



# SAR TEST REPORT

HCT CO., LTD

EUT Type:	Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC	
FCC ID:	ZNFP875H	
Model:	LG-P875h	
Additional:	LGP875h ,P875h	
Date of Issue:	Apr. 02, 2013	
Test report No.:	HCTA1302FS03	
Test Laboratory:	<b>HCT CO., LTD.</b> 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Korea TEL: +82 31 645 6300 FAX: +82 31 645 6401	
Applicant :	<b>LG Electronics, MobileComm U.S.A., Inc.</b> 1000 Sylvan Avenue, Englewood Cliffs NJ 07632	
Testing has been carried out in accordance with:	RSS-102 Issue 4; Health Canada Safety Code 6 47CFR §2.1093 FCC OET Bulletin 65(Edition 97-01), Supplement C (Edition 01-01) ANSI/ IEEE C95.1 – 1992 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 : Yun Jeang Heo Test Engineer of SAR Part	 _____ Approved by : Jae-Sang So Manager of SAR Part

# Table of Contents

<b>1. INTRODUCTION .....</b>	<b>4</b>
<b>2. TEST METHODOLOGY .....</b>	<b>5</b>
<b>3. DESCRIPTION OF DEVICE.....</b>	<b>6</b>
<b>4. DESCRIPTION OF TEST EQUIPMENT .....</b>	<b>8</b>
<b>6. DESCRIPTION OF TEST POSITION.....</b>	<b>1 7</b>
<b>7. MEASUREMENT UNCERTAINTY .....</b>	<b>1 9</b>
<b>8. ANSI/ IEEE C95.1 - 1992 RF EXPOSURE LIMITS .....</b>	<b>2 0</b>
<b>9. SAR SYSTEM VALIDATION.....</b>	<b>2 1</b>
<b>10. SYSTEM VERIFICATION.....</b>	<b>2 2</b>
<b>11. RF CONDUCTED POWER MEASUREMENT .....</b>	<b>2 4</b>
<b>12. SAR Test configuration &amp; Antenna Information .....</b>	<b>3 9</b>
<b>13. SAR TEST DATA SUMMARY .....</b>	<b>4 0</b>
13.1 Measurement Results (GSM850 Head SAR).....	4 0
13.2 Measurement Results (GSM1900 Head SAR).....	4 1
13.3 Measurement Results (WCDMA850 Head SAR).....	4 2
13.4 Measurement Results (WCDMA1900 Head SAR).....	4 3
13.5 Measurement Results (LTE Band 7 Head SAR) .....	4 4
13.6 Measurement Results (802.11b/g/n Head SAR) .....	4 5
13.7 Measurement Results (GSM850 Hotspot SAR).....	4 6
13.8 Measurement Results (GSM1900 Hotspot SAR).....	4 7
13.9 Measurement Results (WCDMA850 Hotspot SAR) .....	4 8
13.10 Measurement Results (WCDMA1900 Hotspot SAR) .....	4 9
13.11 Measurement Results (LTE Band7 Hotspot SAR) .....	5 0
13.12 Measurement Results (802.11b/g/n Hotspot SAR) .....	5 1
13.13 Measurement Results (Body-worn SAR) .....	5 2
<b>14. SAR Summation Scenario .....</b>	<b>5 3</b>
<b>15. CONCLUSION.....</b>	<b>5 9</b>
<b>16. REFERENCES .....</b>	<b>6 0</b>
<b>Attachment 1. – SAR Test Plots .....</b>	<b>6 1</b>
<b>Attachment 2. – Dipole Verification Plots.....</b>	<b>1 4 4</b>
<b>Attachment 3. – Probe Calibration Data .....</b>	<b>1 5 3</b>
<b>Attachment 4. – Dipole Calibration Data .....</b>	<b>1 7 6</b>

## Revision History

Rev.	Issue DATE	DESCRIPTION
-	Mar. 22, 2013	Initial Issue
1	Mar.29.2013	Page 1/6/53/54/56 is revised
2	Apr. 2, 2013	Page 6 is reviesed

# 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.

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 C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz. 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. The measurement procedure described in IEEE/ANSI C95.3-1992 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave 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 NCRP, 1986, Bethesda, MD 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

## SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative of the incremental electromagnetic energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). 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).**

where:

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

$\sigma$  = 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.

## **2. TEST METHODOLOGY**

---

The tests documented in this report were performed in accordance with FCC OET Bulletin 65 Supplement C 01-01, IEEE Standard 1528-2003 & IEEE 1528a-2005 and the following published KDB procedures.

- FCC KDB Publication 941225 D01 SAR test for 3G devices v02
- FCC KDB Publication 941225 D02 Guidance for 3GPP R6 and R7 HSPA v02v01
- FCC KDB Publication 941225 D03 SAR Test Reduction GSM GPRS EDGE v01
- FCC KDB Publication 941225 D04 SAR for GSM E GPRS Dual Xfer Mode v01
- FCC KDB Publication 941225 D05 SAR for LTE Devices v02
- FCC KDB Publication 941225 D06 Hot Spot SAR v01
- FCC KDB Publication 248227 D01v01r02(SAR Considerationa for 802.11 Devices)
- FCC KDB Publication 447498 D01v05 (General SAR Guidance)
- FCC KDB Publication 648474 D04 SAR Handsets Multi Xmitter and Ant v01
- FCC KDB Publication 865664 D01 SAR measurement 100 MHz to 6 GHz v01
- FCC KDB Publication 865664 D02 SAR Reporting v01

### 3. 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	Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC					
FCC ID:	ZNFP875H					
Model:	LG-P875h,					
Additional:	LGP875h, P875h					
Trade Name	LG Electronics, MobileComm U.S.A., Inc.					
Application Type	Certification					
Mode(s) of Operation	GSM850/GSM1900 /WCDMA850/WCDMA1900/LTE7/802.11b/g/n					
Tx Frequency	824.20 - 848.80 MHz (GSM850) /1 850.20 – 1 909.80 MHz (GSM1900) 826.4 - 846.6 MHz (WCDMA850)/ 1 852.4 – 1 907.6 MHz (WCDMA1900) 2 412- 2 462 MHz (802.11b/g/n)/ 2 502.5 – 2 567.5 (LTE 7)					
Production Unit or Identical Prototype	Prototype					
Max SAR	Band	Tx Frequency (MHz)	Equipment Class	Reported 1g SAR (W/kg)		
				Head	Body-worn	Hotspot
	GSM850	824.20 - 848.80	PCE	0.282	0.633	0.572
	GSM1900	1 850.20 - 1 909.80	PCE	0.575	0.755	0.755
	WCDMA 850	826.4 - 846.6	PCE	0.348	0.599	0.599
	WCDMA 1900	1 852.4 – 1 907.6	PCE	0.962	0.944	0.944
	LTE 7	2 502.5 – 2 567.5	PCE	0.674	0.495	0.495
	BT	2 402 - 2 480	DSS	-	-	-
	802.11b	2 412- 2 462	DTS	0.158	0.142	0.142
Simultaneous SAR per KDB 690783 D01				1.110	1.086	1.086
Date(s) of Tests	Jan.31, 2013 ~ Mar.8, 2013					
Antenna Type	Integral Antenna					
GPRS	Multislot Class: 12 Mode class: B					
Key Feature(s)	This device supports Mobile Hotspot.					

### 3.1 KDB 941225 LTE information

Frequency Range:	Band 7: 2 502.5 MHz – 2 567.5 MHz																																																
Channel Bandwidth:	Band 7 5 MHz, 10 MHz 15MHz 20MHz																																																
Channel Number & Frequency:	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: yellow;"> <th colspan="8">Band 7</th> </tr> <tr style="background-color: lightgreen;"> <th colspan="2">5 MHz</th> <th colspan="2">10 MHz</th> <th colspan="2">15 MHz</th> <th colspan="2">20 MHz</th> </tr> <tr style="background-color: lightgreen;"> <th>Ch.</th> <th>Freq.(MHz)</th> <th>Ch.</th> <th>Freq.(MHz)</th> <th>Ch.</th> <th>Freq.(MHz)</th> <th>Ch.</th> <th>Freq.(MHz)</th> </tr> </thead> <tbody> <tr> <td>20775</td> <td>2502.5</td> <td>20800</td> <td>2505</td> <td>20825</td> <td>2507.5</td> <td>20850</td> <td>2510</td> </tr> <tr> <td>21100</td> <td>2535</td> <td>21100</td> <td>2535</td> <td>21100</td> <td>2535</td> <td>21100</td> <td>2535</td> </tr> <tr> <td>21425</td> <td>2567.5</td> <td>21400</td> <td>2565</td> <td>21375</td> <td>2562.5</td> <td>21350</td> <td>2560</td> </tr> </tbody> </table>	Band 7								5 MHz		10 MHz		15 MHz		20 MHz		Ch.	Freq.(MHz)	Ch.	Freq.(MHz)	Ch.	Freq.(MHz)	Ch.	Freq.(MHz)	20775	2502.5	20800	2505	20825	2507.5	20850	2510	21100	2535	21100	2535	21100	2535	21100	2535	21425	2567.5	21400	2565	21375	2562.5	21350	2560
Band 7																																																	
5 MHz		10 MHz		15 MHz		20 MHz																																											
Ch.	Freq.(MHz)	Ch.	Freq.(MHz)	Ch.	Freq.(MHz)	Ch.	Freq.(MHz)																																										
20775	2502.5	20800	2505	20825	2507.5	20850	2510																																										
21100	2535	21100	2535	21100	2535	21100	2535																																										
21425	2567.5	21400	2565	21375	2562.5	21350	2560																																										
UE Category & Uplink	UE Category 3 QPSK, 16QAM																																																
Description of the LTE Transmitter & antenna	<p>This model have three Tx antennas.</p> <ul style="list-style-type: none"> <li>- , One is for GSM and WCDMA. It can not transmit simultaneously.</li> <li>- , Another is for LTE. . GSM / WCDMA and LTE can not transmit simultaneously</li> <li>- The other is for BT &amp; WLAN. It can not transmit simultaneously.</li> </ul> <p>Please find the section 14.</p>																																																
LTE voice/data requirements	Data Only, LTE voice is available via VoIP. Considering the users may install 3rd party software to enable VoIP, LTE Head SAR is also evaluated.																																																
Identify if MPR is optional or mandatory	<p>The EUT incorporates MPR as per 3GPP TS36.101.</p> <p>The MPR is permanently built-in by design as a mandatory.</p> <p>A-MPR is not implemented.</p> <p>During SAR testing, A-MPR was disabled by setting NS=01 on the R&amp;S CMW500.</p>																																																
Maximum average (dBm)	See section 10.7 RF output power measurements in the SAR report.																																																
Identify all other U.S. wireless operating modes, device	<p>- , GSM850/1900, WCDMA850/1900 and LTE Band 7</p> <p>: Head &amp; Body SAR are required.</p>																																																
Maximum average conducted output power for other wireless mode and frequency	See section 10 RF output power measurements in the SAR report.																																																
Simultaneous	This device supports simultaneous transmission. Please find the section 14.																																																
Power reduction	This device doesn't implements power reduction.																																																
Description of the test	LTE SAR Testing was performed using a CMW500.																																																

## **4. DESCRIPTION OF TEST EQUIPMENT**

### **4.1 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 Figure.4.1).

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 IV 3.0 GHz 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.

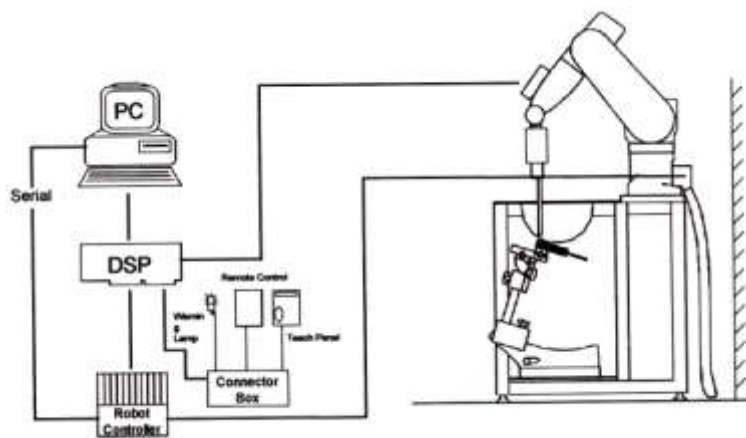


Figure 4.1 HCT SAR Lab. Test Measurement Set-up

The DAE4 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.



## 4.2 DASY4 E-FIELD PROBE SYSTEM

### 4.2.1 EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL 900 and HSL 1810 Additional CF for other liquids and frequencies upon request
Frequency	10 MHz to 4 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 4 GHz)
Directivity	$\pm 0.2$ dB in HSL (rotation around probe axis) $\pm 0.3$ dB in tissue material (rotation normal to probe axis)
Dynamic Range	5 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm
Application	General dosimetry up to 4 GHz Dosimetry in strong gradient fields Compliance tests of mobile phones



Figure 4.2 Photograph of the probe and the Phantom



Figure 4.3 EX3DV4 E-field Probe

The SAR measurements were conducted with the dosimetric probe EX3DV4, designed in the classical triangular configuration 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 multifiber 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 DASY4 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.

## 4.3 PROBE CALIBRATION PROCESS

### 4.3.1 E-Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with an accuracy better than ± 10 %. The spherical isotropy was evaluated with the proper procedure 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 bellow 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)

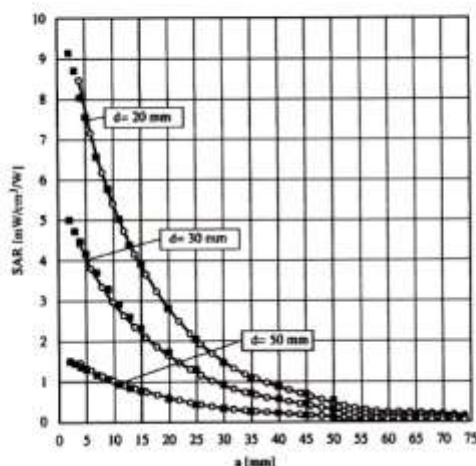


Figure 4.4 E-Field and Temperature measurements at 900 MHz

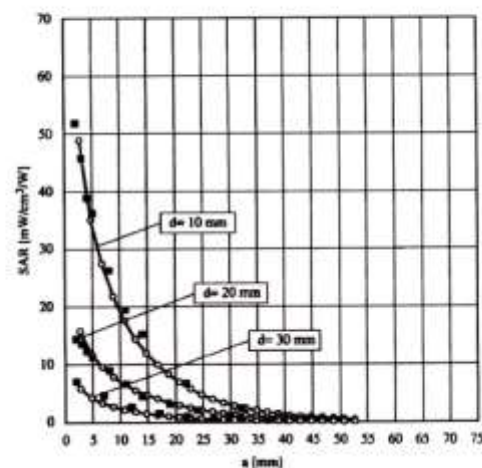


Figure 4.5 E-Field and temperature measurements at 1.8 GHz

### 4.3.2 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 like below;

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

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.

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

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

## 4.4 SAM Phantom

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.



Shell Thickness	2.0 mm ± 0.2 mm (6 ± 0.2 mm at ear point)	
Filling Volume	about 25 L	
Dimensions	810 mm x 1 000 mm x 500 mm (H x L x W)	Figure 4.6 SAM Phantom

Triple Modular Phantom consists of three identical modules which can be installed and removed separately without emptying the liquid. It includes three reference points for phantom installation. Covers prevent evaporation of the liquid. Phantom material is resistant to DGBE based tissue simulating liquids. The MFP V5.1 will be delivered including wooden support only (**non-standard** SPEAG support).

Applicable for system performance check from 700 MHz to 6 GHz (MFP V5.1C) or 800 MHz - 6 GHz (MFP V5.1A) as well as dosimetric evaluations for body-worn operation.



Shell Thickness	2.0 mm ± 0.2 mm	
Filling Volume	approx. 9.2 L	
Dimensions	830 mm x 500 mm (L x W)	Figure 4.7 Triple Modular Phantom

## 4.5 Device Holder for Transmitters

In combination with the SAM Phantom V 4.0, 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. To produce the Worst-case condition (the hand absorbs antenna output power), the hand is omitted during the tests.



Figure 4.8 Device Holder

## 4.6 Tissue Simulating Mixture Characterization

The mixture is characterized to obtain proper dielectric constant (permittivity) and conductivity of the tissue of interest. The tissue dielectric parameters recommended in IEEE 1528 and IEC 62209 have been used as targets for the compositions, and are to match within 5%, per the FCC recommendations

Ingredients (% by weight)	Frequency (MHz)					
	835		1 900		2 450 - 2700	
Tissue Type	Head	Body	Head	Body	Head	Body
Water	40.45	53.06	54.9	70.17	71.88	73.2
Salt (NaCl)	1.45	0.94	0.18	0.39	0.16	0.1
Sugar	57.0	44.9	0.0	0	0.0	0.0
HEC	1.0	1.0	0.0	0	0.0	0.0
Bactericide	0.1	0.1	0.0	0	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	19.97	0.0
DGBE	0.0	0.0	44.92	29.44	7.99	26.7
Diethylene glycol hexyl ether	-	-	-	-	-	-

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 4.1 Composition of the Tissue Equivalent Matter**

## 4.7 SAR TEST EQUIPMENT

Manufacturer	Type / Model	S/N	Calib. Date	Calib.Interval	Calib.Due
SPEAG	SAM Phantom	-	N/A	N/A	N/A
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
HP	Pavilion t000_puffer	KRJ51201TV	N/A	N/A	N/A
SPEAG	Light Alignment Sensor	265	N/A	N/A	N/A
Staubli	Teach Pendant (Joystick)	D221340.01	N/A	N/A	N/A
SPEAG	DAE4	648	Apr. 27, 2012	Annual	Apr. 27, 2013
SPEAG	DAE3	466	Feb. 21, 2012	Annual	Feb. 21, 2013
SPEAG	DAE3	446	Jan. 16, 2013	Annual	Jan. 16, 2014
SPEAG	E-Field Probe EX3DV4	3797	Nov. 22, 2012	Annual	Nov. 22, 2013
SPEAG	E-Field Probe EX3DV4	3863	July 13, 2012	Annual	July 13, 2013
SPEAG	Validation Dipole D835V2	441	May 16, 2012	Annual	May 16, 2013
SPEAG	Validation Dipole D1900V2	5d032	July 20, 2012	Annual	July 20, 2013
SPEAG	Validation Dipole D2450V2	743	Aug. 23, 2012	Annual	Aug. 23, 2013
SPEAG	Validation Dipole D2600V2	1015	May 15, 2012	Annual	May 15, 2013
Agilent	Power Meter(F) E4419B	MY41291386	Nov. 02, 2012	Annual	Nov. 02, 2013
Agilent	Power Sensor(G) 8481	MY41090870	Nov. 02, 2012	Annual	Nov. 02, 2013
HP	Dielectric Probe Kit 85070C	00721521	CBT		
HP	Dual Directional Coupler	16072	Nov. 02, 2012	Annual	Nov. 02, 2013
R&S	Base Station CMW500	1201.0002K50_116858	Jan. 17,2013	Annual	Jan. 17,2014
HP	Base Station E5515C	GB44400269	Feb. 14, 2013	Annual	Feb. 14, 2014
HP	Signal Generator 8664A	3744A02069	Nov. 02, 2012	Annual	Nov. 02, 2013
Hewlett Packard	11636B/Power Divider	11377	Nov. 11. 2012	Annual	Nov. 11. 2013
Agilent	N9020A/ SIGNAL	MY51110020	Jul. 31.2012	Annual	Jul. 31.2013
TESCOM	TC-3000C / BLUETOOTH	3000C000276	Jul. 11, 2012	Annual	Jul. 11, 2013

**NOTE:**

1. The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Verification measurement is performed by HCT Lab. before each test. The brain/body 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/body-equivalent material.

2. CBT(Calibrating Before Testing). Prior to testing, the dielectric probe kit was calibrated via the network analyzer, with the specified procedure(calibrated in pure water) and calibration kit(standard) short circuit, before the dielectric measurement. The specific procedure and calibration kit are provided by Agilent

## 5. 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 15 mm x 15 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 30 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. 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). 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.

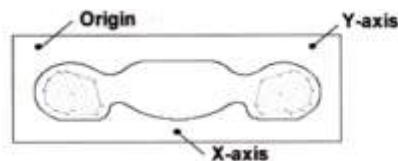


Figure 5.1 SAR Measurement Point in Area Scan

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extend, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SASR-distribution over 10g.

Area scan and zoom scan resolution setting follow KDB 865664 D01v01 quoted below

		$\leq 3$ GHz	$> 3$ GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		$5 \pm 1$ mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{Area}, \Delta y_{Area}$		$\leq 2$ GHz: $\leq 15$ mm 2 – 3 GHz: $\leq 12$ mm	3 – 4 GHz: $\leq 12$ mm 4 – 6 GHz: $\leq 10$ mm
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}, \Delta y_{Zoom}$		$\leq 2$ GHz: $\leq 8$ mm 2 – 3 GHz: $\leq 5$ mm*	3 – 4 GHz: $\leq 5$ mm* 4 – 6 GHz: $\leq 4$ mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$	$\leq 5$ mm	3 – 4 GHz: $\leq 4$ mm 4 – 5 GHz: $\leq 3$ mm 5 – 6 GHz: $\leq 2$ mm
	graded grid	$\Delta z_{Zoom}(1)$ : between 1 <sup>st</sup> two points closest to phantom surface	$\leq 4$ mm
		$\Delta z_{Zoom}(n>1)$ : between subsequent points	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$
Minimum zoom scan volume	x, y, z	$\geq 30$ mm	3 – 4 GHz: $\geq 28$ mm 4 – 5 GHz: $\geq 25$ mm 5 – 6 GHz: $\geq 22$ mm
<p>Note: <math>\delta</math> is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.</p> <p>* When zoom scan is required and the <i>reported</i> SAR from the area scan based <i>1-g SAR estimation</i> procedures of KDB 447498 is <math>\leq 1.4</math> W/kg, <math>\leq 8</math> mm, <math>\leq 7</math> mm and <math>\leq 5</math> mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</p>			



## 6. DESCRIPTION OF TEST POSITION

### 6.1 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 1528-2003 illustration below.

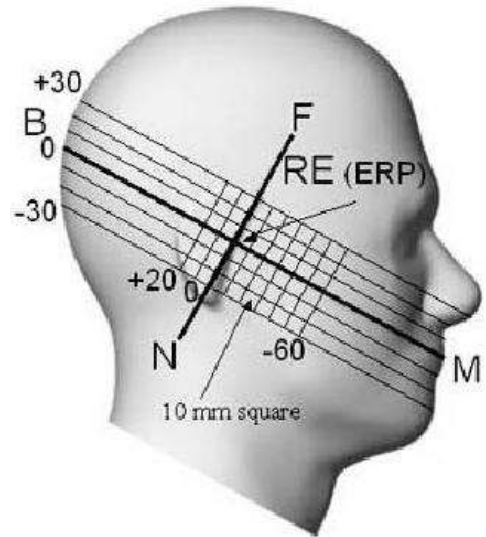


Figure 6.1 Side view of the phantom

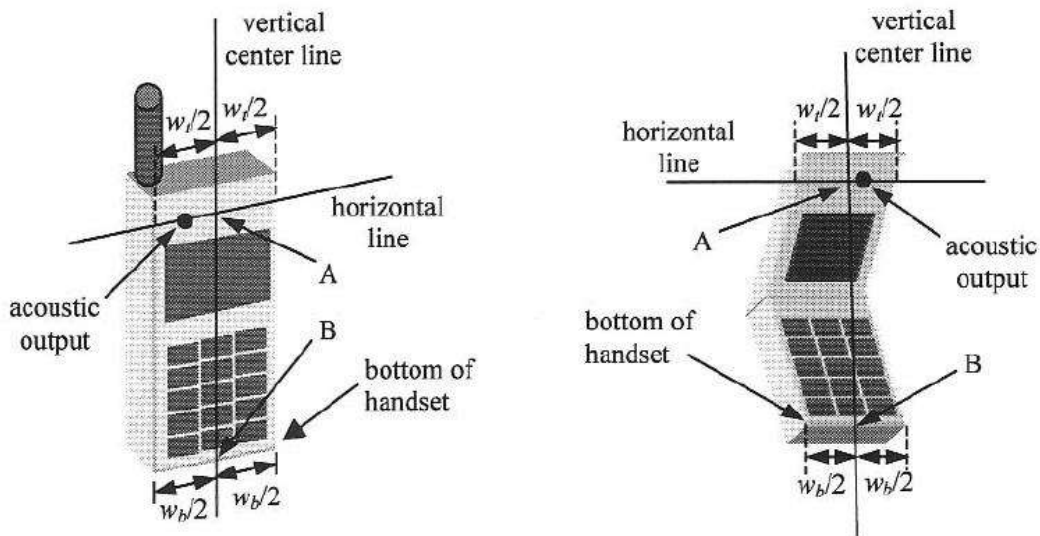


Figure 6.2 Handset vertical and horizontal reference lines

## **6.2 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 1.0 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.

## 7. MEASUREMENT UNCERTAINTY

Error Description	Tol (± %)	Prob. dist.	Div.	$C_i$	Standard Uncertainty (± %)	$V_{eff}$
<b>1. Measurement System</b>						
Probe Calibration	6.00	N	1	1	6.00	∞
Axial Isotropy	4.70	R	1.73	0.7	1.90	∞
Hemispherical Isotropy	9.60	R	1.73	0.7	3.88	∞
Boundary Effects	1.00	R	1.73	1	0.58	∞
Linearity	4.70	R	1.73	1	2.71	∞
System Detection Limits	1.00	R	1.73	1	0.58	∞
Readout Electronics	0.30	N	1.00	1	0.30	∞
Response Time	0.8	R	1.73	1	0.46	∞
Integration Time	2.6	R	1.73	1	1.50	∞
RF Ambient Conditions	3.00	R	1.73	1	1.73	∞
Probe Positioner	0.40	R	1.73	1	0.23	∞
Probe Positioning	2.90	R	1.73	1	1.67	∞
Max SAR Eval	1.00	R	1.73	1	0.58	∞
<b>2. Test Sample Related</b>						
Device Positioning	2.90	N	1.00	1	2.90	145
Device Holder	3.60	N	1.00	1	3.60	5
Power Drift	5.00	R	1.73	1	2.89	∞
<b>3. Phantom and Setup</b>						
Phantom Uncertainty	4.00	R	1.73	1	2.31	∞
Liquid Conductivity(target)	5.00	R	1.73	0.64	1.85	∞
Liquid Conductivity(meas.)	2.07	N	1	0.64	1.32	9
Liquid Permittivity(target)	5.00	R	1.73	0.6	1.73	∞
Liquid Permittivity(meas.)	5.02	N	1	0.6	3.01	9
<b>Combine Standard Uncertainty</b>					11.13	
<b>Coverage Factor for 95 %</b>					$k=2$	
<b>Expanded STD Uncertainty</b>					22.25	

Table 7.1 Uncertainty (800 MHz- 2700 MHz)

## 8. ANSI/ IEEE C95.1 - 1992 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 8.1 Safety Limits for Partial Body Exposure**

**NOTES:**

\* The Spatial Peak value of the SAR averaged over any 1 g 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 g 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).

