

# SAR TEST REPORT

<b>Equipment Under Test</b>	PDA phone
<b>Model Name</b>	WING200
<b>Company Name</b>	High Tech Computer Corp.
<b>Company Address</b>	23 Hsin Hua Rd., Taoyuan 330, Taiwan, R.O.C.
<b>Date of Receipt</b>	2007.07.10
<b>Date of Test(s)</b>	2007.07.25-2007.11.14
<b>Date of Issue</b>	2007.11.14

Standards:

**FCC OET Bulletin 65 supplement C,  
ANSI/IEEE C95.1, C95.3, IEEE 1528**


In the configuration tested, the EUT complied with the standards specified above.

**Remarks:**

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Taiwan Electronic & Communication Laboratory Services or testing done by SGS Taiwan Electronic & Communication Laboratory Services in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Electronic & Communication Laboratory Services in writing.

Tested by : Ricky Huang  Date : 2007.11.14  
Sr. Engineer

Approved by : Robert Chang  Date : 2007.11.14  
Tech. Manager

# Contents

<b>1. General Information</b>	
1.1 Testing Laboratory	6
1.2 Details of Applicant	6
1.3 Description of EUT(s)	6
1.4 Test Environment	9
1.5 Operation description	9
1.6 Positioning Procedure	9
1.7 Evaluation Procedures	10
1.8 SAR System Verification	12
1.9 System Components	13
1.10 SAR System Verification	15
1.11 Tissue Simulant Fluid for the Frequency Band	16
1.12 Test Standards and Limits	18
<b>2. Summary of Results</b>	21
<b>3. Instruments List</b>	35
<b>4. Measurements</b>	37
<b>GSM 850MHz</b>	
4.1.1 Right-head Slider-off, cheek, middle channel	37
4.1.2 Left-head Slider-off, cheek, middle channel	38
4.1.3 Right-head Slider-off, tilt 15°, middle channel	39
4.1.4 Left-head Slider-off, tilt 15°, middle channel	40
4.1.5 Right-head Slider-on, cheek, middle channel	41
4.1.6 Left-head Slider-on, cheek, middle channel	42
4.1.7 Right-head Slider-on, tilt 15°, middle channel	43
4.1.8 Left-head Slider-on, tilt 15°, middle channel	44
4.1.9 Body-Worn, lowest channel	45
4.1.10 Body-Worn, middle channel	46
4.1.11 Body-Worn, highest channel	47
4.1.12 Body-Worn, highest channel_ repeated in EUT front to Phantom	48
4.1.13 Body-Worn, highest channel_ repeated with Memory Card	49
4.1.14 Body-Worn, highest channel_ repeated with Bluetooth active	50
4.1.15 Body-Worn, highest channel_ repeated with Samsung Battery	51
4.1.16 Body-Worn, highest channel_ repeated with Sanyo Battery	52
4.1.17 Body-Worn, highest channel_ repeated with Headset_1	53
4.1.18 Body-Worn, highest channel_ repeated with Headset_2	54
4.1.19 Body-Worn, highest channel_ repeated with WiFi b active	55
4.1.20 Body-Worn, highest channel_ repeated with WiFi g active	56
4.1.21 Body-Worn, highest channel_ repeated with EGPRS active	57
4.1.22 Body-Worn, hingest channel_ repeated with Sanyo Battery & Holster_2	58
<b>PCS 1900MHz</b>	
4.2.1 Right-head Slider-off, cheek, middle channel	59
4.2.2 Left-head Slider-off, cheek, middle channel	60
4.2.3 Right-head Slider-off, tilt 15°, middle channel	61
4.2.4 Left-head Slider-off, tilt 15°, middle channel	62
4.2.5 Right-head Slider-on, cheek, middle channel	63
4.2.6 Left-head Slider-on, cheek, middle channel	64
4.2.7 Right-head Slider-on, tilt 15°, middle channel	65

4.2.8 Left-head Slider-on, tilt 15°, middle channel	66
4.2.9 Body-Worn, lowest channel	67
4.2.10 Body-Worn, middle channel	68
4.2.11 Body-Worn, highest channel	69
4.1.12 Body-Worn, middle channel_ repeated with Holster_2	70

## WCDMA B2

4.3.1 Right-head Slider-off, cheek, middle channel	71
4.3.2 Left-head Slider-off, cheek, middle channel	72
4.3.3 Right-head Slider-off, tilt 15°, lowest channel	73
4.3.4 Right-head Slider-off, tilt 15°, middle channel	74
4.3.5 Right-head Slider-off, tilt 15°, highest channel	75
4.3.6 Left-head Slider-off, tilt 15°, lowest channel	76
4.3.7 Left-head Slider-off, tilt 15°, middle channel	77
4.3.8 Left-head Slider-off, tilt 15°, highest channel	78
4.3.9 Right-head Slider-on, cheek, middle channel	79
4.3.10 Left-head Slider-on, cheek, lowest channel	80
4.3.11 Left-head Slider-on, cheek, middle channel	81
4.3.12 Left-head Slider-on, cheek, highest channel	82
4.3.13 Right-head Slider-on, tilt 15°, lowest channel	83
4.3.14 Right-head Slider-on, tilt 15°, middle channel	84
4.3.15 Right-head Slider-on, tilt 15°, highest channel	85
4.3.16 Left-head Slider-on, tilt 15°, lowest channel	86
4.3.17 Left-head Slider-on, tilt 15°, middle channel	87
4.3.18 Left-head Slider-on, tilt 15°, highest channel	88
4.3.19 Right-head Slider-off, tilt 15°, middle channel_ repeated with Bluetooth active	89
4.3.20 Right-head Slider-off, tilt 15°, middle channel_ repeated with Memory card	90
4.3.21 Right-head Slider-off, tilt 15°, middle channel_ repeated with Samsung Battery	91
4.3.22 Right-head Slider-off, tilt 15°, middle channel_ repeated with Sanyo Battery	92
4.3.23 Right-head Slider-off, tilt 15°, middle channel_ repeated with WiFi b active	93
4.3.24 Right-head Slider-off, tilt 15°, middle channel_ repeated with WiFi g active	94
4.3.25 Body-Worn, lowest channel	95
4.3.26 Body-Worn, middle channel	96
4.3.27 Body-Worn, highest channel	97
4.3.28 Body-Worn, middle channel_ repeated with Holster_2	98
4.4.29 Body-Worn, middle channel_ worst case repeated with HSDPA mode	99

## WCDMA B5

4.4.1 Right-head Slider-off, cheek, middle channel	100
4.4.2 Left-head Slider-off, cheek, middle channel	101
4.4.3 Right-head Slider-off, tilt 15°, middle channel	102
4.4.4 Left-head Slider-off, tilt 15°, middle channel	103
4.4.5 Right-head Slider-on, cheek, middle channel	104
4.4.6 Left-head Slider-on, cheek, middle channel	105
4.4.7 Right-head Slider-on, tilt 15°, middle channel	106
4.4.8 Left-head Slider-on, tilt 15°, middle channel	107
4.4.9 Body-Worn, lowest channel	108
4.4.10 Body-Worn, middle channel	109
4.4.11 Body-Worn, highest channel	110
4.4.12 Body-Worn, lowest channel_ repeated with Headset_2	111
4.4.13 Body-Worn, lowest channel_ worst case repeated with HSDPA mode	112

## Second solution measurement result (changed PCM & Camera)

### GSM 850MHz

4.5.1 Right-head Slider-off, cheek, middle channel.....	113
4.5.2 Left-head Slider-off, cheek, middle channel.....	114
4.5.3 Right-head Slider-off, tilt 15°, middle channel.....	115
4.5.4 Left-head Slider-off, tilt 15°, middle channel.....	116
4.5.5 Right-head Slider-on, cheek, middle channel.....	117
4.5.6 Left-head Slider-on, cheek, middle channel.....	118
4.5.7 Right-head Slider-on, tilt 15°, middle channel.....	119
4.5.8 Left-head Slider-on, tilt 15°, middle channel.....	120
4.5.9 Body-Worn, lowest channel.....	121
4.5.10 Body-Worn, middle channel.....	122
4.5.11 Body-Worn, highest channel.....	123
4.5.12 Body-Worn, highest channel_ repeated in EUT front to Phantom.....	124
4.5.13 Body-Worn, highest channel_ repeated with Memory Card.....	125
4.5.14 Body-Worn, highest channel_ repeated with Bluetooth active.....	126
4.5.15 Body-Worn, highest channel_ repeated with Samsung Battery.....	127
4.5.16 Body-Worn, highest channel_ repeated with Sanyo Battery.....	128
4.5.17 Body-Worn, highest channel_ repeated with Headset_1.....	129
4.5.18 Body-Worn, highest channel_ repeated with Headset_2.....	130
4.5.19 Body-Worn, highest channel_ repeated with WiFi b active.....	131
4.5.20 Body-Worn, highest channel_ repeated with WiFi g active.....	132
4.5.21 Body-Worn, highest channel_ repeated with EGPRS active.....	133
4.5.22 Body-Worn, hingest channel_ repeated with Sanyo Battery & Holster_2.....	134

### PCS 1900MHz

4.6.1 Right-head Slider-off, cheek, middle channel.....	135
4.6.2 Left-head Slider-off, cheek, middle channel.....	136
4.6.3 Right-head Slider-off, tilt 15°, middle channel.....	137
4.6.4 Left-head Slider-off, tilt 15°, middle channel.....	138
4.6.5 Right-head Slider-on, cheek, middle channel.....	139
4.6.6 Left-head Slider-on, cheek, middle channel.....	140
4.6.7 Right-head Slider-on, tilt 15°, middle channel.....	141
4.6.8 Left-head Slider-on, tilt 15°, middle channel.....	142
4.6.9 Body-Worn, lowest channel.....	143
4.6.10 Body-Worn, middle channel.....	144
4.6.11 Body-Worn, highest channel.....	145
4.6.12 Body-Worn, lowest channel_ repeated with Holstert_2.....	146

### WCDMA B2

4.7.1 Right-head Slider-off, cheek, middle channel.....	147
4.7.2 Left-head Slider-off, cheek, middle channel.....	148
4.7.3 Right-head Slider-off, tilt 15°, middle channel.....	149
4.7.4 Left-head Slider-off, tilt 15°, middle channel.....	150
4.7.5 Right-head Slider-on, cheek, middle channel.....	151
4.7.6 Left-head Slider-on, cheek, lowest channel.....	152
4.7.7 Left-head Slider-on, cheek, middle channel.....	153
4.7.8 Left-head Slider-on, cheek, highest channel.....	154
4.7.9 Right-head Slider-on, tilt 15°, middle channel.....	155
4.7.10 Left-head Slider-on, tilt 15°, lowest channel.....	156

4.7.11 Left-head Slider-on, tilt 15°, middle channel	157
4.7.12 Left-head Slider-on, tilt 15°, highest channel	158
4.7.13 Right-head Slider-off, tilt 15°, middle channel_ repeated with Bluetooth active	159
4.7.14 Right-head Slider-off, tilt 15°, middle channel_ repeated with Memory card	160
4.7.15 Right-head Slider-off, tilt 15°, middle channel_ repeated with Samsung Battery	161
4.7.16 Right-head Slider-off, tilt 15°, middle channel_ repeated with Sanyo Battery	162
4.7.17 Right-head Slider-off, tilt 15°, middle channel_ repeated with WiFi b active	163
4.7.18 Right-head Slider-off, tilt 15°, middle channel_ repeated with WiFi g active	164
4.7.19 Body-Worn, lowest channel	165
4.7.20 Body-Worn, middle channel	166
4.7.21 Body-Worn, highest channel	167
4.7.22 Body-Worn, middle channel_ repeated with Holstert_2	168
4.4.23 Body-Worn, middle channel_ worst case repeated with HSDPA mode	169

### WCDMA B5

4.8.1 Right-head Slider-off, cheek, middle channel	170
4.8.2 Left-head Slider-off, cheek, middle channel	171
4.8.3 Right-head Slider-off, tilt 15°, middle channel	172
4.8.4 Left-head Slider-off, tilt 15°, middle channel	173
4.8.5 Right-head Slider-on, cheek, middle channel	174
4.8.6 Left-head Slider-on, cheek, middle channel	175
4.8.7 Right-head Slider-on, tilt 15°, middle channel	176
4.8.8 Left-head Slider-on, tilt 15°, middle channel	177
4.8.9 Body-Worn, lowest channel	178
4.8.10 Body-Worn, middle channel	179
4.8.11 Body-Worn, highest channel	180
4.8.12 Body-Worn, lowest channel_ repeated with Holster_2	181
4.8.13 Body-Worn, lowest channel_ worst case repeated with HSDPA mode	182

### System Verification

5. DAE & Probe Calibration certificate	196
6. Uncertainty Analysis	215
7. Phantom description	216
8. System Validation from Original equipment supplier	217

# 1. General Information

## 1.1 Testing Laboratory

SGS Taiwan Ltd. Electronics & Communication Laboratory	
134, Wu Kung Road, Wuku industrial zone	
Taipei county, Taiwan, R.O.C.	
Telephone	+886-2-2299-3279
Fax	+886-2-2298-0488
Internet	<a href="http://www.tw.sgs.com/">http://www.tw.sgs.com/</a>

## 1.2 Details of Applicant

Company Name	High Tech Computer Corp.
Company Address	23 Hsin Hua Rd., Taoyuan 330, Taiwan, R.O.C.
Telephone	886-3-3753252
Fax	886-3-3755530
Contact Person	Emily Shih
E-mail	<a href="mailto:Emily_Sih@HTC.com.tw">Emily_Sih@HTC.com.tw</a>
Web site	<a href="http://www.htc.com/tw/">http://www.htc.com/tw/</a>

