

SAR TEST REPORT

Equipment Under Test	: Cellular/PCS GSM/EDGE & WCDMA Phone with Bluetooth&WLAN
Model No.	: LG-C900N (Additional model name : C900N, LG-C900n, C900n)
Applicant	: LG Electronics Inc.
Address of Applicant	: 60-39, Gasan-dong, Gumchon-gu, Seoul, 153-023, Korea
FCC ID	: BEJC900N
Device Category	: Portable Device
Exposure Category	: General Population/Uncontrolled Exposure
Date of Receipt	: 2010-08-13
Date of Test(s)	: 2010-09-10 ~ 2010-09-13
Date of Issue	: 2010-09-15
Max. SAR	: 0.186 W/kg (GSM850), 0.287 W/kg (PCS1900), 0.682 W/kg (WCDMA II), 0.110 W/kg (WLAN)

Standards:

FCC OET Bulletin 65 supplement C
IEEE 1528, 2003
ANSI/IEEE C95.1, C95.3

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

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Testing Korea Co., Ltd. or testing done by SGS Testing Korea Co., Ltd. in connection with distribution or use of the product described in this report must be approved by SGS Testing Korea Co., Ltd. in writing.

Tested by	: Fred Jeong		2010-09-15
Approved by	: Leo Kim		2010-09-15

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1. General Information

1.1 Testing Laboratory

SGS Testing Korea Co., Ltd.
Wireless Div. 2FL, 18-34, Sanbon-dong, Gunpo-si, Gyeonggi-do, Korea 435-040
Telephone : +82 +31 428 5700
FAX : +82 +31 427 2371
Homepage : www.kr.sgs.com/ee

1.2 Details of Manufacturer

Manufacturer : LG Electronics Inc.
Address : 60-39, Gasan-dong, Gumchon-gu, Seoul, 153-023, Korea
Contact Person : Hyeon Kyun Kim
Phone No. : 82-2-2033-1113

1.3 Version of Report

Version Number	Date	Revision
00	2010-09-15	Initial issue

1.4 Description of EUT(s)

EUT Type	: Cellular/PCS GSM/EDGE & WCDMA Phone with Bluetooth&WLAN
Model	: LG-C900N (Additional model name : C900N, LG-C900n, C900n)
Serial Number	: 005KPKN0168453
Mode of Operation	: GSM850, PCS1900, WCDMA II, WLAN, Bluetooth
Duty Cycle	: 8.3(GSM), 8.3(GPRS 1Tx Slot), 1(WCDMA), 1(WLAN)
Body worn Accessory	: None
Tx Frequency Range	: 824.2 MHz ~ 848.8 MHz (GSM850) 1850.2 MHz ~ 1909.8 MHz (PCS1900) 1852.4 MHz ~ 1907.6 MHz (WCDMA II) 2412 MHz ~ 2462 MHz (WLAN) 2402 MHz ~ 2480 MHz (Bluetooth)
Conducted Max Power	: 33.06 dBm(GSM850), 30.07 dBm(PCS1900), 23.36 dBm(WCDMA II), 17.74 dBm(WLAN), 4.75 dBm(Bluetooth)
Battery Type	: DC 3.7 V(Lithum-ion Battery)

1.5 Test Environment

Ambient temperature	: 21 ° C ~ 23 ° C
Tissue Simulating Liquid	: 21 ° C ~ 23 ° C
Relative Humidity	: 40 % ~ 60 %

1.6 Operation Configuration

The device in GSM and WCDMA mode was controlled by using a Communication tester (CMU 200). Communication between the device and the tester was established by air link. And the client provided a special driver and test program which can control the frequency and power of the WLAN module. Measurements were performed at the lowest, middle and highest channels of the operating band. The EUT was set to maximum power level during all tests and at the beginning of each test the battery was fully charged.

The DASY4 system measures power drift during SAR testing by comparing e-field in the same location at the beginning and at the end of measurement. Based on the RF Power and antenna separation distance, stand-alone BT SAR and simultaneous SAR evaluation are not required.

1.7 EVALUATION PROCEDURES

- Power Reference Measurement Procedures

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The Minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 4 mm. This distance cannot be smaller than the Distance of sensor calibration points to probe tip as defined in the probe properties (for example, 2.7 mm for an ET3DV6 probe type).

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

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

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

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

The maximum search is automatically performed after each area scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with

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

1.8 The SAR Measurement System

A photograph of the SAR measurement System is given in Fig. a. This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (Speag Dasy 4 professional system). A Model ET3DV6 1782 E-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation $SAR = \sigma (|E_i|^2) / \rho$ where σ and ρ are the conductivity and mass density of the tissue-simulant. The DASY4 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Staubli RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimeter probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

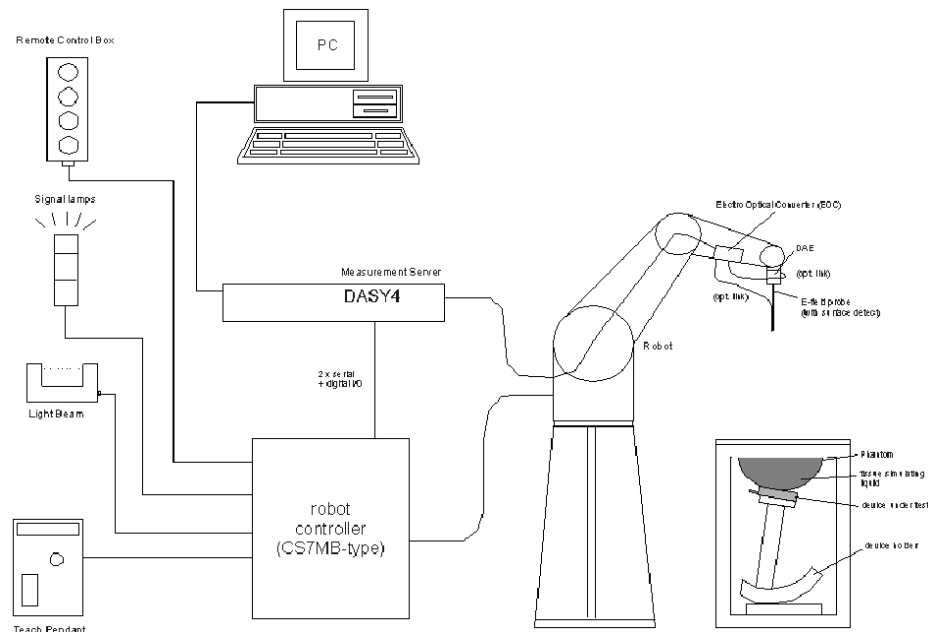


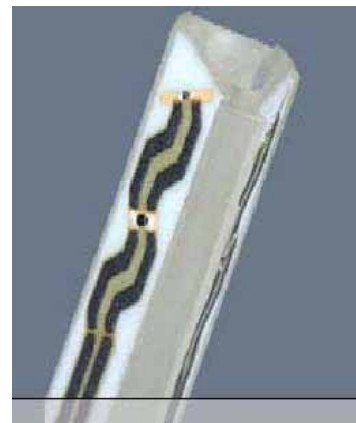
Fig a. The microwave circuit arrangement used for SAR system verification

- The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to the DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- A computer operating Windows 2000 or Windows XP.
- DASY4 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom enabling testing body usage.
- The device holder for flat phantom.
- Tissue simulating liquid mixed according to the given recipes.
- Validation dipole kits allowing to validate the proper functioning of the system.

1.9 System Components

ET3DV6 E-Field Probe

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



ET3DV6 E-Field Probe

NOTE:

1. The Probe parameters have been calibrated by the SPEAG. Please reference "APPENDIX D" for the Calibration Certification Report.

SAM Phantom

Construction: The SAM Phantom is constructed of a fiberglass shell integrated in a wooden table. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90 % of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot

Shell Thickness: 2.0 mm $\pm$ 0.1 mm

Filling Volume: Approx. 25 liters



SAM Phantom

DEVICE HOLDER

Construction In combination with the Twin SAM PhantomV4.0/V4.0C or Twin SAM, the Mounting Device (made from POM) enables the rotation of the mounted transmitter in spherical coordinates, whereby the rotation point is the ear opening. The devices can be easily and accurately positioned according to IEC, IEEE, CENELEC, FCC or other specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom).



Device Holder

1.10 SAR System Verification

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within $\pm 10\%$ from the target SAR values. These tests were done at 835 MHz, 1900 MHz and 2450 MHz. The tests for EUT were conducted within 24 hours after each validation. The obtained results from the system accuracy verification are displayed in the table 1. During the tests, the ambient temperature of the laboratory was in the range 21 °C ~ 23 °C, the relative humidity was in the range 40 % ~ 60 % and the liquid depth above the ear reference points was above 15 cm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.

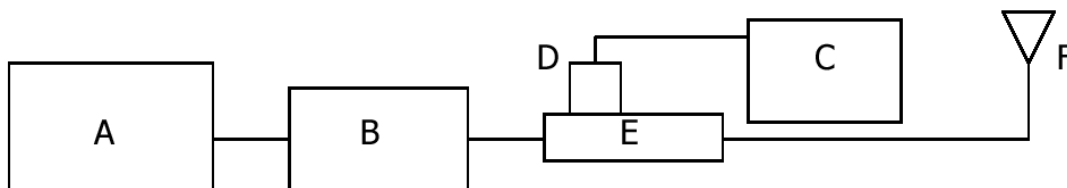


Fig b. The microwave circuit arrangement used for SAR system verification

- A. Agilent Model E4421B Signal Generator
- B. EMPOWER Model 2001-BBS3Q7ECK Amplifier
- C. Agilent Model E4419B Power Meter
- D. Agilent Model 9300H Power Sensor
- E. Agilent Model 777D/778D Dual directional coupling
- F. Reference dipole Antenna



Photo of the dipole Antenna

System Validation Results

Validation Kit	Tissue	Target SAR 1 g from Calibration Certificate (Input Power : 250 mW)	Measured SAR 1 g (Input Power : 250 mW)	Deviation (%)	Date	Liquid Temp. (°C)
D835V2 S/N: 490	835 MHz Brain	2.42 W/kg	2.49 W/kg	2.89	2010-09-10	22.3
D1900V2 S/N: 5d033	1900 MHz Brain	9.90 W/kg	9.71 W/kg	-1.92	2010-09-11	22.3
D2450V2 S/N: 734	2450 MHz Brain	12.8 W/kg	12.5 W/kg	-2.34	2010-09-13	22.2
D2450V2 S/N: 734	2450 MHz Body	13.4 W/kg	14.0 W/kg	4.48	2010-09-13	22.2

Table 1. Results system validation

1.11 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this simulant fluid were measured by using the Agilent Model 85070D Dielectric Probe (rates frequency band 200 MHz to 20 GHz) in conjunction with Agilent E5070B Network Analyzer(300 KHz - 3 GHz) by using a procedure detailed in Section V.

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters		
			Permittivity	Conductivity	Simulated Tissue Temp(°C)
835	Head	Measured, 2010-09-10	41.3	0.88	22.3
		Recommended Limits	41.5	0.90	21.0 ~ 23.0
		Deviation(%)	-0.48	-2.22	-
	Body	Measured, 2010-09-10	53.3	0.97	22.3
		Recommended Limits	55.2	0.97	21.0 ~ 23.0
		Deviation(%)	-3.44	0.00	-
1900	Head	Measured, 2010-09-11	40.0	1.41	22.3
		Recommended Limits	40.0	1.40	21.0 ~ 23.0
		Deviation(%)	0.00	0.71	-
	Body	Measured, 2010-09-11	51.3	1.57	22.3
		Recommended Limits	53.3	1.52	21.0 ~ 23.0
		Deviation(%)	-3.75	3.29	-
2450	Head	Measured, 2010-09-13	38.2	1.84	22.2
		Recommended Limits	39.2	1.80	21.0 ~ 23.0
		Deviation(%)	-2.55	2.22	-
	Body	Measured, 2010-09-13	51.0	1.93	22.2
		Recommended Limits	52.7	1.95	21.0 ~ 23.0
		Deviation(%)	-3.23	-1.03	-

The composition of the brain tissue simulating liquid

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

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

Salt: 99 +% Pure Sodium Chloride

Sugar: 98 +% Pure Sucrose

Water: De-ionized, 16 MΩ⁺ 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

1.12 Test Standards and Limits

According to FCC 47CFR §2.1093(d) The limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (“SAR”) in Section 4.2 of “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” ANSI/IEEE C95.3–2003, Copyright 2003 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in “Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields,” NCRP Report No. 86, Section 17.4.5. Copyright NCRP, 1986, Bethesda, Maryland 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards. The criteria to be used are specified in paragraphs (d)(1) and (d)(2) of this section and shall apply for portable devices transmitting in the

frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz are to be evaluated in terms of the MPE limits specified in § 1.1310 of this chapter. Measurements and calculations to demonstrate compliance with MPE field strength or power density limits for devices operating above 6 GHz should be made at a minimum distance of 5 cm from the radiating source.

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

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

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

Table .4 RF exposure limits

2. Instruments List

Manufacturer	Device	Type	Serial Number	Due date of Calibration
Stäubli	Robot	RX90BL	F03/5W05A1/A/01	N/A
Schmid& Partner Engineering AG	Dosimetric E-Field Probe	ET3DV6	1782	April 28, 2011
Schmid& Partner Engineering AG	835 MHz System Validation Dipole	D835V2	490	May 21, 2012
Schmid& Partner Engineering AG	1900 MHz System Validation Dipole	D1900V2	5d033	May 26, 2012
Schmid& Partner Engineering AG	2450 MHz System Validation Dipole	D2450V2	734	May 27, 2012
Schmid& Partner Engineering AG	Data acquisition Electronics	DAE3	567	December 09, 2010
Schmid& Partner Engineering AG	Software	DASY 4 V4.7	-	N/A
Schmid& Partner Engineering AG	Phantom	SAM Phantom V4.0	TP-1299 TP-1300	N/A
Agilent	Network Analyzer	E5070B	MY42100282	March 31, 2011
Agilent	Dielectric Probe Kit	85070D	2184	N/A
Agilent	Power Meter	E4419B	GB43311126	September 28, 2010
Agilent	Power Sensor	E9300H	MY41495307	September 29, 2010
			MY41495308	September 29, 2010
Agilent	Signal Generator	E4421B	MY43350132	September 29, 2010
Empower RF Systems	Power Amplifier	2057-BBS3Q5KCK	1003 D/C 0344	October 19, 2010
Agilent	Dual Directional Coupler	777D 778D	50128 50454	September 28, 2010
Microlab	LP Filter	LA-15N LA-30N	N/A	September 28, 2010
R&S	Mobile Test Unit	CMU 200	107279	March 31, 2011

3.Summary of Results

FCC Power Measurement Procedures

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 shielded chamber. 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.

RF Conducted Power

GSM

	Channel	Frequency(MHz)	Conducted Power(dBm)				
			GSM	GPRS			
				1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot
GSM 850 Band	128	824.2	33.06	33.06	30.97	30.00	29.03
	190	836.6	33.04	33.05	30.97	29.99	29.02
	251	848.8	33.05	33.04	30.94	29.98	29.03
PCS 1900 Band	512	1850.2	29.99	29.99	28.49	27.47	26.52
	661	1880.0	30.05	30.04	28.52	27.52	26.57
	810	1909.8	30.05	30.07	28.56	27.55	26.58

	Channel	Frequency(MHz)	Conducted Power(dBm)			
			EDGE			
			1 Tx Slot	2 Tx Slot	3 Tx Slot	4 Tx Slot
GSM 850 Band	128	824.2	27.07	26.57	25.64	24.57
	190	836.6	27.09	26.59	25.56	24.61
	251	848.8	27.07	26.62	25.58	24.56
PCS 1900 Band	512	1850.2	26.10	25.59	24.63	23.59
	661	1880.0	26.17	25.62	24.68	23.66
	810	1909.8	26.13	25.57	24.66	23.68

WLAN

Mode (Data Rate)	Average Power(dBm)		
	Low	Mid	High
11b (1 Mbps)	17.74	17.14	16.88
11g (6 Mbps)	14.28	14.16	13.96
11n (N0)	13.24	11.74	12.18

BT

Mode	Average Power(dBm)		
	Low	Mid	High
BDR	3.61	4.29	4.60
EDR	3.74	4.44	4.75

WCDMA II

Band	Mode	Channel		Frequency(MHz)	Conducted Power(dBm)		
WCDMA II (RMC)	RMC	9262		1852.4	23.20		
	RMC	9400		1880.0	23.20		
	RMC	9538		1907.6	23.20		
WCDMA II (HSDPA Active)	Sub-test 1	9262		1852.4	23.36		
		9400		1880.0	23.36		
		9538		1907.6	23.36		
	Sub-test 2	9262		1852.4	23.19		
		9400		1880.0	23.19		
		9538		1907.6	23.19		
	Sub-test 3	9262		1852.4	22.82		
		9400		1880.0	22.82		
		9538		1907.6	22.82		
	Sub-test 4	9262		1852.4	22.68		
		9400		1880.0	22.68		
		9538		1907.6	22.68		
		β c		β d	Δ ACK, Δ NACK, Δ CQI		AGV
	Sub-test 1	2		15	8		-
	Sub-test 2	12		15	8		-
	Sub-test 3	15		8	8		-
	Sub-test 4	15		4	8		-
WCMA II (HSUPA)	Sub-test 1	9262		1852.4	22.91		
		9400		1880.0	22.91		
		9538		1907.6	22.91		
	Sub-test 2	9262		1852.4	21.29		
		9400		1880.0	21.29		
		9538		1907.6	21.29		
	Sub-test 3	9262		1852.4	22.03		
		9400		1880.0	22.03		
		9538		1907.6	22.03		
	Sub-test 4	9262		1852.4	21.74		
		9400		1880.0	21.74		
		9538		1907.6	21.74		
	Sub-test 5	9262		1852.4	22.66		
		9400		1880.0	22.66		
		9538		1907.6	22.66		
		β c		β d	Δ ACK, Δ NACK, Δ CQI		AGV
	Sub-test 1	11		15	8		20
	Sub-test 2	6		15	8		12
	Sub-test 3	15		15	8		15
Sub-test 4	2		15	8		17	
Sub-test 5	15		15	8		21	

KDB 648474 D01 SAR Handsets Multi Xmitter and Ant v01r05 _Sept. 2008

Summary of SAR Evaluation Requirements for Cell Phone with Multiple Transmitters

These procedures were followed according to KDB 648474 document “SAR Handsets Multi Xmitter and Ant v01r05”, September 2008. The procedures are applicable to phones with built-in unlicensed transmitters, such as 802.11 a/b/g and Bluetooth devices.

