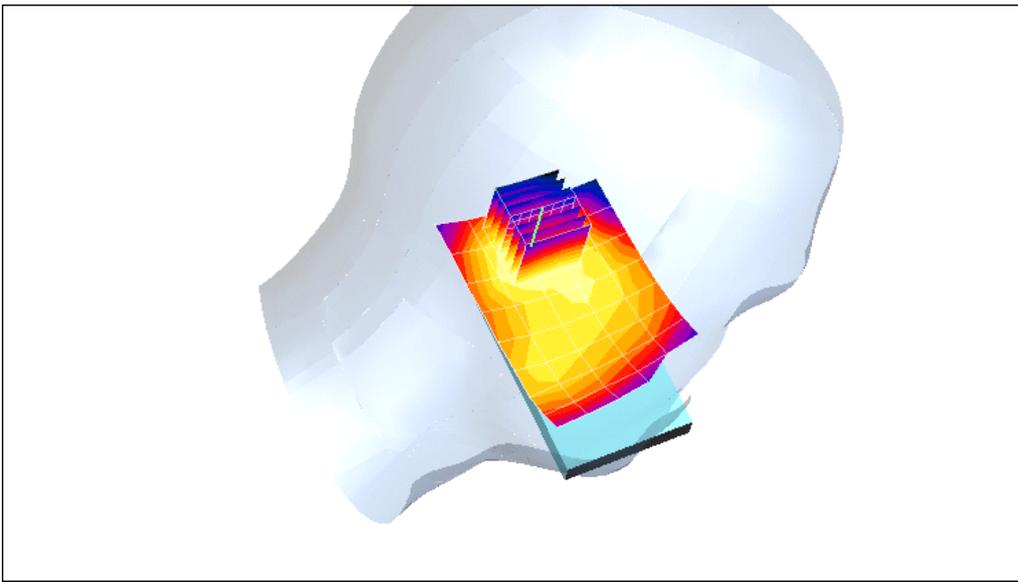
FLAT	Towards ground	848.8 MHz
<p>Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.969$ mho/m; $\epsilon_r = 55.8$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(7.149, 7.54, 7.336); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1560; Type: SAM; Serial: 1560 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards ground- High GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.52 mW/g</p> <p>Towards ground- High GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 30.5 V/m; Power Drift = -0.058 dB Peak SAR (extrapolated) = 1.92 W/kg SAR(1 g) = 1.43 mW/g; SAR(10 g) = 1.02 mW/g Maximum value of SAR (measured) = 1.53 mW/g</p>		
 <p>0 dB = 1.53mW/g</p>		

GSM (1900MHz/Head)

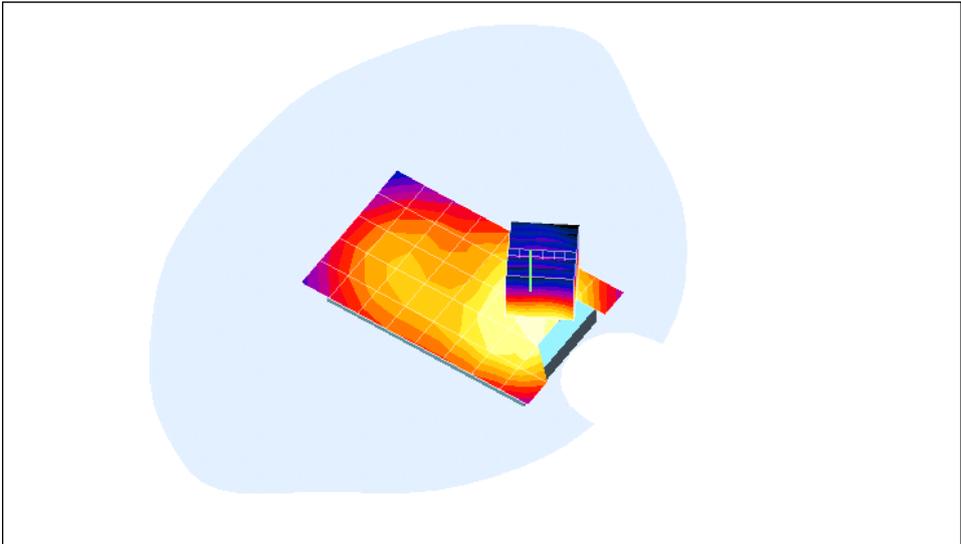
Right Side	Cheek	1880.0 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.5$; $\rho = 1500$ kg/m³ Phantom section: Right Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.438, 5.759, 5.595); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Touch position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.370 mW/g</p> <p>Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 10.5 V/m; Power Drift = 0.028 dB Peak SAR (extrapolated) = 0.578 W/kg SAR(1 g) = 0.385 mW/g; SAR(10 g) = 0.239 mW/g Maximum value of SAR (measured) = 0.392 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000</p> <p>-3.46</p> <p>-6.92</p> <p>-10.4</p> <p>-13.8</p> <p>-17.3</p> </div>  </div> <p style="text-align: center;">0 dB = 0.392mW/g</p>		