## 1.3 Description of EUT

EUT Name	PDA phone				
Model number	Wing200				
FCC ID	NM8WG				
Mode of Operation	GSM/GPRS/EDGE, Band 850/1900/WCDMA B2/WCDMA B5				
Duty Cycle	GSM	GPRS	WCDMA B2	WCDMA B5	WiFi b+g
	1/8	1/4	1		
Modulation Mode	GSM/GPRS	EDGE	WCDMA B2	WCDMA B5	WiFi b+g
	GMSK	8PSK	WCDMA		B:QPSK G:OFDM
Maximum RF Conducted Power(Average)	EGSM 850	DCS 1900	WCDMA B2	WCDMA B5	WiFi b+g
	32.76dbm	30.10dbm	23.30dbm	23.24dbm	14.12 dBm

TX Frequency range (MHz)	EGSM 850	DCS 1900	WCDMA B2	WCDMA B5	WiFi b+g
	824.2-848.8	1850-1910	1852.4-1907.6	826.4-846.6	2412-2472
Channel Number (ARFCN)	EGSM 850	DCS 1900	WCDMA B2	WCDMA B5	WiFi b+g
	128-251	512-810	9262-9538	4132-4233	1-13
Antenna Gain	EGSM 850	DCS 1900	WCDMA B2	WCDMA B5	WiFi b+g
	-2 ~ +2 dBi				
Antenna Type	PIFA				
Battery Type	1. Simplo, Model number:LIBR160 3.7V 1050mAh Lithium-Ion 2. Sanyo, Model number:LIBR160 3.7V 1050mAh Lithium-Ion 3. Samsung, Model number: WING160 3.7V 1050mAh Lithium-Ion				
Definition	Production unit				
IMEI	353486010020240(TY722FY00163) 353486010022477(TY722FY00207)				
Max. SAR Measurement value (1 g) 1 <sup>st</sup> solution	For Head part			For Body Part	
	1.06 W/kg (At WCDMA B2, Left Head Slider-on ,Cheek Position channel 9400)			1.42 W/kg (At GSM 850 GPRS mode, Channel 251 with Sanyo Battery)	
Max. SAR Measurement value (1 g) 2 <sup>nd</sup> solution	1.05 W/kg (At WCDMA B2, Left Head Slider-on ,Cheek Position channel 9400 with Samsung Battery)			1.58 W/kg (At GSM 850 GPRS mode, Channel 251)	

Note:

- EGPRS mode was not measured because maximum averaged output power is more than 3 dB lower in EGPRS mode than in GPRS mode.

(In EDGE mode, its power class level is E2 and output power less than 24dBm)

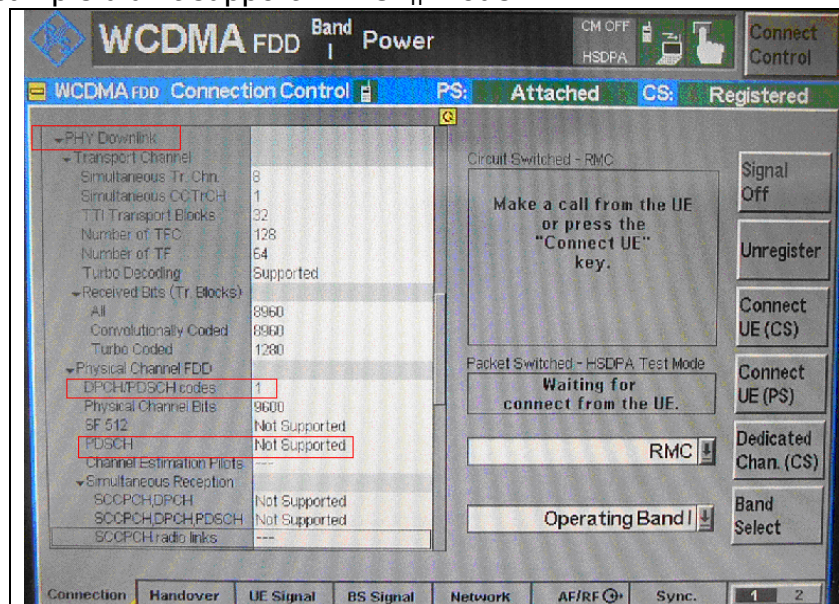
EDGE Conducted output Power	850 Band			1900 Band		
	Frequency (MHz)	CH Number	Peak Power (dBm)	Frequency (MHz)	CH Number	Peak Power (dBm)
	1850.2	512	23.5	1850.2	512	23.5
	1880	661	23.8	1880	661	23.8
	1909.8	810	24.3	1909.8	810	24.3

Wifi	802.11b	802.11g
Channel Frequency Under Test And Its Conducted Output Power (Peak)	13.78 dBm (2412MHz)	10.97 dBm (2412MHz)
	13.75 dBm (2437MHz)	11.23 dBm (2437MHz)
	14.12 dBm (2462MHz)	11.48 dBm (2462MHz)

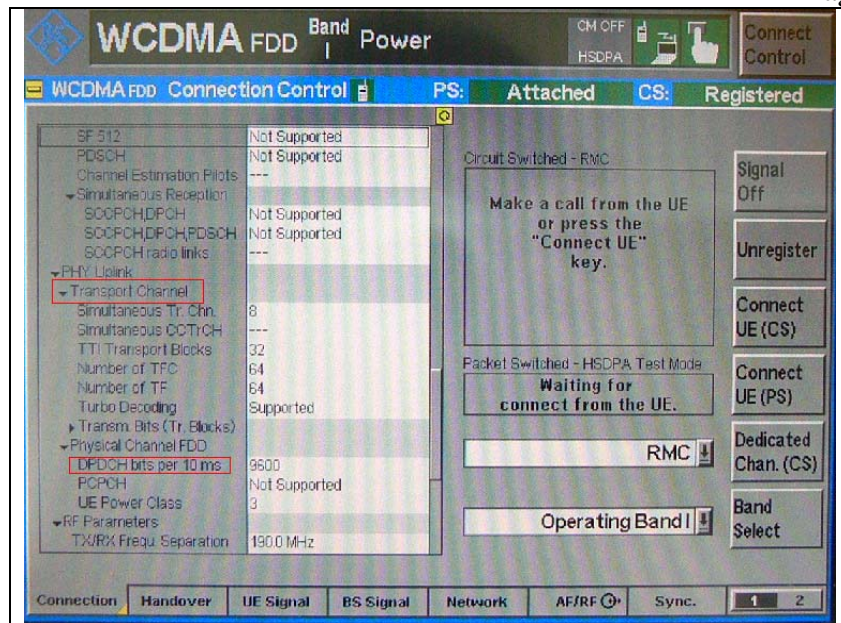
2. Follow FCC document KDB 941225, we have verified maximum output power on high, middle and low channels, and perform SAR testing in 12.2kbps RMC mode & Test Loop Mode1 for Body & Head position. The SAR is not required for other spreading codes and multiple DPDCH<sub>n</sub> since the output power for each of these other configurations <1/4 dB higher than 12.2kbps RMC.

	Channel Bit Rate (kbps)	Channel Symbol Rate (ksps)	Spreading Factor	Spreading Code Number	Bits/Slot
DPCCH	15	15	256	0	10
DPDCH <sub>1</sub>	15	15	256	64	10
	30	30	128	32	20
	60	60	64	16	40
	120	120	32	8	80
	240	240	16	4	160
	480	480	8	2	320
DPDCH <sub>2</sub>	960	960	4	1	640
	960	960	4	1, 2, 3	640

3. The sample didn't support DPDCH<sub>n</sub> mode.







## 1.4 Test Environment

Ambient Temperature: 22.2° C

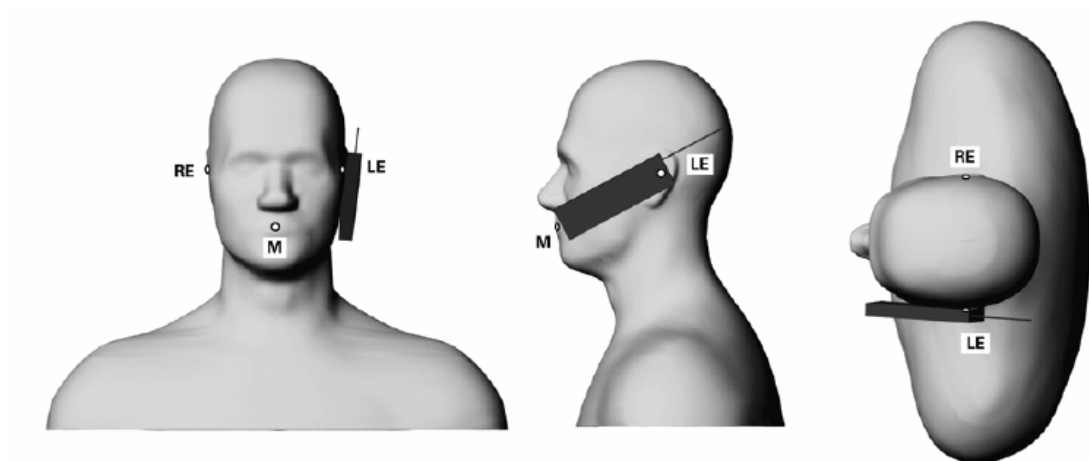
Tissue Simulating Liquid: 21.7° C

Relative Humidity: 62 %

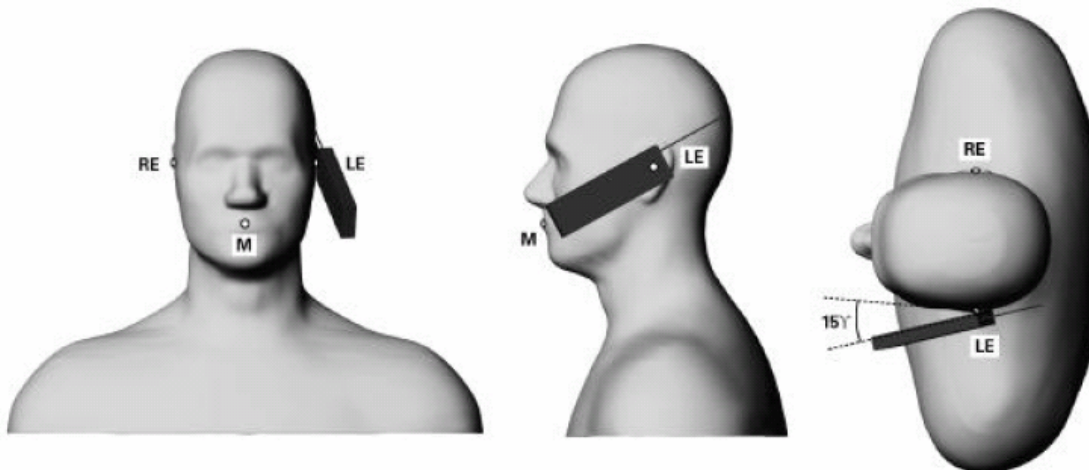
## 1.5 Operation description

1. The EUT controlled by using a Wireless Communication Tester (Agilent 8960), and the communication between the EUT and the tester is established by air link. Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s). The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged.
2. In each band perform SAR testing for each operation mode using the center frequency on both the left and right sides of the head, cheek and tilt positions to find the maximum mass-averaged SAR value of these configurations (the worst case configuration).
3. Measure the low-end and the high-end frequencies of the configuration giving rise to the maximum mass-averaged SAR in head positions.
4. For highest SAR configuration in this band repeated with Memory Card & Bluetooth active on & handset\_1 & headset\_2 & Samsung Battery & Sanyo Battery & WiFi b/g active and EDGE mode.
5. During the SAR testing, the DASY4 system checks power drift by comparing the -field strength of one specific location measured at the beginning with that measured at the end of the SAR testing

## 1.6 Positioning Procedure



Phone position 1, "cheek" or "touch" position. The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning



Phone position 2, "tilted position." The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning

Cheek/Touch Position: the handset was brought toward the mouth of the head phantom by pivoting against the ear reference point until any point of the mouthpiece or keypad touched the phantom.

Ear/Tilt Position: With the phone aligned in the Cheek/Touch position, the handset was tilted away from the mouth with respect to the test device reference point by 15 degrees.

## 1.7 EVALUATION PROCEDURES

The entire evaluation of the spatial peak values is performed within the Post-processing engine (SEMCAD). The system always gives the maximum values for the 1 g and 10 g cubes. The algorithm to find the cube with highest averaged SAR is divided into the

following stages:

1. The extraction of the measured data (grid and values) from the Zoom Scan.
2. The calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
3. The generation of a high-resolution mesh within the measured volume
4. The interpolation of all measured values from the measurement grid to the high-resolution grid
5. The extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
6. The calculation of the averaged SAR within masses of 1g and 10g.

The probe is calibrated at the center of the dipole sensors that is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated. The angle between the probe axis and the surface normal line is less than 30 degree.

In the Area Scan, the gradient of the interpolation function is evaluated to find all the extreme of the SAR distribution. The uncertainty on the locations of the extreme is less than 1/20 of the grid size. Only local maximum within -2 dB of the global maximum are searched and passed for the Cube Scan measurement. In the Cube Scan, the interpolation function is used to extrapolate the Peak SAR from the lowest measurement points to the inner phantom surface (the extrapolation distance). The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5mm.