<Output Power Thresholds for Unlicensed Transmitters>

	2.45	5.15 - 5.35	5.47 - 5.85	GHz
P_{Ref}	12	6	5	mW
Device output power should be rounded to the nearest mW to compare with values specified in this table.				

<SAR Evaluation Requirements for Cellphones with Multiple Transmitters>

	Individual Transmitter	Simultaneous Transmission
Licensed Transmitters	<u>Routine evaluation required</u>	SAR not required: <u>Unlicensed only</u>
Unlicensed Transmitters	<u>When there is no simultaneous transmission –</u> - output ≤ 60 f: SAR not required - output > 60 f: stand-alone SAR required <u>When there is simultaneous transmission –</u> <u>Stand-alone SAR not required when</u> - output $\leq 2 \cdot P_{Ref}$ and antenna is ≥ 5.0 cm from other antennas - output $\leq P_{Ref}$ and antenna is ≥ 2.5 cm from other antennas - output $\leq P_{Ref}$ and antenna is < 2.5 cm from other antennas, each with either output power $\leq P_{Ref}$ or 1-g SAR < 1.2 W/kg <u>Otherwise stand-alone SAR is required</u> <u>When stand-alone SAR is required</u> - test SAR on highest output channel for each wireless mode and exposure condition - if SAR for highest output channel is $> 50\%$ of SAR limit, evaluate all channels according to normal procedures	- when stand-alone 1-g SAR is not required and antenna is ≥ 5 cm from other antennas <u>Licensed & Unlicensed</u> - when the sum of the 1-g SAR is < 1.6 W/kg for all simultaneous transmitting antennas - when SAR to peak location separation ratio of simultaneous transmitting antenna pair is < 0.3 SAR required: <u>Licensed & Unlicensed</u> antenna pairs with SAR to peak location separation ratio ≥ 0.3; test is only required for the configuration that results in the highest SAR in stand-alone configuration for each wireless mode and exposure condition Note: simultaneous transmission exposure conditions for head and body can be different for different style phones; therefore, different test requirements may apply
Jaw, Mouth and Nose	<u>Flat phantom SAR required</u> - when measurement is required in tight regions of SAM and it is not feasible or the results can be questionable due to probe tilt, calibration, positioning and orientation issues - position rectangular and clam-shell phones according to flat phantom procedures and conduct SAR measurements for these specific locations	When simultaneous transmission SAR testing is required, contact the FCC Laboratory for interim guidance.

<KDB 648474 Simultaneous SAR evaluation>

Mode (f)	P (dBm)	P (mW)	Stand-alone SAR
GSM 850	33.06	2023.02	Yes
PCS 1900	30.07	1016.25	Yes
WCDMA II	23.36	216.77	Yes
WLAN	17.74	59.43	Yes
Bluetooth	4.75	2.99	No

⇒ Simultaneous and Stand-alone SAR for Bluetooth is not required.

Mode pair	D _{xy} (mm)	The sum of all 1g SAR	Simultaneous Tx SAR	Notes
GSM/WCDMA & 802.11 b/g	100	$0.682 + 0.110 = 0.792$	No	$d_{xy} > 5$ cm, the sum of all 1g SAR < 1.6 W/kg
GSM/WCDMA & Bluetooth	100	$0.682 + BT < 1.6$	No	$d_{xy} > 5$ cm, the sum of all 1g SAR < 1.6 W/kg
802.11 b/g & Bluetooth	-	$0.110 + BT < 1.6$	No	BT & WLAN using same antenna and can't transmit simultaneously

* Please see Antenna distance file for finding all distances.

GSM850 Head SAR

Ambient Temperature (°C)	22.3
Liquid Temperature (°C)	22.3
Date	2010-09-10

Head	EUT Position	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
		Frequency (MHz)	Channel				
Left Ear	Cheek	836.6	190	Down	-0.050	0.105	1.6
	Cheek	836.6	190	Up	0.062	0.136	
	Tilt	836.6	190	Up	-0.184	0.080	
Right Ear	Cheek	836.6	190	Down	-0.029	0.116	
	Cheek	836.6	190	Up	-0.154	0.067	
	Tilt	836.6	190	Down	0.033	0.087	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.

GSM850 Body SAR

Ambient Temperature (°C)	22.3
Liquid Temperature (°C)	22.3
Date	2010-09-10

Test Mode	EUT Position	Slot	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
			Frequency (MHz)	Channel				
GPRS	Front	1 Tx	836.6	190	Down	0.032	0.115	1.6
	Front	1 Tx	836.6	190	Up	0.008	0.134	
	Back	1 Tx	836.6	190	Up	-0.026	0.186	
GSM	Back	-	836.6	190	Up	-0.038	0.147	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.
5. The distance from EUT to flat phantom for testing Body SAR is 20 mm.
6. This model supports GPRS (Class 12) and EDGE. The power in GPRS mode is higher than in EDGE mode and all Tx (1Tx ~ 4Tx) cases were investigated with the conducted power. The worst-case (GPRS 1 Tx) results are reported. (Please refer to the conduction power table Page 15)

PCS1900 Head SAR

Ambient Temperature (°C)	22.3
Liquid Temperature (°C)	22.3
Date	2010-09-11

Head	EUT Position	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
		Frequency (MHz)	Channel				
Left Ear	Cheek	1880.0	661	Down	0.023	0.139	1.6
	Cheek	1880.0	661	UP	0.124	0.268	
	Tilt	1880.0	661	UP	-0.130	0.064	
Right Ear	Cheek	1880.0	661	Down	-0.169	0.133	
	Cheek	1880.0	661	UP	-0.030	0.287	
	Tilt	1880.0	661	UP	-0.040	0.076	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.

PCS1900 Body SAR

Ambient Temperature (°C)	22.3
Liquid Temperature (°C)	22.3
Date	2010-09-11

Test Mode	EUT Position	Slot	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
			Frequency (MHz)	Channel				
GPRS	Front	1 Tx	1880.0	661	Down	0.092	0.059	1.6
	Front	1 Tx	1880.0	661	Up	-0.135	0.127	
	Back	1 Tx	1880.0	661	Up	-0.185	0.124	
GSM	Front	-	1880.0	661	Up	-0.015	0.120	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.
5. The distance from EUT to flat phantom for testing Body SAR is 20 mm.
6. This model supports GPRS (Class 12) and EDGE. The power in GPRS mode is higher than in EDGE mode and all Tx (1Tx ~ 4Tx) cases were investigated with the conducted Power. The worst-case (GPRS 1 Tx) results are reported. (Please refer to the conduction power table Page 15)

WCDMA II Head SAR

Ambient Temperature (°C)	22.3
Liquid Temperature (°C)	22.3
Date	2010-09-11

Head	EUT Position	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
		Frequency (MHz)	Channel				
Left Ear	Cheek	1880.0	9400	Down	-0.118	0.278	1.6
	Cheek	1880.0	9400	UP	-0.103	0.525	
	Tilt	1880.0	9400	UP	-0.133	0.096	
Right Ear	Cheek	1880.0	9400	Down	0.119	0.286	
	Cheek	1880.0	9400	UP	-0.113	0.682	
	Tilt	1880.0	9400	UP	-0.108	0.176	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.

WCDMA II Body SAR

Ambient Temperature (°C)	22.3
Liquid Temperature (°C)	22.3
Date	2010-09-11

Test Mode	EUT Position	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
		Frequency (MHz)	Channel				
HSDPA	Front	1880.0	9400	Down	0.154	0.122	1.6
	Front	1880.0	9400	Up	-0.037	0.332	
	Back	1880.0	9400	Up	0.022	0.323	
RMC	Front	1880.0	9400	Up	-0.017	0.360	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.
5. The distance from EUT to flat phantom for testing Body SAR is 20 mm.

WLAN Head SAR

Ambient Temperature (°C)	22.2
Liquid Temperature (°C)	22.2
Date	2010-09-13

Head	Test Mode	EUT Position	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
			Frequency (MHz)	Channel				
Left Ear	11b	Cheek	2437	6	UP	-0.031	0.027	1.6
	11b	Cheek	2437	6	Down	-0.195	0.110	
	11b	Tilt	2437	6	Down	0.073	0.100	
	11g	Cheek	2437	6	Down	-0.081	0.062	
	11n	Cheek	2437	6	Down	-0.164	0.034	
Right Ear	11b	Cheek	2437	6	UP	-0.130	0.064	
	11b	Cheek	2437	6	Down	0.189	0.105	
	11b	Tilt	2437	6	Down	-0.076	0.095	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.
5. WLAN could be used for data transmission during voice communication at the same time.

WLAN Body SAR

Ambient Temperature (°C)	22.2
Liquid Temperature (°C)	22.2
Date	2010-09-13

Body	Test Mode	EUT Position	Traffic Channel		Slide	Power Drift(dB)	1 g SAR (W/kg)	1 g SAR Limits (W/kg)
			Frequency (MHz)	Channel				
Body	11b	Front	2437	6	Down	0.070	0.022	1.6
	11b	Back	2437	6	Down	0.111	0.014	
	11b	Front	2412	1	Down	-0.148	0.015	
	11g	Front	2437	6	Down	0.084	0.011	
	11n	Front	2437	6	Down	-0.081	0.00664	
	11b	Front	2437	6	UP	-0.006	0.013	

<Note>

1. The test data reported are the worst-case SAR value with the position set in a typical configuration.
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings and the standard batteries are the only options.
4. Justification for reduced test configuration : Per FCC/OET Bulletin 65 Supplement C [July 2001], if the SAR measured at the middle channel for each test configuration (left, right, cheek, tilt, Slide Up, Slide Down) is at least 3.0 dB lower than the SAR limit, testing at the high and low channel is optional for such test configurations.
5. The distance from EUT to flat phantom for testing Body SAR is 20 mm.
(Please refer to the conduction power table Page 15)



Appendix

List

Appendix A	DASY4 Report (Plots of the SAR Measurements)	- 835 MHz, 1900 MHz, 2450 MHz Validation Test - GSM850 Test - PCS1900 Test - WCDMA II Test - WLAN Test
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Appendix A

Test Plot - DASY4 Report

835 MHz Validation Test

Test Laboratory: SGS Testing Korea
 File Name: [Validation 835 MHz.da4](#)

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:490
Program Name: Validation 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.882 \text{ mho/m}$; $\epsilon_r = 41.3$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.26, 6.26, 6.26); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Validation 835 MHz/Area Scan (61x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 2.70 mW/g

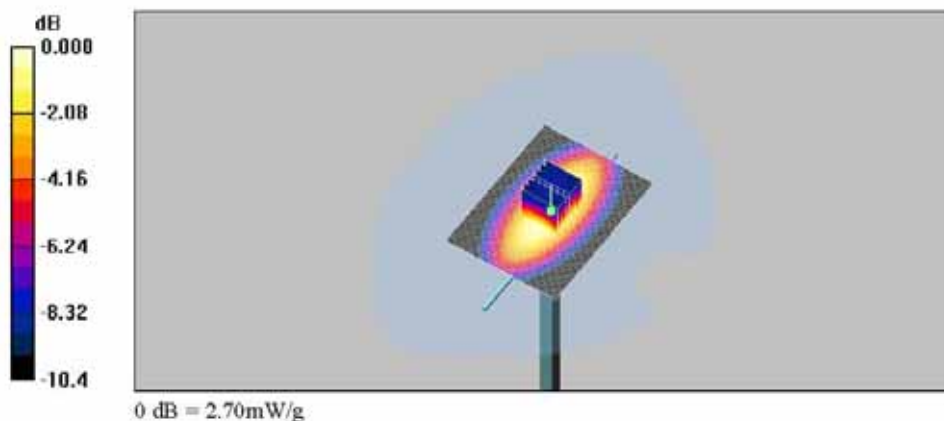
Validation 835 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$,
 $dz=5\text{mm}$

Reference Value = 57.1 V/m; Power Drift = -0.012 dB

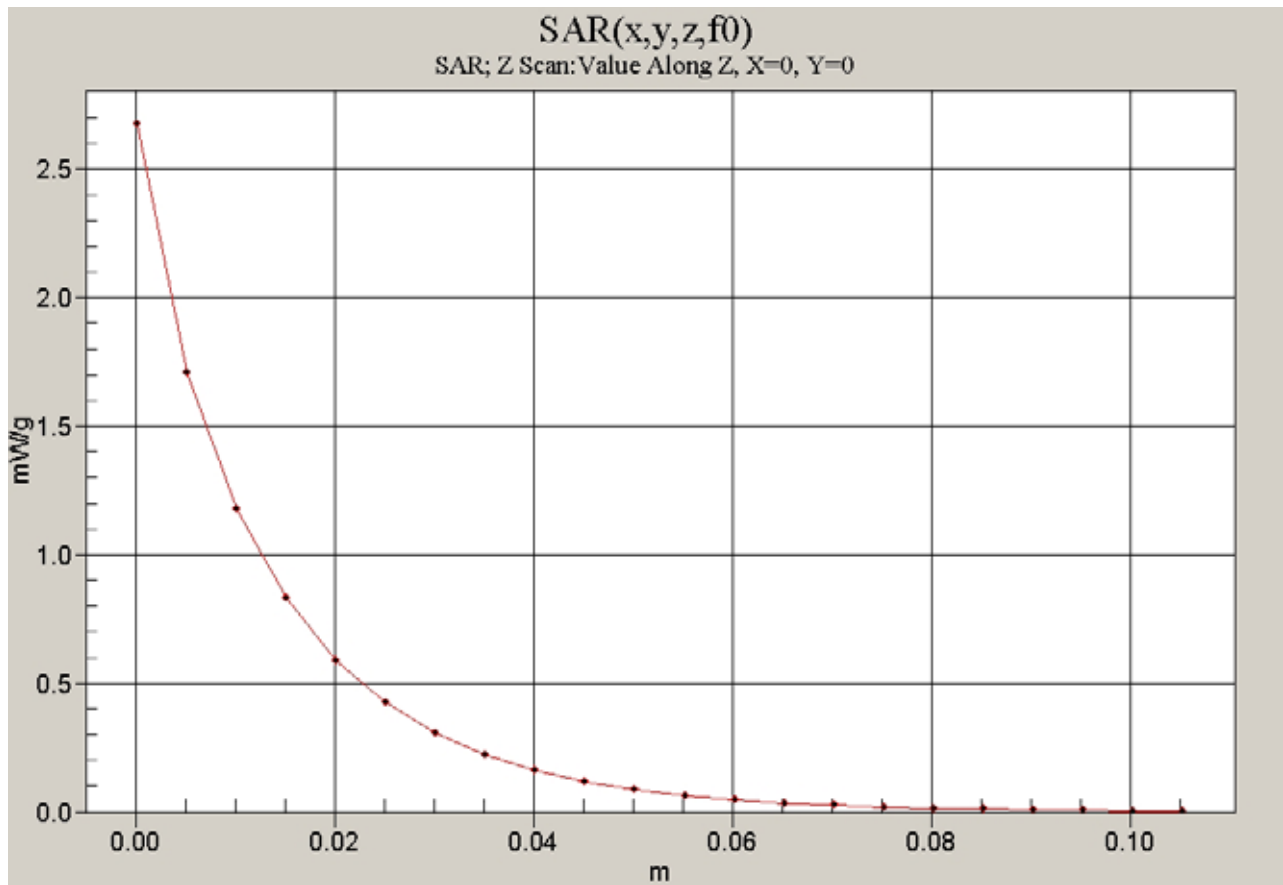
Peak SAR (extrapolated) = 3.71 W/kg

SAR(1 g) = 2.49 mW/g; SAR(10 g) = 1.63 mW/g

Maximum value of SAR (measured) = 2.70 mW/g



Z Scan



1900 MHz Validation Test

Test Laboratory: SGS Testing Korea
 File Name: [Validation 1900 MHz.da4](#)

