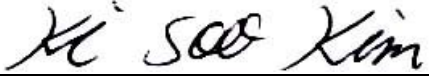




# SAR TEST REPORT

HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD



EUT Type:	Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth		
FCC ID:	JYCC810		
Model:	C810	Trade Name	Pantech
Date of Issue:	Mar.26, 2007		
Test report no.:	HCT-SAR07-0310		
Test Laboratory:	HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD. SAN 136-1, AMI-RI, BUBAL-EUP, ICHEON-SI, KYOUNKI-DO, 467-701, KOREA TEL: +82 31 639 8518 FAX: +82 31 639 8525		
Applicant :	Pantech Co., Ltd. Shinsong Bldg, 25-12, Yeouido-dong, Youngdeungpo-Gu, Seoul, 150-711, Korea Tel: +82 02 3660 5996 Fax: +82 02 3660 5828 E-Mail: lit@pantech.com		
Testing has been carried out in accordance with:	47CFR §2.1093 FCC OET Bulletin 65(Edition 97-01), Supplement C (Edition 01-01) ANSI/ IEEE C95.1 – 2005 IEEE 1528-2003		
Test result:	The tested device complies with the requirements in respect of all parameters subject to the test. The test results and statements relate only to the items tested. The test report shall not be reproduced except in full, without written approval of the laboratory.		
Signature	 Report prepared by: Ki-Soo Kim Manager of Product Compliance Team		

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# 1. INTRODUCTION

The FCC has adopted the guidelines for evaluating the environmental effects of radio frequency radiation in ET Docket 93-62 on Aug. 6, 1996 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-2005 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz. (c) 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.[2] The measurement procedure described in IEEE/ANSI C95.3-1992 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave[3] is used for guidance in measuring SAR due to the RF radiation exposure from the Equipment Under Test (EUT). 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 (c) NCRP, 1986, Bethesda, MD 20814.[4] 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.

## SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density ( $\rho$ ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body.

$$SAR = \frac{d}{dt} \left( \frac{dU}{dm} \right) = \frac{d}{dt} \left( \frac{dU}{\rho dV} \right)$$

**Figure 2. SAR Mathematical Equation**

**SAR is expressed in units of Watts per Kilogram (W/kg).**

$$SAR = \sigma E^2 / \rho$$

where:

$\sigma$	=	conductivity of the tissue-simulant material (S/m)
$\rho$	=	mass density of the tissue-simulant material (kg/m <sup>3</sup> )
$E$	=	Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relations to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[4]

## 2. DESCRIPTION OF DEVICE

Environmental evaluation measurements of specific absorption rate (SAR) distributions in emulated human head and body tissues exposed to radio frequency (RF) radiation from wireless portable devices for compliance with the rules and regulations of the U.S. Federal Communications Commission (FCC).

EUT Type	Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth
FCC ID	JYCC810
Model(s)	C810
Trade Name	Pantech
Serial Number(s)	JYCC81020070301
Application Type	Certification
Modulation(s)	GSM850/GSM1900/WCDMA850/WCDMA1900
Tx Frequency	824.20 - 848.80 MHz (GSM850) 826.4 - 846.6 MHz (WCDMA850) 1850.20 - 1909.80 MHz (GSM1900) 1852.4 - 1907.6 MHz (WCDMA1900) 2402 - 2480 MHz (Bluetooth)
Rx Frequency	869.20 - 893.80 MHz (GSM850) 871.4 - 891.6 (WCDMA850) 1930.20 - 1989.80 MHz (GSM1900) 1932.4 - 1987.6 MHz (WCDMA1900) 2402 - 2480 MHz (Bluetooth)
FCC Classification	Licensed Portable Transmitter Held to Ear (PCE)
Production Unit or Identical Prototype	Prototype
Max SAR	0.657 W/kg GSM850 Head SAR / 1.19 W/kg GSM850 Body SAR 0.503 W/kg GSM1900 Head SAR / 0.469 W/kg GSM1900 Body SAR 0.759 W/kg WCDMA850 Head SAR / 0.329 W/kg WCDMA850 Body SAR 1.07 W/kg WCDMA1900 Head SAR / 0.383 W/kg WCDMA1900 Body SAR
Date(s) of Tests	Mar. 21, 2007 ~ Mar. 22, 2007 / April 18, 2007
Antenna Type	Intenna

## 3. DESCRIPTION OF TEST EQUIPMENT

### 3.1 SAR MEASUREMENT SETUP

These measurements are performed using the DASY4 automated dosimetric assessment system. It is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland. It consists of high precision robotics system (Staubli), robot controller, Pentium III computer, near-field probe, probe alignment sensor, and the generic twin phantom containing the brain equivalent material. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF) (see Fig.3.1).

A cell controller system contains the power supply, robot controller, teach pendant (Joystick), and remote control, is used to drive the robot motors. The PC consists of the HP Pentium 4 3.0GHz computer with Windows XP system and SAR Measurement Software DASY4, A/D interface card, monitor, mouse, and keyboard. The Staubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.

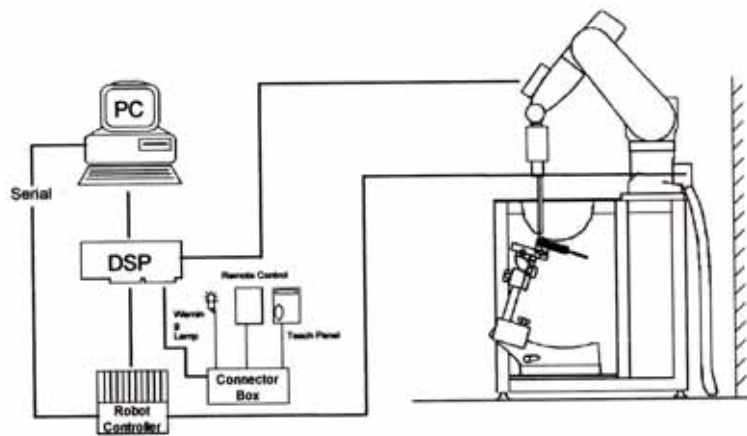


Figure 3.1 HCT SAR Lab. Test Measurement Set-up

The DAE3 consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer. The system is described in detail in [5].

## 3.2 DASYS E-FIELD PROBE SYSTEM

### 3.2.1 ET3DV6 Probe Specification

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection System Built-in shielding against static charges
Calibration	In air from 10 MHz to 2.5 GHz In brain and muscle simulating tissue at Frequencies of 450 MHz, 900 MHz and 1.8 GHz (accuracy :8 %)
Frequency	10 MHz to > 6 GHz; Linearity: . 0.2 dB (30 MHz to 3 GHz)
Directivity	0.2 dB in brain tissue (rotation around probe axis) 0.4 dB in brain tissue (rotation normal probe axis)
Dynamic Range Linearity:	5 uW/g to > 100 mW/g; 0.2 dB
Surface Detection	0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces.
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 dissymmetry up to 3 GHz Compliance tests of mobile phones  Fast automatic scanning in arbitrary phantoms



Figure 3.2 Photograph of the probe and the Phantom

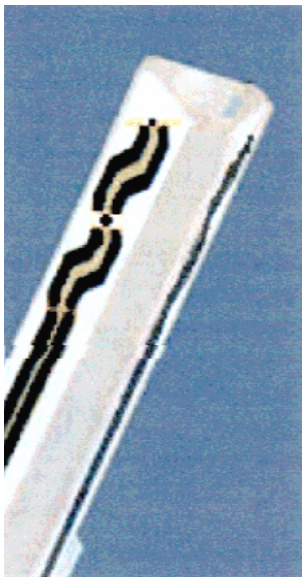


Figure 3.3 ET3DV6 E-field Probe

The SAR measurements were conducted with the dosimetric probe ET3DV6, designed in the classical triangular configuration [5] and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical mortar line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches a maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASYS4 software reads the reflection during a software approach and looks for the maximum using a 2<sup>nd</sup> order fitting. The approach is stopped at reaching the maximum.

### 3.3 PROBE CALIBRATION PROCESS

#### 3.3.1 E-Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure described in [6] with an accuracy better than +/- 10 %. The spherical isotropy was evaluated with the procedure described in [7] and found to be better than +/- 0.25 dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe is tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies below 1 GHz, and in a waveguide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

where:

- $\Delta t$  = exposure time (30 seconds),
- C = heat capacity of tissue (brain or muscle),
- $\Delta T$  = temperature increase due to RF exposure.

SAR is proportional to  $\Delta T / \Delta t$ , the initial rate of tissue heating, before thermal diffusion takes place. Now it's possible to quantify the electric field in the simulated tissue by equating the thermally derived SAR to the E- field;

$$SAR = \frac{|E|^2 \cdot \sigma}{\rho}$$

where:

- $\sigma$  = simulated tissue conductivity,
- $\rho$  = Tissue density (1.25 g/cm<sup>3</sup> for brain tissue)

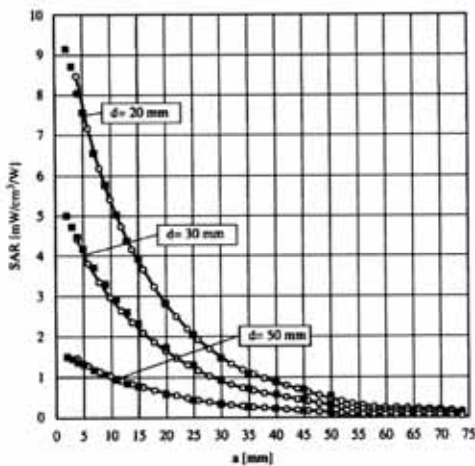


Figure 3.4 E-Field and Temperature measurements at 900MHz[5]

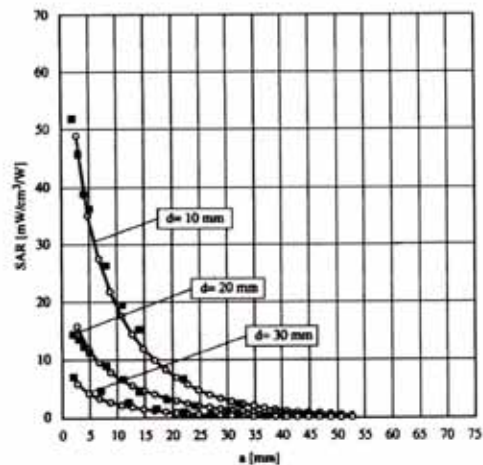


Figure 3.5 E-Field and temperature measurements at 1.8GHz [5]

### 3.3.2 Data Extrapolation

The DASY4 software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as [8]:

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

with  $V_i$  = compensated signal of channel i (i=x,y,z)  
 $U_i$  = input signal of channel i (i=x,y,z)  
 $cf$  = crest factor of exciting field (DASY parameter)  
 $dcp_i$  = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes:

$$E_i = \sqrt{\frac{V_i}{Norm_i \cdot ConvF}}$$

with  $V_i$  = compensated signal of channel i (i = x,y,z)  
 $Norm_i$  = sensor sensitivity of channel i (i = x,y,z)  
 $\mu V/(V/m)^2$  for E-field probes  
 $ConvF$  = sensitivity of enhancement in solution  
 $E_i$  = electric field strength of channel i in V/m

The RSS value of the field components gives the total field strength (Hermetian magnitude):

$$E_{tot} = \sqrt{E_x^2 + E_y^2 + E_z^2}$$

The primary field data are used to calculate the derived field units.

$$SAR = E_{tot}^2 \cdot \frac{\sigma}{\rho \cdot 1000}$$

with SAR = local specific absorption rate in W/g  
 $E_{tot}$  = total field strength in V/m  
 $\sigma$  = conductivity in [mho/m] or [Siemens/m]  
 $\rho$  = equivalent tissue density in g/cm<sup>3</sup>

The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = \frac{E_{tot}^2}{3770}$$

with  $P_{pwe}$  = equivalent power density of a plane wave in W/cm<sup>2</sup>  
 $E_{tot}$  = total electric field strength in V/m



### 3.4 SAM Phantom

The SAM Phantom is constructed of a fiberglass shell integrated in a wooden table. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90 % of all users [9][10]. 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 the 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 in the robot.



Figure 3.6 SAM Phantom

<b>Shell Thickness</b>	<b>2.0 mm</b>
Filling Volume	Volume Approx. 30 liters
Dimensions	810 x 1000 x 500 mm (H x L x W)

### 3.5 Device Holder for Transmitters

In combination with the SAM Phantom V4.0, the Mounting Device (POM) enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation points is the ear opening. The devices can be easily, accurately, and repeatably positioned according to the FCC and CENELEC specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom).

Note: A simulating human hand is not used due to the complex anatomical and geometrical structure of the hand that may produce an infinite number of configurations [10]. To produce the Worst-case condition (the hand absorbs antenna output power), the hand is omitted during the tests.



Fig. 3.7 Device Holder

### 3.6 Brain & Muscle Simulating Mixture Characterization

The brain and muscle mixtures consist of a viscous gel using hydrox-ethyl cellulose (HEC) gelling agent and saline solution (see Table 3.1). Preservation with a bactericide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Hartsgrove [11].

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

Salt:	99 %Pure Sodium Chloride	Sugar:	98 %Pure Sucrose
Water:	De-ionized, 16M resistivity	HEC:	Hydroxyethyl Cellulose
DGBE:	99 % Di(ethylene glycol) butyl ether,[2-(2-butoxyethoxy)ethanol]		
Triton X-100(ultra pure):	Polyethylene glycol mono[4-(1,1,3,3-tetramethylbutyl)phenyl] ether		

**Table 3.1 Composition of the Tissue Equivalent Matter**

### 3.7 SAR TEST EQUIPMENT

Manufacturer	Type / Model	S/N	Calib. Date	Calib. Interval	Calib. Due
Staubli	Robot RX90L	F01/ 5K09A1/A/01	N/A	N/A	N/A
Staubli	Robot ControllerCS7MB	F99/5A82A1/C/01	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	D221340.01	N/A	N/A	N/A
HP	Pavilion t000_puffer	KRJ51201TV	N/A	N/A	N/A
SPEAG	SAM Phantom	-	N/A	N/A	N/A
SPEAG	Light Alignment Sensor	265	N/A	N/A	N/A
SPEAG	DAE3V1	466	01/25/07	Annual	01/25/08
SPEAG	DAE3V1	447	11/17/06	Annual	11/17/07
SPEAG	E-Field Probe ET3DV6	1609	03/23/06	Annual	03/23/07
SPEAG	E-Field Probe ET3DV6	1798	08/25/06	Annual	08/25/07
SPEAG	Validation Dipole D835V2	441	08/14/06	Annual	08/14/07
SPEAG	Validation Dipole D900V2	121	02/19/07	Annual	02/19/08
SPEAG	Validation Dipole D1800V2	2d007	08/16/06	Annual	08/16/07
SPEAG	Validation Dipole D1900V2	5d032	02/20/07	Annual	02/20/08
SPEAG	Validation Dipole D2450V2	743	01/17/07	Annual	01/17/08
Agilent	Power Meter(F) E4419B	MY40330223	11/08/06	Annual	11/08/07
Agilent	Power Sensor(G) 8481	MY41090870	11/21/06	Annual	11/21/07
HP	Signal Generator E4438C	MY45092381	02/07/07	Annual	02/07/08
EM POWER	Power Amp BBS3Q7ELU	1013-D/C-0127	Apr.09, 2007	Annual	Apr.09, 2008
HP	Network Analyzer 8753ES	JP39240221	Apr.11, 2007	Annual	Apr.11, 2008
HP	Dielectric Probe Kit 85070C	00721521	N/A	N/A	N/A
HP	Dual Directional Coupler 778D	16072	11/09/06	Annual	11/09/07
R&S	Base Station CMU200	838207/050	11/14/06	Annual	11/14/07
Agilent	Base Station E5515C	US41070189	05/03/06	Annual	05/03/07
Tescom	Bluetooth TC-3000	3000A490112	01/24/07	Annual	01/24/08

**NOTE:**

The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Validation measurement is performed by HCT Lab. before each test. The brain simulating material is calibrated by HCT using the dielectric probe system and network analyzer to determine the conductivity and permittivity (dielectric constant) of the brain-equivalent material.

## 4. SAR MEASUREMENT PROCEDURE

The evaluation was performed with the following procedure:

1. The SAR value at a fixed location above the ear point was measured and was used as a reference value for assessing the power drop.
2. The SAR distribution at the exposed side of the head was measured at a distance of 3.9 mm from the inner surface of the shell. The area covered the entire dimension of the head and the horizontal grid spacing was 20 mm x 20 mm. Based on this data, the area of the maximum absorption was determined by spline interpolation.
3. Around this point, a volume of 32 mm x 32 mm x 34 mm was assessed by measuring 5 x 5 x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:
  - a. The data at the surface were extrapolated, since the center of the dipoles is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm [13]. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.
  - b. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition (in x,y, and z directions) [13][14]. The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.
  - c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR value, at the same location as procedure #1, was re-measured. If the value changed by more than 5 %, the evaluation is repeated.

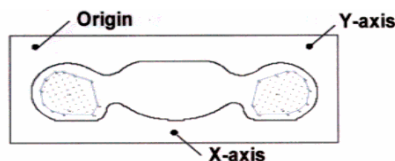


Fig. 4.1 SAR Measurement Point in Area Scan

## 5. DESCRIPTION OF TEST POSITION

### 5.1 HEAD POSITION

The device was placed in a normal operating position with the Point A on the device, as illustrated in following drawing, aligned with the location of the RE(ERP) on the phantom. With the ear-piece pressed against the head, the vertical center line of the body of the handset was aligned with an imaginary plane consisting of the RE, LE and M. While maintaining these alignments, the body of the handset was gradually moved towards the cheek until any point on the mouth-piece or keypad contacted the cheek. This is a cheek/touch position. For ear/tilt position, while maintain the device aligned with the BM and FN lines, the device was pivot against ERP back for 15° or until the device antenna touch the phantom. Please refer to IEEE SC-2 P1528 illustration below.

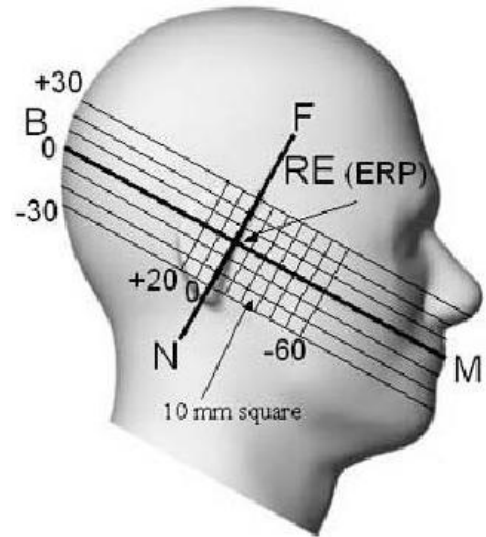


Figure 5.1 Side view of the phantom

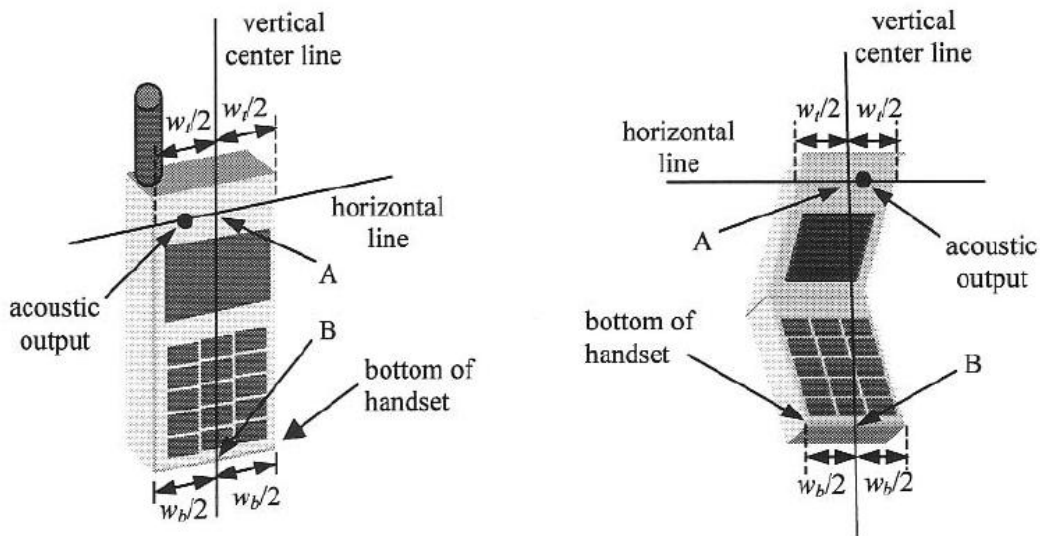


Figure 5.2 Handset vertical and horizontal reference lines

## **5.2 Body Holster/Belt Clip Configurations**

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration. A device with a headset output is tested with a headset connected to the device. Body dielectric parameters are used.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with each accessory. If multiple accessory share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some Devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used.

Since this EUT does not supply any body worn accessory to the end user a distance of 1.5 cm from the EUT back surface to the liquid interface is configured for the generic test.

"See the Test SET-UP Photo"

Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessory(ies), including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

In all cases SAR measurements are performed to investigate the worst-case positioning. Worstcase positioning is then documented and used to perform Body SAR testing.

## 6. MEASUREMENT UNCERTAINTY

Measurement uncertainties in SAR measurements are difficult to quantify due to several variables including biological, physiological, and environmental. However, we estimate the measurement uncertainties in SAR to be less than 15-25 % [16].

According to ANSI/IEEE C95.3, the overall uncertainties are difficult to assess and will vary with the type of meter and usage situation. However, accuracy's of 1 to  $\pm 3$  dB can be expected in practice, with greater uncertainties in near-field situations and at higher frequencies (shorter wavelengths), or areas where large reflecting objects are present. Under optimum measurement conditions, SAR measurement uncertainties of at least  $\pm 2$  dB can be expected.[3]

According to CENELEC [17], typical worst-case uncertainty of field measurements is 5 dB. For well-defined modulation characteristics the uncertainty can be reduced to  $\pm 3$  dB.