## 9. SAR SYSTEM VALIDATION

Per FCC KCB 865664 D02v01, SAR system validation status should be document to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in IEEE 1528-2003 and FCC KDB 865664 D01 v01. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

**SAR System Validation Summary**

SAR System #	Probe	probe Type	Probe Calibration Point		Dipole	Date	Dielectric Parameters		CW Validation			Modulation Validation		
							Measured Permittivity	Measured conductivity	Sensitivity	Probe Linearity	Probe Isortopy	MOD. Type	Duty Factor	PAR
3	3797	EX3DV4	Head	835	441	Dec.20,2012	40.4	0.92	PASS	PASS	PASS	GMSK	PASS	N/A
3	3797	EX3DV4	Head	1900	5d032	Dec.20,2012	39.8	1.4	PASS	PASS	PASS	GMSK	PASS	N/A
3	3797	EX3DV4	Head	2600	1015	Jan.04,2013	39.41	1.98	PASS	PASS	PASS	N/A	N/A	N/A
1	3863	EX3DV4	Head	2450	743	Dec.20,2012	38.1	1.83	PASS	PASS	PASS	OFDM	N/A	PASS
1	3863	EX3DV4	Body	835	441	Dec.21,2012	56.9	0.98	PASS	PASS	PASS	GMSK	PASS	N/A
1	3863	EX3DV4	Body	1900	5d032	Dec.21,2012	51.8	1.54	PASS	PASS	PASS	GMSK	PASS	N/A
1	3863	EX3DV4	Body	2450	743	Dec.21,2012	52.9	1.96	PASS	PASS	PASS	OFDM	N/A	PASS
3	3797	EX3DV4	Body	2600	1015	Jan.05,2013	52.83	2.2	PASS	PASS	PASS	N/A	N/A	N/A

## 10. SYSTEM VERIFICATION

### 10.1 Tissue Verification

Freq. [MHz]	Date	Probe	Dipole	Liquid	Liquid Temp. [°C]	Parameters	Target Value	Measured Value	Deviation [%]	Limit [%]
835	Jan. 31	3797	441	Head	21.0	$\epsilon_r$	41.5	40.5	-2.41	$\pm 5$
						$\sigma$	0.90	0.919	2.11	$\pm 5$
835	Feb. 1	3863		Body	21.4	$\epsilon_r$	55.2	57.0	3.26	$\pm 5$
						$\sigma$	0.97	0.984	1.44	$\pm 5$
1 900	Feb, 4	3797	5d032	Head	21.5	$\epsilon_r$	40.0	40.9	2.25	$\pm 5$
						$\sigma$	1.40	1.37	-2.14	$\pm 5$
1 900	Feb. 5	3863		Body	21.2	$\epsilon_r$	53.3	51.9	-2.63	$\pm 5$
						$\sigma$	1.52	1.54	1.32	$\pm 5$
2 450	Mar. 8	3863	743	Head	21.2	$\epsilon_r$	39.2	38.1	-2.81	$\pm 5$
						$\sigma$	1.80	1.84	2.22	$\pm 5$
2 450	Mar. 8	3863		Body	21.2	$\epsilon_r$	52.7	53.6	1.71	$\pm 5$
						$\sigma$	1.95	1.94	-0.51	$\pm 5$
2 600	Feb 13	3797	1015	Head	21.2	$\epsilon_r$	39.0	40.0	2.56	$\pm 5$
						$\sigma$	1.96	2.02	3.06	$\pm 5$
2 600	Feb 14	3797		Body	21.1	$\epsilon_r$	52.51	52.7	0.36	$\pm 5$
						$\sigma$	2.16	2.1	-2.78	$\pm 5$

The Tissue dielectronic parameters were measured prior to the SAR evaluation using an Agilent 85070C Dielectronic Probe Kit and Agilent Network Analyzer.

### 10.2 System Verification

Prior to assessment, the system is verified to the  $\pm 10\%$  of the specifications at 835 MHz / 1 900 MHz / 2 450MHz / 2600MHz by using the system Verification kit. (Graphic Plots Attached)

Freq. [MHz]	Date	Probe (SN)	Dipole (SN)	Liquid	Amb. Temp. [°C]	Liquid Temp. [°C]	1 W Target SAR <sub>1g</sub> (SPEAG) (mW/g)	Measured SAR <sub>1g</sub> (mW/g)	1 W Normalized SAR <sub>1g</sub> (mW/g)	Deviation [%]	Limit [%]
835	Jan. 31	3797	441	Head	21.2	21.0	9.43	0.988	9.88	4.77	$\pm 10$
835	Feb. 1	3863		Body	21.6	21.4	9.50	0.958	9.58	0.84	$\pm 10$
1 900	Feb, 4	3797	5d032	Head	21.7	21.5	39.0	4.11	41.1	5.38	$\pm 10$
1 900	Feb. 5	3863		Body	21.4	21.2	39.9	4.15	41.5	4.01	$\pm 10$
2 450	Mar. 8	3863	743	Head	21.8	21.6	52.7	5.38	53.8	2.09	$\pm 10$
2 450	Mar. 8	3863		Body	21.8	21.6	51.2	5.13	51.3	0.20	$\pm 10$
2 600	Feb 13	3797	1015	Head	21.4	21.2	57.8	5.85	58.5	1.21	$\pm 10$
2 600	Feb 14	3797		Body	21.3	21.1	54.1	5.56	55.6	2.77	$\pm 10$

## **10.3 System Verification Procedure**

SAR measurement was prior to assessment, the system is verified to the  $\pm 10\%$  of the specifications at each frequency band by using the system Verification kit. (Graphic Plots Attached)

- Cabling the system, using the Verification kit equipments.
- Generate about 100 mW Input Level from the Signal generator to the Dipole Antenna.
- Dipole Antenna was placed below the Flat phantom.
- The measured one-gram SAR at the surface of the phantom above the dipole feed-point should be within 10 % of the target reference value.
- The results are normalized to 1 W input power.

## 11. RF CONDUCTED POWER MEASUREMENT

Power measurements were performed using a base station simulator under digital average power. 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 evaluation 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.

### 11.1 GSM

Conducted output power measurements were performed using a base station simulator under digital average power.



SAR Test for WWAN were performed with a base station simulator Agilent E5515C. Communication between the device and the emulator was established by air link. Set base station emulator to allow DUT to radiate maximum output power during all tests. Please refer to the below worst case SAR operation setup.

- GSM voice: Head SAR
- GPRS Multi-slots : Body SAR with GPRS Multi-slot Class12 with CS 1 (GMSK)

**Note;**

CS1/MCS7 coding scheme was used in GPRS/EDGE output power measurements and SAR Testing, as a condition where GMSK/8PSK modulation was ensured. Investigation has shown that CS1 - CS4/ MCS5 – MCS9 settings do not have any impact on the output levels in the GPRS/EDGE modes.

GSM850

Target Power : 33 dBm

GSM1900

Target Power : 30 dBm

GPRS850

GPRS 1tx : 32.5 dBm/ EGPRS 1tx : 26.5 dBm

GPRS 2tx : 30.0 dBm/ EGPRS 2tx : 25.5 dBm

GPRS 3tx : 28.5 dBm/ EGPRS 3tx : 24.5 dBm

GPRS 4tx : 27.0 dBm/ EGPRS 4tx : 23.5 dBm

Tune-up Tolerance : -1.5dB/ +0.7dB

PCS1900

GPRS 1tx : 29.5 dBm/ EGPRS 1tx : 25.0 dBm

GPRS 2tx : 27.0 dBm/ EGPRS 2tx : 24.5 dBm

GPRS 3tx : 26.0 dBm/ EGPRS 3tx : 24.0 dBm

GPRS 4tx : 25.0 dBm/ EGPRS 4tx : 23.0 dBm

Tune-up Tolerance : -1.5dB/ +0.7dB



## GSM Conducted output powers (Burst-Average)

Band	Channel	Voice	GPRS(GMSK) Data – CS1				EDGE Data			
		GSM (dBm)	GPRS 1 TX Slot (dBm)	GPRS 2 TX Slot (dBm)	GPRS 3 TX Slot (dBm)	GPRS 4 TX Slot (dBm)	EDGE 1 TX Slot (dBm)	EDGE 2 TX Slot (dBm)	EDGE 3 TX Slot (dBm)	EDGE 4 TX Slot (dBm)
GSM 850	128	33.06	33.10	30.68	28.76	27.34	25.90	25.63	24.85	23.59
	190	33.05	33.11	30.59	28.74	27.31	25.85	25.60	24.86	23.57
	251	33.10	33.08	30.64	28.54	27.50	25.80	25.55	24.85	23.52
GSM 1900	512	30.15	30.05	27.25	25.49	24.45	23.95	23.80	23.53	22.86
	661	30.15	30.13	27.24	25.80	24.30	23.95	23.80	23.52	22.90
	810	30.20	30.20	27.32	25.90	24.71	24.04	23.91	23.60	22.99

## GSM Conducted output powers (Frame-Average)

Band	Channel	Voice	GPRS(GMSK) Data – CS1				EDGE Data			
		GSM (dBm)	GPRS 1 TX Slot (dBm)	GPRS 2 TX Slot (dBm)	GPRS 3 TX Slot (dBm)	GPRS 4 TX Slot (dBm)	EDGE 1 TX Slot (dBm)	EDGE 2 TX Slot (dBm)	EDGE 3 TX Slot (dBm)	EDGE 4 TX Slot (dBm)
GSM 850	128	24.03	24.07	24.66	24.5	24.33	16.87	19.61	20.59	20.58
	190	24.02	24.08	24.57	24.48	24.3	16.82	19.58	20.6	20.56
	251	24.07	24.05	24.62	24.28	24.49	16.77	19.53	20.59	20.51
GSM 1900	512	21.12	21.02	21.23	21.23	21.44	14.92	17.78	19.27	19.85
	661	21.12	21.1	21.22	21.54	21.29	14.92	17.78	19.26	19.89
	810	21.17	21.17	21.3	21.64	21.7	15.01	17.89	19.34	19.98

**Note:**

Time slot average factor is as follows:

1 Tx slot = 9.03 dB, Frame-Average output power = Burst-Average output power – 9.03 dB

2 Tx slot = 6.02 dB, Frame-Average output power = Burst-Average output power – 6.02 dB

3 Tx slot = 4.26 dB, Frame-Average output power = Burst-Average output power – 4.26 dB

4 Tx slot = 3.01 dB, Frame-Average output power = Burst-Average output power – 3.01 dB

## 11.2 WCDMA

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 and the maximum SAR for 12.2 kbps RMC is  $\leq 75\%$  of the SAR limit. Otherwise, SAR is Measured for HSDPA, using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, using the highest body SAR configuration in 12.2 kbps RMC without HSDPA, on the maximum output channel with the body exposure configuration that results in the highest SAR in 12.2 kbps RMC for that RF channel.

### 11.2.1 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 3 GPP TS 34.121, using the appropriate RMC or AMR with TPC(transmit power control) set to all “1s”.

### 11.2.2 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 RMC. Otherwise, SAR is measured on the maximum output channel in 12.2 AMR with a 3.4 kbps SRB (signaling radio bearer using the exposure configuration that results in the highest SAR for that RF channel in 12.2 RMC.

### 11.2.3 Body SAR Measurement

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all “1s”.

### 11.2.4 Handsets with Release 5 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 and the maximum SAR for 12.2 kbps RMC is  $\leq 75\%$  of the SAR limit. Otherwise, SAR is Measured for HSDPA, using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, using the highest body SAR configuration in 12.2 kbps RMC without HSDPA, on the maximum output channel with the body exposure configuration that results in the highest SAR in 12.2 kbps RMC for that RF channel.

**Sub-Test 1 Setup for Release 5 HSDPA**

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	CM (dB) <sup>(2)</sup>
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15 <sup>(3)</sup>	15/15 <sup>(3)</sup>	64	12/15 <sup>(3)</sup>	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Note 1:  $\Delta_{ACK}, \Delta_{NACK}$  and  $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$   
 Note 2: CM = 1 for  $\beta_c/\beta_d = 12/15, \beta_{hs}/\beta_c = 24/15$ .  
 Note 3: For subtest 2 the  $\beta_c/\beta_d$  ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 11/15$  and  $\beta_d = 15/15$ .

## 11.2.5 Handsets with Release 6 HSPA (HSDPA/HSUPA)

Body SAR is not required for handsets with HSPA capabilities when the maximum average output of each RF channel with HSUPA/HSDPA active is less than ¼ dB higher than that measured without HSUPA/HSDPA using 12.2 kbps RMC and the maximum SAR for 12.2 kbps RMC is ≤ 75 % of the SAR limit. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.1 kbps RMC without HSPA. When VOIP is applicable for head exposure, SAR is not required when the maximum output of each RF channel with HSPA is less than ¼ dB higher than that measured using 12.2 kbps RMC; otherwise, the same HSPA configuration used for body measurement should be used to test for head exposure.

Sub-test	$\beta_c$	$\beta_d$	$\beta_d$ (SF)	$\beta_c/\beta_d$	$\beta_{hs}^{(1)}$	$\beta_{ec}$	$\beta_{ed}$	$\beta_{ed}$ (SF)	$\beta_{ed}$ (codes)	CM <sup>(2)</sup> (dB)	MPR (dB)	AG <sup>(4)</sup> Index	E-TFCI
1	11/15 <sup>(3)</sup>	15/15 <sup>(3)</sup>	64	11/15 <sup>(3)</sup>	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 <sup>(4)</sup>	15/15 <sup>(4)</sup>	64	15/15 <sup>(4)</sup>	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1:  $\Delta_{ACK}$ ,  $\Delta_{NACK}$  and  $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$ .

Note 2: CM = 1 for  $\beta_c/\beta_d = 12/15$ ,  $\beta_{hs}/\beta_c = 24/15$ . For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the  $\beta_c/\beta_d$  ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 10/15$  and  $\beta_d = 15/15$ .

Note 4: For subtest 5 the  $\beta_c/\beta_d$  ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to  $\beta_c = 14/15$  and  $\beta_d = 15/15$ .

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.

Note 6:  $\beta_{ed}$  can not be set directly; it is set by Absolute Grant Value.

WCDMA850

Target Power : 23.0 dBm

Tune-up Tolerance : -1.5dB/ +0.7dB

WCDMA1900

Target Power : 23.0 dBm

Tune-up Tolerance : -1.5dB/ +0.7dB

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]						MPR
			UL 4132 (826.4)	Power reduction (dB)	UL 4183 (836.6)	Power reduction (dB)	UL 4233 (846.6)	Power reduction (dB)	
			DL 4357		DL 4408		DL 4458		
99	WCDMA	12.2 kbps RMC	22.77	-	22.82	-	22.60	-	-
99	WCDMA	12.2 kbps AMR	22.74	-	22.74	-	22.58	-	-
5	HSDPA	Subtest 1	21.76	0.04	21.71	0.02	21.56	0.01	0
5		Subtest 2	21.80	0	21.73	0	21.57	0	0
5		Subtest 3	21.30	0.5	21.22	0.51	21.08	0.49	-0.5
5		Subtest 4	21.30	0.5	21.22	0.51	21.07	0.5	-0.5
6	HSUPA	Subtest 1	21.75	0	21.65	0	21.39	0	0
6		Subtest 2	18.95	2.8	18.91	2.74	18.77	2.62	-2
6		Subtest 3	20.01	1.74	20.00	1.65	19.82	1.57	-1
6		Subtest 4	21.33	0.42	21.33	0.32	21.26	0.13	-2
6		Subtest 5	21.47	0.28	21.37	0.28	21.25	0.14	0

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]						MPR
			UL 9262 (1852.4)	Power reduction (dB)	UL 9400 (1880.0)	Power reduction (dB)	UL 9538 (1907.6)	Power reduction (dB)	
			DL 9662		DL 9800		DL 9938		
99	WCDMA	12.2 kbps RMC	22.75	-	22.60	-	22.62	-	-
99	WCDMA	12.2 kbps AMR	22.73	-	22.59	-	22.61	-	-
5	HSDPA	Subtest 1	21.80	0	21.67	0.01	21.67	0.06	0
5		Subtest 2	21.74	0.06	21.68	0	21.73	0	0
5		Subtest 3	21.30	0.5	21.26	0.42	21.33	0.4	-0.5
5		Subtest 4	21.30	0.5	21.26	0.42	21.30	0.43	-0.5
6	HSUPA	Subtest 1	21.54	0	21.22	0.02	21.62	0.08	0
6		Subtest 2	18.77	2.77	18.68	2.56	18.84	2.86	-2
6		Subtest 3	20.00	1.54	20.37	0.87	20.49	1.21	-1
6		Subtest 4	20.93	0.61	21.24	0	21.28	0.42	-2
6		Subtest 5	21.29	0.25	20.91	0.33	21.70	0	0

WCDMA Average Conducted output powers

## 11.3 LTE

SAR testing was performed according to the FCC KDB 941225 D05v02 publication.

This DUT is developed base on MPR. The MPR is mandatory.

The device will not operate with any other MPR setting than that stated in the table as indicated.

SAR Testing was performed using a CMW500. UE transmits with Maximum output power during SAR testing.

A-MPR has been disabled for all SAR tests by setting NS=01 on the R&S CMW500.

LTE Band 7

Target Power : 23.0 dBm

Tune-up Tolerance : -1.5dB/ +0.7dB

Bandwidth	UL Channel	UL Freq.(MHz)	Modulation	RB Size	RB Offset	Max.Average Power (dBm)	Target MPR (dB)	Measured Power reduction (dB)
5 MHz	20775	2502.5	QPSK	1	0	23.18	0	0.10
				1	12	23.28	0	0.00
				1	24	23.13	0	0.15
				12	0	22.43	1	0.85
				12	6	22.56	1	0.72
				12	11	22.58	1	0.70
				25	0	22.47	1	0.81
			16QAM	1	0	22.33	1	0.95
				1	12	22.52	1	0.76
				1	24	22.56	1	0.72
				12	0	21.39	2	1.89
				12	11	21.34	2	1.94
				12	6	21.39	2	1.89
				25	0	21.43	2	1.85
5 MHz	21100	2535	QPSK	1	0	23.26	0	0.10
				1	12	23.36	0	0.00
				1	24	23.27	0	0.09
				12	0	22.47	1	0.89
				12	6	22.38	1	0.98
				12	11	22.48	1	0.88
				25	0	22.41	1	0.95
			16QAM	1	0	22.35	1	1.01
				1	12	22.39	1	0.97
				1	24	22.46	1	0.90
				12	0	21.38	2	1.98
				12	11	21.37	2	1.99
				12	6	21.4	2	1.96

				25	0	21.37	2	1.99
5 MHz	21425	2567.5	QPSK	1	0	23.12	0	0.00
				1	12	23.11	0	0.01
				1	24	23.02	0	0.10
				12	0	22.4	1	0.72
				12	6	22.38	1	0.74
				12	11	22.35	1	0.77
				25	0	22.35	1	0.77
			16QAM	1	0	22.45	1	0.67
				1	12	22.4	1	0.72
				1	24	22.32	1	0.80
				12	0	21.4	2	1.72
				12	11	21.36	2	1.76
				12	6	21.42	2	1.70
				25	0	21.43	2	1.69

Bandwidth	UL Channel	UL Freq.(MHz)	Modulation	RB Size	RB Offset	Max.Average Power (dBm)	Target MPR (dB)	Measured Power reduction (dB)
10MHz	20800	2505	QPSK	1	0	23.1	0	0.02
				1	24	23.06	0	0.06
				1	49	23.12	0	0.00
				25	0	22.42	1	0.70
				25	12	22.34	1	0.78
				12	24	22.34	1	0.78
				50	0	22.41	1	0.71
			16QAM	1	0	22.09	1	1.03
				1	24	22.37	1	0.75
				1	49	22.41	1	0.71
				25	0	21.4	2	1.72
				25	12	21.42	2	1.70
				25	24	21.43	2	1.69
				50	0	21.4	2	1.72
10MHz	21100	2535	QPSK	1	0	23.26	0	0.07
				1	12	23.29	0	0.04
				1	24	23.33	0	0.00
				25	0	22.5	1	0.83
				25	12	22.57	1	0.76
				25	24	22.63	1	0.70

			16QAM	25	0	22.58	1	0.75
				1	0	22.31	1	1.02
				1	24	22.38	1	0.95
				1	49	22.48	1	0.85
				25	0	21.51	2	1.82
				25	12	21.58	2	1.75
				25	24	21.59	2	1.74
				50	0	21.5	2	1.83
10MHz	21400	2565	QPSK	1	0	23.09	0	0.15
				1	24	23.24	0	0.00
				1	49	23.13	0	0.11
				25	0	22.4	1	0.84
				25	12	22.48	1	0.76
				25	24	22.42	1	0.82
			16QAM	50	0	22.35	1	0.89
				1	0	22.53	1	0.71
				1	24	22.36	1	0.88
				1	49	22.27	1	0.97
				25	0	21.35	2	1.89
				25	12	21.48	2	1.76
				25	24	21.53	2	1.71
				50	0	21.51	2	1.73

Bandwidth	UL Channel	UL Freq.(MHz)	Modulation	RB Size	RB Offset	Max.Average Power (dBm)	Target MPR (dB)	Measured Power reduction (dB)
15NHz	20825	2507.5	QPSK	1	0	23.16	0	0.12
				1	37	23.14	0	0.14
				1	74	23.28	0	0.00
				36	0	22.49	1	0.79
				36	18	22.37	1	0.91
				36	38	22.51	1	0.77
				75	0	22.4	1	0.88
			16QAM	1	0	22.56	1	0.72
				1	37	22.39	1	0.89
				1	74	22.38	1	0.90
				36	0	21.45	2	1.83
				36	18	21.38	2	1.90
				36	38	21.41	2	1.87

				75	0	21.4	2	1.88
15MHz	21100	2535	QPSK	1	0	23.28	0	0.05
				1	37	23.33	0	0.00
				1	74	23.26	0	0.07
				36	0	22.52	1	0.81
				36	18	22.54	1	0.79
				36	38	22.54	1	0.79
				75	0	22.59	1	0.74
			16QAM	1	0	22.45	1	0.88
				1	37	22.48	1	0.85
				1	74	22.46	1	0.87
				36	0	21.59	2	1.74
				36	18	21.63	2	1.70
				36	38	21.64	2	1.69
				75	0	21.62	2	1.71
15MHz	21375	2562.5	QPSK	1	0	23.07	0	0.17
				1	37	23.24	0	0.00
				1	74	23.13	0	0.11
				36	0	22.38	1	0.86
				36	18	22.43	1	0.81
				36	38	22.37	1	0.87
				75	0	22.39	1	0.85
			16QAM	1	0	22.29	1	0.95
				1	37	22.41	1	0.83
				1	74	22.46	1	0.78
				36	0	21.43	2	1.81
				36	18	21.45	2	1.79
				36	38	21.39	2	1.85
				75	0	21.43	2	1.81



Bandwidth	UL Channel	UL Freq.(MHz)	Modulation	RB Size	RB Offset	Max.Average Power (dBm)	Target MPR (dB)	Measured Power reduction (dB)
20MHz	20850	2510	QPSK	1	0	23.3	0	0.20
				1	49	23.11	0	0.39
				1	99	23.5	0	0.00
				50	0	22.28	1	1.22
				50	25	22.44	1	1.06
				50	49	22.46	1	1.04
				100	0	22.41	1	1.09
			16QAM	1	0	22.44	1	1.06
				1	49	22.49	1	1.01
				1	99	22.69	1	0.81
				50	0	21.35	2	2.15
				50	25	21.55	2	1.95
				50	49	21.46	2	2.04
				100	0	21.48	2	2.02
20MHz	21100	2535	QPSK	1	0	23.2	0	0.09
				1	49	23.29	0	0.00
				1	99	23.21	0	0.08
				50	0	22.43	1	0.86
				50	25	22.57	1	0.72
				50	49	22.5	1	0.79
				100	0	22.53	1	0.76
			16QAM	1	0	22.39	1	0.90
				1	49	22.51	1	0.78
				1	99	22.48	1	0.81
				50	0	21.38	2	1.91
				50	25	21.55	2	1.74
				50	49	21.54	2	1.75
				100	0	21.57	2	1.72
20MHz	21350	2560	QPSK	1	0	23.04	0	0.10
				1	49	23.14	0	0.00
				1	99	23.1	0	0.04
				50	0	22.25	1	0.89
				50	25	22.3	1	0.84
				50	49	22.48	1	0.66
				100	0	22.27	1	0.87
			16QAM	1	0	22.25	1	0.89
				1	49	22.2	1	0.94

				1	99	22.4	1	0.74
				50	0	21.25	2	1.89
				50	25	21.35	2	1.79
				50	49	21.42	2	1.72
				100	0	21.3	2	1.84

**Note;**

The EUT enables maximum power reduction in accordance with 3GPP 36.101. The MPR settings are configured during the manufacture process and are not configurable by the network, carrier, or end user.

## 11.4 WiFi

### 11.4.1 SAR Testing for 802.11b/g/n modes

#### General Device Setup

Normal Network operating configurations are not suitable for measuring the SAR of 802.11 a/b/g transmitters. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable.

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

#### Frequency Channel Configurations

802.11 a/b/g and 4.9 GHz operating modes are tested independently according to the service requirements in each frequency band. 802.11 b/g modes are tested on channels 1, 6 and 11. 802.11a is tested for UNII operations on channels 36 and 48 in the 5.15-5.25 GHz band; channels 52 and 64 in the 5.25-5.35 GHz band; Channels 104, 116, 124 and 136 in the 5.470-5.725 GHz band; and channels 149 and 161 in the 5.8 GHz band. When 5.8 GHz § 15.247 is also available, channels 149, 157 and 165 should be tested instead of the UNII channels. 4.9 GHz is tested on channels 1, 10 and 5 or 6, whichever has the higher output power, for 5 MHz channels; channels 11, 15 and 19 for 10 MHz channels; and channels 21 and 25 for 20 MHz channels.

These are referred to as the "default test channels". 802.11g mode was evaluated only if the output power was 0.25 dB higher than the 802.11b mode.