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d033
Program Name: Validation 1900 MHz

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Validation 1900 MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 11.6 mW/g

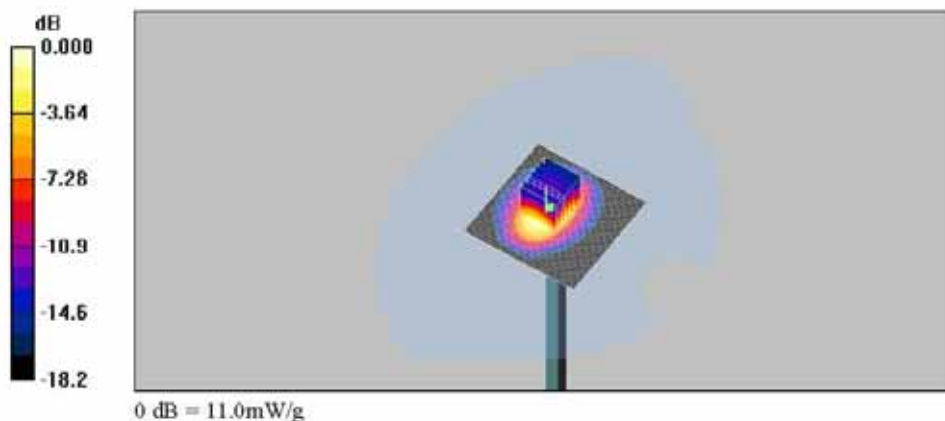
Validation 1900 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 78.2 V/m; Power Drift = -0.013 dB

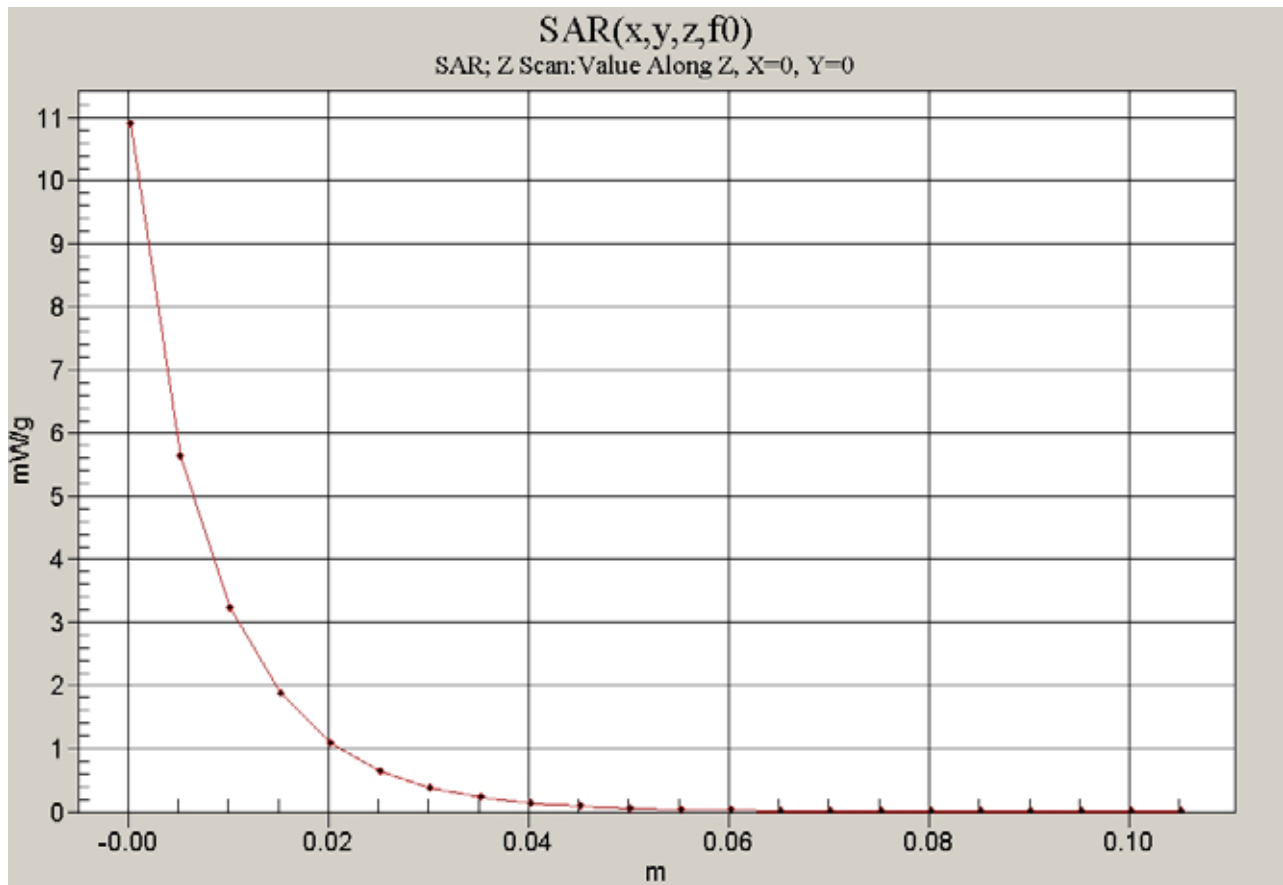
Peak SAR (extrapolated) = 17.0 W/kg

SAR(1 g) = 9.71 mW/g; SAR(10 g) = 5.06 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



Z Scan



2450 MHz Validation Test_Head

Test Laboratory: SGS Testing Korea
 File Name: [Validation 2450_Head.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:734
 Program Name: Validation 2450 MHz_Head

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.84$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Validation 2450 MHz_Head/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 15.1 mW/g

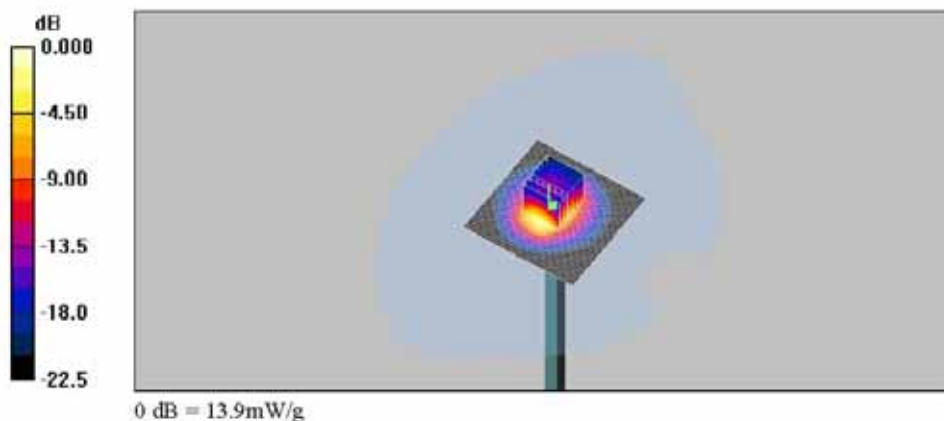
Validation 2450 MHz_Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.1 V/m; Power Drift = -0.059 dB

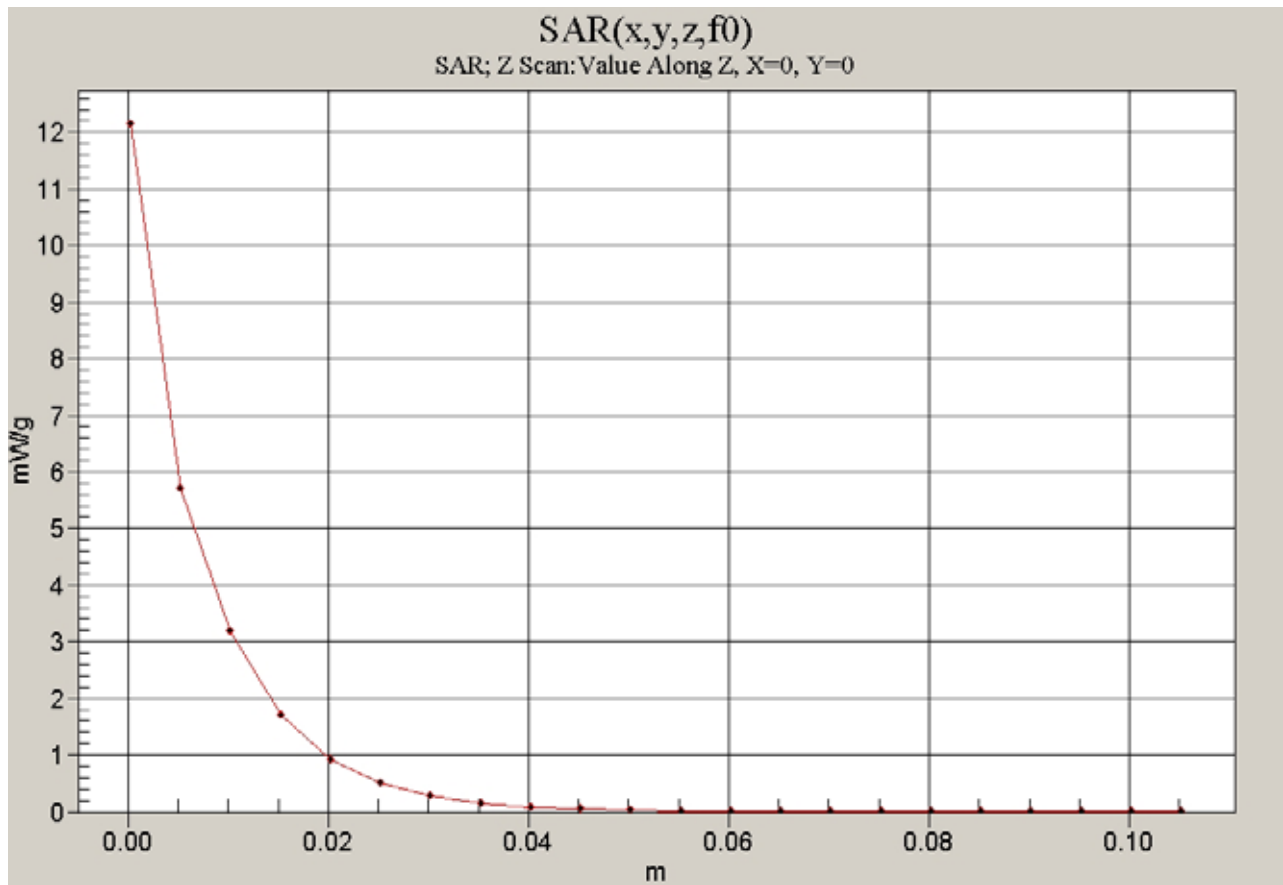
Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 12.5 mW/g; SAR(10 g) = 5.68 mW/g

Maximum value of SAR (measured) = 13.9 mW/g



Z Scan



2450 MHz Validation Test_Body

Test Laboratory: SGS Testing Korea
 File Name: [Validation 2450_Body.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:734
Program Name: Validation 2450 MHz

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.07, 4.07, 4.07); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Validation 2450 MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 16.7 mW/g

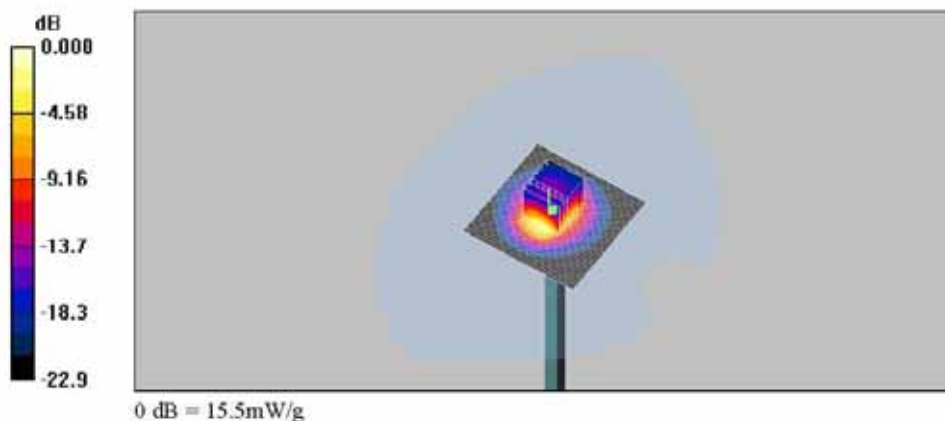
Validation 2450 MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.3 V/m; Power Drift = -0.050 dB

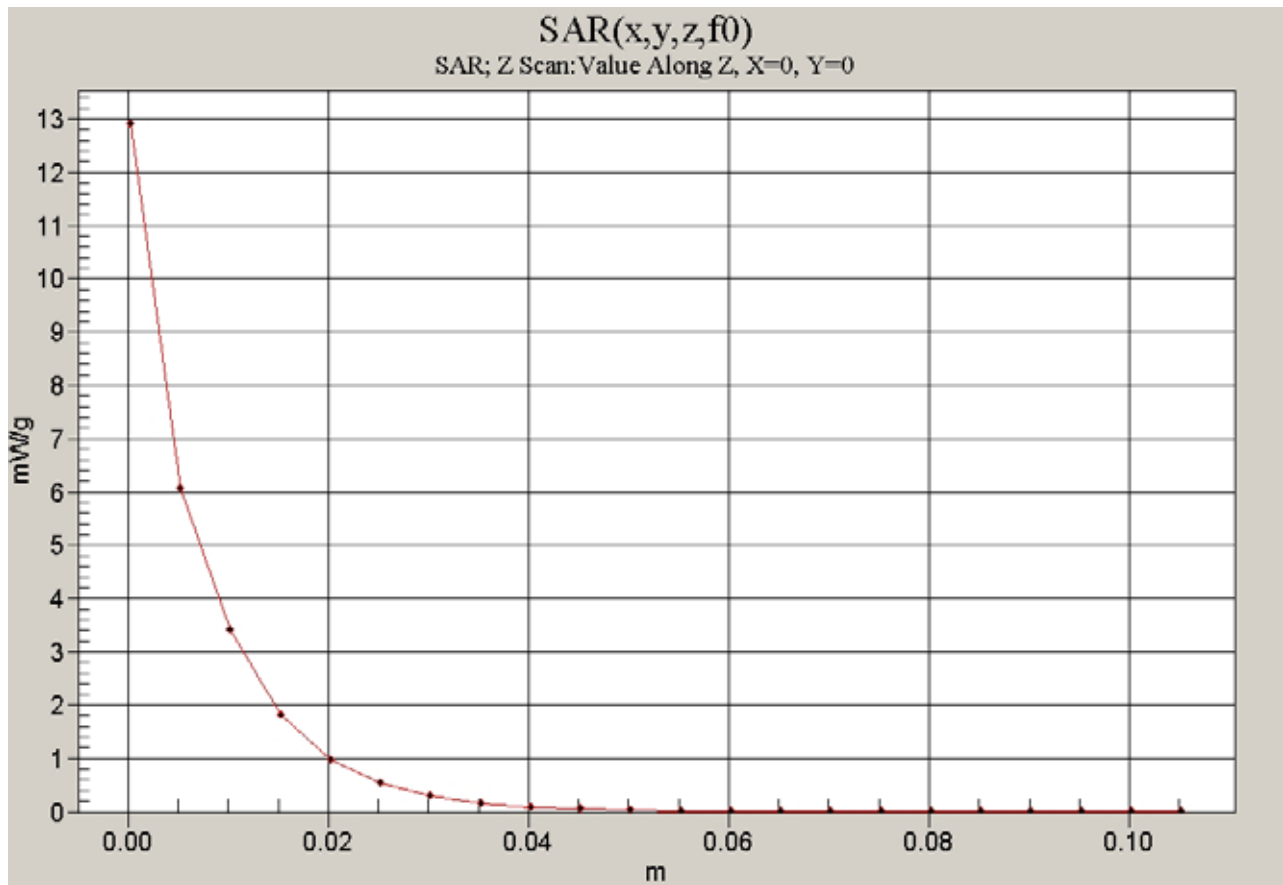
Peak SAR (extrapolated) = 33.9 W/kg

SAR(1 g) = 14 mW/g; SAR(10 g) = 6.32 mW/g

Maximum value of SAR (measured) = 15.5 mW/g



Z Scan



GSM 850 Head SAR Test

Test Laboratory: SGS Testing Korea
File Name: [GSM850_LE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
Program Name: GSM850_Head_Slide Down