Error Description	Uncertainty value [%]	Probability Distribution	Divisor	ci	ci <sup>2</sup>	Standard Uncertainty [%]	Stand Uncert <sup>2</sup>	(Stand Uncert <sup>2</sup> ) X (ci <sup>2</sup> )	V <sub>i</sub> & V <sub>e</sub> #
<b>1. Measurement System</b>									
Probe Calibration	5.5	Normal	1.00	1	1	5.50	30.25	30.25	$\infty$
Axial Isotropy	4.7	Rectangular	1.73	0.7	0.49	2.71	7.36	3.61	$\infty$
Hemispherical Isotropy	9.6	Rectangular	1.73	0.7	0.49	5.54	30.72	15.06	$\infty$
Linearity	4.7	Rectangular	1.73	1	1	2.71	7.36	7.36	$\infty$
System Detection limits	1.0	Rectangular	1.73	1	1	0.58	0.33	0.33	$\infty$
Boundary effect	1.0	Rectangular	1.73	1	1	0.58	0.33	0.33	$\infty$
Response time	0.8	Rectangular	1.73	1	1	0.46	0.21	0.21	$\infty$
RF Ambient conditions	3.0	Rectangular	1.73	1	1	1.73	3.00	3.00	$\infty$
Readout Electronics	0.3	Normal	1.00	1	1	0.30	0.09	0.09	$\infty$
Integration time	2.6	Rectangular	1.73	1	1	1.50	2.25	2.25	$\infty$
Probe positioner	0.4	Rectangular	1.73	1	1	0.23	0.05	0.05	$\infty$
Probe positioning	2.9	Rectangular	1.73	1	1	1.67	2.80	2.80	$\infty$
Maximum SAR evaluation	1.0	Rectangular	1.73	1	1	0.58	0.33	0.33	$\infty$
<b>Sub Total</b>								<b>65.69</b>	
<b>2. Test Sample Related</b>									
Device Positioning	1.8	Normal	1.00	1	1	1.77	3.13	3.13	9
Device Holder	3.6	Normal	1.00	1	1	3.60	12.96	12.96	$\infty$
Power Drift	5.0	Rectangular	1.73	1	1	2.89	8.33	8.33	$\infty$
<b>Sub Total</b>								<b>24.43</b>	
<b>3. Phantom and Setup</b>									
Phantom Uncertainty	4.0	Rectangular	1.73	1	1	2.31	5.33	5.33	$\infty$
Liquid conductivity (target)	5.0	Rectangular	1.73	0.5	0.25	2.89	8.33	2.08	$\infty$
Liquid conductivity (measurement error)	2.5	Normal	1.00	0.5	0.25	2.50	6.25	1.56	$\infty$
Liquid permittivity (target)	5.0	Rectangular	1.73	0.5	0.25	2.89	8.33	2.08	$\infty$
Liquid permittivity (measurement error)	2.5	Normal	1.00	0.5	0.25	2.50	6.25	1.56	$\infty$
<b>Sub Total</b>								<b>12.63</b>	
<b>Combined standard uncertainty [%]</b>						<b>10.14</b>		102.74	-
<b>Expanded uncertainty [k = 2, confidence 95 %]</b>						<b><math>\pm 20.3</math> %</b>			

**Table 6.1 Breakdown of Errors**

## 7. ANSI/ IEEE C95.1 - 2005 RF EXPOSURE LIMITS

HUMAN EXPOSURE	UNCONTROLLED ENVIRONMENT General Population (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT Occupational (W/kg) or (mW/g)
SPATIAL PEAK SAR * (Brain)	1.60	8.00
SPATIAL AVERAGE SAR ** (Whole Body)	0.08	0.40
SPATIAL PEAK SAR *** (Hands / Feet / Ankle / Wrist)	4.00	20.00

Table 7.1 Safety Limits for Partial Body Exposure

**NOTES:**

\* The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

\*\* The Spatial Average value of the SAR averaged over the whole-body.

\*\*\* The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

**Uncontrolled Environments** are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

**Controlled Environments** are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e.as a result of employment or occupation).



## 8. SYSTEM VERIFICATION

### 8.1 Tissue Verification

Freq. [MHz]	Date	Liquid	Liquid Temp[°C]	Parameters	Target Value	Measured Value	Deviation [%]	Limit [%]
835	Mar.21, 2007	Head	21.5	$\epsilon_r$	41.5	41.8	+ 0.72	± 5
				$\sigma$	0.90	0.884	- 1.78	± 5
835	Mar.21, 2007	Body	21.5	$\epsilon_r$	55.2	53.3	- 3.44	± 5
				$\sigma$	0.97	0.99	+ 2.06	± 5
1900	Mar.22, 2007	Head	21.6	$\epsilon_r$	40.0	39.4	- 1.50	± 5
				$\sigma$	1.40	1.46	+ 4.29	± 5
1900	Mar.22, 2007	Body	21.6	$\epsilon_r$	53.3	52.0	- 2.44	± 5
				$\sigma$	1.52	1.56	+ 2.63	± 5

Freq. [MHz]	Date	Liquid	Liquid Temp[°C]	Parameters	Target Value	Measured Value	Deviation [%]	Limit [%]
835	April 18, 2007	Head	22.1	$\epsilon_r$	41.5	39.8	- 4.10	± 5
				$\sigma$	0.90	0.875	- 2.78	± 5
835	April 18, 2007	Body	22.1	$\epsilon_r$	55.2	54.8	- 0.72	± 5
				$\sigma$	0.97	0.98	+ 1.03	± 5
1900	April 18, 2007	Head	22.1	$\epsilon_r$	40.0	39.8	- 0.50	± 5
				$\sigma$	1.40	1.45	+ 3.57	± 5
1900	April 18, 2007	Body	22.1	$\epsilon_r$	53.3	52.0	- 2.44	± 5
				$\sigma$	1.52	1.56	+ 2.63	± 5

## 8.2 System Validation

Prior to assessment, the system is verified to the  $\pm 10\%$  of the specifications at 835 MHz / 1900 MHz by using the system validation kit. (Graphic Plots Attached)

Freq. [MHz]	Date	Liquid	Liquid Temp [°C]	SAR Average	Target Value (IEEE 1528) (mW/g)	Measured Value (mW/g)	Deviation [%]	Limit [%]
835 MHz	Mar.21, 2007	Head	21.5	1 g	9.5	9.34	- 1.68	$\pm 10$
1900 MHz	Mar.22, 2007	Head	21.6	1 g	39.7	41.30	+ 4.03	$\pm 10$

\* Input Power: 1 W

Freq. [MHz]	Date	Liquid	Liquid Temp [°C]	SAR Average	Target Value (IEEE 1528) (mW/g)	Measured Value (mW/g)	Deviation [%]	Limit [%]
835 MHz	April 18, 2007	Head	22.1	1 g	9.5	9.53	+ 0.32	$\pm 10$
1900 MHz	April 18, 2007	Head	22.1	1 g	39.7	41.1	+ 3.53	$\pm 10$

## 9. 3G MEASUREMENT PROCEDURES

### 9. 1 Procedures Used To Establish Test Signal

The handset was placed into a simulated call using a base station simulator in a shielded chamber. Such test signals offer a consistent means for testing SAR and are recommended for evaluating SAR. SAR measurements were taken with a fully charged battery. In order to verify that the device was tested and maintained at full power, this was configured with the base station simulator. The SAR measurement software calculates a reference point at the start and end of the test to check for power drifts. If conducted power deviations of more than 5% occurred, the tests were repeated.

### 9. 2 SAR Measurement Conditions for WCDMA

These procedures were followed according to FCC "SAR Measurement Procedures for 3G Devices", May 2006.

#### 9. 2. 1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC(transmit power control) set to all "1s". Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes) should be tabulated in the test report. All configurations that are not supported by the EUT or cannot be measured due to technical or equipment limitations should be clearly identified.

#### 9. 2. 2 Head SAR Measurements

SAR for head exposure configurations is measured using the 12.2 kbps RMC with TPC bits configured to all "1s". SAR in AMR configurations is not required when the maximum average output of each RF channel for 12.2 kbps AMR is less than ¼ dB higher than that measured in 12.2 kbps SRB (Signaling radio bearer) using the exposure configuration That results in the highest SAR in 12.2 RMC for that RF channel.

#### 9. 2. 3 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with TPC bits configured to all "1s".

#### 9. 2. 4 Handsets with HSDPA

Body SAR is not required for handsets with HSDPA capabilities when the maximum average output of each RF channel with HSDPA active is less than ¼ dB higher than that measured without HSDPA using 12.2 kbps RMC. Otherwise, SAR is measured for HSDPA, using FRC, with the body exposure configuration that results in the highest SAR in 12.2 RMC for that RF channel.

WCDMA	Channel	HSDPA INACTIVE		HSDPA ACTIVE		GSM	Channel	GSM	GPRS	EDGE
		12.2kbps RMC (dBm)	12.2kbps AMR (dBm)	12.2kbps RMC (dBm)	12.2kbps AMR (dBm)					
850	4132	24.03	24.02	23.88	24.01	850	128	32.91	32.80	27.25
	4175	23.94	23.92	23.91	23.89		190	32.90	33.05	27.21
	4233	24.07	24.05	24.07	24.01		251	32.88	32.91	27.20
1900	9262	24.02	24.02	24.01	24.01	1900	512	30.01	29.98	26.07
	9400	24.07	24.06	24.15	24.04		661	30.06	30.05	26.15
	9538	24.18	24.11	24.07	24.09		810	30.15	30.14	26.25

## 10. SAR TEST DATA SUMMARY

### 10.1 Measurement Results (GSM850 Head SAR Slide Down)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel.		Begin	End				
836.6	190 (Mid)	GSM850	32.91	32.72	Standard	Left Ear	Touch	0.657
836.6	190 (Mid)	GSM850	32.92	32.90	Standard	Right Ear	Touch	0.601
836.6	190 (Mid)	GSM850	32.90	32.84	Standard	Left Ear	Tilt	0.442
836.6	190 (Mid)	GSM850	32.93	33.01	Standard	Right Ear	Tilt	0.405
836.6	190 (Mid)	GSM850	32.90	32.95	Standard	Left Ear	Touch	*0.625
836.6	190 (Mid)	GSM850	32.91	33.86	Standard	Left Ear	Touch	**0.595
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b>						<b>Head</b>		
<b>Spatial Peak</b>						<b>1.6 W/kg (mW/g)</b>		
<b>Uncontrolled Exposure/ General Population</b>						<small>Averaged over 1 gram</small>		

**NOTES:**

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- All modes of operation were investigated and the worst-case are reported.
- Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- Tissue parameters and temperatures are listed on the SAR plot.
- Battery Type             Standard                     Extended                     Slim  
Batteries are fully charged for all readings.
- Test Signal Call Mode    Manual Test cord             Base Station Simulator
- Highest SAR value measurement in this band repeated with \*Bluetooth/ \*\*Memory.
- Antenna Type             Intenna                     Retractable                     Fixed
- Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 10.2 Measurement Results (GSM850 Head SAR Slide Up)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel		Begin	End				
836.6	190 (Mid)	GSM850	32.91	32.86	Standard	Left Ear	Touch	0.562
836.6	190 (Mid)	GSM850	32.90	32.72	Standard	Right Ear	Touch	0.621
836.6	190 (Mid)	GSM850	32.91	32.74	Standard	Left Ear	Tilt	0.311
836.6	190 (Mid)	GSM850	32.93	32.76	Standard	Right Ear	Tilt	0.310
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b> <b>Spatial Peak</b> <b>Uncontrolled Exposure/ General Population</b>						<b>Head</b> <b>1.6 W/kg (mW/g)</b> <small>Averaged over 1 gram</small>		

**NOTES:**

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- All modes of operation were investigated and the worst-case are reported.
- Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- Tissue parameters and temperatures are listed on the SAR plot.
- Battery Type  Standard  Extended  Slim  
Batteries are fully charged for all readings.
- Test Signal Call Mode  Manual Test cord  Base Station Simulator
- Antenna Type  Intenna  Retractable  Fixed
- Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 10.3 Measurement Results (GSM1900 Head SAR Slide Down)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel.		Begin	End				
1880.0	661 (Mid)	GSM1900	30.06	30.06	Standard	Left Ear	Touch	0.442
1880.0	661 (Mid)	GSM1900	30.06	29.90	Standard	Right Ear	Touch	0.364
1880.0	661 (Mid)	GSM1900	30.06	30.05	Standard	Left Ear	Tilt	0.503
1880.0	661 (Mid)	GSM1900	30.06	30.02	Standard	Right Ear	Tilt	0.461
1880.0	661 (Mid)	GSM1900	30.06	29.92	Standard	Left Ear	Tilt	*0.500
1880.0	661 (Mid)	GSM1900	30.06	30.04	Standard	Left Ear	Tilt	**0.491
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b>						<b>Head</b>		
<b>Spatial Peak</b>						<b>1.6 W/kg (mW/g)</b>		
<b>Uncontrolled Exposure/ General Population</b>						<small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type                     Standard                     Extended                     Slim  
Batteries are fully charged for all readings.
- 6 Test Signal Call Mode        Manual Test cord            Base Station Simulator
- 7 Highest SAR value measurement in this band repeated with \*Bluetooth/ \*\*Memory.
- 8 Antenna Type                    Intenna                         Retractable                    Fixed
- 9 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 10.4 Measurement Results(GSM1900 Head SAR Slide Up)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel.		Begin	End				
1880.0	661 (Mid)	GSM1900	30.06	30.01	Standard	Left Ear	Touch	0.103
1880.0	661 (Mid)	GSM1900	30.06	30.00	Standard	Right Ear	Touch	0.096
1880.0	661 (Mid)	GSM1900	30.06	30.07	Standard	Left Ear	Tilt	0.072
1880.0	661 (Mid)	GSM1900	30.06	29.91	Standard	Right Ear	Tilt	0.065
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b> <b>Spatial Peak</b> <b>Uncontrolled Exposure/ General Population</b>						<b>Head</b> <b>1.6 W/kg (mW/g)</b> <small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type                     Standard                     Extended                     Slim  
    Batteries are fully charged for all readings.
- 6 Test Signal Call Mode        Manual Test cord        Base Station Simulator
- 8 Antenna Type                     Intenna                     Retractable                     Fixed
- 9 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 10.5 Measurement Results (WCDMA850 Head SAR Slide Down)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel.		Begin	End				
835.0	4175 (Mid)	WCDMA850	23.97	24.13	Standard	Left Ear	Touch	0.641
835.0	4175 (Mid)	WCDMA850	23.94	23.95	Standard	Right Ear	Touch	0.759
835.0	4175 (Mid)	WCDMA850	23.96	23.95	Standard	Left Ear	Tilt	0.448
835.0	4175 (Mid)	WCDMA850	23.95	23.86	Standard	Right Ear	Tilt	0.591
835.0	4175 (Mid)	WCDMA850	23.96	23.99	Standard	Right Ear	Touch	*0.644
835.0	4175 (Mid)	WCDMA850	23.94	23.91	Standard	Right Ear	Touch	**0.716
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b> <b>Spatial Peak</b> <b>Uncontrolled Exposure/ General Population</b>						<b>Head</b> <b>1.6 W/kg (mW/g)</b> <small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type            Standard                    Extended                    Slim  
Batteries are fully charged for all readings.
- 6 Test Signal Call Mode    Manual Test cord        Base Station Simulator
- 7 Highest SAR value measurement in this band repeated with \*Bluetooth/ \*\*Memory.
- 8 Antenna Type            Intenna                    Retractable                Fixed
- 9 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).



## 10.6 Measurement Results (WCDMA850 Head SAR Slide Up)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel.		Begin	End				
835.0	4175 (Mid)	WCDMA850	23.94	24.05	Standard	Left Ear	Touch	0.544
835.0	4175 (Mid)	WCDMA850	23.95	23.99	Standard	Right Ear	Touch	0.515
835.0	4175 (Mid)	WCDMA850	23.94	23.94	Standard	Left Ear	Tilt	0.307
835.0	4175 (Mid)	WCDMA850	23.96	23.96	Standard	Right Ear	Tilt	0.273
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b> <b>Spatial Peak</b> <b>Uncontrolled Exposure/ General Population</b>						<b>Head</b> <b>1.6 W/kg (mW/g)</b> <small>Averaged over 1 gram</small>		

**NOTES:**

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- All modes of operation were investigated and the worst-case are reported.
- Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- Tissue parameters and temperatures are listed on the SAR plot.
- Battery Type             Standard             Extended             Slim  
Batteries are fully charged for all readings.
- Test Signal Call Mode    Manual Test cord     Base Station Simulator
- Antenna Type             Intenna             Retractable             Fixed
- Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 10.7 Measurement Results(WCDMA1900 Head SAR Slide Down)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel.		Begin	End				
1852.4	9262 (Low)	WCDMA1900	24.06	24.05	Standard	Left Ear	Touch	0.940
1880.0	9400 (Mid)	WCDMA1900	24.03	24.11	Standard	Left Ear	Touch	0.907
1907.6	9538 (High)	WCDMA1900	24.07	24.15	Standard	Left Ear	Touch	0.819
1852.4	9262 (Low)	WCDMA1900	23.98	24.02	Standard	Right Ear	Touch	0.676
1880.0	9400 (Mid)	WCDMA1900	23.97	23.78	Standard	Right Ear	Touch	0.758
1907.6	9538 (High)	WCDMA1900	23.99	23.99	Standard	Right Ear	Touch	0.653
1852.4	9262 (Low)	WCDMA1900	24.02	24.03	Standard	Left Ear	Tilt	1.07
1880.0	9400 (Mid)	WCDMA1900	24.04	24.03	Standard	Left Ear	Tilt	1.06
1907.6	9538 (High)	WCDMA1900	23.99	24.01	Standard	Left Ear	Tilt	1.01
1852.4	9262 (Low)	WCDMA1900	24.08	24.07	Standard	Right Ear	Tilt	0.927
1880.0	9400 (Mid)	WCDMA1900	23.99	24.10	Standard	Right Ear	Tilt	0.933
1907.6	9538 (High)	WCDMA1900	24.03	24.16	Standard	Right Ear	Tilt	1.00
1852.4	9262 (Low)	WCDMA1900	24.00	24.88	Standard	Left Ear	Tilt	*0.916
1852.4	9262 (Low)	WCDMA1900	24.05	25.05	Standard	Left Ear	Tilt	**1.01
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b>						<b>Head</b>		
<b>Spatial Peak</b>						<b>1.6 W/kg (mW/g)</b>		
<b>Uncontrolled Exposure/ General Population</b>						<small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type                     Standard                     Extended                     Slim  
    Batteries are fully charged for all readings.
- 6 Test Signal Call Mode     Manual Test cord            Base Station Simulator
- 7 Highest SAR value measurement in this band repeated with \*Bluetooth/ \*\*Memory.
- 8 Antenna Type                     Intenna                     Retractable                     Fixed

## 10.8 Measurement Results (WCDMA1900 Head SAR Slide Up)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Test Position	SAR(mW/g)
MHz	Channel.		Begin	End				
1880.0	9400 (Mid)	WCDMA1900	24.07	24.01	Standard	Left Ear	Touch	0.184
1880.0	9400 (Mid)	WCDMA1900	24.08	24.11	Standard	Right Ear	Touch	0.231
1880.0	9400 (Mid)	WCDMA1900	24.06	24.23	Standard	Left Ear	Tilt	0.134
1880.0	9400 (Mid)	WCDMA1900	24.04	24.04	Standard	Right Ear	Tilt	0.133
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b> <b>Spatial Peak</b> <b>Uncontrolled Exposure/ General Population</b>						<b>Head</b> <b>1.6 W/kg (mW/g)</b> <small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type                     Standard                     Extended                     Slim  
    Batteries are fully charged for all readings.
- 6 Test Signal Call Mode         Manual Test cord             Base Station Simulator
- 7 Antenna Type                     Intenna                     Retractable                     Fixed
- 8 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 10.9 Measurement Results (GSM850 Body SAR)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Ant. Position	SAR(mW/g)
MHz	Channel.		Begin	End				
824.2	128 (Low)	GPRS	32.89	32.86	Standard	1.5 cm without Holster	Intenna	0.995
836.6	190 (Mid)	GPRS	32.94	32.92	Standard	1.5 cm without Holster	Intenna	1.19
849.8	251 (High)	GPRS	32.92	32.88	Standard	1.5 cm without Holster	Intenna	0.904
836.6	190 (Mid)	GSM850	32.91	32.87	Standard	1.5 cm without Holster	Intenna	* 0.588
836.6	190 (Mid)	GPRS	32.93	32.91	Standard	1.5 cm without Holster	Intenna	**0.945
836.6	190 (Mid)	GPRS	32.91	32.90	Standard	1.5 cm without Holster	Intenna	***0.991
836.6	190 (Mid)	GPRS	32.90	32.87	Standard	1.5 cm without Holster	Intenna	****0.342
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b>						<b>Body</b>		
<b>Spatial Peak</b>						<b>1.6 W/kg (mW/g)</b>		
<b>Uncontrolled Exposure/ General Population</b>						<small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type                     Standard                     Extended                     Slim  
Batteries are fully charged for all readings.
- 6 Test Signal Call Mode         Manual Test cord         Base Station Simulator
- 7 Both side of the phone were tested and the worst-case side is reported.
- 8 HEADSET was connected.
- 9 Test Configuration             With Holster                     Without Holster
- 10 Highest SAR value measurement in this band repeated with \*GSM / \*\* Bluetooth /\*\*\*Memory/\*\*\*\*Front.
- 11 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
- 12 This model support GPRS Class10 (2Tx).

## 10.10 Measurement Results (GSM1900 Body SAR)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Ant. Position	SAR(mW/g)
MHz	Channel.		Begin	End				
1880.0	661 (Mid)	GPRS	30.04	30.03	Standard	1.5 cm without Holster	Intenna	0.469
1880.0	661 (Mid)	GSM1900	30.06	30.03	Standard	1.5 cm without Holster	Intenna	*0.251
1880.0	661 (Mid)	GPRS	30.08	30.04	Standard	1.5 cm without Holster	Intenna	**0.451
1880.0	661 (Mid)	GPRS	30.06	30.02	Standard	1.5 cm without Holster	Intenna	***0.464
1880.0	661 (Mid)	GPRS	30.05	30.00	Standard	1.5 cm without Holster	Intenna	****0.173
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b>						<b>Body</b>		
<b>Spatial Peak</b>						<b>1.6 W/kg (mW/g)</b>		
<b>Uncontrolled Exposure/ General Population</b>						<small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type                     Standard                     Extended                     Slim  
Batteries are fully charged for all readings.
- 6 Test Signal Call Mode         Manual Test cord             Base Station Simulator
- 7 Both side of the phone were tested and the worst-case side is reported.
- 8 HEADSET was connected.
- 9 Test Configuration             With Holster                     Without Holster
- 10 Highest SAR value measurement in this band repeated with \*GSM / \*\* Bluetooth /\*\*\*Memory/\*\*\*\*Front.
- 11 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
- 12 This model support GPRS Class10 (2Tx).