The maximum search is automatically performed after each area scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with relatively large grid spacing. After the area scanning measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations. The 1g and 10g peak evaluations are only available for the predefined cube 7x7x7 scans. The routines are verified and optimized for the grid dimensions used in these cube measurements. The measured volume of 30x30x30mm contains about 30g of tissue. The first procedure is an extrapolation (incl. Boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D interpolation to get all points within the measured volume. In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is the moved around until the highest averaged SAR is found. If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that case the cube measurement can be repeated, using the new interpolated maximum as the center.

## 1.8 The SAR Measurement System

A photograph of the SAR measurement System is given in Fig. a. This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY 4 professional system ). A Model EX3DV3 3526-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation  $SAR = \sigma (|E_i|^2) / \rho$  where  $\sigma$  and  $\rho$  are the conductivity and mass density of the tissue-simulant.

The DASY4 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stabile RX family) with controller, teach pendant and software. An arm extension is for accommodating the data acquisition electronics (DAE).

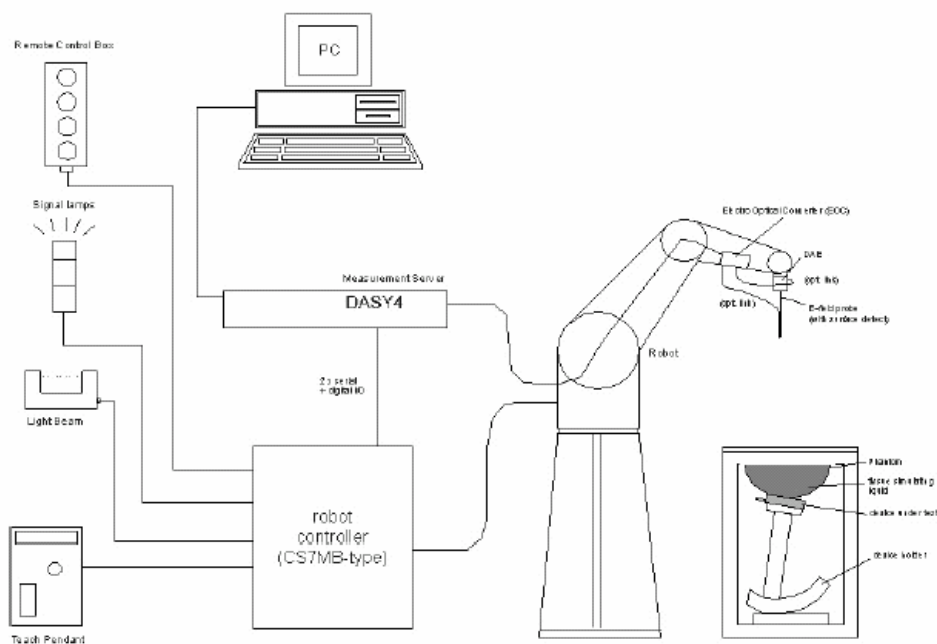


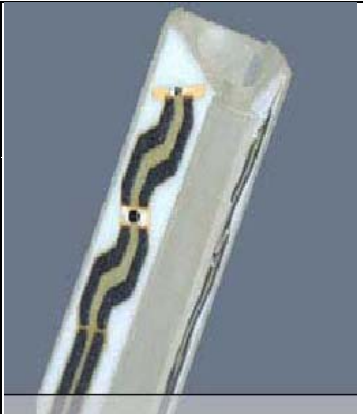
Fig.a The microwave circuit arrangement used for SAR system verification

- A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to the DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.

- A computer operating Windows 2000 or Windows XP.
- DASY4 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
  - The SAM twin phantom enabling testing left-hand and right-hand usage.
  - The device holder for handheld mobile phones.
  - Tissue simulating liquid mixed according to the given recipes.
  - Validation dipole kits allowing to validate the proper functioning of the system.


## 1.9 System Components

### ET3DV6 E-Field Probe

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g. glycol).	
Calibration	In air from 10 MHz to 2.5 GHz In brain simulating tissue (accuracy $\pm 8\%$ )	
Frequency	10 MHz to >6 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 3 GHz)	
Directivity	$\pm 0.2$ dB in brain tissue (rotation around probe axis) $\pm 0.4$ dB in brain tissue (rotation normal to probe axis)	
Dynamic Range:	5 $\mu$ W/g to >100 mW/g; Linearity: $\pm 0.2$ dB	
Dimensions	Overall length: 330 mm Tip length: 16 mm Body diameter: 12 mm Tip diameter: 6.8 mm Distance from probe tip to dipole centers: 2.7 mm	
Application	General dosimetry up to 3 GHz Compliance tests of mobile phone	

EX3DV3 E-Field Probe

### EX3DV3 E-Field Probe

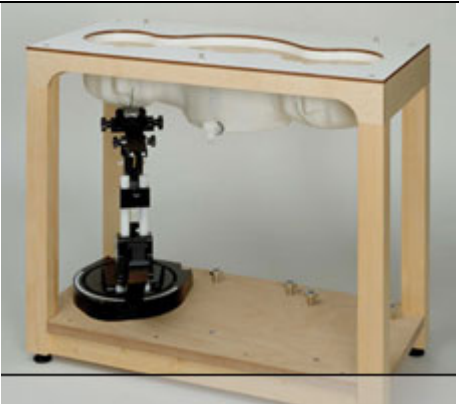
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL850/1900 Additional CF for other liquids and frequencies upon request	

EX3DV3 E-Field Probe




Frequency	10 MHz to > 6 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)
Directivity	$\pm 0.3$ dB in HSL (rotation around probe axis) $\pm 0.5$ dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB (noise: typically < 1 $\mu$ W/g)
Dimension	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

### SAM PHANTOM V4.0C

Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-200X, CENELEC 50361 and IEC 62209. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.	
Shell Thickness	2 $\pm$ 0.2 mm	
Filling Volume	Approx. 25 liters	
Dimensions	Height: 251 mm; Length: 1000 mm; Width: 500 mm	

### DEVICE HOLDER

Construction	In combination with the Twin SAM Phantom V4.0/V4.0C or Twin SAM, the Mounting Device (made from POM) enables the rotation of the mounted transmitter in spherical coordinates, whereby the rotation point is the ear opening. The devices can be easily and accurately positioned according to IEC, IEEE, CENELEC, FCC or other specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom).	 <p style="text-align: center;">Device Holder</p>
--------------	---	--

### 1.10 SAR System Verification

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values. These tests were done at 900/1900MHz. The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed in the table 1. During the tests, the ambient temperature of the laboratory was in the range 22.2°C, the relative humidity was in the range 62% and the liquid depth above the ear reference points was above 15 cm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.

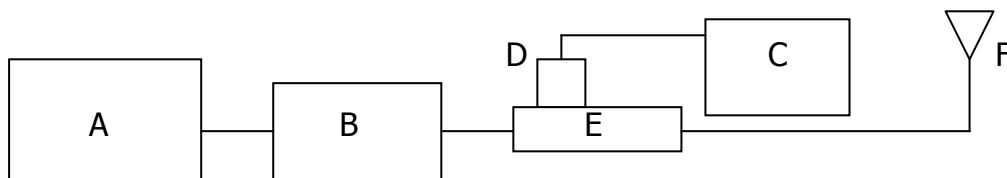


Fig.b The microwave circuit arrangement used for SAR system verification

- A. Agilent Model 8648D Signal Generator
- B. Mini circuits Model ZHL-42 Amplifier
- C. Agilent Model E4416A Power Meter
- D. Agilent Model 8481H Power Sensor
- E. Agilent Model 777D/778D Dual directional coupling



Photograph of the dipole Antenna

- F. Reference dipole antenna
- G. Agilent Model E4421B Signal Generator
- H. EMPOWER Model 2001-BBS3Q7ECK Amplifier
- I. Agilent Model E4419B Power Meter
- J. Agilent Model 9300H Power Sensor

Validation Kit	Frequency	Target SAR(1g)	Measured	Variation	Measured
	(MHz)	(Pin=250mW)	SAR(1g)	(%)	Date
D835V2	835 MHz	2.36m W/g	2.43m W/g	2.96	2007/7/25
S/N: 490	(Head)				
D835V2	835 MHz	2.36m W/g	2.37m W/g	0.4	2007/8/6

S/N: 490	(Head)				
D835V2	835 MHz	2.36m W/g	2.36m W/g	0	2007/8/10
S/N: 490	(Head)				
D900V2	900 MHz	2.66m W/g	2.68m W/g	0.75	2007/9/29
S/N: 178	(Head)				
D900V2	900 MHz	2.69m W/g	2.68m W/g	-0.37	2007/9/23
S/N: 178	(Body)				
D900V2	900 MHz	2.69m W/g	2.70m W/g	0.37	2007/9/29
S/N: 178	(Body)				
D900V2	900 MHz	2.69m W/g	2.67m W/g	-0.74	2007/11/13
S/N: 178	(Body)				
D1900V2	1900 MHz	9.66m W/g	9.70m W/g	0.41	2007/7/26
S/N: 5d033	(Head)				
D1900V2	1900 MHz	9.66m W/g	9.82m W/g	1.66	2007/8/13
S/N: 5d033	(Head)				
D1900V2	1900 MHz	9.28 m W/g	9.71m W/g	4.6	2007/9/30
S/N: 5d027	(Head)				
D1900V2	1900 MHz	9.67 m W/g	9.84m W/g	1.75	2007/9/12
S/N: 5d027	(Body)				
D1900V2	1900 MHz	9.67 m W/g	9.82m W/g	1.55	2007/9/30
S/N: 5d027	(Body)				
D1900V2	1900 MHz	9.67 m W/g	9.53m W/g	-1.44	2007/11/14
S/N: 5d027	(Body)				

Table 1. System validation (follow manufacture target value)

### 1.11 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this Head-simulant fluid were measured by using the HP Model 85070D Dielectric Probe (rates frequency band 200 MHz to 20 GHz) in conjunction with HP 8753D Network Analyzer (30 KHz-6000MHz) by using a procedure detailed in Section V.

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The depth of the tissue simulant in the ear reference point of the phantom was 15cm±5mm during all tests. (Fig .2)

Frequency (MHz)	Tissue type	Measurement date/ Limits	Dielectric Parameters		
			$\rho$	$\sigma$ (S/m)	Simulated Tissue Temperature(°C)
835	Head	Measured, 2007.07.25	42.2	0.884	22.2



		Recommended Limits	39.4-43.6	0.86-1.05	20-24
835	Head	Measured, 2007.08.06	42.3	0.881	22.2
		Recommended Limits	39.4-43.6	0.86-1.05	20-24
835	Head	Measured, 2007.08.10	42.3	0.878	22.3
		Recommended Limits	39.4-43.6	0.86-1.05	20-24
900	Head	Measured, 2007.09.29	40.9	1	21.7
		Recommended Limits	39.4-43.6	0.86-1.03	20-24
900	Body	Measured, 2007.09.23	55.5	1.03	21.7
		Recommended Limits	52.3-58	0.92-1.1	20-24
900	Body	Measured, 2007.09.29	55.3	0.994	21.7
		Recommended Limits	52.3-58	0.92-1.1	20-24
900	Body	Measured, 2007.11.13	55.5	1.03	21.7
		Recommended Limits	52.3-58	0.92-1.1	20-24
1900	Head	Measured, 2007.07.26	41	1.37	21.7
		Recommended Limits	38-42	1.33-1.47	20-24
1900	Head	Measured, 2007.08.13	41	1.37	21.7
		Recommended Limits	38-42	1.33-1.47	20-24
1900	Head	Measured, 2007.09.30	39.5	1.42	21.7
		Recommended Limits	38-42	1.33-1.47	20-24
1900	Body	Measured, 2007.09.12	52.4	1.58	21.7
		Recommended Limits	50.6-56	1.38-1.6	20-24
1900	Body	Measured, 2007.09.30	52.3	1.58	21.7
		Recommended Limits	50.6-56	1.38-1.6	20-24
1900	Body	Measured, 2007.11.14	53.2	1.58	21.7
		Recommended Limits	50.6-56	1.38-1.6	20-24

Table 2. Dielectric Parameters of Tissue Simulant Fluid

Band 850(Body) Frequency (MHz)	Channel	Target	Permittivity		Target	Conductivity	
			Measurement Date	Variation		Measurement Date	Variation
Low(824.2)	128	55.2	54	2.22%	0.97	0.925	4.86%
Mid(836.6)	190		53.9	2.41%		0.925	4.86%
High(848.8)	251		53.5	3.17%		0.944	2.75%

Table 3. Dielectric Parameters of Tissue Simulant Fluid (follow P1528 target value)

The composition of the brain tissue simulating liquid:

Ingredients (% by weight)	Frequency (MHz)									
	450		835		915		1900		2450	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	38.56	51.16	41.45	52.4	41.05	56.0	54.9	40.4	62.7	73.2
Salt (NaCl)	3.95	1.49	1.45	1.4	1.35	0.76	0.18	0.5	0.5	0.04
Sugar	56.32	46.78	56.0	45.0	56.5	41.76	0.0	58.0	0.0	0.0
HEC	0.98	0.52	1.0	1.0	1.0	1.21	0.0	1.0	0.0	0.0
Bactericide	0.19	0.05	0.1	0.1	0.1	0.27	0.0	0.1	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	0.0	0.0	44.92	0.0	0.0	26.7
Dielectric Constant	43.42	58.0	42.54	56.1	42.0	56.8	39.9	54.0	39.8	52.5
Conductivity (S/m)	0.85	0.83	0.91	0.95	1.0	1.07	1.42	1.45	1.88	1.78

The composition of the brain tissue simulating liquid for 900 & 1900 band:

Ingredient	900MHz(Head)	900Mhz(Body)	1900MHz(Head)	1900Mhz(Body)
DGMBE	X	X	444.52 g	300.67
Water	532.98 g	631.68 g	552.42 g	716.56 g
Salt	18.3 g	11.72 g	3.06 g	4.0 g
Preventol D-7	2.4 g	1.2g	X	X
Cellulose	3.2 g	X	X	X
Sugar	766.0 g	600 g	X	X
Total amount	1 L (1.0kg)	1 L (1.0kg)	1 L (1.0kg)	1 L (1.0kg)

Table 4. Recipes for tissue simulating liquid

### 1.12 Test Standards and Limits

According to FCC 47CFR §2.1093(d) The limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate ("SAR") in Section 4.2 of "IEEE Standard for Safety

Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1-1992, Copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5. Copyright NCRP, 1986, Bethesda, Maryland 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards. The criteria to be used are specified in paragraphs (d)(1) and (d)(2) of this section and shall apply for portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz are to be evaluated in terms of the MPE limits specified in § 1.1310 of this chapter. Measurements and calculations to demonstrate compliance with MPE field strength or power density limits for devices operating above 6 GHz should be made at a minimum distance of 5 cm from the radiating source.