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.884$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY4 Configuration:

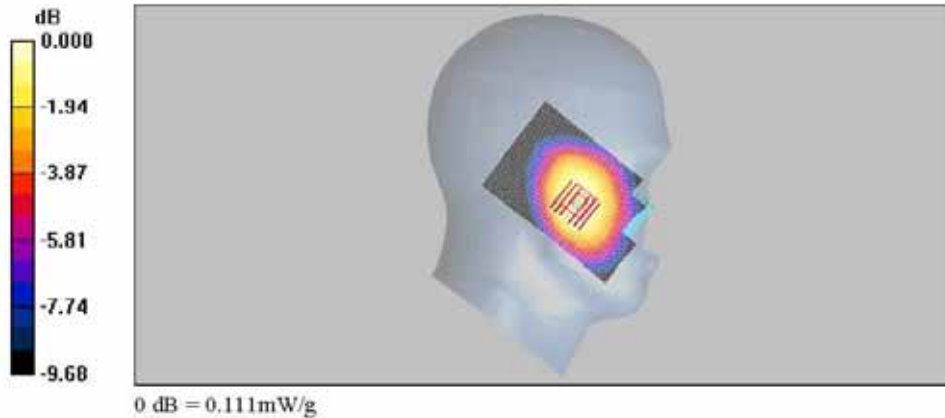
- Probe: ET3DV6 - SN1782; ConvF(6.26, 6.26, 6.26); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM850_LE_Mid_Cheek_Slide Down/Area Scan (61x91x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.111 mW/g

GSM850_LE_Mid_Cheek_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.61 V/m; Power Drift = -0.050 dB
Peak SAR (extrapolated) = 0.132 W/kg
SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.079 mW/g
Maximum value of SAR (measured) = 0.111 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GSM850_LE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: GSM850_Head_Slide Up

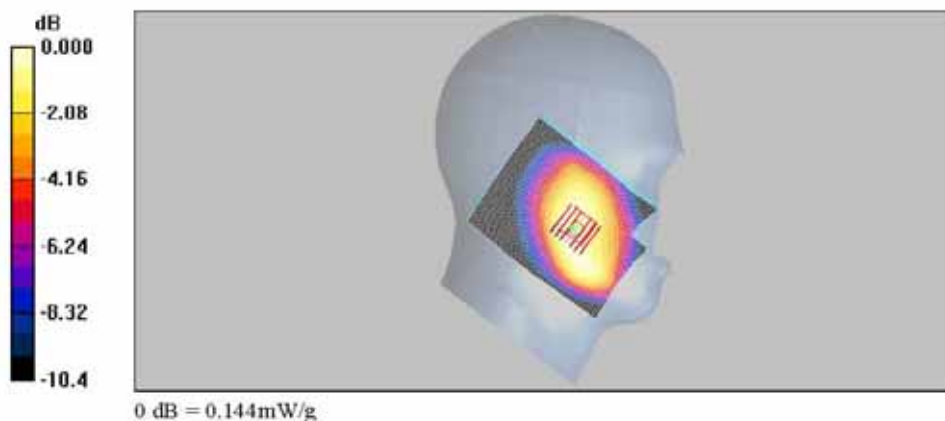
Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.884$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.26, 6.26, 6.26); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM850_LE_Mid_Cheek_Slide Up/Area Scan (71x91x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
 Maximum value of SAR (interpolated) = 0.145 mW/g

GSM850_LE_Mid_Cheek_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid:
 $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
 Reference Value = 4.14 V/m; Power Drift = 0.062 dB
 Peak SAR (extrapolated) = 0.177 W/kg
SAR(1 g) = 0.136 mW/g; SAR(10 g) = 0.100 mW/g
 Maximum value of SAR (measured) = 0.144 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GSM850_LE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: GSM850_Head_Slide Up

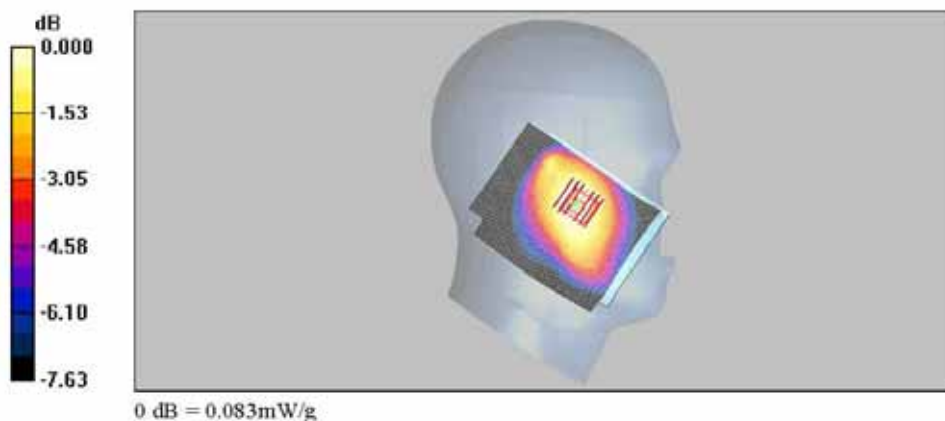
Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.884$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.26, 6.26, 6.26); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM850_LE_Mid_Tilt_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.083 mW/g

GSM850_LE_Mid_Tilt_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 6.84 V/m; Power Drift = -0.184 dB
 Peak SAR (extrapolated) = 0.095 W/kg
SAR(1 g) = 0.080 mW/g; SAR(10 g) = 0.062 mW/g
 Maximum value of SAR (measured) = 0.083 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GSM850_RE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: GSM850_Head_Slide Down

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.884$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.26, 6.26, 6.26); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM850_RE_Mid_Cheek_Slide Down/Area Scan (61x91x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.119 mW/g

GSM850_RE_Mid_Cheek_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

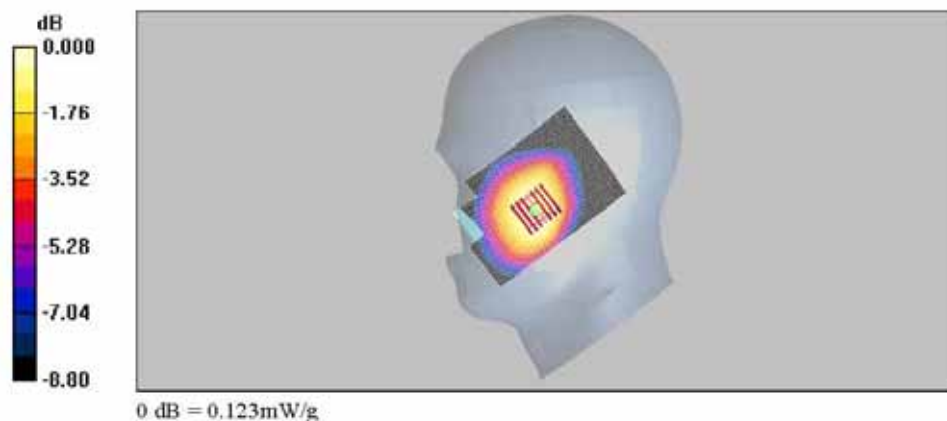
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.06 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 0.146 W/kg

SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.088 mW/g

Maximum value of SAR (measured) = 0.123 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GSM850_RE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: GSM850_Head_Slide Up

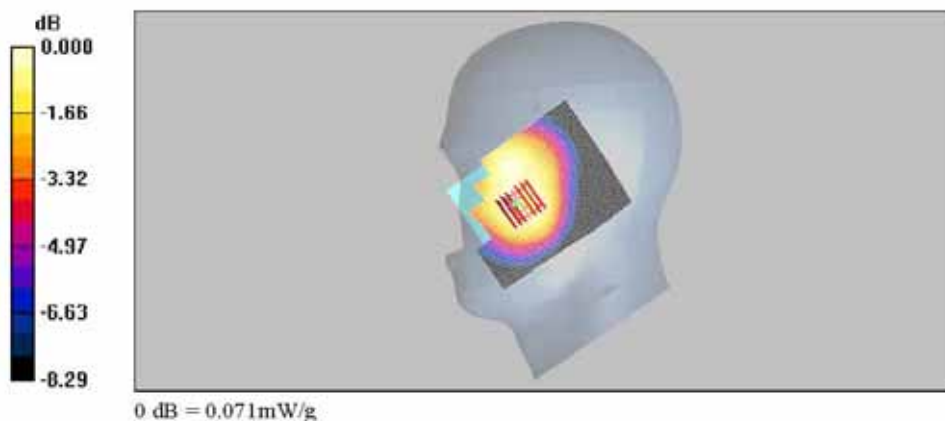
Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.884$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.26, 6.26, 6.26); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM850_RE_Mid_Cheek_Slide Up/Area Scan (71x91x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
 Maximum value of SAR (interpolated) = 0.069 mW/g

GSM850_RE_Mid_Cheek_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
 Reference Value = 3.32 V/m; Power Drift = -0.154 dB
 Peak SAR (extrapolated) = 0.079 W/kg
SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.054 mW/g
 Maximum value of SAR (measured) = 0.071 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GSM850_RE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: GSM850_Head_Slide Down

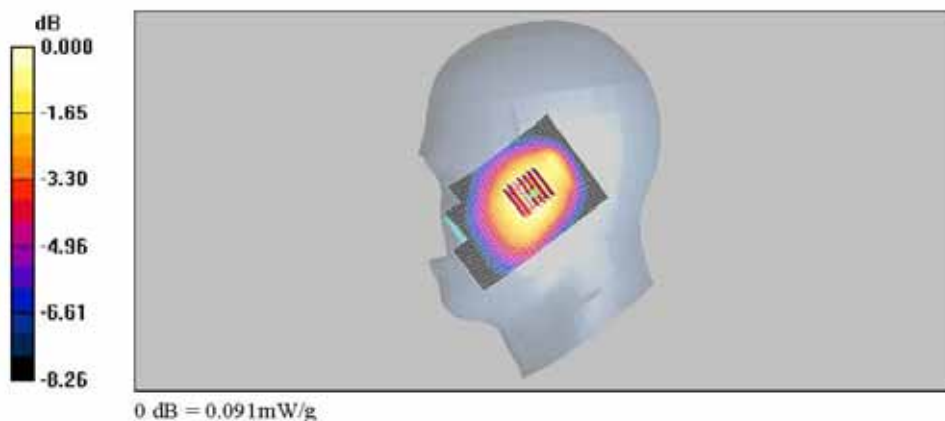
Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.884 \text{ mho/m}$; $\epsilon_r = 41.2$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.26, 6.26, 6.26); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM850_RE_Mid_Tilt_Slide Down/Area Scan (61x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (interpolated) = 0.091 mW/g

GSM850_RE_Mid_Tilt_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
 Reference Value = 7.79 V/m; Power Drift = 0.033 dB
 Peak SAR (extrapolated) = 0.108 W/kg
SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.066 mW/g
 Maximum value of SAR (measured) = 0.091 mW/g



GSM850 Body SAR Test

Test Laboratory: SGS Testing Korea
 File Name: [GPRS850_Body_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: GSM850_Body_Slide Down

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.974$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.11, 6.11, 6.11); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS850_Front_Mid_1Tx_Slide Down/Area Scan (61x91x1): Measurement grid:

$dx = 15$ mm, $dy = 15$ mm

Maximum value of SAR (interpolated) = 0.122 mW/g

GPRS850_Front_Mid_1Tx_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

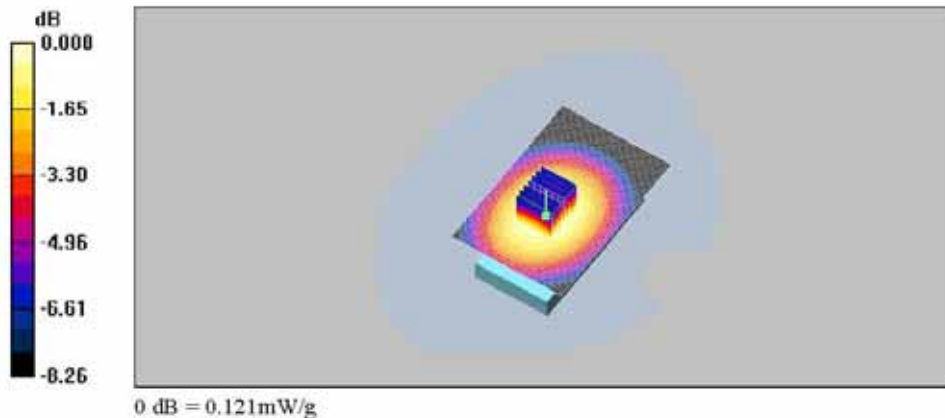
$dx = 5$ mm, $dy = 5$ mm, $dz = 5$ mm

Reference Value = 11.5 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.115 mW/g; SAR(10 g) = 0.086 mW/g

Maximum value of SAR (measured) = 0.121 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GPRS850_Body_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: GSM850_Body_Slide Up

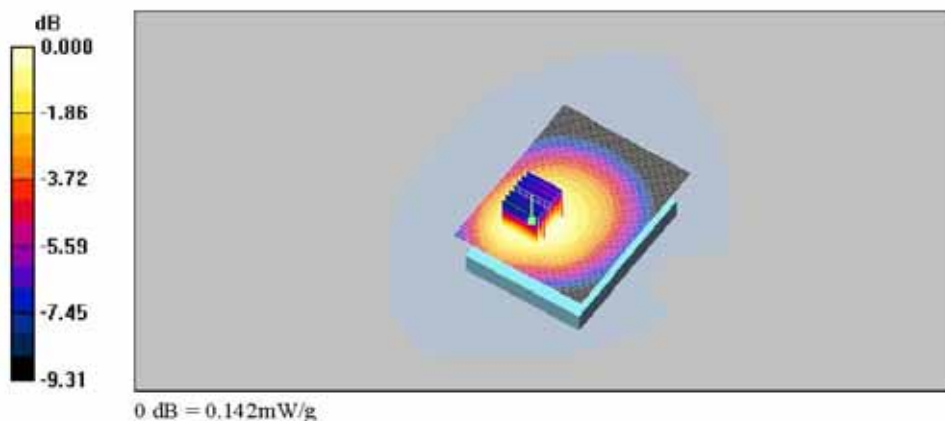
Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.974$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.11, 6.11, 6.11); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS850_Front_Mid_1Tx_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.142 mW/g

GPRS850_Front_Mid_1Tx_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 11.6 V/m; Power Drift = 0.008 dB
 Peak SAR (extrapolated) = 0.177 W/kg
SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.098 mW/g
 Maximum value of SAR (measured) = 0.142 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GPRS850_Body_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: GSM850_Body_Slide Up

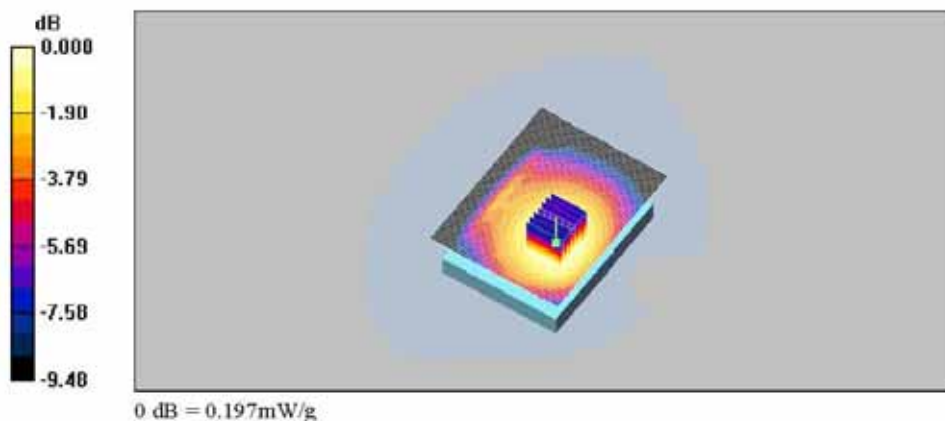
Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.974$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