Mode	GHz	Channel	Turbo Channel	"Default Test Channels"			
				§15.247	UNII		
				802.11b	802.11g		
802.11 b/g	2.412	1		√	√		
	2.437	6	6	√	√		
	2.462	11		√	√		
802.11a	5.18	36				√	
	5.20	40	43 (5.21 GHz)			*	
	5.22	44				*	
	5.24	48	50 (5.25 GHz)			√	
	5.26	52	58 (5.29 GHz)			√	
	5.28	56				*	
	5.30	60				*	
	5.32	64				√	
	5.500	100	Unknown				*
	5.520	104					√
	5.540	108					*
	5.560	112					*
	5.580	116					√
	5.600	120					*
	5.620	124					√
	5.640	128				*	
	5.660	132				*	
5.680	136				√		
5.700	140				*		
UNII or §15.247	5.745	149		√		√	
	5.765	153	152 (5.76 GHz)		*	*	
	5.785	157		√			
	5.805	161	160 (5.80 GHz)		*	√	
§15.247	5.825	165		√			

802.11 Test Channels per FCC Requirements

2.4GHz

802.11b : 16.3 dBm    802.11g : 12.8 dBm    802.11n : 11.3 dBm

Tune-up Tolerance : -1.5dB/ +0.7dB

**■ TEST RESULTS-Average**
**Conducted Output Power Measurements (802.11b Mode)**

802.11b Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
2412	1	1 Mbps	16.66	30
		2 Mbps	16.36	30
		5.5 Mbps	15.41	30
		11 Mbps	13.67	30
2437	6	1 Mbps	16.11	30
		2 Mbps	16.15	30
		5.5 Mbps	15.61	30
		11 Mbps	12.57	30
2462	11	1 Mbps	16.63	30
		2 Mbps	16.57	30
		5.5 Mbps	15.52	30
		11 Mbps	13.35	30

**Conducted Output Power Measurements (802.11g Mode)**

802.11g Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
2412	1	6 Mbps	12.63	30
		9 Mbps	12.46	30
		12 Mbps	12.42	30
		18 Mbps	12.22	30
		24 Mbps	12.05	30
		36 Mbps	11.73	30
		48 Mbps	11.30	30
		54 Mbps	11.31	30
2437	6	6 Mbps	12.30	30
		9 Mbps	12.16	30
		12 Mbps	11.53	30
		18 Mbps	12.09	30
		24 Mbps	11.86	30
		36 Mbps	11.32	30
		48 Mbps	10.67	30
		54 Mbps	10.97	30
2462	11	6 Mbps	12.76	30
		9 Mbps	12.20	30
		12 Mbps	12.45	30
		18 Mbps	11.77	30
		24 Mbps	11.81	30
		36 Mbps	11.55	30
		48 Mbps	10.72	30
		54 Mbps	11.07	30

**Conducted Output Power Measurements (802.11n Mode)**

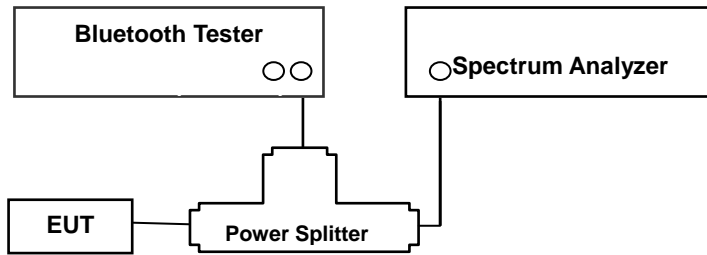
802.11n Mode		Rate (Mbps)	Measured Power(dBm)	Limit (dBm)
Frequency[MHz]	Channel No.			
2412	1	6.5 Mbps	11.58	30
		13 Mbps	10.38	30
		19.5 Mbps	10.22	30
		26 Mbps	9.76	30
		39 Mbps	9.70	30
		52 Mbps	9.29	30
		58.5 Mbps	9.19	30
		65 Mbps	9.29	30
2437	6	6.5 Mbps	10.83	30
		13 Mbps	9.81	30
		19.5 Mbps	9.33	30
		26 Mbps	9.26	30
		39 Mbps	8.41	30
		52 Mbps	8.14	30
		58.5 Mbps	8.09	30
		65 Mbps	8.34	30
2462	11	6.5 Mbps	11.37	30
		13 Mbps	10.03	30
		19.5 Mbps	10.19	30
		26 Mbps	10.00	30
		39 Mbps	8.88	30
		52 Mbps	8.63	30
		58.5 Mbps	9.20	30
		65 Mbps	8.85	30

Note;

SAR testing was performed according to the FCC KDB 248227D01v01r02.

## 11.5 Bluetooth Average Power

### Test Configuration



### TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer. The Spectrum Analyzer is set to the average detector mode. This test is performed with hopping off.

1. Span = 2 MHz (GFSK) / 5 MHz ( $\pi/4$ DQPSK and 8DPSK)
2. RBW = auto (GFSK) / auto ( $\pi/4$ DQPSK and 8DPSK)
3. VBW = auto (GFSK) / auto ( $\pi/4$ DQPSK and 8DPSK)
4. Sweep = 1 s
5. Packet type= DH5 (GFSK) / 2-DH5 ( $\pi/4$ DQPSK) / 3-DH5 (8DPSK)

Model	Channel	Frequency (MHz)	Target Power (dBm)		
			GFSK	8DPSK	$\pi/4$ DQPSK
LG-P875h	0	2402	6.28	4.73	4.70
	39	2440	7.91	6.30	6.38
	78	2480	6.63	5.01	5.03

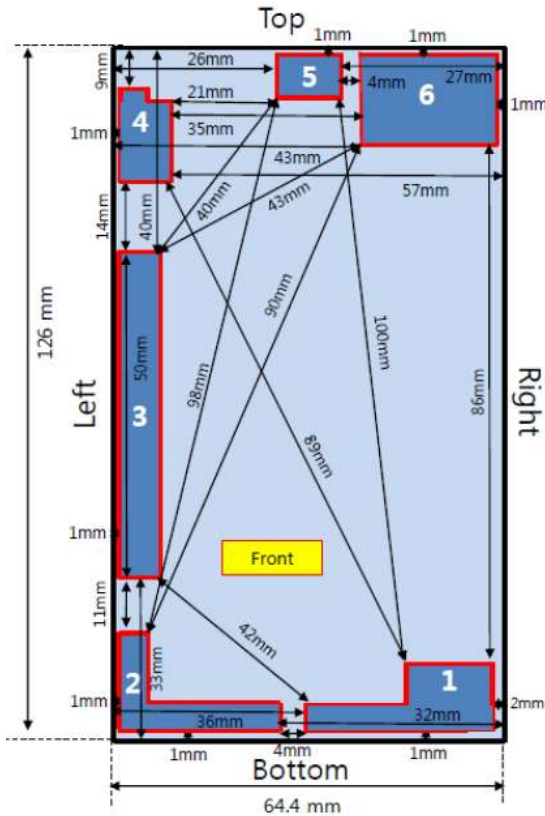
Power Tolerance: - 1.5dB/ + 0.7dB

## 12. SAR Test configuration & Antenna Information

### 12.1 Mobile Hotspot sides for SAR Testing configurations

Mode	Rear	Front	Left	Right	Bottom	Top
GSM 850	Yes	Yes	No	Yes	Yes	No
GSM 1 900	Yes	Yes	No	Yes	Yes	No
WCDMA 850	Yes	Yes	No	Yes	Yes	No
WCDMA 1 900	Yes	Yes	No	Yes	Yes	No
LTE band 7	Yes	Yes	Yes	No	Yes	No
2.4 GHz WLAN	Yes	Yes	No	No	No	Yes

### 12.2 Antenna and Device Information



Antenna	Mode	Band
1	GSM	GSM 850 Tx / Rx
		EGSM Tx / Rx
		DCS Tx / Rx
	WCDMA	PCS Tx / Rx
		B1 Tx / Rx
		B2 Tx / Rx
LTE	B5 Tx / Rx	
2	LTE	B20 Tx / Rx
3	LTE	B20 DRX
4	WCDMA	WCDMA B1 / 2 DRX
5	BT / WIFI	2.4 GHz
6	GPS / LTE	GPS(1575.42 GHz) / LTE B7
7	NFC Antenna	

[Front side View]

**Note;**

Per FCC KDB Publication 941225 D06v01, we performed the SAR testing at 1 cm from the top & bottom surfaces and also from side edges with a transmitting antenna  $\leq 2.5$  cm from an edge.

\*Please see the Antenna distance\_P875h for further information.

## 13. SAR TEST DATA SUMMARY

### 13.1 Measurement Results (GSM850 Head SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Battery	Phantom Position	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
836.6	190 (Mid)	GSM850	33.05	-0.171	Standard	Left Ear	0.228	0.265	1
			33.05	-0.103	Standard	Left Tilt 15°	0.166	0.193	2
			33.05	0.105	Standard	Right Ear	0.243	0.282	3
			33.05	-0.148	Standard	Right Tilt 15°	0.145	0.168	4
836.6	190 (Mid)	GPRS 2Tx	30.59	-0.101	Standard	Left Ear	0.235	0.241	5
			30.59	0.055	Standard	Left Tilt 15°	0.15	0.154	6
			30.59	0.117	Standard	Right Ear	0.269	0.276	7
			30.59	-0.028	Standard	Right Tilt 15°	0.154	0.158	8
<b>ANSI/ IEEE C95.1 - 1992- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Head 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

#### 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 cm ± 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
- According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.
- For Head SAR testing, the EUT was set in GPRS multi-slot class12 with 2uplink slots for GSM850 due to maximum source-based time-averaged output power.  
According to the KDB 941225 D03 SAR test reduction GSM/GPRS/EDGE, the maximum output power configuration were chosen for SAR testing.
- GSM GPRS VoIP is 3<sup>rd</sup> Party applications possibly installed and used by the end-user



## 13.2 Measurement Results (GSM1900 Head SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Battery	Phantom Position	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
1 880.0	661 (Mid)	GSM1900	30.15	-0.146	Standard	Left Ear	0.172	0.195	9
			30.15	-0.127	Standard	Left Tilt 15°	0.135	0.153	10
			30.15	0.136	Standard	Right Ear	0.442	0.502	11
			30.15	-0.074	Standard	Right Tilt 15°	0.148	0.168	12
1 880.0	661 (Mid)	GPRS 4Tx	24.30	0.006	Standard	Left Ear	0.223	0.280	13
			24.30	-0.176	Standard	Left Tilt 15°	0.157	0.197	14
			24.30	0.182	Standard	Right Ear	0.458	0.575	15
			24.30	-0.103	Standard	Right Tilt 15°	0.169	0.212	16
<b>ANSI/ IEEE C95.1 - 1992– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Head 1.6 W/kg (mW/g)</b> Averaged over 1 gram			

### 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 cm ± 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
- According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.
- For Head SAR testing, the EUT was set in GPRS multi-slot class12 with 4uplink slots for GSM1900 due to maximum source-based time-averaged output power.  
According to the KDB 941225 D03 SAR test reduction GSM/GPRS/EDGE, the maximum output power configuration were chosen for SAR testing.
- GSM GPRS VoIP is 3<sup>rd</sup> Party applications possibly installed and used by the end-user

### 13.3 Measurement Results (WCDMA850 Head SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Battery	Phantom Position	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
836.6	4183 (Mid)	WCDMA850	22.82	-0.049	Standard	Left Ear	0.255	0.312	17
			22.82	-0.058	Standard	Left Tilt 15°	0.155	0.190	18
			22.82	-0.072	Standard	Right Ear	0.284	0.348	19
			22.82	-0.134	Standard	Right Tilt 15°	0.141	0.173	20
<b>ANSI/ IEEE C95.1 - 1992– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Head 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

**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 cm ± 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
- According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.

## 13.4 Measurement Results (WCDMA1900 Head SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Battery	Phantom Position	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
1 880.0	9400 (Mid)	WCDMA1900	22.60	-0.140	Standard	Left Ear	0.365	0.470	21
			22.60	-0.123	Standard	Left Tilt 15°	0.253	0.326	22
1 852.4	9262 (Low)		22.75	0.130	Standard	Right Ear	0.713	0.887	23
1 880.0	9400(Mid)		22.60	0.077	Standard	Right Ear	0.747	0.962	24
1 907.6	9538 (High)		22.62	-0.028	Standard	Right Ear	0.713	0.914	25
1 880.0	9400 (Mid)		22.60	0.019	Standard	Right Tilt 15°	0.269	0.347	26
<b>ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Head 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

### 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 cm ± 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
- According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.

## 13.5 Measurement Results (LTE Band 7 Head SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Battery	Phantom Position	RB Size	RB Offset	Measured SAR (mW/g)	Scaled up SAR (mW/g)	MPR.	Plot No
MHz	ch.											
2510	20850	QPSK	23.5	0.159	Standard	Left Ear	1	99	0.644	0.674	0	27
2535	21100		22.57	-0.021	Standard	Left Ear	50	25	0.475	0.489	1	28
2510	20850		23.5	0.076	Standard	Left Tilt 15°	1	99	0.256	0.268	0	29
2535	21100		22.57	0.090	Standard	Left Tilt 15°	50	25	0.208	0.214	1	30
2510	20850		23.5	0.102	Standard	Right Ear	1	99	0.415	0.435	0	31
2535	21100		22.57	0.143	Standard	Right Ear	50	25	0.345	0.355	1	32
2510	20850		23.5	0.166	Standard	Right Tilt	1	99	0.169	0.177	0	33
2535	21100		22.57	0.113	Standard	Right Tilt	50	25	0.131	0.135	1	34
<b>ANSI/ IEEE C95.1 1992 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>								<b>Head</b> <b>1.6 W/kg (mW/g)</b> Averaged over 1 gram				

### 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 cm ± 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 According to FCC KDB 941225 D05v02:
  - a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
    - i. The required channel and offset combination with the highest maximum output power is required for SAR.
    - ii. When the reported SAR is  $\leq 0.8$  W/kg, testing of the remaining RB offset configuration and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
    - iii. When the reported SAR for a required test channel is  $> 1.45$  W/kg, SAR is required for all RB offset configuration for that channel.
  - b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
  - c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocations is less than the highest maximum output power of the 1RB and 50% RB allocation and the reported SAR for the 1RB and 50% RB allocation is  $< 0.8$  W/kg.
  - d. Per Section 5.2.4 and 5.3, SAR test for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configuration determined by Sections 5.2.1 through 5.2.3 is less than or equal to 1/2 dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is  $< 1.45$  W/kg.
- 8 According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is  $\leq 0.8$  W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz.
- 9 LTE VoIP is 3<sup>rd</sup> Party applications possibly installed and used by the end-user

## 13.6 Measurement Results (802.11b/g/n Head SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Battery	Phantom Position	Data Rate	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel									
2 412	1 (Mid)	802.11b	16.66	-0.174	Standard	Left Ear	1Mbps	0.115	0.124	35
			16.66	0.083	Standard	Left Tilt 15°	1Mbps	0.111	0.120	36
			16.66	0.145	Standard	Right Ear	1Mbps	0.137	0.148	37
			16.66	-0.091	Standard	Right Tilt 15	1Mbps	0.146	0.158	38
<b>ANSI/ IEEE C95.1 - 1992– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Head 1.6 W/kg (mW/g) Averaged over 1 gram</b>				

### 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 cm ± 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
- IEEE 802.11g(including 802.11n) SAR testing is required when the conducted powers are equal to or greater than 0.25 dB Than the conducted powers in IEEE 802.11b.
- For 2.4GHz WLAN, Highest average power channel for the lowest data rate was selected for SAR evaluation based on KDB 248227. Other channels are not necessary because 1g-average SAR < 0.8 W/Kg and peak SAR < 1.6W/Kg per KDB 248227.

## 13.7 Measurement Results (GSM850 Hotspot SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Configuration	Separation Distance	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
836.6	190 (Mid)	GPRS 2Tx	30.59	-0.075	Rear	1.0 cm	0.558	0.572	39
			30.59	-0.134	Front	1.0 cm	0.251	0.257	40
			30.59	-0.061	Right	1.0 cm	0.39	0.400	42
			30.59	-0.086	Bottom	1.0 cm	0.129	0.132	43
<b>ANSI/ IEEE C95.1 - 1992– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Body 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

### NOTES:

- The test data reported are the worst-case SAR value with the antenna-body 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 cm ± 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
- Test Configuration  With Holster  Without Holster
- According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.
- For body SAR testing, the EUT was set in GPRS multi-slot class12 with 2uplink slots for GSM850 due to maximum source-based time-averaged output power.  
According to the KDB 941225 D03 SAR test reduction GSM/GPRS/EDGE, the maximum output power configuration were chosen for Body SAR testing.

## 13.8 Measurement Results (GSM1900 Hotspot SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Configuration	Separation Distance	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
1 880	661 (Mid)	GPRS 4Tx	24.30	0.124	Rear	1.0 cm	0.547	0.755	44
			24.30	0.071	Front	1.0 cm	0.442	0.610	45
			24.30	-0.151	Right	1.0 cm	0.204	0.282	47
			24.30	0.068	Bottom	1.0 cm	0.361	0.498	48
<b>ANSI/ IEEE C95.1 - 1992- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Body 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

### NOTES:

- The test data reported are the worst-case SAR value with the antenna-body 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 cm ± 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
- Test Configuration  With Holster  Without Holster
- According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.
- For body SAR testing, the EUT was set in GPRS multi-slot class12 with 4uplink slots for GSM1900 due to maximum source-based time-averaged output power.  
According to the KDB 941225 D03 SAR test reduction GSM/GPRS/EDGE, the maximum output power configuration were chosen for Body SAR testing.

## 13.9 Measurement Results (WCDMA850 Hotspot SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Configuration	Separation Distance	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
836.6	4183 (Mid)	WCDMA850	22.82	0.044	Rear	1.0 cm	0.489	0.599	49
			22.82	0.092	Front	1.0 cm	0.229	0.280	50
			22.82	-0.011	Right	1.0 cm	0.233	0.285	52
			22.82	-0.015	Bottom	1.0 cm	0.106	0.130	53
<b>ANSI/ IEEE C95.1 - 1992– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Body 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

### NOTES:

- The test data reported are the worst-case SAR value with the antenna-body 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 cm ± 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
- Test Configuration  With Holster  Without Holster
- According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.



## 13.10 Measurement Results (WCDMA1900 Hotspot SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Configuration	Separation Distance	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
1 852.4	9262 (Low)	WCDMA 1900	22.75	0.052	Rear	1.0 cm	0.601	0.748	54
1 880	9400 (Mid)		22.60	-0.049	Rear	1.0 cm	0.733	0.944	55
1 907.6	9538 (High)		22.62	0.014	Rear	1.0 cm	0.696	0.893	56
1 880	9400 (Mid)		22.60	0.094	Front	1.0 cm	0.663	0.854	57
			22.60	-0.041	Right	1.0 cm	0.272	0.350	59
			22.60	-0.072	Bottom	1.0 cm	0.615	0.792	60

<b>ANSI/ IEEE C95.1 - 1992- Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>	<b>Body 1.6 W/kg (mW/g) Averaged over 1 gram</b>
---	--

### NOTES:

- 1 The test data reported are the worst-case SAR value with the antenna-body 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 cm ± 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 Test Configuration  With Holster  Without Holster
- 8 According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.

## 13.11 Measurement Results (LTE Band7 Hotspot SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Configuration	RB Size	RB Offset	Separation Distance	Measured SAR (mW/g)	Scaled up SAR (mW/g)	MPR.	Plot No.
MHz	ch.											
2510	20850	QPSK	23.5	0.112	Rear	1	99	1.0 cm	0.473	0.495	0	61
2535	21100	QPSK	22.57	0.026	Rear	50	25	1.0 cm	0.355	0.366	1	62
2510	20850	QPSK	23.5	-0.023	Front	1	99	1.0 cm	0.426	0.446	0	63
2535	21100	QPSK	22.57	-0.161	Front	50	25	1.0 cm	0.337	0.347	1	64
2510	20850	QPSK	23.5	0.164	Left	1	99	1.0 cm	0.134	0.140	0	65
2535	21100	QPSK	22.57	0.108	Left	50	25	1.0 cm	0.105	0.108	1	66
2510	20850	QPSK	23.5	-0.028	Bottom	1	99	1.0 cm	0.372	0.128	0	69
2535	21100	QPSK	22.57	-0.081	Bottom	50	25	1.0 cm	0.264	0.101	1	70
<b>ANSI/ IEEE C95.1 1992 – Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>								<b>Body</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 cm ± 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 According to FCC KDB 941225 D05v02:
  - e. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
    - i. The required channel and offset combination with the highest maximum output power is required for SAR.
    - ii. When the reported SAR is  $\leq 0.8$  W/kg, testing of the remaining RB offset configuration and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
    - iii. When the reported SAR for a required test channel is  $> 1.45$  W/kg, SAR is required for all RB offset configuration for that channel.
  - f. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
  - g. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocations is less than the highest maximum output power of the 1RB and 50% RB allocation and the reported SAR for the 1RB and 50% RB allocation is  $< 0.8$  W/kg.
  - h. Per Section 5.2.4 and 5.3, SAR test for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configuration determined by Sections 5.2.1 through 5.2.3 is less than or equal to 1/2 dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is  $< 1.45$  W/kg.

## 13.12 Measurement Results (802.11b/g/n Hotspot SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Configuration	Data Rate	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
2 412	1 (Low)	802.11b	16.66	0.155	Rear	1Mbps	0.131	0.142	71
			16.66	-0.152	Front	1Mbps	0.048	0.052	72
			16.66	-0.123	Top	1Mbps	0.070	0.076	73
<b>ANSI/ IEEE C95.1 - 1992– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Body 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

### NOTES:

- 1 The test data reported are the worst-case SAR value with the antenna-body 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 cm ± 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 code  Base Station Simulator
- 7 IEEE 802.11g(including 802.11n) SAR testing is required when the conducted powers are equal to or greater than 0.25 dB Than the conducted powers in IEEE 802.11b.
- 8 For 2.4GHz WLAN, Highest average power channel for the lowest data rate was selected for SAR evaluation based on KDB 248227. Other channels are not necessary because 1g-average SAR < 0.8 W/Kg and peak SAR < 1.6W/Kg per KDB 248227.

## 13.13 Measurement Results (Body-worn SAR)

Frequency		Modulation	Conducted Power (dBm)	Power Drift (dB)	Configuration	Separation Distance	Measured SAR(mW/g)	Scaled SAR(mW/g)	Plot No.
MHz	Channel								
836.6	190 (Mid)	GSM850	33.05	-0.058	Rear	1.0 cm	0.545	0.633	74
836.6	190 (Mid)	GSM850 GPRS 2Tx	30.59	-0.075	Rear	1.0 cm	0.558	0.572	39
1 880	661 (Mid)	GSM1900	30.15	0.121	Rear	1.0 cm	0.419	0.476	75
1 880	661 (Mid)	GSM1900 GPRS 4Tx	24.30	0.124	Rear	1.0 cm	0.547	0.755	44
836.6	4183 (Mid)	WCDMA850	22.82	0.044	Rear	1.0 cm	0.489	0.599	49
1 880	9400 (Mid)	WCDMA1900	22.60	-0.049	Rear	1.0 cm	0.733	0.944	55
2510	20850	LTE Band 7	23.5	0.112	Rear	1.0 cm	0.473	0.495	61
2 412	1 (Low)	802.11b (1Mbps)	16.66	0.156	Rear	1.0 cm	0.133	0.142	71
<b>ANSI/ IEEE C95.1 - 1992– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population</b>						<b>Body 1.6 W/kg (mW/g) Averaged over 1 gram</b>			

### NOTES:

- 1 The test data reported are the worst-case SAR value with the antenna-body 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 cm ± 0.2 cm.
- 4 Tissue parameters and temperatures are listed on the SAR plot.
- 5 According to KDB 447498, Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz.

## 14. SAR Summation Scenario

	Position	Applicable Combination	
Simultaneous Transmission	Head	GSM 850 Voice + 2.4 GHz WiFi	
		GSM 1 900 Voice + 2.4 GHz WiFi	
		GPRS 850 Data + 2.4 GHz WiFi(*)	
		GPRS 1 900 Data + 2.4 GHz WiFi(*)	
		WCDMA 850 Voice + 2.4 GHz WiFi	
		WCDMA 1 900 Voice + 2.4 GHz WiFi	
		LTE 7 Data + 2.4 GHz WiFi(*)	
	Hotspot	GPRS 850 Data + 2.4 GHz WiFi	
		GPRS1 900 Data + 2.4 GHz WiFi	
		WCDMA 850 Data + 2.4 GHz WiFi	
		WCDMA 1 900 Data + 2.4 GHz WiFi	
		LTE 7 Data + 2.4 GHz WiFi	
	Body-worn	GSM850 Voice/GPRS + 2.4 GHz WiFi(*)	
		GSM1900 Voice/GPRS + 2.4 GHz WiFi(*)	
		GSM850 Voice + 2.4 GHz Bluetooth	
		GSM1900 Voice + 2.4 GHz Bluetooth	
		WCDMA 850 Voice + 2.4 GHz WiFi	
		WCDMA 1 900 Voice + 2.4 GHz WiFi	
		WCDMA 850 Voice + 2.4 GHz Bluetooth	
		WCDMA 1 900 Voice + 2.4 GHz Bluetooth	
		LTE 7 Data + 2.4 GHz WiFi (*)	
	BT and WLAN are not simultaneous transmission.		
	(*)= For VoIP 3 <sup>rd</sup> party applications possibly installed and used by end-user		

Per FCC KDB 447498 D01v05, The SAR exclusion threshold for distance < 50mm is defined by the following equation:

$$\frac{\text{Max Power of Channel}(mW)}{\text{Test Separation Dist}(mm)} * \sqrt{\text{Frequency}(GHz)} \leq 3.0$$

Mode	Frequency	Maximum Allowed Power	Separatuin Distance	≤ 3.0
	[MHz]	[mW]	[mm]	
Bluetooth	2440	6.6	10	0.97

Based on the maximum conducted power of Bluetooth and antenna to use separation distance, Bluetooth SAR was not required  $[(6/10)*\sqrt{2.440}] = 0.97 < 3.0$ .

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required. Per FCC KDB 447498 D01v05 IV.C.1iii, simultaneous transmission SAR test exclusion may be applied when the sum of the 1-g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is  $\leq 1.6W/kg$ . When standalone SAR is not required to be measured per FCC KDB 447498 D01v05 4.3.22, the following equation must be used to estimate the standalone 1-g SAR for simultaneous transmission assessment involving that transmitter

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{7.5} * \frac{(\text{Max Power of channel,mW})}{\text{Min.Separation Distance}}$$

. Mode	Frequency	Maximum Allowed Power	Separatuin Distance (Body)	Estimated SAR (Body)
	[MHz]	[mW]	[mm]	[W/kg]
Bluetooth	2440	6.6	10	0.14

Note : Held-to ear configurations are not applicable to Bluetooth operations and therefore were not considered for simultaneous transmission. The Estimated SAR results were determined according to FCC KDB447498 D01v05

**Simultaneous Transmission Summation for Held to Ear**

Band	configuration	Scaled SAR(W/kg)	2.4 GHz WIFI Scaled SAR (W/kg)	$\Sigma$ 1-g SAR (W/kg)
GSM850	Left Cheek	0.265	0.124	0.389
	Left Tilt	0.193	0.12	0.313
	Right Cheek	0.282	0.148	0.430
	Right Tilt	0.168	0.158	0.326
GSM 1 900	Left Cheek	0.195	0.124	0.319
	Left Tilt	0.153	0.12	0.273
	Right Cheek	0.502	0.148	0.650
	Right Tilt	0.168	0.158	0.326
GPRS 850	Left Cheek	0.241	0.124	0.365
	Left Tilt	0.154	0.12	0.274
	Right Cheek	0.276	0.148	0.424
	Right Tilt	0.158	0.158	0.316
GPRS 1 900	Left Cheek	0.28	0.124	0.404
	Left Tilt	0.197	0.12	0.317
	Right Cheek	0.575	0.148	0.723
	Right Tilt	0.212	0.158	0.370
WCDMA 850	Left Cheek	0.312	0.124	0.436
	Left Tilt	0.19	0.12	0.310
	Right Cheek	0.348	0.148	0.496
	Right Tilt	0.173	0.158	0.331
WCDMA 1 900	Left Cheek	0.47	0.124	0.594
	Left Tilt	0.326	0.12	0.446
	Right Cheek	0.962	0.148	1.110
	Right Tilt	0.347	0.158	0.505
LTE 7	Left Cheek	0.674	0.124	0.798
	Left Tilt	0.268	0.12	0.388
	Right Cheek	0.435	0.148	0.583
	Right Tilt	0.177	0.158	0.335

**Simultaneous Transmission Summation for Body-Worn (1 cm)**

Band	configuration	Scaled SAR(W/kg)	2.4 GHz WIFI Scaled SAR (W/kg)	BT SAR (W/kg)	$\Sigma$ 1-g SAR (W/kg)
GSM 850	Rear	0.663	0.142		0.805
				0.14	0.803
GSM 1900	Rear	0.476	0.142		0.618
				0.14	0.616
GPRS 850	Rear	0.572	0.142		0.714
				0.14	0.712
GPRS 1900	Rear	0.755	0.142		0.897
				0.14	0.895
WCDMA 850	Rear	0.599	0.142		0.741
				0.14	0.739
WCDMA 1900	Rear	0.944	0.142		1.086
				0.14	1.084
LTE Band 7	Rear	0.495	0.142		0.637
				0.14	0.635



**Simultaneous Transmission Summation for Hotspot (1 cm)**

Band	configuration	Scaled SAR(W/kg)	2.4 GHz WIFI Scaled SAR (W/kg)	$\Sigma$ 1-g SAR (W/kg)
GSM850	Rear	0.572	0.142	0.714
	Front	0.257	0.052	0.309
	Left			0
	Right	0.4		0.400
	Bottom	0.132		0.132
	Top		0.076	0.076
GSM 1 900	Rear	0.755	0.142	0.897
	Front	0.61	0.052	0.662
	Left			0
	Right	0.282		0.282
	Bottom	0.498		0.498
	Top		0.076	0.076
WCDMA 850	Rear	0.599	0.142	0.741
	Front	0.28	0.052	0.332
	Left			0
	Right	0.285		0.285
	Bottom	0.13		0.130
	Top		0.076	0.076
WCDMA 1 900	Rear	0.944	0.142	1.086
	Front	0.854	0.052	0.906
	Left			0
	Right	0.35		0.350
	Bottom	0.792		0.792
	Top		0.076	0.076
LTE 7	Rear	0.495	0.142	0.637
	Front	0.446	0.052	0.498
	Left	0.14		0.140
	Right			0
	Bottom	0.128		0.128
	Top		0.076	0.076

## 14.1 Simultaneous Transmission Conclusion

The above numerical summed SAR results for all the worst-case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit. And therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v05

## 15. CONCLUSION

---

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the ANSI/IEEE C95.1 1992.