(1) Limits for Occupational/Controlled exposure: 0.4 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 8 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 20 W/kg, as averaged over an 10 grams of tissue (defined as a tissue volume in the shape of a cube). Occupational/Controlled limits apply when persons are exposed as a consequence of their employment provided these persons are fully aware of and exercise control over their exposure. Awareness of exposure can be accomplished by use of warning labels or by specific training or education through appropriate means, such as an RF safety program in a work environment.

(2) Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.(Table .5)

<b>Human Exposure</b>	<b>Uncontrolled Environment General Population</b>	<b>Controlled Environment Occupational</b>
<b>Spatial Peak SAR (Brain)</b>	1.60 m W/g	8.00 m W/g
<b>Spatial Average SAR (Whole Body)</b>	0.08 m W/g	0.40 m W/g
<b>Spatial Peak SAR (Hands/Feet/Ankle/Wrist)</b>	4.00 m W/g	20.00 m W/g

Table .5 RF exposure limits

Notes:

1. Uncontrolled environments are defined as locations where there is potential exposure of individuals who have no knowledge or control of their potential exposure.
2. Controlled environments are defined as locations where there is potential exposure of individuals who have knowledge of their potential exposure and can exercise control over their exposure.

## 2.Summary of Results

### GSM 850 MHZ

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.317	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.295	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.238	22.1	21.7
<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.229	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.220	22.1	21.7
<b>Left Head Slider-on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.294	22.1	21.7
<b>Right Head Slider-on(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.194	22.1	21.7
<b>Left Head Slider-on(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.66dbm	0.269	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]

850 MHz	128	824.2	32.46dbm	1.25	22.1	21.7
	190	836.6	32.66dbm	1.24	22.1	21.7
	251	848.8	32.76dbm	1.3	22.1	21.7
<b>Body worn- repeated for EUT front to phantom</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	0.535	22.1	21.7
<b>Body worn-repeated with Memory card</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	1.37	22.1	21.7
<b>Body worn-repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	1.32	22.1	21.7
<b>Body worn-repeated with Samsung Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	1.38	22.1	21.7
<b>Body worn-repeated with Sanyo Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
<b>850 MHz</b>	<b>251</b>	<b>848.8</b>	<b>32.76dbm</b>	<b>1.42</b>	22.1	21.7
<b>Body worn-repeated with Headset 1</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	0.919	22.1	21.7
<b>Body worn-repeated with Headset 2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	0.920	22.1	21.7
<b>Body worn-repeated with WiFi b active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	1.05	22.1	21.7
<b>Body worn-repeated with WiFi g active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]

850 MHz	251	848.8	32.76dbm	1.01	22.1	21.7
<b>Body worn-repeated with EGPRS mode</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	0.355	22.1	21.7
<b>Body worn-repeated with Sanyo Battery &amp; Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.76dbm	1.1	22.1	21.7

## PCS 1900 MHZ

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.358	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.384	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.571	22.1	21.7
<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.489	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.355	22.1	21.7
<b>Left Head Slider- on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.521	22.1	21.7
<b>Right Head Slider- on (15° Tilt Position)</b>						

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.463	22.1	21.7
<b>Left Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.518	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.79dbm	0.944	22.1	21.7
	661	1880	29.88dbm	0.951	22.1	21.7
	810	1909.8	30.08dbm	0.907	22.1	21.7
<b>Body worn-repeated with Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.376	22.1	21.7

## WCDMA B2

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.664	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.752	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.95dbm	0.865	22.1	21.7
	9400	1880.0	23.16dbm	0.983	22.1	21.7
	9538	1907.6	22.98dbm	0.963	22.1	21.7
<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.95dbm	0.866	22.1	21.7



	9400	1880.0	23.16dbm	0.925	22.1	21.7
	9538	1907.6	22.98dbm	0.876	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.759	22.1	21.7
<b>Left Head Slider- on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.95dbm	1.02	22.1	21.7
	<b>9400</b>	<b>1880.0</b>	<b>23.16dbm</b>	<b>1.06</b>	22.1	21.7
	9538	1907.6	22.98dbm	1.04	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Samsung Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	1.04	22.1	21.7
<b>Right Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.95dbm	0.813	22.1	21.7
	9400	1880.0	23.16dbm	0.864	22.1	21.7
	9538	1907.6	22.98dbm	0.917	22.1	21.7
<b>Left Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA_ B2	9262	1852.4	22.95dbm	1.00	22.1	21.7
	9400	1880.0	23.16dbm	1.05	22.1	21.7
	9538	1907.6	22.98dbm	1.01	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.904	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with MemoryCard active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.907	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Samsung Battery active</b>						

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.855	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Sanyo Battery active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.856	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Wibi b active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.786	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Wibi g active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.833	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.95dbm	0.789	22.1	21.7
	9400	1880.0	23.16dbm	0.862	22.1	21.7
	9538	1907.6	22.98dbm	0.832	22.1	21.7
<b>Body worn-repeated with Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.16dbm	0.786	22.1	21.7
<b>Body worst case-repeated with HSDPA mode</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.04dbm	0.884	22.1	21.7

## WCDMA B5

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.466	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.453	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.348	22.1	21.7
<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.352	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.315	22.1	21.7
<b>Left Head Slider- on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.433	22.1	21.7
<b>Right Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.282	22.1	21.7
<b>Left Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.16dbm	0.416	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	23.20dbm	0.877	22.1	21.7
	4183	836.6	23.16dbm	0.796	22.1	21.7
	4233	846.6	23.02dbm	0.843	22.1	21.7
<b>Body worn-repeated with Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	23.20dbm	0.840	22.1	21.7
<b>Body worst case-repeat with HSDPA mode</b>						

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	23.57dbm	1.09	22.1	21.7

Note: SAR measurement results for the Mobile Phone at maximum output power.

## Second solution measurement result (changed PCM & Camera)

### GSM 850 MHZ

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850MHZ	190	836.6	32.6dbm	0.380	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.6dbm	0.364	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.6dbm	0.265	22.1	21.7
<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.6dbm	0.249	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.6dbm	0.223	22.1	21.7
<b>Left Head Slider-on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.6dbm	0.319	22.1	21.7
<b>Right Head Slider-on(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.6dbm	0.182	22.1	21.7
<b>Left Head Slider-on(15° Tilt Position)</b>						

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	190	836.6	32.6dbm	0.316	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	32.5dbm	1.51	22.1	21.7
	190	836.6	32.6dbm	1.55	22.1	21.7
	<b>251</b>	<b>848.8</b>	<b>32.5dbm</b>	<b>1.58</b>	22.1	21.7
<b>Body worn- repeated for EUT front to phantom</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.567	22.1	21.7
<b>Body worn-repeated with Memory card</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.56	22.1	21.7
<b>Body worn-repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.57	22.1	21.7
<b>Body worn-repeated with Samsung Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.49	22.1	21.7
<b>Body worn-repeated with Sanyo Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.54	22.1	21.7
<b>Body worn-repeated with Headset 1</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.28	22.1	21.7
<b>Body worn-repeated with Headset 2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.29	22.1	21.7
<b>Body worn-repeated with WiFi b active</b>						

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.24	22.1	21.7
<b>Body worn-repeated with WiFi g active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.19	22.1	21.7
<b>Body worn-repeated with EGPRS mode</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.311	22.1	21.7
<b>Body worn-repeated with Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	1.24	22.1	21.7

## PCS 1900 MHZ

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.0dbm	0.272	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.0dbm	0.318	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.403	22.1	21.7
<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	29.88dbm	0.381	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.0dbm	0.292	22.1	21.7

<b>Left Head Slider- on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.0dbm	0.527	22.1	21.7
<b>Right Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.0dbm	0.377	22.1	21.7
<b>Left Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.0dbm	0.474	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.8dbm	0.713	22.1	21.7
	661	1880	30.0dbm	0.695	22.1	21.7
	810	1909.8	30.1dbm	0.638	22.1	21.7
<b>Body worn-repeated with Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.8dbm	0.518	22.1	21.7

## WCDMA B2

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.547	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.607	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.769	22.1	21.7

<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.727	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.533	22.1	21.7
<b>Left Head Slider- on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	23.14dbm	0.842	22.1	21.7
	9400	1880.0	23.3dbm	1	22.1	21.7
	9538	1907.6	23.15dbm	0.892	22.1	21.7
<b>Right Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA_ B2	9400	1880.0	23.3dbm	0.680	22.1	21.7
<b>Left Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA_ B2	9262	1852.4	23.14dbm	0.822	22.1	21.7
	9400	1880.0	23.3dbm	0.905	22.1	21.7
	9538	1907.6	23.15dbm	0.811	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.995	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with MemoryCard active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.988	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Samsung Battery active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	1.05	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Sanyo Battery active</b>						



Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	1	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Wibi b active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	1.01	22.1	21.7
<b>Left Head Slider- on (Cheek Position) -repeated with Wibi g active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.990	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	23.14dbm	0.857	22.1	21.7
	9400	1880.0	23.3dbm	0.934	22.1	21.7
	9538	1907.6	23.15dbm	0.779	22.1	21.7
<b>Body worn-repeated with Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.3dbm	0.759	22.1	21.7
<b>Body worst case-repeated with HSDPA mode</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880.0	23.11dbm	0.829	22.1	21.7

## WCDMA B5

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.488	22.1	21.7
<b>Left Head Slider-off (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.471	22.1	21.7
<b>Right Head Slider-off(15° Tilt Position)</b>						

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.373	22.1	21.7
<b>Left Head Slider-off(15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.354	22.1	21.7
<b>Right Head Slider-on(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.367	22.1	21.7
<b>Left Head Slider- on (Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.470	22.1	21.7
<b>Right Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.302	22.1	21.7
<b>Left Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	23.12dbm	0.461	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	23.24dbm	1.07	22.1	21.7
	4183	836.6	23.16dbm	0.818	22.1	21.7
	4233	846.6	23.07dbm	0.934	22.1	21.7
<b>Body worn-repeated with Holster_2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	23.24dbm	0.910	22.1	21.7
<b>Body worst case-repeat with HSDPA mode</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	23.63dbm	1.1	22.1	21.7

Note: SAR measurement results for the Mobile Phone at maximum output power.

### 3. Instruments List

Maunfacturer	Device	Type	Serial Number	Due date of Calibration
Stäubli	Robot	RX90BL	F03/5W05A1/A/01	N/A
Schmid& Partner Engineering AG	Dosimetric E-Field Probe	ET3DV6	1782	April 23, 2008
Schmid& Partner Engineering AG	835 MHz System Validation Dipole	D835V2	490	August 14, 2007
Schmid& Partner Engineering AG	1900 MHz System Validation Dipole	D1900V2	5d033	August 16, 2007
Schmid& Partner Engineering AG	Data acquisition Electronics	DAE3	567	September 22, 2007
Schmid& Partner Engineering AG	Software	DASY 4 V4.7	N/A	N/A
Schmid& Partner Engineering AG	Phantom	SAM Phantom V4.0	TP-1299 TP-1300	N/A
Agilent	Network Analyzer	E5070B	MY42100282	May 11, 2008
Agilent	Dielectric Probe Kit	85070D	2184	N/A
Agilent	Power Meter	E4419B	GB43311126	December 8, 2007
Agilent	Power Sensor	E9300H	MY41495308 MY41495314	December 8, 2007
Agilent	Signal Generator	E4421B	MY43350132	December 8, 2007
Empower RF Systems	Power Amplifier	2001-BBS3Q7ECK	1032 D/C 0336	May 11, 2008
Agilent	Dual Directional Coupler	777D 778D	50128 50454	December 8, 2007
Microlab	LP Filter	LA-15N LA-30N	N/A	December 8, 2007
R & S	Mobile Test Unit	CMU200	GB43345198	December 28,

2007

Schmid & Partner Engineering AG	Dosimetric E-Field Probe	EX3DV3	3526	Aug.29.2008
Schmid & Partner Engineering AG	900/1900 MHz System Validation Dipole	D900V2 D1900V2	178 5d027	Feb.19.2008 Mar.20.2008
Schmid & Partner Engineering AG	Data acquisition Electronics	DAE4	679	Apr.20.2008
Schmid & Partner Engineering AG	Software	DASY 4 V4.7 Build 53	N/A	Calibration isn't necessary
Schmid & Partner Engineering AG	Phantom	SAM	N/A	Calibration isn't necessary
Agilent	Network Analyzer	8753D	3410A05547	Nov.16.2007
Agilent	Dielectric Probe Kit	85070D	US01440168	Calibration isn't necessary
Agilent	Dual-directional coupler	778D	50313	Aug.21.2008
Agilent	RF Signal Generator	8648D	3847M00432	May.22.2008
Agilent	Power Sensor	8481H	MY41091361	Jun.04.2008
Agilent	8960 Series 10 Wireless Communication Tester	8960	GB44051912	Nov.28.2007