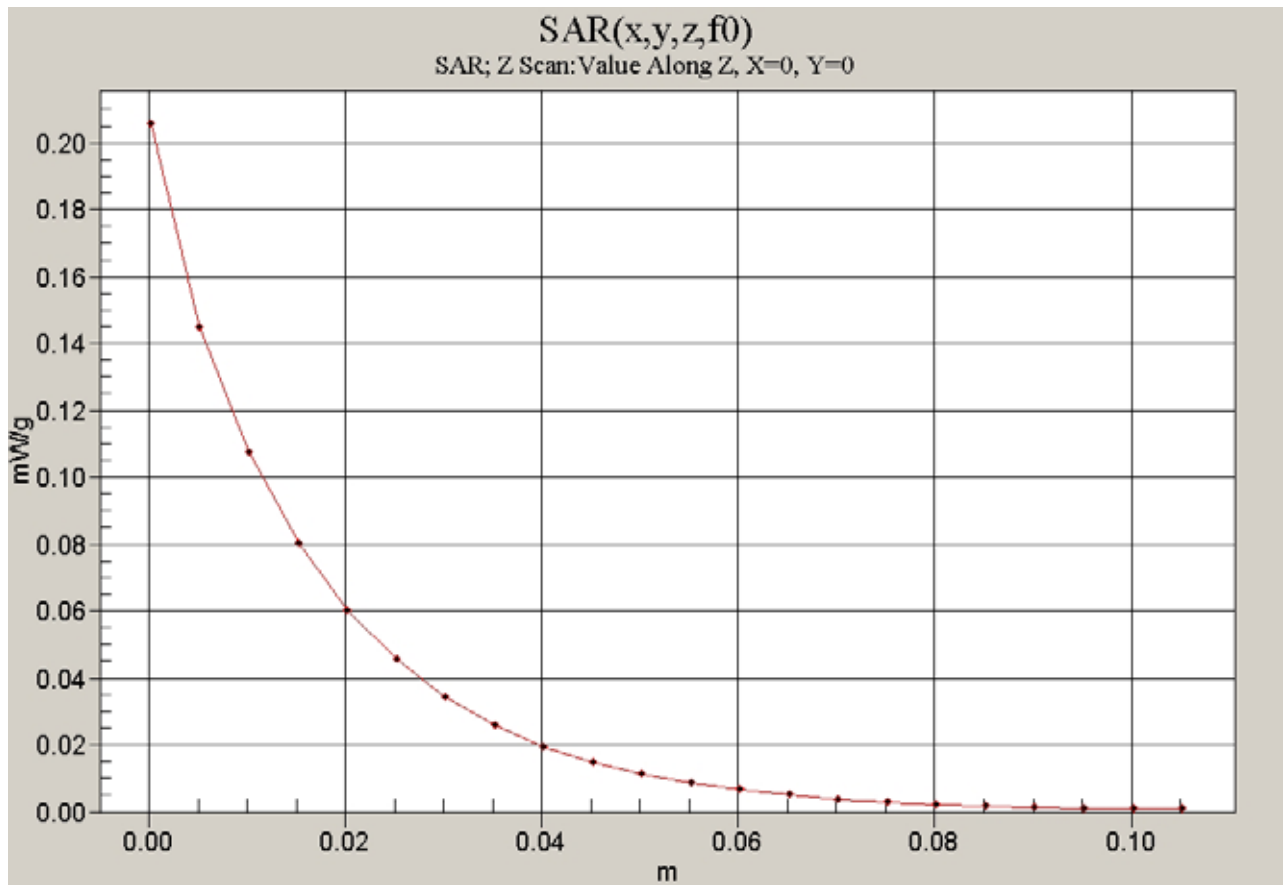
- Probe: ET3DV6 - SN1782; ConvF(6.11, 6.11, 6.11); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS850_Back_Mid_1Tx_Slide Up/Area Scan (71x91x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
 Maximum value of SAR (interpolated) = 0.199 mW/g

GPRS850_Back_Mid_1Tx_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm
 Reference Value = 13.0 V/m; Power Drift = -0.026 dB
 Peak SAR (extrapolated) = 0.247 W/kg
SAR(1 g) = 0.186 mW/g; SAR(10 g) = 0.135 mW/g
 Maximum value of SAR (measured) = 0.197 mW/g



Z Scan



Test Laboratory: SGS Testing Korea
 File Name: [GSM850_Body_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: GSM850_Body_Slide Up

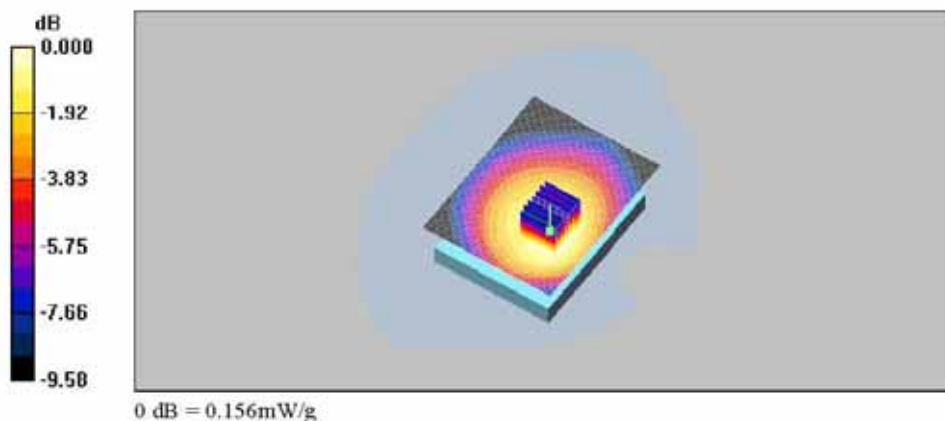
Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.974$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(6.11, 6.11, 6.11); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP_900MHz; Type: SAM MIC #2000-93; Serial: TP-1300
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM850_Back_Mid_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.156 mW/g

GSM850_Back_Mid_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 11.6 V/m; Power Drift = -0.038 dB
 Peak SAR (extrapolated) = 0.196 W/kg
SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.105 mW/g
 Maximum value of SAR (measured) = 0.156 mW/g



PCS1900 Head SAR Test

Test Laboratory: SGS Testing Korea
 File Name: [PCS1900_LE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile Slide Down; Serial: 005KPKN0168453
 Program Name: PCS1900_LE_Slide Down

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_Mid_Cheek_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.145 mW/g

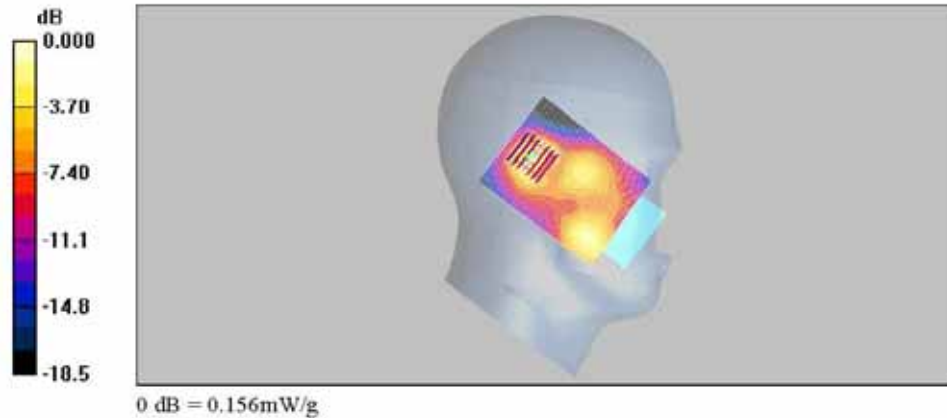
LE_Mid_Cheek_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.52 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.264 W/kg

SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.067 mW/g

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



Test Laboratory: SGS Testing Korea
 File Name: [PCS1900_LE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile Slide Up; Serial: 005KPKN0168453
 Program Name: PCS1900_LE_Slide Up

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_Mid_Cheek_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.277 mW/g

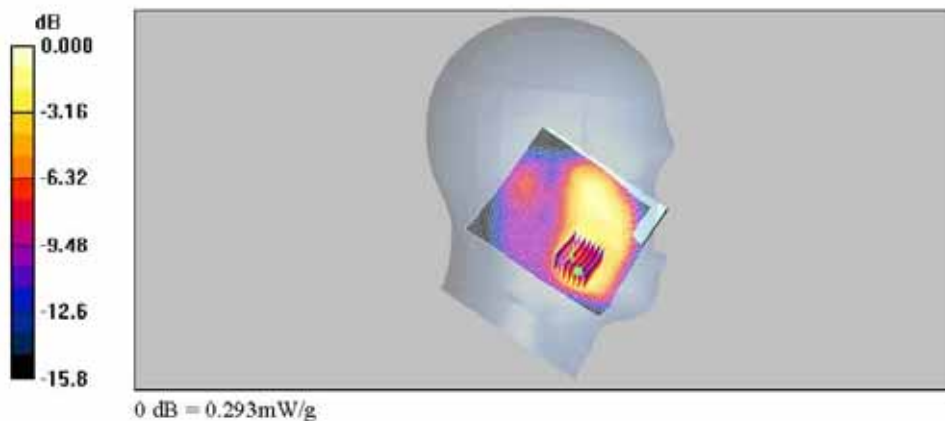
LE_Mid_Cheek_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.96 V/m; Power Drift = 0.124 dB

Peak SAR (extrapolated) = 0.367 W/kg

SAR(1 g) = 0.268 mW/g; SAR(10 g) = 0.162 mW/g

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



Test Laboratory: SGS Testing Korea
 File Name: [PCS1900_LE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile Slide Up; Serial: 005KPKN0168453
 Program Name: PCS1900_LE_Slide Up

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_Mid_Tilt_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.070 mW/g

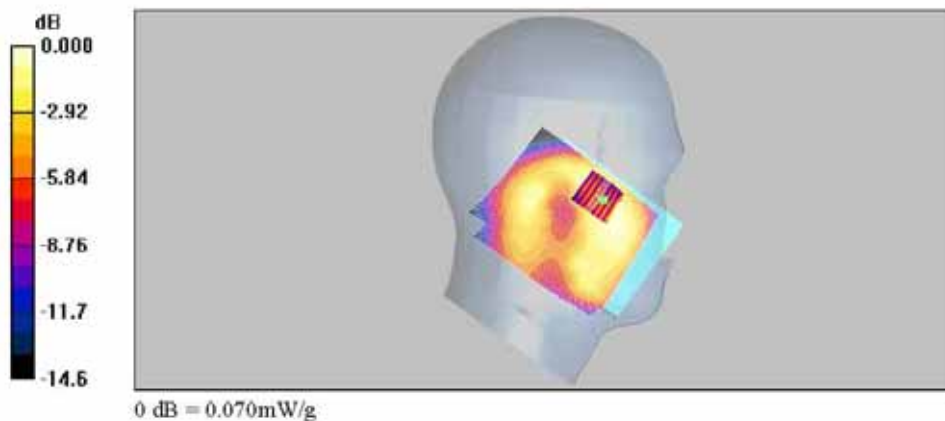
LE_Mid_Tilt_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.98 V/m; Power Drift = -0.130 dB

Peak SAR (extrapolated) = 0.089 W/kg

SAR(1 g) = 0.064 mW/g; SAR(10 g) = 0.043 mW/g

Maximum value of SAR (measured) = 0.070 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [PCS1900_RE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile Slide Down; Serial: 005KPKN0168453
 Program Name: PCS1900_RE_Slide Down

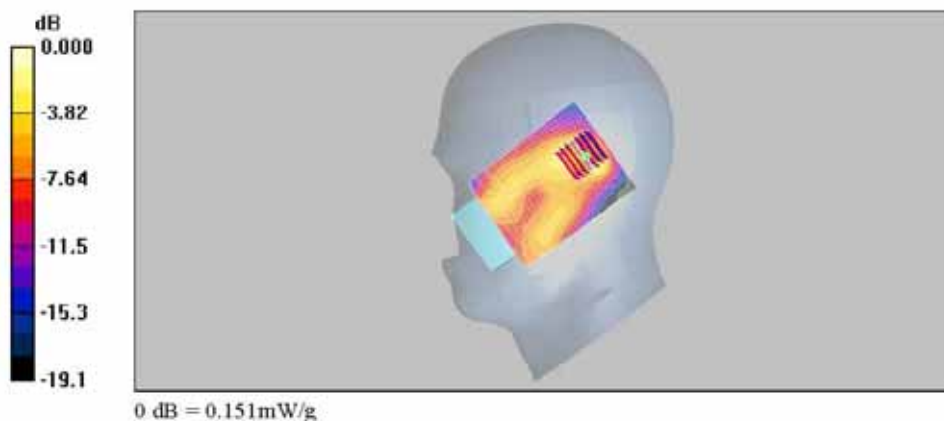
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_Mid_Cheek_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.141 mW/g

RE_Mid_Cheek_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 7.95 V/m; Power Drift = -0.169 dB
 Peak SAR (extrapolated) = 0.242 W/kg
SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.068 mW/g
 Maximum value of SAR (measured) = 0.151 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [PCS1900_RE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile Slide Up; Serial: 005KPKN0168453
 Program Name: PCS1900_RE_Slide Up

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_Mid_Cheek_Slide Up/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.332 mW/g

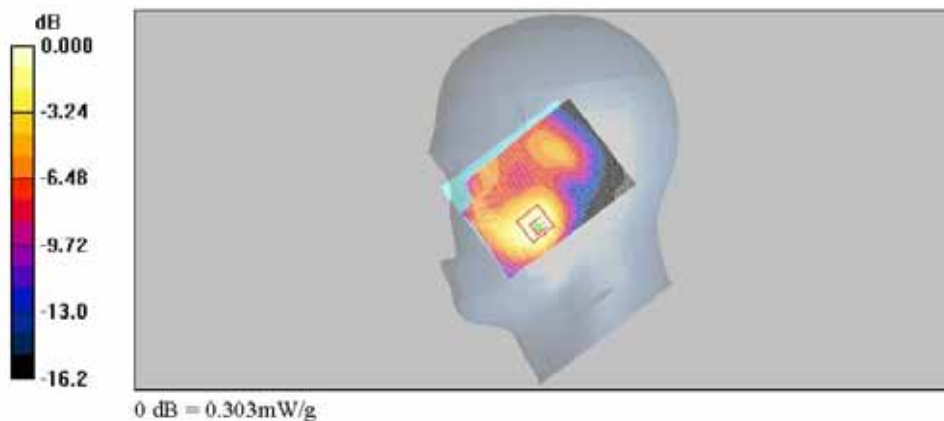
RE_Mid_Cheek_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.66 V/m; Power Drift = -0.030 dB

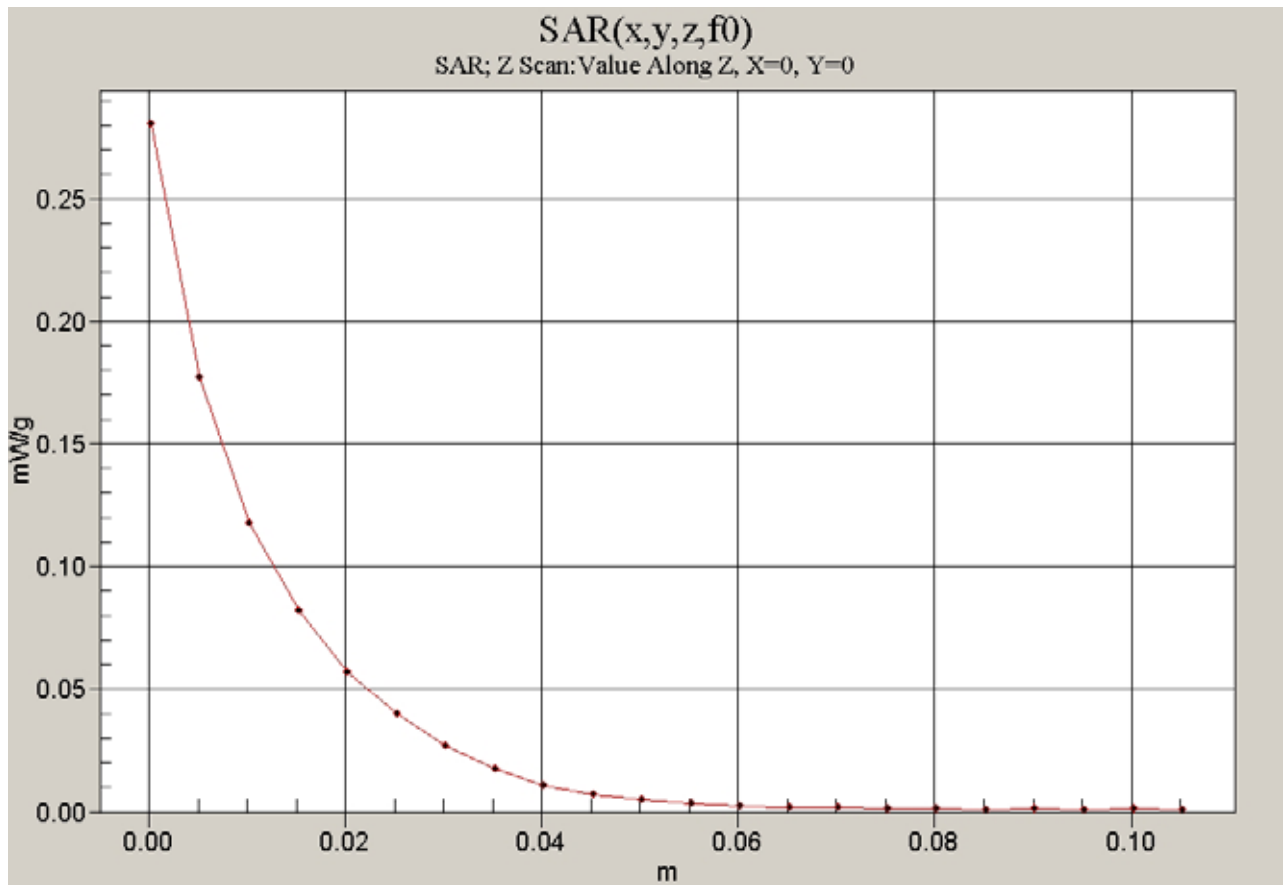
Peak SAR (extrapolated) = 0.454 W/kg

SAR(1 g) = 0.287 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.303 mW/g



Z Scan



Test Laboratory: SGS Testing Korea
 File Name: [PCS1900_RE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile Slide Up; Serial: 005KPKN0168453
 Program Name: PCS1900_RE_Slide Up