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.

## 16. REFERENCES

---

- [1] Federal Communications Commission, OET Bulletin 65 (Edition 97-01), Supplement C (Edition 01-01), Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields, July 2001.
- [2] IEEE Standards Coordinating Committee 34 – IEEE Std. 1528-2003, IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body from Wireless Communications Devices.
- [3] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation, Aug. 1996.
- [4] ANSI/IEEE C95.1 - 1991, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300 kHz to 100 GHz, New York: IEEE, Aug. 1992
- [5] ANSI/IEEE C95.3 - 1991, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: IEEE, 1992.
- [6] NCRP, National Council on Radiation Protection and Measurements, Biological Effects and Exposure Criteria for Radio Frequency Electromagnetic Fields, NCRP Report No. 86, 1986. Reprinted Feb. 1995.
- [7] T. Schmid, O. Egger, N. Kuster, Automated E-field scanning system for dosimetric assessments, IEEE Transaction on Microwave Theory and Techniques, vol. 44, Jan. 1996, pp. 105-113.
- [8] K. Pokovic, T. Schmid, N. Kuster, Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies, ICECOM97, Oct. 1997, pp. 120-124.
- [9] K. Pokovic, T. Schmid, and N. Kuster, E-field Probe with improved isotropy in brain simulating liquids, Proceedings of the ELMAR, Zadar, Croatia, June 23-25, 1996, pp. 172-175.
- [10] Schmid & Partner Engineering AG, Application Note: Data Storage and Evaluation, June 1998, p2.
- [11] V. Hombach, K. Meier, M. Burkhardt, E. Kuhn, N. Kuster, The Dependence of EM Energy Absorption upon Human Head Modeling at 900 MHz, IEEE Transaction on Microwave Theory and Techniques, vol. 44 no. 10, Oct. 1996, pp. 1865-1873.
- [12] N. Kuster and Q. Balzano, Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300 MHz, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.
- [13] G. Hartsgrove, A. Kraszewski, A. Surowiec, Simulated Biological Materials for Electromagnetic Radiation Absorption Studies, University of Ottawa, Bioelectromagnetics, Canada: 1987, pp. 29-36.
- [14] Q. Balzano, O. Garay, T. Manning Jr., Electromagnetic Energy Exposure of Simulated Users of Portable Cellular Telephones, IEEE Transactions on Vehicular Technology, vol. 44, no.3, Aug. 1995.
- [15] W. Gander, Computer mathematic, Birkhaeuser, Basel, 1992.
- [16] W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, Numerical Recipes in C, The Art of Scientific Computing, Second edition, Cambridge University Press, 1992.
- [17] Federal Communications Commission, OET Bulletin 65, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. Supplement C, Dec. 1997.
- [18] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.
- [19] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10 kHz-300 GHz, Jan. 1995.
- [20] Prof. Dr. Niels Kuster, ETH, Eidgenössische Technische Hochschule Zürich, Dosimetric Evaluation of the Cellular Phone.
- [21] SAR Evaluation of Handsets with Multiple Transmitters and Antennas #648474.
- [22] SAR Measurement Procedure for 802.11 a/b/g Transmitters #KDB 248227.

## Attachment 1. – SAR Test Plots

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 1

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

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

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

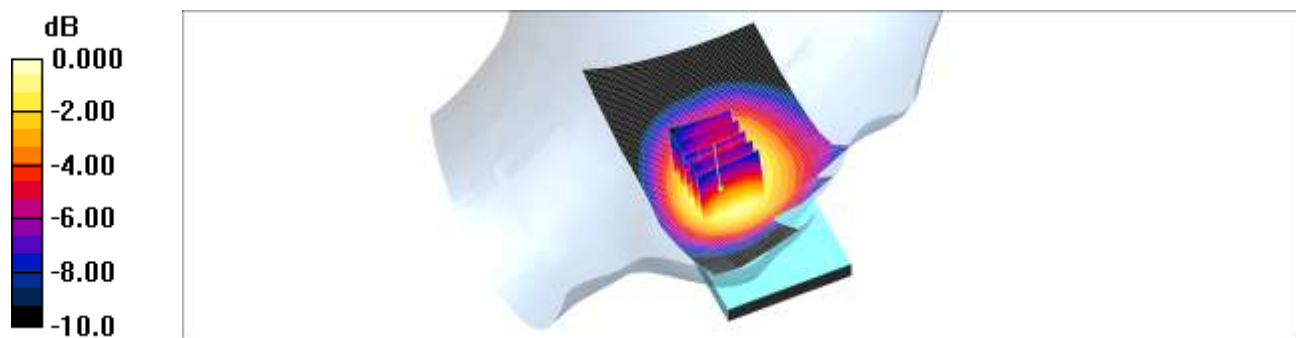
Reference Value = 3.84 V/m; Power Drift = -0.171 dB

Peak SAR (extrapolated) = 0.278 W/kg

**SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.170 mW/g**

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

Maximum value of SAR (measured) = 0.238 mW/g



Test Laboratory: HCT CO., LTD

EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 2

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

Left tilt 190/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.175 mW/g

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

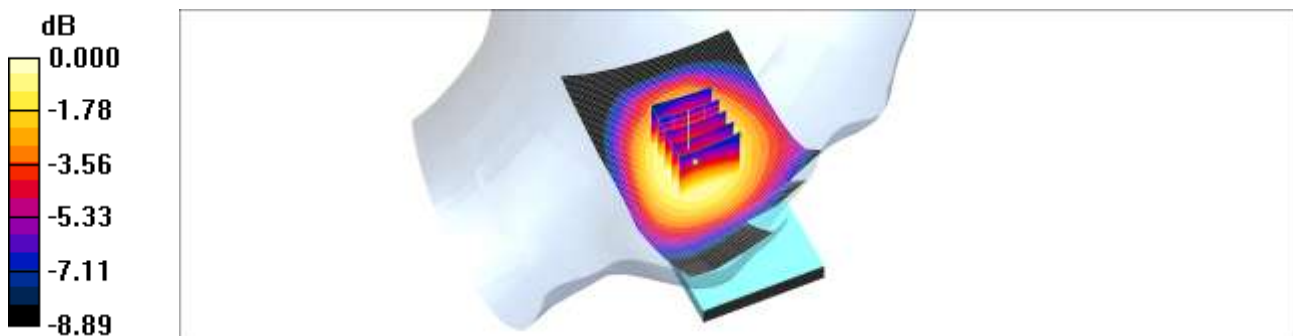
Reference Value = 7.43 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 0.201 W/kg

SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.127 mW/g

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

Maximum value of SAR (measured) = 0.174 mW/g



Test Laboratory: HCT CO., LTD

EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 3

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section  
Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22  
Sensor-Surface: 4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1141  
Measurement SW: DAS4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Right touch 190/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.262 mW/g

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

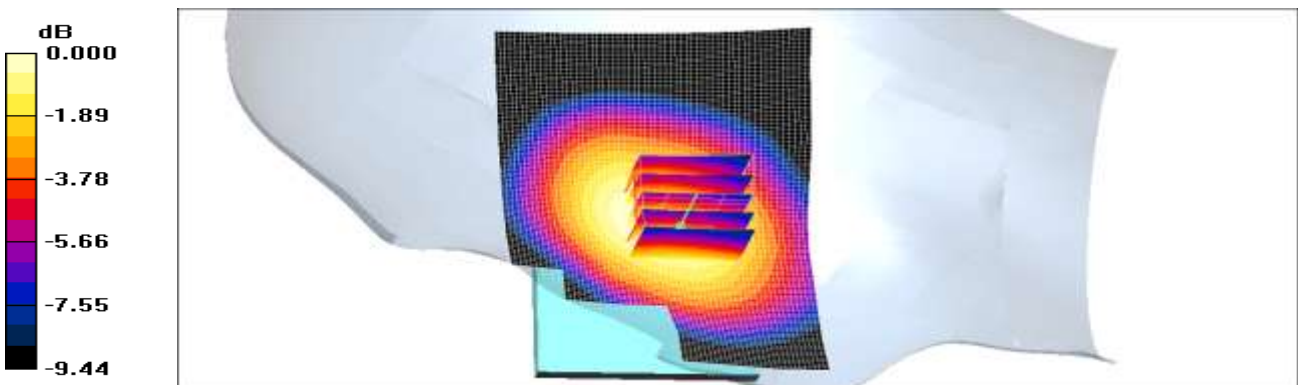
Reference Value = 3.96 V/m; Power Drift = 0.105 dB

Peak SAR (extrapolated) = 0.305 W/kg

**SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.184 mW/g**

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

Maximum value of SAR (measured) = 0.254 mW/g



0 dB = 0.254mW/g



Test Laboratory: HCT CO., LTD  
 EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
 Liquid Temperature: 21.0 °C  
 Ambient Temperature: 21.2 °C  
 Test Date: Jan.31, 2013  
 Plot NO. 4

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
 Medium parameters used (interpolated):  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.921 \text{ mho/m}$ ;  $\epsilon_r = 40.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
 - Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 190/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.158 mW/g

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

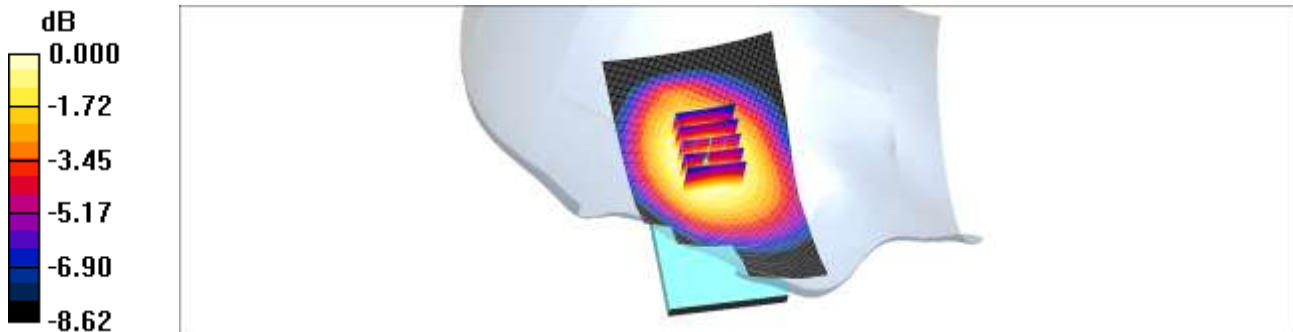
Reference Value = 6.65 V/m; Power Drift = -0.148 dB

Peak SAR (extrapolated) = 0.175 W/kg

**SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.111 mW/g**

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

Maximum value of SAR (measured) = 0.151 mW/g



0 dB = 0.151mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 5

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190 GPRS 2Tx/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

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

**Left touch 190 GPRS 2Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

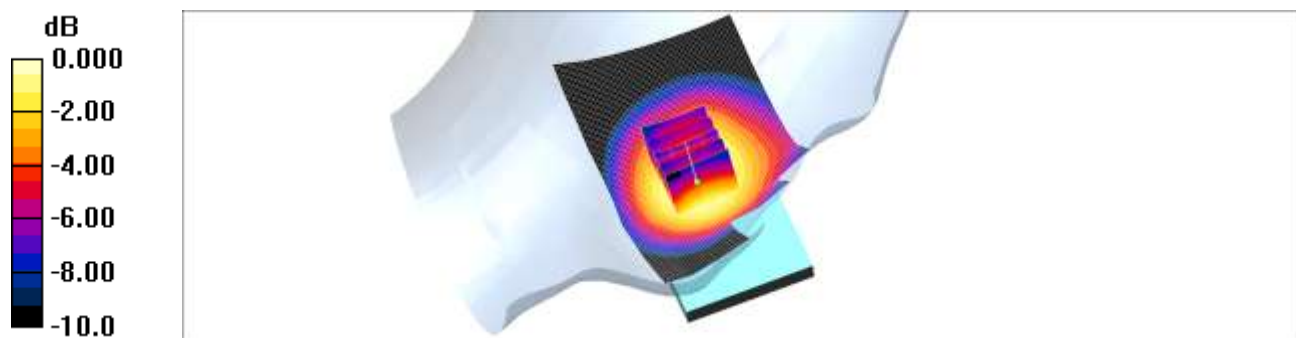
Reference Value = 4.26 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 0.291 W/kg

**SAR(1 g) = 0.235 mW/g; SAR(10 g) = 0.176 mW/g**

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

Maximum value of SAR (measured) = 0.248 mW/g



0 dB = 0.248mW/g

Test Laboratory: HCT CO., LTD

EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 6

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

Left tilt 190 GPRS 2Tx/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.197 mW/g

Left tilt 190 GPRS 2Tx/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

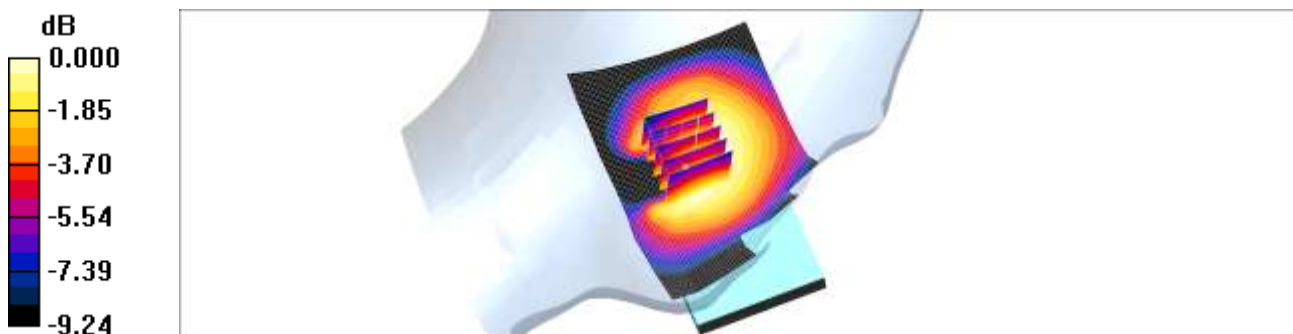
Reference Value = 7.68 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 0.182 W/kg

SAR(1 g) = 0.150 mW/g; SAR(10 g) = 0.114 mW/g

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

Maximum value of SAR (measured) = 0.156 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 7

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 190 GPRS 2Tx/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.287 mW/g

**Right touch 190 GPRS 2Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

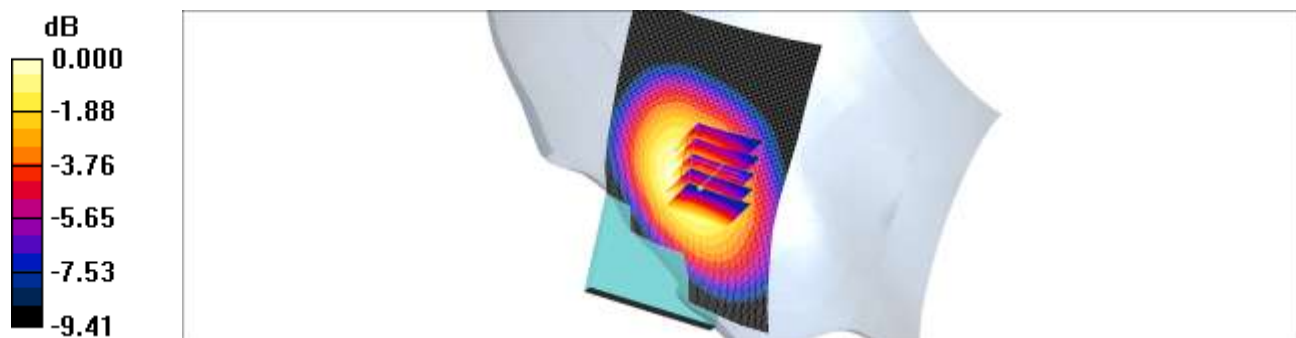
Reference Value = 4.07 V/m; Power Drift = 0.117 dB

Peak SAR (extrapolated) = 0.336 W/kg

**SAR(1 g) = 0.269 mW/g; SAR(10 g) = 0.203 mW/g**

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

Maximum value of SAR (measured) = 0.282 mW/g



0 dB = 0.282mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 8

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 190 GPRS 2Tx/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.159 mW/g

**Right tilt 190 GPRS 2Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

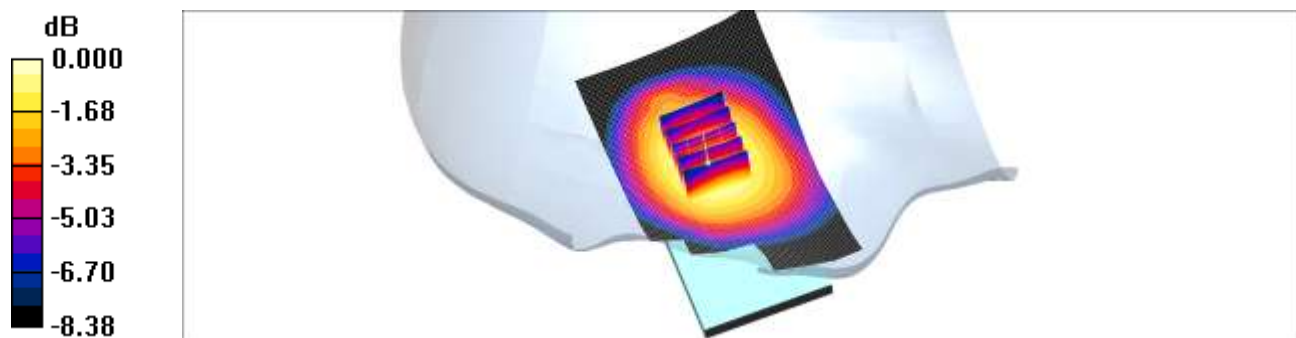
Reference Value = 6.79 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.207 W/kg

**SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.116 mW/g**

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

Maximum value of SAR (measured) = 0.162 mW/g



0 dB = 0.162mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 9

**DUT: LG-P875h; Type: Bar; Serial: #1**

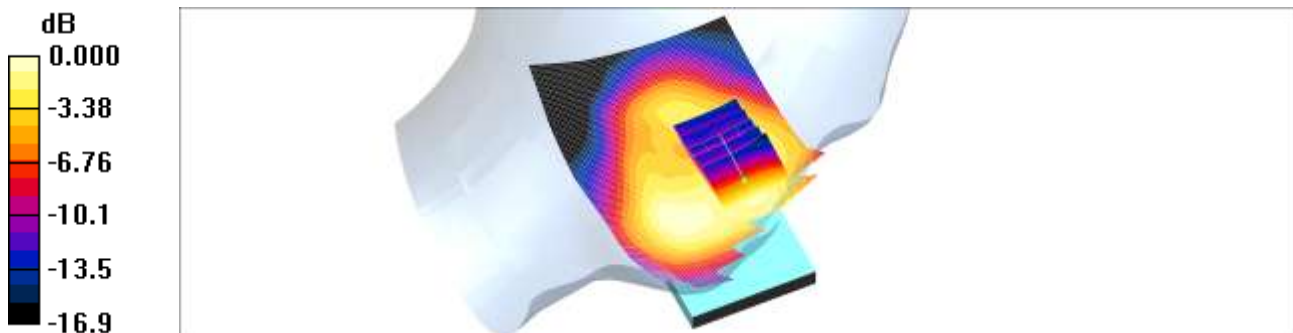
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left Touch 661/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.183 mW/g

**Left Touch 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.10 V/m; Power Drift = -0.146 dB  
Peak SAR (extrapolated) = 0.297 W/kg  
**SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.100 mW/g**  
Maximum value of SAR (measured) = 0.180 mW/g



0 dB = 0.180mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 10

**DUT: LG-P875h; Type: Bar; Serial: #1**

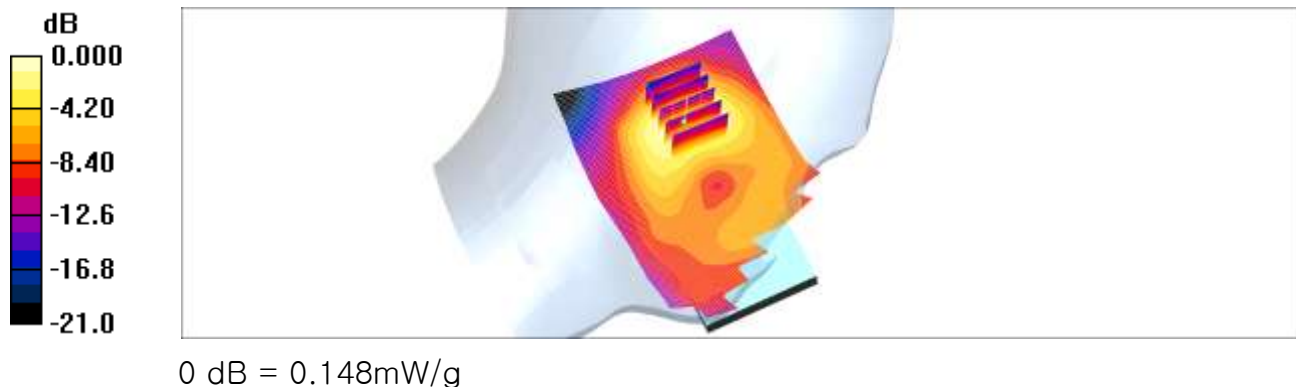
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left Tilt 661/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.154 mW/g

**Left Tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.77 V/m; Power Drift = -0.127 dB  
Peak SAR (extrapolated) = 0.239 W/kg  
**SAR(1 g) = 0.135 mW/g; SAR(10 g) = 0.075 mW/g**  
Maximum value of SAR (measured) = 0.148 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE,  
WCDMA/HSDPA/HSUPA, LTE Phone with  
Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 11

**DUT: LG-P875h; Type: Bar; Serial: #1**

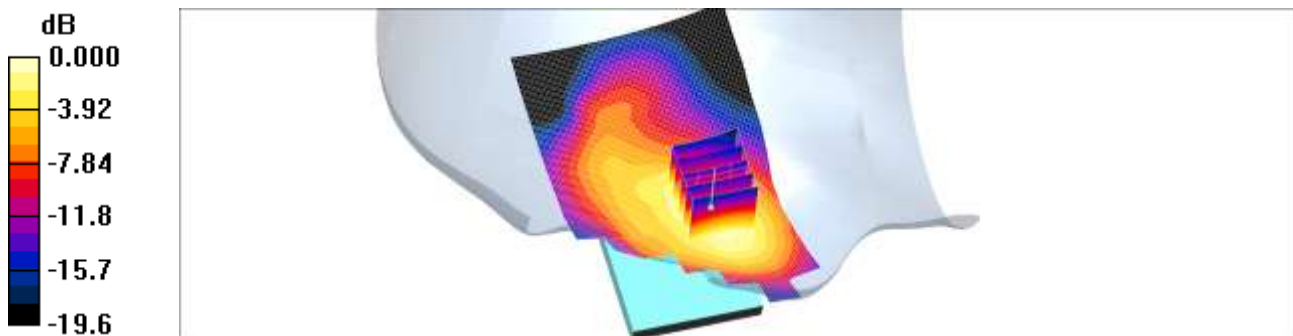
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8  
Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right Touch 661/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.474 mW/g

**Right Touch 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.91 V/m; Power Drift = 0.136 dB  
Peak SAR (extrapolated) = 0.797 W/kg  
**SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.246 mW/g**  
Maximum value of SAR (measured) = 0.488 mW/g



0 dB = 0.488mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 12

**DUT: LG-P875h; Type: Bar; Serial: #1**

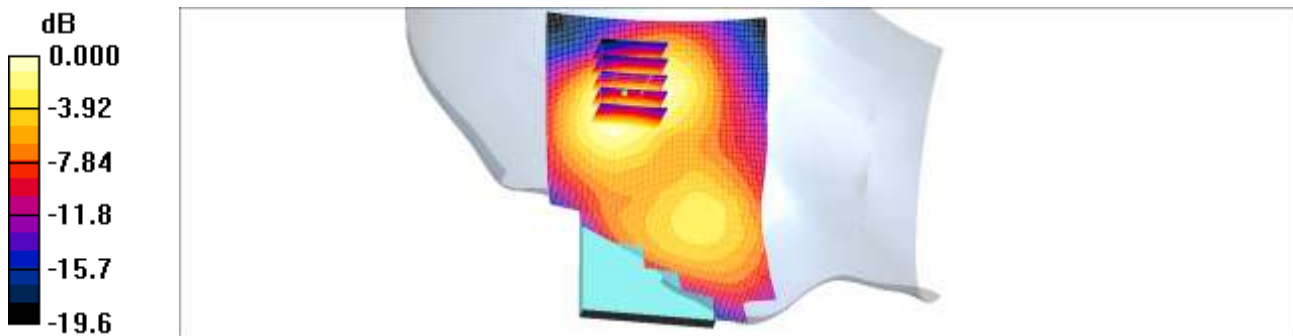
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right Tilt 661/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.186 mW/g

**Right Tilt 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 8.23 V/m; Power Drift = -0.074 dB  
Peak SAR (extrapolated) = 0.246 W/kg  
**SAR(1 g) = 0.148 mW/g; SAR(10 g) = 0.087 mW/g**  
Maximum value of SAR (measured) = 0.158 mW/g