## 4. Measurements

Date/Time: 2007-07-25 11:43:56

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Right\\_Ear.da4](#)

**DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163**  
**Program Name: GSM850\_Right Ear**

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM850\_RE\_Cheek\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.336 mW/g

**GSM850\_RE\_Cheek\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

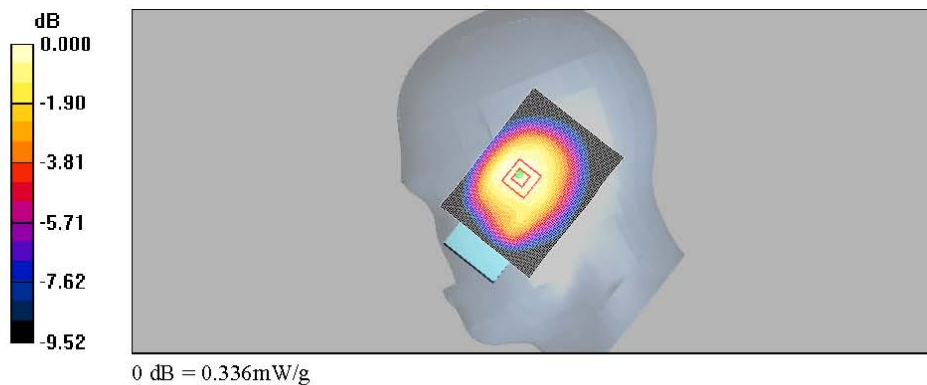
Reference Value = 16.4 V/m; Power Drift = 0.133 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.238 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.336 mW/g



Date/Time: 2007-07-25 10:23:48

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Left Ear.da4](#)

**DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163**  
**Program Name: GSM850\_Left Ear**

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$

kg/m<sup>3</sup>  
Phantom section: Left Section

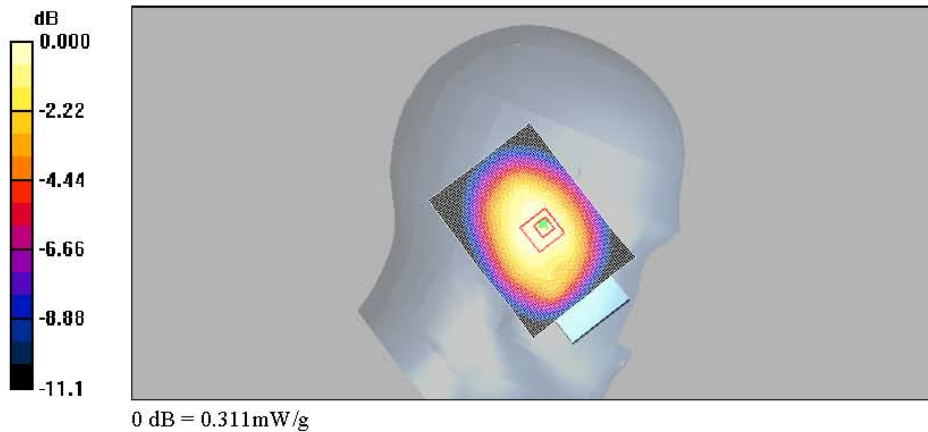
DASY4 Configuration:  
- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23  
- Sensor-Surface: 4mm (Mechanical Surface Detection)  
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22  
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300  
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM850\_LE\_Cheek\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid:  
dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.  
Maximum value of SAR (interpolated) = 0.334 mW/g

**GSM850\_LE\_Cheek\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  
dx=5mm, dy=5mm, dz=5mm  
Reference Value = 16.4 V/m; Power Drift = -0.192 dB  
Peak SAR (extrapolated) = 0.418 W/kg  
SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.219 mW/g

Info: Interpolated medium parameters used for SAR evaluation.  
Maximum value of SAR (measured) = 0.311 mW/g



Date/Time: 2007-07-25 12:02:56

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Right Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM850\_Right Ear

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:  
- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23  
- Sensor-Surface: 4mm (Mechanical Surface Detection)  
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22  
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300  
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

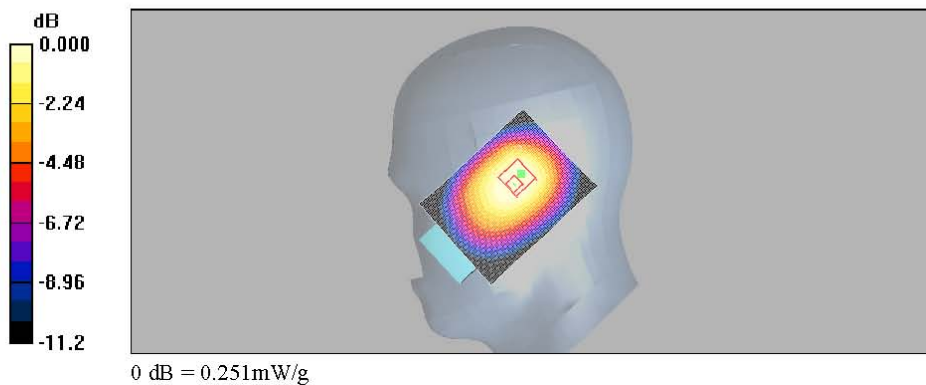
**GSM850\_RE\_Tilt\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)  
Maximum value of SAR (interpolated) = 0.250 mW/g

**GSM850\_RE\_Tilt\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  
dx=5mm, dy=5mm, dz=5mm  
Reference Value = 16.9 V/m; Power Drift = -0.021 dB  
Peak SAR (extrapolated) = 0.297 W/kg  
**SAR(1 g) = 0.238 mW/g; SAR(10 g) = 0.170 mW/g**

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.251 mW/g



Date/Time: 2007-07-25 10:42:27

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Left\\_Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM850\_Left Ear

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM850\_LE\_Tilt\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.249 mW/g

**GSM850\_LE\_Tilt\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm

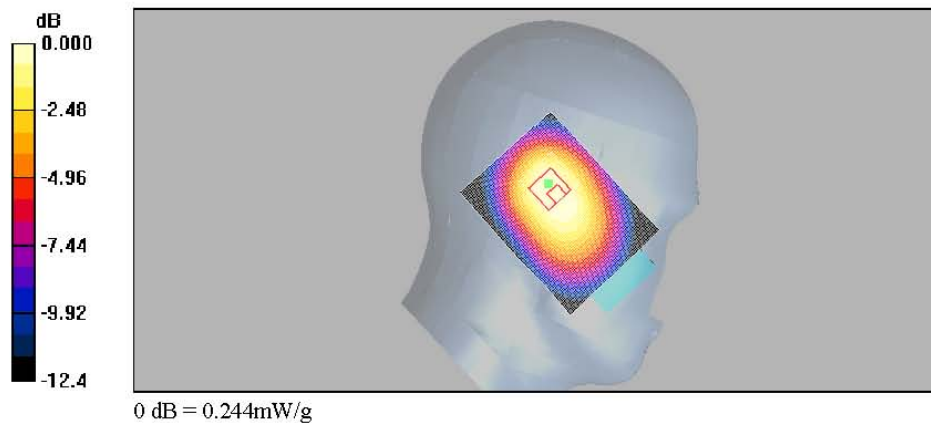
Reference Value = 16.4 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.159 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.244 mW/g





Date/Time: 2007-07-25 1:12:42

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Right Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM850\_Right Ear

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM850\_RE\_Cheek\_Slide Open\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.233 mW/g

**GSM850\_RE\_Cheek\_Slide Open\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm

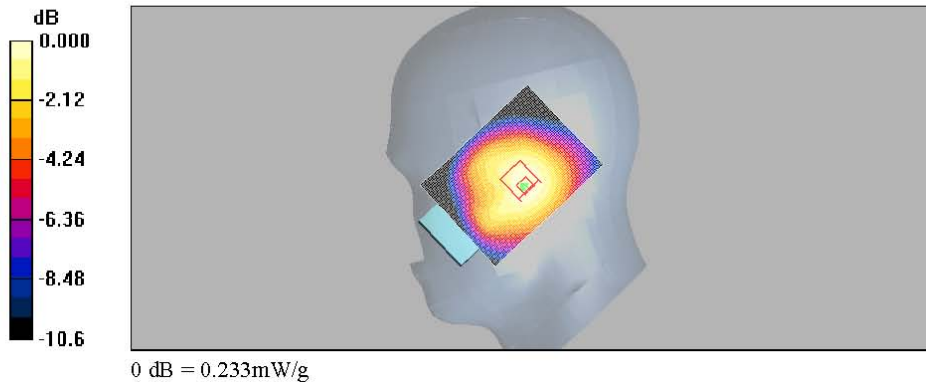
Reference Value = 13.9 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.284 W/kg

**SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.164 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.233 mW/g



Date/Time: 2007-07-25 11:01:34

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Left Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM850\_Left Ear

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM850\_LE\_Cheek\_Slide Open\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.314 mW/g

**GSM850\_LE\_Cheek\_Slide Open\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm

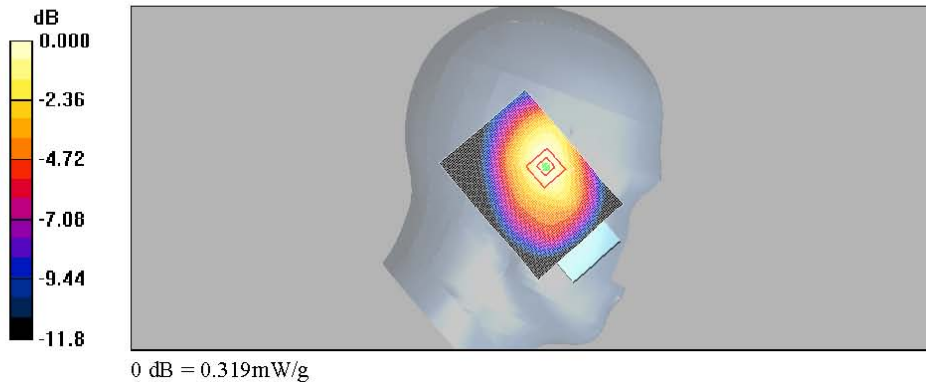
Reference Value = 13.2 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.431 W/kg

SAR(1 g) = 0.294 mW/g; SAR(10 g) = 0.197 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.319 mW/g



Date/Time: 2007-07-25 1:31:44

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Right\\_Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM850\_Right Ear

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM850\_RE\_Tilt\_Slide Open\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.207 mW/g

**GSM850\_RE\_Tilt\_Slide Open\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm

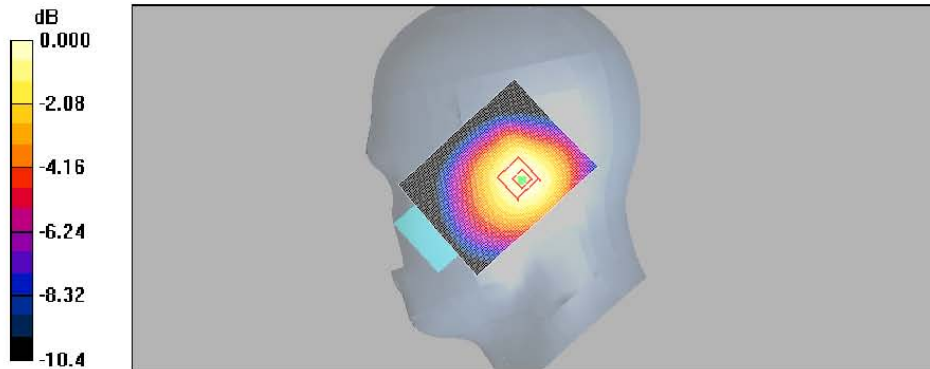
Reference Value = 13.6 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 0.242 W/kg

SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.141 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.207 mW/g



Date/Time: 2007-07-25 11:20:45

Test Laboratory: SGS Testing Korea  
File Name: [GSM850\\_Left Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM850\_Left Ear

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.886$  mho/m;  $\epsilon_r = 42.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.18, 6.18, 6.18); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP\_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM850\_LE\_Tilt\_Slide Open\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.293 mW/g

**GSM850\_LE\_Tilt\_Slide Open\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:

dx=5mm, dy=5mm, dz=5mm

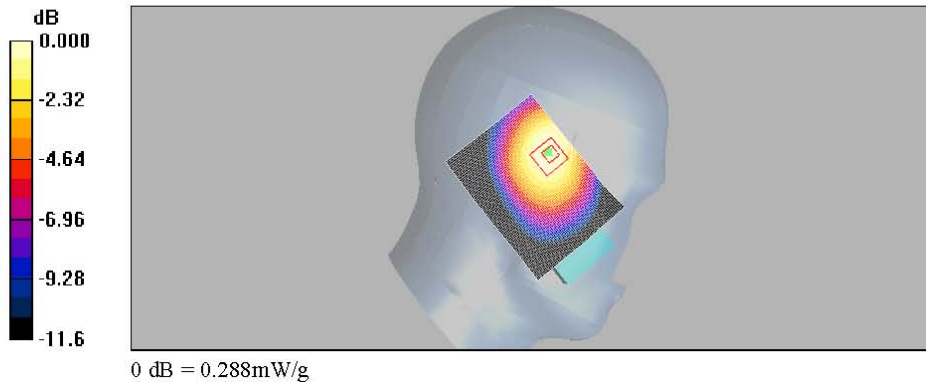
Reference Value = 12.8 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 0.392 W/kg