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_Mid_Tilt_Slide Up/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.087 mW/g

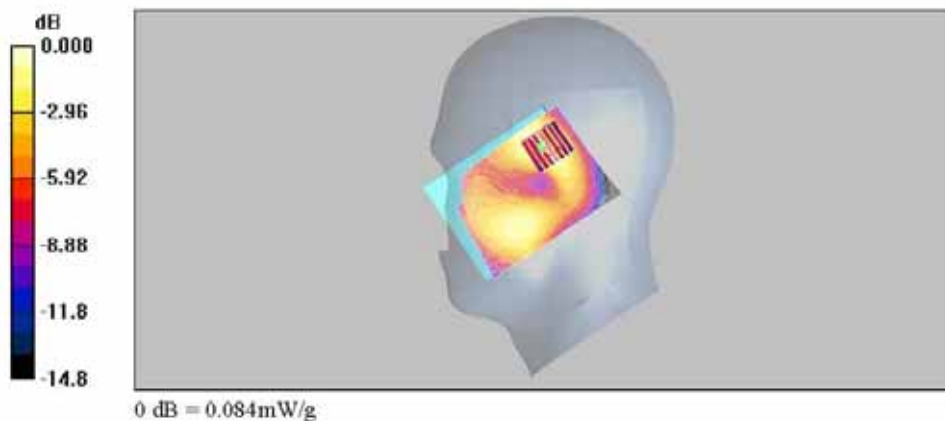
RE_Mid_Tilt_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.30 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 0.113 W/kg

SAR(1 g) = 0.076 mW/g; SAR(10 g) = 0.048 mW/g

Maximum value of SAR (measured) = 0.084 mW/g



PCS1900 Body SAR Test

Test Laboratory: SGS Testing Korea
 File Name: [GPRS1900_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: PCS1900_Slide Down

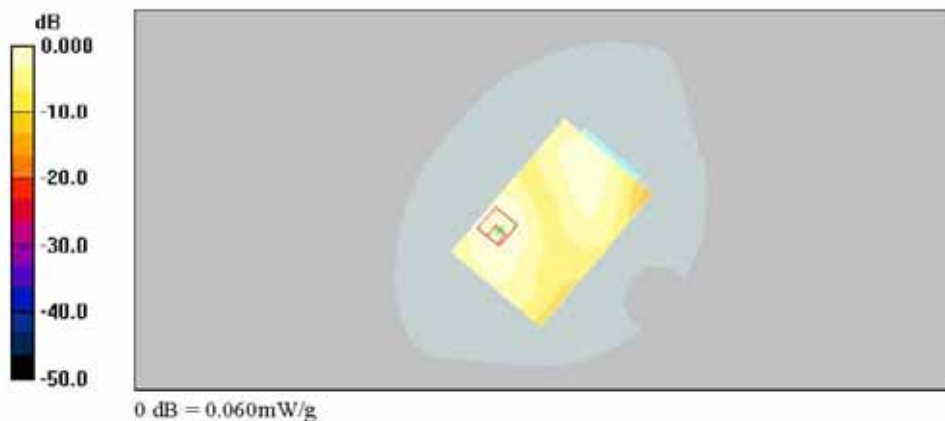
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS1900_Front_Mid_1Tx_Slide Down/Area Scan (61x91x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.061 mW/g

GPRS1900_Front_Mid_1Tx_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 3.03 V/m; Power Drift = 0.092 dB
 Peak SAR (extrapolated) = 0.146 W/kg
SAR(1 g) = 0.059 mW/g; SAR(10 g) = 0.035 mW/g
 Maximum value of SAR (measured) = 0.060 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GPRS1900_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: PCS1900_Slide Up

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS1900_Front_Mid_1Tx_Slide Up/Area Scan (71x91x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.140 mW/g

GPRS1900_Front_Mid_1Tx_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

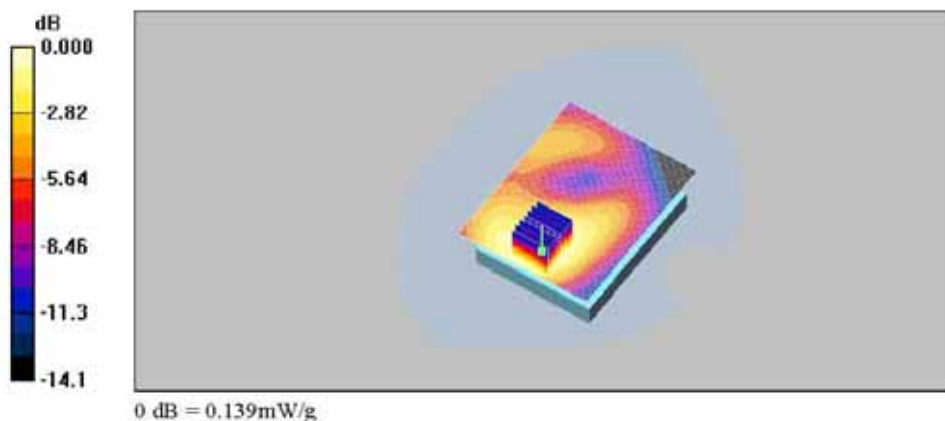
dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.79 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 0.173 W/kg

SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.082 mW/g

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



Test Laboratory: SGS Testing Korea

File Name: [GPRS1900_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453

Program Name: PCS1900_Slide Up

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS1900_Back_Mid_1Tx_Slide Up/Area Scan (71x91x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

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

GPRS1900_Back_Mid_1Tx_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid:

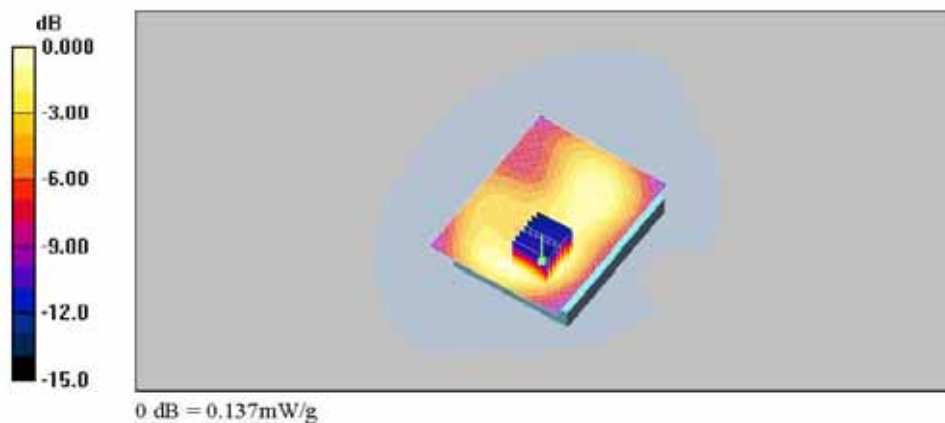
$dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.55 V/m; Power Drift = -0.185 dB

Peak SAR (extrapolated) = 0.177 W/kg

SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.075 mW/g

Maximum value of SAR (measured) = 0.137 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [GSM1900_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
Program Name: PCS1900_Slide Up

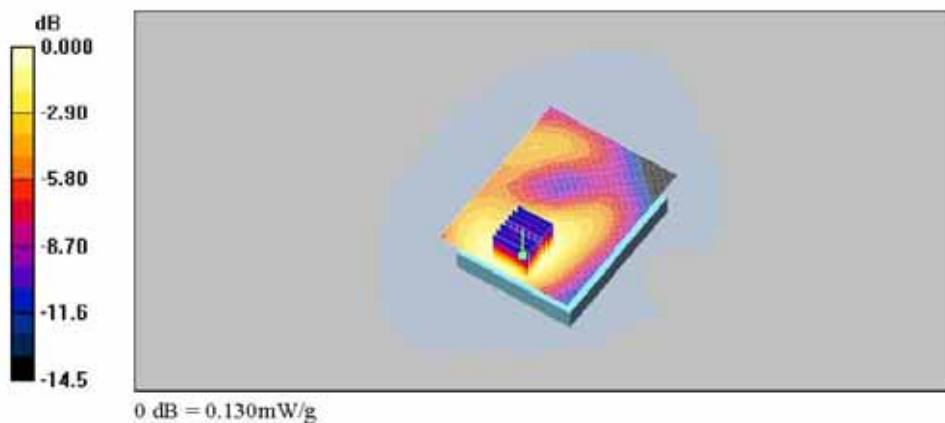
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GSM1900_Front_Mid_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.131 mW/g

GSM1900_Front_Mid_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 5.56 V/m; Power Drift = -0.015 dB
 Peak SAR (extrapolated) = 0.163 W/kg
SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.078 mW/g
 Maximum value of SAR (measured) = 0.130 mW/g



WCDMA II Head SAR Test

Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II LE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: WCDMA II_LE_Slide Down

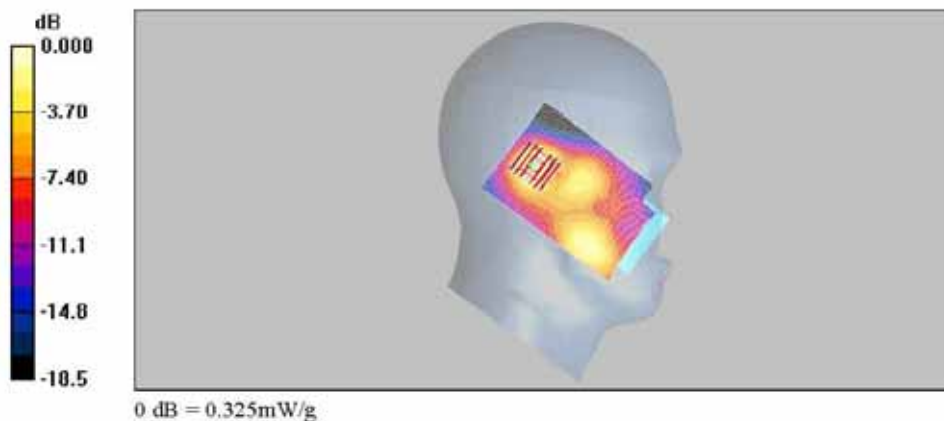
Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_Mid_Cheek_Slide Down/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.290 mW/g

LE_Mid_Cheek_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 13.8 V/m; Power Drift = -0.118 dB
 Peak SAR (extrapolated) = 0.527 W/kg
SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.138 mW/g
 Maximum value of SAR (measured) = 0.325 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_LE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: WCDMA II_LE_Slide Up

Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_Mid_Cheek_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.536 mW/g

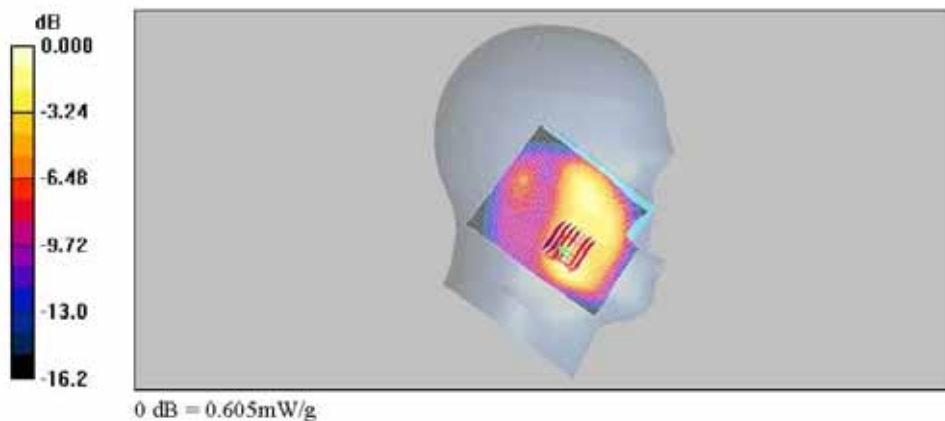
LE_Mid_Cheek_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.91 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 0.736 W/kg

SAR(1 g) = 0.525 mW/g; SAR(10 g) = 0.316 mW/g

Maximum value of SAR (measured) = 0.605 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II LE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: WCDMA II_LE_Slide Up

Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_Mid_Tilt_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.106 mW/g

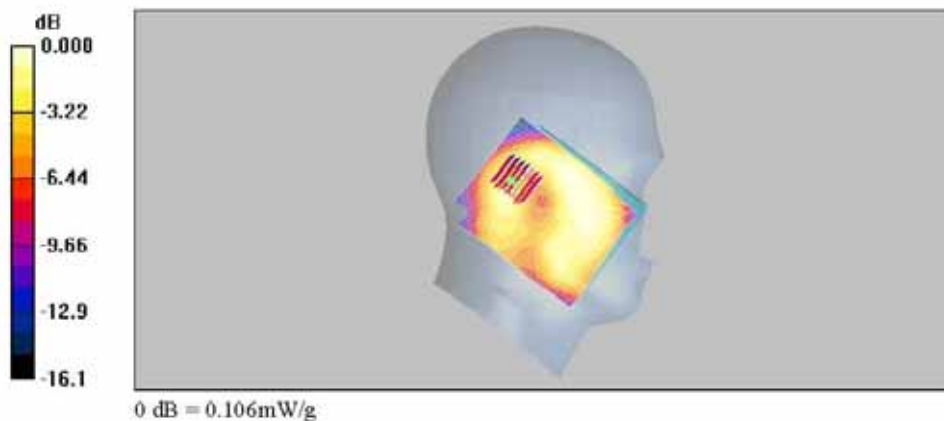
LE_Mid_Tilt_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.11 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 0.143 W/kg

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.058 mW/g

Maximum value of SAR (measured) = 0.106 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_RE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile Slide Down; Serial: 005KPKN0168453
 Program Name: WCDMA II_RE_Slide Down

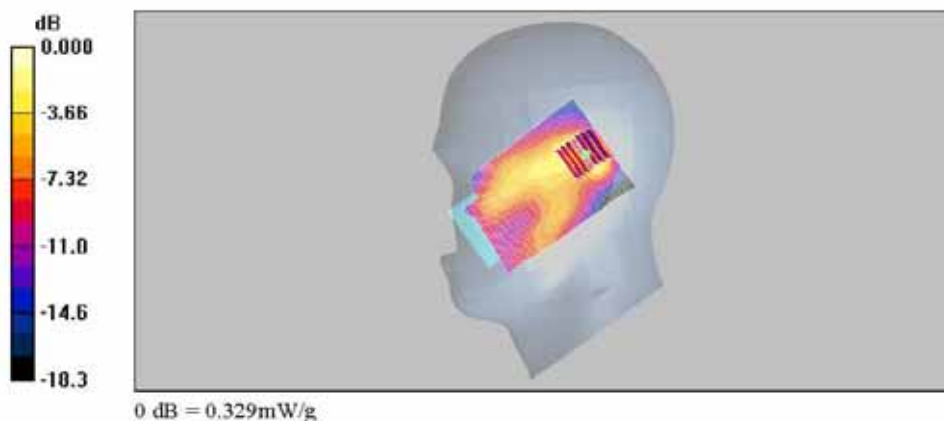
Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_Mid_Cheek_Slide Down/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.327 mW/g

RE_Mid_Cheek_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 11.4 V/m; Power Drift = 0.119 dB
 Peak SAR (extrapolated) = 0.510 W/kg
SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.150 mW/g
 Maximum value of SAR (measured) = 0.329 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_RE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile Slide Up; Serial: 005KPKN0168453
 Program Name: WCDMA II_RE_Slide Up

Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_Mid_Cheek_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.772 mW/g