0 dB = 0.158mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 13

**DUT: LG-P875h; Type: Bar; Serial: #1**

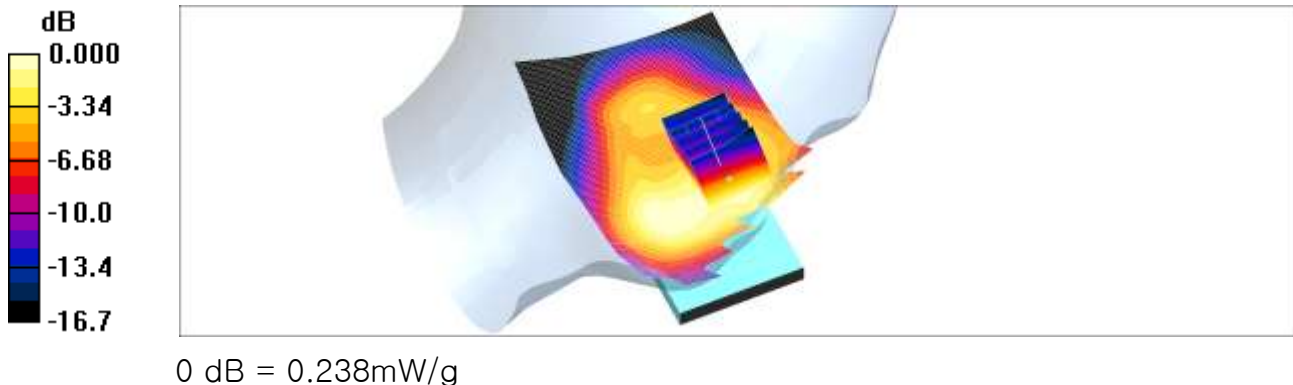
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left Touch 661 GPRS 4Tx/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.249 mW/g

**Left Touch 661 GPRS 4Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.08 V/m; Power Drift = 0.006 dB  
Peak SAR (extrapolated) = 0.385 W/kg  
**SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.129 mW/g**  
Maximum value of SAR (measured) = 0.238 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 14

**DUT: LG-P875h; Type: Bar; Serial: #1**

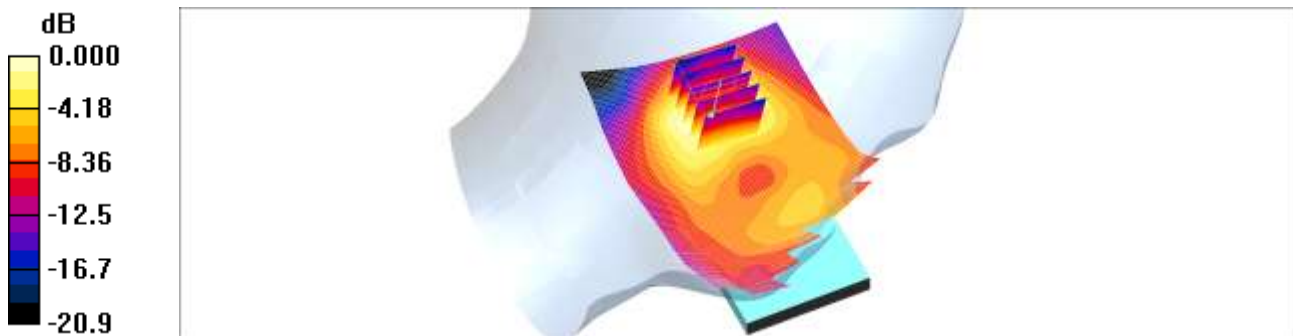
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left Tilt 661 GPRS 4Tx/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.183 mW/g

**Left Tilt 661 GPRS 4Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 8.80 V/m; Power Drift = -0.176 dB  
Peak SAR (extrapolated) = 0.273 W/kg  
**SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.088 mW/g**  
Maximum value of SAR (measured) = 0.170 mW/g



0 dB = 0.170mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 15

**DUT: LG-P875h; Type: Bar; Serial: #1**

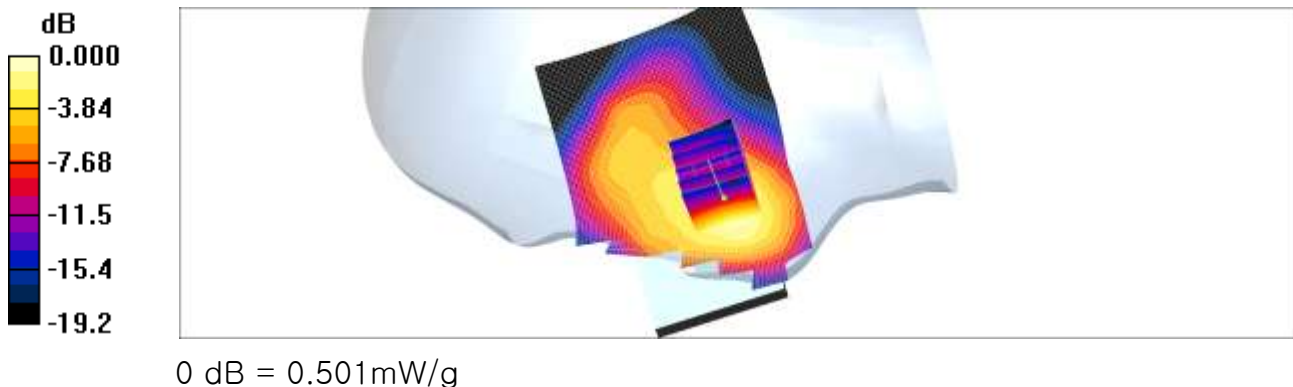
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right Touch 661 GPRS 4Tx/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.482 mW/g

**Right Touch 661 GPRS 4Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.79 V/m; Power Drift = 0.182 dB  
Peak SAR (extrapolated) = 0.819 W/kg  
**SAR(1 g) = 0.458 mW/g; SAR(10 g) = 0.254 mW/g**  
Maximum value of SAR (measured) = 0.501 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 16

**DUT: LG-P875h; Type: Bar; Serial: #1**

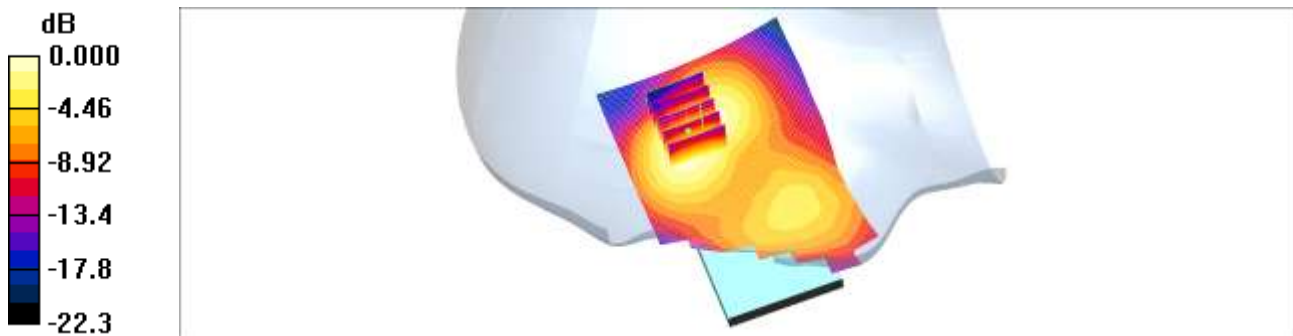
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right Tilt 661 GPRS 4Tx/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.206 mW/g

**Right Tilt 661 GPRS 4Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 8.50 V/m; Power Drift = -0.103 dB  
Peak SAR (extrapolated) = 0.287 W/kg  
**SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.099 mW/g**  
Maximum value of SAR (measured) = 0.182 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 17

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section  
Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1141
- Measurement SW: DAS4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Left touch 4183/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.275 mW/g

Left touch 4183/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

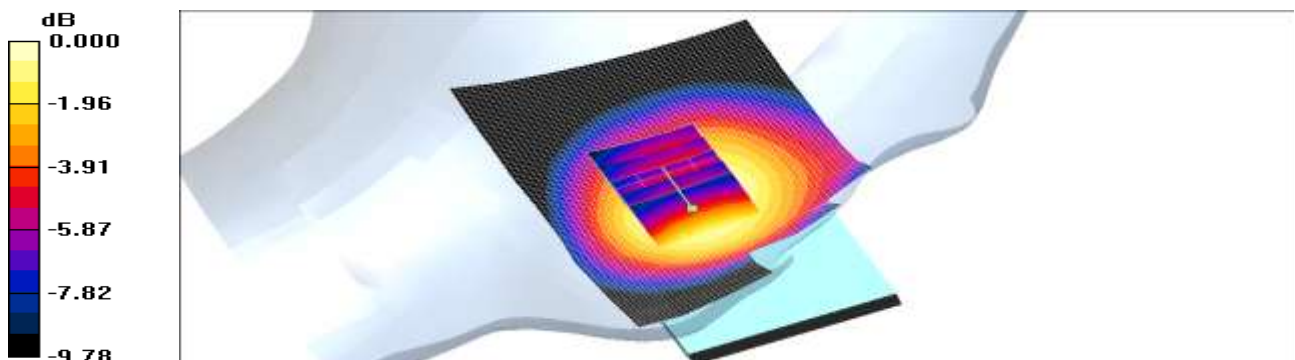
Reference Value = 4.91 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 0.312 W/kg

SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.190 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.267 mW/g



0 dB = 0.267mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 18

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Left tilt 4183/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.159 mW/g

**Left tilt 4183/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

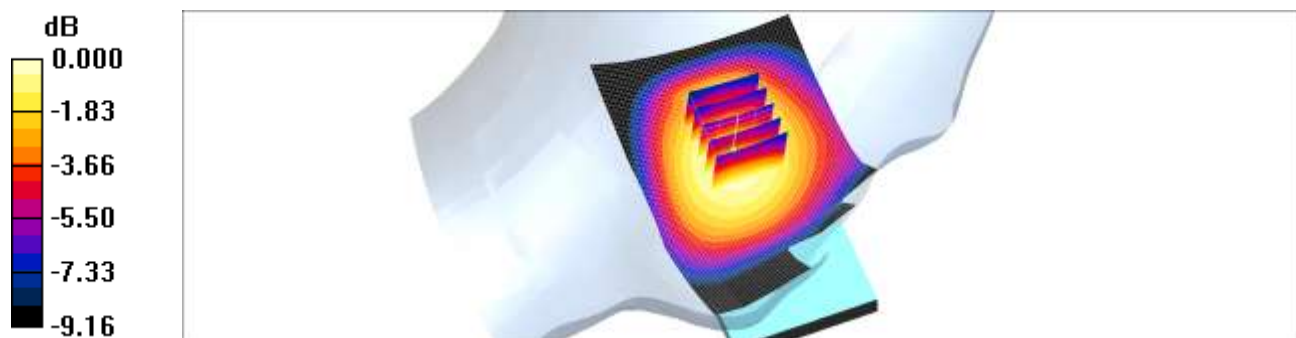
Reference Value = 8.47 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.191 W/kg

**SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.118 mW/g**

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

Maximum value of SAR (measured) = 0.164 mW/g



0 dB = 0.164mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 19

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Right touch 4183/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.304 mW/g

**Right touch 4183/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

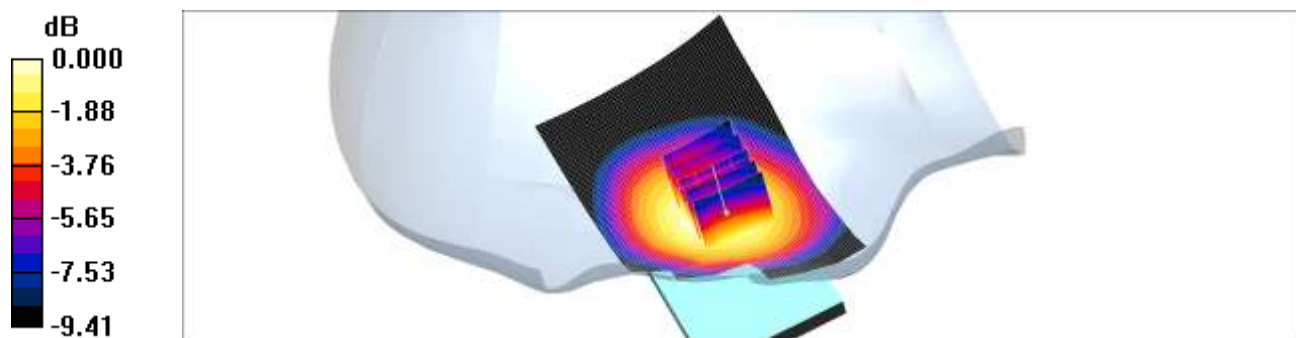
Reference Value = 4.26 V/m; Power Drift = -0.072 dB

Peak SAR (extrapolated) = 0.361 W/kg

**SAR(1 g) = 0.284 mW/g; SAR(10 g) = 0.213 mW/g**

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

Maximum value of SAR (measured) = 0.295 mW/g





Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.0 °C  
Ambient Temperature: 21.2 °C  
Test Date: Jan.31, 2013  
Plot NO. 20

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 40.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.94, 8.94, 8.94); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 4183/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.146 mW/g

**Right tilt 4183/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

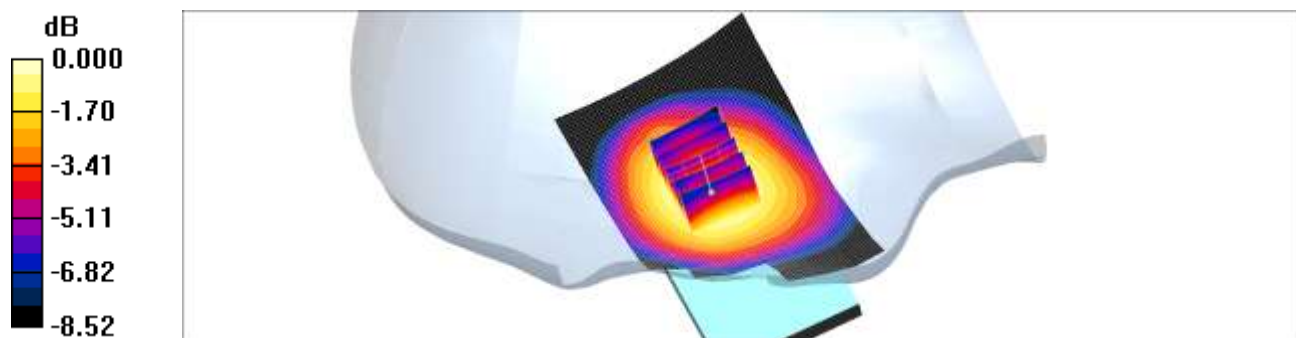
Reference Value = 6.08 V/m; Power Drift = -0.134 dB

Peak SAR (extrapolated) = 0.170 W/kg

**SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.109 mW/g**

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

Maximum value of SAR (measured) = 0.147 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 21

**DUT: LG-P875h; Type: Bar; Serial: #1**

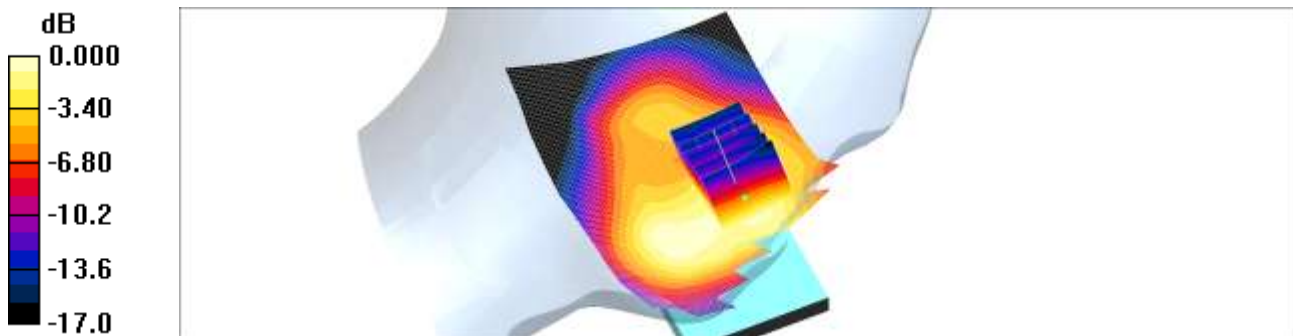
Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left Touch 9400/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.397 mW/g

**Left Touch 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 7.65 V/m; Power Drift = -0.140 dB  
Peak SAR (extrapolated) = 0.629 W/kg  
**SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.213 mW/g**  
Maximum value of SAR (measured) = 0.383 mW/g



0 dB = 0.383mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 22

**DUT: LG-P875h; Type: Bar; Serial: #1**

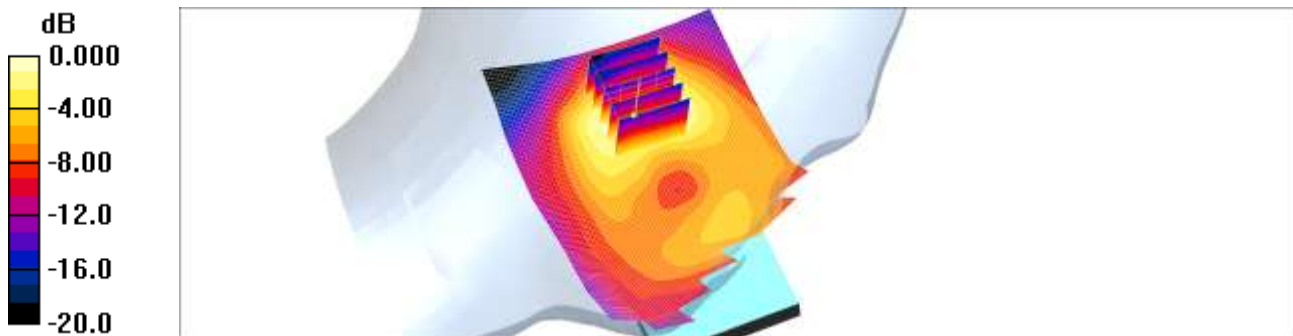
Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Left Tilt 9400/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.091 mW/g

**Left Tilt 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 10.8 V/m; Power Drift = -0.123 dB  
Peak SAR (extrapolated) = 0.450 W/kg  
**SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.141 mW/g**  
Maximum value of SAR (measured) = 0.275 mW/g



0 dB = 0.275mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 23

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: WCDMA1900; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.32$  mho/m;  $\epsilon_r = 41$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right Touch 9262/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.770 mW/g

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

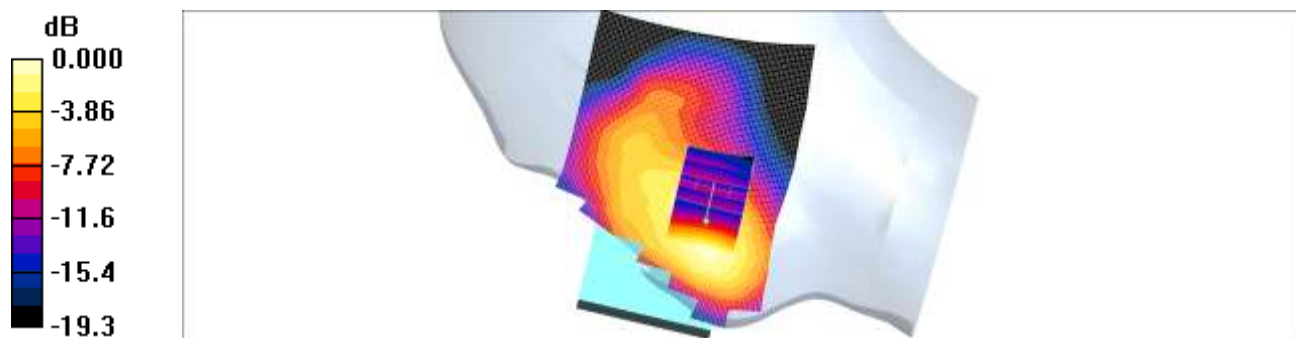
Reference Value = 7.17 V/m; Power Drift = 0.130 dB

Peak SAR (extrapolated) = 1.26 W/kg

**SAR(1 g) = 0.713 mW/g; SAR(10 g) = 0.400 mW/g**

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

Maximum value of SAR (measured) = 0.780 mW/g



0 dB = 0.780mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 24

**DUT: LG-P875h; Type: Bar; Serial: #1**

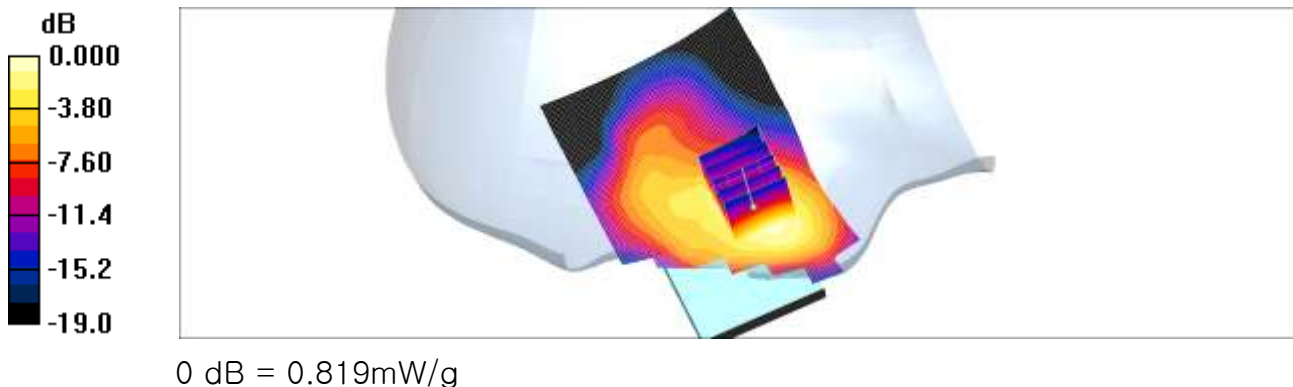
Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right Touch 9400/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.815 mW/g

**Right Touch 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.75 V/m; Power Drift = 0.077 dB  
Peak SAR (extrapolated) = 1.33 W/kg  
**SAR(1 g) = 0.747 mW/g; SAR(10 g) = 0.420 mW/g**  
Maximum value of SAR (measured) = 0.819 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 25

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: WCDMA1900; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1907.6 \text{ MHz}$ ;  $\sigma = 1.38 \text{ mho/m}$ ;  $\epsilon_r = 40.8$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

Right Touch 9538/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.778 mW/g

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

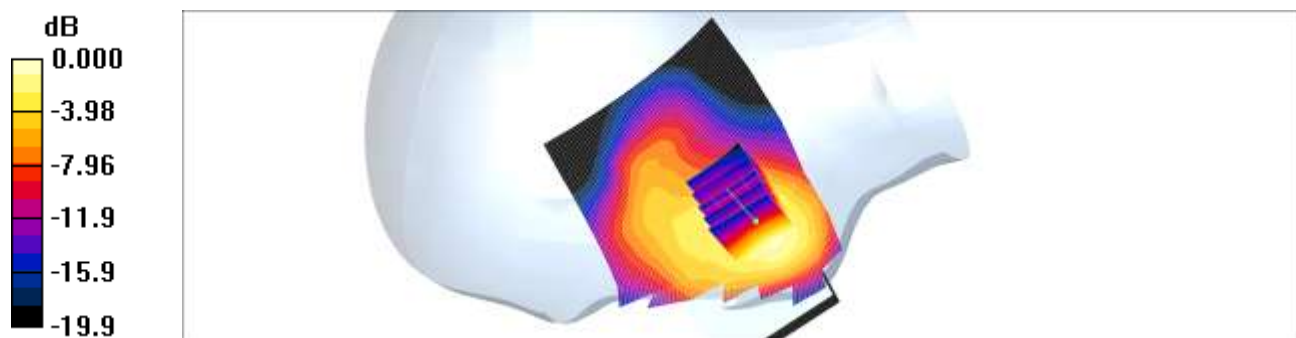
Reference Value = 7.56 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.713 mW/g; SAR(10 g) = 0.395 mW/g

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

Maximum value of SAR (measured) = 0.785 mW/g



0 dB = 0.785mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.5 °C  
Ambient Temperature: 21.7 °C  
Test Date: Feb.4, 2013  
Plot NO. 26

**DUT: LG-P875h; Type: Bar; Serial: #1**

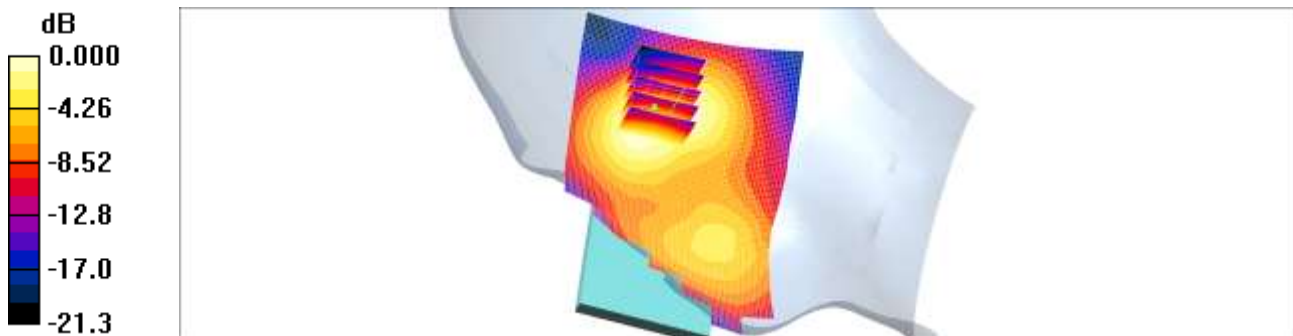
Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.35$  mho/m;  $\epsilon_r = 40.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.47, 7.47, 7.47); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right Tilt 9400/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.316 mW/g

**Right Tilt 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 9.66 V/m; Power Drift = 0.019 dB  
Peak SAR (extrapolated) = 0.458 W/kg  
**SAR(1 g) = 0.269 mW/g; SAR(10 g) = 0.158 mW/g**  
Maximum value of SAR (measured) = 0.291 mW/g



0 dB = 0.291mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 27

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.9$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Bnad 7 Left touch 1RB 99offset QPSK 20850/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (interpolated) = 0.627 mW/g

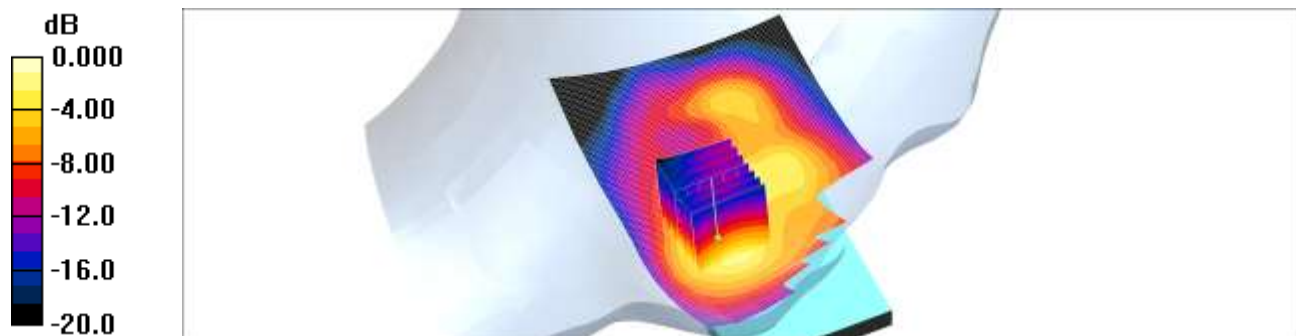
LTE Bnad 7 Left touch 1RB 99offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.42 V/m; Power Drift = 0.159 dB