## 10.11 Measurement Results (WCDMA850 Body SAR)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Ant. Position	SAR(mW/g)
MHz	Channel.		Begin	End				
835.0	4175 (Mid)	WCDMA850	23.94	23.99	Standard	1.5 cm without Holster	Intenna	0.329
835.0	4175 (Mid)	WCDMA850	23.96	23.86	Standard	1.5 cm without Holster	Intenna	*0.324
835.0	4175 (Mid)	WCDMA850	23.99	23.92	Standard	1.5 cm without Holster	Intenna	**0.325
835.0	4175 (Mid)	WCDMA850	24.02	23.99	Standard	1.5 cm without Holster	Intenna	***0.252
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b>								
<b>Spatial Peak</b>						<b>Body</b>		
<b>Uncontrolled Exposure/ General Population</b>						<b>1.6 W/kg (mW/g)</b>		
						<small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type            Standard                    Extended                    Slim  
Batteries are fully charged for all readings.
- 6 Test Signal Call Mode    Manual Test cord        Base Station Simulator
- 7 Both side of the phone were tested and the worst-case side is reported.
- 8 HEADSET was connected.
- 9 Test Configuration        With Holster                    Without Holster
- 11 Highest SAR value measurement in this band repeated with \* Bluetooth /\*\*Memory/ \*\*\*Front.
- 12 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 10.12 Measurement Results (WCDMA1900 Body SAR)

Frequency		Modulation	Conducted Power (dBm)		Battery	Phantom Position	Ant. Position	SAR(mW/g)
MHz	Channel.		Begin	End				
1880.0	9400 (Mid)	WCDMA1900	24.07	24.14	Standard	1.5 cm without Holster	Intenna	0.383
1880.0	9400 (Mid)	WCDMA1900	24.05	24.08	Standard	1.5 cm without Holster	Intenna	*0.33
1880.0	9400 (Mid)	WCDMA1900	24.07	24.07	Standard	1.5 cm without Holster	Intenna	**0.332
1880.0	9400 (Mid)	WCDMA1900	23.99	24.12	Standard	1.5 cm without Holster	Intenna	***0.157
<b>ANSI/ IEEE C95.1 2005 – Safety Limit</b>								
<b>Spatial Peak</b>						<b>Body</b>		
<b>Uncontrolled Exposure/ General Population</b>						<b>1.6 W/kg (mW/g)</b>		
						<small>Averaged over 1 gram</small>		

**NOTES:**

- 1 The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supplement C [July 2001].
- 2 All modes of operation were investigated and the worst-case are reported.
- 3 Measured Depth of Simulating Tissue is 15.0 ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 Battery Type            Standard                    Extended                    Slim  
Batteries are fully charged for all readings.
- 6 Test Signal Call Mode    Manual Test cord        Base Station Simulator
- 7 Both side of the phone were tested and the worst-case side is reported.
- 8 HEADSET was connected.
- 9 Test Configuration        With Holster                    Without Holster
- 11 Highest SAR value measurement in this band repeated with \* Bluetooth /\*\*Memory/ \*\*\*Front.
- 12 Justification for reduced test configurations: per FCC/OET Supplement C (July, 2001), if the SAR measured at the middle channel for each test configuration (Left, right, cheek/touch, tilt/ear, extended and retracted) is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).

## 11. CONCLUSION

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The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the ANSI/IEEE C95.1 2005.

These measurements are taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests.



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## Attachment 1. – SAR Test Plots

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.705 mW/g

**Left touch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

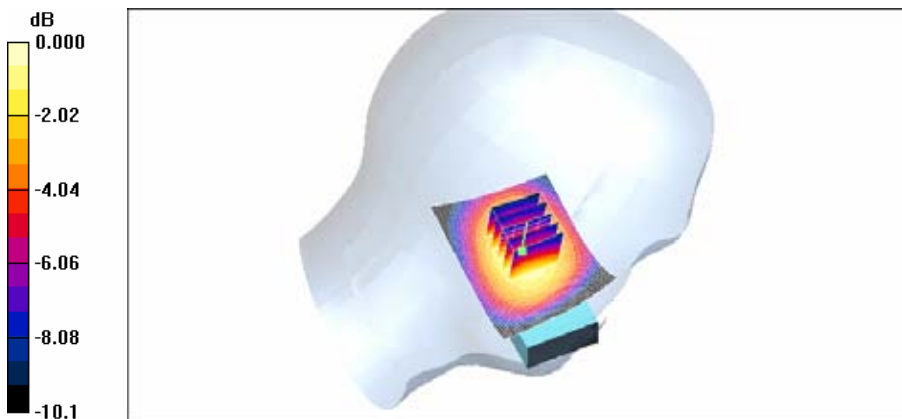
Reference Value = 21.6 V/m; Power Drift = -0.178 dB

Peak SAR (extrapolated) = 0.882 W/kg

**SAR(1 g) = 0.657 mW/g; SAR(10 g) = 0.461 mW/g**

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

Maximum value of SAR (measured) = 0.711 mW/g



0 dB = 0.711 mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 190/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.651 mW/g

**Right touch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

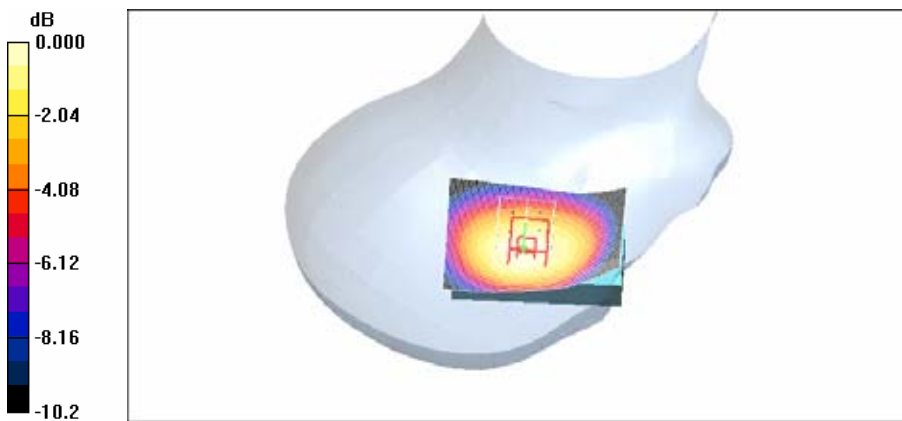
Reference Value = 20.0 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.791 W/kg

**SAR(1 g) = 0.601 mW/g; SAR(10 g) = 0.427 mW/g**

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

Maximum value of SAR (measured) = 0.645 mW/g



0 dB = 0.645mW/g

Test Laboratory: HYUNDAI CALIBRATION &amp; CERTIFICATION TECHNOLOGIES CO., LTD

EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth

Liquid Temperature: 21.5

Ambient Temperature: 21.7

Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left tilt 190/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.482 mW/g

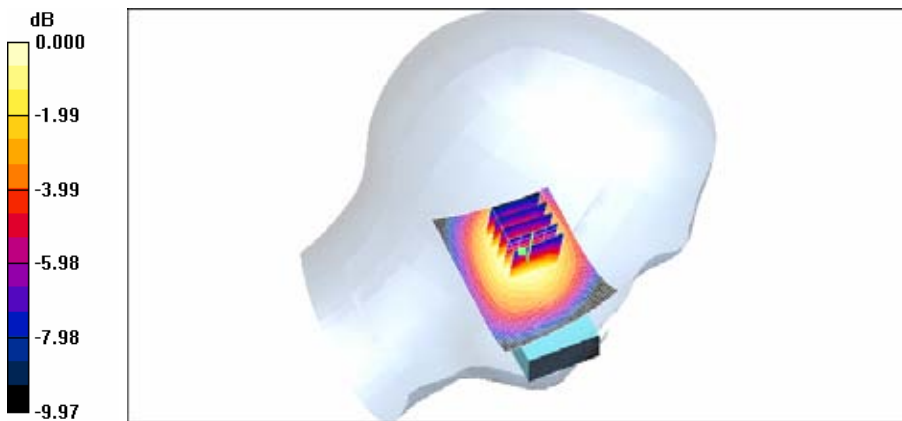
**Left tilt 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.7 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 0.582 W/kg

**SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.318 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.473 mW/g



0 dB = 0.473mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 190/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.442 mW/g

**Right tilt 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

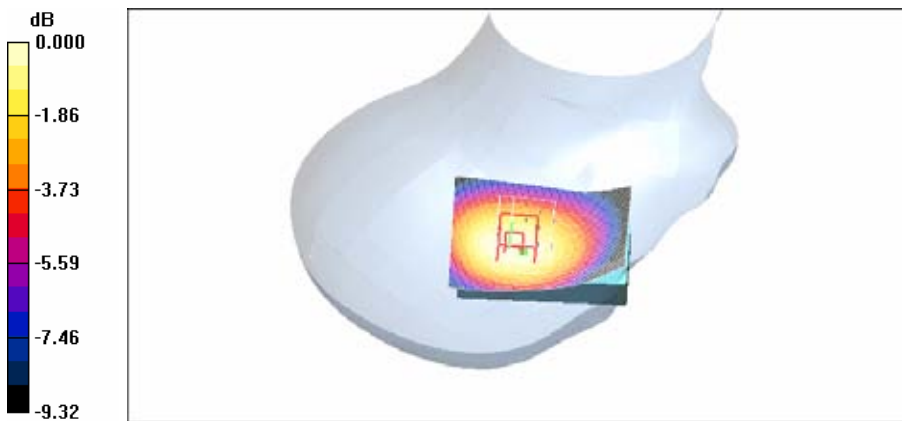
Reference Value = 20.9 V/m; Power Drift = 0.166 dB

Peak SAR (extrapolated) = 0.524 W/kg

**SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.290 mW/g**

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

Maximum value of SAR (measured) = 0.426 mW/g



0 dB = 0.426mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007  
Option: Bluetooth

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.678 mW/g

**Left touch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

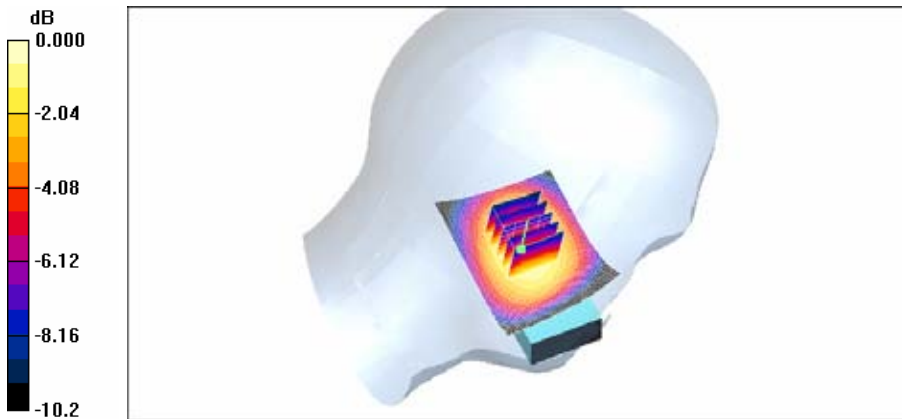
Reference Value = 21.5 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.836 W/kg

**SAR(1 g) = 0.625 mW/g; SAR(10 g) = 0.437 mW/g**

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

Maximum value of SAR (measured) = 0.673 mW/g



0 dB = 0.673mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007  
Option: Memory

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.884 \text{ mho/m}$ ;  $r = 41.7$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.647 mW/g

**Left touch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

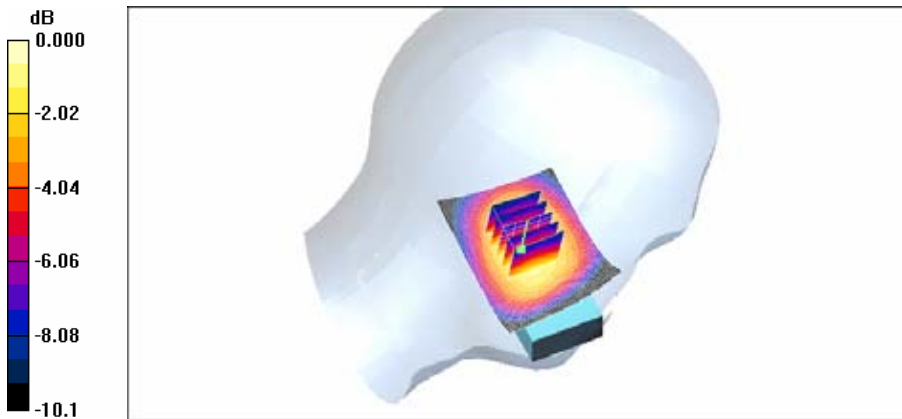
Reference Value = 20.5 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 0.789 W/kg

**SAR(1 g) = 0.595 mW/g; SAR(10 g) = 0.420 mW/g**

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

Maximum value of SAR (measured) = 0.649 mW/g



0 dB = 0.649mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810-up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.884 \text{ mho/m}$ ;  $r = 41.7$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190/Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Maximum value of SAR (interpolated) = 0.594 mW/g

**Left touch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

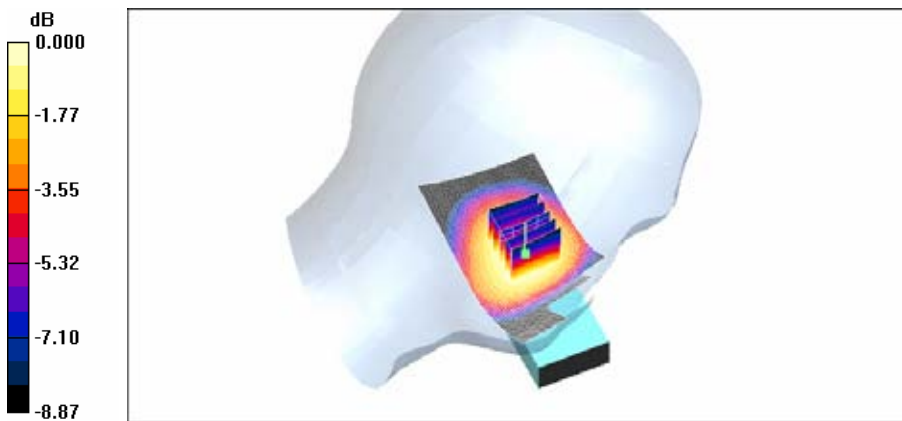
Reference Value = 25.8 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.722 W/kg

**SAR(1 g) = 0.562 mW/g; SAR(10 g) = 0.410 mW/g**

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

Maximum value of SAR (measured) = 0.590 mW/g



0 dB = 0.590mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810-up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 190/Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.659 mW/g

**Right touch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

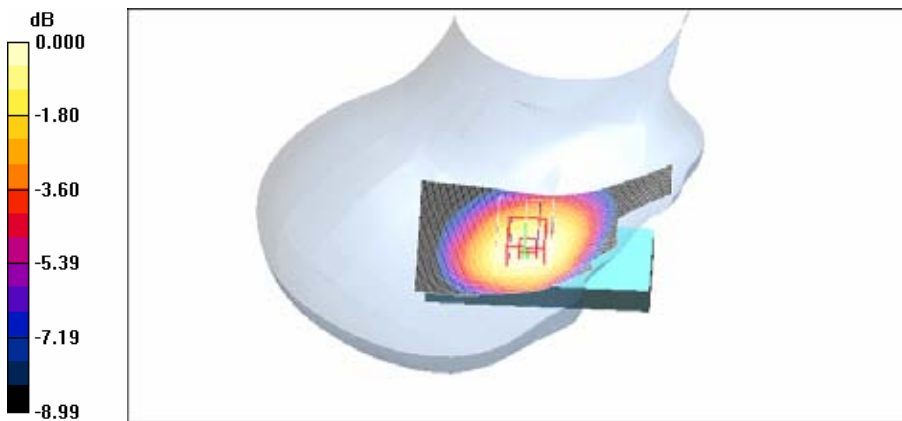
Reference Value = 27.2 V/m; Power Drift = -0.197 dB

Peak SAR (extrapolated) = 0.787 W/kg

**SAR(1 g) = 0.621 mW/g; SAR(10 g) = 0.453 mW/g**

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

Maximum value of SAR (measured) = 0.653 mW/g



0 dB = 0.653mW/g

Test Laboratory: HYUNDAI CALIBRATION &amp; CERTIFICATION TECHNOLOGIES CO., LTD

EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth

Liquid Temperature: 21.5

Ambient Temperature: 21.7

Test Date: Mar.21, 2007

**DUT: C810-up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left tilt 190/Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.328 mW/g

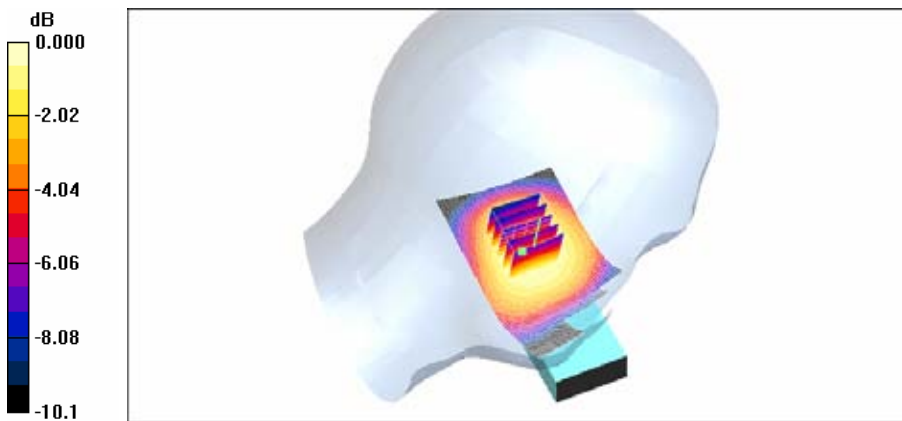
**Left tilt 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.5 V/m; Power Drift = -0.192 dB

Peak SAR (extrapolated) = 0.413 W/kg

**SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.225 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.327 mW/g



0 dB = 0.327mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810-up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 190/Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.337 mW/g

**Right tilt 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

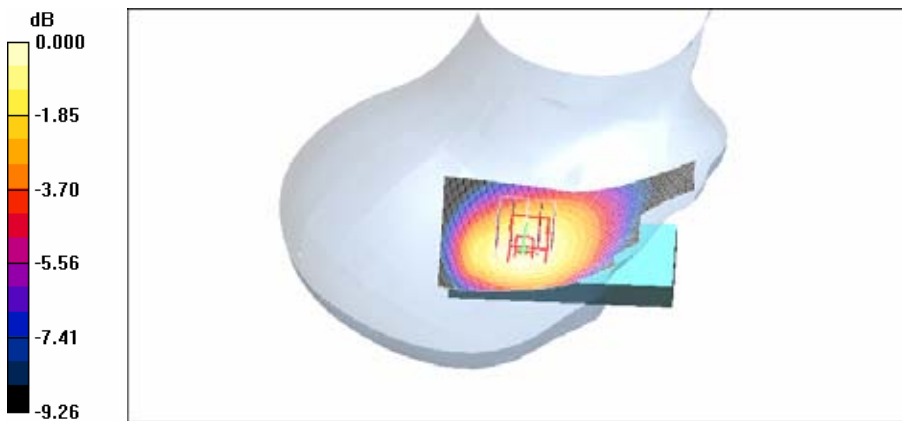
Reference Value = 16.8 V/m; Power Drift = -0.189 dB

Peak SAR (extrapolated) = 0.398 W/kg

**SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.226 mW/g**

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

Maximum value of SAR (measured) = 0.327 mW/g



0 dB = 0.327mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

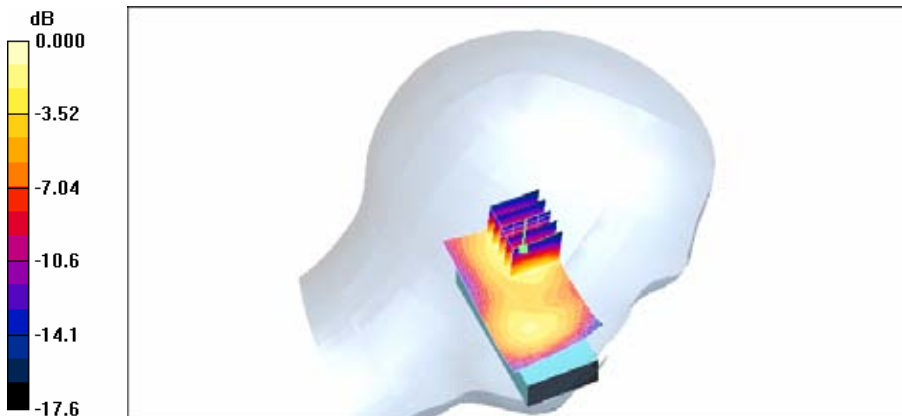
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left touch 661/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.468 mW/g

**Left touch 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15.3 V/m; Power Drift = -0.001 dB  
Peak SAR (extrapolated) = 0.754 W/kg  
**SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.247 mW/g**  
Maximum value of SAR (measured) = 0.490 mW/g



0 dB = 0.490mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

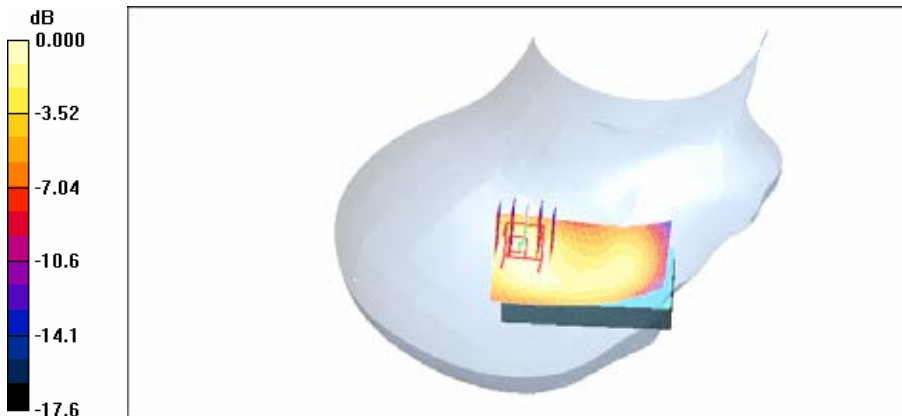
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 661/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.415 mW/g

**Right touch 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.6 V/m; Power Drift = -0.161 dB  
Peak SAR (extrapolated) = 0.593 W/kg  
**SAR(1 g) = 0.364 mW/g; SAR(10 g) = 0.218 mW/g**  
Maximum value of SAR (measured) = 0.398 mW/g