**SAR(1 g) = 0.269 mW/g; SAR(10 g) = 0.183 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.288 mW/g



## Body\_CH128

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.925$  mho/m;

$\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.34 mW/g

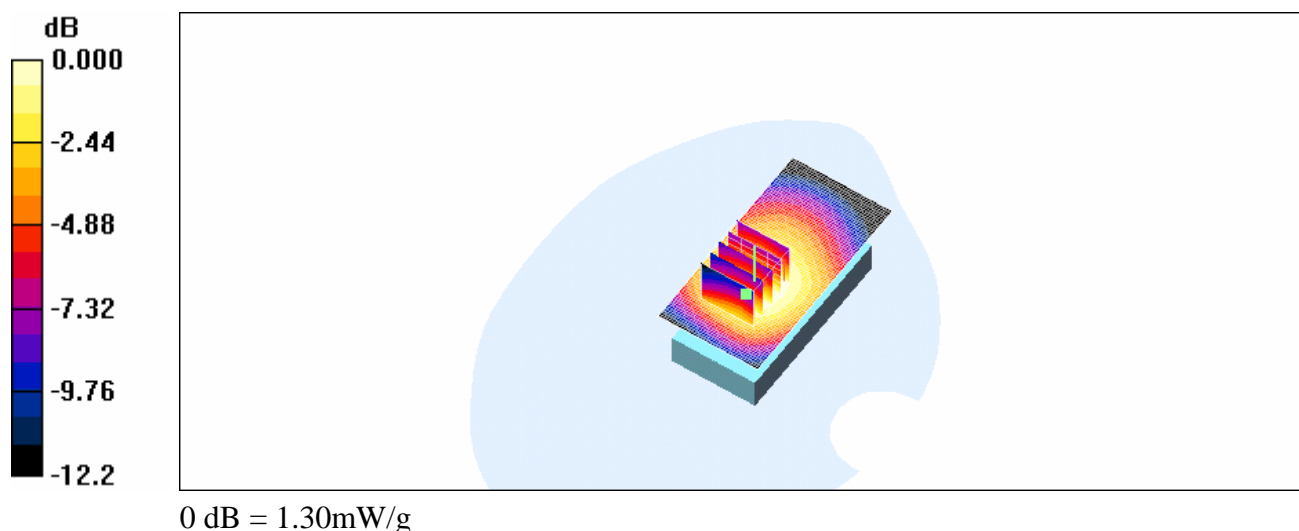
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 1.65 W/kg

**SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.899 mW/g**

Maximum value of SAR (measured) = 1.30 mW/g



## Body\_CH190

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.925$  mho/m;

$\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.32 mW/g

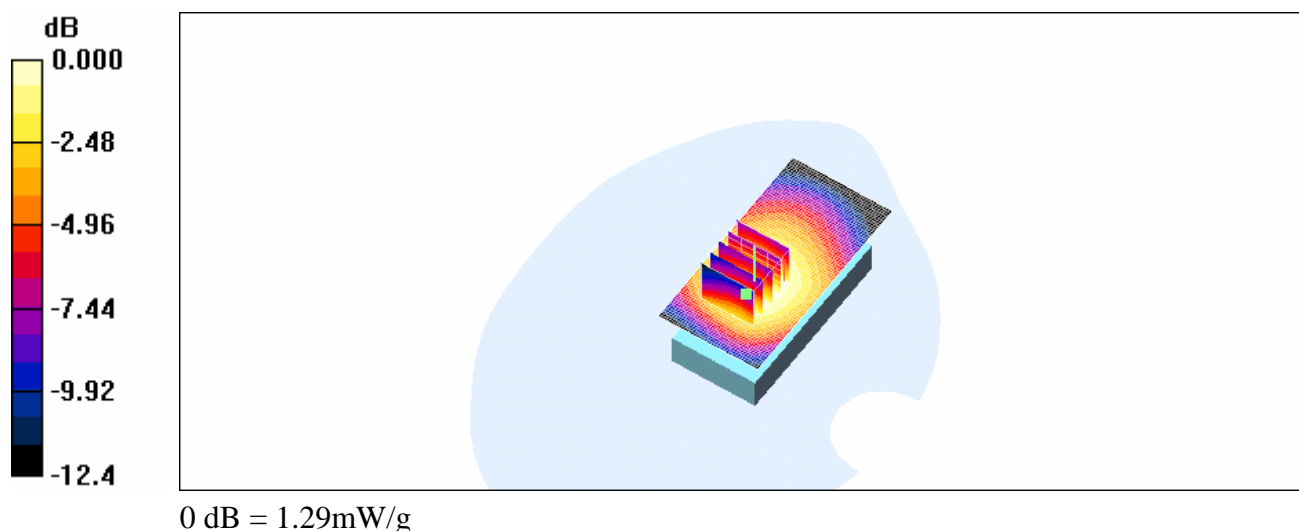
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 1.64 W/kg

**SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.892 mW/g**

Maximum value of SAR (measured) = 1.29 mW/g





## Body\_CH251

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.40 mW/g

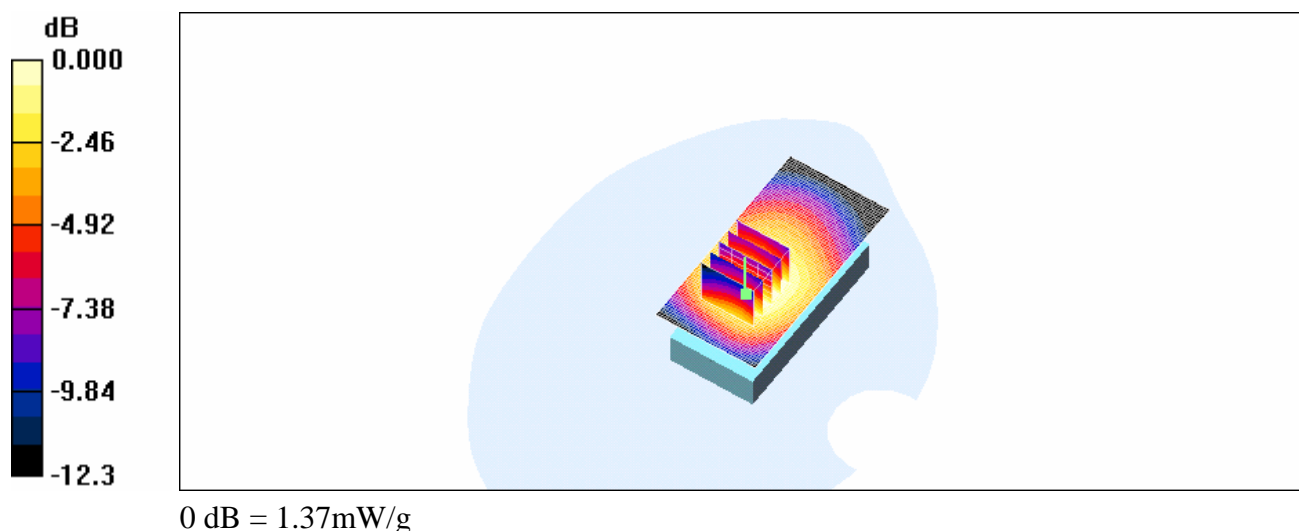
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.7 V/m; Power Drift = -0.154 dB

Peak SAR (extrapolated) = 1.76 W/kg

**SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.935 mW/g**

Maximum value of SAR (measured) = 1.37 mW/g



## Body\_CH251\_ repeated in EUT front to Phantom

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.568 mW/g

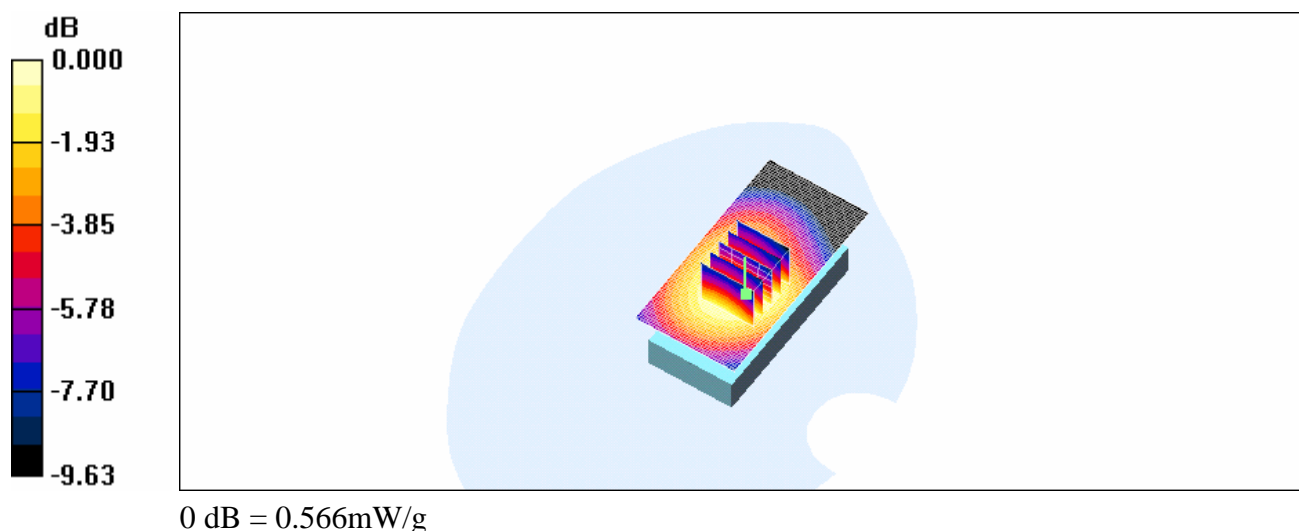
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.1 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.695 W/kg

**SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.393 mW/g**

Maximum value of SAR (measured) = 0.566 mW/g





## Body\_CH251\_ repeated with Memory Card active

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.48 mW/g

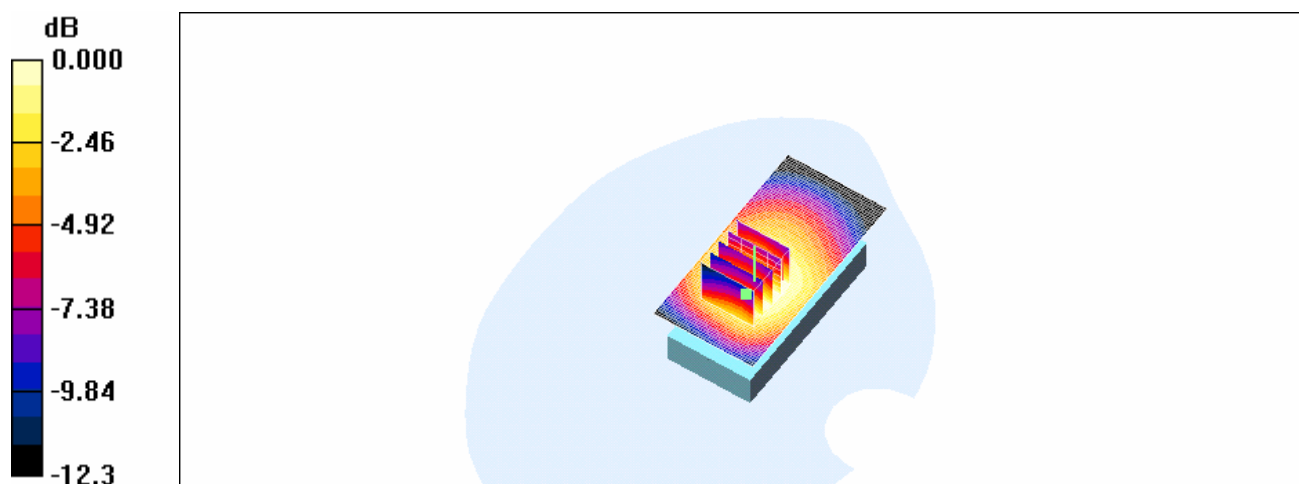
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.8 V/m; Power Drift = -0.150 dB

Peak SAR (extrapolated) = 1.81 W/kg

**SAR(1 g) = 1.37 mW/g; SAR(10 g) = 0.995 mW/g**

Maximum value of SAR (measured) = 1.43 mW/g



## Body\_CH251\_ repeated with Bluetooth active

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.42 mW/g

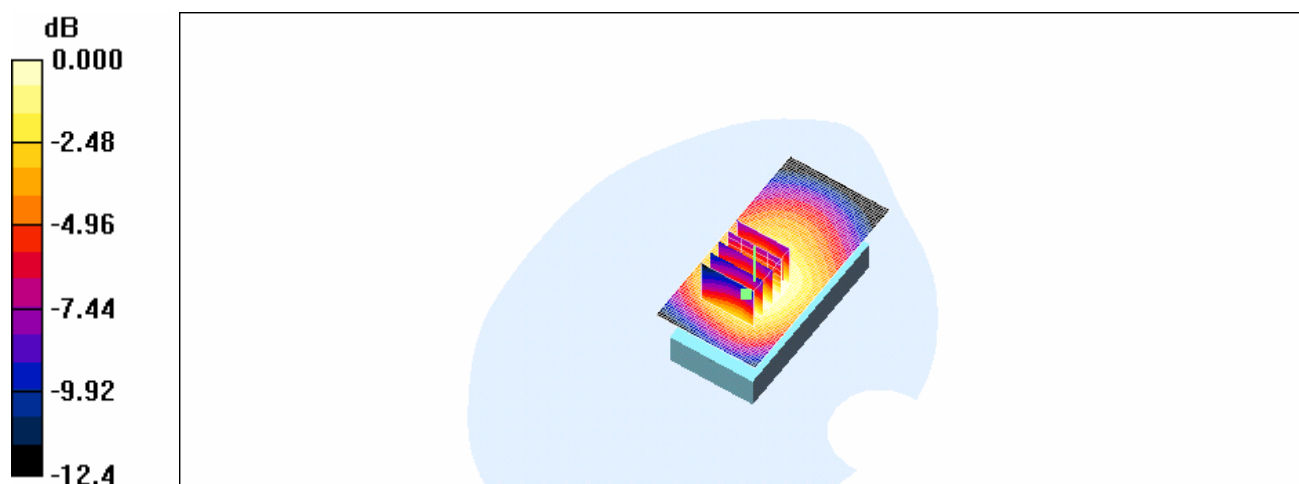
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.7 V/m; Power Drift = -0.182 dB