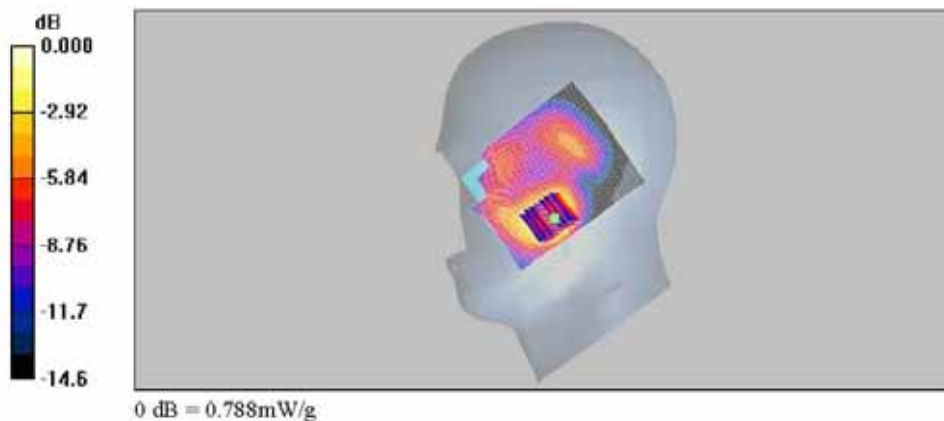
RE_Mid_Cheek_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = -0.113 dB

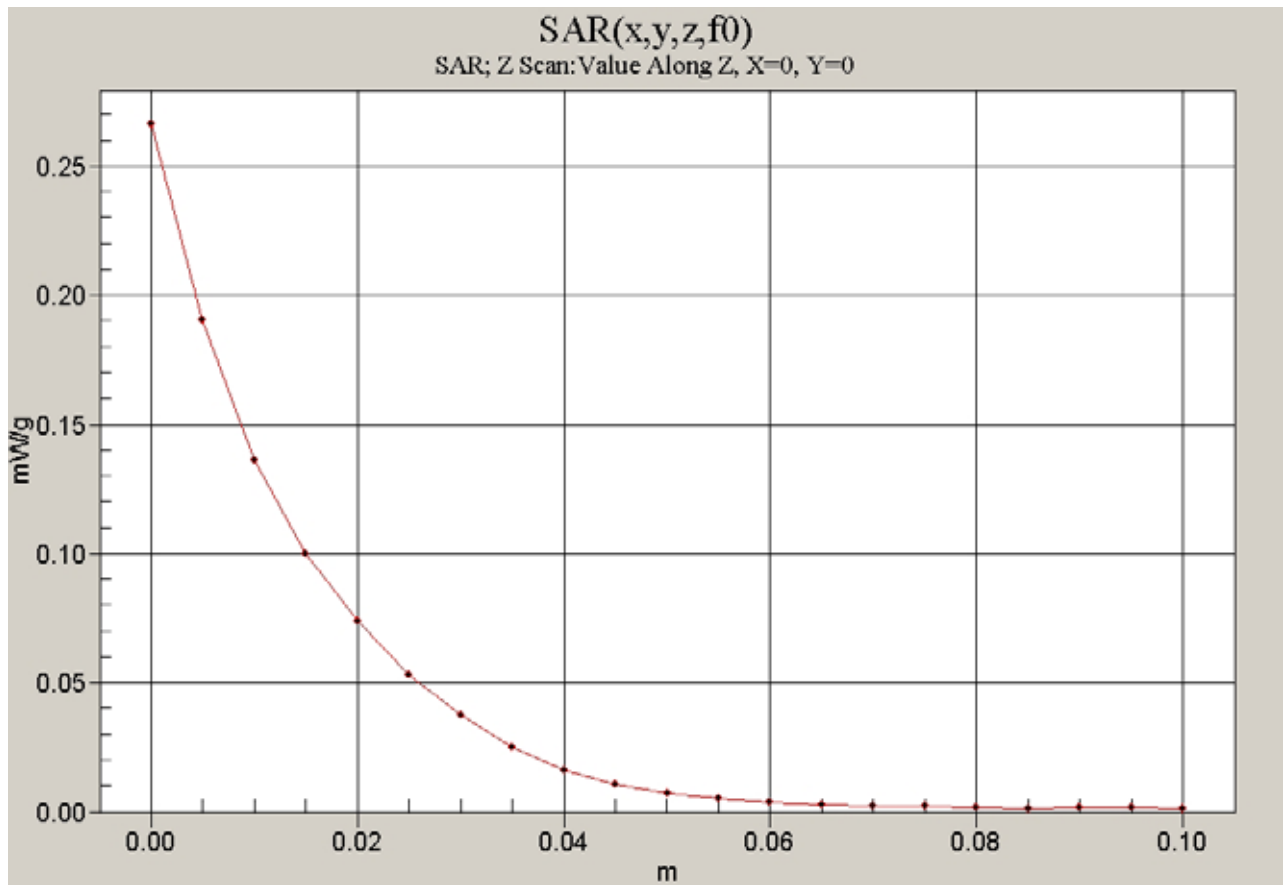
Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.682 mW/g; SAR(10 g) = 0.409 mW/g

Maximum value of SAR (measured) = 0.788 mW/g



Z Scan



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_RE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile Slide Up; Serial: 005KPKN0168453
 Program Name: WCDMA II_RE_Slide Up

Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(5.04, 5.04, 5.04); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_Mid_Tilt_Slide Up/Area Scan (71x91x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.207 mW/g

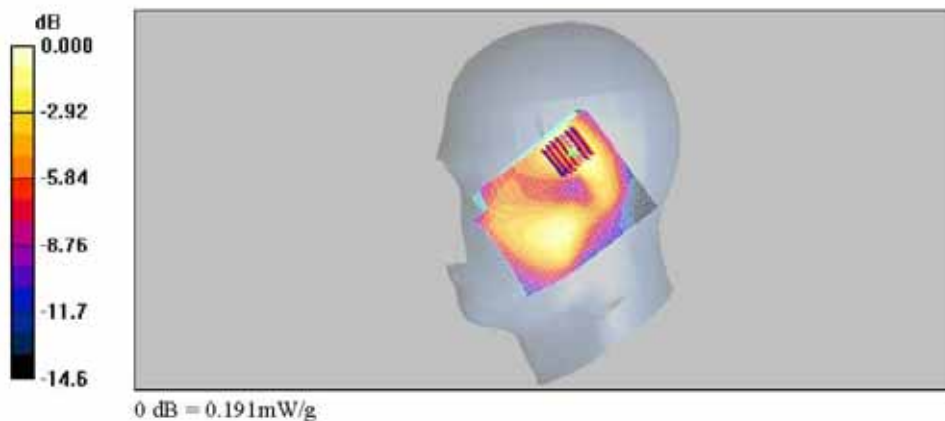
RE_Mid_Tilt_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.88 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.256 W/kg

SAR(1 g) = 0.176 mW/g; SAR(10 g) = 0.111 mW/g

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



WCDMA II Body SAR Test

Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: WCDMA II_Slide Down

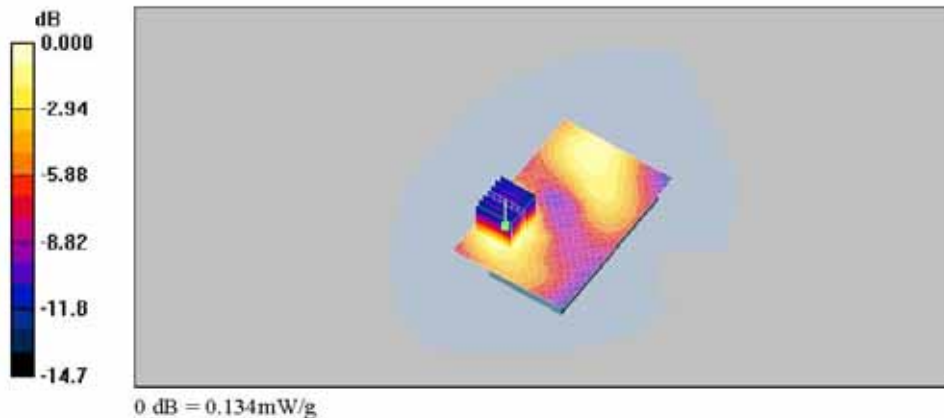
Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WCDMA II_HSDPA_Front_Mid_Slide Down/Area Scan (61x91x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.137 mW/g

WCDMA II_HSDPA_Front_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0:
 Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 3.62 V/m; Power Drift = 0.154 dB
 Peak SAR (extrapolated) = 0.174 W/kg
SAR(1 g) = 0.122 mW/g; SAR(10 g) = 0.076 mW/g
 Maximum value of SAR (measured) = 0.134 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: WCDMA II_Slide Up

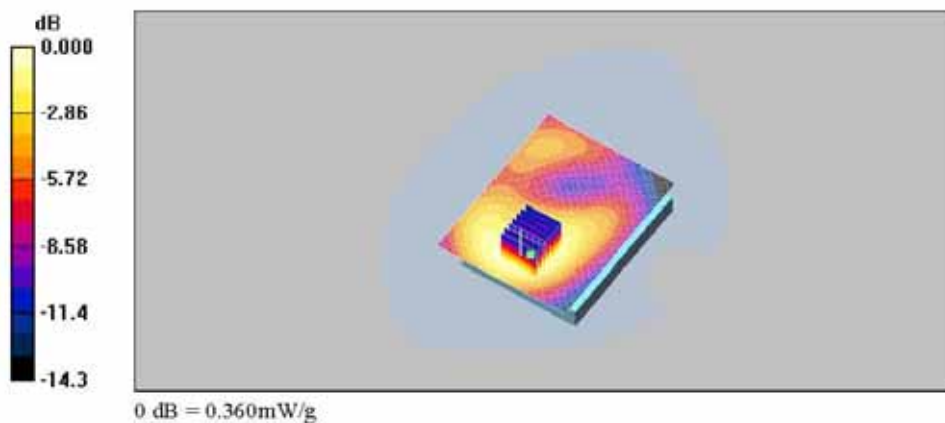
Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WCDMA II_HSDPA_Front_Mid_Slide Up/Area Scan (71x91x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.361 mW/g

WCDMA II_HSDPA_Front_Mid_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 8.46 V/m; Power Drift = -0.037 dB
 Peak SAR (extrapolated) = 0.448 W/kg
SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.214 mW/g
 Maximum value of SAR (measured) = 0.360 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: WCDMA II_Slide Up

Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WCDMA II_HSDPA_Back_Mid_Slide Up/Area Scan (71x91x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.364 mW/g

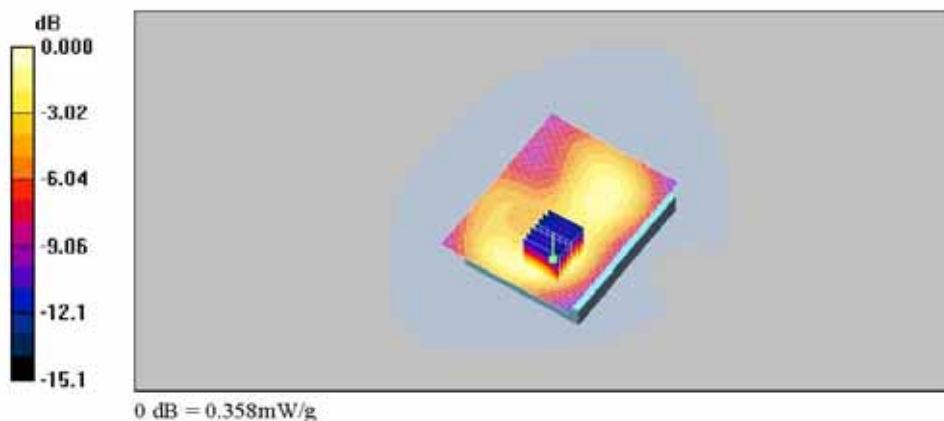
WCDMA II_HSDPA_Back_Mid_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.4 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.464 W/kg

SAR(1 g) = 0.323 mW/g; SAR(10 g) = 0.197 mW/g

Maximum value of SAR (measured) = 0.358 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WCDMA II_RMC_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: WCDMA II_Slide Up

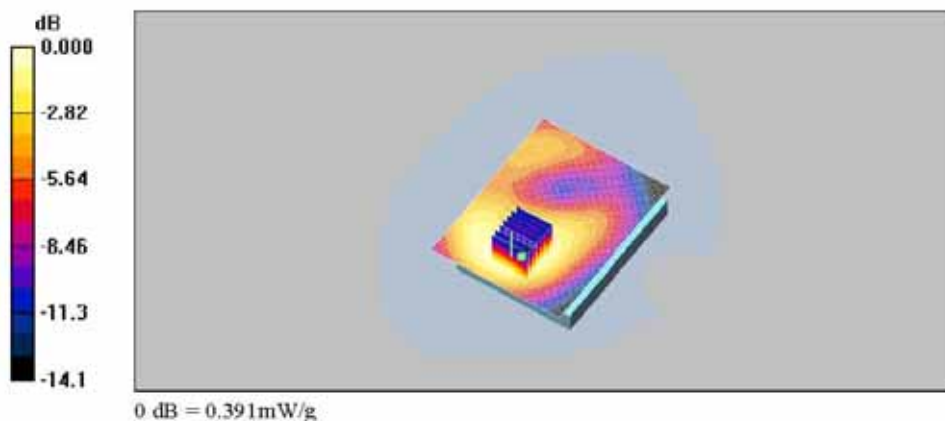
Communication System: W-CDMA II; Frequency: 1880 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.46, 4.46, 4.46); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WCDMA II_RMC_Front_Mid_Slide Up/Area Scan (71x91x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.392 mW/g

WCDMA II_RMC_Front_Mid_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 9.65 V/m; Power Drift = -0.017 dB
 Peak SAR (extrapolated) = 0.485 W/kg
SAR(1 g) = 0.360 mW/g; SAR(10 g) = 0.232 mW/g
 Maximum value of SAR (measured) = 0.391 mW/g



WLAN Head SAR Test

Test Laboratory: SGS Testing Korea
 File Name: [WLAN_LE_Slide Up.d44](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Up

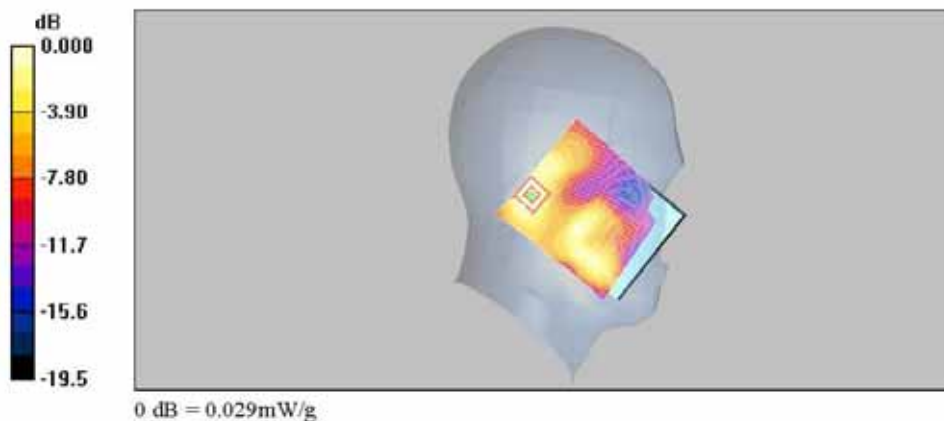
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_11b_Cheek_Mid_Slide Up/Area Scan (71x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.037 mW/g

LE_11b_Cheek_Mid_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 3.84 V/m; Power Drift = -0.031 dB
 Peak SAR (extrapolated) = 0.057 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.013 mW/g
 Maximum value of SAR (measured) = 0.029 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_LE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Down

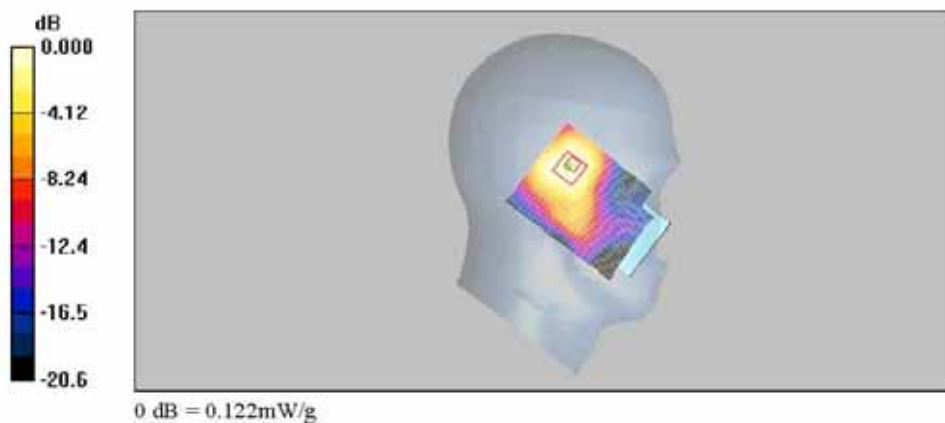
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