0 dB = 0.398mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

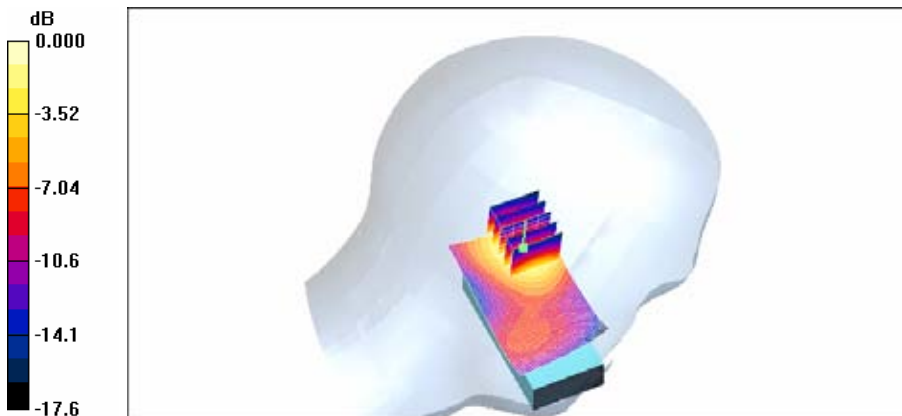
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\rho_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 661/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.557 mW/g

**Left tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.0 V/m; Power Drift = -0.013 dB  
Peak SAR (extrapolated) = 0.861 W/kg  
**SAR(1 g) = 0.503 mW/g; SAR(10 g) = 0.275 mW/g**  
Maximum value of SAR (measured) = 0.553 mW/g



0 dB = 0.553mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

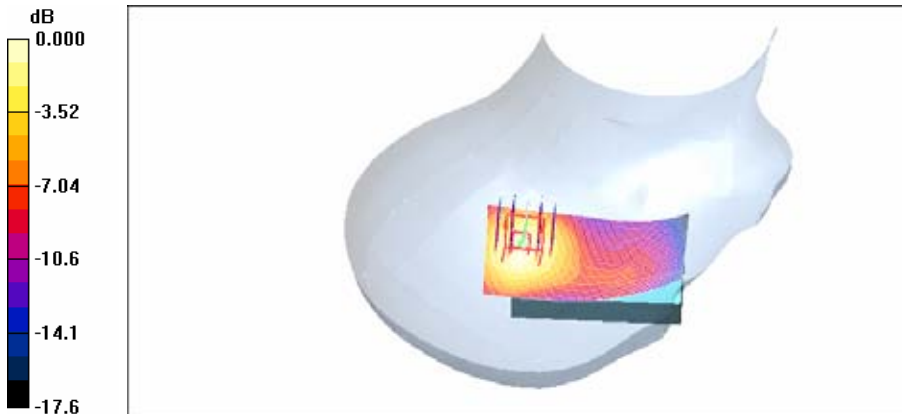
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right tilt 661/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.521 mW/g

**Right tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 18.1 V/m; Power Drift = -0.035 dB  
Peak SAR (extrapolated) = 0.750 W/kg  
**SAR(1 g) = 0.461 mW/g; SAR(10 g) = 0.263 mW/g**  
Maximum value of SAR (measured) = 0.512 mW/g



0 dB = 0.512mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007  
Option: Bluetooth

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

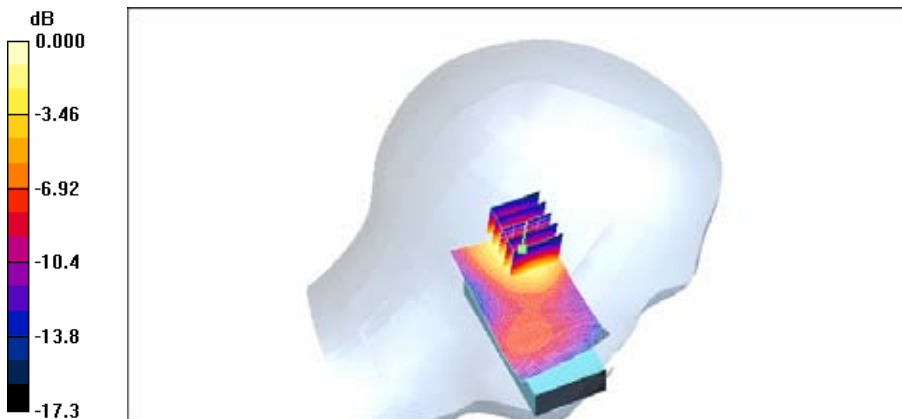
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor - Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 661/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.566 mW/g

**Left tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.6 V/m; Power Drift = -0.178 dB  
Peak SAR (extrapolated) = 0.848 W/kg  
**SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.278 mW/g**  
Maximum value of SAR (measured) = 0.554 mW/g



0 dB = 0.554mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007  
Option: Memory

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

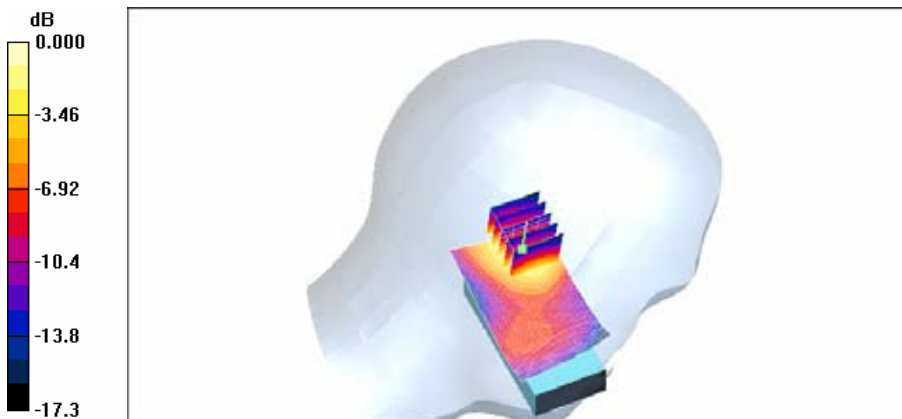
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 661/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.551 mW/g

**Left tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.3 V/m; Power Drift = -0.015 dB  
Peak SAR (extrapolated) = 0.822 W/kg  
**SAR(1 g) = 0.491 mW/g; SAR(10 g) = 0.274 mW/g**  
Maximum value of SAR (measured) = 0.540 mW/g



0 dB = 0.540mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

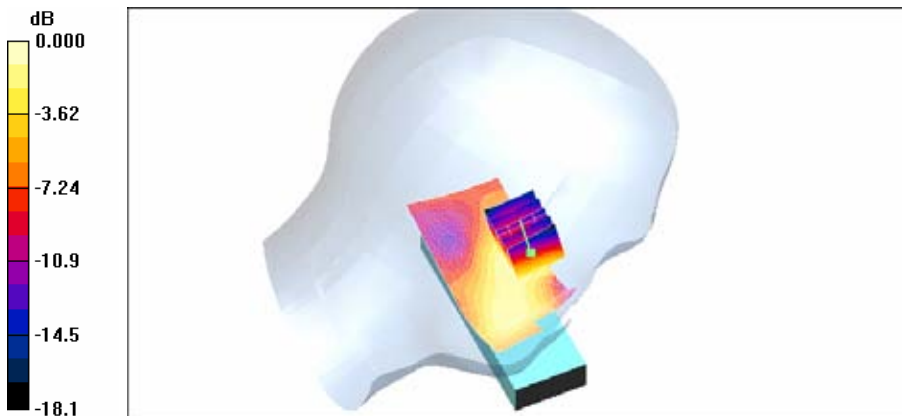
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.43 \text{ mho/m}$ ;  $\rho = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left touch 661/Area Scan (41x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.115 mW/g

**Left touch 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 7.50 V/m; Power Drift = -0.045 dB  
Peak SAR (extrapolated) = 0.167 W/kg  
**SAR(1 g) = 0.103 mW/g; SAR(10 g) = 0.062 mW/g**  
Maximum value of SAR (measured) = 0.114 mW/g



0 dB = 0.114mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

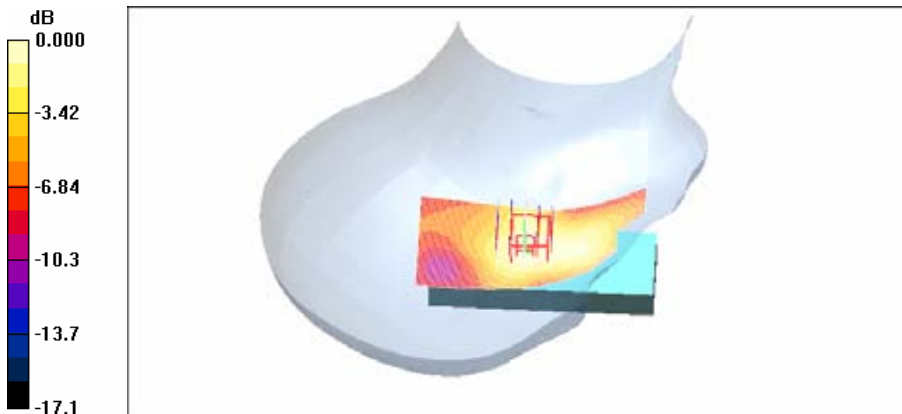
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 661/Area Scan (41x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.107 mW/g

**Right touch 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 8.24 V/m; Power Drift = -0.062 dB  
Peak SAR (extrapolated) = 0.126 W/kg  
**SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.062 mW/g**  
Maximum value of SAR (measured) = 0.106 mW/g



0 dB = 0.106mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

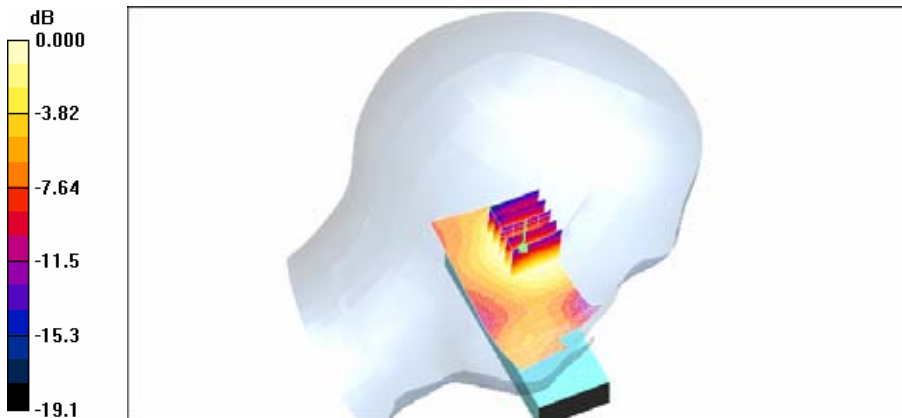
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 661/Area Scan (41x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.080 mW/g

**Left tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.81 V/m; Power Drift = 0.007 dB  
Peak SAR (extrapolated) = 0.106 W/kg  
**SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.045 mW/g**  
Maximum value of SAR (measured) = 0.078 mW/g



0 dB = 0.078mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

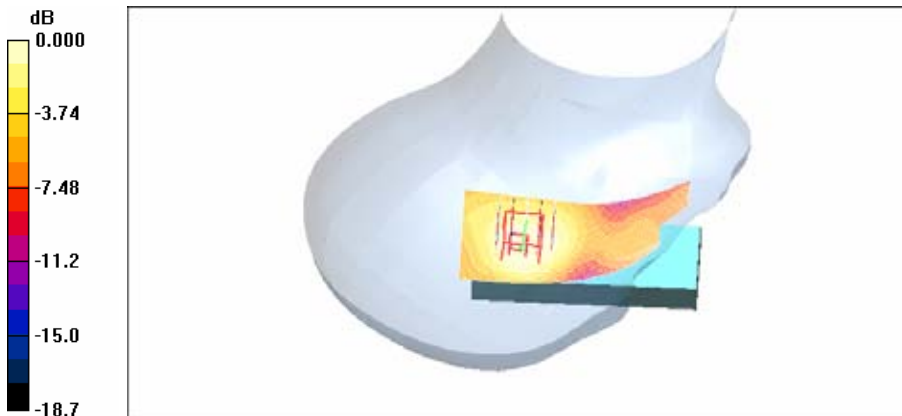
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right tilt 661/Area Scan (41x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.073 mW/g

**Right tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.60 V/m; Power Drift = -0.147 dB  
Peak SAR (extrapolated) = 0.095 W/kg  
**SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.040 mW/g**  
Maximum value of SAR (measured) = 0.070 mW/g



0 dB = 0.070mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

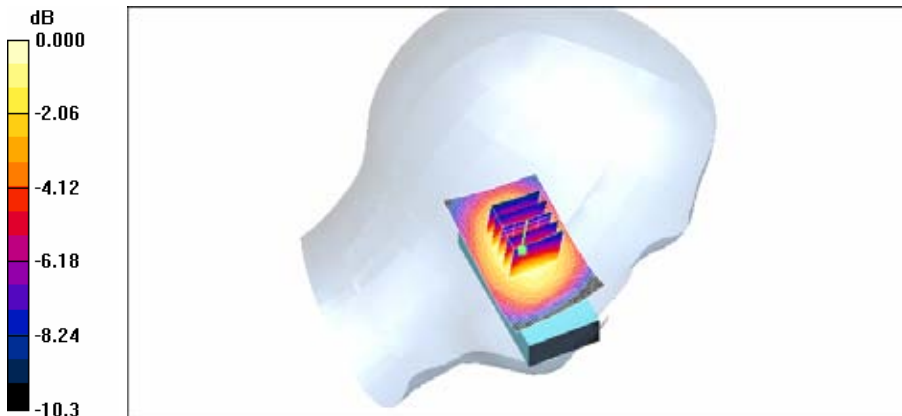
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 4175/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.691 mW/g

**Left touch 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 21.8 V/m; Power Drift = 0.179 dB  
Peak SAR (extrapolated) = 0.846 W/kg  
**SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.452 mW/g**  
Maximum value of SAR (measured) = 0.687 mW/g



0 dB = 0.687mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

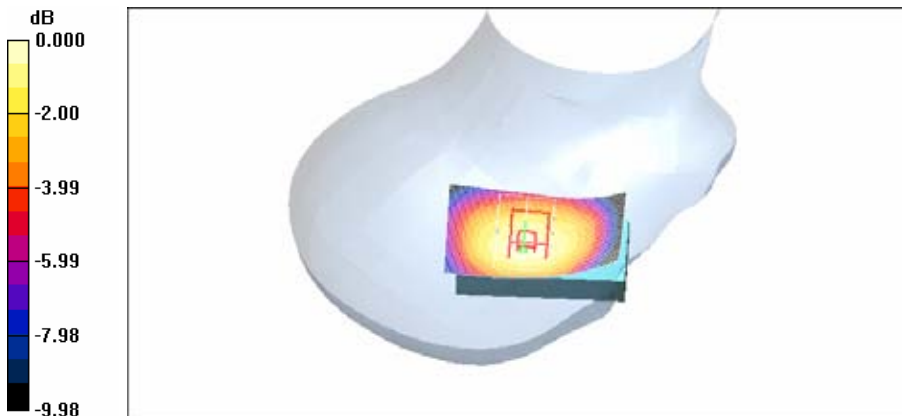
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 4175/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.750 mW/g

**Right touch 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23.7 V/m; Power Drift = 0.011 dB  
Peak SAR (extrapolated) = 0.979 W/kg  
**SAR(1 g) = 0.759 mW/g; SAR(10 g) = 0.546 mW/g**  
Maximum value of SAR (measured) = 0.803 mW/g



0 dB = 0.803mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

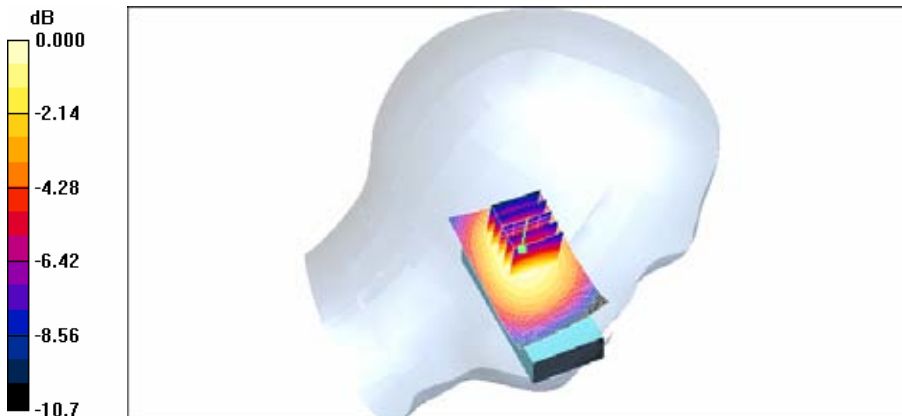
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left tilt 4175/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.473 mW/g

**Left tilt 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.1 V/m; Power Drift = -0.111 dB  
Peak SAR (extrapolated) = 0.597 W/kg  
**SAR(1 g) = 0.448 mW/g; SAR(10 g) = 0.316 mW/g**  
Maximum value of SAR (measured) = 0.472 mW/g



0 dB = 0.472mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

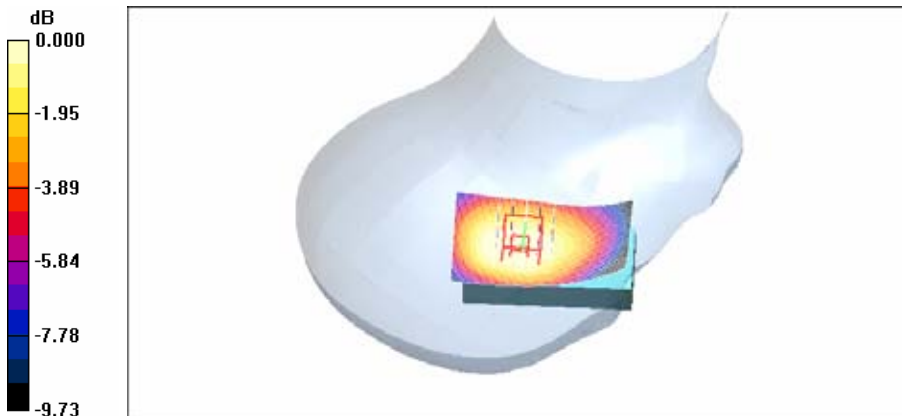
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 4175/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.663 mW/g

**Right tilt 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23.0 V/m; Power Drift = -0.095 dB  
Peak SAR (extrapolated) = 0.773 W/kg  
**SAR(1 g) = 0.591 mW/g; SAR(10 g) = 0.423 mW/g**  
Maximum value of SAR (measured) = 0.626 mW/g



0 dB = 0.626mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007  
Option: Bluetooth

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

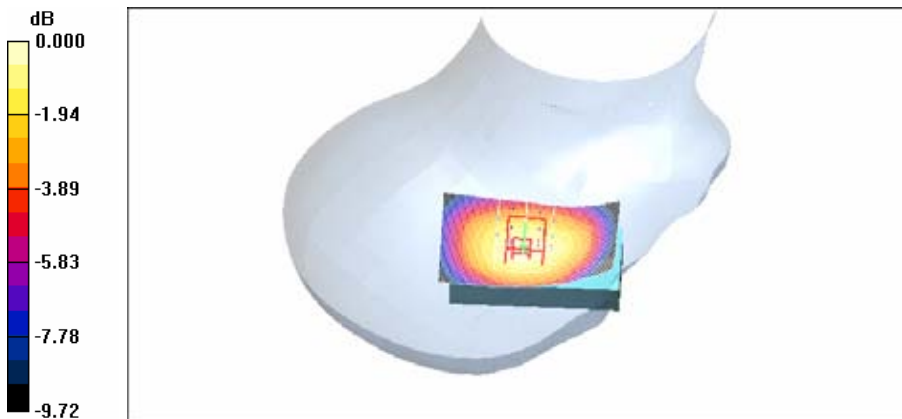
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.884 \text{ mho/m}$ ;  $r = 41.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section ; Measurement SW: DASy4, V4.7 Build 53

DASy4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 4175/Area Scan (41x71x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.668 mW/g

**Right touch 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 20.4 V/m; Power Drift = 0.028 dB  
Peak SAR (extrapolated) = 0.835 W/kg  
**SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.462 mW/g**  
Maximum value of SAR (measured) = 0.685 mW/g



0 dB = 0.685mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007  
Option: Memory

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

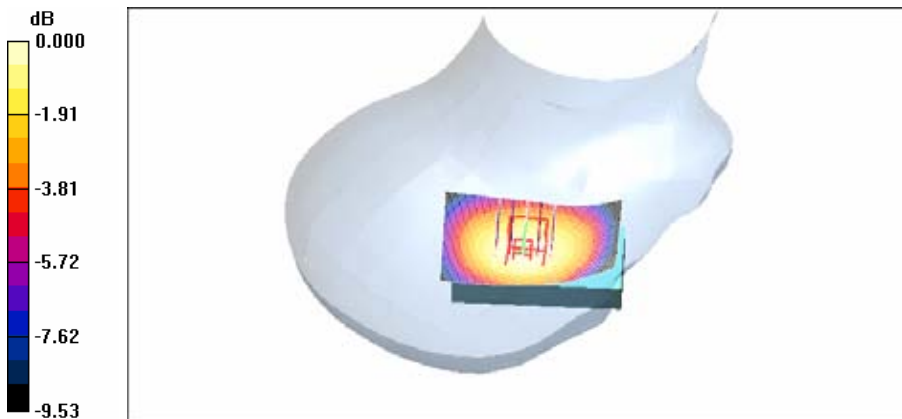
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.884 \text{ mho/m}$ ;  $r = 41.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 4175/Area Scan (41x71x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.773 mW/g

**Right touch 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 22.5 V/m; Power Drift = -0.038 dB  
Peak SAR (extrapolated) = 0.926 W/kg  
**SAR(1 g) = 0.716 mW/g; SAR(10 g) = 0.514 mW/g**  
Maximum value of SAR (measured) = 0.764 mW/g



0 dB = 0.764mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

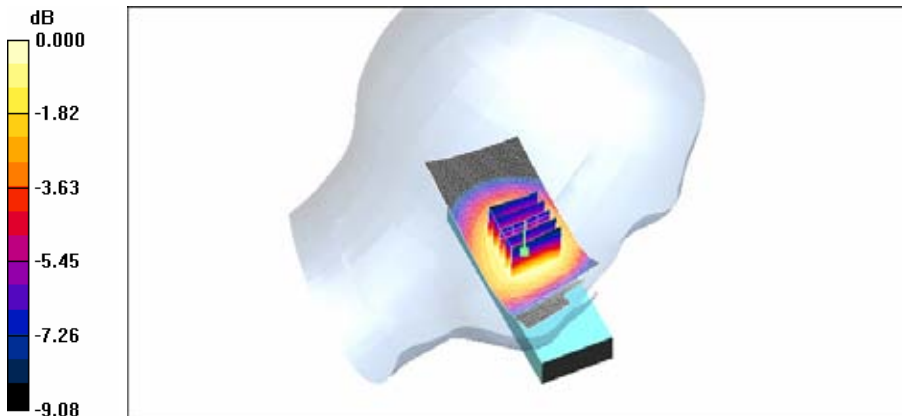
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DAS4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 4175/Area Scan (41x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.570 mW/g