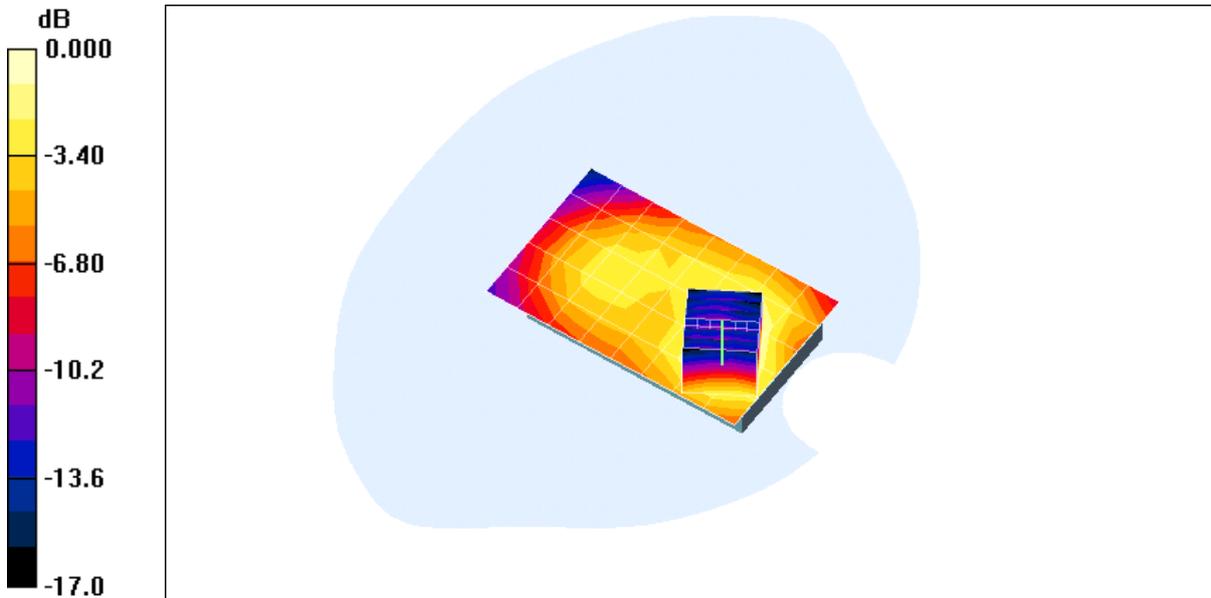
Right Side	Tilt	1880.0 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.5$; $\rho = 1500$ kg/m³ Phantom section: Right Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.438, 5.759, 5.595); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Tilt position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.112 mW/g</p> <p>Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 12.0 V/m; Power Drift = 0.001 dB Peak SAR (extrapolated) = 0.199 W/kg SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.078 mW/g Maximum value of SAR (measured) = 0.135 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000</p> <p>-4.20</p> <p>-8.40</p> <p>-12.6</p> <p>-16.8</p> <p>-21.0</p> </div>  </div> <p style="text-align: center;">0 dB = 0.135mW/g</p>		

Left Side	Cheek	1880.0 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.5$; $\rho = 1500$ kg/m³ Phantom section: Left Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.438, 5.759, 5.595); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Touch position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.433 mW/g</p> <p>Touch position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 9.19 V/m; Power Drift = 0.017 dB Peak SAR (extrapolated) = 0.713 W/kg SAR(1 g) = 0.461 mW/g; SAR(10 g) = 0.275 mW/g Maximum value of SAR (measured) = 0.475 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000</p> <p>-3.66</p> <p>-7.32</p> <p>-11.0</p> <p>-14.6</p> <p>-18.3</p> </div>  </div> <p style="text-align: center;">0 dB = 0.475mW/g</p>		

Left Side	Tilt	1880.0 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used (interpolated): $f = 1880$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 38.5$; $\rho = 1500$ kg/m³ Phantom section: Left Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.438, 5.759, 5.595); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Tilt position - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.099 mW/g</p> <p>Tilt position - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 11.0 V/m; Power Drift = -0.052 dB Peak SAR (extrapolated) = 0.165 W/kg SAR(1 g) = 0.109 mW/g; SAR(10 g) = 0.067 mW/g Maximum value of SAR (measured) = 0.113 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000</p> <p>-3.80</p> <p>-7.60</p> <p>-11.4</p> <p>-15.2</p> <p>-19.0</p> </div>  </div> <p style="text-align: center;">0 dB = 0.113mW/g</p>		