Peak SAR (extrapolated) = 1.14 W/kg

**SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.347 mW/g**

Maximum value of SAR (measured) = 0.732 mW/g



0 dB = 0.732mW/g

Test Laboratory: HCT CO., LTD



EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 28

DUT: LG-P875h; Type: Bar; Serial: #1

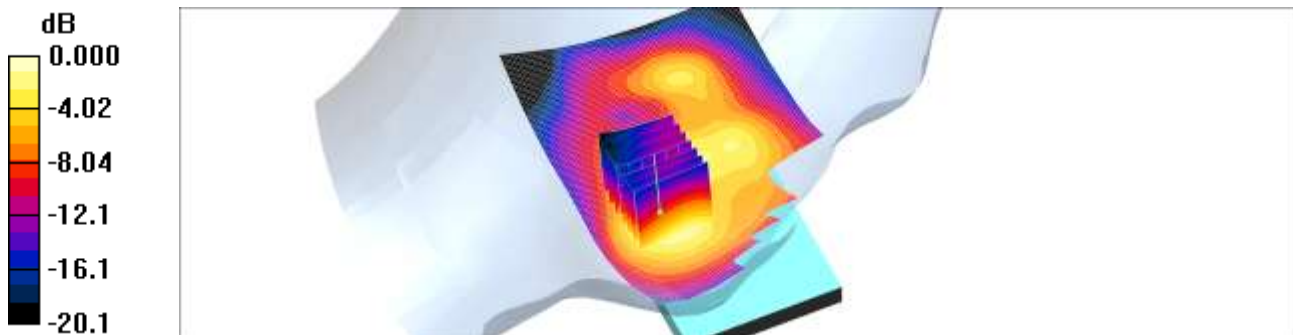
Communication System: LTE Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Bnad 7 Left touch 50RB 25offset QPSK 21100/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (interpolated) = 0.503 mW/g

LTE Bnad 7 Left touch 50RB 25offset QPSK 21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 4.35 V/m; Power Drift = -0.021 dB  
Peak SAR (extrapolated) = 0.851 W/kg  
**SAR(1 g) = 0.475 mW/g; SAR(10 g) = 0.254 mW/g**  
Maximum value of SAR (measured) = 0.523 mW/g



0 dB = 0.523mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 29

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.9$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Bnad 7 Left tilt 1RB 99offset QPSK 20850/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (interpolated) = 0.290 mW/g

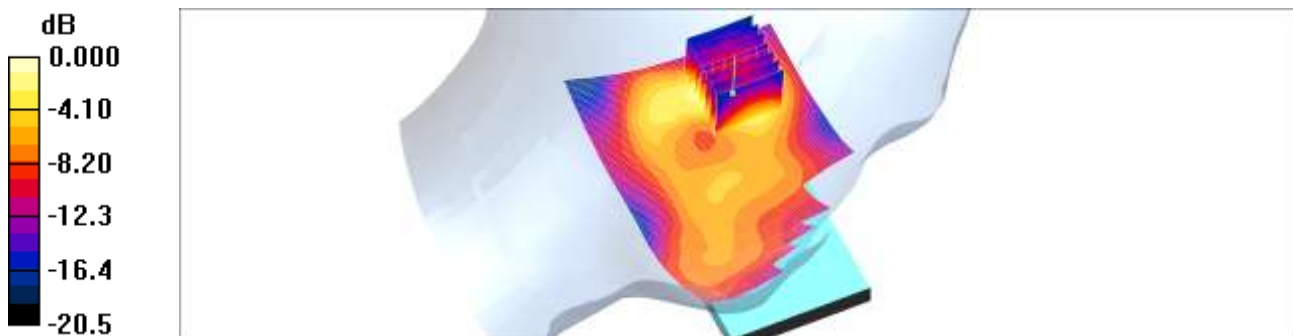
LTE Bnad 7 Left tilt 1RB 99offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.89 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 0.432 W/kg

**SAR(1 g) = 0.256 mW/g; SAR(10 g) = 0.133 mW/g**

Maximum value of SAR (measured) = 0.285 mW/g



0 dB = 0.285mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 30

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Bnad 7 Left tilt 50RB 25offset QPSK 21100/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (interpolated) = 0.228 mW/g

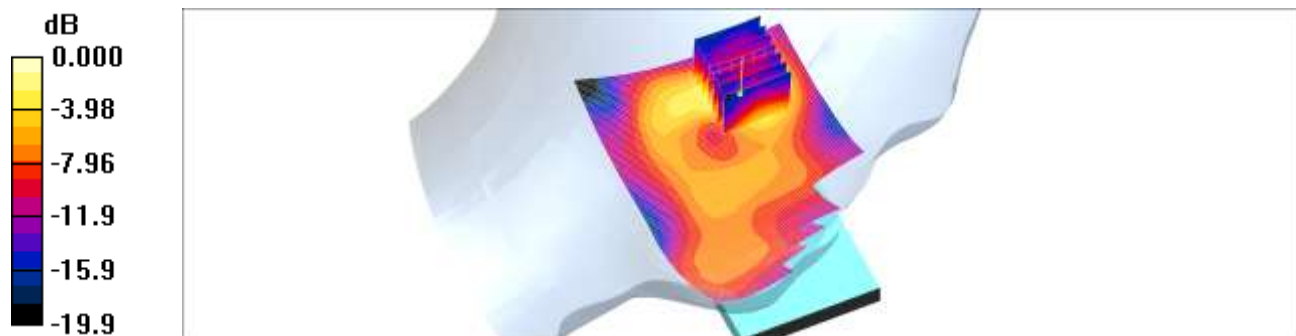
LTE Bnad 7 Left tilt 50RB 25offset QPSK 21100/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.75 V/m; Power Drift = 0.090 dB

Peak SAR (extrapolated) = 0.356 W/kg

SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.106 mW/g

Maximum value of SAR (measured) = 0.231 mW/g



0 dB = 0.231mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 31

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.9$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 7 Right touch 1RB 99 offset QPSK 20850/Area Scan (81x121x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.490 mW/g

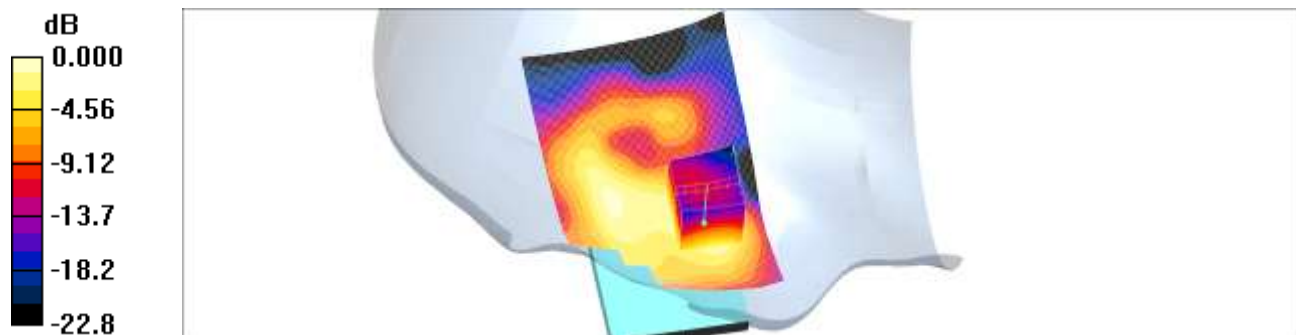
**LTE Band 7 Right touch 1RB 99 offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.04 V/m; Power Drift = 0.102 dB

Peak SAR (extrapolated) = 0.698 W/kg

**SAR(1 g) = 0.415 mW/g; SAR(10 g) = 0.227 mW/g**

Maximum value of SAR (measured) = 0.452 mW/g



0 dB = 0.452mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 32

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 7 Right touch 50RB 25 offset QPSK 20850/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.403 mW/g

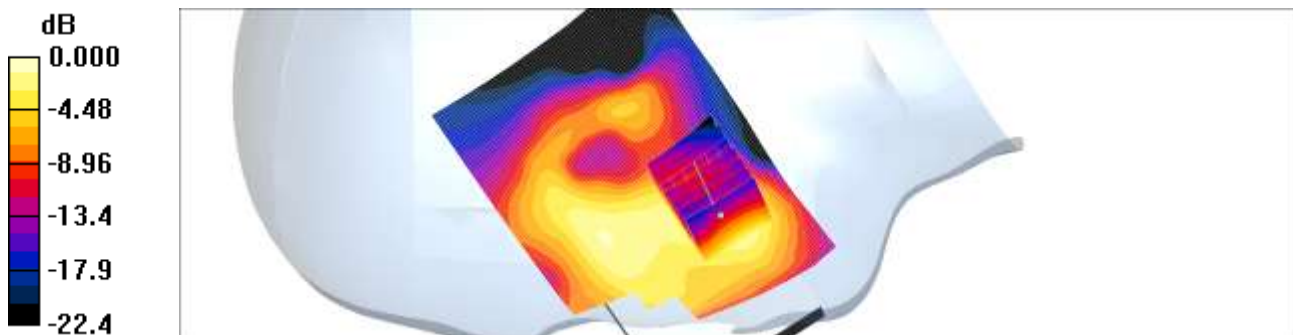
LTE Band 7 Right touch 50RB 25 offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.31 V/m; Power Drift = 0.143 dB

Peak SAR (extrapolated) = 0.591 W/kg

**SAR(1 g) = 0.345 mW/g; SAR(10 g) = 0.188 mW/g**

Maximum value of SAR (measured) = 0.373 mW/g



0 dB = 0.373mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 33

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.9$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 7 Right tilt 1RB 99 offset QPSK 20850/Area Scan (81x121x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (interpolated) = 0.190 mW/g

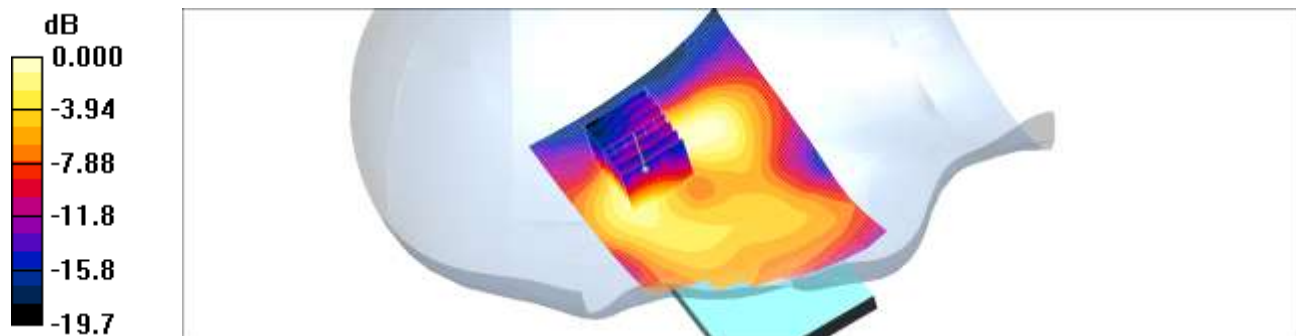
**LTE Band 7 Right tilt 1RB 99 offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.23 V/m; Power Drift = 0.166 dB

Peak SAR (extrapolated) = 0.340 W/kg

**SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.086 mW/g**

Maximum value of SAR (measured) = 0.191 mW/g



0 dB = 0.191mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.13, 2013  
Plot NO. 34

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 40.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 7 Right tilt 50RB 25 offset QPSK 20850/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (interpolated) = 0.144 mW/g

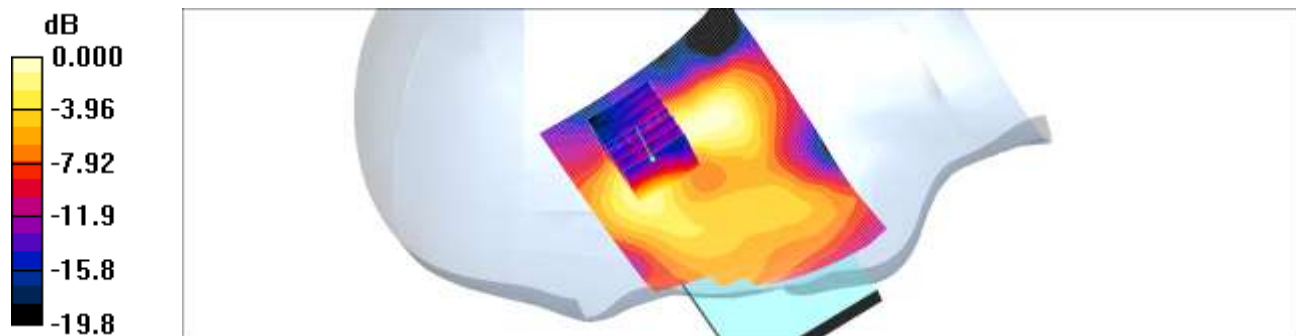
LTE Band 7 Right tilt 50RB 25 offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.85 V/m; Power Drift = 0.113 dB

Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.148 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.6 °C  
Ambient Temperature: 21.8 °C  
Test Date: Mar 8, 2013  
Plot NO. 35

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.8$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.19, 7.19, 7.19); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2013-01-16
- Phantom: 800/900 Phantom; Type: SAM

**WiFi2450MHz Left touch 1Mbps 1ch/Area Scan (81x121x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.124 mW/g

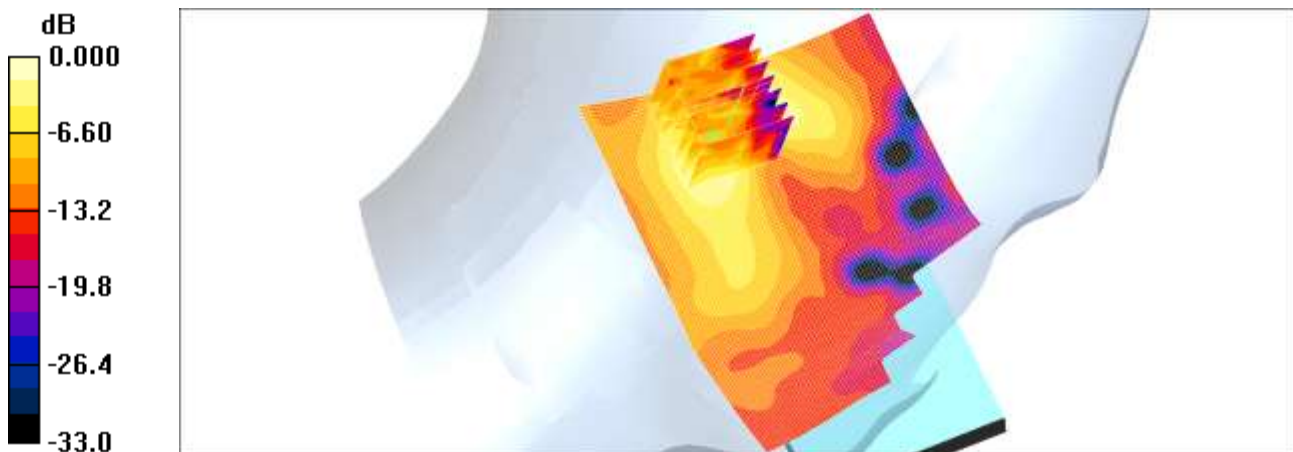
**WiFi2450MHz Left touch 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.67 V/m; Power Drift = -0.174 dB

Peak SAR (extrapolated) = 0.274 W/kg

**SAR(1 g) = 0.115 mW/g; SAR(10 g) = 0.046 mW/g**

Maximum value of SAR (measured) = 0.139 mW/g



0 dB = 0.139mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.6 °C  
Ambient Temperature: 21.8 °C  
Test Date: Mar 8, 2013  
Plot NO. 36

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.8$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.19, 7.19, 7.19); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2013-01-16
- Phantom: 800/900 Phantom; Type: SAM

**WiFi2450MHz Left tilt 1Mbps 1ch/Area Scan (81x121x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.125 mW/g

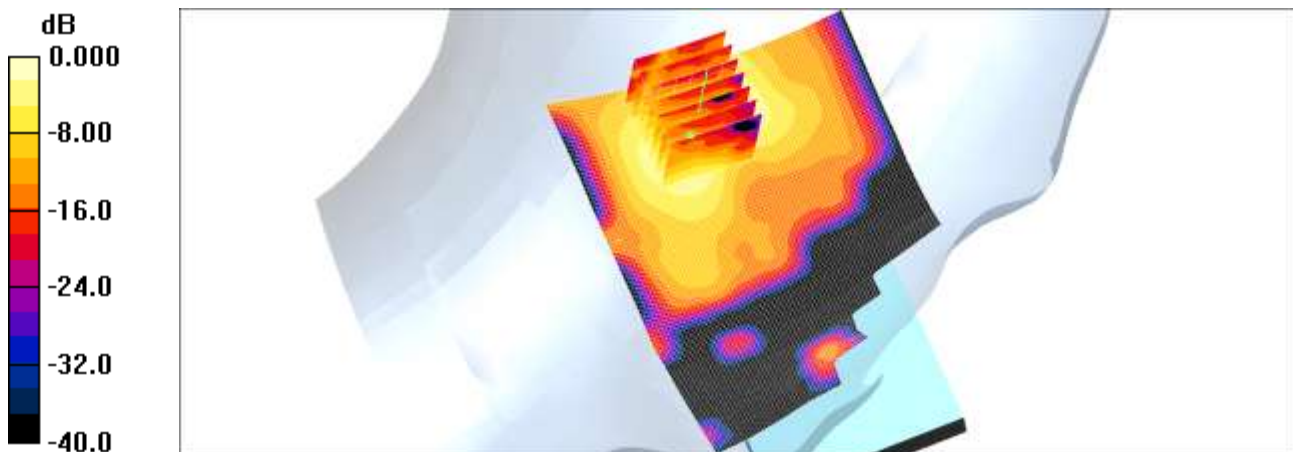
**WiFi2450MHz Left tilt 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.26 V/m; Power Drift = 0.083 dB

Peak SAR (extrapolated) = 0.661 W/kg

**SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.048 mW/g**

Maximum value of SAR (measured) = 0.136 mW/g



0 dB = 0.136mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.6 °C  
Ambient Temperature: 21.8 °C  
Test Date: Mar 8, 2013  
Plot NO. 37

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: 2450MHz FCC; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.8$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.19, 7.19, 7.19); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2013-01-16
- Phantom: 800/900 Phantom; Type: SAM

WiFi2450MHz Right touch 1Mbps 1ch/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.162 mW/g

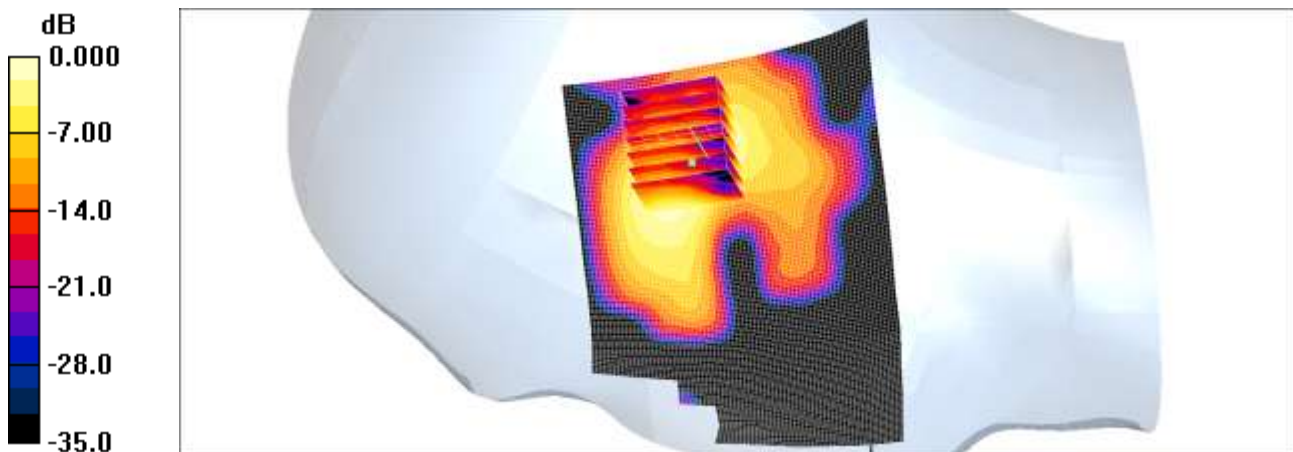
WiFi2450MHz Right touch 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.55 V/m; Power Drift = 0.145 dB

Peak SAR (extrapolated) = 0.292 W/kg

SAR(1 g) = 0.137 mW/g; SAR(10 g) = 0.064 mW/g

Maximum value of SAR (measured) = 0.160 mW/g



0 dB = 0.160mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.6 °C  
Ambient Temperature: 21.8 °C  
Test Date: Mar 8, 2013  
Plot NO. 38

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: 2450MHz FCC; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.8$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.19, 7.19, 7.19); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2013-01-16
- Phantom: 800/900 Phantom; Type: SAM

WiFi2450MHz Right tilt 1Mbps 1ch/Area Scan (81x121x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.209 mW/g

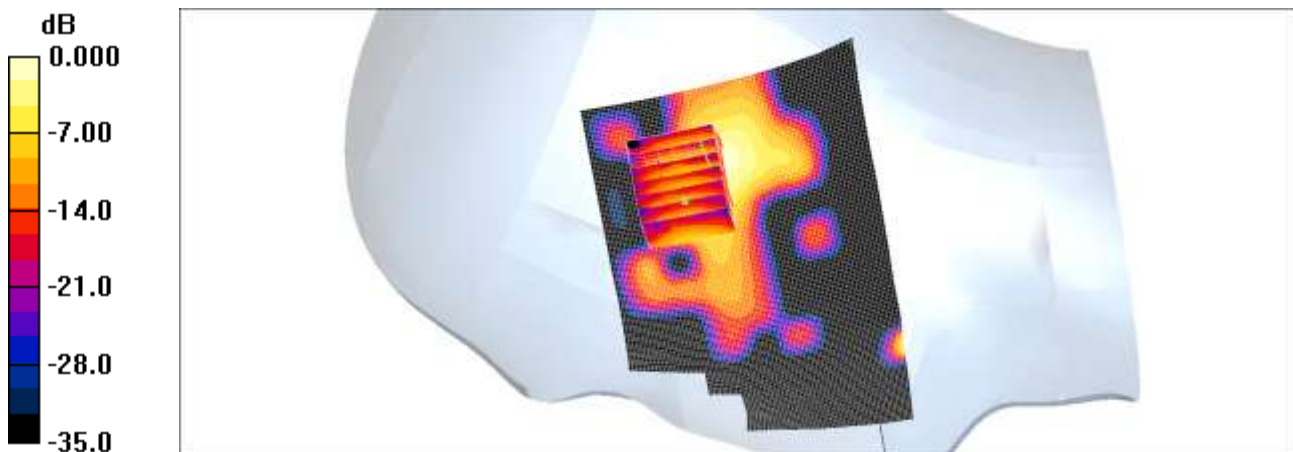
WiFi2450MHz Right tilt 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.03 V/m; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 0.315 W/kg

SAR(1 g) = 0.146 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.169 mW/g



0 dB = 0.169mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 39

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**GSM850 Body Rear 190 2Tx/Area Scan (101x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.599 mW/g

**GSM850 Body Rear 190 2Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

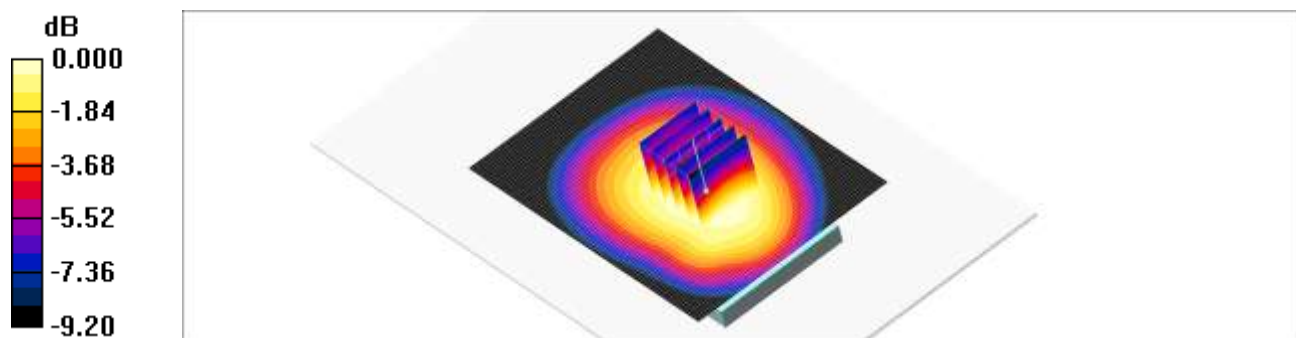
Reference Value = 23.2 V/m; Power Drift = -0.075 dB

Peak SAR (extrapolated) = 0.698 W/kg

**SAR(1 g) = 0.558 mW/g; SAR(10 g) = 0.422 mW/g**

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

Maximum value of SAR (measured) = 0.584 mW/g



0 dB = 0.584mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 40

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

GSM850 Body Front 190 2Tx/Area Scan (101x71x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.266 mW/g

GSM850 Body Front 190 2Tx/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

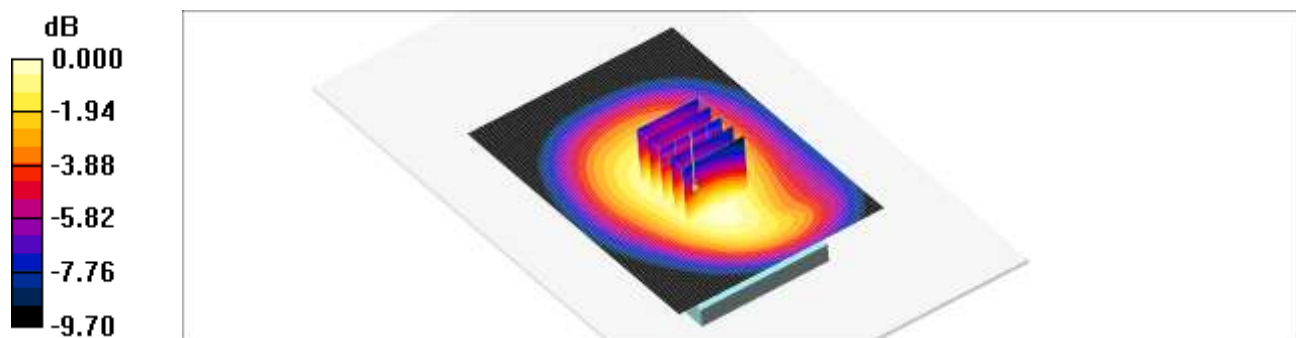
Reference Value = 16.0 V/m; Power Drift = -0.134 dB

Peak SAR (extrapolated) = 0.314 W/kg

SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.189 mW/g

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

Maximum value of SAR (measured) = 0.264 mW/g



0 dB = 0.264mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 42

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

GSM850 Body Right Side 2Tx 190/Area Scan (101x41x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.421 mW/g

GSM850 Body Right Side 2Tx 190/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