**Left touch 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 24.8 V/m; Power Drift = 0.113 dB  
Peak SAR (extrapolated) = 0.699 W/kg  
**SAR(1 g) = 0.544 mW/g; SAR(10 g) = 0.395 mW/g**  
Maximum value of SAR (measured) = 0.572 mW/g



0 dB = 0.572mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

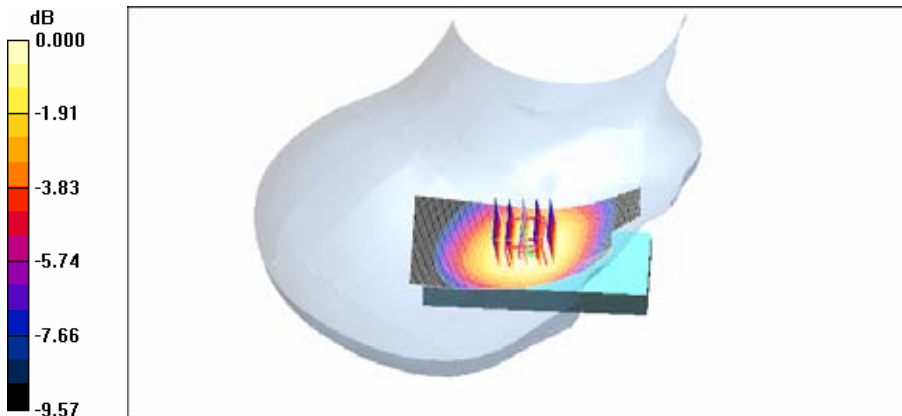
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 4175/Area Scan (41x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.548 mW/g

**Right touch 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 24.3 V/m; Power Drift = 0.041 dB  
Peak SAR (extrapolated) = 0.658 W/kg  
**SAR(1 g) = 0.515 mW/g; SAR(10 g) = 0.369 mW/g**  
Maximum value of SAR (measured) = 0.546 mW/g



0 dB = 0.546mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

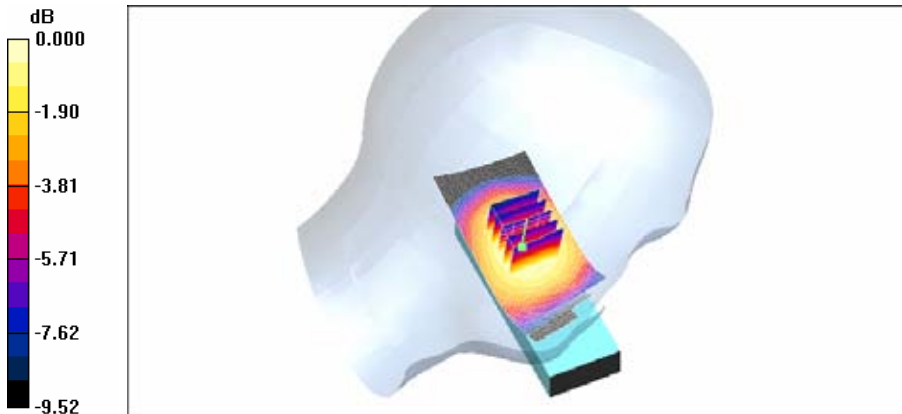
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.884 \text{ mho/m}$ ;  $r = 41.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section ; Measurement SW: DAS4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left tilt 4175/Area Scan (41x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.330 mW/g

**Left tilt 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 16.3 V/m; Power Drift = 0.007 dB  
Peak SAR (extrapolated) = 0.402 W/kg  
**SAR(1 g) = 0.307 mW/g; SAR(10 g) = 0.223 mW/g**  
Maximum value of SAR (measured) = 0.325 mW/g



0 dB = 0.325mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

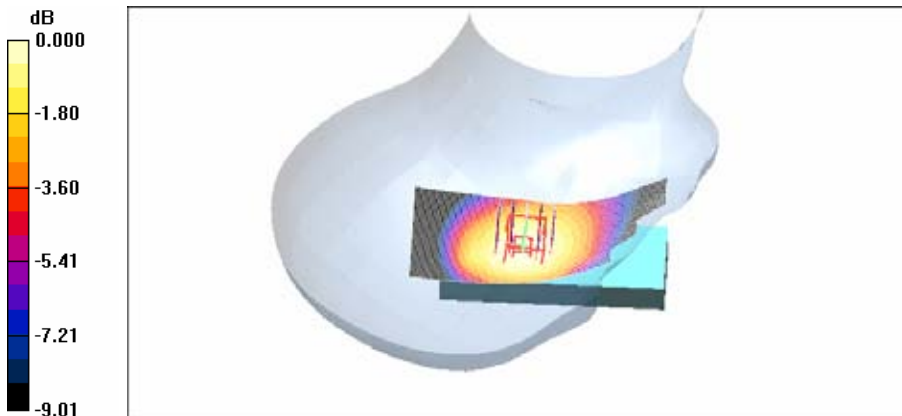
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 4175/Area Scan (41x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.295 mW/g

**Right tilt 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 16.0 V/m; Power Drift = 0.001 dB  
Peak SAR (extrapolated) = 0.348 W/kg  
**SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.200 mW/g**  
Maximum value of SAR (measured) = 0.288 mW/g



0 dB = 0.288mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1852.4 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.41$  mho/m;  $r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left touch 9262/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.946 mW/g

**Left touch 9262/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.6 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 0.750 W/kg

**SAR(1 g) = 0.595 mW/g; SAR(10 g) = 0.400 mW/g**

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

Maximum value of SAR (measured) = 0.634 mW/g

**Left touch 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

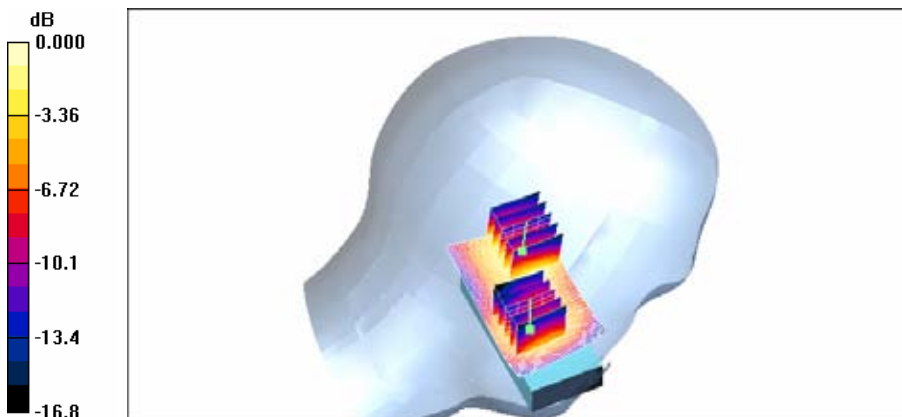
Reference Value = 22.6 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 1.56 W/kg

**SAR(1 g) = 0.940 mW/g; SAR(10 g) = 0.536 mW/g**

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

Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(2); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\rho_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DAS4, V4.7 Build 53

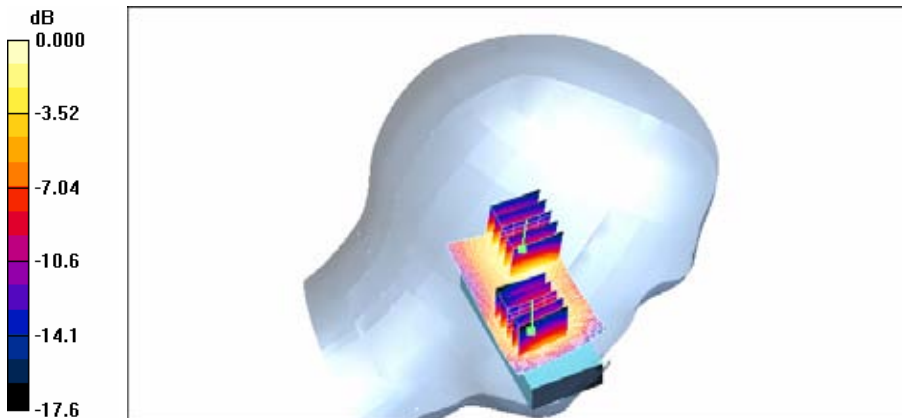
DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left touch 9400/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.02 mW/g

**Left touch 9400/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23.4 V/m; Power Drift = 0.085 dB  
Peak SAR (extrapolated) = 0.730 W/kg  
**SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.379 mW/g**  
Maximum value of SAR (measured) = 0.598 mW/g

**Left touch 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 23.4 V/m; Power Drift = 0.085 dB  
Peak SAR (extrapolated) = 1.54 W/kg  
**SAR(1 g) = 0.907 mW/g; SAR(10 g) = 0.510 mW/g**  
Maximum value of SAR (measured) = 0.995 mW/g



0 dB = 0.995mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1907.6 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.47$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left touch 9538/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.971 mW/g

**Left touch 9538/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.6 V/m; Power Drift = 0.189 dB

Peak SAR (extrapolated) = 0.650 W/kg

**SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.347 mW/g**

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

Maximum value of SAR (measured) = 0.558 mW/g

**Left touch 9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

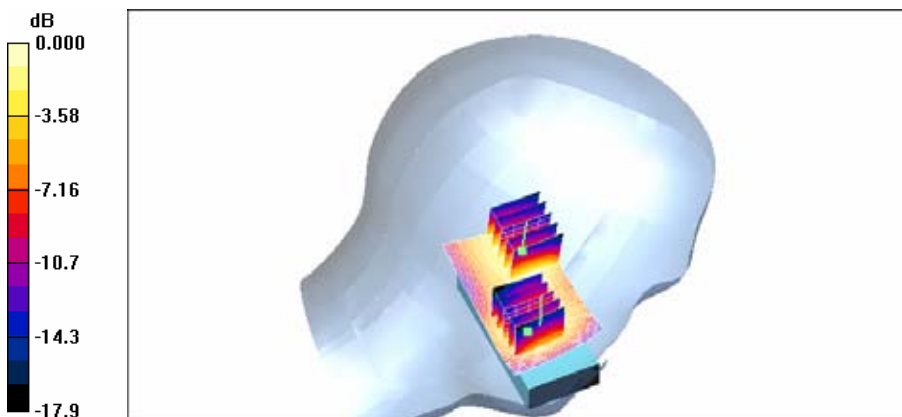
Reference Value = 21.6 V/m; Power Drift = 0.189 dB

Peak SAR (extrapolated) = 1.40 W/kg

**SAR(1 g) = 0.819 mW/g; SAR(10 g) = 0.458 mW/g**

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

Maximum value of SAR (measured) = 0.910 mW/g



0 dB = 0.910mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1852.4 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.41$  mho/m;  $r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 9262/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.818 mW/g

**Right touch 9262/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.2 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 0.636 W/kg

**SAR(1 g) = 0.520 mW/g; SAR(10 g) = 0.357 mW/g**

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

Maximum value of SAR (measured) = 0.563 mW/g

**Right touch 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

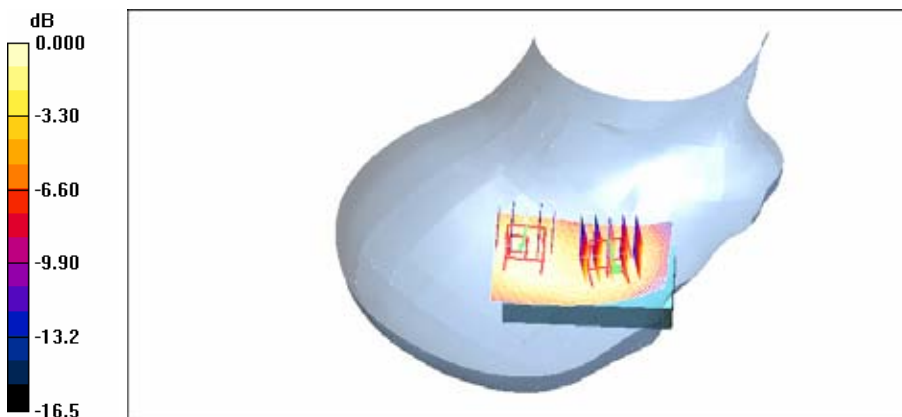
Reference Value = 24.2 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.409 mW/g**

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

Maximum value of SAR (measured) = 0.739 mW/g



0 dB = 0.739mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\rho_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ;Measurement SW: DASY4, V4.7 Build 53

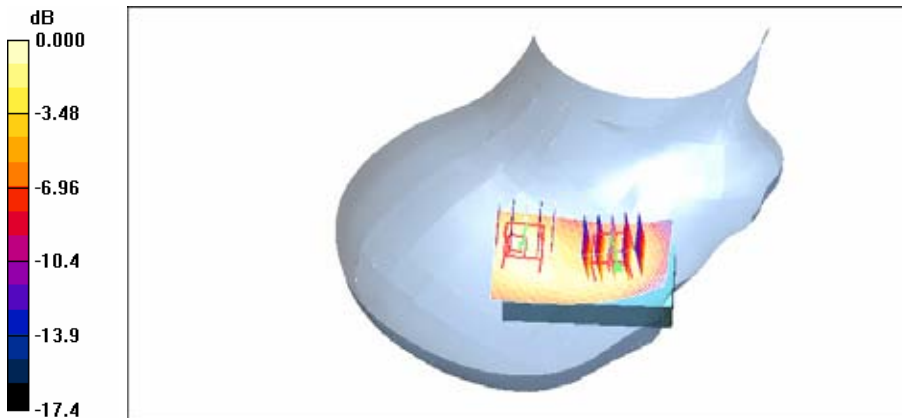
DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 9400/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.860 mW/g

**Right touch 9400/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 24.1 V/m; Power Drift = -0.208 dB  
Peak SAR (extrapolated) = 0.635 W/kg  
**SAR(1 g) = 0.517 mW/g; SAR(10 g) = 0.354 mW/g**  
Maximum value of SAR (measured) = 0.560 mW/g

**Right touch 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 24.1 V/m; Power Drift = -0.208 dB  
Peak SAR (extrapolated) = 1.25 W/kg  
**SAR(1 g) = 0.758 mW/g; SAR(10 g) = 0.452 mW/g**  
Maximum value of SAR (measured) = 0.826 mW/g



0 dB = 0.826mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1907.6 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.47$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 9538/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.733 mW/g

**Right touch 9538/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.1 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.346 mW/g**

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

Maximum value of SAR (measured) = 0.685 mW/g

**Right touch 9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

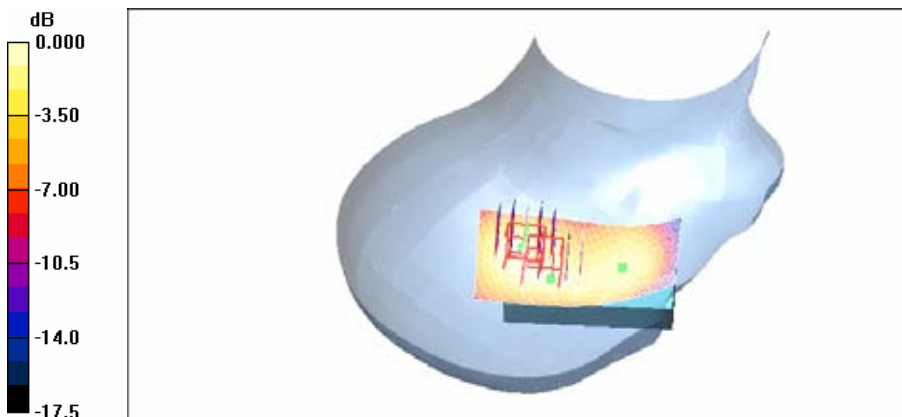
Reference Value = 23.1 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 1.08 W/kg

**SAR(1 g) = 0.653 mW/g; SAR(10 g) = 0.384 mW/g**

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

Maximum value of SAR (measured) = 0.718 mW/g



0 dB = 0.718mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1852.4 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.41$  mho/m;  $r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 9262/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.02 mW/g

**Left tilt 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

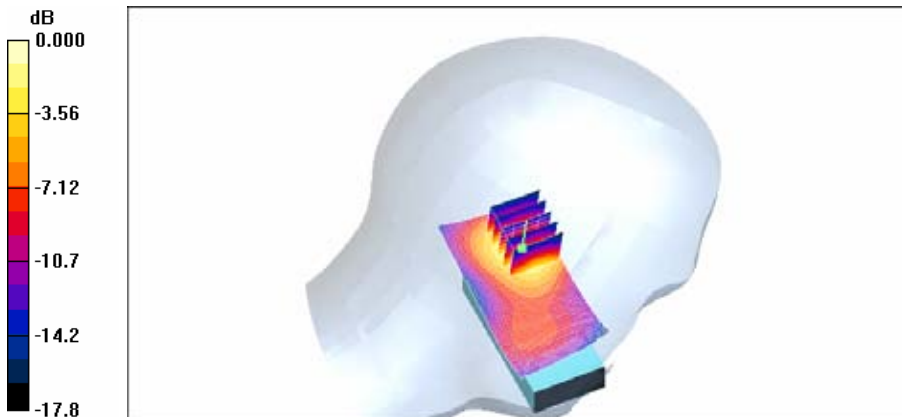
Reference Value = 23.6 V/m; Power Drift = 0.098 dB

Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.561 mW/g**

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

Maximum value of SAR (measured) = 1.19 mW/g



0 dB = 1.19mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

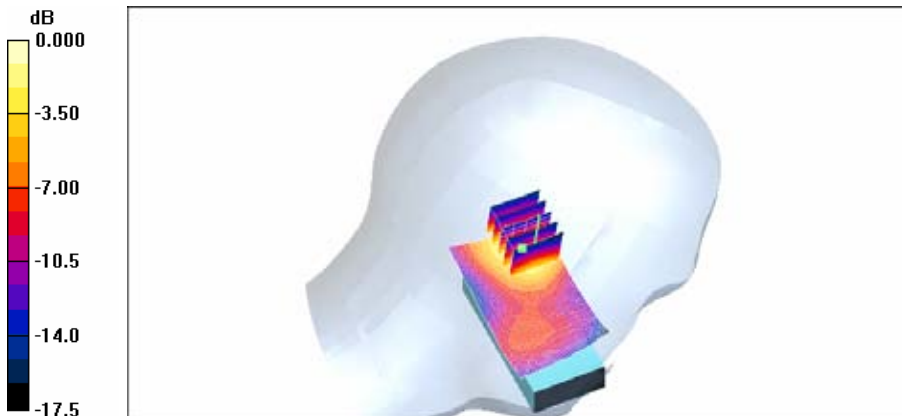
Communication System: WCDMA1900(2); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\rho = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 9400/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.10 mW/g

**Left tilt 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.9 V/m; Power Drift = -0.092 dB  
Peak SAR (extrapolated) = 1.84 W/kg  
**SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.572 mW/g**  
Maximum value of SAR (measured) = 1.18 mW/g



0 dB = 1.18mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1907.6 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.47$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 9538/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

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

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

**Left tilt 9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

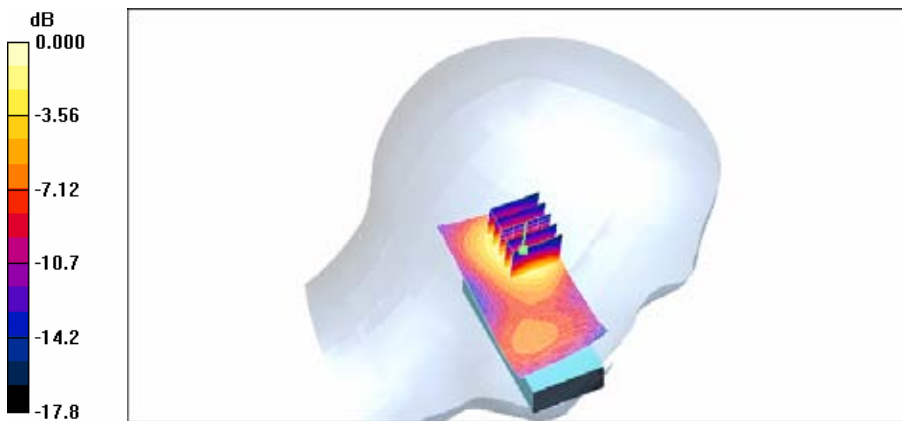
Reference Value = 25.2 V/m; Power Drift = 0.132 dB

Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.559 mW/g**

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

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



0 dB = 1.10mW/g

Test Laboratory: HYUNDAI CALIBRATION &amp; CERTIFICATION TECHNOLOGIES CO., LTD

EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth

Liquid Temperature: 21.6

Ambient Temperature: 21.8

Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.41$  mho/m;  $r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right tilt 9262/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.966 mW/g

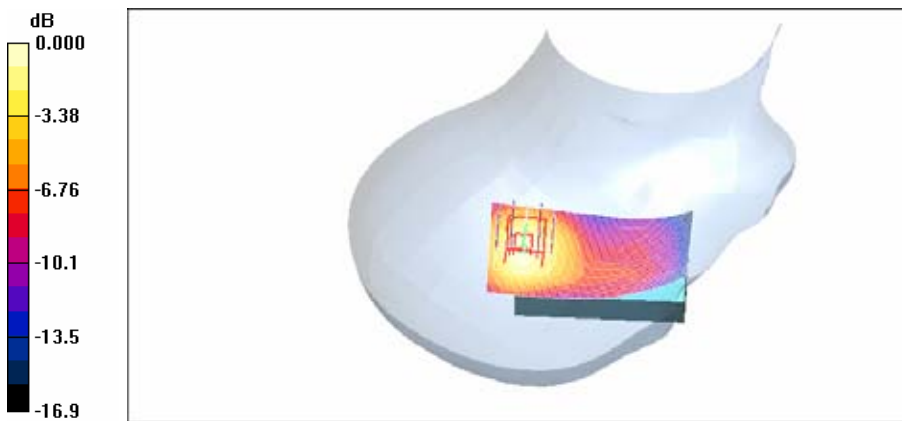
**Right tilt 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.3 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 1.51 W/kg