Peak SAR (extrapolated) = 1.77 W/kg

**SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.947 mW/g**

Maximum value of SAR (measured) = 1.38 mW/g



0 dB = 1.38mW/g

## Body\_CH251\_ repeated with Samsung Battery

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.48 mW/g

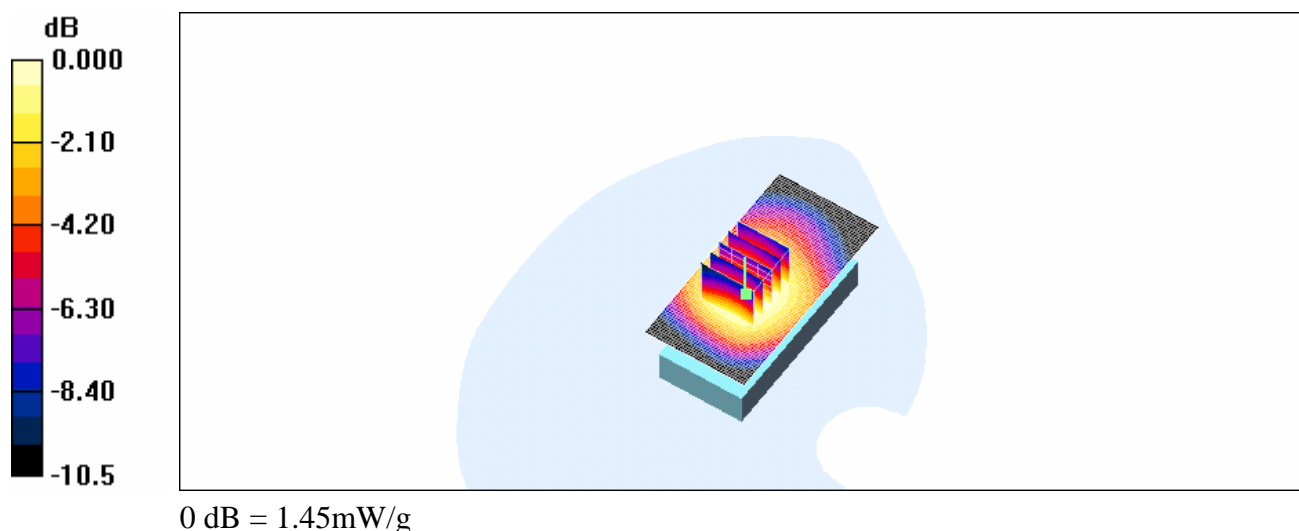
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 1.80 W/kg

**SAR(1 g) = 1.38 mW/g; SAR(10 g) = 1 mW/g**

Maximum value of SAR (measured) = 1.45 mW/g



## Body\_CH251\_ repeated with Sanyo Battery

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.56 mW/g

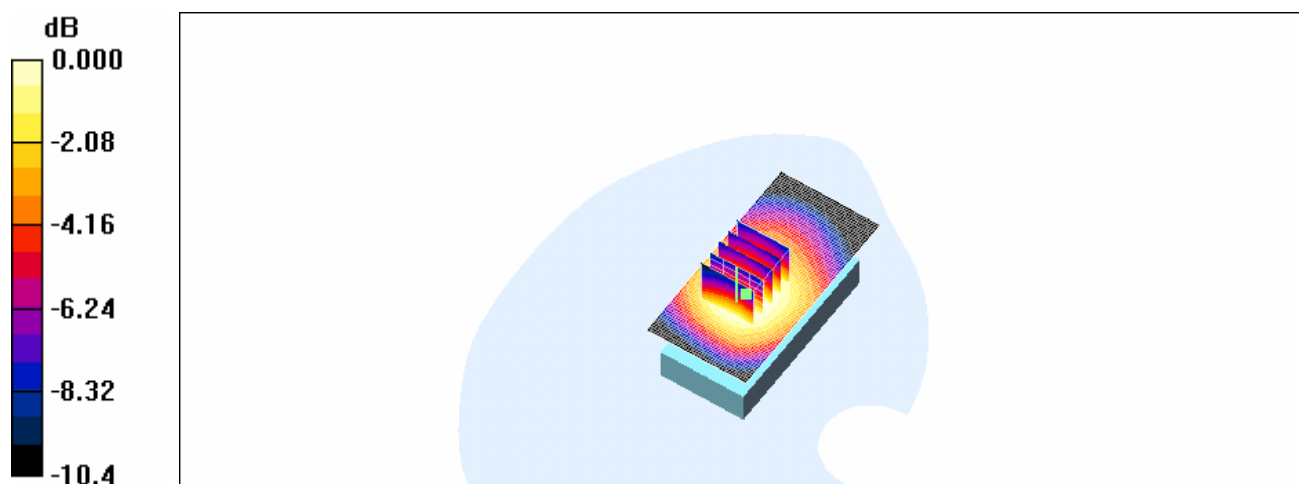
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = -0.071 dB

Peak SAR (extrapolated) = 1.90 W/kg

**SAR(1 g) = 1.42 mW/g; SAR(10 g) = 1.02 mW/g**

Maximum value of SAR (measured) = 1.48 mW/g



0 dB = 1.48mW/g

## Body\_CH251\_ repeated with Headset\_1 active

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.45 mW/g

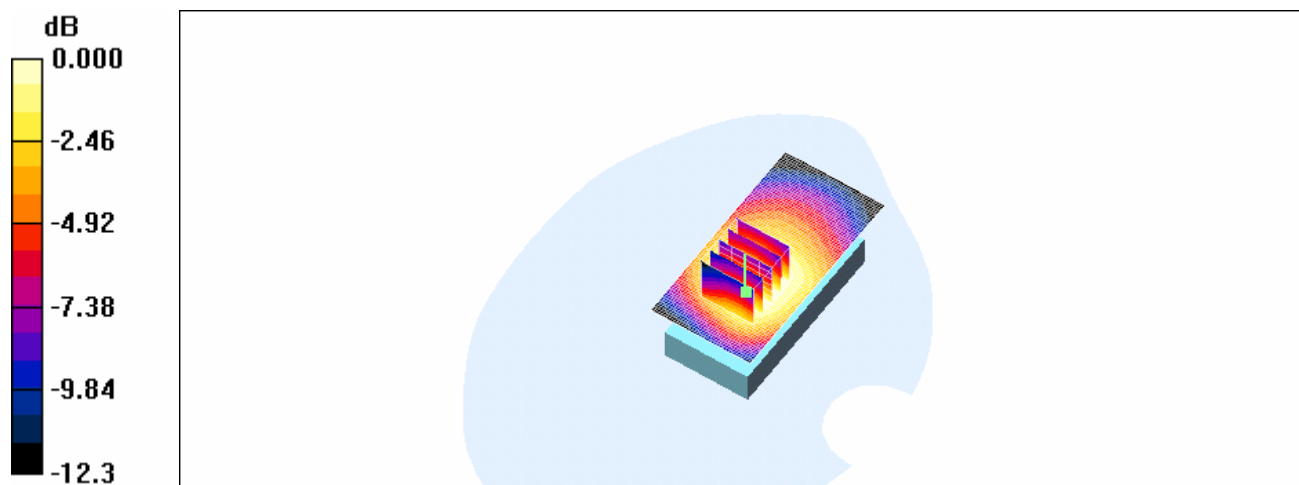
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = -0.186 dB

Peak SAR (extrapolated) = 1.73 W/kg

**SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.919 mW/g**

Maximum value of SAR (measured) = 1.35 mW/g



## Body\_CH251\_ repeated with Headset\_2 active

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;  
 $\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.38 mW/g

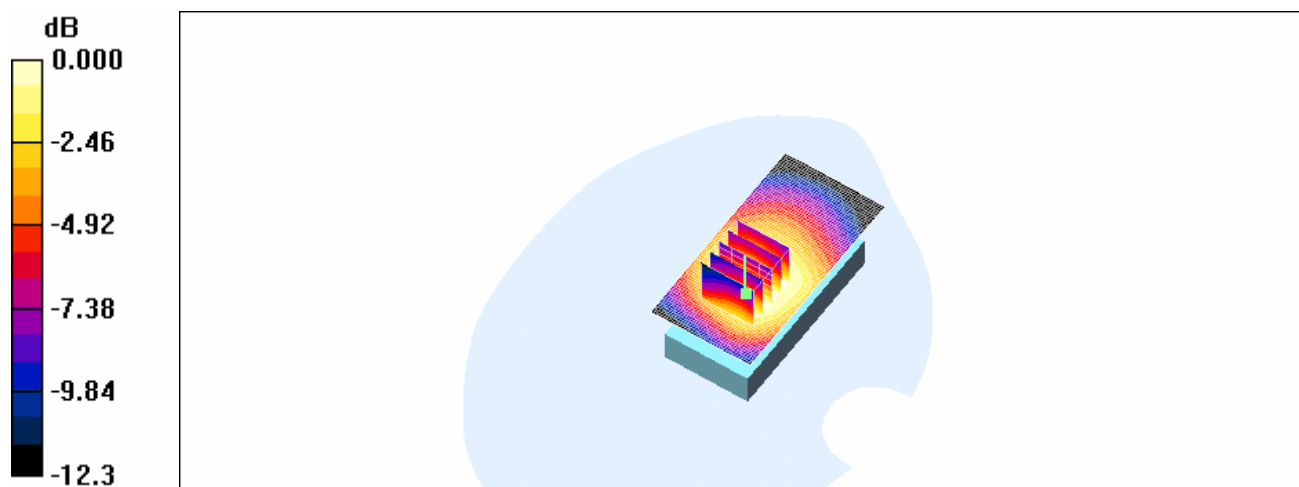
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.154 dB

Peak SAR (extrapolated) = 1.70 W/kg

**SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.920 mW/g**

Maximum value of SAR (measured) = 1.35 mW/g



0 dB = 1.35mW/g

## Body\_CH251\_ repeated with WiFi b active

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.18 mW/g

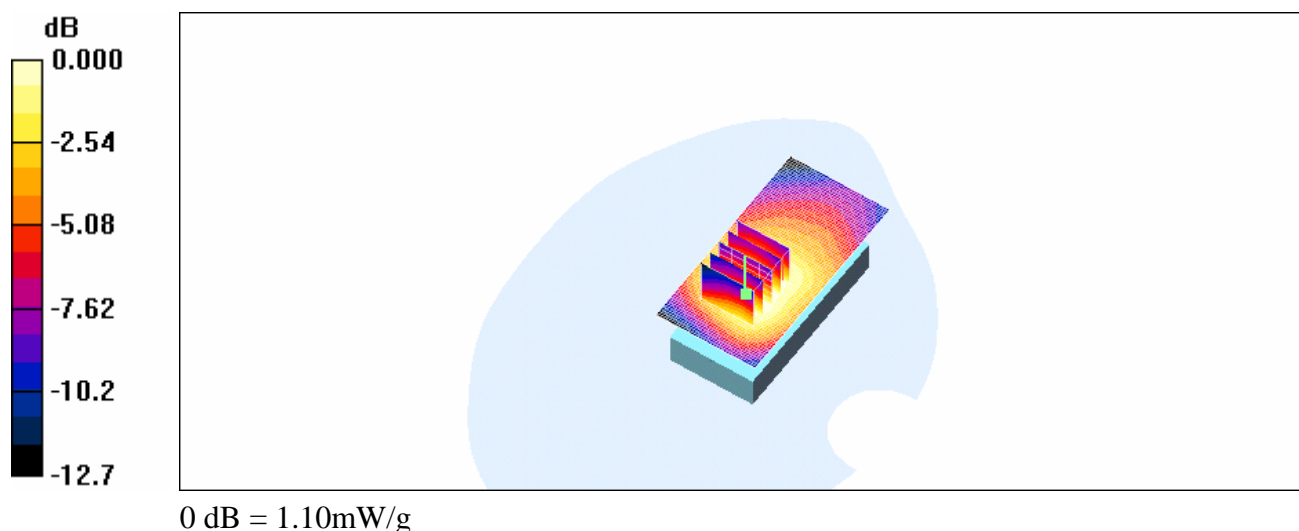
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.7 V/m; Power Drift = -0.201 dB