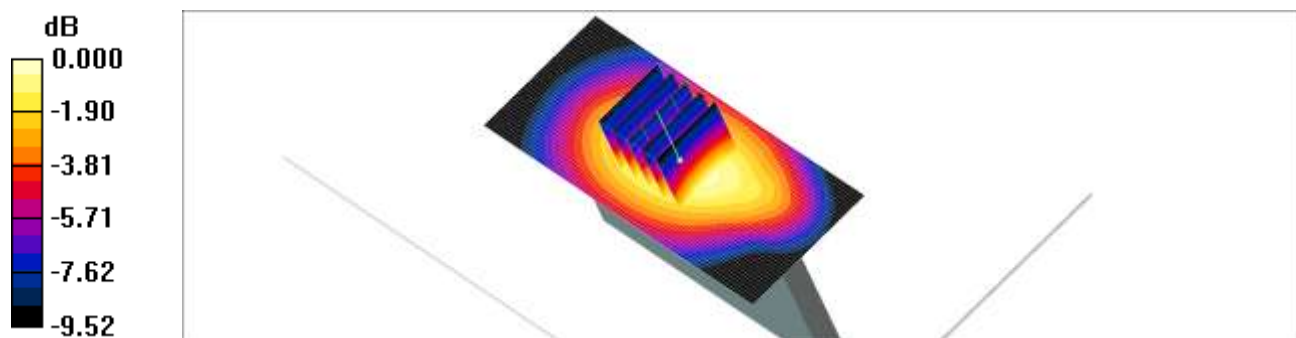
Reference Value = 20.7 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.390 mW/g; SAR(10 g) = 0.266 mW/g

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

Maximum value of SAR (measured) = 0.419 mW/g



0 dB = 0.419mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 43

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

GSM850 Body Bottom 2TX 190/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.159 mW/g

GSM850 Body Bottom 2TX 190/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

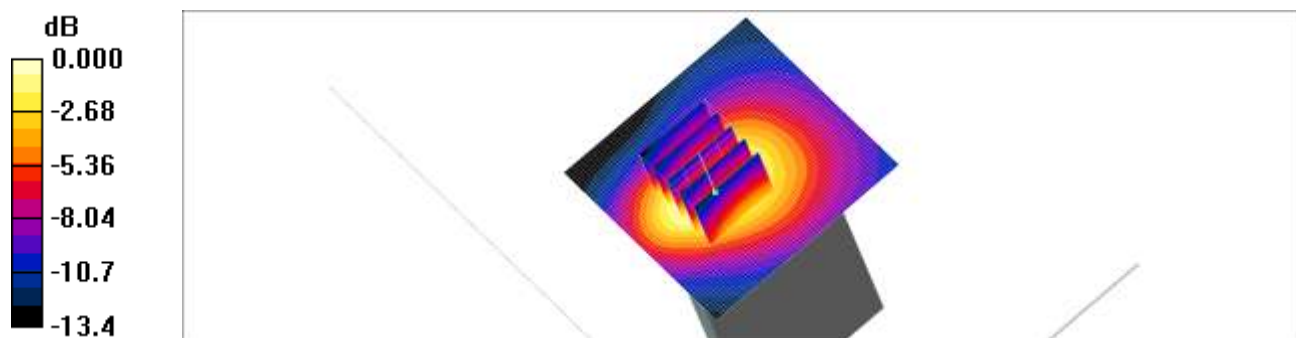
Reference Value = 11.4 V/m; Power Drift = -0.086 dB

Peak SAR (extrapolated) = 0.203 W/kg

SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.080 mW/g

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

Maximum value of SAR (measured) = 0.141 mW/g



0 dB = 0.141mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 44

**DUT: LG-P875h; Type: bar; Serial: #1**

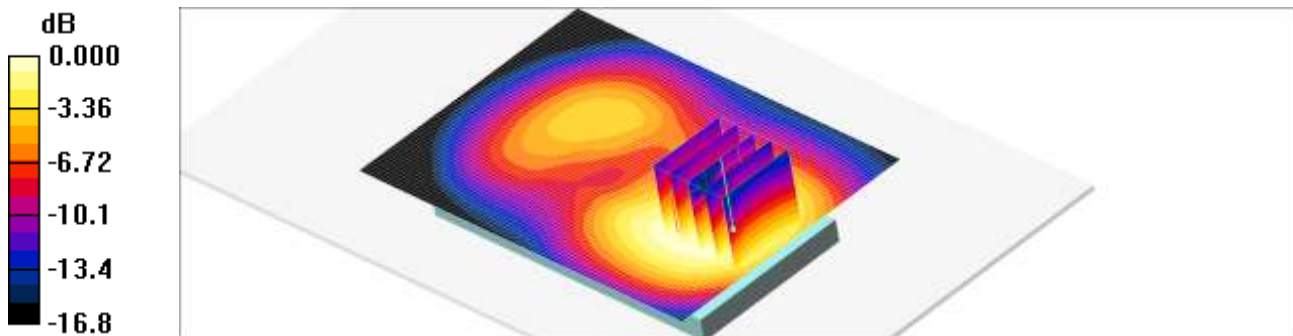
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**GSM1900 Body Rear 661 4Tx/Area Scan (101x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.615 mW/g

**GSM1900 Body Rear 661 4Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 8.51 V/m; Power Drift = 0.124 dB  
Peak SAR (extrapolated) = 0.848 W/kg  
**SAR(1 g) = 0.547 mW/g; SAR(10 g) = 0.353 mW/g**  
Maximum value of SAR (measured) = 0.578 mW/g



0 dB = 0.578mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 45

DUT: LG-P875h; Type: bar; Serial: #1

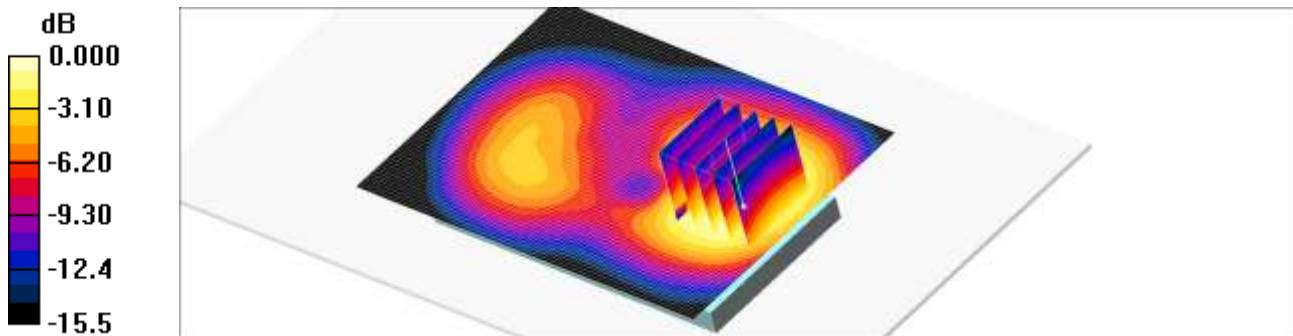
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**GSM1900 Body Front 661 4Tx/Area Scan (101x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.452 mW/g

**GSM1900 Body Front 661 4Tx/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.10 V/m; Power Drift = 0.071 dB  
Peak SAR (extrapolated) = 0.718 W/kg  
**SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.276 mW/g**  
Maximum value of SAR (measured) = 0.464 mW/g



0 dB = 0.464mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 47

DUT: LG-P875h; Type: bar; Serial: #1

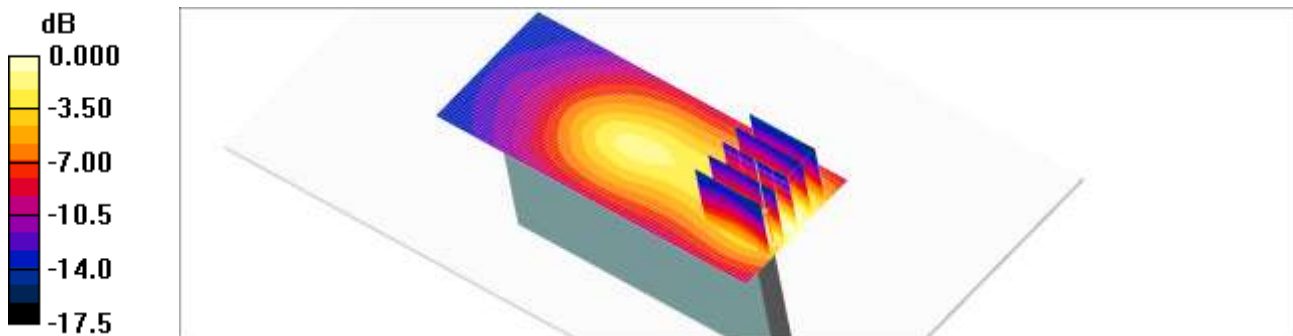
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**GSM1900 Body Right Side 4Tx 661/Area Scan (101x41x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.235 mW/g

**GSM1900 Body Right Side 4Tx 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 10.1 V/m; Power Drift = -0.151 dB  
Peak SAR (extrapolated) = 0.346 W/kg  
**SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.114 mW/g**  
Maximum value of SAR (measured) = 0.222 mW/g



0 dB = 0.222mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 48

**DUT: LG-P875h; Type: bar; Serial: #1**

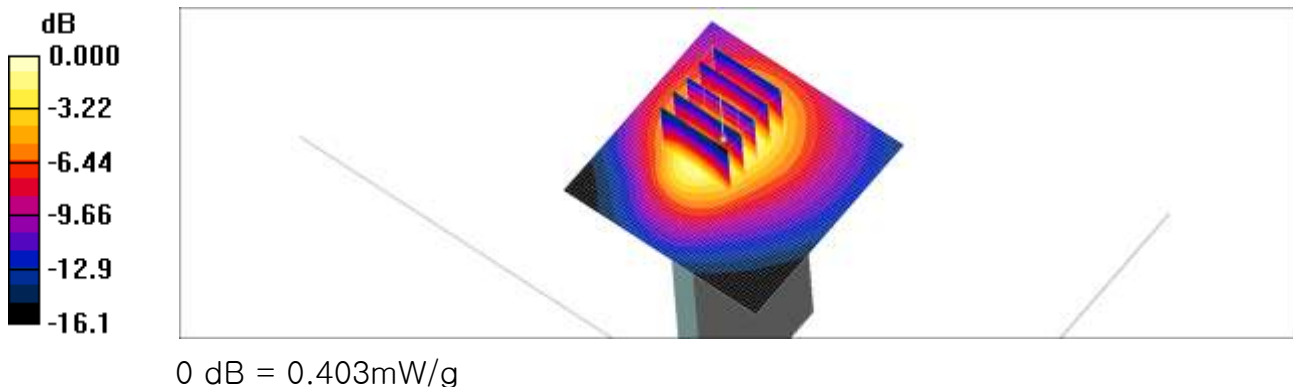
Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.53 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**GSM1900 Body Bottom 4TX 661/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.416 mW/g

**GSM1900 Body Bottom 4TX 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 12.6 V/m; Power Drift = 0.068 dB  
Peak SAR (extrapolated) = 0.572 W/kg  
**SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.210 mW/g**  
Maximum value of SAR (measured) = 0.403 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 49

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

WCDMA850 Body Rear 4183/Area Scan (101x61x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.509 mW/g

WCDMA850 Body Rear 4183/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

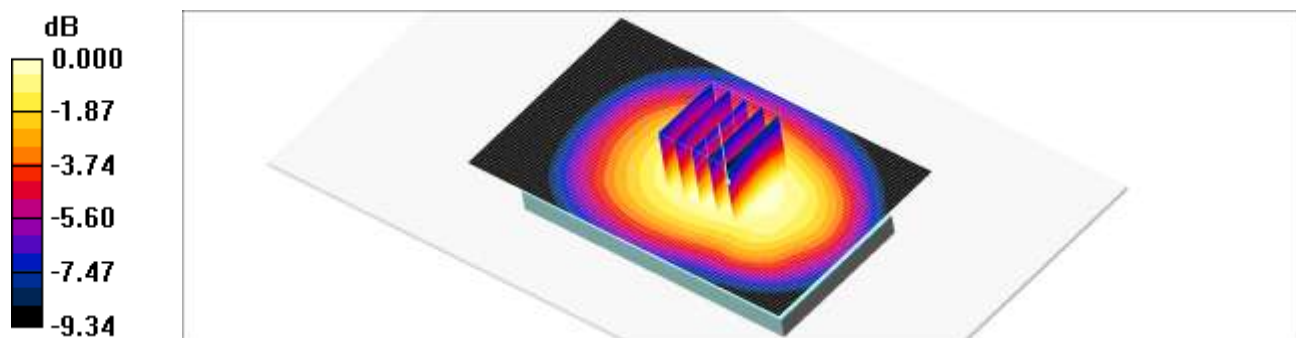
Reference Value = 22.0 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.613 W/kg

SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.368 mW/g

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

Maximum value of SAR (measured) = 0.512 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 50

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**WCDMA850 Body Front 4183/Area Scan (101x61x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.241 mW/g

**WCDMA850 Body Front 4183/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

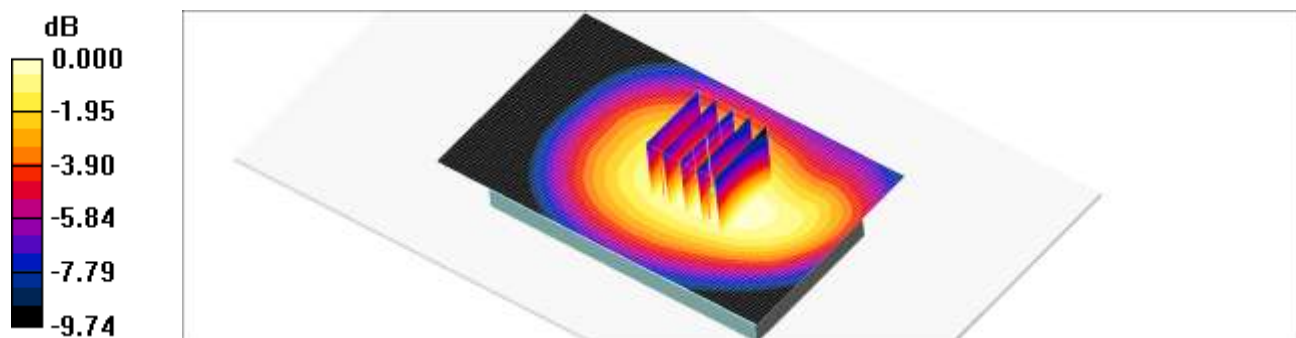
Reference Value = 14.6 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.286 W/kg

**SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.171 mW/g**

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

Maximum value of SAR (measured) = 0.241 mW/g



0 dB = 0.241mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 52

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

WCDMA850 Body Right side 4183/Area Scan (101x31x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.247 mW/g

WCDMA850 Body Right side 4183/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

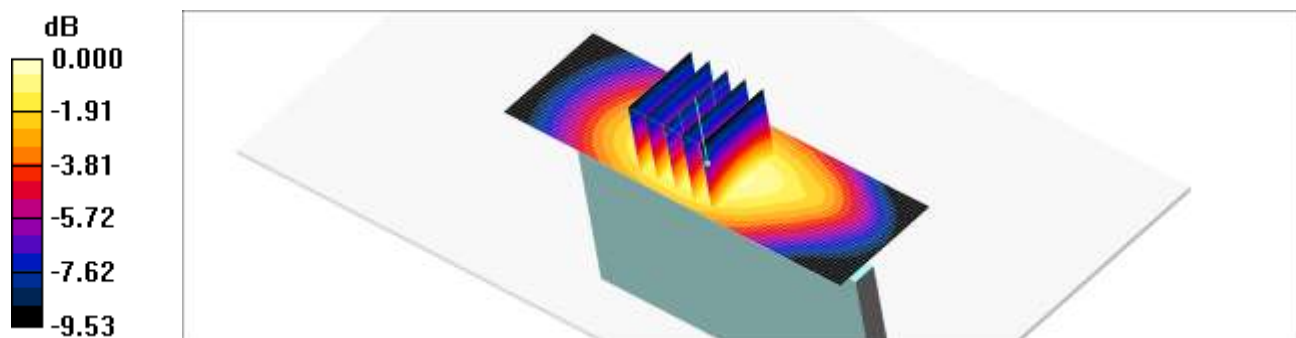
Reference Value = 15.9 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.331 W/kg

SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.159 mW/g

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

Maximum value of SAR (measured) = 0.250 mW/g



0 dB = 0.250mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.4 °C  
Ambient Temperature: 21.6 °C  
Test Date: Feb.1, 2013  
Plot NO. 53

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.986$  mho/m;  $\epsilon_r = 57$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(9.25, 9.25, 9.25); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

WCDMA850 Body Bottom 4183/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.120 mW/g

WCDMA850 Body Bottom 4183/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

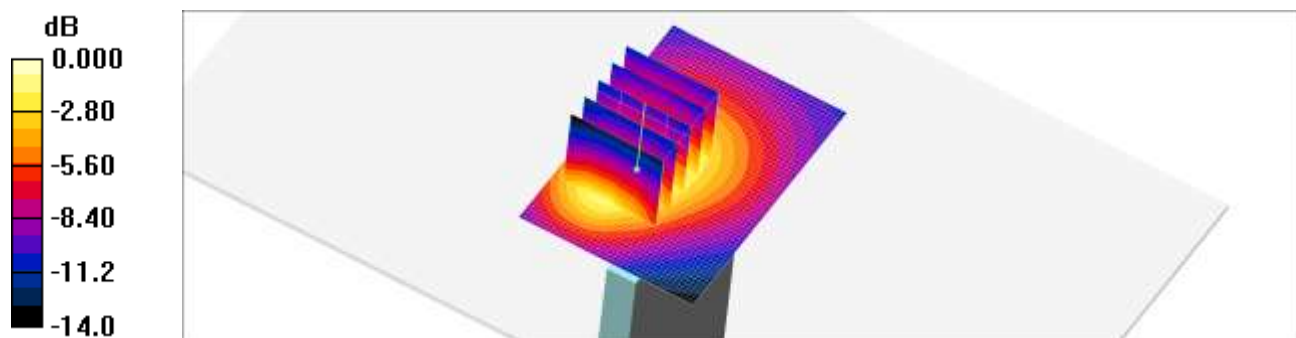
Reference Value = 9.26 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.168 W/kg

SAR(1 g) = 0.106 mW/g; SAR(10 g) = 0.065 mW/g

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

Maximum value of SAR (measured) = 0.116 mW/g



0 dB = 0.116mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 54

**DUT: LG-P875h; Type: bar; Serial: #1**

Communication System: WCDMA1900; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**WCDMA1900 Body Rear 9262/Area Scan (101x61x1):** Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.668 mW/g

**WCDMA1900 Body Rear 9262/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

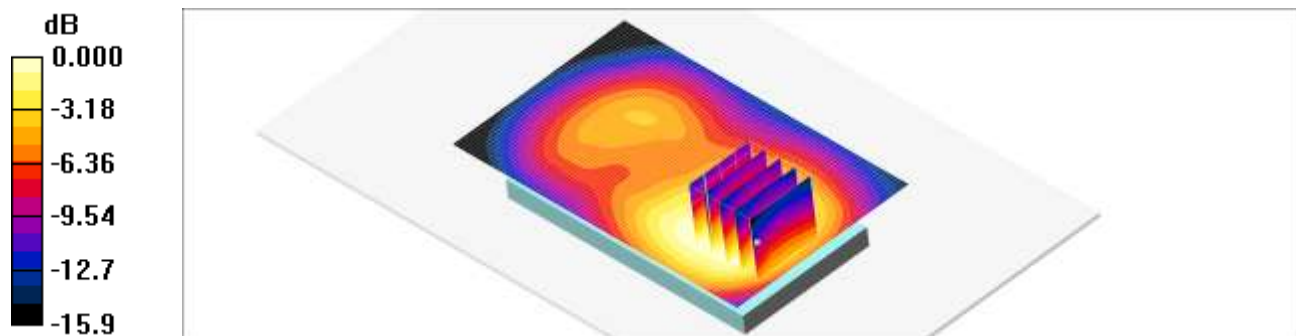
Reference Value = 10.3 V/m; Power Drift = 0.052 dB

Peak SAR (extrapolated) = 0.923 W/kg

**SAR(1 g) = 0.601 mW/g; SAR(10 g) = 0.395 mW/g**

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

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



0 dB = 0.651mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 55

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.53 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

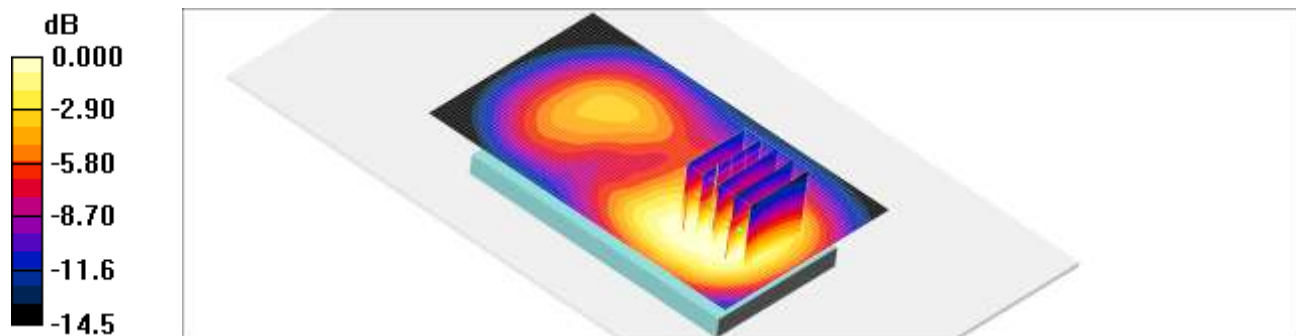
DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

WCDMA1900 Body Rear 9400/Area Scan (101x61x1): Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.796 mW/g

WCDMA1900 Body Rear 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 = -0.049 dB  
Peak SAR (extrapolated) = 1.12 W/kg  
SAR(1 g) = 0.733 mW/g; SAR(10 g) = 0.482 mW/g

Maximum value of SAR (measured) = 0.774 mW/g



0 dB = 0.774mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 56

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: WCDMA1900; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.55$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

WCDMA1900 Body Rear 9538/Area Scan (101x61x1): Measurement grid: dx=15mm, dy=15mm

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

Maximum value of SAR (interpolated) = 0.763 mW/g

WCDMA1900 Body Rear 9538/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

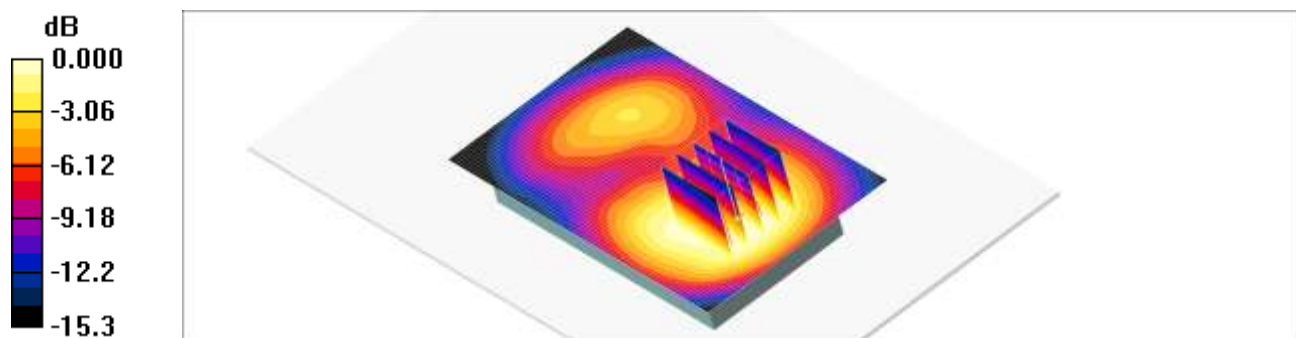
Reference Value = 9.05 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.696 mW/g; SAR(10 g) = 0.444 mW/g

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

Maximum value of SAR (measured) = 0.740 mW/g



0 dB = 0.740mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 57

DUT: LG-P875h; Type: bar; Serial: #1

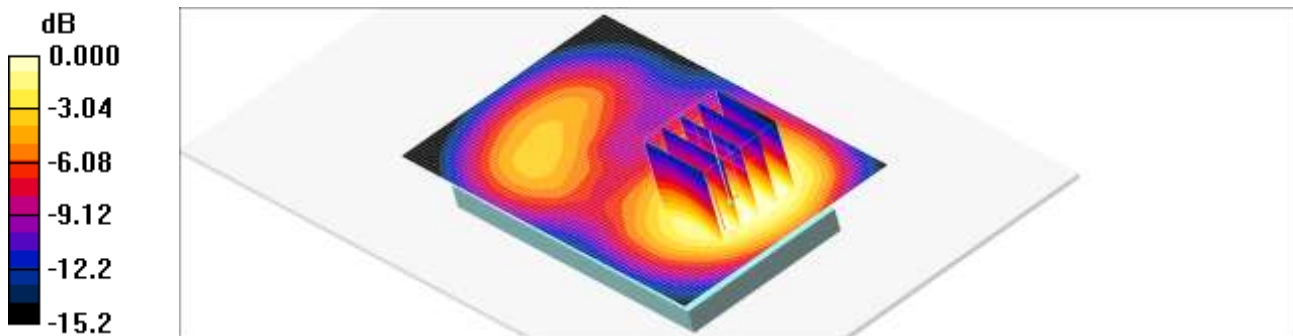
Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.53 \text{ mho/m}$ ;  $\epsilon_r = 52$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**WCDMA1900 Body Front 9400/Area Scan (101x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.724 mW/g

**WCDMA1900 Body Front 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 7.67 V/m; Power Drift = 0.094 dB  
Peak SAR (extrapolated) = 1.02 W/kg  
**SAR(1 g) = 0.663 mW/g; SAR(10 g) = 0.419 mW/g**  
Maximum value of SAR (measured) = 0.712 mW/g



0 dB = 0.712mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 59

DUT: LG-P875h; Type: bar; Serial: #1

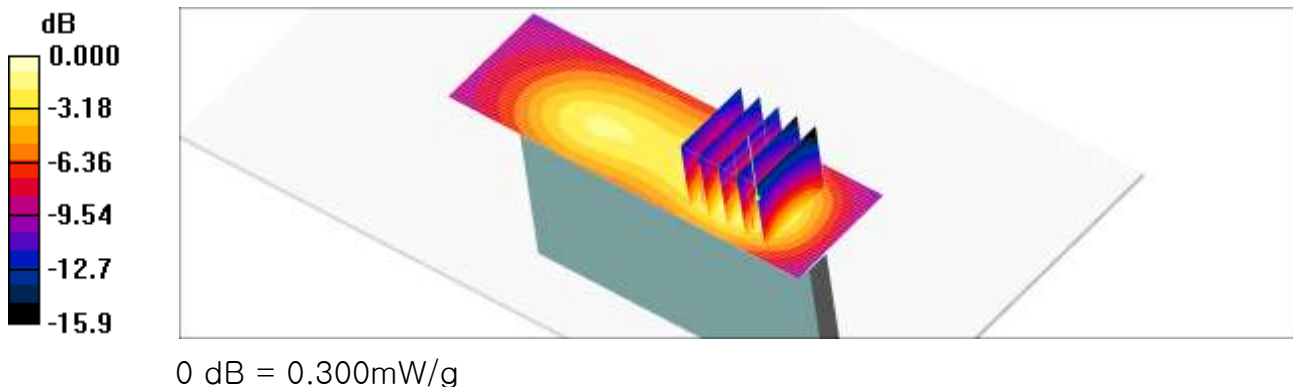
Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