**SAR(1 g) = 0.927 mW/g; SAR(10 g) = 0.528 mW/g**[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

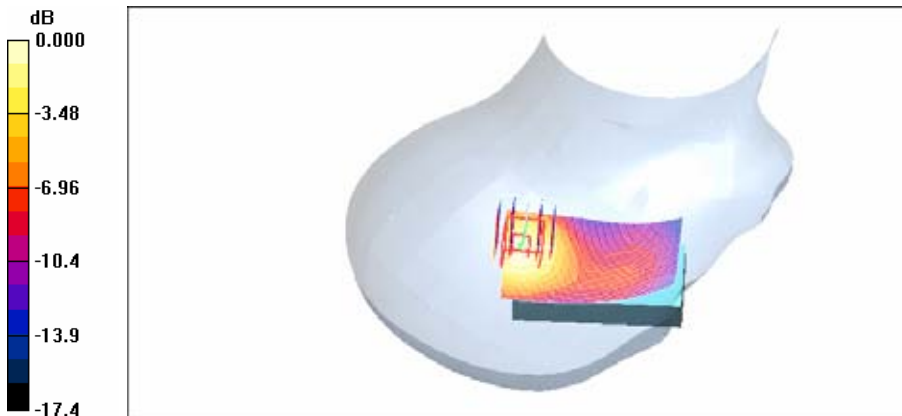
Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right tilt 9400/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.08 mW/g

**Right tilt 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.6 V/m; Power Drift = 0.100 dB  
Peak SAR (extrapolated) = 1.63 W/kg  
**SAR(1 g) = 0.993 mW/g; SAR(10 g) = 0.561 mW/g**  
Maximum value of SAR (measured) = 1.10 mW/g



0 dB = 1.10mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1907.6 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.47$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right tilt 9538/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.21 mW/g

**Right tilt 9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

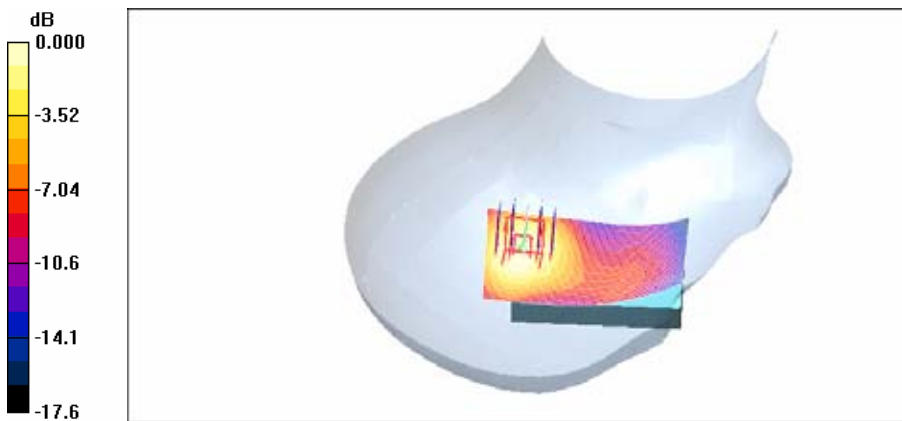
Reference Value = 26.7 V/m; Power Drift = 0.153 dB

Peak SAR (extrapolated) = 1.67 W/kg

**SAR(1 g) = 1 mW/g; SAR(10 g) = 0.565 mW/g**

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

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



0 dB = 1.12mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007  
Option: Bluetooth

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.41$  mho/m;  $r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 9262/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.03 mW/g

**Left tilt 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

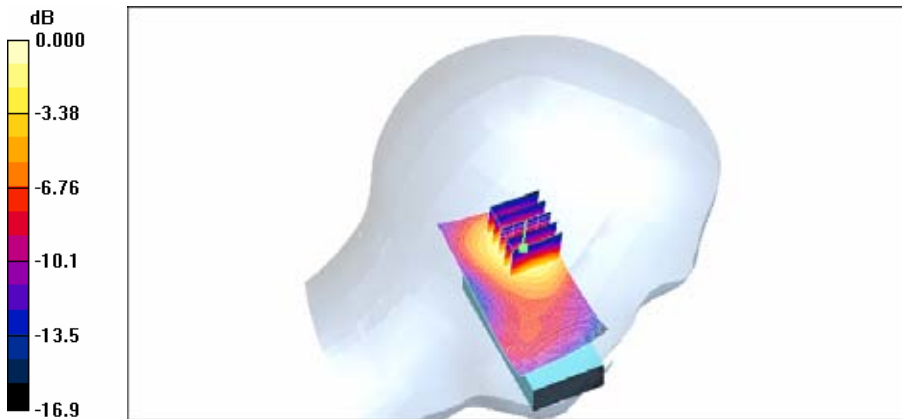
Reference Value = 24.9 V/m; Power Drift = -0.164 dB

Peak SAR (extrapolated) = 1.53 W/kg

**SAR(1 g) = 0.916 mW/g; SAR(10 g) = 0.515 mW/g**

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

Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007  
Option: Memory

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.41$  mho/m;  $r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 9262/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 1.00 mW/g

**Left tilt 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

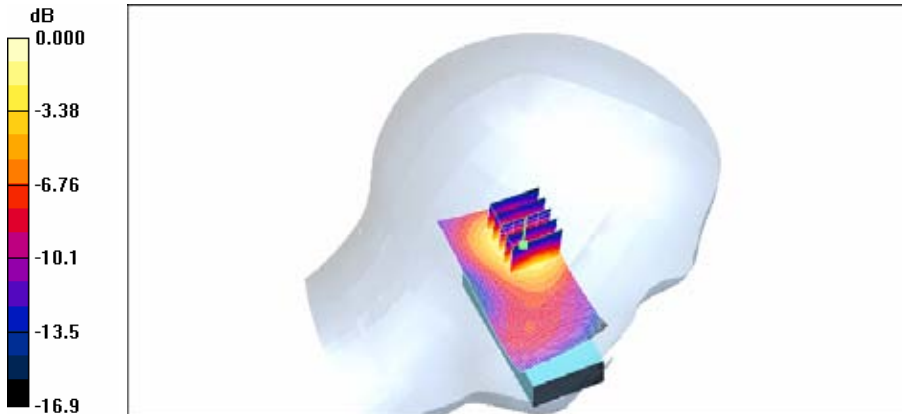
Reference Value = 23.6 V/m; Power Drift = 0.079 dB

Peak SAR (extrapolated) = 1.68 W/kg

**SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.562 mW/g**

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

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



0 dB = 1.10mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

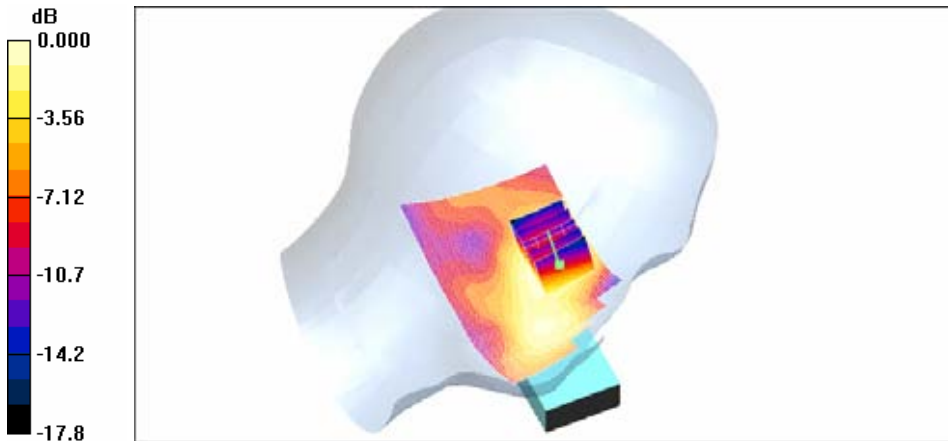
Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left touch 9400/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.249 mW/g

**Left touch 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 10.6 V/m; Power Drift = -0.067 dB  
Peak SAR (extrapolated) = 0.292 W/kg  
**SAR(1 g) = 0.184 mW/g; SAR(10 g) = 0.112 mW/g**  
Maximum value of SAR (measured) = 0.201 mW/g



0 dB = 0.201mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

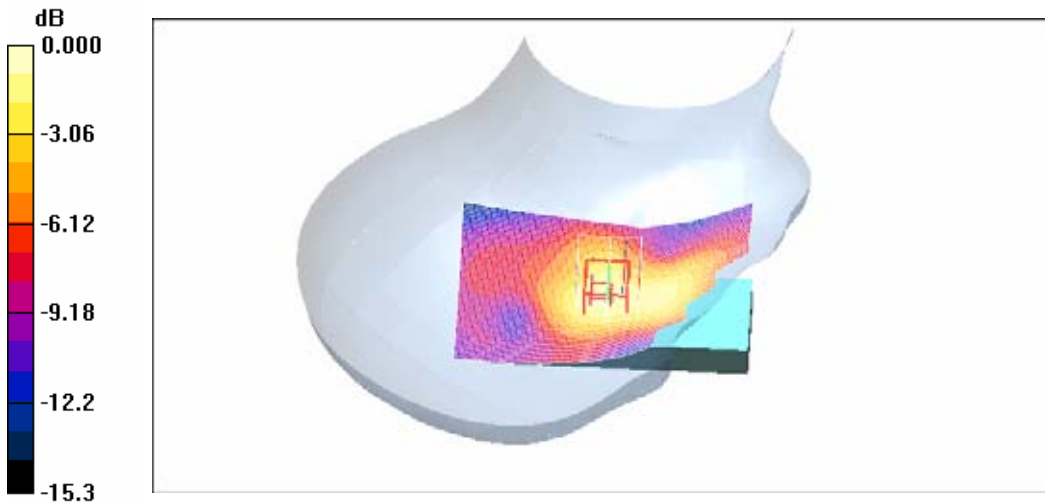
Communication System: WCDMA1900(2); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 9400/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.204 mW/g

**Right touch 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 11.7 V/m; Power Drift = 0.208 dB  
Peak SAR (extrapolated) = 0.298 W/kg  
**SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.151 mW/g**  
Maximum value of SAR (measured) = 0.243 mW/g



0 dB = 0.243mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

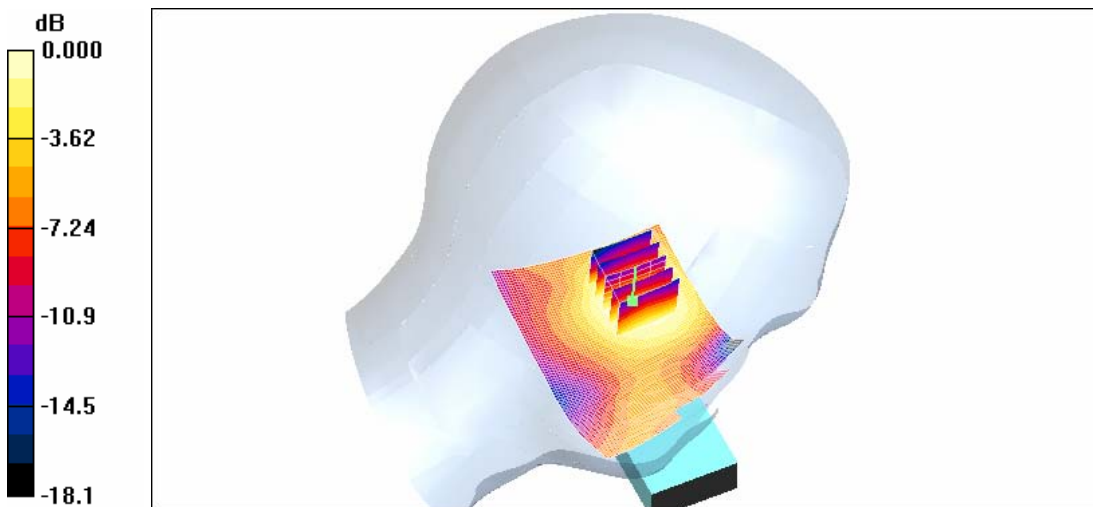
Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\rho_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 9400/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.149 mW/g

**Left tilt 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.49 V/m; Power Drift = 0.186 dB  
Peak SAR (extrapolated) = 0.194 W/kg  
**SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.085 mW/g**  
Maximum value of SAR (measured) = 0.145 mW/g



0 dB = 0.145mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 up; Type: Slide Up; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(2); Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right tilt 9400/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.144 mW/g

**Right tilt 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.59 V/m; Power Drift = -0.007 dB  
Peak SAR (extrapolated) = 0.196 W/kg  
**SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.083 mW/g**  
Maximum value of SAR (measured) = 0.147 mW/g



0 dB = 0.147mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10

**DUT: C810; Type: Slide down; Serial: #1**

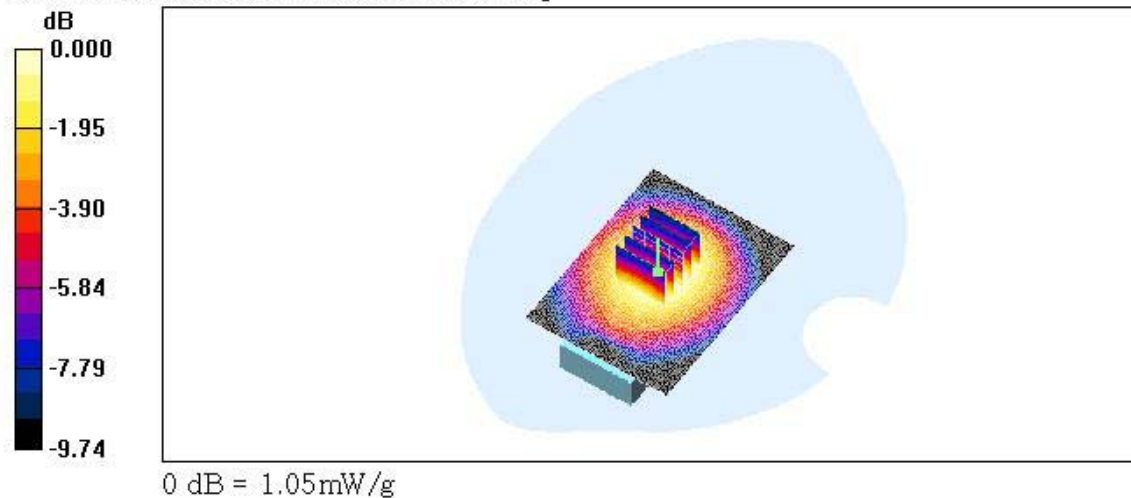
Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:4.15  
Medium parameters used:  $f = 825$  MHz;  $\sigma = 0.968$  mho/m;  $\epsilon_r = 55$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

## DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 128/Area Scan (61x81x1):** Measurement grid:  $\Delta x = 15$ mm,  $\Delta y = 15$ mm  
Maximum value of SAR (interpolated) = 1.06 mW/g

**GSM850 Body 128/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $\Delta x = 8$ mm,  $\Delta y = 8$ mm,  $\Delta z = 5$ mm  
Reference Value = 29.7 V/m; Power Drift = 0.096 dB  
Peak SAR (extrapolated) = 1.34 W/kg  
**SAR(1 g) = 0.995 mW/g; SAR(10 g) = 0.703 mW/g**  
Maximum value of SAR (measured) = 1.05 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10

**DUT: C810; Type: Slide down; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 190/Area Scan (61x81x1):** Measurement grid:  $\Delta x = 15$ mm,  $\Delta y = 15$ mm

Info: Interpolated medium parameters used for SAR evaluation.  
Maximum value of SAR (interpolated) = 1.25 mW/g

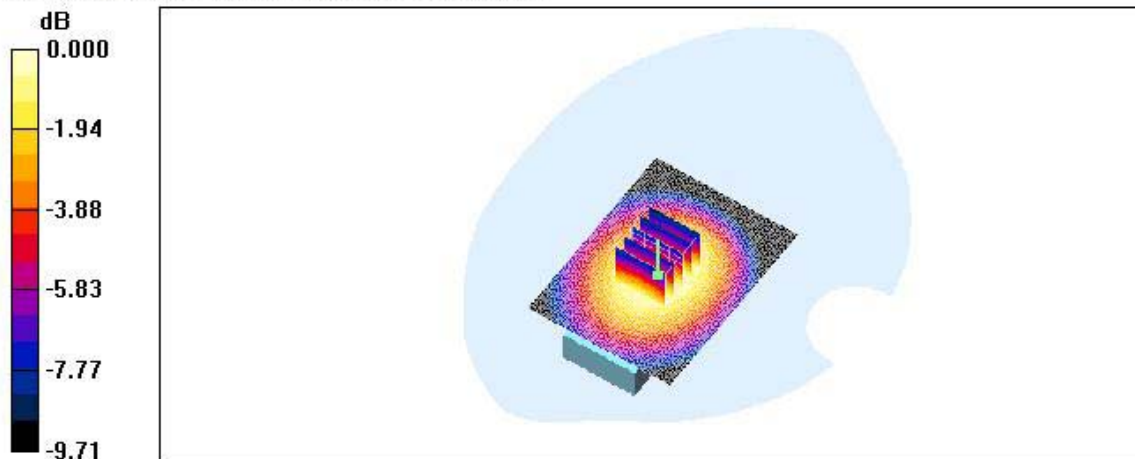
**GSM850 Body 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $\Delta x = 8$ mm,  $\Delta y = 8$ mm,  $\Delta z = 5$ mm

Reference Value = 28.9 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 1.54 W/kg

**SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.850 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.  
Maximum value of SAR (measured) = 1.26 mW/g



0 dB = 1.26mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10

**DUT: C810; Type: Slide down; Serial: #1**

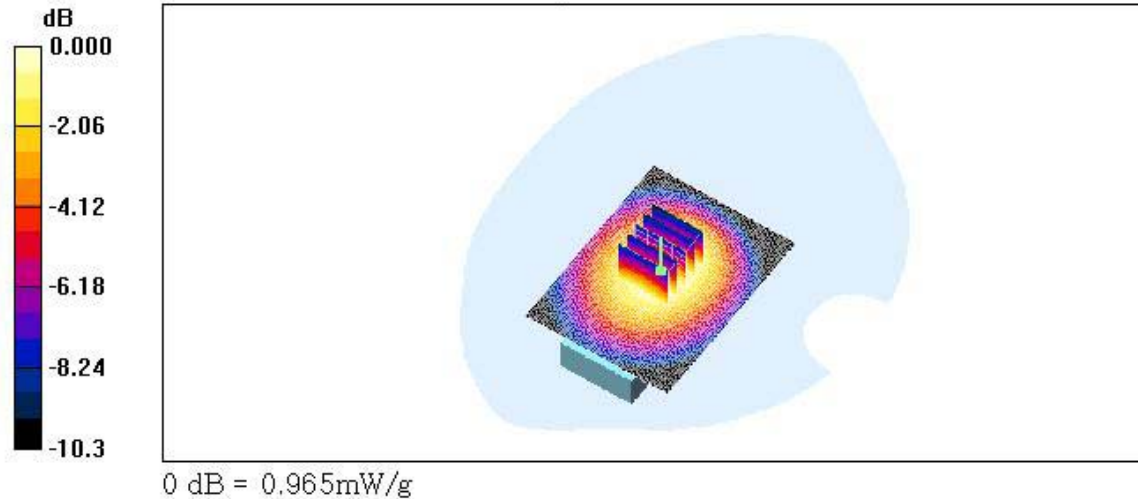
Communication System: GSM 850; Frequency: 849.8 MHz; Duty Cycle: 1:4.15  
Medium parameters used:  $f = 850$  MHz;  $\sigma = 0.996$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

## DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 251/Area Scan (61x81x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm  
Maximum value of SAR (interpolated) = 0.945 mW/g

**GSM850 Body 251/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm  
Reference Value = 26.8 V/m; Power Drift = -0.010 dB  
Peak SAR (extrapolated) = 1.21 W/kg  
**SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.637 mW/g**  
Maximum value of SAR (measured) = 0.965 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.991$  mho/m;  $r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 190/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.615 mW/g

**GSM850 Body 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

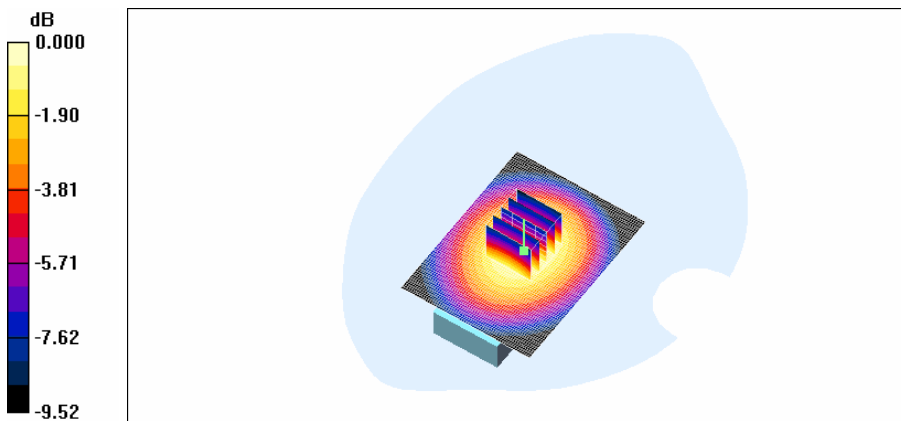
Reference Value = 21.5 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 0.773 W/kg

**SAR(1 g) = 0.588 mW/g; SAR(10 g) = 0.420 mW/g**

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

Maximum value of SAR (measured) = 0.624 mW/g



0 dB = 0.624mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10 with Bluetooth

**DUT: C810; Type: Slide down; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

## DASY4 Configuration:

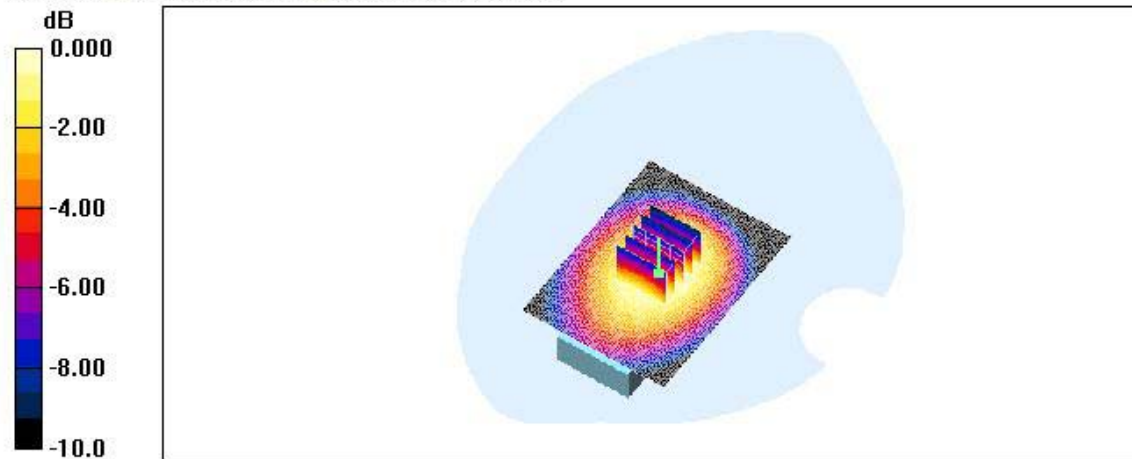
- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 190/Area Scan (61x81x1):** Measurement grid:  $\Delta x = 15$ mm,  $\Delta y = 15$ mm