Peak SAR (extrapolated) = 1.44 W/kg

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.735 mW/g**

Maximum value of SAR (measured) = 1.10 mW/g



## Body\_CH251\_ repeated with WiFi g active

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.12 mW/g

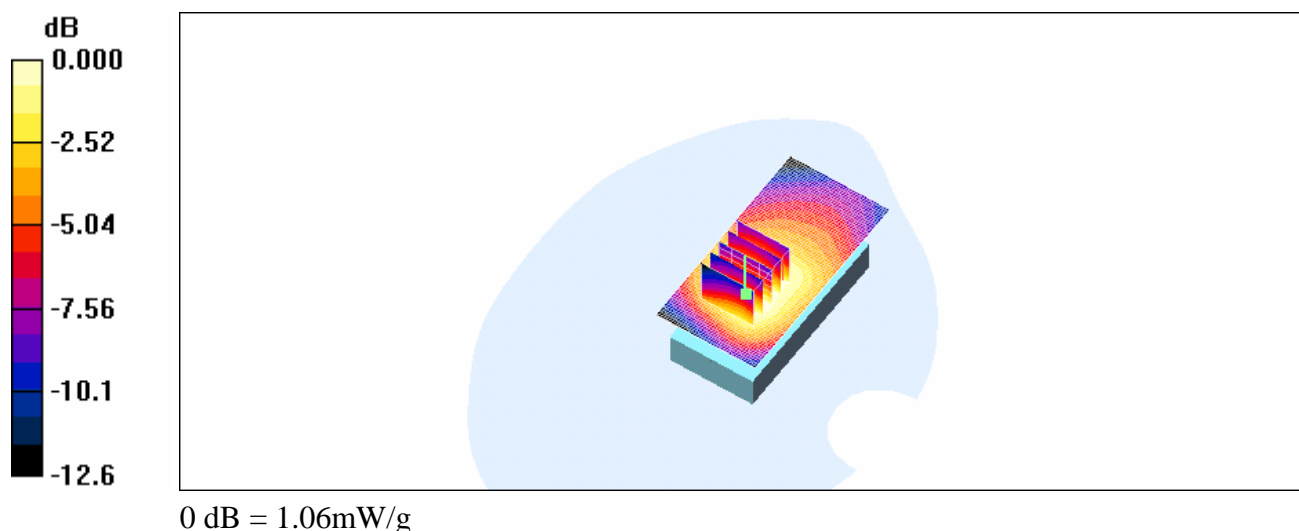
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.2 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.709 mW/g**

Maximum value of SAR (measured) = 1.06 mW/g





## Body\_CH251\_ repeated with EGPRS mode

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.383 mW/g

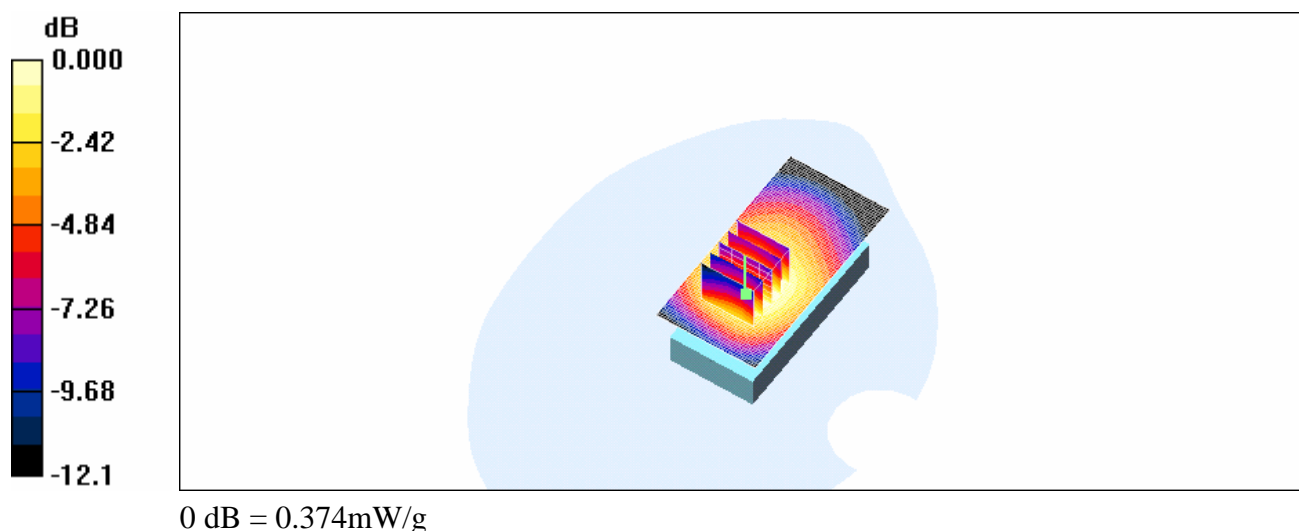
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.86 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.475 W/kg

**SAR(1 g) = 0.355 mW/g; SAR(10 g) = 0.255 mW/g**

Maximum value of SAR (measured) = 0.374 mW/g



## Body\_CH251\_ repeated with Sanyo Battery & Holster\_2

DUT: Wing200; Type: GSM; Serial: TY722FY00163

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4

Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 0.944$  mho/m;

$\epsilon_r = 53.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; ConvF(10.93, 10.93, 10.93); Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2007/4/20
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.22 mW/g

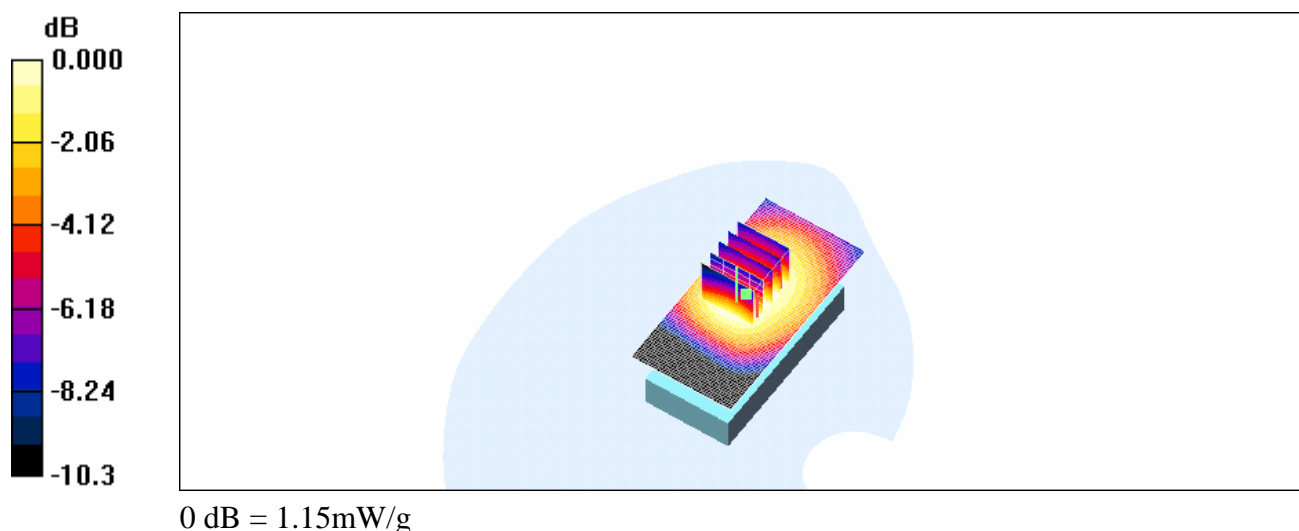
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.65 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 1.47 W/kg

**SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.798 mW/g**

Maximum value of SAR (measured) = 1.15 mW/g



Date/Time: 2007-07-26 9:55:02

Test Laboratory: SGS Testing Korea  
File Name: [GSM1900\\_Right\\_Ear.da4](#)

**DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163**  
**Program Name: GSM1900\_Right Ear**

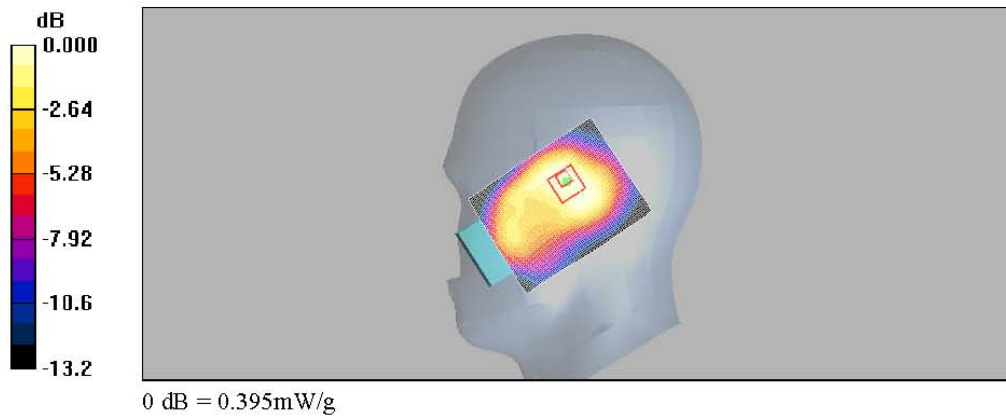
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 41.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.16, 5.16, 5.16); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM1900\_RE\_Cheek\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.416 mW/g

**GSM1900\_RE\_Cheek\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 17.9 V/m; Power Drift = -0.091 dB  
Peak SAR (extrapolated) = 0.540 W/kg  
**SAR(1 g) = 0.358 mW/g; SAR(10 g) = 0.239 mW/g**  
Maximum value of SAR (measured) = 0.395 mW/g



Date/Time: 2007-07-26 11:29:15

Test Laboratory: SGS Testing Korea  
File Name: [GSM1900\\_Left Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM1900\_Left Ear

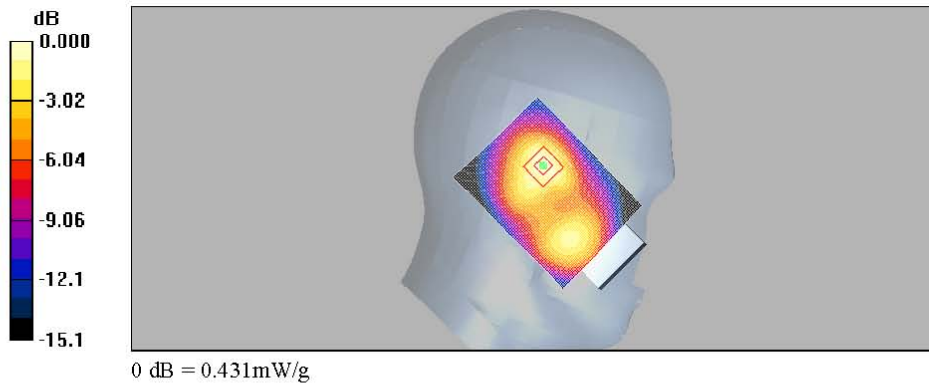
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 41.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.16, 5.16, 5.16); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM1900\_LE\_Cheek\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.428 mW/g

**GSM1900\_LE\_Cheek\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 15.3 V/m; Power Drift = -0.157 dB  
Peak SAR (extrapolated) = 0.606 W/kg  
**SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.223 mW/g**  
Maximum value of SAR (measured) = 0.431 mW/g



Date/Time: 2007-07-26 10:14:26

Test Laboratory: SGS Testing Korea  
File Name: [GSM1900\\_Right\\_Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM1900\_Right Ear

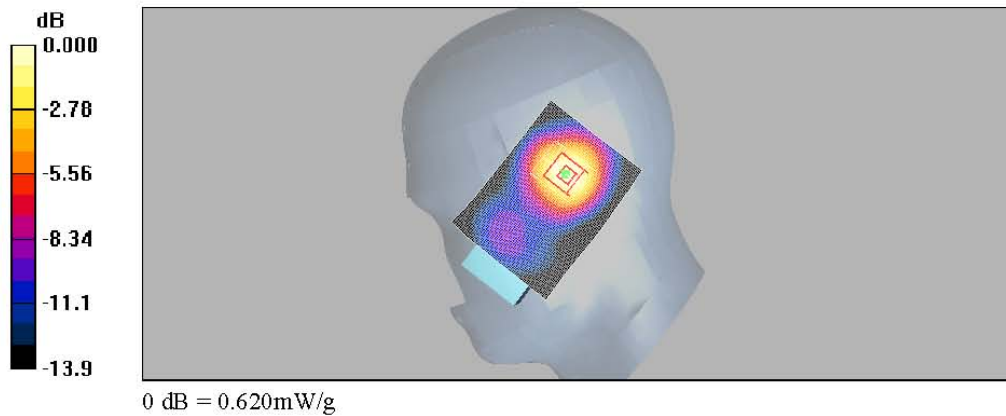
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 41.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.16, 5.16, 5.16); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM1900\_RE\_Tilt\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.660 mW/g

**GSM1900\_RE\_Tilt\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 23.1 V/m; Power Drift = -0.098 dB  
Peak SAR (extrapolated) = 0.854 W/kg  
**SAR(1 g) = 0.571 mW/g; SAR(10 g) = 0.345 mW/g**  
Maximum value of SAR (measured) = 0.620 mW/g



Date/Time: 2007-07-26 11:51:36

Test Laboratory: SGS Testing Korea  
File Name: [GSM1900\\_Left\\_Ear.da4](#)

DUT: WING200; Type: Slide Keyboard; Serial: TY722FY00163  
Program Name: GSM1900\_Left Ear

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 41.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.16, 5.16, 5.16); Calibrated: 2007-04-23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2006-09-22
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**GSM1900\_LE\_Tilt\_Slide Close\_Mid/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.539 mW/g

**GSM1900\_LE\_Tilt\_Slide Close\_Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 19.6 V/m; Power Drift = -0.069 dB  
Peak SAR (extrapolated) = 0.780 W/kg  
**SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.289 mW/g**  
Maximum value of SAR (measured) = 0.545 mW/g