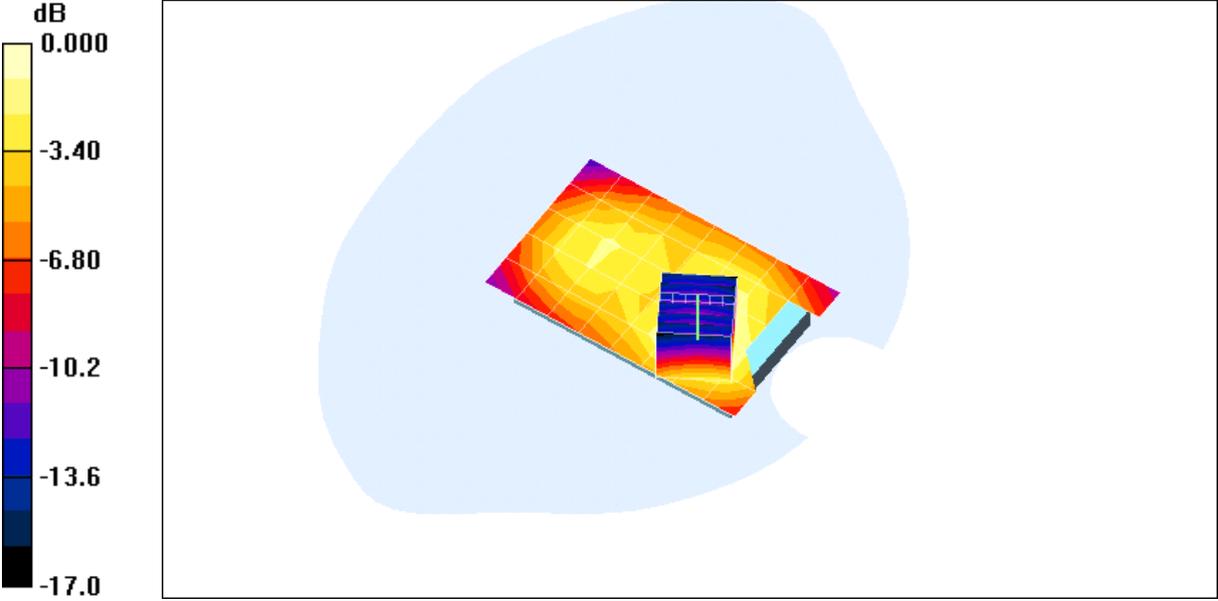
GSM with headset (1900MHz/Flat)

FLAT	Towards ground	1880 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.271, 5.584, 5.501); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards ground - Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.223 mW/g</p> <p>Towards ground - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 7.57 V/m; Power Drift = 0.010 dB Peak SAR (extrapolated) = 0.387 W/kg SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.133 mW/g Maximum value of SAR (measured) = 0.252 mW/g</p>		
<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>dB</p> <p>0.000</p> <p>-3.46</p> <p>-6.92</p> <p>-10.4</p> <p>-13.8</p> <p>-17.3</p> </div> <div style="flex-grow: 1;">  </div> </div> <p style="text-align: center;">0 dB = 0.252mW/g</p>		

FLAT	Towards phantom	1880 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p>		
<p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.271, 5.584, 5.501); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p>		
<p>Towards phantom- Middle/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.150 mW/g</p>		
<p>Towards phantom- Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 7.74 V/m; Power Drift = 0.060 dB Peak SAR (extrapolated) = 0.250 W/kg SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.091 mW/g Maximum value of SAR (measured) = 0.167 mW/g</p>		
		
<p>0 dB = 0.167mW/g</p>		

GPRS (1900MHz/Flat)

FLAT	Towards ground	1880 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p> <p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.271, 5.584, 5.501); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p> <p>Towards ground- Middle GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.270 mW/g</p> <p>Towards ground- Middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 8.34 V/m; Power Drift = -0.009 dB Peak SAR (extrapolated) = 0.454 W/kg SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.157 mW/g Maximum value of SAR (measured) = 0.299 mW/g</p> <div data-bbox="207 1332 1380 1915"> <p>0 dB = 0.299mW/g</p> </div>		

FLAT	Towards phantom	1880 MHz
<p>Communication System: PCS1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³ Phantom section: Flat Section</p>		
<p>DASY4 Configuration: - Probe: ES3DV3 - SN3128; ConvF(5.271, 5.584, 5.501); Calibrated: 2/3/2012 - Sensor-Surface: 4mm (Mechanical Surface Detection) - Electronics: DAE4 Sn720; Calibrated: 2/7/2012 - Phantom: SAM 1559; Type: SAM; Serial: 1559 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186</p>		
<p>Towards phantom- Middle GPRS/Area Scan (6x9x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.209 mW/g</p>		
<p>Towards phantom- Middle GPRS/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 9.14 V/m; Power Drift = 0.016 dB Peak SAR (extrapolated) = 0.352 W/kg SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.124 mW/g Maximum value of SAR (measured) = 0.230 mW/g</p>		
 <p>0 dB = 0.230mW/g</p>		