Info: Interpolated medium parameters used for SAR evaluation.  
Maximum value of SAR (interpolated) = 0.993 mW/g

**GSM850 Body 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $\Delta x = 8$ mm,  $\Delta y = 8$ mm,  $\Delta z = 5$ mm  
Reference Value = 27.5 V/m; Power Drift = -0.142 dB  
Peak SAR (extrapolated) = 1.31 W/kg  
**SAR(1 g) = 0.945 mW/g; SAR(10 g) = 0.670 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.  
Maximum value of SAR (measured) = 0.996 mW/g



0 dB = 0.996mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10 with Memory

**DUT: CS10; Type: Slide down; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 190/Area Scan (61x81x1):** Measurement grid:  $\Delta x = 15$ mm,  $\Delta y = 15$ mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 1.04 mW/g

**GSM850 Body 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $\Delta x = 8$ mm,  $\Delta y = 8$ mm,  $\Delta z = 5$ mm

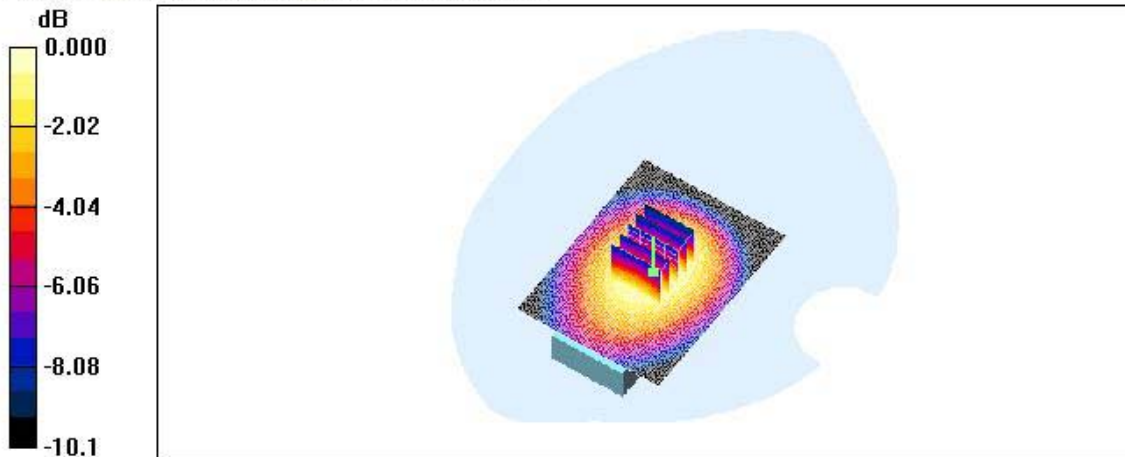
Reference Value = 28.0 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 1.33 W/kg

**SAR(1 g) = 0.991 mW/g; SAR(10 g) = 0.701 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.05 mW/g



0 dB = 1.05mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10 with Front

**DUT: C810; Type: Slide down; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.98$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 190/Area Scan (61x81x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.366 mW/g

**GSM850 Body 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

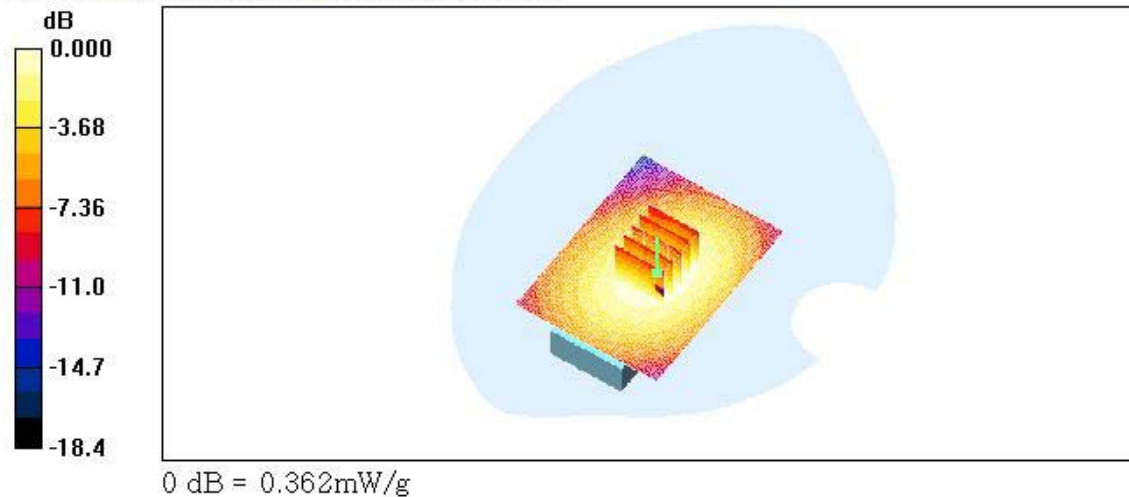
Reference Value = 15.6 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 0.447 W/kg

**SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.247 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.362 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10

**DUT: C810 down; Type: Slide down; Serial: #1**

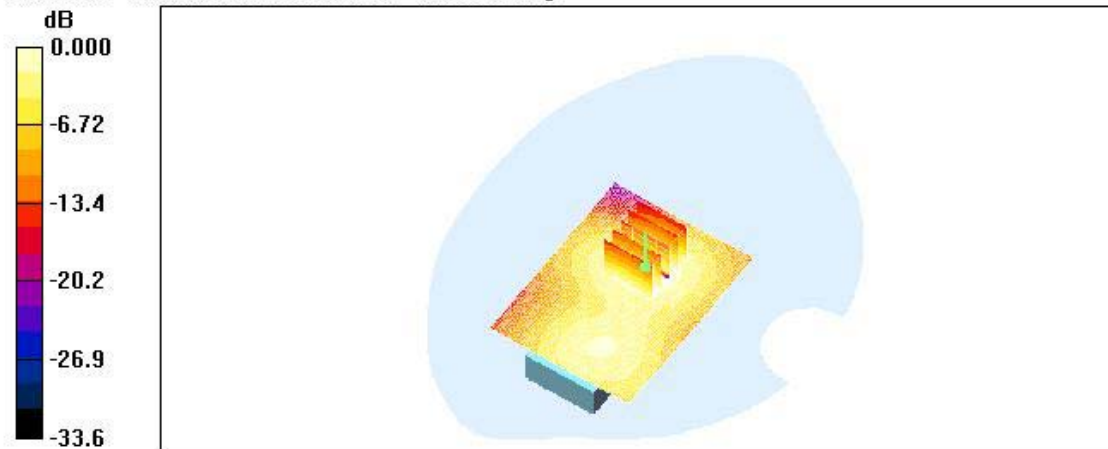
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4.15  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 1800/1900 MHz; Type: SAM

**GSM1900 Body 661/Area Scan (61x81x1):** Measurement grid:  $dx=15$ mm,  $dy=15$ mm  
Maximum value of SAR (interpolated) = 0.481 mW/g

**GSM1900 Body 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm  
Reference Value = 17.6 V/m; Power Drift = 0.082 dB  
Peak SAR (extrapolated) = 0.722 W/kg  
**SAR(1 g) = 0.469 mW/g; SAR(10 g) = 0.269 mW/g**  
Maximum value of SAR (measured) = 0.485 mW/g



0 dB = 0.485mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

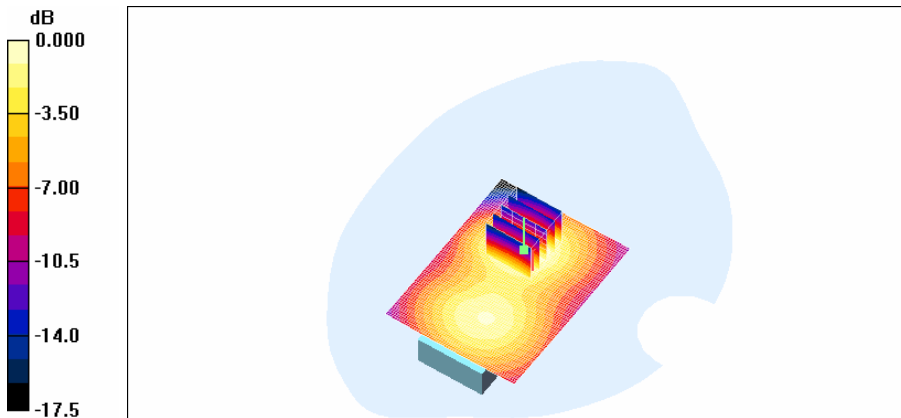
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.55$  mho/m;  $\rho_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASy4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**GSM1900 Body 661/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.297 mW/g

**GSM1900 Body 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 14.2 V/m; Power Drift = -0.032 dB  
Peak SAR (extrapolated) = 0.367 W/kg  
**SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.151 mW/g**  
Maximum value of SAR (measured) = 0.274 mW/g



0 dB = 0.274mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10 with Bluetooth

**DUT: C810 down; Type: Slide down; Serial: #1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4.15

Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.1$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

## DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 1800/1900 MHz; Type: SAM

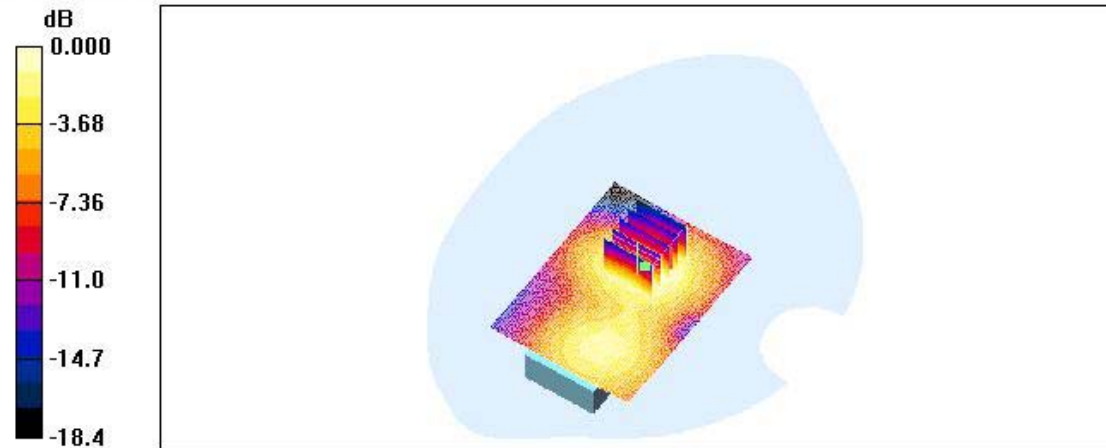
**GSM1900 Body 661/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.492 mW/g**GSM1900 Body 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$ 

Reference Value = 17.4 V/m; Power Drift = -0.155 dB

Peak SAR (extrapolated) = 0.666 W/kg

**SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.272 mW/g**

Maximum value of SAR (measured) = 0.480 mW/g



0 dB = 0.480mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10 with Memory

**DUT: C810 down; Type: Slide down; Serial: #1**

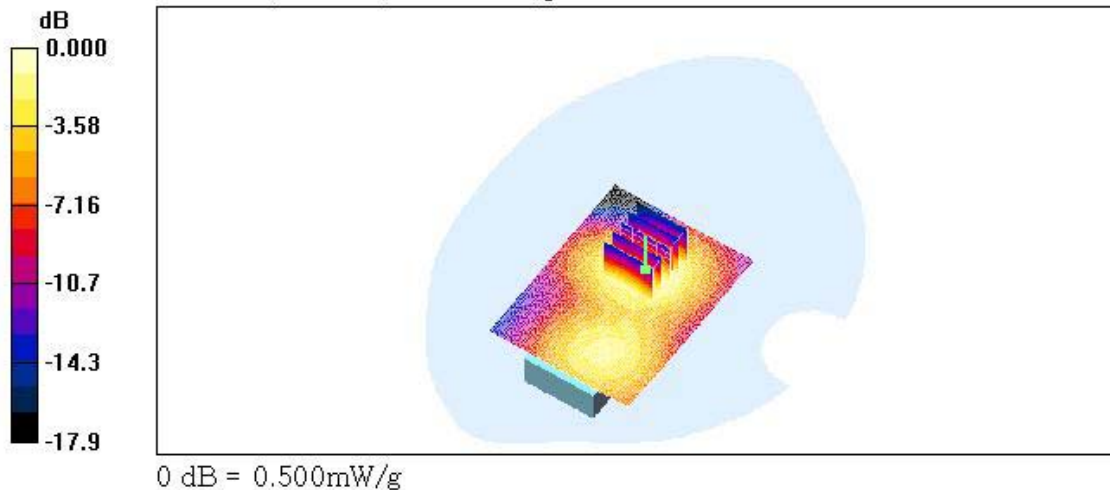
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4.15  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 1800/1900 MHz; Type: SAM

**GSM1900 Body 661/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.505 mW/g

**GSM1900 Body 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.8 V/m; Power Drift = -0.139 dB  
Peak SAR (extrapolated) = 0.680 W/kg  
**SAR(1 g) = 0.464 mW/g; SAR(10 g) = 0.278 mW/g**  
Maximum value of SAR (measured) = 0.500 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10 with Front

**DUT: CS10 down; Type: Slide down; Serial: #1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4.15  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.54 \text{ mho/m}$ ;  $\epsilon_r = 52.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 1800/1900 MHz; Type: SAM

**GSM1900 Body 661/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.182 mW/g

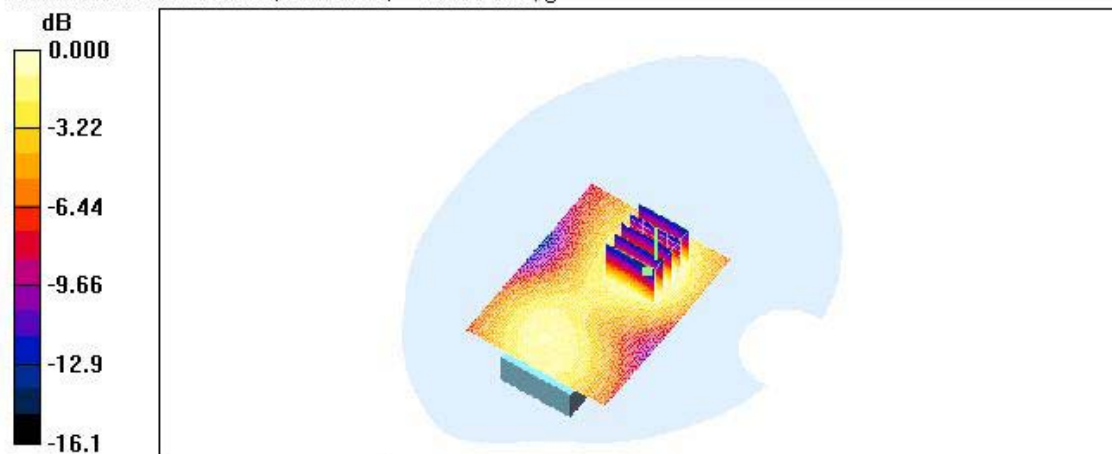
**GSM1900 Body 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.1 V/m; Power Drift = 0.195 dB

Peak SAR (extrapolated) = 0.257 W/kg

**SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.110 mW/g**

Maximum value of SAR (measured) = 0.186 mW/g



0 dB = 0.186mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

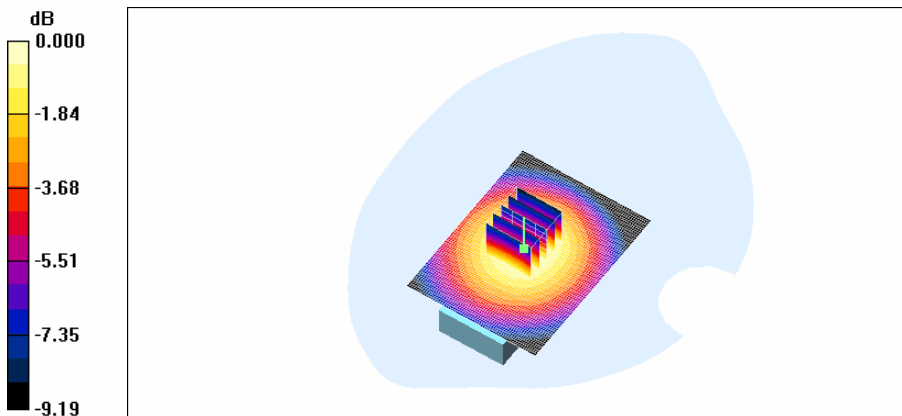
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $r = 53.3$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASy4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**WCDMA 850 Body 4175/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.344 mW/g

**WCDMA 850 Body 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 15.5 V/m; Power Drift = 0.057 dB  
Peak SAR (extrapolated) = 0.429 W/kg  
**SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.236 mW/g**  
Maximum value of SAR (measured) = 0.352 mW/g



0 dB = 0.352mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007  
Option: Bluetooth

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

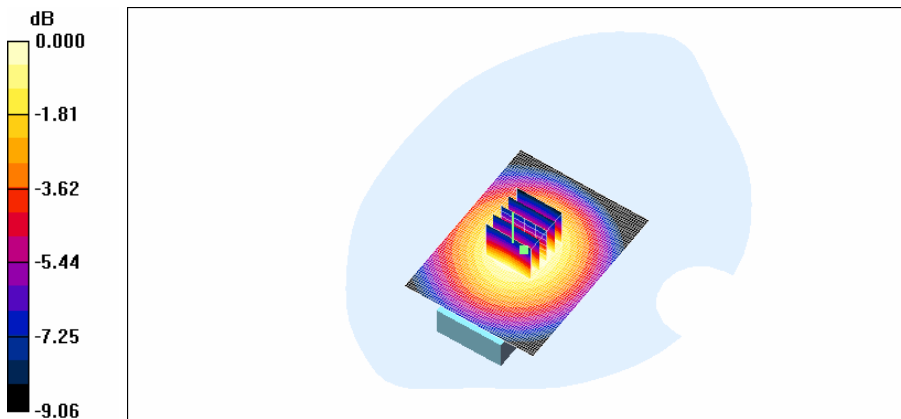
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $r = 53.3$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**WCDMA 850 Body 4175/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.351 mW/g

**WCDMA 850 Body 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 15.7 V/m; Power Drift = -0.121 dB  
Peak SAR (extrapolated) = 0.431 W/kg  
**SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.234 mW/g**  
Maximum value of SAR (measured) = 0.342 mW/g



0 dB = 0.342mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007  
Option: Memory

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

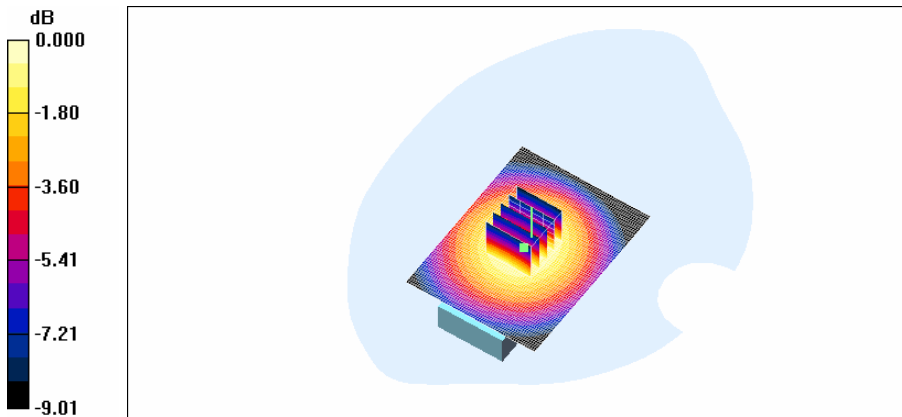
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.99$  mho/m;  $r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**WCDMA 850 Body 4175/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.338 mW/g

**WCDMA 850 Body 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15.6 V/m; Power Drift = -0.070 dB  
Peak SAR (extrapolated) = 0.423 W/kg  
**SAR(1 g) = 0.325 mW/g; SAR(10 g) = 0.235 mW/g**  
Maximum value of SAR (measured) = 0.344 mW/g



0 dB = 0.344mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007  
Option: Front

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

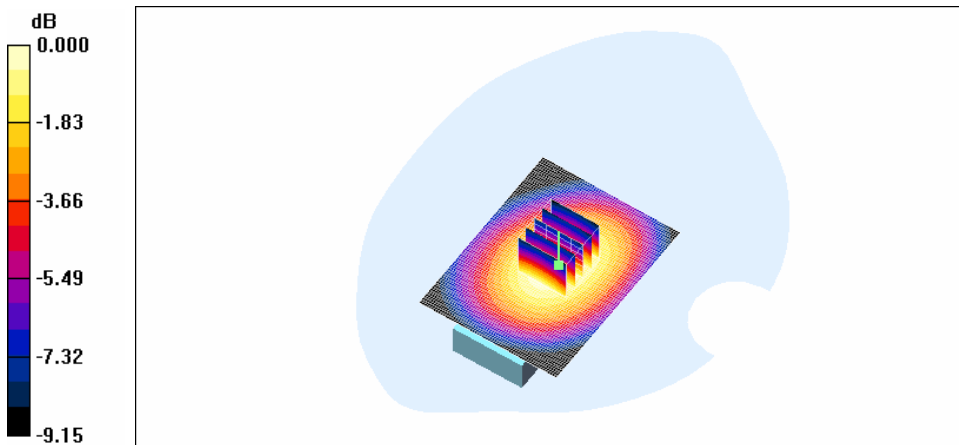
Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\rho = 0.99 \text{ mho/m}$ ;  $r = 53.3$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DAS4, V4.7 Build 53

DAS4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**WCDMA 850 Body 4175/Area Scan (61x81x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.270 mW/g

**WCDMA 850 Body 4175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 14.8 V/m; Power Drift = -0.105 dB  
Peak SAR (extrapolated) = 0.332 W/kg  
**SAR(1 g) = 0.252 mW/g; SAR(10 g) = 0.182 mW/g**  
Maximum value of SAR (measured) = 0.268 mW/g