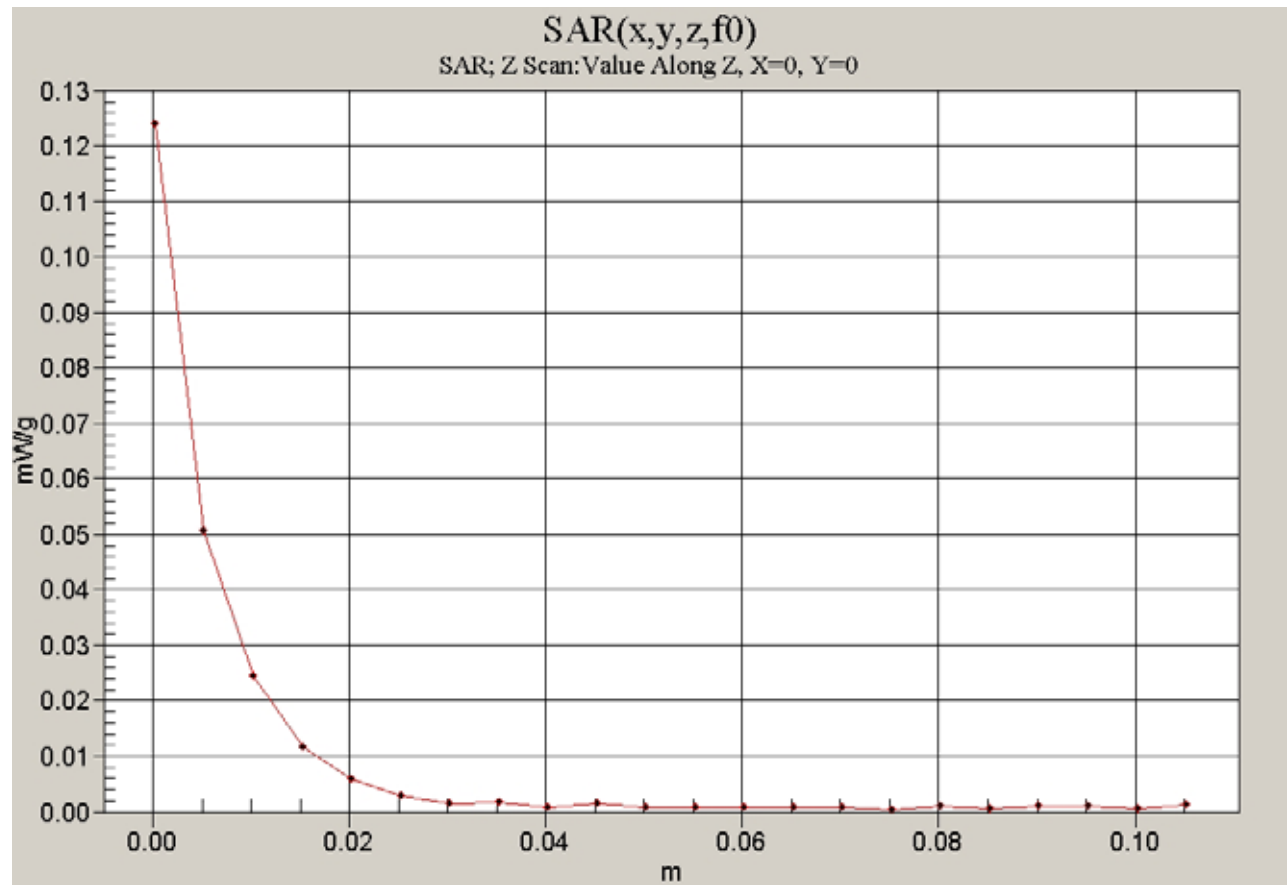
- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_11b_Cheek_Mid_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.126 mW/g

LE_11b_Cheek_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 8.11 V/m; Power Drift = -0.195 dB
 Peak SAR (extrapolated) = 0.235 W/kg
SAR(1 g) = 0.110 mW/g; SAR(10 g) = 0.060 mW/g
 Maximum value of SAR (measured) = 0.122 mW/g



Z Scan



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_LE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Down

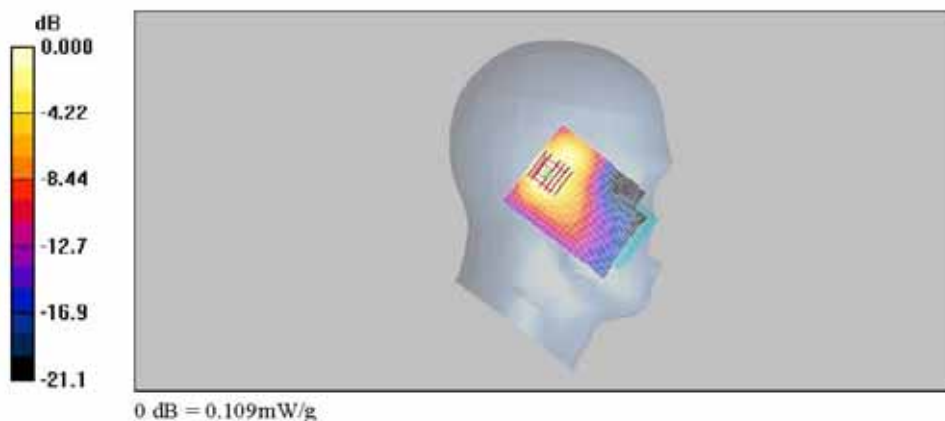
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_11b_Tilt_Mid_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.105 mW/g

LE_11b_Tilt_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 7.79 V/m; Power Drift = 0.073 dB
 Peak SAR (extrapolated) = 0.214 W/kg
SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.050 mW/g
 Maximum value of SAR (measured) = 0.109 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_LE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Down

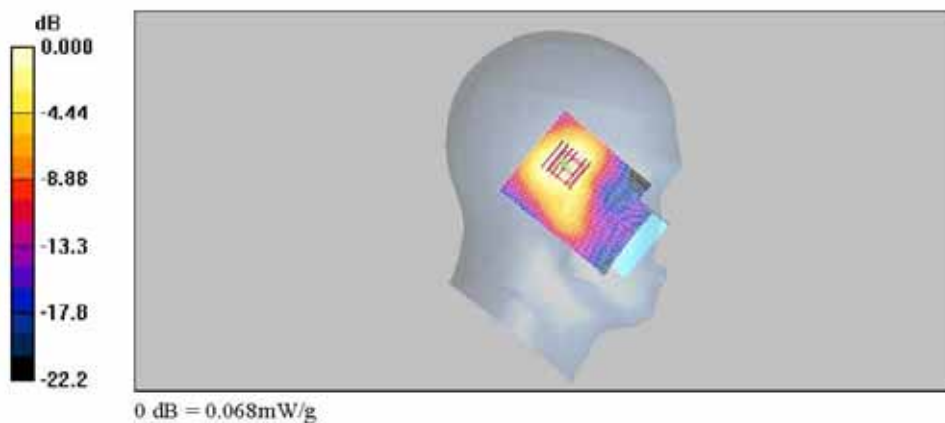
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_11g_Cheek_Mid_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.070 mW/g

LE_11g_Cheek_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 5.99 V/m; Power Drift = -0.081 dB
 Peak SAR (extrapolated) = 0.135 W/kg
SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.034 mW/g
 Maximum value of SAR (measured) = 0.068 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_LE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Down

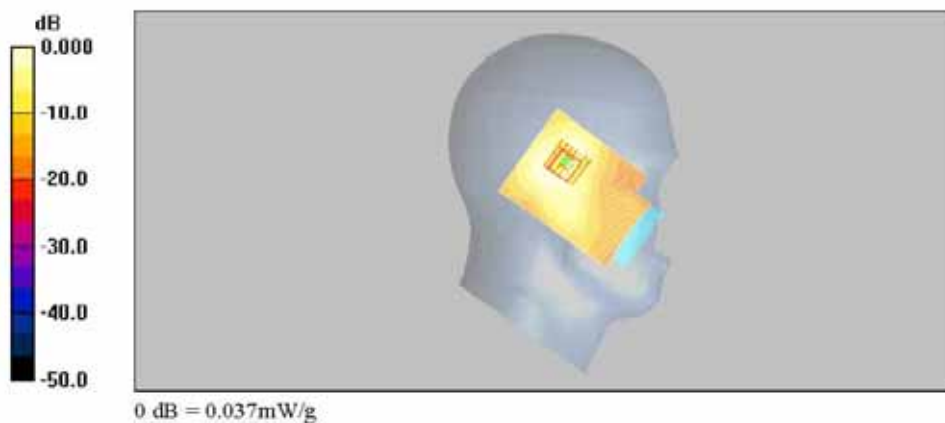
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE_11n_Cheek_Mid_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.041 mW/g

LE_11n_Cheek_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 4.37 V/m; Power Drift = -0.164 dB
 Peak SAR (extrapolated) = 0.073 W/kg
SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.018 mW/g
 Maximum value of SAR (measured) = 0.037 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_RE_Slide Up.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Up; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Up

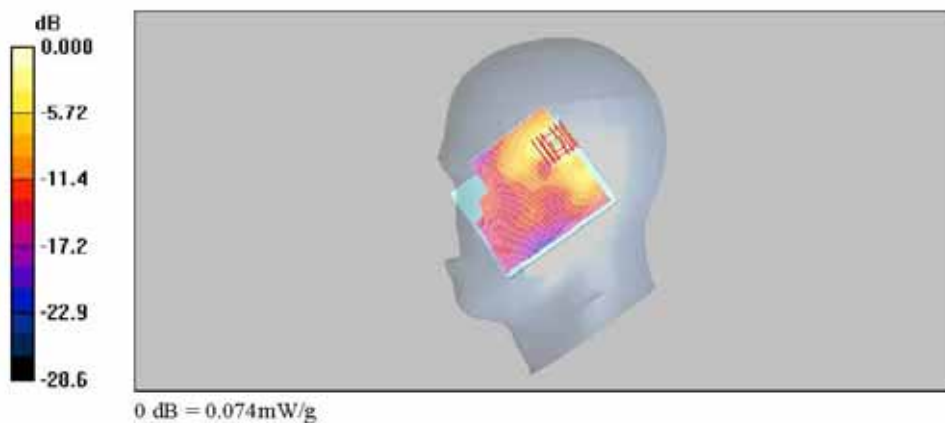
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_11b_Cheek_Mid_Slide Up/Area Scan (71x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.065 mW/g

RE_11b_Cheek_Mid_Slide Up/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 3.02 V/m; Power Drift = -0.130 dB
 Peak SAR (extrapolated) = 0.133 W/kg
SAR(1 g) = 0.064 mW/g; SAR(10 g) = 0.030 mW/g
 Maximum value of SAR (measured) = 0.074 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_RE_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Down

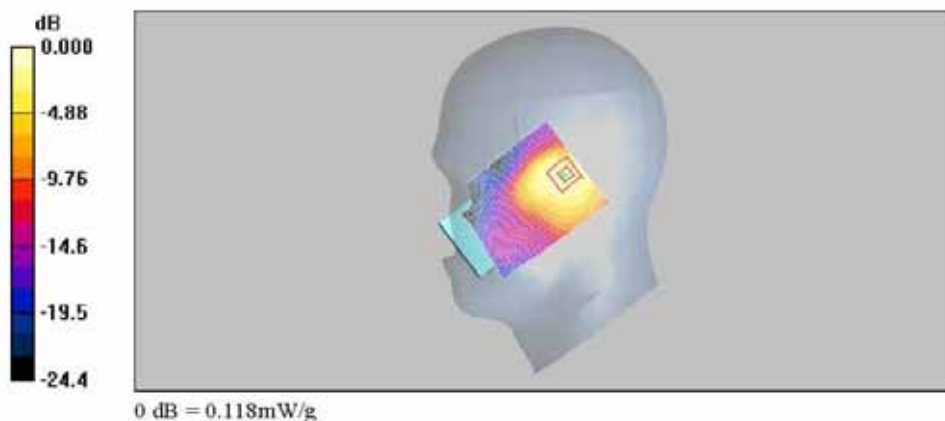
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_11b_Cheek_Mid_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.120 mW/g

RE_11b_Cheek_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 8.24 V/m; Power Drift = 0.189 dB
 Peak SAR (extrapolated) = 0.195 W/kg
SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.054 mW/g
 Maximum value of SAR (measured) = 0.118 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_RE_Slide Down.d4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Slide Down

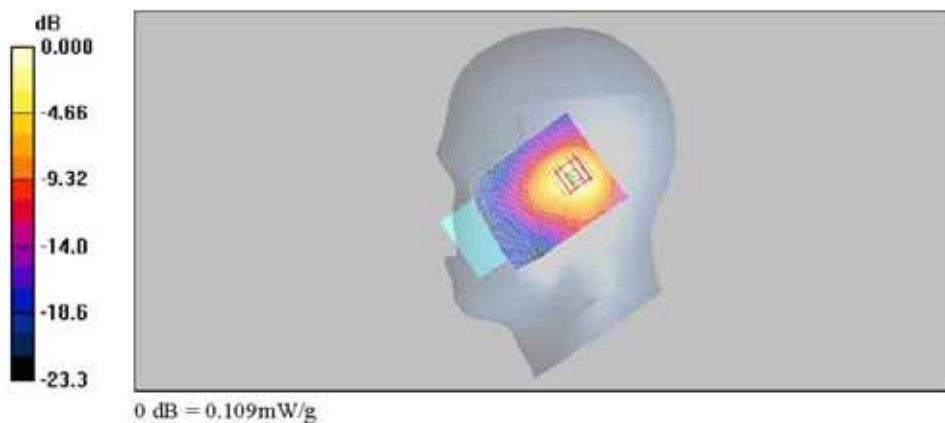
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.8$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.48, 4.48, 4.48); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE_11b_Tilt_Mid_Slide Down/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.105 mW/g

RE_11b_Tilt_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 7.74 V/m; Power Drift = -0.076 dB
 Peak SAR (extrapolated) = 0.185 W/kg
SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.047 mW/g
 Maximum value of SAR (measured) = 0.109 mW/g



WLAN Body SAR Test

Test Laboratory: SGS Testing Korea
 File Name: [WLAN_Body_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Body_Slide Down

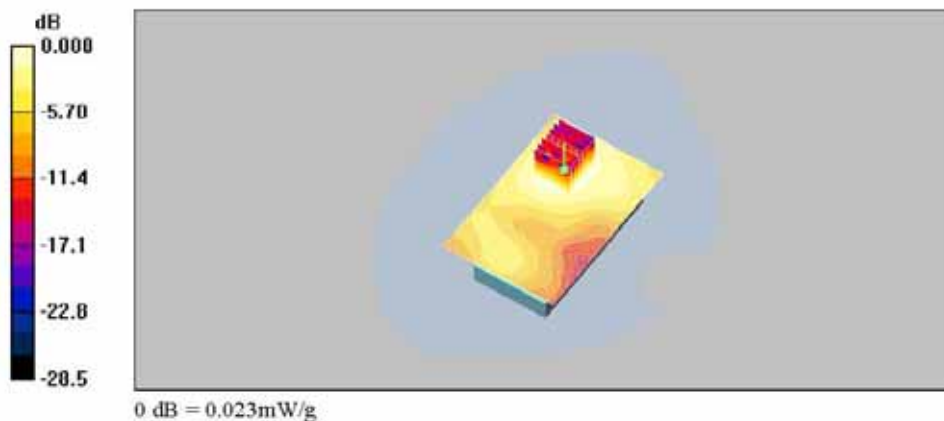
Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.07, 4.07, 4.07); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_Body_11b_Front_Mid_Slide Down/Area Scan (61x91x1): Measurement grid:
 dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.023 mW/g

WLAN_Body_11b_Front_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement
 grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 1.94 V/m; Power Drift = 0.070 dB
 Peak SAR (extrapolated) = 0.046 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.012 mW/g
 Maximum value of SAR (measured) = 0.023 mW/g



Test Laboratory: SGS Testing Korea
 File Name: [WLAN_Body_Slide Down.da4](#)

DUT: LG-C900N; Type: Mobile_Slide Down; Serial: 005KPKN0168453
 Program Name: WLAN_Body_Slide Down

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1782; ConvF(4.07, 4.07, 4.07); Calibrated: 2010-04-28
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn567; Calibrated: 2009-12-09
- Phantom: SAM MIC #2000-93 with CRP; Type: SAM MIC #2000-93; Serial: TP-1299
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WLAN_Body_11b_Back_Mid_Slide Down/Area Scan (61x91x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.015 mW/g

WLAN_Body_11b_Back_Mid_Slide Down/Zoom Scan (7x7x7)/Cube 0: Measurement

grid; dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.85 V/m; Power Drift = 0.111 dB

Peak SAR (extrapolated) = 0.037 W/kg

SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00676 mW/g

Maximum value of SAR (measured) = 0.015 mW/g