WCDMA1900 Body Right side 9400/Area Scan (101x31x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.326 mW/g

WCDMA1900 Body Right side 9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 11.0 V/m; Power Drift = -0.041 dB  
Peak SAR (extrapolated) = 0.453 W/kg  
SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.156 mW/g  
Maximum value of SAR (measured) = 0.300 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Feb.5, 2013  
Plot NO. 60

DUT: LG-P875h; Type: bar; Serial: #1

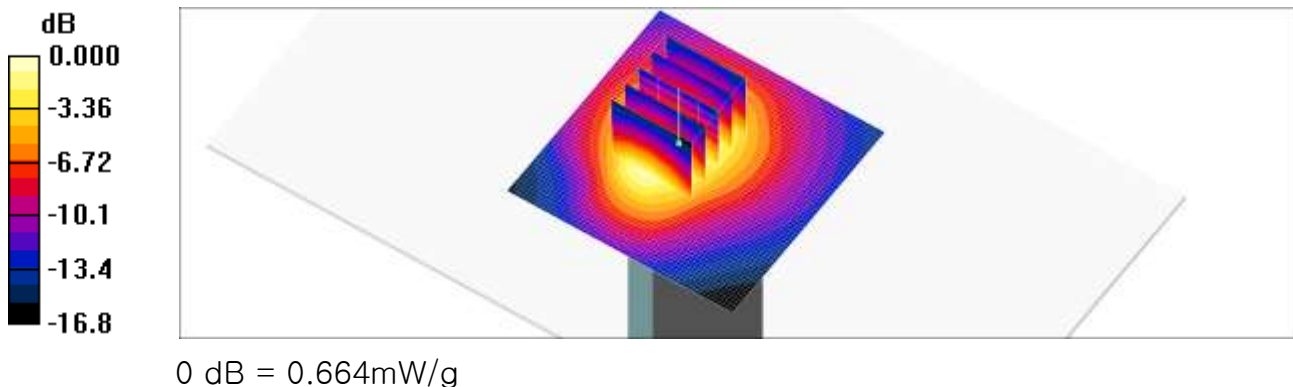
Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7.46, 7.46, 7.46); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

WCDMA1900 Body Bottom 9400/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.735 mW/g

WCDMA1900 Body Bottom 9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 18.3 V/m; Power Drift = -0.072 dB  
Peak SAR (extrapolated) = 1.00 W/kg  
SAR(1 g) = 0.615 mW/g; SAR(10 g) = 0.360 mW/g  
Maximum value of SAR (measured) = 0.664 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 61

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used (extrapolated):  $f = 2510$  MHz;  $\sigma = 2.03$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**LTE Band 7 Hotspot Rear 1RB 99 offset 20850/Area Scan (121x81x1):** Measurement grid: dx=12mm, dy=12mm

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

Maximum value of SAR (interpolated) = 0.511 mW/g

**LTE Band 7 Hotspot Rear 1RB 99 offset 20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

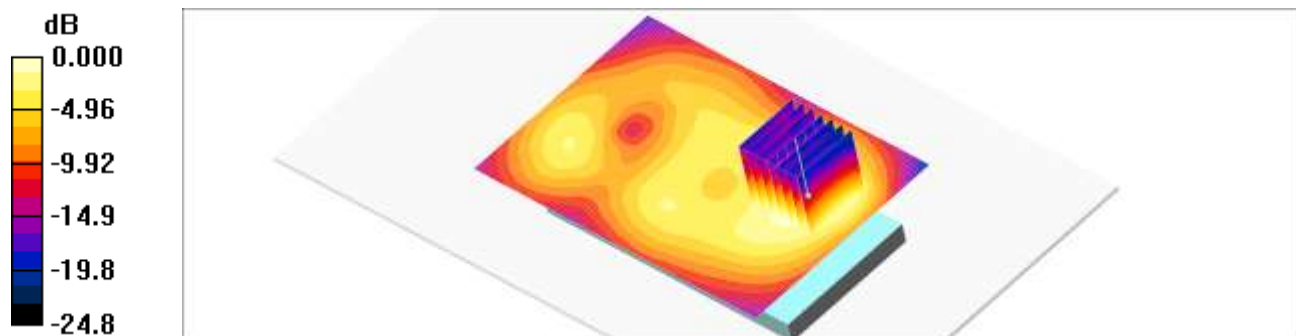
Reference Value = 9.62 V/m; Power Drift = 0.112 dB

Peak SAR (extrapolated) = 0.981 W/kg

**SAR(1 g) = 0.473 mW/g; SAR(10 g) = 0.252 mW/g**

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

Maximum value of SAR (measured) = 0.510 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 62

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: LTE Band 7; Frequency: 2535 MHz;Duty Cycle: 1:1  
Medium parameters used (extrapolated):  $f = 2535 \text{ MHz}$ ;  $\sigma = 2.07 \text{ mho/m}$ ;  $\epsilon_r = 53.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**LTE Band 7 Hotspot Rear 50RB 25 offset 21100/Area Scan (121x81x1):** Measurement grid: dx=12mm, dy=12mm

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

Maximum value of SAR (interpolated) = 0.399 mW/g

**LTE Band 7 Hotspot Rear 50RB 25 offset 21100/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

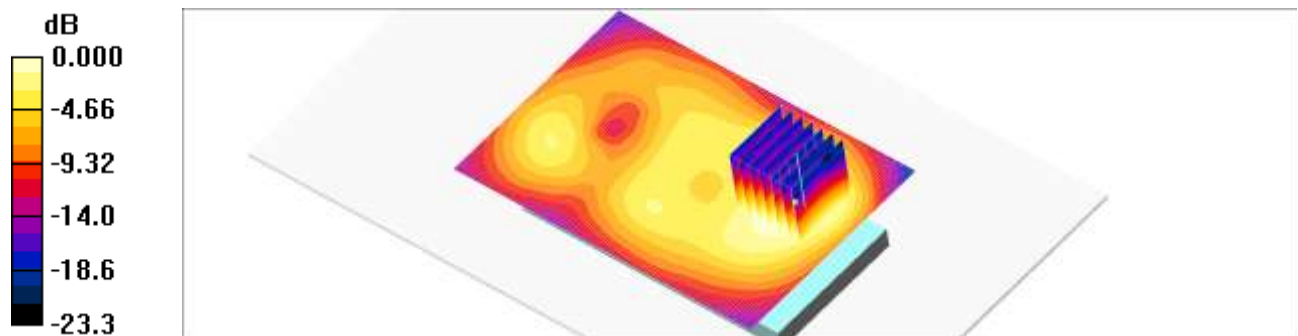
Reference Value = 8.71 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.748 W/kg

**SAR(1 g) = 0.355 mW/g; SAR(10 g) = 0.190 mW/g**

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

Maximum value of SAR (measured) = 0.379 mW/g



0 dB = 0.379mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 63

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used (extrapolated):  $f = 2510$  MHz;  $\sigma = 2.03$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**LTE Band 7 Hotspot Front 1RB 99 offset QPSK 20850/Area Scan (121x81x1):** Measurement grid: dx=12mm, dy=12mm

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

Maximum value of SAR (interpolated) = 0.487 mW/g

**LTE Band 7 Hotspot Front 1RB 99 offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

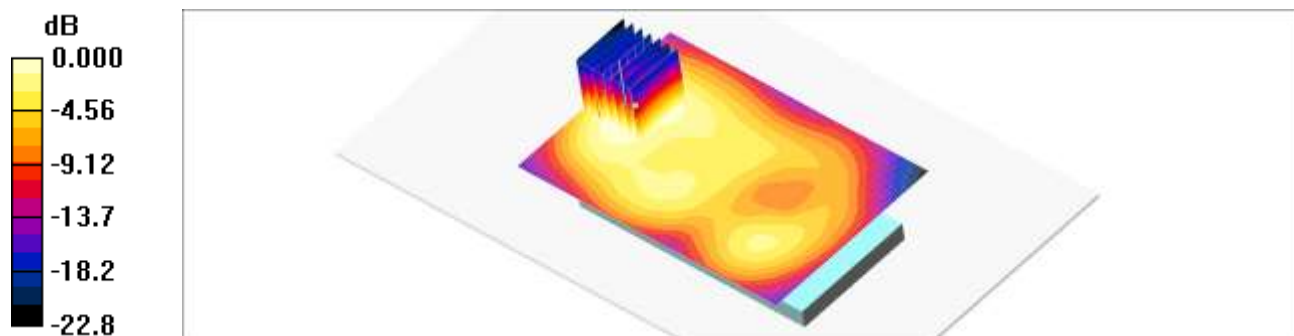
Reference Value = 10.3 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.853 W/kg

**SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.228 mW/g**

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

Maximum value of SAR (measured) = 0.462 mW/g



0 dB = 0.462mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 64

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1  
Medium parameters used (extrapolated):  $f = 2535$  MHz;  $\sigma = 2.07$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

LTE Band 7 Hotspot Front 50RB 25 offset 21100 QPSK/Area Scan (121x81x1): Measurement grid: dx=12mm, dy=12mm

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

Maximum value of SAR (interpolated) = 0.378 mW/g

LTE Band 7 Hotspot Front 50RB 25 offset 21100 QPSK/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

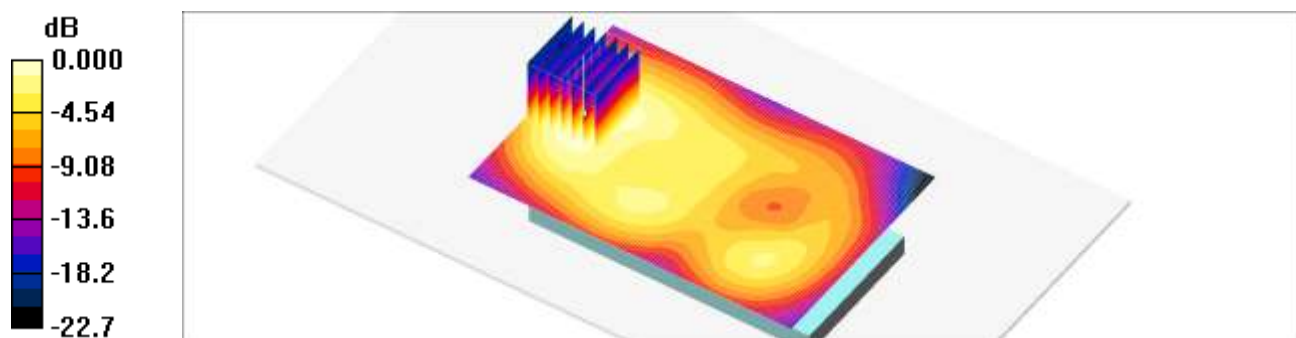
Reference Value = 8.94 V/m; Power Drift = -0.161 dB

Peak SAR (extrapolated) = 0.674 W/kg

SAR(1 g) = 0.337 mW/g; SAR(10 g) = 0.179 mW/g

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

Maximum value of SAR (measured) = 0.363 mW/g



0 dB = 0.363mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 65

DUT: LG-P875h; Type: bar; Serial: #1

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.98$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**LTE Band 7 Hotspot Left Side 1RB 99 offset QPSK 20850ch/Area Scan (121x51x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.152 mW/g

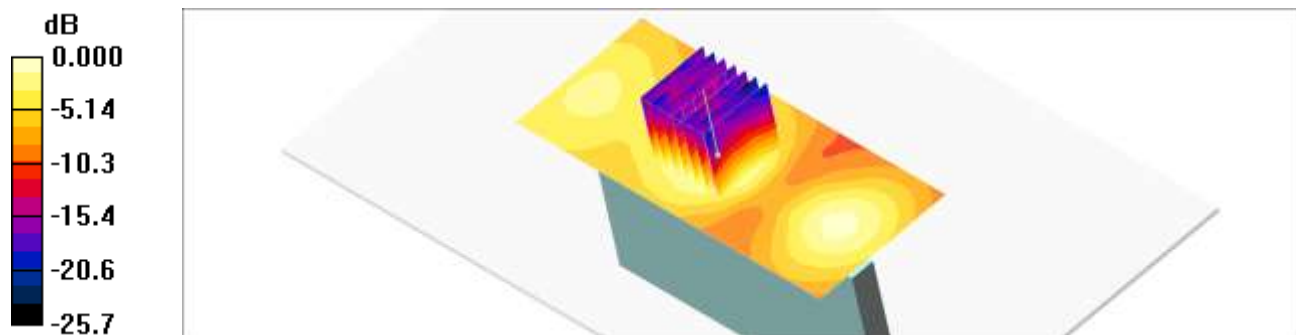
**LTE Band 7 Hotspot Left Side 1RB 99 offset QPSK 20850ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.90 V/m; Power Drift = 0.164 dB

Peak SAR (extrapolated) = 0.276 W/kg

**SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.068 mW/g**

Maximum value of SAR (measured) = 0.147 mW/g



0 dB = 0.147mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 66

**DUT: LG-P875h; Type: bar; Serial: #1**

Communication System: LTE Band 7; Frequency: 2535 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2535$  MHz;  $\sigma = 2.02$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**LTE Band 7 Hotspot Left Side 50RB 25 offset QPSK 21100ch/Area Scan (121x51x1):** Measurement grid: dx=12mm, dy=12mm

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

Maximum value of SAR (interpolated) = 0.116 mW/g

**LTE Band 7 Hotspot Left Side 50RB 25 offset QPSK 21100ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

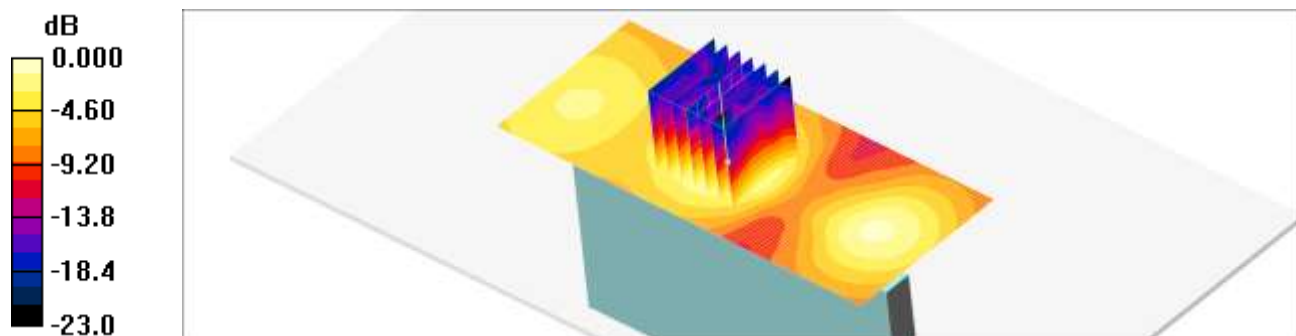
Reference Value = 6.25 V/m; Power Drift = 0.108 dB

Peak SAR (extrapolated) = 0.216 W/kg

**SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.053 mW/g**

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

Maximum value of SAR (measured) = 0.115 mW/g



0 dB = 0.115mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 69

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: LTE Band 7; Frequency: 2510 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.98$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**LTE 7 Hotspot Bottom 1RB 99offset QPSK 20850/Area Scan (51x81x1):** Measurement grid: dx=12mm, dy=12mm  
Maximum value of SAR (interpolated) = 0.605 mW/g

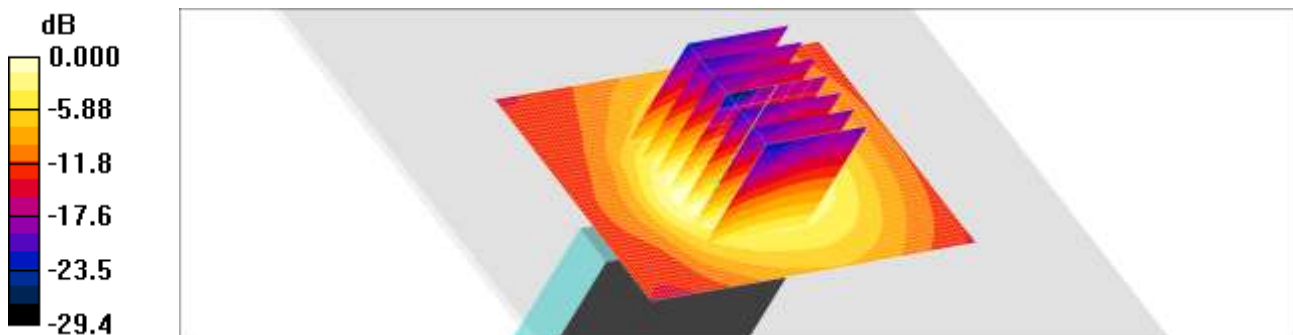
**LTE 7 Hotspot Bottom 1RB 99offset QPSK 20850/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.2 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.789 W/kg

**SAR(1 g) = 0.372 mW/g; SAR(10 g) = 0.192 mW/g**

Maximum value of SAR (measured) = 0.560 mW/g



0 dB = 0.560mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Feb.14, 2013  
Plot NO. 70

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: LTE Band 7; Frequency: 2535 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2535$  MHz;  $\sigma = 2.02$  mho/m;  $\epsilon_r = 52.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:  
- Probe: EX3DV4 - SN3797; ConvF(6.73, 6.73, 6.73); Calibrated: 2012-11-22  
- Sensor-Surface: 2mm (Mechanical Surface Detection)  
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA

**LTE 7 Hotspot Bottom 50RB 25offset QPSK 21100/Area Scan (51x81x1):** Measurement grid: dx=12mm, dy=12mm

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

Maximum value of SAR (interpolated) = 0.440 mW/g

**LTE 7 Hotspot Bottom 50RB 25offset QPSK 21100/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

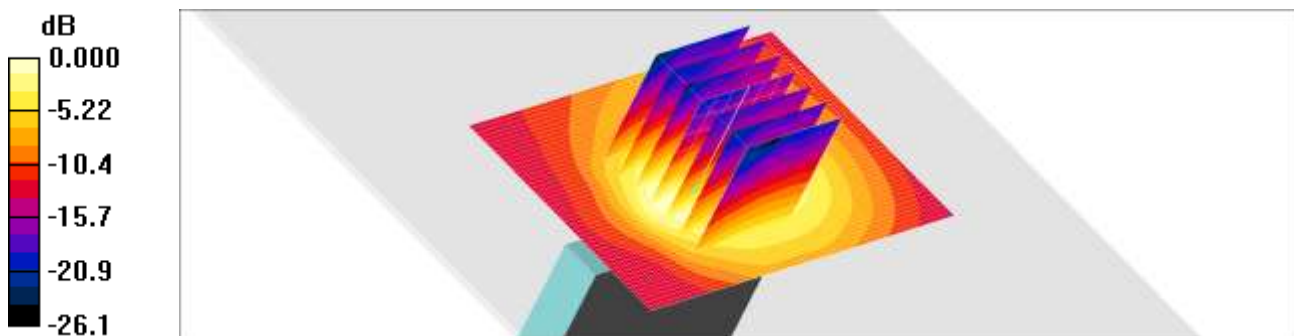
Reference Value = 11.7 V/m; Power Drift = -0.081 dB

Peak SAR (extrapolated) = 0.572 W/kg

**SAR(1 g) = 0.264 mW/g; SAR(10 g) = 0.136 mW/g**

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

Maximum value of SAR (measured) = 0.397 mW/g



0 dB = 0.397mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.6 °C  
Ambient Temperature: 21.8 °C  
Test Date: Mar 8, 2013  
Plot NO. 71

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.89$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7, 7, 7); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2013-01-16
- Phantom: Triple Flat Phantom 5.1C\_20120905; Type: QD 000 P51 CA

**WiFi2450 Body Rear 1Mbps 1ch/Area Scan (121x81x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.152 mW/g

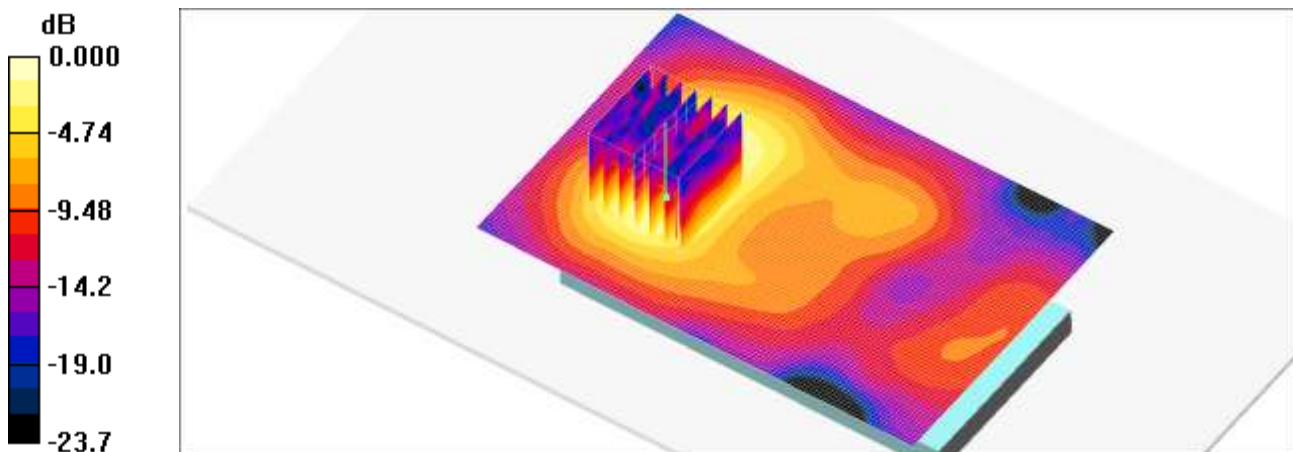
**WiFi2450 Body Rear 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.14 V/m; Power Drift = 0.155 dB

Peak SAR (extrapolated) = 0.280 W/kg

**SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.059 mW/g**

Maximum value of SAR (measured) = 0.149 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.6 °C  
Ambient Temperature: 21.8 °C  
Test Date: Mar 8, 2013  
Plot NO. 72

DUT: LG-P875h; Type: Bar; Serial: #1

Communication System: 2450MHz FCC; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.89$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7, 7, 7); Calibrated: 2012-07-13
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2013-01-16
- Phantom: Triple Flat Phantom 5.1C\_20120905; Type: QD 000 P51 CA

WiFi2450 Body Front 1Mbps 1ch/Area Scan (121x81x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.058 mW/g

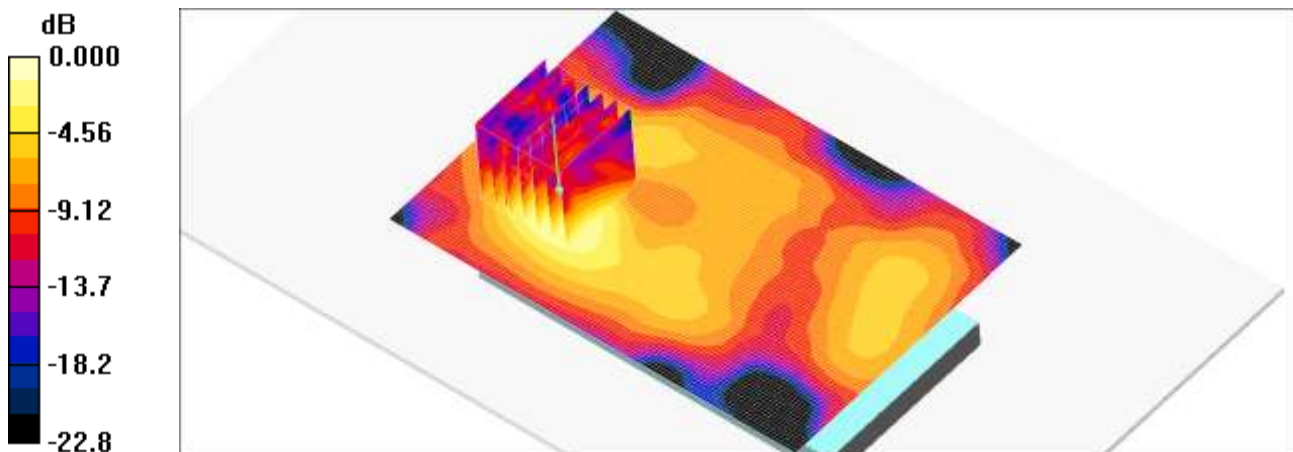
WiFi2450 Body Front 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.52 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 0.077 W/kg

SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.021 mW/g

Maximum value of SAR (measured) = 0.057 mW/g



0 dB = 0.057mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: Cellular/PCS GSM/GPRS/EDGE, WCDMA/HSDPA/HSUPA, LTE Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.6 °C  
Ambient Temperature: 21.8 °C  
Test Date: Mar 8, 2013  
Plot NO. 73

**DUT: LG-P875h; Type: Bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.89$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Center Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3863; ConvF(7, 7, 7); Calibrated: 2012-07-13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn446; Calibrated: 2013-01-16
- Phantom: Triple Flat Phantom 5.1C\_20120905; Type: QD 000 P51 CA

**WiFi2450 Body Top 1Mbps 1ch/Area Scan (81x51x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.109 mW/g

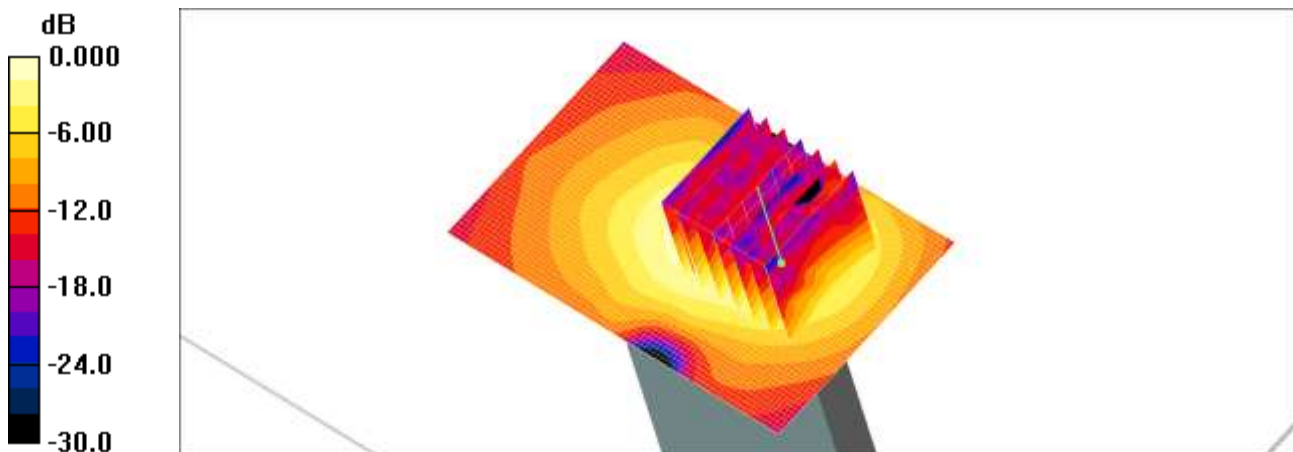
**WiFi2450 Body Top 1Mbps 1ch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.27 V/m; Power Drift = -0.123 dB

Peak SAR (extrapolated) = 0.154 W/kg

**SAR(1 g) = 0.070 mW/g; SAR(10 g) = 0.031 mW/g**

Maximum value of SAR (measured) = 0.106 mW/g



0 dB = 0.106mW/g