0 dB = 0.268mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

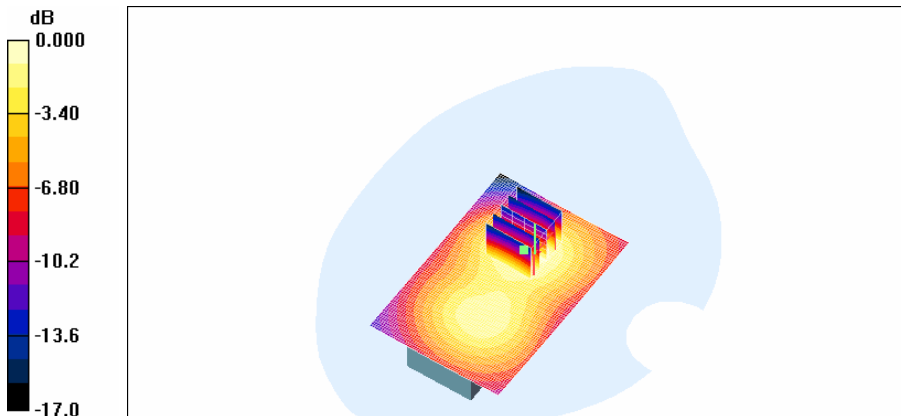
Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.55$  mho/m;  $\rho_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ;Measurement SW: DASy4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**WCDMA 1900 Body 9400/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.410 mW/g

**WCDMA 1900 Body 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 17.2 V/m; Power Drift = 0.071 dB  
Peak SAR (extrapolated) = 0.559 W/kg  
**SAR(1 g) = 0.383 mW/g; SAR(10 g) = 0.232 mW/g**  
Maximum value of SAR (measured) = 0.422 mW/g



0 dB = 0.422mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007  
Option: Bluetooth

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

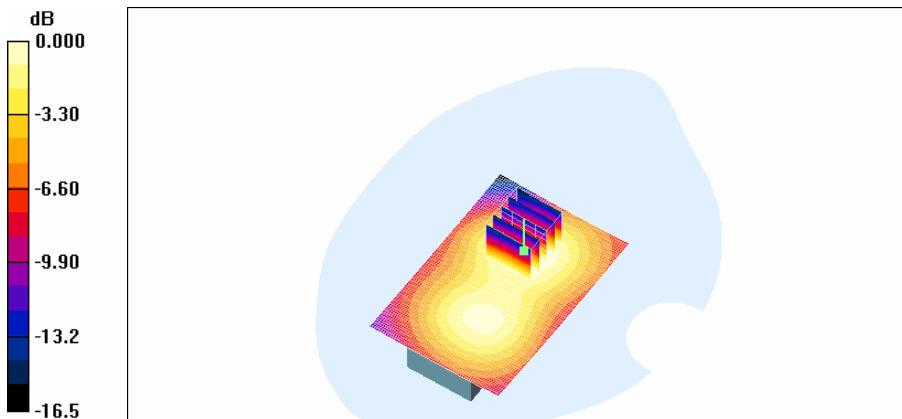
Communication System: WCDMA1900(FCC); Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $r = 52.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**WCDMA 1900 Body 9400/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.404 mW/g

**WCDMA 1900 Body 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 18.2 V/m; Power Drift = 0.047 dB  
Peak SAR (extrapolated) = 0.475 W/kg  
**SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.204 mW/g**  
Maximum value of SAR (measured) = 0.358 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007  
Option: Memory

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

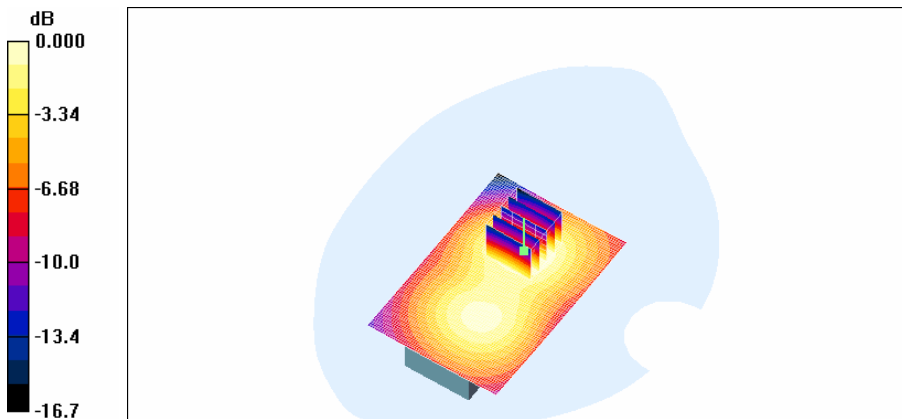
Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $r = 52.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**WCDMA 1900 Body 9400/Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.408 mW/g

**WCDMA 1900 Body 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 17.7 V/m; Power Drift = -0.009 dB  
Peak SAR (extrapolated) = 0.474 W/kg  
**SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.205 mW/g**  
Maximum value of SAR (measured) = 0.361 mW/g



0 dB = 0.361mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007  
Option: Front

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

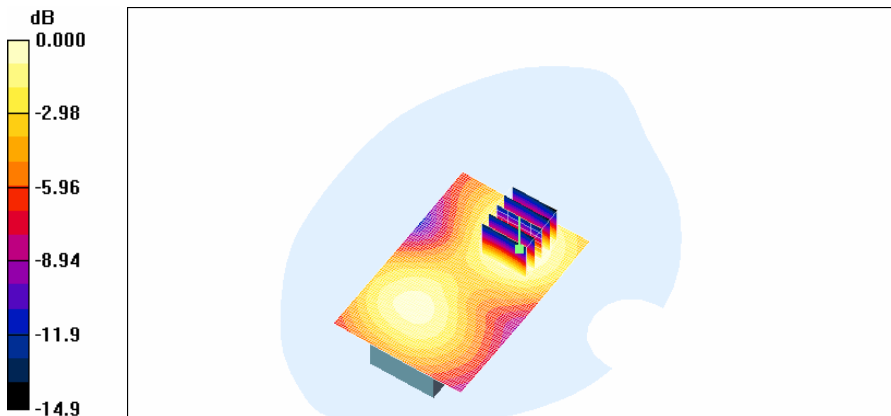
Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $r = 52.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ;Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**WCDMA 1900 Body 9400/Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.177 mW/g

**WCDMA 1900 Body 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 10.1 V/m; Power Drift = 0.173 dB  
Peak SAR (extrapolated) = 0.224 W/kg  
**SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.100 mW/g**  
Maximum value of SAR (measured) = 0.171 mW/g



0 dB = 0.171mW/g

Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.884$  mho/m;  $\epsilon_r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

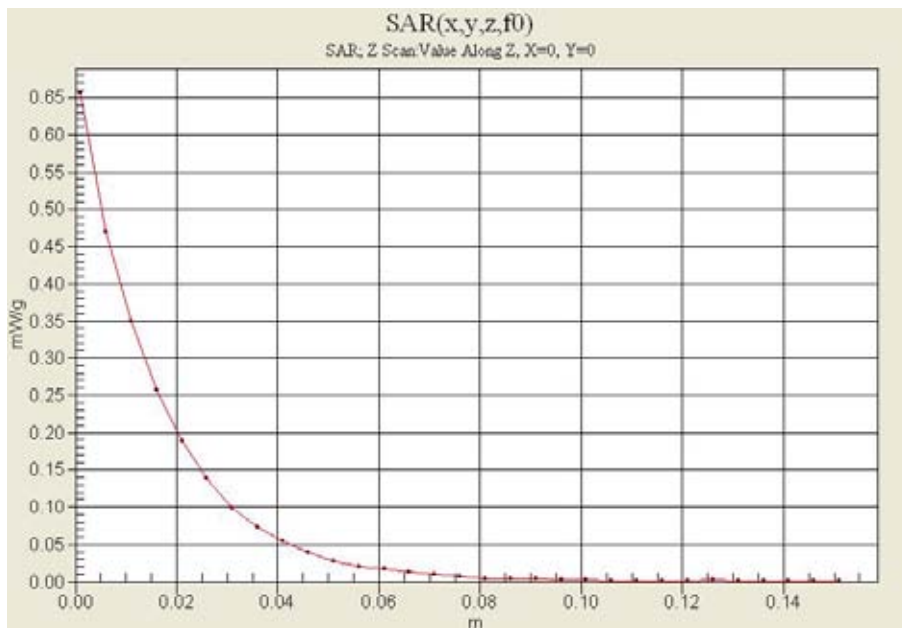
DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190/Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

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

Maximum value of SAR (measured) = 0.657 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10

**DUT: C810; Type: Slide down; Serial: #1**

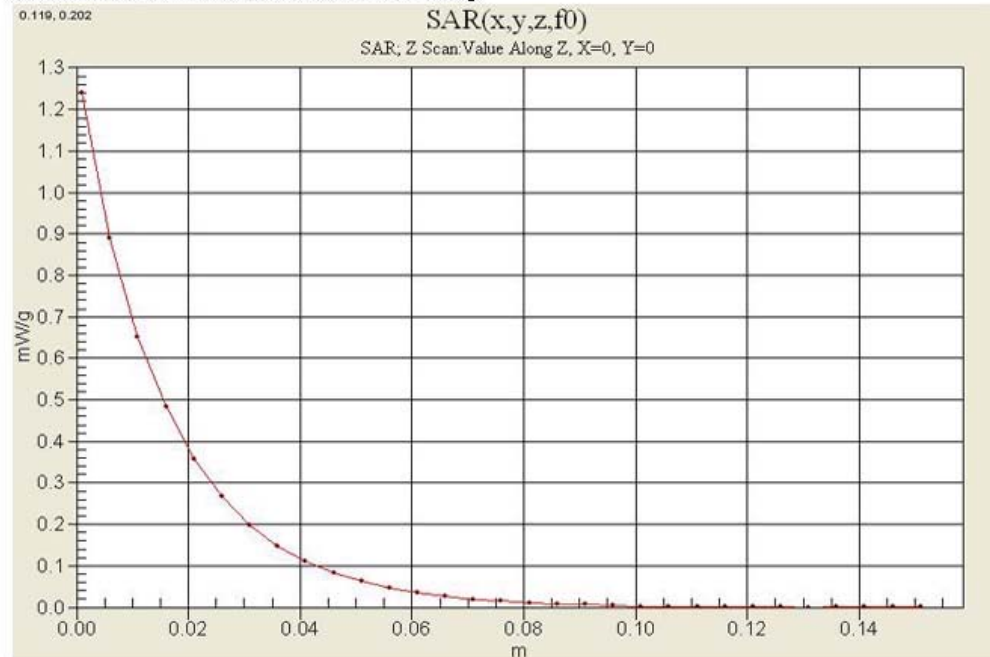
Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz,  $\sigma = 0.98$  mho/m,  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 835/900 MHz; Type: SAM

**GSM850 Body 190/Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

Info: Interpolated medium parameters used for SAR evaluation.  
Maximum value of SAR (measured) = 1.24 mW/g





Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

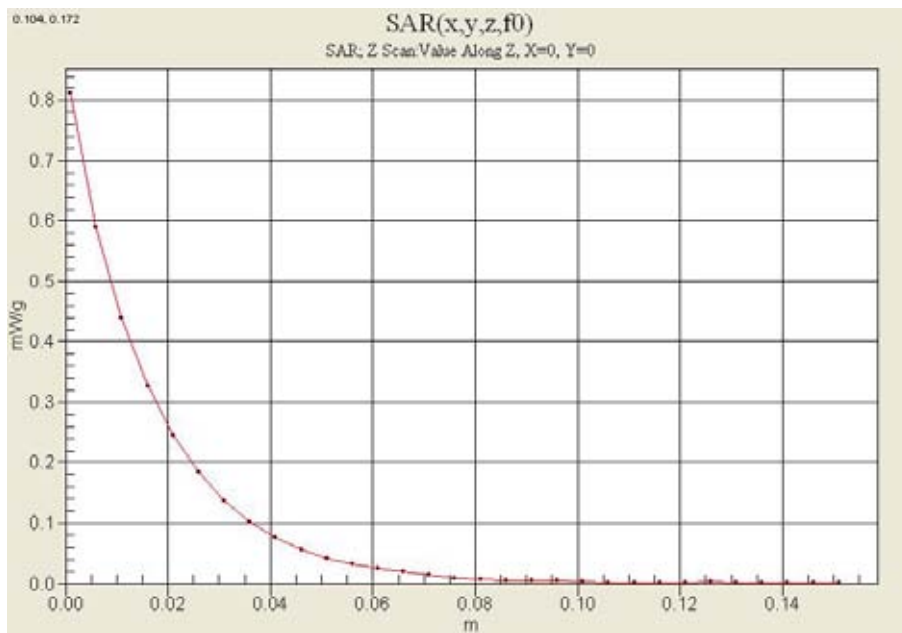
**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $r = 41.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(6.73, 6.73, 6.73); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 4175/Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 0.812 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.21, 2007

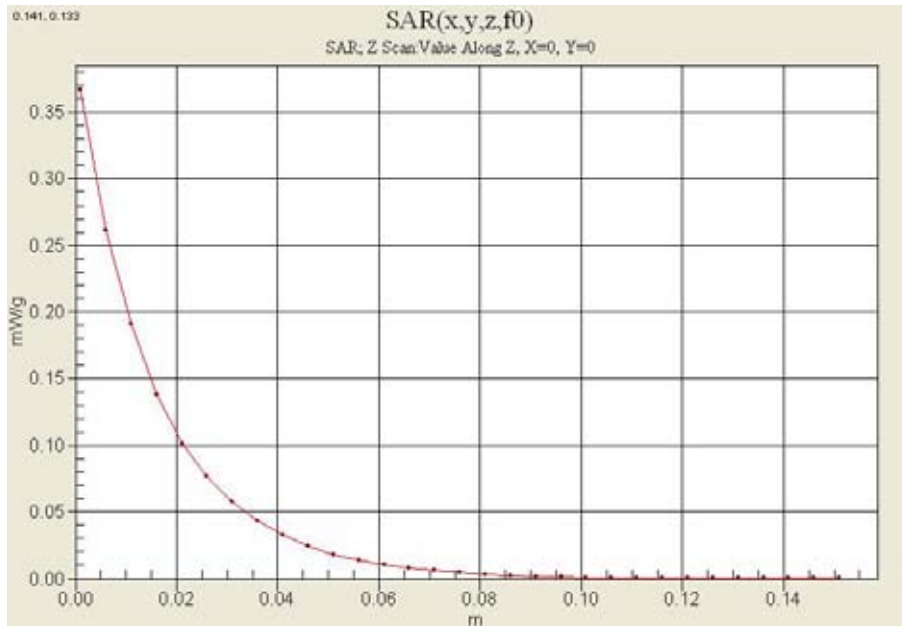
**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA850; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.99$  mho/m;  $\rho_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(6.71, 6.71, 6.71); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 835/900 MHz; Type: SAM

**WCDMA 850 Body 4175/Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 0.367 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.6  
Ambient Temperature: 21.8  
Test Date: Mar.22, 2007

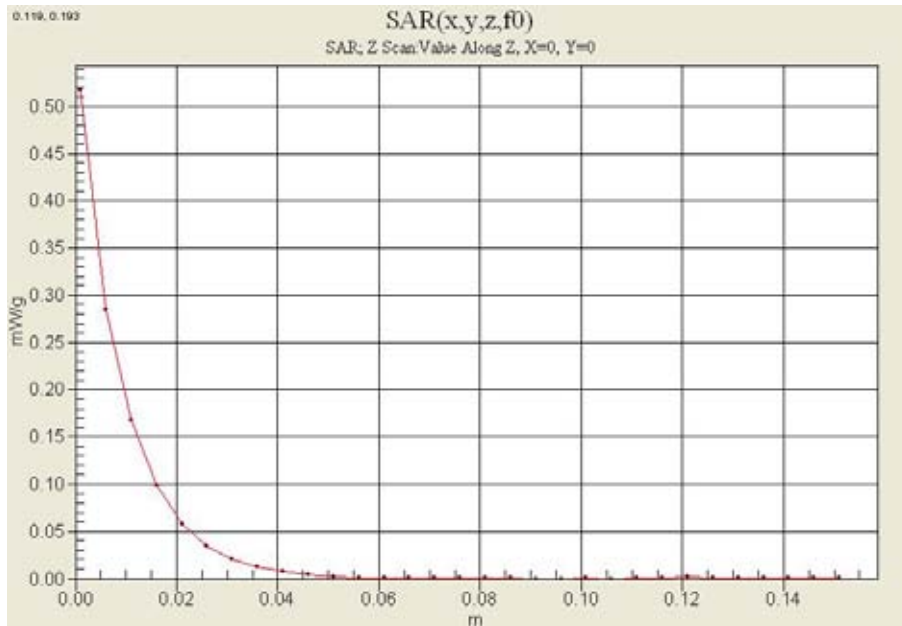
**DUT: C810 down; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.43$  mho/m;  $\rho = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 – SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 661/Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 0.518 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 22.1  
Ambient Temperature: 22.3  
Test Date: April 18, 2007  
Option: GPRS Class10

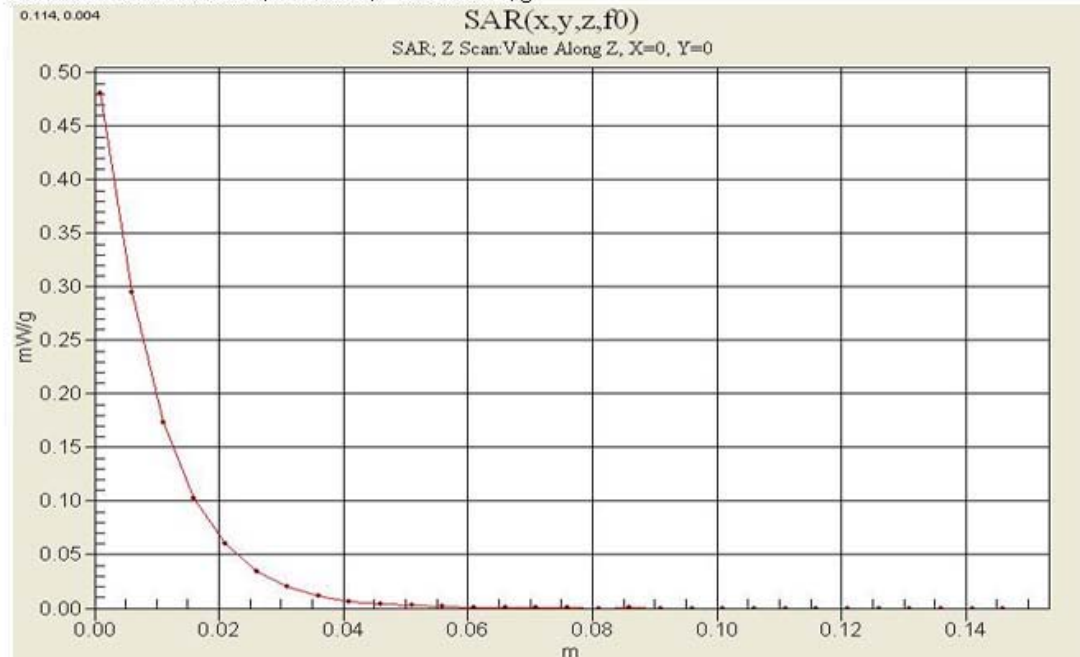
**DUT: CS10 down; Type: Slide down; Serial: #1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4.15  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn447; Calibrated: 2007-03-06
- Phantom: SAM 1800/1900 MHz; Type: SAM

**GSM1900 Body 661/Z Scan (1x1x31):** Measurement grid:  $dx=20$ mm,  $dy=20$ mm,  $dz=5$ mm  
Maximum value of SAR (measured) = 0.481 mW/g



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD

EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth

Liquid Temperature: 21.5

Ambient Temperature: 21.7

Test Date: Mar.22, 2007

**DUT: C810 down; Type: Slide down; Serial: #1**

**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.41$  mho/m;  $r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section ;Measurement SW: DASY4, V4.7 Build 53

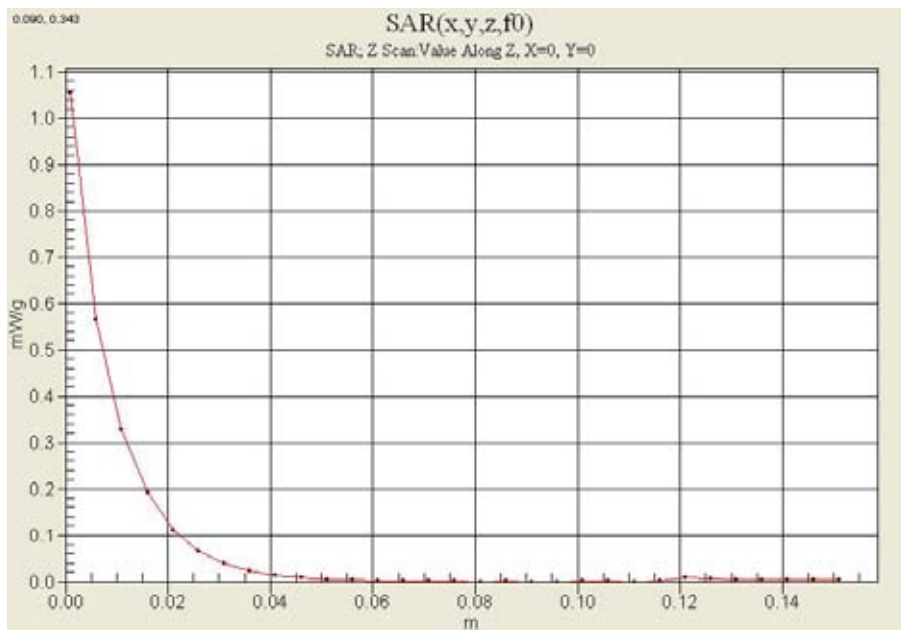
DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(5.6, 5.6, 5.6); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left tilt 9262/Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm

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

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



Test Laboratory: HYUNDAI CALIBRATION & CERTIFICATION TECHNOLOGIES CO., LTD  
EUT Type: Dual-Band Dual-Mode GSM/WCDMA Phone with Bluetooth  
Liquid Temperature: 21.5  
Ambient Temperature: 21.7  
Test Date: Mar.22, 2007

**DUT: C810; Type: Slide down; Serial: #1**  
**Program Name: C810**

Communication System: WCDMA1900(FCC); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\epsilon = 1.55$  mho/m;  $\mu_r = 52.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ;Measurement SW: DAS4, V4.7 Build 53

DASY4 Configuration:

- Probe: ET3DV6 - SN1798; ConvF(4.8, 4.8, 4.8); Calibrated: 2006-08-25
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn446; Calibrated: 2006-11-15
- Phantom: SAM 1800/1900 MHz; Type: SAM

**WCDMA 1900 Body 9400/Z Scan (1x1x31):** Measurement grid: dx=20mm, dy=20mm, dz=5mm  
Maximum value of SAR (measured) = 0.395 mW/g

